General Disclaimer

One or more of the Following Statements may affect this Document

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.

- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.

- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.

- This document is paginated as submitted by the original source.

- Portions of this document are not fully legible due to the historical nature of some of the material. However, it is the best reproduction available from the original submission.

Produced by the NASA Center for Aerospace Information (CASI)

BOEING

CR 115563

(NASA-CR-115563) ECLIPSE COOLING OF SELECTED LUNAR FEATURES R.W. Shorthill, et al (Boeing Co., Seattle, Wash.) Mar. 1970 454 p

N72-23891

CSCL 03B

G3/30 Unclas 25868

MAY 1972
RECEIVED
NASA STI FACILITY
INPUT BRANCH

OFFICE OF PRIME RESPONSIBILITY

TN4

ECLIPSE COOLING OF SELECTED LUNAR FEATURES

BY R.W. SHORTHILL, J.M. SAARI, F.E. BAIRD AND J.R. LeCOMPTE

Prepared under Contract No. NAS 9-9794 by

THE BOEING COMPANY SPACE DIVISION
GUIDANCE AND CONTROL TECHNOLOGY

and

THE BOEING SCIENTIFIC RESEARCH LABORATORIES

Seattle, Washington

for

MANNED SPACECRAFT CENTER

Houston, Texas

MARCH 1970

ECLIPSE COOLING OF SELECTED LUNAR FEATURES

ABSTRACT

A program was begun in 1962 to measure systematically the photometric and radiometric properties of the lunar surface. The thermal measurements upon which this report is based were made in the 10 - 12 micron band during the total eclipse of December 19, 1964. This report includes a normalized differential thermal contour map showing the location of the thermal anomalies or "hot spots" on the disk and the eclipse cooling curves of 400 sites of which more than 300 were hot spots. The eclipse cooling data is compared to a particulate thermophysical model of the soil.

TABLE OF CONTENTS

		Page
		1
I.	INTRODUCTION	2
II.	MEASUREMENTS	5
III.	CALIBRATION	
IV.	THE PARTICULATE SOIL MODEL AND DIFFERENTIAL ENERGY PARAMETER	8
V.	DATA REDUCTION PROGRAM	12
	A. FLAT MOON ROUTINE (SCAN 13H)	14
	B. CONTOUR MAP ROUTINE	16
	C. SELENOGRAPHIC TO SCANNER COORDINATE CONVERSION	16
	D. DATA RETRIEVAL	19
VI.	SITE SELECTION	19
VII.	EXPLANATION OF DATA SHEETS	20
VIII.	DISCUSSION	25
IX.	REFERENCES	28
X.	DATA SHEETS	46
XI.	ACKNOWLEDGEMENTS	447

LIST OF FIGURES

		Page
Figure 1.	Cut-away view of the detector assembly showing the photomultiplier and mercury-doped germanium detector assemblies, the blackbody reference source, and the reflecting chopper.	2
Figure 2.	Transmission response of the infrared detector system.	3
Figure 3a.	Location of sites on quadrant I of the lunar disk.	37
Figure 3b.	Location of sites on quadrant II of the lunar disk.	38
Figure 3c.	Location of sites on quadrant III of the lunar disk.	39
Figure 3d.	Location of sites on quadrant IV of the lunar disk.	40
Figure 4.	Earthside hemisphere showing flattened moon normalized differential thermal contour map of Scan 13H made midway into totality with the effects of initial temperature and eclipse geometry removed. Each gray level represents a step of 0.02 in $\Delta(T/T_i)$.	41
Figure 5a.	Flattened moon normalized differential thermal contour map for quadrant I of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.	

LIST OF FIGURES

Page

Figure 5b. Flattened moon normalized differential thermal contour map for quadrant II of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.

Figure 5c. Flattened moon normalized differential thermal contour map for quadrant III of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.

Figure 5d. Flattened moon normalized differential thermal contour map for quadrant IV of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.

LIST OF TABLES

		Page
Table 1.	Noise Temperature for the Scans.	8
Table 2.	List of Sites.	29

I. INTRODUCTION

Measurements of thermal emission from the moon have shown that the lunar surface contains a large number of "hot spots," i.e., features which cool less than their surroundings (Saari and Shorthill, 1965). More than 1000 hot spots have been found on the eclipsed moon. The majority of these have been identified as craters (Shorthill and Saari, 1965). Their distribution over the lunar surface is not random but shows certain concentrations on the disk. The present study was conducted to examine the thermal cooling and location of these hot spots in more detail.

The thermal data upon which this study is based were taken during the lunar eclipse of December 19, 1964 in the 10 - 12 micron band at the Helwan Observatory in Egypt using the 74-inch Kottamia telescope. The raw data contain effects from the initial temperature distribution, the eclipse geometry, and certain other effects. This report contains the results of a computer program conducted to reduce part of this data. These results are: 1) a "flattened moon" contour map showing the differential normalized temperature of

hot spots with the effects of initial temperature distribution and eclipse geometry removed, 2) normalized cooling curves for 300 hot spots and 100 selected "normal" sites, and 3) comparison of the experimental measurements with a particulate model of the soil.

II. MEASUREMENTS

Measurements were made with a cooled mercury-doped germanium infrared photodetector mounted on a mechanical scanning device which was located at the Newtonian focus of the 74-inch Kottamia telescope. Figure 1 shows a cut-away view of the detector assembly. The infrared energy was reflected onto the detector by means of a reflecting chopper. A second channel was provided to measure the intensity of visible light. A bandpass filter was used to limit the infrared radiation to the 10 - 12 micron spectral band. The transmission characteristics of the system are shown in Figure 2.

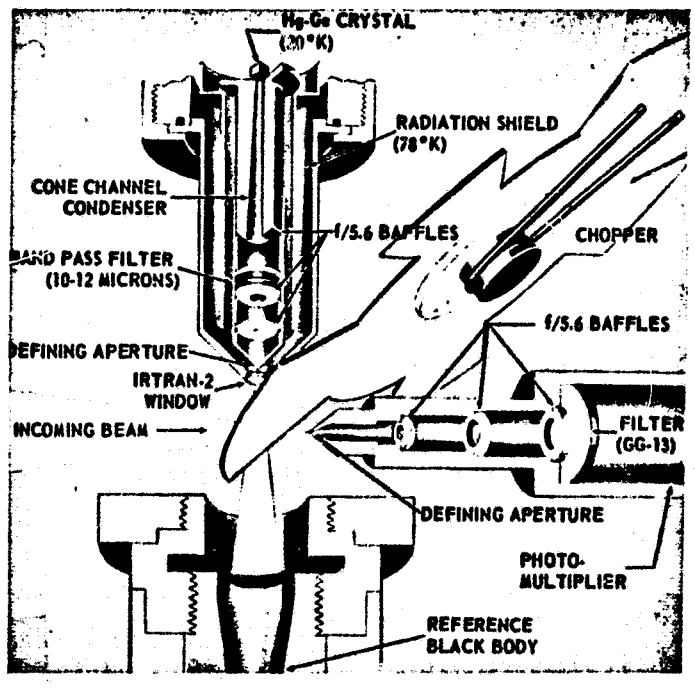


Figure 1. Cut-away view of the detector assembly showing the photomultiplier and mercury-doped germanium detector assemblies, the blackbody reference source, and the reflecting chopper.

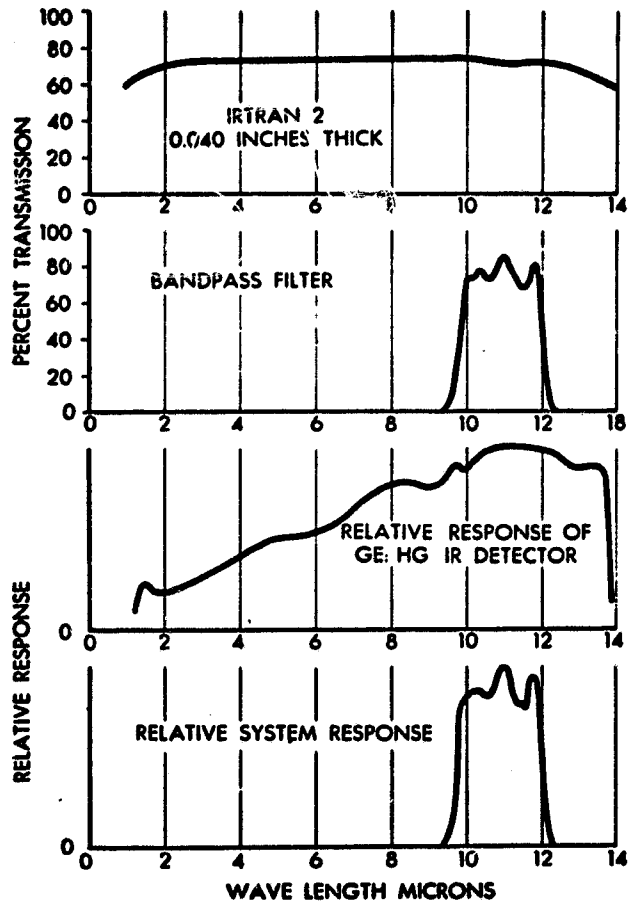


Figure 2. Transmission response of the infrared detector system.

Scanning was accomplished by moving the detector assembly of Figure 1 across the stationary image of the moon in a rectangular raster, the individual scan lines being separated by one resolution element of 10 arc-seconds or 17.0 km at the center of the disc.

Coarse tracking was done automatically by the telescope drive and fine tracking was done manually by guiding on a small bright feature viewed through a guide scope mounted near the primary mirror. Tracking accuracy was approximately 2 arc-seconds in most cases.

Incoming radiation was chopped at 430 Hz. Output signals were amplified, rectified synchronously, smoothed and recorded in analog form on magnetic tape. All data were later converted to digital format for ease in data reduction. A single tape in digital format contains about 200,000 data points, i.e., about 200 scan lines by about 1000 data points per line. A scan was made on the full moon just prior to the eclipse plus 8 during the eclipse. Each scan required about 17 minutes to complete. The scans are designated by an alphanumeric designation beginning with scan 8H and ending with 16H. Scan 8H was made immediately prior to earth shadow entry. Scan 13H is the first scan totally in the umbra and scan 16H, the last scan, is partially in the umbra and partially in the post-penumbra.

III. CALIBRATION

The calibration of the infrared detector took into account the changing air mass and water vapor for the different scan programs. For simplicity, a calibration was calculated for each scan program when the disk center was passed over; i.e., it was assumed this calibration for the center was valid for the entire moon. To be perfectly correct, it would have been necessary to calculate a calibration for each point taking into account its own air mass and water vapor in the line of sight. Obviously this would have enormously complicated the determination of brightness temperatures. It is to be noted that it took only ~17 minutes to scan the entire moon so in time one is off at best ~8 1/2 minutes.

A complete discussion of the manner in which the infrared detector was calibrated for a series of lunation measurements has been published (Saari and Shorthill, 1967). In that publication it was stated that the formula used for calculating the brightness temperature T of

the moon was approximated to several tenths of a degree by the formula

$$T = L/\log (K/V+1)$$

where L is a constant depending somewhat on air mass and precipitable water in the line of sight and V is the voltage output above the sky for temperature T. The constant K can be separated into two factors

$$K = K'K''$$

where K' depends on the atmospheric transmission, i.e., on the air mass and precipitable water PW in the line of sight, and K'' depends on the overall sensitivity of the telescope and detector amplifier system. It was assumed that K'' remained constant throughout the eclipse. Values of L and K' had been previously determined for a matrix of values of PW and air mass on a computer to allow interpolation for intermediate values. The topocentric zenith angles were calculated for the midpoint of each scan program; this information along with ground-based humidity measurements, allowed the precipitable water to also be calculated. Thus values of L and K' were calculated for each scan program.

In order to complete the calibration, a value for K", assumed constant through the eclipse, must be assigned. This was accomplished on scan 8H by calculating a temperature T_{ssp} for the subsolar point taking into account conduction into the surface, the local albedo, and directional effects. Appropriate values of L' and K' were determined and the voltage V_{ssp} read from the magnetic tape. Substitution into the equations leaves only one unknown, K", which was then calculated and used for determination of K for scan programs 9H through 16H. The infrared amplifier was run at higher gain settings during the totality of the eclipse, for which proper allowance was made.

Noise from the sky and from the measurement system was recorded when the scanner was off the moon. A standard deviation in voltage was computed from 14 sets of 45 to 190 data points to the right and left of the moon on certain scan lines. The rms value of these sets of data were inserted into each calibration equation to determine a "noise temperature." The results of the calculation are shown in Table 1. It will be noted that the lowest noise

temperatures were obtained on scans 13H, 14H, and 15H for which the amplifier gain was highest; this may indicate the presence of noise in the system after the amplifier.

Table 1. Noise Temperature for the Scans

Scan	Noise Temperature (K)
8H	139.5
9H	137.2
10H	139.7
11H	137.1
12H	129.3
13H	125.8
14H	126.1
15H	127.1
16H	138.2

IV. THE PARTICULATE SOIL MODEL AND DIFFERENTIAL ENERGY PARAMETER

The experimental data were compared with a particulate thermophysical model of the lunar soil (Winter and Saari, 1969). The model idealizes the soil as consisting of a cubic matrix of cubical particles in which radiation exchange between different layers of particles could be calculated. The model took into account the experimentally observed variation of specific heat with temperature. Moreover, conduction between contiguous

particles was allowed by connecting them with a thermal resistor R_s across their common edge. With this model it was determined that agreement with experimental data could be achieved if R_s was allowed to decrease with depth z; the formula used was

$$R_s(z)/R_s(0) = \alpha + (1 - \alpha) \exp(-z^2/z_o^2)$$

where $R_s(0)$, the value at the surface, was taken from a re-interpretation of laboratory experiments on thermal transport through powders as a function of particle size. The parameters α and z_o in the equation were chosen so as to give a best fit with experimental data. For the present publication, somewhat different values of the thermophysical parameters compared with the original paper were used, namely:

Bulk density of particles	2.7 g cm^{-3}
Size of cubes	45 microns
$R_s(0)$	6.6×10^7 sec K $joule^{-1}$
z_o	3.0 mm
α	1/5

It is to be noted that the experimental eclipse and nighttime cooling used for comparison with the model included both maria and upland data; actually it is known some maria or parts of maria are enhanced thermally compared to the uplands, so the model represents some kind of average between these two provinces.

The data in this report are plotted both in temperature normalized to the pre-eclipse value and in terms of a new measure of eclipse cooling, namely the differential energy parameter, DEP. The latter is defined by

$$DEP = (T(\tau)/T_i)^4 - I(\tau)$$

where τ is time normalized to penumbral duration and starting at the beginning of the penumbra for the point in question, $T(\tau)$ is its temperature at time τ, T_i is its initial temperature, and $I(\tau)$ is the solar flux at τ normalized to the pre-eclipse value. Use of such a differential parameter allows meaningful comparisons to be made during the penumbral phase of the eclipse when normalized temperature curves are insufficiently distinct. $I(\tau)$ is calculated from the eclipse geometry with the sun's limb darkening taken into account. It is to be noted that use of such a differential quantity places extra demands on the accuracy of the infrared measurements during the penumbral phase.

Theoretical cooling curves for the model were computed along the equator for $0°$, $\pm 10°$, $\pm 20°$, $\pm 40°$, and $\pm 60°$ in longitude. The

results were used to provide "interpolated" cooling curves for intermediate longitudes. No curves were run as a function of latitude because of time limitations. Thus it should be realized that comparison between the model and points at high latitude may be somewhat compromised. Actually it would be expected that points near the equator would cool more than points near the pole in terms of DEP or T/T_i because of the higher starting temperature.

V. DATA REDUCTION PROGRAM

The computer program used to process the data consisted of the following:

A. A routine which corrected for the effects of initial temperature distribution and time after penumbral entry for use on scan 13H data to produce a flat moon,

B. A routine which plotted the flat moon data in the form of a contour map of the lunar surface,

C. A coordinate conversion routine which calculated the scan line and data point number from the selenographic coordinates of each selected site, for each scan,

D. A routine which searched the data tapes and extracted the temperature in the immediate vicinity of each site,

E. A routine which calculated the most likely temperature at the site by means of a "hill climbing" technique,

F. A routine which calculated the normalized temperature, i.e., the scan temperature divided by the temperature of the last scan prior to penumbral entry (usually 8H but sometimes 9H),

G. A routine which calculated the normalized time τ, i.e., time normalized to penumbral duration,

H. A routine which calculated the insolation during the penumbra,

I. A routine which calculated the differential energy parameter DEP,

J. A routine for drawing a smooth curve between points of the temperature and differential energy parameter vs normalized time curves, and

K. A routine for plotting the data.

The output consisted of:

1. A contour map of the eclipsed moon showing differential temperature normalized to pre-eclipse temperature with the east-west asymmetry caused by the direction of the shadow removed.

2. Curves and tabular data for 400 selected sites of their cooling during the eclipse. Temperatures were normalized to pre-eclipse temperatures and time was normalized to penumbral duration so that these cooling curves could be compared with each other.

3. Curves and tabular data for 400 selected sites of the differential energy parameter derived from the cooling curves in the manner prescribed below. This parameter is a very sensitive measure of the thermophysical properties of the surface.

A. Flat Moon Routine (Scan 13H)

The scans made during totality are useful for showing the presence of thermally enhanced areas on the lunar disk; however, the fall-off in temperature toward the limb and the east-west asymmetry caused by the passage of the shadow makes it difficult to compare different areas on an equitable basis. Accordingly, a "flattened moon," one in which temperatures are compared with an unenhanced base, would be useful. Accordingly, studies were made to show how this could be accomplished.

Plots over the disk for scan 13H of temperature on unenhanced areas normalized to the pre-eclipse value showed, rather surprisingly, this ratio to be a function of x alone, where x is the distance east (+) or west (-) of the line

joining the poles (it is normalized to the disk radius). Accordingly, a flat moon parameter $\Delta(T/T_i)$ was defined by the expression

$$\Delta(T/T_i) = (T - T_b)/T_i$$

where T is the temperature read on scan 13H for the site in question, and T_b and T_i are the base and initial temperatures given below. As far as T_i is concerned, unpublished data shows that, as a function of x is concerned, it can be represented along the equator by

$$T_i = 337.4 + 60.6\sqrt{1 - x^2}, \quad x > 0$$

$$= 312.6 + 85.4\sqrt{1 - x^2}, \quad x < 0$$

As far as T_b is concerned, a similar expression was found to apply as follows

$$T_b = 143.754 + 38.441\sqrt{1 - x^2} + 10.3983\ x, \quad x > 0$$

$$= 133.143 + 49.052\sqrt{1 - x^2} + 10.3983\ x, \quad x < 0$$

where the term 10.3983x is an empirically determined quantity which provides an east-west asymmetry to allow for the longer

cooling in the west because of the direction of the passage of the shadow over the moon. Essentially, the above procedure provides a more or less empirically determined base for comparison with the scan 13H temperature measurements. Isocontours of $\Delta(T/T_i)$ for the scan showed that indeed it was successful in "flattening" the moon so that certain seas, like Mare Humorum, stood out above their environs. However, it was found near the limb 20° west of the north pole and 20° east of the south pole that the parameter went negative. Accordingly, an empirically determined correction was applied in these regions to remove this anomaly.

B. Contour Map Routine

This routine consists of the logic necessary to draw contours of the flat moon parameter calculated for scan 13H over the disk.

C. Selenographic to Scanner Coordinate Conversion

Site locations on the moon expressed in standard selenographic coordinates had to be converted to scan line number and

data point number (along a scan line) in order to extract temperature data for specific sites from the data tapes. Since the moon was librated at the time the scans were made, it was necessary to convert to a librated coordinate system. This was accomplished as follows:

Let: λ = longitude of the site,

β = latitude of the site,

S^* = semi-diameter of the moon,

ℓ = longitude of the subearth point, and

b = latitude of the subearth point.

Then: $\xi = \cos\beta\sin\lambda$

$\eta = \sin\beta$

$\zeta = \cos\beta\cos\lambda = \sqrt{1-\xi^2-\eta^2}$

and:
$$\begin{bmatrix} U \\ V \\ W \end{bmatrix} = \begin{bmatrix} \cos\ell & o & -\sin\ell \\ -\sin\ell\ \sin b & \cos b & -\cos\ell\ \sin b \\ \sin\ell\ \cos b & \sin b & \cos\ell\ \cos b \end{bmatrix} \begin{bmatrix} \xi \\ \eta \\ \zeta \end{bmatrix}$$

Following this it was necessary to insert a correction to account for the finite distance between the earth and moon. This was done as follows:

$$U' = U + UW \sin S^*$$

$$V' = V + VW \sin S^*$$

Finally, a number of small clearly identifiable features were located on each scan from contour map printouts of the data. Their ξ, η coordinates were read from the L and PL* catalog and converted to U', V' coordinates using the above equations. Scan line and data point number coordinates (X, Y) were read from the contour map printout. The relationship between the two coordinate systems was then determined from the equations:

$$X = C_1 + C_2U' + C_3V'$$

$$Y = C_4 + C_5U' + C_6V'$$

by evaluating the constants, C_n, through a least squares fitting process. Thirty to 84 points were selected on each scan for processing. The average calculated error was 0.35 of a resolution element, the values ranging from 0.21 to 0.66, the latter on scan 16H for which there were guiding difficulties.

---

*Lunar and Planetary Laboratory Catalog of Lunar Craters, University of Arizona.

D. Data Retrieval

The data retrieval program started with the latitudes and longitudes of the selected sites and, using the above coordinate transform routine, accomplished the following:

1. Calculated the fractional scan line and data point number of each site for each of the 9 data tapes.
2. Calculated the scan line number and data point of the 64 closest data points to each site.
3. Arranged the scan line numbers and data point numbers so that all data could be retrieved by a single reading of each of the data tapes.
4. Read the data tapes and retrieved the temperature data.

VI. SITE SELECTION

The four hundred sites selected for study in this report are divided into two groups. Sites 1 - 100 were selected to be representative of major topographic features. They are subdivided as follows:

24	dark albedo sites
22	bright albedo sites
19	mare sites
15	sites in major ray systems
15	spacecraft landing or impact sites
5	Apollo landing sites

The remaining three hundred sites, 101 - 400, are hot spots selected from the flat moon contour map generated as a part of this study. They represent a more or less uniform distribution over the disk.

Each site was assigned a site number and an alphanumeric code index for ease in determining its location on the disk. The first numeral of the alphanumeric designation is the quadrant in which the site is located. The letter and second numeral were arbitrarily assigned to identify the site within the quadrant. Thus, the designation 2A2 indicates that the site is A2 in the second quadrant.

Table 2 lists the sites in numerical order and Figure 3 shows their locations on the disk.

VII. EXPLANATION OF DATA SHEETS

Figures 4 and 5 show the flattened moon as generated by this study. In figure 4 the flattened moon contour map was painted with various shades of gray paint to show enhanced regions. Each increased gray step represents a step of 0.02 in $\Delta(T/T_i)$. The largest hot spot is the crater Tycho. There are more than

one thousand other hot spots. They appear to be concentrated more in mare regions. In addition, certain of the mare are slightly thermally enhanced over the uplands. Figure 5 shows the flattened moon contours divided into the four quadrants. The librated selenographic grid is drawn every 5° in latitude and longitude (separation in lor itude is increased toward the poles). Tic marks are indicated every degree in both longitude and latitude. The contour interval is in .01 units of $\Delta(T/T_i)$. The predominant level should be zero which represents the empirically determined base. In some cases negative levels are found which are explained in terms of (1) system noise, (2) inaccuracies in the empirically determined base, and (3) possible regions that cool more than typical upland material.

The four hundred data sheets show the thermal data for each of the four hundred sites. The abbreviations used are as follows:

LAMBDA - site longitude

BETA - site latitude

XI, ETA - site location in ξ, η coordinates

L+PL CODE - Lunar and Planetary Laboratory location code

ALBEDO - visible light albedo as measured on scan 8H-Visible

13H FLAT MOON DATA FM - the fractional enhancement of the site over background as measured on the flattened moon map. FM' refers to the value obtained by the hill climbing routine.

INITIAL TEMPERATURE - the average initial temperature of the site determined by averaging the pre-penumbral temperatures weighted inversely as their time from penumbral entry.

TAU-END OF TOTALITY - the time at the end of totality for the site measured from the time of penumbral entry in units normalized to penumbral duration.

DIFFERENTIAL ENERGY DATA

TAU - time normalized to penumbral duration. Certain particular values were selected for comparison purposes.

DEP - differential energy parameter determined as defined above.

DEP-SMOOTH - an average value calculated from the particulate model for an unenhanced area with the same longitude as the site.

δDEP - difference between the solid and dashed curves.

ECLIPSE TEMPERATURE DATA (for sites 1 - 100)

SCAN - alphanumeric designation of each scan.

TAU - time normalized to penumbral duration.

TEMP - measured value of site temperature from each of the scans.

TN - temperature normalized to pre-eclipse value

DEP - calculated value of differential energy parameter from each value of TEMP.

ECLIPSE TEMPERATURE DATA (for sites 101 - 400)

For these sites SCAN, TAU, and TEMP have the same meaning as above. However, since many of these sites are rather localized hot spots, it is possible in the scanner conversion process that the calculated location may not coincide with

the hot spot. Accordingly, for these sites a "hill-climbing" routine was utilized to search for a maximum value in a square data block roughly three resolution elements on a side. If the maximum value was on the boundary of the data block, the temperature value was read (using an interpolation routine) at the calculated position. In this case zeros were placed in the first column of OFFSET and the direction of offset in the second column. If not on the boundary, a second degree surface was fitted in the vicinity of the maximum value, and the position and value of the maximum on the surface determined. This temperature is designated TEMP', the value of normalized temperature TN', and the corresponding calculated value of the differential energy parameter is DEP'. The change in position necessary to go to the maximum value is given under the column OFFSET. The first number refers to the offset distance in units of a resolution element; the second number refers to the direction of offset where a value zero corresponds to an upward offset in the scan format, +0.5 to the left, -0.5 to the right, and $\pm$ 1 to a downward offset. TN' and DEP' are plotted on the graphs.

On the graphs the solid curves are the result of a best-fit to the experimental data determined with the aid of an oscilloscope.

In the left graph, the dashed line represents the interpolated DEP curve based on the particulate model. In the right graph, the dashed line is the normalized cooling curve calculated from the particulate model DEP curve.

In cases where the data point for a site on scan 16H falls in the post-penumbra, the curve was constrained to go through the data point and the point on the solid DEP curve at the end of totality; this post-penumbral portion of the curve was fit with the same shape as the insolation function would have during the post-penumbra. The normalized eclipse temperature curve (solid curve) in the right graph is calculated from the solid DEP curve.

VIII. DISCUSSION

In this section certain characteristics of the data will be discussed.

It is to be noted for the comparison (dashed) cooling curves drawn for DEP that for longitudes far in the east a negative excursion is shown for times just after $\tau = 0$. Likewise for longitudes far in the west a positive-going hump is shown just after $\tau = 0$. At the present time it is not possible to explain these characteristics of the curves; in fact, the negative excursion to the east may be rather unexpected. In any event, it will require a special theoretical study to explain this matter.

Site #316 is supposedly the hot spot found on or near the crater Olbers, but in the data extraction routine apparently this hot spot was missed. For each scan the hill-climbing routine apparently found the maximum value on the boundary of the data block searched since no offset is indicated. This leads to the conclusion that the cooling indicated for site 316 refers to an unenhanced point near Olbers and is not the hot spot as such. Examination of Lunar Earthside Chart (LEC-1A) shows

Olbers further to the north than given in the L & PL catalog. This may account for the fact that site #316 was not found to be a hot spot as expected.

Some hot spots are craters comparable to or smaller than the sensor resolution. In these cases the differential signal over the environs depends exactly how the anomaly was intersected in the scan raster pattern. Since this could vary from scan to scan, some of the inconsistencies noted in the cooling data could arise from this source. Thus for hot spots smaller than the resolution element either an areal correction must be applied (which necessitates an assumption on the size of the anomaly) or measurements must be made at higher resolution. It must be kept in mind, therefore, that the cooling data refers to that observed by a sensor with 10 arc-seconds resolution; data at higher resolution could well yield greater temperature differentials over the environs for small thermal features.

The "flattened moon" data presented in this report should be considered to be a first attempt at such a representation. For instance, there may be a question as to the validity of using

an initial temperature which is a function of east-west direction alone. The ideal method, perhaps, would be to determine a normalized temperature base for unenhanced upland points reading from both scans 8H and 13H. A surface in normalized temperature then could be fitted over the disk with which normalized temperature data from scans 8H and 13H for particular sites of interest could be compared. In any event, the representation of the data in terms of a differential normalized quantity is useful in comparing with other data, e.g., radar measurements, for the purpose of correlation.

IX. REFERENCES

[1]Saari, J. M. and Shorthill, R. W., "Thermal Anomalies on the Totally Eclipsed Moon of December 19, 1964," *Nature*, Vol. 205, No. 4975, March 1965, pp. 964-965.

[2]Shorthill, R. W. and Saari, J. M., "Nonuniform Cooling of the Eclipsed Moon: A Listing of Thirty Prominent Anomalies," *Science*, Vol. 150, No. 3693, October 1965, pp. 210-212.

[3]Saari, J. M. and Shorthill, R. W., "Isothermal and Isophotic Atlas of the Moon," *NASA Contractors Report CR-855*, September 1967, NASA.

[4]Winter, D. F. and Saari, J. M., "A Particulate Thermophysical Model of the Lunar Soil," *Astrophysical Journal*, Vol. 156, June 1969, pp. 1135-1157.

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00:00 UT 19 DEC 1966 1ST	2ND	3RD	4TH	TP
1	2A1	DARKEST POINT	28351	-62.81 W	17.81 N	-0.8469	0.3058	8.83	69.88	196.33	257.38	61.05
2	2A2	E. STRUVE	28397	-74.06 W	21.72 N	-0.8933	0.3700	7.84	69.48	193.57	255.20	61.63
3	2A3	N.E. CALVARIUS	28181	-61.81 W	6.23 N	-0.8762	0.1086	6.81	66.12	199.85	259.15	59.30
4	3A1	GRIMALDI	39027	-67.20 W	-4.00 S	-0.9196	-0.0698	4.69	62.70	201.99	260.01	58.02
5	2A4	W. GUDITHUISEN	26594	-54.8[illegible] W	32.68 N	-0.6882	0.5400	15.27	79.22	194.26	258.21	63.95
6	2A5	S. ARISTARCHUS	26394	-46.74 W	19.77 N	-0.6853	0.3382	13.85	75.44	199.71	261.30	61.59
7	2A6	N.E. BESSARION	24394	-31.15 W	19.68 N	-0.4871	0.3368	19.69	81.54	204.77	266.62	61.85
8	2A7	S. LAMBERT	23431	-21.05 W	24.42 N	-0.3271	0.4134	24.95	87.90	206.79	269.74	62.95
9	2A8	S. BEER	21461	-9.81 W	24.42 N	-0.1552	0.4134	30.00	93.22	211.05	274.28	63.22
10	2A9	S.E. ERATOSTHENES	20291	-5.65 W	12.00 N	-0.0963	0.2079	30.26	91.31	217.76	278.81	61.05
11	1A1	N. MANILIUS	11361	9.40 E	18.05 N	0.1553	0.3098	38.29	100.76	221.53	284.00	62.47
12	1A2	E. MANILIUS	13239	19.91 E	16.90 N	0.3259	0.2907	43.11	105.62	226.26	288.76	62.50
13	1A3	N.E. BESSEL	13461	23.27 E	24.22 N	0.3603	0.4102	45.03	109.06	223.79	287.82	64.04
14	1A4	S.E. LAMONNIER	14431	28.12 E	24.20 N	0.4299	0.4099	47.05	111.20	225.48	289.64	64.15
15	1A5	S.E. FRANZ	15276	36.37 E	14.92 N	0.5730	0.2574	50.03	112.51	233.23	295.71	62.48
16	1A6	CAUCHY	16130	39.32 E	5.87 N	0.6303	0.1022	50.64	111.57	238.50	299.43	60.93
17	4A1	N. MESSIER	47020	46.27 E	-0.05 S	0.7226	-0.0009	52.67	112.77	243.14	303.24	60.10
18	4A2	S.E. MESSIER	47180	51.34 E	-5.96 S	0.7766	-0.1039	53.66	112.97	246.66	305.97	59.31
19	4A3	W. WEBB	48060	59.35 E	-0.15 S	0.8603	-0.0026	56.58	116.82	246.61	306.85	60.24
20	1A7	MARE CRISIUM	18226	58.24 E	16.10 N	0.8169	0.2773	57.18	120.27	238.64	301.72	63.09
21	1A8	E. MARE CRISIUM	18350	63.45 E	17.70 N	0.8522	0.3040	58.39	121.86	238.74	302.21	63.47
22	3A2	N.W. MARE NUBIUM 1	31394	-11.42 W	-19.83 S	-0.1862	-0.3393	25.10	82.13	225.80	282.84	57.03
23	3A3	N.W. MARE NUBIUM 2	31383	-11.32 W	-19.57 S	-0.1849	-0.3349	25.15	82.20	225.77	282.83	57.06
24	3A4	N.W. MARE NUBIUM 3	31384	-11.00 W	-20.13 S	-0.1791	-0.3442	25.29	82.30	226.06	283.08	57.01
25	3A5	BRIGHTEST POINT	30564	-4.15 W	-32.90 S	-0.0607	-0.5432	28.20	84.39	231.94	288.13	56.18
26	1A9	N.E. GEMINUS	16599	58.00 E	36.00 N	0.6861	0.5878	56.02	123.45	225.78	293.21	67.43
27	1B1	N.W. NEWCOMB	15574	42.50 E	32.50 N	0.5698	0.5373	52.20	118.51	224.82	291.13	66.31
28	2B1	S.E. PHILOLAUS	21982	-28.01 W	67.50 N	-0.1797	0.9239	34.11	106.35	192.56	264.80	72.24
29	3A6	S.E. DARWIN	38357	-67.00 W	-22.00 S	-0.8535	-0.3746	5.61	62.07	208.37	264.83	56.46
30	3A7	N.W. PROSPER HENRY	37399	-60.00 W	-23.50 S	-0.7962	-0.3987	7.30	63.69	210.31	266.70	56.39
31	3A8	W. REGIOMONTANUS	30438	-2.00 W	-29.00 S	-0.0305	-0.4848	29.19	85.63	232.00	288.44	56.44
32	3A9	S.E. FOURIER	36542	-48.50 W	-31.00 S	-0.6420	-0.5150	11.49	67.49	215.90	271.90	56.00
33	3B1	S. PITATUS	31583	-12.00 W	-32.00 S	-0.1763	-0.5299	24.91	81.09	228.68	284.85	56.18
34	3B2	E. WILHELM	32658	-20.00 W	-42.50 S	-0.2522	-0.6756	22.50	78.12	228.30	283.92	55.62
35	3B3	E. LONGOMONTANUS	31795	-17.00 W	-49.00 S	-0.1918	-0.7547	24.15	79.56	230.75	286.16	55.41
36	3B4	N.E. CLAVIUS	30789	-7.50 W	-52.66 S	-0.0792	-0.7951	27.35	82.69	234.21	289.55	55.34
37	3B5	E. CLAVIUS	30825	-2.50 W	-57.99 S	-0.0231	-0.8480	28.92	84.14	236.22	291.44	55.22
38	3B6	N. BLANCANUS	31869	-20.50 W	-62.34 S	-0.1626	-0.8857	24.90	79.99	232.70	287.78	55.09
39	4A4	ZOLLNER	43124	19.00 E	-8.00 S	0.3224	-0.1392	40.49	99.11	235.75	294.37	58.63
40	4A5	N.W. CYRILLUS	43251	21.00 E	-12.00 S	0.3505	-0.2079	41.00	99.19	237.72	295.91	58.19
41	4A6	N.W. LEGENDRE	48426	68.00 E	-27.66 S	0.8212	-0.4643	53.45	110.51	254.09	311.14	57.05
42	4A7	S.E. PLAYFAIR	41466	10.50 E	-27.50 S	0.1616	-0.4617	34.75	91.41	236.79	293.45	56.66
43	4A8	N.E. JANSSEN	45637	45.00 E	-42.00 S	0.5255	-0.6691	44.68	100.67	249.13	305.12	55.99
44	4A9	W. DOVE	43743	29.99 E	-47.16 S	0.3399	-0.7333	39.34	95.02	244.92	300.60	55.68
45	4B1	N.E. LILIUS	40789	8.00 E	-53.00 S	0.0838	-0.7986	32.00	87.39	238.68	294.07	55.39
46	4B2	S.E. CURIER	41729	11.50 E	-52.50 S	0.1214	-0.7934	33.08	88.49	239.65	295.07	55.41
47	2B2	SINUS RORIS	24748	-45.00 W	51.00 N	-0.4450	0.7771	24.66	92.89	192.43	260.66	68.23
48	3B7	MARE HUMORUM	35471	-39.00 W	-24.00 S	-0.5749	-0.4067	13.68	70.15	216.37	272.84	56.48
49	2B3	SINUS IRIDUM	23771	-32.00 W	45.00 N	-0.3747	0.7071	26.07	93.19	196.62	263.74	67.12
50	3B8	MARE COGNITUM	33189	-23.00 W	-11.00 S	-0.3836	-0.1908	19.89	77.60	218.25	275.96	57.71

Table 2. List of Sites

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00.00 UT 19 DEC 1964 1ST	2ND	3RD	4TH	TP
51	2B4	MARE IMBRIUM	22643	-18.00 W	39.00 N	-0.2402	0.6293	29.32	95.43	202.47	268.58	66.11
52	3B9	MARE NUBIUM	32346	-15.00 W	-21.00 S	-0.2416	-0.3583	23.44	80.35	224.61	281.52	56.90
53	2B5	SINUS AESTUUM	21241	-8.00 W	12.00 N	-0.1361	0.2079	29.10	90.10	216.76	277.76	61.00
54	2B6	SINUS MEDII	20022	-1.00 W	1.00 N	-0.0174	0.0175	31.44	90.91	223.94	283.41	59.46
55	1B2	MARE VAPORUM	10252	3.00 E	13.00 N	0.0510	0.2250	34.66	96.07	221.06	282.47	61.41
56	1B3	MARE SERENITATIS	12484	18.00 E	26.00 N	0.2777	0.4384	42.85	107.12	220.95	285.22	64.27
57	1B4	LACUS MORTIS	13710	26.00 E	44.50 N	0.3127	0.7009	46.25	114.91	212.97	281.63	68.66
58	1B5	MARE TRANQUILLITATIS	14192	30.00 E	7.00 N	0.4963	0.1219	46.90	107.86	234.69	295.65	60.96
59	1B6	MARE FRIGORIS	12891	30.00 E	56.00 N	0.2939	0.8090	46.80	117.73	208.18	279.11	70.93
60	4B3	MARE NECTARIS	45256	35.00 E	-15.00 S	0.5540	-0.2588	46.62	104.65	243.88	301.91	58.03
61	1B7	LACUS SOMNIORUM	14671	36.00 E	37.50 N	0.4663	0.6088	49.85	117.15	219.93	287.23	67.30
62	4B4	JANSSEN	44753	40.83 E	-46.75 S	0.4480	-0.7284	42.41	98.15	247.76	303.50	55.74
63	4B5	MARE FECUNDITATIS	47096	52.00 E	-2.50 S	0.7873	-0.0436	54.28	114.09	245.68	305.49	59.81
64	1B8	MARE CRISIUM	18229	59.00 E	17.00 N	0.8197	0.2924	57.37	120.65	238.28	301.56	63.28
65	2A7	S.W. COPERNICUS	24053	-26.74 W	2.00 N	-0.4496	0.0349	18.97	78.13	212.44	271.61	59.17
66	2B8	W. COPERNICUS	24136	-26.00 W	9.33 N	-0.4326	0.1622	20.16	80.39	210.24	270.46	60.22
67	2B9	E. COPERNICUS	21187	-10.37 W	9.67 N	-0.1774	0.1679	27.65	88.22	216.63	277.20	60.57
68	3C1	N.W. TYCHO 1	33416	-20.33 W	-27.17 S	-0.3091	-0.4566	21.24	77.65	224.17	280.58	56.41
69	3C2	N.W. TYCHO 2	32592	-19.63 W	-31.50 S	-0.2865	-0.5225	21.76	77.91	225.62	281.77	56.15
70	3C3	N.E. TYCHO	30562	-4.00 W	-31.67 S	-0.0596	-0.5250	28.27	84.53	231.75	288.01	56.26
71	2C4	E. ARISTARCHUS	26358	-45.00 W	22.25 N	-0.6545	0.3786	15.04	77.11	199.49	261.55	62.06
72	2C2	S.E. ARISTARCHUS	25298	-38.00 W	16.00 N	-0.5918	0.2756	16.19	77.28	203.60	264.68	61.08
73	2C3	W. KEPLER	26172	-42.84 W	7.17 N	-0.6746	0.1248	12.86	72.50	204.79	264.43	59.64
74	2C4	N.W. KEPLER 1	26136	-39.90 W	9.25 N	-0.6331	0.1607	14.28	74.26	205.11	265.10	59.98
75	2C5	N.W. KEPLER 2	25131	-32.00 W	6.42 N	-0.5266	0.1118	17.13	76.82	208.89	268.59	59.69
76	2C6	E. KEPLER	26221	-39.67 W	12.00 N	-0.6244	0.2079	14.81	75.22	204.31	264.72	60.41
77	4B6	E. MADLER	45109	30.83 E	-10.84 S	0.5034	-0.1880	45.47	103.96	241.31	299.76	58.45
78	1B9	N. ARISTILLUS	10602	0.08 E	38.00 N	0.0011	0.6157	36.30	102.70	208.70	275.10	66.40
79	4B7	W. LANGRENUS	48107	54.49 E	-10.00 S	0.8017	-0.1736	54.03	112.85	248.66	307.47	58.82
80	1C1	RANGER VI IMP.	13166	21.42 E	9.35 N	0.3603	0.1625	43.23	104.42	230.32	291.51	61.18
81	3C4	RANGER VII IMP.	33159	-20.58 W	-10.67 S	-0.3455	-0.1851	21.02	78.79	219.16	276.93	57.77
82	3C5	RANGER VII P1F79	33230	-19.83 W	-11.42 S	-0.3325	-0.1980	21.35	79.05	219.72	277.42	57.70
83	3C6	RANGER VII P2F63	33139	-19.57 W	-11.32 S	-0.3284	-0.1963	21.47	79.19	219.80	277.52	57.72
84	3C7	RANGER VII P3F120	33240	-20.13 W	-11.00 S	-0.3378	-0.1908	21.22	78.96	219.46	277.20	57.74
85	3C8	RANGER VII P4F120	33149	-20.10 W	-10.90 S	-0.3375	-0.1891	21.23	78.99	219.44	277.19	57.75
86	1C2	RANGER VII IMP	14025	24.77 E	2.67 N	0.4185	0.0465	44.21	104.38	234.44	294.61	60.17
87	3C9	RANGER IX IMP	30242	-2.33 W	-12.91 S	-0.0397	-0.2235	29.71	87.49	227.83	285.61	57.78
88	3D1	SURVEYOR I	36094	-43.34 W	-2.33 S	-0.6857	-0.0407	11.71	70.12	207.70	266.11	58.41
89	3D2	SURVEYOR III	33096	-23.16 W	-3.33 S	-0.3927	-0.0581	20.18	78.73	215.70	274.24	58.55
90	1C3	SURVEYOR V	13093	23.18 E	1.50 N	0.3935	0.0262	43.37	103.34	234.25	294.22	59.97
91	2C7	SURVEYOR VI	20031	-1.48 W	0.46 N	-0.0259	0.0081	31.15	90.53	223.92	283.30	59.38
92	3D3	SURVEYOR VII	31656	-11.44 W	-41.02 S	-0.1496	-0.6563	25.47	81.20	230.88	286.61	55.73
93	2C8	LUNA IX	28192	-64.55 W	7.00 N	-0.8962	0.1219	6.29	65.67	199.05	258.43	59.38
94	2C9	LUNA XIII	28342	-62.05 W	18.87 N	-0.8359	0.3234	9.27	70.51	196.20	257.44	61.24
95	1C4	APOLLO SITE I	15065	34.00 E	2.67 N	0.5586	0.0465	48.24	108.57	237.97	298.31	60.33
96	1C5	APOLLO SITE II	14091	23.62 E	0.75 N	0.4006	0.0131	43.50	103.37	234.71	294.57	59.87
97	2D1	APOLLO SITE III	20021	-1.34 W	0.42 N	-0.0233	0.0073	31.22	90.60	224.00	283.38	59.38
98	3D4	APOLLO SITE IV	35096	-36.41 W	-3.50 S	-0.5925	-0.0610	14.35	72.70	210.52	268.87	58.35
99	2D2	APOLLO SITE V	26063	-41.67 W	1.67 N	-0.6645	0.0291	12.66	71.57	206.96	265.87	58.91
100	2D3	REINER GAMMA	28153	-58.80 W	7.40 N	-0.8482	0.1288	7.75	67.24	200.18	259.67	59.49

Table 2. Continued

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00•00 UT 19 DEC 1964 1ST	2ND	3RD	4TH	TP
101	4B8	ABULFEDA E	41268	10•18 E	-16•75 S	0•1692	-0•2682	35•49	93•05	234•37	291•92	57•56
102	4B9	ABULFEDA O	42202	12•26 E	-12•84 S	0•2070	-0•2222	36•82	94•80	234•25	292•23	57•98
103	3D5	AGATHARCHIDES A	34339	-28•40 W	-23•25 S	-0•4370	-0•3947	17•70	74•31	219•91	276•52	56•61
104	4C1	ALFRAGANUS	43029	19•01 E	-5•42 S	0•3242	-0•0945	40•75	99•69	234•94	293•89	58•95
105	3D6	ALPETRAGIUS B	31216	-6•84 W	-15•11 S	-0•1149	-0•2607	27•41	84•91	226•47	283•97	57•51
106	2D4	ANAXAGORAS	20955	-10•18 W	73•54 N	-0•0501	0•9590	38•32	111•96	193•76	267•40	73•64
107	2D5	ANGSTROM	25479	-41•59 W	29•87 N	-0•5756	0•4980	18•28	81•88	198•27	261•87	63•60
108	2D6	ANGSTROM A	25561	-41•11 W	30•93 N	-0•5640	0•5140	18•75	82•58	198•10	261•93	63•82
109	1C6	ARAGO	13160	21•41 E	6•17 N	0•3630	0•1074	42•96	103•62	231•68	292•34	60•66
110	1C7	ARGO B	13056	20•81 E	3•45 N	0•3547	0•0602	42•44	102•67	232•52	292•75	60•22
111	1C8	ARAGO D	13172	22•40 E	6•90 N	0•3783	0•1202	43•49	104•28	231•77	292•57	60•80
112	1C9	ARATUS	10470	4•56 E	23•59 N	0•0725	0•4002	36•56	99•98	217•03	280•46	63•43
113	1D1	ARATUS C-BS	11450	9•46 E	24•04 N	0•1501	0•4074	38•88	102•52	218•74	282•38	63•65
114	1D2	ARCHYTAS	10845	5•01 E	58•78 N	0•0453	0•8552	40•00	111•26	200•62	271•89	71•27
115	4C2	ARGELANDER D	40370	4•48 E	-17•63 S	0•0745	-0•3028	32•72	90•12	232•12	289•53	57•41
116	2D7	ARISTARCHUS	26470	-47•54 W	23•70 N	-0•6755	0•4019	14•59	76•88	198•36	260•65	62•29
117	1D3	ARISTILLUS	10515	1•24 E	33•86 N	0•0179	0•5572	36•26	101•77	211•02	276•52	65•50
118	1D4	ARISTILLUS A	10565	4•54 E	33•59 N	0•0660	0•5533	37•64	103•18	212•30	277•84	65•54
119	1D5	ARISTOTELES	11796	17•31 E	50•14 N	0•1907	0•7676	43•35	113•06	207•56	277•27	69•71
120	1D6	ATLAS A	15731	49•55 E	45•32 N	0•5350	0•7111	52•83	122•28	217•66	287•11	69•45
121	4C3	BEAUMONT D	44229	26•21 E	-17•07 S	0•4222	-0•2935	42•72	100•44	241•05	298•77	57•72
122	2D8	BESSARION	25285	-37•26 W	14•85 N	-0•5852	0•2563	16•26	77•17	204•22	265•12	60•90
123	2D9	BESSARION A	26219	-39•77 W	17•06 N	-0•6116	0•2934	15•73	76•96	202•67	263•90	61•23
124	2E1	BESSARION B	26238	-41•66 W	16•79 N	-0•6364	0•2889	14•97	76•12	202•14	263•30	61•16
125	2E2	BESSARION C	26257	-42•56 W	16•00 N	-0•6502	0•2757	14•67	75•68	202•10	263•11	61•01
126	2E3	BESSARION D	26323	-41•65 W	19•76 N	-0•6255	0•3381	15•62	77•29	201•23	262•90	61•67
127	1D7	BESSEL	12587	17•91 E	21•72 N	0•2857	0•3700	42•54	105•93	223•11	286•51	63•39
128	1D8	BESSEL A	13421	20•98 E	24•73 N	0•3252	0•4183	44•07	108•16	222•70	286•78	64•08
129	1D9	BESSEL D	13405	19•84 E	27•30 N	0•3016	0•4587	43•72	108•31	220•92	285•52	64•60
130	1E1	BESSEL E	12353	15•43 E	19•61 N	0•2506	0•3356	41•25	104•17	223•20	286•11	62•92
131	1E2	BESSEL H	13403	19•98 E	25•66 N	0•3080	0•4331	43•69	107•95	221•84	286•10	64•25
132	3D7	BIRT	31338	-8•54 W	-22•33 S	-0•1374	-0•3800	26•38	83•25	227•70	284•56	56•86
133	1E3	BLAGG	10022	0•40 E	1•17 N	0•0070	0•0204	32•17	91•68	224•51	284•02	59•51
134	2E4	BODE	20141	-2•43 W	6•72 N	-0•0421	0•1171	31•28	91•55	221•20	281•47	60•27
135	2E5	BODE A	20115	-1•15 W	9•00 N	-0•0199	0•1565	32•16	92•82	220•88	281•54	60•66
136	2E6	BODE B	20155	-3•07 W	8•74 N	-0•0529	0•1520	31•18	91•75	220•15	280•72	60•57
137	2E7	BODE C	20281	-4•74 W	12•22 N	-0•0808	0•2117	30•74	91•85	218•06	279•17	61•11
138	2E8	BODE G	20161	-3•54 W	6•33 N	-0•0613	0•1103	30•68	90•87	220•86	281•05	60•19
139	3D8	BONPLAND D	33107	-18•23 W	-10•14 S	-0•3080	-0•1761	22•14	79•99	220•00	277•85	57•85
140	3D9	BONPLAND E	33176	-22•61 W	-9•76 S	-0•3789	-0•1695	20•11	77•95	218•02	275•86	57•84
141	1E6	BOSCOVICH A	12116	12•65 E	9•46 N	0•2160	0•1646	39•06	100•08	226•66	287•68	61•02
142	2E9	BRAYLEY	25365	-36•89 W	20•89 N	-0•5608	0•3566	17•66	79•61	202•41	264•37	61•96
143	2F1	BRAYLEY C	25396	-39•42 W	21•38 N	-0•5913	0•3645	16•81	78•81	201•44	263•44	62•00
144	2F2	BRAYLEY D	25304	-32•83 W	20•02 N	-0•5094	0•3424	19•07	80•95	204•07	265•94	61•88
145	1E5	BRUCE	10002	0•40 E	1•17 N	0•0070	0•0204	32•17	91•68	224•51	284•02	59•51
146	4C4	BUCH DB	42631	17•01 E	-37•87 S	0•2309	-0•6139	36•41	92•46	240•62	296•68	56•05
147	3E1	COMPANUS	34416	-27•73 W	-27•97 S	-0•4110	-0•4690	18•28	74•58	221•60	277•90	56•30
148	2F3	CARLINI	23535	-24•06 W	33•71 N	-0•3391	0•5550	25•74	90•53	202•43	267•22	64•79
149	2F4	CARLINI A	23567	-26•57 W	35•32 N	-0•3650	0•5781	25•18	90•25	201•09	266•16	65•07
150	2F5	CARLINI D	22534	-15•99 W	32•95 N	-0•2311	0•5439	28•83	93•66	205•40	270•23	64•83

Table 2. Continued

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00.00 UT 19 DEC 1964 1ST	2ND	3RD	4TH	TP
151	2F6	CARLINI G	23553	-25.00 W	32.60 N	-0.3561	0.5387	25.10	89.63	202.51	267.03	64.53
152	1E6	CASSINI A	10664	4.77 E	40.48 N	0.0632	0.6492	38.44	105.54	209.03	276.13	67.10
153	1E7	CASSINI C	11606	7.80 E	41.71 N	0.1013	0.6654	39.71	107.19	209.36	276.83	67.48
154	1E8	CASSINI K	10750	4.08 E	45.10 N	0.0502	0.7084	38.63	106.78	206.60	274.75	68.15
155	4C5	CATHARINA F	43363	23.09 E	-19.51 S	0.3696	-0.3339	41.07	98.52	240.34	297.79	57.44
156	1E9	CAUCHY	16116	38.68 E	9.59 N	0.6163	0.1666	50.65	112.21	236.61	298.16	61.56
157	1F1	CAUCHY M	15163	35.08 E	7.67 N	0.5696	0.1336	49.09	110.25	236.25	297.41	61.16
158	1F2	CAYLEY	12066	15.12 E	3.95 N	0.2602	0.0689	39.76	99.96	229.94	290.13	60.19
159	4C6	CENSORINUS	45030	32.68 E	-0.40 S	0.5399	-0.0069	47.40	107.25	238.66	298.51	59.85
160	1F3	CEPHEUS A	15645	46.46 E	41.03 N	0.5469	0.6564	52.64	121.02	220.05	288.43	68.38
161	1F4	CHLADNI	10016	1.14 E	3.99 N	0.0198	0.0696	32.80	92.74	223.81	283.74	59.93
162	3E2	CICHUS B	32574	-19.30 W	-33.17 S	-0.2767	-0.5471	21.99	78.05	226.19	282.25	56.06
163	3E3	CICHUS C	33505	-21.82 W	-33.56 S	-0.3097	-0.5528	21.03	77.05	225.36	281.39	56.02
164	1F5	CONON	10336	1.98 E	21.67 N	0.0321	0.3692	35.14	98.12	216.89	279.87	62.98
165	4C7	COOK G	47312	48.70 E	-18.89 S	0.7108	-0.3237	50.83	108.59	249.03	306.78	57.76
166	2F7	COPERNICUS	23136	-19.98 W	9.65 N	-0.3369	0.1676	22.99	83.37	212.57	272.95	60.38
167	1F6	DANIELL	14527	31.17 E	35.41 N	0.4218	0.5794	48.28	114.98	219.91	286.60	66.70
168	3E4	DARNEY C	34224	-25.98 W	-14.12 S	-0.4249	-0.2439	18.50	75.88	218.02	275.39	57.37
169	3E5	DAVY A	31231	-7.71 W	-12.21 S	-0.1311	-0.2115	27.12	84.90	225.24	283.01	57.78
170	3E6	DAVY G	30187	-5.06 W	-10.36 S	-0.0867	-0.1798	28.53	86.53	225.86	283.87	58.01
171	1F7	DAWES	14229	26.34 E	17.21 N	0.4238	0.2959	45.99	108.70	228.53	291.24	62.71
172	2F8	DELISLE	24499	-34.60 W	29.97 N	-0.4919	0.4995	20.77	84.53	200.31	264.06	63.76
173	1F8	DESEILLIGNY	13326	20.57 E	21.11 N	0.3278	0.3601	43.69	107.02	224.42	287.76	63.34
174	1F9	DIONYSIUS	12094	17.32 E	2.79 N	0.2973	0.0486	40.72	100.78	231.32	291.38	60.06
175	2F9	DIOPHANTUS	24496	-34.24 W	27.61 N	-0.4986	0.4634	20.28	83.57	201.15	264.44	63.29
176	2G1	DIOPHANTUS B	24468	-32.48 W	29.06 N	-0.4694	0.4857	21.32	84.94	201.26	264.87	63.62
177	4C8	DOLLOND E	42167	15.73 E	-10.24 S	0.2668	-0.1778	38.72	97.03	235.02	293.33	58.31
178	3E7	DOPPELMAYER K	35490	-40.66 W	-23.98 S	-0.5953	-0.4064	13.09	69.55	215.81	272.28	56.47
179	2G2	DRAPER C	23249	-21.47 W	17.06 N	-0.3499	0.2933	23.42	84.99	209.31	270.89	61.58
180	4C9	E. PICKERING	41025	7.02 E	-2.87 S	0.1221	-0.0500	35.14	94.22	228.88	287.96	59.08
181	1G1	EGEDE A	11718	10.48 E	51.48 N	0.1133	0.7824	41.23	111.04	205.20	275.01	69.81
182	3E8	EUCLIDES	34182	-29.50 W	-7.38 S	-0.4883	-0.1285	17.10	75.10	214.45	272.45	58.00
183	3E9	EUCLIDES B	34290	-30.30 W	-11.77 S	-0.4939	-0.2039	16.64	74.19	215.55	273.10	57.55
184	3F1	EUCLIDES C	34282	-30.00 W	-13.27 S	-0.4866	-0.2296	16.76	74.17	216.16	273.57	57.41
185	2G3	EULER	24349	-29.14 W	23.27 N	-0.4473	0.3951	21.28	83.83	204.28	266.83	62.55
186	2G4	EULER G	24325	-27.33 W	20.68 N	-0.4295	0.3531	21.50	83.60	205.81	267.92	62.11
187	4D1	FAYE	40366	3.84 E	-21.41 S	0.0623	-0.3651	32.17	89.23	232.76	289.83	57.07
188	3F2	FLAMSTEED	36097	-44.25 W	-4.48 S	-0.6956	-0.0781	11.26	69.41	208.11	266.26	58.15
189	3F3	FLAMSTEED A	36173	-42.92 W	-7.87 S	-0.6745	-0.1370	11.63	69.44	209.67	267.47	57.80
190	3F4	FLAMSTEED B	36180	-43.71 W	-5.94 S	-0.6873	-0.1034	11.39	69.39	208.76	266.76	58.00
191	3F5	FLAMSTEED C	37019	-46.22 W	-5.50 S	-0.7187	-0.0958	10.51	68.53	207.80	265.82	58.02
192	3F6	FRA MAURO C	33069	-21.64 W	-5.43 S	-0.3671	-0.0947	20.76	79.08	217.03	275.35	58.32
193	3F7	FRA MAURO D	33008	-17.58 W	-4.81 S	-0.3009	-0.0838	22.73	81.18	218.56	277.02	58.45
194	3F8	FRA MAURO H	32067	-15.53 W	-4.15 S	-0.2671	-0.0724	23.76	82.32	219.23	277.80	58.56
195	2G5	GAMBART A	23021	-18.71 W	0.96 N	-0.3208	0.0168	22.63	81.78	216.14	275.29	59.15
196	2G6	GAMBART B	22003	-11.56 W	2.15 N	-0.2002	0.0376	26.24	85.68	218.84	278.27	59.44
197	2G7	GAMBART C	22005	-11.79 W	3.33 N	-0.2040	0.0580	26.24	85.84	218.32	277.92	59.60
198	2G8	GAMBART G	22003	-12.02 W	1.94 N	-0.2081	0.0339	25.99	85.39	218.71	278.11	59.40
199	3F9	GASSENDI A	36216	-39.72 W	-15.53 S	-0.6157	-0.2677	12.89	70.00	213.31	270.42	57.11
200	3G1	GASSENDI F	36285	-44.91 W	-15.02 S	-0.6819	-0.2592	10.98	68.10	211.41	268.52	57.11

Table 2. Continued

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00.00 UT 19 DEC 1964 1ST	2ND	3RD	4TH	TP
201	3G2	GASSENDI G	36278	-44.56 W	-16.74 S	-0.6719	-0.2881	11.18	68.16	212.11	269.08	56.97
202	3G3	GASSENDI J	35356	-36.99 W	-21.59 S	-0.5595	-0.3680	14.22	70.88	216.26	272.92	56.66
203	3G4	GASSENDI L	36324	-41.62 W	-20.34 S	-0.6228	-0.3476	12.44	69.16	214.27	270.99	56.72
204	3G5	GASSENDI M	35391	-39.01 W	-18.59 S	-0.5966	-0.3188	13.28	70.15	214.57	271.44	56.87
205	3G6	GASSENDI O	35337	-35.01 W	-21.93 S	-0.5322	-0.3734	15.00	71.65	217.07	273.72	56.65
206	3G7	GASSENDI Y	35385	-38.41 W	-20.89 S	-0.5804	-0.3565	13.65	70.35	215.54	272.24	56.70
207	1G2	GEMINUS G	16541	48.55 E	30.84 N	0.6435	0.5127	54.11	120.18	227.38	293.45	66.07
208	1G3	GLAISHER	17232	49.43 E	13.20 N	0.7396	0.2283	54.62	117.01	238.08	300.47	62.40
209	4D2	GOCLENIUS A	47162	50.39 E	-6.93 S	0.7648	-0.1207	53.24	112.41	246.69	305.87	59.17
210	1G4	GODIN	11073	10.20 E	1.83 N	0.1770	0.0320	37.15	96.94	228.62	288.40	59.79
211	1G5	GROVE	14614	32.97 E	40.32 N	0.4149	0.6471	48.71	116.59	217.35	285.23	67.88
212	2G9	GRUITHUISEN	25534	-39.68 W	32.83 N	-0.5365	0.5422	19.80	84.05	197.96	262.21	64.25
213	3G8	GUERICKE C	31290	-11.53 W	-11.55 S	-0.1959	-0.2002	25.29	83.09	223.35	281.14	57.80
214	3G9	GUERICKE E	32107	-12.02 W	-10.00 S	-0.2051	-0.1737	25.13	83.08	222.66	280.61	57.95
215	3H1	GUERICKE H	32241	-14.25 W	-12.43 S	-0.2404	-0.2152	23.95	81.62	222.43	280.10	57.67
216	1G6	HADLEY A	11402	6.58 E	25.00 N	0.1039	0.4226	37.65	101.41	217.17	280.94	63.76
217	3H2	HAIDINGER J	33621	-24.35 W	-37.93 S	-0.3252	-0.6147	20.48	76.28	225.66	281.45	55.79
218	3H3	HEINSIUS A	32633	-17.51 W	-39.68 S	-0.2315	-0.6385	23.14	78.90	228.47	284.22	55.75
219	2H1	HEIS D	24532	-31.03 W	31.62 N	-0.4390	0.5243	22.53	86.71	200.90	265.07	64.18
220	1G7	HERCULES C	14627	35.33 E	42.71 N	0.4249	0.6783	49.31	117.81	216.42	284.92	68.50
221	1G8	HERCULES G	14732	39.08 E	46.38 N	0.4349	0.7239	50.05	119.50	214.88	284.33	69.45
222	3H4	HERIGONIUS	35243	-33.93 W	-13.33 S	-0.5431	-0.2306	15.12	72.48	214.67	272.04	57.36
223	2H2	HERONOTUS A	27336	-52.03 W	21.49 N	-0.7335	0.3664	12.61	74.43	197.78	259.60	61.82
224	3H5	HERSCHEL	30039	-2.07 W	-5.67 S	-0.0360	-0.0988	30.34	88.92	225.73	284.31	58.59
225	3H6	HERSCHEL C	30058	-3.16 W	-5.00 S	-0.0550	-0.0871	29.84	88.49	225.02	283.67	58.65
226	3H7	HESIODUS B	32465	-17.47 W	-27.10 S	-0.2673	-0.4556	22.45	78.89	225.28	281.72	56.44
227	3H8	HESIODUS E	32436	-15.29 W	-27.86 S	-0.2332	-0.4673	23.41	79.81	226.35	282.75	56.41
228	4D3	HIPPARCHUS C	41142	8.25 E	-7.39 S	0.1423	-0.1287	35.35	93.89	230.90	289.44	58.54
229	4D4	HIPPARCHUS G	41028	7.43 E	-5.02 S	0.1289	-0.0875	35.15	93.97	229.78	288.59	58.81
230	4D5	HIPPARCHUS K	40132	2.19 E	-6.96 S	0.0379	-0.1212	32.37	90.87	228.06	286.55	58.50
231	2H3	HORTENSIUS A	25007	-30.70 W	4.37 N	-0.5091	0.0762	17.45	76.87	210.08	269.50	59.42
232	2H4	HORTENSIUS B	24089	-29.44 W	5.27 N	-0.4895	0.0918	18.10	77.67	210.27	269.84	59.57
233	2H5	HORTENSIUS C	24140	-26.70 W	5.94 N	-0.4469	0.1034	19.41	79.12	211.13	270.83	59.71
234	4D6	ISIDORUS A	45143	33.18 E	-8.01 S	0.5419	-0.1397	46.79	105.61	241.39	300.21	58.82
235	4D7	ISIDORUS D	45057	34.08 E	-6.26 S	0.5588	-0.0[illegible]	47.59	106.92	240.54	299.86	59.33
236	4D8	ISIDORUS E	45039	32.61 E	-5.37 S	0.5366	-0.09[illegible]	46.85	106.01	240.36	299.52	59.16
237	1G9	JANSEN B	14148	26.66 E	10.67 N	0.4410	0.185[illegible]	45.71	107.23	231.79	293.31	61.52
238	1H1	JANSEN C	14267	29.18 E	16.22 N	0.4681	0.2794	47.15	109.74	230.06	292.65	62.58
239	1H2	JANSEN D	14257	28.43 E	15.71 N	0.4583	0.2707	46.81	109.28	230.05	292.52	62.47
240	1H3	JANSEN E	14254	27.83 E	14.47 N	0.4520	0.2498	46.48	108.70	230.44	292.66	62.22
241	1H4	JANSEN F	15201	31.10 E	12.61 N	0.5041	0.2183	47.76	109.71	232.54	294.49	61.95
242	1H5	JANSEN G	14136	26.01 E	9.31 N	0.4328	0.1617	45.32	106.59	232.16	293.43	61.27
243	1H6	JANSEN L	14285	30.09 E	14.70 N	0.4849	0.2537	47.46	109.77	231.15	293.47	62.31
244	1H7	JANSEN U	15220	32.32 E	11.95 N	0.5230	0.2070	48.23	110.09	233.29	295.15	61.86
245	1H8	JANSEN T	15149	33.46 E	11.35 N	0.5406	0.1968	48.67	110.44	233.98	295.75	61.77
246	4D9	KAISER C	41539	9.69 E	-36.54 S	0.1352	-0.5954	33.71	89.79	237.84	293.92	56.08
247	2H6	KEPLER	26104	-37.97 W	8.13 N	-0.6091	0.1414	14.87	74.72	206.14	265.99	59.85
248	2H7	KEPLER A	25182	-36.09 W	7.13 N	-0.5845	0.1242	15.50	75.23	207.14	266.87	59.73
249	2H8	KEPLER C	26157	-41.79 W	10.01 N	-0.6563	0.1739	13.67	73.74	204.23	264.30	60.07
250	3H9	KIES A	33437	-22.69 W	-28.30 S	-0.3396	-0.4741	20.33	76.64	223.58	279.90	56.32

Table 2. Continued

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00.00 UT 19 DEC 1964 1ST	2ND	3RD	4TH	TP
251	3J1	KIES D	32482	-18.47 W	-24.89 S	-0.2874	-0.4208	21.96	78.53	224.27	280.85	56.58
252	2H9	KIRCH	20673	-5.60 W	39.21 N	-0.0756	0.6322	34.20	100.70	206.32	272.82	66.51
253	2J1	KIRCH E	20599	-6.91 W	36.47 N	-0.0967	0.5968	33.23	99.08	207.06	272.91	65.85
254	2J2	LA HIRE A	23447	-23.42 W	28.49 N	-0.3493	0.4770	24.79	88.50	204.47	268.18	63.71
255	2J3	LA HIRE B	23446	-22.99 W	27.66 N	-0.3460	0.4642	24.79	88.34	204.92	268.47	63.55
256	3J2	LALANDE	31047	-8.61 W	-4.44 S	-0.1492	-0.0775	27.16	85.79	222.39	281.03	58.63
257	3J3	LALANDE A	31161	-9.77 W	-6.62 S	-0.1686	-0.1153	26.43	84.78	222.58	280.94	58.36
258	3J4	LALANDE B	31055	-8.99 W	-3.12 S	-0.1561	-0.0544	27.06	85.85	221.78	280.57	58.79
259	2J4	LAMBERT	23423	-20.94 W	25.77 N	-0.3219	0.4347	25.27	88.49	206.34	269.56	63.22
260	2J5	LANSBERG A	25010	-31.09 W	0.18 N	-0.5164	0.0032	16.86	75.73	211.32	270.19	58.87
261	3J5	LANSBERG D	35005	-30.59 W	-3.00 S	-0.5082	-0.0523	16.84	75.33	212.57	271.06	58.48
262	3J6	LANSBERG E	35003	-30.28 W	-1.83 S	-0.5040	-0.0319	17.06	75.69	212.31	270.96	58.63
263	4E1	LANGRENUS	48165	60.92 E	-8.90 S	0.8634	-0.1547	55.86	114.87	249.85	308.86	59.01
264	4E2	LANGRENUS C	48069	60.07 E	-5.60 S	0.8625	-0.0975	56.12	115.57	248.68	308.13	59.45
265	4E3	LANGRENUS D	48118	55.75 E	-10.43 S	0.8129	-0.1810	54.31	113.09	249.08	307.86	58.77
266	2J6	LAPLACE A	23629	-26.85 W	43.68 N	-0.3267	0.6906	27.34	94.28	198.33	265.28	66.94
267	2J7	LAPLACE F	22731	-19.79 W	45.46 N	-0.2375	0.7127	30.19	97.72	199.68	267.22	67.54
268	3J7	LETRONNE F	37116	-46.05 W	-9.22 S	-0.7106	-0.1603	10.49	68.13	209.10	266.73	57.64
269	2J8	LE VERRIER D	21663	-12.31 W	39.69 N	-0.1641	0.6386	31.65	98.07	203.99	270.41	66.42
270	2J9	LE VERRIER E	22617	-16.95 W	42.35 N	-0.2155	0.6736	30.46	97.36	201.57	268.47	66.90
271	1H9	LICK D	17272	52.71 E	13.16 N	0.7747	0.2276	55.62	118.05	238.95	301.39	62.44
272	1J1	LINNE	11486	11.79 E	27.70 N	0.1809	0.4649	40.24	104.71	217.81	282.28	64.47
273	1J2	LINNE A	12418	14.36 E	28.93 N	0.2170	0.4838	41.46	106.26	218.11	282.91	64.80
274	1J3	LUTHER	13544	24.12 E	33.15 N	0.3421	0.5469	45.66	111.66	219.11	285.11	66.00
275	1J4	LYELL B	16204	38.46 E	14.39 N	0.6024	0.2485	50.81	113.24	234.18	296.61	62.43
276	1J5	MACLEAR	13138	61.61 E	67.40 N	0.3381	0.9232	49.24	123.30	203.83	277.88	74.05
277	1J6	MACROBIUS A	16313	40.37 E	19.54 N	0.6104	0.3345	51.68	115.15	232.04	295.51	63.47
278	1J7	MACROBIUS C	16365	45.02 E	20.84 N	0.6611	0.3558	53.31	117.14	232.66	296.48	63.83
279	4E4	MADLER	44189	29.77 E	-10.99 S	0.4874	-0.1907	45.00	103.41	240.95	299.36	58.42
280	1J8	MANILIUS	11254	9.09 E	14.47 N	0.1529	0.2499	37.80	99.60	223.00	284.81	61.81
281	1J9	MANILIUS D	11212	7.01 E	13.23 N	0.1188	0.2289	36.66	98.20	222.67	284.21	61.54
282	1K1	MANNERS	13047	20.01 E	4.58 N	0.3411	0.0799	42.17	102.55	231.75	292.13	60.38
283	1K2	MARALDI	15333	34.85 E	19.39 N	0.5390	0.3320	49.60	112.92	230.37	293.69	63.32
284	1K3	MARALDI B	15284	36.79 E	14.35 N	0.5802	0.2479	50.17	112.56	233.65	296.04	62.39
285	1K4	MARALDI M	16300	39.09 E	17.46 N	0.6015	0.3001	51.16	114.19	232.78	295.81	63.03
286	2K1	MARIUS	27250	-50.75 W	11.88 N	-0.7578	0.2058	10.87	71.10	200.91	261.14	60.23
287	2K2	MARIUS A	27201	-45.96 W	12.60 N	-0.7016	0.2181	12.60	73.01	202.09	262.50	60.41
288	2K3	MARIUS B	27208	-47.25 W	16.33 N	-0.7047	0.2811	12.90	73.89	200.58	261.57	60.99
289	2K4	MARIUS BC	27216	-48.22 W	15.37 N	-0.7190	0.2650	12.37	73.19	200.59	261.41	60.82
290	2K5	MARIUS C	27214	-47.56 W	13.98 N	-0.7161	0.2416	12.31	72.92	201.19	261.80	60.60
291	2K6	MARIUS D	26199	-44.96 W	11.41 N	-0.6927	0.1978	12.74	72.98	202.77	263.01	60.24
292	2K7	MARIUS M	27289	-54.83 W	17.38 N	-0.7801	0.2987	10.78	71.84	198.23	259.30	61.07
293	2K8	MARKOV E	25767	-59.88 W	50.52 N	-0.5499	0.7719	21.47	89.34	190.12	257.99	67.87
294	1K5	MASKELYNE	15003	30.04 E	2.17 N	0.5002	0.0379	46.51	106.70	236.69	296.88	60.19
295	1K6	MASKELYNE G	14044	26.70 E	2.31 N	0.4489	0.0403	45.05	105.20	235.34	295.50	60.15
296	1K7	MASKELYNE H	15038	32.28 E	4.92 N	0.5321	0.0857	47.71	108.37	236.42	297.08	60.66
297	1K8	MASKELYNE K	14095	29.69 E	3.24 N	0.4945	0.0566	46.46	106.80	236.14	296.48	60.35
298	1K9	MASKELYNE N	15009	30.34 E	5.34 N	0.5030	0.0930	46.92	107.61	235.53	296.22	60.69
299	1L1	MASKELYNE W	14081	29.21 E	0.86 N	0.4880	0.0150	46.03	106.01	236.88	296.86	59.98
300	1L2	MASKELYNE X	14062	27.39 E	1.32 N	0.4600	0.0230	45.27	105.29	236.00	296.02	60.02

Table 2. Continued

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00.00 UT 19 DEC 1964 1ST	2ND	3RD	4TH	TP
301	1L3	MASON C	14608	33.83 E	42.87 N	0.4080	0.6804	48.84	117.33	215.95	284.45	3.50
302	1L4	MENELAUS	12268	15.95 E	16.27 N	0.2638	0.2801	41.23	103.52	225.00	287.29	62.29
303	1L5	MENELAUS A	12229	13.40 E	17.06 N	0.2215	0.2934	40.10	102.48	223.60	285.98	62.38
304	4E5	MESSIER A	47023	46.92 E	-1.99 S	0.7299	-0.0348	52.69	112.51	244.05	303.87	59.82
305	4E6	MESSIER B	47041	48.00 E	-0.88 S	0.7430	-0.0153	53.17	113.17	243.96	303.96	60.00
306	4E7	MESSIER G	47099	52.86 E	-5.38 S	0.7937	-0.0938	54.20	113.60	246.88	306.29	59.41
307	2K9	MILICHIUS	24197	-30.18 W	10.01 N	-0.4951	0.1738	18.40	78.66	208.38	268.64	60.25
308	2L1	MILICHIUS A	25126	-32.03 W	9.25 N	-0.5234	0.1608	17.50	77.61	207.94	268.05	60.11
309	4E8	MOLTKE	44001	24.18 E	-0.57 S	0.4096	-0.0100	43.64	103.32	235.42	295.11	59.69
310	3J8	MOSTING	31001	-17.14 W	-5.85 S	-0.2932	-0.1019	22.87	81.21	219.09	277.43	58.34
311	3J9	MOSTING A	30095	-5.17 W	-3.20 S	-0.0900	-0.0559	28.97	87.81	223.52	282.36	58.84
312	3K1	MOSTING C	31043	-8.08 W	-1.80 S	-0.1405	-0.0314	27.63	86.60	221.74	280.71	58.97
313	1L6	NEWCOMB Q	15580	42.98 E	30.40 N	0.5880	0.5060	52.45	118.30	226.29	292.16	65.85
314	4E9	NICOLAI A	42697	23.63 E	-42.42 S	0.2959	-0.6746	38.17	94.03	243.08	298.94	55.86
315	3K2	NICOLLET	32307	-12.45 W	-21.91 S	-0.2000	-0.3731	24.60	81.46	225.93	282.79	56.86
316	2L2	OLBERS (?)	29162	-75.69 W	7.12 N	-0.9615	0.1239	4.33	63.66	197.26	256.59	59.33
317	3K3	OPELT K	32283	-17.04 W	-13.59 S	-0.2869	-0.2350	22.59	80.11	221.58	279.10	57.53
318	3K4	PALISA P	31126	-7.33 W	-9.66 S	-0.1258	-0.1678	27.44	85.50	224.63	282.68	58.05
319	1L7	PALLAS N	10102	0.51 E	7.02 N	0.0088	0.1223	32.79	93.17	222.38	282.76	60.38
320	3K5	PARRY F	32153	-14.72 W	-7.65 S	-0.2518	-0.1332	23.96	82.11	220.73	278.90	58.17
321	4F1	PETAVIUS B	47383	57.10 E	-19.85 S	0.7897	-0.3396	53.00	110.72	251.32	309.04	57.72
322	2L3	PIAZZI SMYTH	20646	-3.23 W	41.85 N	-0.0420	0.6672	35.52	102.69	205.91	273.09	67.18
323	1L8	PICARD	17285	54.57 E	14.55 N	0.7887	0.2513	56.19	118.92	238.66	301.39	62.73
324	4F2	PICCOLOMINI D	44475	32.30 E	-26.92 S	0.4765	-0.4528	43.76	100.65	244.96	301.86	56.89
325	4F3	PICCOLOMINI K	44443	29.76 E	-25.68 S	0.4473	-0.4334	42.98	99.95	243.91	300.88	56.97
326	4F4	PICCOLOMINI L	44494	33.79 E	-26.11 S	0.4994	-0.4401	44.45	101.42	245.38	302.35	56.97
327	4F5	PICCOLOMINI M	44466	31.89 E	-27.89 S	0.4670	-0.4677	43.45	100.26	244.93	301.75	56.81
328	2L4	PICO B	21782	-15.34 W	46.44 N	-0.1823	0.7246	31.94	99.82	200.55	268.44	67.89
329	2L5	PICO C	20773	-6.62 W	47.16 N	-0.0784	0.7332	35.09	103.39	202.68	270.98	68.30
330	2L6	PICO E	21638	-10.28 W	42.95 N	-0.1306	0.6814	33.04	100.27	203.32	270.54	67.23
331	3K6	PITATUS J	32404	-13.51 W	-26.48 S	-0.2091	-0.4459	24.15	80.66	226.71	283.22	56.51
332	2L7	PITON B	20603	-0.15 W	39.29 N	-0.0020	0.6332	36.37	103.05	208.04	276.72	66.68
333	1L9	PLANA C	13637	27.12 E	42.76 N	0.3347	0.6789	46.68	114.97	214.31	282.60	68.29
334	2L8	PLATO D	21766	-14.50 W	49.59 N	-0.1623	0.7614	32.89	101.54	199.66	268.30	68.64
335	2L9	PLATO E	21776	-16.12 W	49.67 N	-0.1797	0.7623	32.39	101.00	199.22	267.83	68.61
336	2M1	PLATO J	20755	-4.56 W	48.97 N	-0.0522	0.7544	36.07	104.86	202.49	271.27	68.79
337	2M2	PLATO M	21769	-15.48 W	53.03 N	-0.1605	0.7989	33.33	102.74	198.25	267.66	69.41
338	1M1	PLINIUS	13286	23.63 E	15.34 N	0.3866	0.2646	44.69	106.98	228.44	290.74	62.30
339	4F6	POLYBIUS A	44339	27.76 E	-21.78 S	0.4325	-0.3710	42.75	100.03	242.57	299.86	57.29
340	4F7	POLYBIUS B	43483	25.58 E	-25.54 S	0.3896	-0.4312	41.34	98.29	242.37	299.31	56.94
341	1M2	POSIDONIUS P	13585	27.55 E	33.57 N	0.3854	0.5529	46.98	113.16	219.94	286.12	66.18
342	1M3	PROCLUS	17207	46.95 E	16.12 N	0.7020	0.2776	53.89	116.81	235.84	298.76	62.91
343	1M4	PROTAGORAS	10872	7.32 E	55.89 N	0.0714	0.8280	40.48	111.18	202.37	273.08	70.71
344	3K7	PTOLEMAEUS A	30114	-0.80 W	-8.51 S	-0.0138	-0.1479	30.76	89.04	227.20	285.47	58.27
345	2M3	PYTHEAS	23325	-20.57 W	20.55 N	-0.3290	0.3510	24.43	86.66	208.39	270.61	62.23
346	4F8	RABBI LEVI L	43526	23.05 E	-34.69 S	0.3219	-0.5692	39.08	95.36	242.49	298.76	56.28
347	2M4	REINER A	27078	-51.38 W	5.13 N	-0.7782	0.0895	9.62	68.87	202.81	262.06	59.25
348	2M5	REINER B	27039	-47.33 W	5.65 N	-0.7317	0.0984	11.04	70.41	203.84	263.21	59.37
349	2M6	REINER C	27086	-51.40 W	3.50 N	-0.7801	0.0610	9.42	68.45	203.32	262.35	59.04
350	2M7	REINHOLD N	24022	-25.38 W	1.58 N	-0.4285	0.0275	19.55	78.68	213.14	272.27	59.13

Table 2. Continued

NO	LOC	NAME	L+PL	LAMBDA	BETA	XI	ETA	MIN. TO CONTACT FROM 00.00 UT 19 DEC 1964 1ST	2ND	3RD	4TH	TP
351	1M5	RHAETICUS B	11012	6.83 E	1.61 N	0.1189	0.0281	35.45	95.14	227.22	286.91	59.69
352	4F9	RICCIUS E	43044	26.44 E	-39.91 S	0.3415	-0.6416	39.51	95.52	243.91	299.91	56.00
353	1M6	RITTER B	13025	18.95 E	3.26 N	0.3242	0.0569	41.54	101.70	231.82	291.98	60.16
354	1M7	ROSS	13260	21.73 E	11.68 N	0.3626	0.2025	43.56	105.15	229.41	291.01	61.59
355	1M8	ROSS B	13139	20.17 E	11.38 N	0.3380	0.1973	42.81	104.32	228.93	290.43	61.51
356	1M9	ROSS C	13210	18.94 E	11.61 N	0.3179	0.2013	42.26	103.78	228.33	289.85	61.52
357	1N1	ROSS F	14108	24.23 E	10.91 N	0.4030	0.1893	44.64	106.15	230.74	292.25	61.51
358	1N2	ROSS G	14118	24.85 E	10.67 N	0.4129	0.1852	44.90	106.38	231.09	292.57	61.48
359	1N3	ROSS H	13167	21.80 E	10.24 N	0.3655	0.1778	43.48	104.82	230.09	291.43	61.34
360	4G1	ROSSE	45340	34.96 E	-17.90 S	0.5453	-0.3073	46.19	103.91	244.48	302.21	57.73
361	4G2	ROTHMANN A	44409	27.68 E	-29.45 S	0.4045	-0.4916	41.61	98.27	243.63	300.29	56.66
362	4G3	ROTHMANN C	43477	25.06 E	-28.63 S	0.3718	-0.4791	40.71	97.41	242.59	299.29	56.70
363	4G4	SACROBOSCO C	42450	16.14 E	-24.05 S	0.2539	-0.4076	37.53	94.51	238.45	295.42	56.98
364	4G5	SAUNDER A	42016	12.29 E	-4.00 S	0.2124	-0.0698	37.65	96.67	231.59	290.61	59.02
365	1N4	SECCHI A	16065	41.47 E	3.29 N	0.6611	0.0574	51.25	111.80	240.30	300.85	60.55
366	1N5	SILBERSCHLAG	12110	12.20 E	6.22 N	0.2101	0.1083	38.55	99.03	227.80	288.28	60.49
367	1N6	SILBERSCHLAG A	12122	13.23 E	6.94 N	0.2272	0.1208	39.12	99.74	227.95	288.57	60.62
368	1N7	SINAS	15115	31.62 E	8.86 N	0.5180	0.1541	47.73	109.04	234.47	295.77	61.30
369	1N8	SINAS E	15106	31.00 E	9.65 N	0.5078	0.1676	47.53	108.95	233.89	295.31	61.43
370	1N9	SINAS H	15147	33.61 E	10.05 N	0.5450	0.1745	48.65	110.19	234.64	296.19	61.54
371	1P1	SINAS J	15147	33.76 E	10.35 N	0.5466	0.1797	48.73	110.33	234.55	296.16	61.60
372	1P2	SOSIGENES	12195	17.61 E	8.71 N	0.2990	0.1514	41.39	102.38	229.05	290.05	61.00
373	1P3	SOSIGENES A	13113	18.49 E	7.76 N	0.3142	0.1351	41.72	102.58	229.81	290.67	60.86
374	2M8	SUESS	27037	-47.65 W	4.35 N	-0.7369	0.0758	10.77	69.96	204.16	263.35	59.19
375	2M9	SUESS F	27002	-44.62 W	1.16 N	-0.7023	0.0203	11.51	70.32	206.14	264.95	58.81
376	1P4	TACQUET	13218	19.18 E	16.61 N	0.3149	0.2859	42.74	105.19	226.11	288.54	62.43
377	1P5	TACQUET C	13243	21.08 E	13.46 N	0.3498	0.2328	43.40	105.29	228.34	290.23	61.89
378	1P6	TARUNTIUS E	16049	40.23 E	5.52 N	0.6428	0.0962	50.96	111.85	238.95	299.84	60.89
379	1P7	TARUNTIUS F	16046	40.54 E	3.94 N	0.6485	0.0687	50.96	111.59	239.73	300.37	60.64
380	1P8	TARUNTIUS G	17053	49.45 E	1.87 N	0.7594	0.0326	53.91	114.35	243.32	303.76	60.44
381	1P9	TARUNTIUS H	17060	49.80 E	0.37 N	0.7638	0.0064	53.89	114.10	244.01	304.22	60.21
382	1R1	TARUNTIUS K	17081	51.53 E	0.65 N	0.7829	0.0114	54.46	114.74	244.38	304.65	60.27
383	1R2	TARUNTIUS P	17080	51.54 E	0.09 N	0.7830	0.0016	54.41	114.60	244.60	304.78	60.19
384	1R3	THEAETETUS	10680	5.99 E	36.98 N	0.0834	0.6016	38.59	104.93	211.14	277.48	66.34
385	3K8	THEBIT A	30376	-4.88 W	-21.57 S	-0.0791	-0.3677	28.10	65.06	229.06	286.02	56.96
386	2N1	TIMAEUS	20808	-0.55 W	62.82 N	-0.0044	0.8896	38.90	110.86	197.99	269.95	71.95
387	2N2	TIMOCHARIS F	22404	-13.06 W	26.69 N	-0.2019	0.4492	28.91	92.50	208.90	272.50	63.60
388	2N3	T. MAYER	24266	-29.16 W	15.54 N	-0.4694	0.2679	19.74	80.91	206.89	268.06	61.16
389	2N4	T. MAYER C	24221	-25.97 W	12.22 N	-0.4280	0.2116	20.60	81.27	209.26	269.93	60.68
390	2N5	T. MAYER G	24239	-27.12 W	17.33 N	-0.4352	0.2978	20.94	82.46	207.04	268.55	61.51
391	4G6	TORRICELLI B	44084	29.16 E	-2.59 S	0.4868	-0.0452	45.67	105.15	238.11	297.60	59.48
392	4G7	TORRICELLI C	44034	25.99 E	-2.69 S	0.4378	-0.0470	44.25	103.67	236.90	296.32	59.42
393	1R4	TRALLES A	16446	47.05 E	27.43 N	0.6497	0.4606	53.84	119.11	229.21	294.49	65.27
394	1R5	TRIESNECKER	10067	3.63 E	4.18 N	0.0631	0.0729	34.08	94.09	224.84	284.85	60.01
395	3K9	TURNER	32022	-13.21 W	-1.38 S	-0.2284	-0.0241	25.11	84.05	219.33	278.27	58.94
396	3L1	TYCHO	31648	-11.16 W	-43.24 S	-0.1410	-0.6850	25.68	81.32	231.42	287.06	55.64
397	1R6	VITRUVIUS	14390	31.27 E	17.65 N	0.4947	0.3032	48.10	111.00	230.08	292.98	62.90
398	1R7	VITRUVIUS A	15330	33.84 E	17.75 N	0.5304	0.3049	49.15	112.12	230.91	293.89	62.98
399	1R8	VITRUVIUS E	14361	29.26 E	18.65 N	0.4631	0.3198	47.31	110.36	228.85	291.91	63.05
400	1R9	VITRUVIUS G	15254	34.63 E	13.92 N	0.5516	0.2406	49.29	111.55	233.14	295.40	62.26

Table 2. Continued

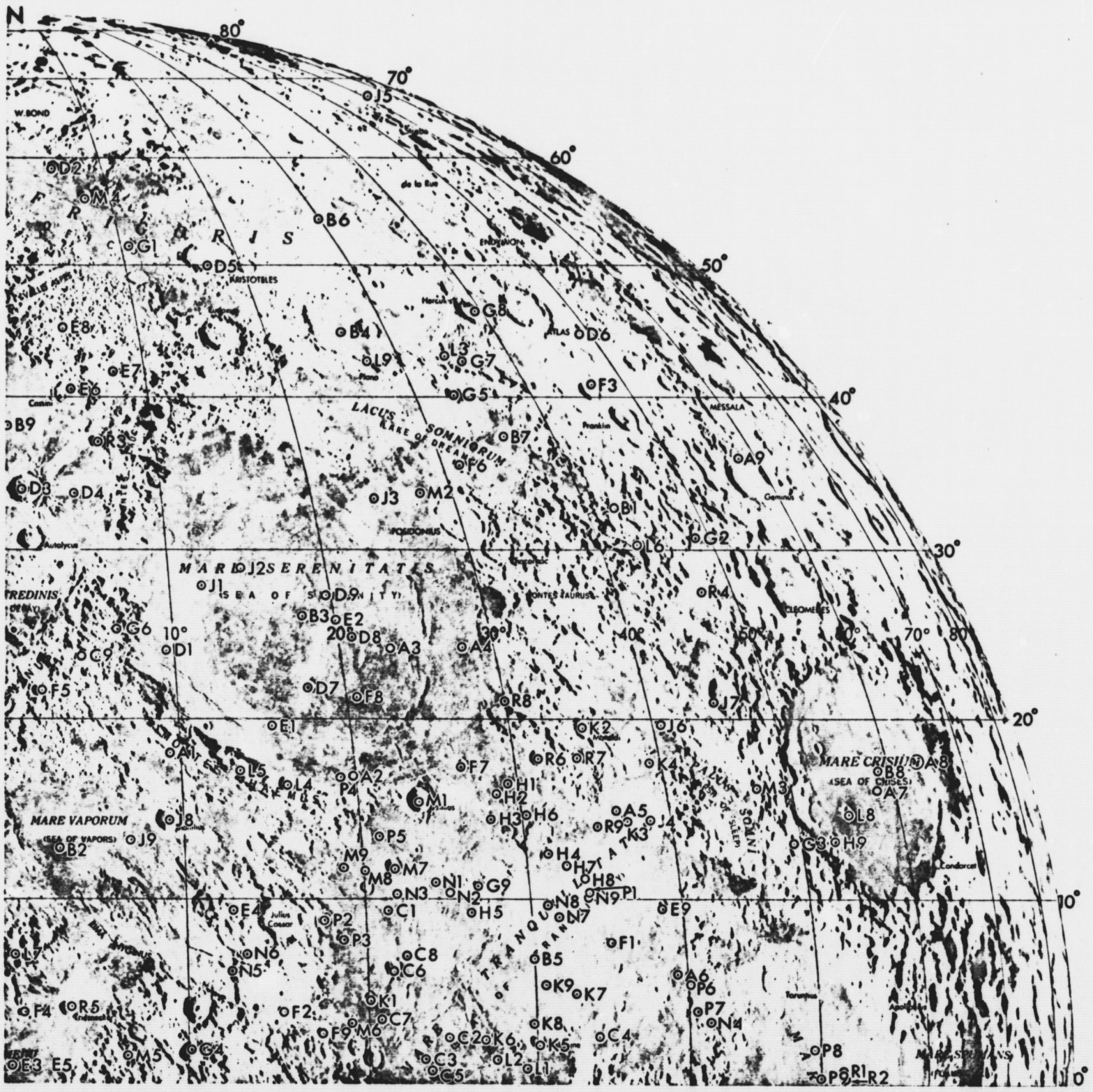


Figure 3a. Location of sites on quadrant I of the lunar disk.



Figure 3b. Location of sites on quadrant II of the lunar disk.

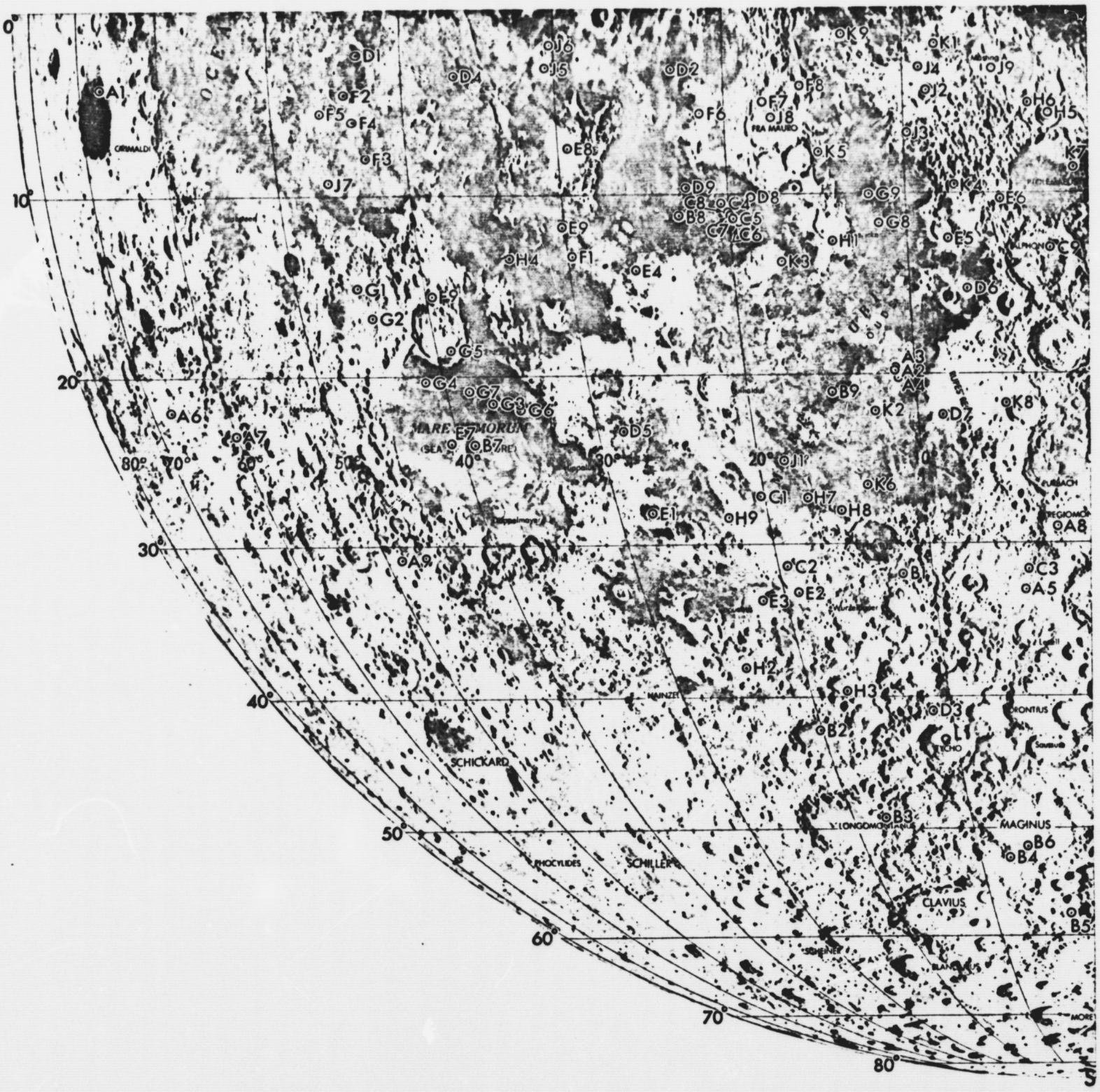


Figure 3c. Location of sites on quadrant III of the lunar disk.

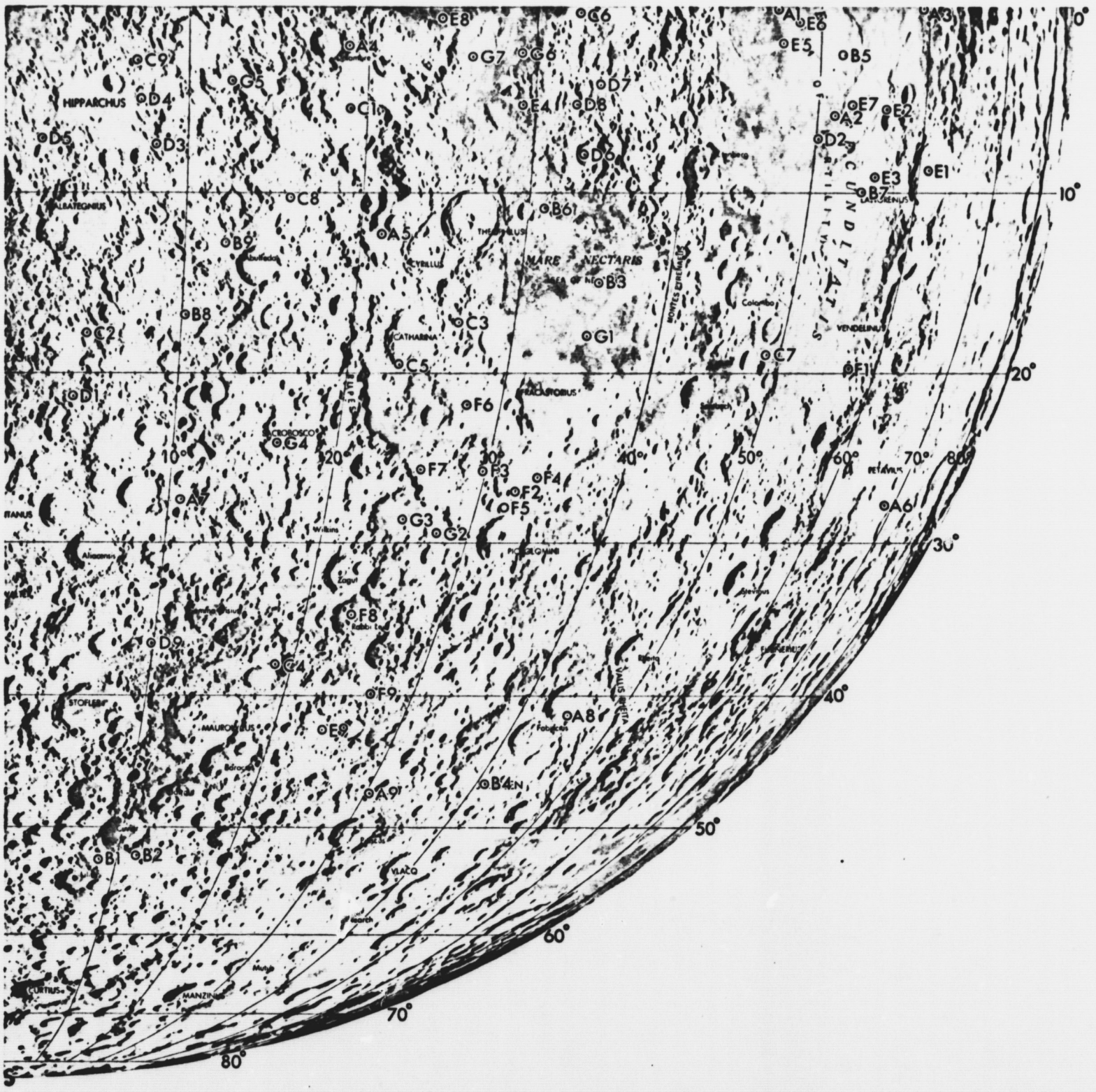


Figure 3d. Location of sites on quadrant IV of the lunar disk.

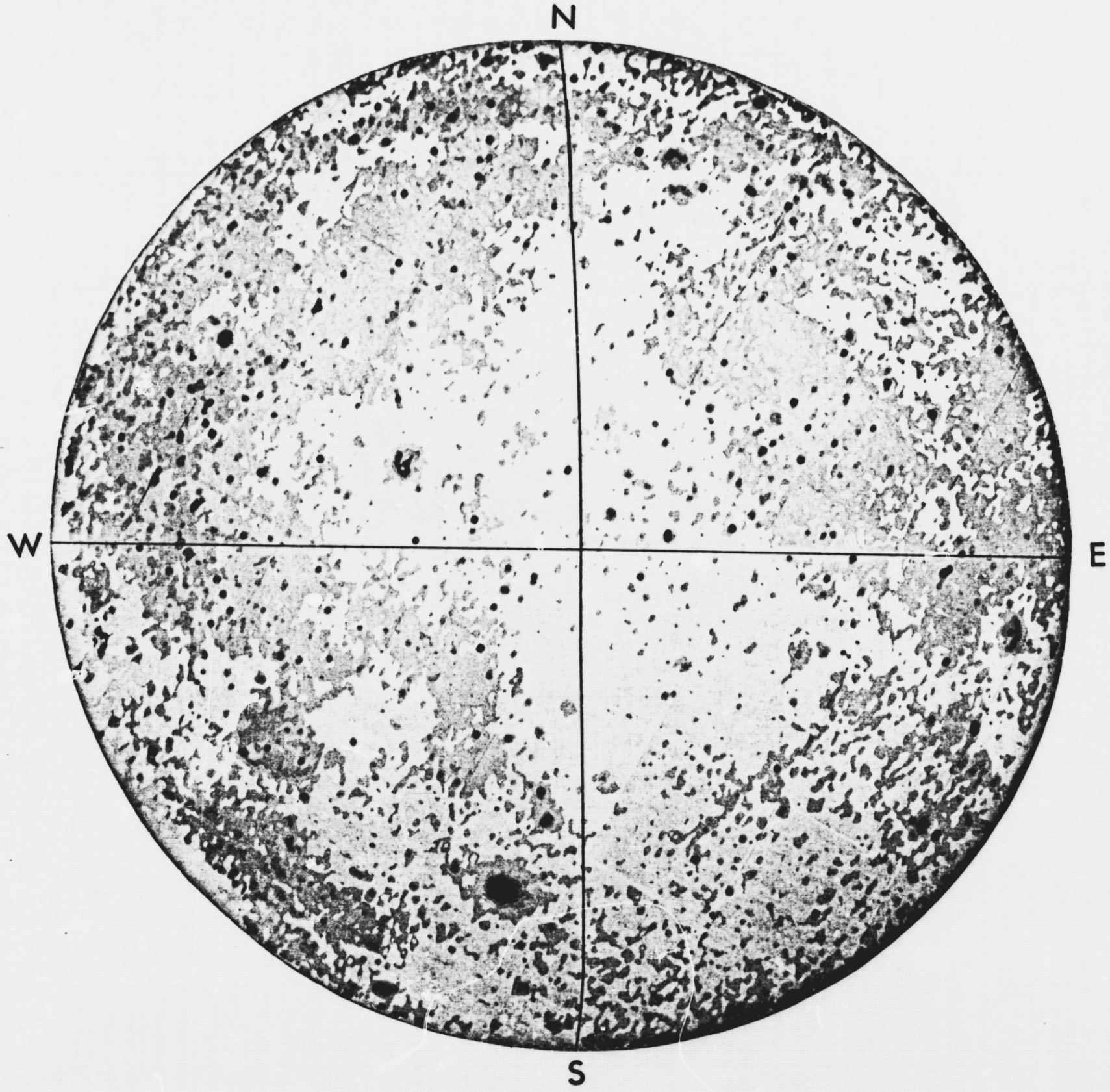


Figure 4. Earthside hemisphere showing flattened moon normalized differential thermal contour map of Scan 13H made midway into totality with the effects of initial temperature and eclipse geometry removed. Each gray level represents a step of 0.02 in $\Delta(T/T_i)$.

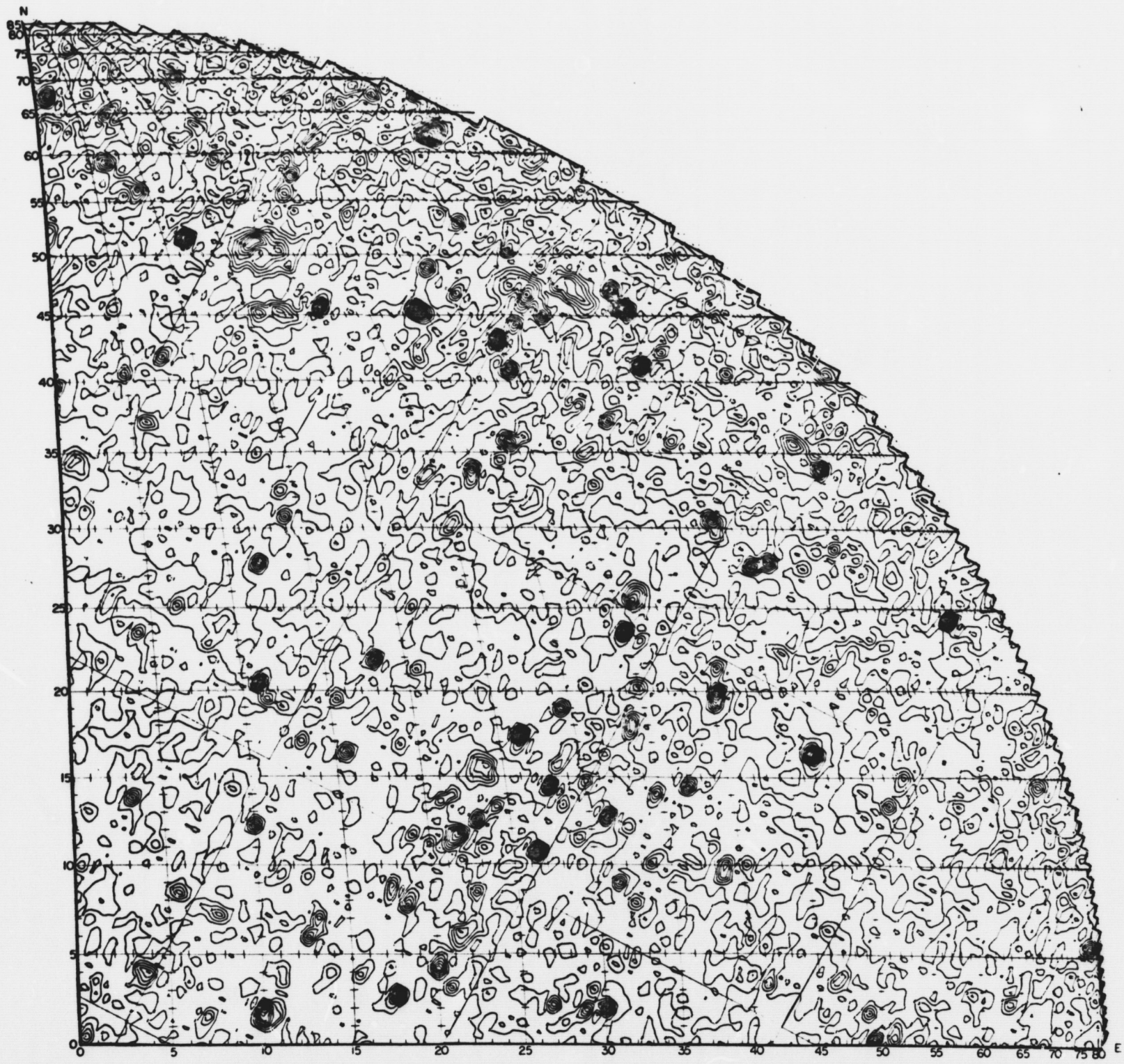


Figure 5a. Flattened moon normalized differential thermal contour map for quadrant I of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.

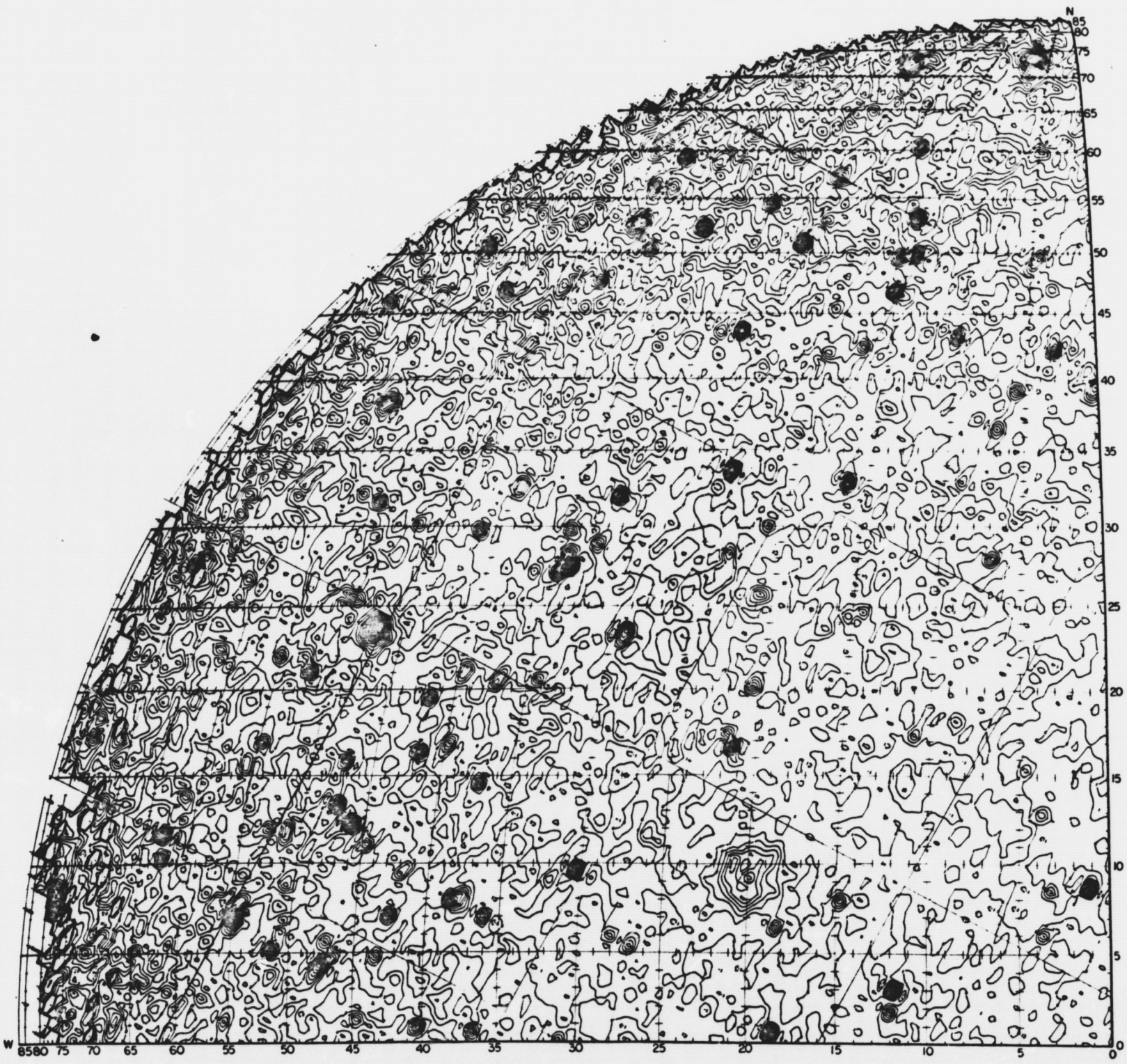


Figure 5b. Flattened moon normalized differential thermal contour map for quadrant II of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.

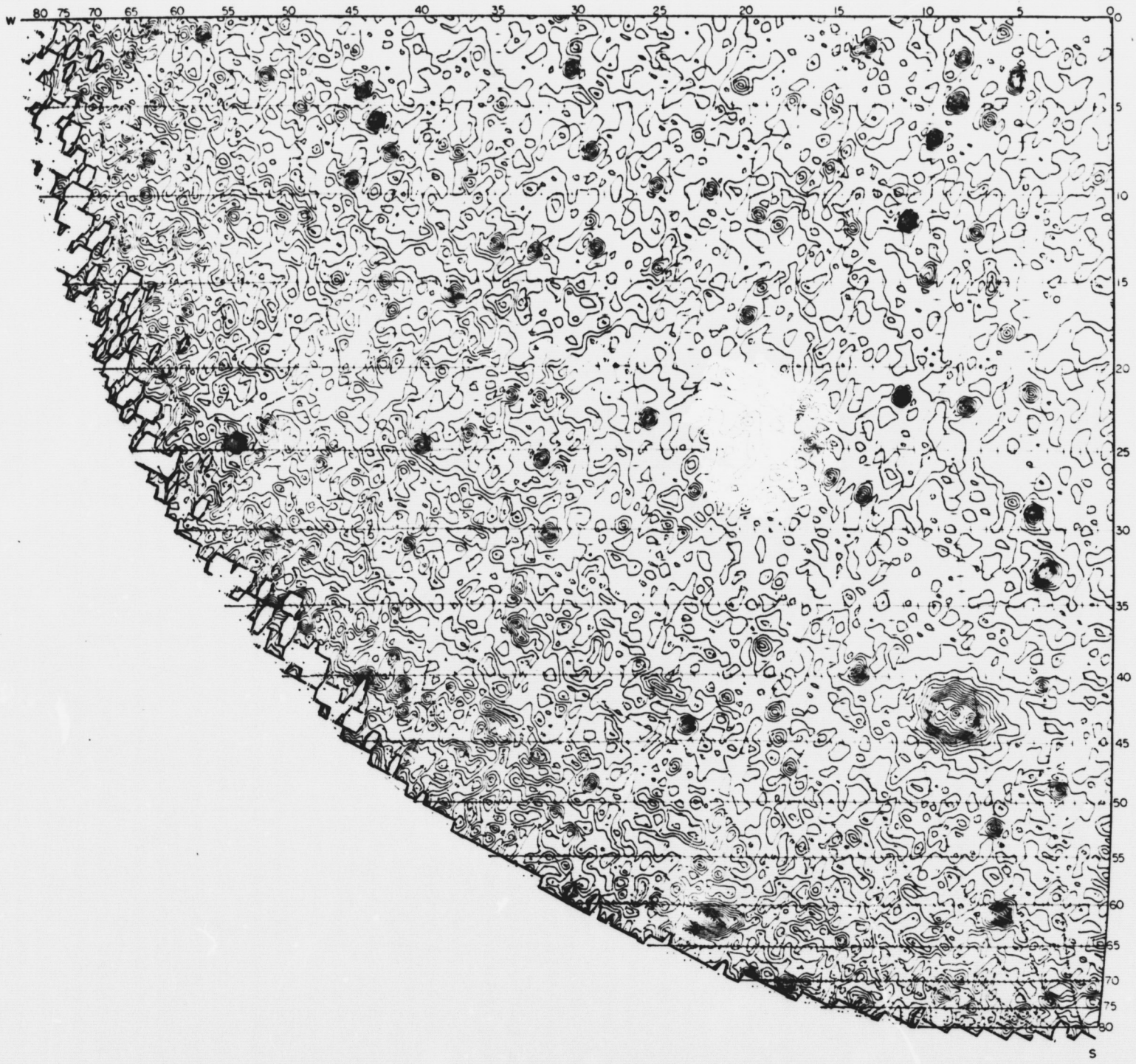


Figure 5c. Flattened moon normalized differential thermal contour map for quadrant III of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.

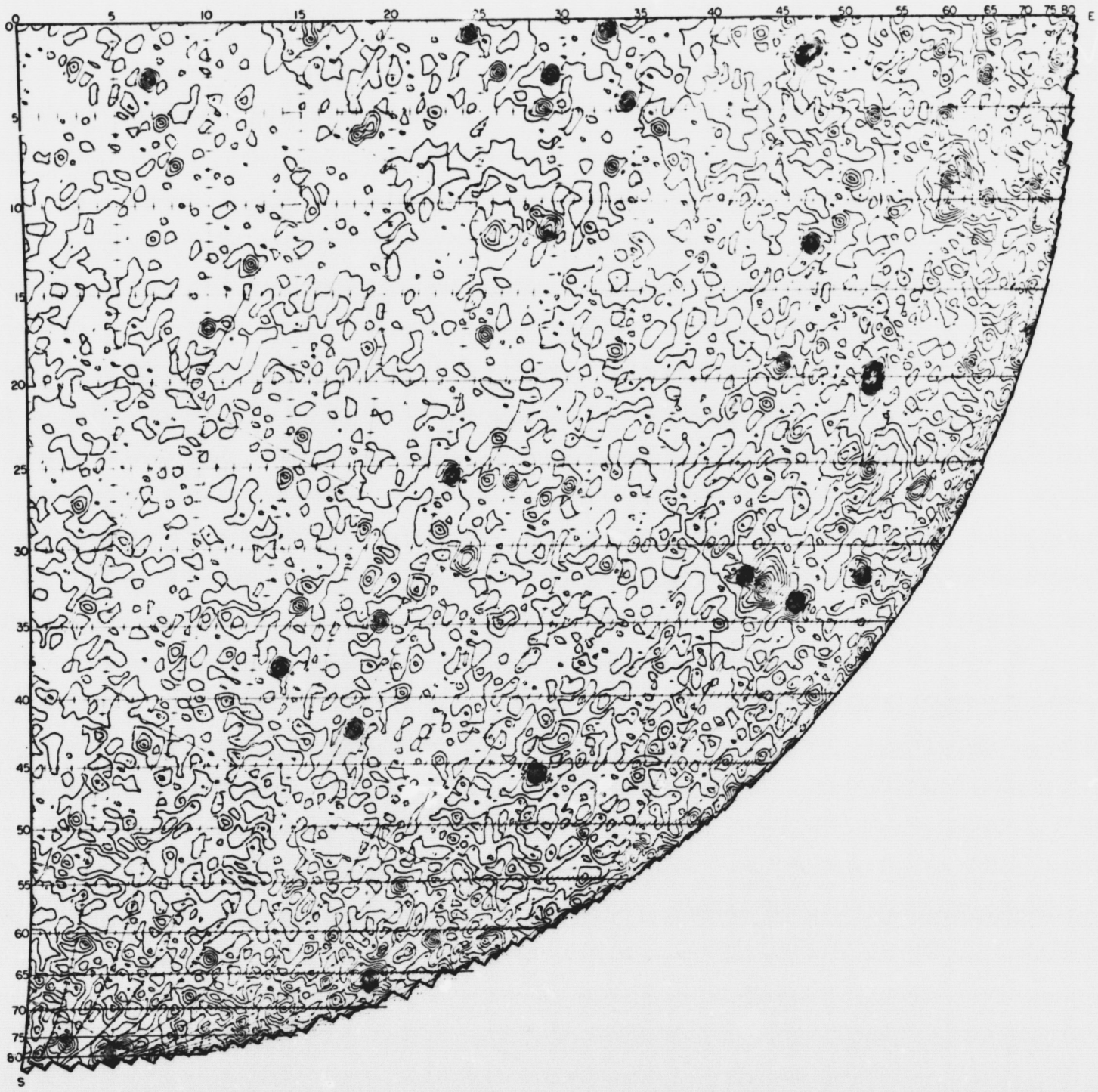


Figure 5d. Flattened moon normalized differential thermal contour map for quadrant IV of the lunar disk. The contour interval is 0.01 units of $\Delta(T/T_i)$.

X. DATA SHEETS

The data sheets are numbered 1 to 400 with the appropriate name or location at the top of each page.

1 (2A1) DARKEST POINT

LAMBDA=62.81 W BETA=17.81 N XI=-.8469 ETA=+.3058 L+PL CODE = 28351 ALBEDO =.0516

13H FLAT MOON DATA
FM=.02750

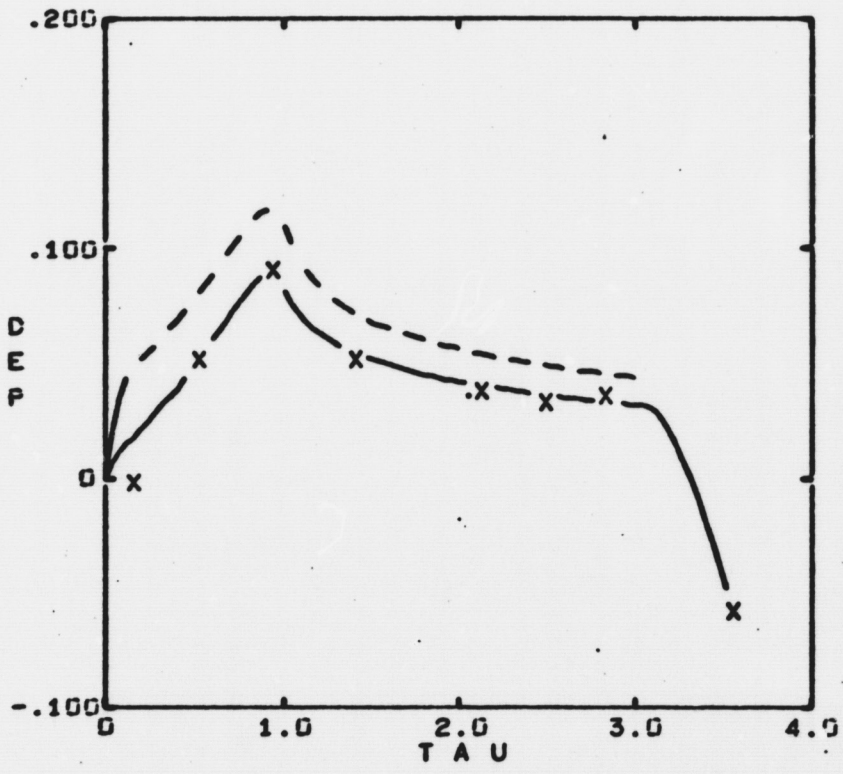
INITIAL TEMPERATURE 355.08
TAU-END OF TOTALITY 3.071

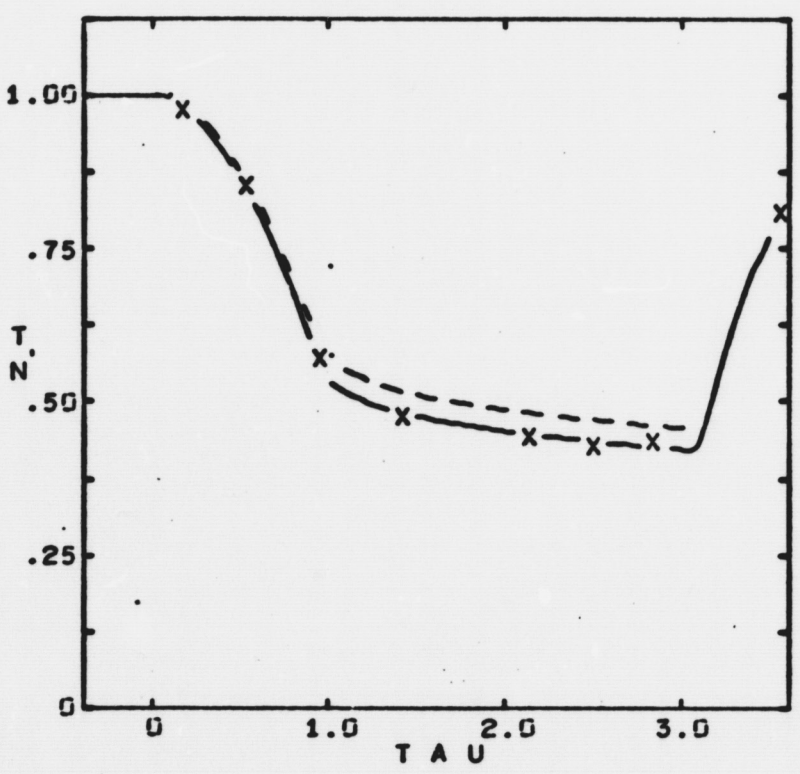
DIFFERENTIAL ENERGY DATA

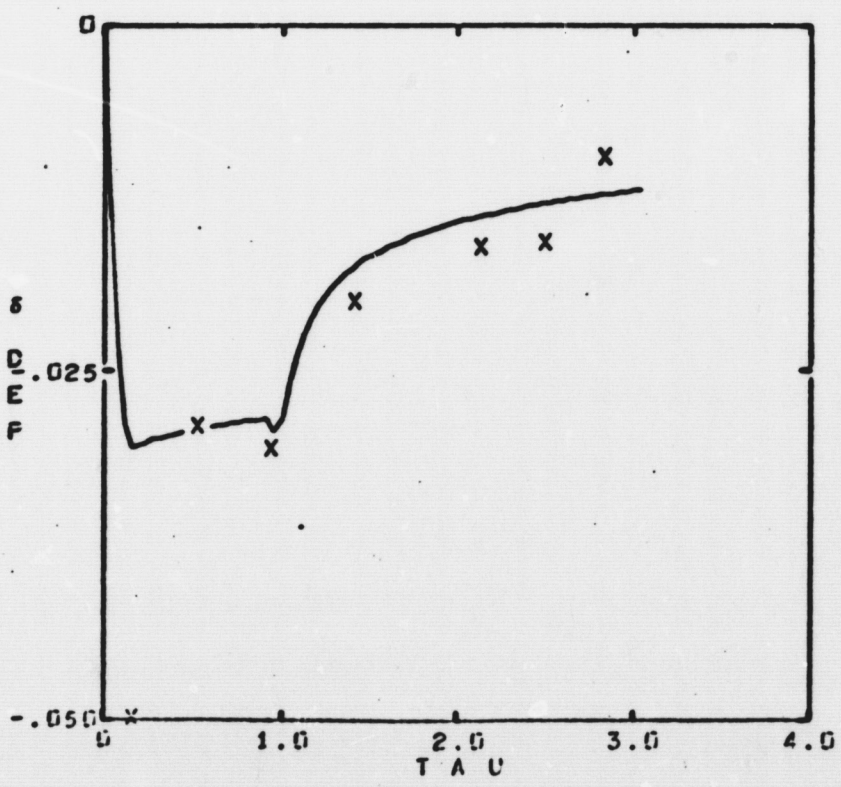
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0249	.0550	-.0301
.50	.0492	.0784	-.0292
.75	.0758	.1044	-.0286
.93	.0930	.1214	-.0284
1.0	.0820	.1103	-.0283
1.5	.0514	.0681	-.0167
2.0	.0418	.0560	-.0142
2.5	.0360	.0488	-.0128
3.0	.0318	.0437	-.0119

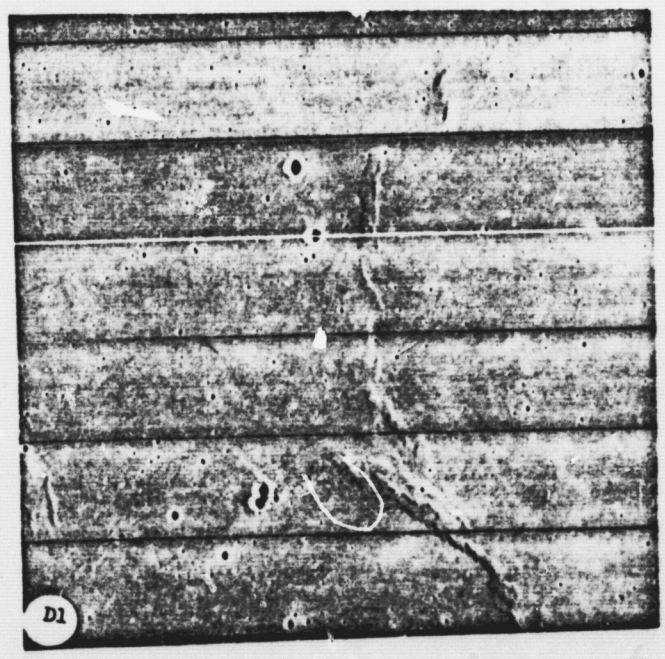
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.567	355.08	1.000	.0000
9H	0.161	347.09	0.977	-.0019
10H	0.520	302.58	0.852	.0516
11H	0.945	202.28	0.570	.0904
12H	1.412	169.13	0.476	.0515
13H	2.123	156.82	0.442	.0380
14H	2.496	151.56	0.427	.0332
15H	2.833	154.47	0.435	.0358
16H	3.561	287.65	0.810	-.0583









LAMBDA=74.06 W BETA=21.72 N XI=-.8933 ETA=+.3700 L+PL CODE = 28397 ALBEDO =.0646

13H FLAT MOON DATA
FM=.00329

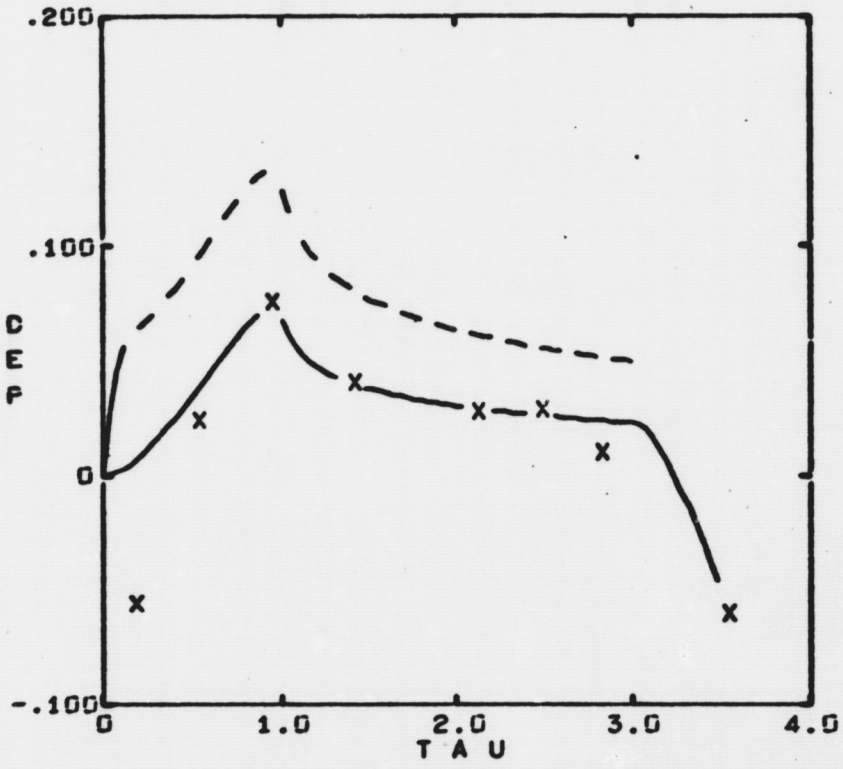
INITIAL TEMPERATURE 340.57
TAU-END OF TOTALITY 3.013

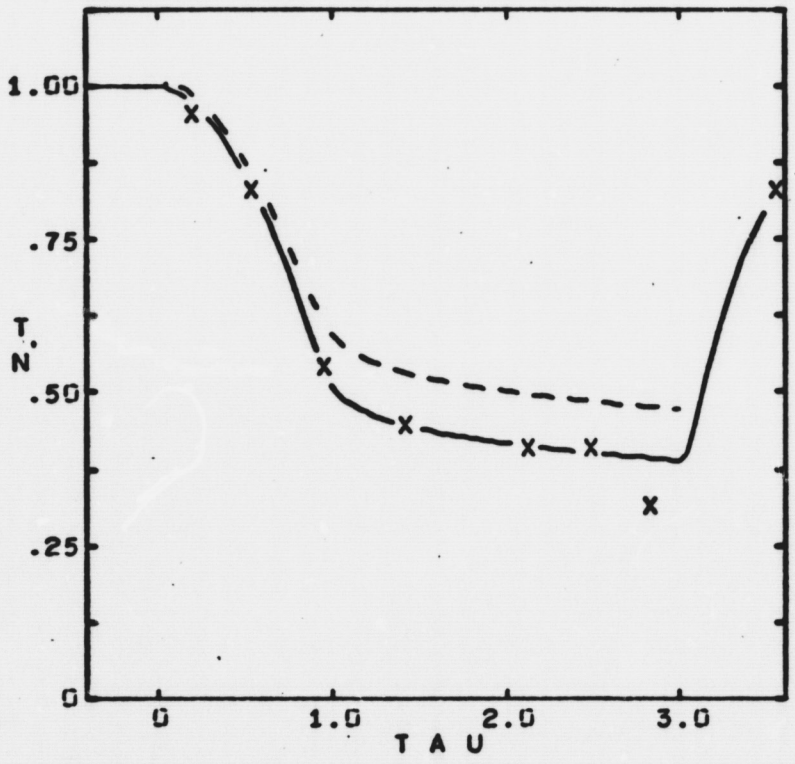
DIFFERENTIAL ENERGY DATA

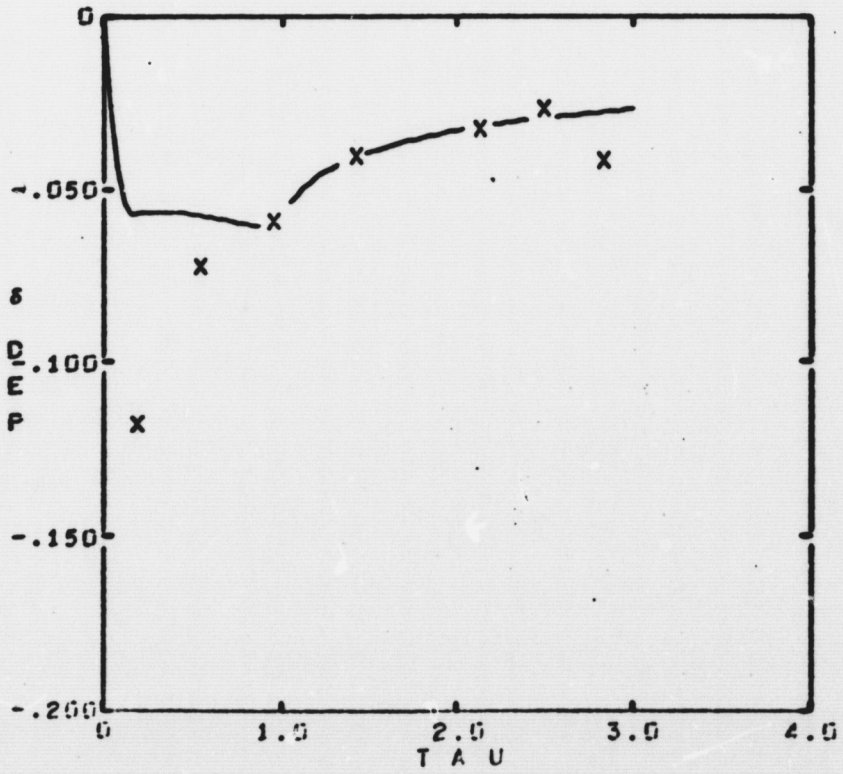
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0114	.0678	-.0564
.50	.0346	.0919	-.0573
.75	.0594	.1191	-.0597
.93	.0755	.1369	-.0614
1.0	.0677	.1246	-.0569
1.5	.0377	.0770	-.0393
2.0	.0302	.0633	-.0331
2.5	.0259	.0553	-.0294
3.0	.0228	.0496	-.0268

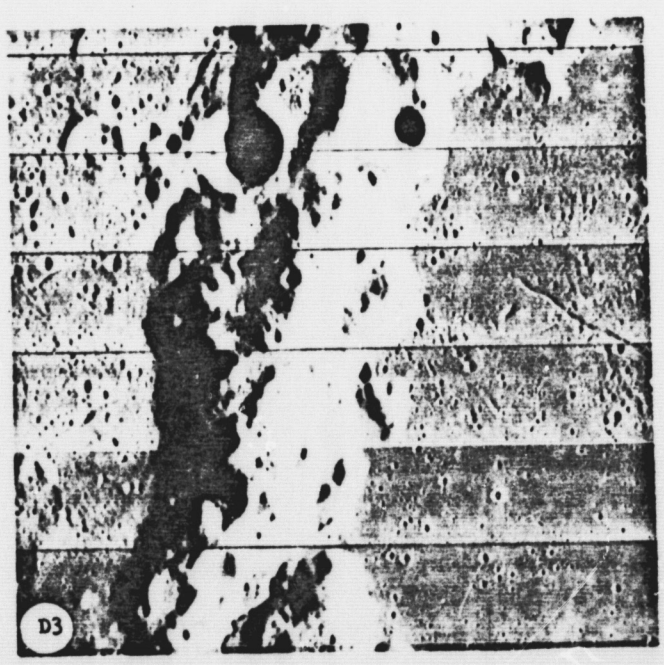
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.542	340.57	1.000	.0000
9H	0.179	326.22	0.958	-.0560
10H	0.535	282.96	0.831	.0235
11H	0.956	184.36	0.541	.0756
12H	1.418	152.60	0.448	.0403
13H	2.123	139.63	0.410	.0283
14H	2.492	139.84	0.411	.0284
15H	2.826	107.24	0.315	.0098
16H	3.543	283.81	0.833	-.0601









3 (2A3) N.E. CALVARIUS

LAMBDA=61.81 W BETA= 6.23 N XI=-.8762 ETA=+.1086 L+PL CODE = 28181 ALBEDO =.0588

13H FLAT MOON DATA
FM=.03180

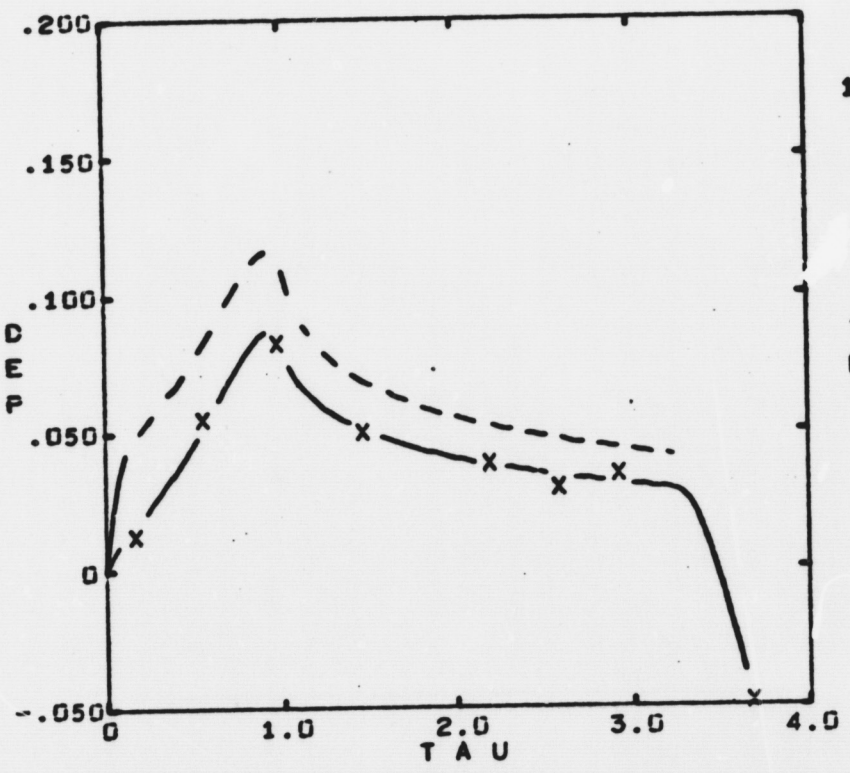
INITIAL TEMPERATURE 357.19
TAU-END OF TOTALITY 3.255

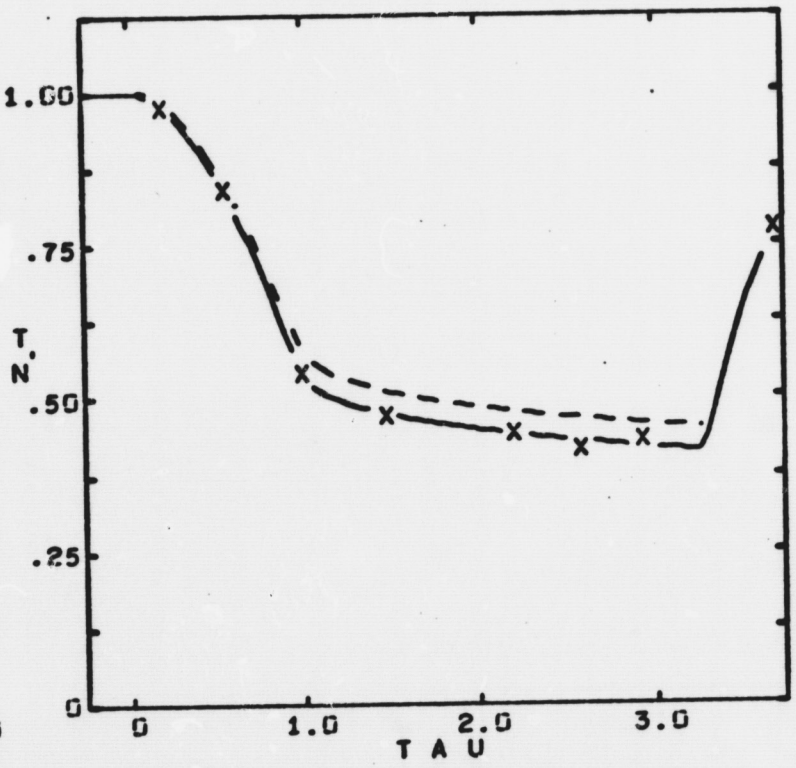
DIFFERENTIAL ENERGY DATA

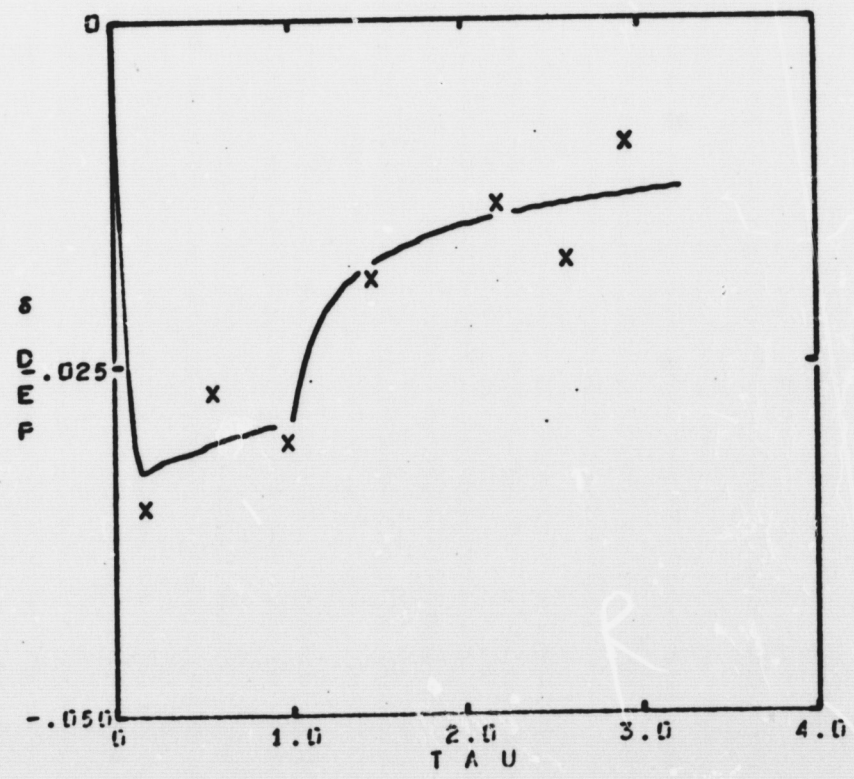
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0219	.0539	-.0320
.50	.0466	.0773	-.0307
.75	.0735	.1033	-.0298
.93	.0910	.1202	-.0292
1.0	.0801	.1092	-.0291
1.5	.0500	.0674	-.0174
2.0	.0406	.0555	-.0149
2.5	.0348	.0484	-.0136
3.0	.0307	.0433	-.0126

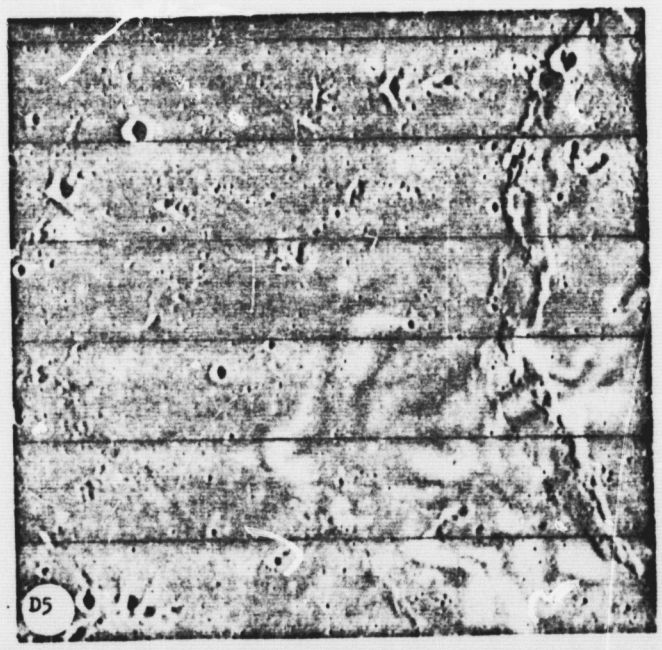
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.575	357.19	1.000	.0000
9H	0.175	349.50	0.978	.0126
10H	0.545	300.78	0.842	.0551
11H	0.982	192.98	0.540	.0828
12H	1.463	168.89	0.473	.0600
13H	2.197	158.73	0.444	.0390
14H	2.580	148.62	0.416	.0300
15H	2.928	154.44	0.432	.0349
16H	3.682	276.76	0.775	-.0485









4 (3A1) GRIMALDI

LAMBDA=67.20 W BETA= 4.00 S XI=-.9196 ETA=-.0698 L+PL CODE = 39027 ALBEDO =.0693

13H FLAT MOON DATA
FM=.03278

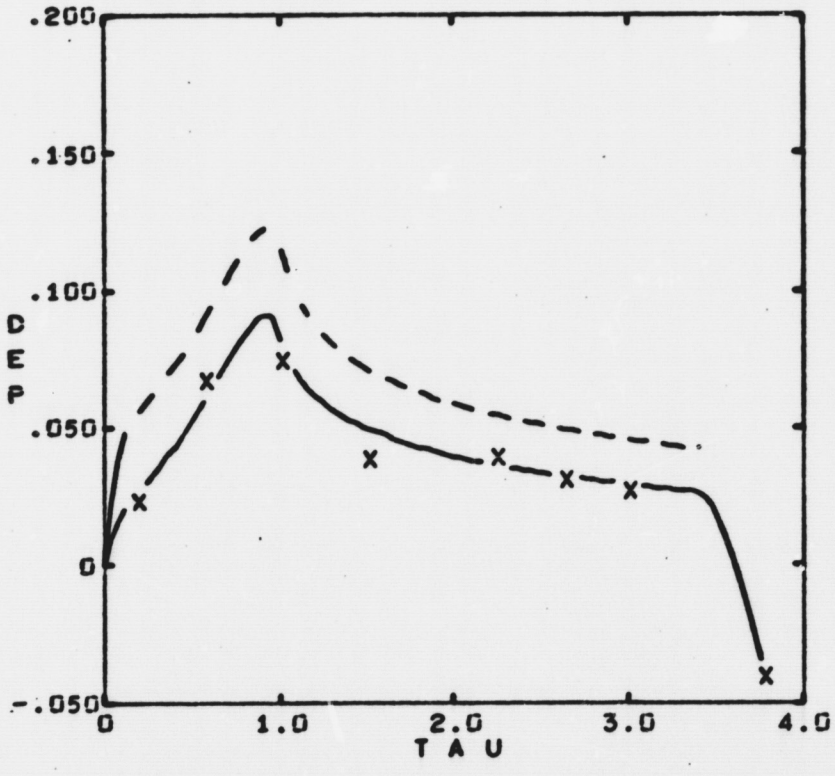
INITIAL TEMPERATURE 345.10
TAU-END OF TOTALITY 3.401

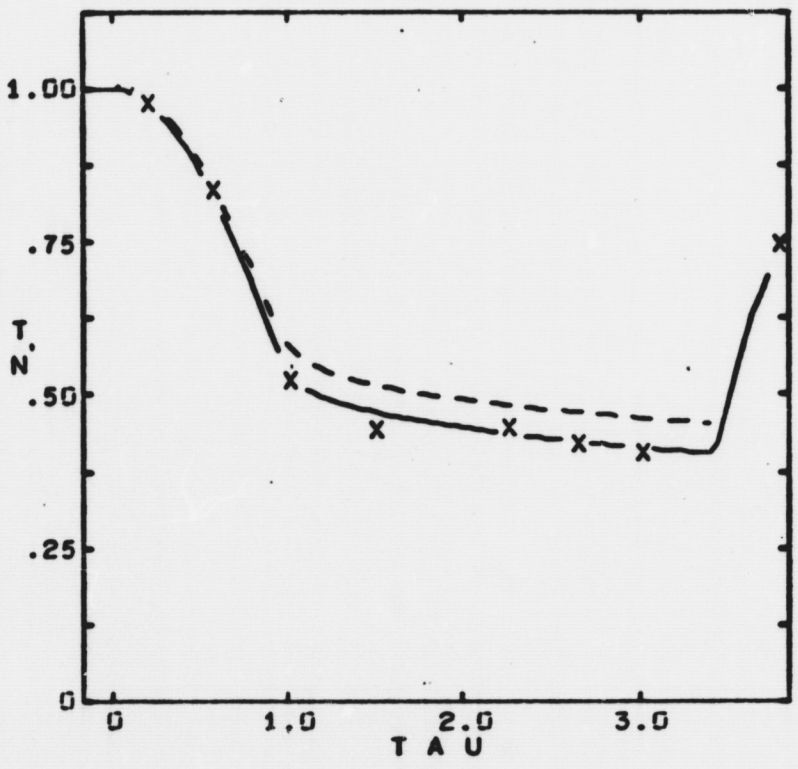
DIFFERENTIAL ENERGY DATA

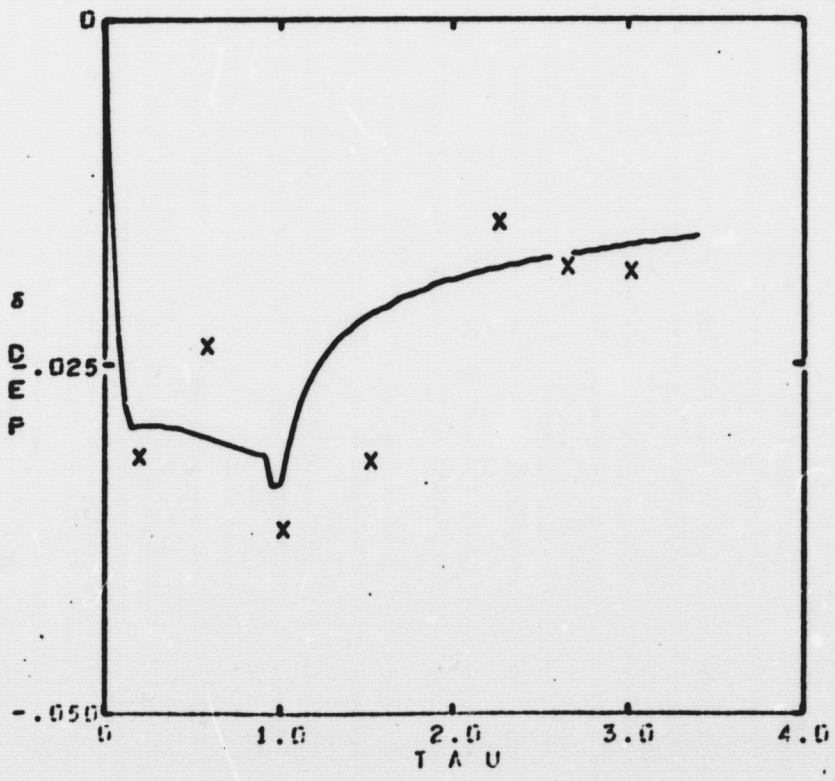
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0304	.0597	-.0293
.50	.0535	.0834	-.0299
.75	.0788	.1098	-.0310
.93	.0953	.1270	-.0317
1.0	.0819	.1155	-.0336
1.5	.0498	.0713	-.0215
2.0	.0398	.0587	-.0189
2.5	.0338	.0512	-.0174
3.0	.0295	.0458	-.0163

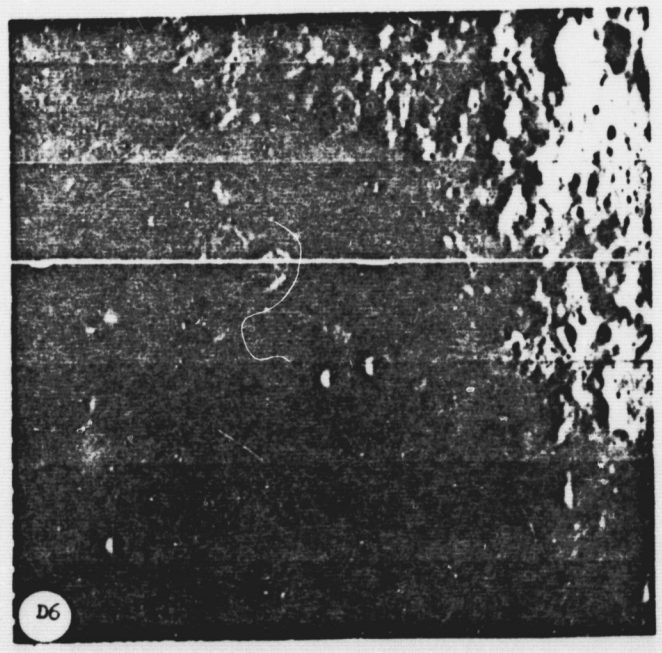
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.578	345.10	1.000	.0000
9H	0.192	337.38	0.978	.0234
10H	0.570	287.98	0.834	.0671
11H	1.017	180.40	0.523	.0747
12H	1.509	153.34	0.444	.0390
13H	2.260	154.14	0.447	.0396
14H	2.650	145.29	0.421	.0314
15H	3.007	140.50	0.407	.0275
16H	3.782	257.67	0.747	-.0404









LAMBDA=54.85 W BETA=32.68 N XI=-.6882 ETA=+.5400 L+PL CODE = 26594 ALBEDO =.0614

13H FLAT MOON DATA
FM=.01600

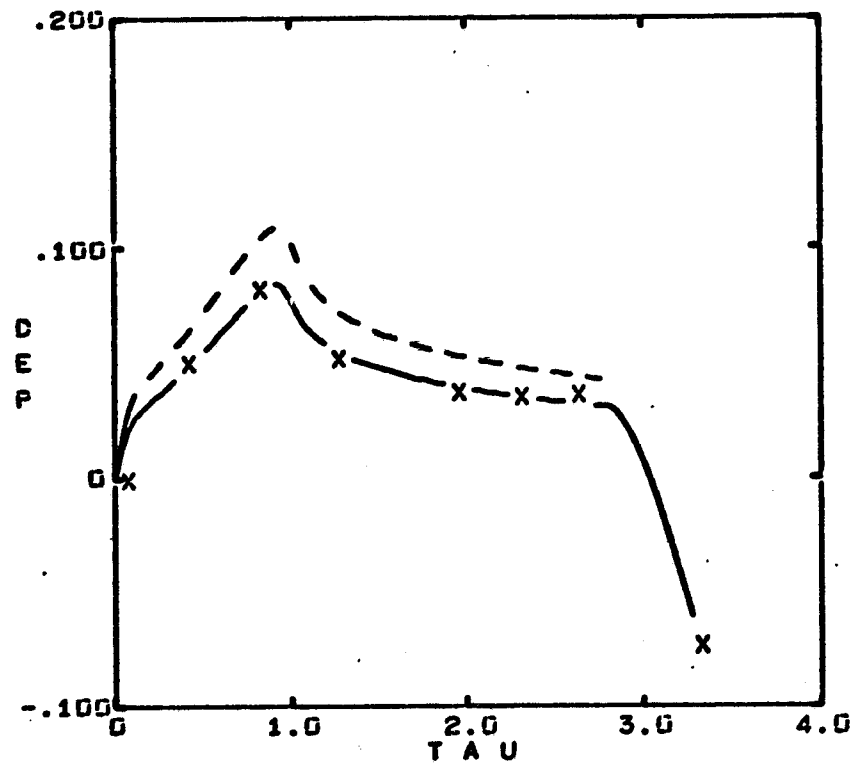
INITIAL TEMPERATURE 358.91
TAU-END OF TOTALITY 2.799

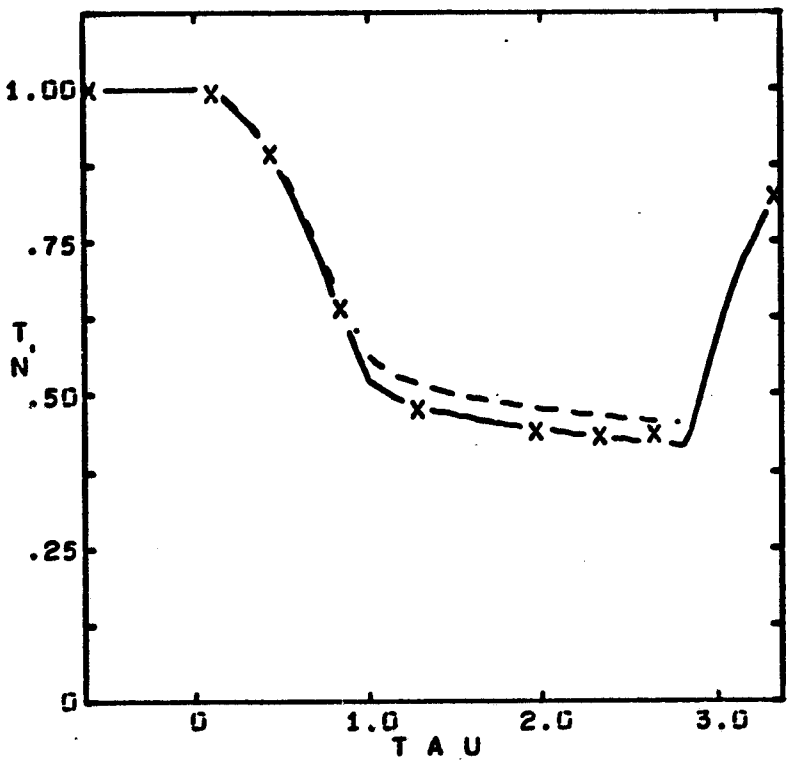
DIFFERENTIAL ENERGY DATA

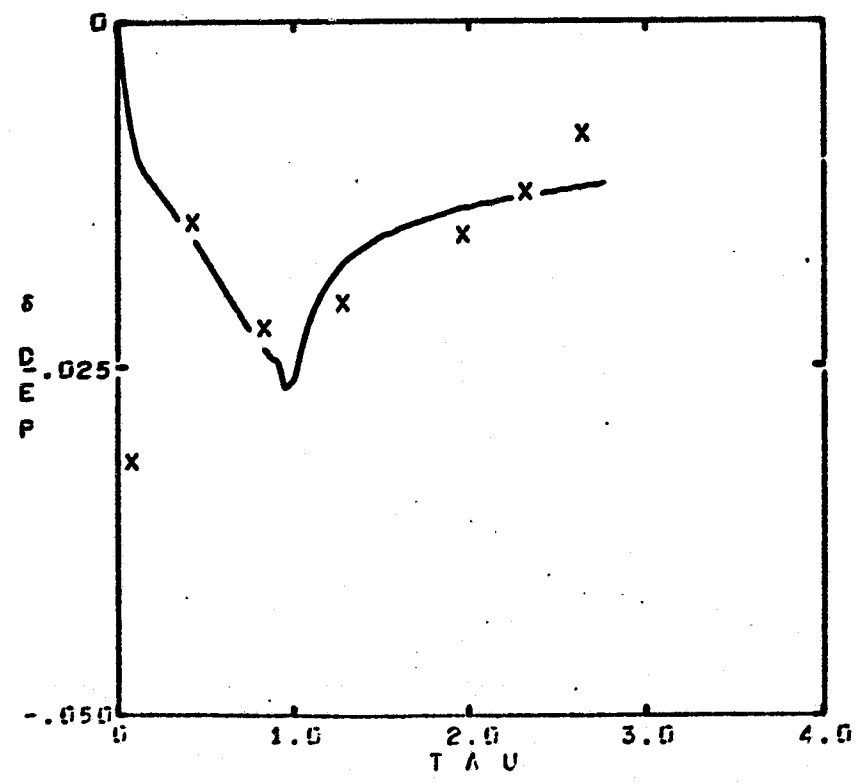
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0349	.0473	-.0124
.50	.0535	.0705	-.0170
.75	.0740	.0961	-.0221
.93	.0874	.1127	-.0253
1.0	.0763	.1022	-.0259
1.5	.0475	.0631	-.0156
2.0	.0384	.0519	-.0135
2.5	.0329	.0452	-.0123

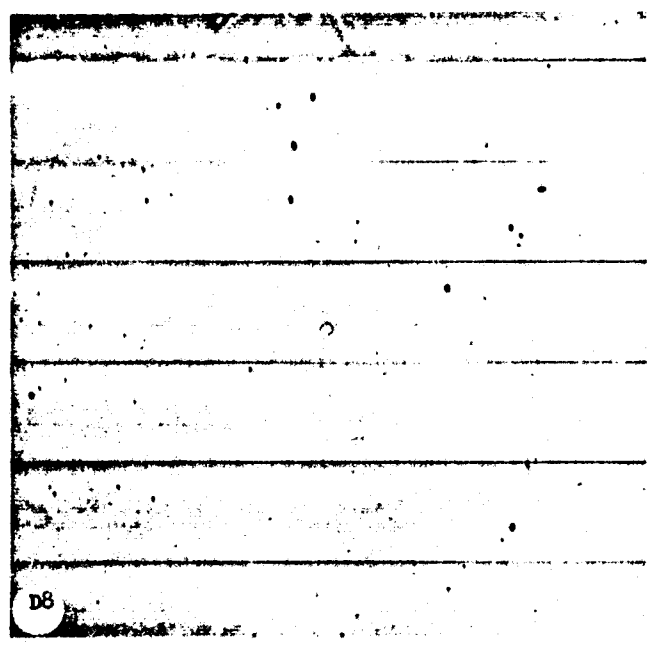
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.607	358.91	1.000	.0000
9H	0.086	355.87	0.992	-.0019
10H	0.430	320.80	0.894	.0492
11H	0.836	229.46	0.639	.0818
12H	1.280	171.19	0.477	.0518
13H	1.958	157.52	0.439	.0371
14H	2.315	155.27	0.433	.0350
15H	2.636	155.98	0.435	.0357
16H	3.330	295.73	0.824	-.0742









6 (2A5) .S. ARISTARCHUS

LAMBDA=46.74 W BETA=19.77 N XI=-.6853 ETA=+.3382 L+FL CODE = 26394 ALBEDO =.0684

13H FLAT MOON DATA
FM=.03591

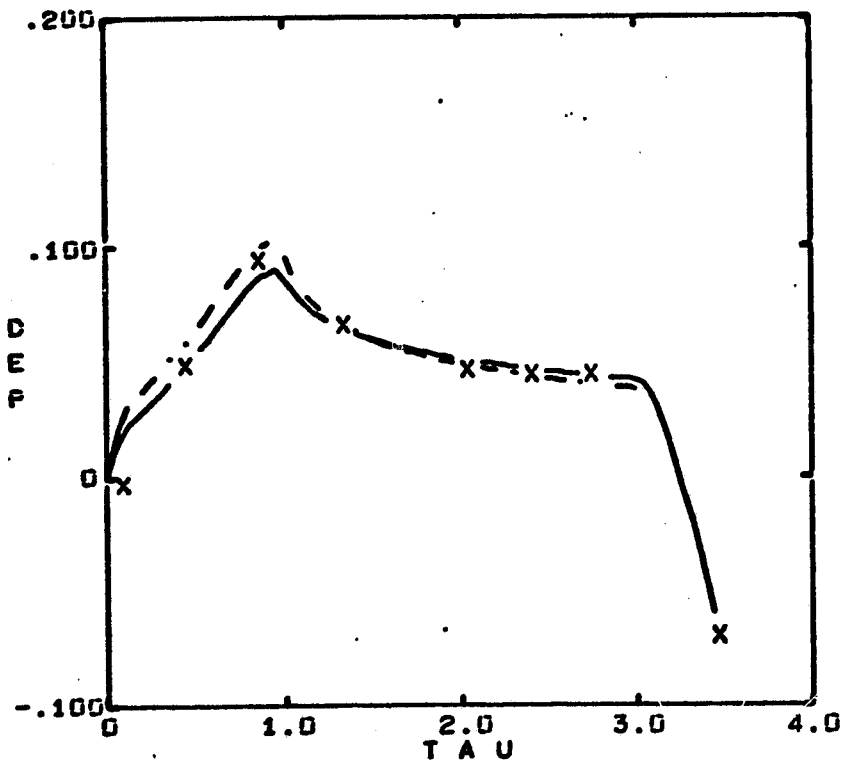
INITIAL TEMPERATURE 370.41
TAU-END OF TOTALITY 3.018

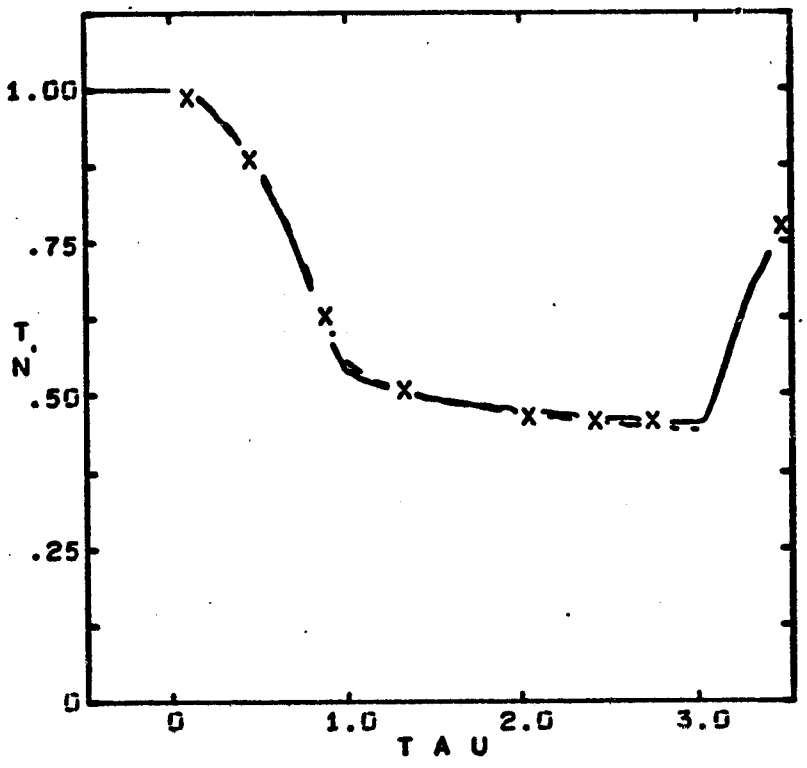
DIFFERENTIAL ENERGY DATA

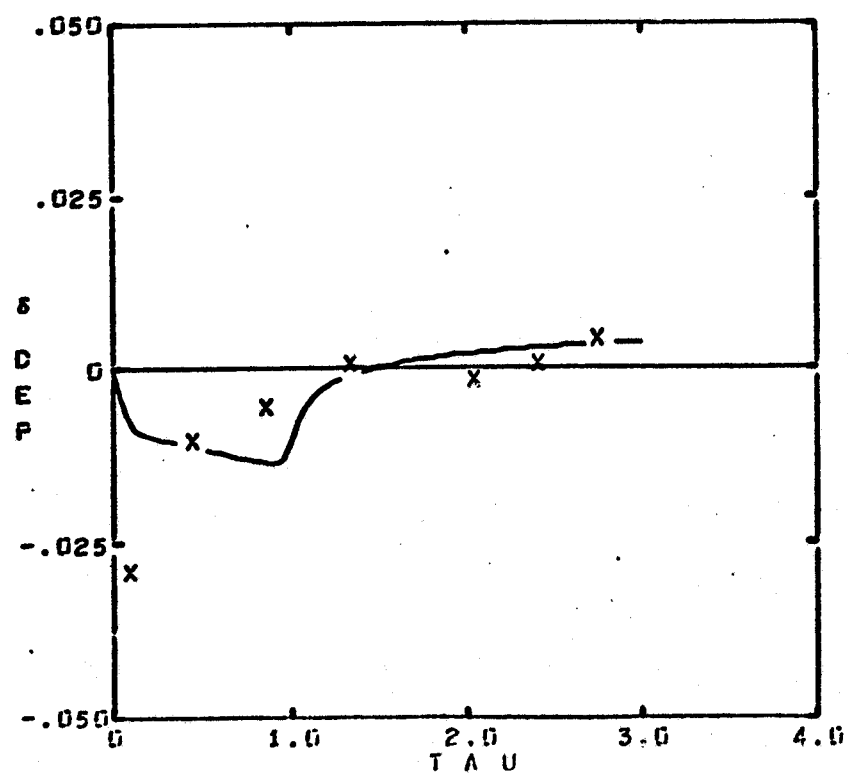
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0313	.0412	-.0099
.50	.0529	.0644	-.0115
.75	.0767	.0896	-.0129
.93	.0923	.1062	-.0139
1.0	.0859	.0961	-.0102
1.5	.0597	.0594	.0003
2.0	.0510	.0488	.0022
2.5	.0457	.0425	.0032
3.0	.0419	.0380	.0039

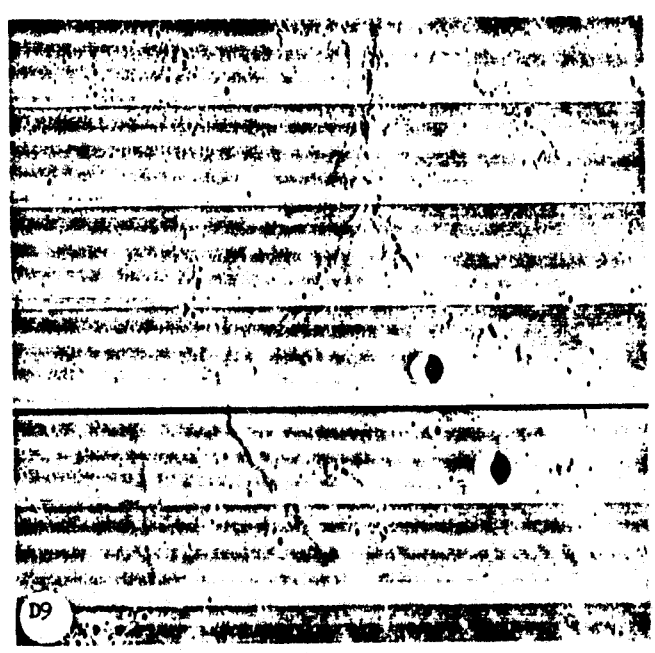
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.631	370.41	1.000	.0000
9H	0.091	366.91	0.991	-.0036
10H	0.448	329.03	0.888	.0488
11H	0.869	232.98	0.629	.0946
12H	1.331	187.96	0.507	.0663
13H	2.037	172.42	0.465	.0469
14H	2.406	170.01	0.459	.0444
15H	2.741	170.06	0.459	.0444
16H	3.467	287.09	0.775	-.0700









7 (2A6) N.E. BESSARION

LAMBDA=31.15 W BETA=19.68 N XI=-.4871 ETA=+.3368 L+PL CODE = 24394 ALBEDO =.0687

13H FLAT MOON DATA
FM=.01688

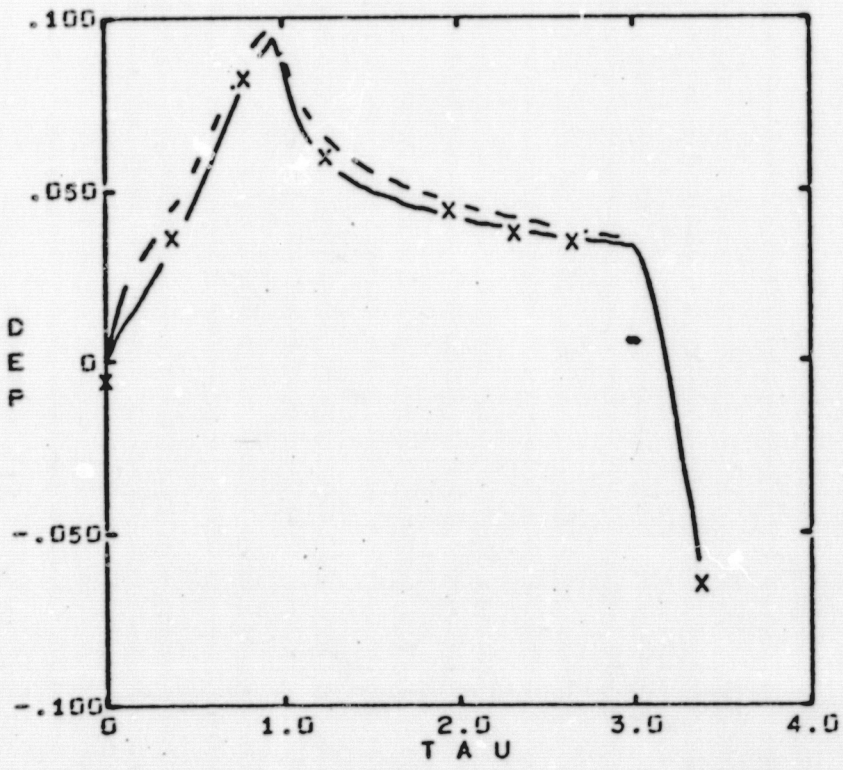
INITIAL TEMPERATURE 383.40
TAU-END OF TOTALITY 2.993

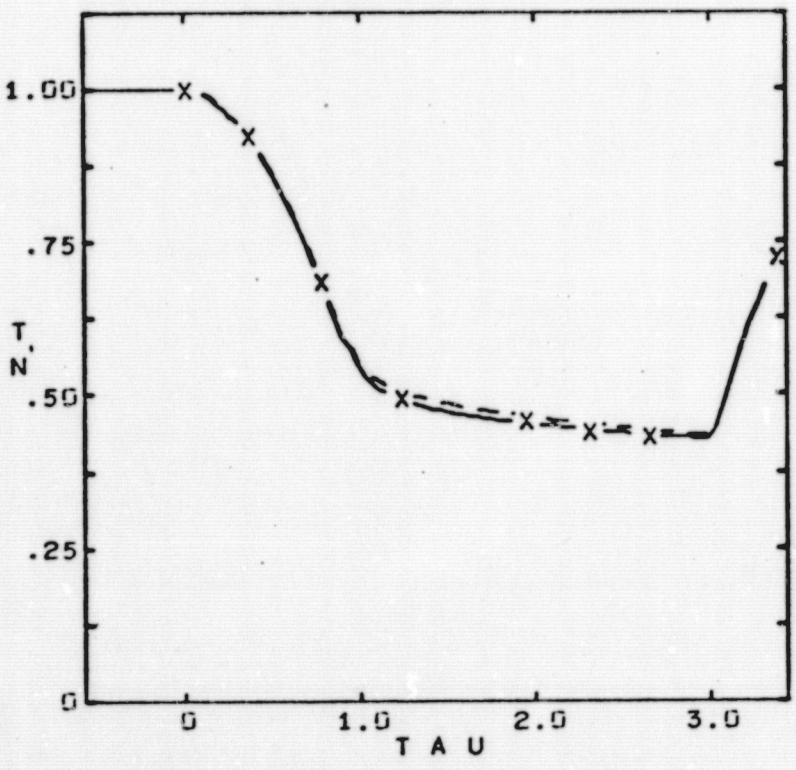
DIFFERENTIAL ENERGY DATA

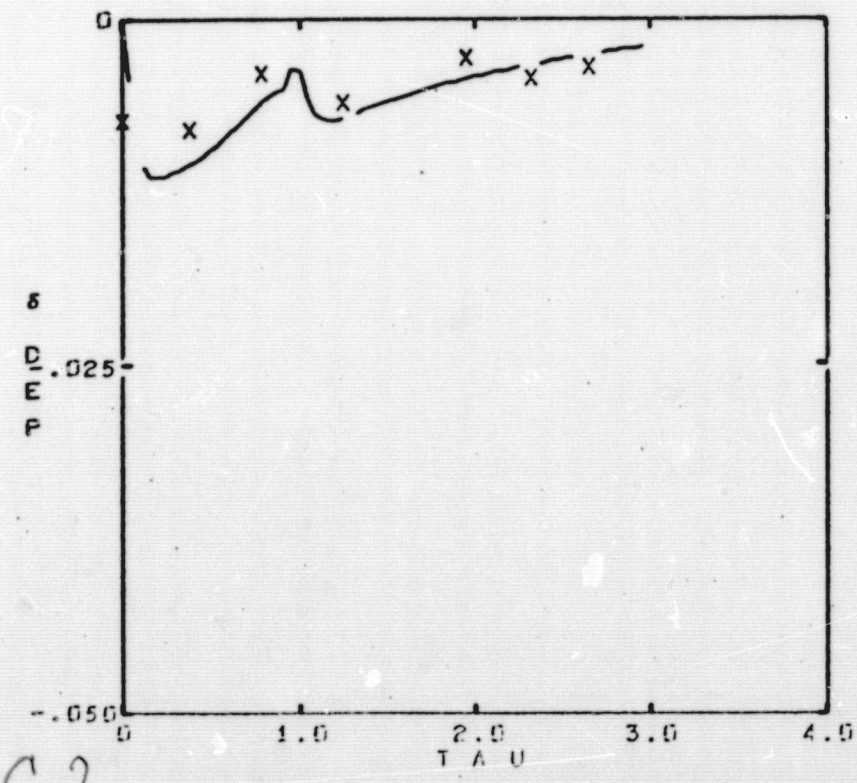
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0223	.0337	-.0114
.50	.0479	.0572	-.0093
.75	.0765	.0830	-.0065
.93	.0954	.0999	-.0045
1.0	.0865	.0902	-.0037
1.5	.0497	.0557	-.0060
2.0	.0416	.0458	-.0042
2.5	.0369	.0397	-.0028

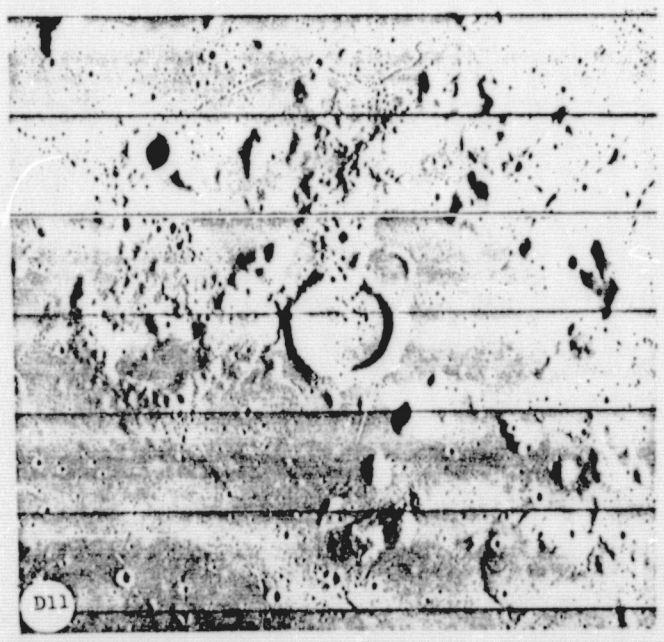
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.710	383.40	1.000	.0000
9H	0.008	382.80	0.998	-.0056
10H	0.364	353.37	0.922	.0359
11H	0.783	263.24	0.687	.0822
12H	1.243	189.29	0.494	.0594
13H	1.945	175.45	0.458	.0439
14H	2.314	168.70	0.440	.0375
15H	2.646	165.79	0.432	.0350
16H	3.377	278.33	0.726	-.0652









C.2

LAMBDA=21.05 W BETA=24.42 N XI=-.3271 ETA=+.4134 L+PL CODE = 23431 ALBEDO =.0676

13H FLAT MOON DATA
FM=-.00508

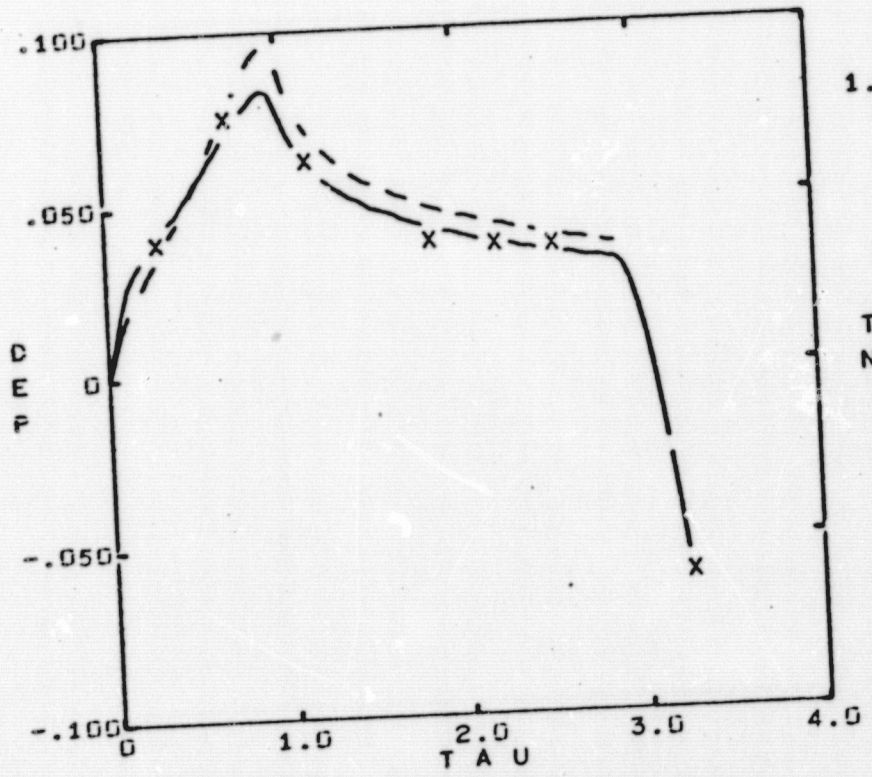
INITIAL TEMPERATURE 387.23
TAU-END OF TOTALITY 2.889

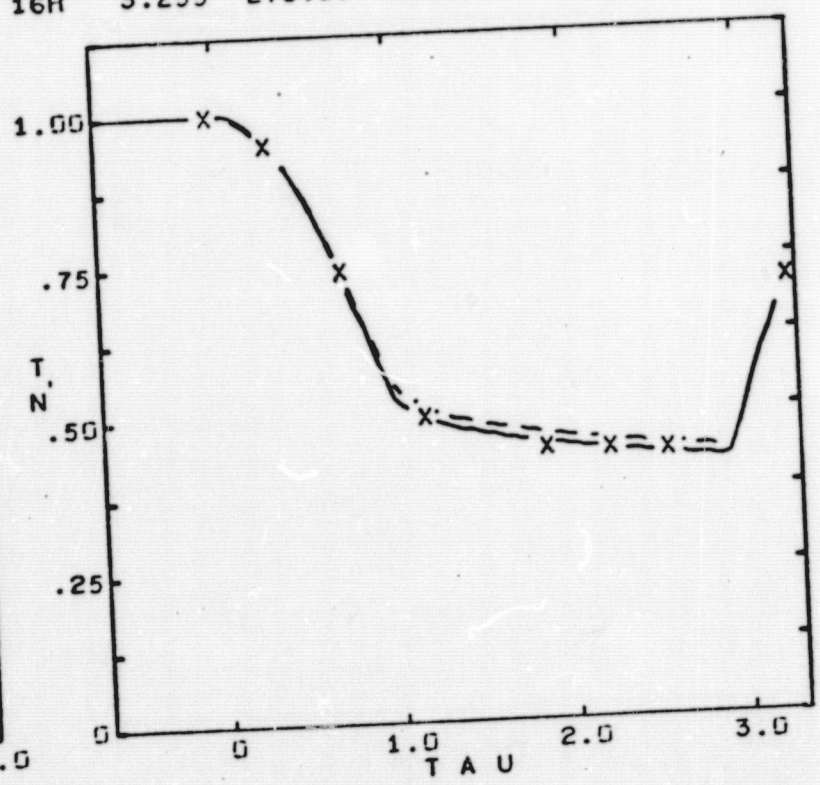
DIFFERENTIAL ENERGY DATA

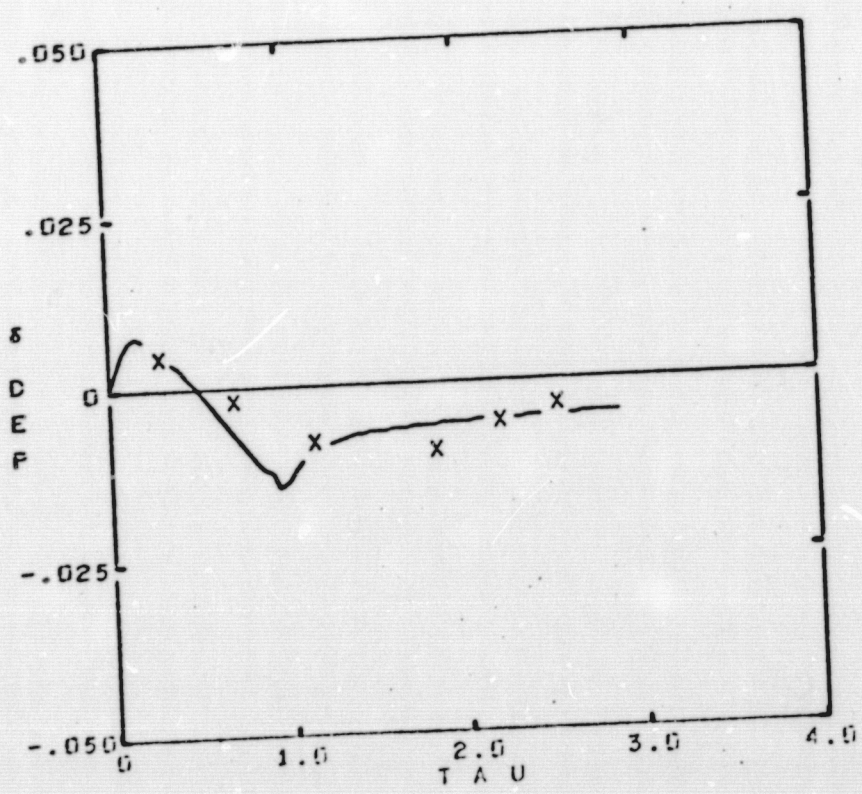
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0374	.0308	.0066
.50	.0552	.0551	.0001
.75	.0735	.0816	-.0081
.93	.0854	.0991	-.0137
1.0	.0760	.0895	-.0135
1.5	.0486	.0553	-.0067
2.0	.0398	.0455	-.0057
2.5	.0344	.0394	-.0050

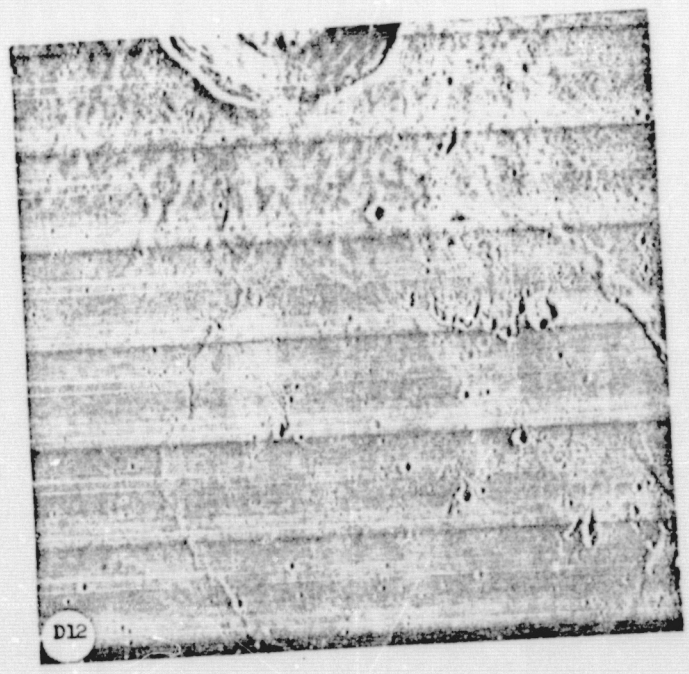
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.763	389.19	1.005	.0204
9H	-0.058	387.08	1.000	-.0015
10H	0.291	367.84	0.950	.0394
11H	0.702	287.19	0.742	.0749
12H	1.155	193.47	0.500	.0623
13H	1.844	171.13	0.442	.0381
14H	2.207	169.75	0.438	.0369
15H	2.533	168.43	0.435	.0358
16H	3.255	275.07	0.710	-.0602









9 (2A8) S. BEER

LAMBDA= 9.81 W BETA=24.42 N XI=-.1552 ETA=+.4134 L+PL CODE = 21461 ALBEDO =.0686

13H FLAT MOON DATA
FM=.00414

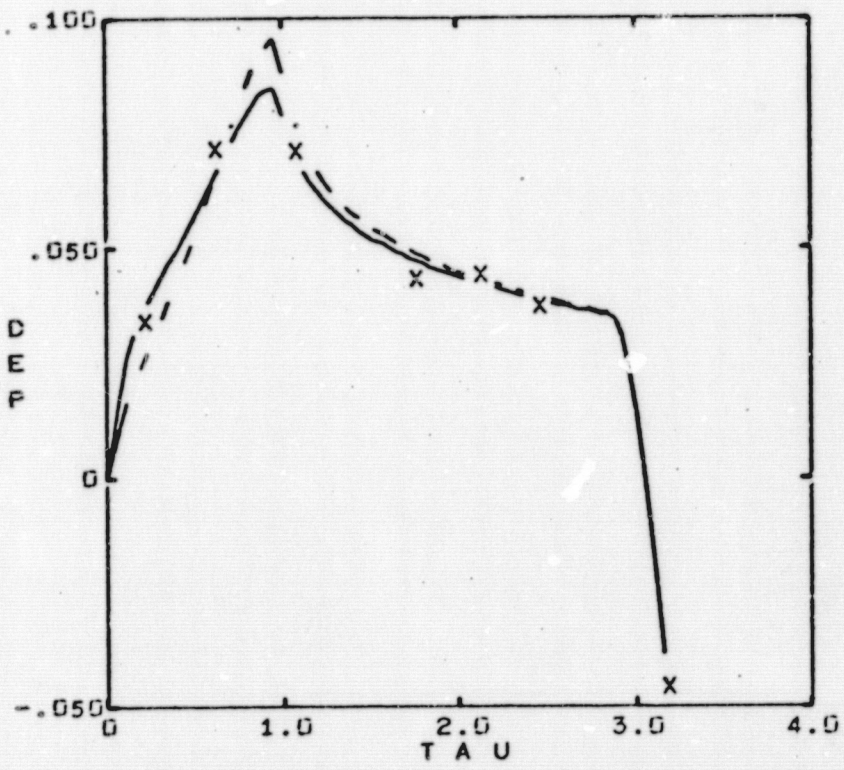
INITIAL TEMPERATURE 391.46
TAU-END OF TOTALITY 2.864

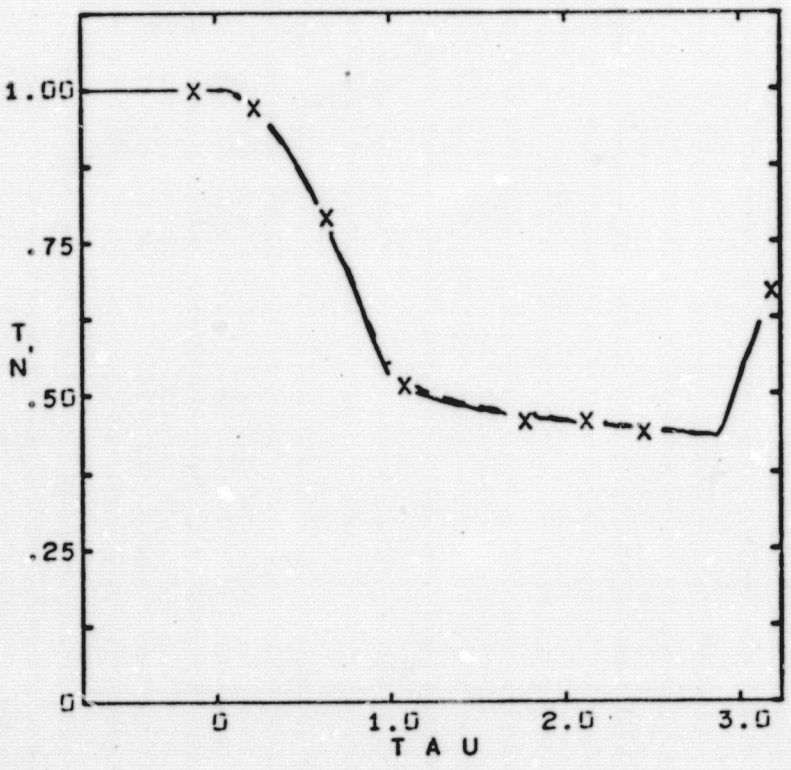
DIFFERENTIAL ENERGY DATA

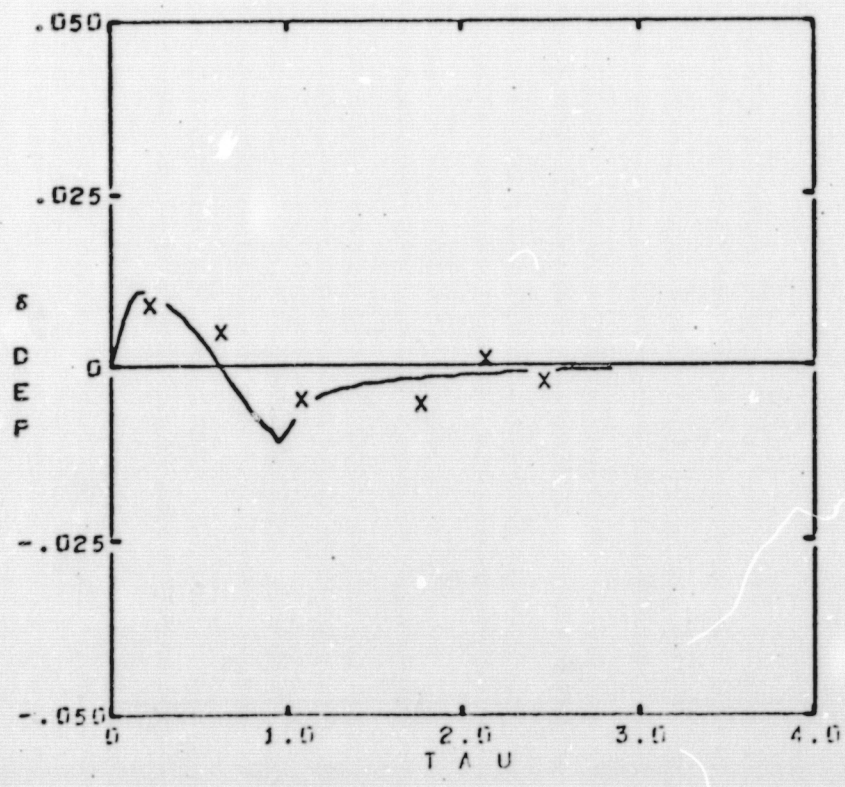
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0384	.0281	.0103
.50	.0571	.0528	.0043
.75	.0753	.0798	-.0045
.93	.0871	.0977	-.0106
1.0	.0780	.0883	-.0094
1.5	.0522	.0546	-.0024
2.0	.0436	.0448	-.0012
2.5	.0381	.0388	-.0007

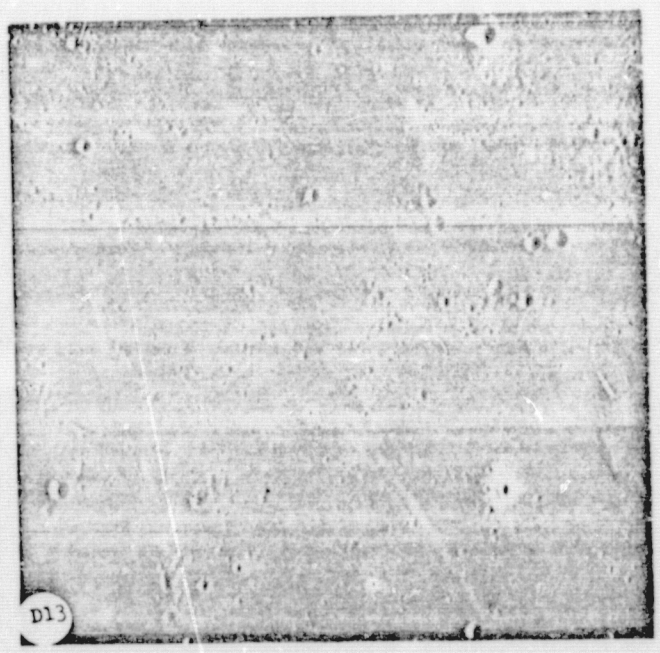
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.828	392.30	1.002	.0086
9H	-0.128	391.33	1.000	-.0013
10H	0.220	380.06	0.971	.0342
11H	0.630	309.22	0.790	.0718
12H	1.080	202.34	0.517	.0714
13H	1.766	178.68	0.456	.0434
14H	2.127	179.54	0.459	.0442
15H	2.452	172.09	0.440	.0373
16H	3.177	261.82	0.669	-.0458









10 (2A9) S.E. ERATOSTHENES

LAMBDA= 5.65 W BETA=12.00 N XI=-.0963 ETA=+.2079 L+PL CODE = 20291 ALBEDO =.0667

13H FLAT MOON DATA
FM=.01604

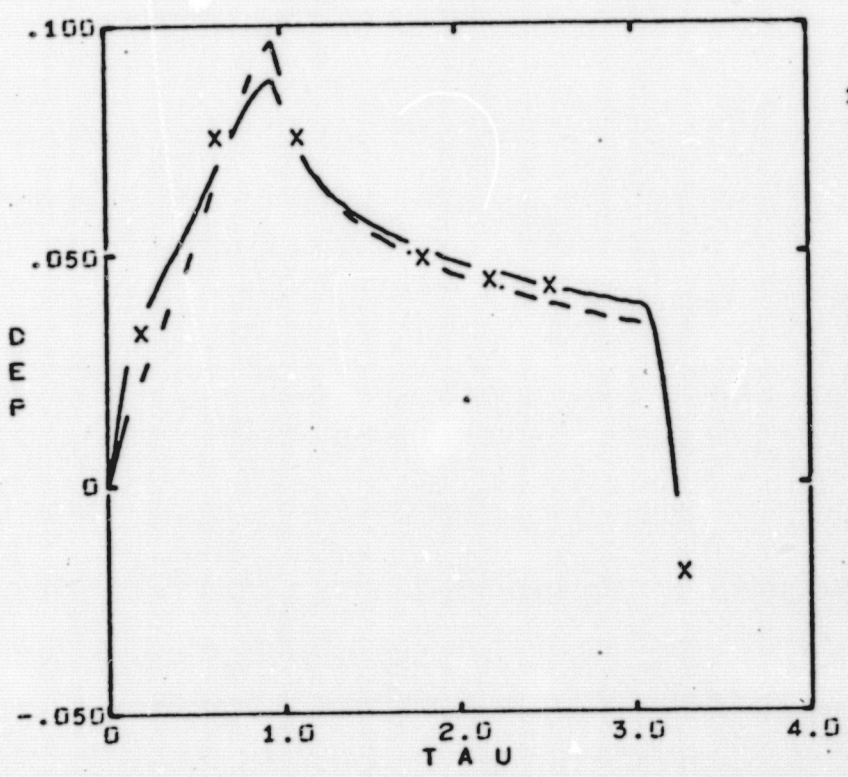
INITIAL TEMPERATURE 396.63
TAU-END OF TOTALITY 3.071

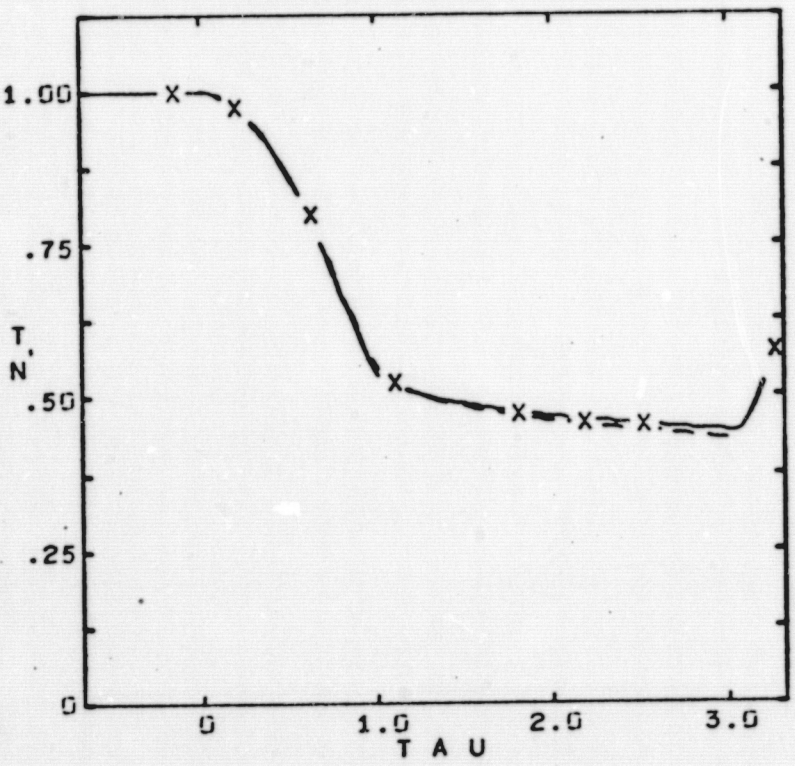
DIFFERENTIAL ENERGY DATA

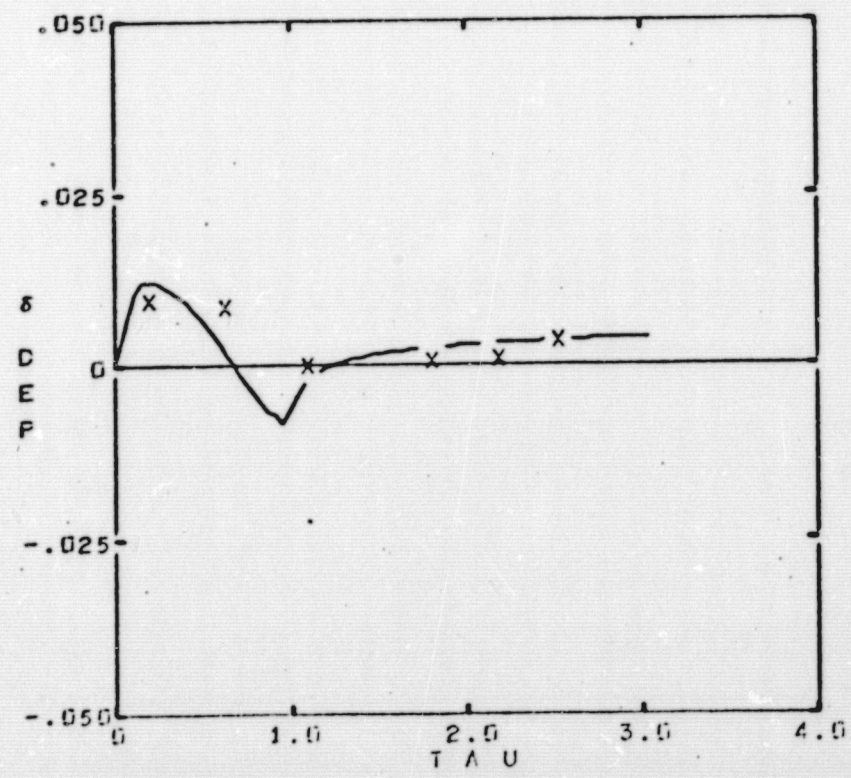
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0395	.0275	.0120
.50	.0590	.0527	.0063
.75	.0777	.0802	-.0025
.93	.0898	.0985	-.0087
1.0	.0829	.0890	-.0061
1.5	.0569	.0551	.0018
2.0	.0483	.0453	.0030
2.5	.0429	.0392	.0037
3.0	.0389	.0348	.0041

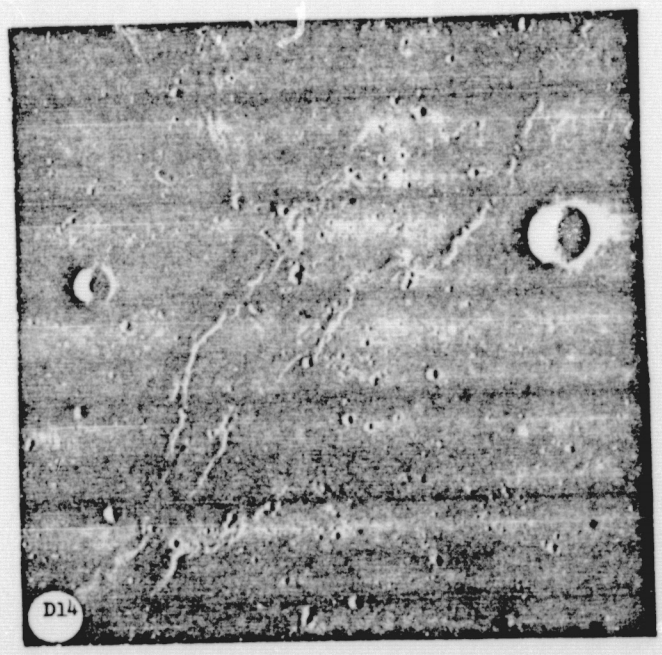
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.883	398.16	1.004	.0155
9H	-0.155	396.36	0.999	-.0027
10H	0.204	387.11	0.976	.0328
11H	0.629	316.09	0.797	.0755
12H	1.096	207.82	0.524	.0754
13H	1.806	186.89	0.471	.0493
14H	2.180	181.74	0.458	.0441
15H	2.516	180.46	0.455	.0429
16H	3.277	228.74	0.577	-.0196









11 (1A1) N. MANILIUS

LAMBDA= 9.40 E BETA=18.05 N XI=+.1553 ETA=+.3098 L+PL CODE = 11361 ALBEDO =.0708

13H FLAT MOON DATA
FM=.00443

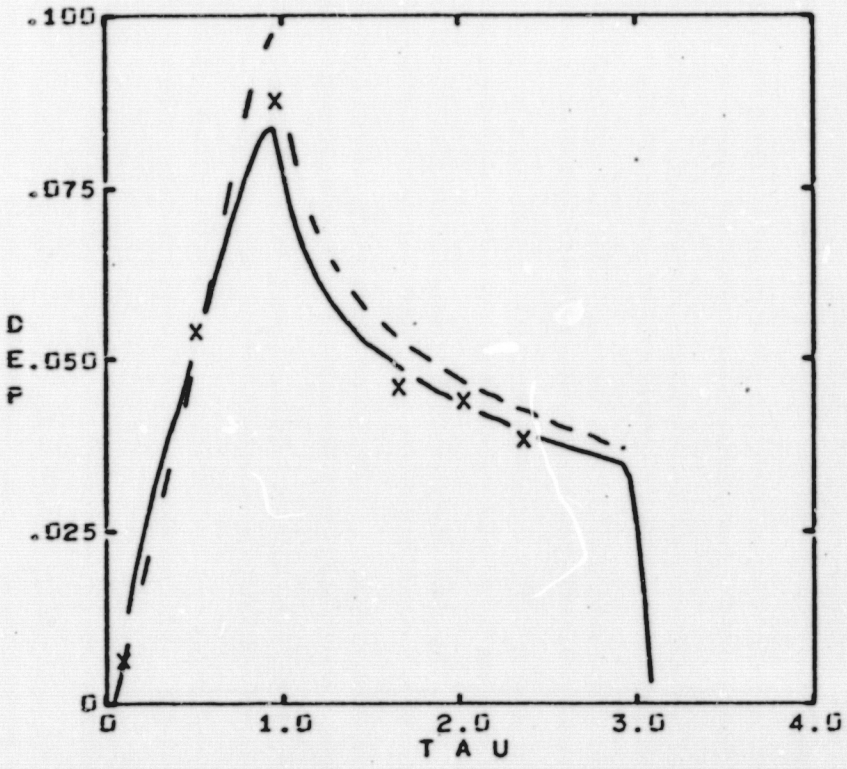
INITIAL TEMPERATURE 396.31
TAU-END OF TOTALITY 2.933

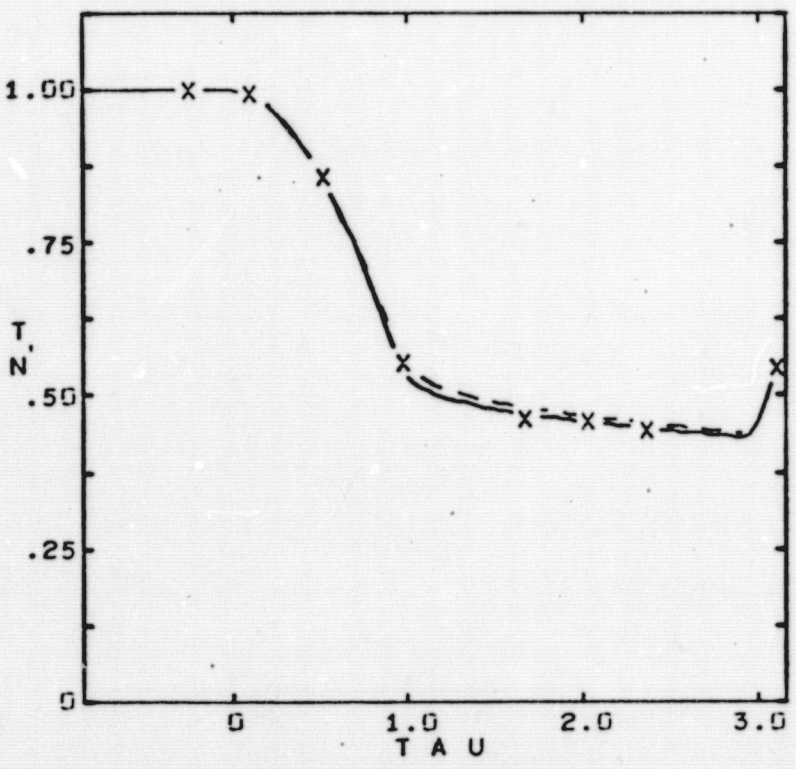
DIFFERENTIAL ENERGY DATA

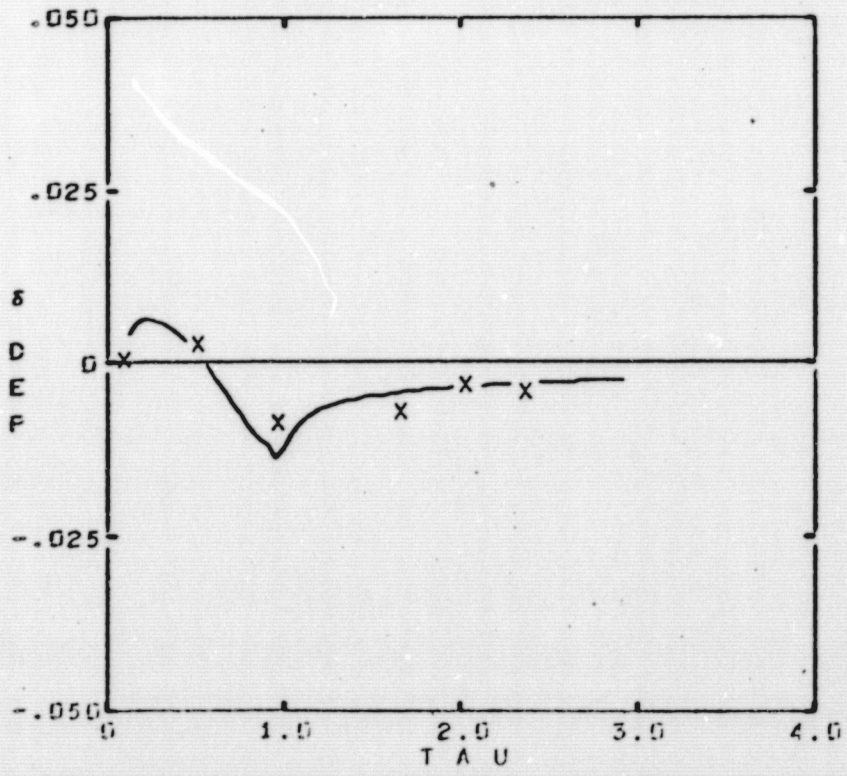
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0288	.0224	.0064
.50	.0514	.0498	.0016
.75	.0722	.0793	-.0071
.93	.0857	.0991	-.0134
1.0	.0776	.0900	-.0124
1.5	.0521	.0569	-.0048
2.0	.0437	.0472	-.0035
2.5	.0383	.0411	-.0028

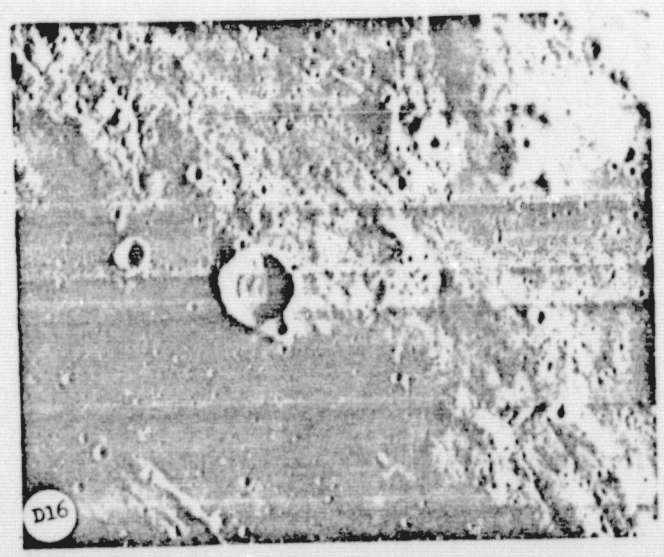
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.964	397.30	1.003	.0101
9H	-0.255	396.05	0.999	-.0027
10H	0.096	393.20	0.992	.0063
11H	0.511	339.15	0.856	.0540
12H	0.968	219.18	0.553	.0876
13H	1.662	183.43	0.463	.0459
14H	2.027	181.30	0.457	.0438
15H	2.356	175.53	0.443	.0385
16H	3.105	215.67	0.544	-.0064









LAMBDA=19.91 E BETA=16.90 N XI=+.3259 ETA=+.2907 L+PL CODE = 13239 ALBEDO =.0634

13H FLAT MOON DATA
FM=.01086

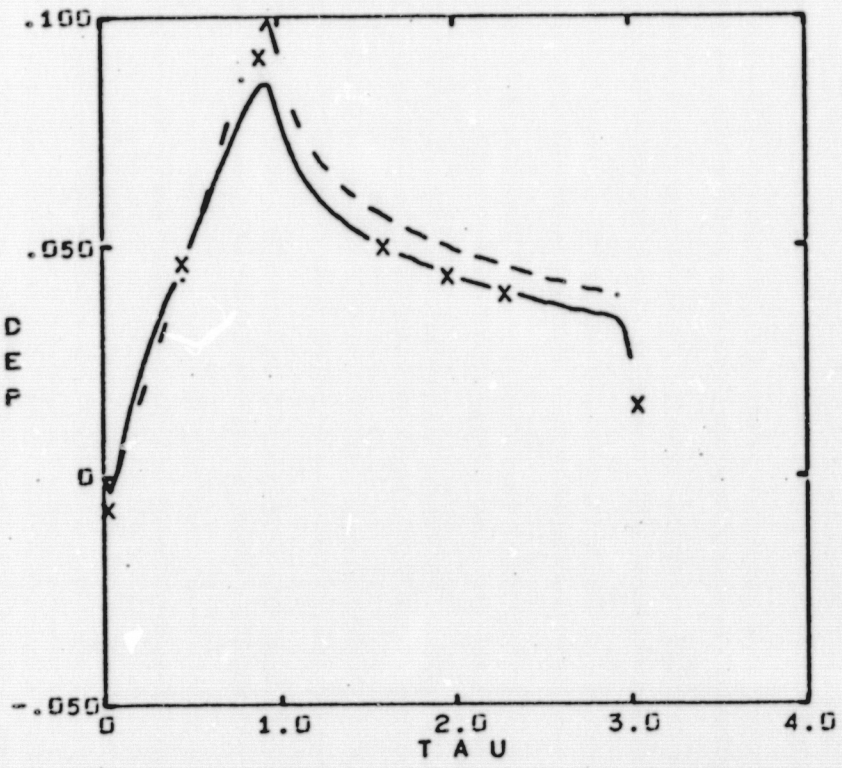
INITIAL TEMPERATURE 394.09
TAU-END OF TOTALITY 2.930

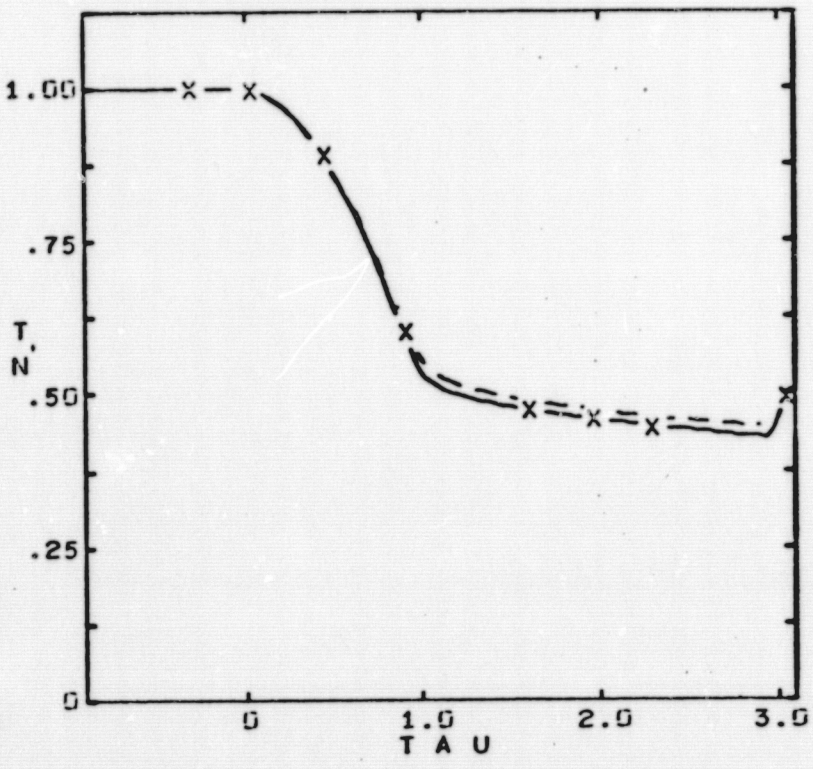
DIFFERENTIAL ENERGY DATA

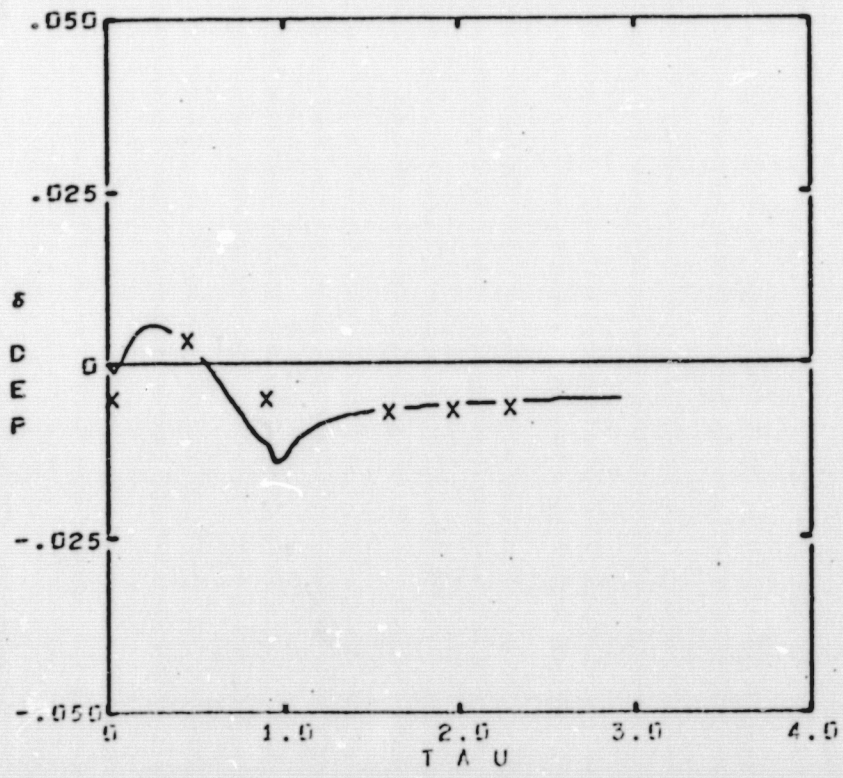
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0267	.0211	.0056
.50	.0515	.0499	.0016
.75	.0738	.0806	-.0068
.93	.0881	.1013	-.0132
1.0	.0786	.0921	-.0135
1.5	.0521	.0590	-.0069
2.0	.0434	.0493	-.0059
2.5	.0378	.0431	-.0053

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.032	394.64	1.001	.0056
9H	-0.325	393.92	1.000	-.0018
10H	0.028	392.86	0.997	-.0076
11H	0.442	350.26	0.889	.0464
12H	0.897	237.25	0.602	.0909
13H	1.591	185.92	0.472	.0495
14H	1.958	179.83	0.456	.0434
15H	2.285	175.29	0.445	.0391
16H	3.040	195.39	0.496	.0150









13 (1A3) N.E. BESSEL

LAMBDA=23.27 E BETA=24.22 N XI=+.3603 ETA=+.4102 L+PL CODE = 13461 ALBEDO =.0626

13H FLAT MOON DATA
FM=.01142

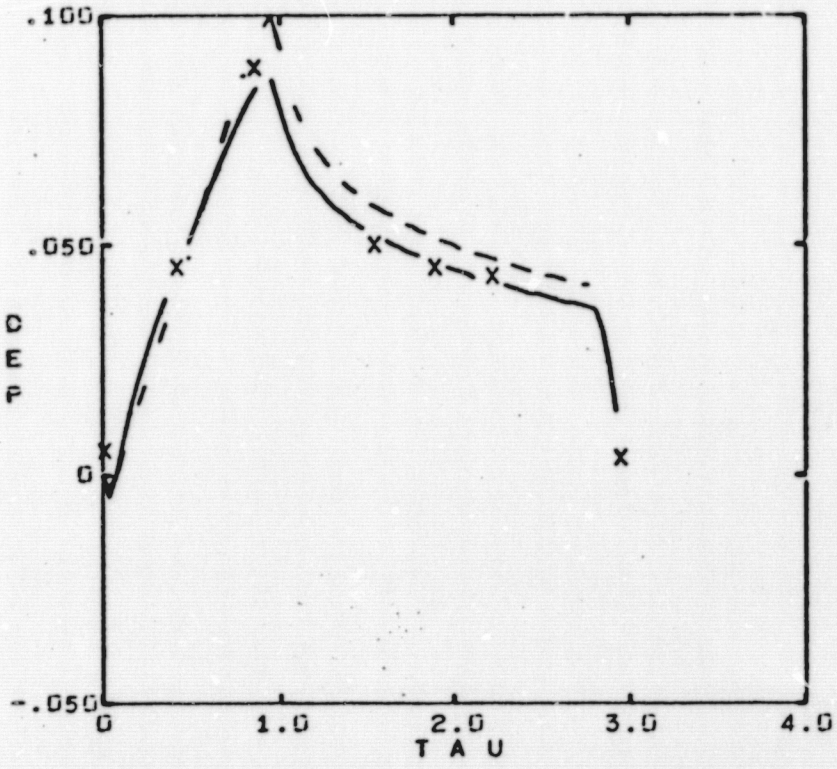
INITIAL TEMPERATURE 389.22
TAU-END OF TOTALITY 2.792

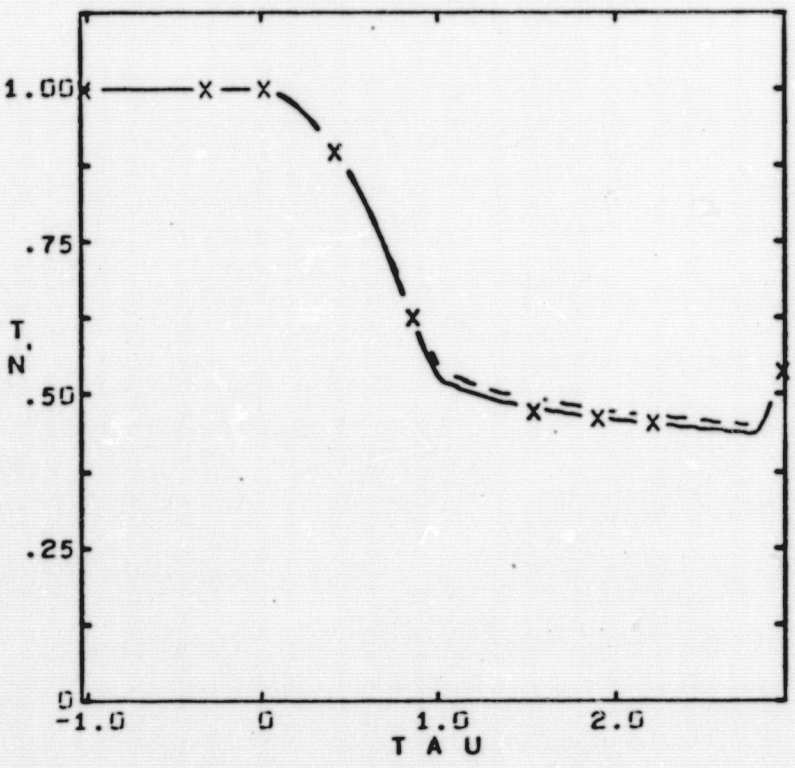
DIFFERENTIAL ENERGY DATA

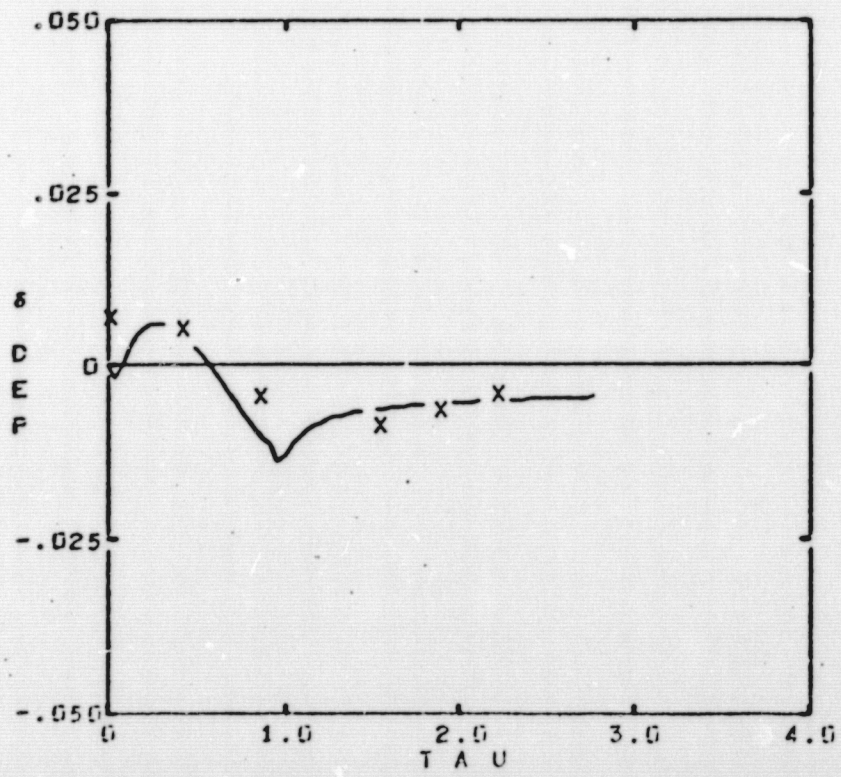
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0266	.0206	.0060
.50	.0521	.0498	.0023
.75	.0746	.0809	-.0063
.93	.0889	.1017	-.0128
1.0	.0796	.0926	-.0130
1.5	.0532	.0596	-.0064
2.0	.0445	.0499	-.0054
2.5	.0389	.0437	-.0048

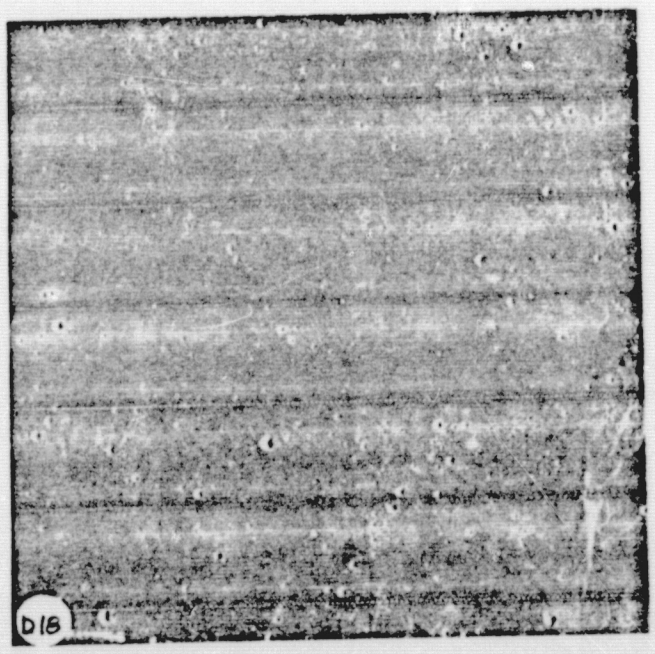
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.022	389.08	1.000	-.0014
9H	-0.333	389.27	1.000	.0005
10H	0.011	389.59	1.001	.0049
11H	0.416	349.94	0.899	.0452
12H	0.860	243.82	0.626	.0888
13H	1.536	184.20	0.473	.0502
14H	1.895	179.32	0.461	.0451
15H	2.215	177.28	0.455	.0430
16H	2.950	209.32	0.538	.0038









14 (1A4) S.E. LAMONNIER

LAMBDA=28.12 E BETA=24.20 N XI=+.4299 ETA=+.4099 L+PL CODE = 14431 ALBEDO =.0622

13H FLAT MOON DATA
FM=.01763

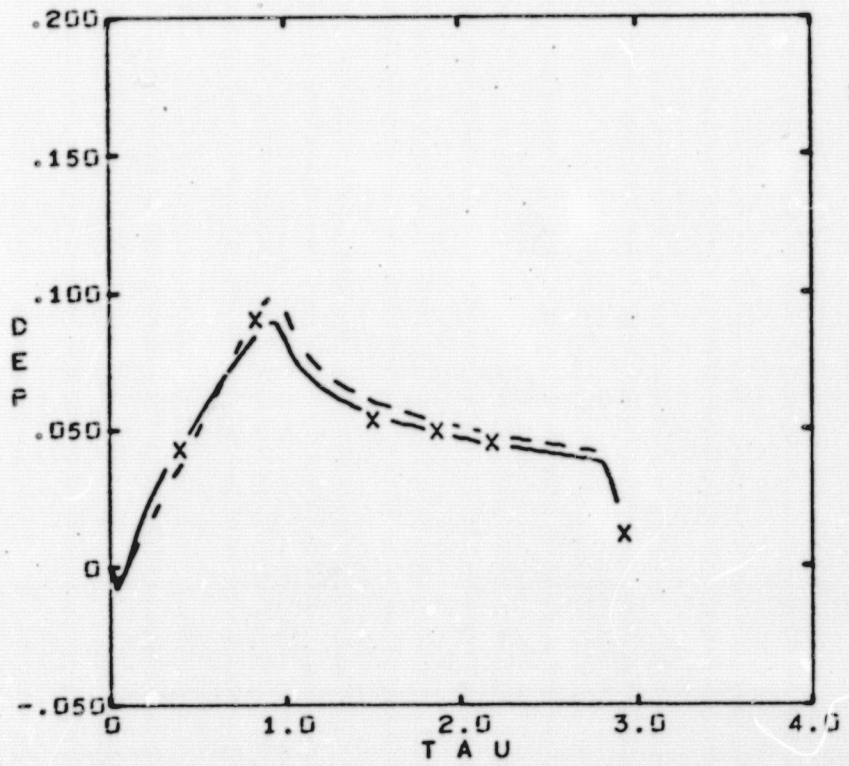
INITIAL TEMPERATURE 387.20
TAU-END OF TOTALITY 2.781

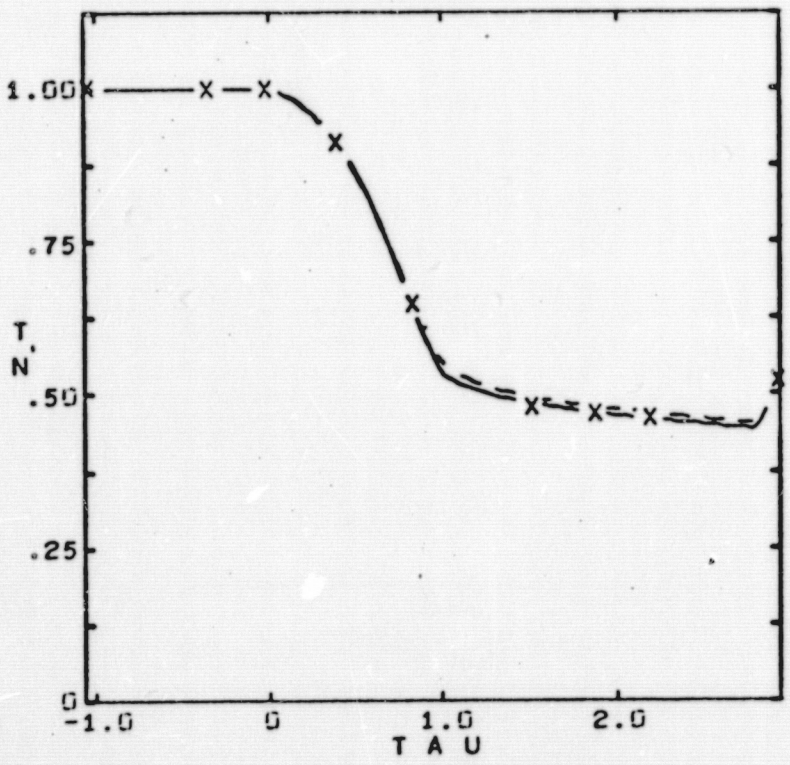
DIFFERENTIAL ENERGY DATA

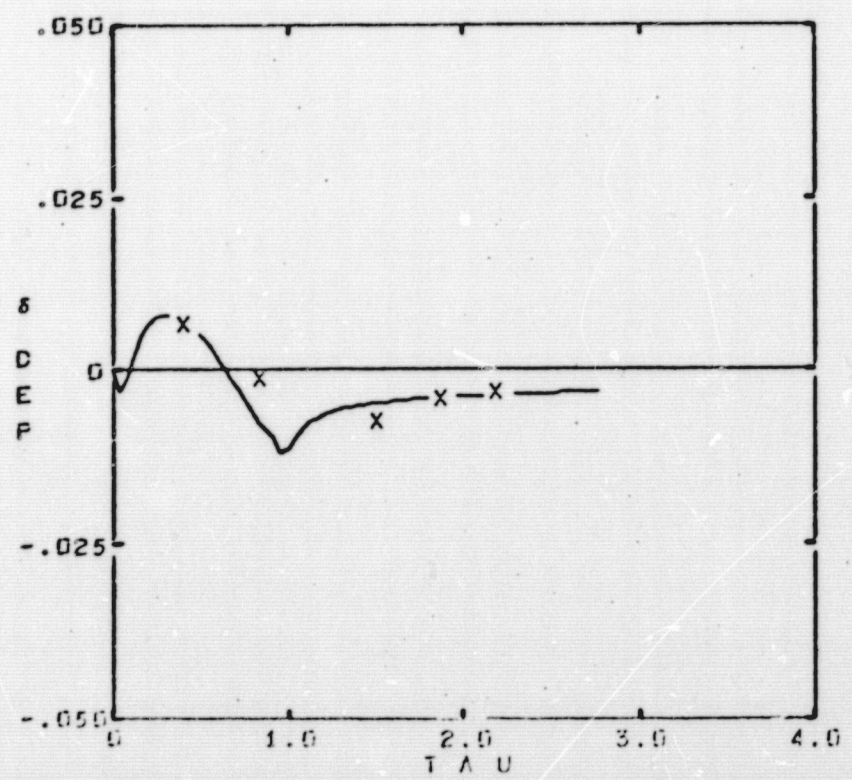
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0274	.0198	.0076
.50	.0546	.0498	.0048
.75	.0772	.0814	-.0042
.93	.0914	.1026	-.0112
1.0	.0823	.0935	-.0112
1.5	.0558	.0606	-.0048
2.0	.0471	.0509	-.0038
2.5	.0414	.0447	-.0033

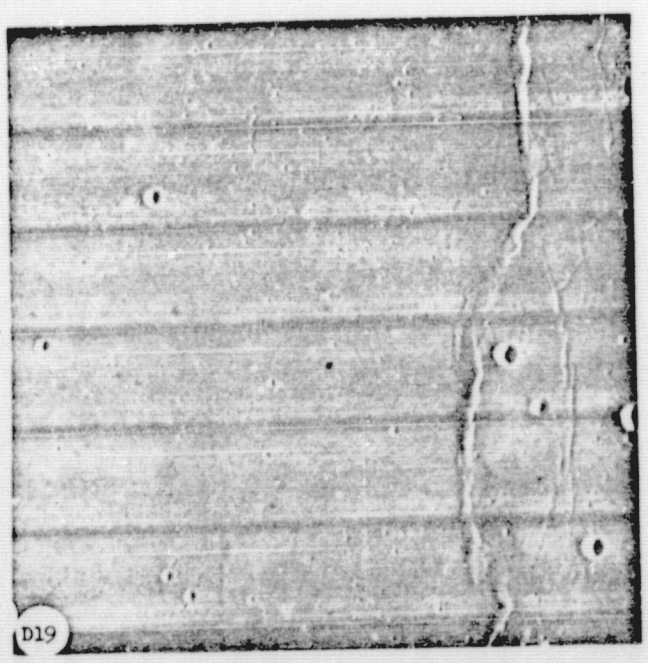
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.048	388.53	1.003	.0137
9H	-0.359	387.46	1.001	.0027
10H	-0.017	387.17	1.000	-.0003
11H	0.387	352.87	0.911	.0429
12H	0.832	251.59	0.650	.0899
13H	1.507	185.87	0.480	.0531
14H	1.864	182.11	0.470	.0489
15H	2.183	178.60	0.461	.0453
16H	2.919	202.72	0.524	.0121









15 (1A5) S.E. FRANZ

LAMBDA=36.37 E BETA=14.92 N XI=+.5730 ETA=+.2574 L+FL CODE = 15276 ALBEDO =.0631

13H FLAT MOON DATA
FM=.00346

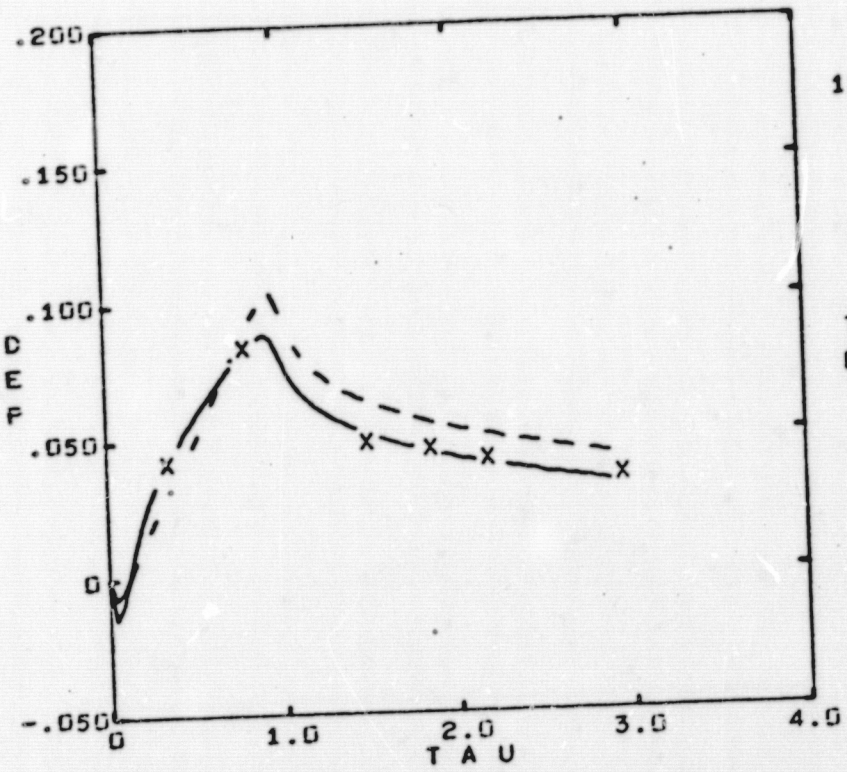
INITIAL TEMPERATURE 384.81
TAU-END OF TOTALITY 2.932

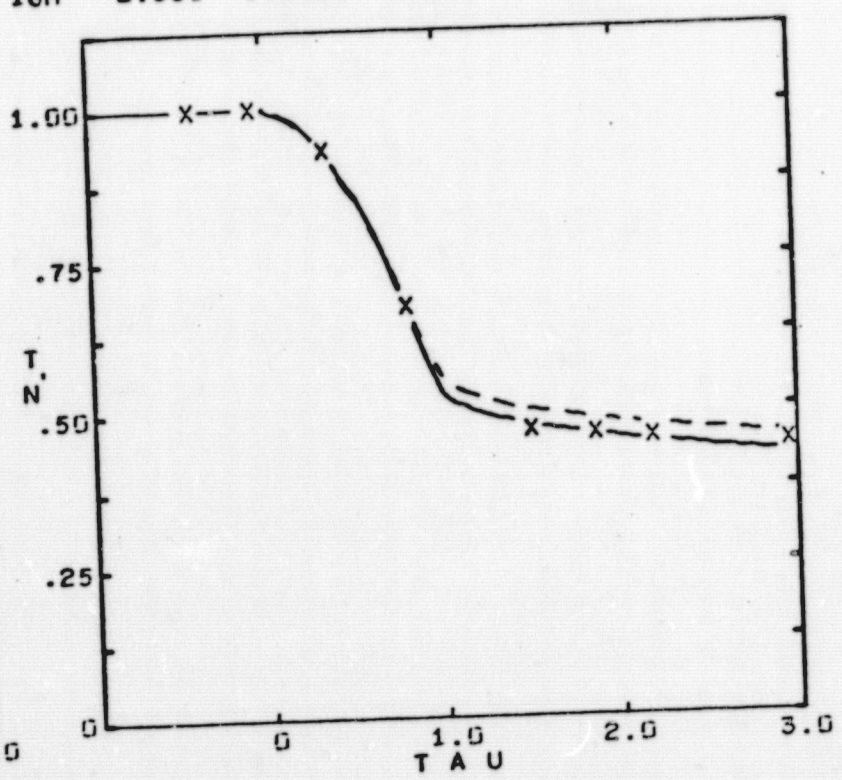
DIFFERENTIAL ENERGY DATA

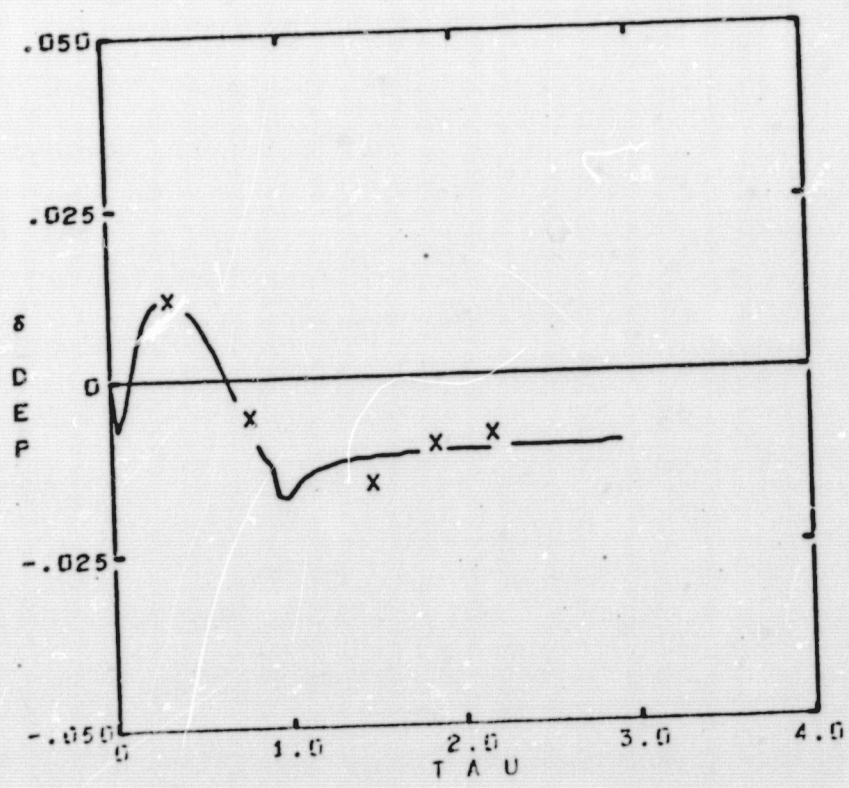
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0294	.0185	.0109
.50	.0587	.0503	.0084
.75	.0788	.0832	-.0044
.93	.0904	.1053	-.0149
1.0	.0792	.0962	-.0170
1.5	.0517	.0631	-.0114
2.0	.0427	.0534	-.0107
2.5	.0368	.0471	-.0103

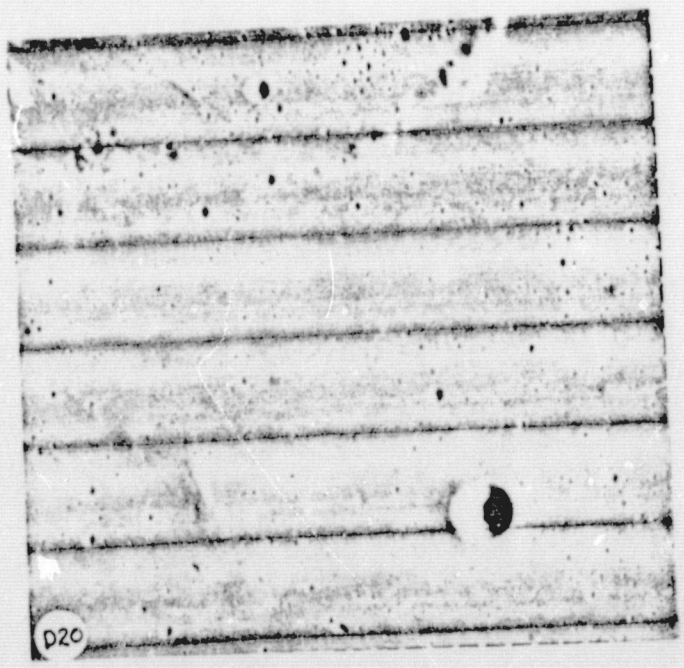
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.133	386.09	1.003	.0133
9H	-0.424	384.46	0.999	-.0036
10H	-0.073	384.79	1.000	-.0002
11H	0.342	358.64	0.932	.0420
12H	0.798	259.63	0.675	.0838
13H	1.491	180.29	0.469	.0482
14H	1.857	178.12	0.463	.0459
15H	2.185	174.54	0.454	.0423
16H	2.951	170.21	0.442	.0357









16 (1A6) CAUCHY

LAMBDA=39.32 E BETA= 5.87 N XI=+.6303 ETA=+.1022 L+FL CODE = 16130 ALBEDO =.0631

13H FLAT MOON DATA
FM=.00772

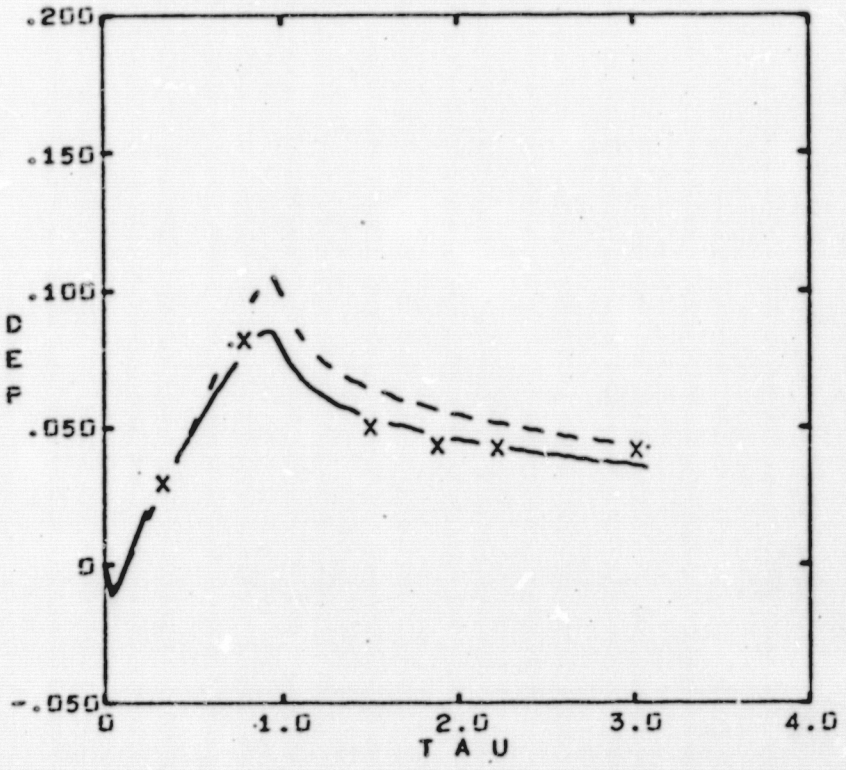
INITIAL TEMPERATURE 384.27
TAU-END OF TOTALITY 3.083

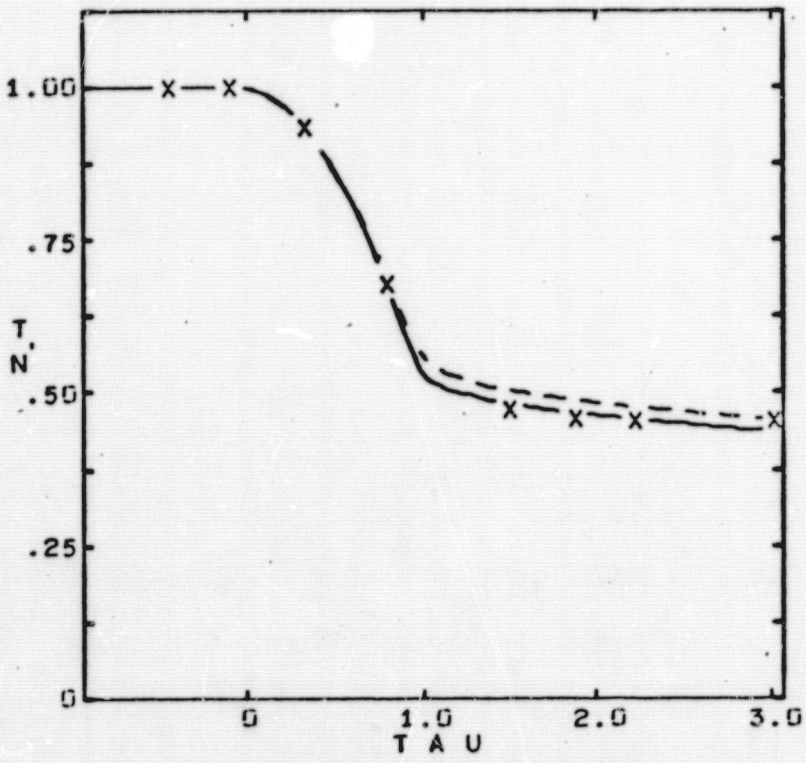
DIFFERENTIAL ENERGY DATA

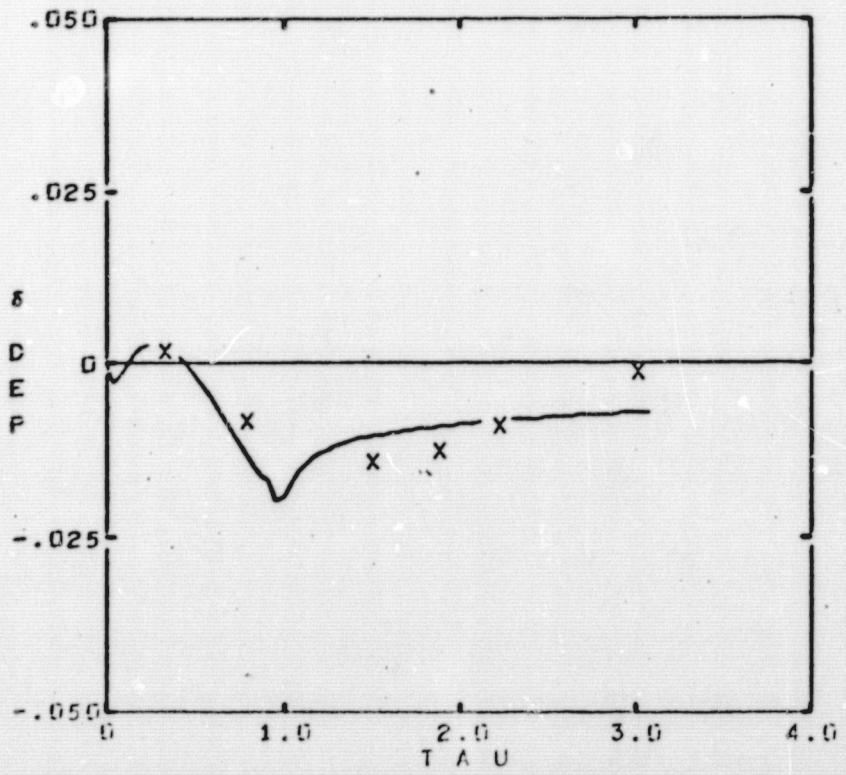
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0209	.0180	.0029
.50	.0490	.0507	-.0017
.75	.0730	.0842	-.0112
.93	.0891	.1068	-.0187
1.0	.0788	.0977	-.0189
1.5	.0540	.0644	-.0104
2.0	.0458	.0546	-.0088
2.5	.0405	.0482	-.0077
3.0	.0363	.0434	-.0071

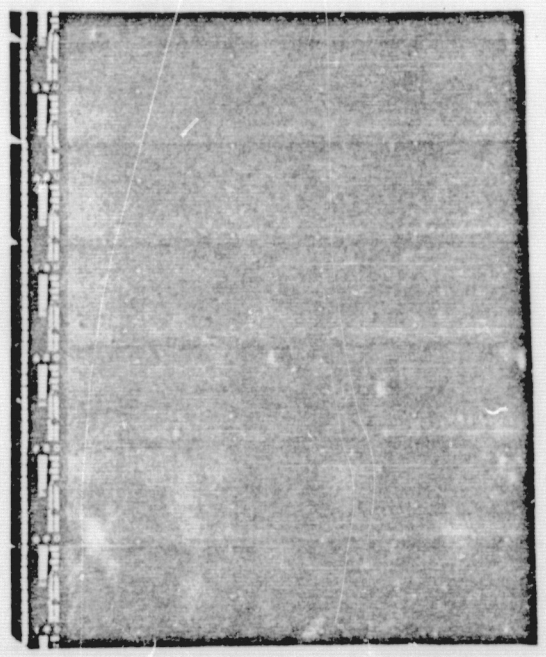
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.186	385.41	1.003	.0119
9H	-0.459	384.37	1.000	.0010
10H	-0.099	384.16	1.000	-.0012
11H	0.327	359.43	0.935	.0297
12H	0.794	260.67	0.678	.0815
13H	1.506	181.85	0.473	.0502
14H	1.881	175.89	0.458	.0439
15H	2.218	174.63	0.454	.0427
16H	3.011	173.92	0.453	.0420









D21

17 (4A1) N. MESSIER

LAMBDA=46.27 E BETA= 0.05 S XI=-.7226 ETA=-.0009 L+PL CODE = 47020 ALBEDO =.0667

13H FLAT MOON DATA
FM=.00238

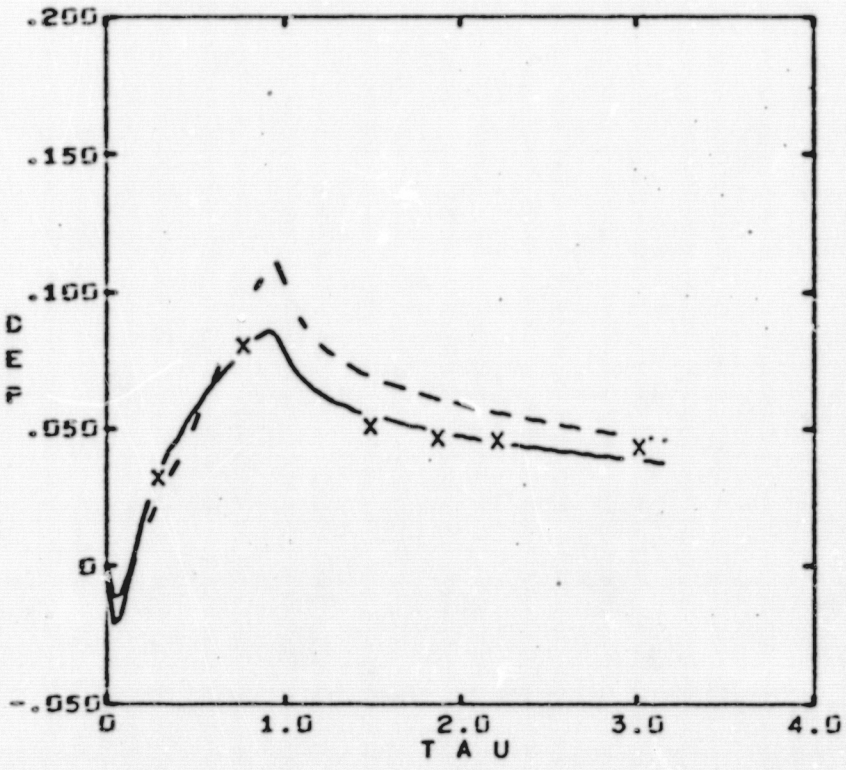
INITIAL TEMPERATURE 377.22
TAU-END OF TOTALITY 3.169

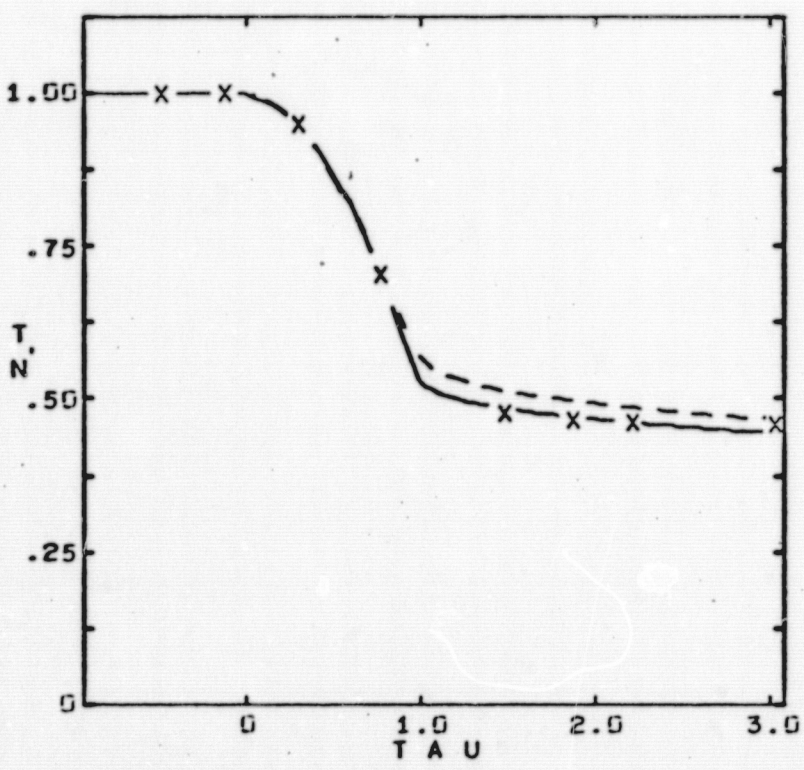
DIFFERENTIAL ENERGY DATA

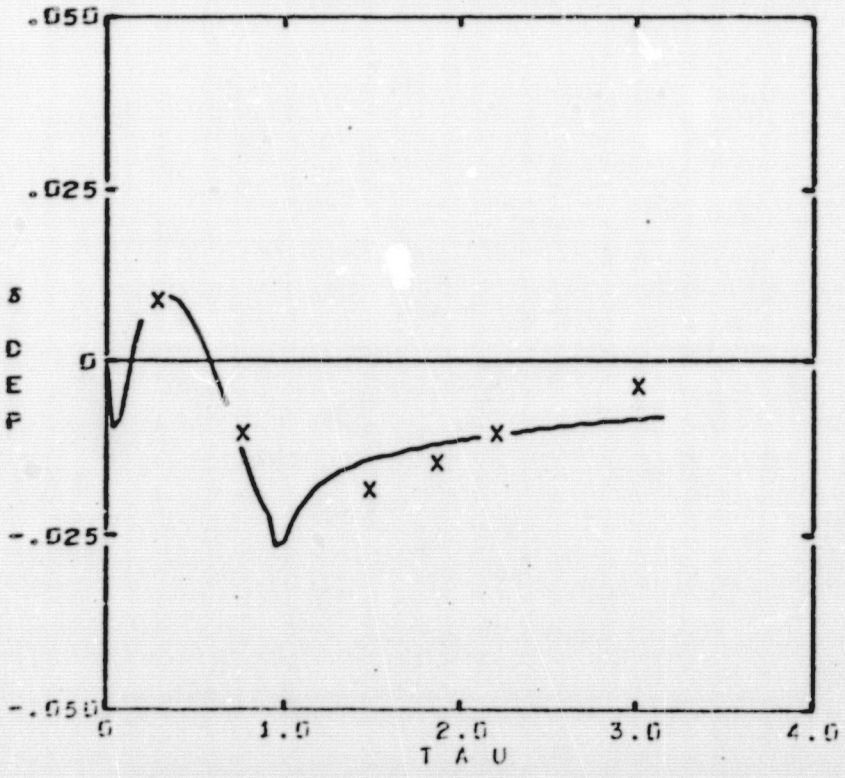
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0257	.0170	.0087
.50	.0574	.0525	.0049
.75	.0768	.0884	-.0116
.93	.0874	.1125	-.0251
1.0	.0776	.1034	-.0258
1.5	.0548	.0690	-.0142
2.0	.0475	.0589	-.0114
2.5	.0426	.0523	-.0097
3.0	.0388	.0472	-.0084

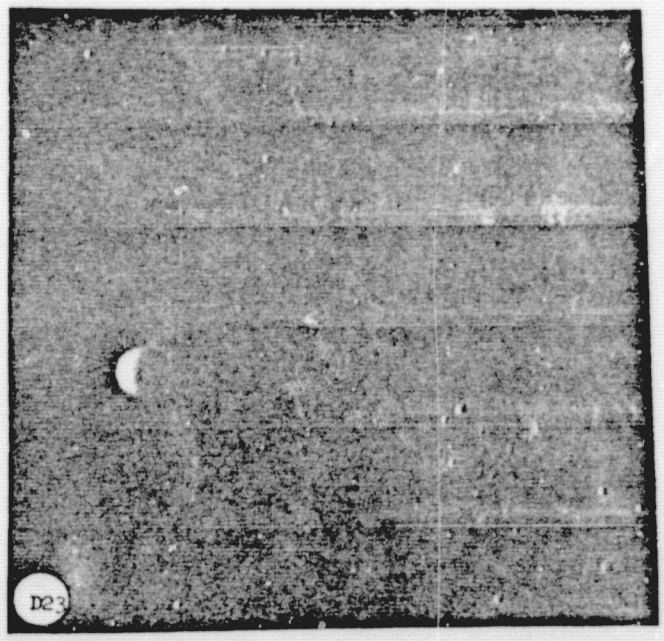
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.243	379.00	1.005	.0190
9H	-0.506	377.37	1.000	.0016
10H	-0.140	376.98	0.999	-.0026
11H	0.291	358.18	0.950	.0318
12H	0.765	264.98	0.702	.0804
13H	1.487	179.25	0.475	.0510
14H	1.868	175.26	0.465	.0466
15H	2.208	174.36	0.462	.0456
16H	3.019	172.38	0.457	.0436









18 (4A2) S.E. MESSIER

LAMBDA=51.34 E BETA= 5.96 S XI=+.7766 ETA=-.1039 L+PL CODE = 47180 ALBEDO =.0647

13H FLAT MOON DATA
FM=.00728

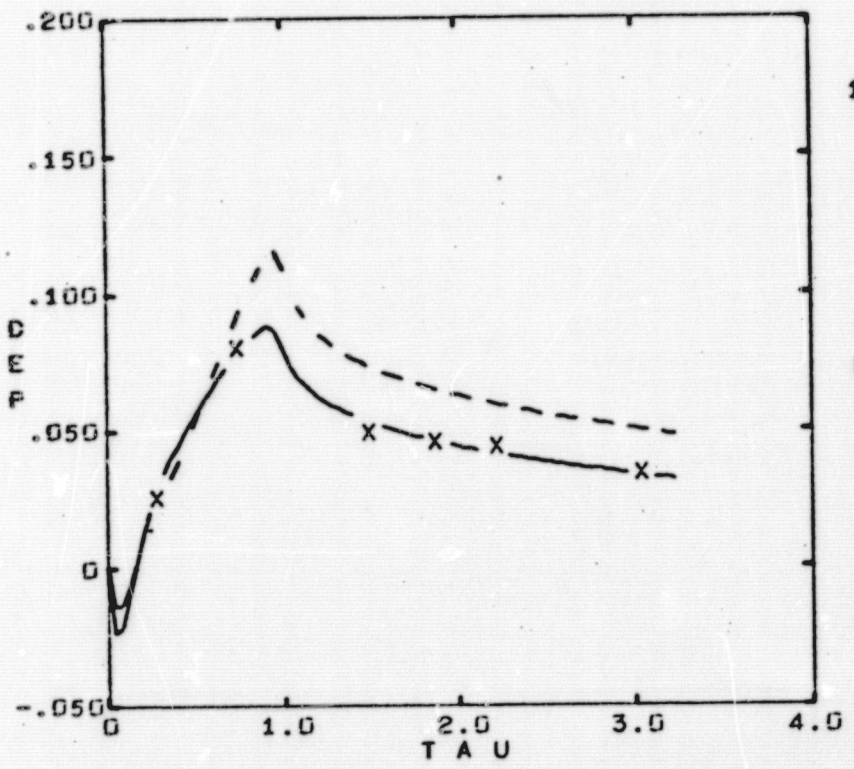
INITIAL TEMPERATURE 373.41
TAU-END OF TOTALITY 3.254

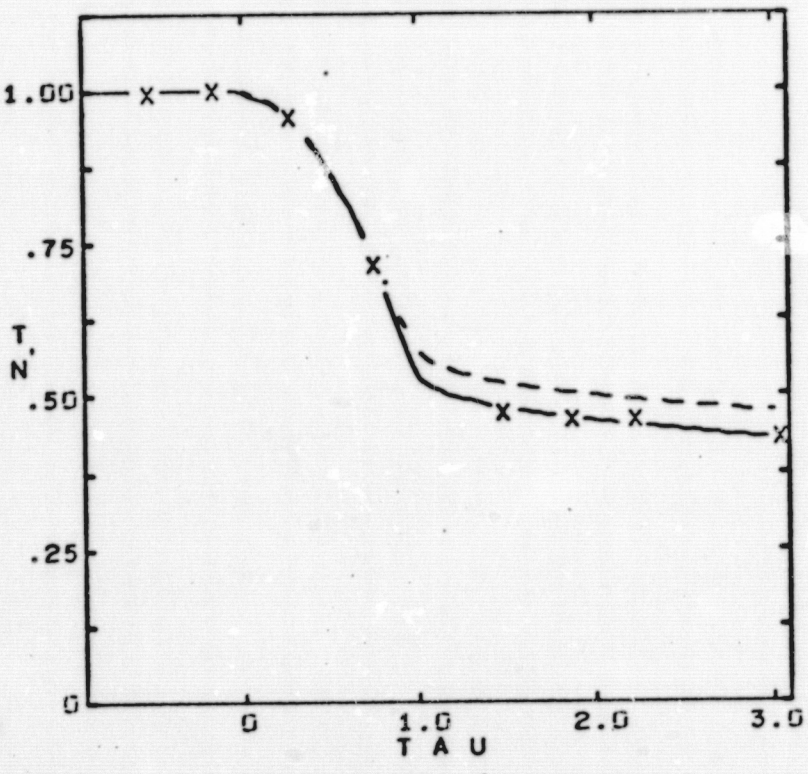
DIFFERENTIAL ENERGY DATA

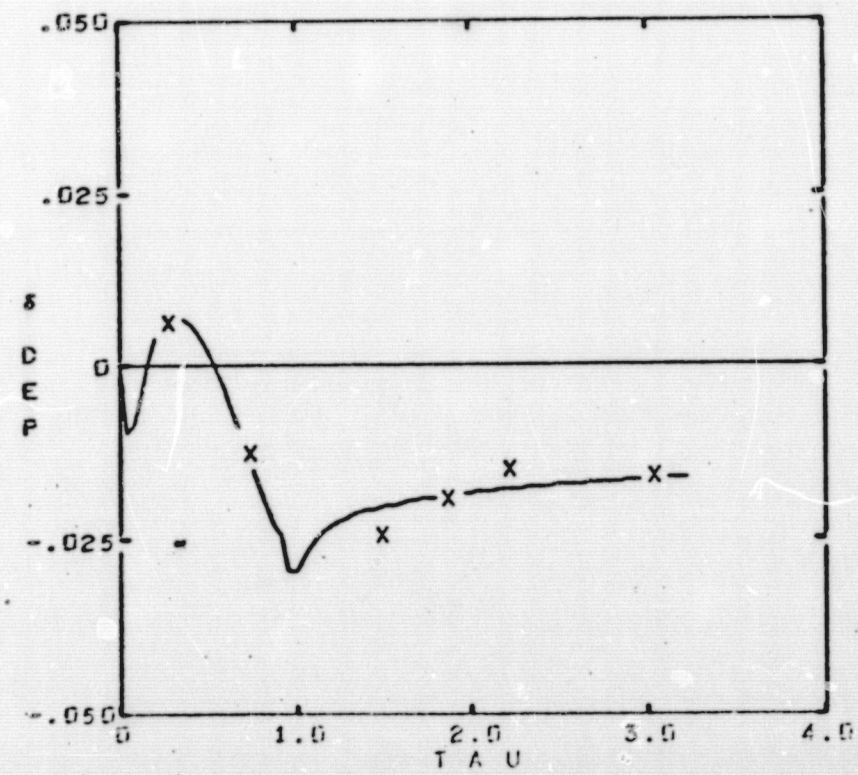
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0224	.0161	.0063
.50	.0563	.0542	.0021
.75	.0781	.0923	-.0142
.93	.0904	.1178	-.0274
1.0	.0790	.1086	-.0296
1.5	.0530	.0732	-.0202
2.0	.0444	.0627	-.0183
2.5	.0387	.0559	-.0172
3.0	.0342	.0506	-.0164

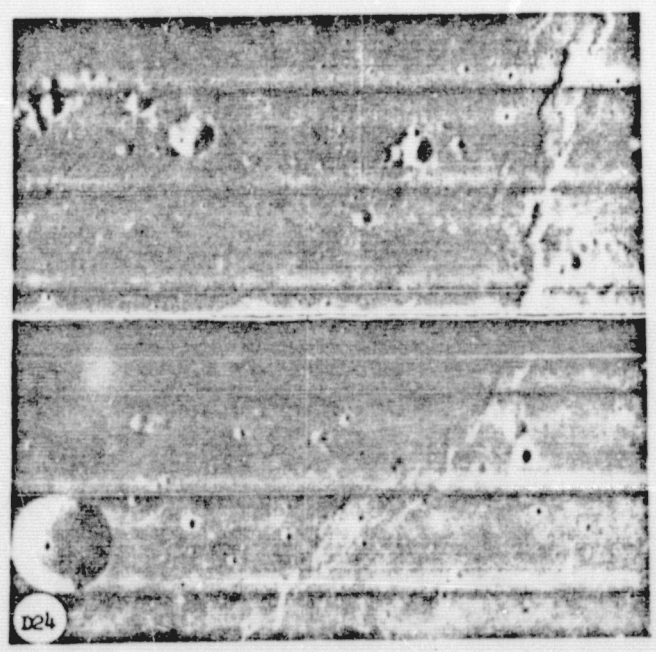
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.286	375.11	1.005	.0184
9H	-0.538	372.48	0.998	-.0098
10H	-0.168	373.47	1.000	.0007
11H	0.271	356.64	0.955	.0257
12H	0.751	266.88	0.715	.0799
13H	1.482	176.07	0.472	.0494
14H	1.867	172.73	0.463	.0458
15H	2.213	171.75	0.460	.0448
16H	3.040	160.97	0.431	.0345









19 (4A3) W. WEBB

LAMBDA=59.35 E BETA= 0.15 S XI=+.8603 ETA=-.0026 L+PL CODE = 48060 ALBEDO =.0758

13H FLAT MOON DATA
FM=-.00250

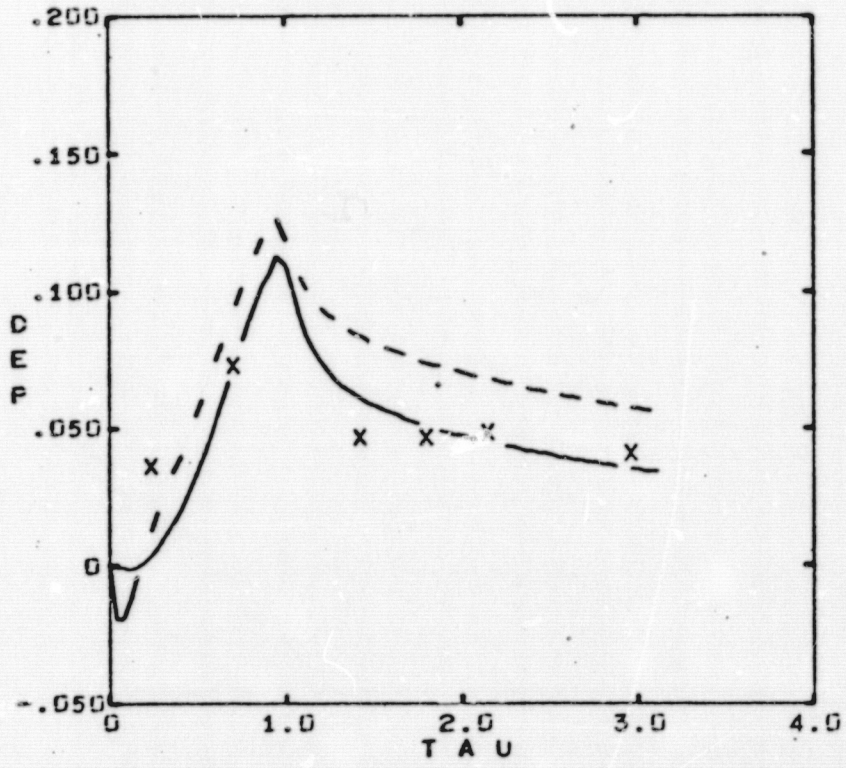
INITIAL TEMPERATURE 363.63
TAU-END OF TOTALITY 3.155

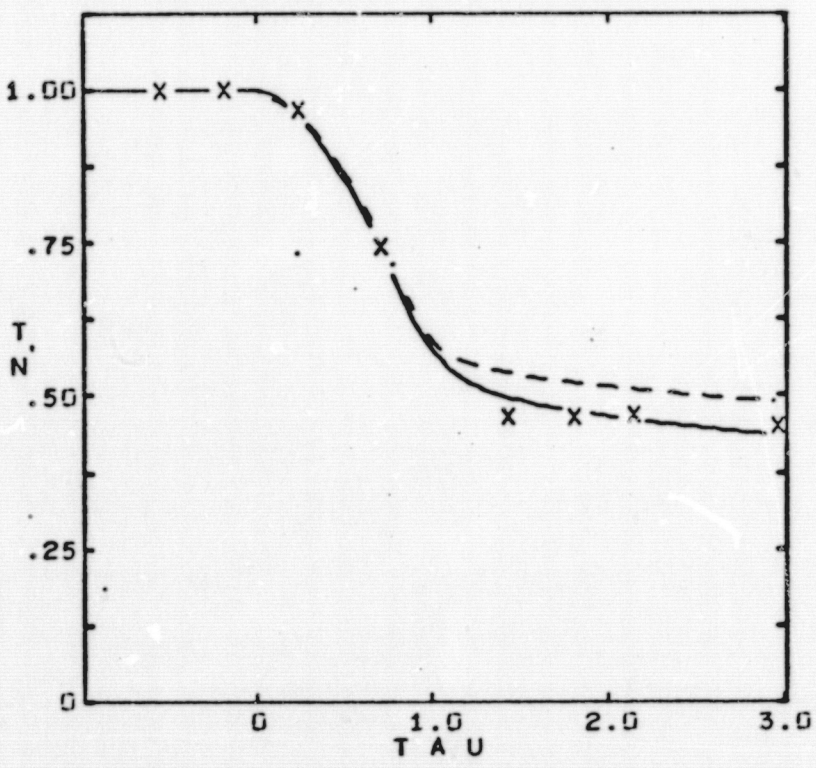
DIFFERENTIAL ENERGY DATA

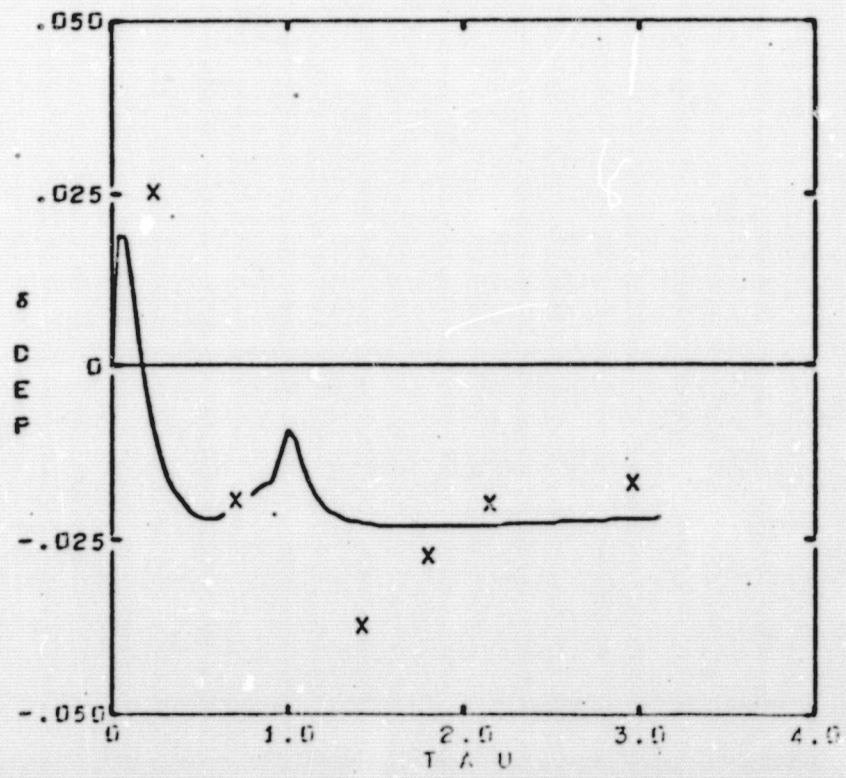
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0041	.0143	-.0102
.50	.0355	.0574	-.0219
.75	.0801	.0998	-.0197
.93	.1126	.1281	-.0155
1.0	.1095	.1189	-.0094
1.5	.0585	.0814	-.0229
2.0	.0473	.0703	-.0230
2.5	.0404	.0630	-.0226
3.0	.0353	.0573	-.0220

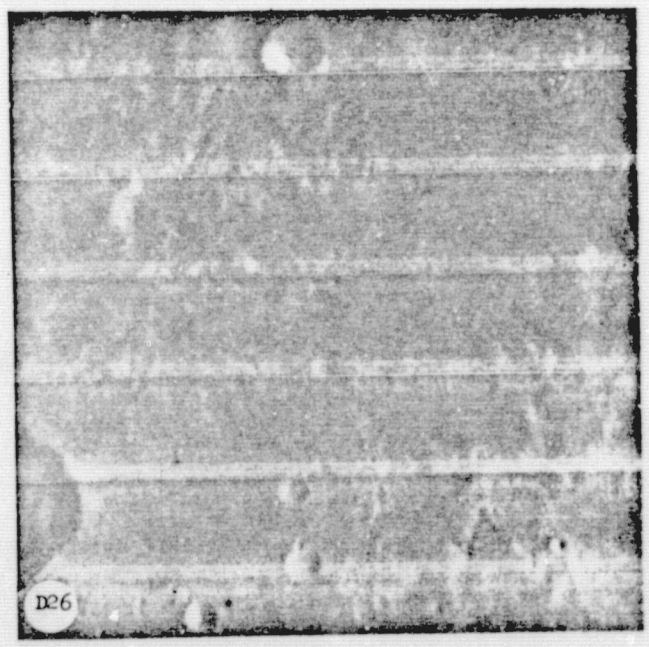
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.297	365.47	1.005	.0204
9H	-0.562	364.30	1.002	.0073
10H	-0.197	363.12	0.999	-.0056
11H	0.234	352.31	0.969	.0366
12H	0.706	270.20	0.743	.0733
13H	1.426	168.88	0.464	.0465
14H	1.807	168.96	0.465	.0466
15H	2.146	170.34	0.468	.0482
16H	2.961	163.47	0.450	.0408









20 (1A7) MARE CRISIUM

LAMBDA=58.24 E BETA=16.10 N XI=+.8169 ETA=+.2773 L+PL CODE = 18228 ALBEDO =.0659

13H FLAT MOON DATA
FM=.01420

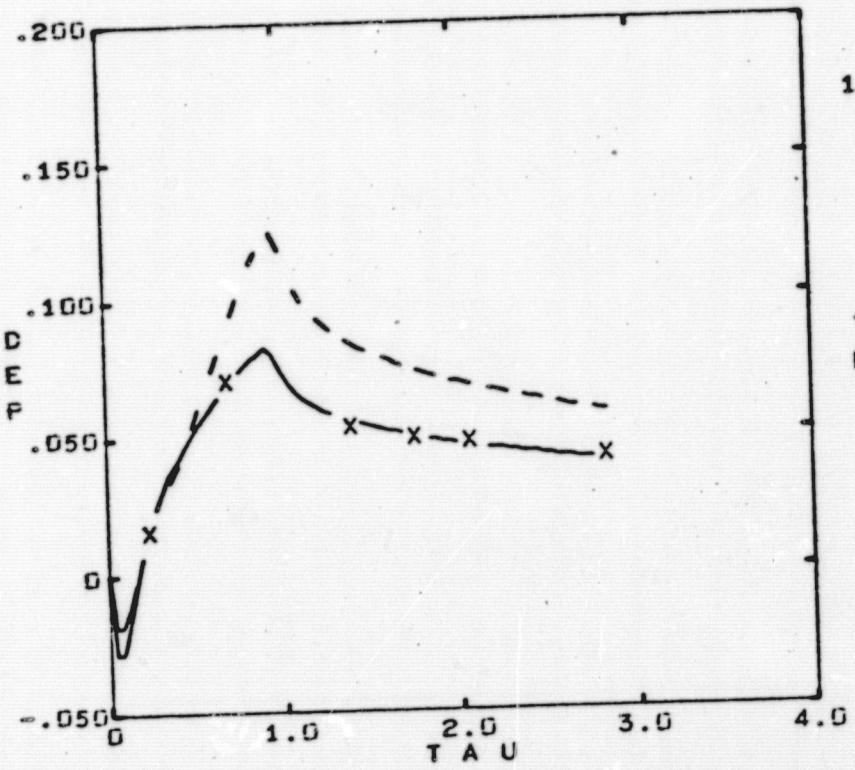
INITIAL TEMPERATURE 365.03
.TAU-END OF TOTALITY 2.876

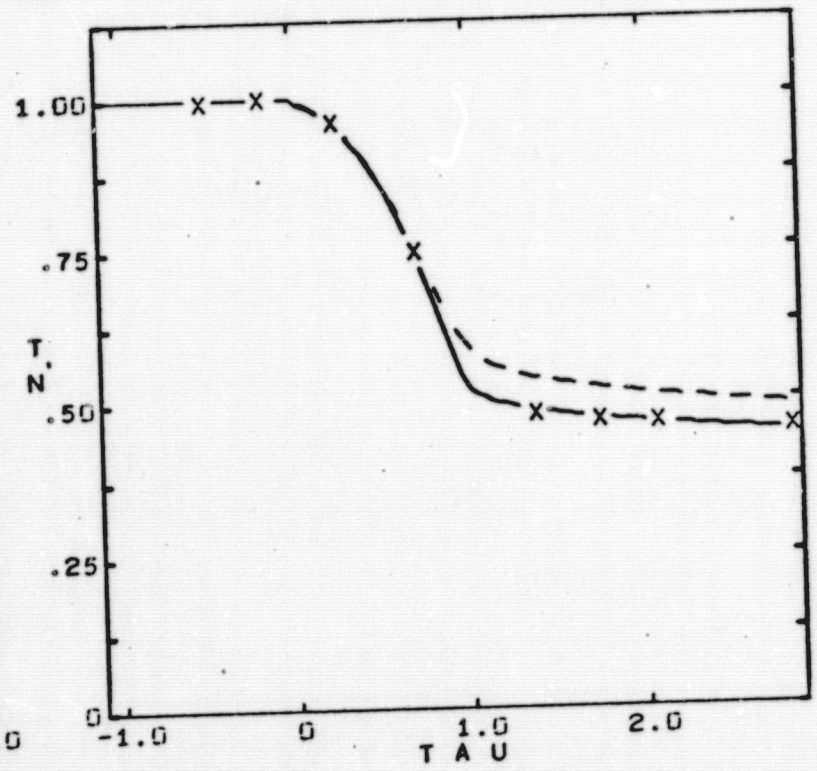
DIFFERENTIAL ENERGY DATA

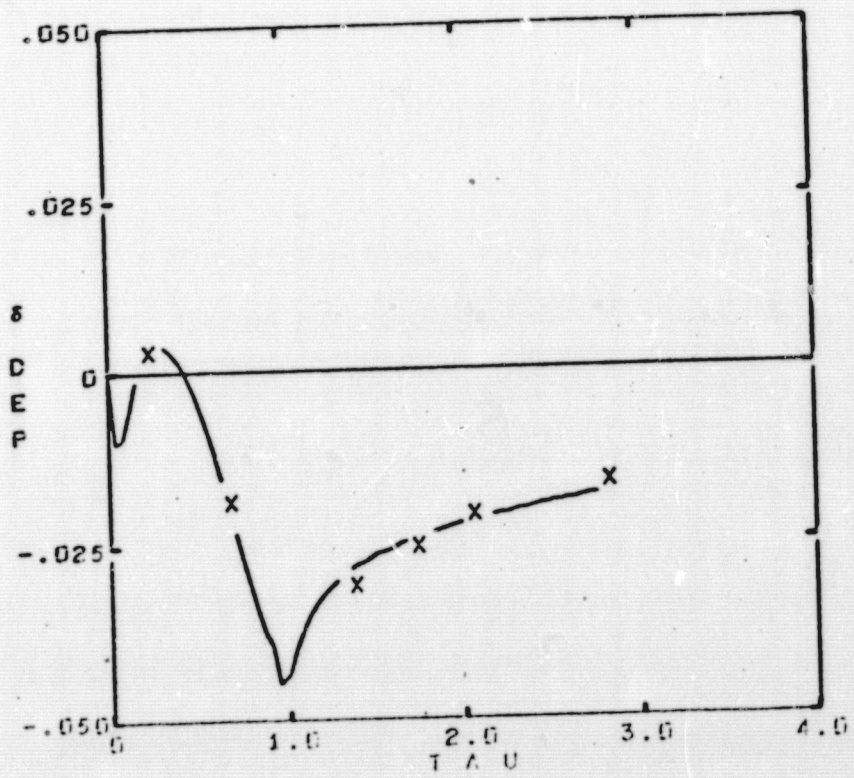
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0184	.0146	.0038
.50	.0527	.0569	-.0042
.75	.0728	.0987	-.0259
.93	.0835	.1266	-.0431
1.0	.0739	.1173	-.0434
1.5	.0535	.0801	-.0266
2.0	.0471	.0692	-.0221
2.5	.0427	.0619	-.0192

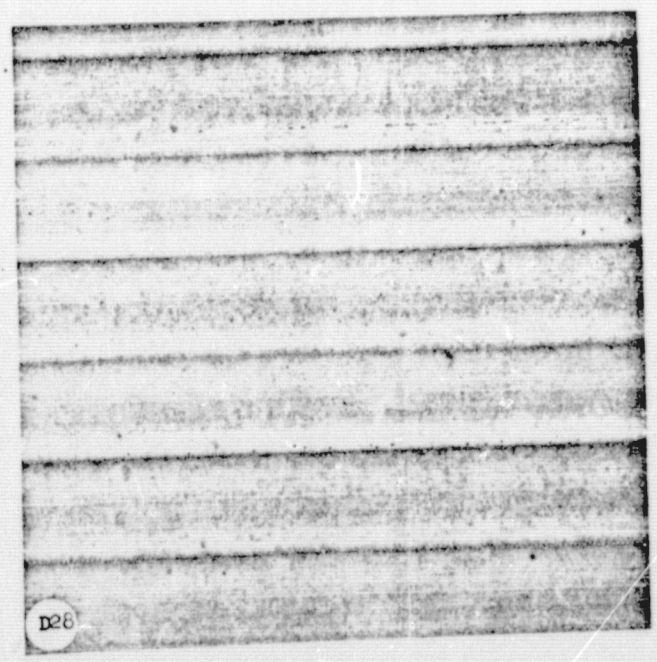
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.219	366.21	1.003	.0130
9H	-0.518	364.21	0.998	-.0090
10H	-0.170	365.14	1.000	.0012
11H	0.241	350.34	0.960	.0159
12H	0.692	272.29	0.746	.0703
13H	1.379	175.51	0.481	.0534
14H	1.742	171.72	0.470	.0490
15H	2.066	170.23	0.466	.0473
16H	2.834	165.24	0.453	.0420









21 (1A8) E. MARE CRISIUM

LAMBDA=63.45 E BETA=17.70 N XI=+.8522 ETA=+.3040 L+PL CODE = 18350 ALBEDO =.0631

13H FLAT MOON DATA
FM=.01990

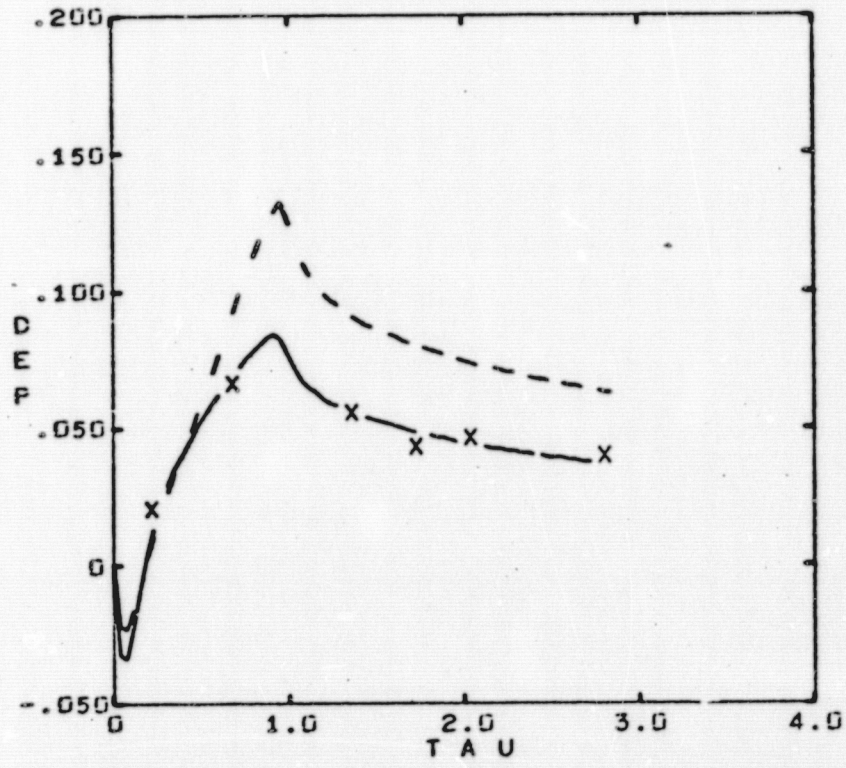
INITIAL TEMPERATURE 359.88
TAU-END OF TOTALITY 2.841

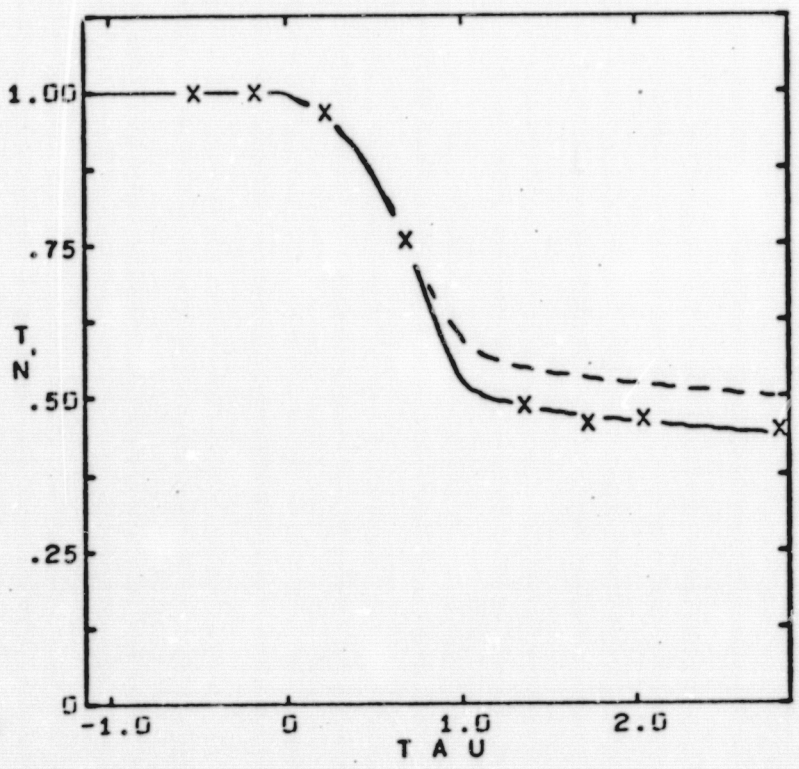
DIFFERENTIAL ENERGY DATA

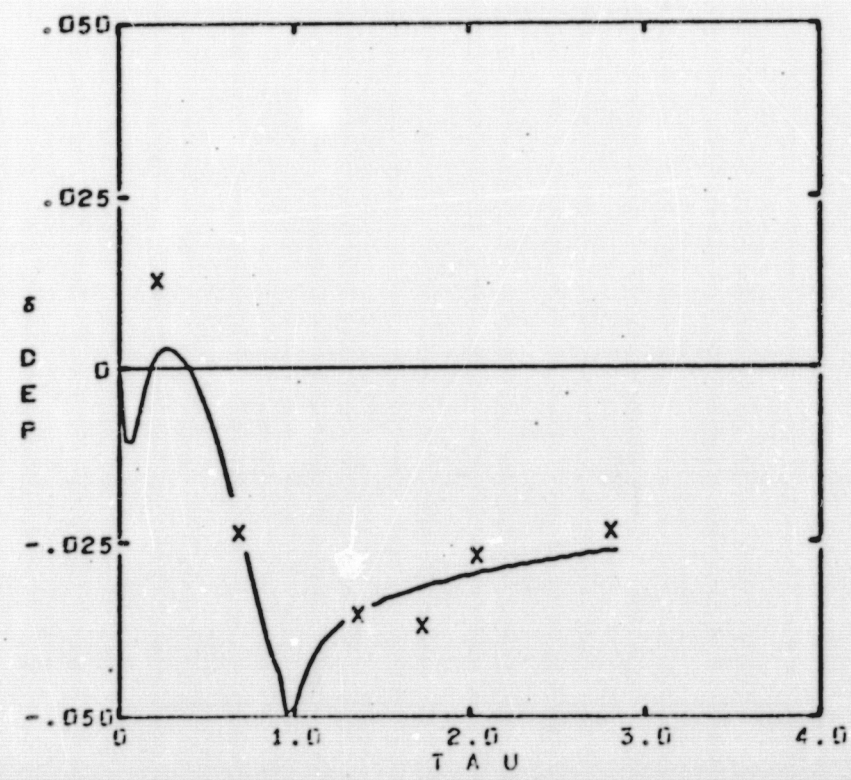
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0158	.0130	.0028
.50	.0528	.0590	-.0062
.75	.0744	.1039	-.0295
.93	.0858	.1337	-.0479
1.0	.0758	.1245	-.0487
1.5	.0525	.0859	-.0334
2.0	.0449	.0746	-.0297
2.5	.0396	.0670	-.0274

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.226	361.34	1.004	.0164
9H	-0.529	360.44	1.002	.0062
10H	-0.183	359.47	0.999	-.0046
11H	0.225	347.56	0.966	.0209
12H	0.674	272.23	0.756	.0667
13H	1.355	174.78	0.486	.0556
14H	1.717	164.21	0.456	.0433
15H	2.040	167.48	0.465	.0469
16H	2.802	160.92	0.447	.0400







PHOTOGRAPH
NOT
AVAILABLE

22 (3A2) N.W. MARE NUBIUM 1

LAMBDA=11.42 W BETA=19.83 S XI=-.1862 ETA=-.3393 L+FL CODE = 31394 ALBEDO =.0707

13H FLAT MOON DATA
FM=.01319

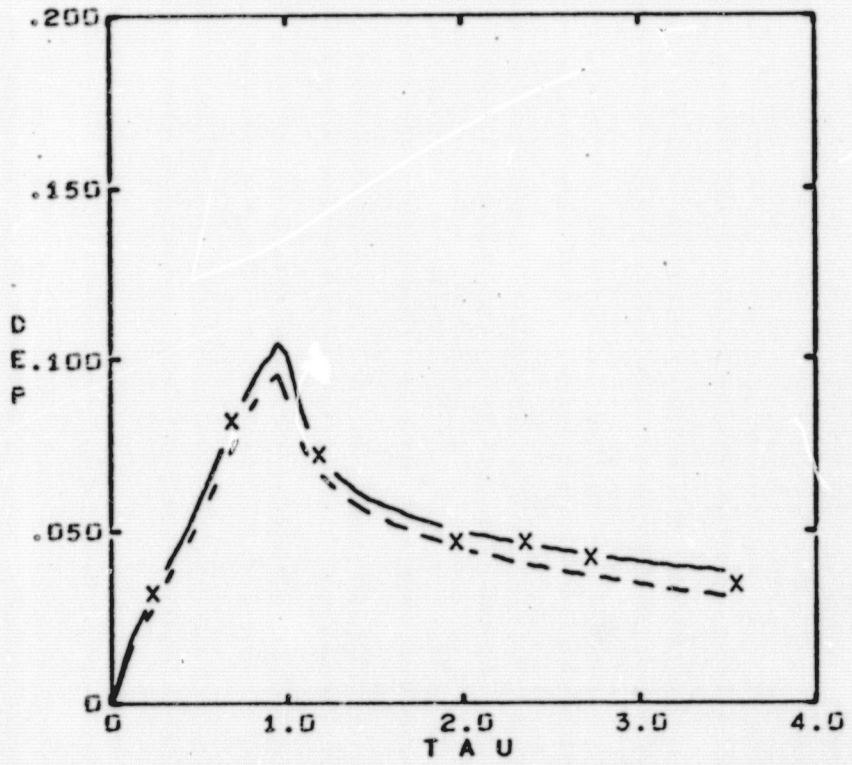
INITIAL TEMPERATURE 391.12
TAU-END OF TOTALITY 3.519

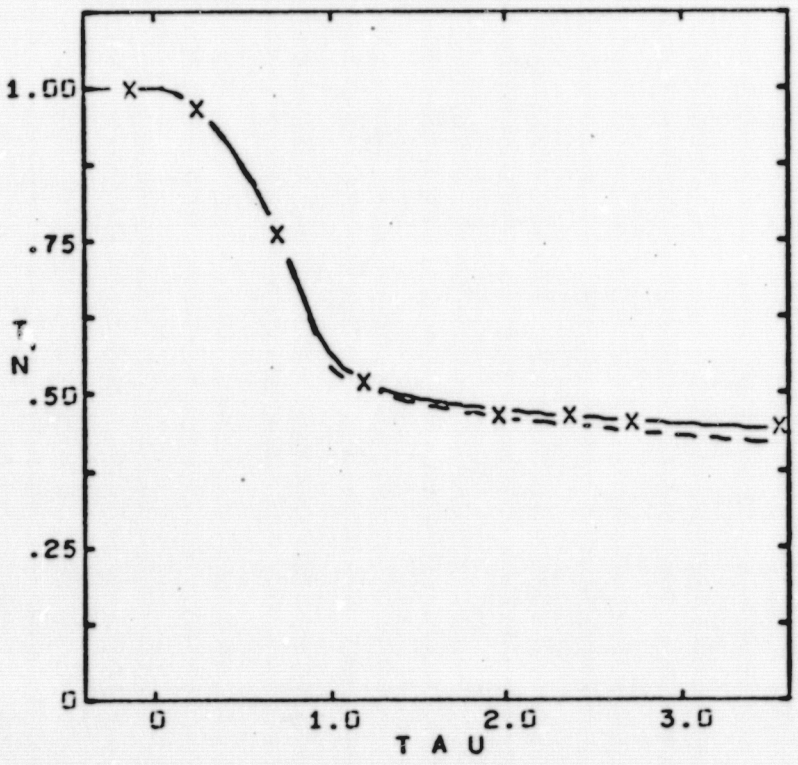
DIFFERENTIAL ENERGY DATA

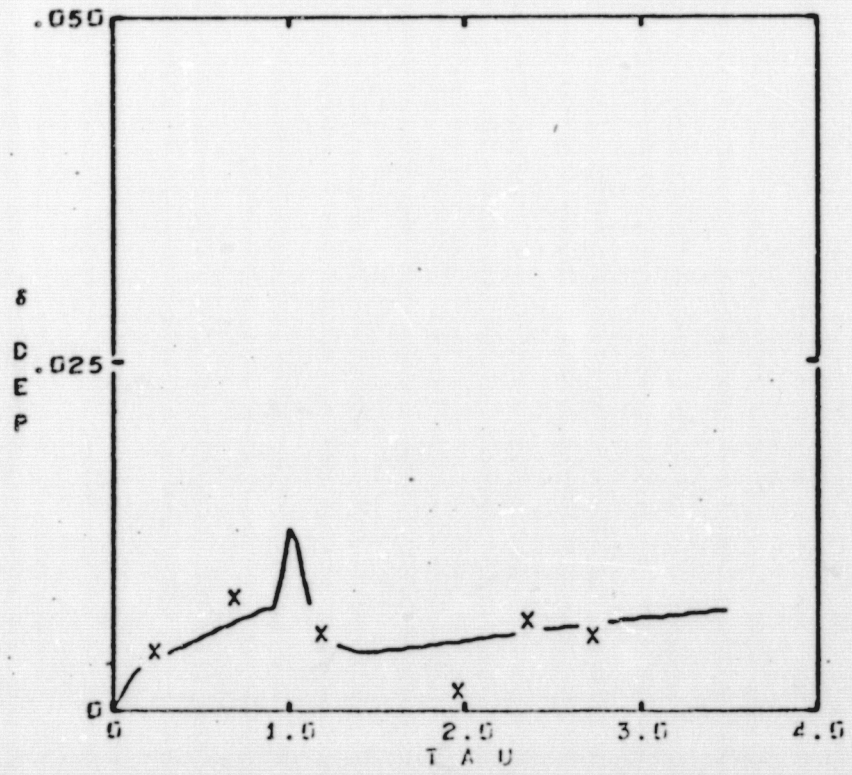
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0320	.0284	.0036
.50	.0582	.0531	.0051
.75	.0866	.0800	.0066
.93	.1054	.0978	.0076
1.0	.1014	.0884	.0130
1.5	.0589	.0547	.0042
2.0	.0499	.0449	.0050
2.5	.0448	.0389	.0059
3.0	.0411	.0345	.0066

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.929	392.10	1.002	.0100
9H	-0.146	390.96	1.000	-.0016
10H	0.238	378.55	0.968	.0316
11H	0.693	298.65	0.764	.0821
12H	1.193	202.94	0.519	.0725
13H	1.955	182.12	0.466	.0470
14H	2.354	182.07	0.466	.0470
15H	2.717	177.27	0.453	.0422
16H	3.545	174.02	0.445	.0344







PHOTOGRAPH
NOT
AVAILABLE

23 (3A3) N.W. MARE NUBIUM 2

LAMBDA=11.32 W BETA=19.57 S XI=-.1849 ETA=-.3349 L+PL CODE = 31383 ALBEDO =.0707

13H FLAT MOON DATA
FM=.01917

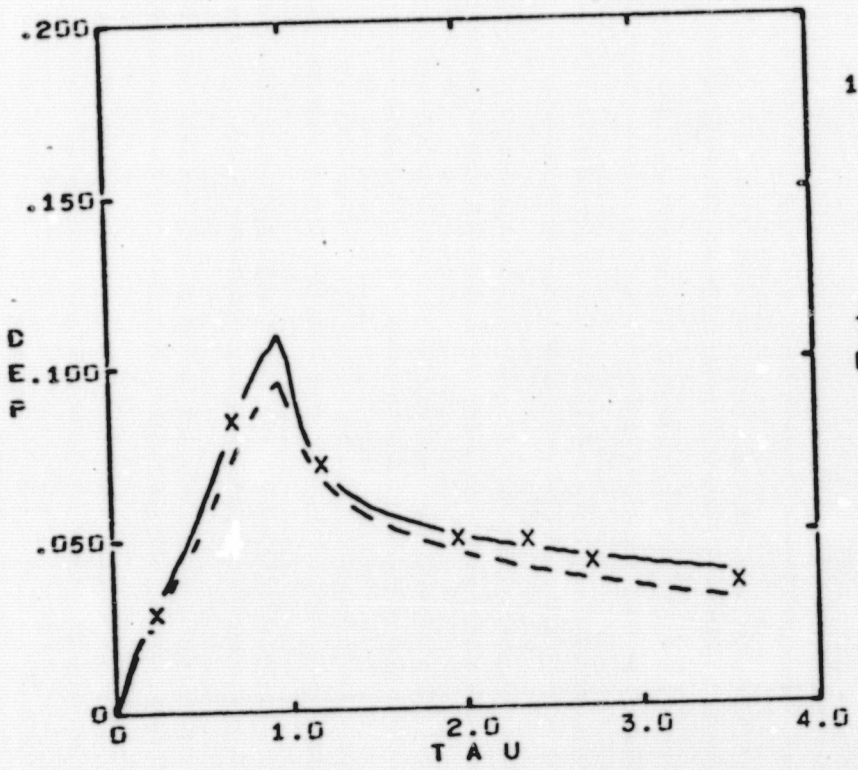
INITIAL TEMPERATURE 391.52
TAU-END OF TOTALITY 3.516

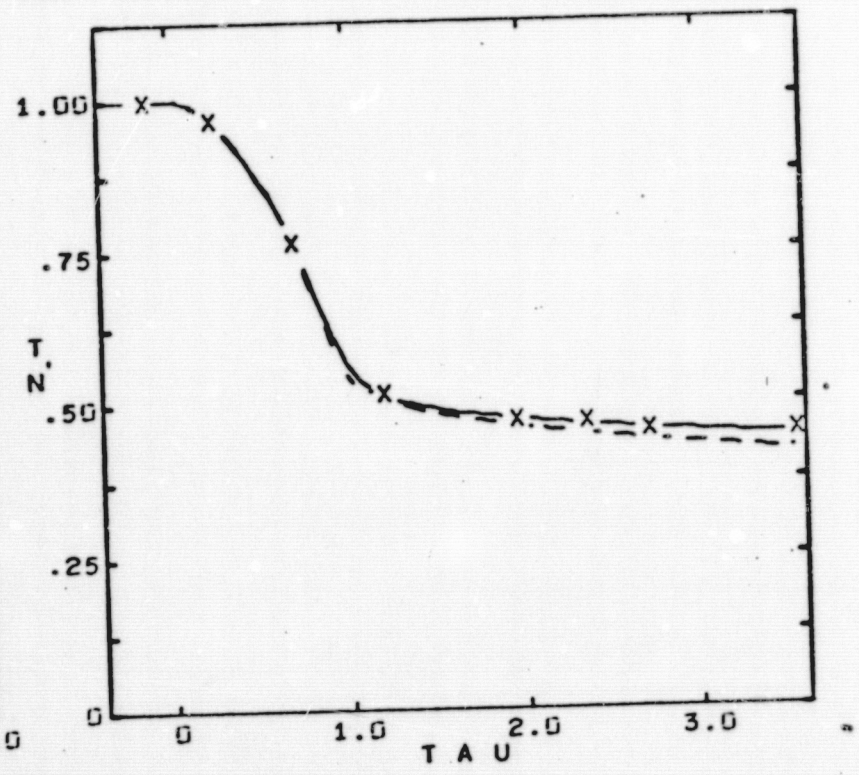
DIFFERENTIAL ENERGY DATA

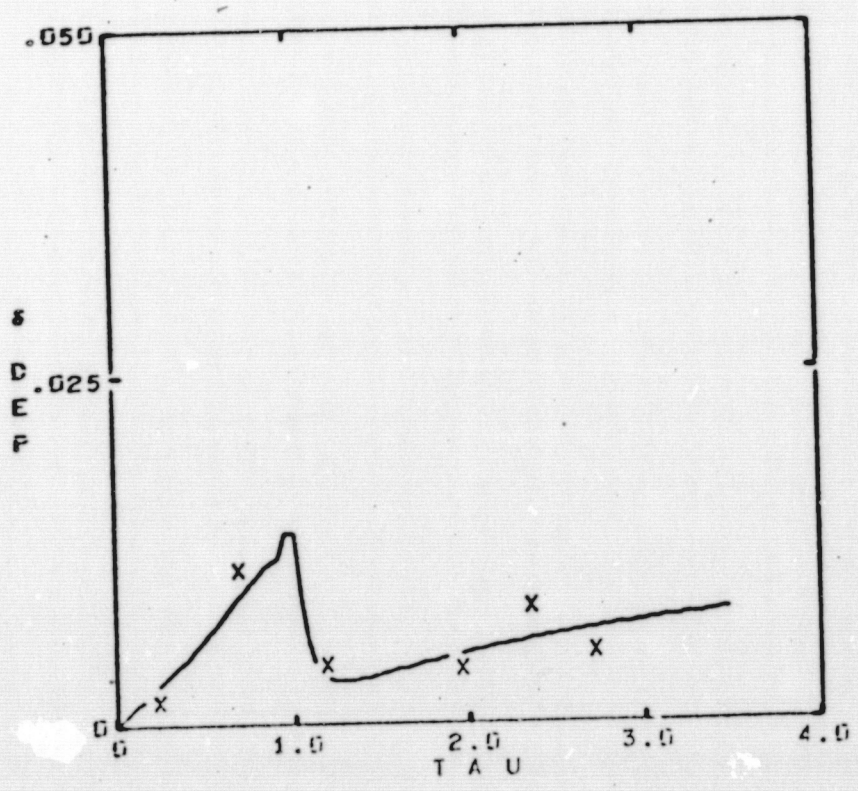
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0312	.0284	.0028
.50	.0592	.0531	.0061
.75	.0899	.0800	.0099
.93	.1102	.0978	.0124
1.0	.1021	.0884	.0137
1.5	.0582	.0547	.0035
2.0	.0499	.0449	.0050
2.5	.0451	.0389	.0062
3.0	.0417	.0345	.0072

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.929	392.17	1.002	.0066
9H	-0.147	391.42	1.000	-.0010
10H	0.237	378.75	0.967	.0289
11H	0.693	299.52	0.765	.0849
12H	1.191	202.33	0.517	.0713
13H	1.955	184.57	0.471	.0494
14H	2.354	183.99	0.470	.0488
15H	2.715	177.18	0.453	.0419
16H	3.543	175.73	0.449	.0357







PHOTOGRAPH
NOT
AVAILABLE

24 (3A4) N.W. MARE NUBIUM 3

LAMBDA=11.00 W BETA=20.13 S XI=-.1791 ETA=-.3442 L+PL CODE = 31384 ALBEDO =.0692

13H FLAT MOON DATA
FM=.01826

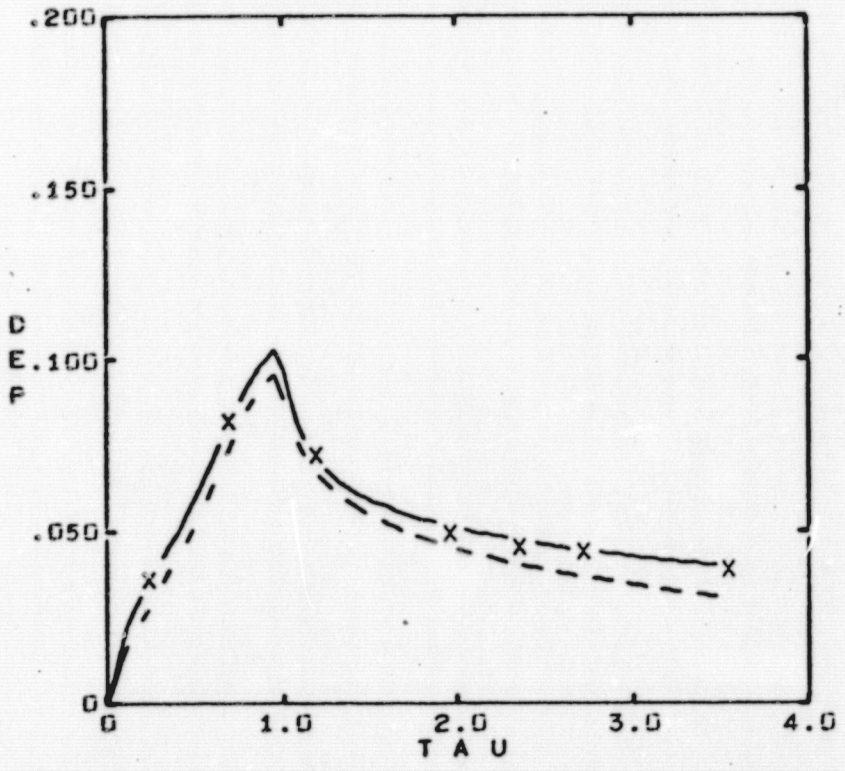
INITIAL TEMPERATURE 390.86
TAU-END OF TOTALITY 3.522

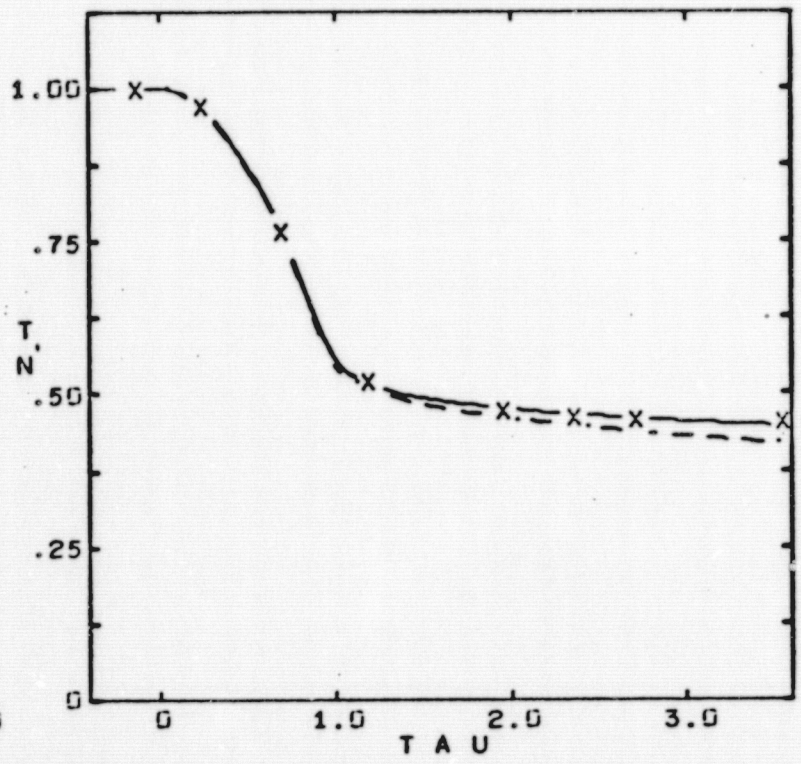
DIFFERENTIAL ENERGY DATA

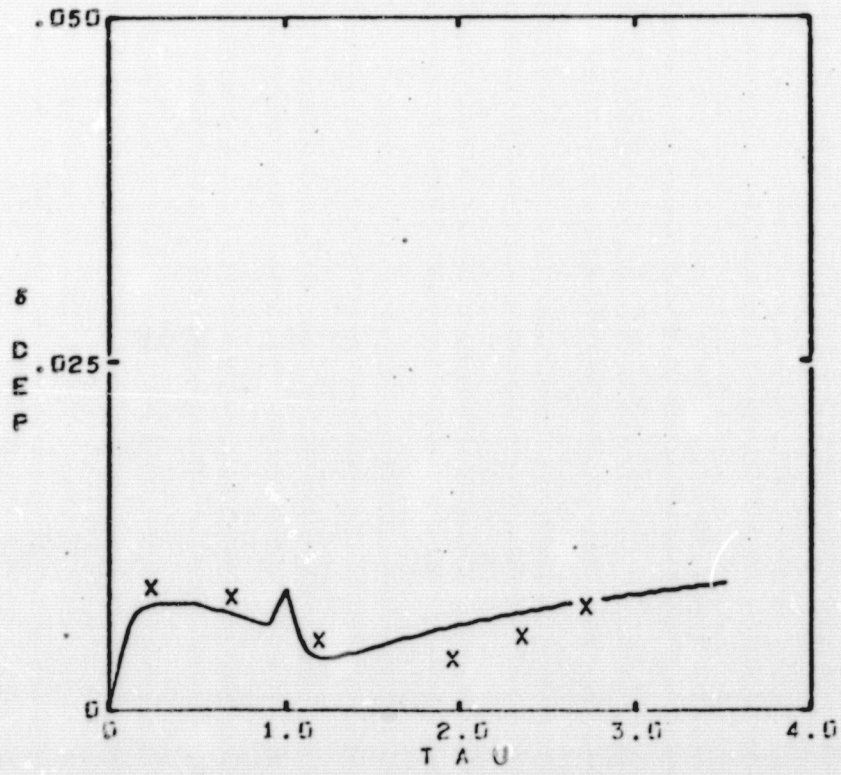
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0358	.0283	.0075
.50	.0605	.0530	.0075
.75	.0866	.0799	.0067
.93	.1038	.0978	.0060
1.0	.0970	.0883	.0087
1.5	.0591	.0546	.0045
2.0	.0510	.0449	.0061
2.5	.0462	.0389	.0073
3.0	.0428	.0345	.0083

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.932	392.59	1.004	.0179
9H	-0.150	390.58	0.999	-.0028
10H	0.235	379.10	0.970	.0357
11H	0.690	299.23	0.766	.0817
12H	1.190	202.56	0.518	.0721
13H	1.953	184.15	0.471	.0493
14H	2.352	180.85	0.463	.0458
15H	2.715	179.32	0.459	.0443
16H	3.543	177.28	0.454	.0388







PHOTOGRAPH
NOT
AVAILABLE

25 (3A5) BRIGHTEST POINT

LAMBDA= 4.15 W BETA=32.90 S XI=-.0607 ETA=-.5432 L+PL CODE = 30564 ALBEDO =.2185

13H FLAT MOON DATA
FM=.10829

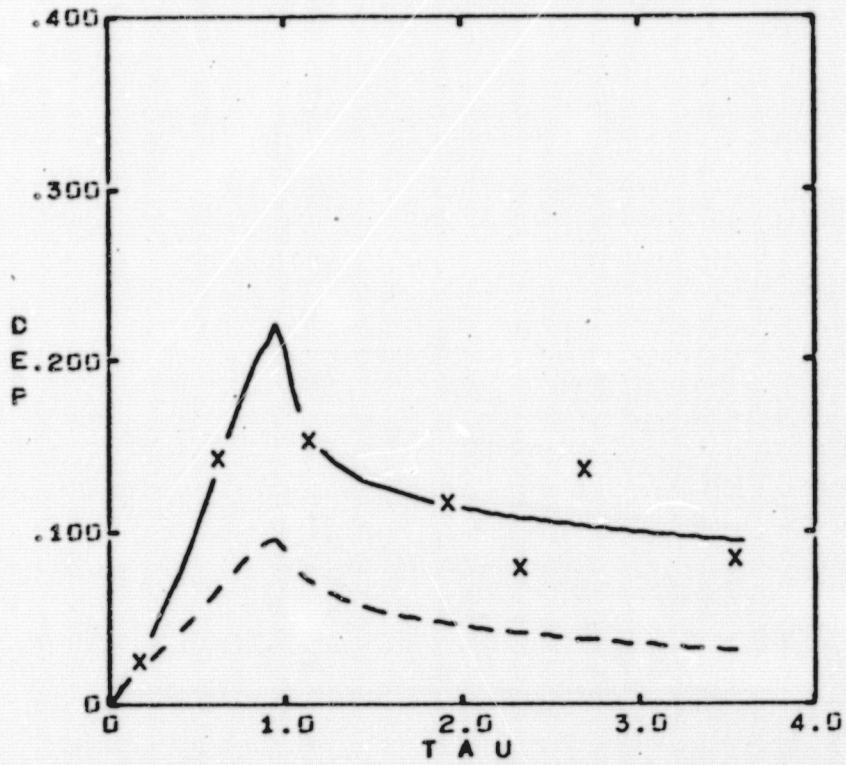
INITIAL TEMPERATURE 369.41
TAU-END OF TOTALITY 3.626

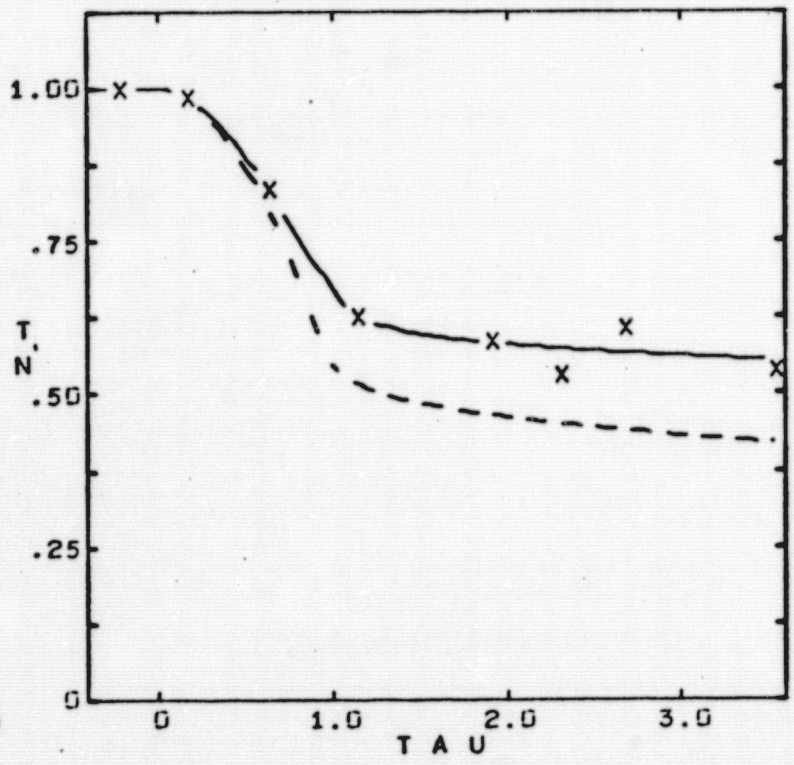
DIFFERENTIAL ENERGY DATA

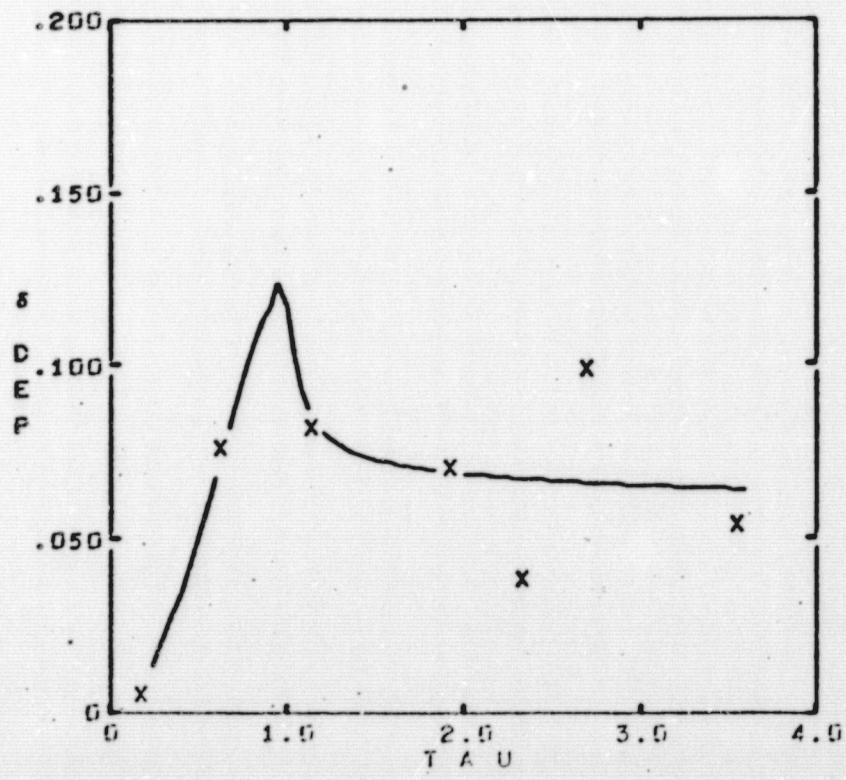
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0415	.0273	.0142
.50	.1033	.0527	.0506
.75	.1743	.0804	.0939
.93	.2221	.0988	.1233
1.0	.2068	.0893	.1175
1.5	.1281	.0554	.0727
2.0	.1141	.0455	.0686
2.5	.1060	.0394	.0666
3.0	.1001	.0349	.0652

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.015	370.22	1.002	.0089
9H	-0.222	369.23	1.000	-.0019
10H	0.170	363.40	0.984	.0248
11H	0.632	308.04	0.834	.1433
12H	1.139	231.31	0.626	.1537
13H	1.915	216.00	0.585	.1169
14H	2.320	196.40	0.532	.0799
15H	2.686	224.68	0.608	.1369
16H	3.541	199.45	0.540	.0850









26 (1A9) N.E. GEMINUS

LAMBDA=58.00 E BETA=36.00 N XI=+.6861 ETA=+.5878 L+PL CODE = 16599 ALBEDO =.1463

13H FLAT MOON DATA
FM=.02280

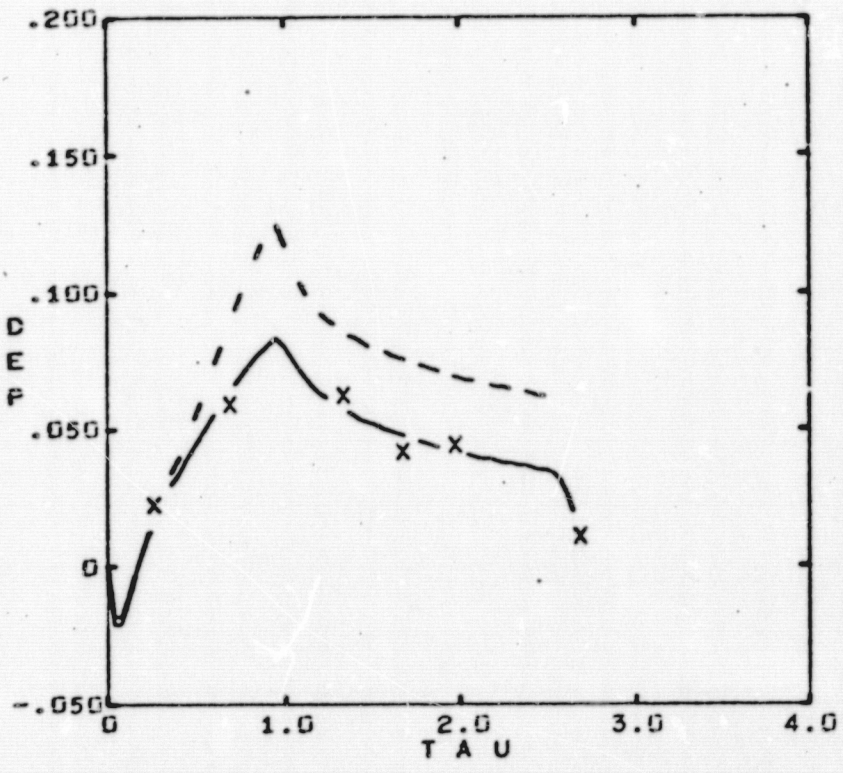
INITIAL TEMPERATURE 352.13
TAU-END OF TOTALITY 2.518

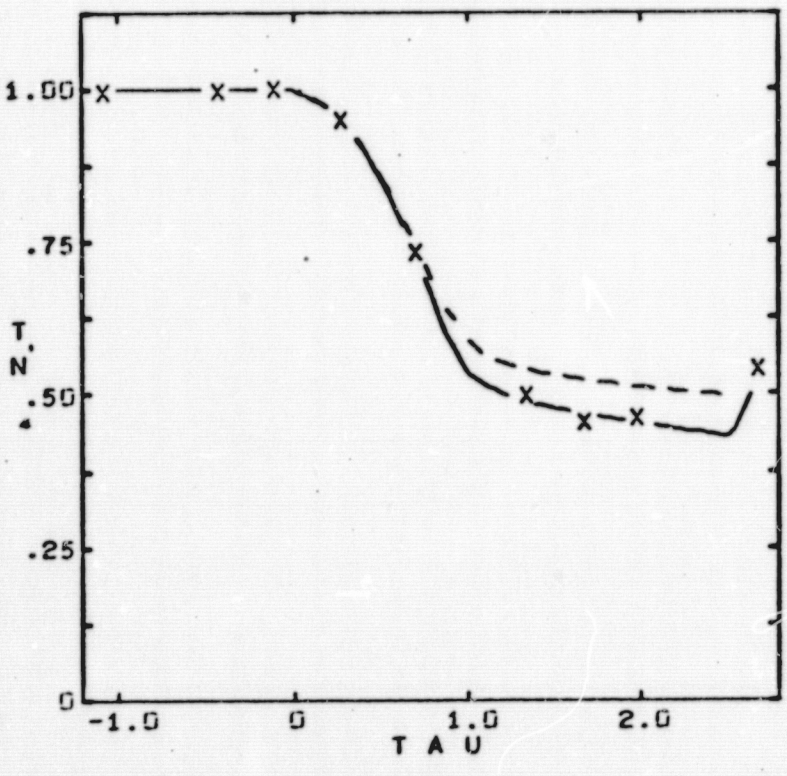
DIFFERENTIAL ENERGY DATA

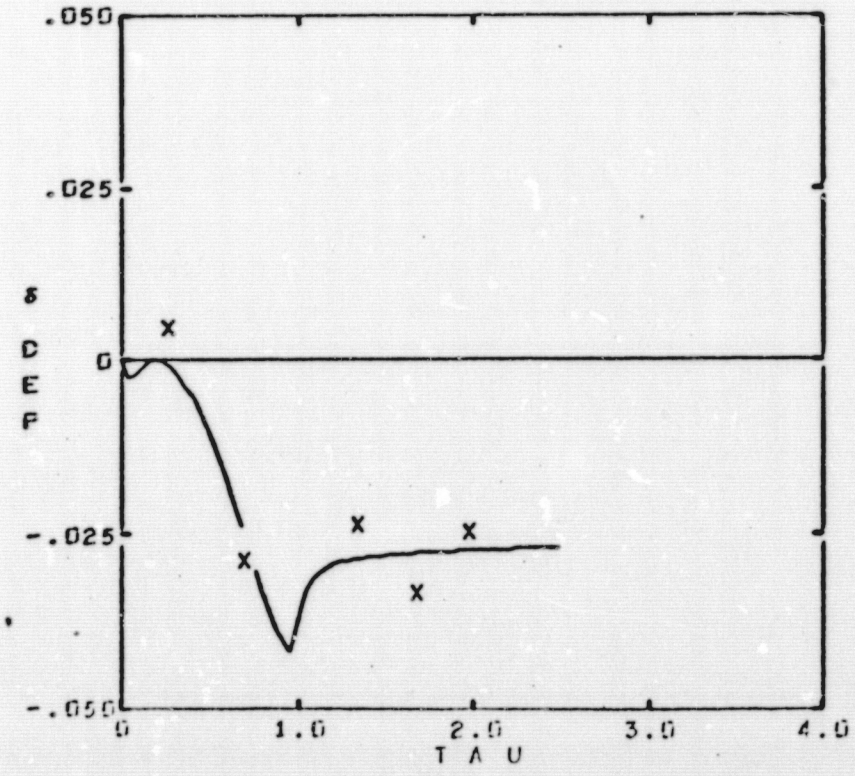
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0144	.0146	-.0002
.50	.0456	.0568	-.0112
.75	.0689	.0985	-.0296
.93	.0831	.1262	-.0431
1.0	.0802	.1170	-.0368
1.5	.0519	.0799	-.0280
2.0	.0417	.0690	-.0273
2.5	.0349	.0617	-.0268

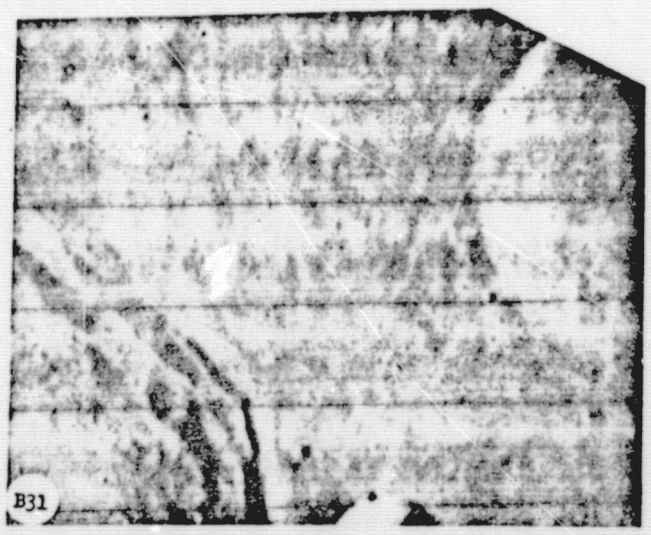
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.097	351.36	0.998	-.0087
9H	-0.444	350.32	0.995	-.0203
10H	-0.118	352.69	1.002	.0064
11H	0.266	334.70	0.950	.0223
12H	0.689	258.01	0.733	.0594
13H	1.330	175.79	0.499	.0621
14H	1.671	159.50	0.453	.0421
15H	1.973	161.86	0.460	.0446
16H	2.678	191.30	0.543	.0113









27 (181) N.W. NEWCOMB

LAMBDA=42.50 E BETA=32.50 N XI=+.5698 ETA=+.5373 L+PL CODE = 15574 ALBEDO =.1361

13H FLAT MOON DATA
FM=.00953

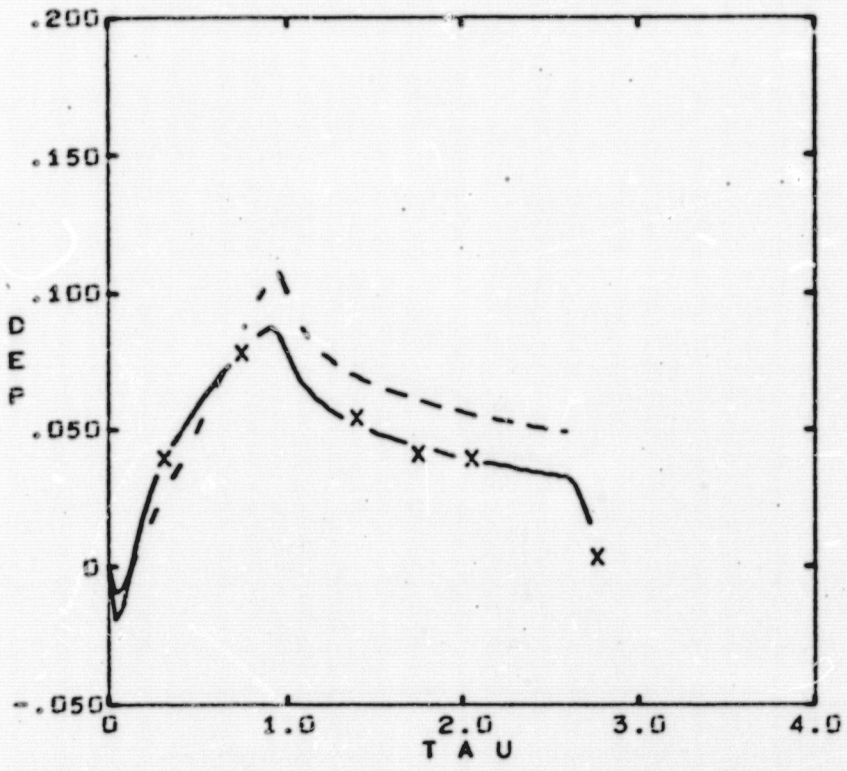
INITIAL TEMPERATURE 366.75
TAU-END OF TOTALITY 2.603

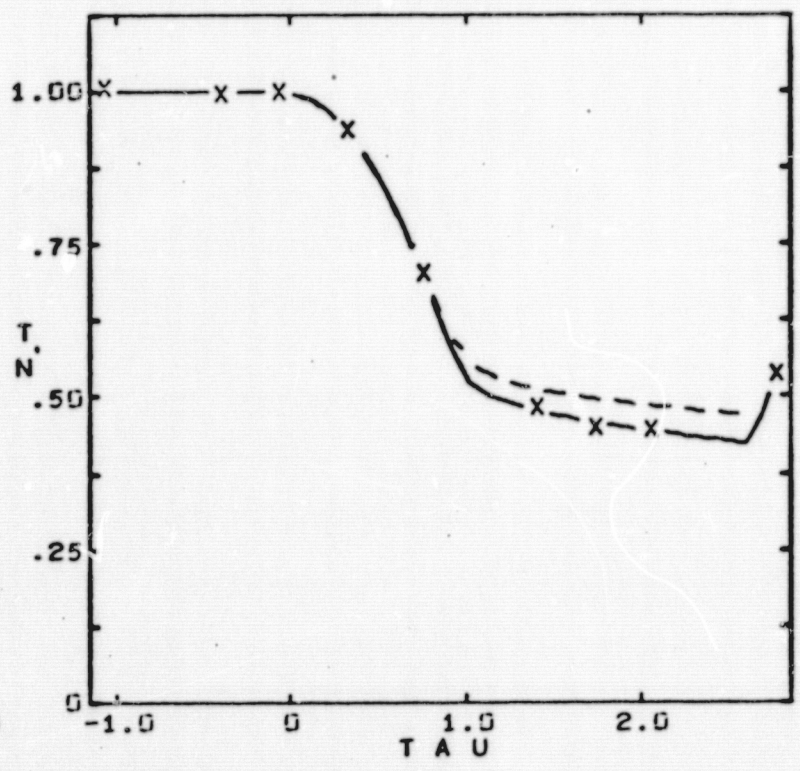
DIFFERENTIAL ENERGY DATA

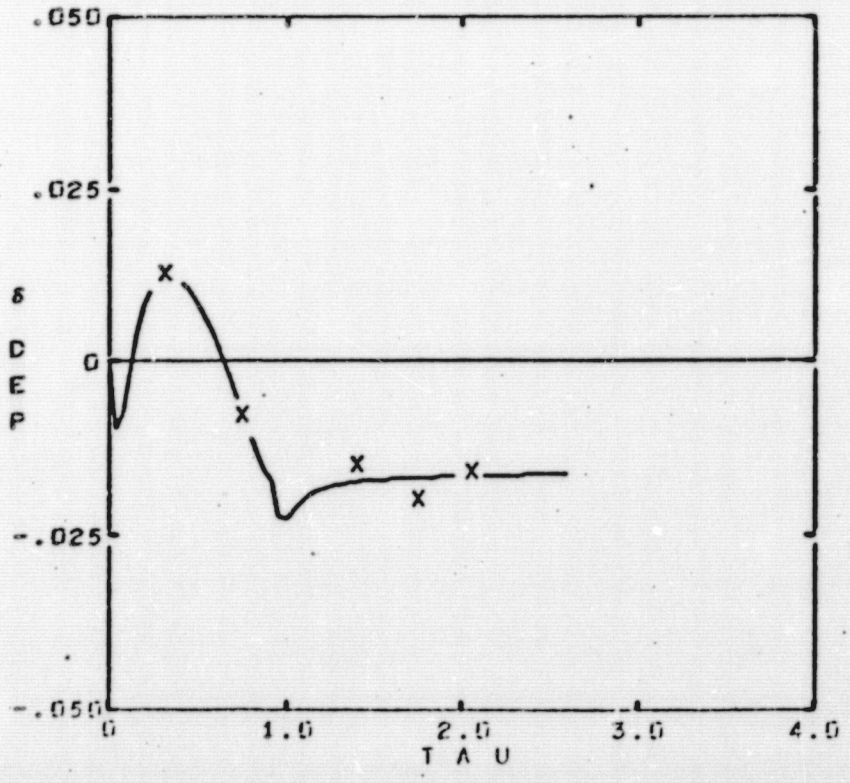
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0283	.0175	.0108
.50	.0595	.0514	.0081
.75	.0786	.0860	-.0074
.93	.0890	.1092	-.0202
1.0	.0774	.1001	-.0227
1.5	.0492	.0663	-.0171
2.0	.0399	.0564	-.0165
2.5	.0337	.0499	-.0162

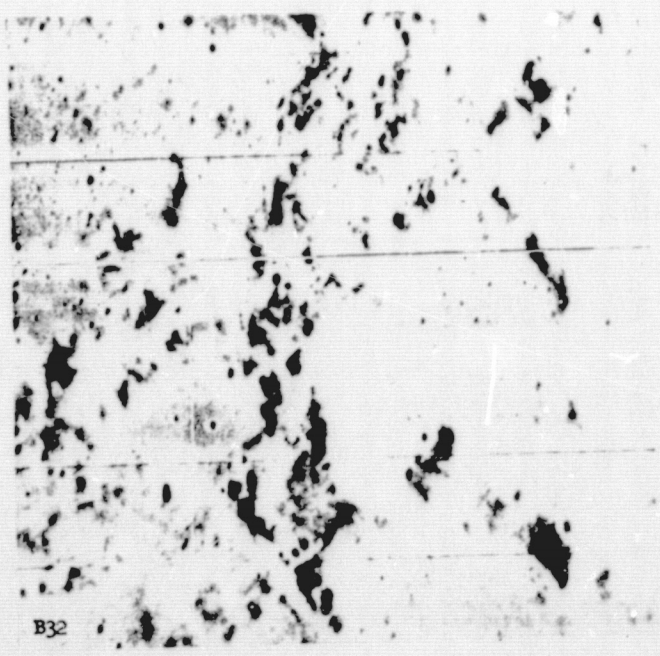
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.070	368.91	1.006	.0238
9H	-0.405	365.86	0.998	-.0097
10H	-0.073	366.76	1.000	.0001
11H	0.318	343.75	0.937	.0396
12H	0.747	257.96	0.703	.0780
13H	1.400	177.18	0.483	.0545
14H	1.745	165.22	0.450	.0412
15H	2.054	163.79	0.447	.0398
16H	2.767	197.36	0.538	.0034









LAMBDA=28.01 W BETA=67.50 N XI=-.1797 ETA=+.9239 L+PL CODE = 21982 ALBEDO =.1408

13H FLAT MOON DATA
FM=.01237

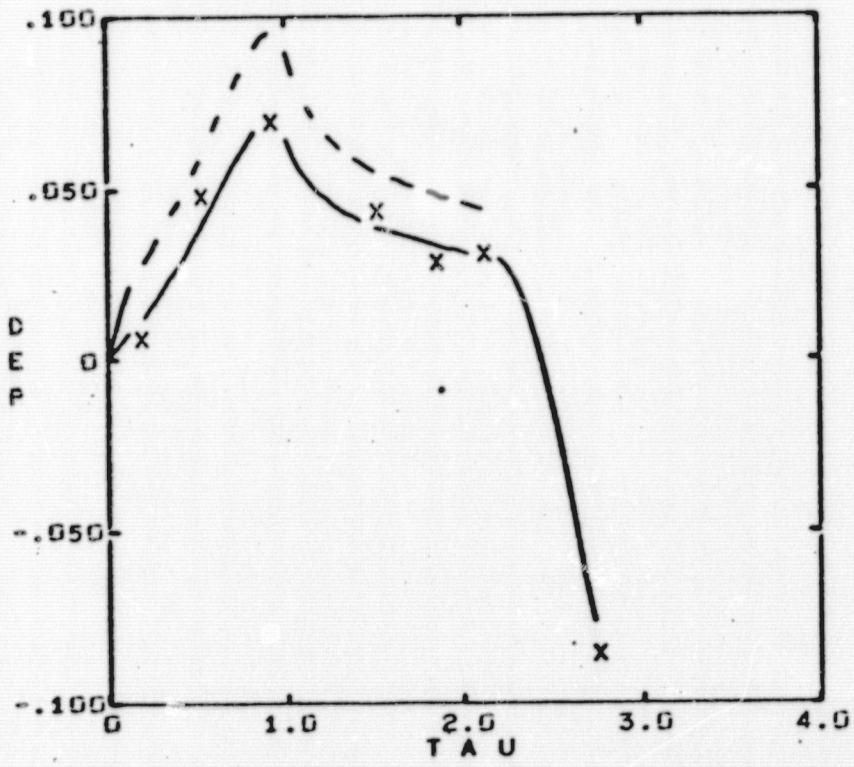
INITIAL TEMPERATURE 339.94
TAU-END OF TOTALITY 2.193

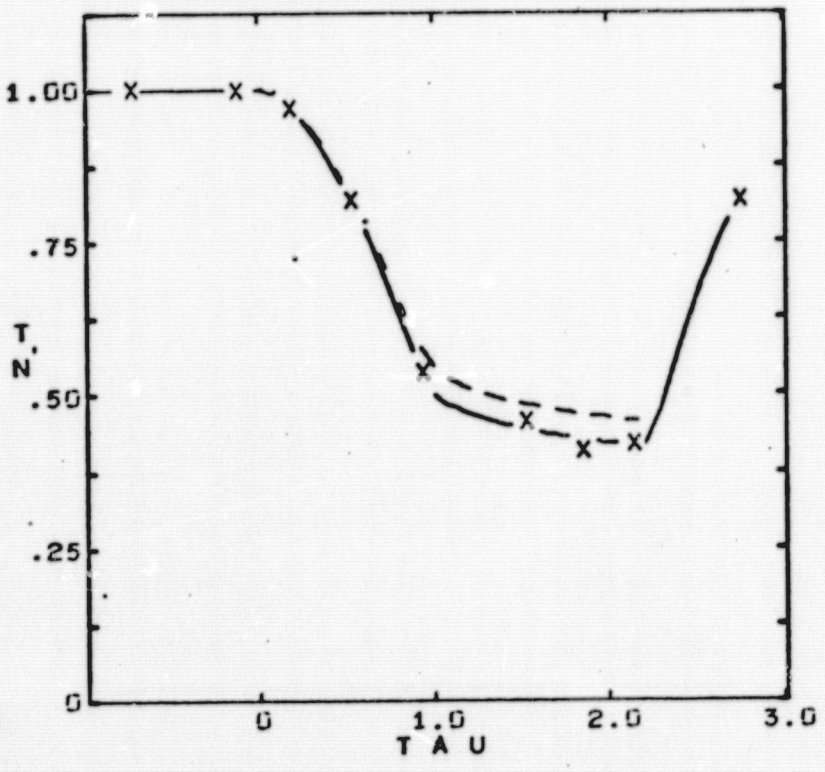
DIFFERENTIAL ENERGY DATA

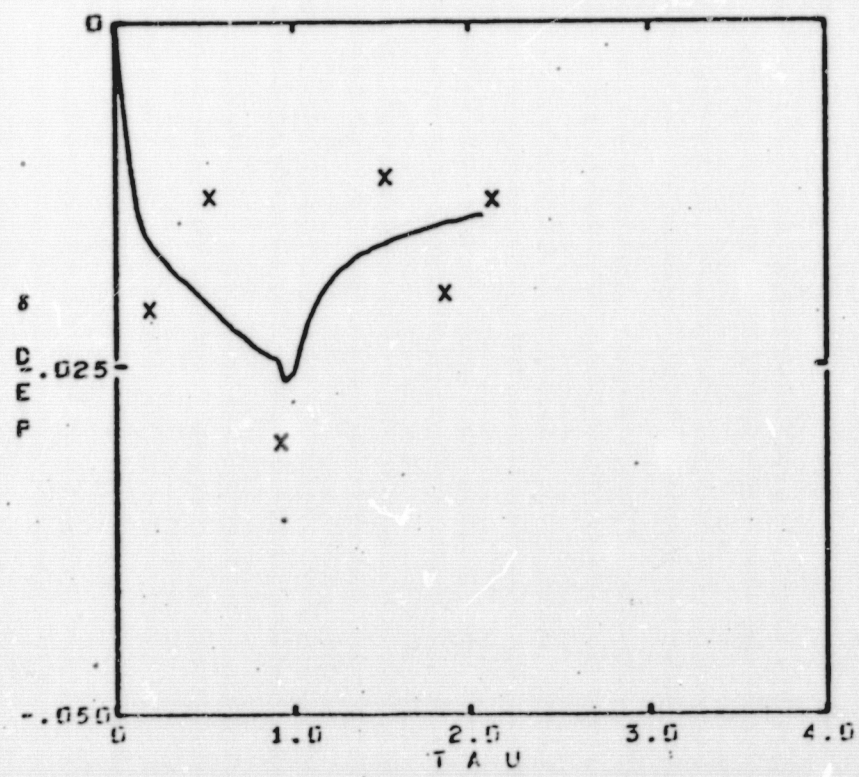
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0158	.0327	-.0169
.50	.0363	.0565	-.0202
.75	.0594	.0825	-.0231
.93	.0747	.0996	-.0249
1.0	.0645	.0899	-.0254
1.5	.0393	.0555	-.0162
2.0	.0314	.0456	-.0142

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.734	341.83	1.006	.0224
9H	-0.124	339.62	0.999	-.0037
10H	0.181	329.89	0.970	.0059
11H	0.540	278.39	0.819	.0479
12H	0.934	183.03	0.538	.0691
13H	1.532	155.16	0.456	.0434
14H	1.850	139.42	0.410	.0283
15H	2.132	142.51	0.419	.0309
16H	2.752	279.23	0.821	-.0860







PHOTOGRAPH
NOT
AVAILABLE

LAMBDA=67.00 W BETA=22.00 S XI=-.8535 ETA=-.3746 L+PL CODE = 38357 ALBEDO =.1422

13H FLAT MOON DATA
FM=.00864

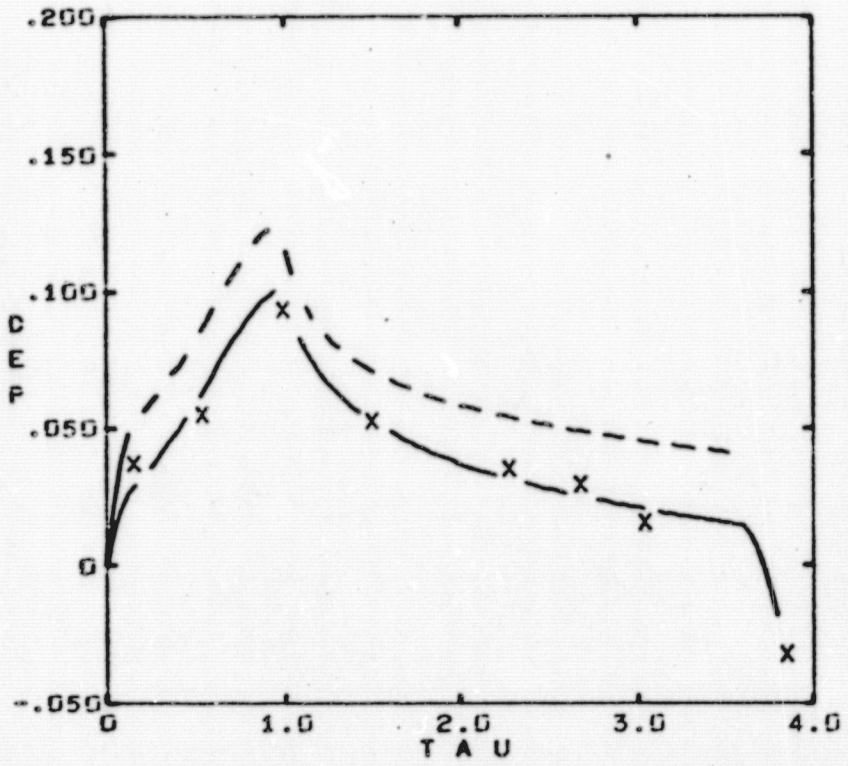
INITIAL TEMPERATURE 340.33
TAU-END OF TOTALITY 3.592

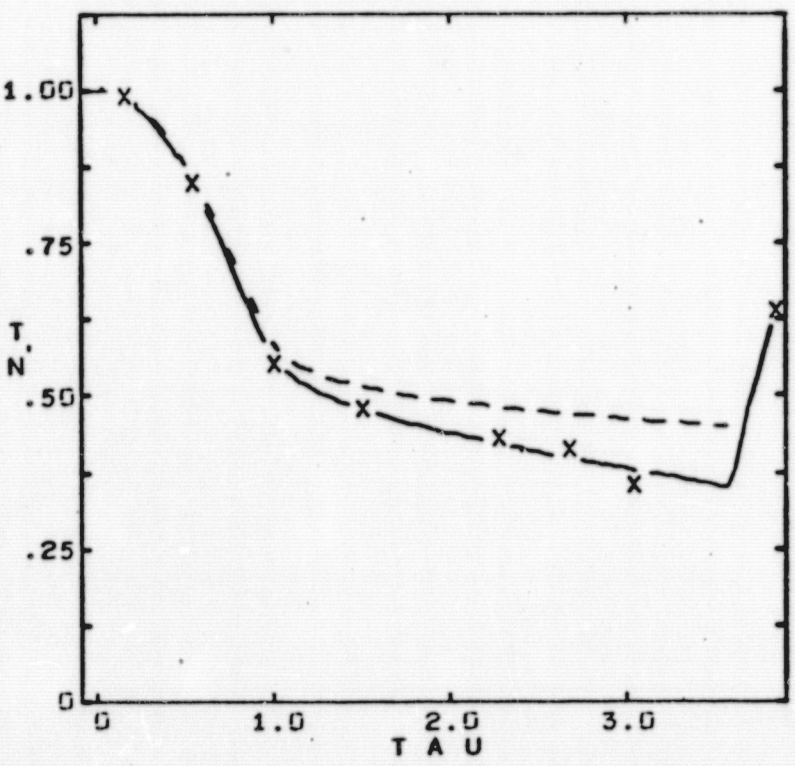
DIFFERENTIAL ENERGY DATA

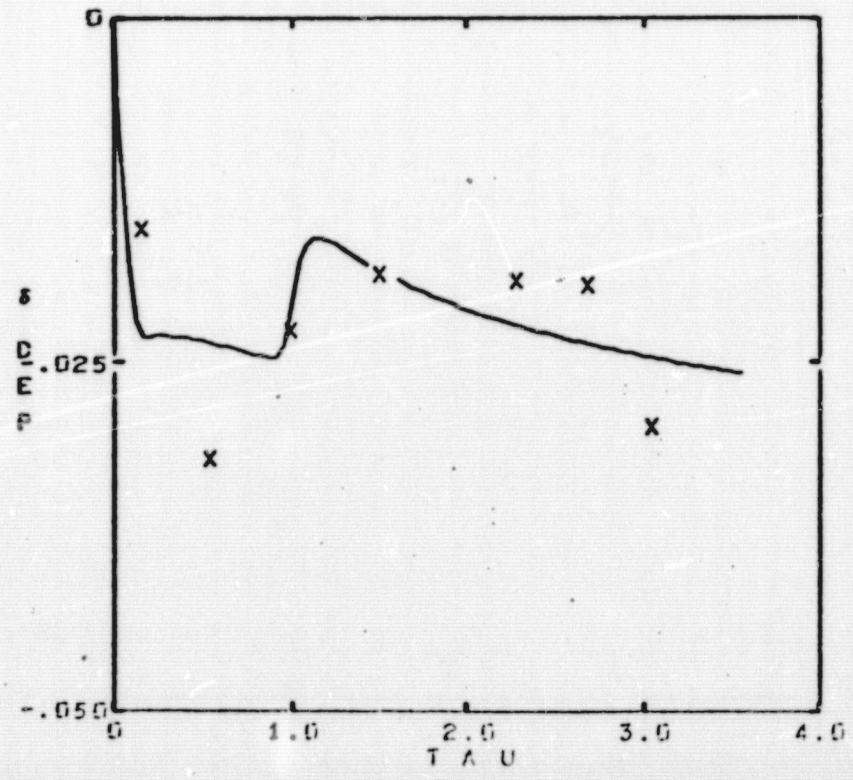
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0364	.0595	-.0231
.50	.0597	.0831	-.0234
.75	.0853	.1095	-.0242
.93	.1020	.1268	-.0248
1.0	.0950	.1152	-.0202
1.5	.0528	.0712	-.0184
2.0	.0374	.0585	-.0211
2.5	.0280	.0510	-.0230
3.0	.0212	.0457	-.0245

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.644	340.33	1.000	.0000
9H	0.149	337.38	0.991	.0367
10H	0.537	289.51	0.851	.0551
11H	0.998	187.99	0.552	.0931
12H	1.502	162.94	0.479	.0525
13H	2.275	147.26	0.433	.0351
14H	2.676	141.23	0.415	.0297
15H	3.042	120.47	0.354	.0157
16H	3.852	218.66	0.643	-.0321









30 (3A7) N.W. PROSPER HENRY

LAMBDA=60.00 W BETA=23.50 S XI=-.7942 ETA=-.3987 L+PL CODE = 37399 ALBEDO =.1465

13H FLAT MOON DATA
FM=.01555

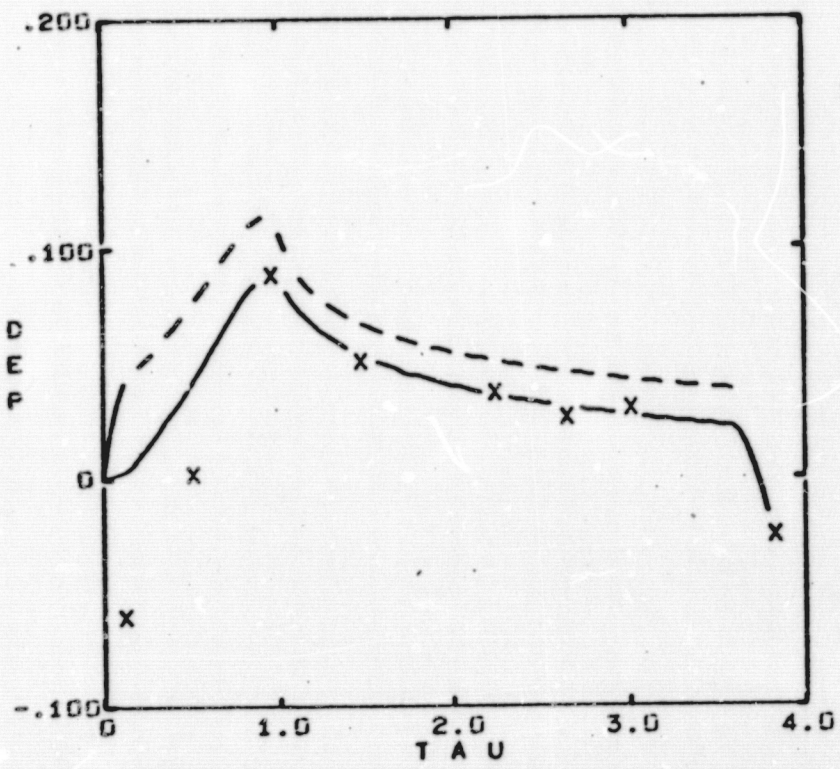
INITIAL TEMPERATURE 353.05
TAU-END OF TOTALITY 3.600

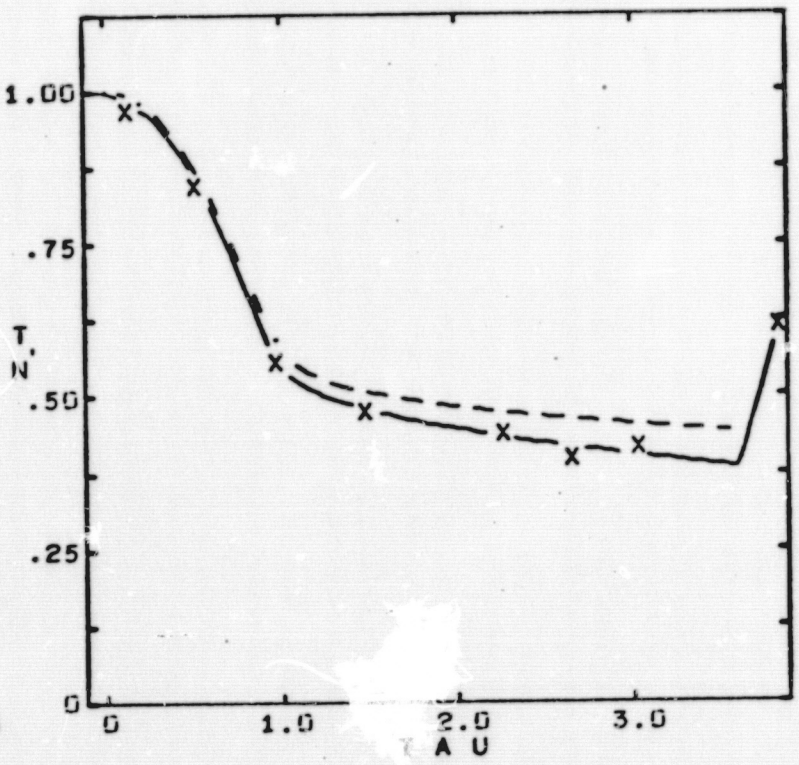
DIFFERENTIAL ENERGY DATA

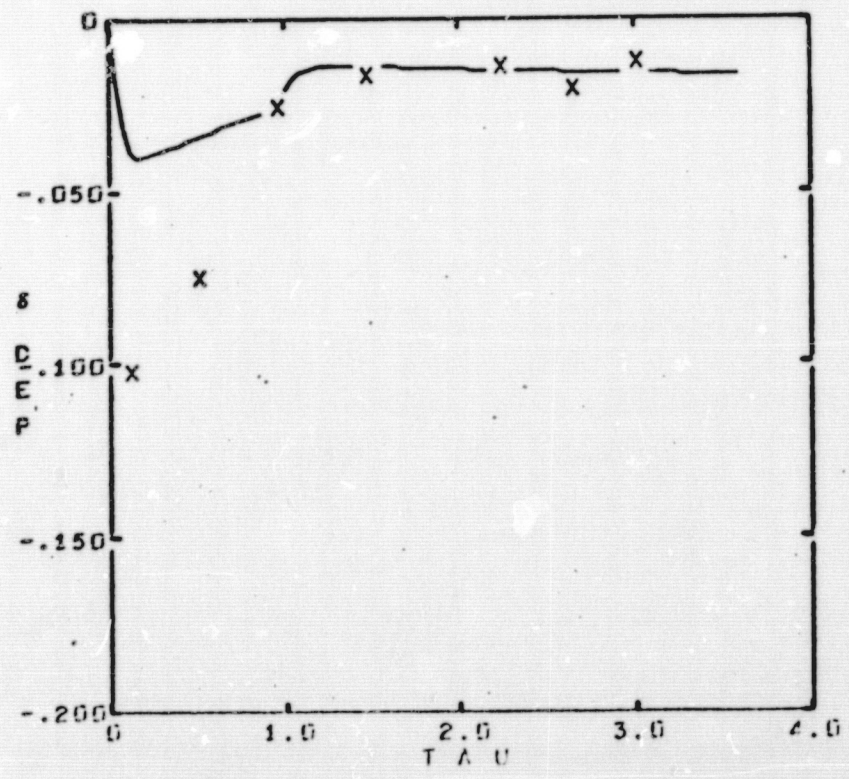
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0131	.0521	-.0390
.50	.0412	.0755	-.0343
.75	.0718	.1013	-.0295
.93	.0917	.1181	-.0264
1.0	.0862	.1072	-.0210
1.5	.0524	.0662	-.0138
2.0	.0399	.0545	-.0146
2.5	.0323	.0475	-.0152
3.0	.0268	.0425	-.0157

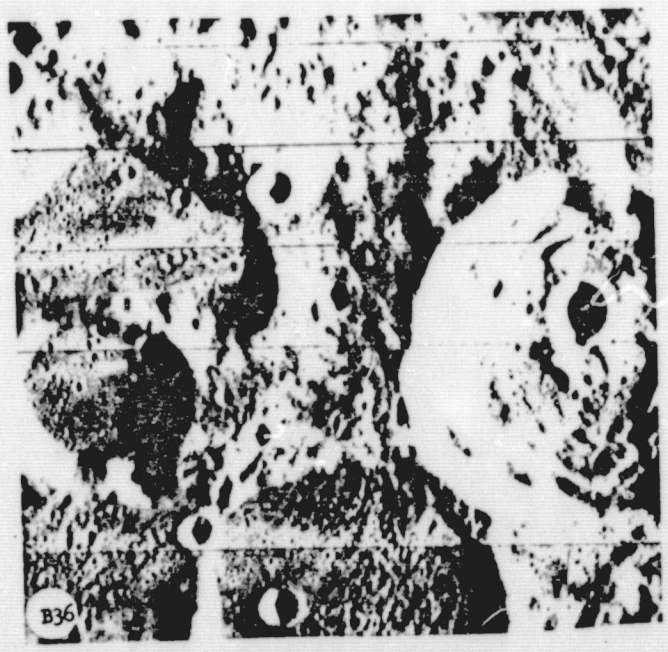
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.673	353.05	1.000	.0000
9H	0.120	342.81	0.971	-.0611
10H	0.509	298.16	0.845	.0014
11H	0.969	195.95	0.555	.0886
12H	1.475	167.47	0.474	.0506
13H	2.249	154.96	0.439	.0371
14H	2.651	141.47	0.401	.0258
15H	3.018	147.12	0.417	.0302
16H	3.831	216.76	0.614	-.0256









31 (348) W. REGIOMONTANUS

LAMBDA= 2.00 W BETA=29.00 S XI=-.0305 ETA=-.4848 L+PL CODE = 30438 ALBEDO =.1360

13H FLAT MOON DATA
FM=.00885

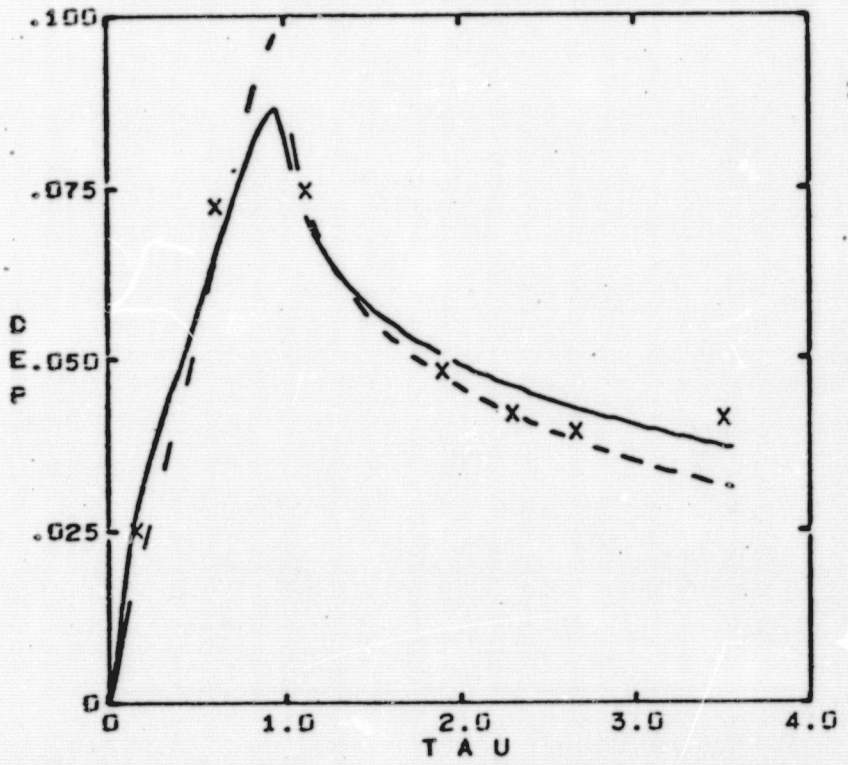
INITIAL TEMPERATURE 383.05
TAU-END OF TOTALITY 3.593

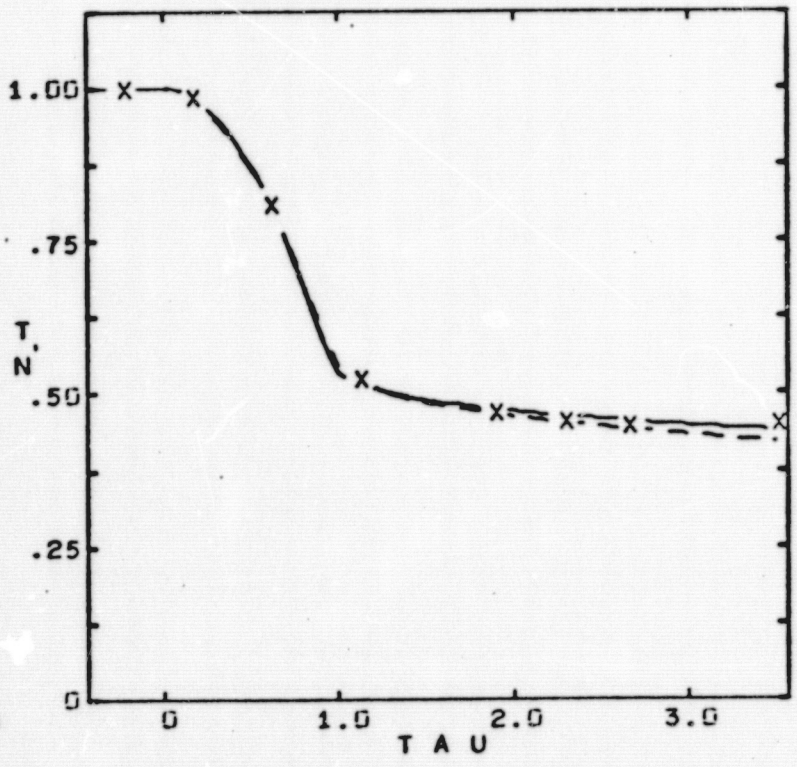
DIFFERENTIAL ENERGY DATA

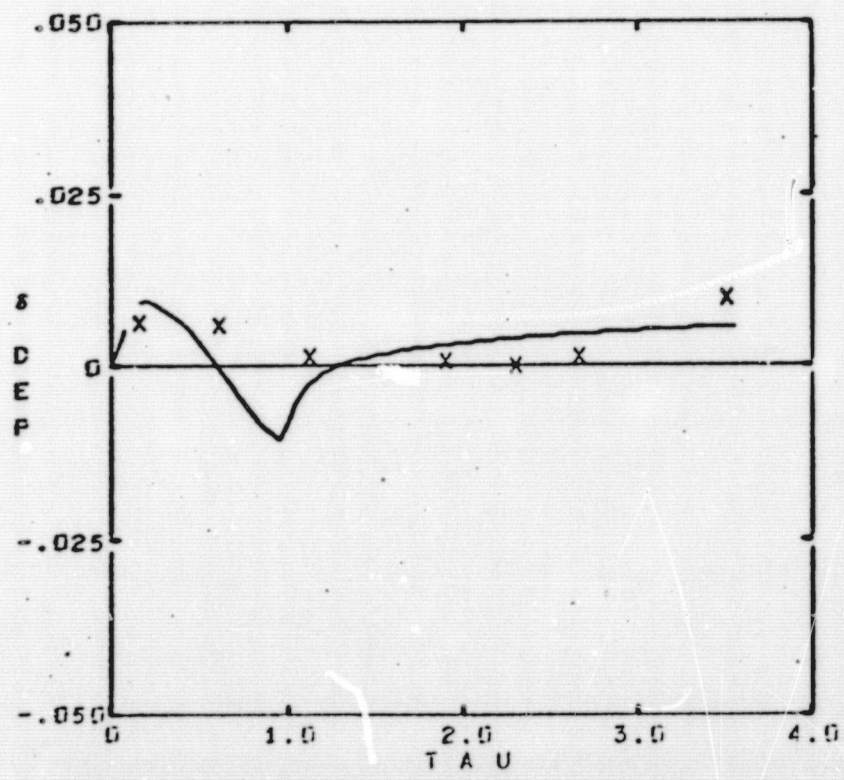
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0362	.0270	.0092
.50	.0562	.0528	.0034
.75	.0757	.0807	-.0050
.93	.0882	.0994	-.0112
1.0	.0819	.0898	-.0079
1.5	.0574	.0557	.0017
2.0	.0492	.0458	.0034
2.5	.0441	.0397	.0044
3.0	.0403	.0352	.0051

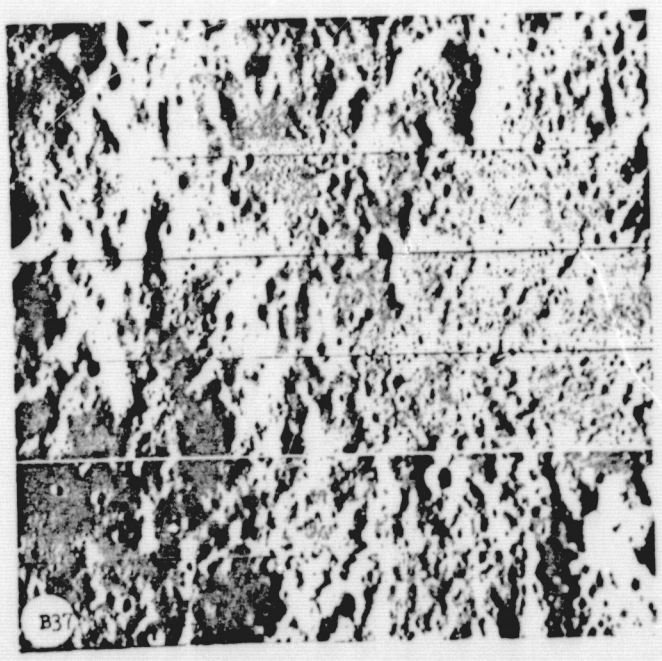
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.019	384.45	1.004	.0147
9H	-0.229	382.74	0.999	-.0033
10H	0.160	377.66	0.986	.0249
11H	0.621	309.56	0.808	.0724
12H	1.125	200.25	0.523	.0747
13H	1.897	179.59	0.469	.0483
14H	2.299	173.50	0.453	.0421
15H	2.665	170.61	0.445	.0394
16H	3.514	172.68	0.451	.0413









LAMBDA=48.50 W BETA=31.00 S XI=-.6420 ETA=-.5150 L+PL CODE = 36542 ALBEDO =.1396

13H FLAT MOON DATA
FM=.00269

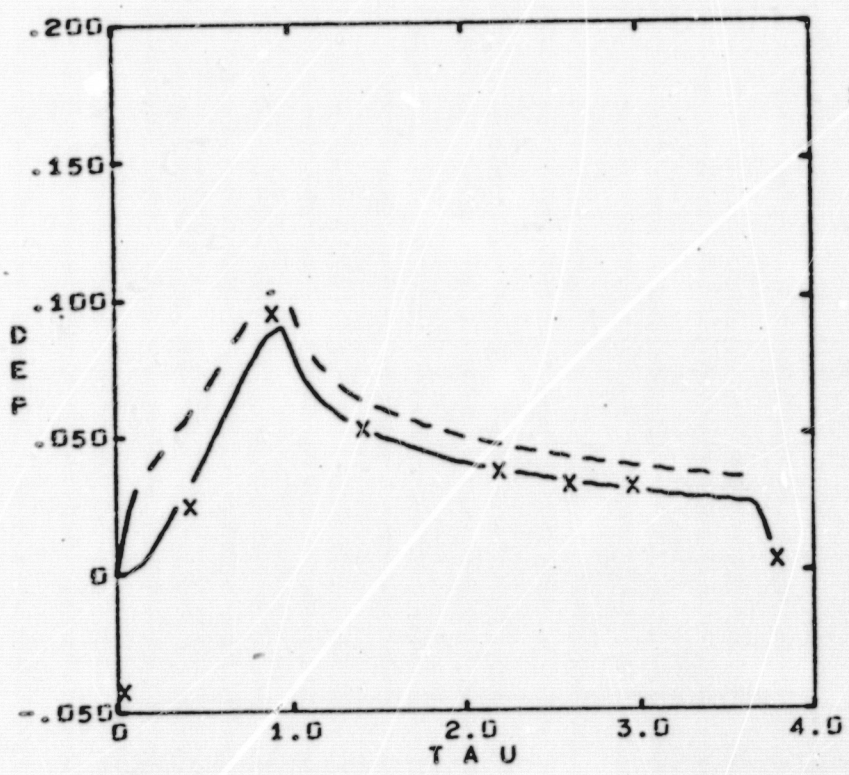
INITIAL TEMPERATURE 358.54
TAU-END OF TOTALITY 3.650

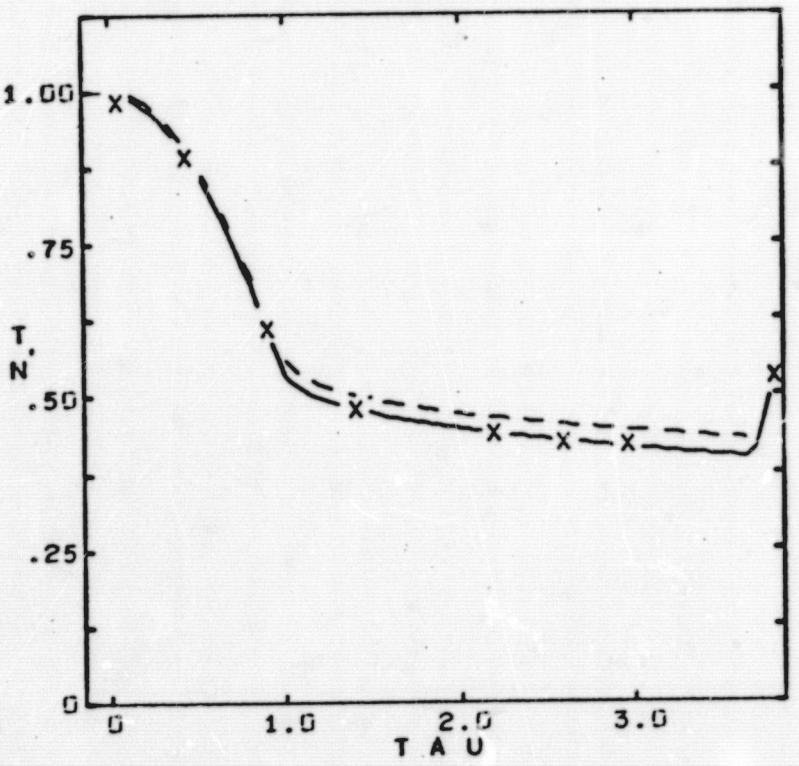
DIFFERENTIAL ENERGY DATA

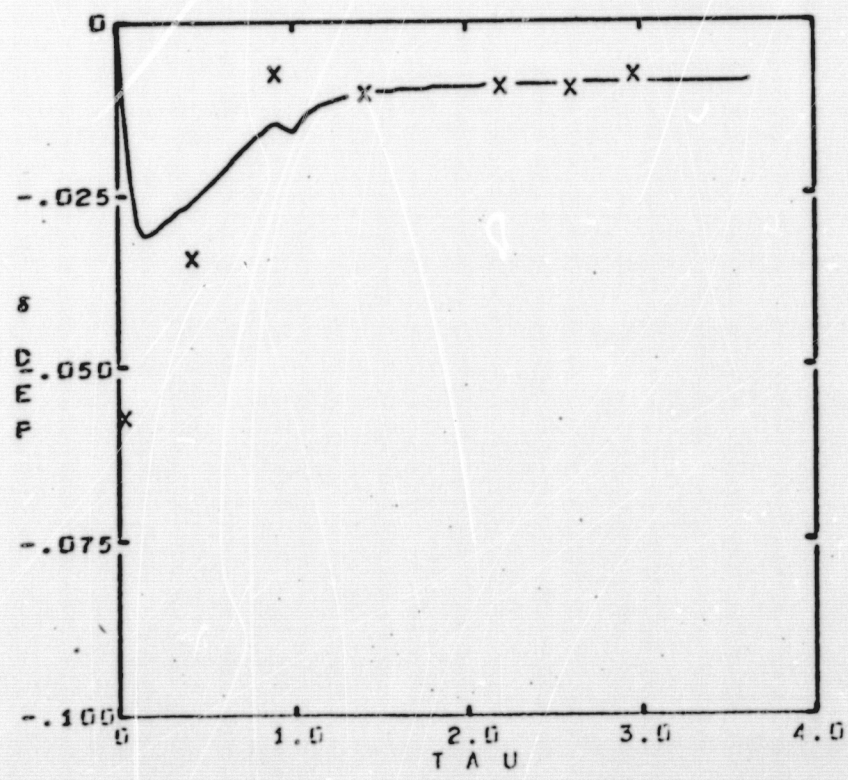
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0128	.0424	-.0296
.50	.0413	.0655	-.0242
.75	.0729	.0909	-.0180
.93	.0937	.1074	-.0137
1.0	.0815	.0973	-.0158
1.5	.0499	.0601	-.0102
2.0	.0400	.0494	-.0094
2.5	.0340	.0430	-.0090
3.0	.0296	.0385	-.0089

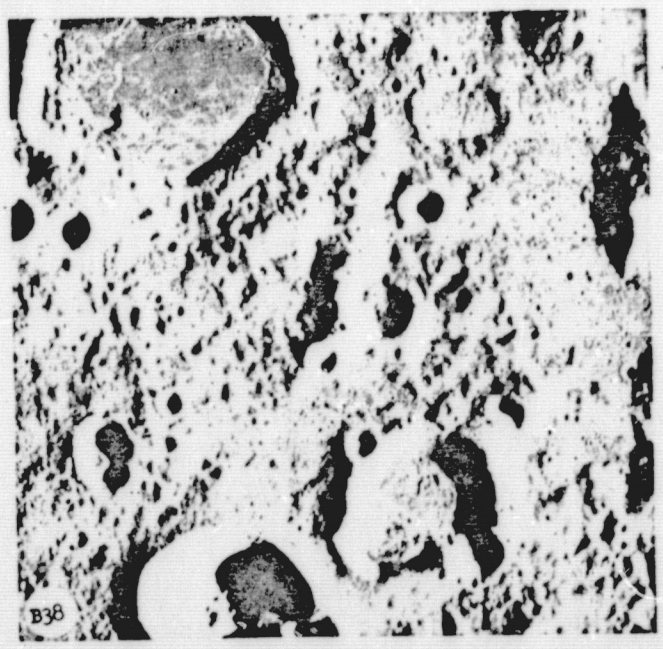
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.757	358.54	1.000	.0000
9H	0.042	353.81	0.987	-.0430
10H	0.434	320.15	0.893	.0247
11H	0.897	219.87	0.613	.0952
12H	1.406	171.73	0.479	.0526
13H	2.185	157.52	0.439	.0373
14H	2.590	152.14	0.424	.0324
15H	2.959	150.42	0.420	.0310
16H	3.790	190.63	0.532	.0042









33 (381) S. PITATUS

LAMBDA=12.00 W BETA=32.00 S XI=-.1763 ETA=-.5299 L+PL CODE = 31583 ALBEDO =.1370

13H FLAT MOON DATA
FM=.00700

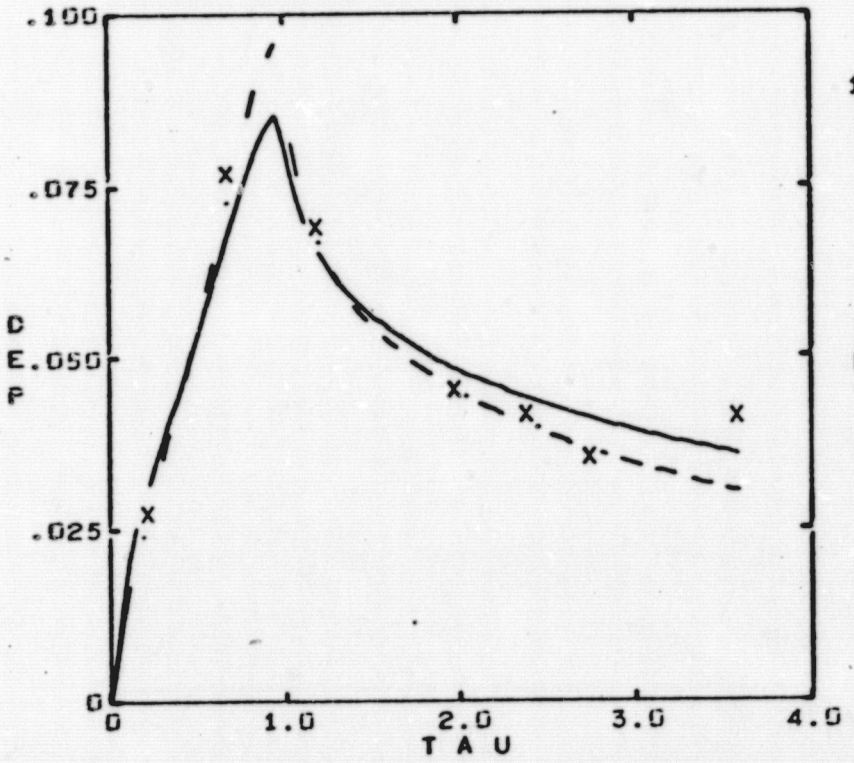
INITIAL TEMPERATURE 380.44
TAU-END OF TOTALITY 3.627

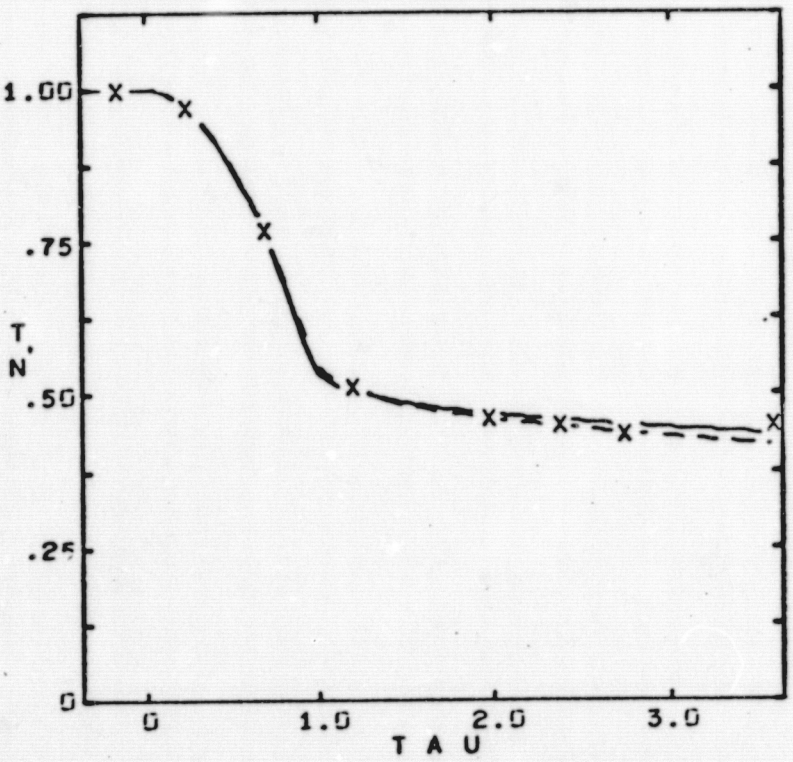
DIFFERENTIAL ENERGY DATA

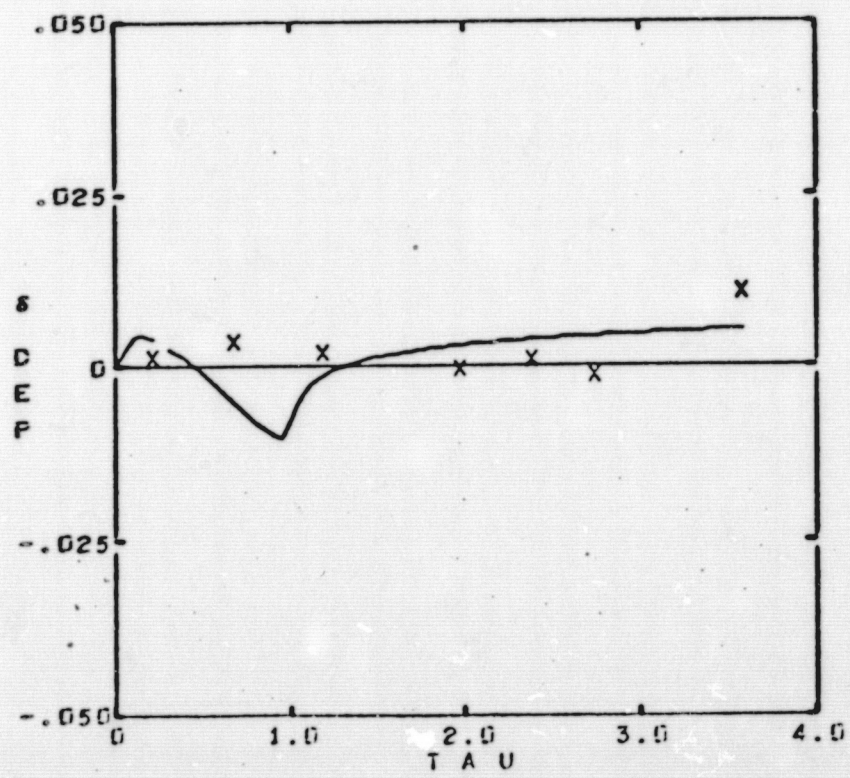
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0324	.0285	.0039
.50	.0525	.0532	-.0007
.75	.0733	.0800	-.0067
.93	.0870	.0979	-.0109
1.0	.0806	.0884	-.0078
1.5	.0561	.0547	.0014
2.0	.0481	.0449	.0032
2.5	.0431	.0389	.0042
3.0	.0393	.0345	.0048

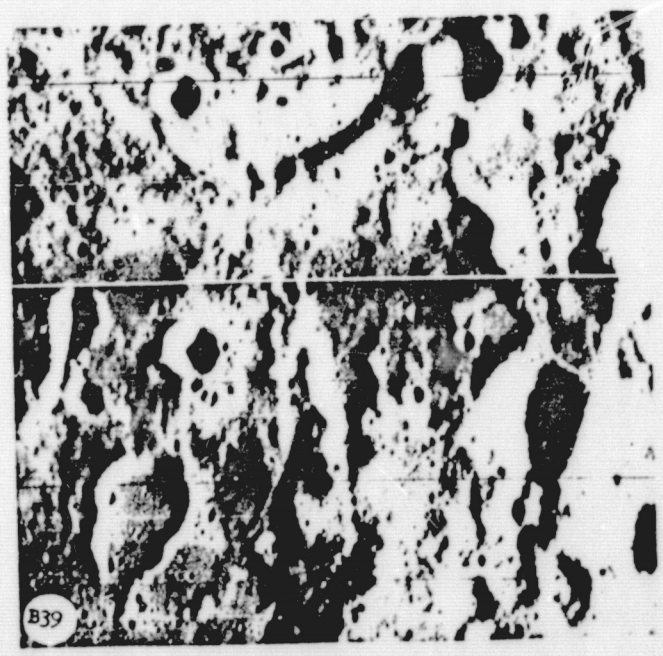
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.964	381.22	1.002	.0082
9H	-0.168	380.31	1.000	-.0014
10H	0.222	369.63	0.972	.0274
11H	0.685	292.06	0.768	.0770
12H	1.191	195.07	0.513	.0691
13H	1.967	175.56	0.461	.0453
14H	2.372	171.75	0.451	.0415
15H	2.740	165.16	0.434	.0355
16H	3.588	171.48	0.451	.0413









LAMBDA=20.00 W BETA=42.50 S XI=-.2522 ETA=-.6756 L+PL CODE = 32658 ALBEDO =.1414

13H FLAT MOON DATA
FM=-.00630

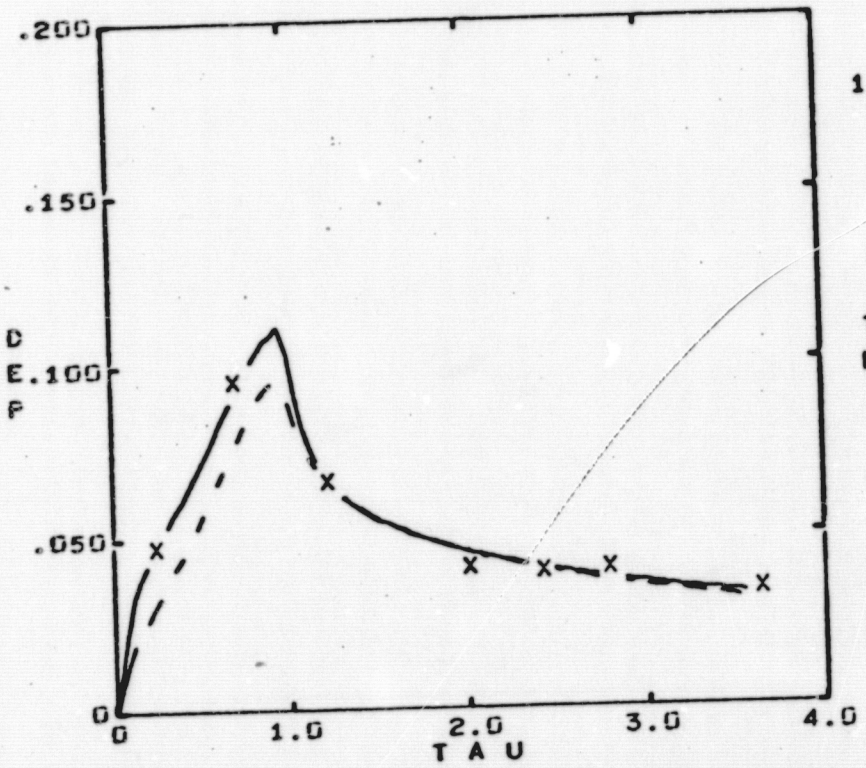
INITIAL TEMPERATURE 364.01
TAU-END OF TOTALITY 3.700

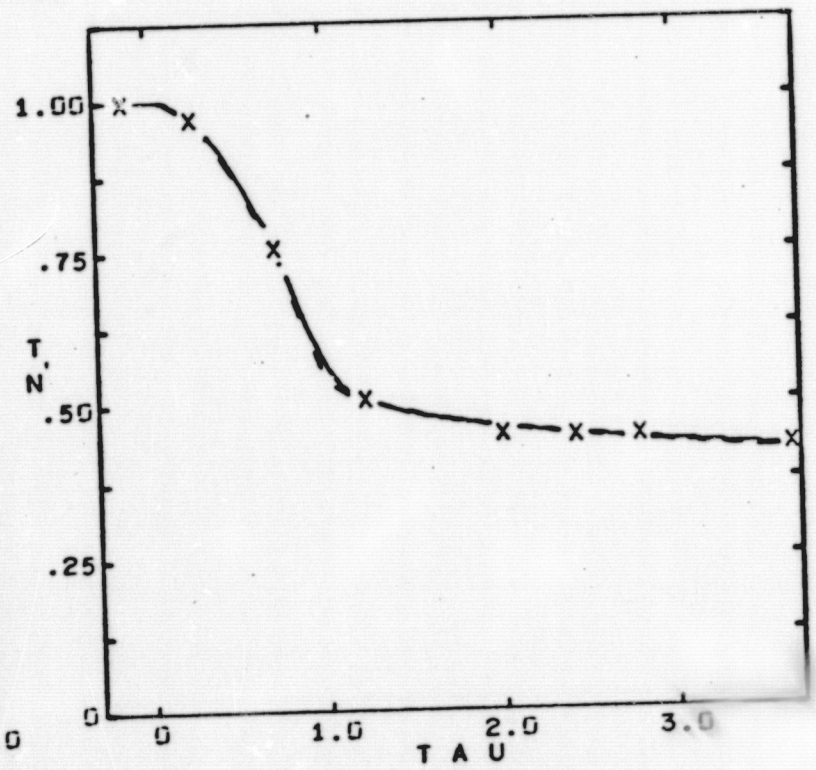
DIFFERENTIAL ENERGY DATA

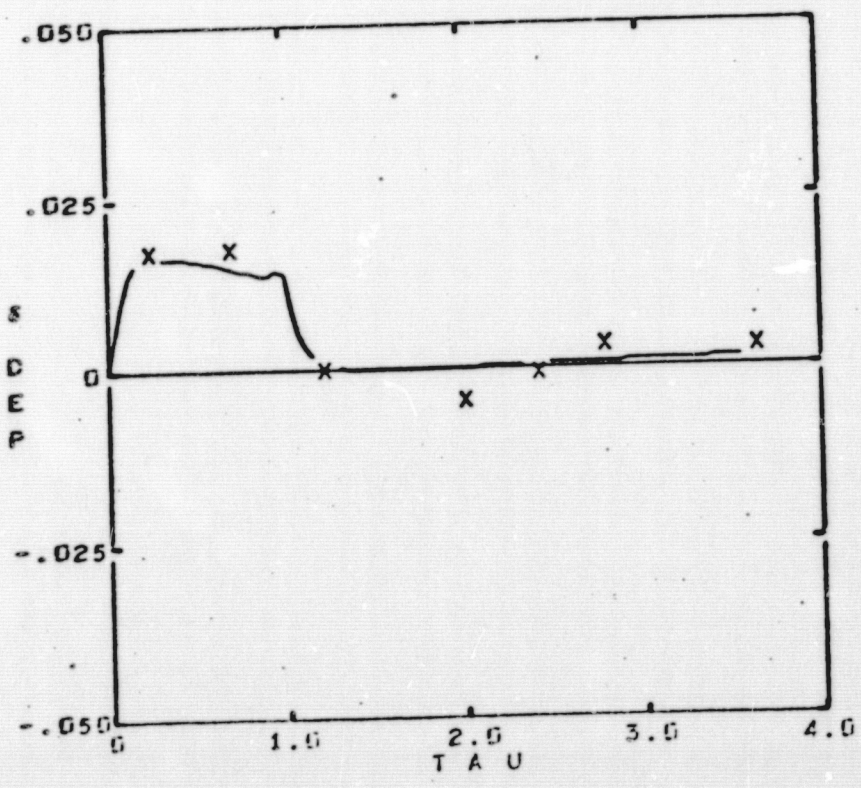
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0468	.0305	.0163
.50	.0710	.0549	.0161
.75	.0962	.0815	.0147
.93	.1126	.0991	.0135
1.0	.1036	.0895	.0141
1.5	.0553	.0553	.0000
2.0	.0457	.0454	.0003
2.5	.0401	.0394	.0007
3.0	.0361	.0350	.0011

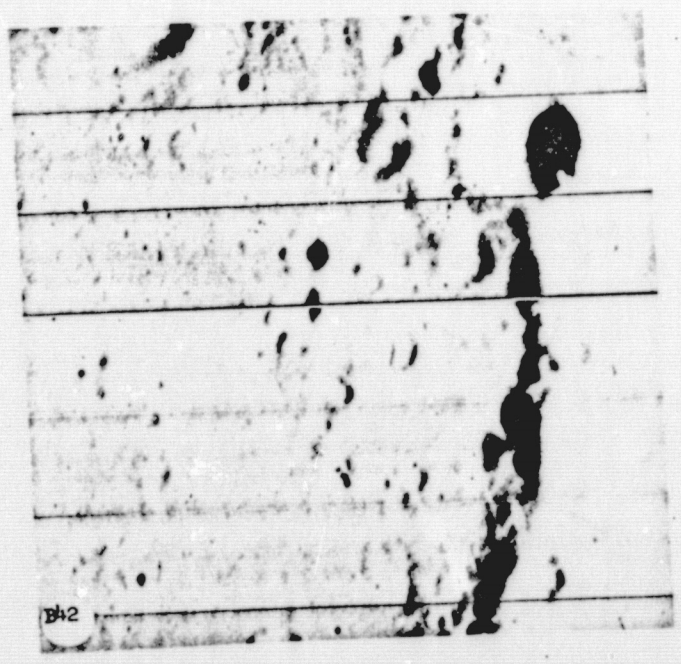
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.954	365.73	1.005	.0191
9H	-0.150	363.74	0.999	-.0030
10H	0.244	353.49	0.971	.0475
11H	0.712	276.57	0.760	.0954
12H	1.225	184.65	0.507	.0662
13H	2.008	163.86	0.450	.0411
14H	2.417	162.56	0.447	.0398
15H	2.789	162.88	0.447	.0401
16H	3.646	155.89	0.428	.0336









35 (383) E. LONGOMONTANUS

LAMBDA=17.00 W BETA=49.00 S XI=-.1918 ETA=-.7547 L+PL CODE = 31795 ALBEDO =.1401

13H FLAT MOON DATA
FM=.01091

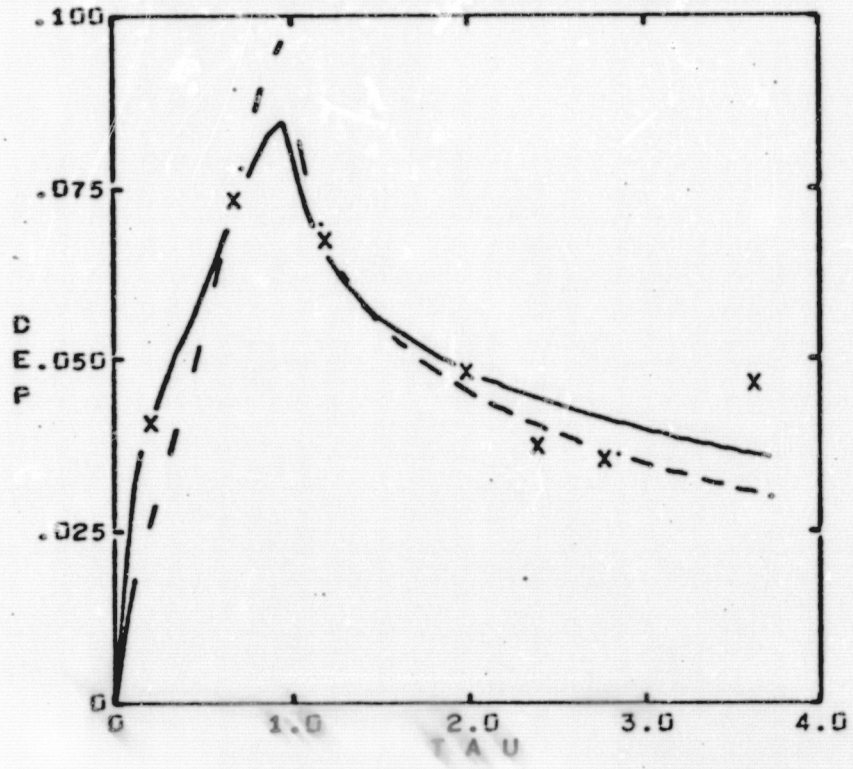
INITIAL TEMPERATURE 358.63
TAU-END OF TOTALITY 3.729

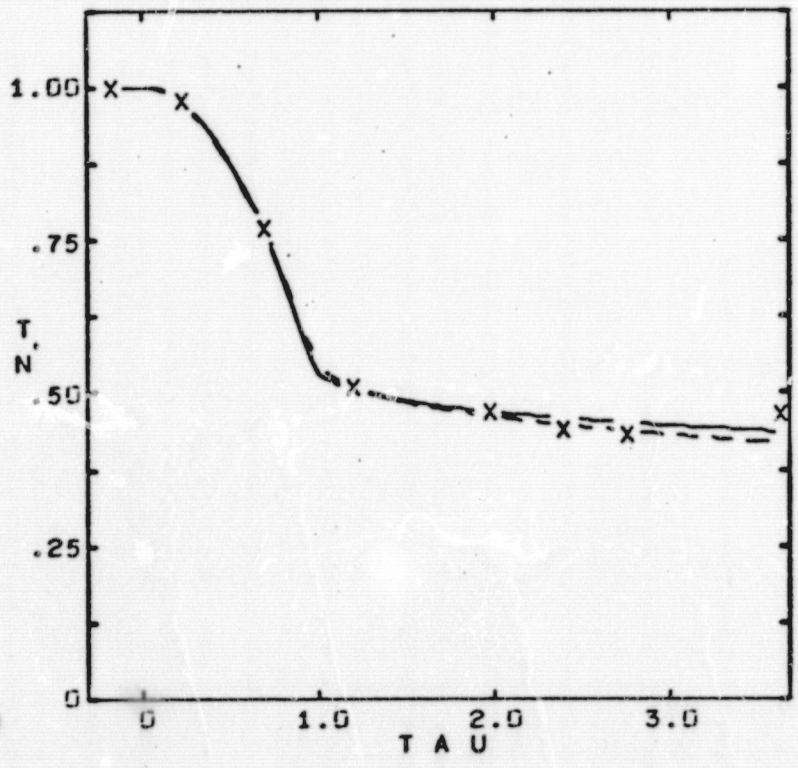
DIFFERENTIAL ENERGY DATA

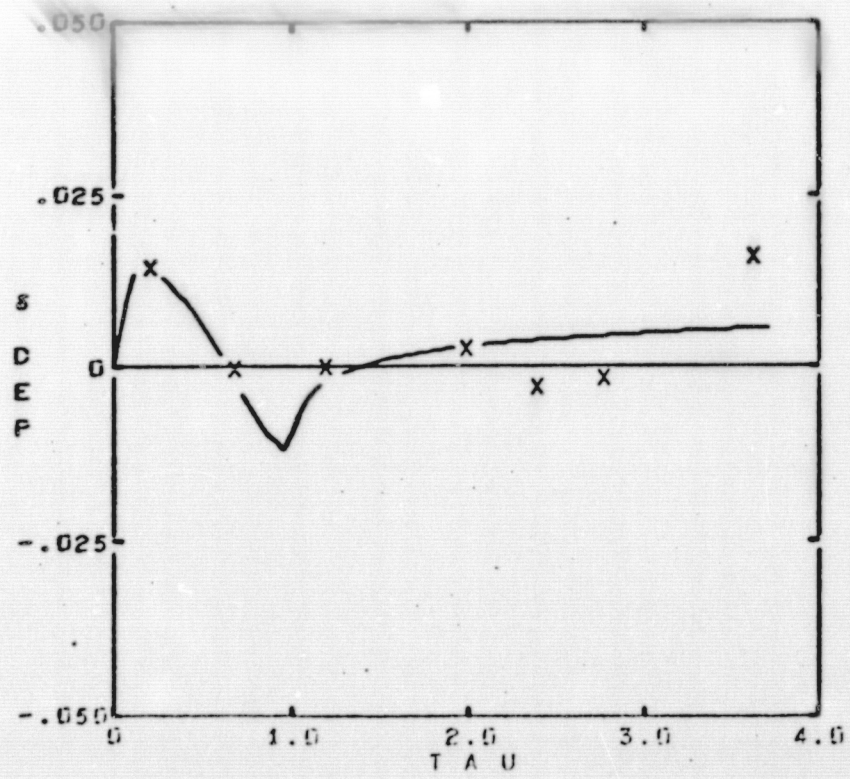
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0435	.0297	.0138
.50	.0600	.0542	.0058
.75	.0759	.0809	-.0050
.93	.0860	.0985	-.0125
1.0	.0798	.0890	-.0092
1.5	.0560	.0550	.0010
2.0	.0482	.0452	.0030
2.5	.0433	.0392	.0041
3.0	.0397	.0348	.0049

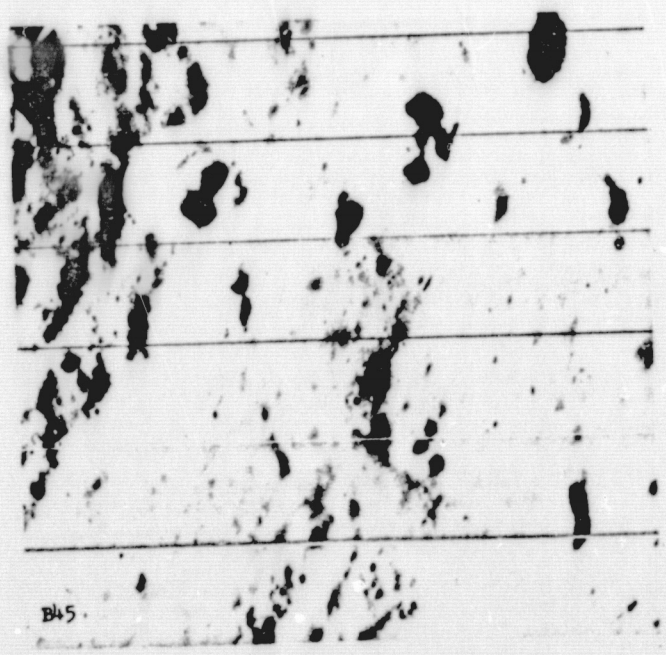
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.994	359.63	1.003	.0112
9H	-0.186	358.44	0.999	-.0021
10H	0.210	350.97	0.979	.0406
11H	0.680	276.44	0.771	.0732
12H	1.193	182.81	0.510	.0675
13H	1.980	167.98	0.468	.0481
14H	2.391	157.89	0.440	.0376
15H	2.764	155.47	0.434	.0353
16H	3.630	166.60	0.465	.0466









36 (364) N.E. CLAVIUS

LAMBDA= 7.50 W BETA=52.66 S XI=-.0792 ETA=-.7951 L+PL CODE = 30789 ALBEDO =.1526

13H FLAT MOON DATA
FM=.01076

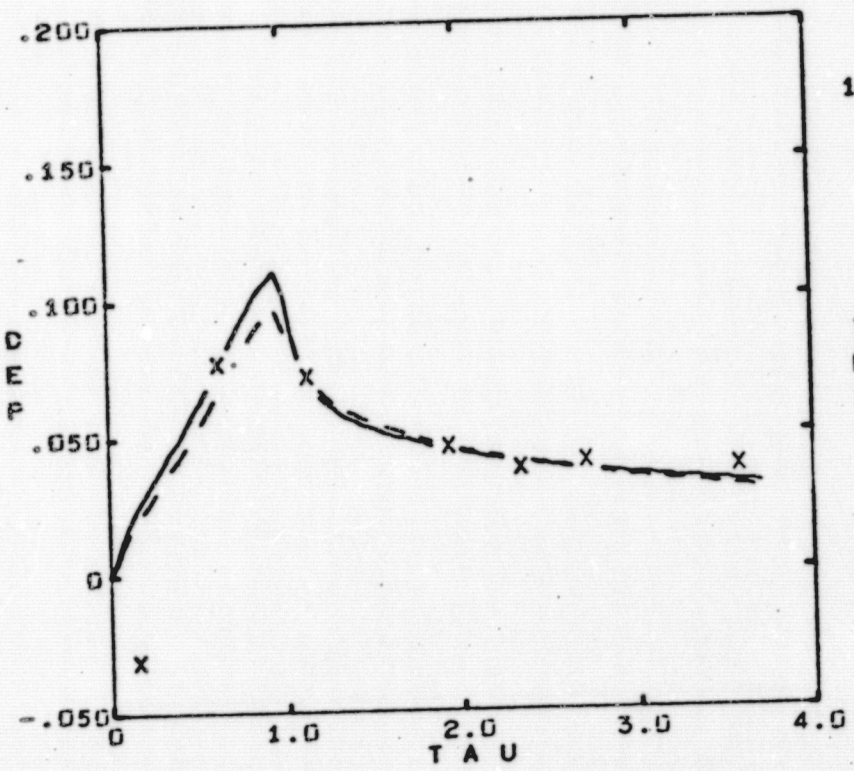
INITIAL TEMPERATURE 361.54
TAU-END OF TOTALITY 3.738

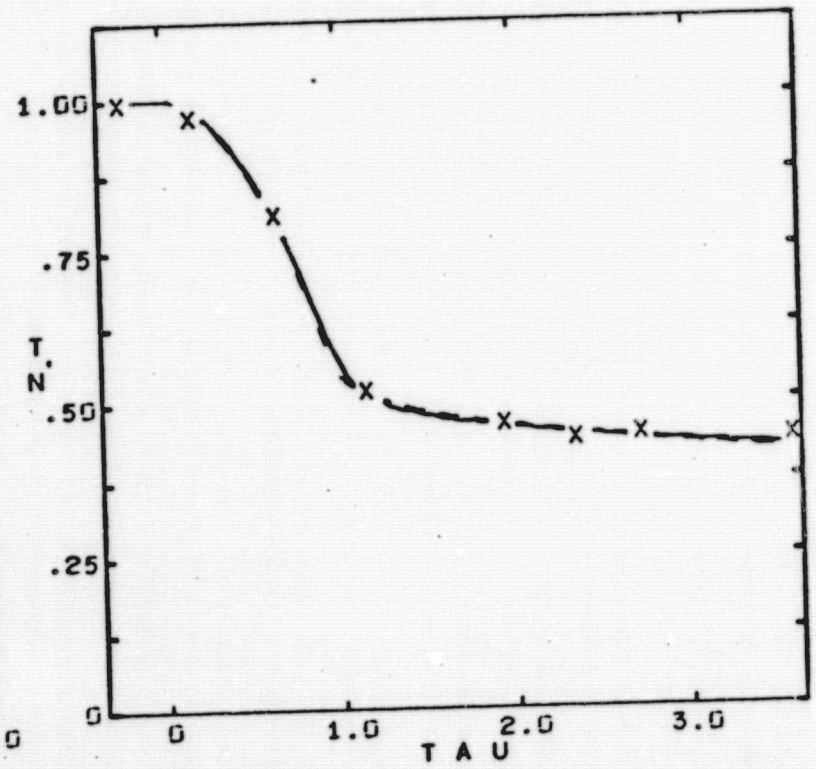
DIFFERENTIAL ENERGY DATA

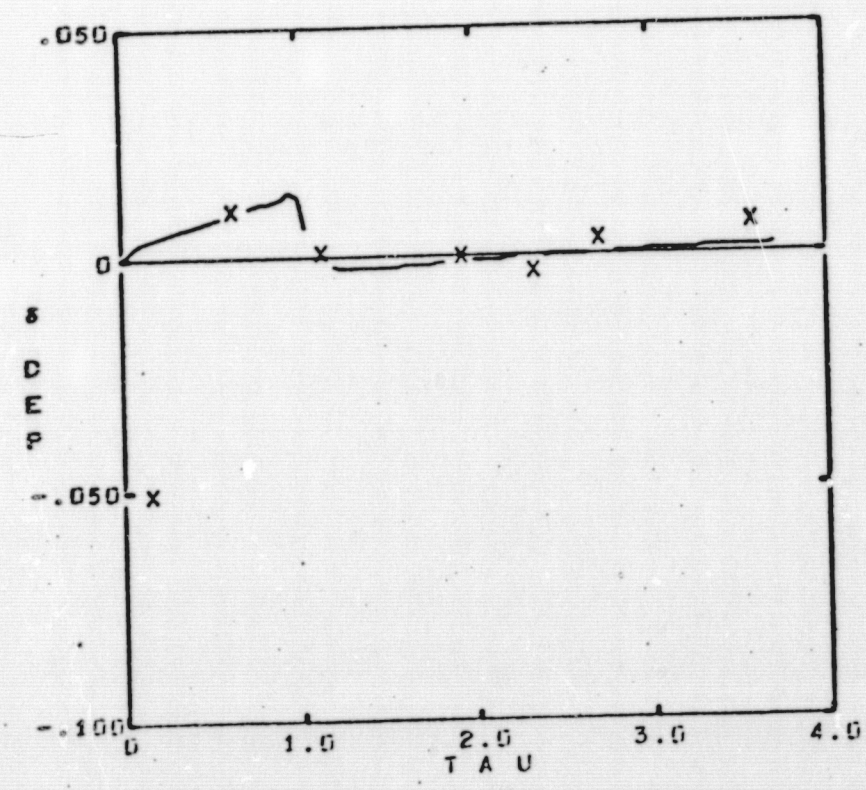
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0331	.0277	.0054
.50	.0610	.0528	.0082
.75	.0911	.0800	.0111
.93	.1111	.0981	.0130
1.0	.1018	.0887	.0131
1.5	.0527	.0549	-.0022
2.0	.0441	.0451	-.0010
2.5	.0391	.0390	.0001
3.0	.0355	.0346	.0009

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.050	364.81	1.009	.0368
9H	-0.241	360.78	0.998	-.0083
10H	0.155	351.45	0.972	-.0318
11H	0.625	292.47	0.809	.0766
12H	1.139	187.50	0.519	.0723
13H	1.928	167.58	0.464	.0462
14H	2.337	159.30	0.441	.0377
15H	2.713	162.08	0.448	.0404
16H	3.587	159.31	0.441	.0377







PHOTOGRAPH
NOT
AVAILABLE

37 (385) E. CLAVIUS

LAMBDA= 2.50 W BETA=57.99 S XI=-.0231 ETA=-.8480 L+FL CODE = 30825 ALBEDO =.1499

13H FLAT MOON DATA
FM=.00299

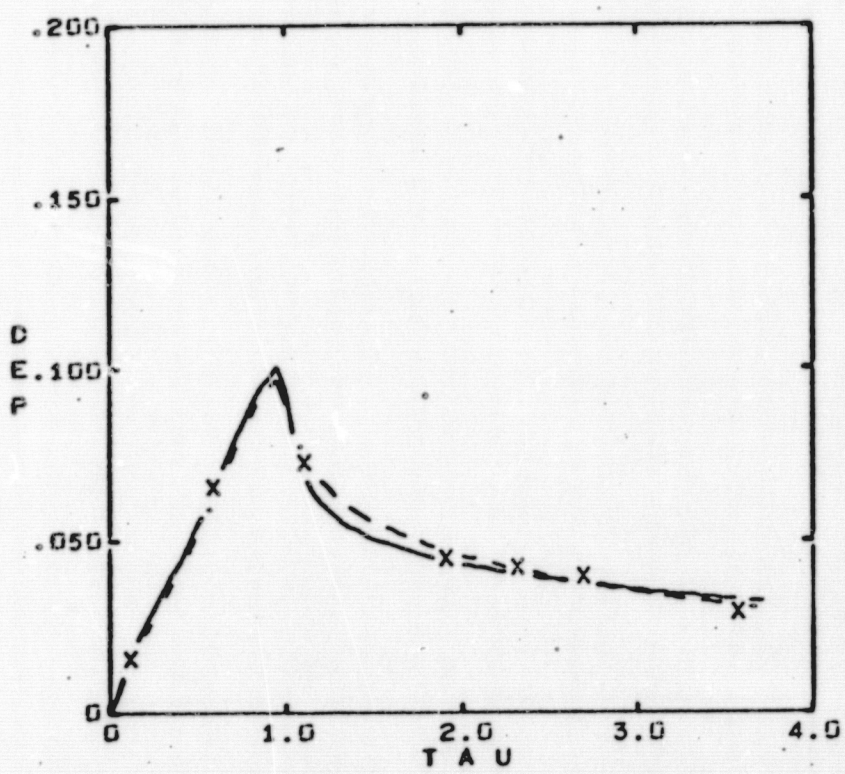
INITIAL TEMPERATURE 352.53
TAU-END OF TOTALITY 3.754

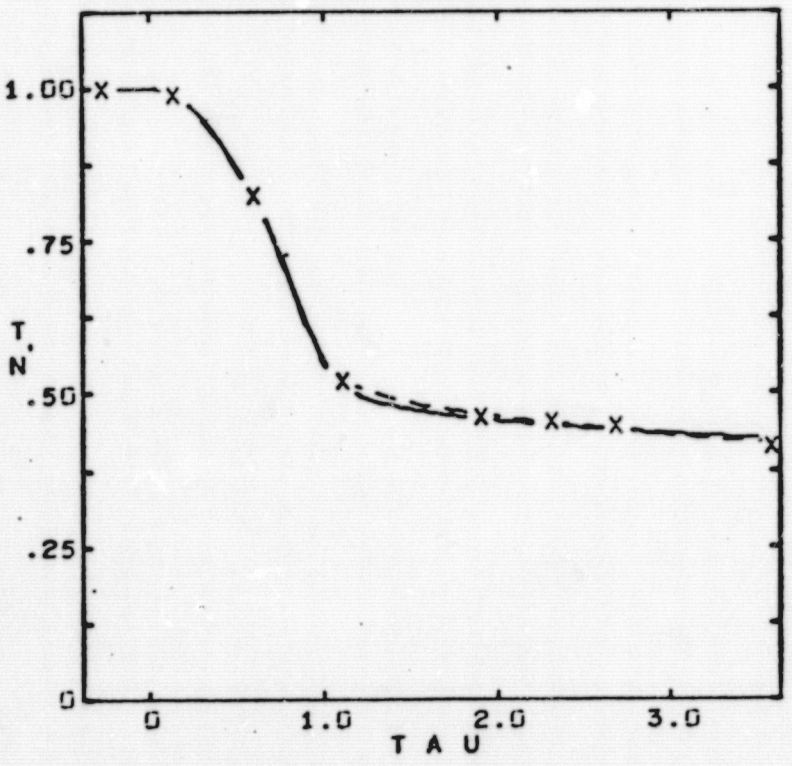
DIFFERENTIAL ENERGY DATA

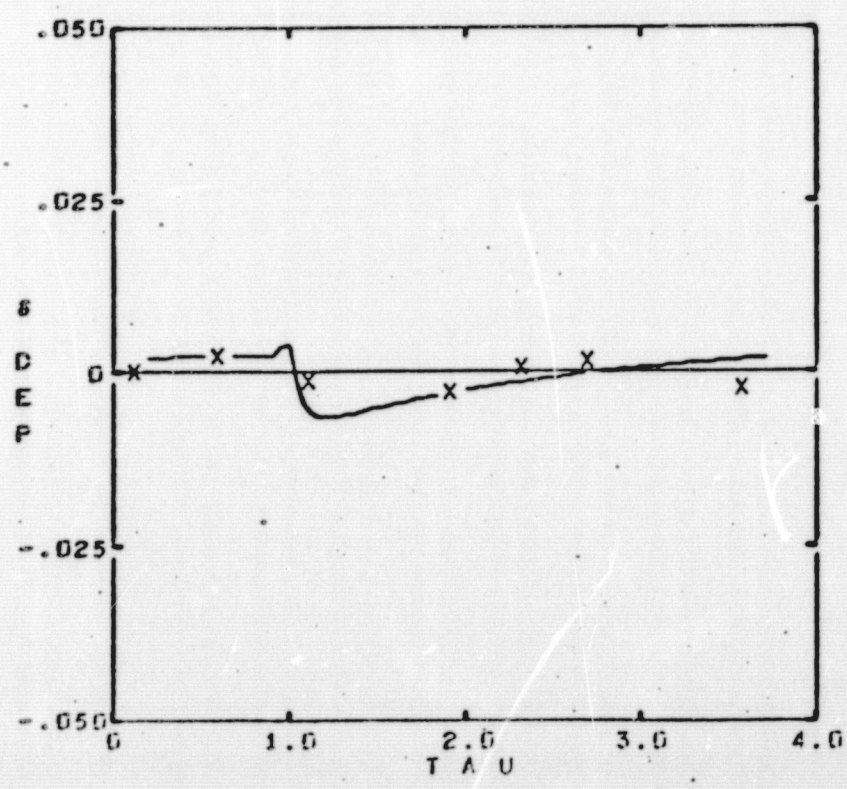
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0292	.0271	.0021
.50	.0552	.0528	.0024
.75	.0832	.0807	.0025
.93	.1018	.0992	.0026
1.0	.0937	.0897	.0040
1.5	.0506	.0557	-.0051
2.0	.0432	.0457	-.0025
2.5	.0388	.0396	-.0008
3.0	.0357	.0351	.0006

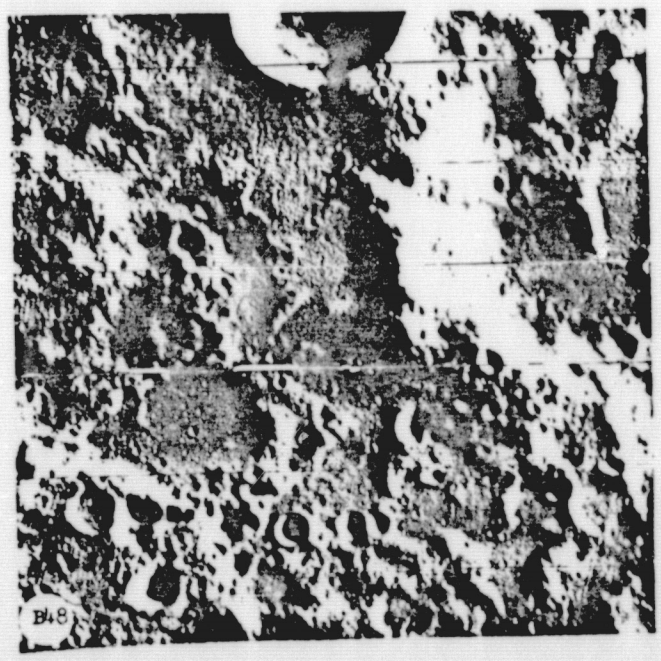
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.083	353.93	1.004	.0159
9H	-0.273	352.18	0.999	-.0040
10H	0.124	349.28	0.991	.0156
11H	0.594	290.35	0.824	.0656
12H	1.110	183.37	0.520	.0732
13H	1.901	161.99	0.460	.0446
14H	2.311	160.09	0.454	.0425
15H	2.687	157.28	0.446	.0396
16H	3.567	145.50	0.413	.0290









LAMBDA=20.50 W BETA=62.34 S XI=-.1626 ETA=-.8857 L+PL CODE = 31869 ALBEDO =.1386

13H FLAT MOON DATA
FM=.00267

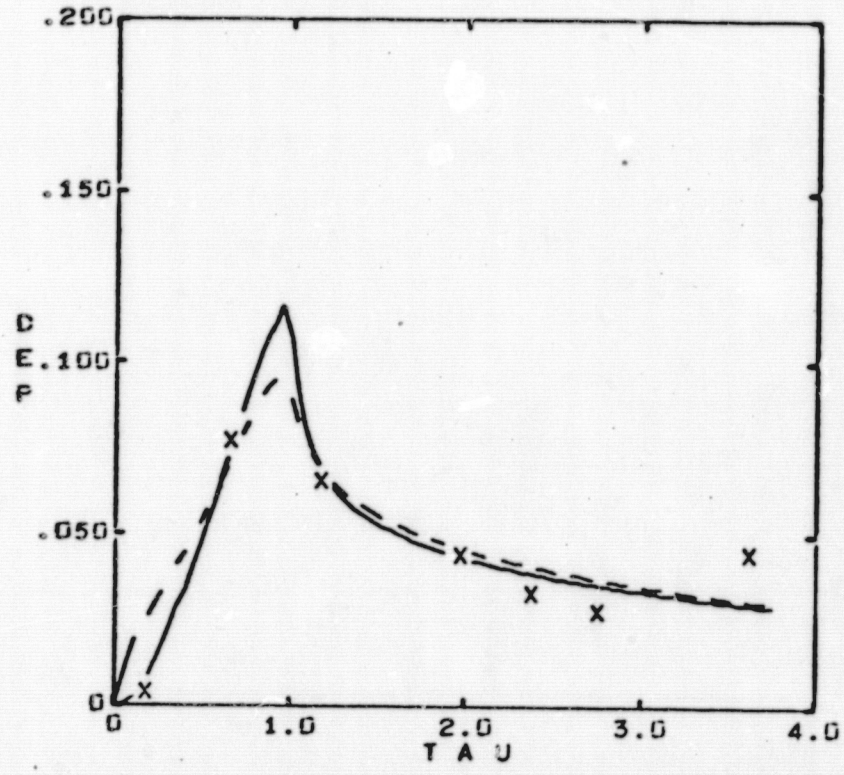
INITIAL TEMPERATURE 341.80
TAU-END OF TOTALITY 3.772

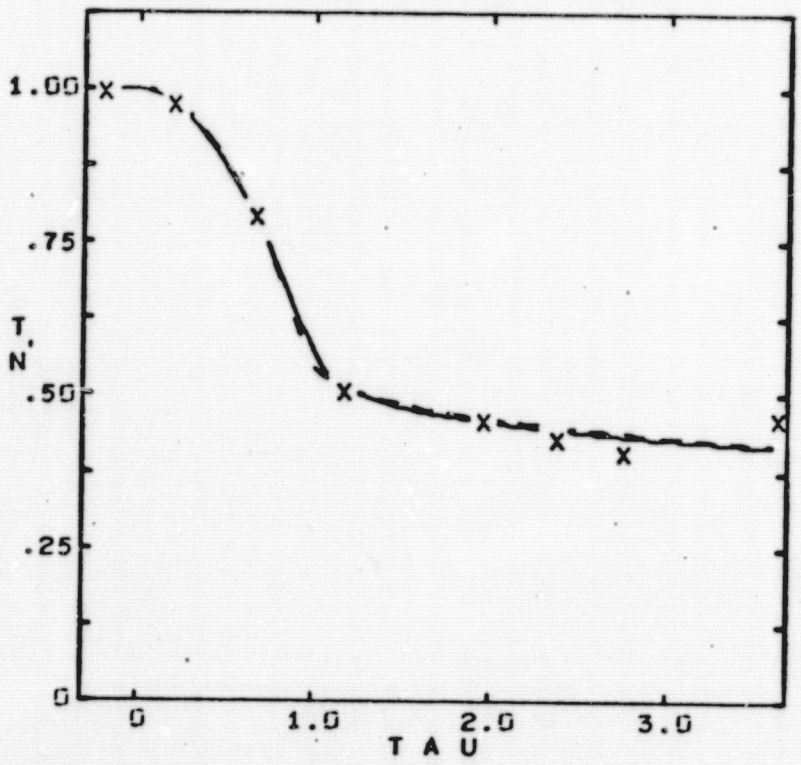
DIFFERENTIAL ENERGY DATA

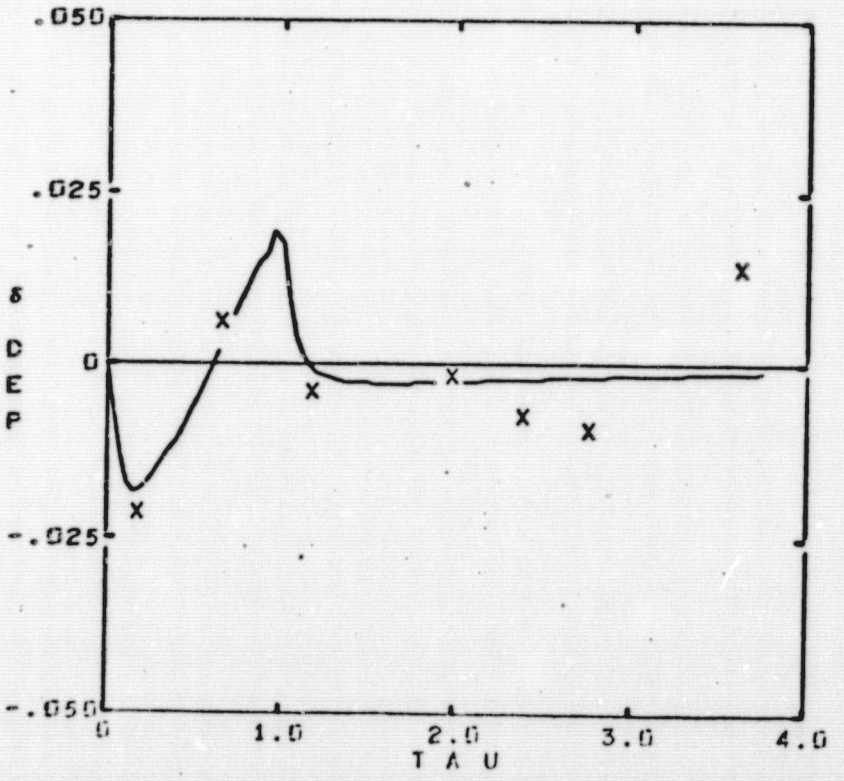
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0140	.0307	-.0167
.50	.0492	.0550	-.0058
.75	.0901	.0815	.0086
.93	.1176	.0991	.0185
1.0	.1071	.0895	.0176
1.5	.0527	.0553	-.0026
2.0	.0430	.0454	-.0024
2.5	.0375	.0394	-.0019
3.0	.0335	.0350	-.0015

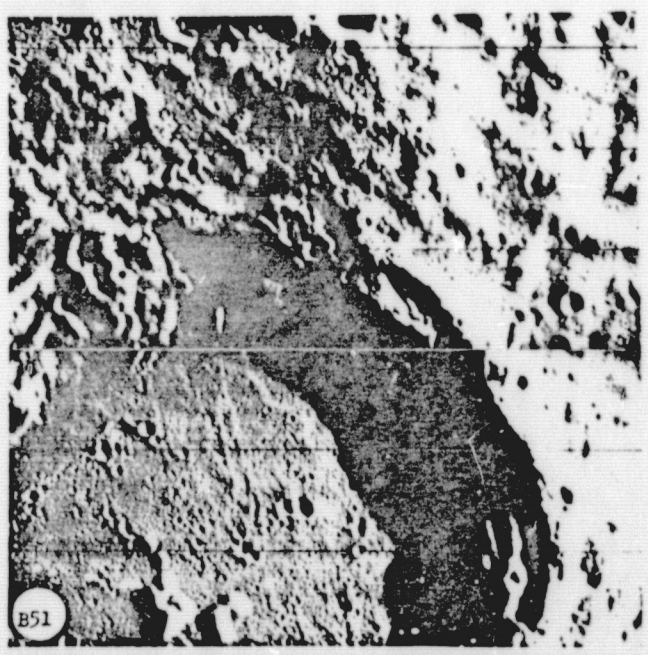
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.027	346.77	1.015	.0594
9H	-0.214	340.77	0.997	-.0121
10H	0.184	333.34	0.975	.0035
11H	0.655	270.29	0.791	.0778
12H	1.172	172.86	0.506	.0654
13H	1.964	156.89	0.459	.0444
14H	2.376	146.17	0.428	.0334
15H	2.753	139.44	0.408	.0277
16H	3.630	157.52	0.461	.0451









39 (4A4) ZOLLNER

LAMBDA=19.00 E BETA= 8.00 S XI=+.3224 ETA=-.1392 L+PL CODE = 43124 ALBEDO =.1404

13H FLAT MOON DATA
FM=.00423

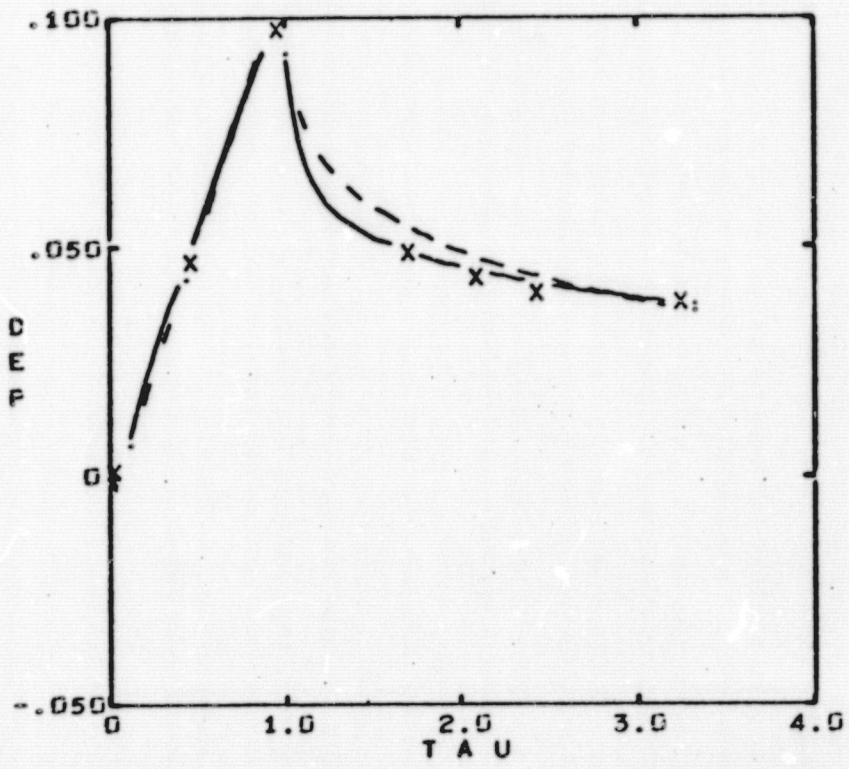
INITIAL TEMPERATURE 391.52
TAU-END OF TOTALITY 3.331

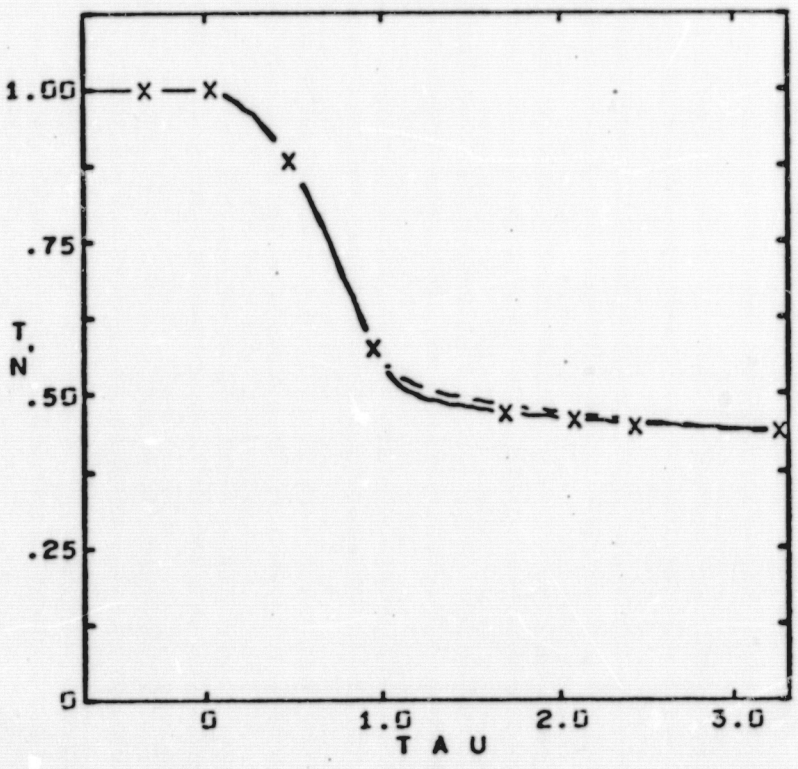
DIFFERENTIAL ENERGY DATA

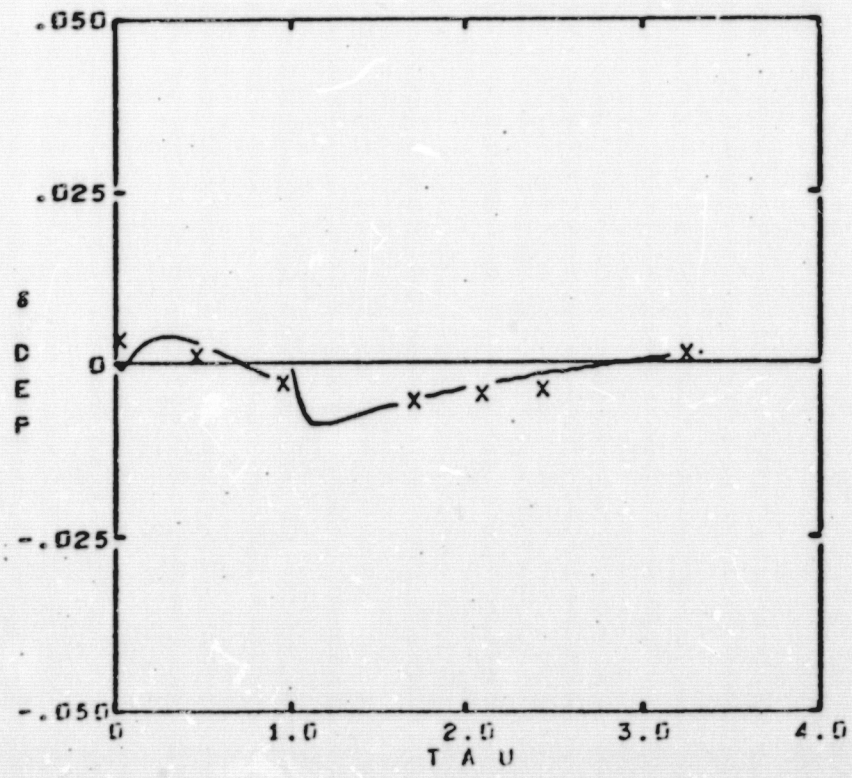
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0251	.0212	.0039
.50	.0528	.0499	.0029
.75	.0803	.0805	-.0002
.93	.0983	.1011	-.0028
1.0	.0914	.0919	-.0005
1.5	.0522	.0588	-.0066
2.0	.0456	.0491	-.0035
2.5	.0417	.0429	-.0012
3.0	.0388	.0383	.0005

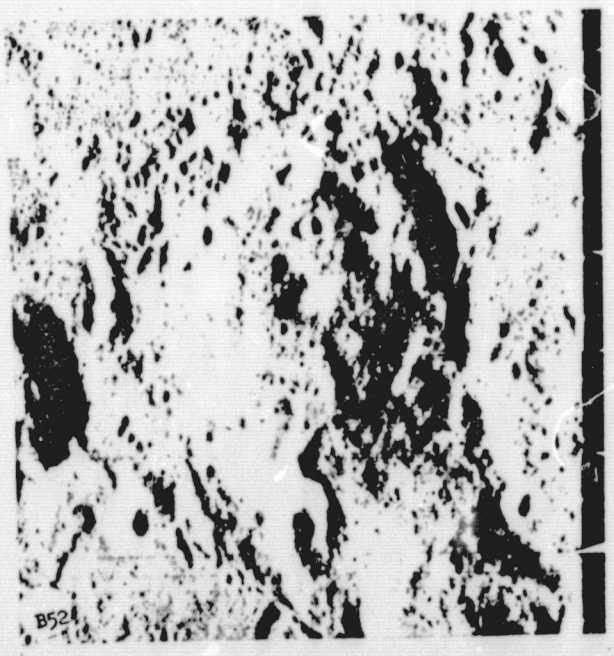
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.109	391.97	1.001	.0046
9H	-0.351	391.38	1.000	-.0015
10H	0.024	391.28	0.999	.0009
11H	0.466	345.42	0.882	.0469
12H	0.952	225.48	0.576	.0975
13H	1.693	184.08	0.470	.0469
14H	2.082	178.69	0.456	.0434
15H	2.433	175.04	0.447	.0399
16H	3.254	172.67	0.441	.0378









40 (4A5) N.W. CYRILLUS

LAMBDA=21.00 E BETA=12.00 S XI=+.3505 ETA=-.2079 L+FL CODE = 43251 ALBEDO =.1398

13H FLAT MOON DATA
FM=.00057

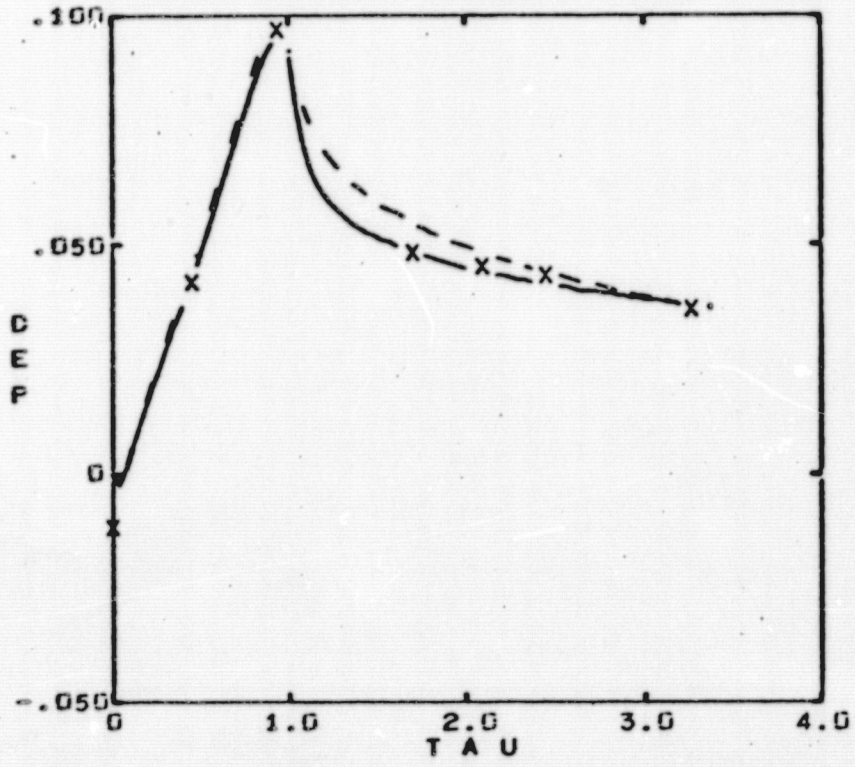
INITIAL TEMPERATURE 388.01
TAU-END OF TOTALITY 3.381

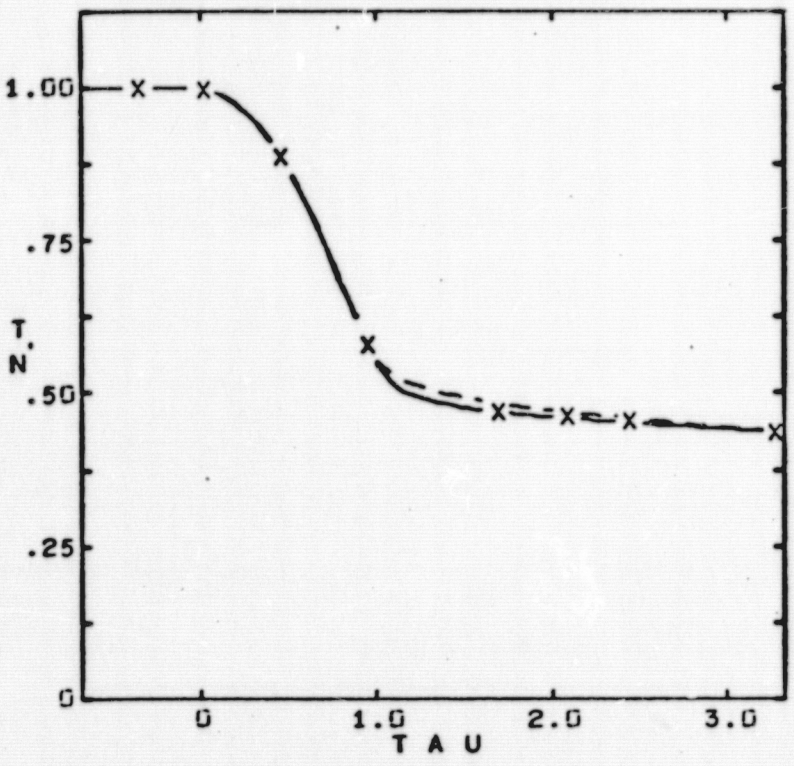
DIFFERENTIAL ENERGY DATA

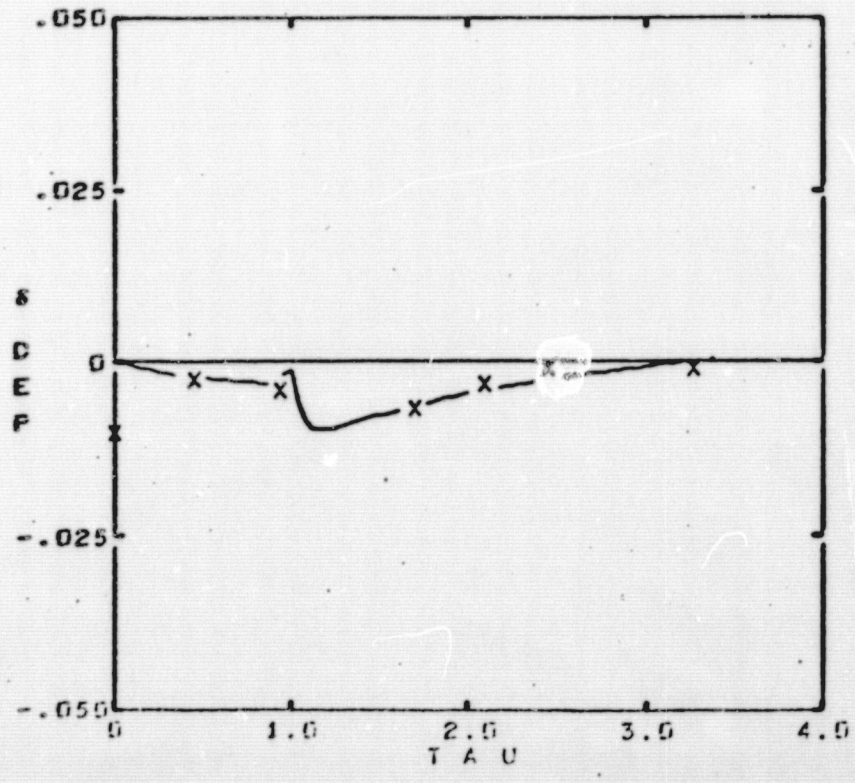
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0197	.0209	-.0012
.50	.0477	.0499	-.0022
.75	.0779	.0807	-.0028
.93	.0982	.1014	-.0032
1.0	.0912	.0922	-.0010
1.5	.0515	.0592	-.0077
2.0	.0449	.0495	-.0046
2.5	.0410	.0433	-.0023
3.0	.0381	.0386	-.0005

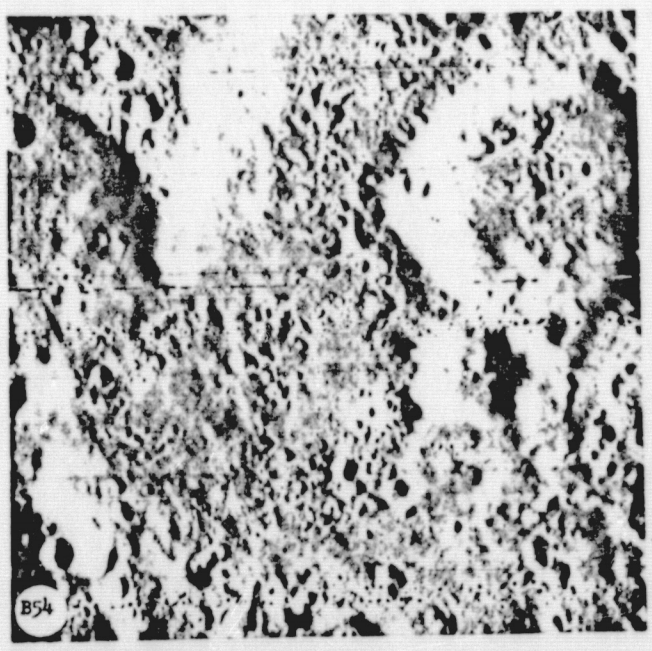
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.133	388.98	1.003	.0101
9H	-0.369	387.69	0.999	-.0033
10H	0.009	386.80	0.997	-.0117
11H	0.455	343.85	0.886	.0420
12H	0.944	225.20	0.580	.0972
13H	1.691	181.75	0.468	.0461
14H	2.083	178.82	0.461	.0451
15H	2.437	176.82	0.456	.0431
16H	3.267	168.71	0.435	.0357









41 (4AS) N.W. LEGENDRE

LAMBDA=68.00 E BETA=27.66 S XI=+.8212 ETA=-.4643 L+PL CODE = 48426 ALBEDO =.1303

13H FLAT MOON DATA
FM=.00840

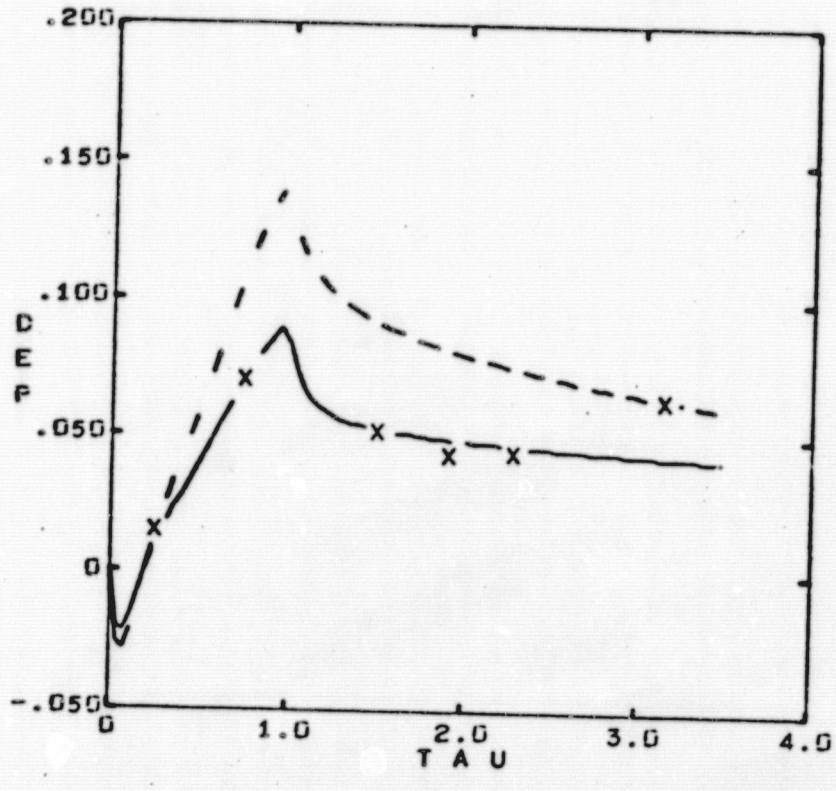
INITIAL TEMPERATURE 345.58
TAU-END OF TOTALITY 3.517

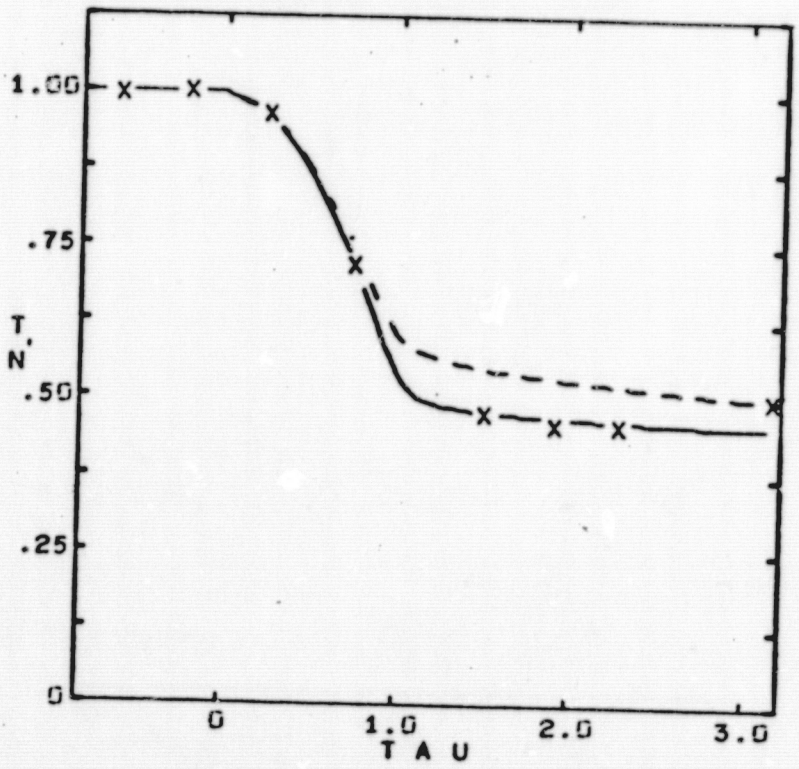
DIFFERENTIAL ENERGY DATA

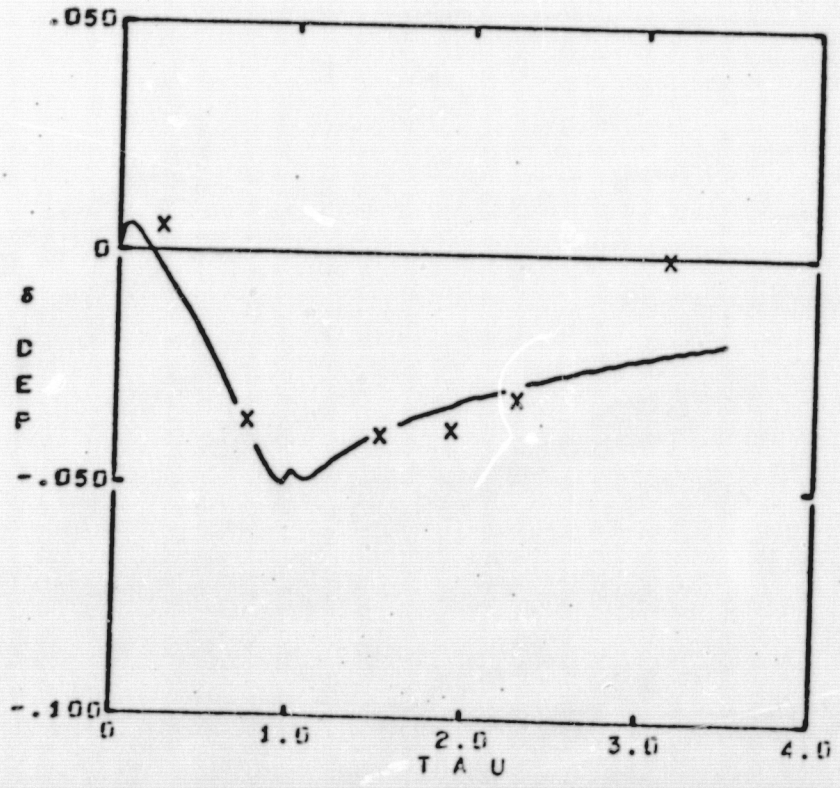
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0083	.0113	-.0030
.50	.0413	.0608	-.0195
.75	.0701	.1084	-.0383
.93	.0887	.1401	-.0514
1.0	.0837	.1309	-.0472
1.5	.0523	.0912	-.0389
2.0	.0482	.0795	-.0313
2.5	.0456	.0717	-.0261
3.0	.0435	.0655	-.0220

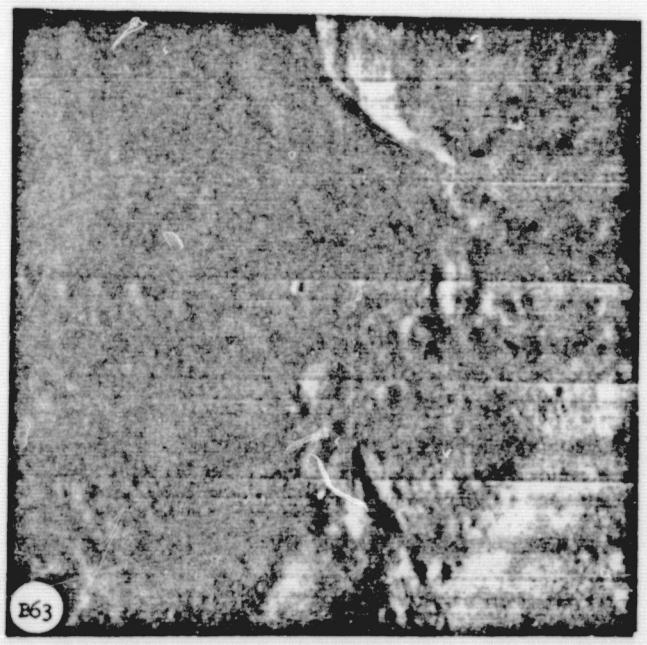
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.375	346.95	1.004	.0159
9H	-0.595	344.93	0.998	-.0076
10H	-0.211	345.61	1.000	.0003
11H	0.244	332.37	0.962	.0154
12H	0.743	248.38	0.719	.0707
13H	1.505	164.91	0.477	.0519
14H	1.906	157.77	0.457	.0434
15H	2.266	158.37	0.458	.0441
16H	3.140	173.52	0.502	.0636









42 (4A7) S.E. PLAYFAIR

LAMBDA=10.50 E BETA=27.50 S XI=+.1616 ETA=-.4617 L+PL CODE = 41466 ALBEDO =.1402

13H FLAT MOON DATA
FM=.00418

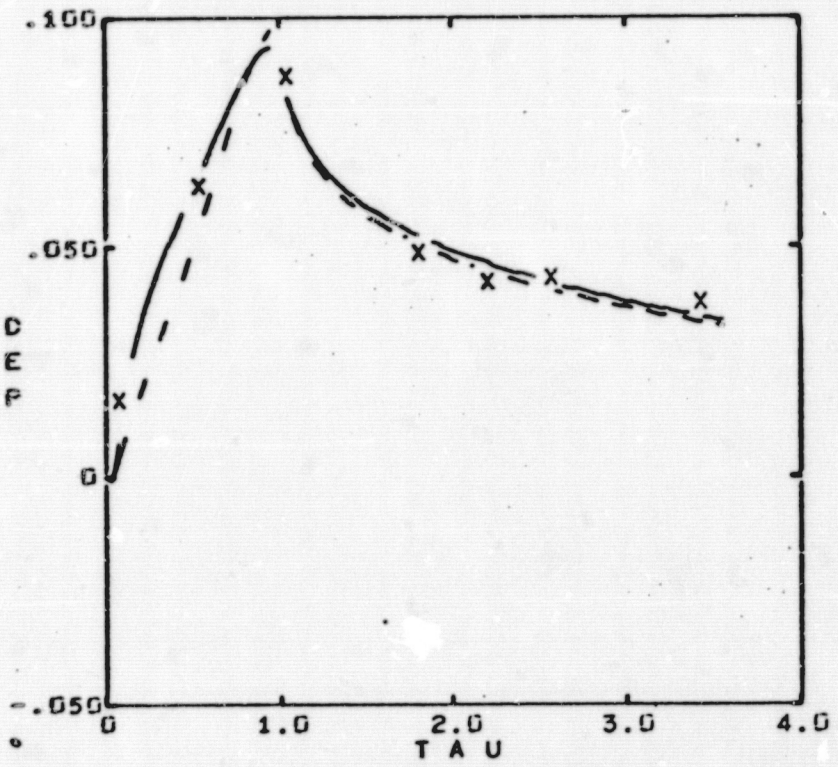
INITIAL TEMPERATURE 381.63
TAU-END OF TOTALITY 3.566

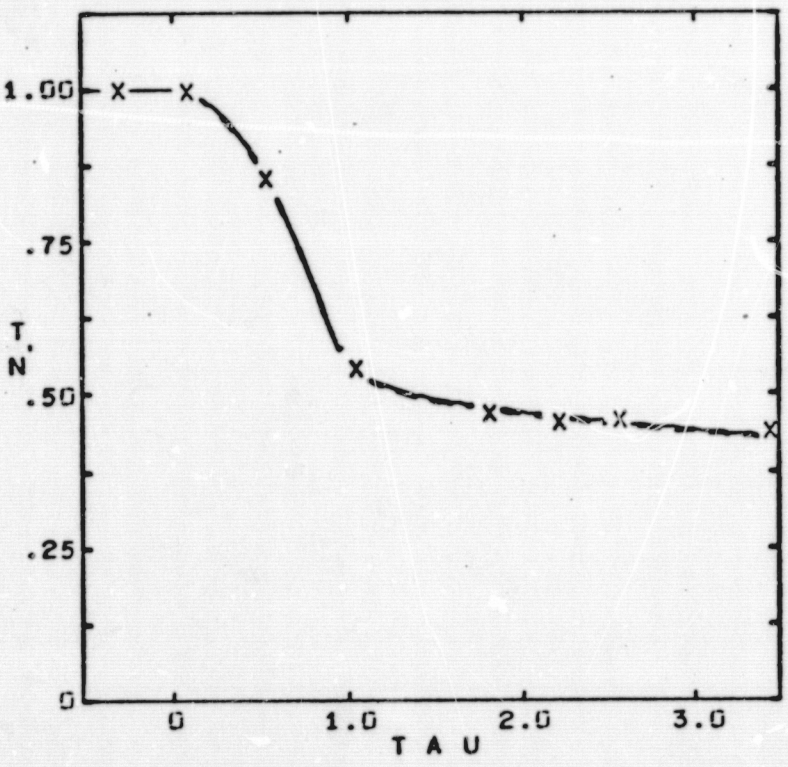
DIFFERENTIAL ENERGY DATA

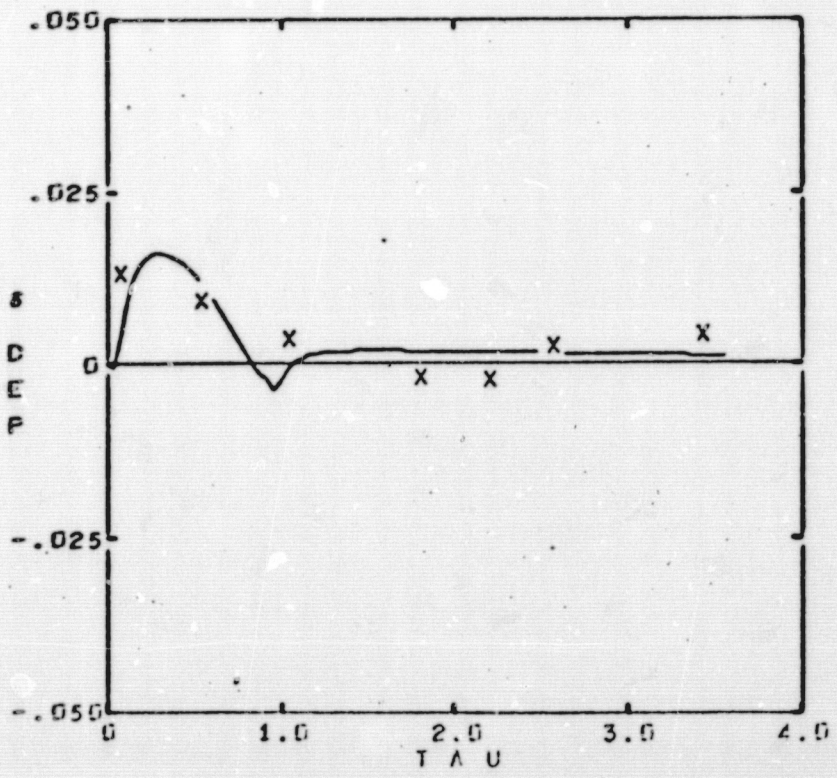
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0379	.0223	.0156
.50	.0626	.0498	.0128
.75	.0829	.0795	.0034
.93	.0955	.0994	-.0039
1.0	.0881	.0902	-.0021
1.5	.0591	.0571	.0020
2.0	.0492	.0474	.0018
2.5	.0429	.0413	.0016
3.0	.0381	.0367	.0014

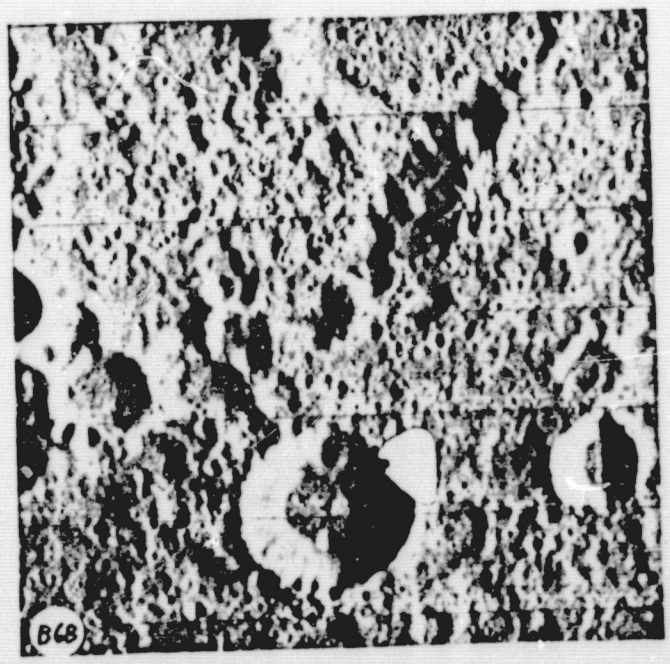
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.098	382.81	1.003	.0124
9H	-0.311	381.30	0.999	-.0035
10H	0.077	380.88	0.998	.0162
11H	0.535	326.22	0.855	.0634
12H	1.038	207.46	0.544	.0873
13H	1.806	179.41	0.470	.0488
14H	2.208	173.31	0.454	.0425
15H	2.571	174.26	0.457	.0435
16H	3.425	168.33	0.441	.0379









43 (4A8) N.E. JANSSEN

LAMBDA=45.00 E BETA=42.00 S XI=+.5255 ETA=-.6691 L+PL CODE = 45637 ALBEDO =.1427

13H FLAT MOON DATA
FM=-.00722

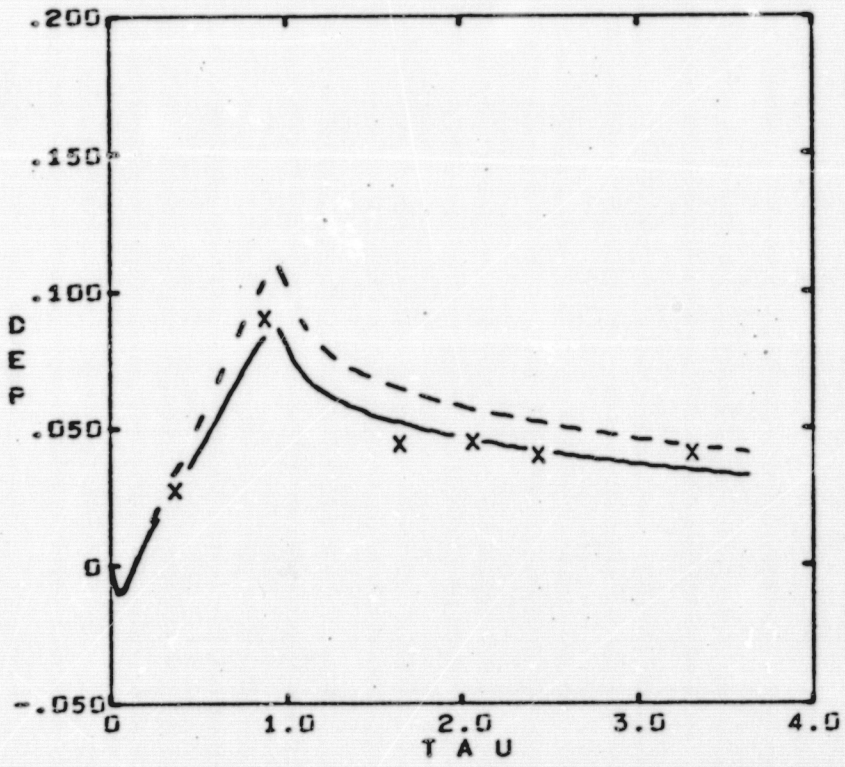
INITIAL TEMPERATURE 355.90
TAU-END OF TOTALITY 3.652

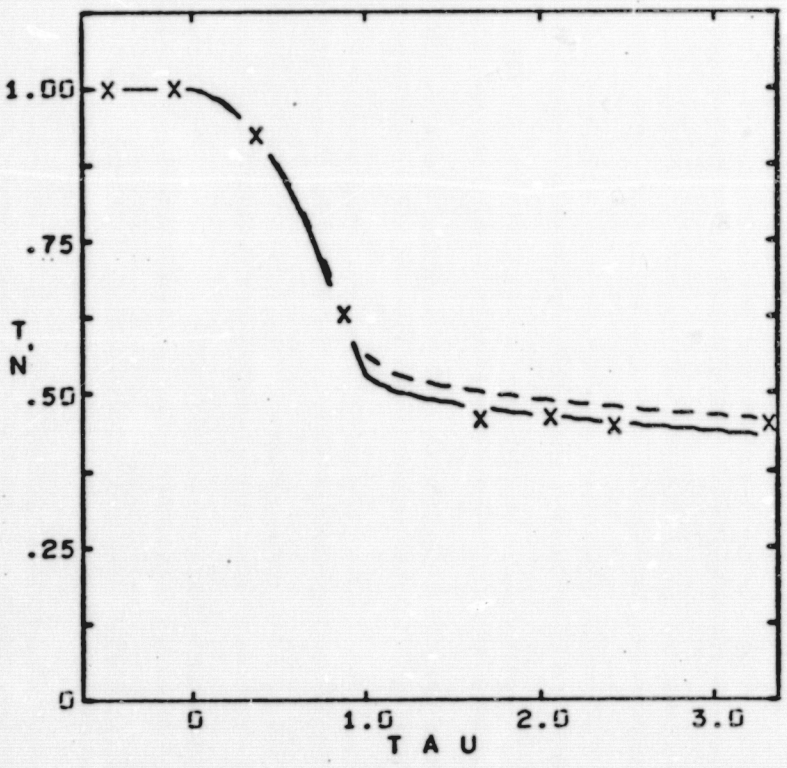
DIFFERENTIAL ENERGY DATA

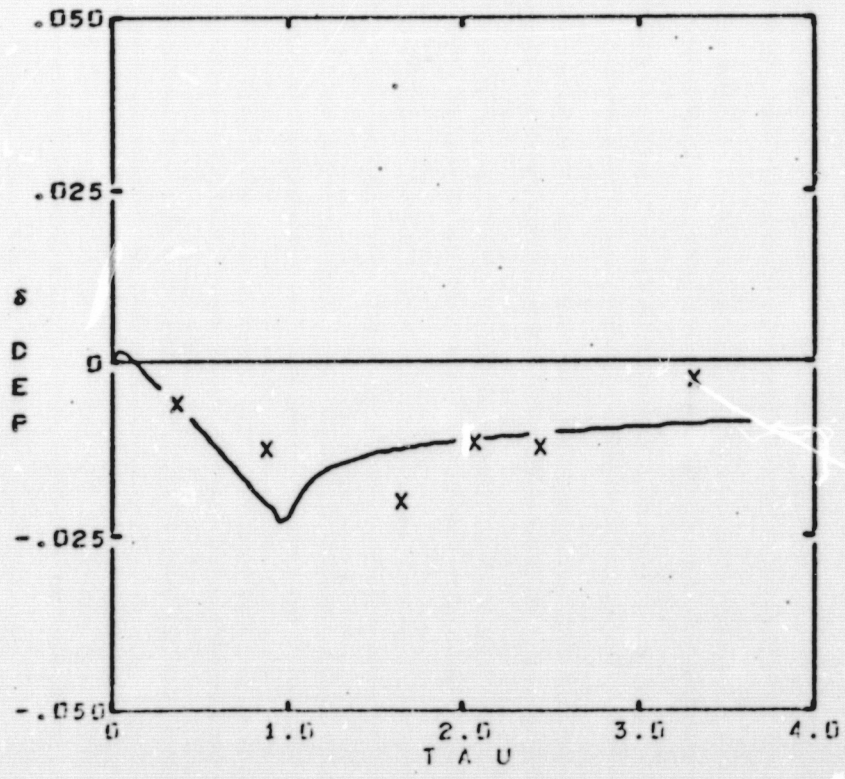
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0142	.0171	-.0029
.50	.0424	.0521	-.0097
.75	.0706	.0875	-.0169
.93	.0895	.1113	-.0218
1.0	.0798	.1022	-.0224
1.5	.0549	.0680	-.0131
2.0	.0467	.0580	-.0113
2.5	.0413	.0514	-.0101
3.0	.0371	.0464	-.0093

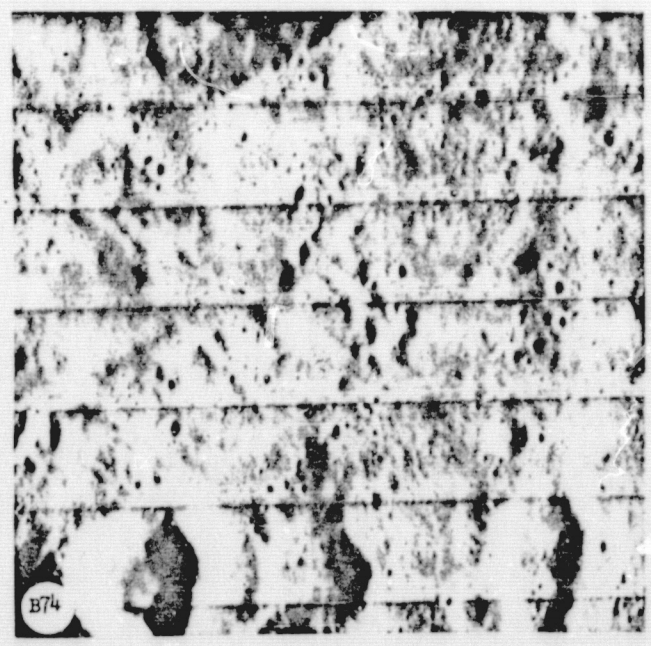
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.290	357.70	1.005	.0203
9H	-0.494	355.52	0.999	-.0042
10H	-0.102	355.84	1.000	-.0007
11H	0.362	329.18	0.925	.0269
12H	0.871	224.16	0.630	.0903
13H	1.649	163.38	0.459	.0444
14H	2.055	164.29	0.462	.0454
15H	2.423	159.38	0.448	.0402
16H	3.309	160.45	0.451	.0413









44 (4A9) W. DOVE

LAMBDA=29.99 E BETA=47.16 S XI=+.3399 ETA=-.7333 L+PL CODE = 43743 ALBEDO =.1309

13H FLAT MOON DATA
FM=.00101

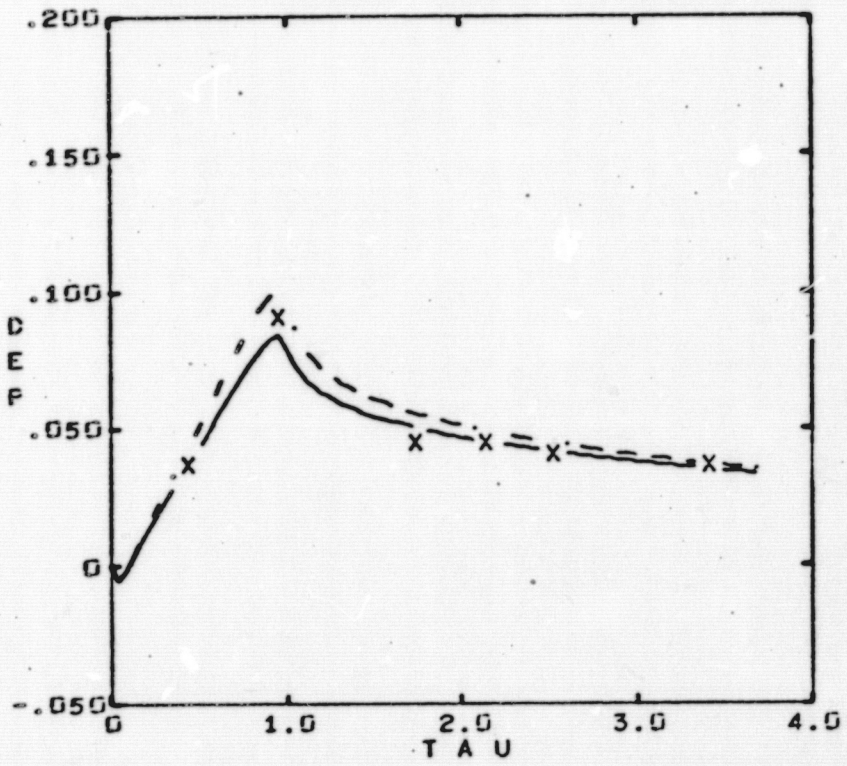
INITIAL TEMPERATURE 361.62
TAU-END OF TOTALITY 3.692

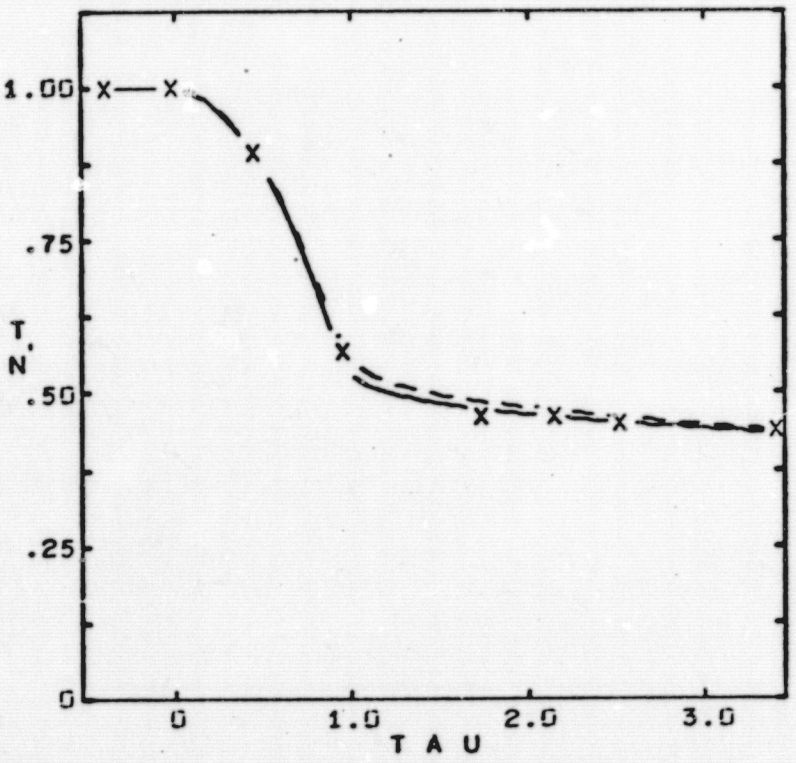
DIFFERENTIAL ENERGY DATA

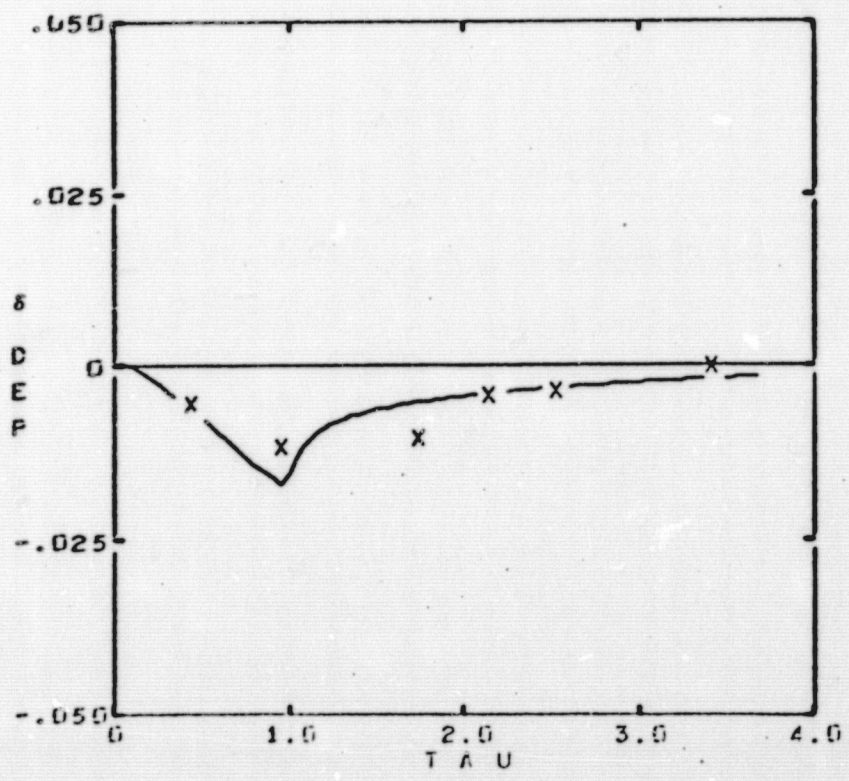
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0171	.0194	-.0023
.50	.0425	.0498	-.0073
.75	.0686	.0816	-.0130
.93	.0861	.1030	-.0169
1.0	.0784	.0939	-.0155
1.5	.0547	.0610	-.0063
2.0	.0470	.0513	-.0043
2.5	.0419	.0451	-.0032
3.0	.0380	.0404	-.0024

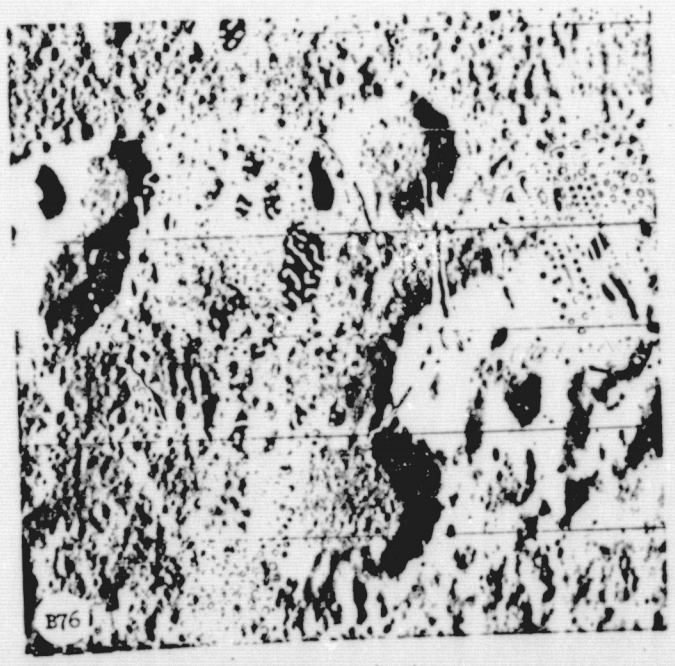
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.223	364.05	1.007	.0272
9H	-0.421	361.52	1.000	-.0011
10H	-0.027	361.57	1.000	-.0005
11H	0.440	323.49	0.895	.0371
12H	0.952	205.25	0.568	.0905
13H	1.735	167.03	0.462	.0455
14H	2.143	166.63	0.461	.0451
15H	2.513	163.21	0.451	.0415
16H	3.399	159.07	0.440	.0374









45 (481) N.E. LILIUS

LAMBDA= 8.00 E BETA=53.00 S XI=+.0838 ETA=-.7986 L+PL CODE = 40789 ALBEDO =.1411

13H FLAT MOON DATA
FM=.00481

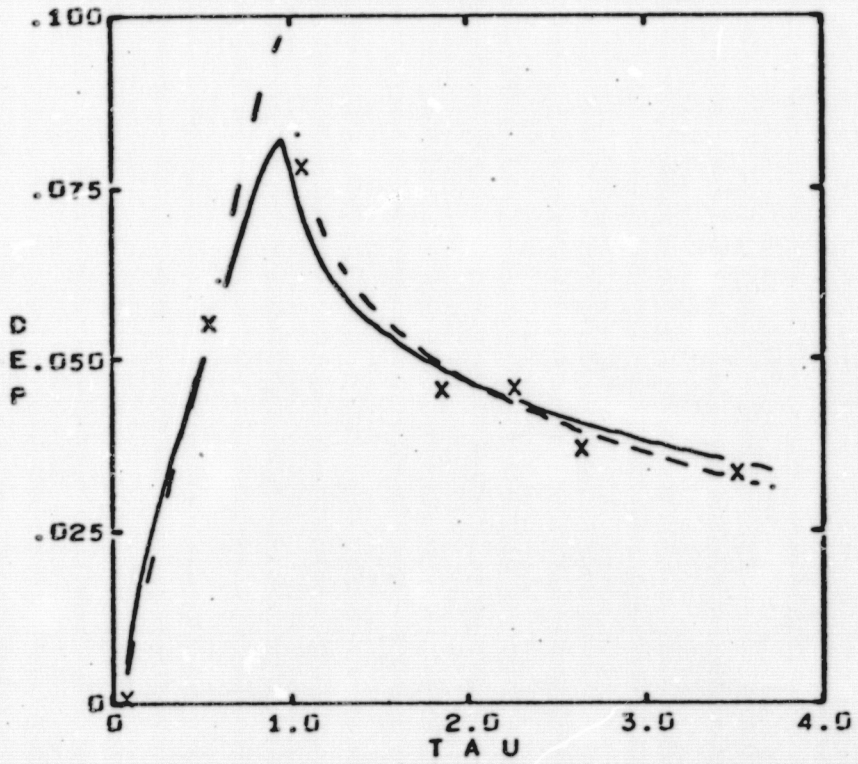
INITIAL TEMPERATURE 360.54
TAU-END OF TOTALITY 3.732

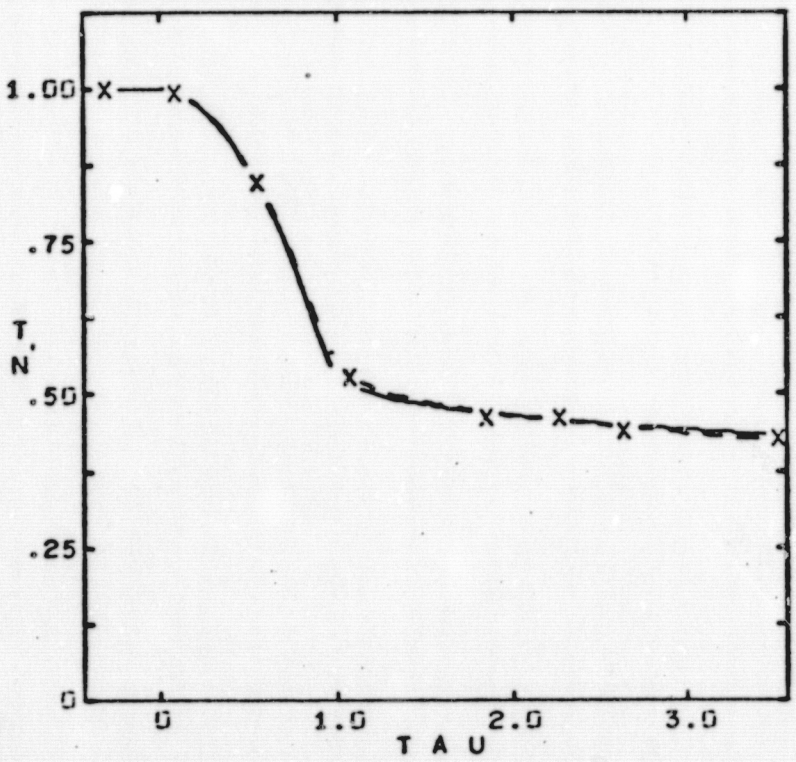
DIFFERENTIAL ENERGY DATA

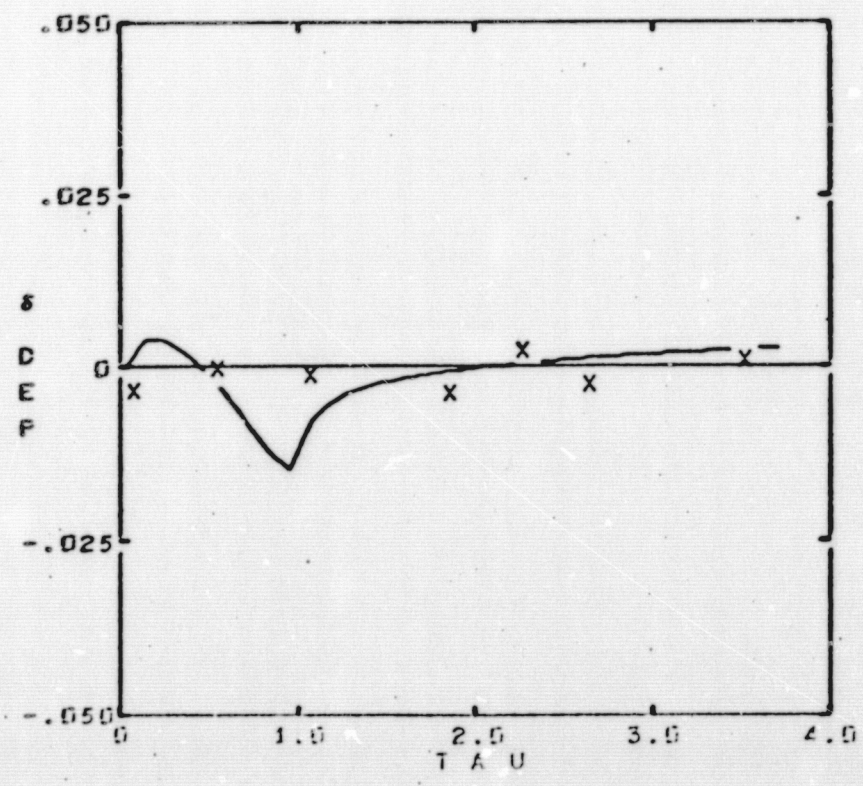
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0266	.0226	.0040
.50	.0487	.0498	-.0011
.75	.0699	.0791	-.0092
.93	.0836	.0987	-.0151
1.0	.0775	.0896	-.0121
1.5	.0544	.0566	-.0022
2.0	.0468	.0469	-.0001
2.5	.0419	.0408	.0011
3.0	.0381	.0363	.0018

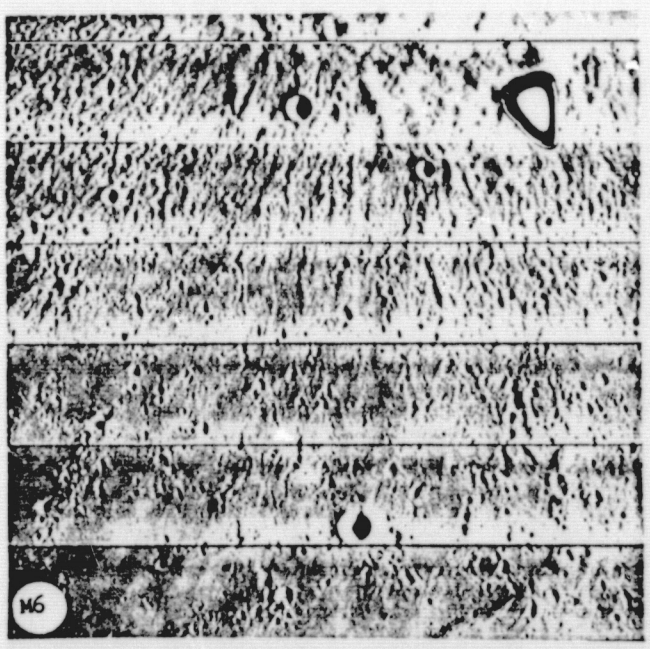
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.123	360.38	1.000	-.0017
9H	-0.315	360.58	1.000	.0005
10H	0.081	358.29	0.994	.0007
11H	0.551	304.59	0.845	.0555
12H	1.065	190.71	0.529	.0783
13H	1.852	166.46	0.462	.0454
14H	2.262	166.86	0.463	.0459
15H	2.636	158.16	0.439	.0370
16H	3.516	154.37	0.428	.0336









LAMBDA=11.50 E BETA=52.50 S XI=+.1214 ETA=-.7934 L+PL CODE = 41729 ALBEDO =.1416

13H FLAT MOON DATA
FM=.01046

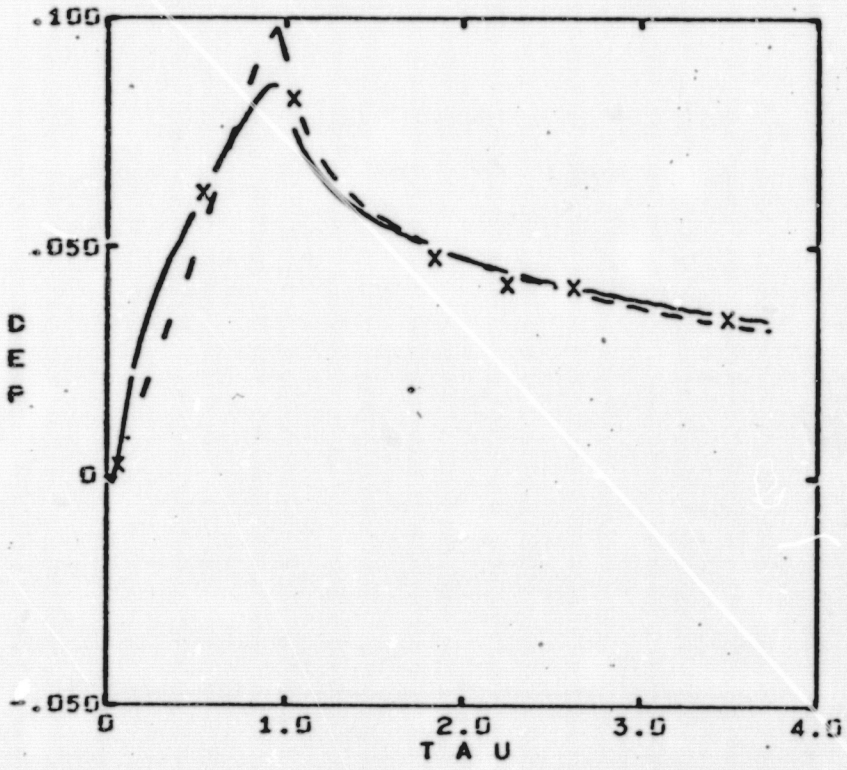
INITIAL TEMPERATURE 361.55
TAU-END OF TOTALITY 3.728

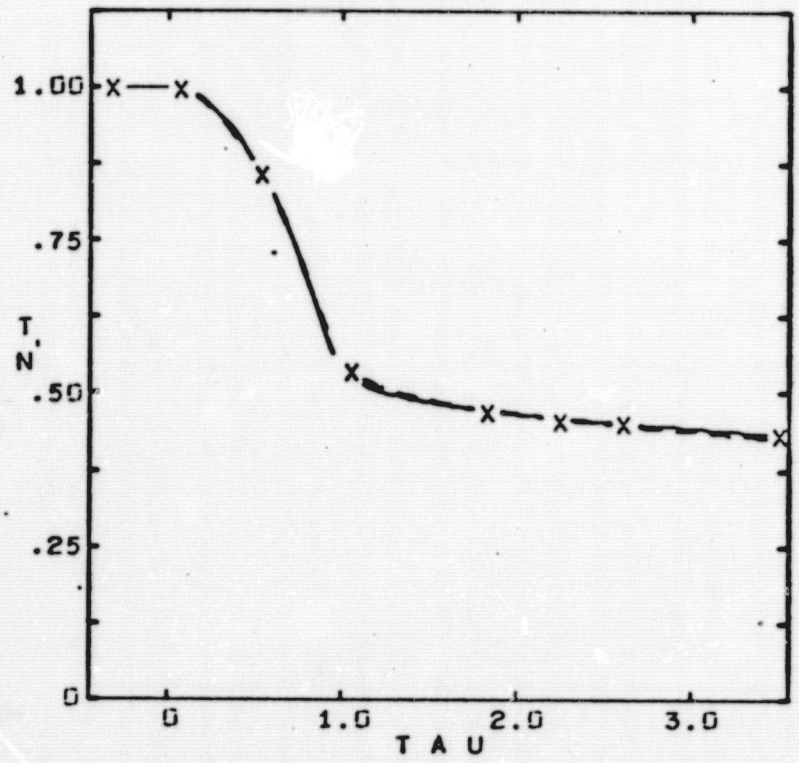
DIFFERENTIAL ENERGY DATA

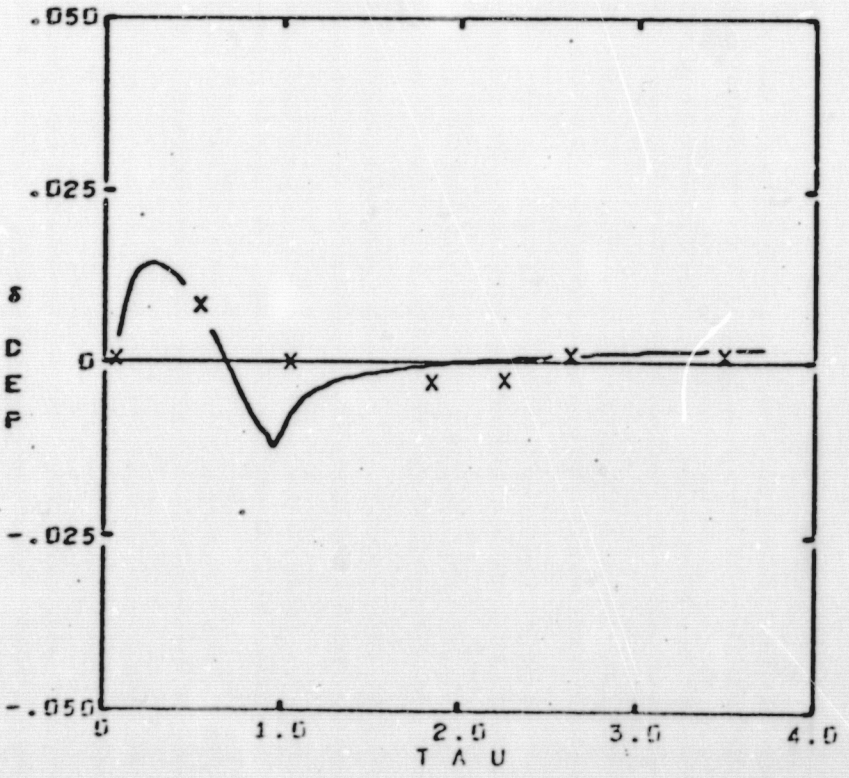
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0365	.0222	.0143
.50	.0590	.0499	.0091
.75	.0765	.0796	-.0031
.93	.0871	.0996	-.0125
1.0	.0804	.0904	-.0100
1.5	.0558	.0573	-.0015
2.0	.0477	.0476	.0001
2.5	.0424	.0415	.0009
3.0	.0385	.0369	.0016

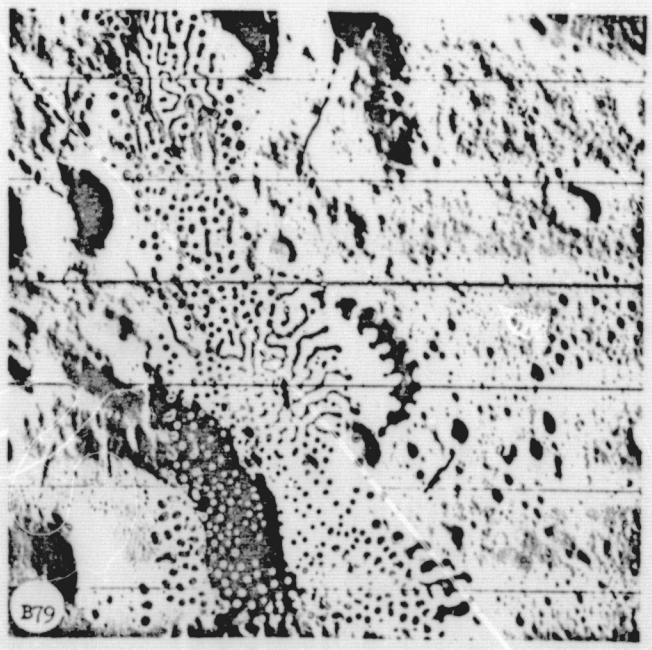
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.137	362.70	1.003	.0128
9H	-0.332	361.21	0.999	-.0037
10H	0.065	360.10	0.996	.0020
11H	0.534	309.80	0.857	.0620
12H	1.048	193.75	0.536	.0825
13H	1.834	168.84	0.467	.0476
14H	2.244	163.62	0.453	.0419
15H	2.618	163.23	0.451	.0415
16H	3.499	155.67	0.431	.0344









47 (282) SINUS RORIS

LAMBDA=45.00 W BETA=51.00 N XI=-.4450 ETA=+.7771 L+PL CODE = 24748 ALBEDO =.0833

13H FLAT MOON DATA
FM=.00061

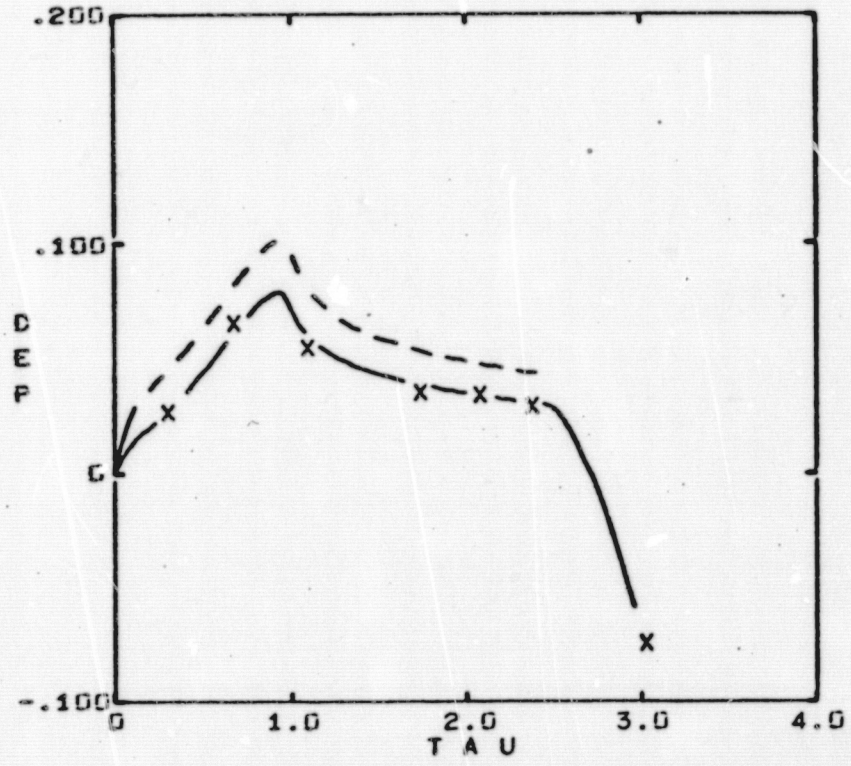
INITIAL TEMPERATURE 352.24
TAU-END OF TOTALITY 2.459

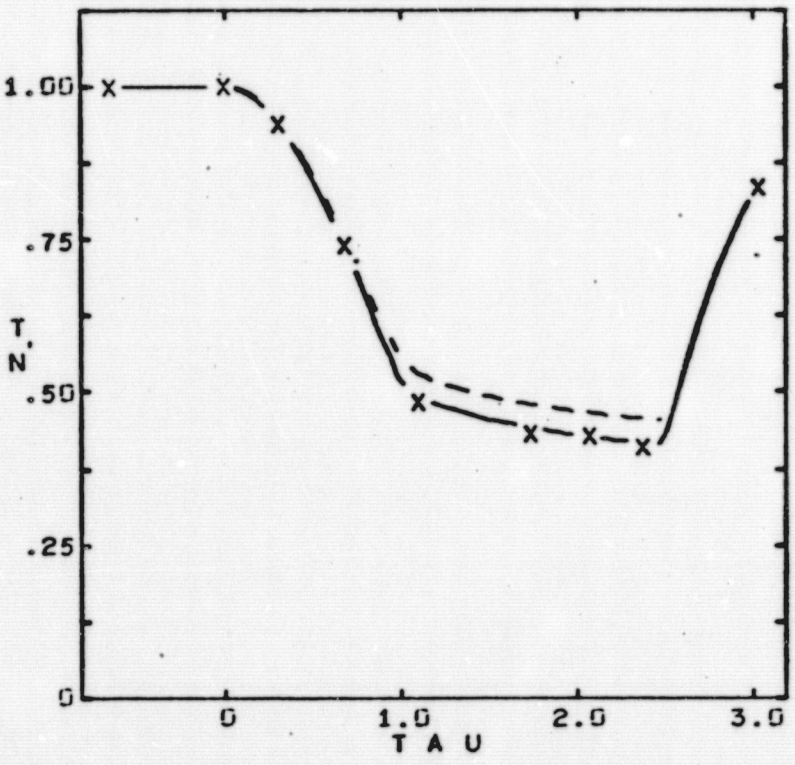
DIFFERENTIAL ENERGY DATA

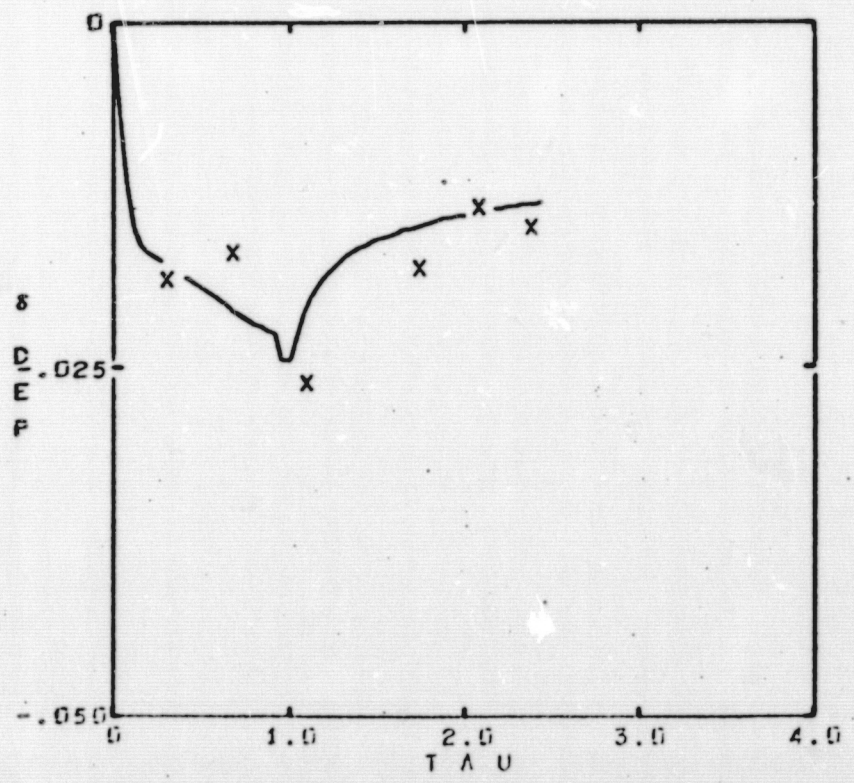
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0231	.0401	-.0170
.50	.0440	.0632	-.0192
.75	.0671	.0885	-.0214
.93	.0823	.1050	-.0227
1.0	.0707	.0951	-.0244
1.5	.0430	.0587	-.0157
2.0	.0343	.0483	-.0140

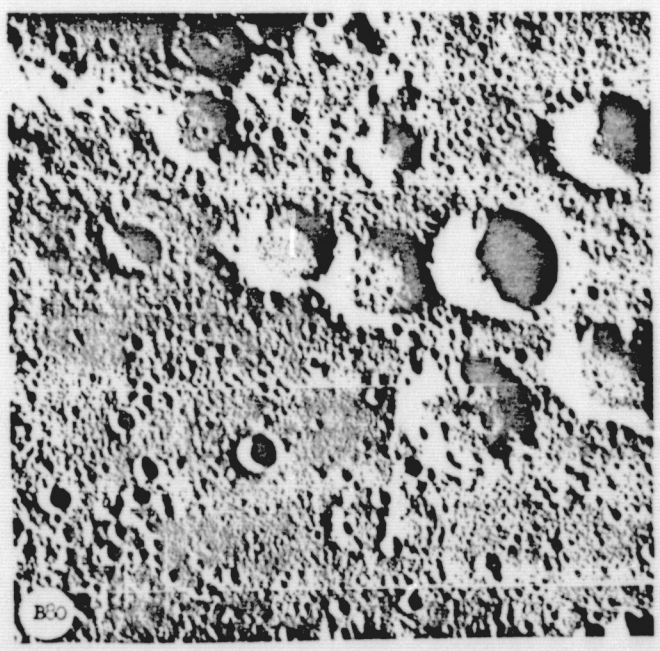
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.668	352.59	1.001	.0039
9H	-0.020	352.23	1.000	-.0001
10H	0.301	330.37	0.938	.0259
11H	0.681	260.68	0.740	.0650
12H	1.099	169.71	0.482	.0539
13H	1.734	152.60	0.433	.0352
14H	2.068	151.12	0.429	.0339
15H	2.369	144.75	0.411	.0285
16H	3.020	294.07	0.835	-.0751









48 (3B7) MARE HUMORUM

LAMBDA=39.00 W BETA=24.00 S XI=-.5749 ETA=-.4067 L+PL CODE = 35171 ALBEDO =.0596

13H FLAT MOON DATA
FM=.02898

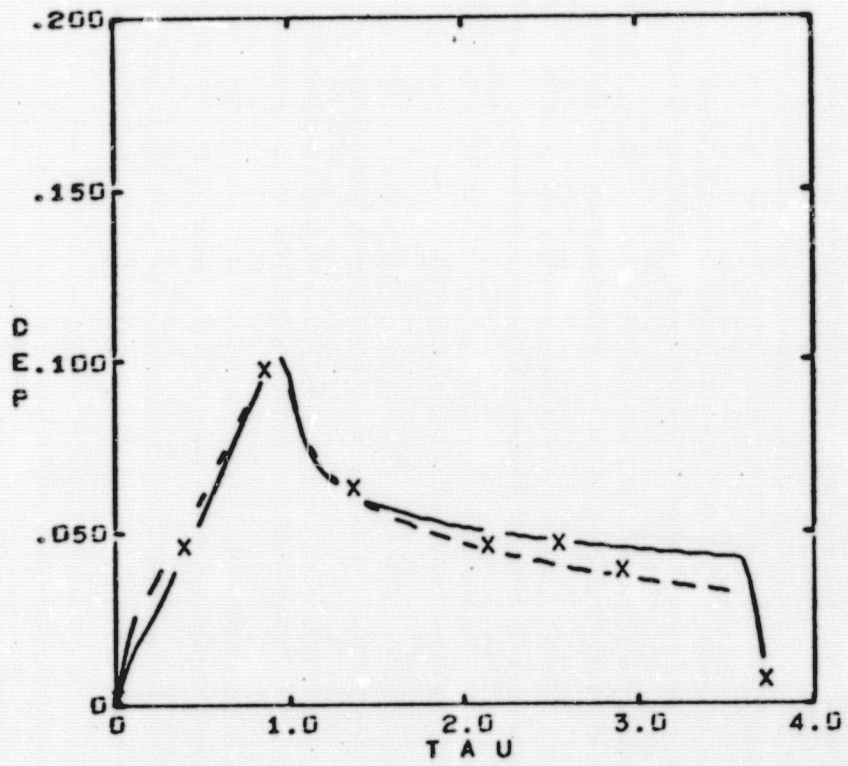
INITIAL TEMPERATURE 375.44
TAU-END OF TOTALITY 3.589

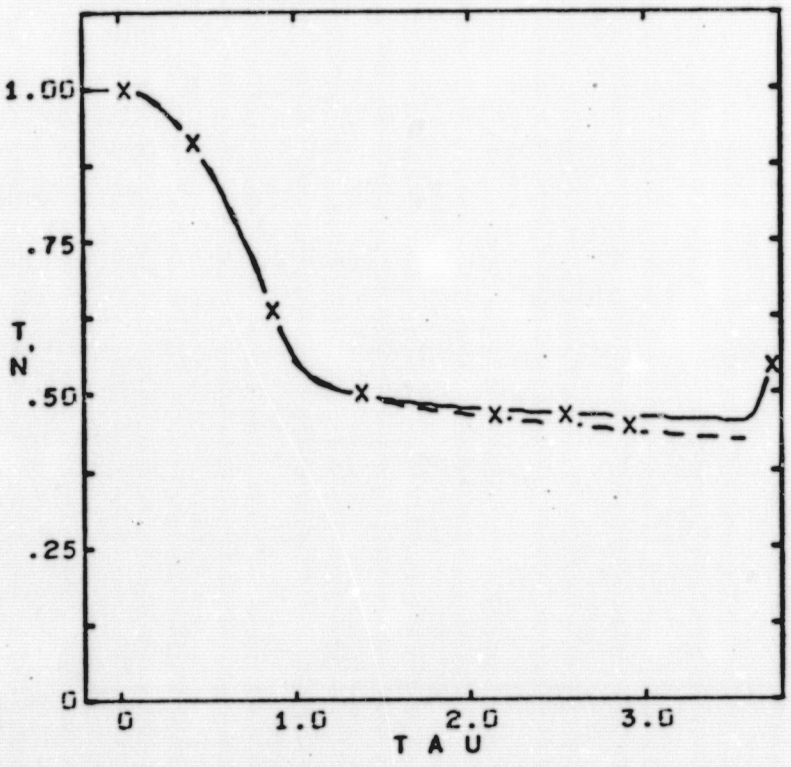
DIFFERENTIAL ENERGY DATA

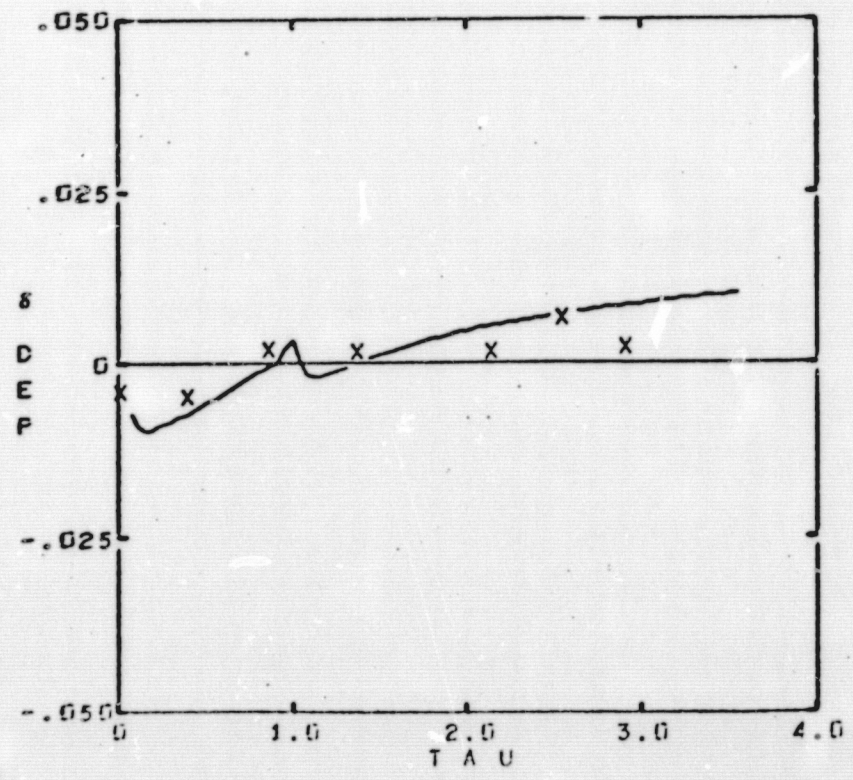
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0278	.0368	-.0090
.50	.0541	.0600	-.0059
.75	.0833	.0853	-.0020
.93	.1026	.1019	.0007
1.0	.0954	.0922	.0032
1.5	.0582	.0569	.0013
2.0	.0515	.0468	.0047
2.5	.0477	.0406	.0071
3.0	.0450	.0363	.0087

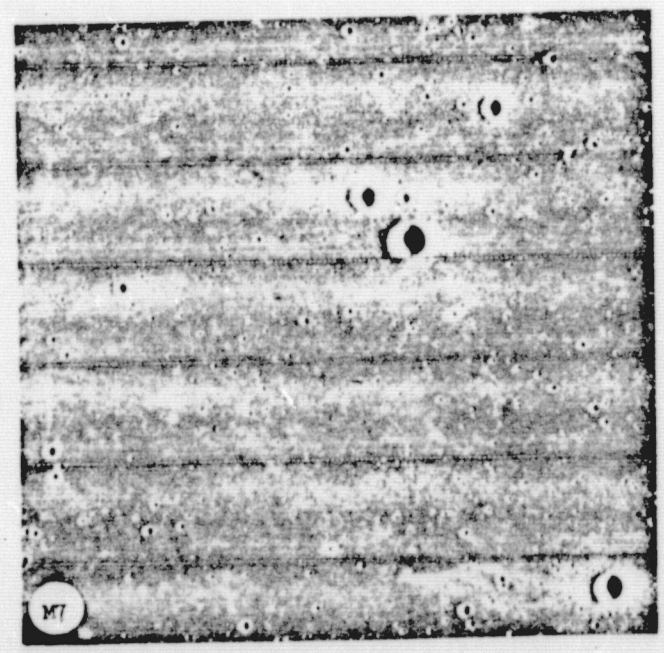
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.771	375.44	1.000	.0000
9H	0.021	375.35	1.000	.0017
10H	0.409	342.05	0.911	.0464
11H	0.868	239.69	0.638	.0977
12H	1.373	188.00	0.501	.0629
13H	2.145	174.27	0.464	.0464
14H	2.547	174.65	0.465	.0468
15H	2.913	167.07	0.445	.0392
16H	3.735	204.65	0.545	.0072









49 (283) SINUS IRIDUM

LAMBDA=32.00 W BETA=45.00 N XI=-.3747 ETA=+.7071 L+PL CODE = 23771 ALBEDO =.0672

13H FLAT MOON DATA
FM=.01551

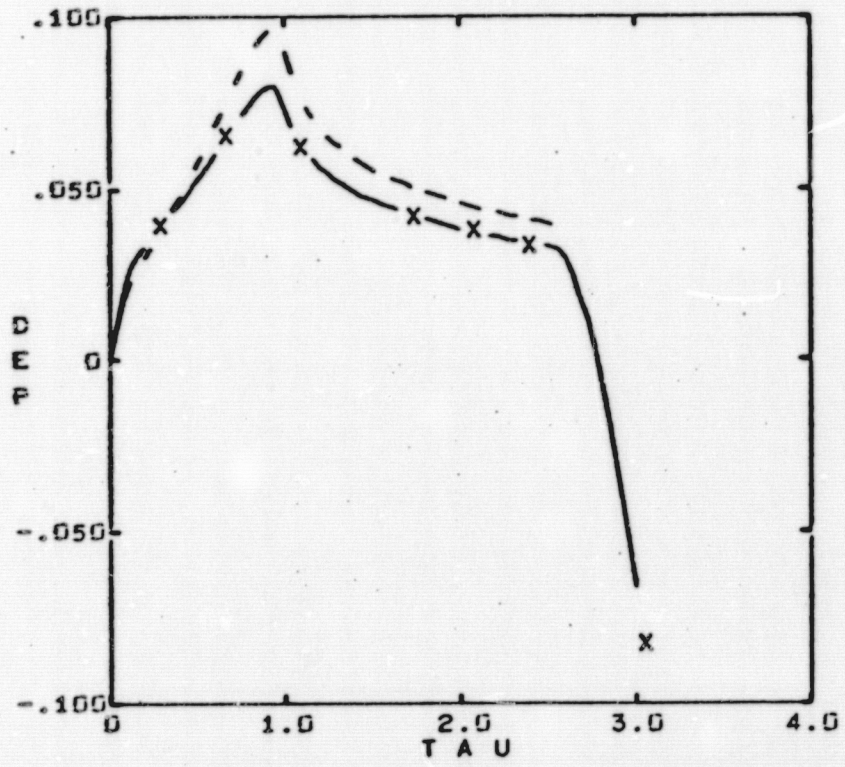
INITIAL TEMPERATURE 367.46
TAU-END OF TOTALITY 2.541

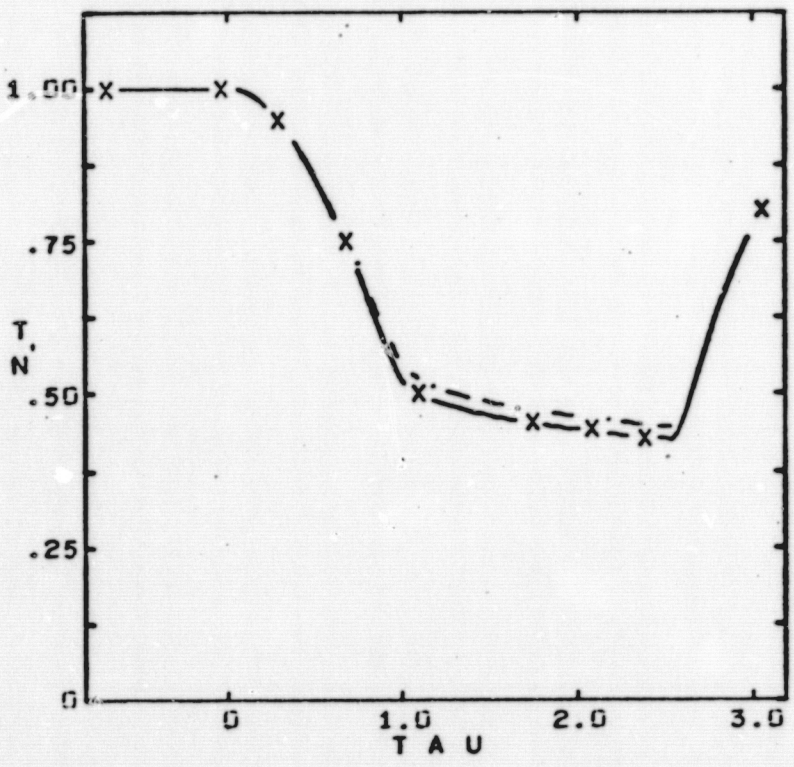
DIFFERENTIAL ENERGY DATA

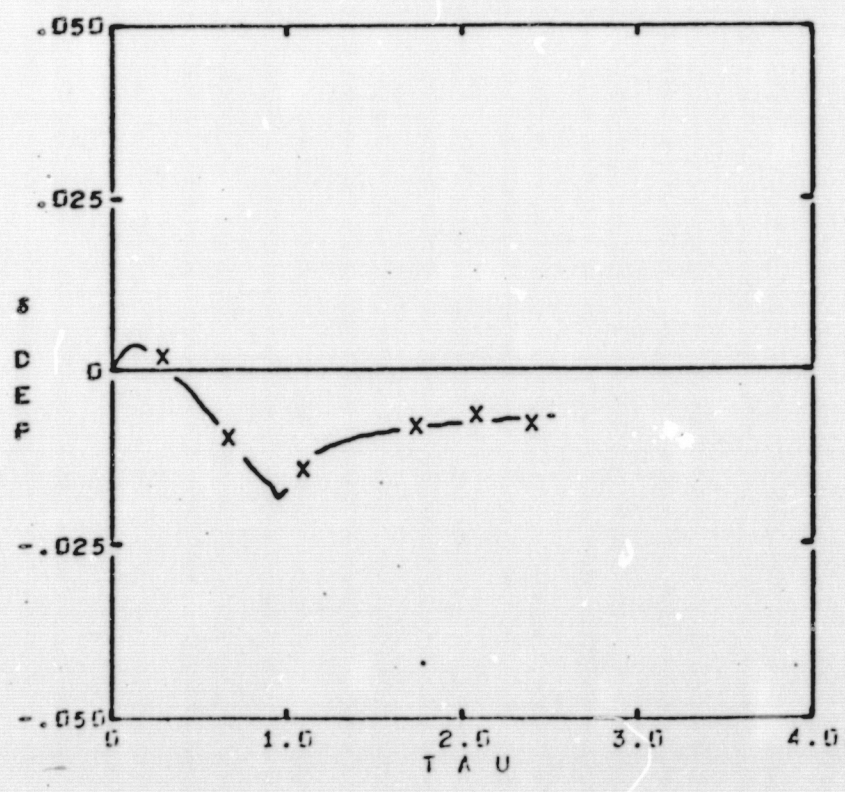
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0359	.0339	.0020
.50	.0528	.0575	-.0047
.75	.0707	.0831	-.0124
.93	.0824	.1000	-.0176
1.0	.0732	.0903	-.0171
1.5	.0466	.0558	-.0092
2.0	.0382	.0458	-.0076
2.5	.0330	.0398	-.0068

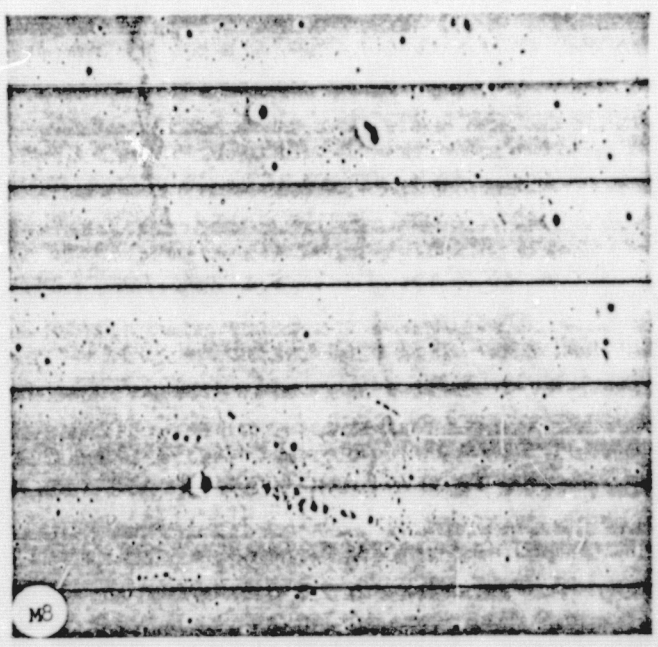
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.704	367.97	1.001	.0056
9H	-0.045	367.43	1.000	-.0004
10H	0.283	348.92	0.950	.0391
11H	0.669	276.15	0.752	.0654
12H	1.093	183.69	0.500	.0624
13H	1.738	166.52	0.453	.0422
14H	2.079	162.62	0.443	.0384
15H	2.384	156.87	0.427	.0332
16H	3.051	294.30	0.801	-.0826









50 (388) MARE COGNITUM

LAMBDA=23.00 W BETA=11.00 S XI=-.3836 ETA=-.1908 L+PL CODE = 33189 ALBEDO =.0623

13H FLAT MOON DATA
FM=.01643

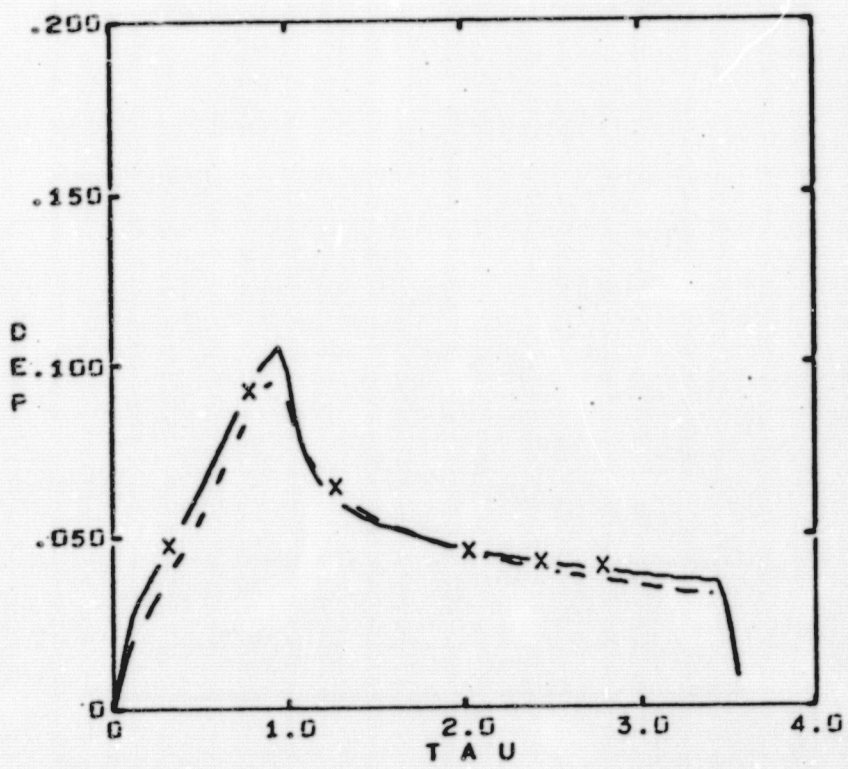
INITIAL TEMPERATURE 390.74
TAU-END OF TOTALITY 3.437

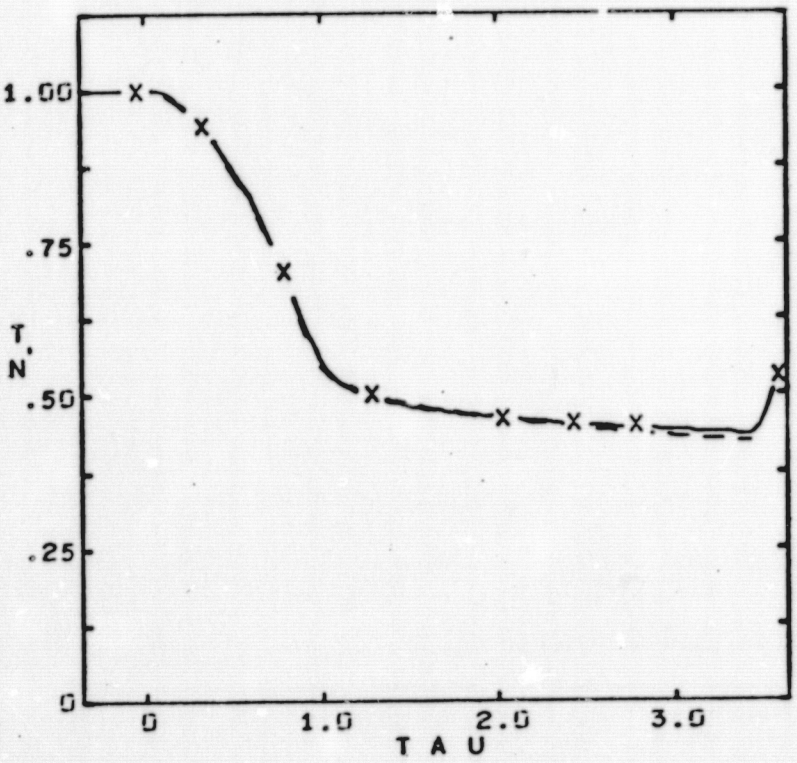
DIFFERENTIAL ENERGY DATA

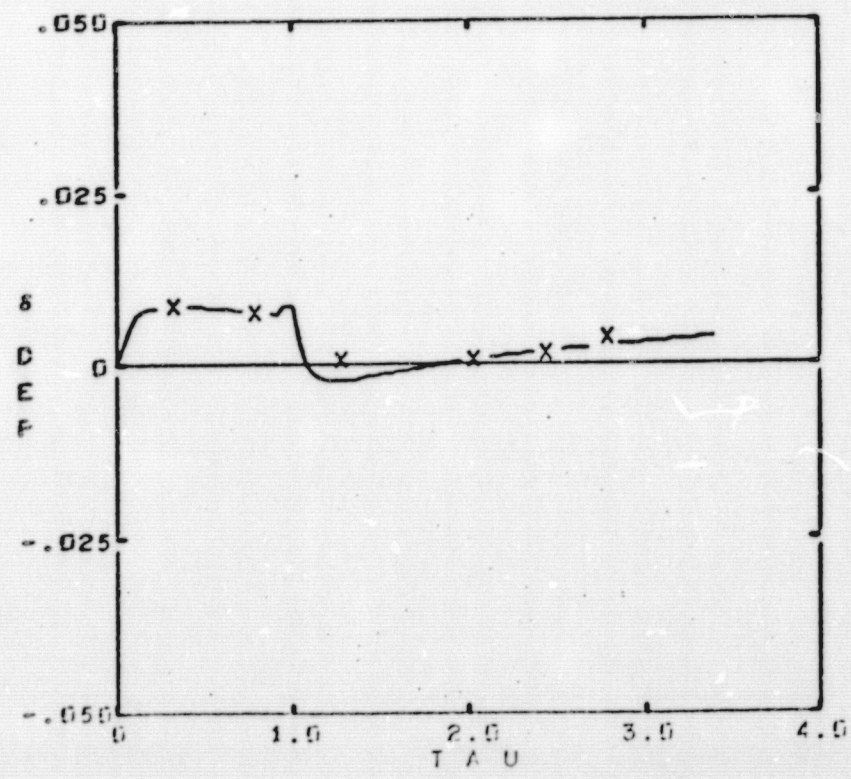
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0397	.0313	.0084
.50	.0639	.0555	.0084
.75	.0897	.0818	.0079
.93	.1066	.0993	.0073
1.0	.0982	.0897	.0085
1.5	.0540	.0554	-.0014
2.0	.0461	.0455	.0006
2.5	.0416	.0395	.0021
3.0	.0384	.0351	.0033

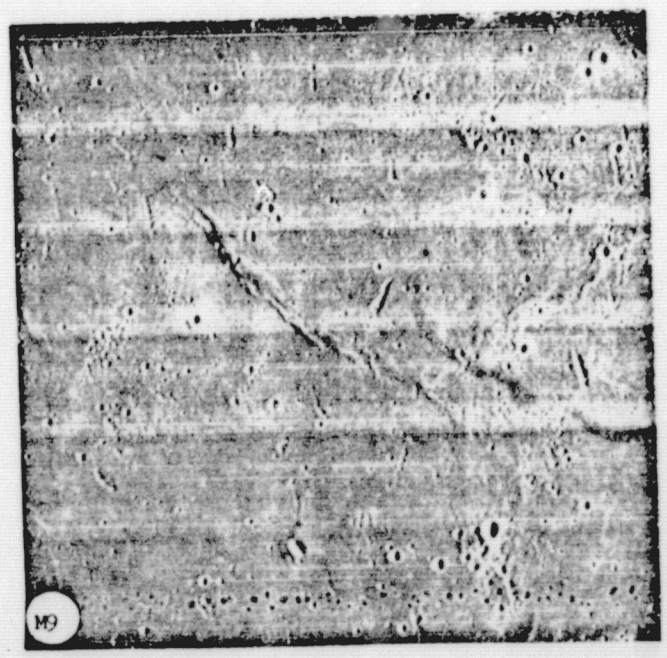
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.822	391.90	1.003	.0120
9H	-0.051	390.67	1.000	-.0007
10H	0.331	367.93	0.942	.0474
11H	0.780	274.86	0.703	.0925
12H	1.274	196.65	0.503	.0642
13H	2.028	180.77	0.463	.0458
14H	2.422	176.98	0.453	.0421
15H	2.779	175.70	0.450	.0409
16H	3.586	207.43	0.531	-.0021









51 (284) MARE IMBRIUM

LAMBDA=18.00 W BETA=39.00 N XI=-.2402 ETA=+.6293 L+PL CODE = 22643 ALBEDO =.0635

13H FLAT MOON DATA
FM=.02170

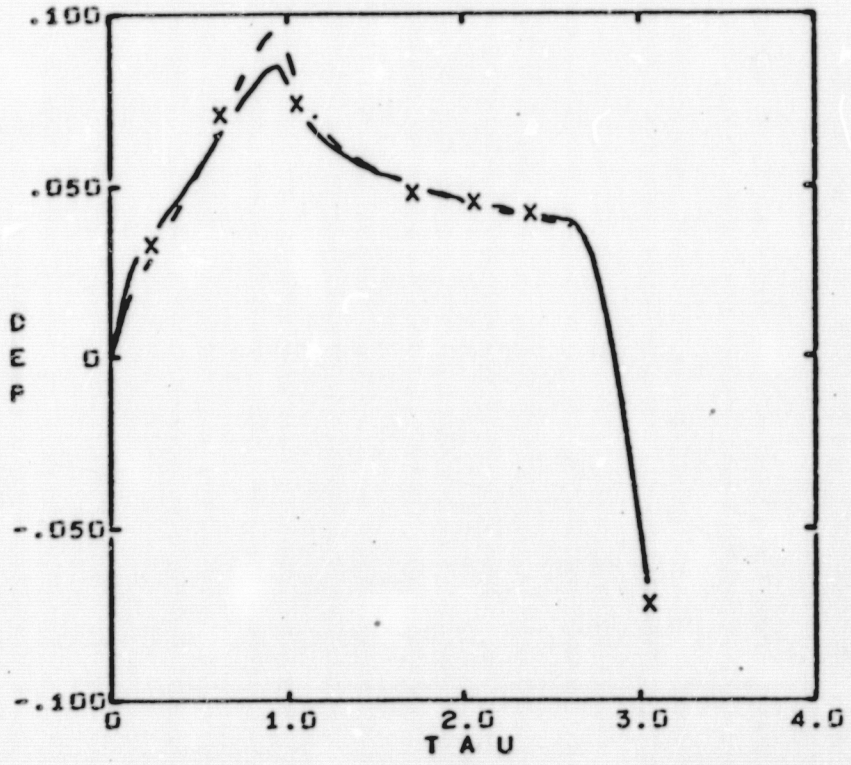
INITIAL TEMPERATURE 378.93
TAU-END OF TOTALITY 2.619

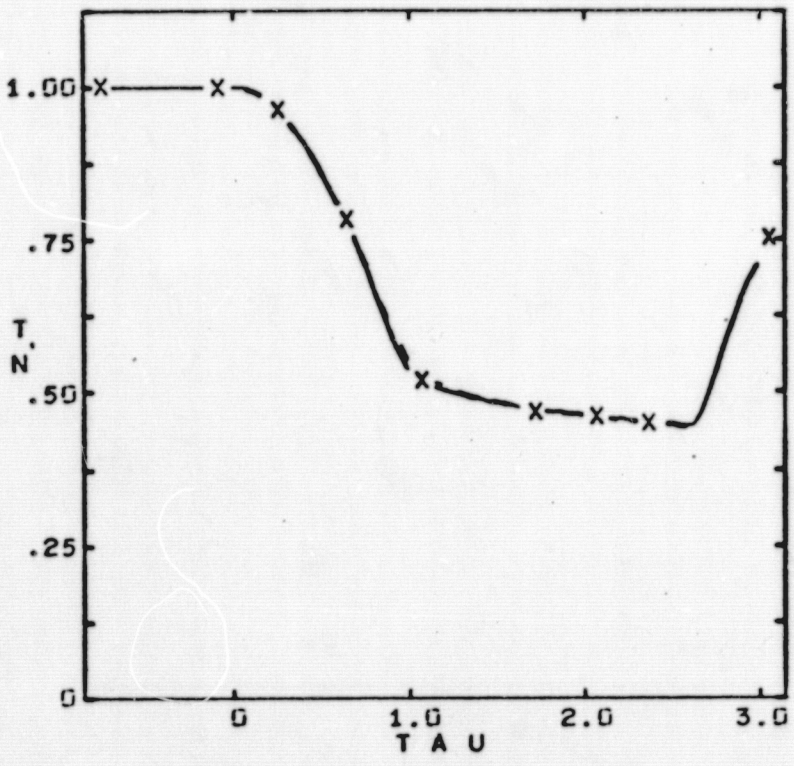
DIFFERENTIAL ENERGY DATA

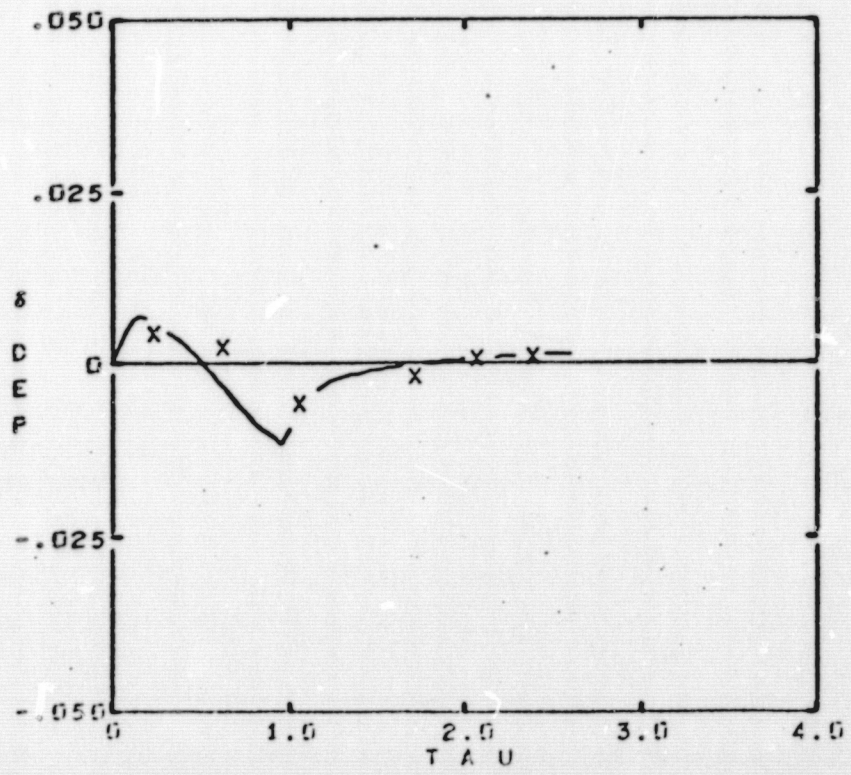
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0360	.0300	.0060
.50	.0548	.0544	.0004
.75	.0742	.0811	-.0069
.93	.0869	.0987	-.0118
1.0	.0799	.0892	-.0093
1.5	.0543	.0551	-.0008
2.0	.0459	.0453	.0006
2.5	.0407	.0393	.0014

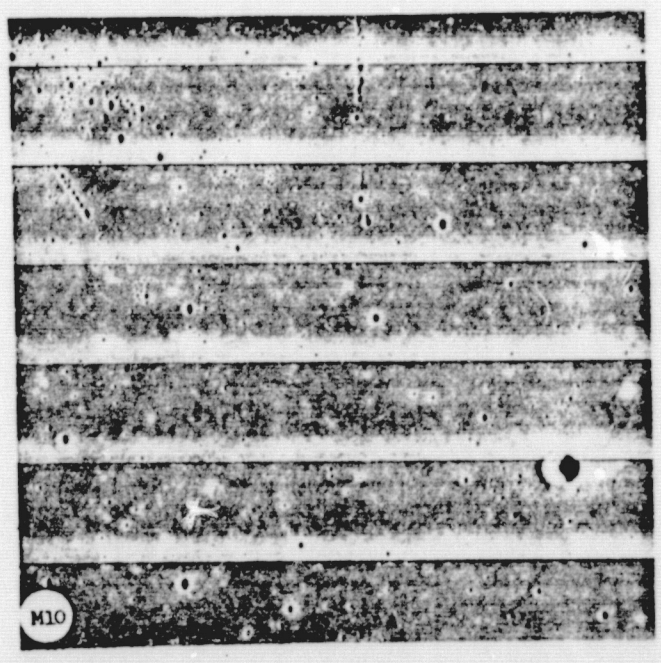
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.764	380.03	1.003	.0116
9H	-0.095	378.80	1.000	-.0014
10H	0.237	365.31	0.964	.0331
11H	0.629	297.29	0.785	.0707
12H	1.060	197.48	0.521	.0738
13H	1.715	177.51	0.468	.0482
14H	2.062	174.83	0.461	.0453
15H	2.371	171.22	0.452	.0417
16H	3.055	285.86	0.754	-.0719









52 (389) MARE NUBIUM

LAMBDA=15.00 W BETA=21.00 S XI=-.2416 ETA=-.3583 L+PL CODE = 32346 ALBEDO =.0628

13H FLAT MOON DATA
FM=.01570

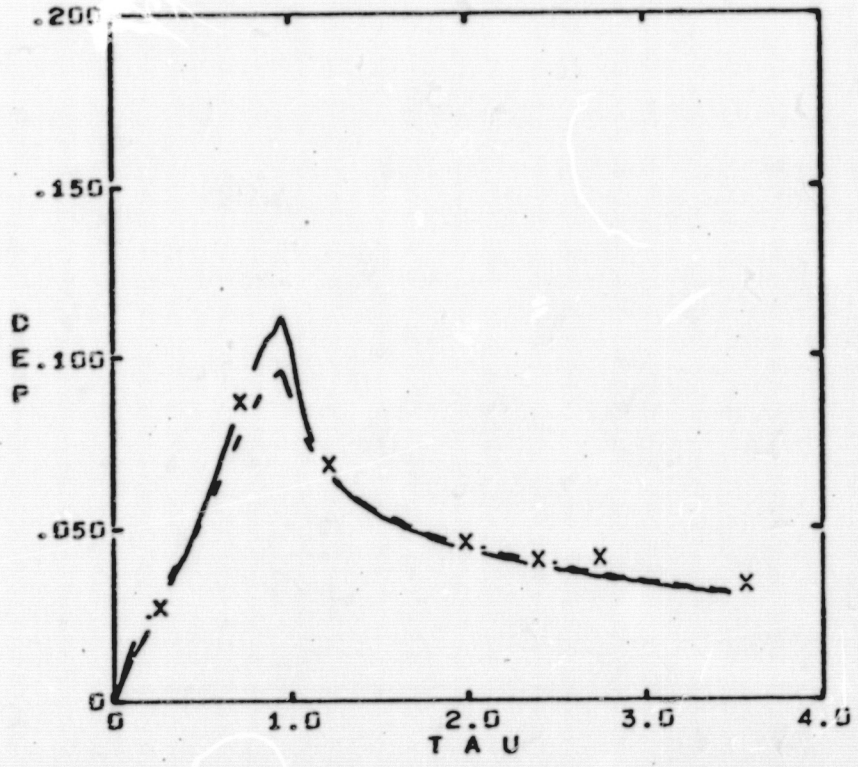
INITIAL TEMPERATURE 391.24
TAU-END OF TOTALITY 3.535

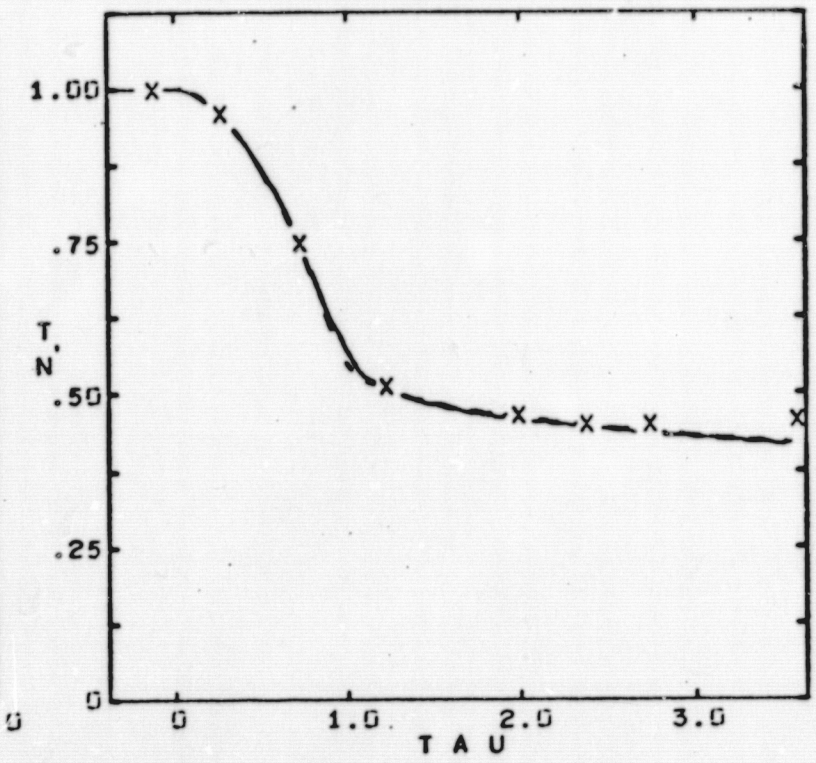
DIFFERENTIAL ENERGY DATA

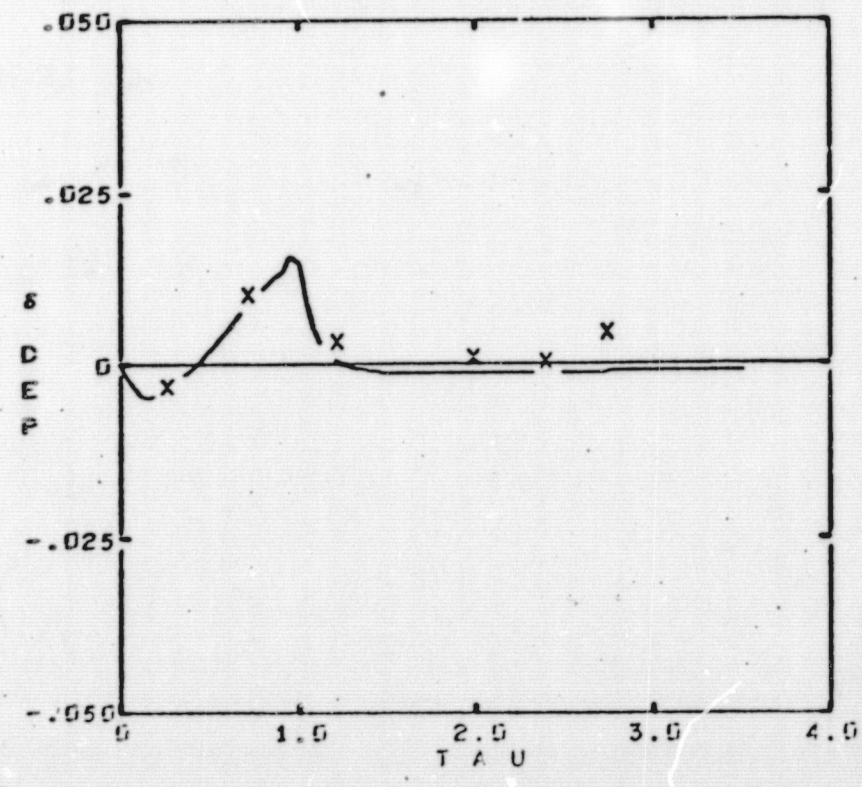
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0257	.0292	-.0035
.50	.0560	.0538	.0022
.75	.0901	.0805	.0096
.93	.1128	.0982	.0146
1.0	.1036	.0888	.0148
1.5	.0539	.0549	-.0010
2.0	.0439	.0451	-.0012
2.5	.0380	.0391	-.0011
3.0	.0339	.0347	-.0008

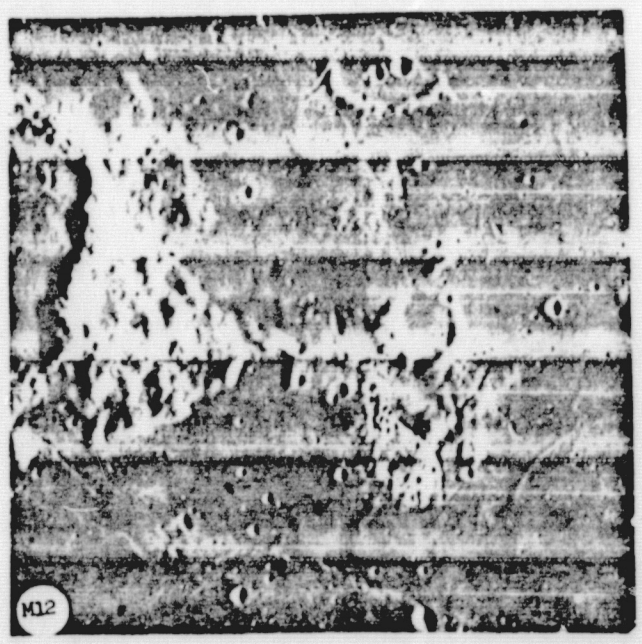
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.907	391.29	1.000	.0005
9H	-0.124	391.23	1.000	-.0001
10H	0.262	375.40	0.960	.0274
11H	0.718	292.90	0.749	.0875
12H	1.219	200.68	0.513	.0692
13H	1.984	181.64	0.464	.0465
14H	2.383	175.81	0.449	.0408
15H	2.746	176.75	0.452	.0417
16H	3.576	178.90	0.457	.0339









53 (285) SINUS AESTUUM

LAMBDA= 8.00 W BETA=12.00 N XI=-.1361 ETA=+.2079 L+PL CODE = 21241 ALBEDO =.0703

13H FLAT MOON DATA
FM=.01382

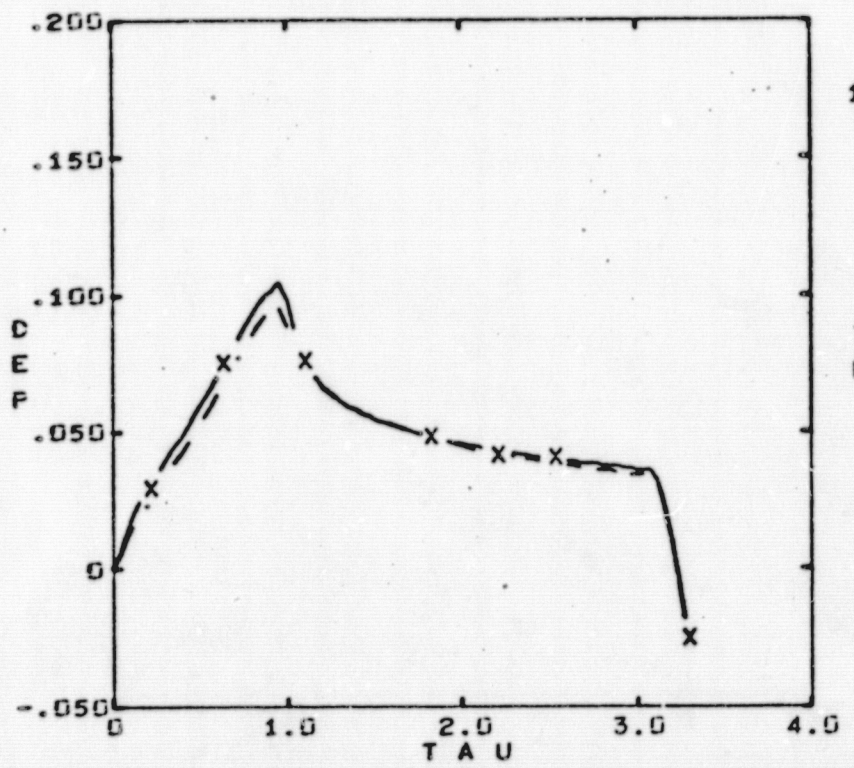
INITIAL TEMPERATURE 395.93
TAU-END OF TOTALITY 3.076

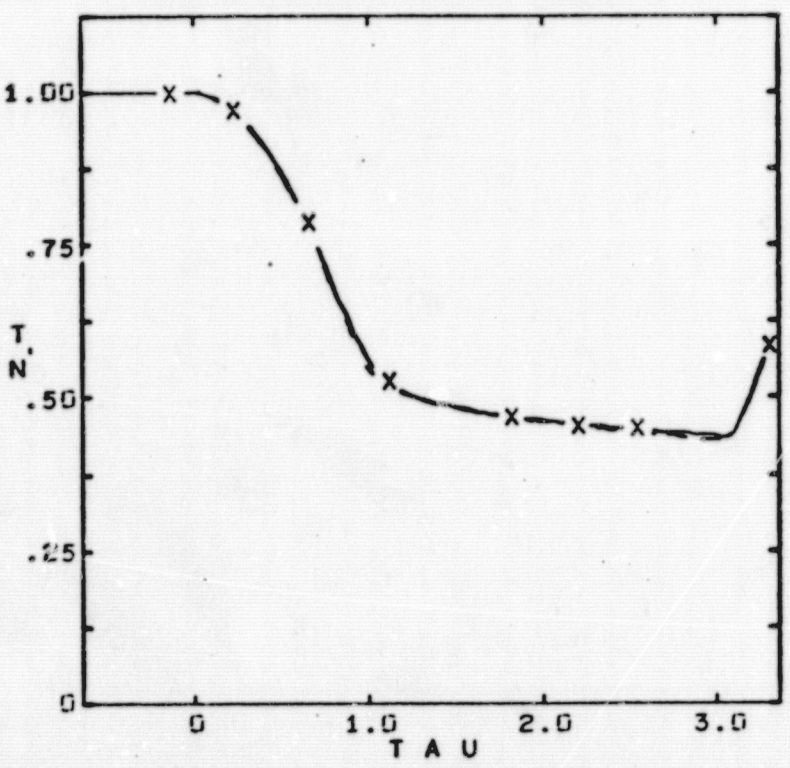
DIFFERENTIAL ENERGY DATA

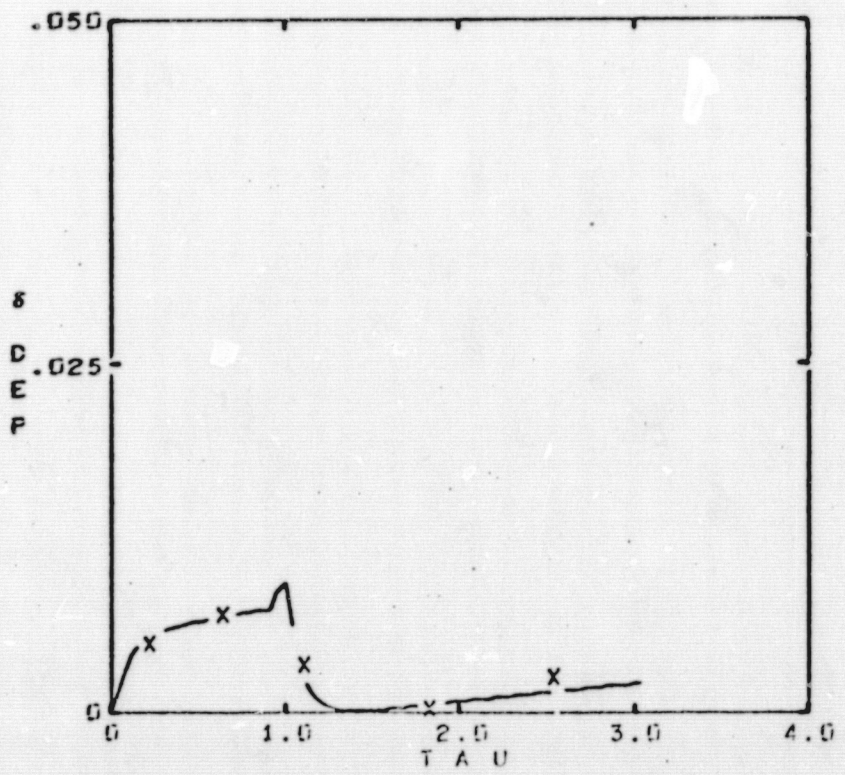
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0332	.0278	.0054
.50	.0592	.0528	.0064
.75	.0870	.0800	.0070
.93	.1054	.0980	.0074
1.0	.0978	.0886	.0092
1.5	.0550	.0548	.0002
2.0	.0458	.0450	.0008
2.5	.0405	.0390	.0015
3.0	.0366	.0346	.0020

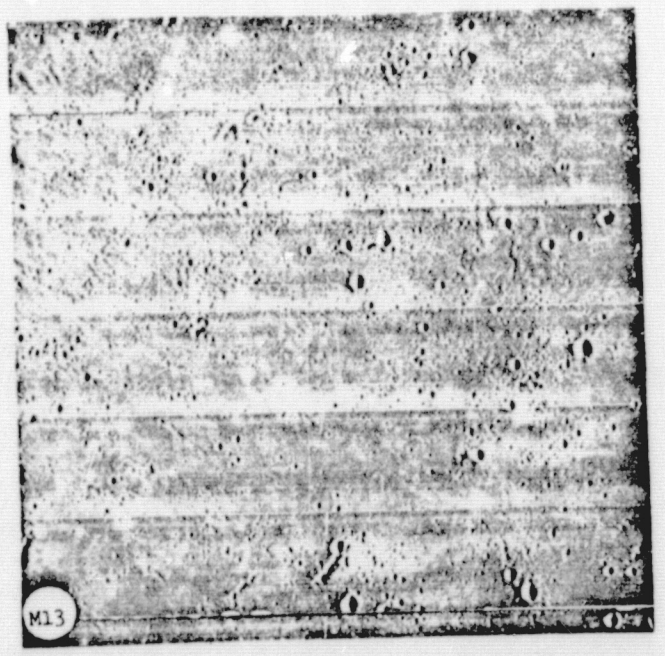
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.867	397.51	1.004	.0161
9H	-0.139	395.68	0.999	-.0026
10H	0.221	384.31	0.971	.0299
11H	0.646	311.12	0.786	.0756
12H	1.113	208.24	0.526	.0765
13H	1.824	185.40	0.468	.0481
14H	2.199	179.39	0.453	.0421
15H	2.536	178.32	0.450	.0411
16H	3.295	232.63	0.588	-.0246









54 (286) SINUS MEDII

LAMBDA= 1.00 W BETA= 1.00 N XI=-.0174 ETA=+.0175 L+PL CODE = 20022 ALBEDO =.0697

13H FLAT MOON DATA
FM=.00883

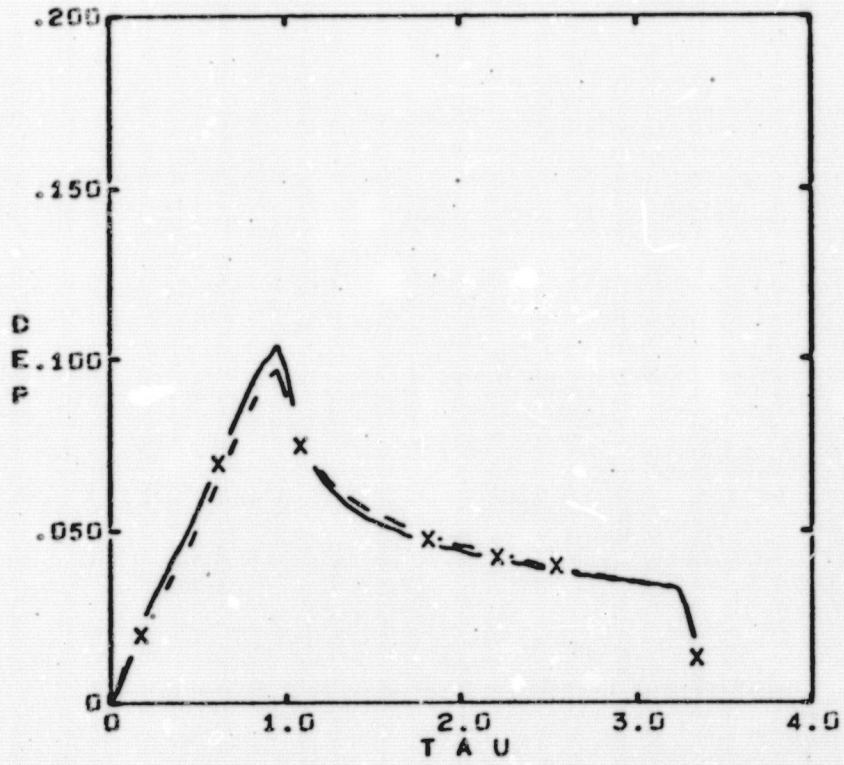
INITIAL TEMPERATURE 398.63
TAU-END OF TOTALITY 3.237

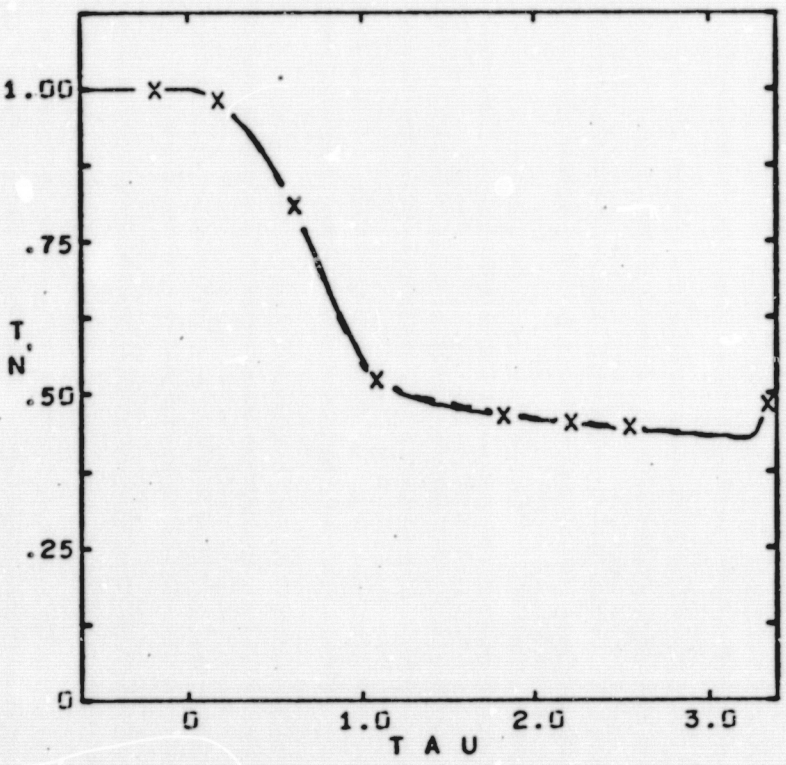
DIFFERENTIAL ENERGY DATA

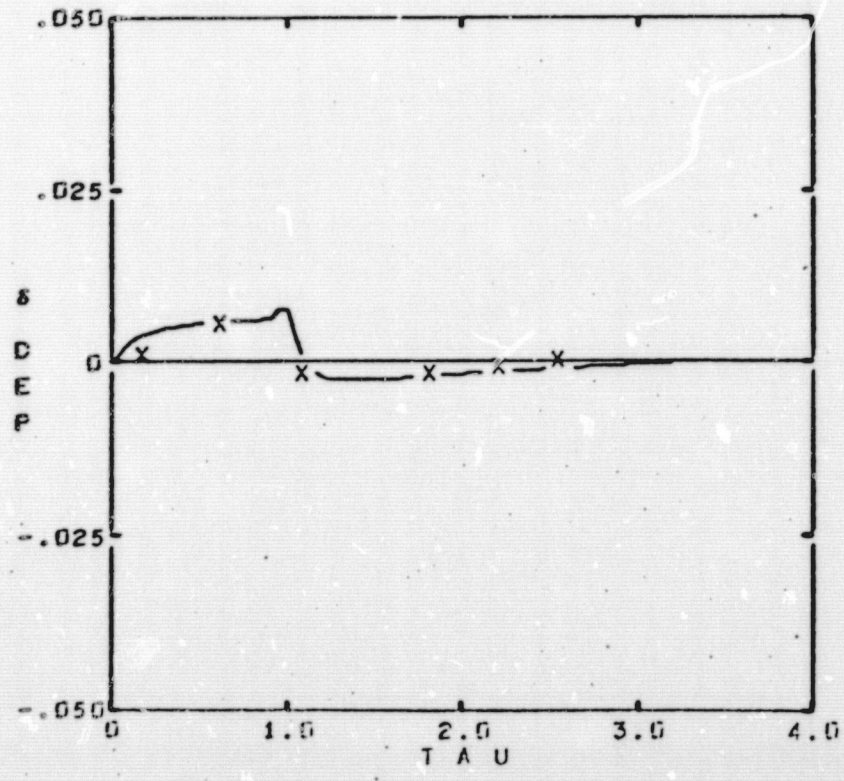
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0307	.0261	.0046
.50	.0576	.0520	.0056
.75	.0861	.0801	.0060
.93	.1051	.0988	.0063
1.0	.0972	.0894	.0078
1.5	.0531	.0556	-.0025
2.0	.0441	.0458	-.0017
2.5	.0388	.0397	-.0009
3.0	.0349	.0352	-.0003

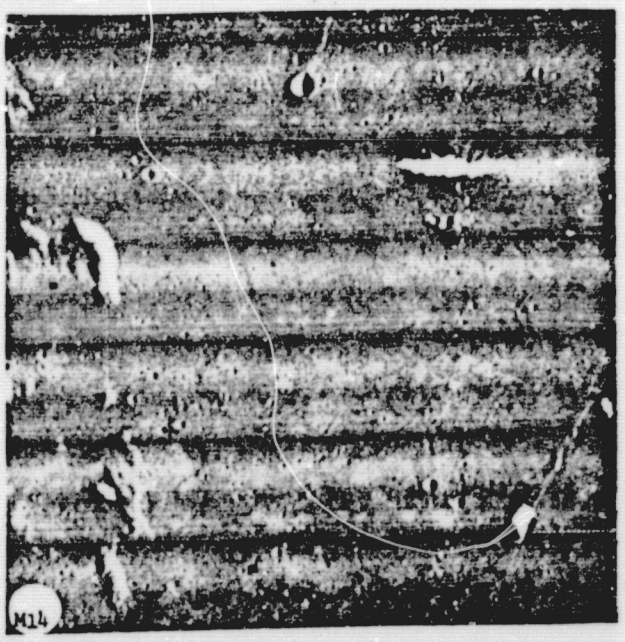
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.944	399.79	1.003	.0117
9H	-0.196	398.39	0.999	-.0024
10H	0.173	391.00	0.981	.0197
11H	0.609	322.72	0.810	.0697
12H	1.088	208.43	0.523	.0747
13H	1.819	185.82	0.466	.0472
14H	2.203	181.06	0.454	.0426
15H	2.548	177.84	0.446	.0396
16H	3.338	193.13	0.484	.0132









55 (182) MARE VAPORUM

LAMBDA= 3.00 E BETA=13.00 N XI=+.0510 ETA=+.2250 L+PL CODE = 10252 ALBEDO =.0657

13H FLAT MOON DATA
FM=.00338

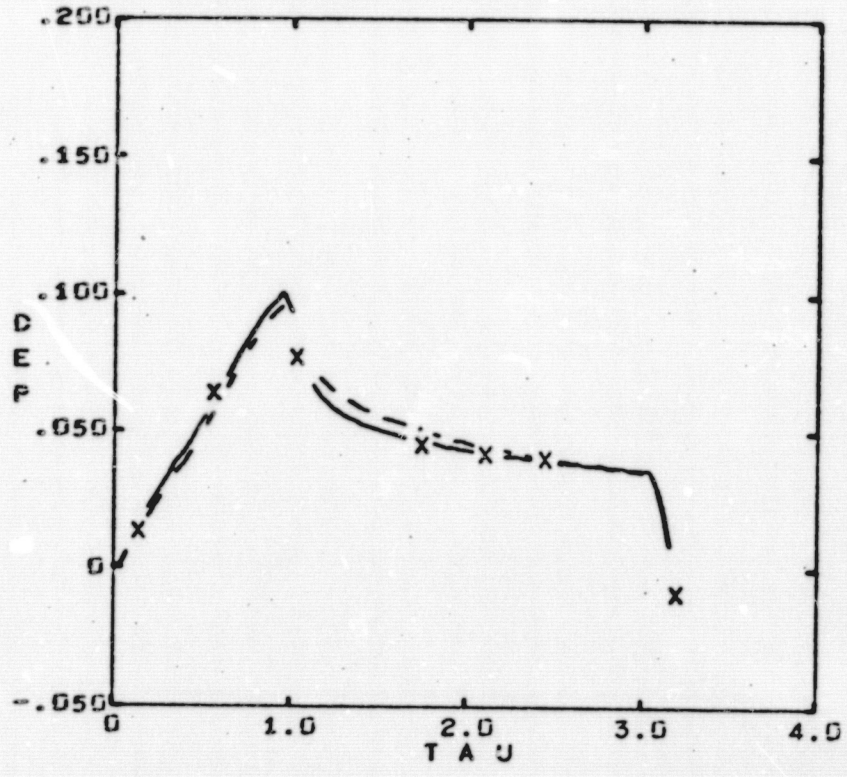
INITIAL TEMPERATURE 398.11
TAU-END OF TOTALITY 3.035

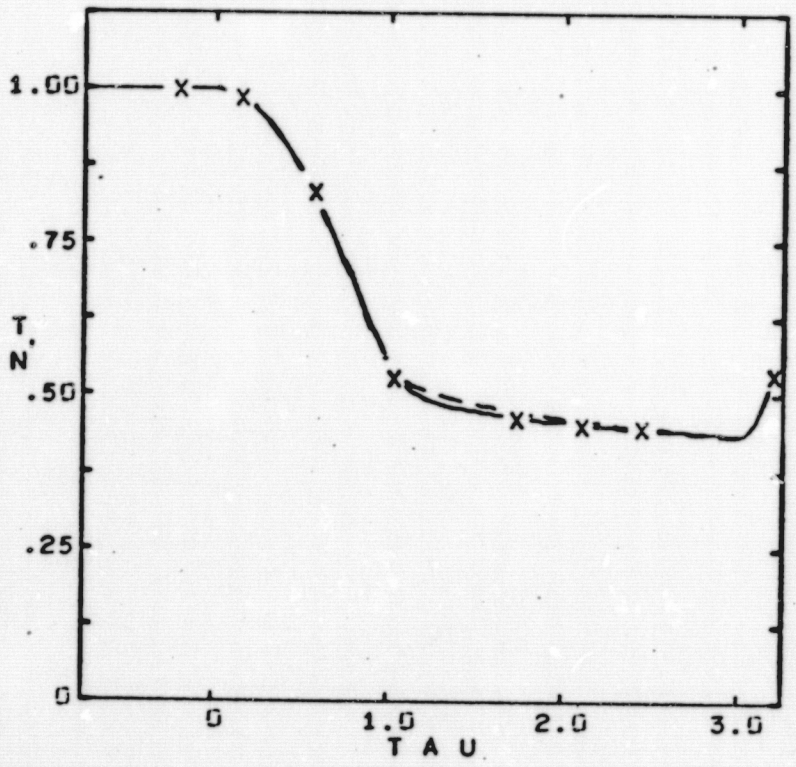
DIFFERENTIAL ENERGY DATA

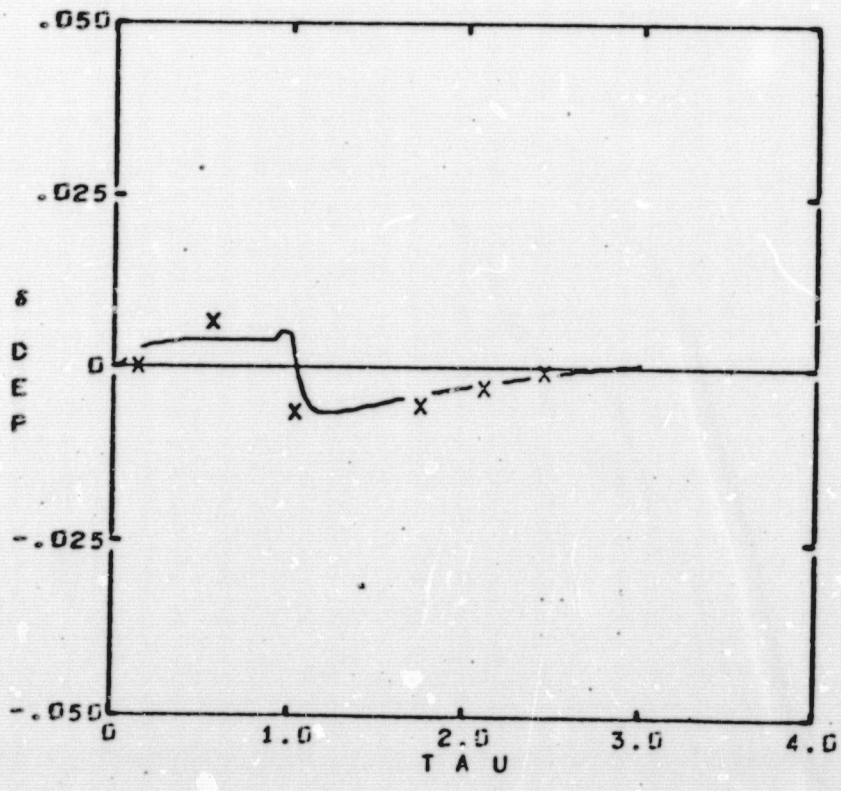
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0266	.0232	.0034
.50	.0537	.0496	.0041
.75	.0823	.0782	.0041
.93	.1014	.0974	.0040
1.0	.0935	.0883	.0052
1.5	.0504	.0555	-.0051
2.0	.0433	.0460	-.0027
2.5	.0392	.0399	-.0007
3.0	.0361	.0355	.0006

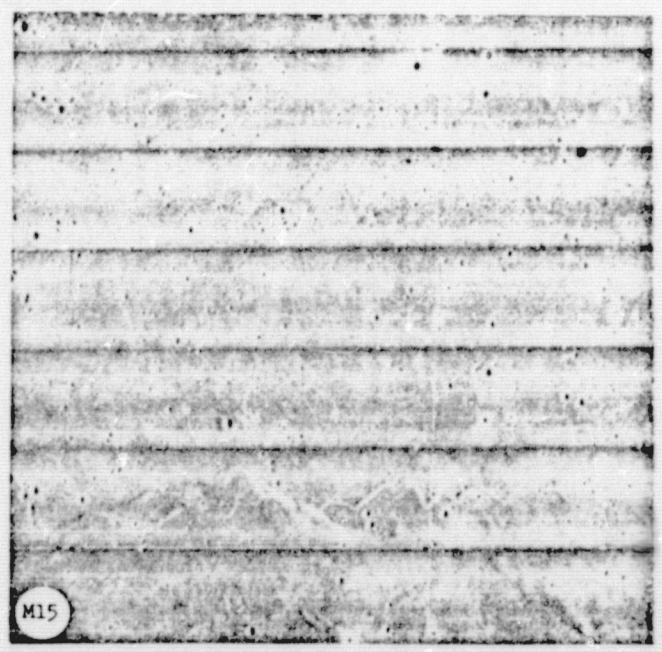
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.938	399.50	1.003	.0140
9H	-0.216	397.79	0.999	-.0032
10H	0.142	392.32	0.985	.0130
11H	0.564	330.83	0.831	.0637
12H	1.027	209.78	0.527	.0771
13H	1.735	183.33	0.460	.0450
14H	2.107	179.82	0.452	.0416
15H	2.441	178.03	0.447	.0400
16H	3.201	213.55	0.536	-.0082









56 (183) MARE SERENITATIS

LAMBDA=18.00 E BETA=26.00 N XI=+.2777 ETA=+.4384 L+PL CODE = 12484 ALBEDO =.0649

13H FLAT MOON DATA
FM=.00989

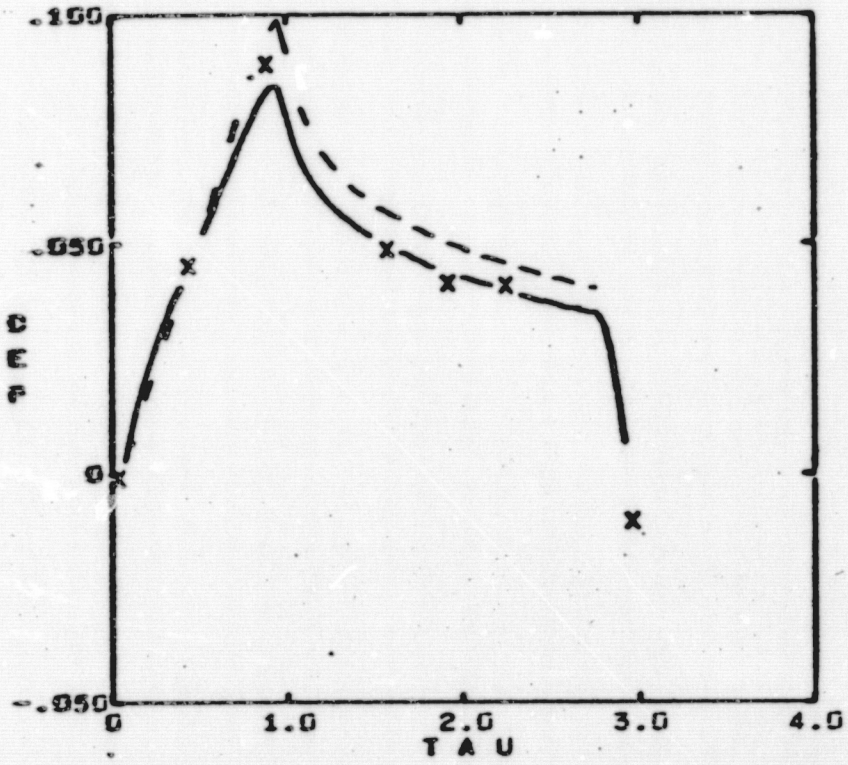
INITIAL TEMPERATURE 390.51
TAU-END OF TOTALITY 2.771

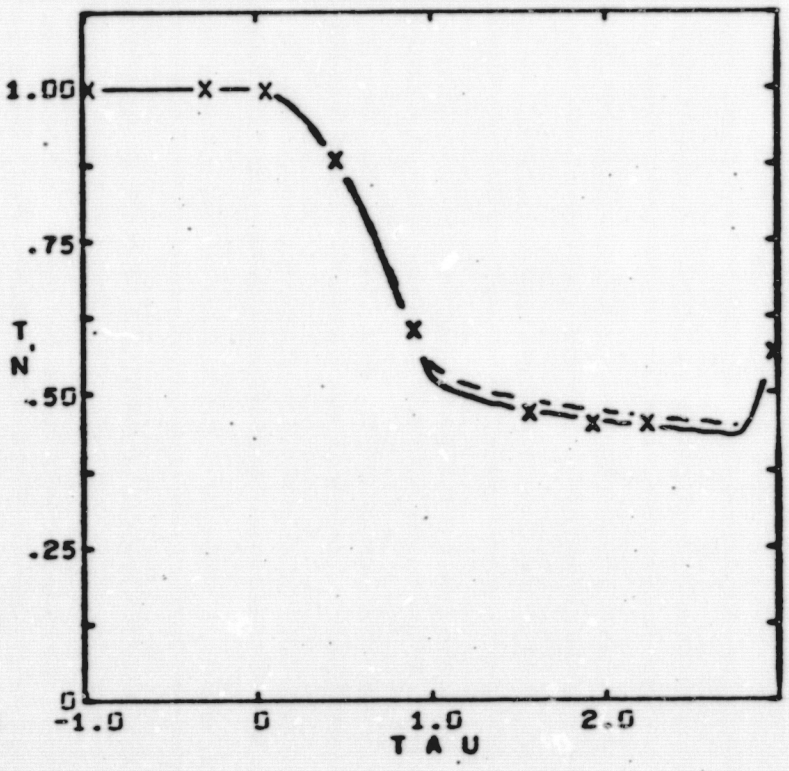
DIFFERENTIAL ENERGY DATA

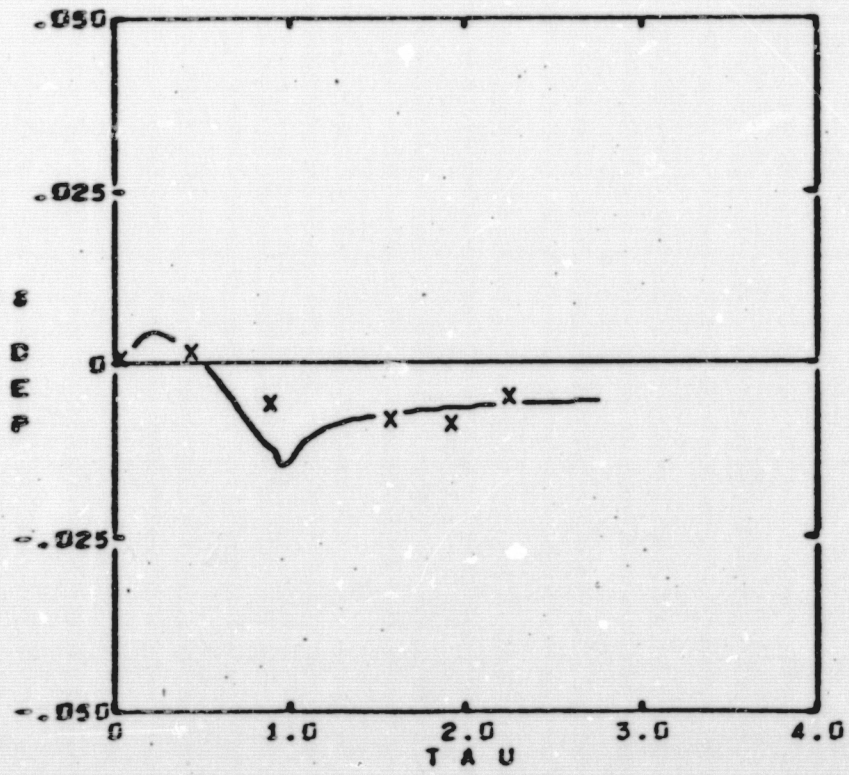
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0260	.0214	.0046
.50	.0502	.0499	.0003
.75	.0725	.0804	-.0079
.93	.0869	.1009	-.0140
1.0	.0774	.0917	-.0143
1.5	.0511	.0586	-.0075
2.0	.0426	.0489	-.0063
2.5	.0370	.0427	-.0057

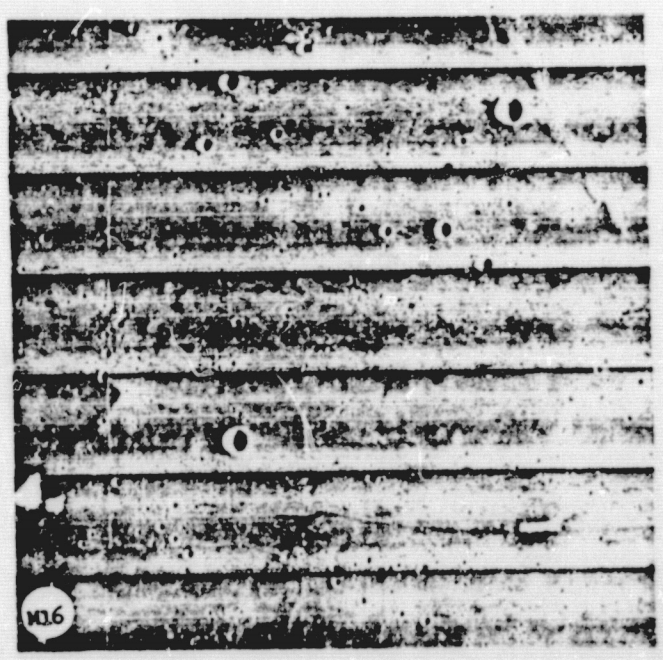
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.986	390.94	1.001	.0044
9H	-0.299	390.38	1.000	-.0013
10H	0.043	389.43	0.997	-.0010
11H	0.446	345.32	0.884	.0454
12H	0.890	235.82	0.604	.0893
13H	1.563	183.60	0.470	.0469
14H	1.920	176.05	0.451	.0413
15H	2.238	175.59	0.450	.0409
16H	2.967	221.13	0.566	-.0103









57 (184) LACUS MORTIS

LAMBDA=26.00 E BETA=44.50 N XI=+.3127 ETA=+.7009 L+PL CODE = 13710 ALBEDO =.0885

13H FLAT MOON DATA
FM=.00676

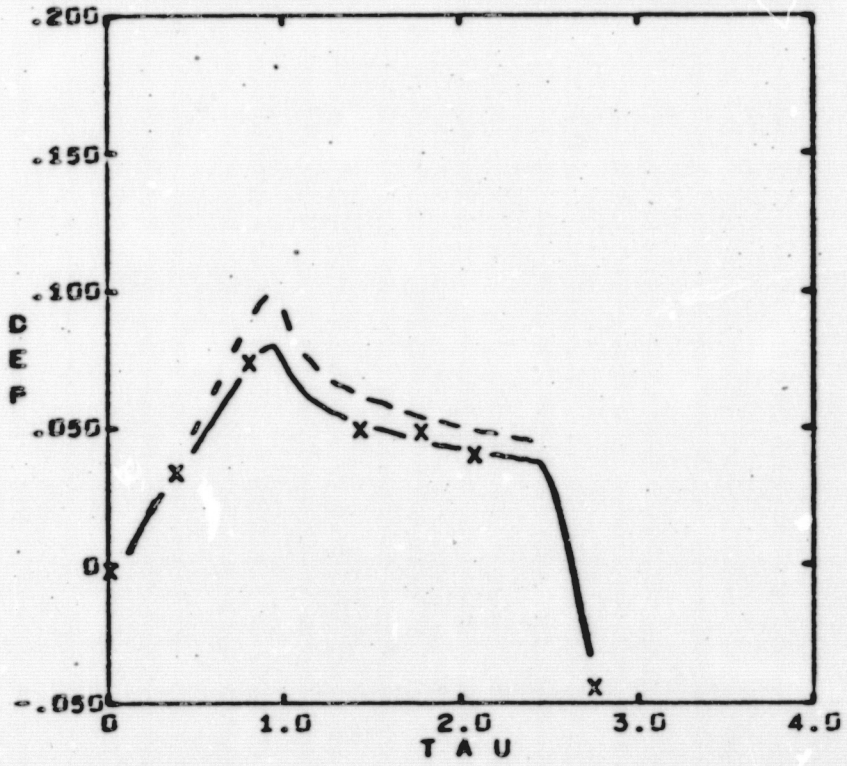
INITIAL TEMPERATURE 370.34
TAU-END OF TOTALITY 2.428

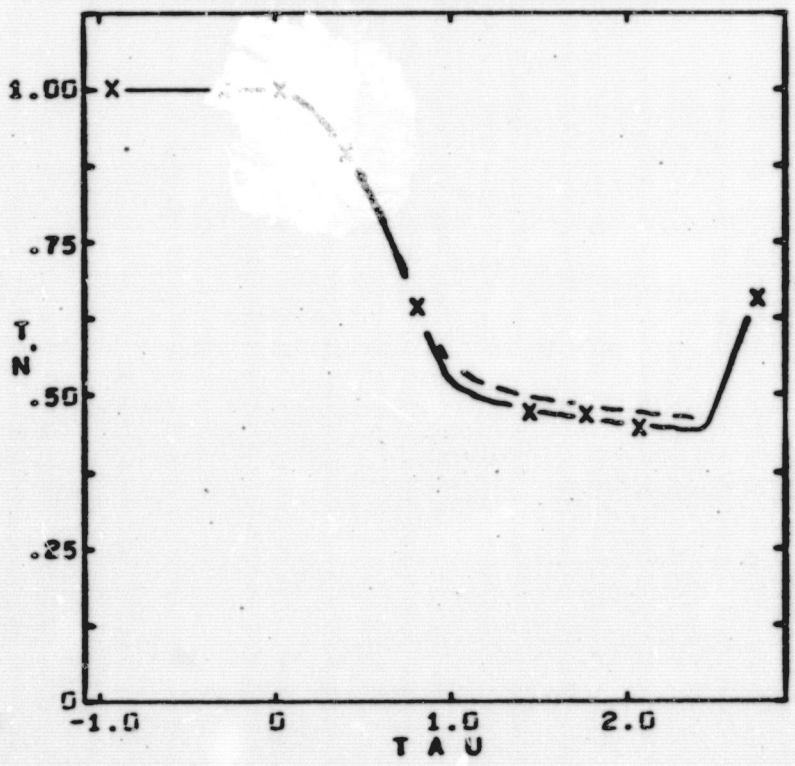
DIFFERENTIAL ENERGY DATA

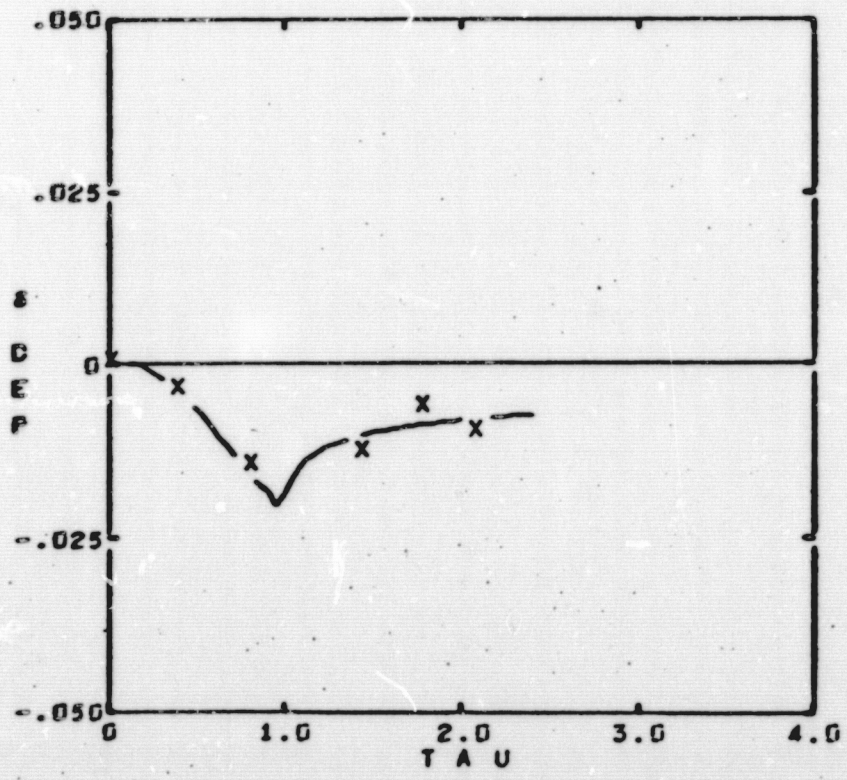
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0192	.0201	-.0009
.50	.0432	.0498	-.0066
.75	.0669	.0811	-.0142
.93	.0825	.1022	-.0197
1.0	.0743	.0931	-.0188
1.5	.0502	.0601	-.0099
2.0	.0424	.0504	-.0080

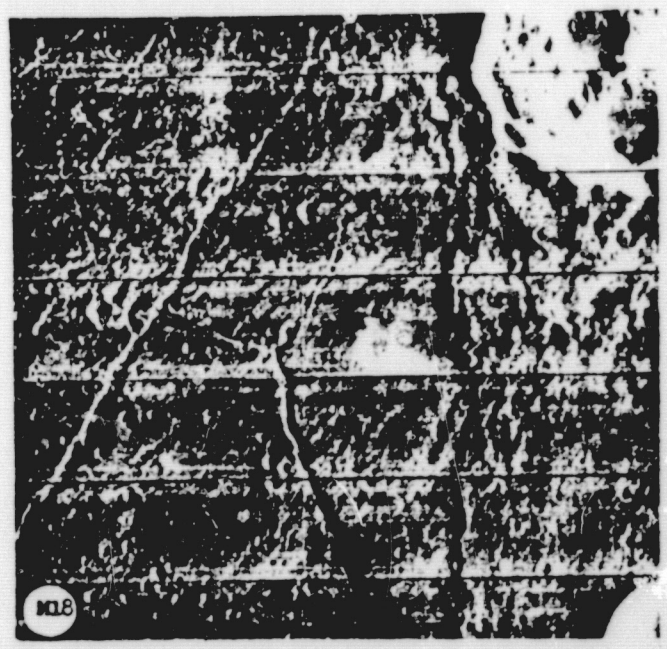
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.945	371.12	1.002	.0085
9H	-0.301	370.09	0.999	-.0027
10H	0.018	369.88	0.999	-.0023
11H	0.396	333.00	0.899	.0339
12H	0.811	238.40	0.644	.0740
13H	1.441	174.73	0.472	.0496
14H	1.774	173.62	0.469	.0483
15H	2.072	165.87	0.448	.0402
16H	2.747	244.34	0.660	-.0445









58 (185) MARE TRANQUILLITATIS

LAMBDA=30.00 E BETA= 7.00 N XI=+.4963 ETA=+.1219 L+PL CODE = 14192 ALBEDO =.0643

25M FLAT MOON DATA
FM=.02110

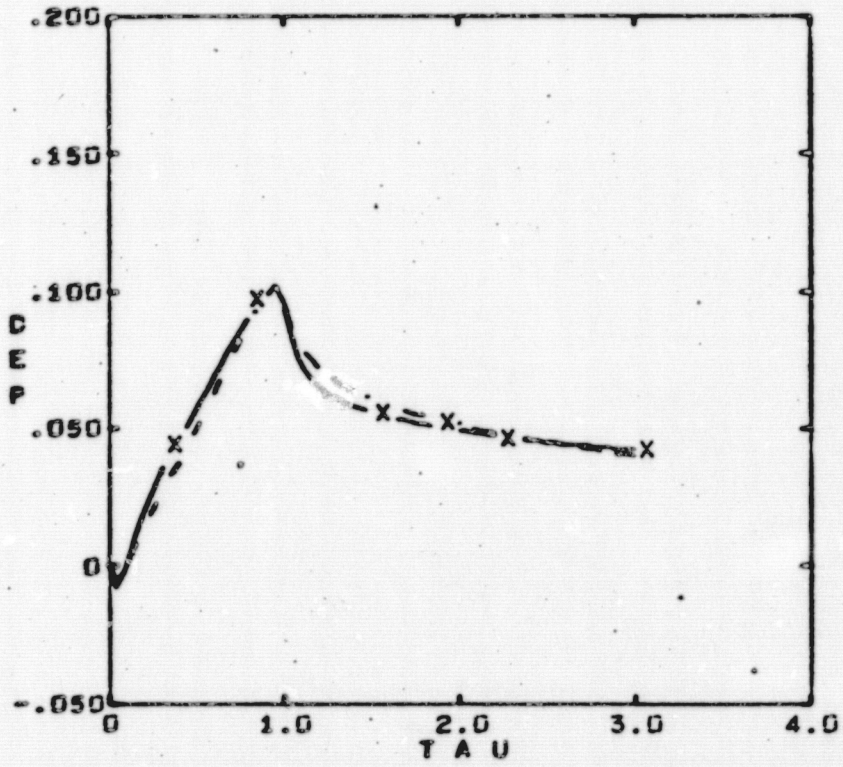
INITIAL TEMPERATURE 390.57
TAU-END OF TOTALITY 3.081

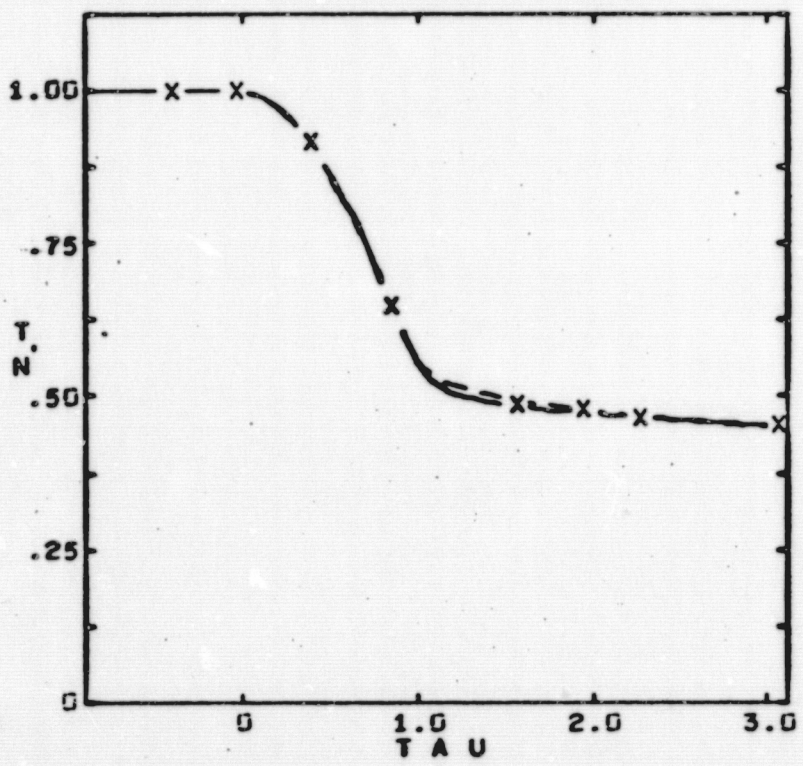
DIFFERENTIAL ENERGY DATA

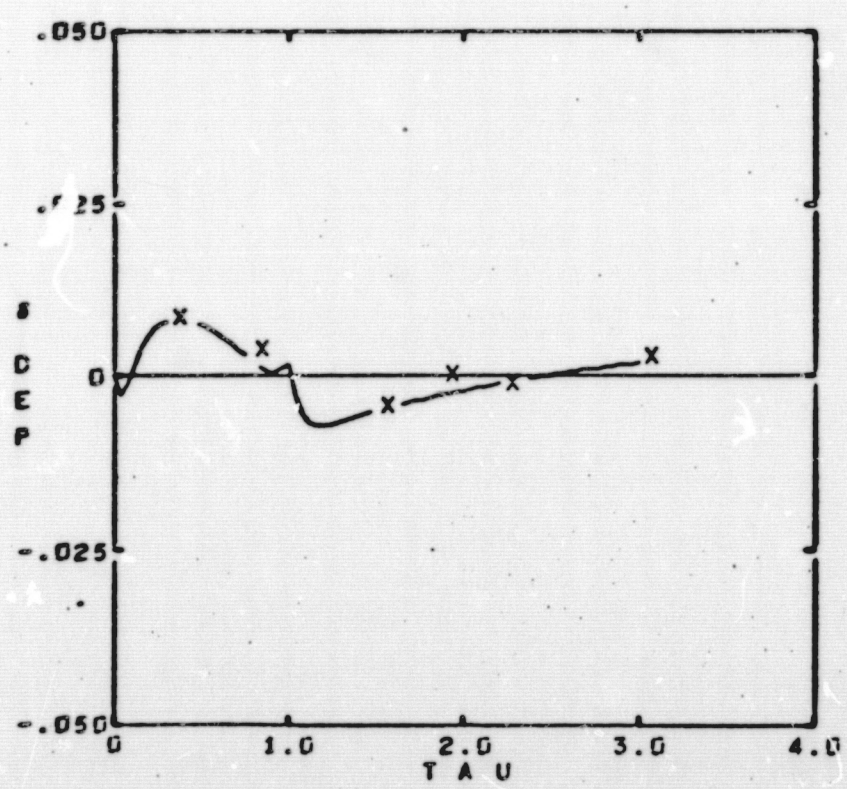
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0265	.0194	.0071
.50	.0572	.0498	.0074
.75	.0848	.0816	.0032
.93	.1026	.1030	-.0004
1.0	.0957	.0939	.0018
1.5	.0559	.0610	-.0051
2.0	.0493	.0513	-.0020
2.5	.0454	.0451	.0003
3.0	.0424	.0404	.0020

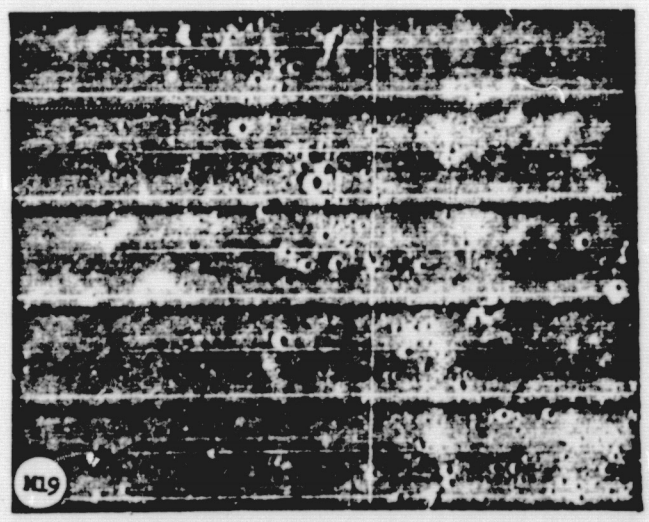
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.130	392.10	1.004	.0158
9H	-0.404	390.86	1.001	.0030
10H	-0.043	390.48	1.000	-.0009
11H	0.383	358.20	0.917	.0441
12H	0.850	252.55	0.647	.0972
13H	1.561	189.54	0.485	.0555
14H	1.936	187.05	0.479	.0526
15H	2.272	181.83	0.466	.0470
16H	3.060	177.64	0.455	.0428









59 (1B6) MARE FRIGORIS

LAMBDA=30.00 E BETA=54.00 N XI=+.2939 ETA=+.8090 L+PL CODE = 12891 ALBEDO =.0736

13H FLAT MOON DATA
FM=.02152

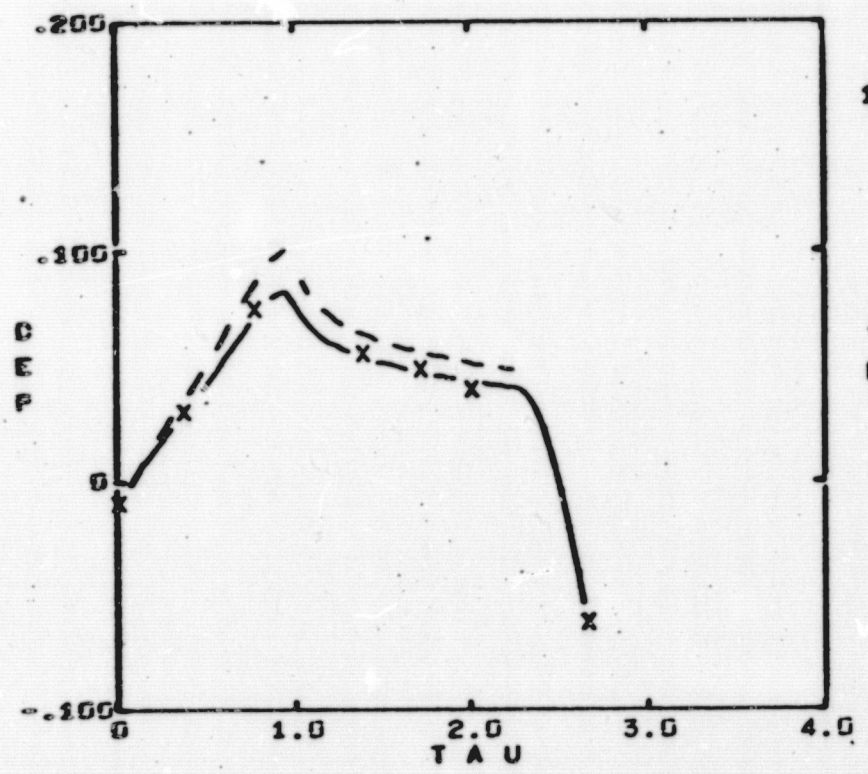
INITIAL TEMPERATURE 360.22
TAU-END OF TOTALITY 2.275

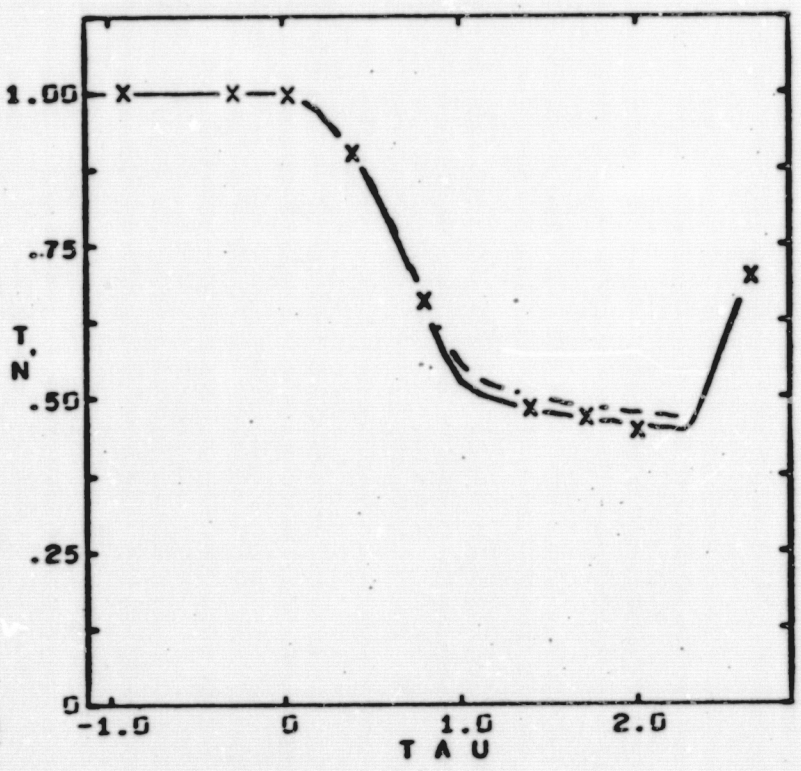
DIFFERENTIAL ENERGY DATA

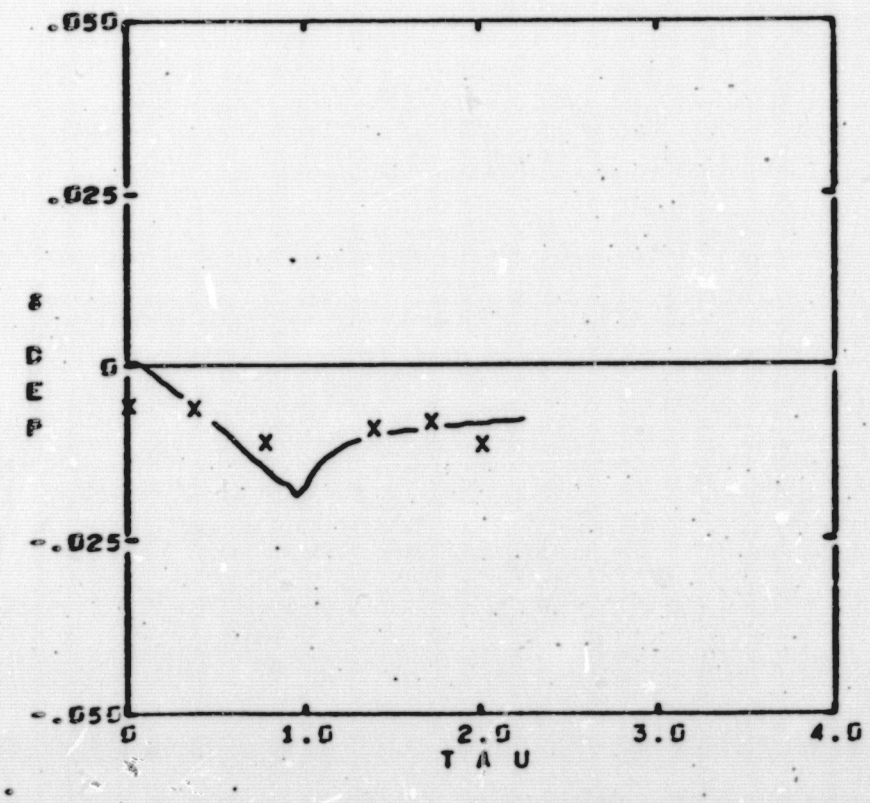
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0163	.0194	-.0031
.50	.0414	.0498	-.0084
.75	.0675	.0816	-.0141
.93	.0850	.1030	-.0180
1.0	.0764	.0939	-.0175
1.5	.0513	.0610	-.0097
2.0	.0430	.0513	-.0083

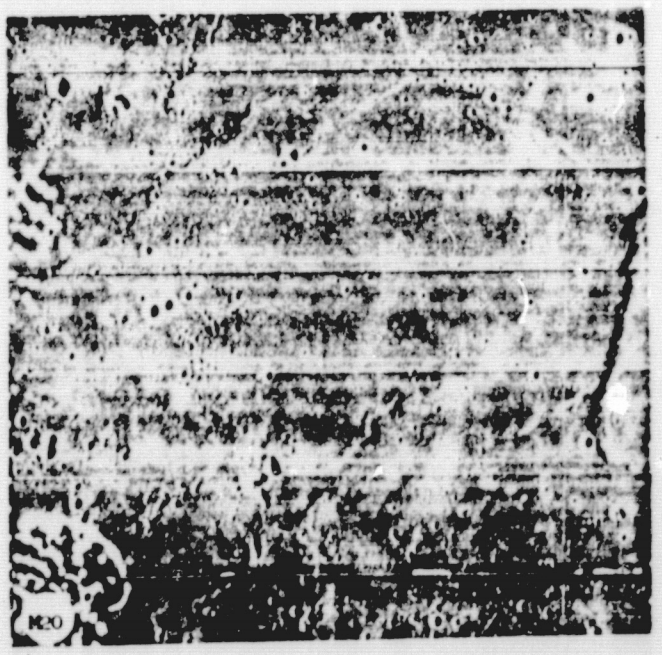
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.912	361.07	1.002	.0094
9H	-0.291	359.95	0.999	-.0030
10H	0.020	359.06	0.997	-.0098
11H	0.384	324.37	0.900	.0295
12H	0.786	237.83	0.660	.0752
13H	1.395	174.44	0.484	.0550
14H	1.718	168.63	0.468	.0480
15H	2.007	161.03	0.447	.0399
16H	2.657	252.49	0.701	-.0617









60 (483) MARE NECTARIS

LAMBDA=35.00 E BETA=15.00 S X1=+.5540 ETA=-.2588 L+FL CODE = 45256 ALBEDO =.0730

13H FLAT MOON DATA
FM=.00392

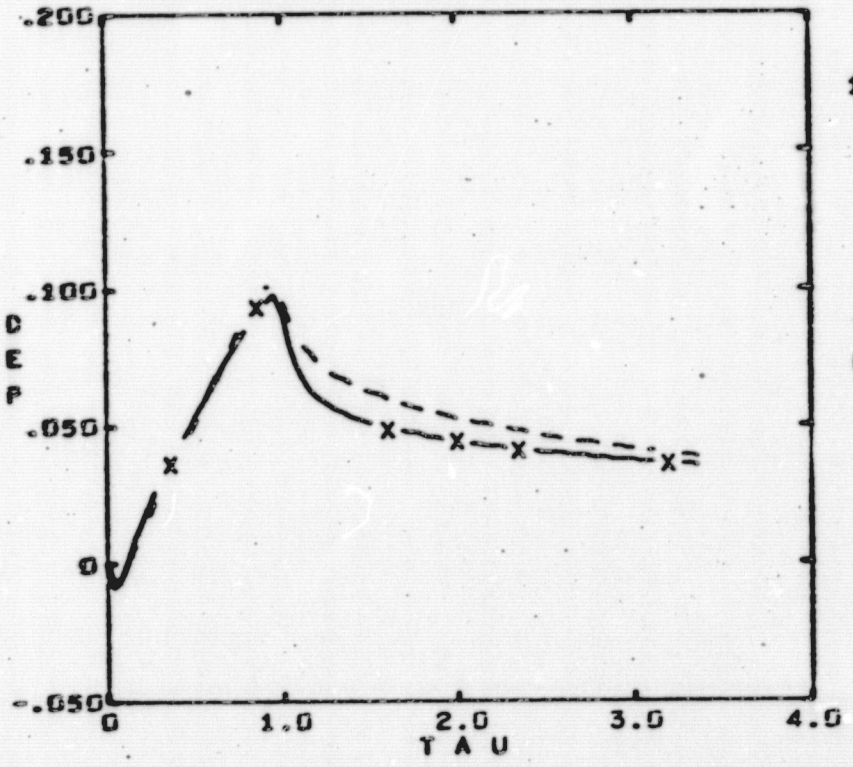
INITIAL TEMPERATURE 383.24
TAU-END OF TOTALITY 3.399

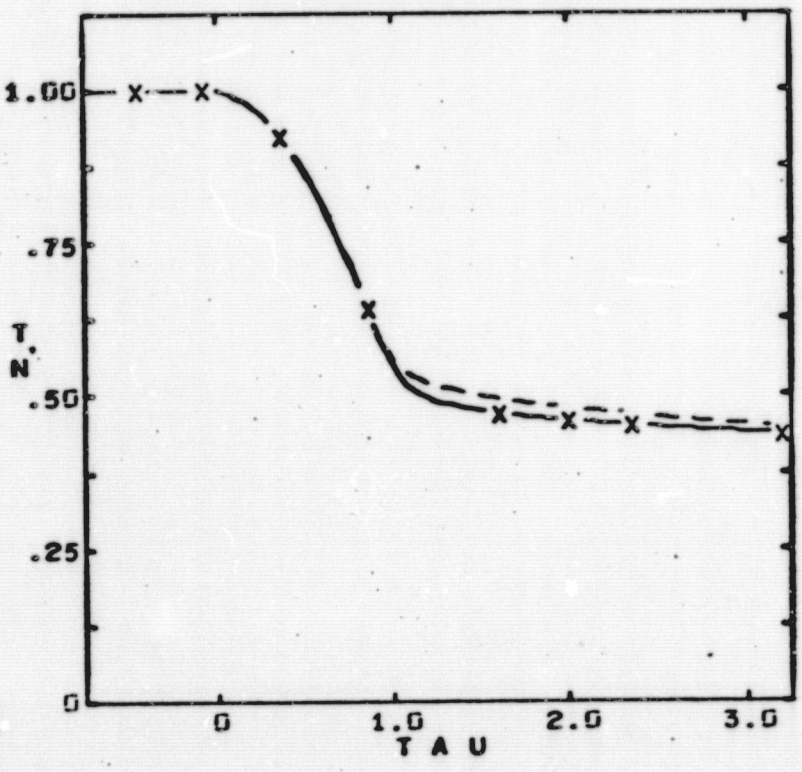
DIFFERENTIAL ENERGY DATA

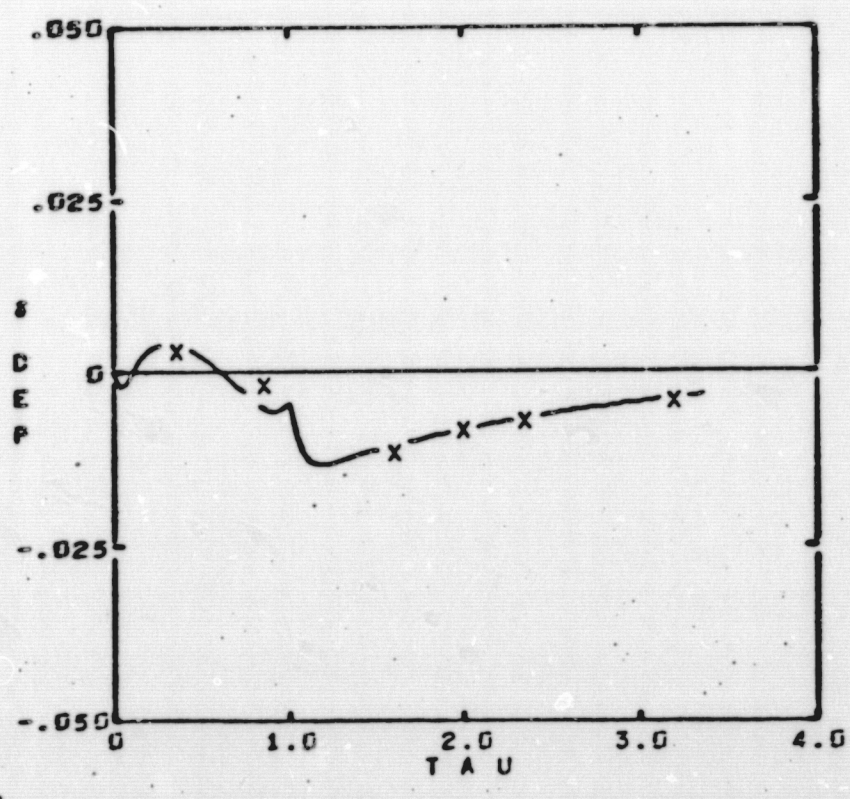
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0225	.0187	.0038
.50	.0525	.0501	.0024
.75	.0800	.0827	-.0027
.93	.0979	.1046	-.0067
1.0	.0910	.0956	-.0046
1.5	.0513	.0626	-.0113
2.0	.0446	.0528	-.0082
2.5	.0405	.0466	-.0061
3.0	.0375	.0418	-.0043

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.226	384.99	1.005	.0184
9H	-0.460	382.88	0.999	-.0038
10H	-0.082	383.19	1.000	-.0005
11H	0.366	354.18	0.924	.0362
12H	0.856	246.11	0.642	.0933
13H	1.605	179.62	0.469	.0483
14H	1.998	175.99	0.459	.0445
15H	2.353	172.70	0.451	.0412
16H	3.195	167.00	0.436	.0361









61 (187) LACUS SOMNIORUM

LAMBDA=36.00 E BETA=37.50 N XI=+.4663 ETA=+.6088 L+PL CODE = 14671 ALBEDO =.0725

13H FLAT MOON DATA
FM=.01230

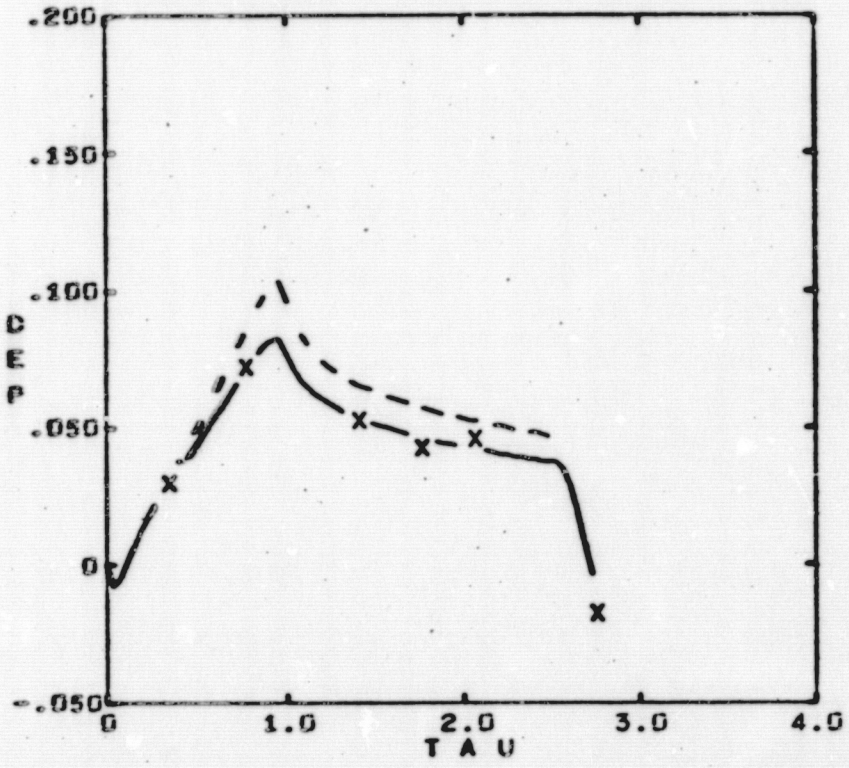
INITIAL TEMPERATURE 371.83
TAU-END OF TOTALITY 2.527

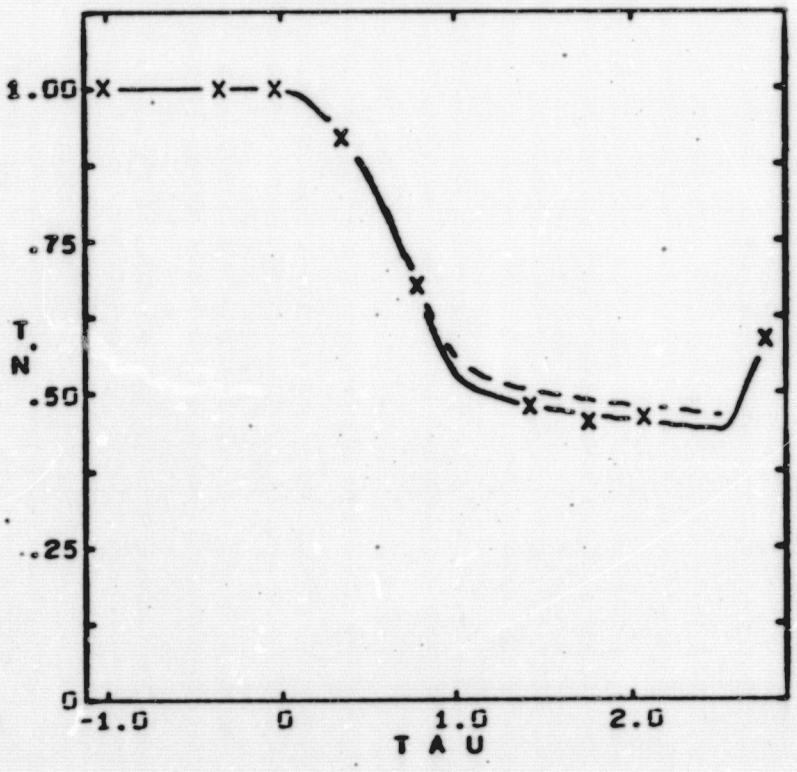
DIFFERENTIAL ENERGY DATA

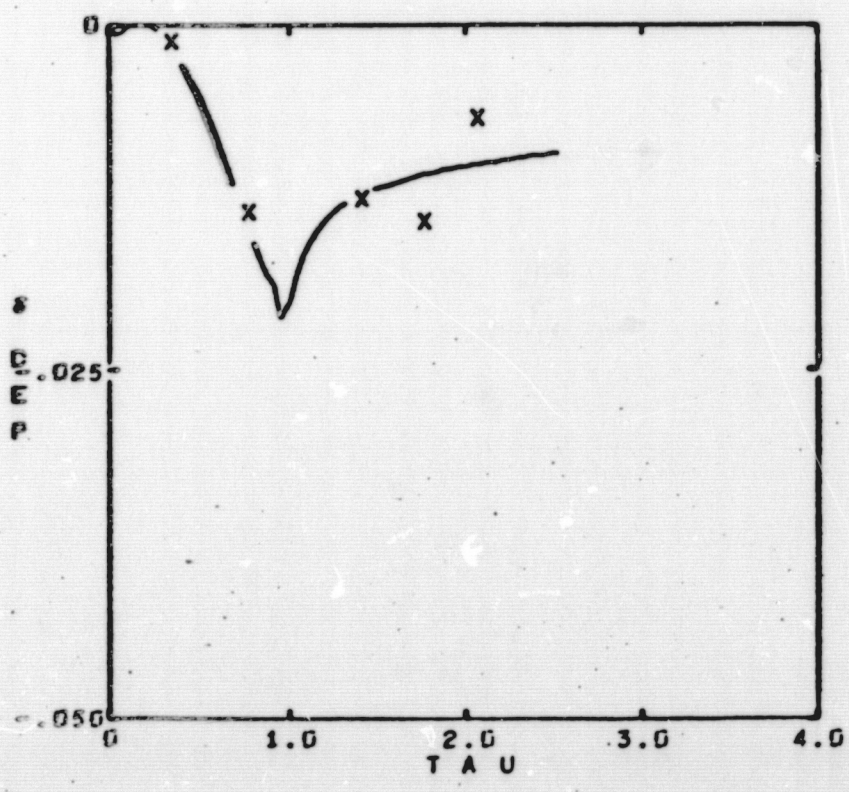
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0185	.0185	.0000
.50	.0447	.0502	-.0055
.75	.0691	.0831	-.0140
.93	.0850	.1051	-.0201
1.0	.0760	.0961	-.0201
1.5	.0512	.0630	-.0118
2.0	.0430	.0532	-.0102
2.5	.0377	.0469	-.0092

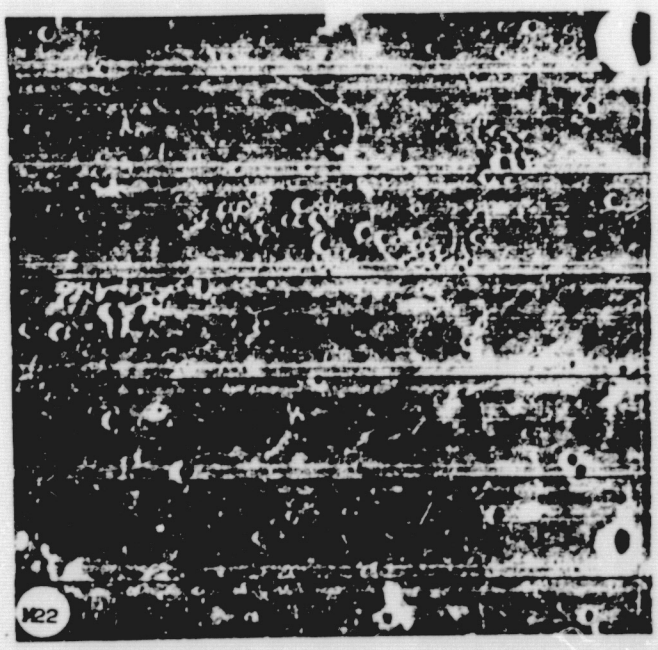
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.018	373.80	1.005	.0214
9H	-0.362	372.33	1.001	.0054
10H	-0.036	371.72	1.000	-.0013
11H	0.349	342.26	0.920	.0298
12H	0.773	251.49	0.676	.0725
13H	1.415	178.31	0.480	.0529
14H	1.756	169.41	0.456	.0431
15H	2.059	171.88	0.462	.0457
16H	2.757	219.83	0.591	-.0176









62 (484) JANSSEN

LAMBDA=40.83 E BETA=46.75 S XI=+.4480 ETA=-.7284 L+FL CODE = 44753 ALBEDO =.1530

83H FLAT MOON DATA
FM=.00661

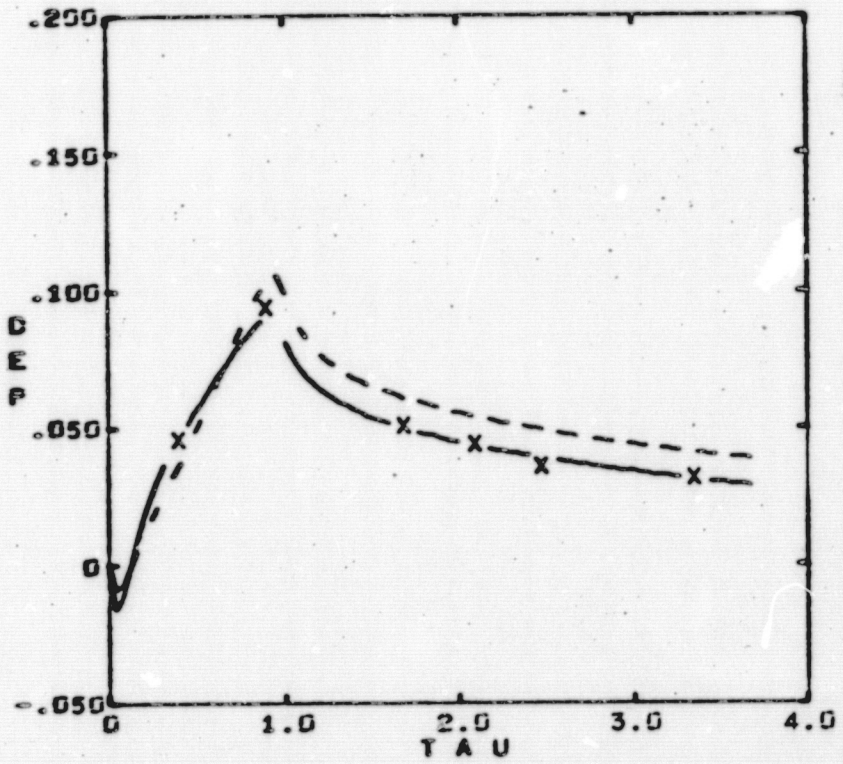
INITIAL TEMPERATURE 352.48
TAU-END OF TOTALITY 3.684

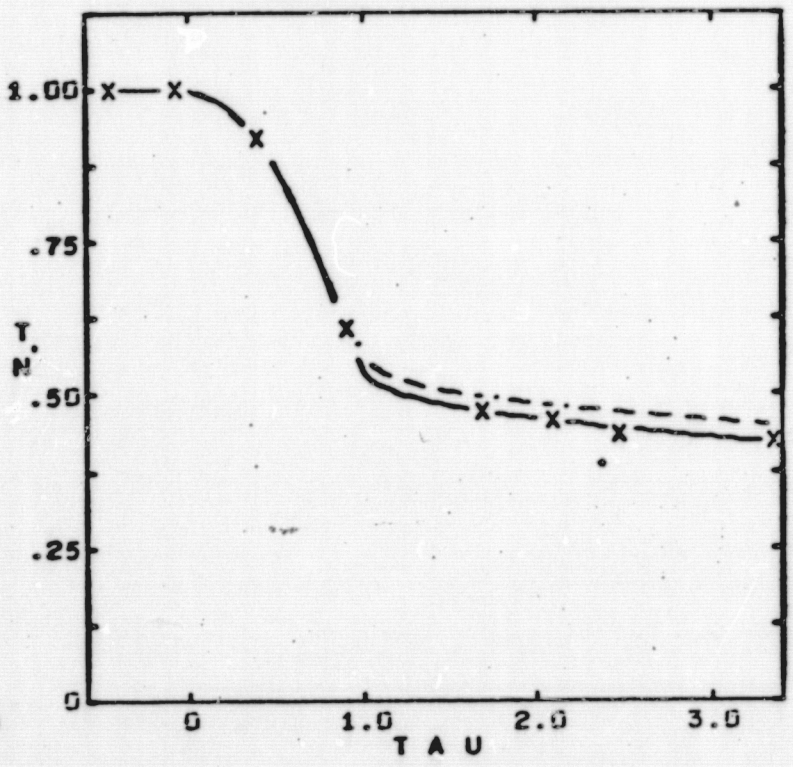
DIFFERENTIAL ENERGY DATA

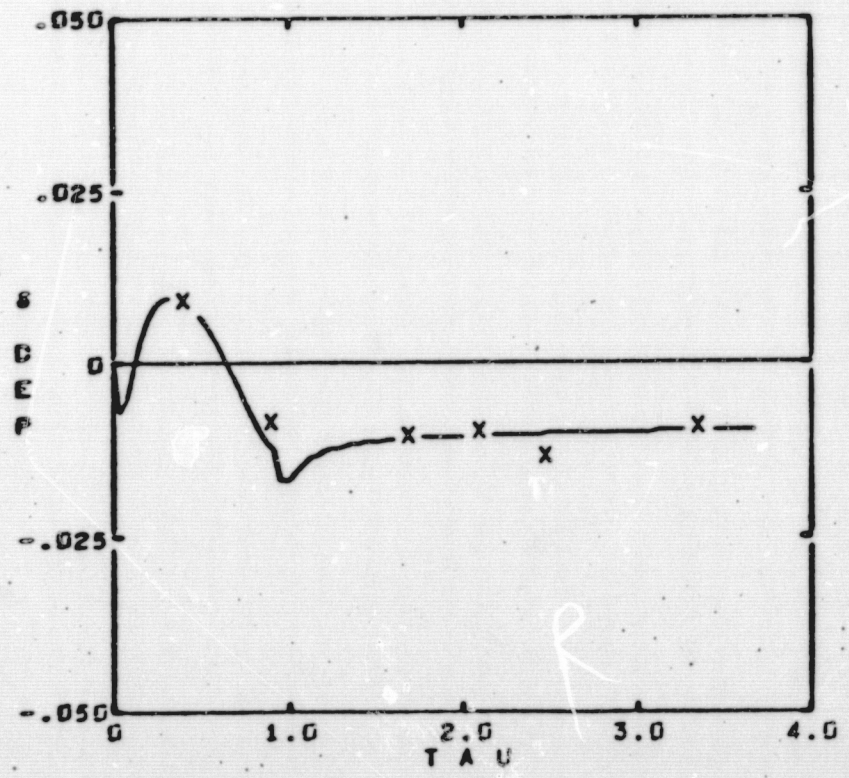
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0263	.0178	.0085
.50	.0574	.0510	.0064
.75	.0798	.0850	-.0052
.93	.0931	.1078	-.0147
1.0	.0818	.0987	-.0169
1.5	.0540	.0652	-.0112
2.0	.0449	.0554	-.0105
2.5	.0389	.0490	-.0101
3.0	.0342	.0441	-.0099

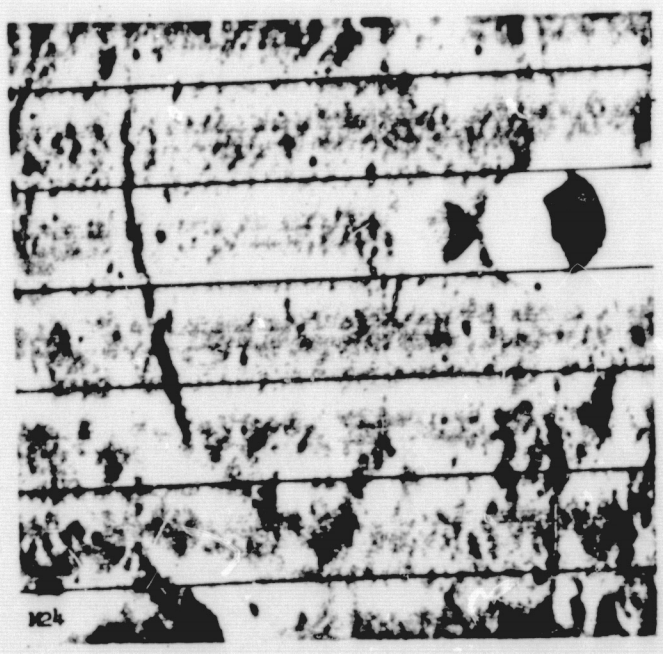
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.268	354.14	1.005	.0189
9H	-0.467	352.29	0.999	-.0022
10H	-0.074	352.42	1.000	-.0007
11H	0.393	323.74	0.918	.0461
12H	0.903	214.21	0.608	.0942
13H	1.685	167.08	0.474	.0505
14H	2.093	161.83	0.459	.0444
15H	2.464	153.67	0.436	.0361
16H	3.351	149.32	0.424	.0322









63 (485) MARE FECUNDITATIS

LAMBDA=52.00 E BETA= 2.50 S. XI=+.7873 ETA=-.0436 L+PL CODE = 47094 ALBEDO =.0656

13H FLAT MOON DATA
FM=.00888

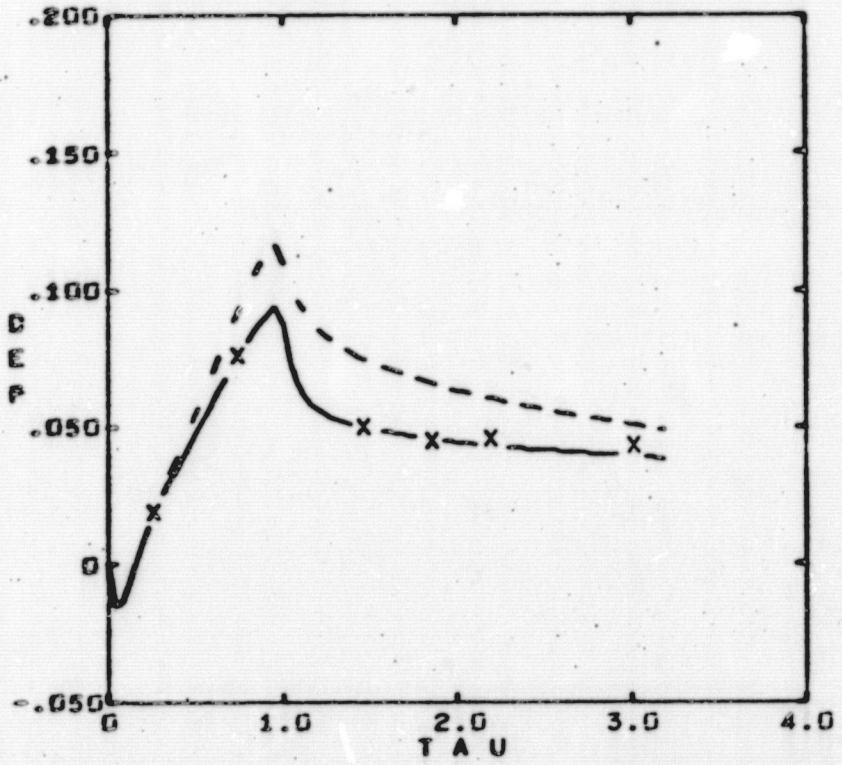
INITIAL TEMPERATURE 373.56
TAU-END OF TOTALITY 3.200

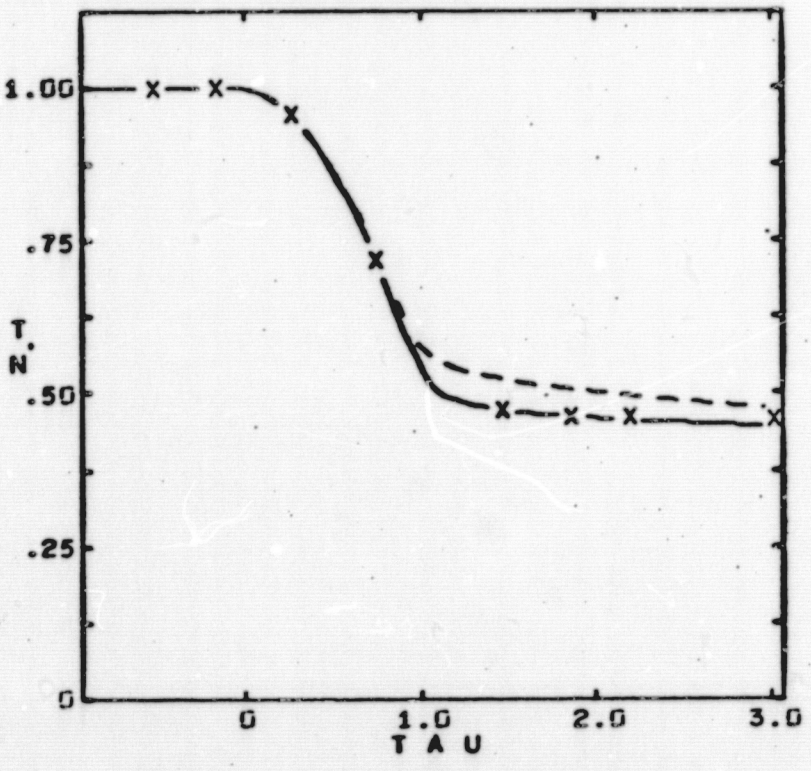
DIFFERENTIAL ENERGY DATA

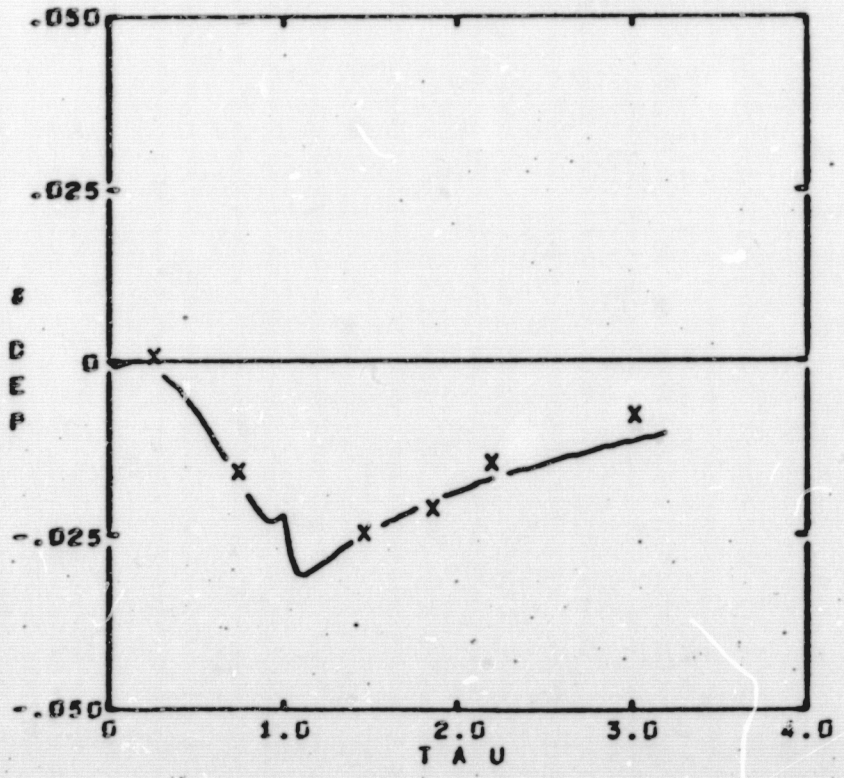
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0155	.0159	-.0004
.50	.0474	.0544	-.0070
.75	.0757	.0928	-.0171
.93	.0940	.1186	-.0246
1.0	.0874	.1094	-.0220
1.5	.0493	.0738	-.0245
2.0	.0446	.0633	-.0187
2.5	.0418	.0564	-.0146
3.0	.0396	.0511	-.0115

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.277	374.71	1.004	.0145
9H	-0.536	373.40	1.000	.0004
10H	-0.169	373.17	0.999	-.0020
11H	0.266	356.41	0.955	.0192
12H	0.741	268.46	0.719	.0758
13H	1.466	176.66	0.473	.0501
14H	1.849	171.94	0.461	.0450
15H	2.192	172.74	0.463	.0458
16H	3.011	170.34	0.456	.0433









64 (188) MARE CRISIUM

LAMBDA=59.00 E BETA=17.00 N XI=+.8197 ETA=+.2924 L+PL CODE = 18223 ALBEDO =.0674

13H FLAT MOON DATA
FM=.01270

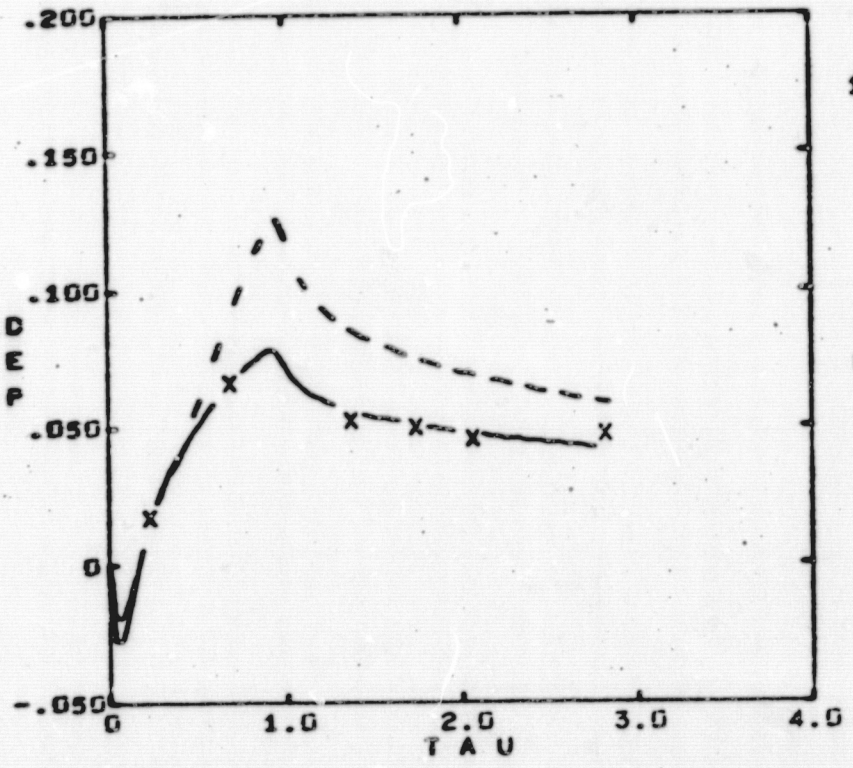
INITIAL TEMPERATURE 364.02
TAU-END OF TOTALITY 2.859

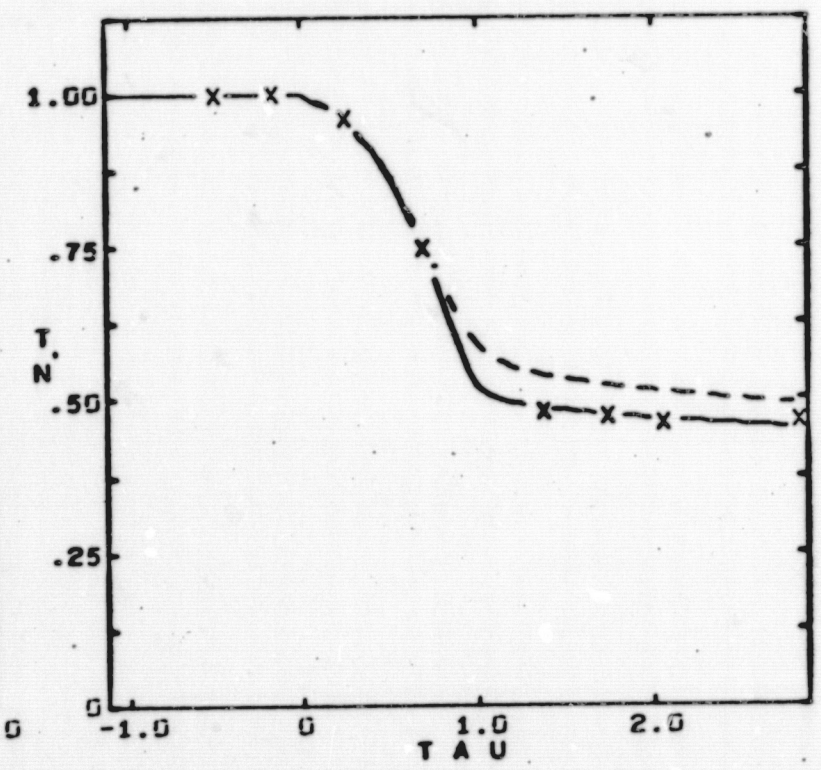
DIFFERENTIAL ENERGY DATA

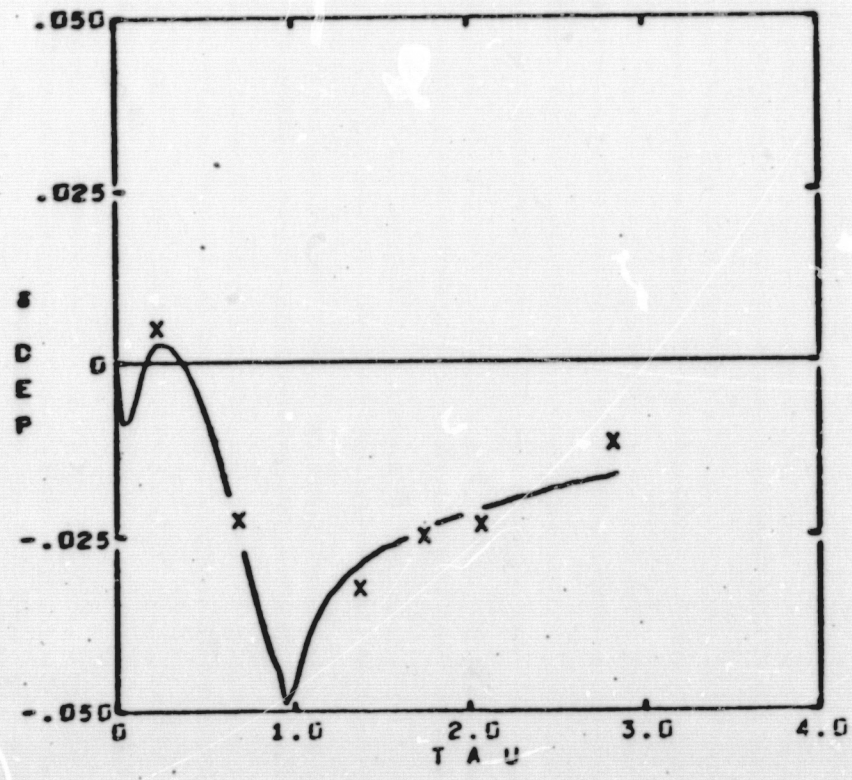
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0172	.0144	.0028
.50	.0501	.0573	-.0072
.75	.0694	.0995	-.0301
.93	.0797	.1276	-.0479
1.0	.0719	.1184	-.0465
1.5	.0540	.0810	-.0270
2.0	.0484	.0700	-.0216
2.5	.0445	.0626	-.0181

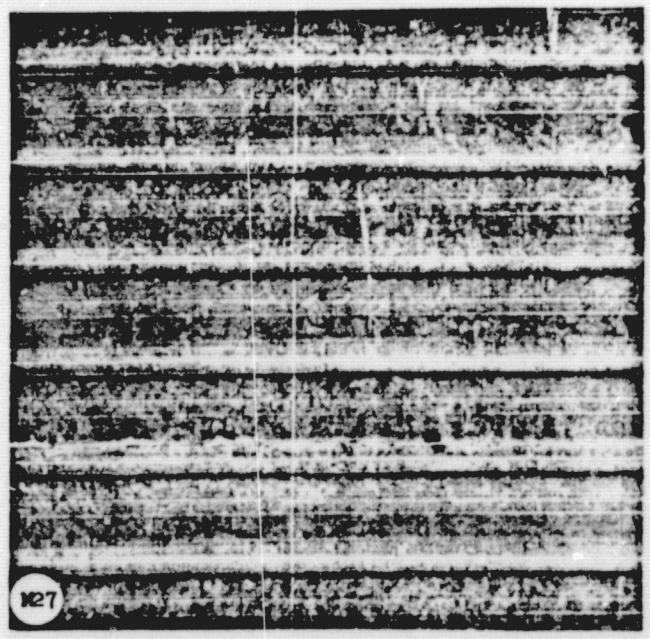
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.216	365.34	1.004	.0146
9H	-0.518	364.08	1.000	.0006
10H	-0.170	363.82	0.999	-.0022
11H	0.239	349.64	0.960	.0174
12H	0.689	271.66	0.746	.0667
13H	1.373	174.51	0.479	.0528
14H	1.736	172.26	0.473	.0501
15H	2.058	168.36	0.462	.0458
16H	2.824	169.81	0.466	.0473









LAMBDA=26.74 W BETA= 2.00 N XI=-.4496 ETA=+.0349 L+PL CODE = 24053 ALBEDO =.0728

13H FLAT MOON DATA
FM=.00788

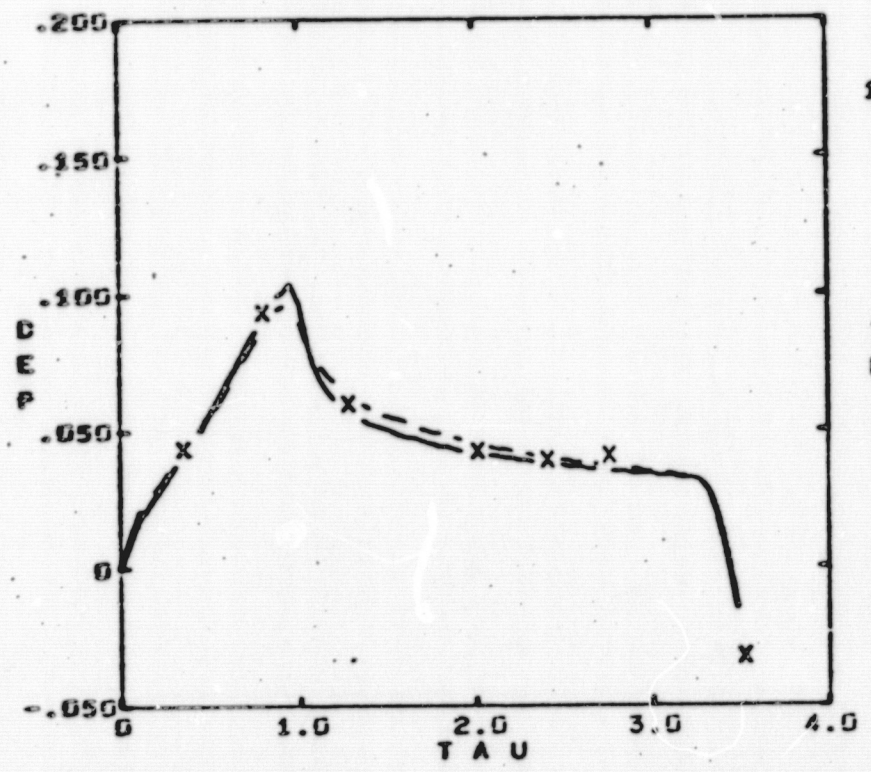
INITIAL TEMPERATURE 387.62
TAU-END OF TOTALITY 3.270

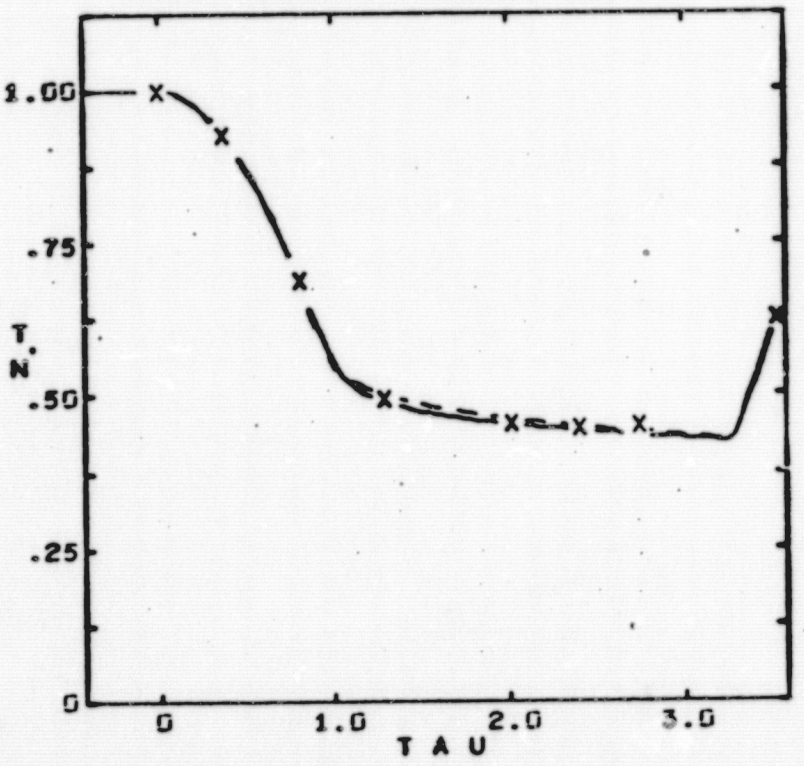
DIFFERENTIAL ENERGY DATA

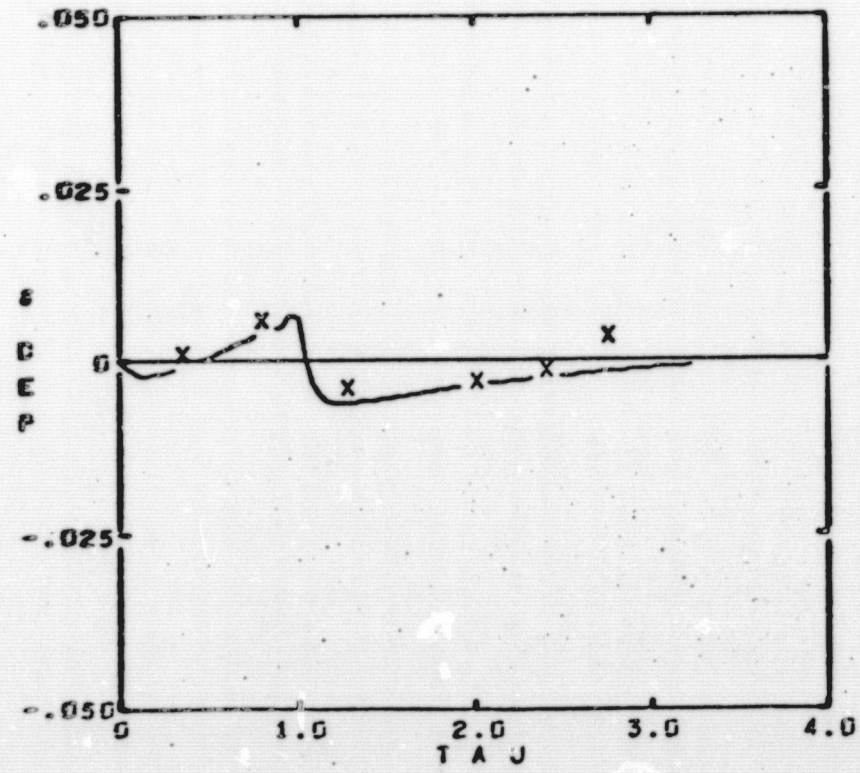
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0307	.0323	-.0016
.50	.0570	.0562	.0008
.75	.0859	.0823	.0036
.93	.1050	.0995	.0055
1.0	.0961	.0899	.0062
1.5	.0502	.0555	-.0053
2.0	.0421	.0456	-.0035
2.5	.0374	.0396	-.0022
3.0	.0342	.0352	-.0010

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.763	389.07	1.004	.0150
9H	-0.012	387.60	1.000	-.0002
10H	0.360	359.70	0.928	.0434
11H	0.799	266.36	0.687	.0931
12H	1.279	191.58	0.494	.0597
13H	2.014	175.98	0.454	.0425
14H	2.399	172.94	0.446	.0396
15H	2.747	174.27	0.450	.0409
16H	3.523	243.03	0.627	-.0321







PHOTOGRAPH
NOT
AVAILABLE

66 (268) W. COPERNICUS

LAMBDA=26.00 W BETA= 9.33 N XI=-.4326 ETA=+.1622 L+FL CODE = 24136 ALBEDO =.0908

13H FLAT MOON DATA
FM=.00387

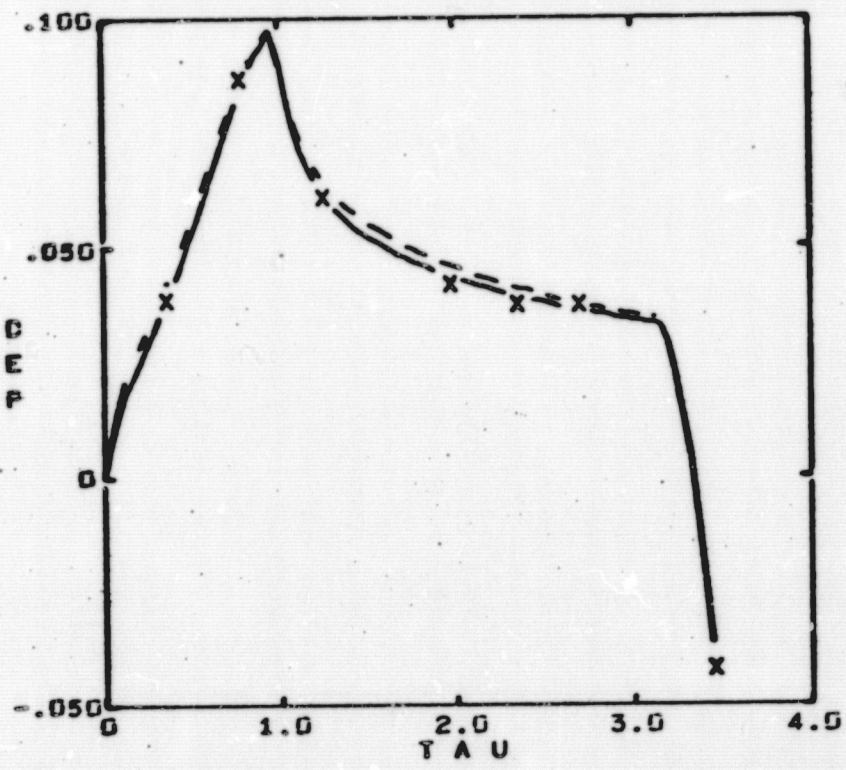
INITIAL TEMPERATURE 385.31
TAU-END OF TOTALITY 3.156

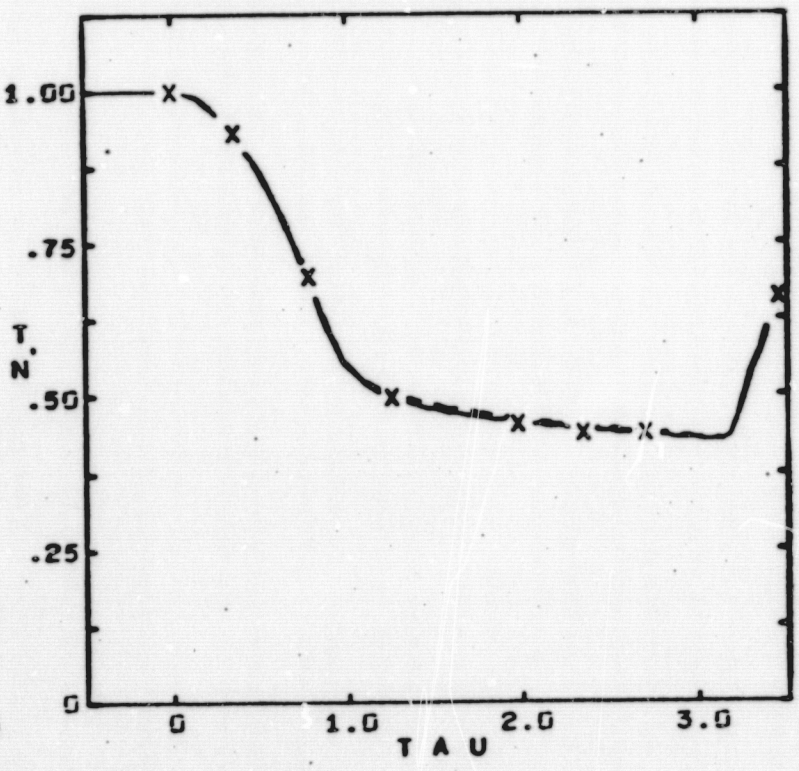
DIFFERENTIAL ENERGY DATA

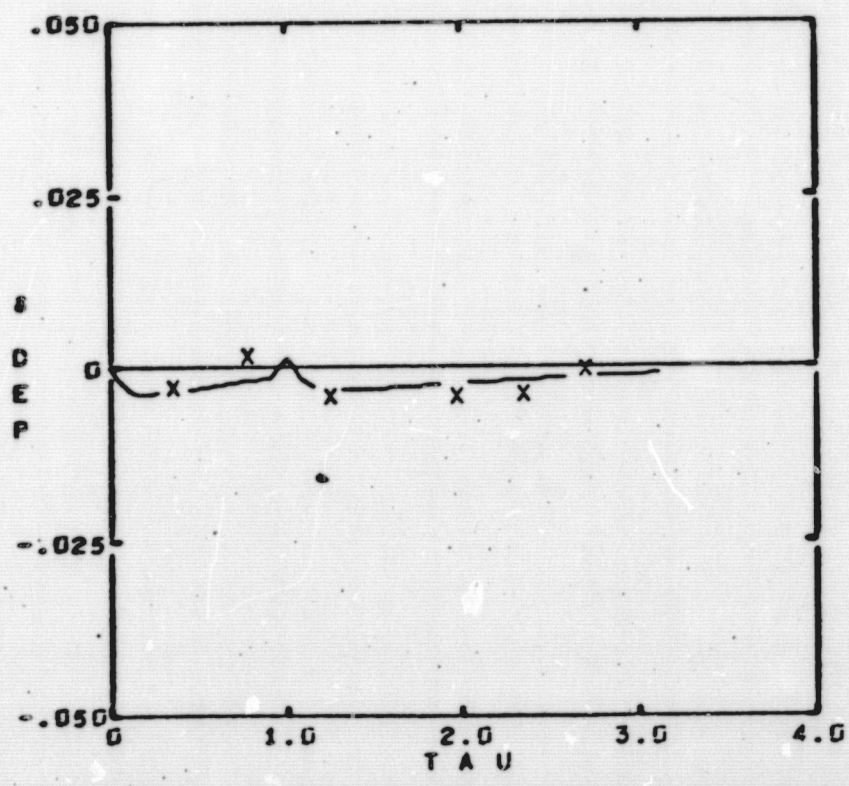
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0285	.0321	-.0036
.50	.0531	.0561	-.0030
.75	.0802	.0822	-.0020
.93	.0982	.0995	-.0013
1.0	.0912	.0899	.0013
1.5	.0524	.0555	-.0031
2.0	.0433	.0456	-.0023
2.5	.0380	.0396	-.0016
3.0	.0342	.0352	-.0010

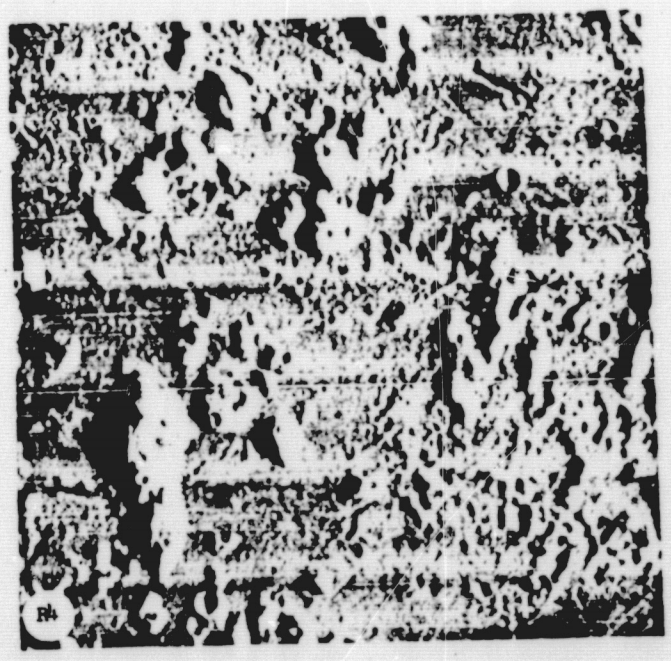
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.754	387.00	1.004	.0176
9H	-0.015	385.28	1.000	-.0004
10H	0.349	358.28	0.930	.0383
11H	0.780	268.00	0.696	.0869
12H	1.253	191.25	0.496	.0607
13H	1.974	174.45	0.453	.0420
14H	2.352	169.28	0.439	.0373
15H	2.694	169.68	0.440	.0376
16H	3.453	255.50	0.663	-.0422









C.3

67 (289) E. COPERNICUS

LAMBDA=10.37 W BETA= 9.67 N XI=-.1774 ETA=+.1679 L+PL CODE = 21187 ALBEDO =.0776

INITIAL TEMPERATURE 394.79
TAU-END OF TOTALITY 3.120

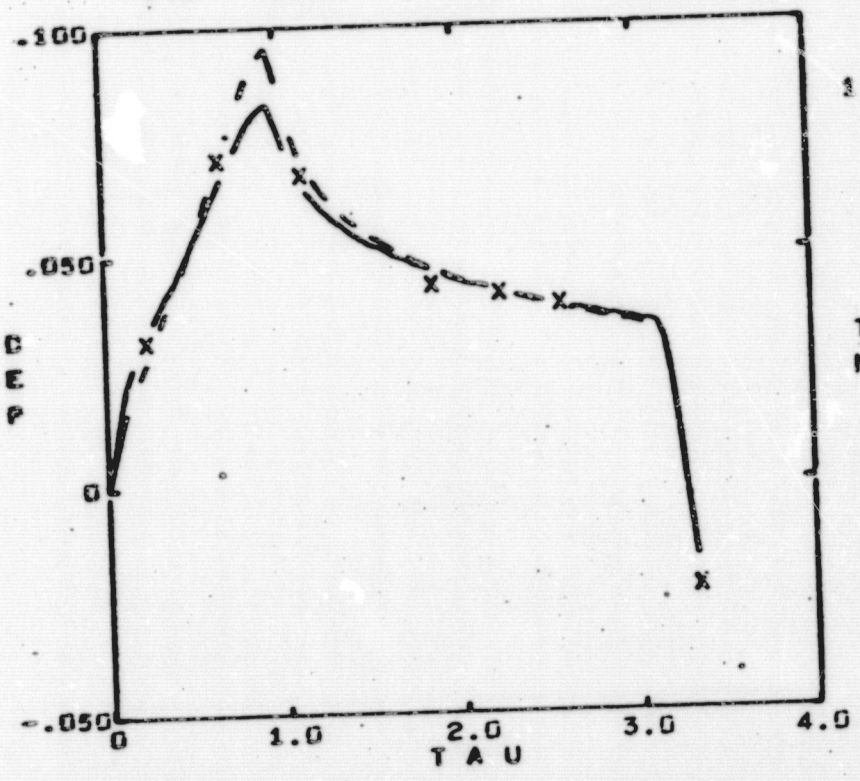
18H FLAT MOON DATA
FM=.00091

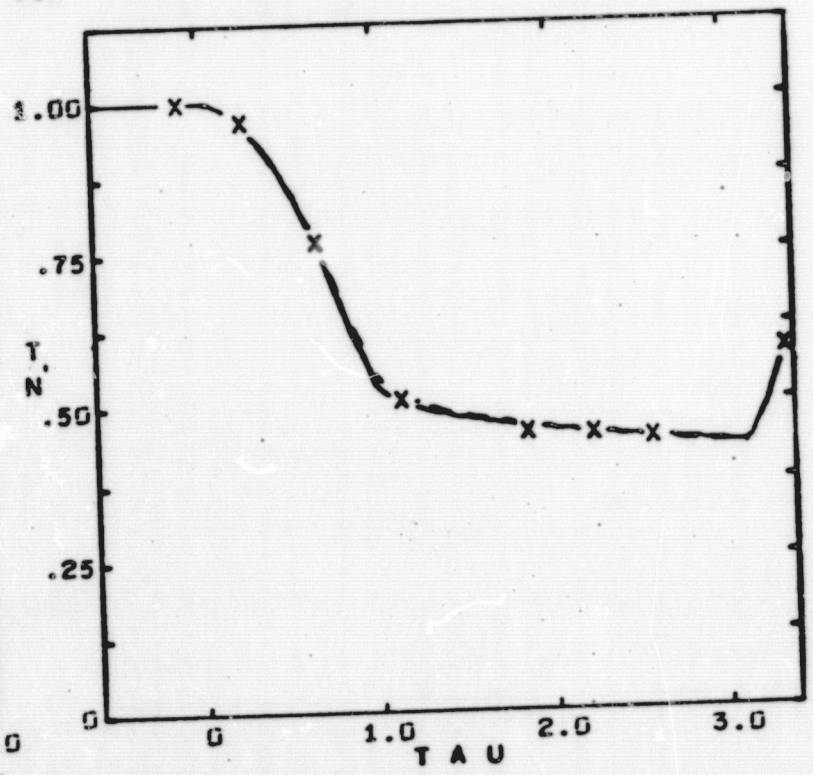
DIFFERENTIAL ENERGY DATA

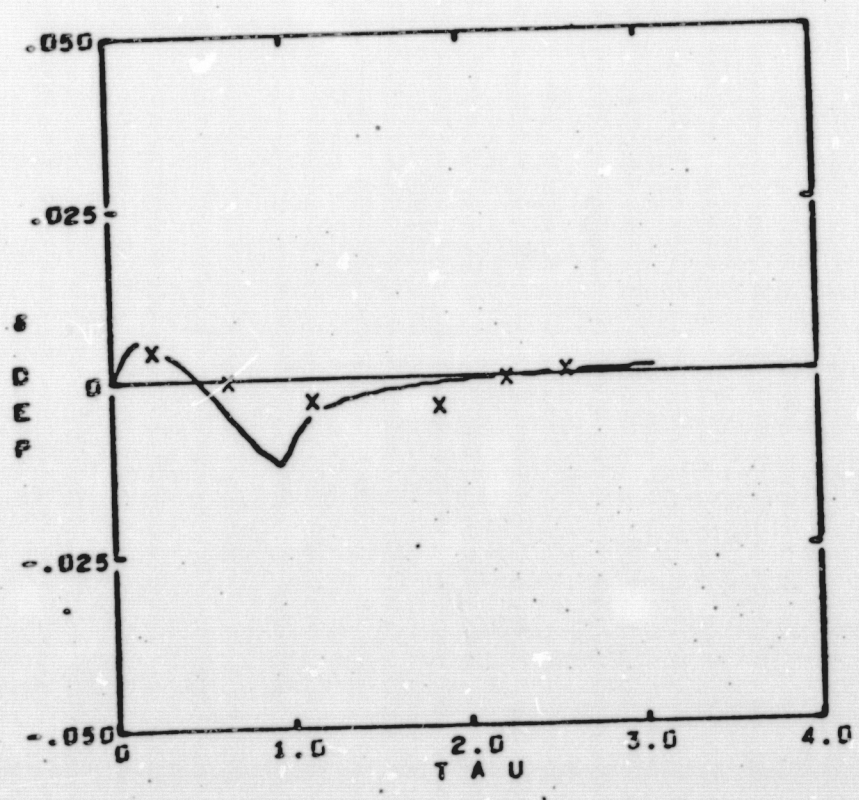
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0334	.0282	.0052
.50	.0527	.0529	-.0002
.75	.0725	.0798	-.0073
.93	.0854	.0977	-.0123
1.0	.0781	.0883	-.0102
1.5	.0527	.0546	-.0019
2.0	.0444	.0448	-.0004
2.5	.0393	.0388	.0005
3.0	.0354	.0344	.0010

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.856	396.16	1.003	.0140
9H	-0.124	394.59	0.999	-.0020
10H	0.240	381.23	0.966	.0315
11H	0.668	303.50	0.769	.0709
12H	1.137	201.49	0.510	.0679
13H	1.854	179.87	0.456	.0431
14H	2.231	178.20	0.451	.0415
15H	2.570	175.28	0.444	.0389
16H	3.335	231.06	0.585	-.0233







PHOTOGRAPH NOT AVAILABLE

68 (3C1) N.W. TYCHO 1

LAMBDA=20.33 W BETA=27.17 S XI=-.3091 ETA=-.4566 L+PL CODE = 33416 ALBEDO =.0738

13H FLAT MOON DATA
FM=.00478

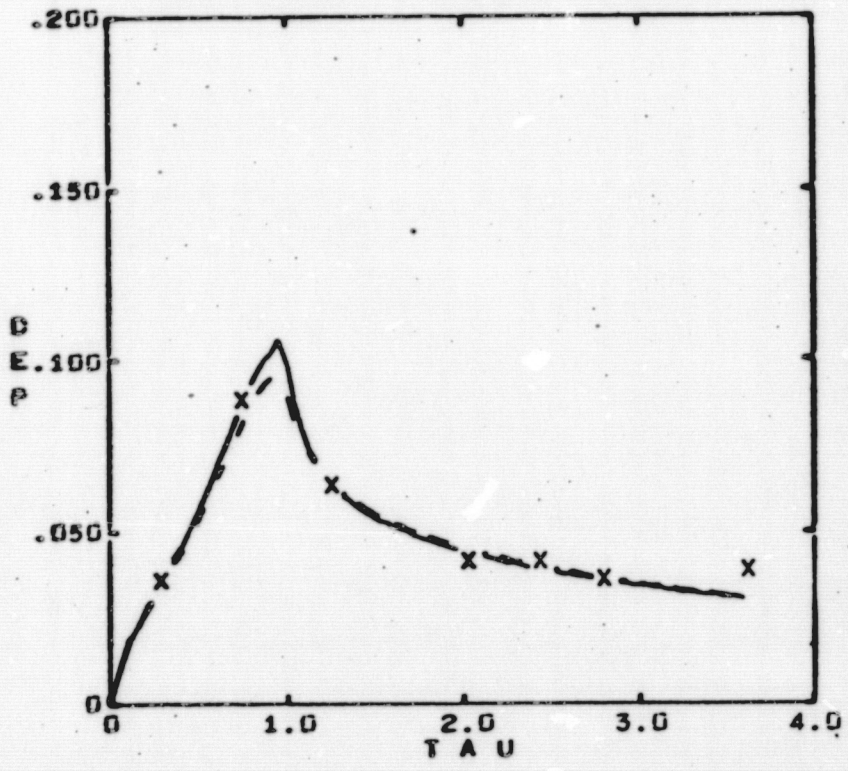
INITIAL TEMPERATURE 383.76
TAU-END OF TOTALITY 3.597

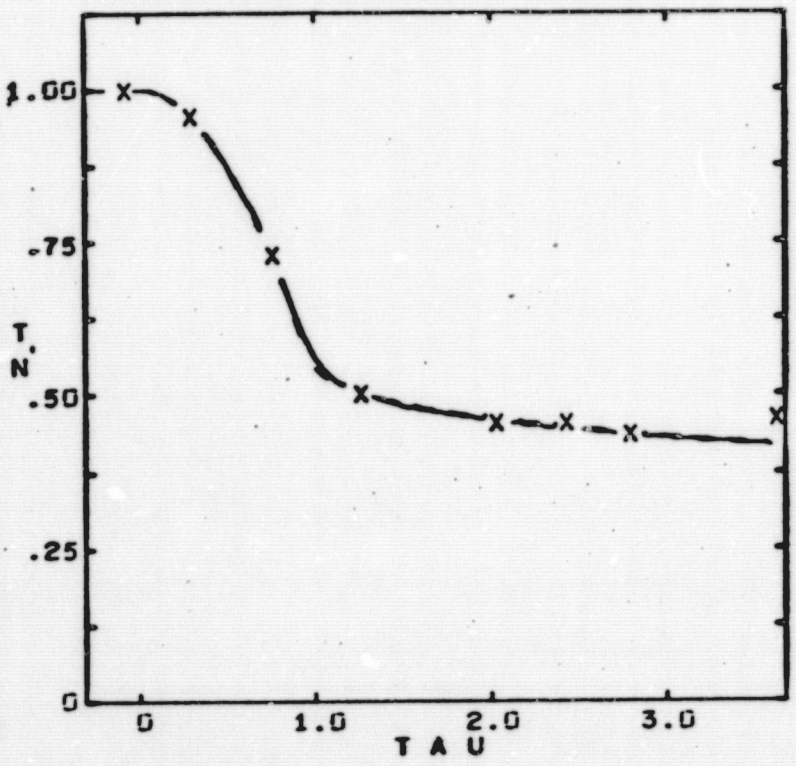
DIFFERENTIAL ENERGY DATA

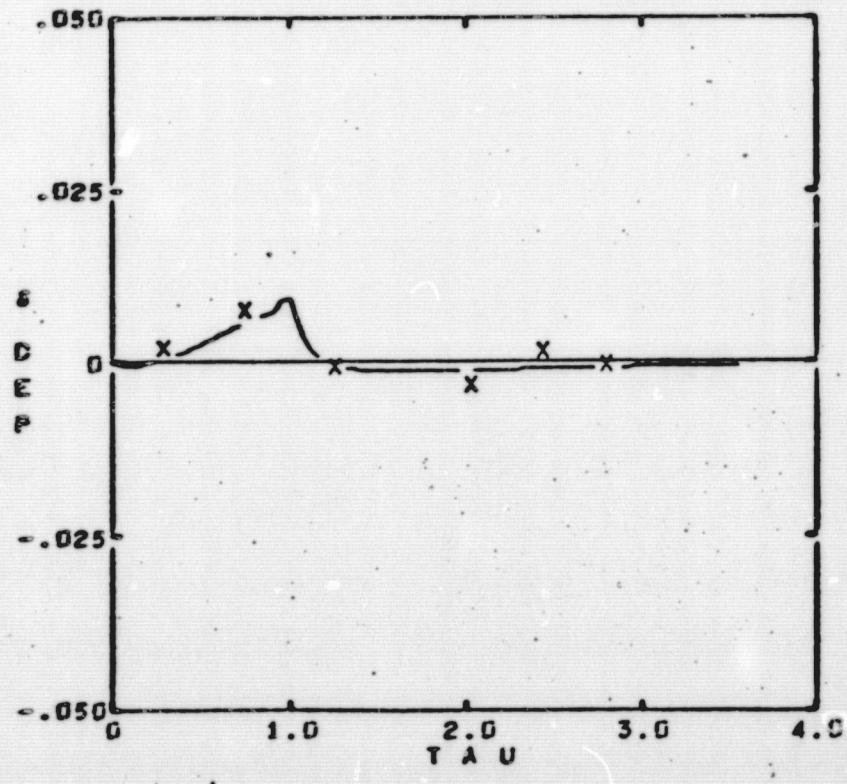
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0307	.0306	.0001
.50	.0577	.0550	.0027
.75	.0873	.0815	.0058
.93	.1069	.0991	.0078
1.0	.0988	.0895	.0093
1.5	.0541	.0553	-.0012
2.0	.0443	.0454	-.0011
2.5	.0385	.0394	-.0009
3.0	.0344	.0350	-.0006

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
6H	-0.895	384.69	1.002	.0097
9H	-0.103	383.66	1.000	-.0011
10H	0.286	366.37	0.955	.0360
11H	0.747	279.58	0.729	.0888
12H	1.253	192.97	0.503	.0639
13H	2.025	173.66	0.453	.0419
14H	2.427	173.59	0.452	.0419
15H	2.794	167.88	0.437	.0366
16H	3.630	177.40	0.462	.0388









69 (3C2) N.W. TYCHO 2

LAMBDA=19.63 W BETA=31.50 S XI=-.2865 ETA=-.5225 L+FL CODE = 32592 ALBEDO =.1257

18H FLAT MOON DATA
FM=.01068

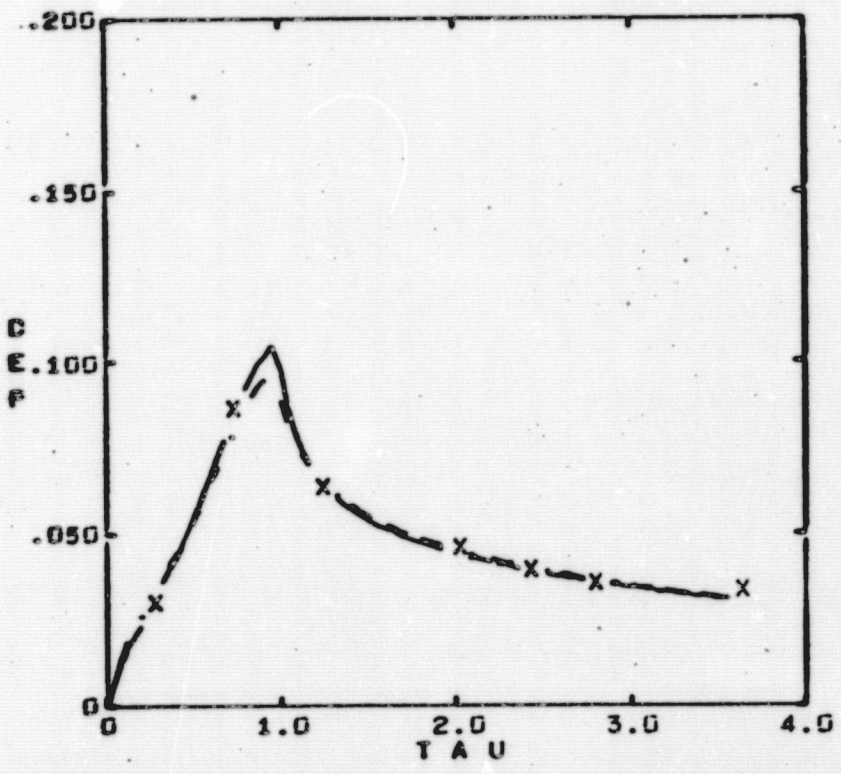
INITIAL TEMPERATURE 377.13
TAU-END OF TOTALITY 3.631

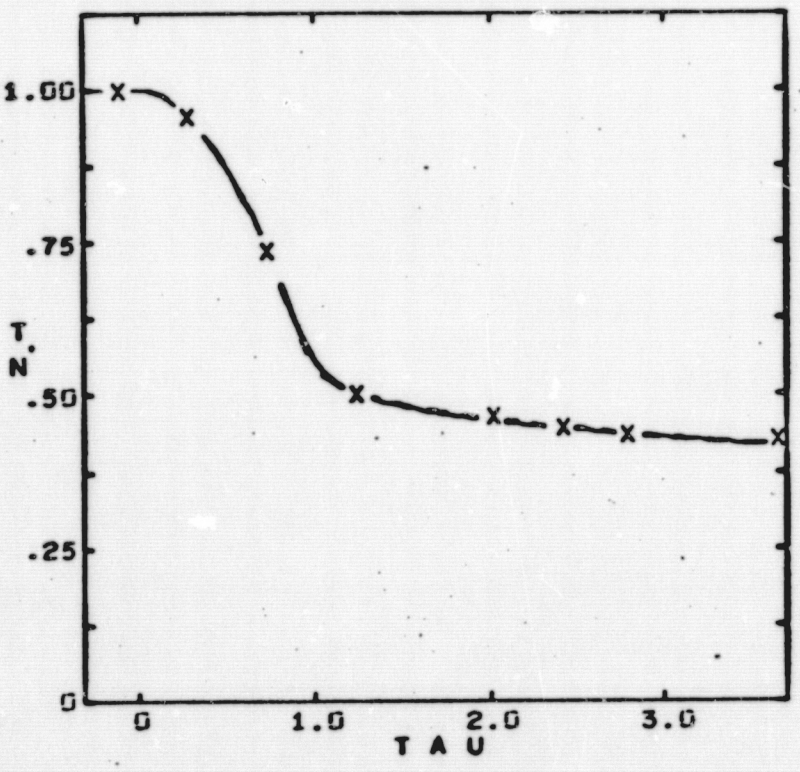
DIFFERENTIAL ENERGY DATA

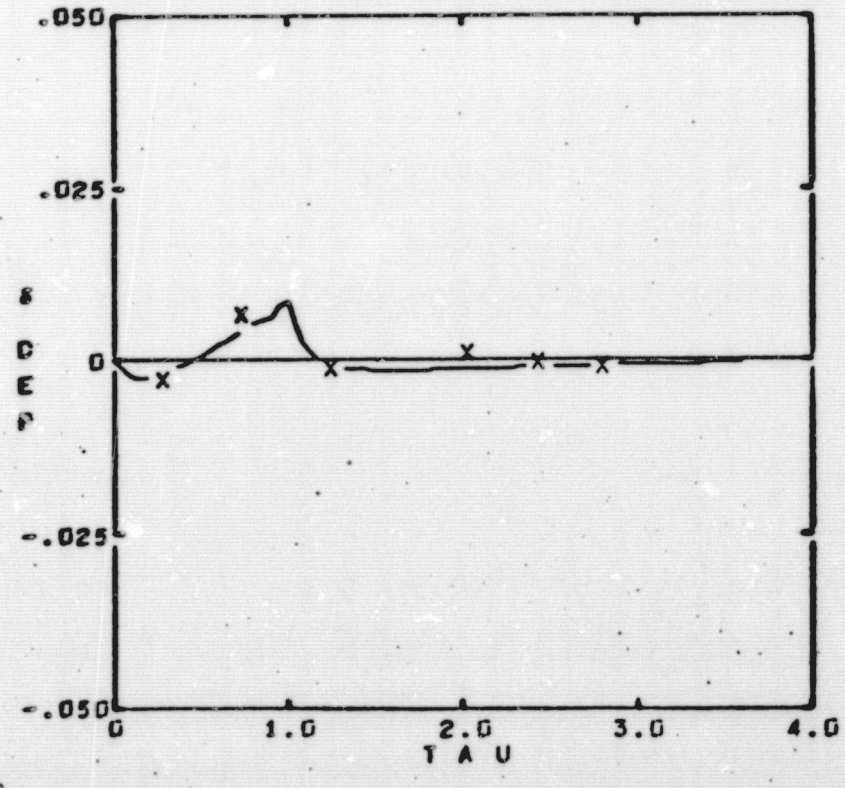
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0284	.0304	-.0020
.50	.0557	.0548	.0009
.75	.0859	.0814	.0045
.93	.1060	.0990	.0070
1.0	.0980	.0894	.0086
1.5	.0539	.0553	-.0014
2.0	.0442	.0454	-.0012
2.5	.0385	.0394	-.0009
3.0	.0344	.0350	-.0006

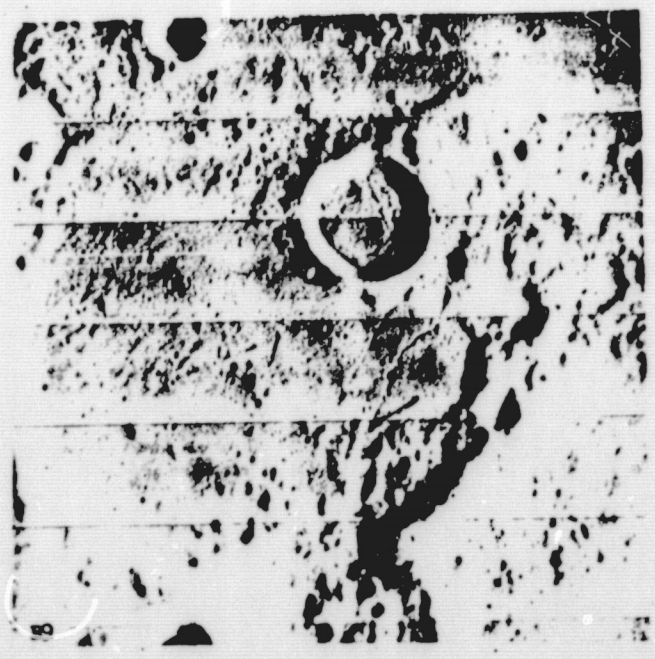
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.914	378.26	1.003	.0120
9H	-0.119	376.99	1.000	-.0016
10H	0.273	361.04	0.957	.0299
11H	0.735	277.88	0.737	.0864
12H	1.243	189.55	0.503	.0638
13H	2.019	174.76	0.463	.0461
14H	2.422	168.60	0.447	.0399
15H	2.791	163.98	0.435	.0357
16H	3.635	162.01	0.430	.0339









70 (3C3) N.E. TYCHO

LAMBDA= 4.00 W BETA=31.67 S XI=-.0594 ETA=-.5250 L+FL CODE = 30562 ALBEDO =.1741

13H FLAT MOON DATA
FM=.02675

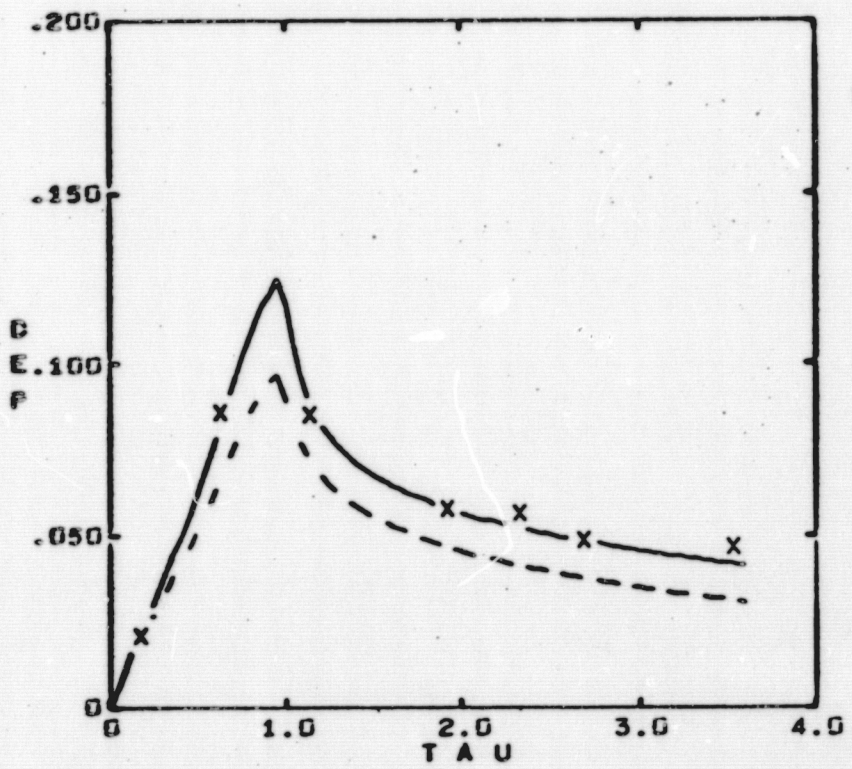
INITIAL TEMPERATURE 376.95
TAU-END OF TOTALITY 3.617

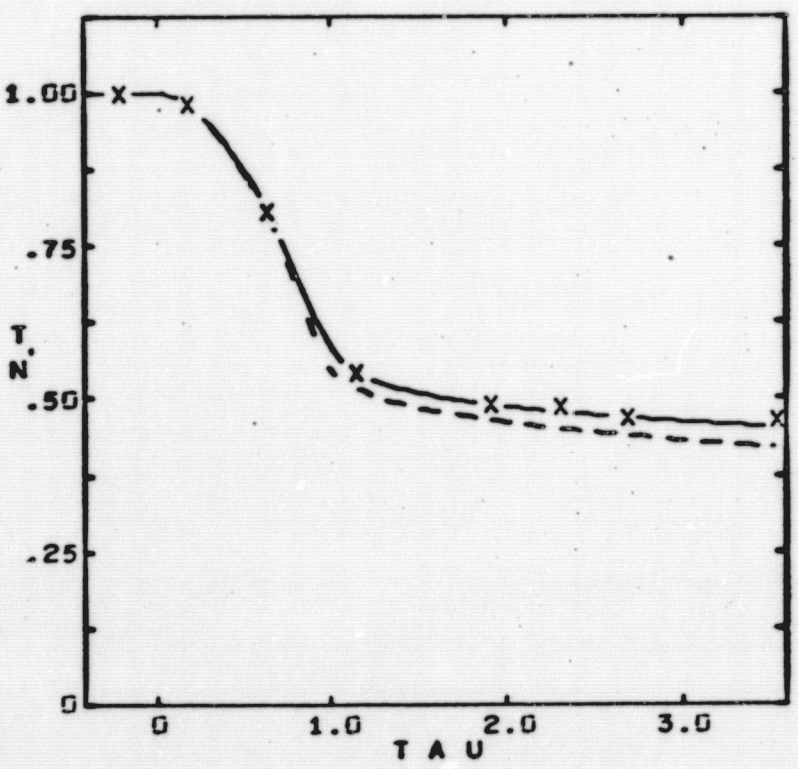
DIFFERENTIAL ENERGY DATA

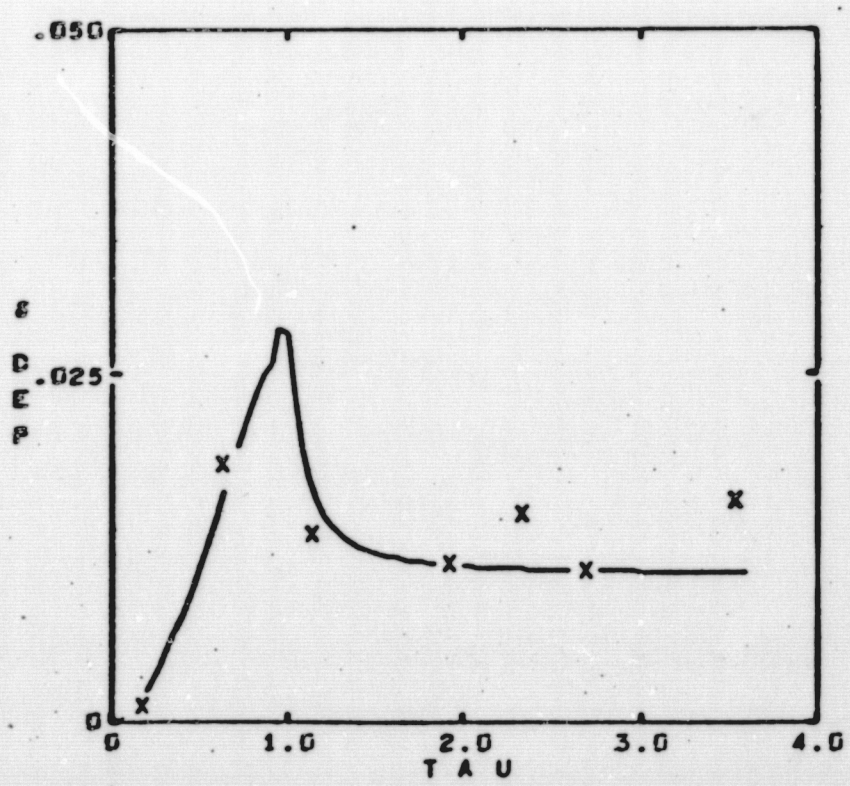
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0306	.0273	.0033
.50	.0640	.0527	.0113
.75	.1012	.0804	.0208
.93	.1260	.0988	.0272
1.0	.1173	.0894	.0279
1.5	.0675	.0554	.0121
2.0	.0567	.0455	.0112
2.5	.0503	.0394	.0109
3.0	.0458	.0349	.0109

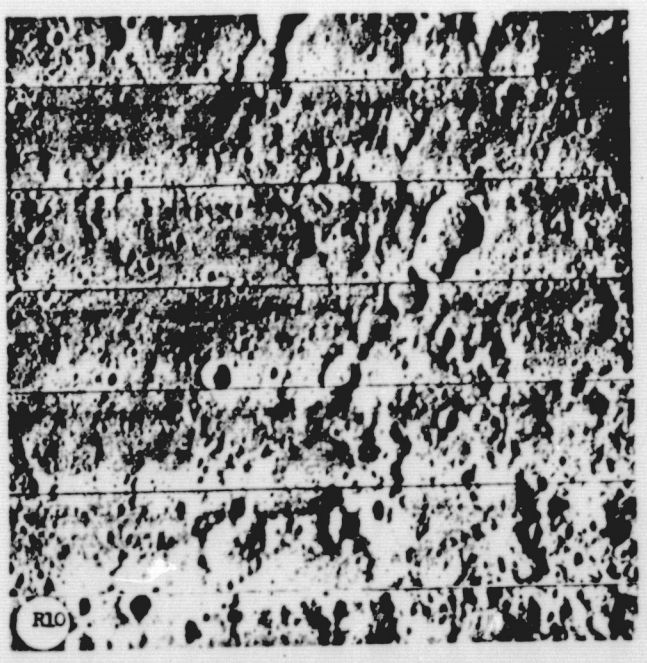
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.014	378.68	1.005	.0185
9H	-0.220	376.58	0.999	-.0040
10H	0.170	370.43	0.983	.0209
11H	0.633	304.39	0.808	.0860
12H	1.138	203.65	0.540	.0852
13H	1.912	185.13	0.491	.0582
14H	2.317	183.63	0.487	.0563
15H	2.684	176.94	0.469	.0485
16H	3.536	175.60	0.466	.0471









P1 (2C1) E. ARISTARCHUS

LAMBDA=45.00 W BETA=22.25 N XI=-.6545 ETA=+.3786 L+PL CODE = 26358 ALBEDO =.0735

INITIAL TEMPERATURE 369.32
TAU-END OF TOTALITY 2.972

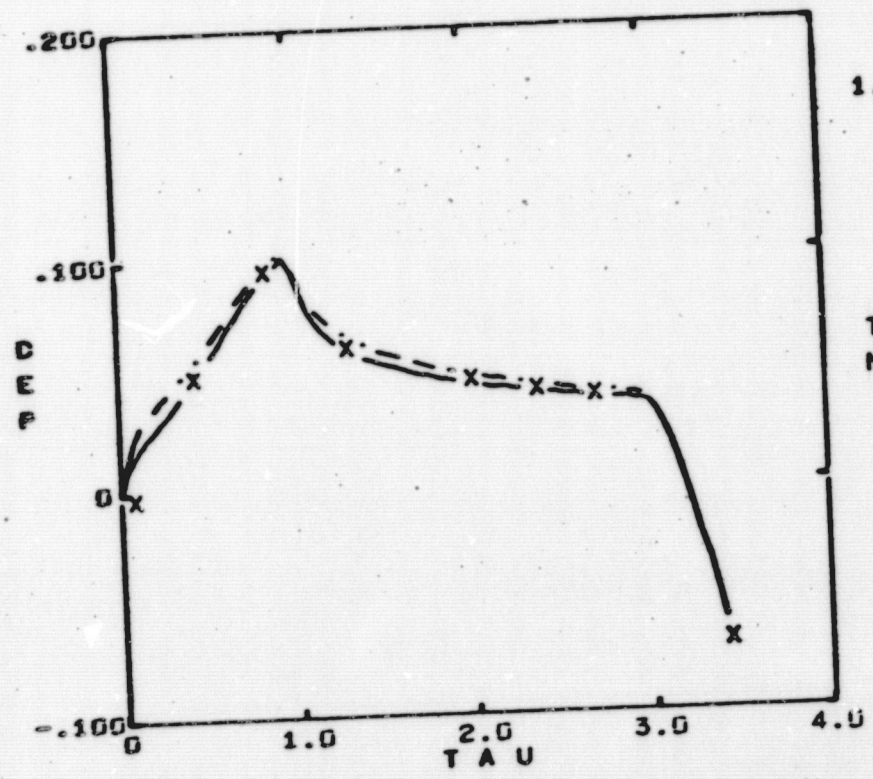
13H FLAT MOON DATA
FM=.02993

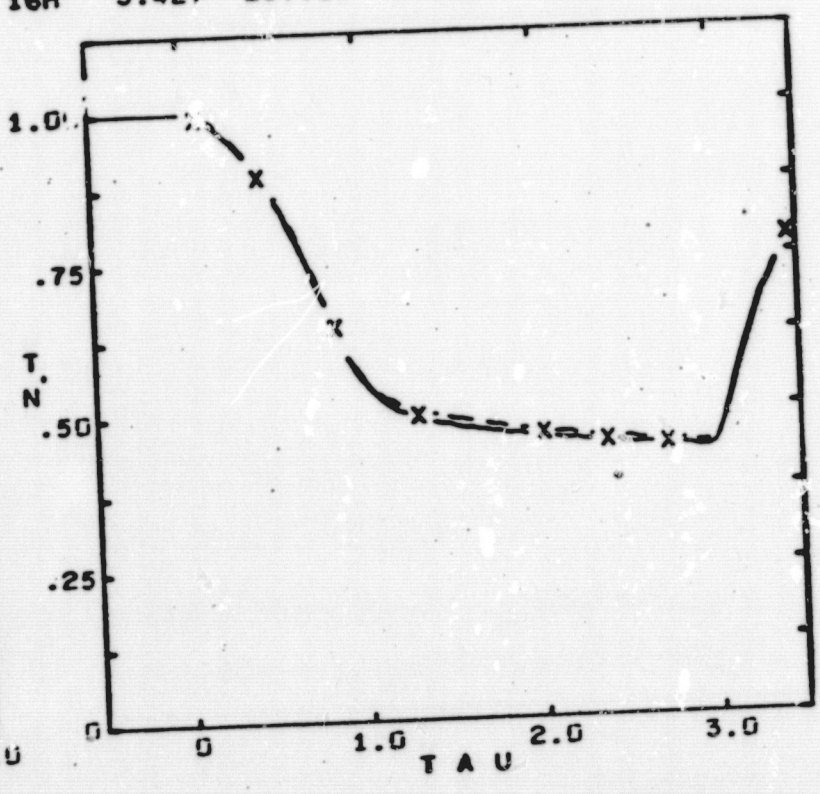
DIFFERENTIAL ENERGY DATA

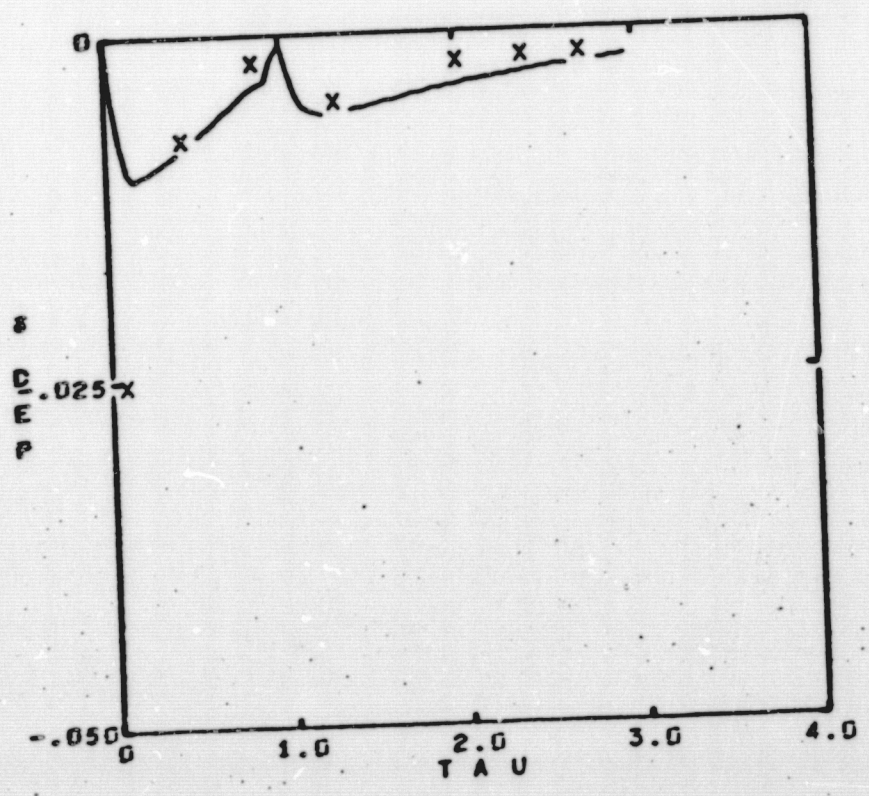
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0303	.0401	-.0098
.50	.0557	.0632	-.0075
.75	.0837	.0885	-.0048
.93	.1020	.1050	-.0030
1.0	.0944	.0951	-.0007
1.5	.0535	.0587	-.0052
2.0	.0444	.0483	-.0039
2.5	.0392	.0420	-.0028

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.659	369.32	1.000	.0000
9H	0.078	366.58	0.993	-.0034
10H	0.431	330.81	0.896	.0489
11H	0.849	238.03	0.645	.0953
12H	1.308	183.40	0.497	.0608
13H	2.007	171.16	0.463	.0461
14H	2.375	166.84	0.452	.0416
15H	2.705	163.49	0.443	.0384
16H	3.427	287.64	0.779	-.0698









72 (2C2) S.E. ARISTARCHUS

LAMBDA=38.00 W BETA=16.00 N. XI=-.5918 ETA=+.2756 L+PL CODE = 25298 ALBEDO =.0741

13H FLAT MOON DATA
FM=.02371

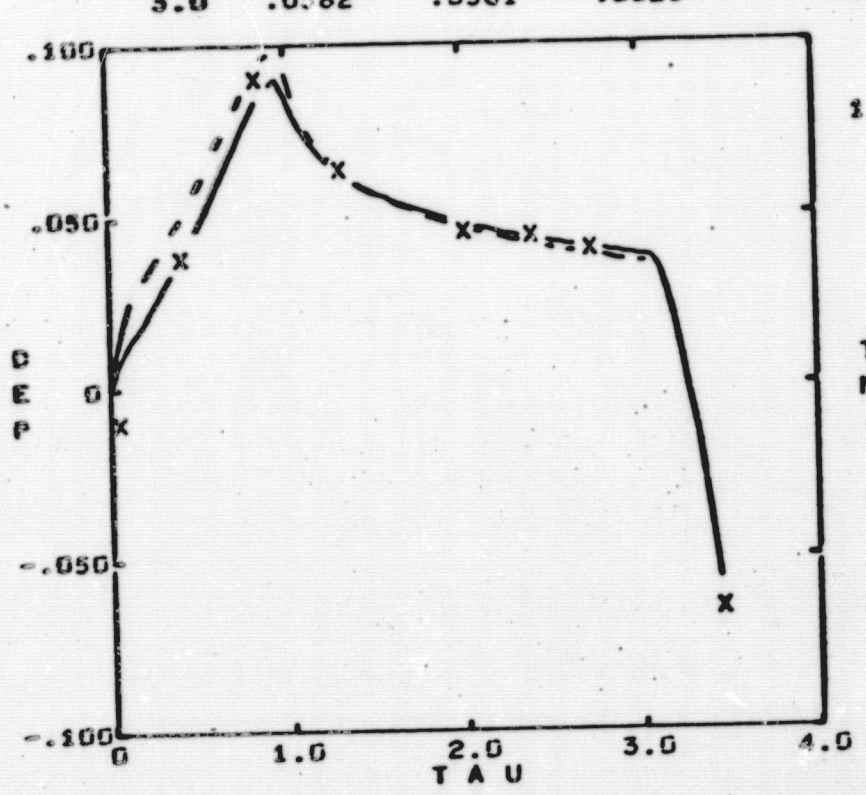
INITIAL TEMPERATURE 378.30
TAU-END OF TOTALITY 3.068

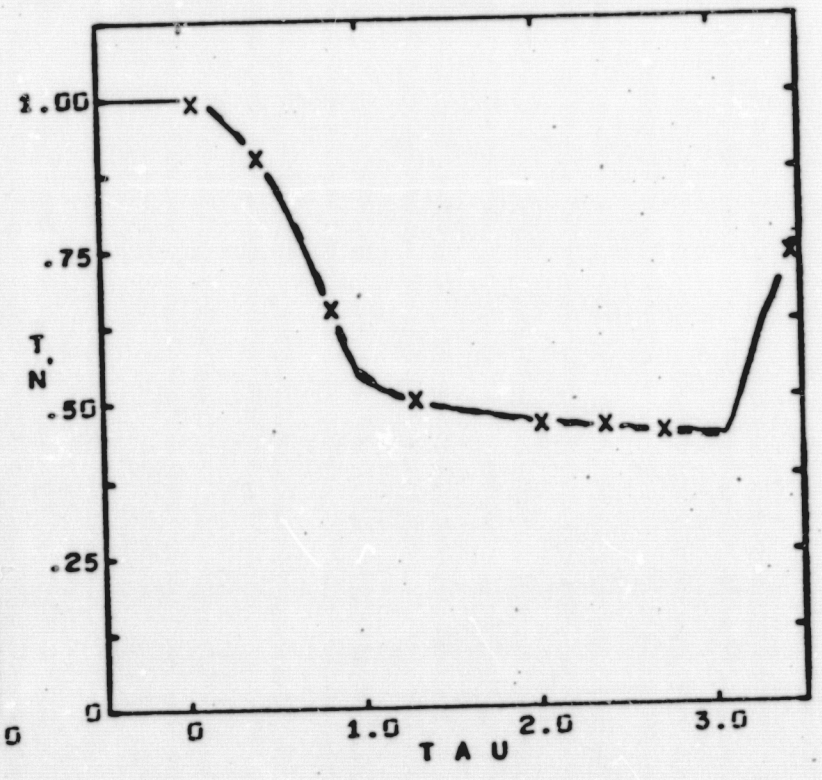
DIFFERENTIAL ENERGY DATA

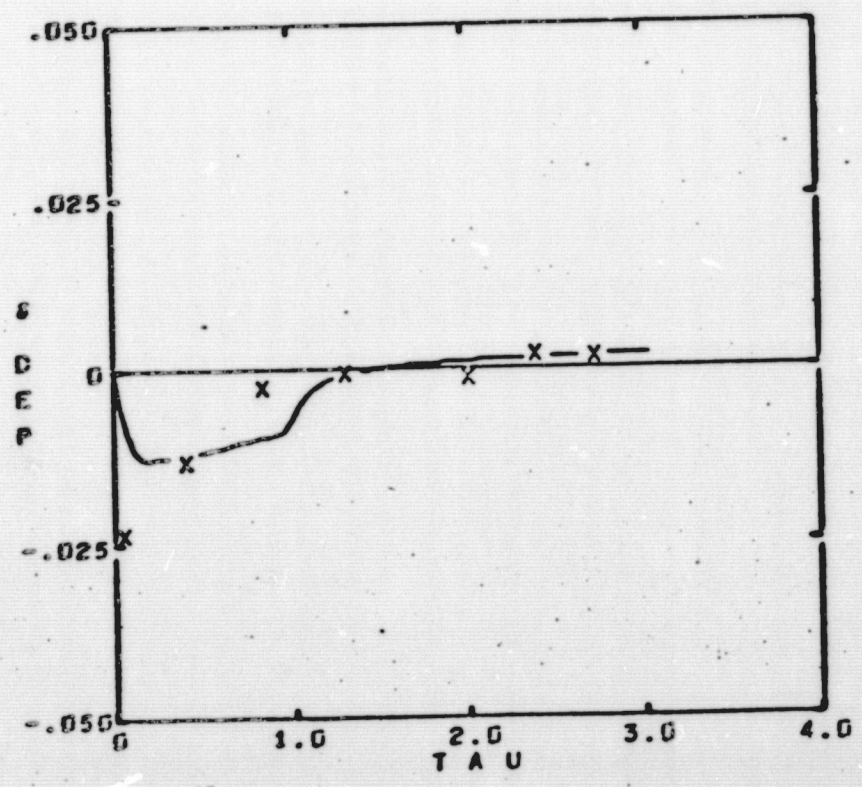
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0237	.0364	-.0127
.50	.0479	.0596	-.0117
.75	.0747	.0849	-.0102
.93	.0924	.1016	-.0092
1.0	.0846	.0918	-.0072
1.5	.0568	.0567	.0001
2.0	.0478	.0466	.0012
2.5	.0422	.0405	.0017
3.0	.0382	.0361	.0021

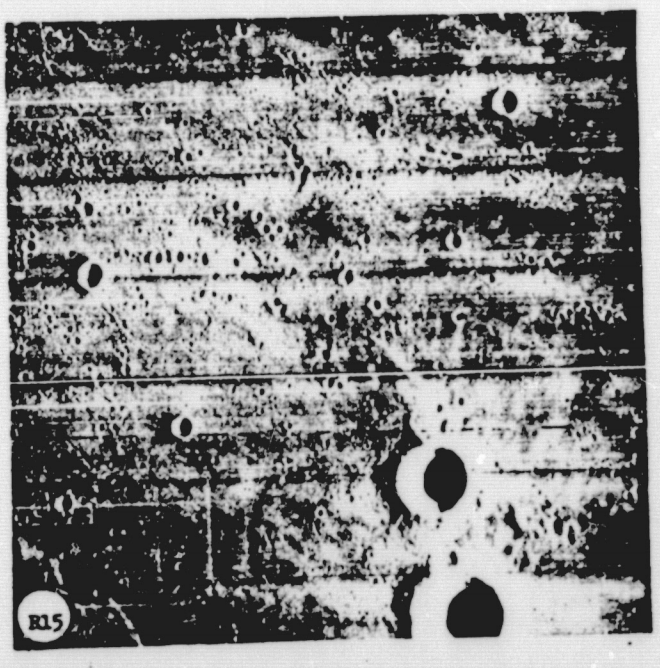
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.676	378.30	1.000	.0000
9H	0.053	376.05	0.994	-.0102
10H	0.412	341.26	0.902	.0378
11H	0.836	246.47	0.652	.0904
12H	1.303	189.71	0.501	.0632
13H	2.014	174.28	0.461	.0450
14H	2.386	172.89	0.457	.0436
15H	2.724	169.50	0.448	.0403
16H	3.462	278.42	0.736	-.0646









73 (2C3) W. KEPLER

LAMBDA=42.84 W BETA= 7.17 N XI=-.6746 ETA=+.1248 L+PL CODE = 26172 ALBEDO =.0712

13H FLAT MOON DATA
FM=.05917

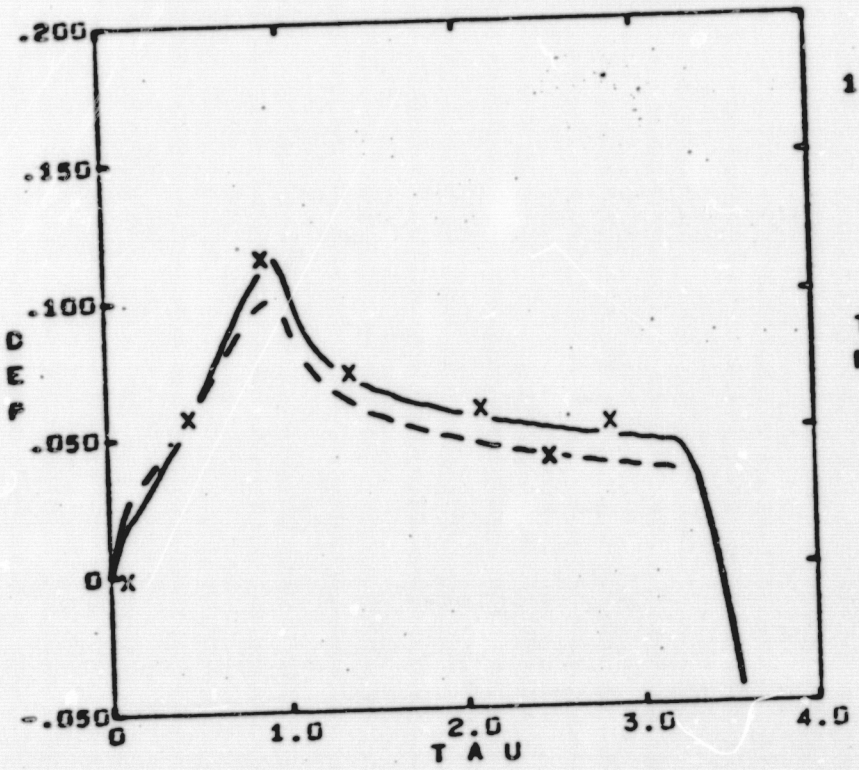
INITIAL TEMPERATURE 374.37
TAU-END OF TOTALITY 3.218

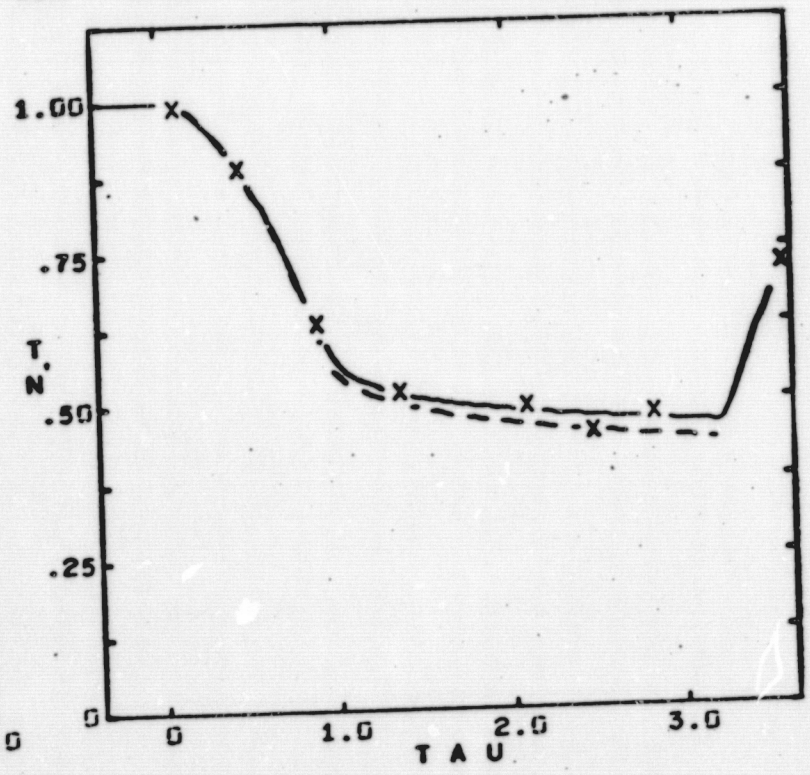
DIFFERENTIAL ENERGY DATA

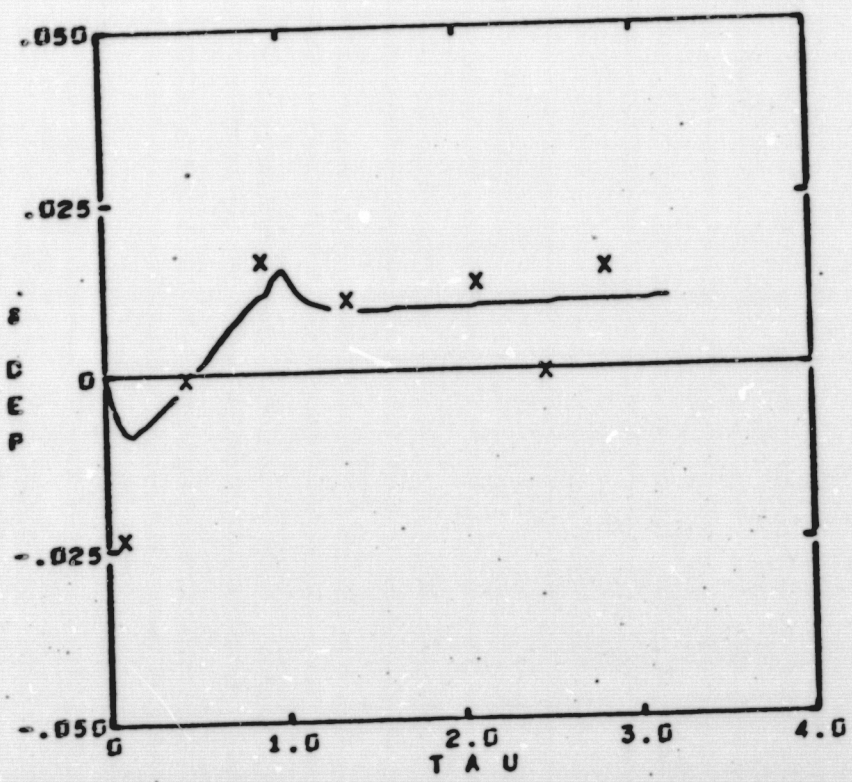
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0322	.0389	-.0067
.50	.0620	.0620	.0000
.75	.0950	.0872	.0078
.93	.1167	.1038	.0129
1.0	.1091	.0939	.0152
1.5	.0671	.0580	.0091
2.0	.0570	.0477	.0093
2.5	.0512	.0415	.0097
3.0	.0470	.0370	.0100

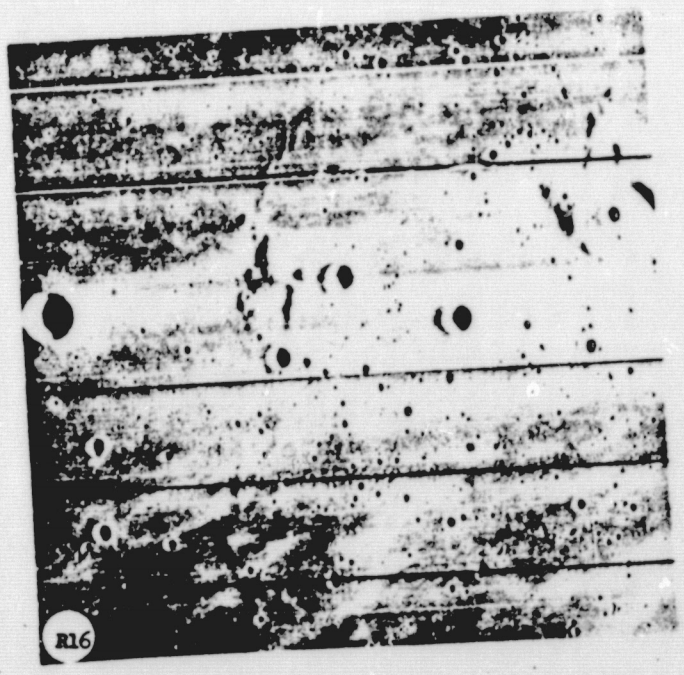
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.659	374.37	1.000	.0000
9H	0.087	371.42	0.992	-.0009
10H	0.456	333.05	0.890	.0572
11H	0.891	237.75	0.635	.1151
12H	1.367	194.53	0.520	.0729
13H	2.097	184.73	0.493	.0593
14H	2.478	168.87	0.451	.0414
15H	2.824	179.80	0.480	.0532
16H	3.581	269.63	0.720	-.0529









LAMBDA=39.90 W BETA= 9.25 N XI=-.6331 ETA=+.1607 L+PL CODE = 26136 ALBEDO =.0813

83H FLAT MOON DATA
FM=.01835

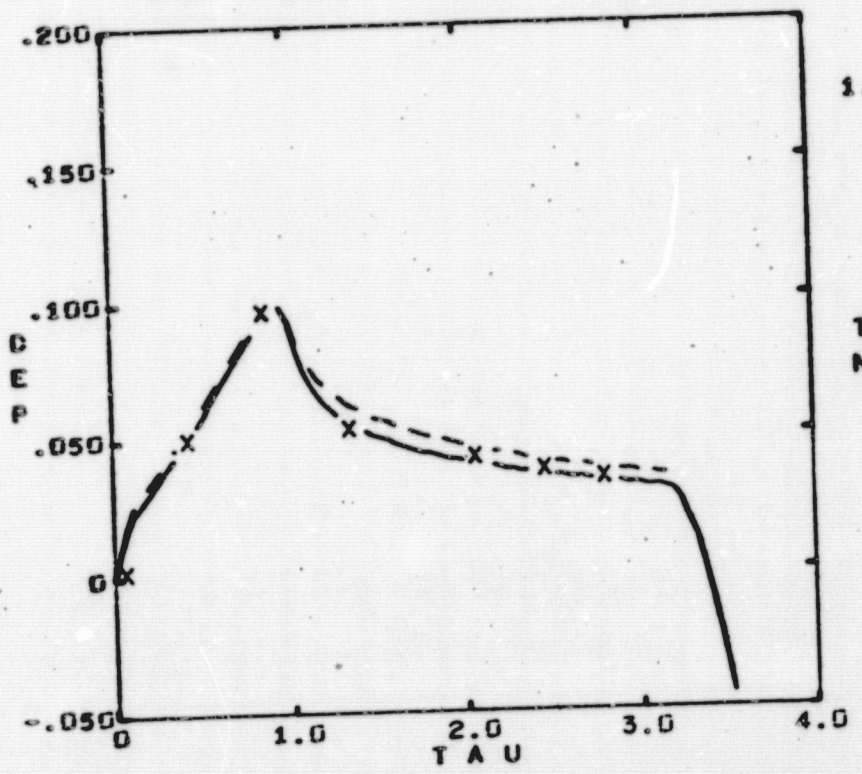
INITIAL TEMPERATURE 376.28
TAU-END OF TOTALITY 3.181

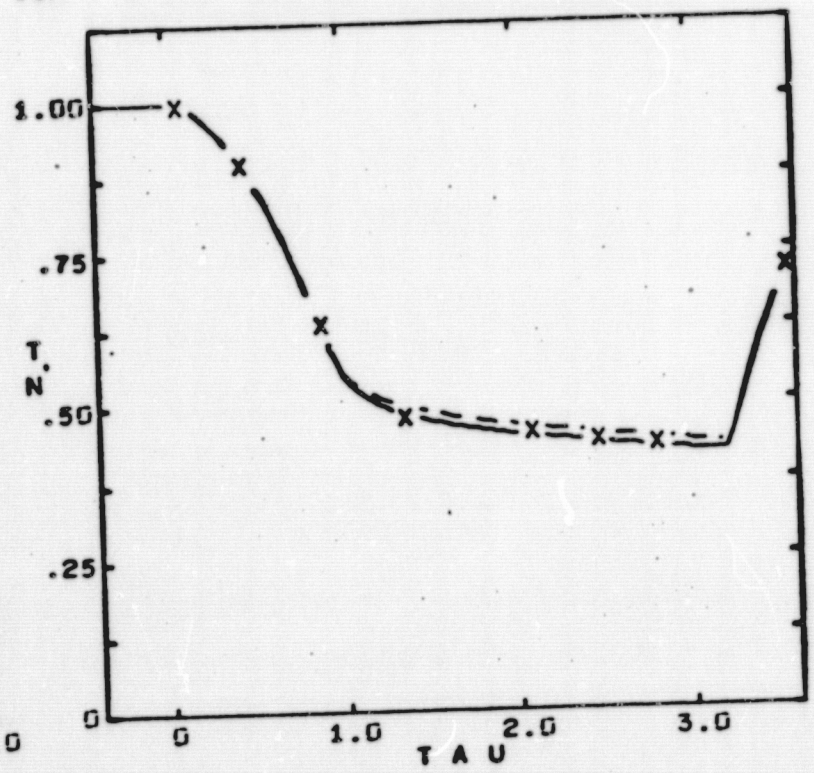
DIFFERENTIAL ENERGY DATA

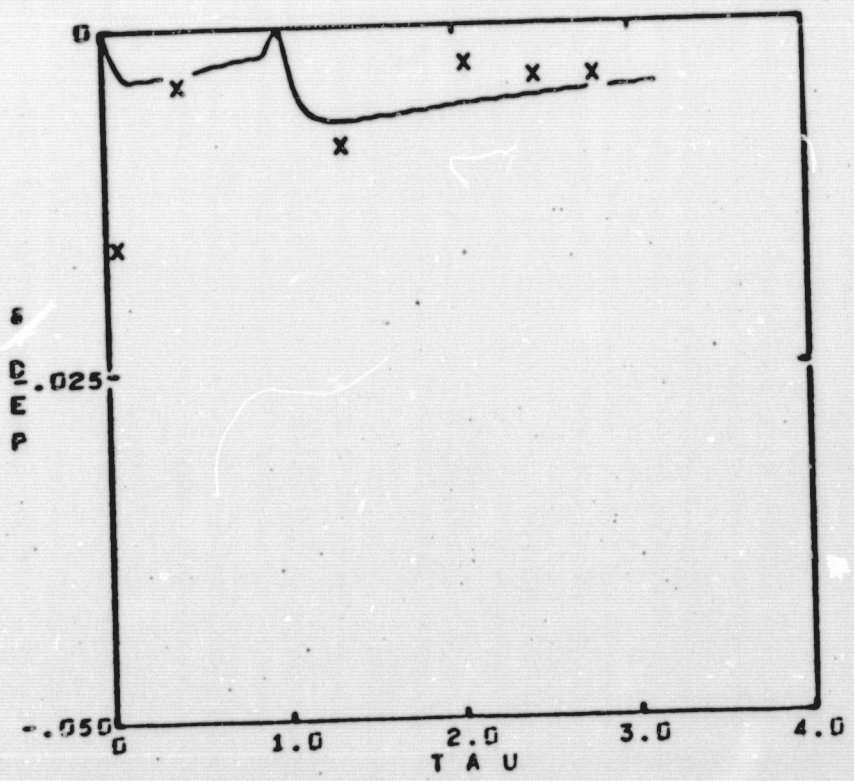
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0336	.0372	-.0036
.50	.0573	.0604	-.0031
.75	.0833	.0857	-.0024
.93	.1004	.1023	-.0019
1.0	.0925	.0925	.0000
1.5	.0504	.0571	-.0067
2.0	.0411	.0469	-.0058
2.5	.0357	.0408	-.0051
3.0	.0319	.0364	-.0045

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.672	376.28	1.000	.0000
9H	0.070	374.46	0.995	.0022
10H	0.436	337.25	0.896	.0501
11H	0.868	238.18	0.633	.0964
12H	1.344	181.11	0.481	.0537
13H	2.068	171.44	0.456	.0431
14H	2.447	165.64	0.440	.0375
15H	2.790	161.96	0.430	.0343
16H	3.545	270.62	0.719	-.0534







8S (2C5) N.W. KEPLER 2

LAMBDA=32.00 W BETA= 6.42 N XI=-.5266 ETA=+.1118 L+PL CODE = 25131 ALBEDO =.0722

15H FLAT MOON DATA
FM=.01673

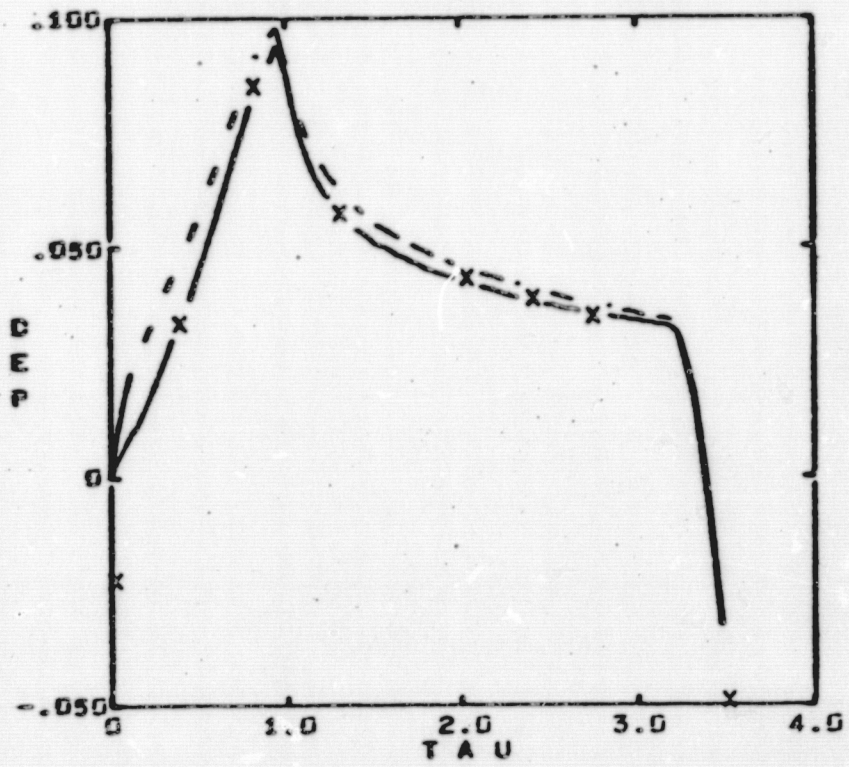
INITIAL TEMPERATURE 385.76
TAU-END OF TOTALITY 3.213

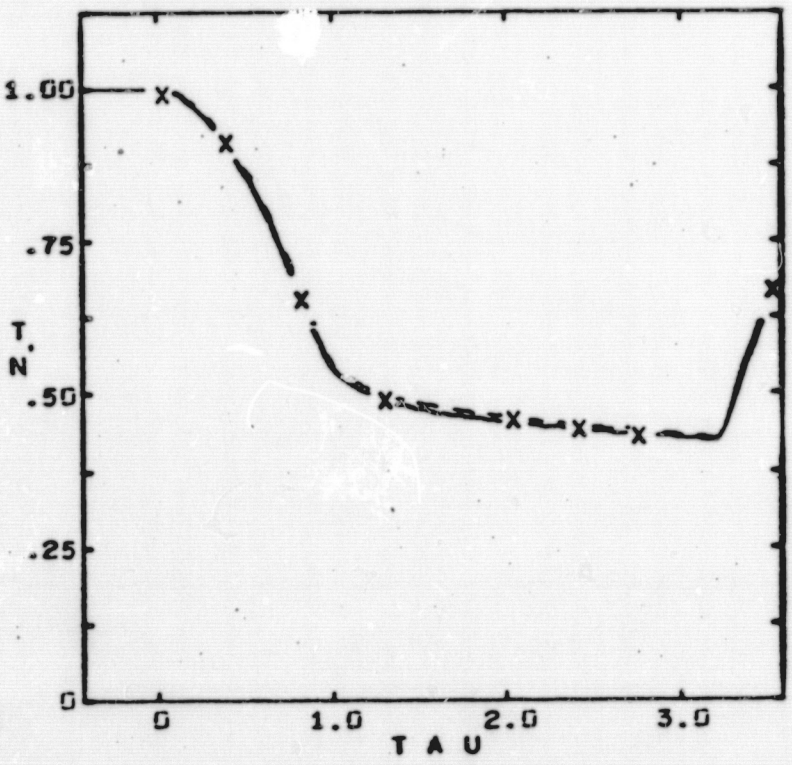
DIFFERENTIAL ENERGY DATA

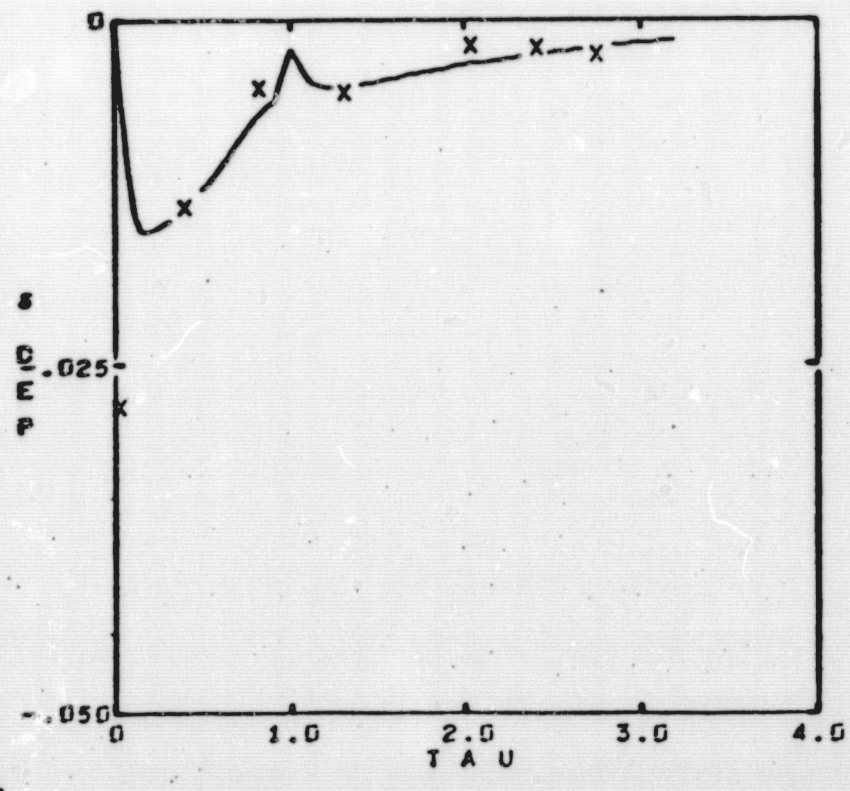
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0189	.0339	-.0150
.50	.0453	.0575	-.0122
.75	.0751	.0831	-.0080
.93	.0948	.1000	-.0052
1.0	.0882	.0903	-.0021
1.5	.0513	.0558	-.0045
2.0	.0426	.0458	-.0032
2.5	.0374	.0398	-.0024
3.0	.0338	.0354	-.0016

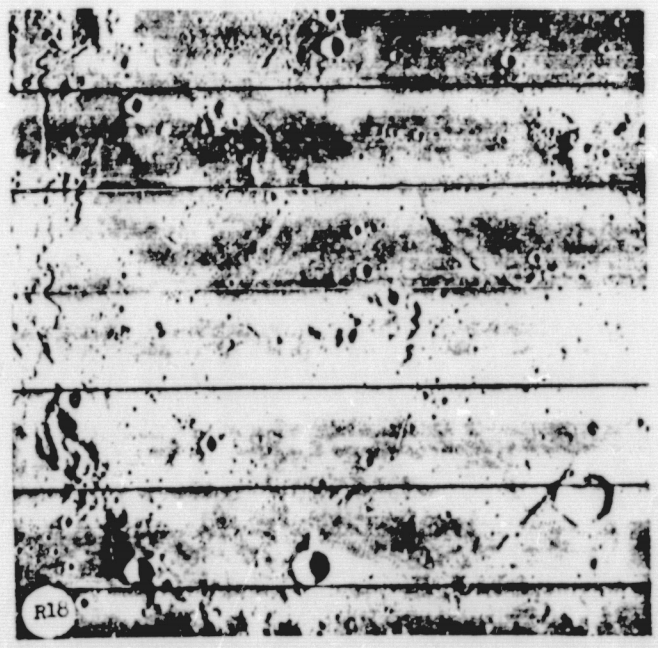
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.722	385.76	1.000	.0000
9H	0.024	383.21	0.993	-.0225
10H	0.392	351.44	0.911	.0333
11H	0.826	253.61	0.657	.0853
12H	1.302	188.85	0.490	.0574
13H	2.031	176.18	0.457	.0435
14H	2.412	171.17	0.444	.0388
15H	2.758	166.78	0.432	.0349
16H	3.521	258.60	0.670	-.0490









LAMBDA=39.67 W BETA=12.00 N XI=-.6244 ETA=+.2079 L+PL CODE = 26221 ALBEDO =.0736

83H FLAT MOON DATA
FM=.00151

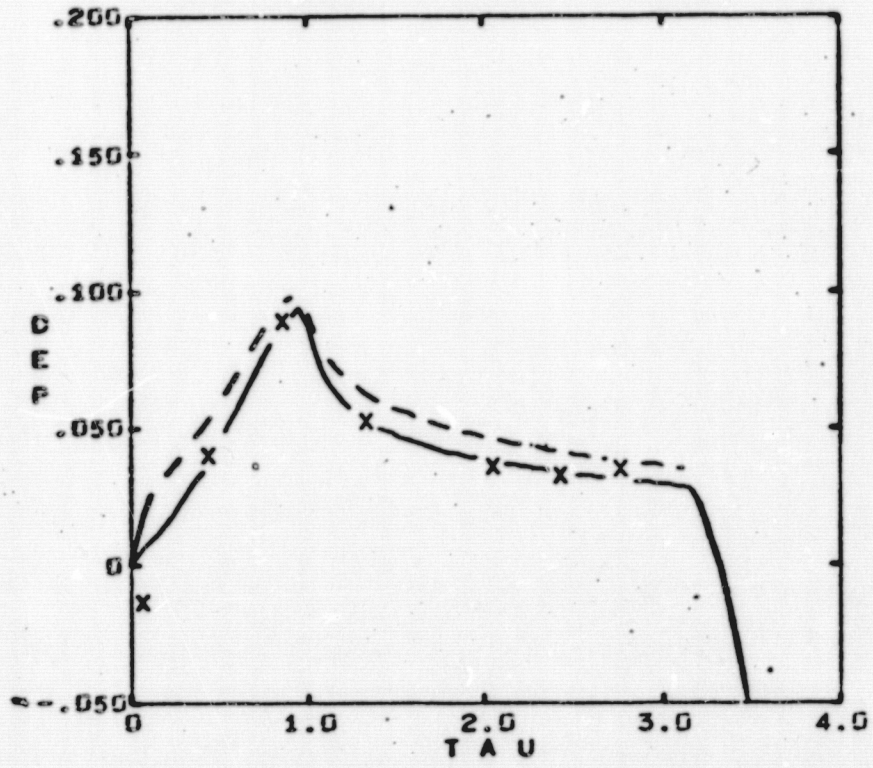
INITIAL TEMPERATURE 378.57
TAU-END OF TOTALITY 3.137

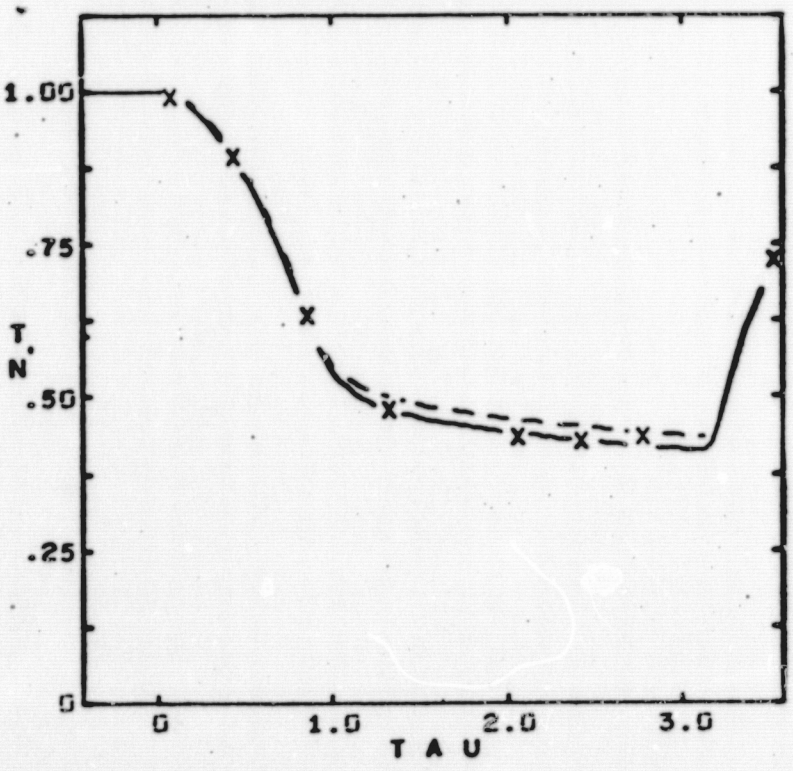
DIFFERENTIAL ENERGY DATA

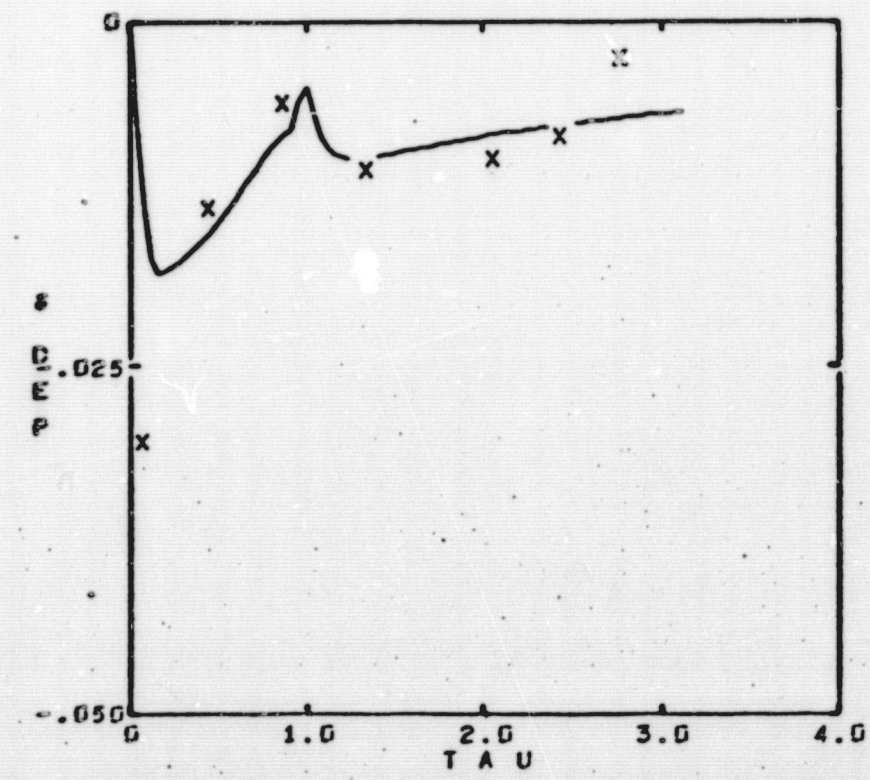
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0194	.0371	-.0177
.50	.0459	.0603	-.0144
.75	.0756	.0856	-.0100
.93	.0951	.1022	-.0071
1.0	.0876	.0924	-.0048
1.5	.0475	.0570	-.0095
2.0	.0386	.0469	-.0083
2.5	.0334	.0408	-.0074
3.0	.0297	.0364	-.0067

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.670	378.57	1.000	.0000
9H	0.066	375.42	0.992	-.0135
10H	0.430	338.77	0.895	.0399
11H	0.860	239.40	0.632	.0893
12H	1.330	180.91	0.478	.0522
13H	2.049	165.09	0.436	.0362
14H	2.427	161.62	0.427	.0332
15H	2.767	164.45	0.434	.0356
16H	3.515	274.53	0.725	-.0622









LAMBDA=30.83 E BETA=10.84 S XI=+.5034 ETA=-.1880 L+FL CODE = 45109 ALBEDO =.1096

83H FLAT MOON DATA
FM=.00011

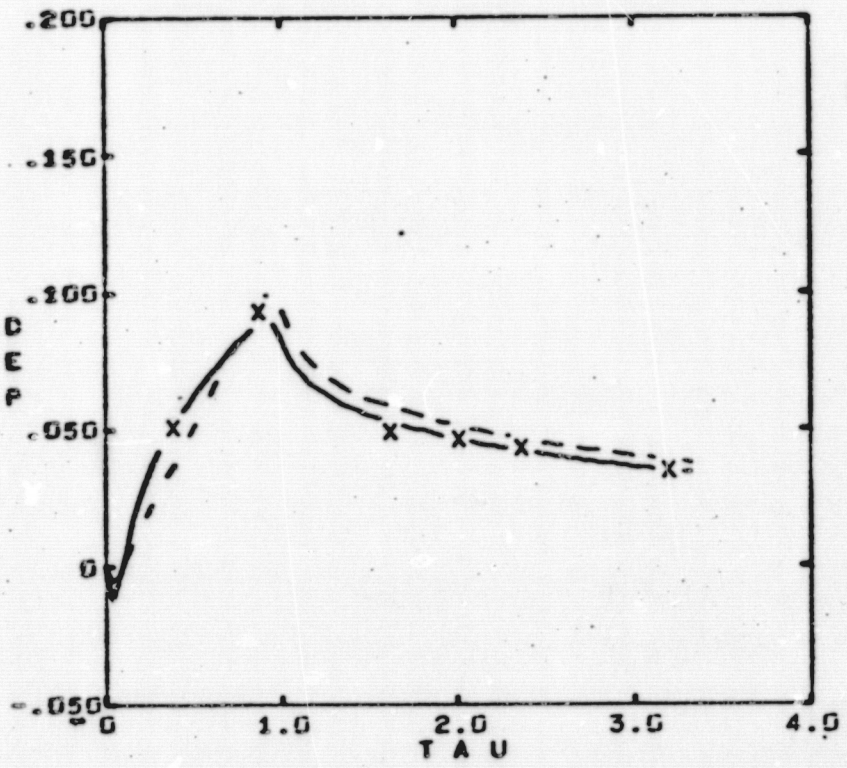
INITIAL TEMPERATURE 382.43
TAU-END OF TOTALITY 3.351

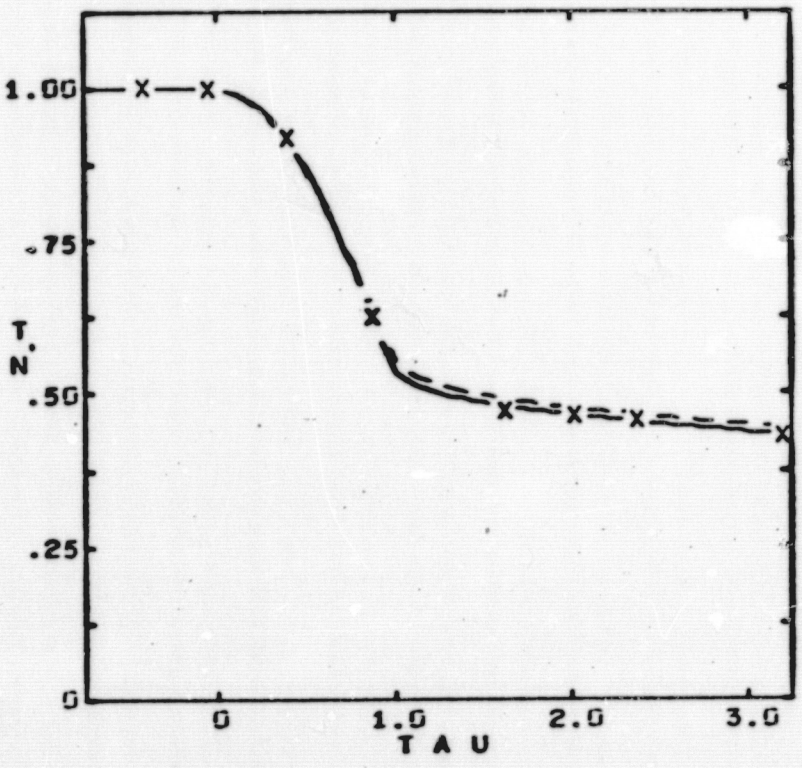
DIFFERENTIAL ENERGY DATA

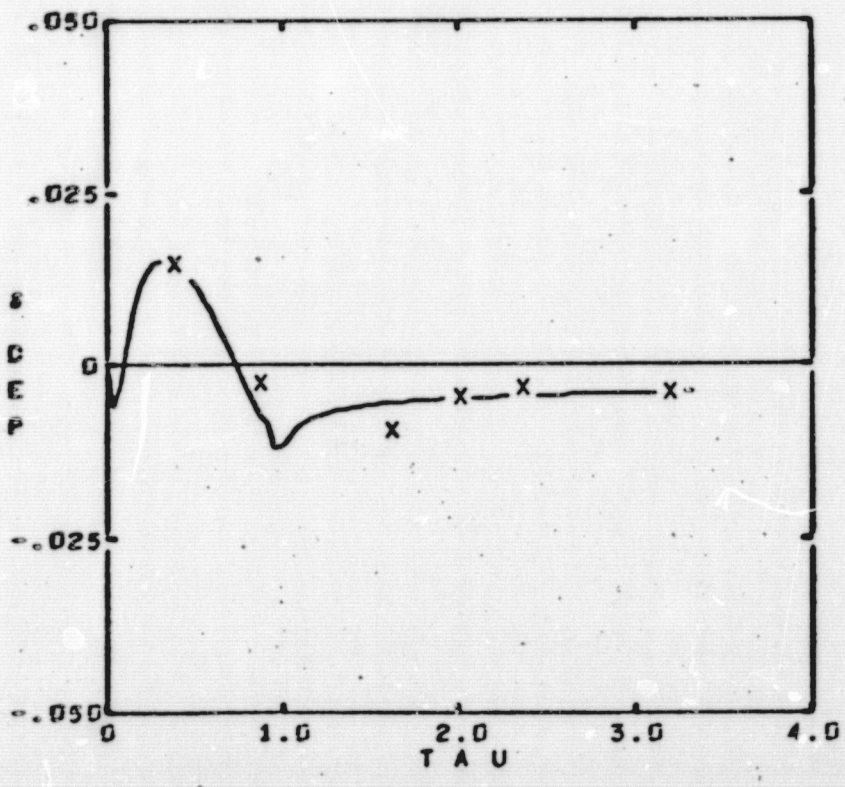
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0332	.0193	.0139
.50	.0617	.0499	.0118
.75	.0812	.0818	-.0006
.93	.0924	.1032	-.0108
1.0	.0824	.0941	-.0117
1.5	.0555	.0612	-.0057
2.0	.0467	.0515	-.0048
2.5	.0410	.0453	-.0043
3.0	.0366	.0406	-.0040

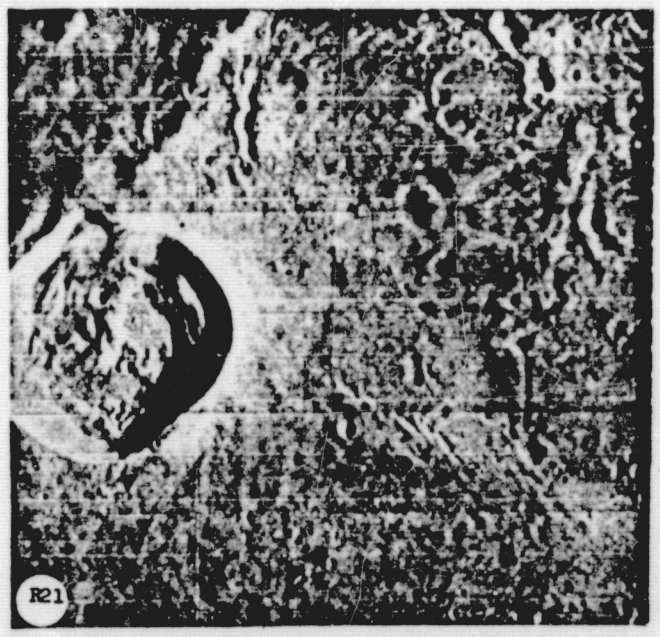
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.192	386.24	1.010	.0404
9H	-0.432	383.46	1.003	.0108
10H	-0.056	382.12	0.999	-.0033
11H	0.389	351.53	0.919	.0507
12H	0.875	239.54	0.626	.0933
13H	1.618	180.02	0.471	.0491
14H	2.009	178.02	0.465	.0470
15H	2.360	174.98	0.458	.0438
16H	3.193	165.82	0.434	.0353









78 (169) N. ARISTILLUS

LAMBDA= 0.08 E BETA=38.00 N XI=+.0011 ETA=+.6157 L+PL CODE = 10602 ALBEDO =.0811

13H FLAT MOON DATA
FM=.00762

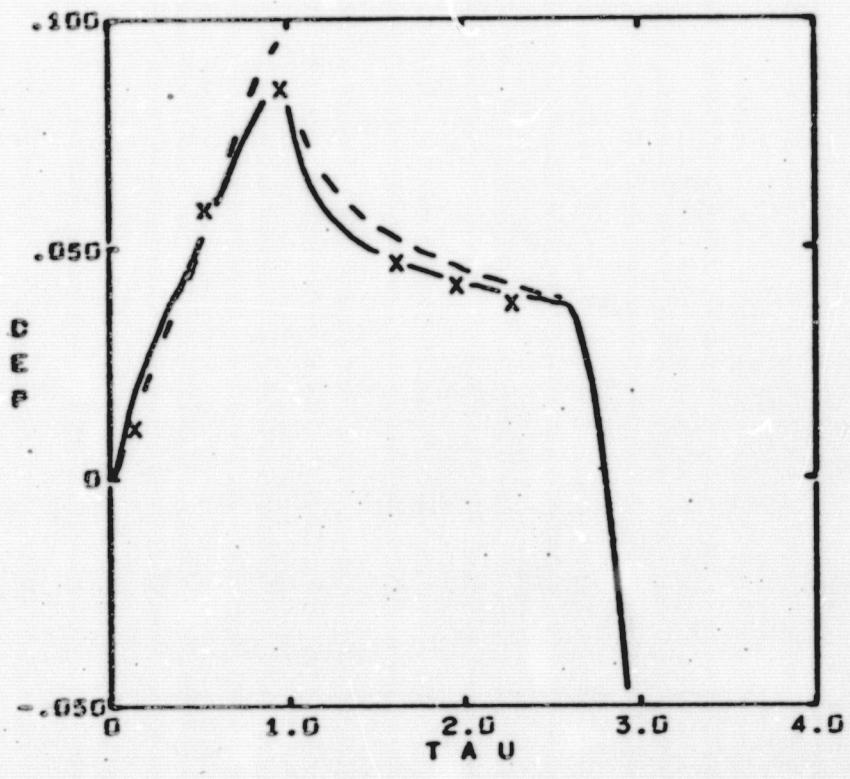
INITIAL TEMPERATURE 381.25
TAU-END OF TOTALITY 2.597

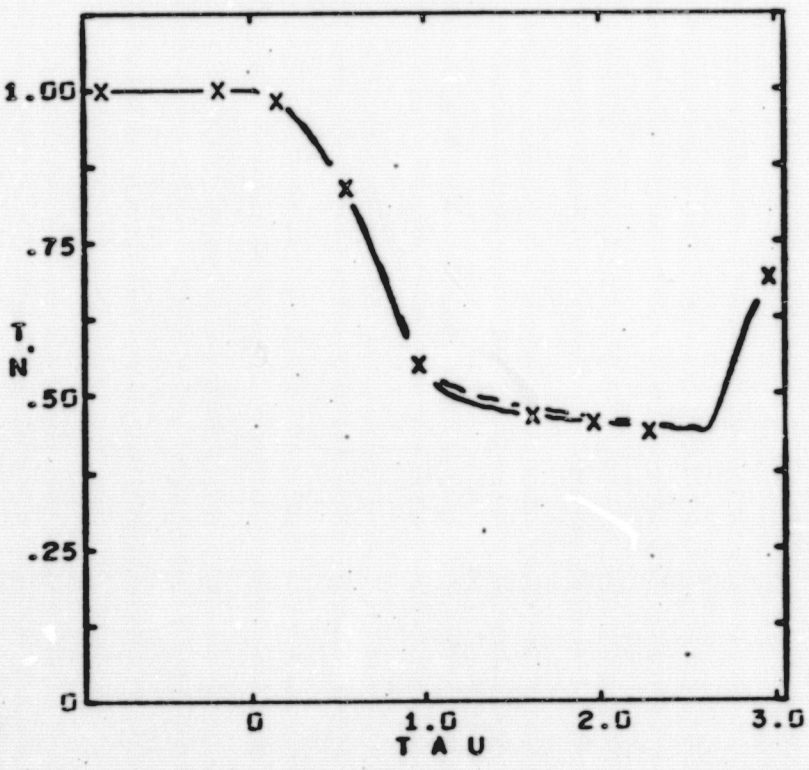
DIFFERENTIAL ENERGY DATA

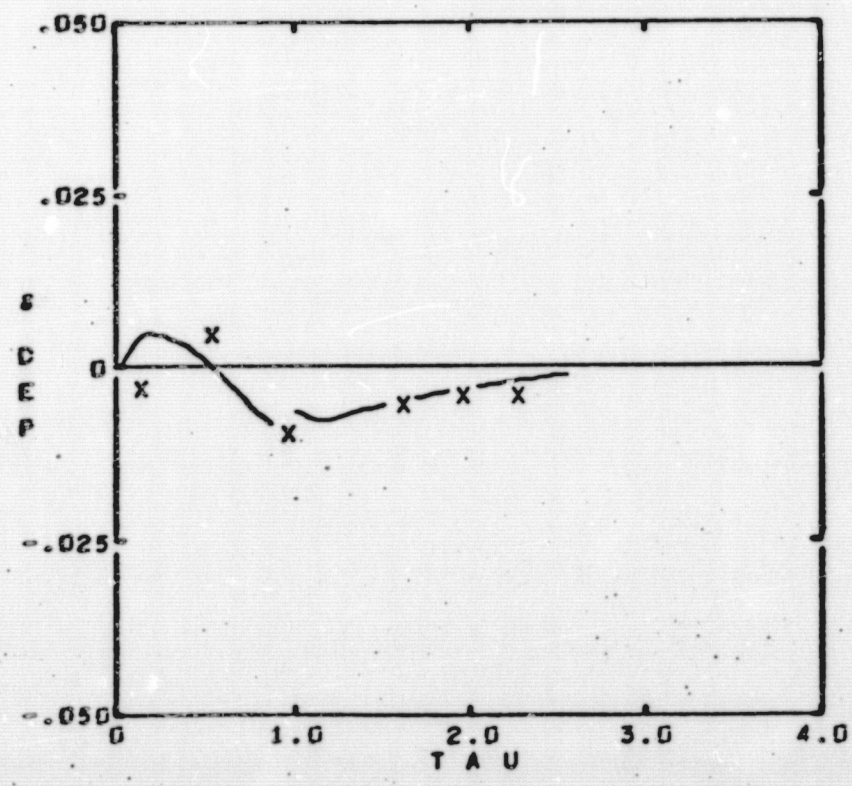
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0284	.0236	.0048
.50	.0506	.0496	.0010
.75	.0725	.0778	-.0053
.93	.0868	.0967	-.0099
1.0	.0813	.0876	-.0063
1.5	.0494	.0550	-.0056
2.0	.0424	.0454	-.0030
2.5	.0382	.0395	-.0013

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.853	381.55	1.001	.0032
9H	-0.188	381.18	1.000	-.0007
10H	0.144	374.87	0.983	.0104
11H	0.534	319.57	0.838	.0582
12H	0.962	209.81	0.550	.0847
13H	1.614	177.34	0.465	.0468
14H	1.959	172.61	0.453	.0420
15H	2.267	168.15	0.441	.0378
16H	2.958	264.51	0.694	-.0630









79 (467) W. LANGRENUS

LAMBDA=54.49 E BETA=10.00 S XI=+.8017 ETA=-.1736 L+PL CODE = 48107 ALBEDO =.0740

13H FLAT MOON DATA
FM=.00858

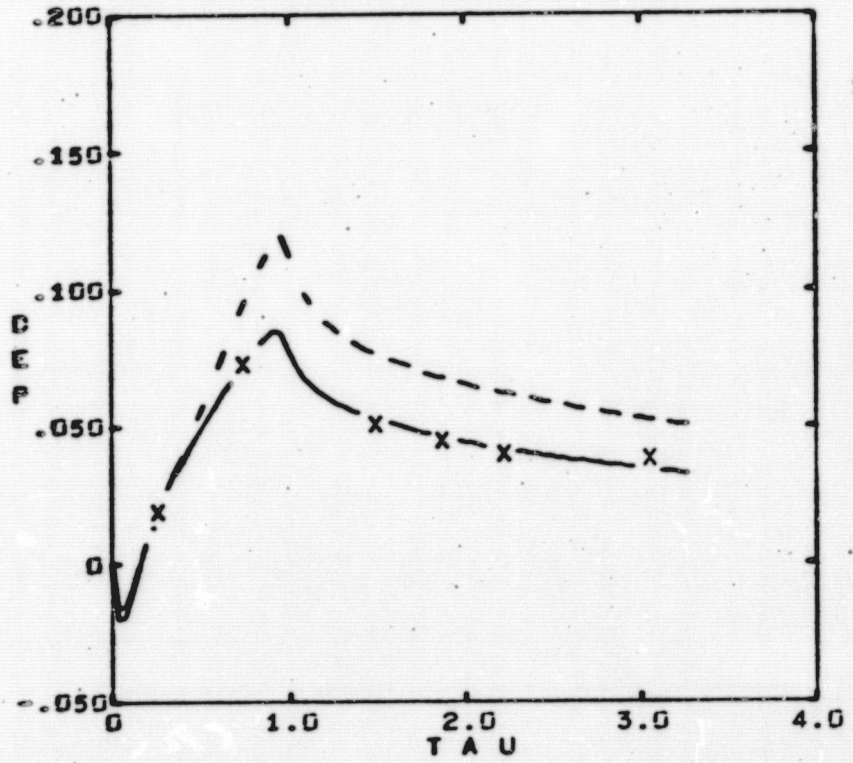
INITIAL TEMPERATURE 367.46
TAU-END OF TOTALITY 3.309

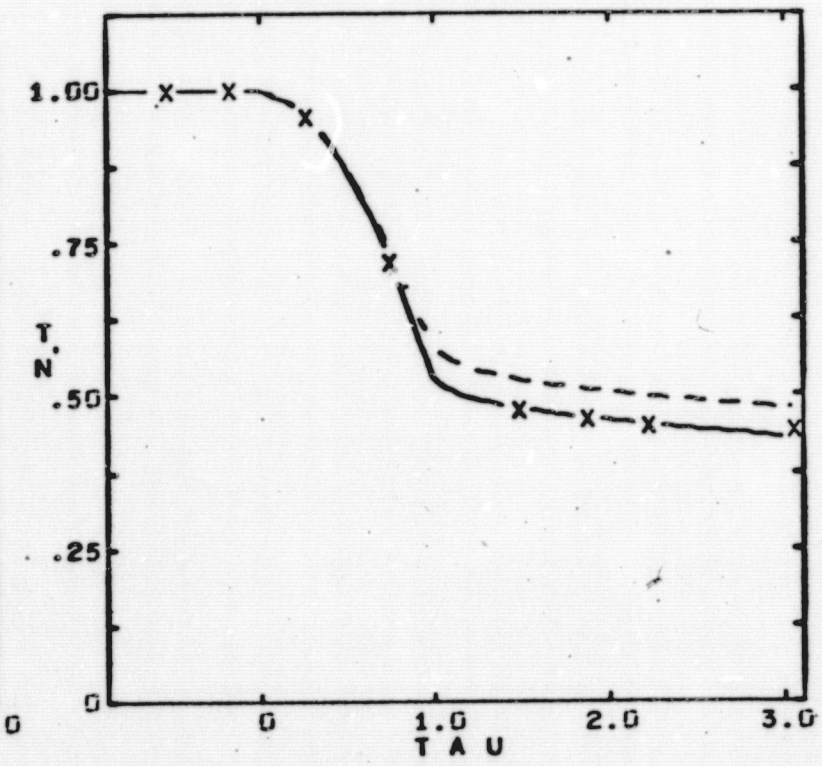
DIFFERENTIAL ENERGY DATA

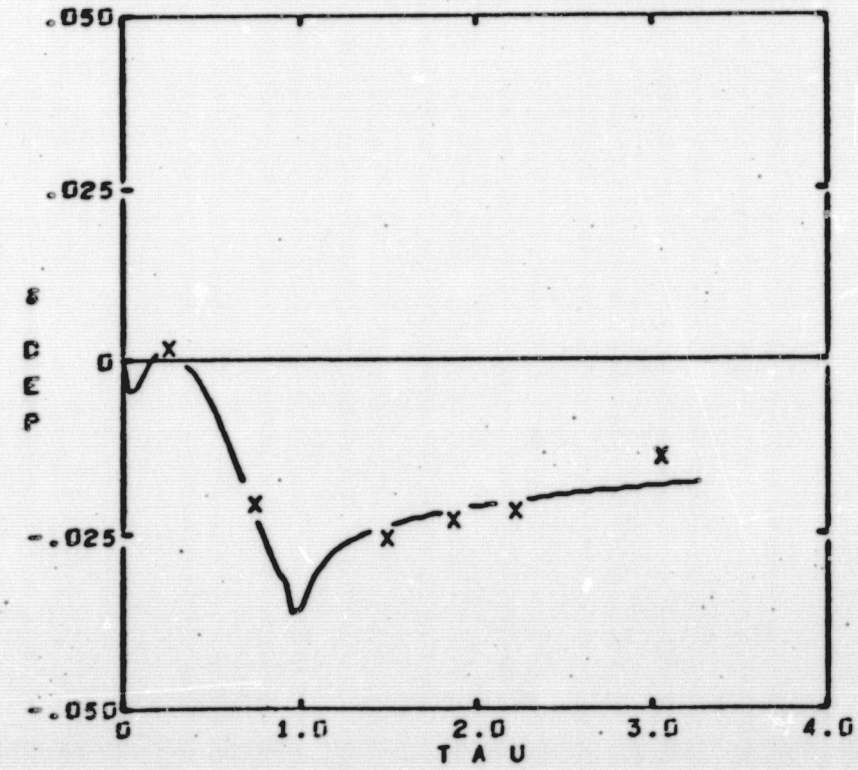
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0170	.0154	.0016
.50	.0489	.0554	-.0065
.75	.0727	.0950	-.0223
.93	.0871	.1215	-.0344
1.0	.0768	.1124	-.0356
1.5	.0525	.0762	-.0237
2.0	.0445	.0655	-.0210
2.5	.0391	.0585	-.0194
3.0	.0349	.0531	-.0182

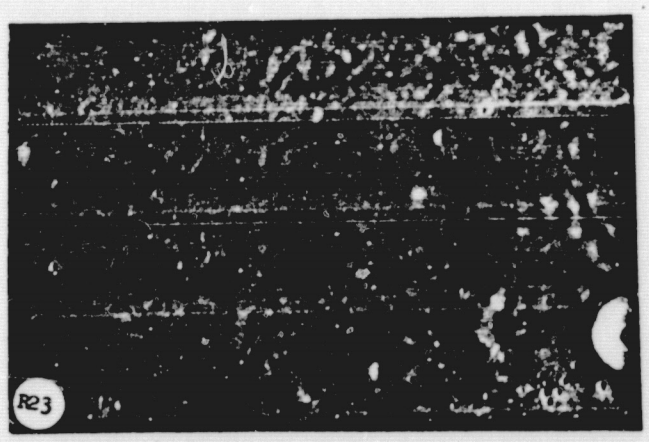
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.310	368.62	1.003	.0127
9H	-0.555	367.46	1.000	-.0000
10H	-0.182	367.30	1.000	-.0018
11H	0.260	351.58	0.957	.0188
12H	0.743	263.52	0.717	.0732
13H	1.482	174.60	0.475	.0510
14H	1.870	169.20	0.460	.0450
15H	2.219	164.90	0.449	.0406
16H	3.057	162.78	0.443	.0385









80 (1C1) RANGER VI IMP.

LAMBDA=21.42 E BETA= 9.35 N XI=+.3603 ETA=+.1625 L+PL CODE = 13166 ALBEDO =.0570

83H FLAT MOON DATA
FM=.01267

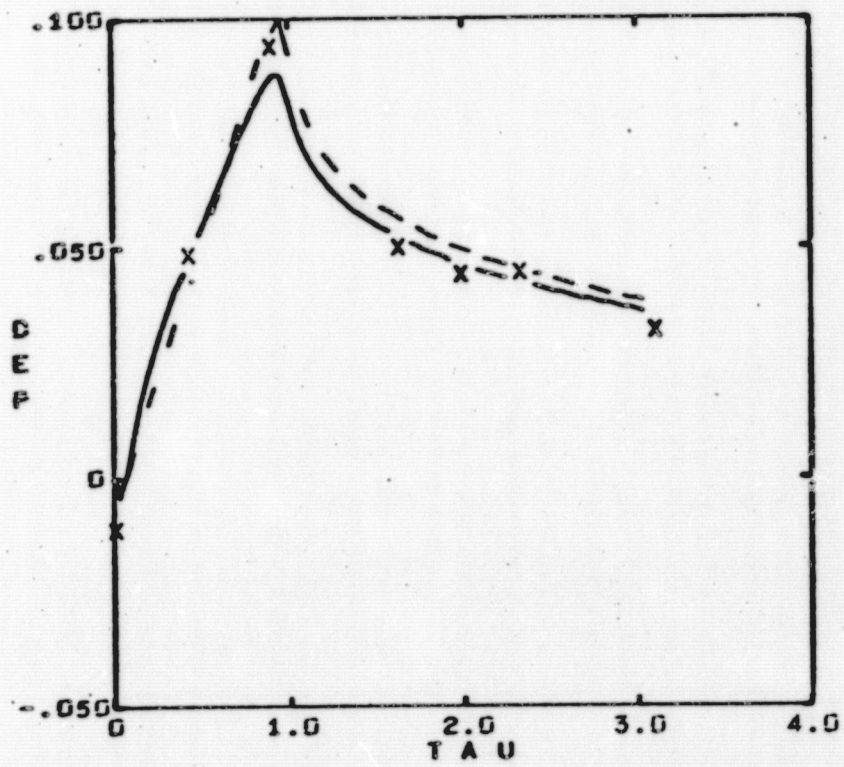
INITIAL TEMPERATURE 396.24
TAU-END OF TOTALITY 3.058

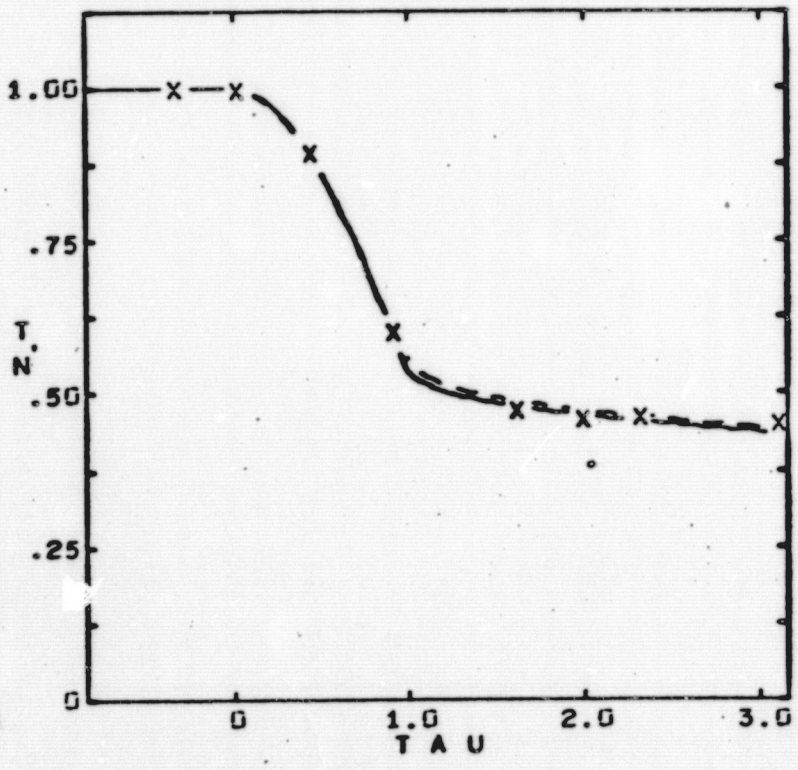
DIFFERENTIAL ENERGY DATA

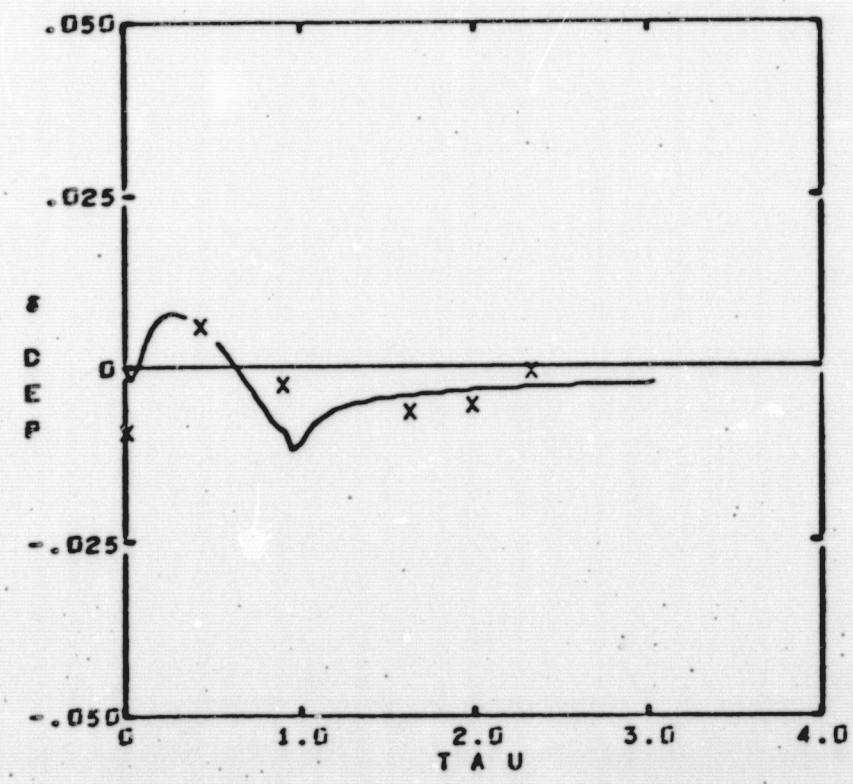
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0286	.0209	.0077
.50	.0542	.0499	.0043
.75	.0764	.0807	-.0043
.93	.0904	.1015	-.0111
1.0	.0813	.0923	-.0110
1.5	.0549	.0593	-.0044
2.0	.0463	.0495	-.0032
2.5	.0407	.0434	-.0027
3.0	.0364	.0387	-.0023

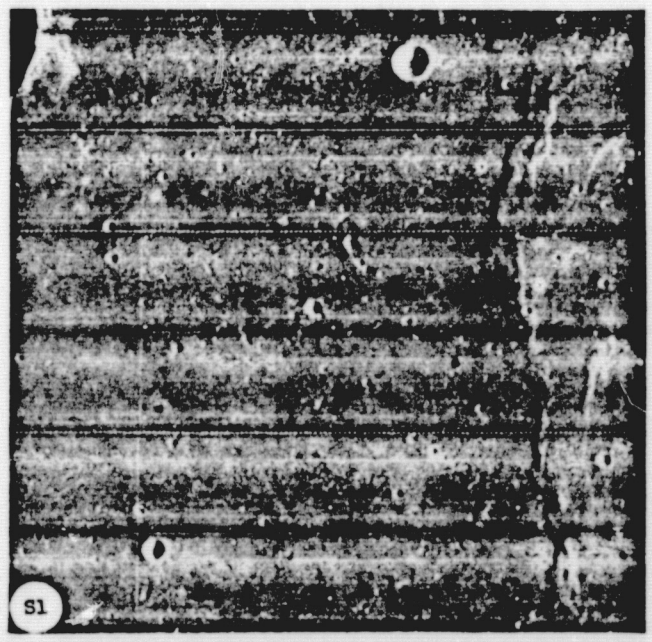
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.069	396.45	1.001	.0021
9H	-0.346	396.17	1.000	-.0007
10H	0.014	394.95	0.997	-.0114
11H	0.438	354.03	0.893	.0484
12H	0.904	238.67	0.602	.0941
13H	1.612	187.53	0.473	.0502
14H	1.986	181.70	0.459	.0442
15H	2.321	182.17	0.460	.0447
16H	3.099	178.39	0.450	.0319









81 (3C4) RANGER VII IMP.

LAMBDA=20.58 W BETA=10.67 S XI=-.3455 ETA=-.1851 L+PL CODE = 33159 ALBEDO =.0661

13H FLAT MOON DATA
FM=.01873

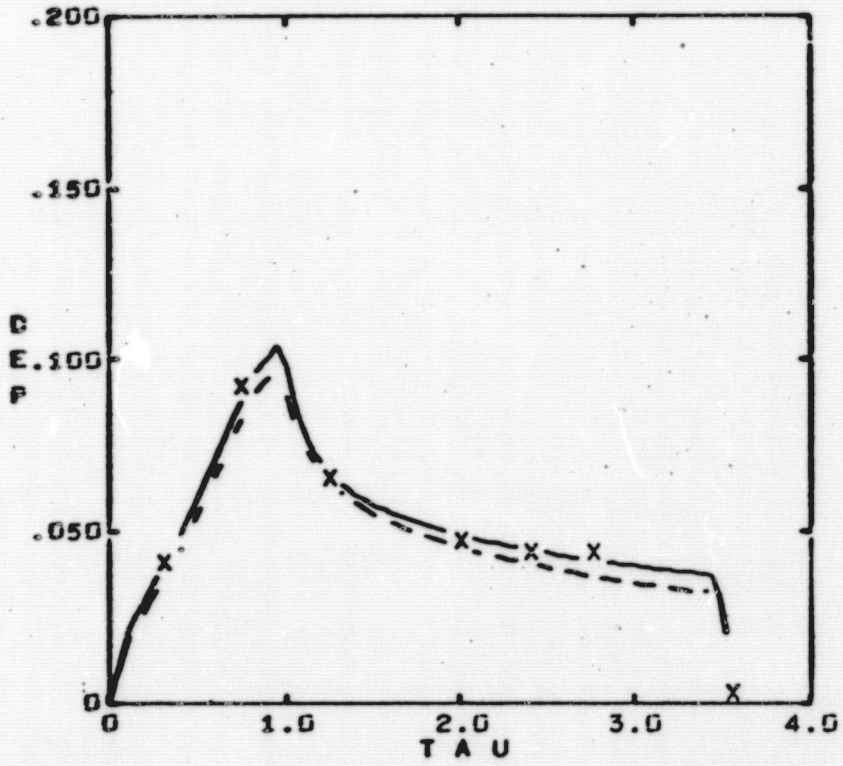
INITIAL TEMPERATURE 391.63
TAU-END OF TOTALITY 3.430

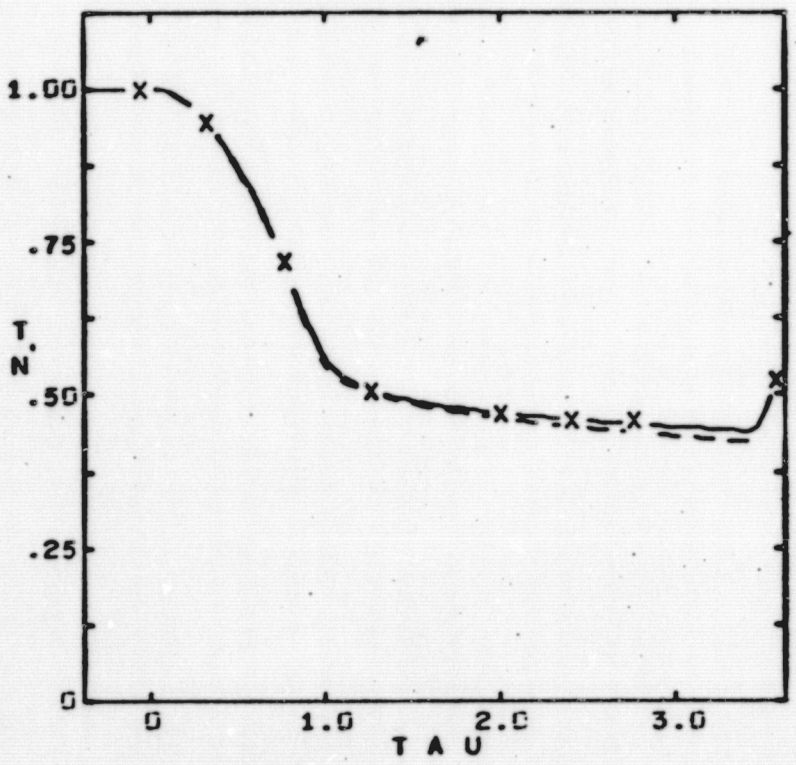
DIFFERENTIAL ENERGY DATA

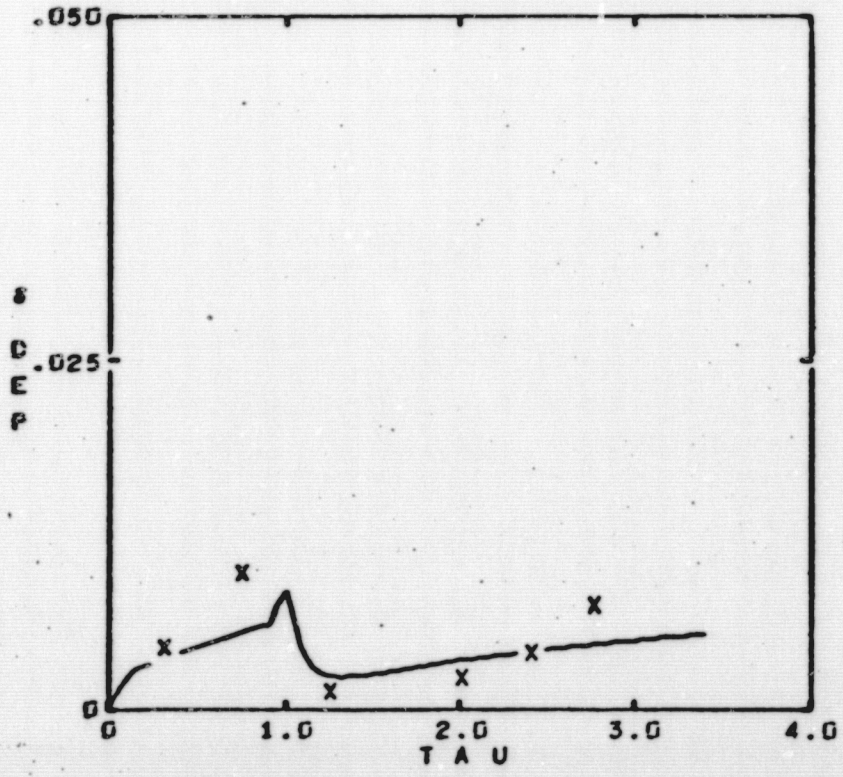
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0340	.0307	.0033
.50	.0594	.0550	.0044
.75	.0871	.0816	.0055
.93	.1053	.0991	.0062
1.0	.0981	.0895	.0086
1.5	.0579	.0553	.0026
2.0	.0489	.0454	.0035
2.5	.0437	.0394	.0043
3.0	.0400	.0350	.0050

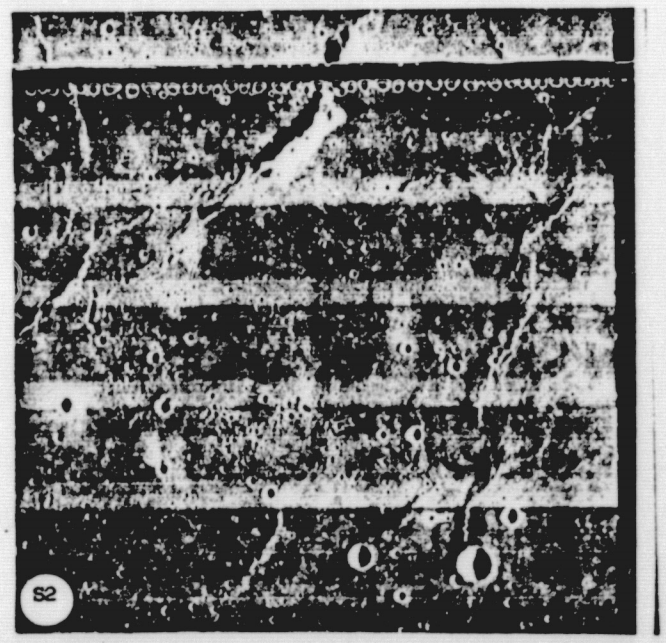
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.838	392.74	1.003	.0114
9H	-0.066	391.54	1.000	-.0009
10H	0.314	370.43	0.946	.0409
11H	0.763	280.88	0.717	.0927
12H	1.256	198.15	0.506	.0655
13H	2.009	182.86	0.467	.0475
14H	2.403	179.81	0.459	.0444
15H	2.759	179.90	0.459	.0445
16H	3.566	204.59	0.522	.0034









62 (3C5) RANGER VII P1F79

LAMBDA=19.83 W BETA=11.42 S XI=-.3325 ETA=-.1980 L+PL CODE = 33230 ALBEDO =.0636

13H FLAT MOON DATA
FM=.03794

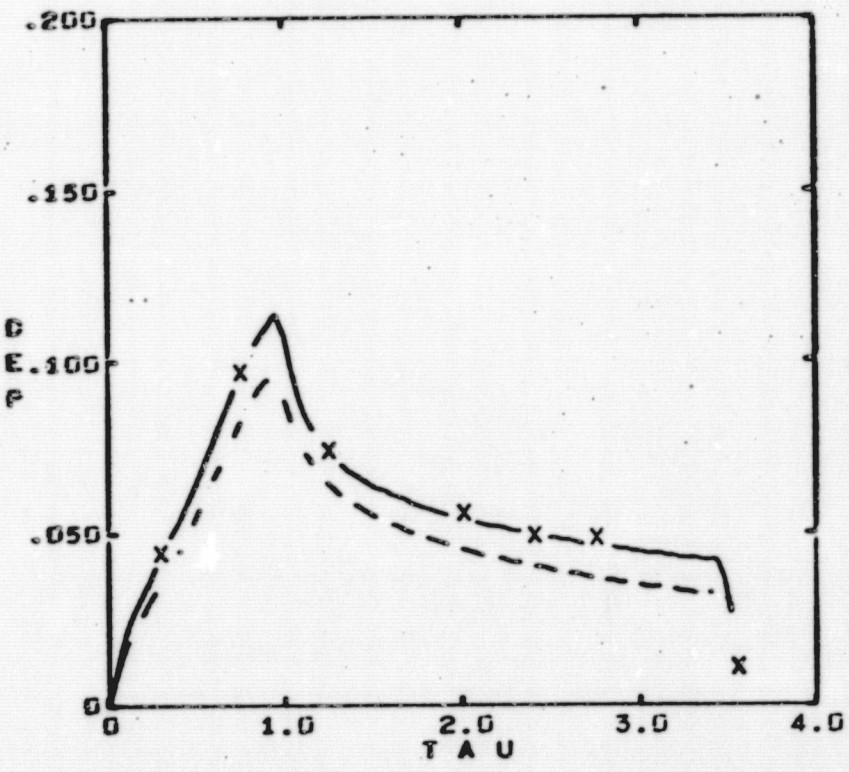
INITIAL TEMPERATURE 391.67
TAU-END OF TOTALITY 3.438

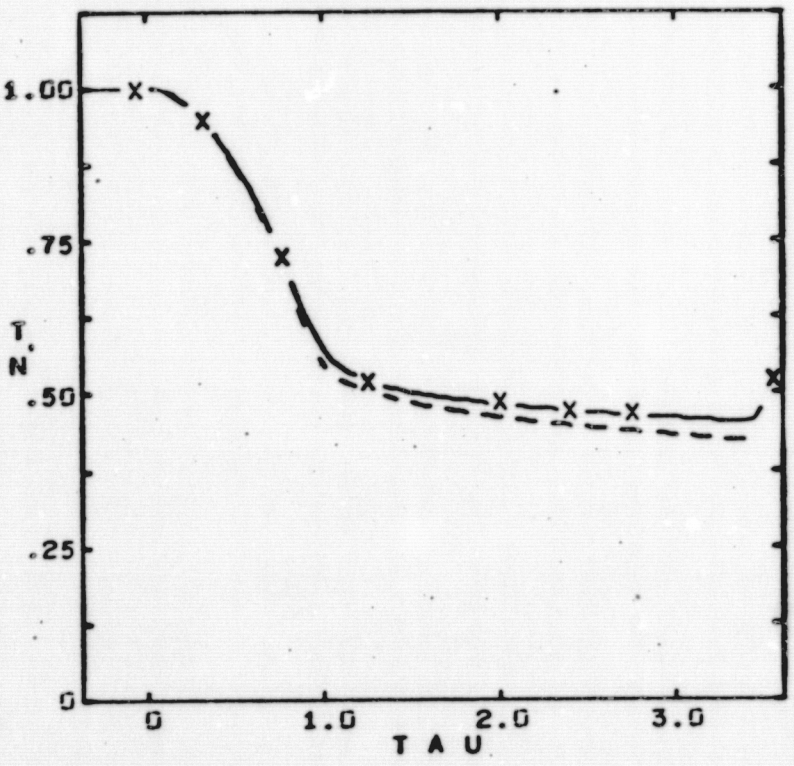
DIFFERENTIAL ENERGY DATA

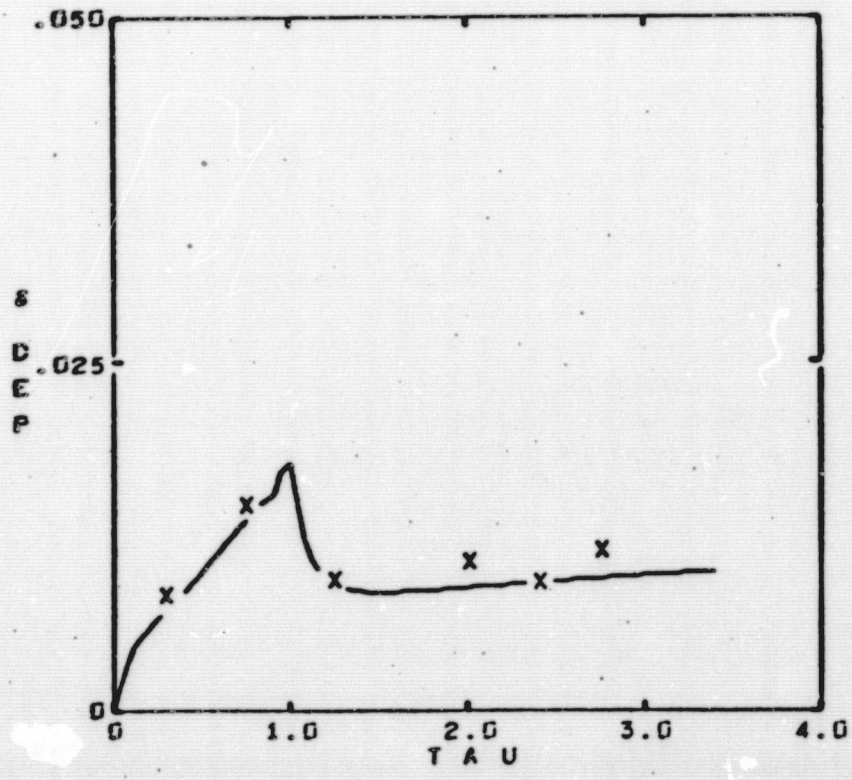
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0369	.0305	.0064
.50	.0648	.0549	.0099
.75	.0950	.0815	.0135
.93	.1150	.0990	.0160
1.0	.1073	.0895	.0178
1.5	.0638	.0553	.0085
2.0	.0543	.0454	.0089
2.5	.0487	.0394	.0093
3.0	.0447	.0350	.0097

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.845	393.08	1.004	.0145
9H	-0.073	391.55	1.000	-.0012
10H	0.308	371.59	0.949	.0441
11H	0.758	283.52	0.724	.0970
12H	1.250	204.27	0.522	.0740
13H	2.006	190.65	0.487	.0561
14H	2.400	184.91	0.472	.0497
15H	2.757	183.80	0.469	.0465
16H	3.565	204.39	0.522	.0109







PHOTOGRAPH
NOT
AVAILABLE

83 (3C6) RANGER VII P2F63

LAMBDA=19.57 W BETA=11.32 S XI=-.3284 ETA=-.1963 L+PL CODE = 33139 ALBEDO =.0636

13H FLAT MOON DATA
FM=.03543

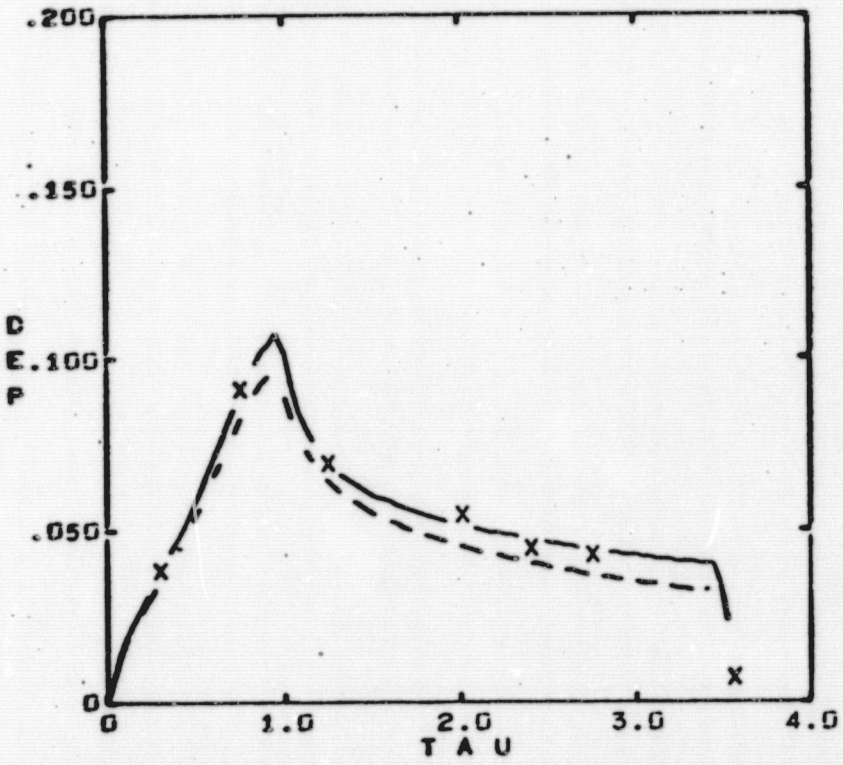
INITIAL TEMPERATURE 392.17
TAU-END OF TOTALITY 3.436

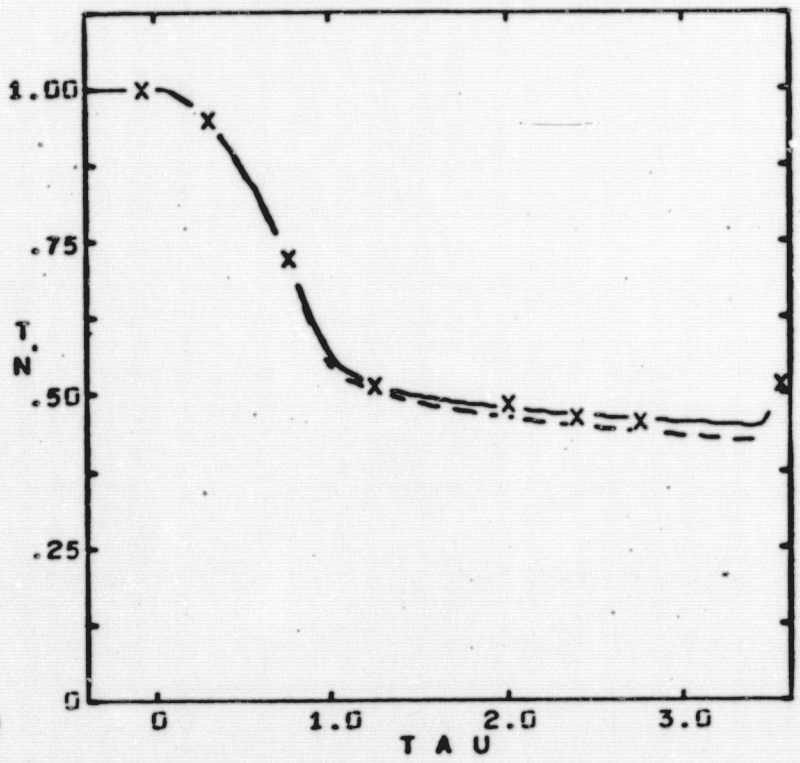
DIFFERENTIAL ENERGY DATA

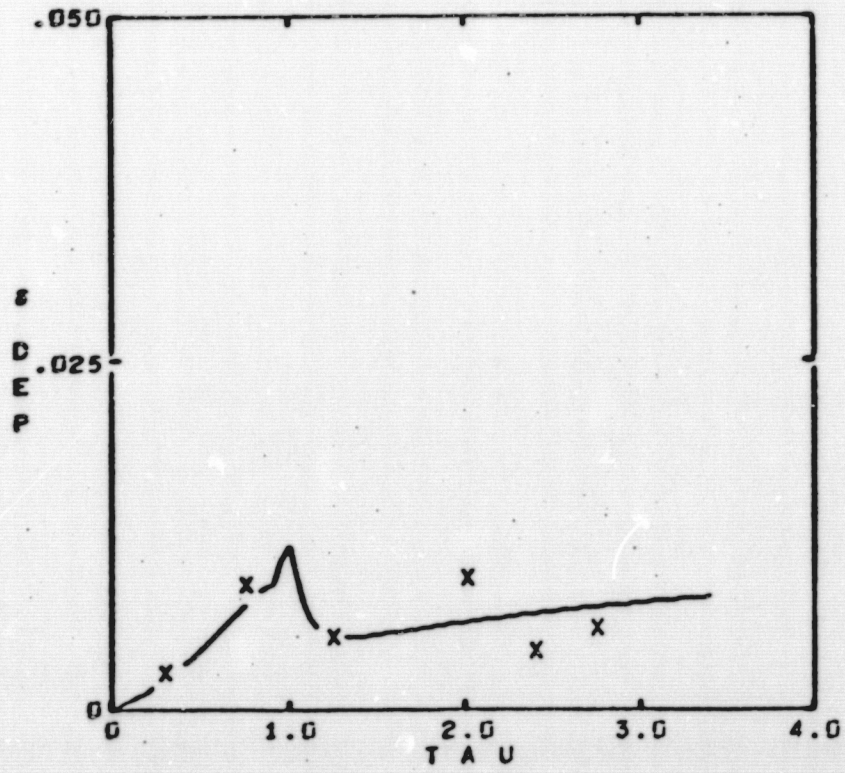
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0321	.0304	.0017
.50	.0591	.0548	.0043
.75	.0888	.0814	.0074
.93	.1084	.0990	.0094
1.0	.1012	.0894	.0118
1.5	.0606	.0553	.0053
2.0	.0516	.0454	.0062
2.5	.0464	.0394	.0070
3.0	.0426	.0350	.0076

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.847	393.73	1.004	.0160
9H	-0.074	392.04	1.000	-.0014
10H	0.306	371.69	0.948	.0382
11H	0.755	282.98	0.722	.0909
12H	1.249	201.54	0.514	.0698
13H	2.003	189.80	0.484	.0549
14H	2.397	180.34	0.460	.0447
15H	2.754	178.46	0.455	.0429
16H	3.563	202.11	0.515	.0073









84 (3C7) RANGER VII P3F120

LAMBDA=20.13 W BETA=11.00 S XI=-.3378 ETA=-.1908 L+PL CODE = 33240 ALBEDO =.0656

INITIAL TEMPERATURE 391.56
TAU-END OF TOTALITY 3.433

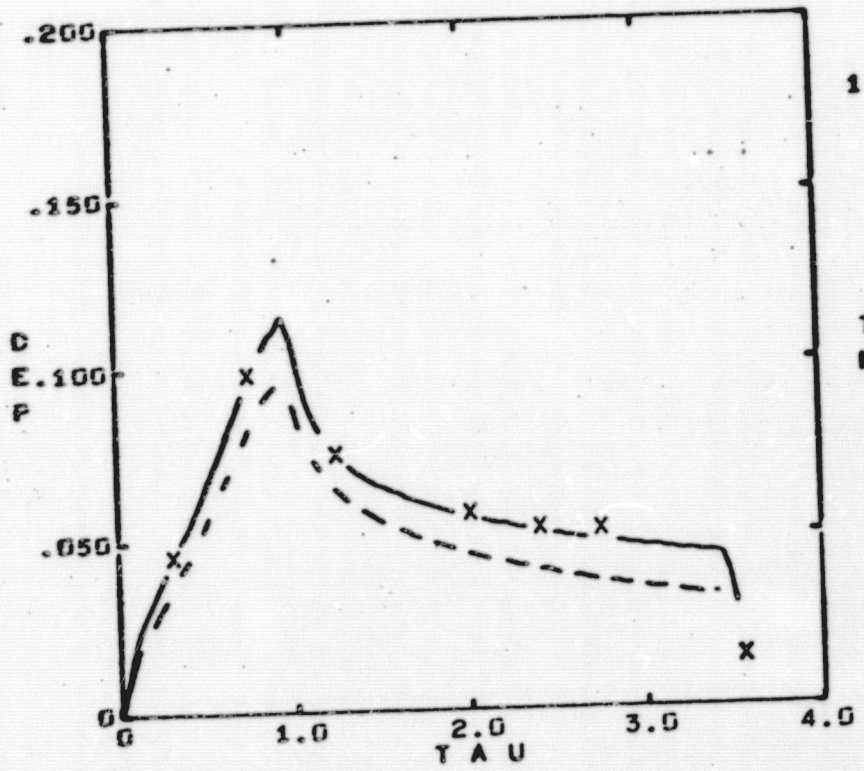
83H FLAT MOON DATA
FM=.03987

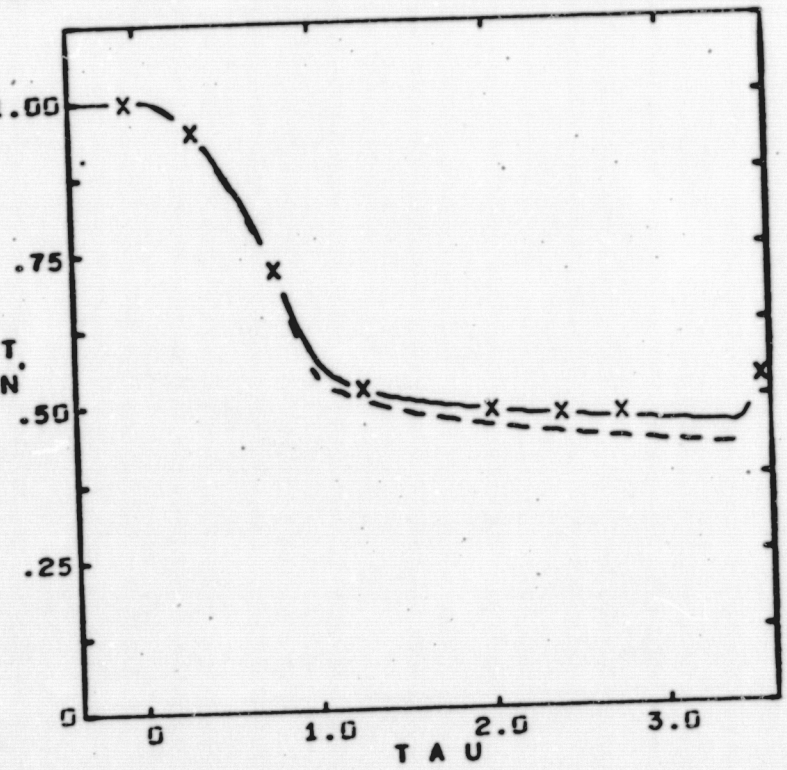
DIFFERENTIAL ENERGY DATA

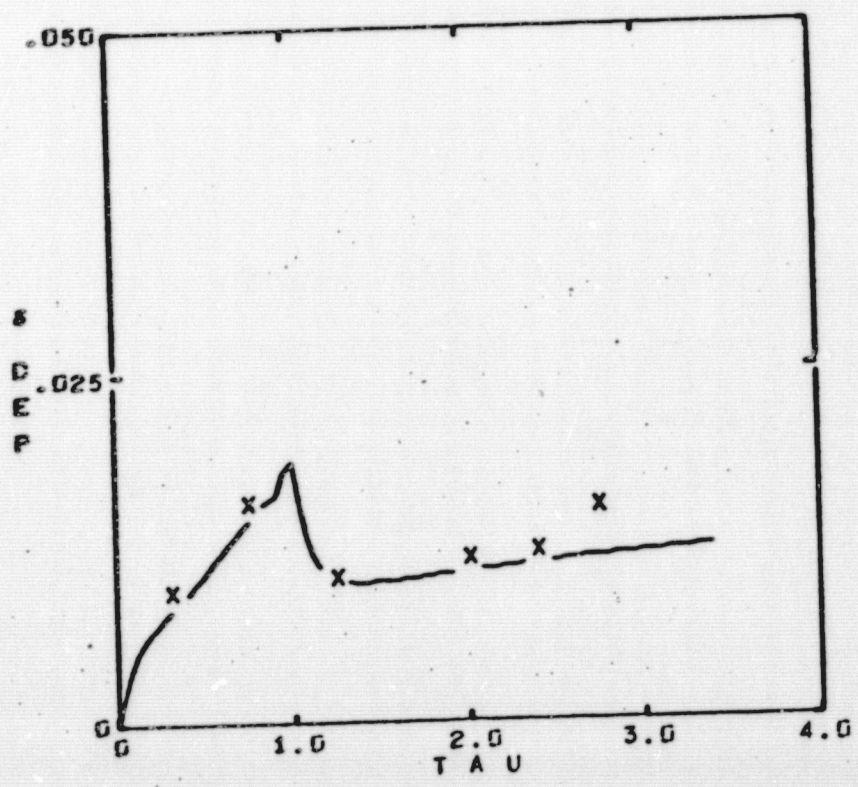
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0378	.0306	.0072
.50	.0657	.0549	.0108
.75	.0959	.0815	.0144
.93	.1159	.0991	.0168
1.0	.1082	.0895	.0187
1.5	.0653	.0553	.0100
2.0	.0562	.0454	.0108
2.5	.0508	.0394	.0114
3.0	.0470	.0350	.0120

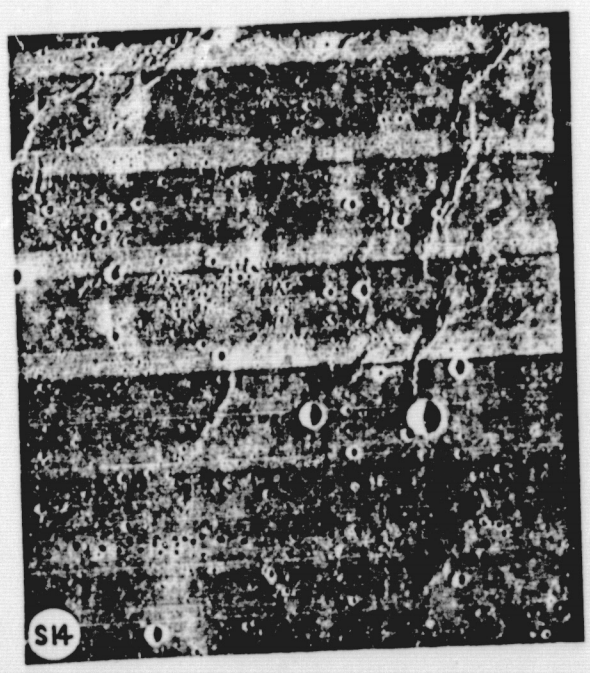
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.842	392.94	1.004	.0142
9H	-0.070	391.45	1.000	-.0012
10H	0.310	371.37	0.948	.0456
11H	0.759	283.26	0.723	.0983
12H	1.253	204.77	0.523	.0748
13H	2.007	191.32	0.489	.0570
14H	2.400	187.53	0.479	.0526
15H	2.757	187.31	0.478	.0524
16H	3.565	209.11	0.534	.0145









85 (3C8) RANGER VII P4F120

LAMBDA=20.10 W BETA=10.90 S XI=-.3375 ETA=-.1891 L+FL CODE = 33149 ALBEDO =.0655

13H FLAT MOON DATA
FM=.03575

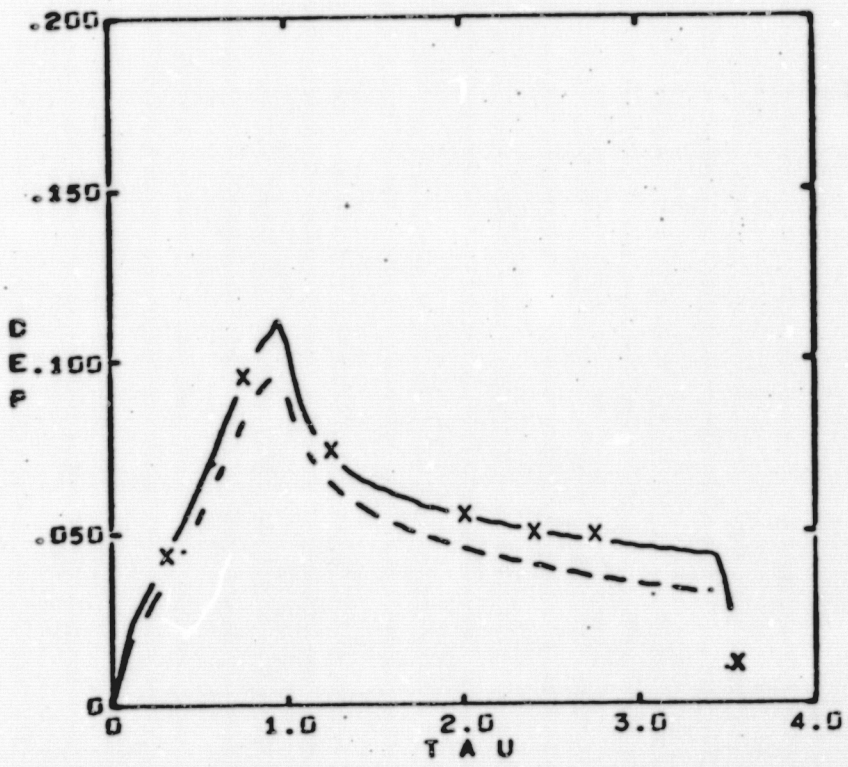
INITIAL TEMPERATURE 391.65
TAU-END OF TOTALITY 3.432

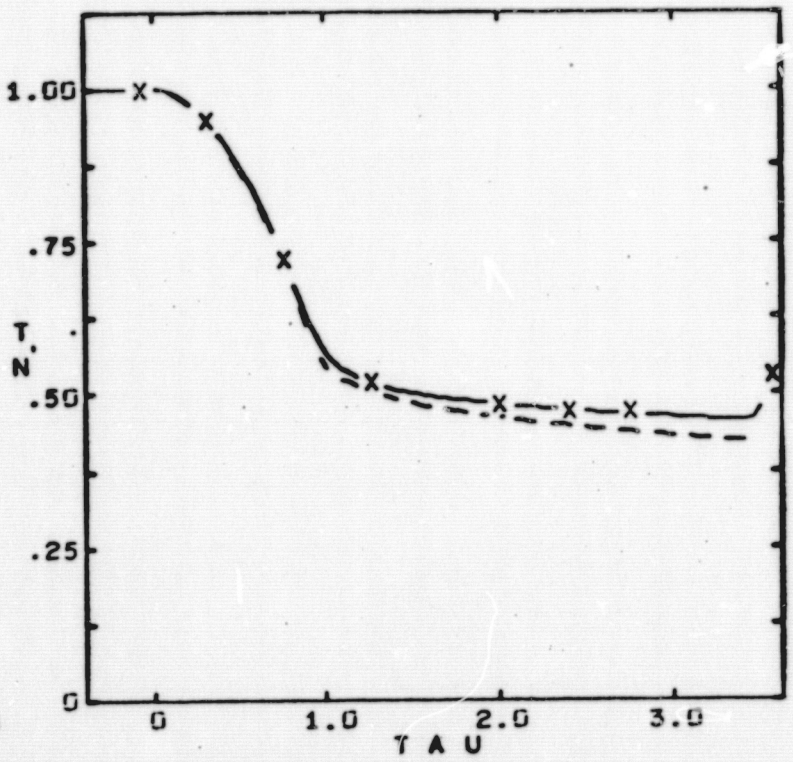
DIFFERENTIAL ENERGY DATA

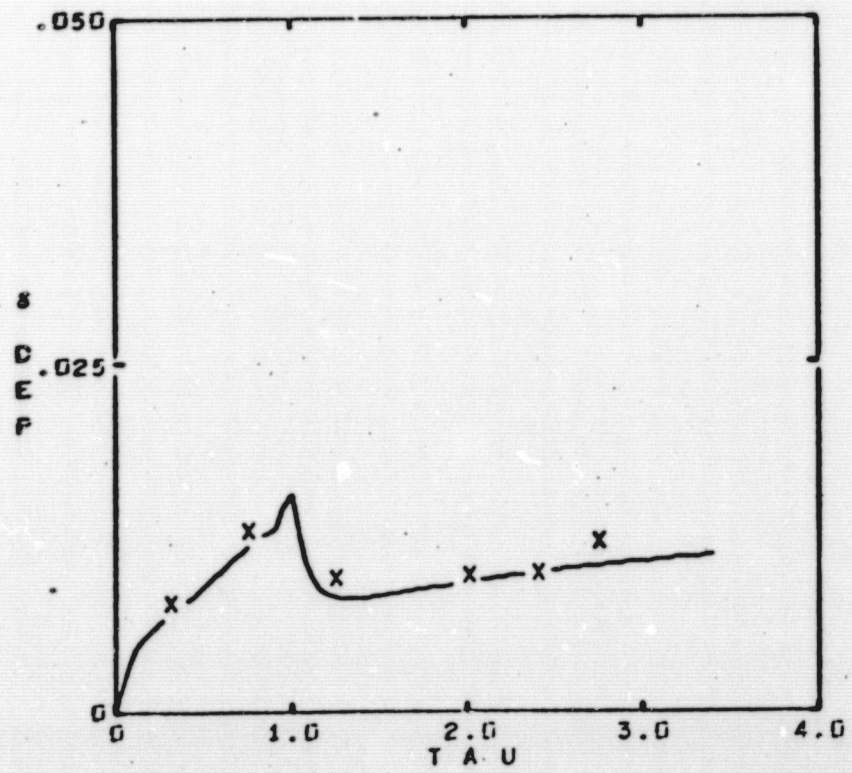
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0368	.0306	.0062
.50	.0639	.0549	.0090
.75	.0933	.0815	.0118
.93	.1126	.0991	.0135
1.0	.1051	.0895	.0156
1.5	.0636	.0553	.0083
2.0	.0547	.0454	.0093
2.5	.0495	.0394	.0101
3.0	.0458	.0350	.0108

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.842	393.11	1.004	.0150
9H	-0.070	391.53	1.000	-.0012
10H	0.310	371.30	0.948	.0439
11H	0.759	282.70	0.722	.0955
12H	1.253	204.25	0.522	.0740
13H	2.006	189.73	0.484	.0551
14H	2.400	185.57	0.474	.0504
15H	2.757	184.44	0.471	.0492
16H	3.564	207.40	0.530	.0115









06 (1C2) RANGER VII IMP

LAMBDA=2[illegible].77 E BETA= 2.67 N XI=+.4185 ETA=+.0465 L+PL CODE = 14025 ALBEDO =.0668

83M FLAT MOON DATA
FM=.00556

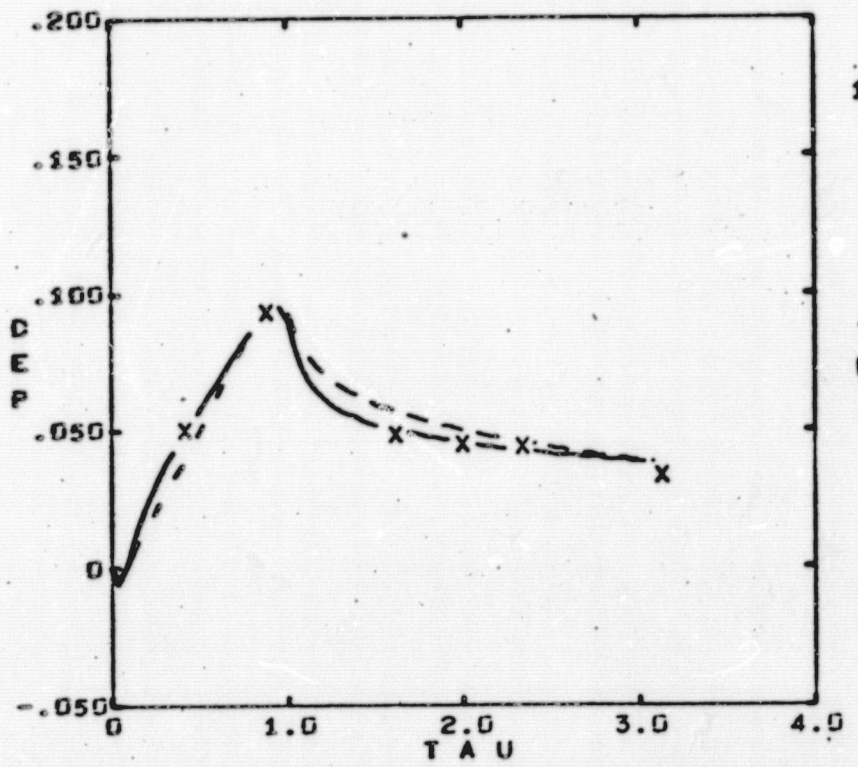
INITIAL TEMPERATURE 393.01
TAU-END OF TOTALITY 3.161

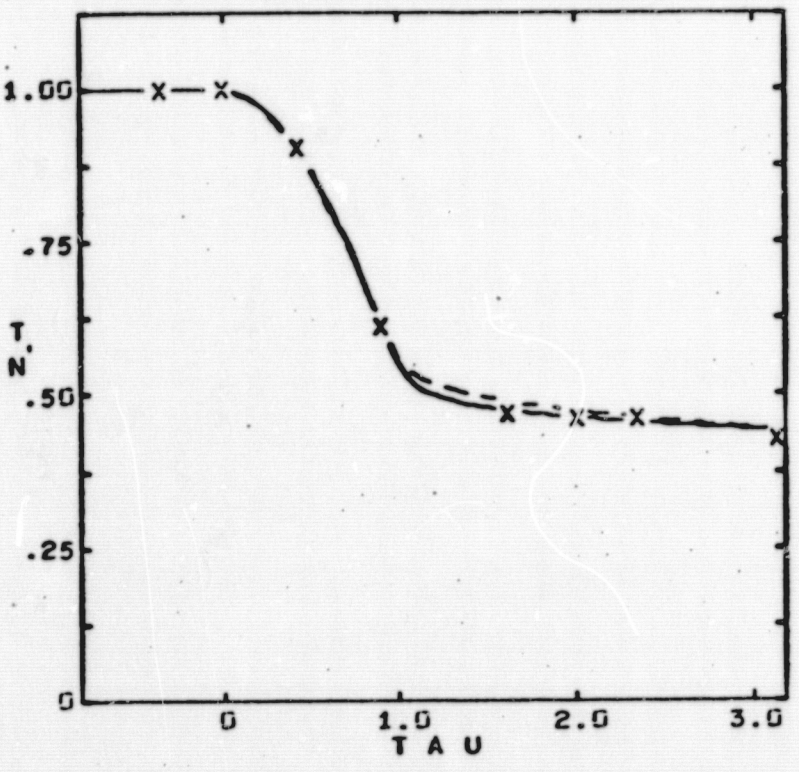
DIFFERENTIAL ENERGY DATA

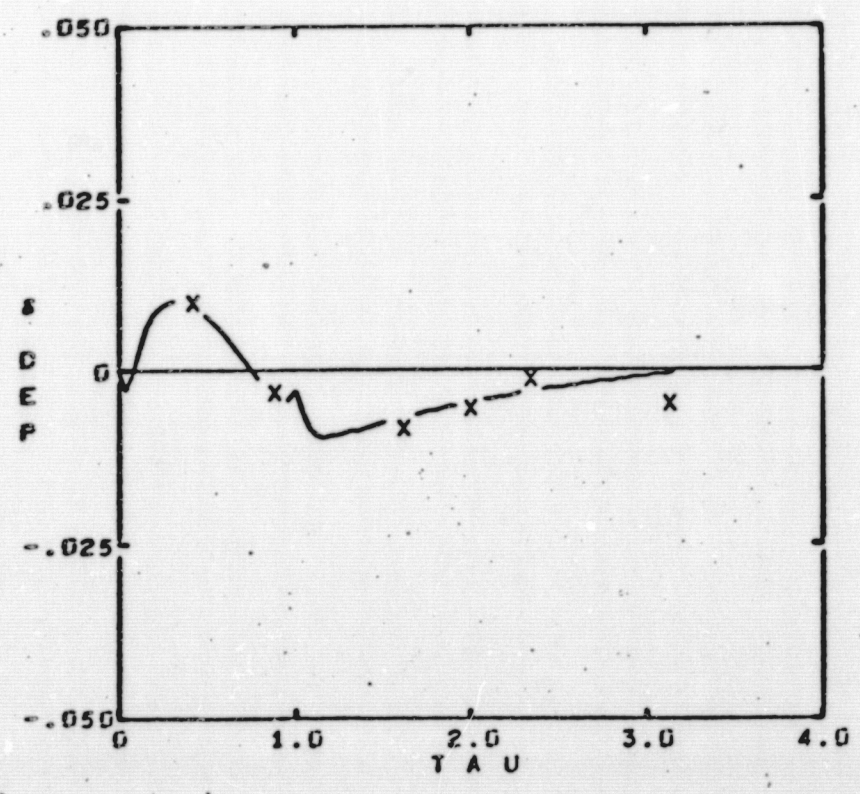
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0298	.0203	.0095
.50	.0577	.0498	.0079
.75	.0814	.0810	.0004
.93	.0962	.1019	-.0057
1.0	.0899	.0928	-.0029
1.5	.0524	.0599	-.0075
2.0	.0457	.0502	-.0045
2.5	.0416	.0440	-.0024
3.0	.0386	.0393	-.0007

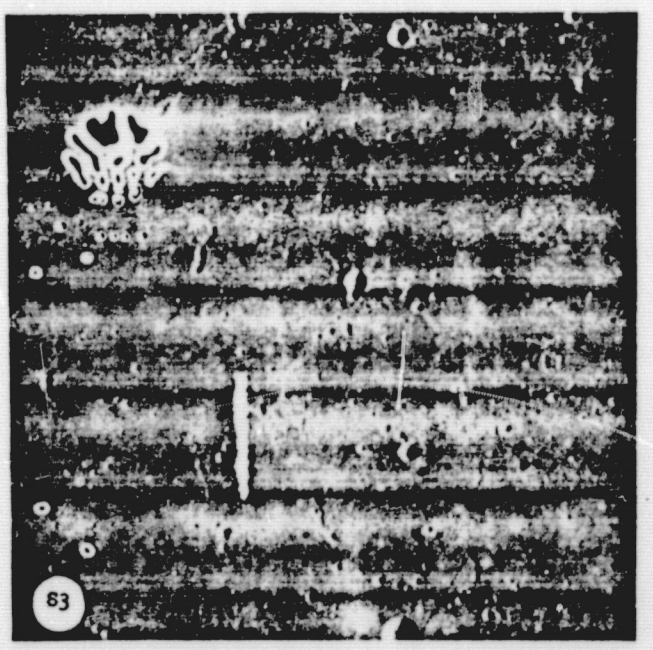
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8M	-1.114	394.37	1.003	.0139
9M	-0.377	393.26	1.001	.0026
10M	-0.012	392.99	1.000	-.0002
11M	0.419	355.27	0.904	.0498
12M	0.892	239.94	0.611	.0931
13M	1.613	184.72	0.470	.0488
14M	1.994	180.90	0.460	.0449
15M	2.335	180.67	0.460	.0447
16M	3.131	168.08	0.428	.0335









67 (3C9) RANGER IX IMP

LAMBDA= 2.33 W BETA=12.91 S XI=-.0397 ETA=-.2235 L+PL CODE = 30242 ALBEDO =.0993

13H FLAT MOON DATA
FM=.00209

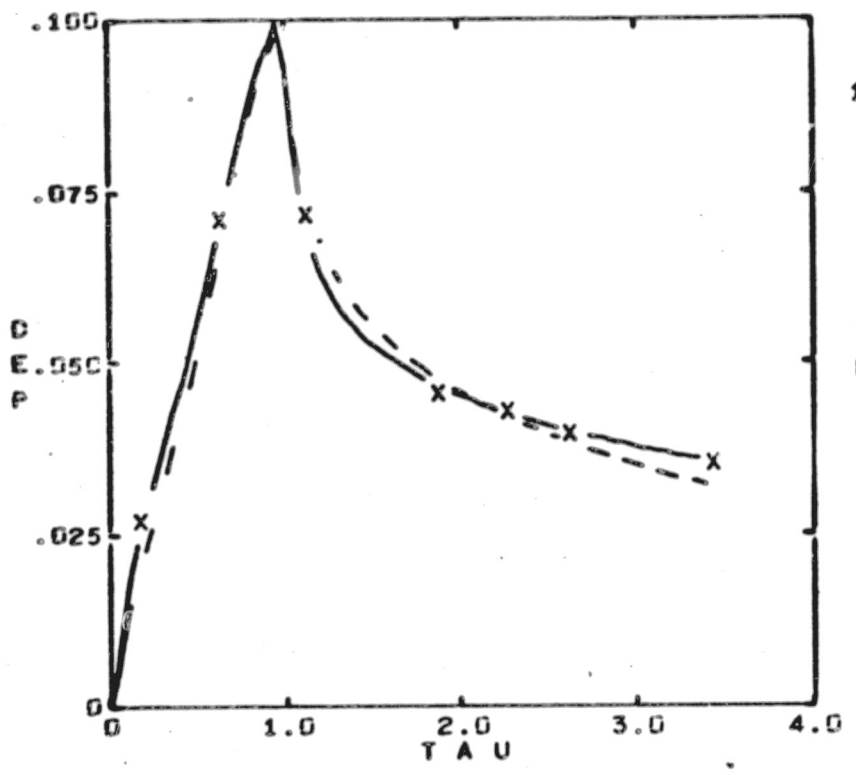
INITIAL TEMPERATURE 393.21
TAU-END OF TOTALITY 3.429

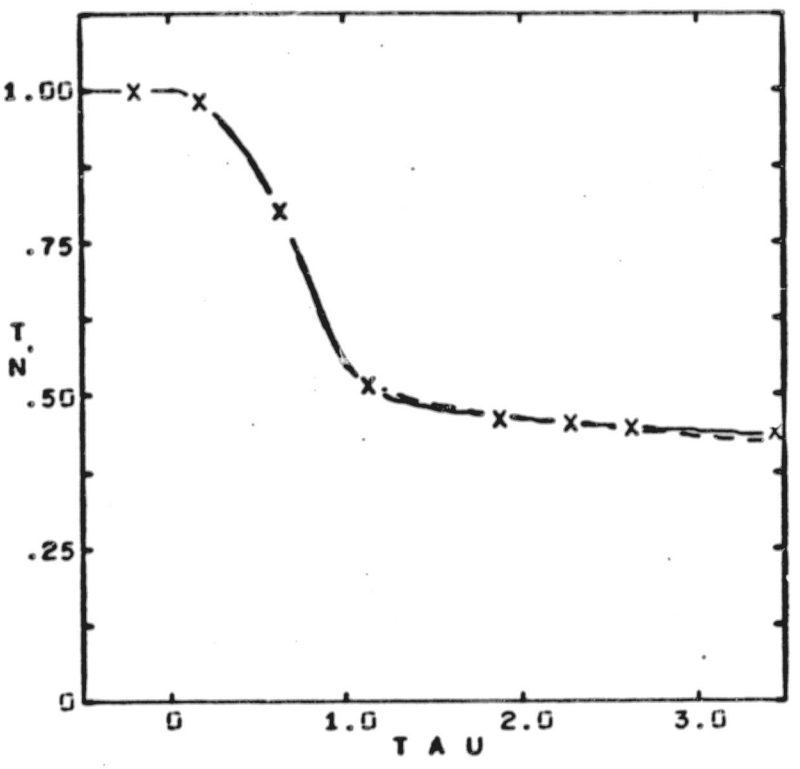
DIFFERENTIAL ENERGY DATA

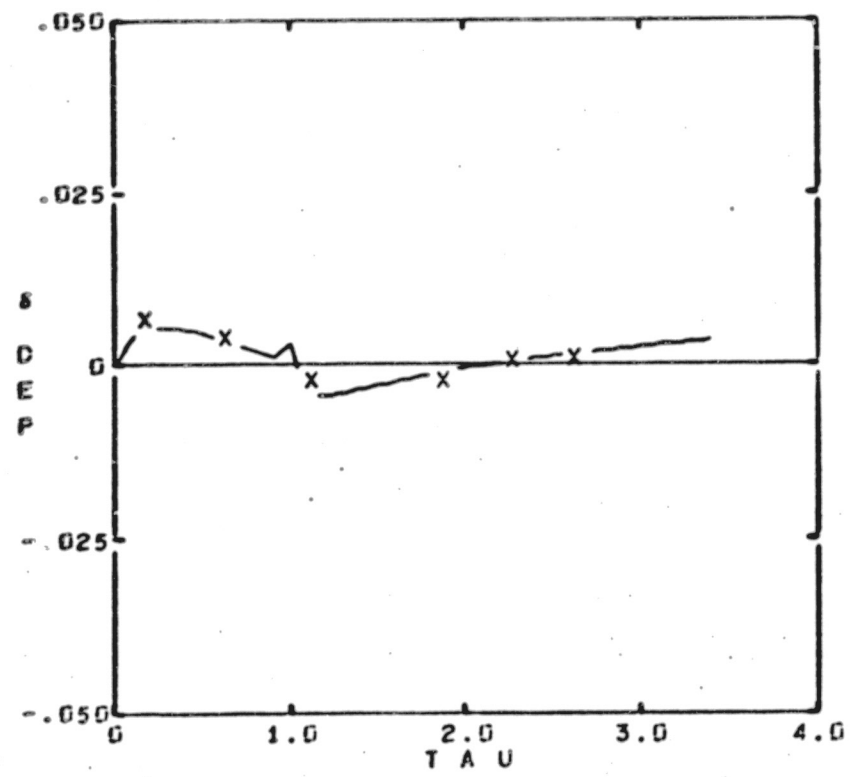
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0326	.0271	.0055
.50	.0573	.0528	.0045
.75	.0831	.0807	.0024
.93	.1001	.0993	.0008
1.0	.0929	.0898	.0031
1.5	.0527	.0557	-.0030
2.0	.0453	.0458	-.0005
2.5	.0409	.0396	.0013
3.0	.0378	.0351	.0027

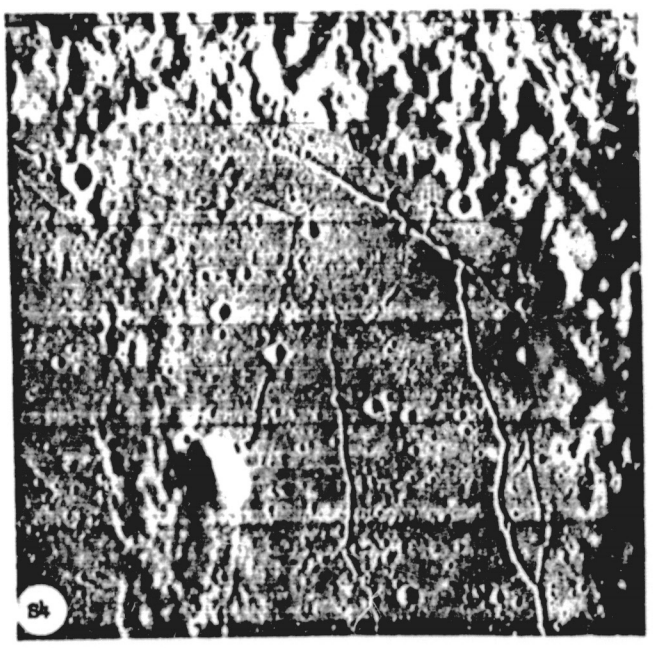
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.973	394.60	1.004	.0142
9H	-0.202	392.92	0.999	-.0029
10H	0.178	386.19	0.982	.0269
11H	0.628	314.92	0.801	.0710
12H	1.120	203.32	0.517	.0715
13H	1.873	181.57	0.462	.0455
14H	2.268	179.16	0.456	.0431
15H	2.623	175.42	0.446	.0396
16H	3.445	172.86	0.440	.0353









LAMBDA=43.34 W BETA= 2.33 S XI=-.6857 ETA=-.0407 L+PL CODE = 36094 ALBEDO =.0538

13H FLAT MOON DATA
FM=.02392

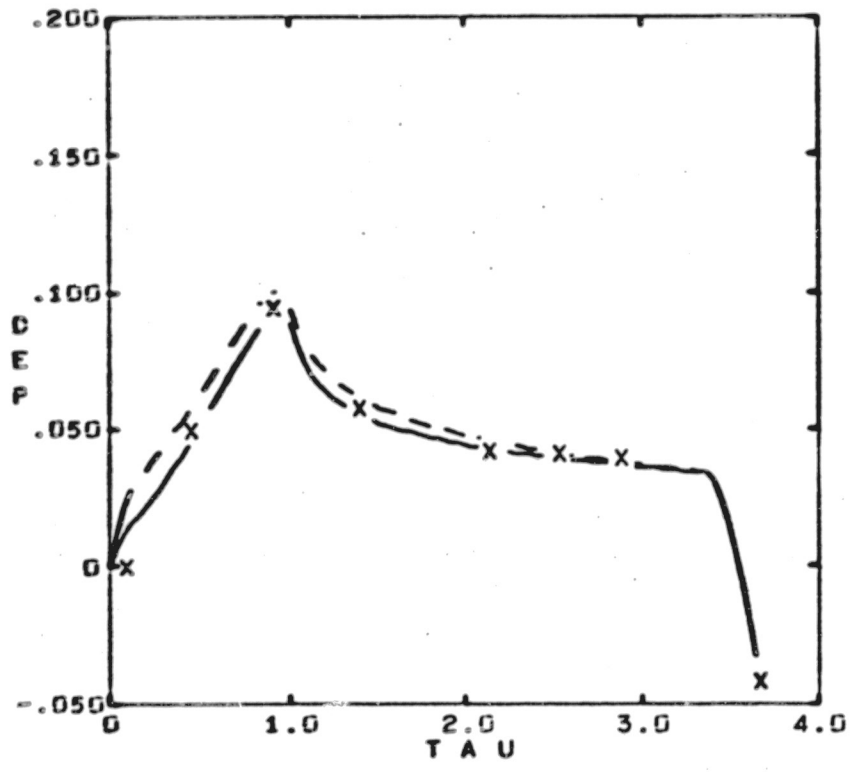
INITIAL TEMPERATURE 378.69
TAU-END OF TOTALITY 3.356

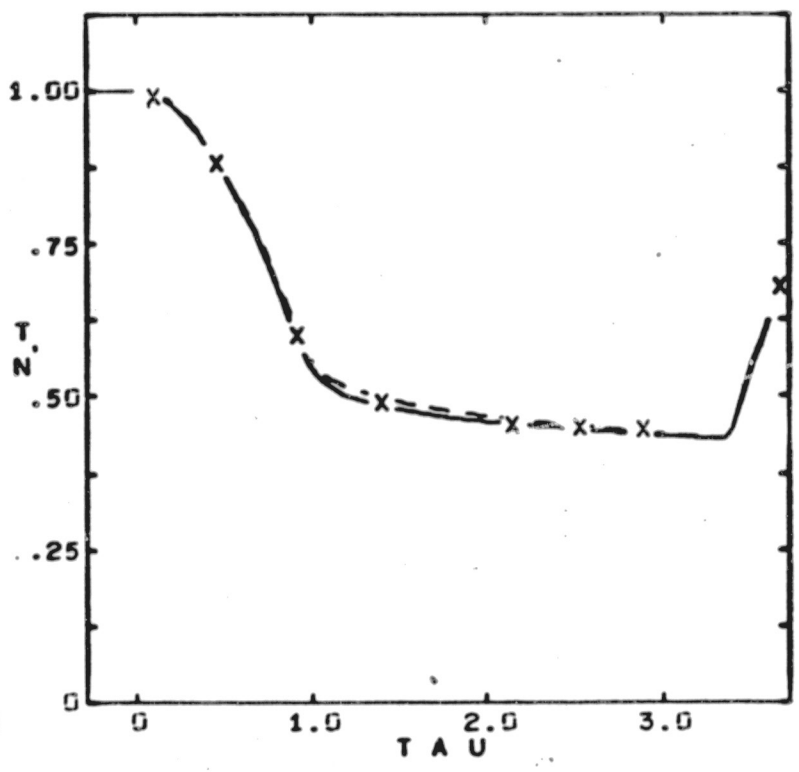
DIFFERENTIAL ENERGY DATA

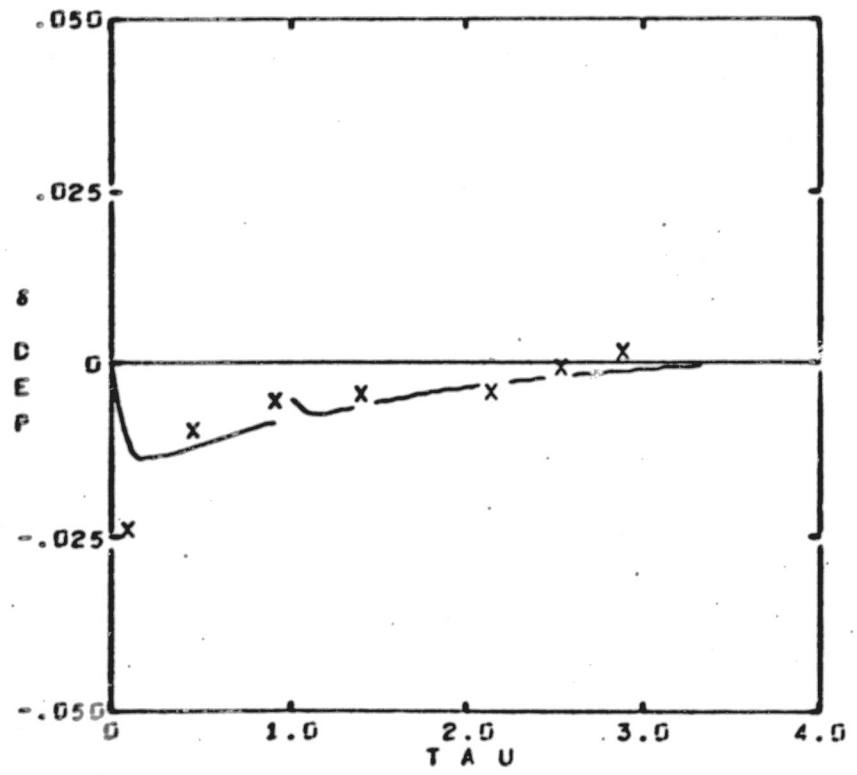
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0257	.0391	-.0134
.50	.0505	.0623	-.0118
.75	.0779	.0875	-.0096
.93	.0959	.1041	-.0082
1.0	.0891	.0942	-.0051
1.5	.0525	.0581	-.0056
2.0	.0443	.0478	-.0035
2.5	.0396	.0416	-.0020
3.0	.0363	.0371	-.0008

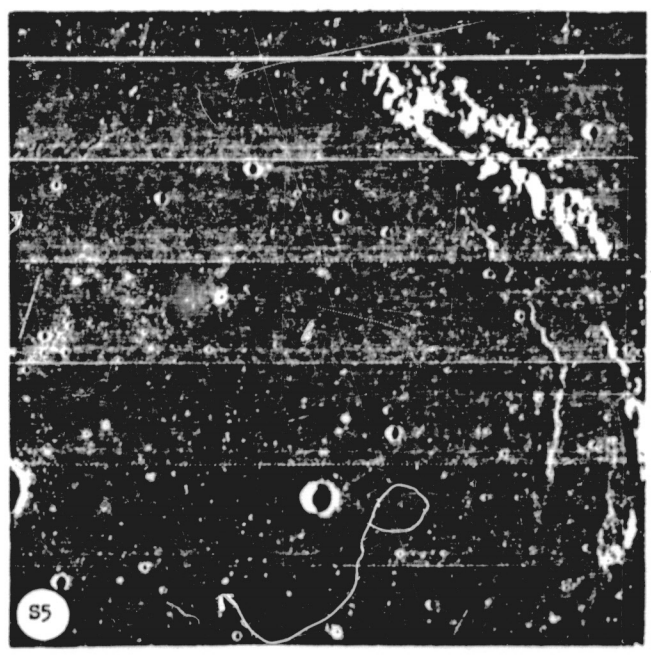
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.674	378.69	1.000	.0000
9H	0.089	375.65	0.992	-.0008
10H	0.464	334.82	0.884	.0492
11H	0.910	227.37	0.600	.0943
12H	1.397	185.23	0.489	.0572
13H	2.141	171.24	0.452	.0418
14H	2.531	170.16	0.449	.0408
15H	2.884	169.15	0.447	.0398
16H	3.664	257.32	0.680	-.0416









89 (3D2) SURVEYOR III

LAMBDA=23.16 W BETA= 3.33 S XI=-.3927 ETA=-.0581 L+PL CODE = 33096 ALBEDO =.0631

83H FLAT MOON DATA
FM=.01068

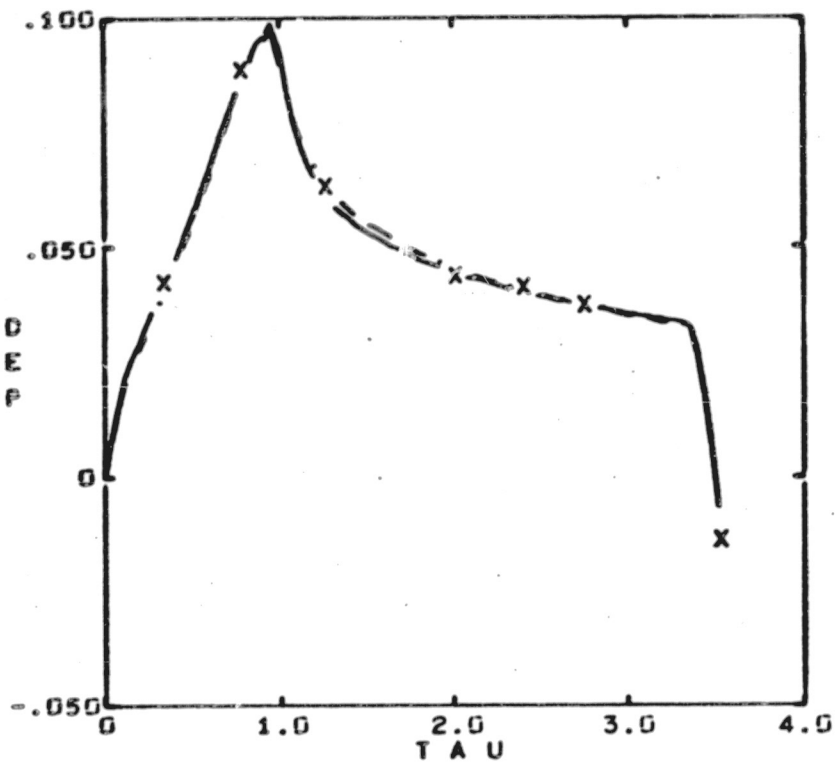
INITIAL TEMPERATURE 391.64
TAU-END OF TOTALITY 3.340

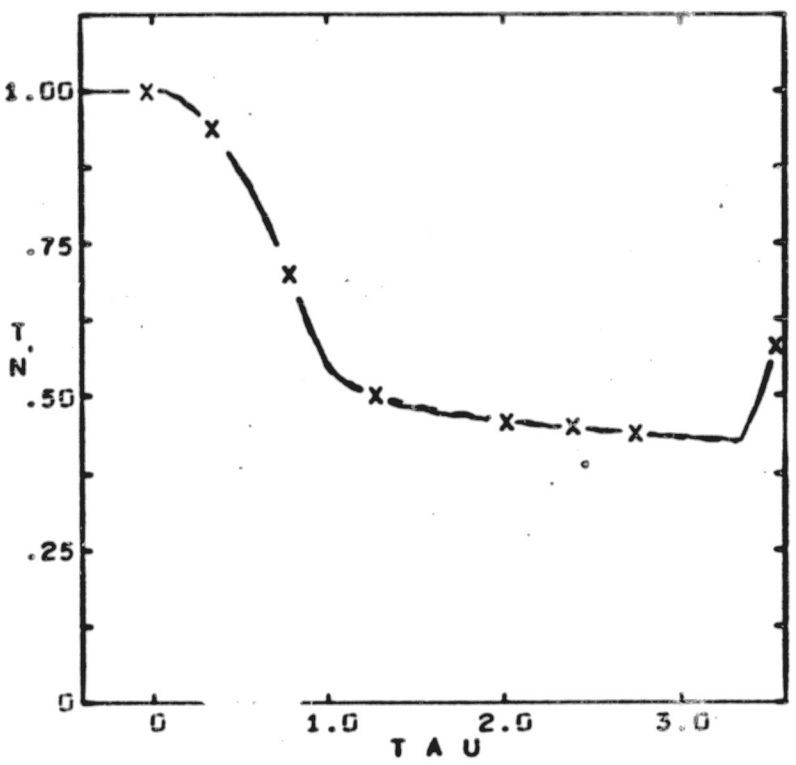
DIFFERENTIAL ENERGY DATA

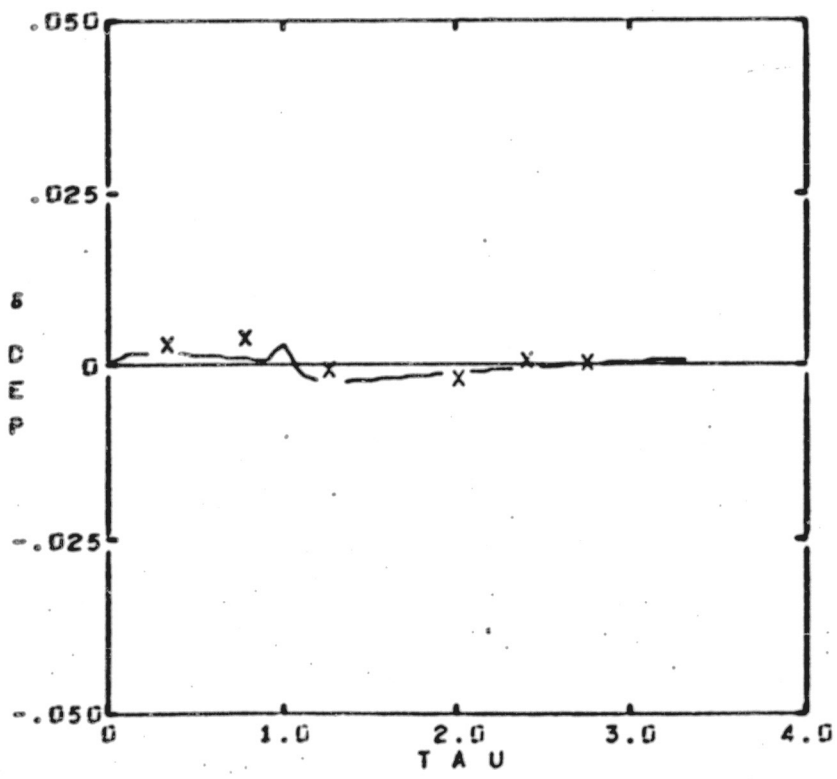
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0332	.0313	.0019
.50	.0571	.0555	.0016
.75	.0830	.0819	.0011
.93	.1001	.0993	.0008
1.0	.0929	.0897	.0032
1.5	.0533	.0554	-.0021
2.0	.0445	.0455	-.0010
2.5	.0393	.0395	-.0002
3.0	.0356	.0351	.0005

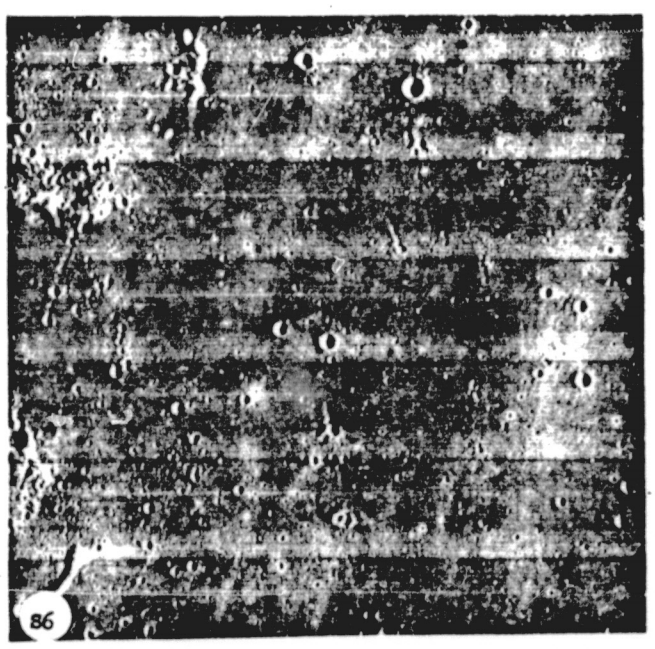
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.800	393.17	1.004	.0158
9H	-0.039	391.56	1.000	-.0008
10H	0.335	367.23	0.938	.0422
11H	0.778	274.43	0.701	.0687
12H	1.265	196.55	0.502	.0634
13H	2.008	178.93	0.457	.0436
14H	2.397	176.71	0.451	.0414
15H	2.749	172.38	0.440	.0375
16H	3.539	228.02	0.582	-.0138









90 (1C3) SURVEYOR V

LAMBDA=23.18 E BETA= 1.50 N XI=+.3935 ETA=+.0262 L+PL CODE = 13093 ALBEDO =.0637

13H FLAT MOON DATA
FM=.00687

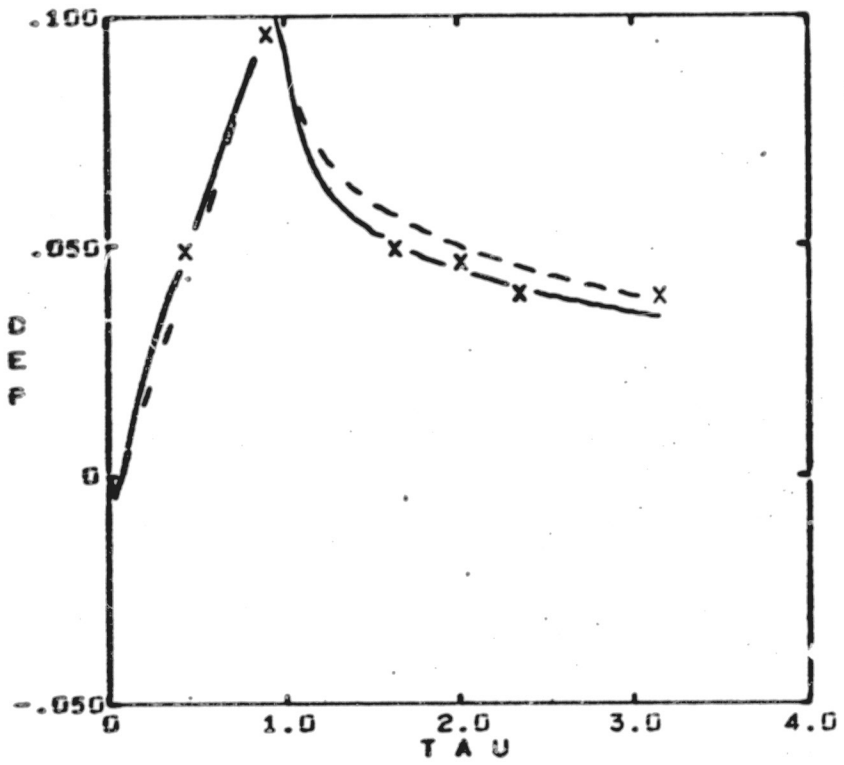
INITIAL TEMPERATURE 394.21
TAU-END OF TOTALITY 3.183

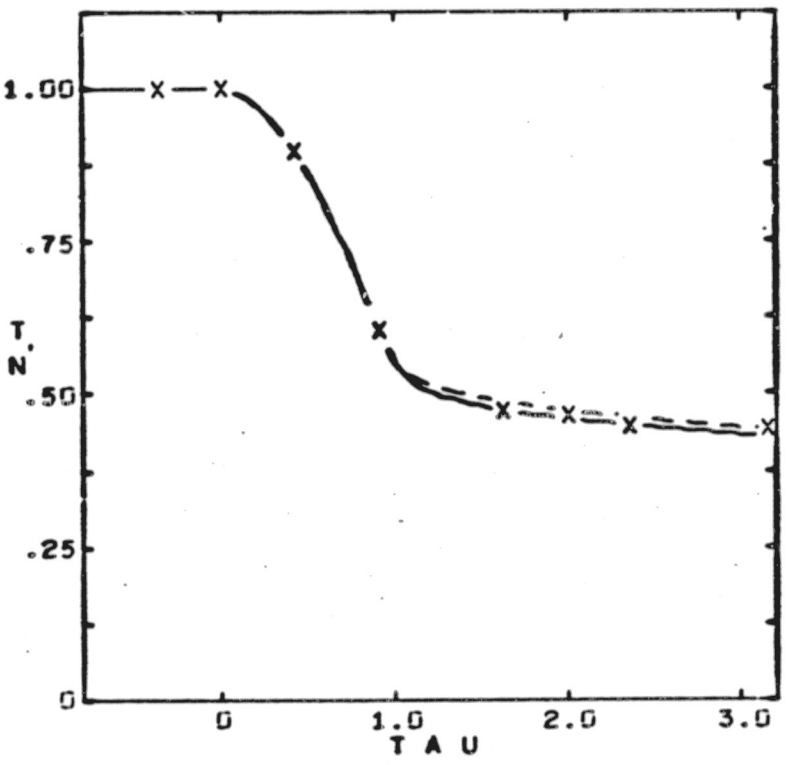
DIFFERENTIAL ENERGY DATA

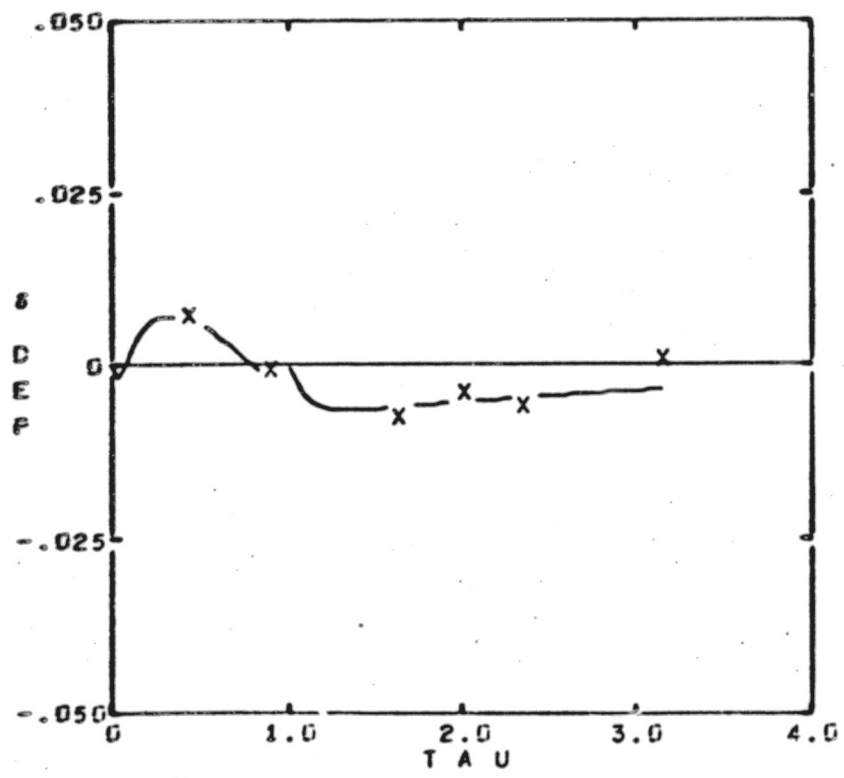
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0272	.0206	.0066
.50	.0557	.0498	.0059
.75	.0820	.0809	.0011
.93	.0990	.1017	-.0027
1.0	.0925	.0926	-.0001
1.5	.0533	.0596	-.0063
2.0	.0446	.0499	-.0053
2.5	.0393	.0437	-.0044
3.0	.0353	.0390	-.0037

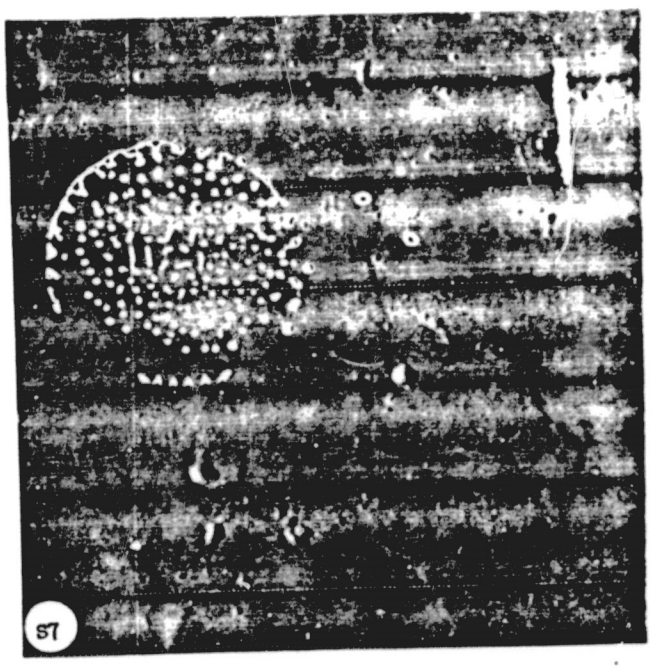
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.108	396.10	1.005	.0193
9H	-0.368	394.03	1.000	-.0018
10H	-0.002	394.21	1.000	-.0000
11H	0.430	354.20	0.898	.0487
12H	0.906	238.23	0.604	.0962
13H	1.629	185.49	0.471	.0490
14H	2.011	182.63	0.463	.0461
15H	2.353	175.77	0.446	.0395
16H	3.152	175.26	0.445	.0391









91 (2C7) SURVEYOR VI

LAMBDA= 1.48 W BETA= 0.46 N XI=-.0259 ETA=+.0081 L+PL CODE = 20031 ALBEDO =.0690

83H FLAT MOON DATA
FM=.00402

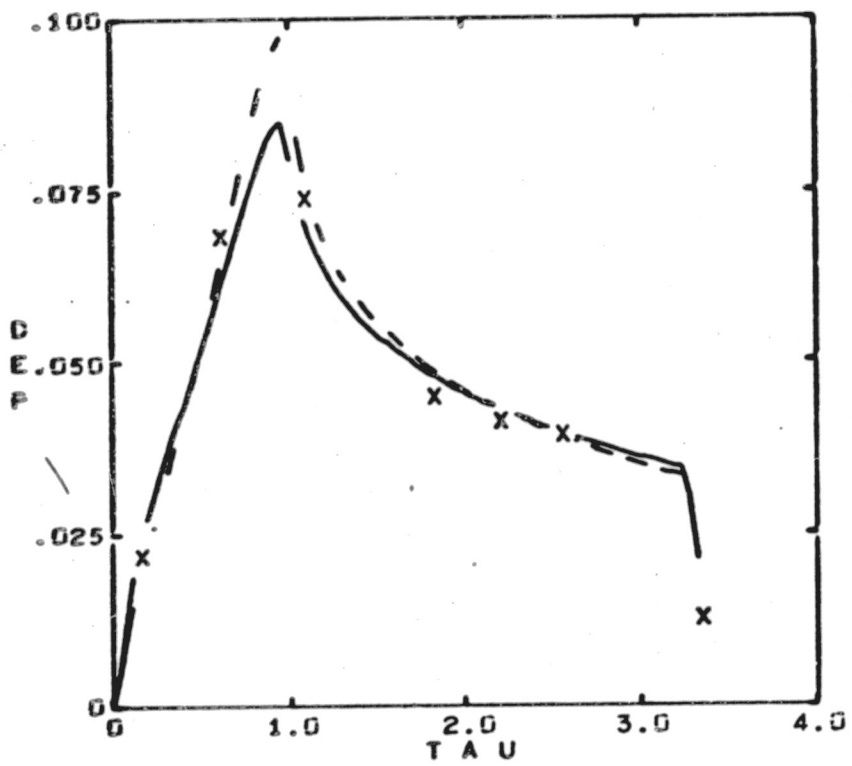
INITIAL TEMPERATURE 399.23
TAU-END OF TOTALITY 3.246

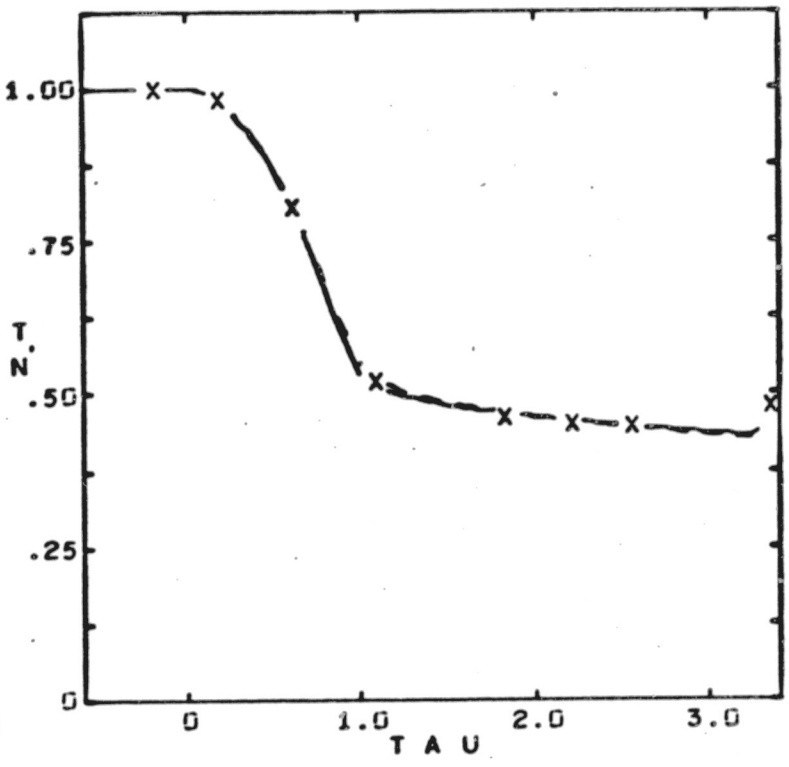
DIFFERENTIAL ENERGY DATA

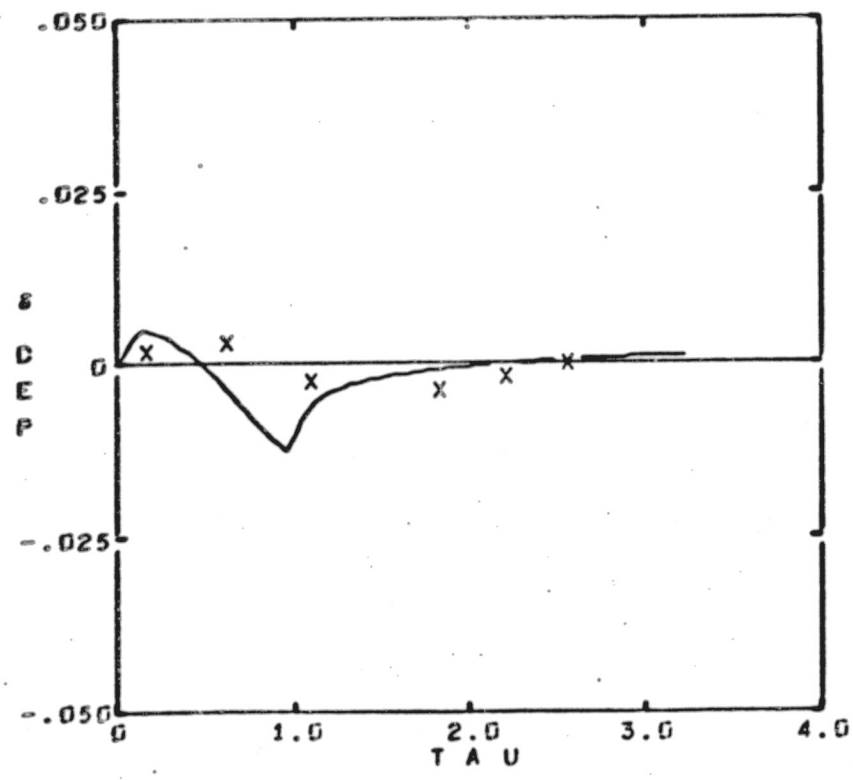
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0313	.0269	.0044
.50	.0520	.0527	-.0007
.75	.0731	.0807	-.0076
.93	.0868	.0994	-.0126
1.0	.0796	.0899	-.0103
1.5	.0539	.0558	-.0019
2.0	.0455	.0459	-.0004
2.5	.0402	.0397	.0005
3.0	.0363	.0352	.0011

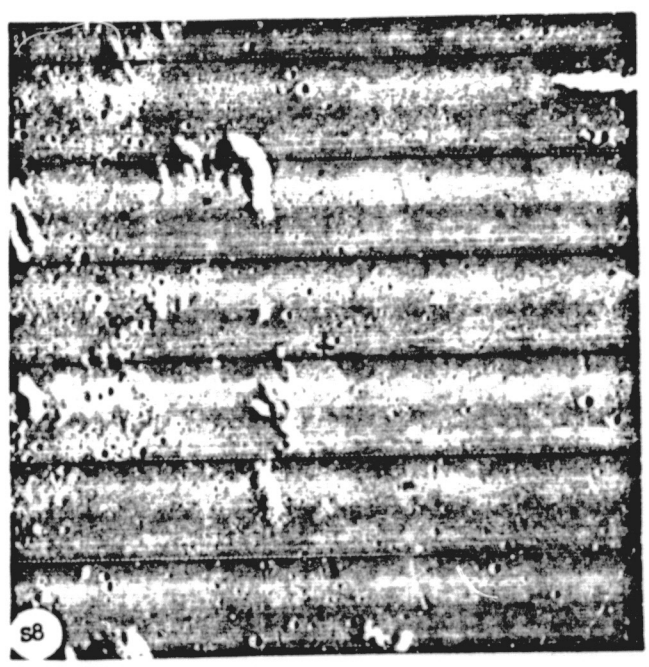
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.941	399.99	1.002	.0077
9H	-0.194	399.07	1.000	-.0016
10H	0.177	391.45	0.981	.0218
11H	0.614	321.87	0.806	.0685
12H	1.094	208.10	0.521	.0738
13H	1.825	183.83	0.460	.0450
14H	2.208	180.06	0.451	.0414
15H	2.555	177.68	0.445	.0392
16H	3.345	191.73	0.480	.0125









LAMBDA=11.44 W BETA=41.02 S XI=-.1496 ETA=-.6563 L+PL CODE = 31656 ALBEDO =.1367

13H FLAT MOON DATA
FM=.08786

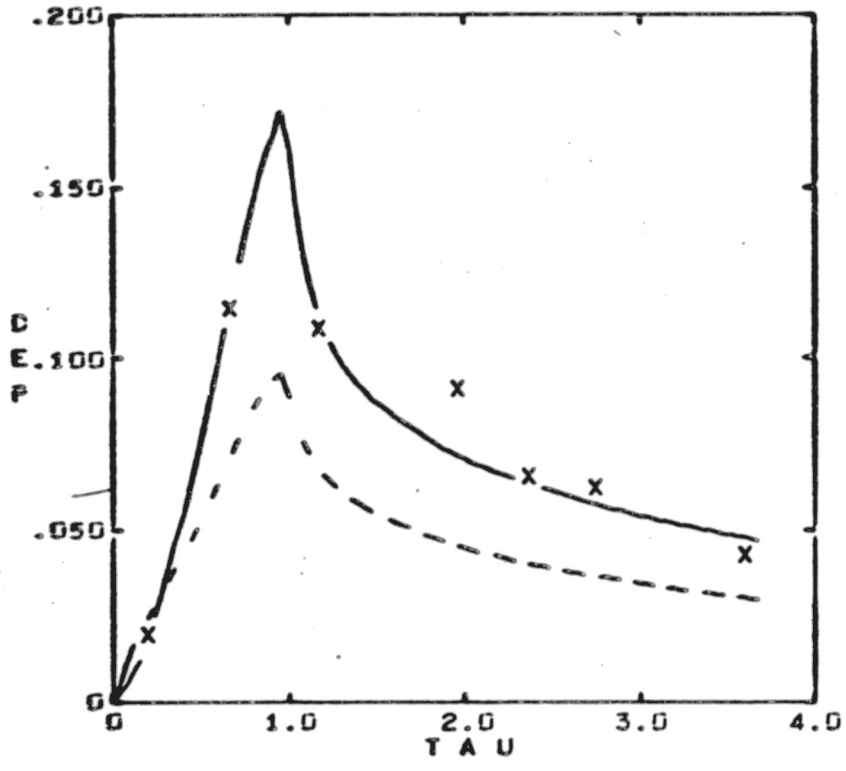
INITIAL TEMPERATURE 367.97
TAU-END OF TOTALITY 3.686

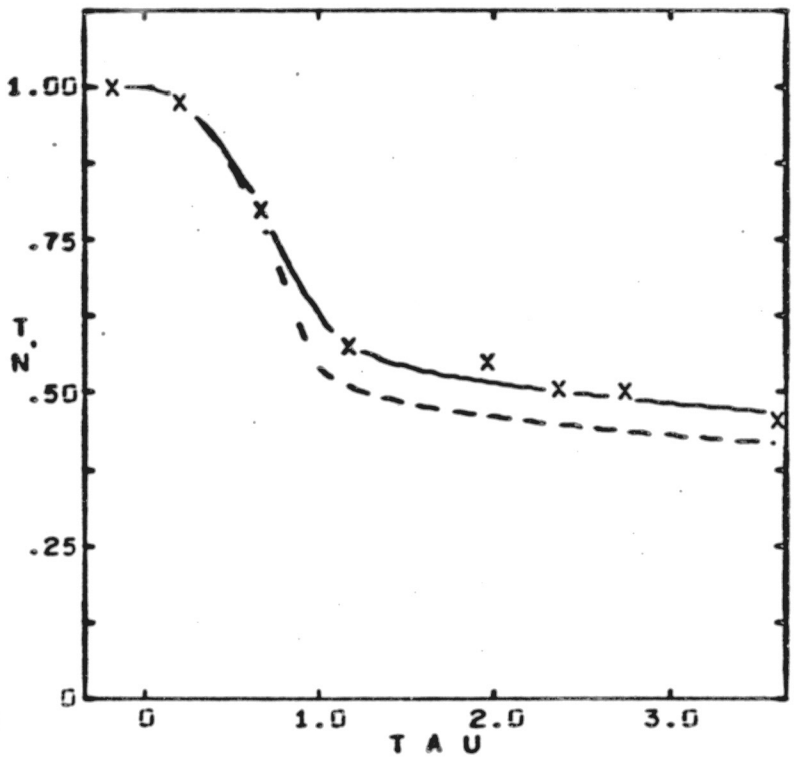
DIFFERENTIAL ENERGY DATA

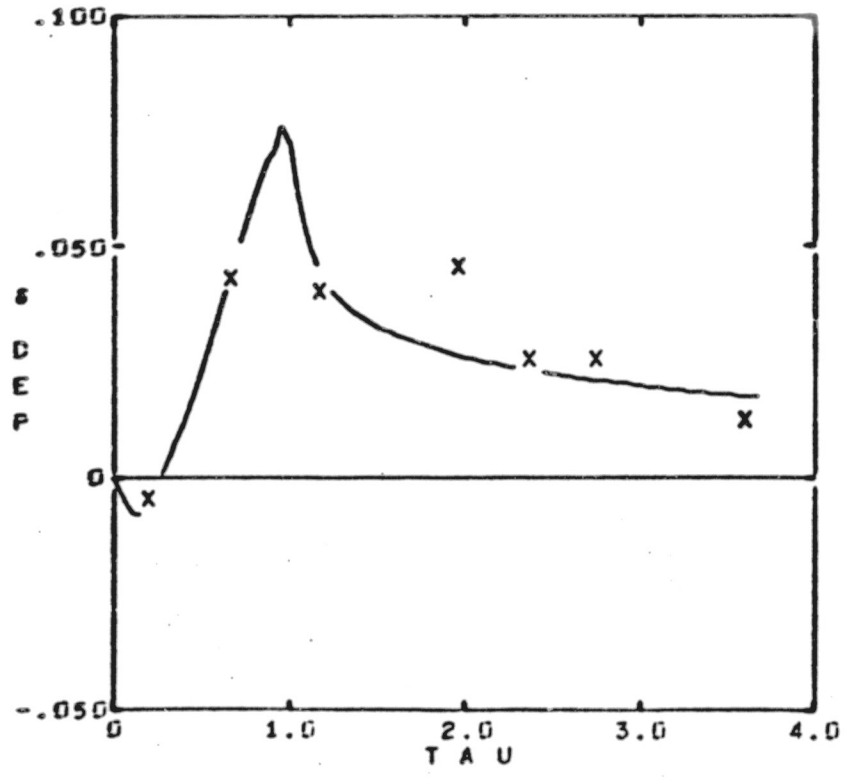
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0262	.0284	-.0022
.50	.0762	.0531	.0231
.75	.1343	.0800	.0543
.93	.1735	.0978	.0757
1.0	.1605	.0884	.0721
1.5	.0872	.0547	.0325
2.0	.0708	.0449	.0259
2.5	.0612	.0389	.0223
3.0	.0542	.0345	.0197

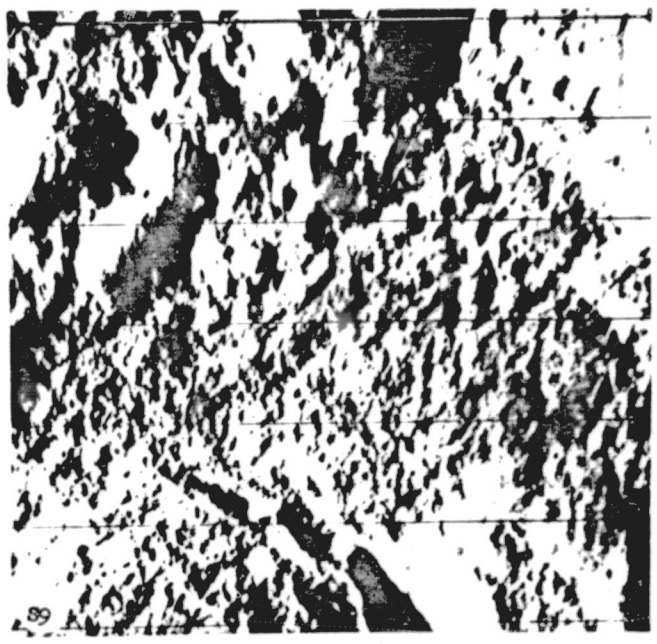
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.996	368.46	1.001	.0053
9H	-0.193	367.88	1.000	-.0010
10H	0.200	358.88	0.975	.0194
11H	0.667	294.41	0.800	.1146
12H	1.177	211.24	0.574	.1086
13H	1.960	202.32	0.550	.0914
14H	2.367	186.46	0.507	.0659
15H	2.738	184.00	0.500	.0625
16H	3.600	167.41	0.455	.0428









93 (2C8) LUNA IX

LAMBDA=64.55 W BETA= 7.00 N XI=-.8962 ETA=+.1219 L+PL CODE = 28192 ALBEDO =.0658

13H FLAT MOON DATA
FM=.00545

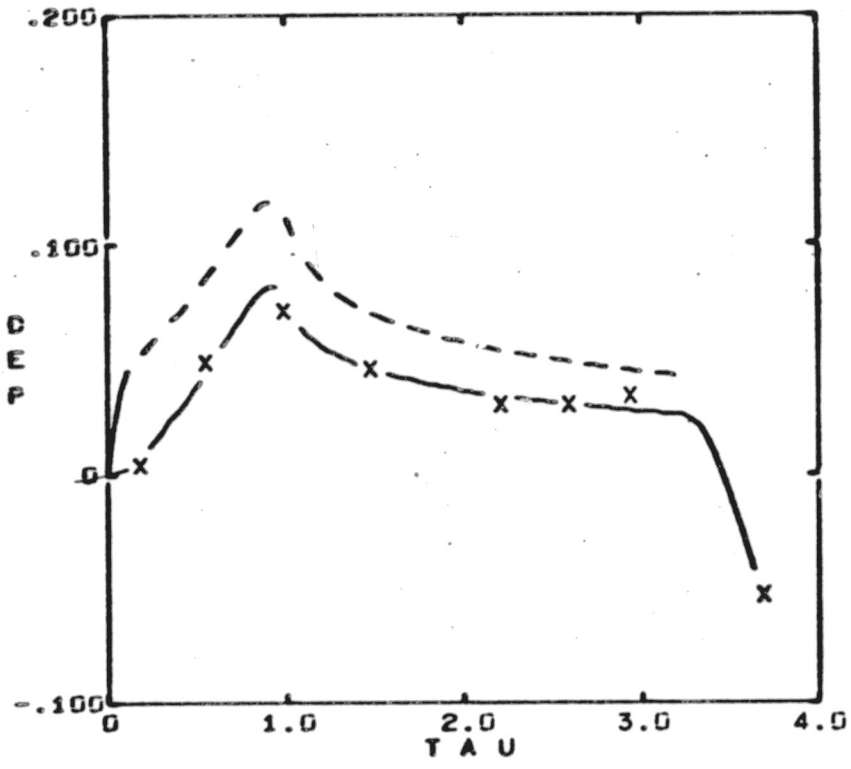
INITIAL TEMPERATURE 353.98
TAU-END OF TOTALITY 3.246

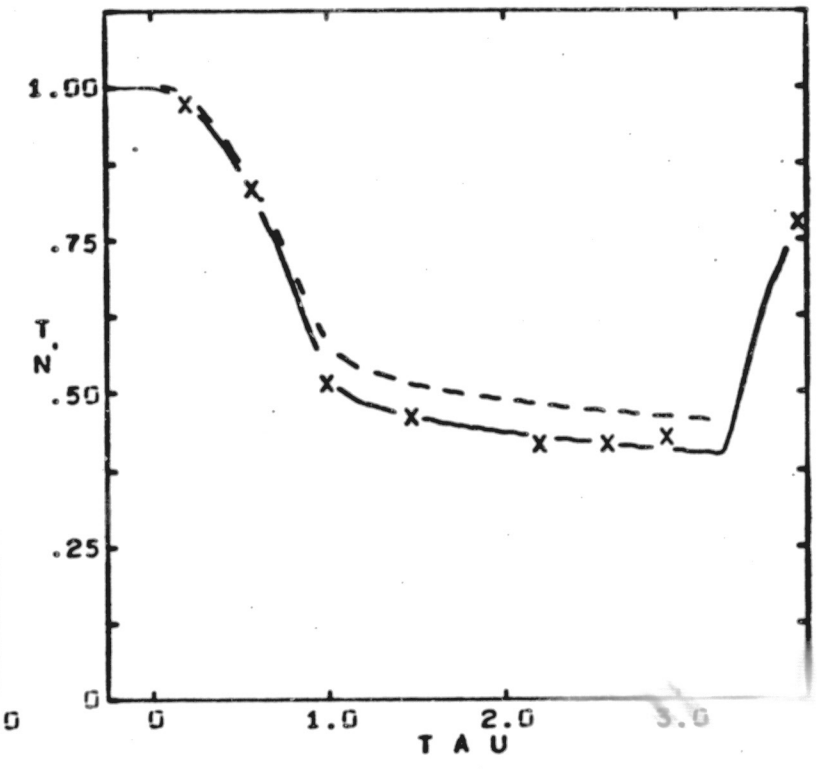
DIFFERENTIAL ENERGY DATA

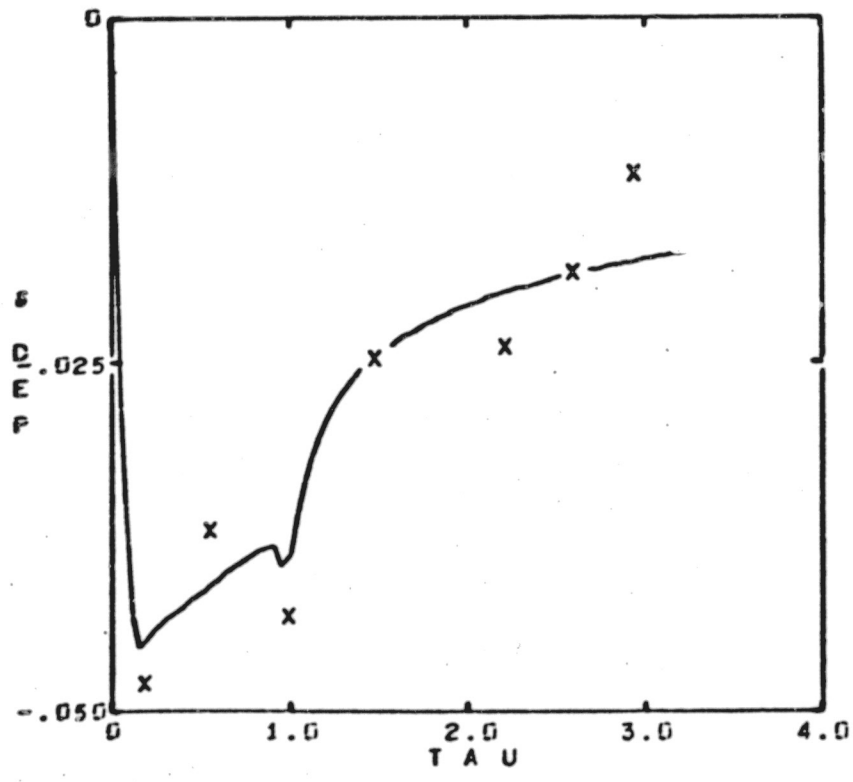
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0125	.0568	-.0443
.50	.0388	.0803	-.0415
.75	.0673	.1065	-.0392
.93	.0858	.1236	-.0378
1.0	.0735	.1123	-.0388
1.5	.0450	.0693	-.0243
2.0	.0362	.0570	-.0208
2.5	.0308	.0497	-.0189
3.0	.0270	.0445	-.0175

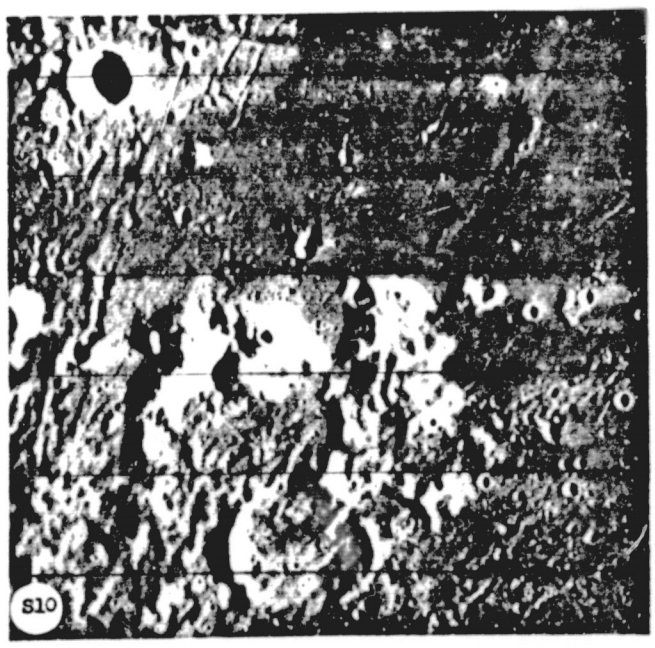
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.566	353.98	1.000	.0000
9H	0.184	344.73	0.974	.0034
10H	0.553	295.40	0.835	.0488
11H	0.991	183.28	0.518	.0711
12H	1.470	163.76	0.463	.0458
13H	2.203	147.11	0.416	.0298
14H	2.585	147.68	0.417	.0303
15H	2.933	151.92	0.429	.0339
16H	3.684	276.22	0.780	-.0537









94 (2C9) LUNA XIII

LAMBDA=62.05 W BETA=18.87 N XI=-.8359 ETA=+.3234 L+PL CODE = 28342 ALBEDO =.0544

13H FLAT MOON DATA
FM=.02204

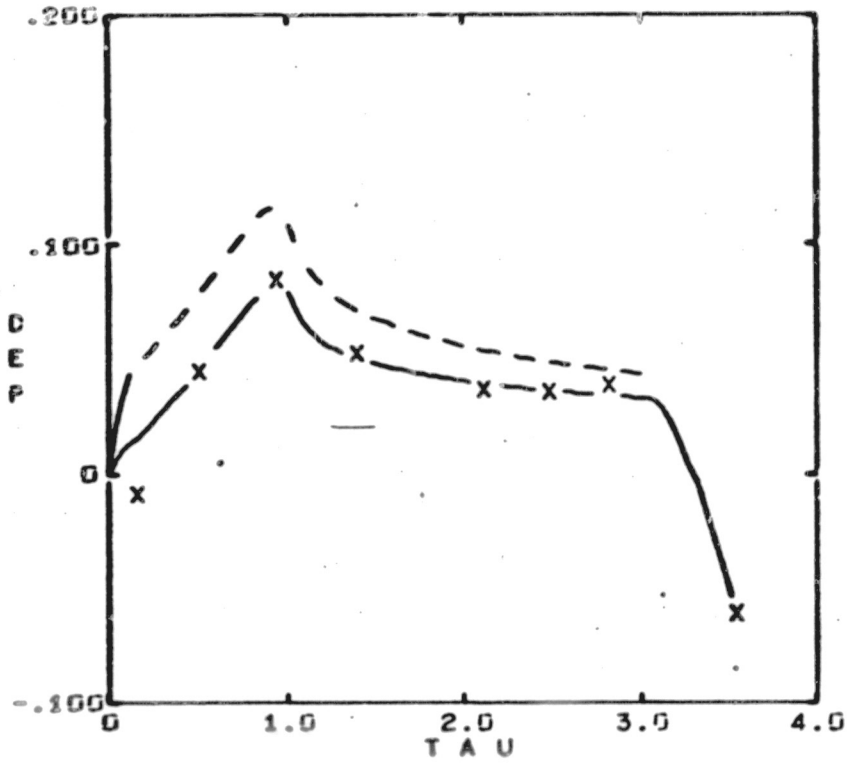
INITIAL TEMPERATURE 356.04
TAU-END OF TOTALITY 3.053

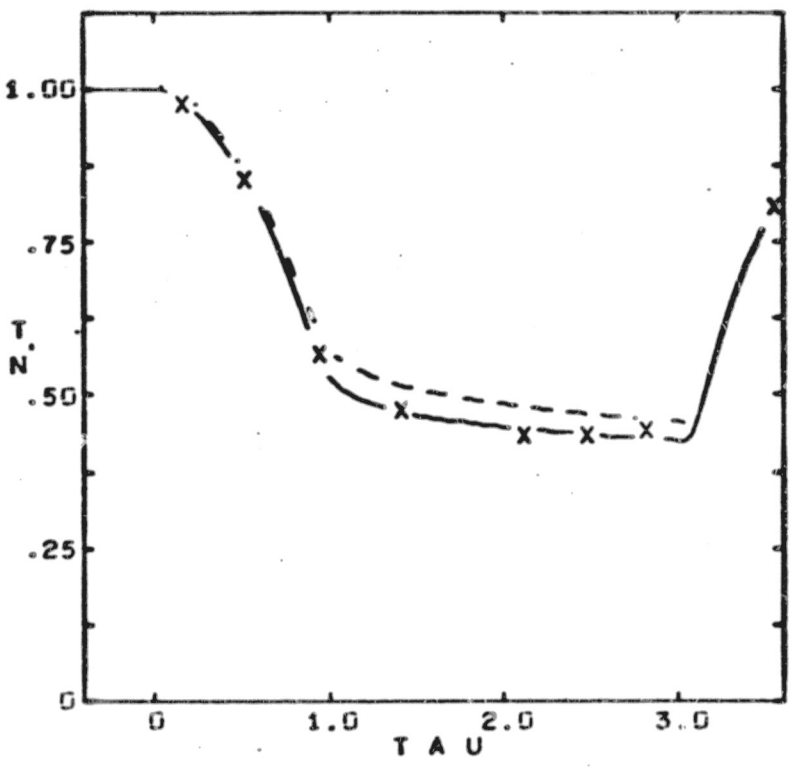
DIFFERENTIAL ENERGY DATA

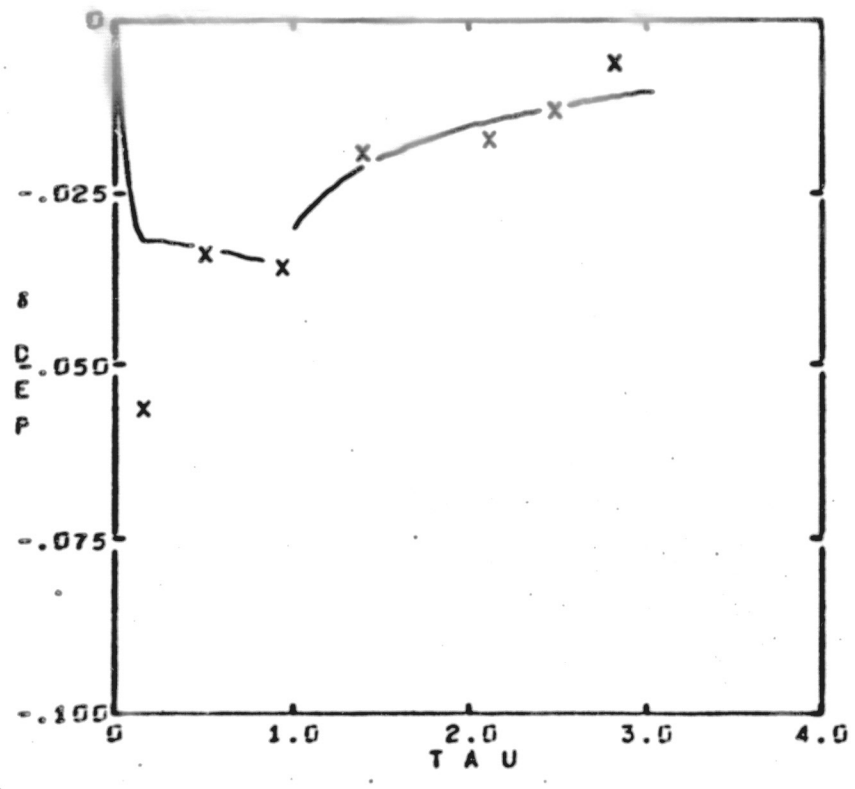
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0222	.0542	-.0320
.50	.0447	.0776	-.0329
.75	.0692	.1036	-.0344
.93	.0852	.1205	-.0353
1.0	.0793	.1094	-.0301
1.5	.0476	.0676	-.0200
2.0	.0402	.0556	-.0154
2.5	.0360	.0485	-.0125
3.0	.0330	.0434	-.0104

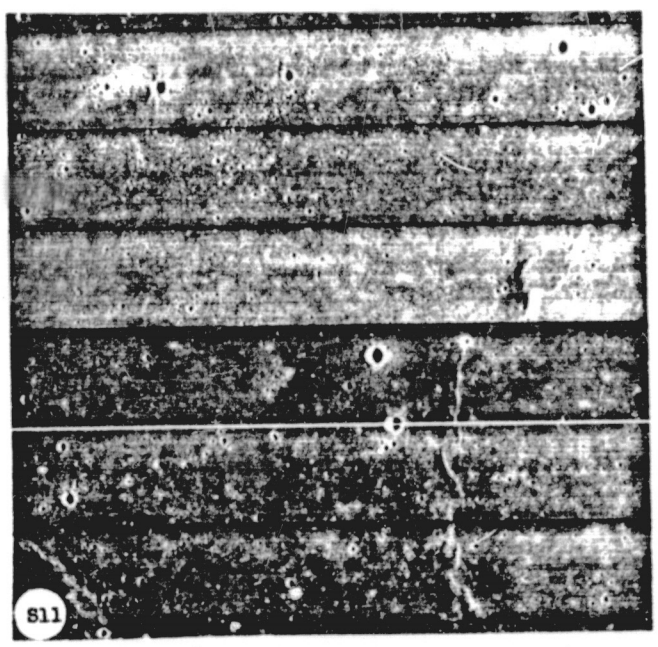
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.570	356.04	1.000	.0000
9H	0.155	347.73	0.977	-.0093
10H	0.514	303.61	0.853	.0450
11H	0.937	201.72	0.567	.0846
12H	1.403	170.09	0.478	.0521
13H	2.112	155.49	0.437	.0364
14H	2.483	154.81	0.435	.0357
15H	2.820	158.06	0.444	.0388
16H	3.545	288.59	0.811	-.0609









95 (1C4) APOLLO SITE I

LAMBDA=34.00 E BETA= 2.67 N XI=+.5586 ETA=+.0465 L+PL CODE = 15065 ALBEDO =.0654

83H FLAT MOON DATA
FM=.00933

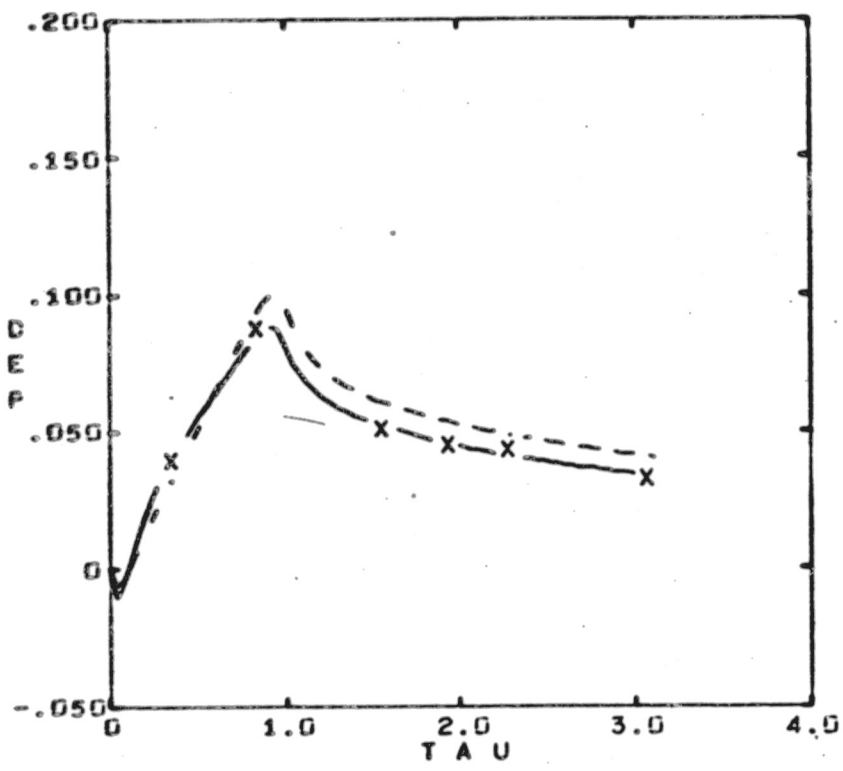
INITIAL TEMPERATURE 387.88
TAU-END OF TOTALITY 3.145

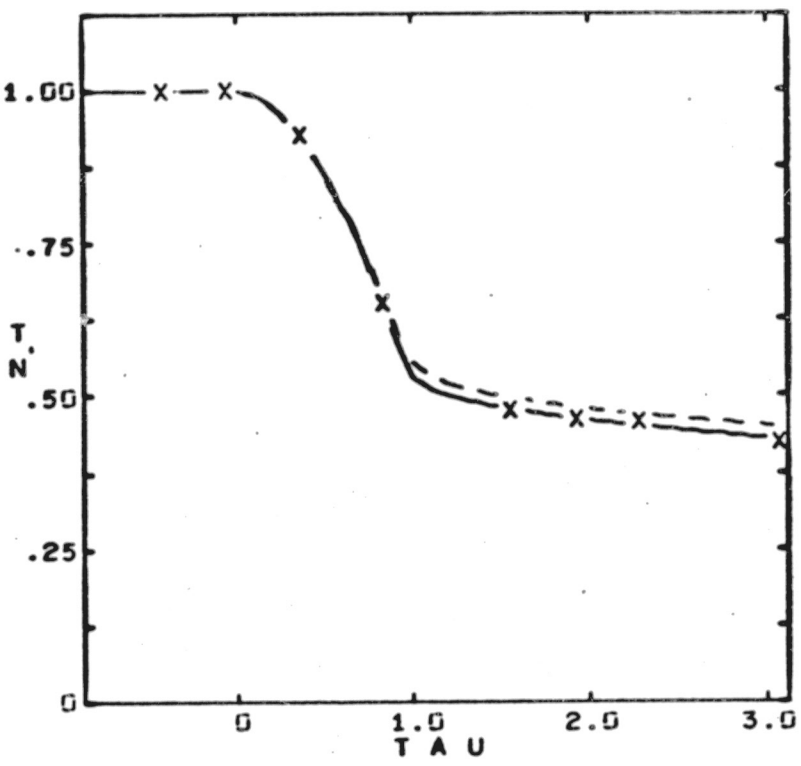
DIFFERENTIAL ENERGY DATA

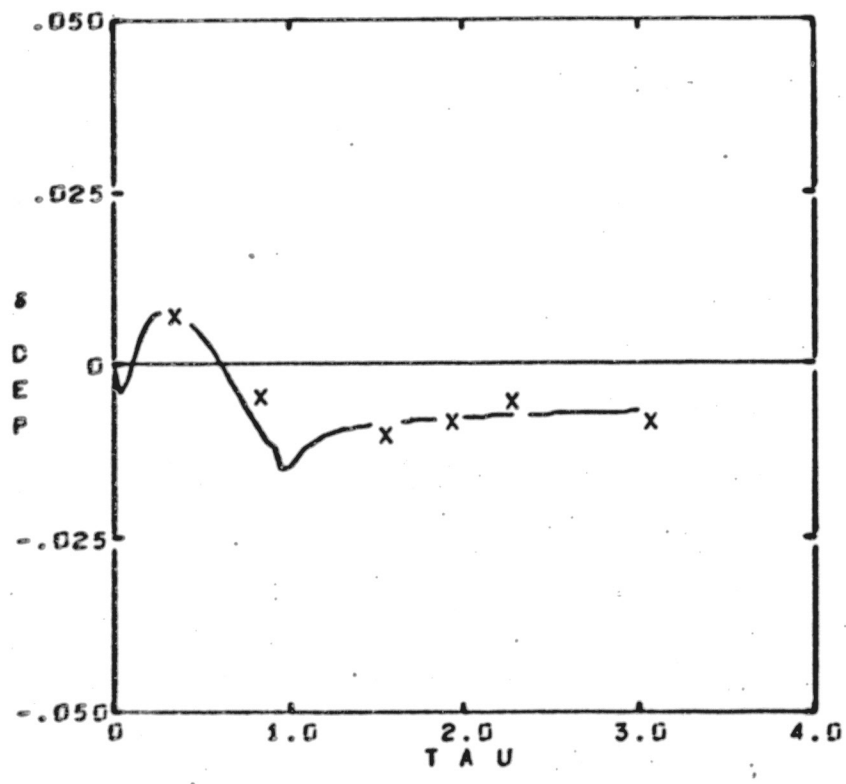
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0262	.0188	.0074
.50	.0544	.0500	.0044
.75	.0767	.0825	-.0058
.93	.0904	.1043	-.0139
1.0	.0802	.0952	-.0150
1.5	.0536	.0622	-.0086
2.0	.0448	.0525	-.0077
2.5	.0391	.0463	-.0072
3.0	.0347	.0415	-.0068

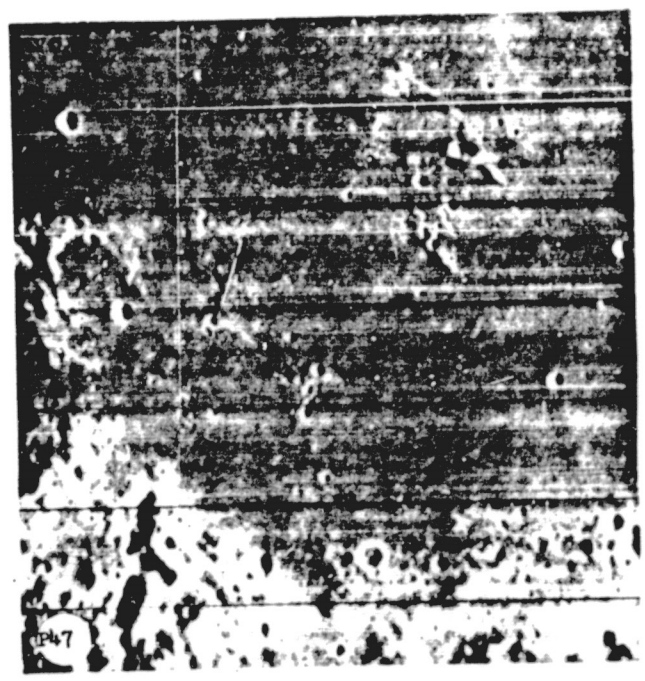
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.169	389.47	1.004	.0165
9H	-0.435	388.05	1.000	.0018
10H	-0.070	387.76	1.000	-.0013
11H	0.360	359.15	0.926	.0395
12H	0.832	253.51	0.654	.0876
13H	1.551	184.15	0.475	.0508
14H	1.929	178.92	0.461	.0453
15H	2.270	177.17	0.457	.0435
16H	3.070	164.86	0.425	.0326









LAMBDA=23.62 E BETA= 0.75 N XI=+.4006 ETA=+.0131 L+PL CODE = 14001 ALBEDO =.0642

13H FLAT MOON DATA
FM=.01618

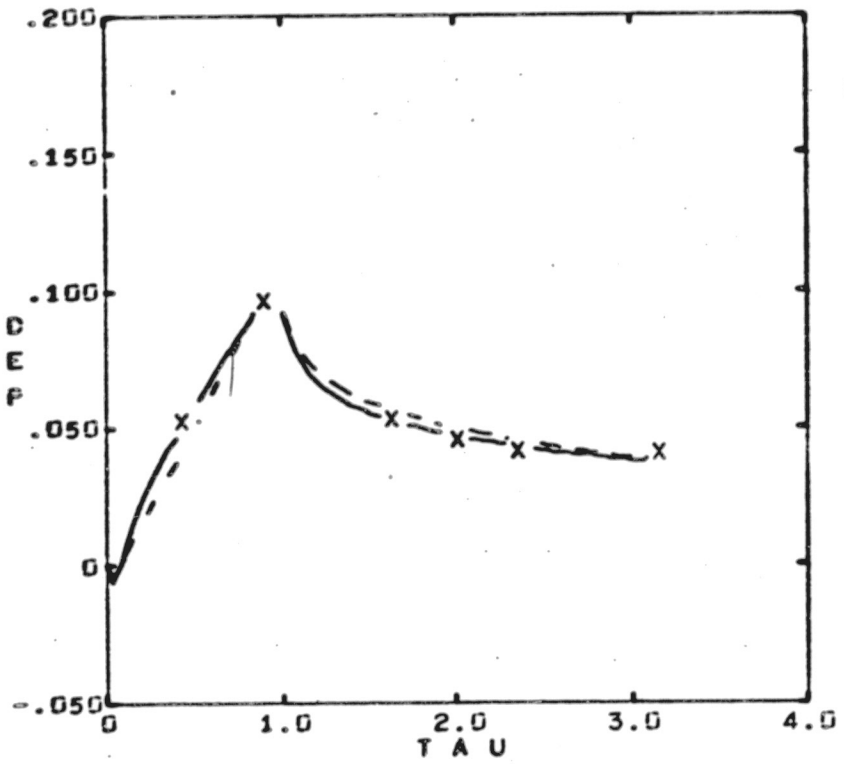
INITIAL TEMPERATURE 393.73
TAU-END OF TOTALITY 3.194

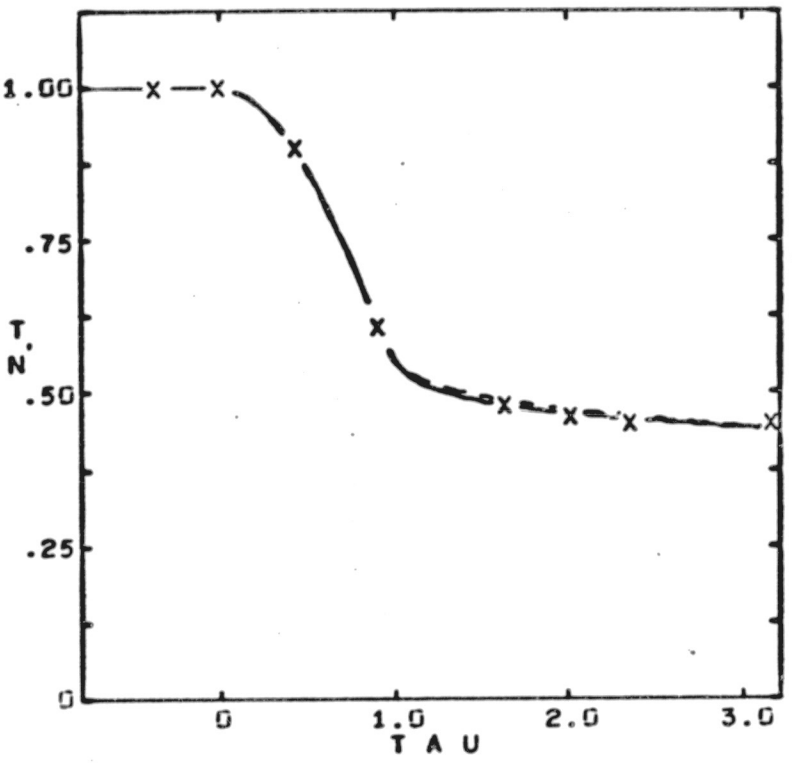
DIFFERENTIAL ENERGY DATA

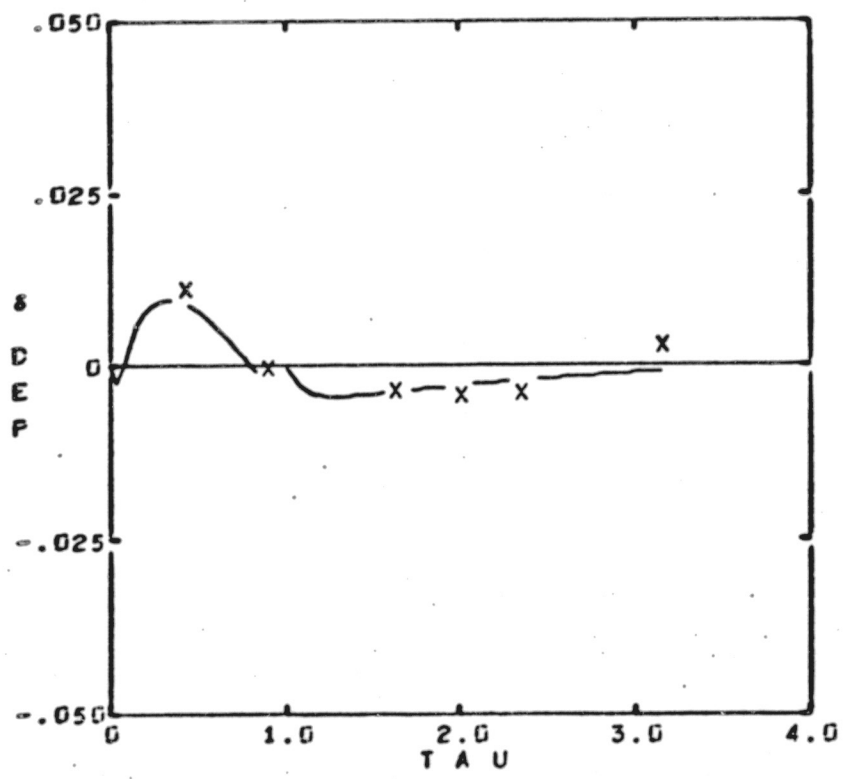
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0294	.0205	.0089
.50	.0577	.0498	.0079
.75	.0825	.0809	.0016
.93	.0983	.1018	-.0035
1.0	.0925	.0926	-.0001
1.5	.0557	.0597	-.0040
2.0	.0472	.0500	-.0028
2.5	.0420	.0438	-.0018
3.0	.0381	.0391	-.0010

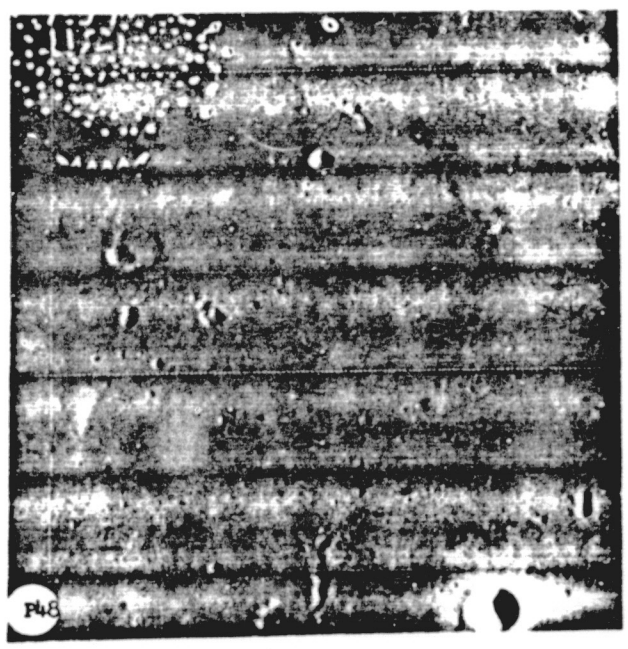
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-1.113	396.17	1.006	.0249
9H	-0.372	394.01	1.001	.0028
10H	-0.006	393.72	1.000	-.0002
11H	0.429	354.58	0.901	.0524
12H	0.904	238.67	0.606	.0965
13H	1.629	189.08	0.480	.0532
14H	2.011	182.22	0.463	.0459
15H	2.354	178.01	0.452	.0418
16H	3.155	177.26	0.450	.0411









97 (2D1) APOLLO SITE III

LAMBDA= 1.34 W BETA= 0.42 N XI=-.0233 ETA=+.0073 L+PL CODE = 20021 ALBEDO =.0694

13M FLAT MOON DATA
FM=.00535

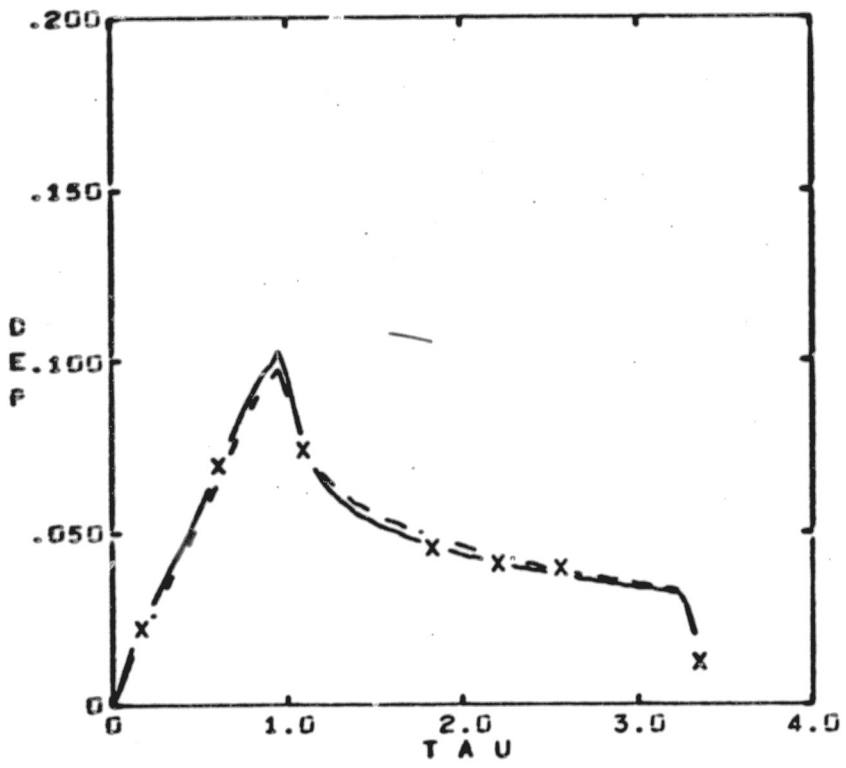
INITIAL TEMPERATURE 399.28
TAU-END OF TOTALITY 3.247

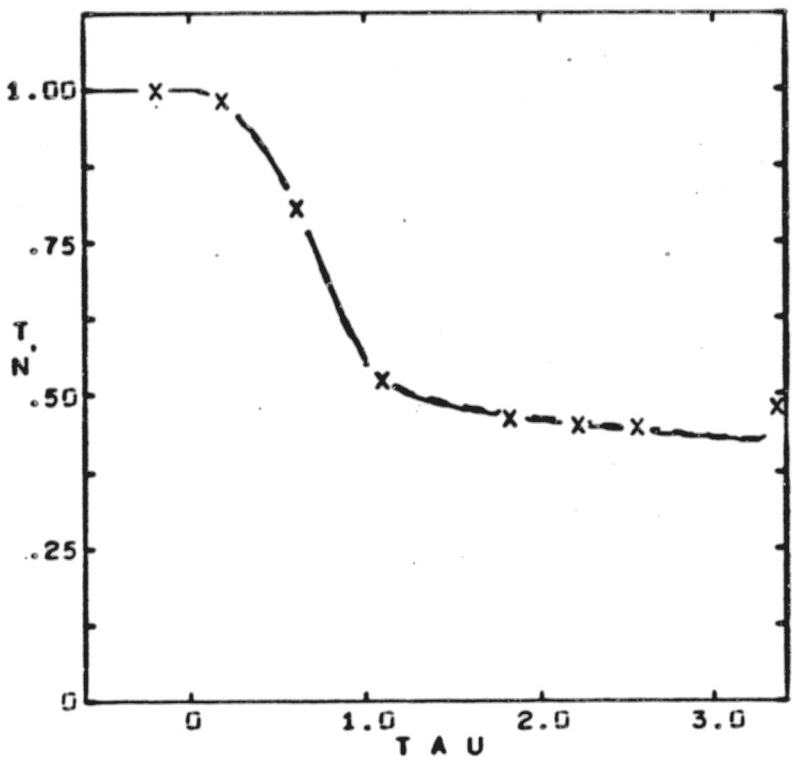
DIFFERENTIAL ENERGY DATA

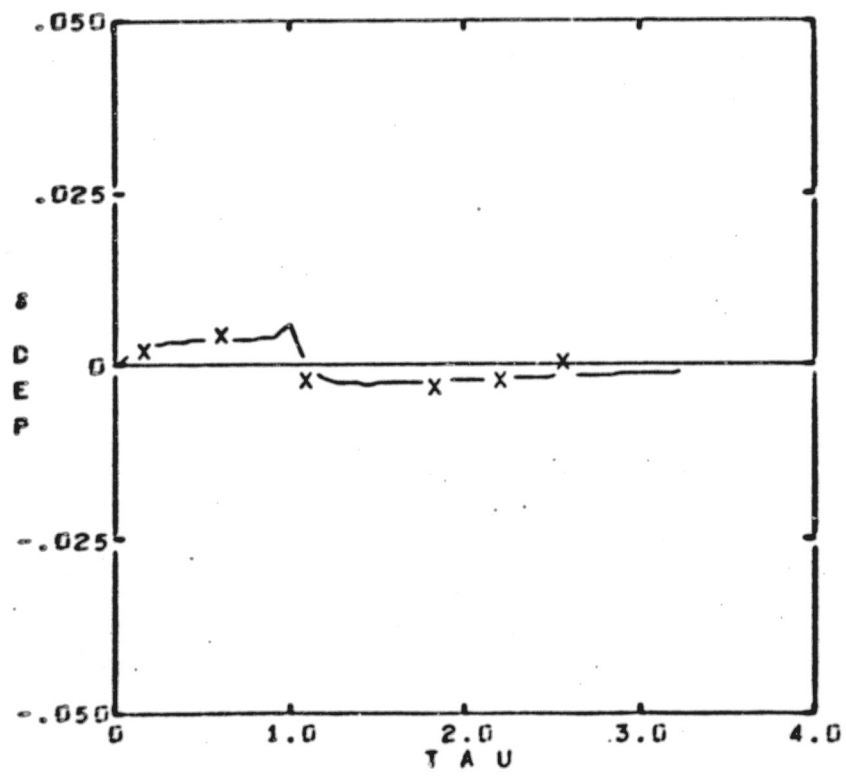
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0299	.0268	.0031
.50	.0563	.0526	.0037
.75	.0846	.0807	.0039
.93	.1033	.0994	.0039
1.0	.0959	.0899	.0060
1.5	.0532	.0558	-.0026
2.0	.0437	.0459	-.0022
2.5	.0381	.0397	-.0016
3.0	.0340	.0352	-.0012

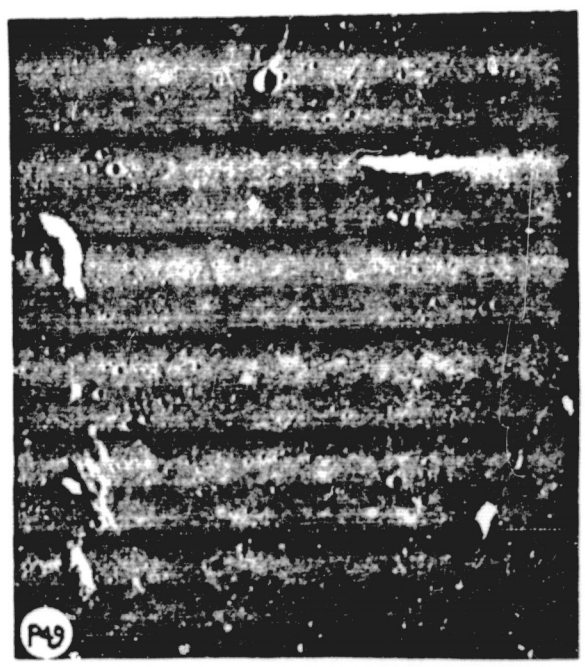
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.943	399.95	1.002	.0067
9H	-0.195	399.14	1.000	-.0014
10H	0.176	391.60	0.981	.0218
11H	0.612	322.38	0.807	.0694
12H	1.092	208.39	0.522	.0742
13H	1.824	184.38	0.462	.0455
14H	2.207	179.70	0.450	.0410
15H	2.554	178.08	0.446	.0396
16H	3.346	191.37	0.479	.0122









LAMBDA=36.41 W BETA= 3.50 S XI=-.5925 ETA=-.0610 L+PL CODE = 35096 ALBEDO =.0577

13H FLAT MOON DATA
FM=.02413

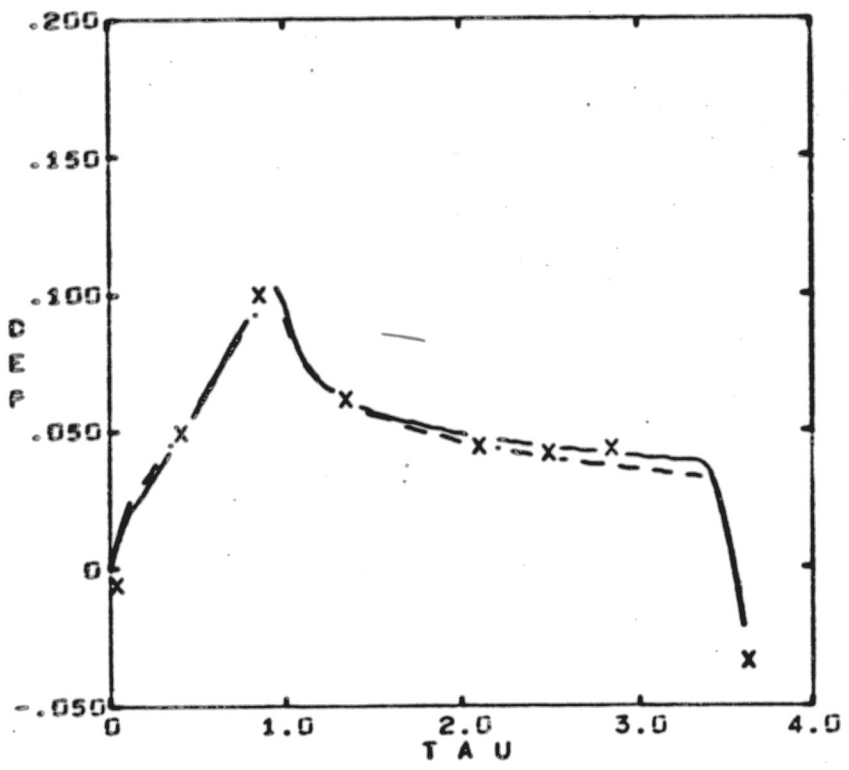
INITIAL TEMPERATURE 383.57
TAU-END OF TOTALITY 3.362

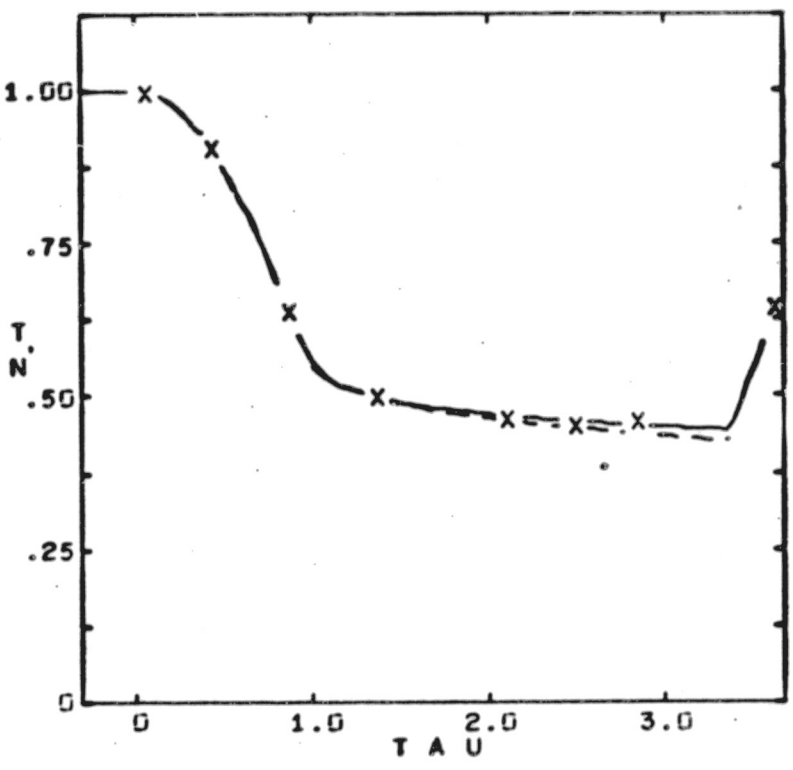
DIFFERENTIAL ENERGY DATA

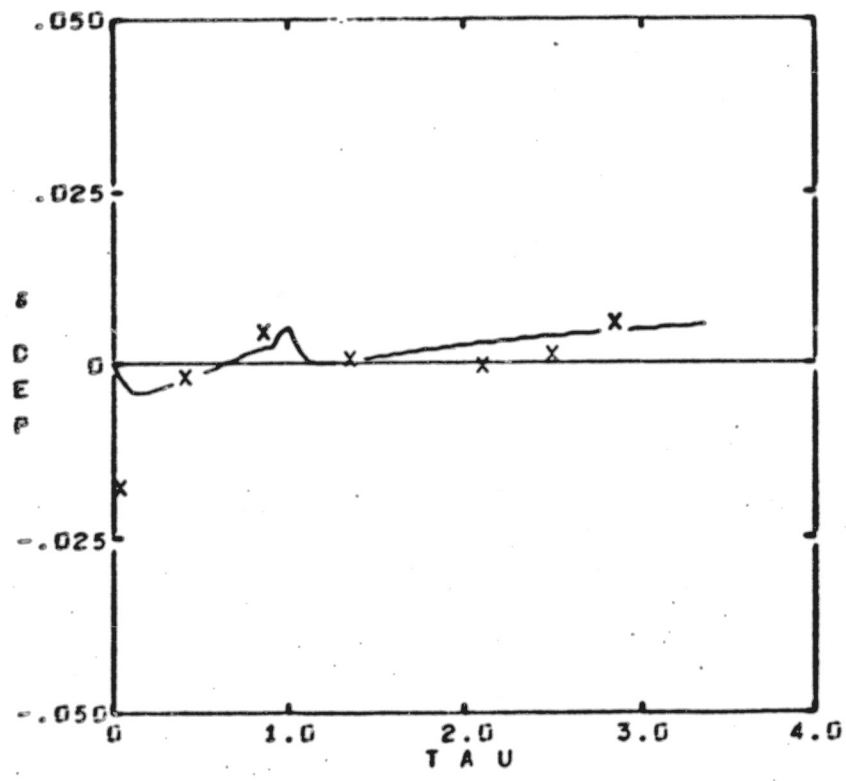
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0320	.0357	-.0037
.50	.0575	.0589	-.0014
.75	.0855	.0843	.0012
.93	.1040	.1010	.0030
1.0	.0967	.0913	.0054
1.5	.0574	.0563	.0011
2.0	.0491	.0463	.0028
2.5	.0443	.0402	.0041
3.0	.0409	.0359	.0050

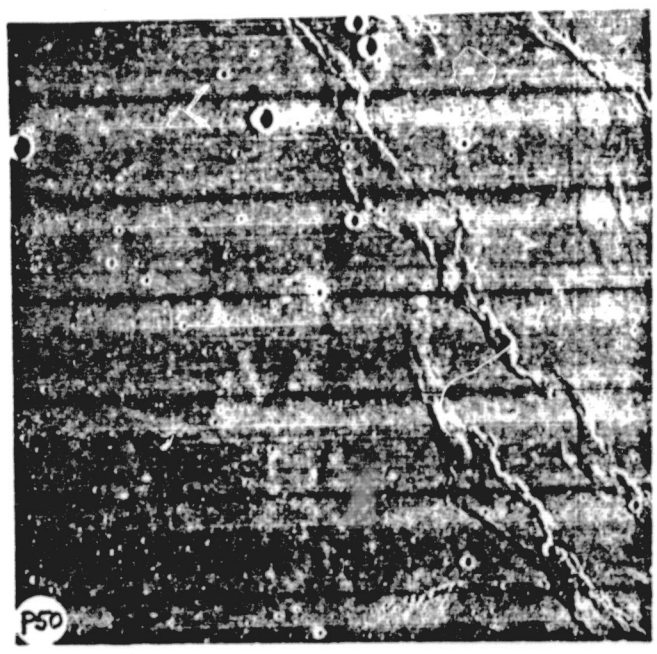
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.717	383.57	1.000	.0000
9H	0.048	381.94	0.996	-.0058
10H	0.424	346.63	0.904	.0496
11H	0.868	244.76	0.638	.0994
12H	1.357	191.23	0.499	.0618
13H	2.102	176.27	0.460	.0446
14H	2.492	173.35	0.452	.0417
15H	2.845	174.90	0.456	.0432
16H	3.630	246.87	0.644	-.0341









99 (202) APOLLO SITE V

LAMBDA=41.67 W BETA= 1.67 N. XI=-.6645 ETA=+.0291 L+PL CODE = 26063 ALBEDO =.0596

83H FLAT MOON DATA
FM=.02281

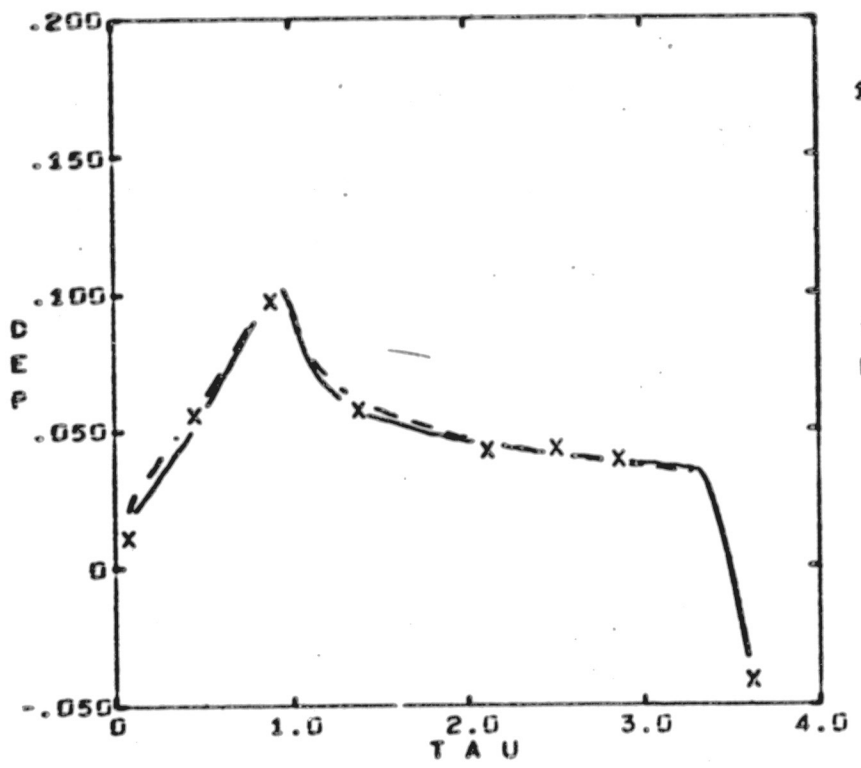
INITIAL TEMPERATURE 378.13
TAU-END OF TOTALITY 3.298

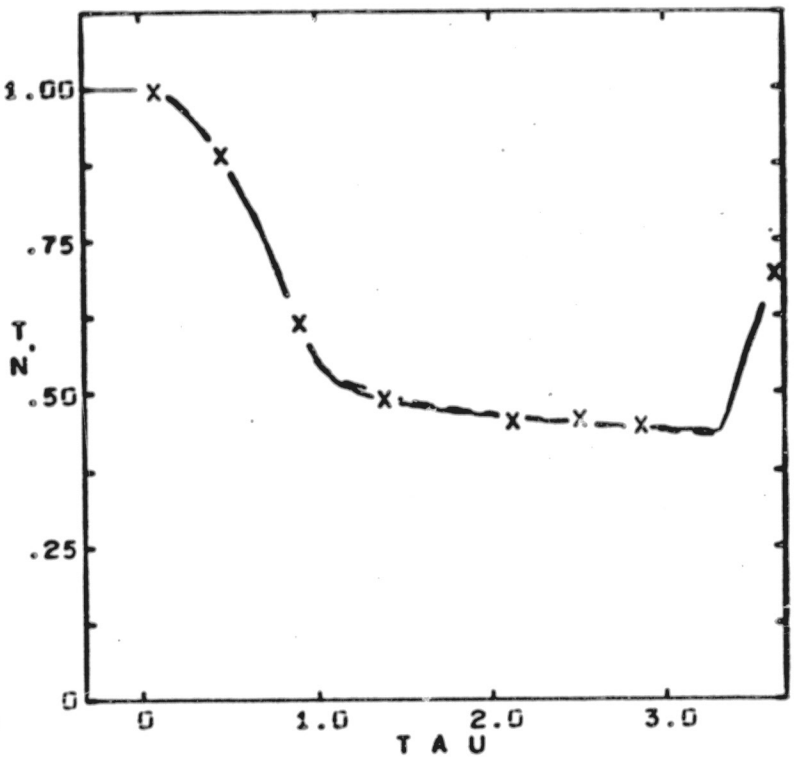
DIFFERENTIAL ENERGY DATA

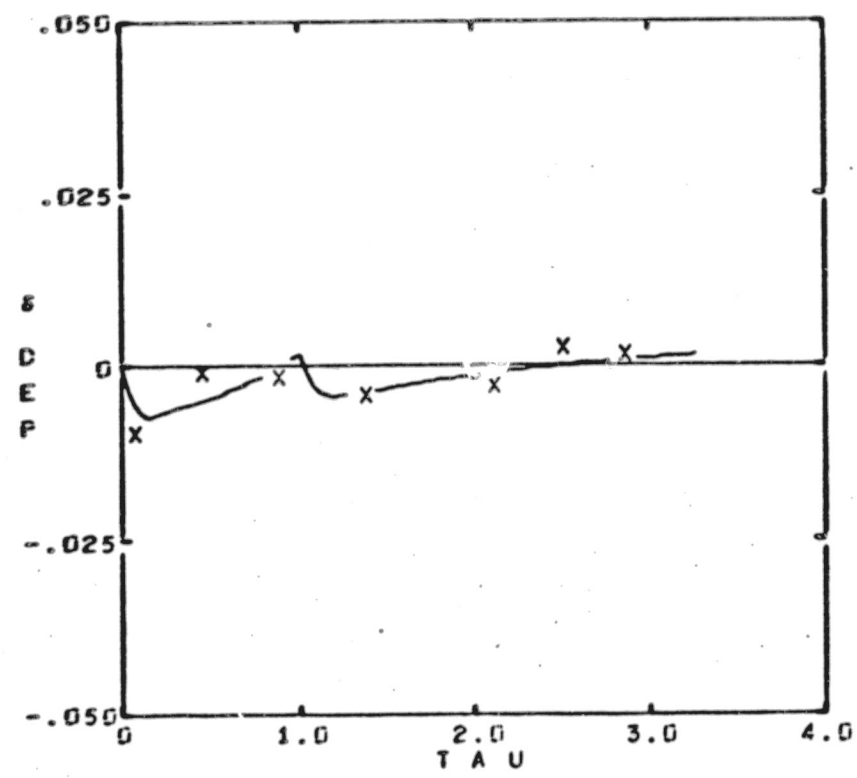
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0315	.0382	-.0067
.50	.0568	.0613	-.0045
.75	.0846	.0866	-.0020
.93	.1030	.1032	-.0002
1.0	.0952	.0933	.0019
1.5	.0544	.0576	-.0032
2.0	.0461	.0474	-.0013
2.5	.0413	.0412	.0001
3.0	.0379	.0368	.0011

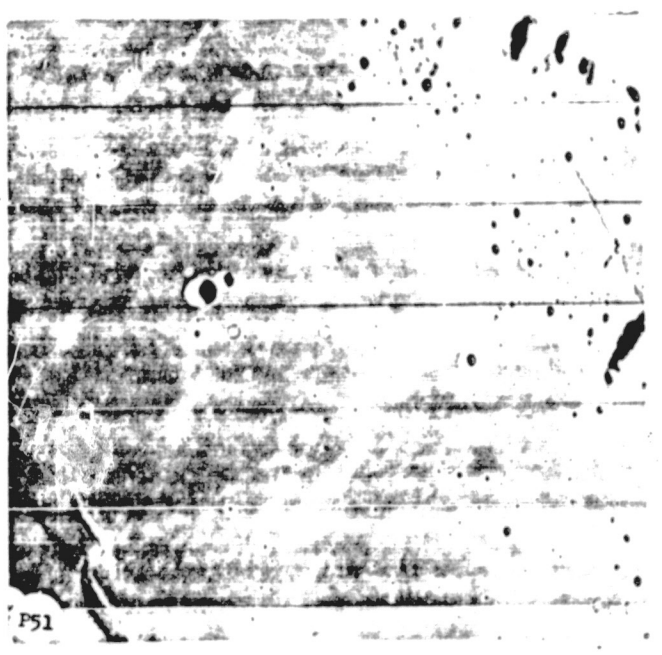
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.674	378.13	1.000	.0000
9H	0.081	376.67	0.996	.0113
10H	0.455	336.82	0.891	.0561
11H	0.895	232.24	0.614	.0970
12H	1.377	185.23	0.490	.0576
13H	2.116	172.07	0.455	.0429
14H	2.502	172.97	0.457	.0438
15H	2.852	168.79	0.446	.0397
16H	3.622	262.57	0.694	-.0415









800 (203) REINER GAMMA

LAMBDA=58.80 W BETA= 7.40 N XI=-.8462 ETA=+.1288 L+PL CODE = 28153 ALBEDO =.0751

83H FLAT MOON DATA
FM=.01923

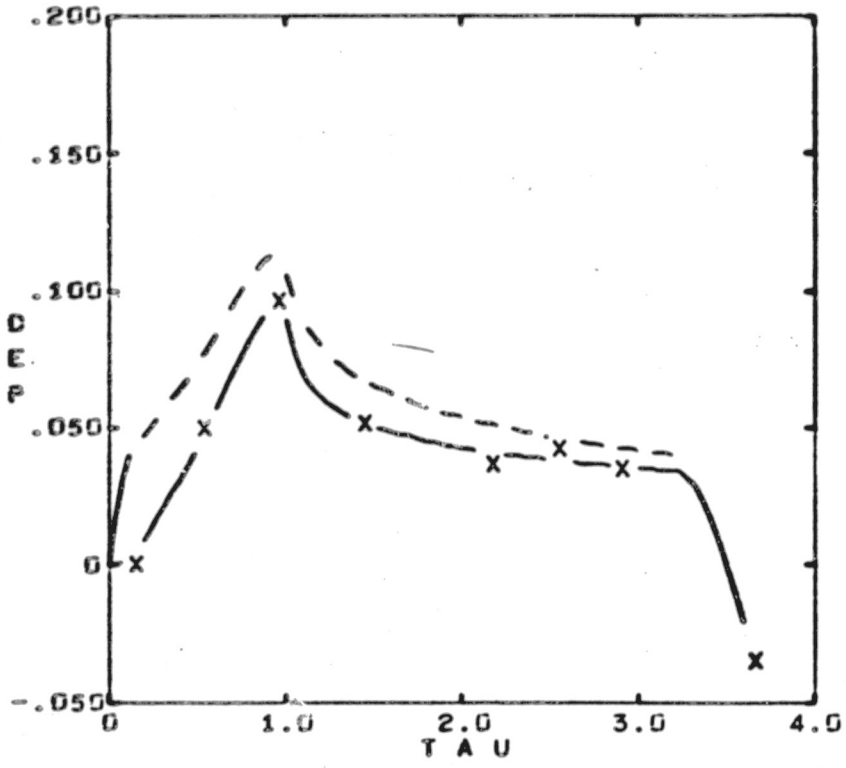
INITIAL TEMPERATURE 357.55
TAU-END OF TOTALITY 3.235

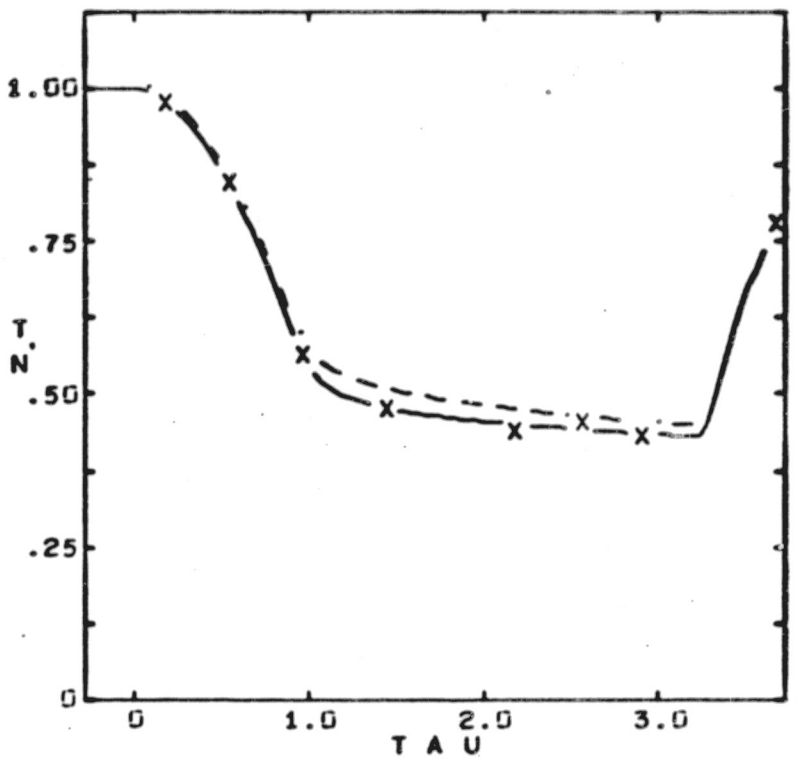
DIFFERENTIAL ENERGY DATA

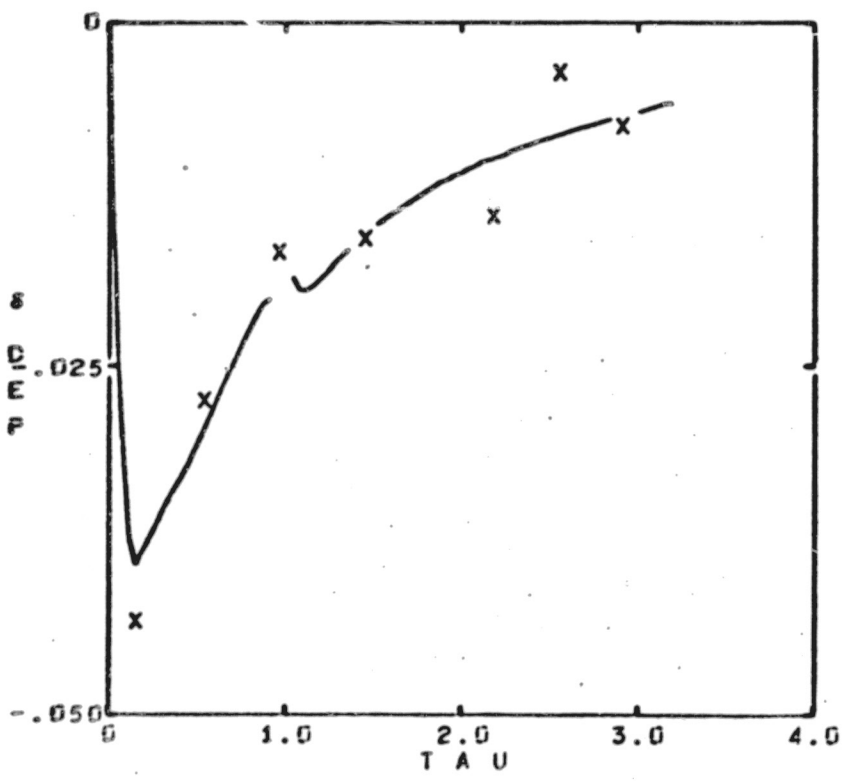
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0139	.0510	-.0371
.50	.0439	.0743	-.0304
.75	.0766	.1000	-.0234
.93	.0979	.1168	-.0189
1.0	.0897	.1060	-.0163
1.5	.0506	.0655	-.0149
2.0	.0430	.0539	-.0109
2.5	.0386	.0469	-.0083
3.0	.0356	.0420	-.0064

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	TN	DEP
8H	-0.585	357.55	1.000	.0000
9H	0.163	349.74	0.978	.0006
10H	0.531	303.04	0.848	.0502
11H	0.969	202.23	0.566	.0962
12H	1.447	170.50	0.477	.0517
13H	2.178	156.94	0.439	.0371
14H	2.560	162.56	0.455	.0427
15H	2.907	155.00	0.434	.0353
16H	3.660	279.14	0.781	-.0343









101 (488) ABULFEDA E

LAMBDA=10.18 E BETA=16.75 S XI=+.1692 ETA=-.2882 L+PL CODE = 41268 ALBEDO =.1740

13H FLAT MOON DATA
FM=.04093 FM'=.04886

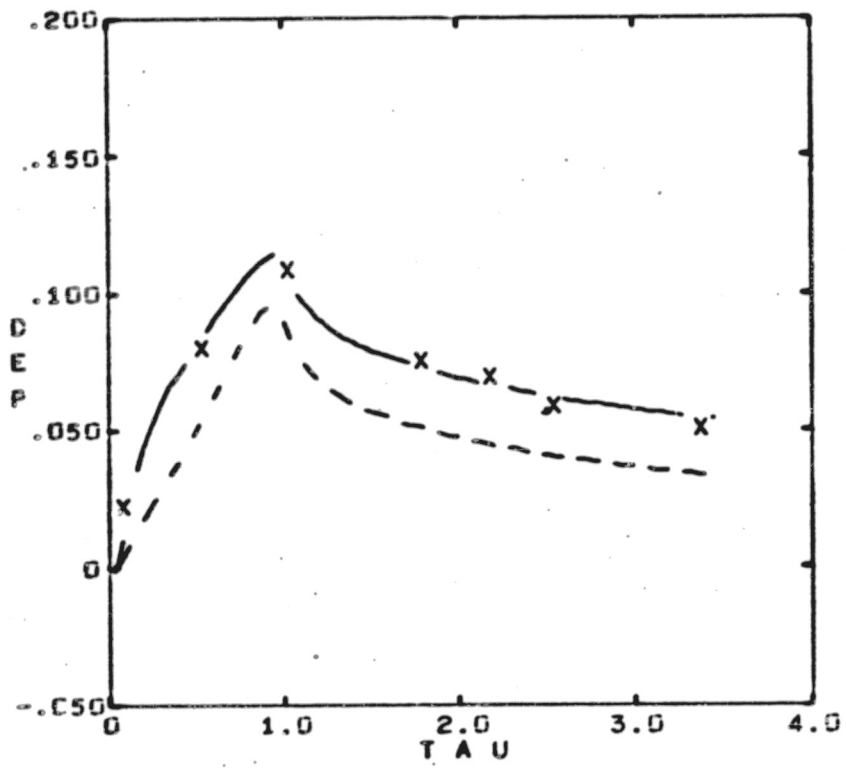
INITIAL TEMPERATURE 382.29
TAU-END OF TOTALITY 3.455

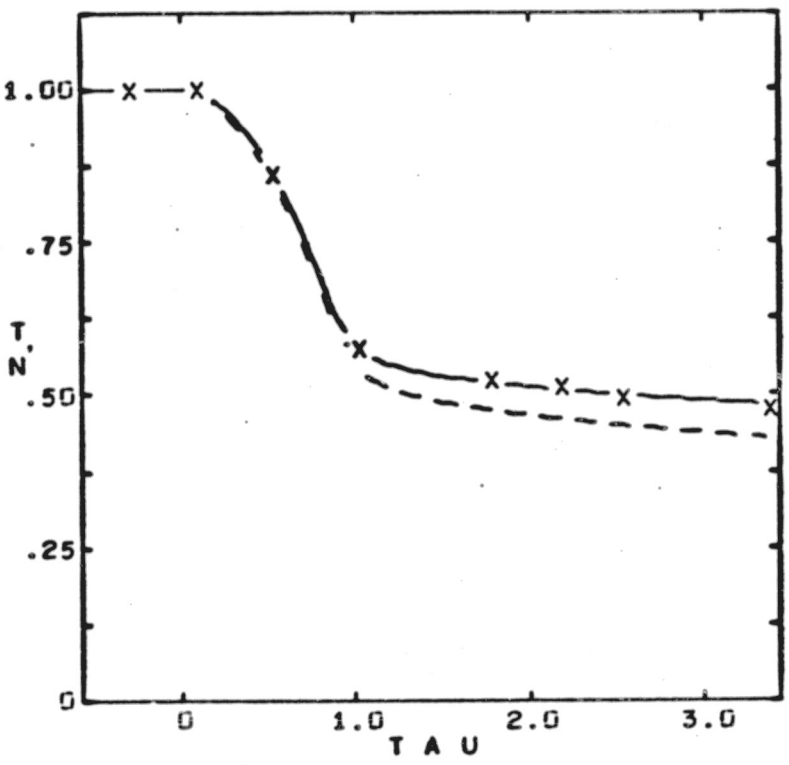
DIFFERENTIAL ENERGY DATA

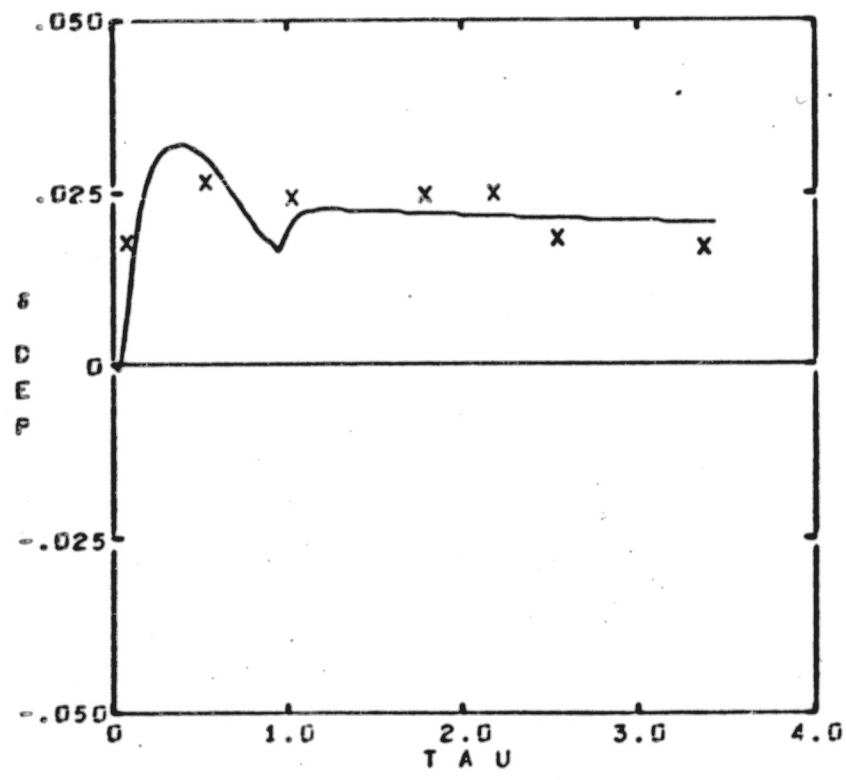
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0515	.0224	.0291
.50	.0806	.0498	.0308
.75	.1022	.0795	.0227
.93	.1150	.0993	.0157
1.0	.1095	.0902	.0193
1.5	.0794	.0571	.0223
2.0	.0691	.0474	.0217
2.5	.0625	.0412	.0213
3.0	.0576	.0367	.0209

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.072	384.20		384.20	1.005	.0201
9H	-0.298	381.76		381.76	0.999	-.0055
10H	0.085	381.70		381.70	0.998	.0220
11H	0.535	328.90	0.000 -.852	328.90	0.860	.0803
12H	1.030	217.23	0.409 +.753	219.64	0.575	.1090
13H	1.785	197.18	0.229 +.053	200.28	0.524	.0753
14H	2.181	193.38	0.392 -.794	196.47	0.514	.0698
15H	2.539	186.18	0.310 +.992	188.46	0.493	.0591
16H	3.373	170.83	0.718 +.609	181.64	0.475	.0510







PHOTOGRAPH NOT AVAILABLE

102 (469) ABULFEDA Q

LAMBDA=12.26 E BETA=12.84 S XI=+.2070 ETA=-.2222 L+PL CODE = 42202 ALBEDO =.1303

13H FLAT MOON DATA
FM=.02479 FM'=.05024

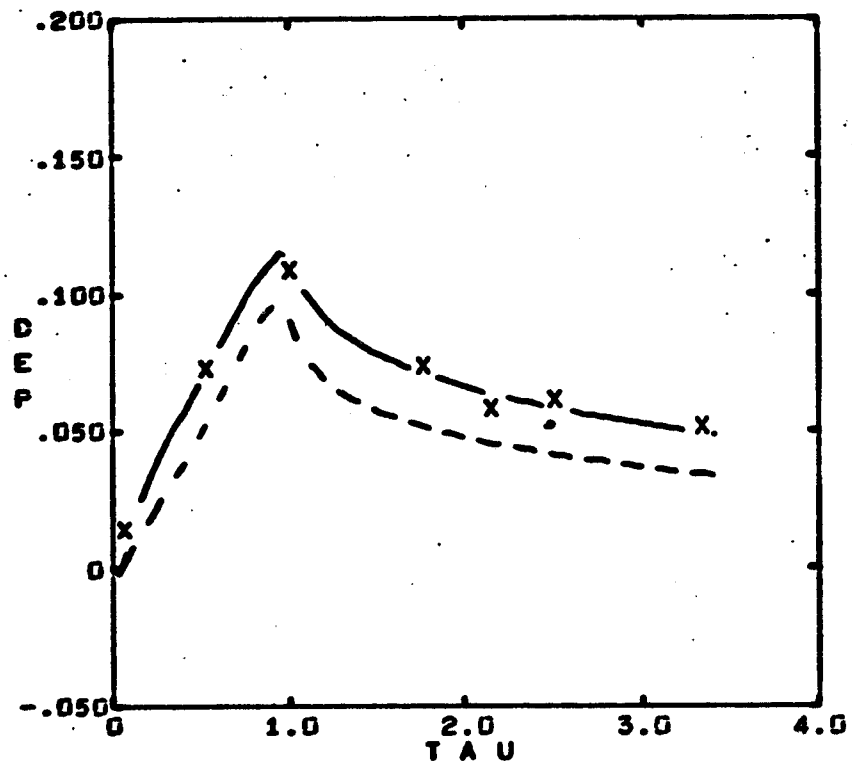
INITIAL TEMPERATURE 386.68
TAU-END OF TOTALITY 3.405

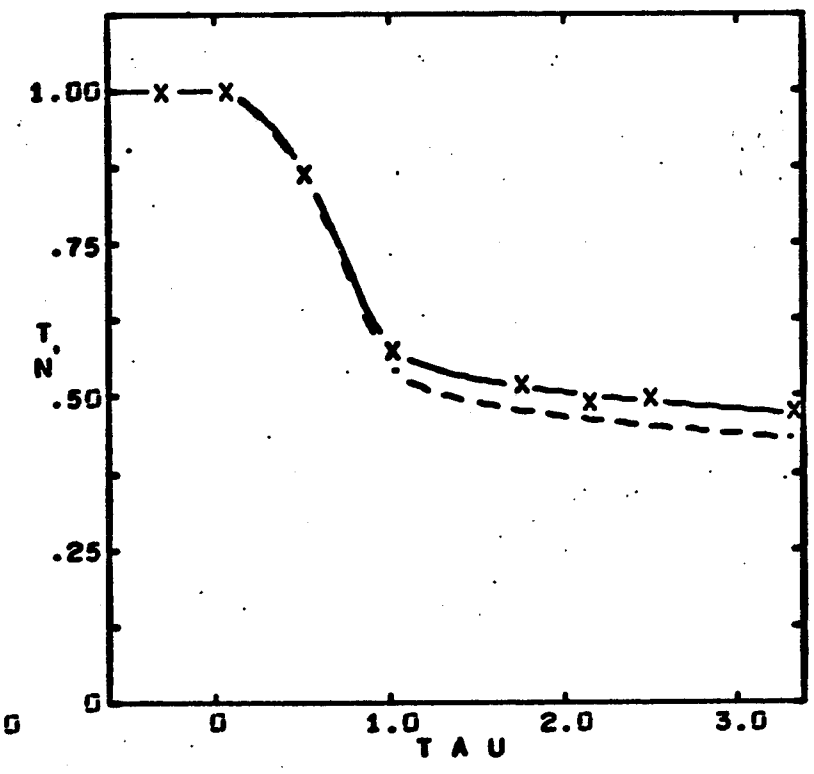
DIFFERENTIAL ENERGY DATA

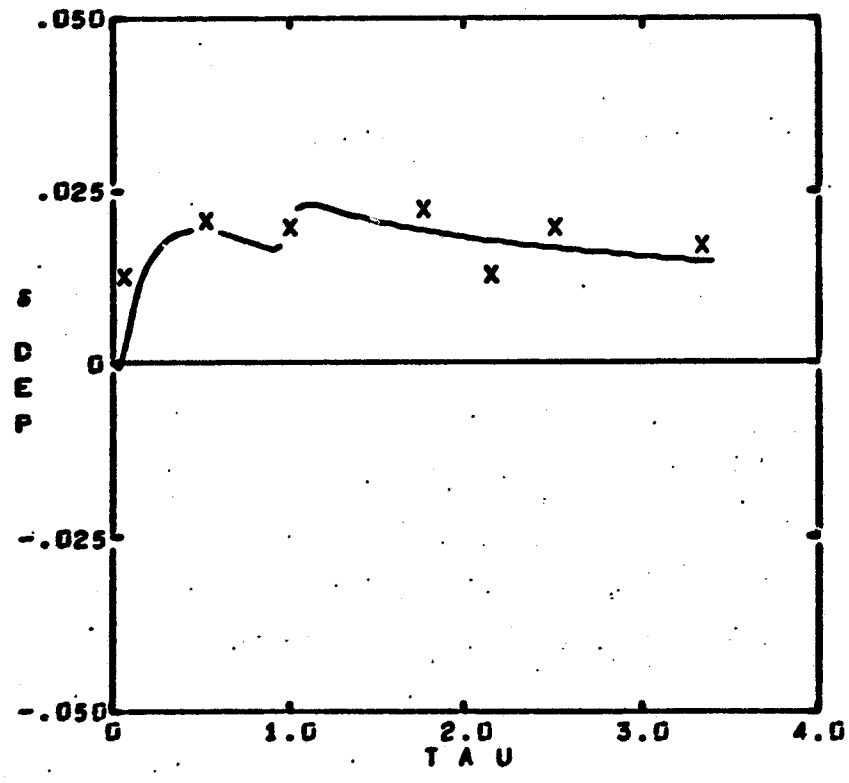
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0383	.0221	.0162
.50	.0693	.0499	.0194
.75	.0976	.0797	.0179
.93	.1157	.0998	.0159
1.0	.1111	.0906	.0205
1.5	.0781	.0575	.0206
2.0	.0661	.0478	.0183
2.5	.0583	.0416	.0167
3.0	.0525	.0370	.0155

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.076	388.47		388.47	1.005	.0186
9H	-0.308	386.17		386.17	0.999	-.0053
10H	0.070	386.08		386.08	0.998	.0146
11H	0.519	334.74	0.000 -.228	334.74	0.866	.0729
12H	1.009	220.61	0.338 -.363	222.02	0.574	.1087
13H	1.759	191.72	0.768 -.197	201.66	0.522	.0740
14H	2.152	186.62	0.571 -.836	190.21	0.492	.0585
15H	2.507	192.01	0.054 -.978	192.46	0.498	.0614
16H	3.335	179.53	0.382 +.694	184.14	0.476	.0514







PHOTOGRAPH NOT AVAILABLE

103 (3D5) AGATHARCHIDES A

LAMBDA=28.40 W BETA=23.25 S XI=-.4370 ETA=-.3947 L↓PL CODE = 34339 ALBEDO =.0812

13H FLAT MOON DATA
FM=.07188 FM'=.08122

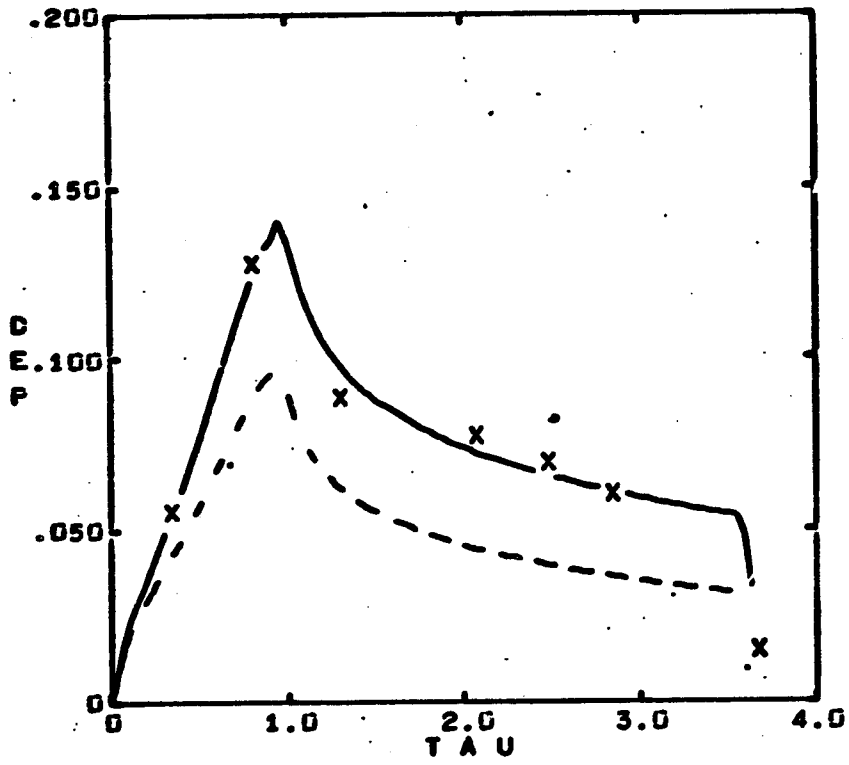
INITIAL TEMPERATURE 379.92
TAU-END OF TOTALITY 3.572

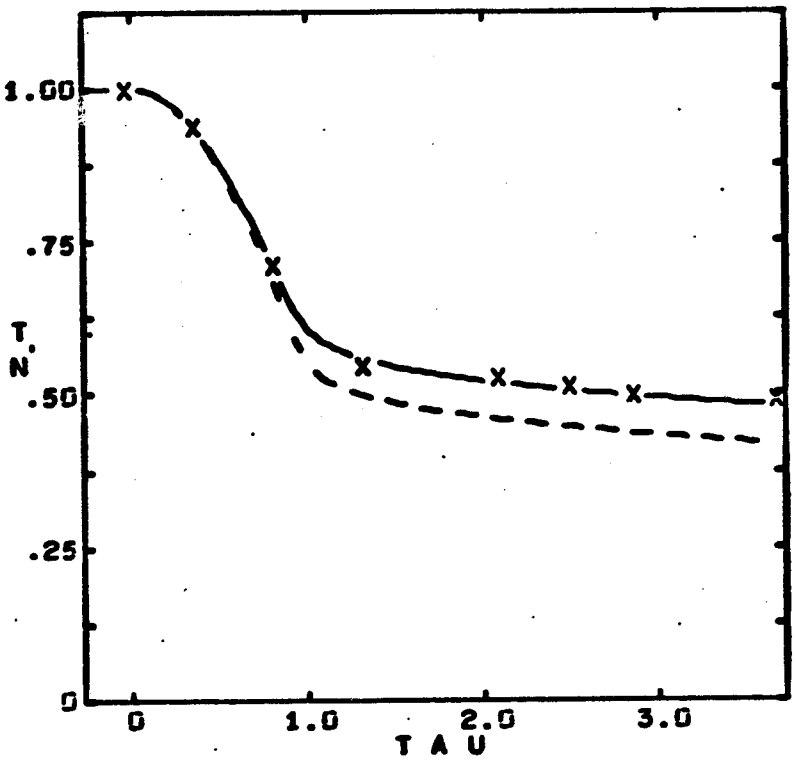
DIFFERENTIAL ENERGY DATA

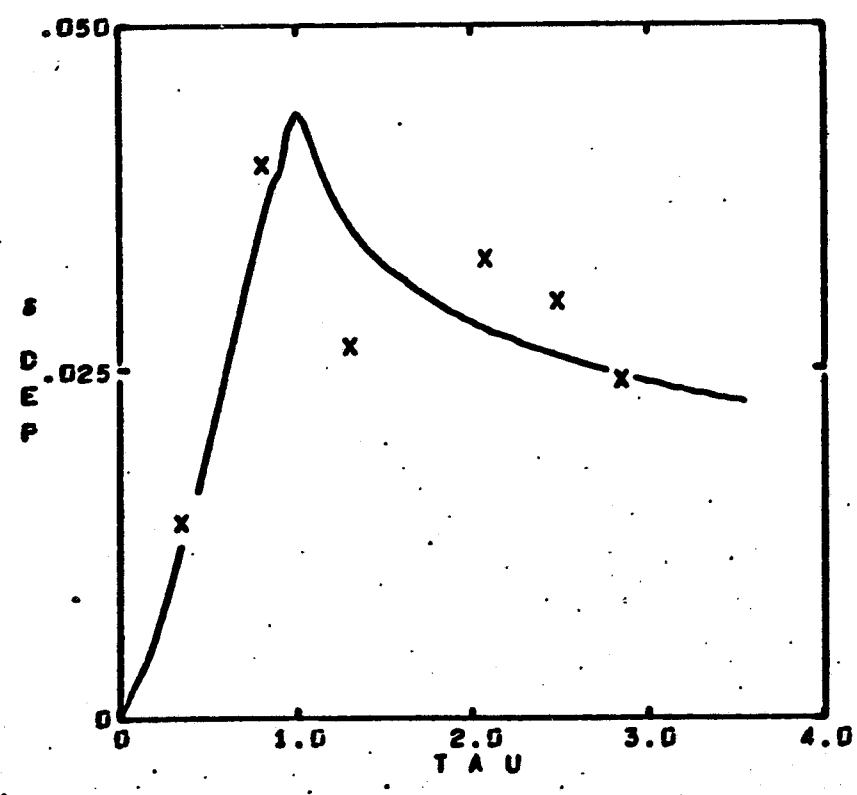
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0402	.0328	.0074
.50	.0758	.0566	.0192
.75	.1151	.0825	.0326
.93	.1411	.0996	.0415
1.0	.1336	.0900	.0436
1.5	.0881	.0555	.0326
2.0	.0741	.0456	.0285
2.5	.0656	.0396	.0260
3.0	.0594	.0353	.0241

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.829	381.90			381.90	1.005	.0210
9H	-0.040	379.82			379.82	1.000	-.0010
10H	0.348	356.62			356.62	0.939	.0556
11H	0.806	267.97	0.305	+.271	270.01	0.711	.1279
12H	1.309	204.89	0.190	-.836	207.41	0.546	.0888
13H	2.079	196.85	0.191	+.795	200.45	0.528	.0775
14H	2.479	182.36	0.560	+.196	195.24	0.514	.0697
15H	2.845	187.03	0.124	-.066	188.63	0.497	.0608
16H	3.671	186.27	0.000	-.214	186.27	0.490	.0146







PHOTOGRAPH NOT AVAILABLE

104 (4C1) ALFRAGANUS

LAMBDA=19.01 E BETA= 5.42 S XI=+.3242 ETA=-.0945 L+PL CODE = 43029 ALBEDO =.1754

13H FLAT MOON DATA
FM=.02764 FM'=.02764

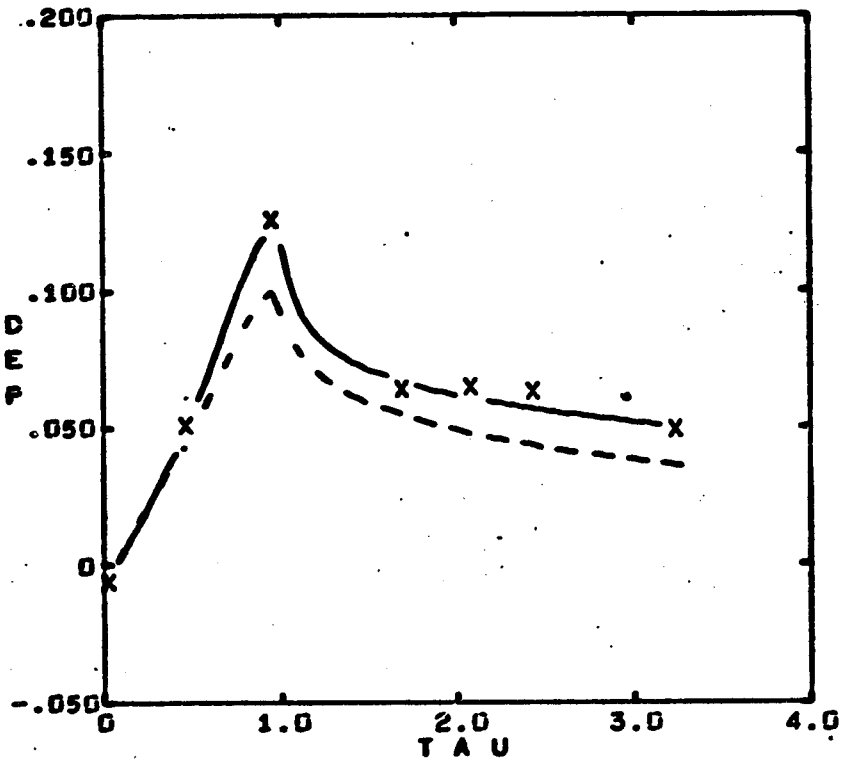
INITIAL TEMPERATURE 385.65
TAU-END OF TOTALITY 3.294

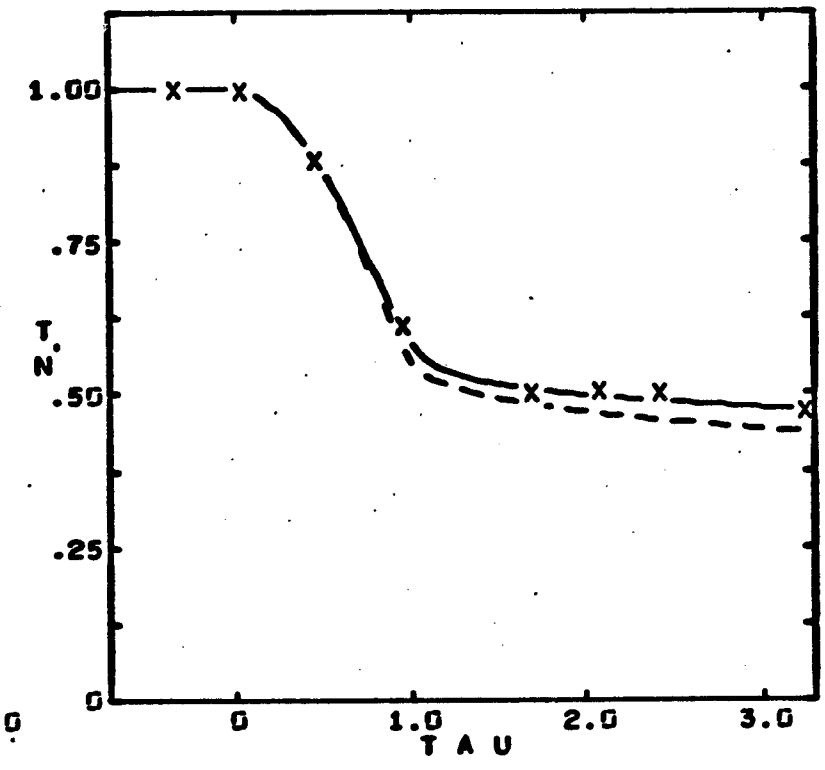
DIFFERENTIAL ENERGY DATA

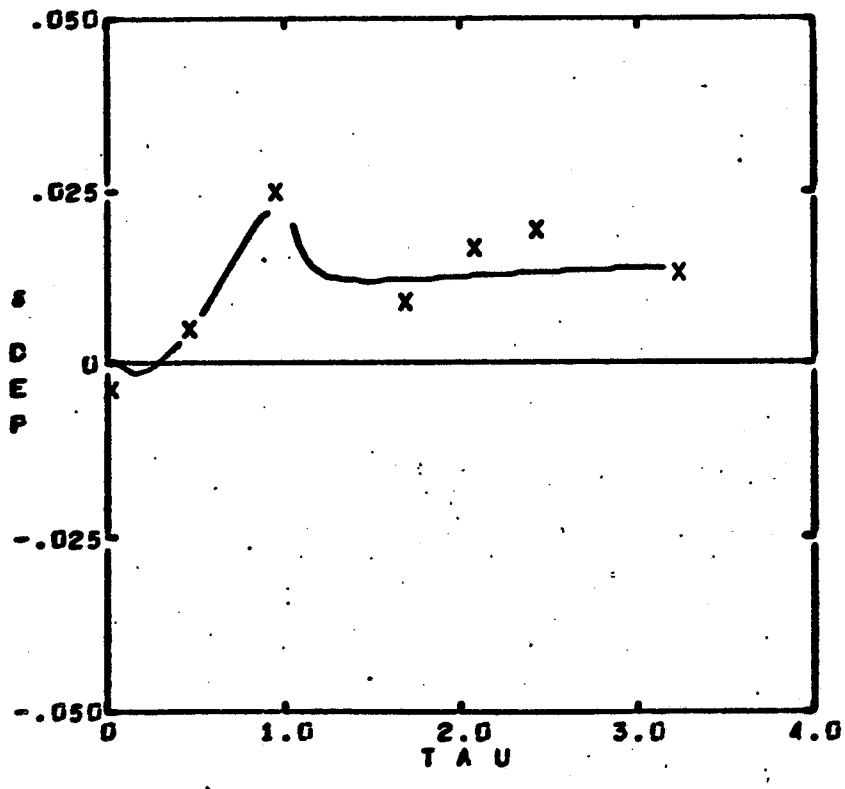
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0206	.0212	-.0006
.50	.0563	.0499	.0064
.75	.0970	.0805	.0165
.93	.1248	.1011	.0237
1.0	.1169	.0919	.0250
1.5	.0708	.0588	.0120
2.0	.0617	.0491	.0126
2.5	.0561	.0429	.0132
3.0	.0521	.0383	.0138

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.102	387.61		387.61	1.005	.0205
9H	-0.348	385.03		385.03	0.998	-.0064
10H	0.024	384.69		384.69	0.998	-.0062
11H	0.464	340.94		340.94	0.864	.0506
12H	0.948	234.71	0.236 +.176	235.93	0.612	.1257
13H	1.685	193.65	0.000 +.108	193.65	0.502	.0636
14H	2.072	194.22	0.186 -.938	194.59	0.505	.0648
15H	2.420	191.80	0.115 -.125	193.20	0.501	.0630
16H	3.234	178.21	0.667 +.903	181.94	0.472	.0495







PHOTOGRAPH
NOT
AVAILABLE

105 (3D6) ALPETRAGIUS G

LAMBDA= 6.84 W BETA=15.11 S XI=-.1149 ETA=-.2607 L+PL CODE = 31216 ALBEDO =.0965

13H FLAT MOON DATA
FM=.03420 FM'=.03794

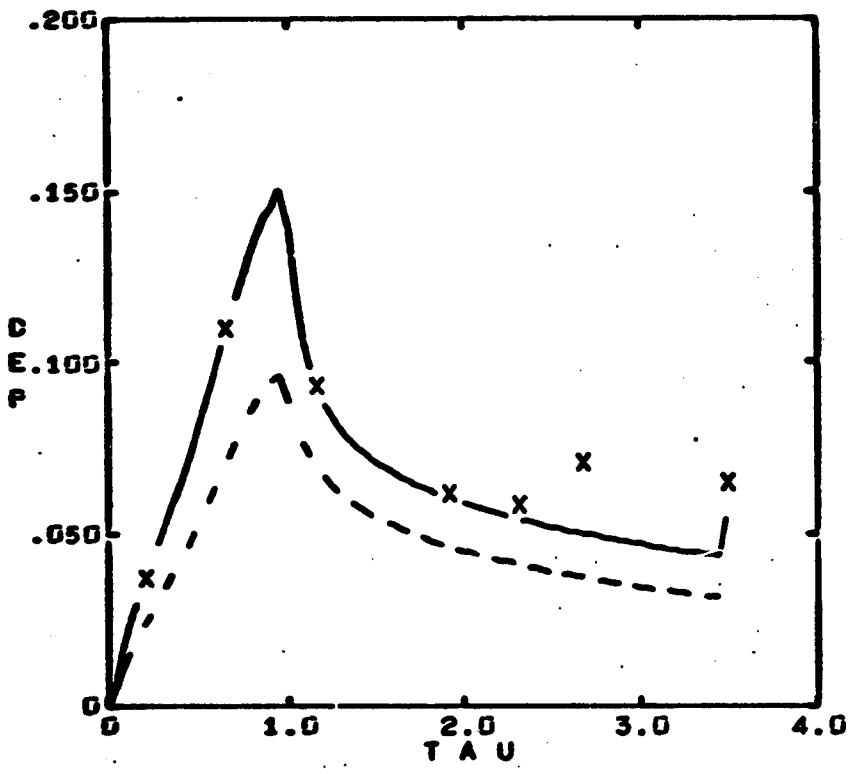
INITIAL TEMPERATURE 391.01
TAU-END OF TOTALITY 3.462

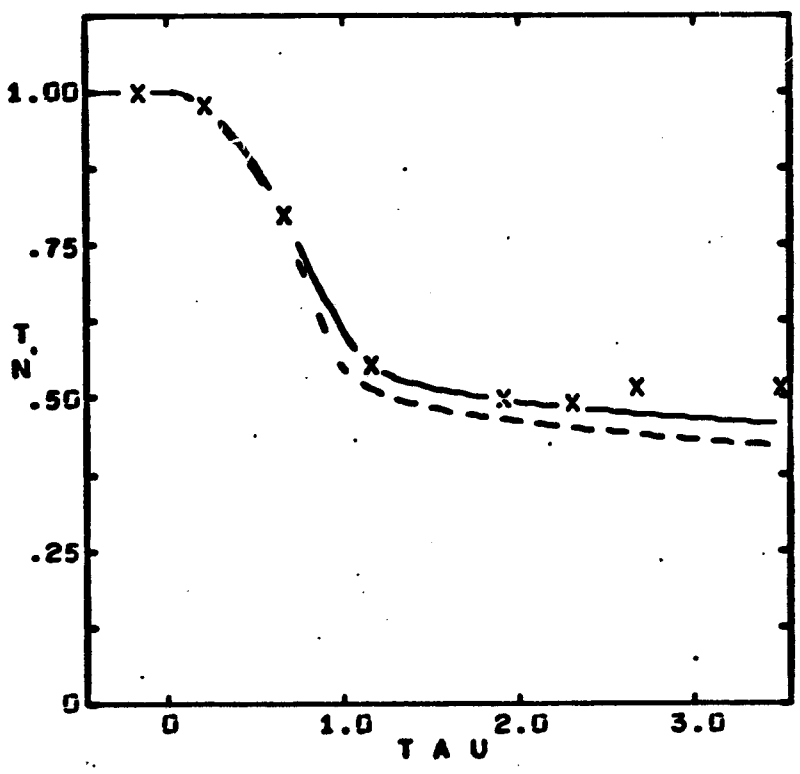
DIFFERENTIAL ENERGY DATA

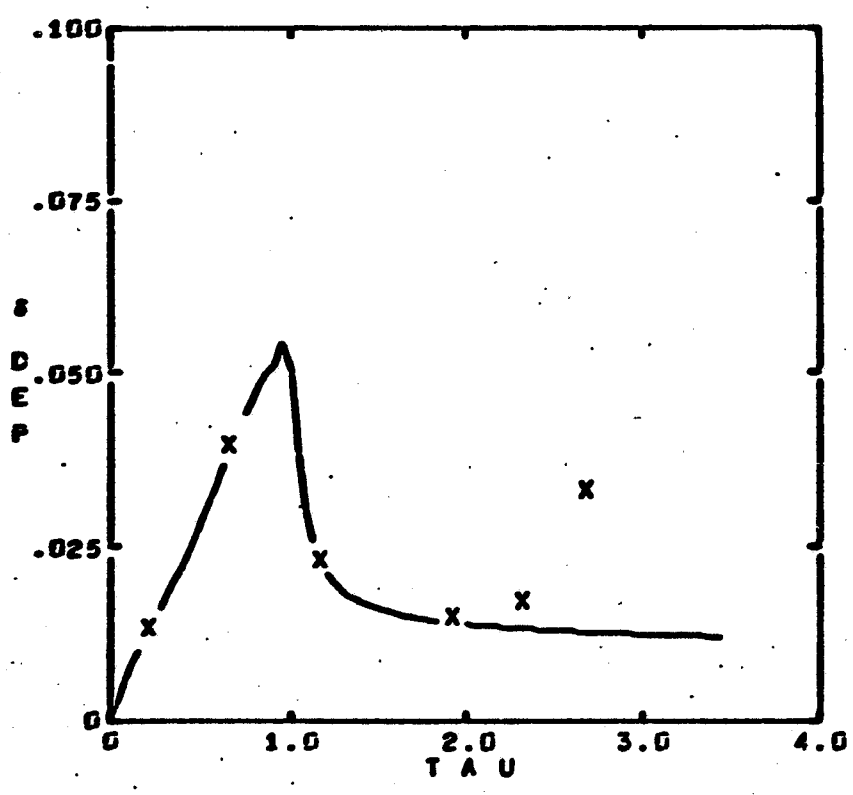
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0421	.0277	.0144
.50	.0810	.0527	.0283
.75	.1235	.0801	.0434
.93	.1517	.0982	.0535
1.0	.1391	.0888	.0503
1.5	.0710	.0550	.0160
2.0	.0590	.0451	.0139
2.5	.0521	.0391	.0130
3.0	.0471	.0347	.0124

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.947	392.36		392.36	1.003	.0139
9H	-0.172	390.76		390.76	0.999	-.0025
10H	0.209	382.07		382.07	0.977	.0372
11H	0.662	310.60	0.419 +.892	312.27	0.799	.1101
12H	1.156	213.06	0.283 +.094	215.87	0.552	.0929
13H	1.913	192.84	0.323 -.138	194.73	0.498	.0615
14H	2.309	183.06	0.618 +.670	192.34	0.492	.0585
15H	2.668	194.06	0.320 -.900	201.63	0.516	.0707
16H	3.489	183.83	0.710 +.808	201.48	0.515	.0654







PHOTOGRAPH NOT AVAILABLE

106 (2D4) ANAXAGORAS

LAMBDA=10.18 W BETA=73.54 N XI=-.0501 ETA=+.9590 L+PL CODE = 20955 ALBEDO =.1788

13H FLAT MOON DATA
FM=.06406 FM'=.10047

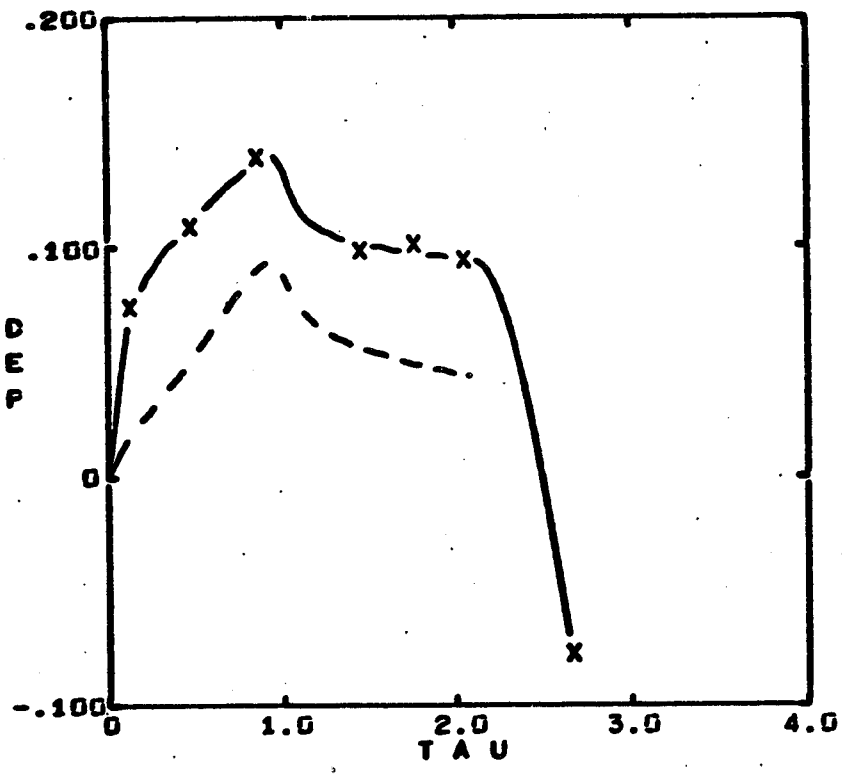
INITIAL TEMPERATURE 334.92
TAU-END OF TOTALITY 2.111

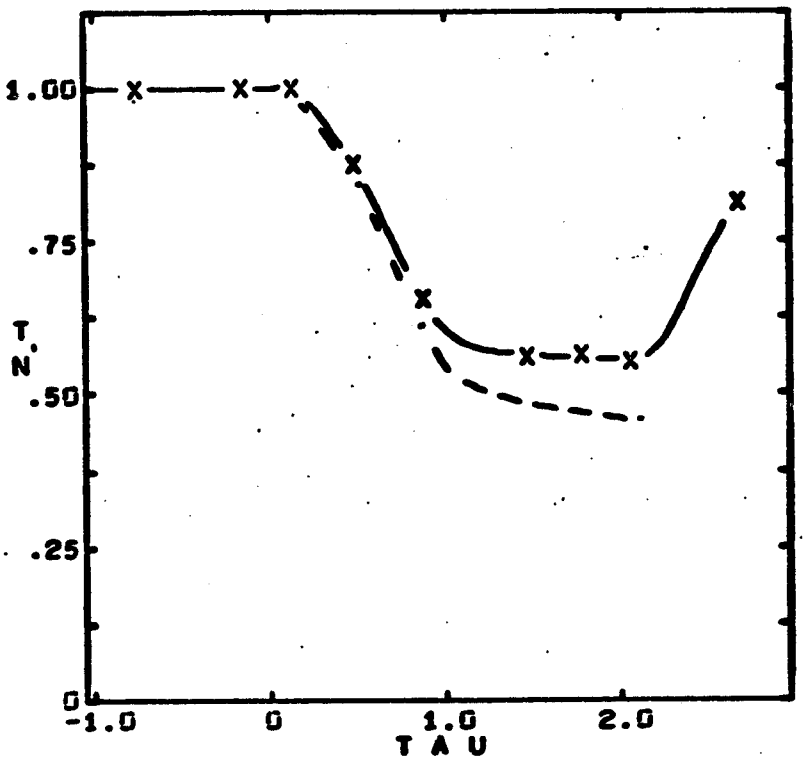
DIFFERENTIAL ENERGY DATA

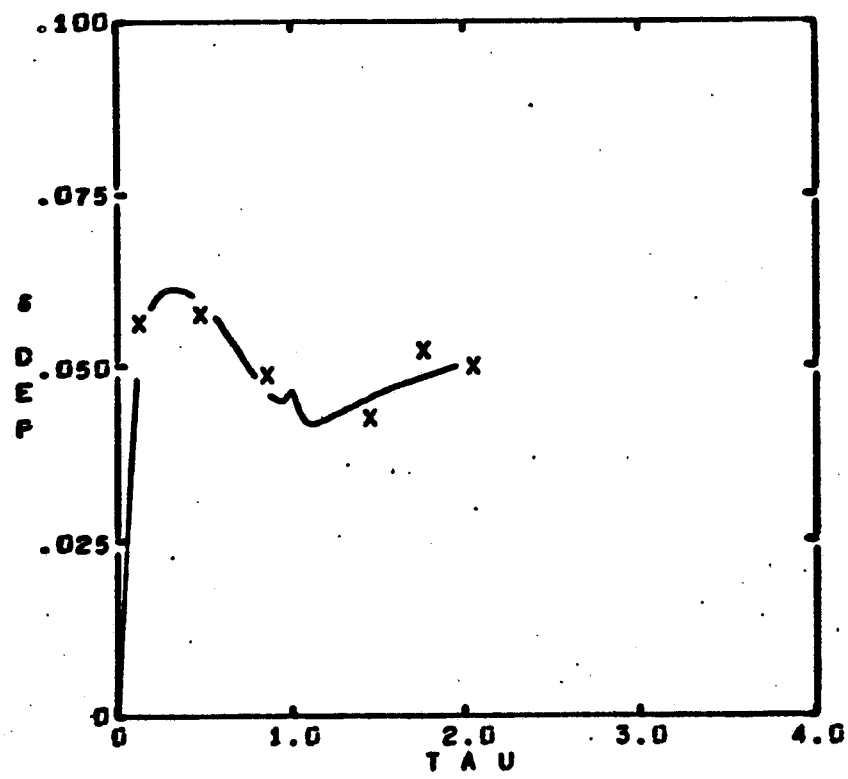
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0883	.0281	.0602
.50	.1118	.0529	.0589
.75	.1301	.0798	.0503
.93	.1411	.0977	.0434
1.0	.1348	.0883	.0465
1.5	.1007	.0546	.0461
2.0	.0953	.0448	.0505
2.5	.0922	.0388	.0534

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.768	334.58		334.58	0.999	-.0040
9H	-0.168	334.99		334.99	1.000	.0009
10H	0.130	335.19		335.19	1.001	.0740
11H	0.482	293.03		293.03	0.875	.1087
12H	0.868	211.09	0.543 +.321	219.94	0.657	.1396
13H	1.455	172.46	1.363 -.639	187.72	0.560	.0987
14H	1.767	169.23	0.923 +.183	188.67	0.564	.1011
15H	2.044	178.30	0.456 -.488	185.60	0.554	.0943
16H	2.655	272.18	0.448 -.488	272.34	0.813	-.0772







PHOTOGRAPH NOT AVAILABLE

107 (2D5) ANGSTROM

LAMBDA=41.59 W BETA=29.87 N XI=-.5756 ETA=+.4980 L+PL CODE = 25479 ALBEDO =.0675

13H FLAT MOON DATA
FM=.06437 FM'=.08144

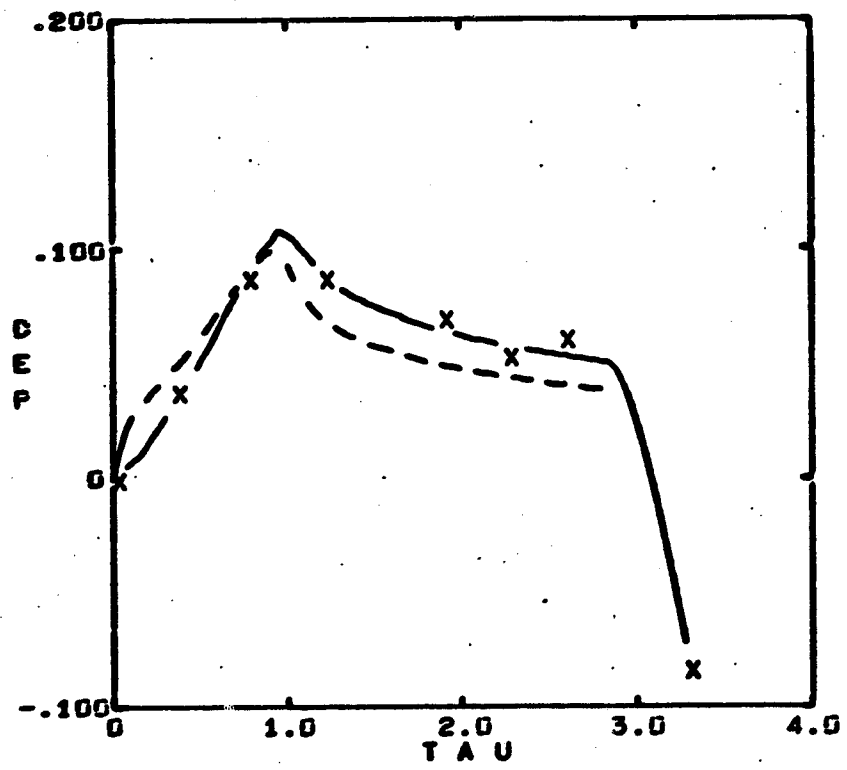
INITIAL TEMPERATURE 372.57
TAU-END OF TOTALITY 2.830

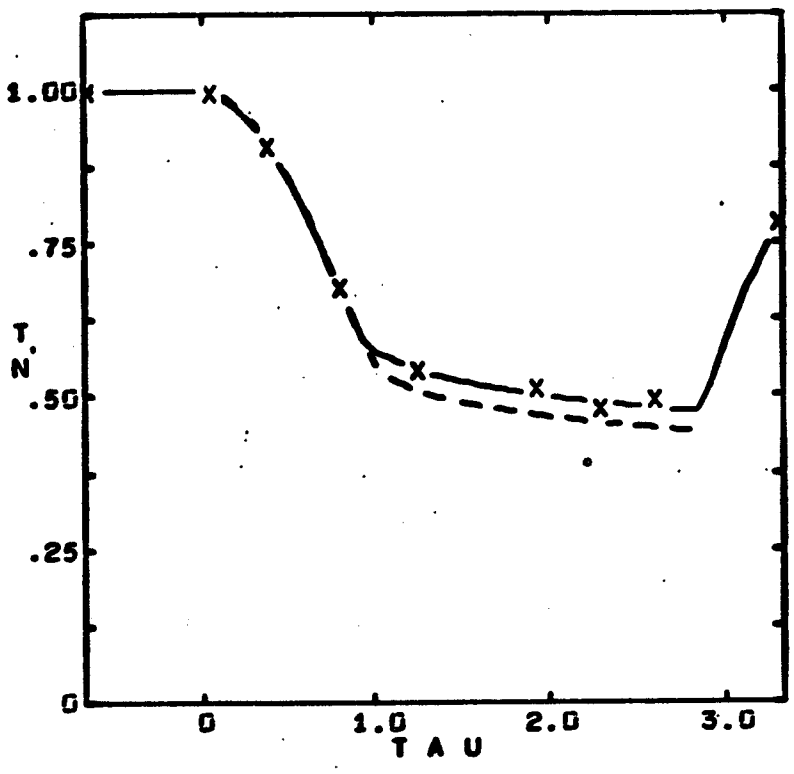
DIFFERENTIAL ENERGY DATA

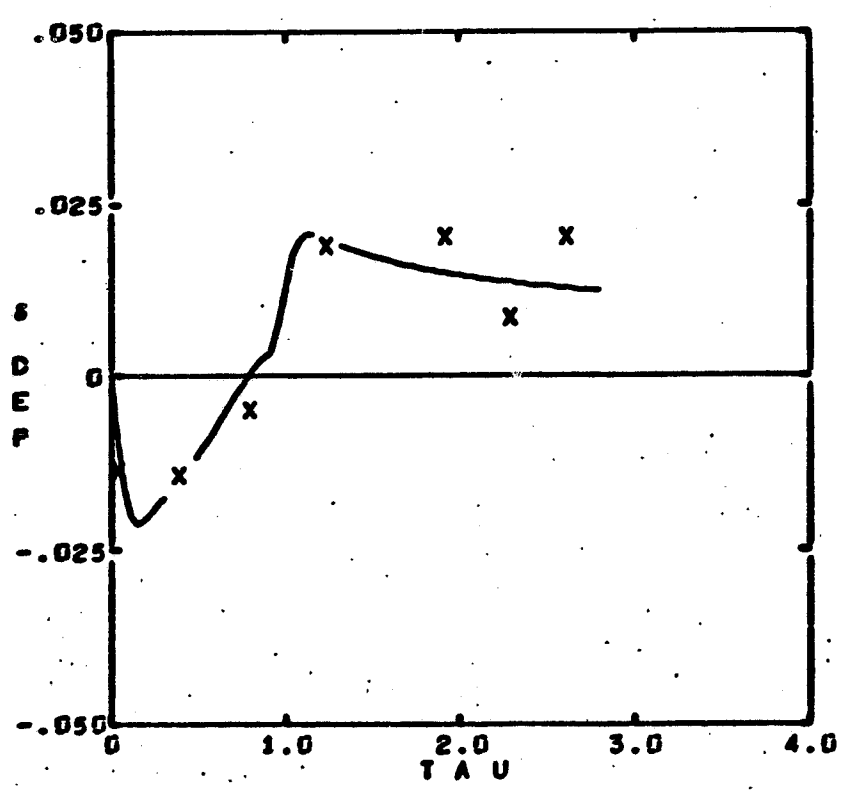
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0188	.0381	-.0193
.50	.0501	.0613	-.0112
.75	.0851	.0866	-.0015
.93	.1082	.1031	.0051
1.0	.1065	.0933	.0132
1.5	.0751	.0576	.0175
2.0	.0620	.0473	.0147
2.5	.0542	.0412	.0130
3.0	.0487	.0367	.0120

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.655	372.57		372.57	1.000	.0000
9H	0.042	371.52		371.52	0.997	-.0018
10H	0.388	338.90		338.90	0.910	.0363
11H	0.795	252.07	0.000 -.399	252.07	0.677	.0863
12H	1.242	199.21	0.247 -.483	202.28	0.543	.0869
13H	1.924	184.63	0.265 -.048	190.97	0.513	.0690
14H	2.283	167.21	0.724 +.972	178.15	0.478	.0523
15H	2.606	177.05	0.361 -.317	184.72	0.496	.0604
16H	3.309	292.59	0.000 +.209	292.59	0.785	-.0842







PHOTOGRAPH NOT AVAILABLE

108 (2C6) ANGSTROM A

LAMBDA=41.11 W BETA=30.93 N. XI=-.5640 ETA=+.5140 L+PL CODE = 25561 ALBEDO =.0700

13H FLAT MOON DATA
FM=.02355 FM'=.02422

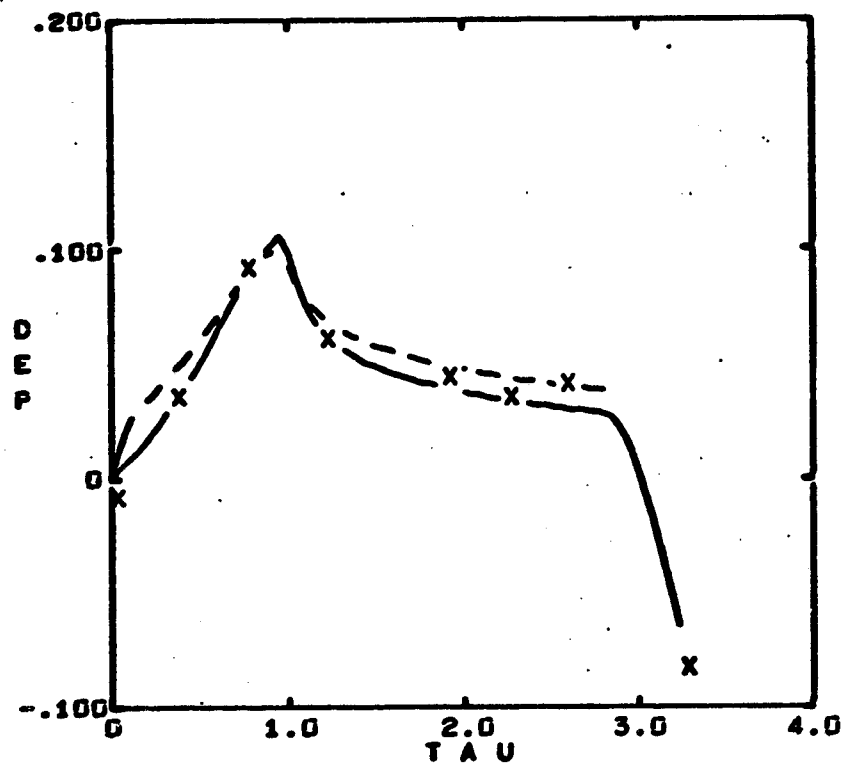
INITIAL TEMPERATURE 371.73
TAU-END OF TOTALITY 2.810

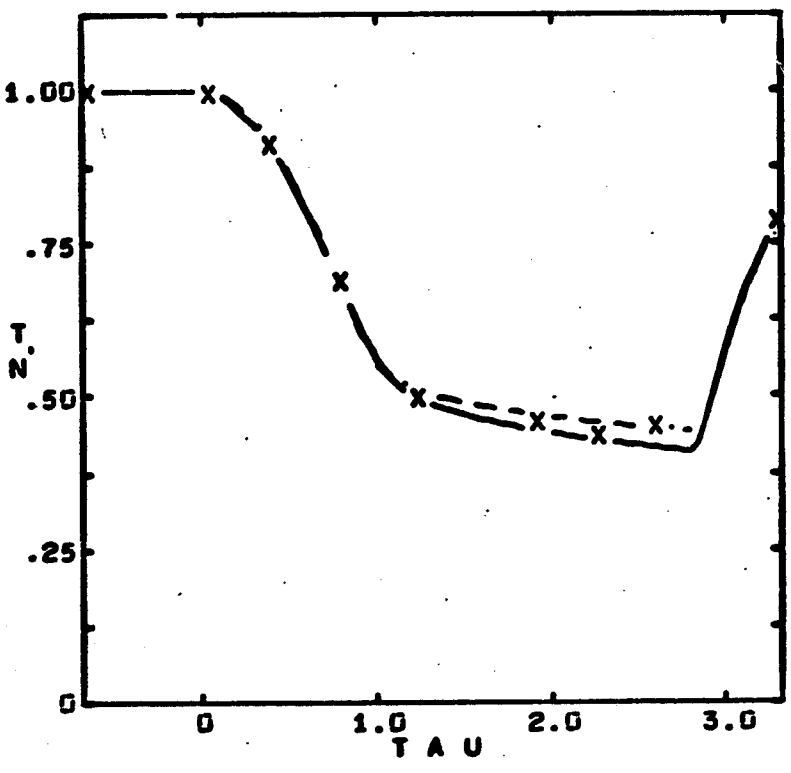
DIFFERENTIAL ENERGY DATA

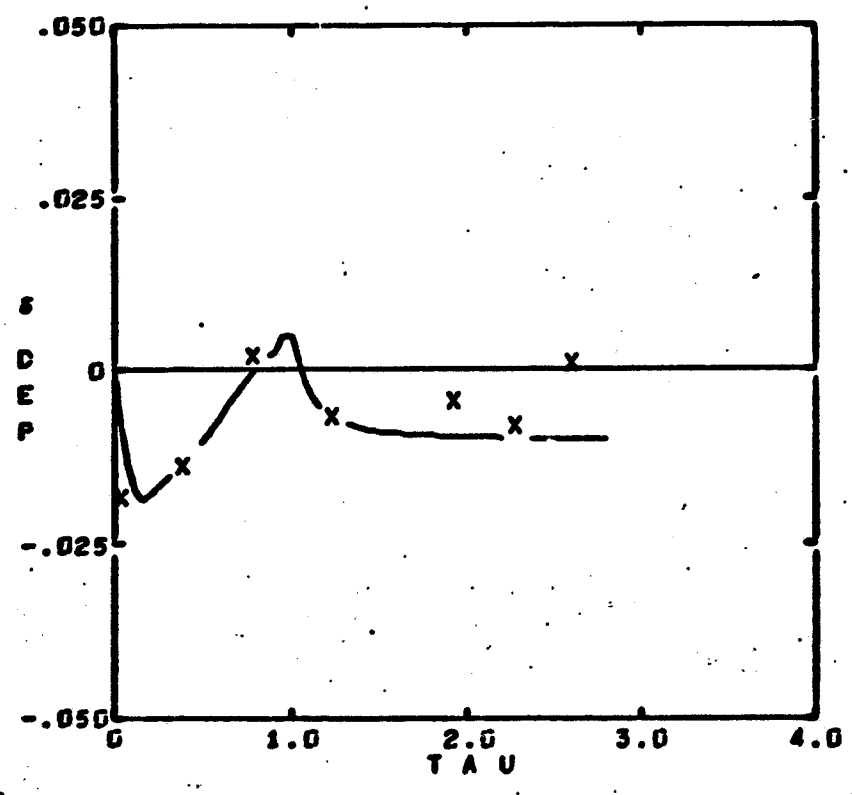
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0209	.0379	-.0170
.50	.0511	.0610	-.0099
.75	.0848	.0863	-.0015
.93	.1070	.1029	.0041
1.0	.0980	.0930	.0050
1.5	.0486	.0574	-.0088
2.0	.0375	.0472	-.0097
2.5	.0311	.0411	-.0100
3.0	.0266	.0366	-.0100

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
3H	-0.658	371.73		371.73	1.000	.0000
9H	0.036	370.25		370.25	0.996	-.0082
10H	0.381	339.04		339.04	0.912	.0359
11H	0.788	253.20	1.738 -.712	255.34	0.687	.0921
12H	1.233	184.91	0.000 +.001	184.91	0.497	.0612
13H	1.913	169.64	0.056 -.091	170.37	0.458	.0441
14H	2.270	161.30	0.000 +.039	161.30	0.434	.0355
15H	2.592	167.49	0.041 -.851	167.65	0.451	.0414
16H	3.292	293.02	0.000 +.799	293.02	0.788	-.0822







PHOTOGRAPH
NOT
AVAILABLE

109 (1C6) ARAGO

LAMBDA=21.41 E BETA= 6.17 N XI=+.3630 ETA=+.1074 L+PL CODE = 13160 ALBEDO =.0683

13H FLAT MOON DATA
FM=.05096 FM'=.05112

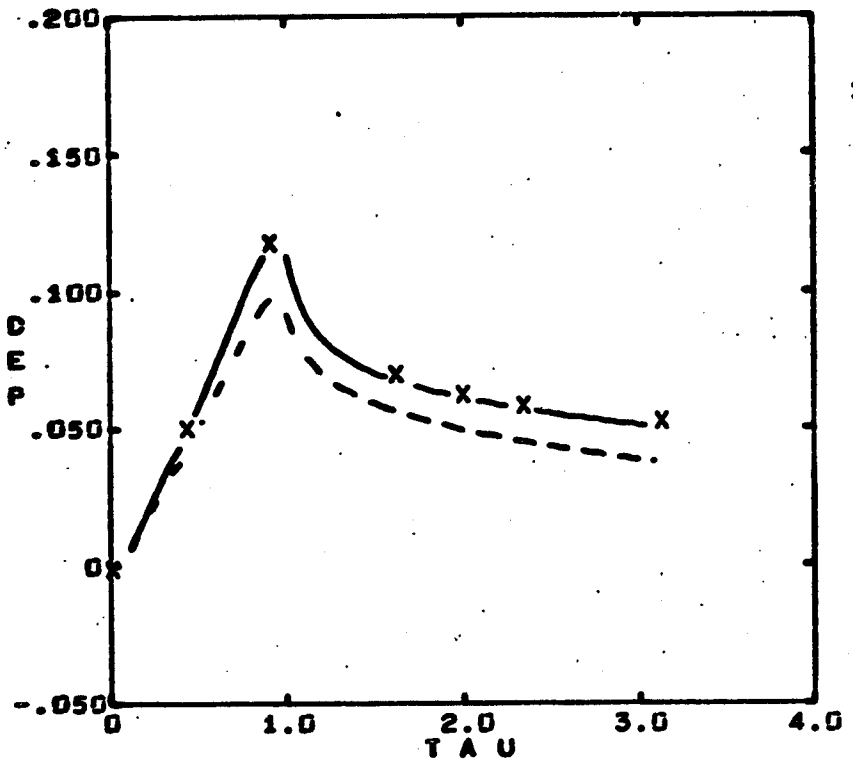
INITIAL TEMPERATURE 396.31
TAU-END OF TOTALITY 3.111

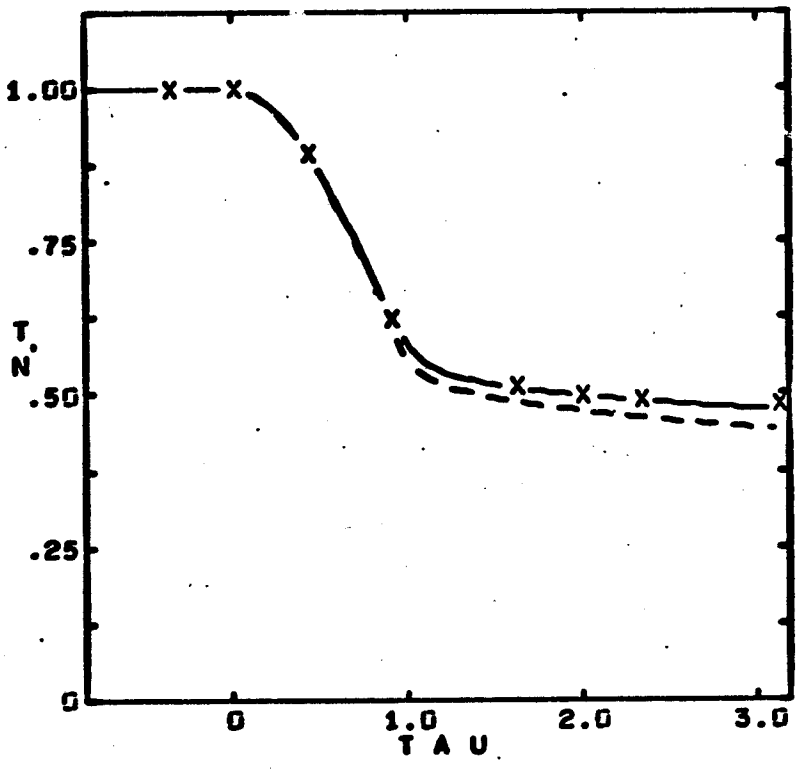
DIFFERENTIAL ENERGY DATA

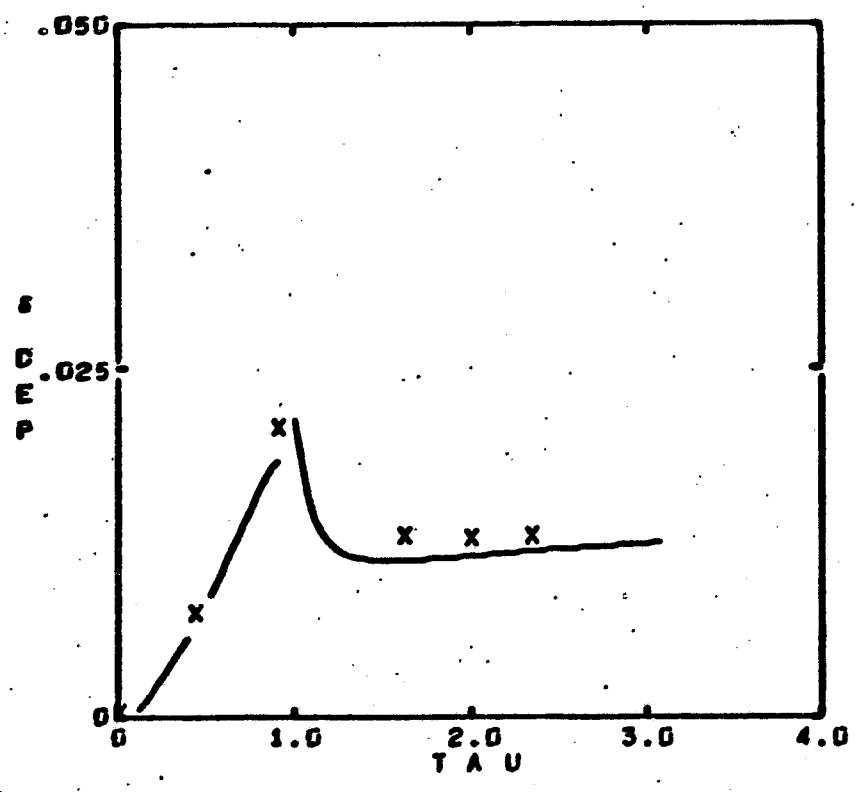
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0234	.0209	.0025
.50	.0580	.0499	.0081
.75	.0955	.0807	.0148
.93	.1208	.1015	.0193
1.0	.1138	.0923	.0215
1.5	.0705	.0593	.0112
2.0	.0611	.0495	.0116
2.5	.0554	.0434	.0120
3.0	.0511	.0387	.0124

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	N'	DEP'
8H	-1.081	397.41		397.41	1.003	.0111
9H	-0.350	395.95		395.95	0.999	-.0036
10H	0.012	396.03		396.03	0.999	-.0016
11H	0.440	354.20		354.20	0.894	.0501
12H	0.910	247.01	0.101 +.714	247.35	0.624	.1176
13H	1.624	202.82	0.163 +.376	203.29	0.513	.0692
14H	2.001	195.21	0.498 +.802	198.02	0.500	.0623
15H	2.339	194.60	0.000 -.937	194.60	0.491	.0581
16H	3.125	184.75	0.693 +.752	191.29	0.483	.0527







PHOTOGRAPH NOT AVAILABLE

LAMBDA=20.81 E BETA= 3.45 N XI=+.3547 ETA=+.0602 L+PL CODE = 13056 ALBEDO =.0621

13H FLAT MOON DATA
FM=.02759 FM'=.02759

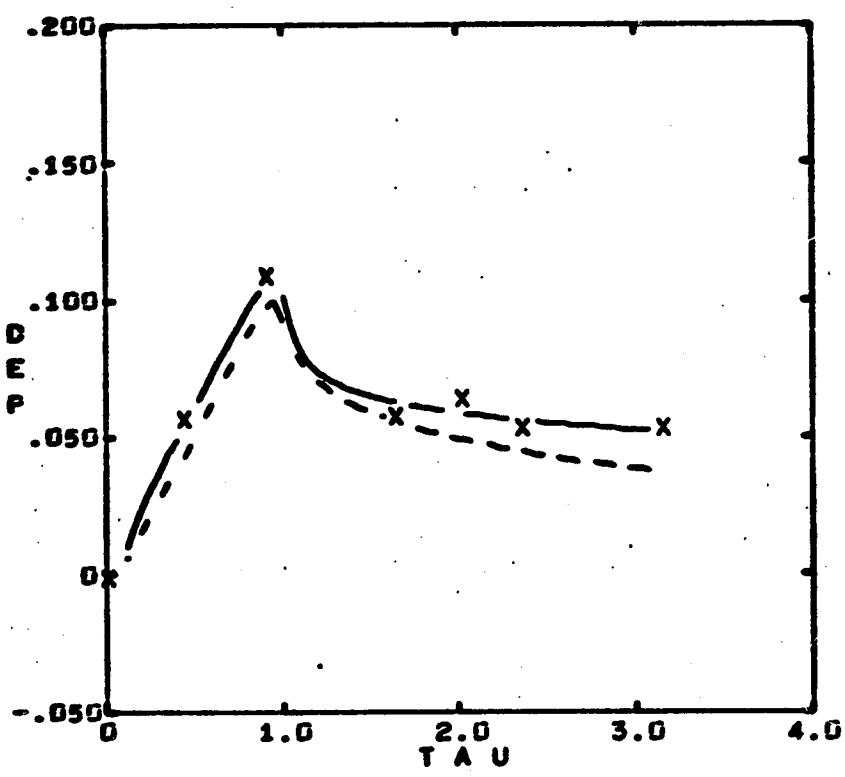
INITIAL TEMPERATURE 395.48
TAU-END OF TOTALITY 3.156

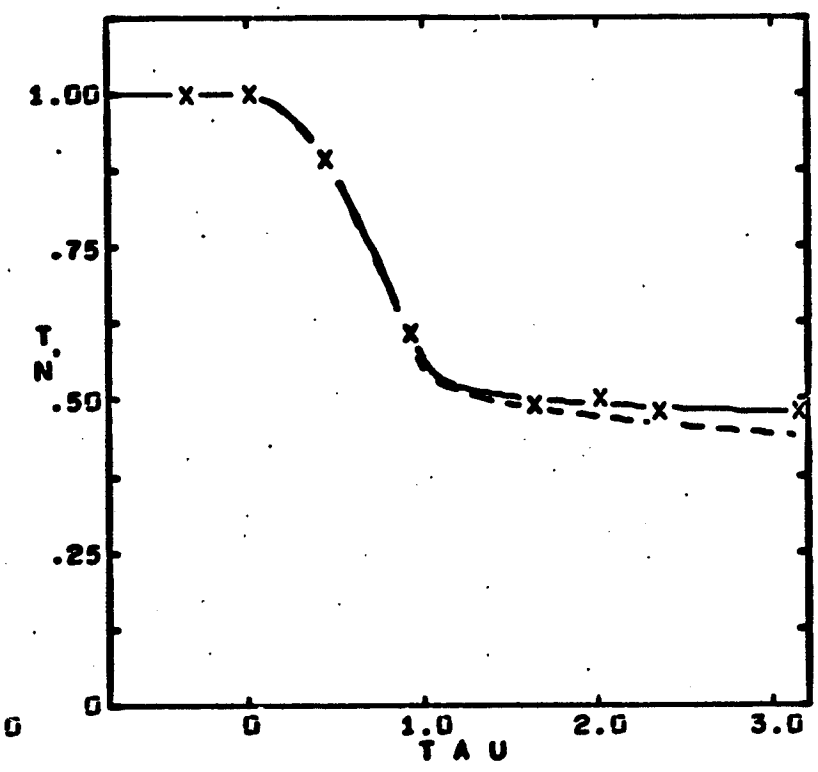
DIFFERENTIAL ENERGY DATA

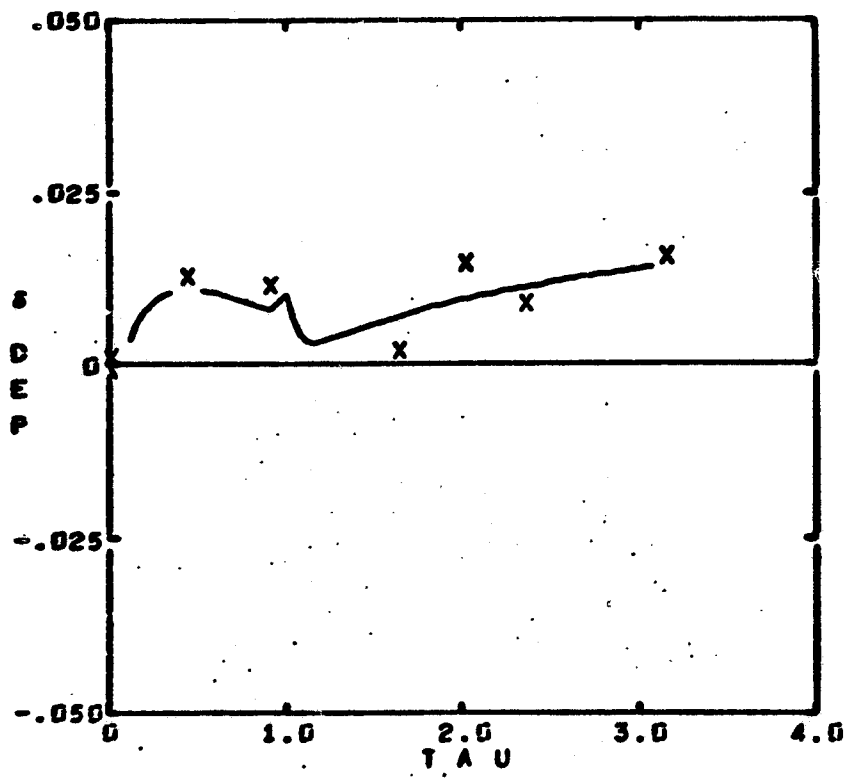
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0299	.0209	.0090
.50	.0608	.0499	.0109
.75	.0900	.0807	.0093
.93	.1089	.1014	.0075
1.0	.1024	.0922	.0102
1.5	.0650	.0591	.0059
2.0	.0589	.0494	.0095
2.5	.0552	.0432	.0120
3.0	.0525	.0386	.0139

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.087	396.71			396.71	1.003	.0126
9H	-0.350	395.08			395.08	0.999	-.0040
10H	0.015	395.20			395.20	0.999	-.0012
11H	0.446	353.24			353.24	0.893	.0563
12H	0.918	239.08	0.327	-.235	240.89	0.609	.1086
13H	1.640	193.87	0.000	+.577	193.87	0.490	.0577
14H	2.019	194.72	0.304	+.523	198.76	0.503	.0638
15H	2.360	190.25	0.000	+.775	190.25	0.481	.0536
16H	3.153	184.82	0.402	+.557	189.75	0.480	.0530







PHOTOGRAPH NOT AVAILABLE

111 (1C8) ARAGO D

LAMBDA=22.40 E BETA= 6.90 N XI=+.3783 ETA=+.1202 L+PL CODE = 13172 ALBEDO =.0627

13H FLAT MOON DATA
FM=.02796 FM'=.02796

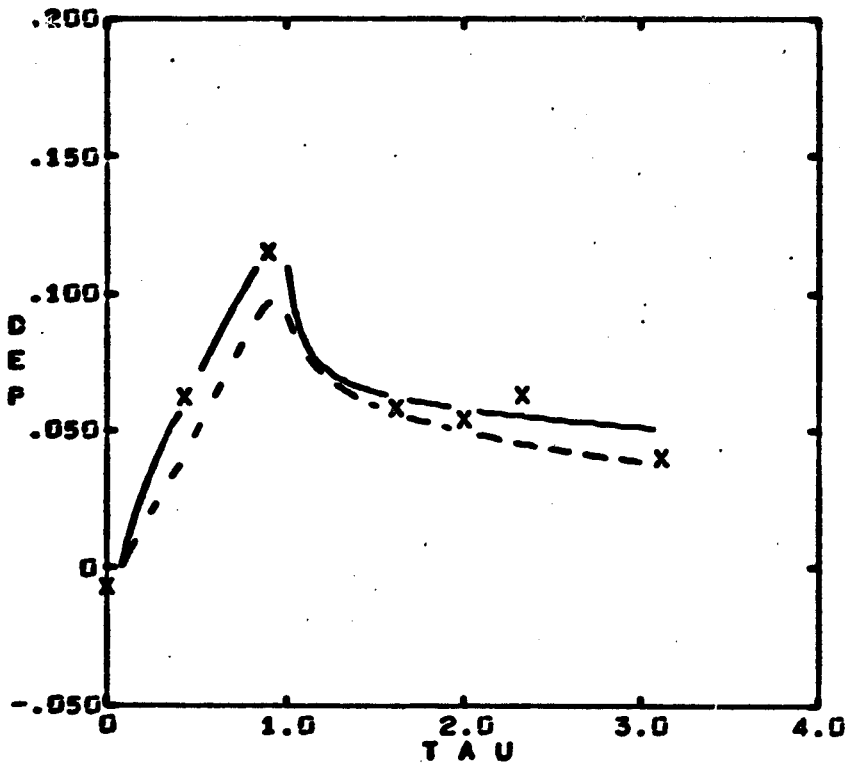
INITIAL TEMPERATURE 394.84
TAU-END OF TOTALITY 3.097

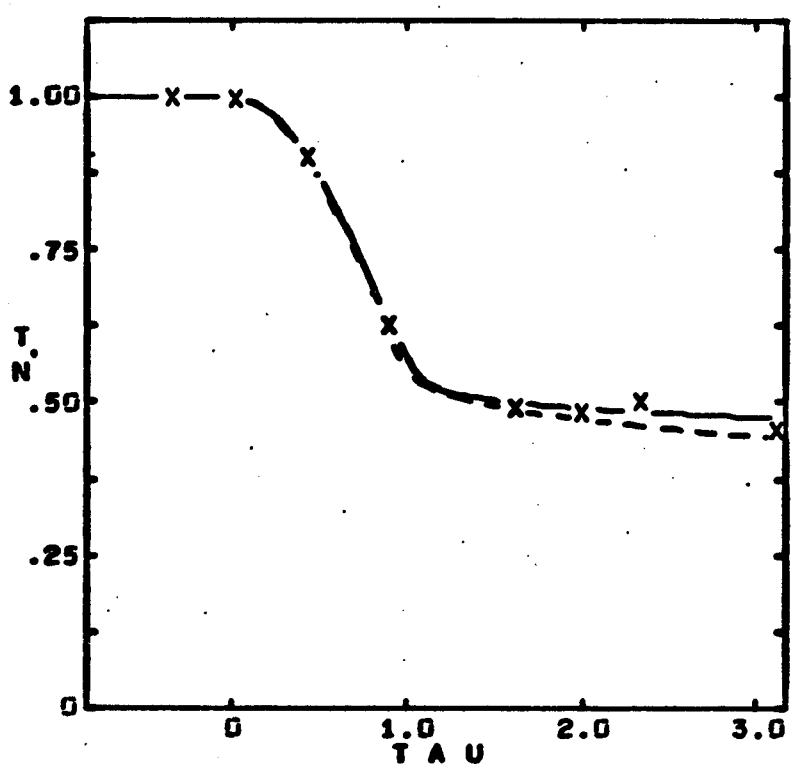
DIFFERENTIAL ENERGY DATA

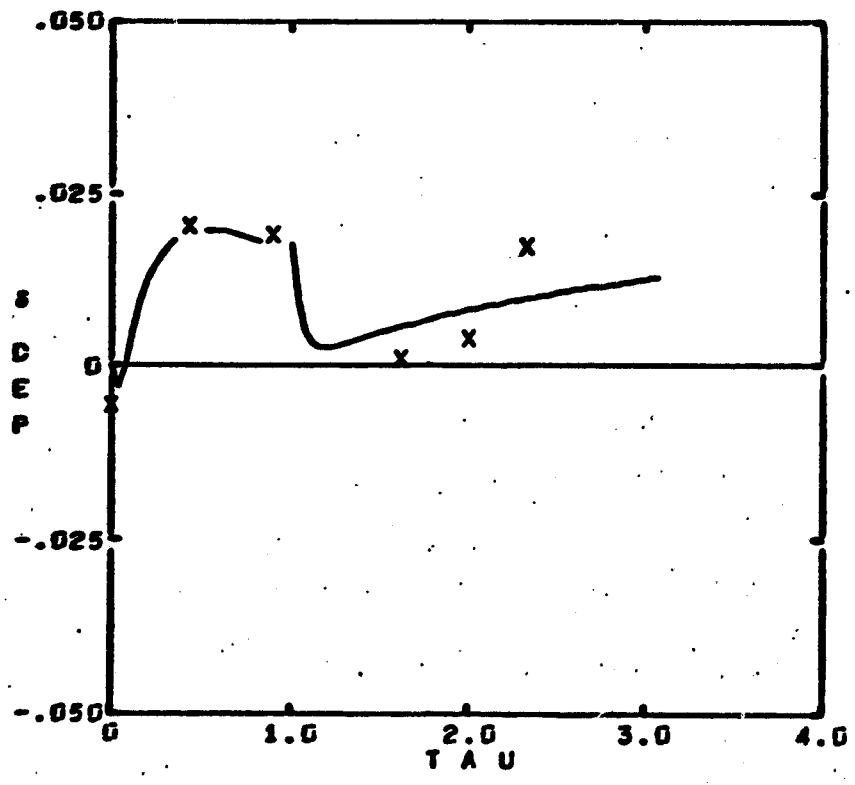
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0357	.0207	.0150
.50	.0696	.0499	.0197
.75	.0996	.0808	.0188
.93	.1188	.1016	.0172
1.0	.1104	.0924	.0180
1.5	.0642	.0594	.0048
2.0	.0579	.0497	.0082
2.5	.0542	.0435	.0107
.0	.0514	.0389	.0125

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.084	396.14		396.14	1.003	.0133
9H	-0.356	394.41		394.41	0.999	-.0043
10H	0.006	394.12		394.12	0.998	-.0069
11H	0.433	355.80		355.80	0.901	.0623
12H	0.901	246.17	0.351 +.894	247.64	0.627	.1155
13H	1.615	193.61	0.000 +.099	193.61	0.490	.0578
14H	1.990	190.38	0.000 +.138	190.38	0.482	.0541
15H	2.328	196.90	0.089 +.708	197.70	0.501	.0629
16H	3.112	178.55	0.000 +.093	178.55	0.452	.0400







PHOTOGRAPH NOT AVAILABLE

112 (1C9) ARATUS

LAMBDA= 4.54 E BETA=23.59 N XI=+.0725 ETA=+.4002 L+PL CODE = 10470 ALBEDO =.1230

13H FLAT MOON DATA
FM=.01630 FM'=.03758

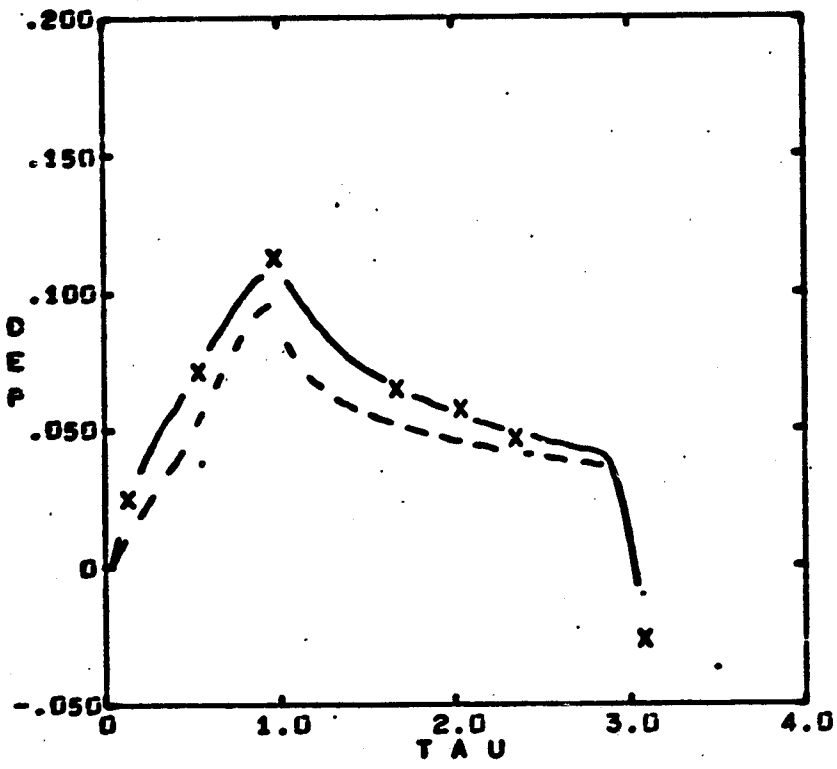
INITIAL TEMPERATURE 386.67
TAU-END OF TOTALITY 2.846

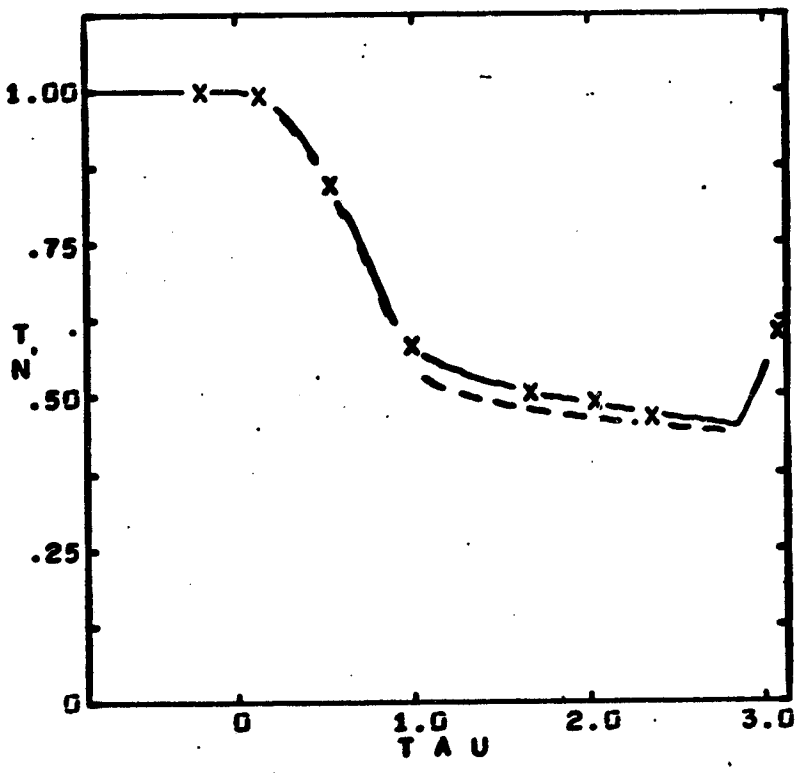
DIFFERENTIAL ENERGY DATA

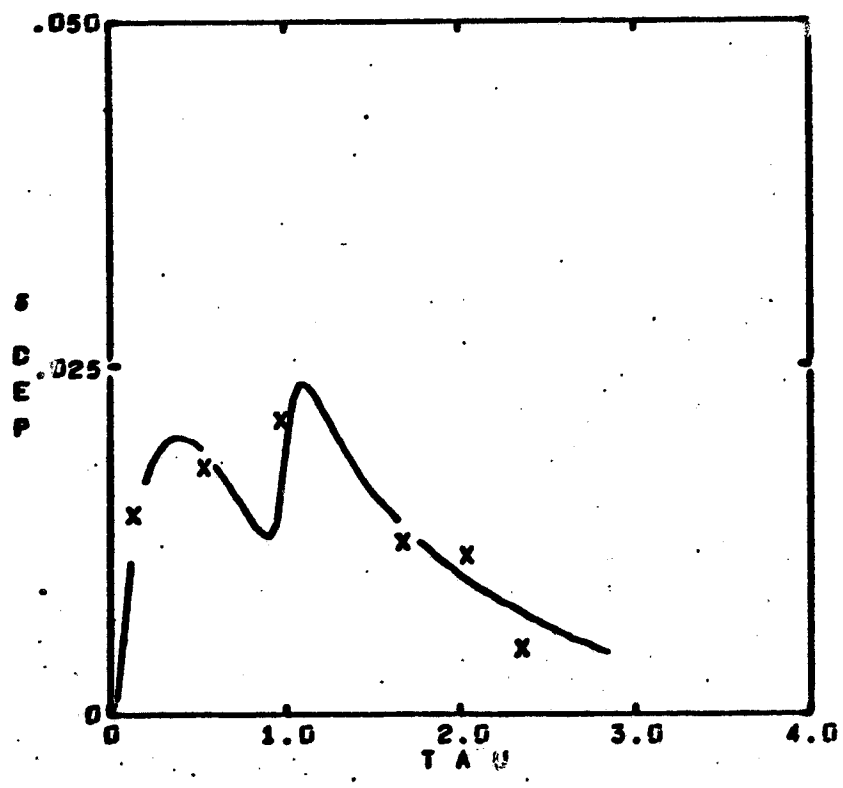
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0413	.0230	.0183
.50	.0690	.0497	.0193
.75	.0938	.0785	.0153
.93	.1096	.0979	.0117
1.0	.1079	.0887	.0192
1.5	.0718	.0559	.0159
2.0	.0562	.0463	.0099
2.5	.0465	.0402	.0063
3.0	.0393	.0357	.0036

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.918	387.94		387.94	1.003	.0132
9H	-0.219	386.36		386.36	0.999	-.0031
10H	0.127	383.28		383.28	0.991	.0250
11H	0.536	327.76	0.000 -.805	327.76	0.848	.0715
12H	0.985	223.98	0.104 +.776	224.84	0.581	.1127
13H	1.668	186.45	0.595 +.247	194.78	0.504	.0644
14H	2.029	183.39	0.472 +.434	189.06	0.489	.0572
15H	2.352	179.06	0.280 -.185	179.53	0.464	.0465
16H	3.084	233.27	0.000 +.453	233.27	0.603	-.0261







PHOTOGRAPH NOT AVAILABLE

LAMBDA= 9.46 E BETA=24.04 N XI=+.1501 ETA=+.4074 L+PL CODE = 11450 ALBEDO =.0616

13H FLAT MOON DATA
FM=.01977 FM'=.02460

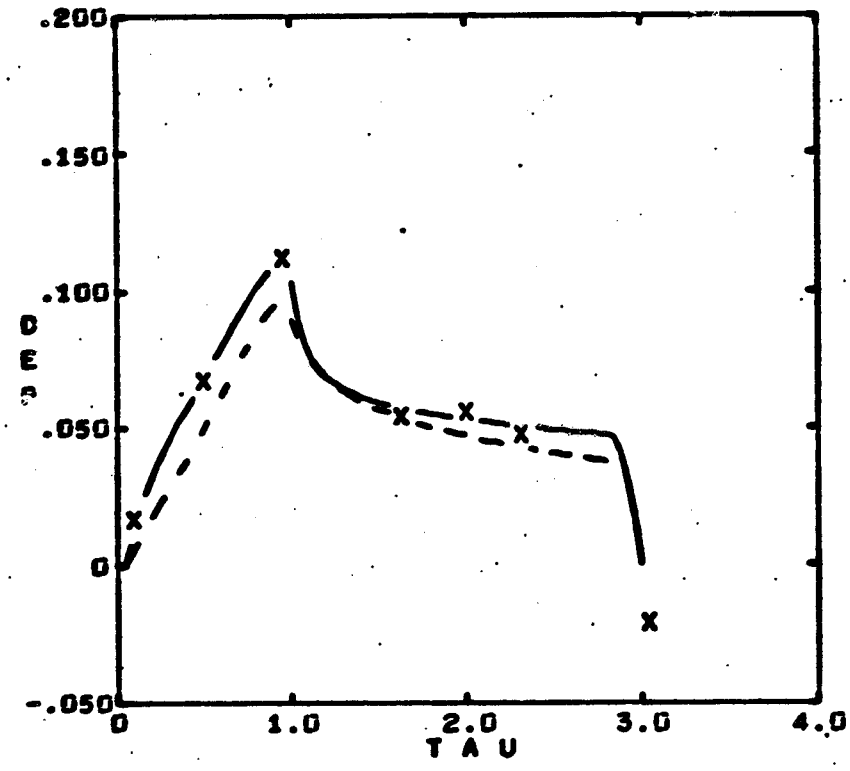
INITIAL TEMPERATURE 393.28
TAU-END OF TOTALITY 2.826

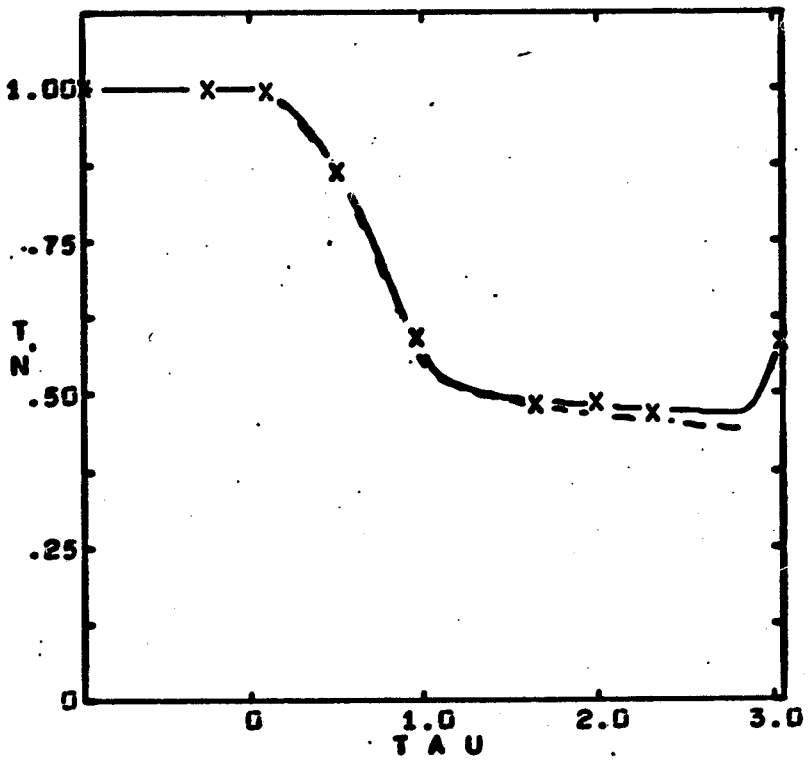
DIFFERENTIAL ENERGY DATA

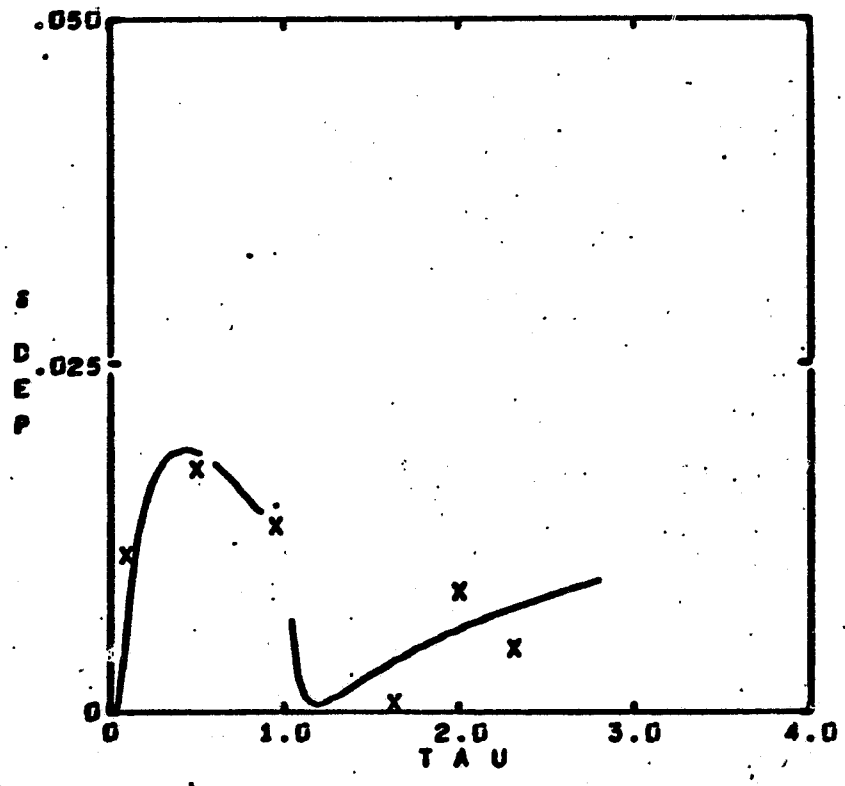
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0390	.0224	.0166
.50	.0685	.0498	.0187
.75	.0953	.0793	.0160
.93	.1124	.0991	.0133
1.0	.1041	.0900	.0141
1.5	.0595	.0569	.0026
2.0	.0531	.0472	.0059
2.5	.0494	.0411	.0083
3.0	.0466	.0365	.0101

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.945	394.34		394.34	1.003	.0109
9H	-0.250	393.00		393.00	0.999	-.0029
10H	0.096	391.22		391.22	0.995	.0170
11H	0.503	338.44	1.587 -.590	339.67	0.864	.0676
12H	0.950	230.22	0.347 +.227	233.23	0.593	.1118
13H	1.632	188.05	0.637 +.306	189.87	0.483	.0543
14H	1.990	181.91	0.779 +.328	191.24	0.486	.0559
15H	2.313	180.21	0.493 +.626	183.79	0.467	.0477
16H	3.045	229.97	0.000 +.386	229.97	0.585	-.0209







PHOTOGRAPH NOT AVAILABLE

814 (1D2) ARCHYTAS

LAMBDA= 5.01 E BETA=58.78 N XI=+.0453 ETA=+.8552 L+PL CODE = 10845 ALBEDO =.1049

13H FLAT MOON DATA
FM=-.00191 FM'=.07365

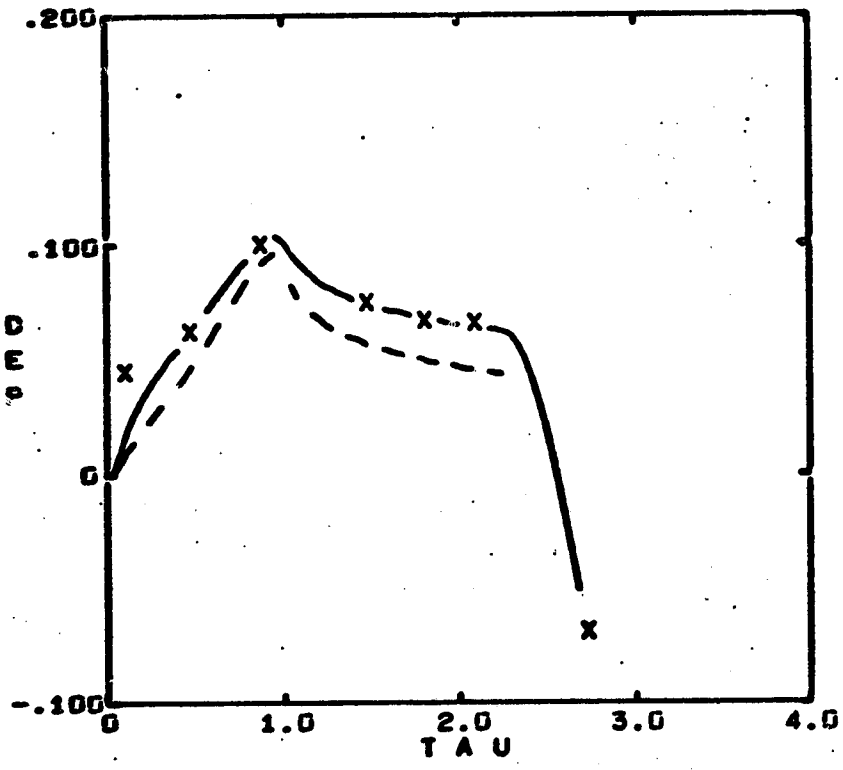
INITIAL TEMPERATURE 362.72
TAU-END OF TOTALITY 2.254

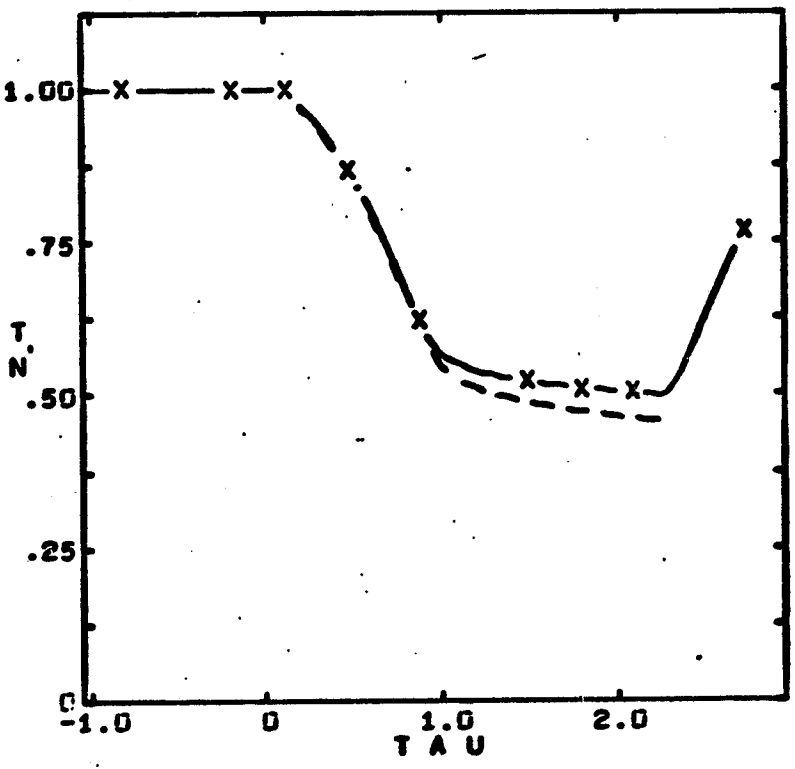
DIFFERENTIAL ENERGY DATA

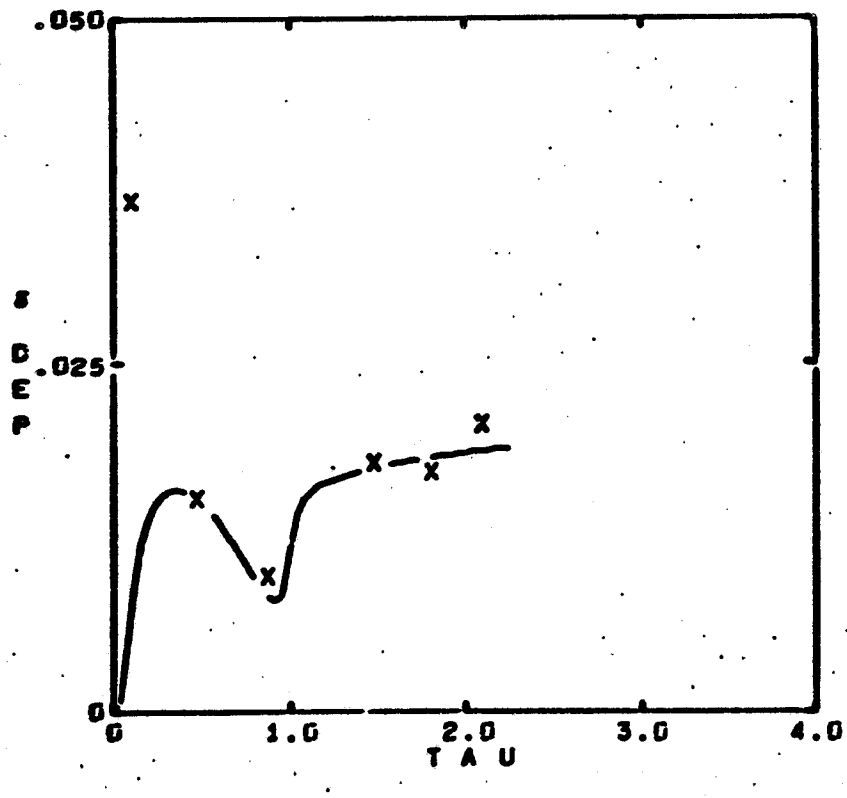
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0379	.0230	.0149
.50	.0647	.0497	.0150
.75	.0892	.0786	.0106
.93	.1049	.0980	.0069
1.0	.1010	.0889	.0121
1.5	.0736	.0560	.0176
2.0	.0650	.0464	.0186
2.5	.0596	.0403	.0193

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.821	364.48		364.48	1.005	.0196
9H	-0.203	362.28		362.28	0.999	-.0048
10H	0.106	362.32		362.32	0.999	.0450
11H	0.470	314.64		314.64	0.867	.0617
12H	0.869	223.35	0.297 +.324	225.51	0.622	.1005
13H	1.476	162.25	1.370 -.695	189.52	0.522	.0745
14H	1.798	171.83	0.722 +.157	184.39	0.508	.0668
15H	2.084	181.13	0.176 +.297	183.72	0.507	.0658
16H	2.722	275.72	0.702 -.568	278.69	0.768	-.0691







PHOTOGRAPH NOT AVAILABLE

115 (4C2) ARGELANDER C

LAMBDA= 4.48 E BETA=17.63 S XI=+.0745 ETA=-.3028 L+PL CODE = 40370 ALBEDO =.1478

13H FLAT MOON DATA
FM=.00885 FM'=.01200

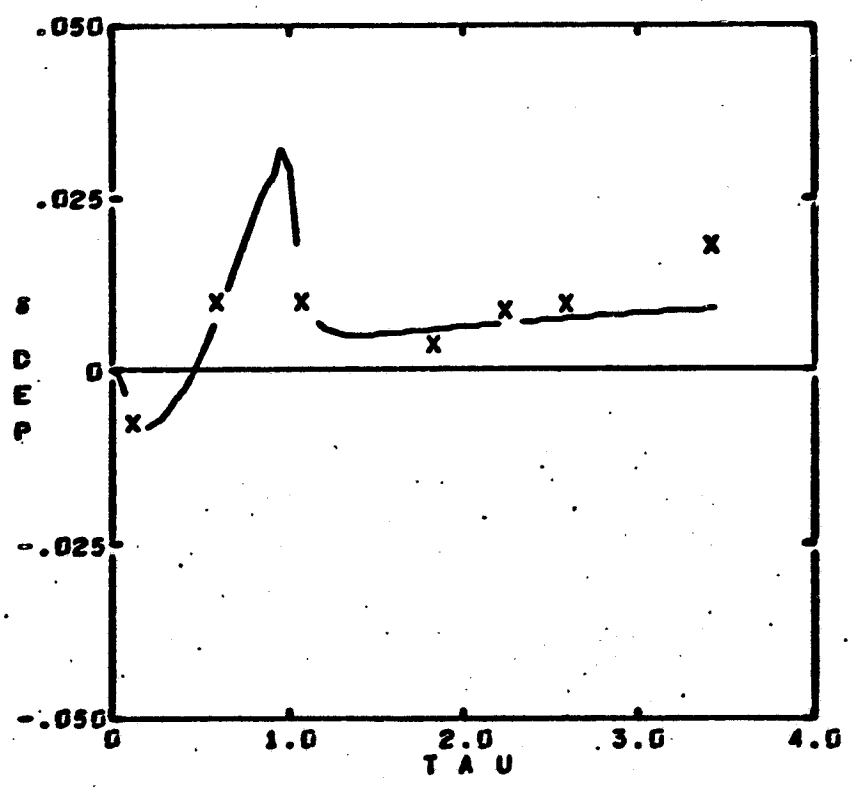
INITIAL TEMPERATURE 386.38
TAU-END OF TOTALITY 3.474

DIFFERENTIAL ENERGY DATA

TAU	DEP	DEP-SMOOTH	δDEP
.25	.0154	.0230	-.0076
.50	.0526	.0497	.0029
.75	.0976	.0785	.0191
.93	.1287	.0978	.0309
1.0	.1180	.0887	.0293
1.5	.0610	.0559	.0051
2.0	.0525	.0462	.0063
2.5	.0475	.0402	.0073
3.0	.0439	.0357	.0082

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.033	388.68		388.68	1.006	.0240
9H	-0.258	385.81		385.81	0.999	-.0059
10H	0.125	381.36		381.36	0.987	.0030
11H	0.577	321.45	0.000 -.827	321.45	0.832	.0684
12H	1.073	209.44	0.202 +.712	210.18	0.544	.0876
13H	1.831	184.05	0.932 -.135	184.95	0.479	.0525
14H	2.227	181.95	0.377 -.574	184.49	0.477	.0520
15H	2.586	177.45	0.427 +.555	181.85	0.471	.0491
16H	3.420	178.95	0.355 +.941	183.26	0.474	.0506



PHOTOGRAPH NOT AVAILABLE

116 (2D7) ARISTARCHUS

LAMBDA=47.54 W BETA=23.70 N XI=-.6755 ETA=+.4019 L+PL CODE = 26470 ALBEDO =.1786

13H FLAT MOON DATA
FM=.14990 FM'=.16349

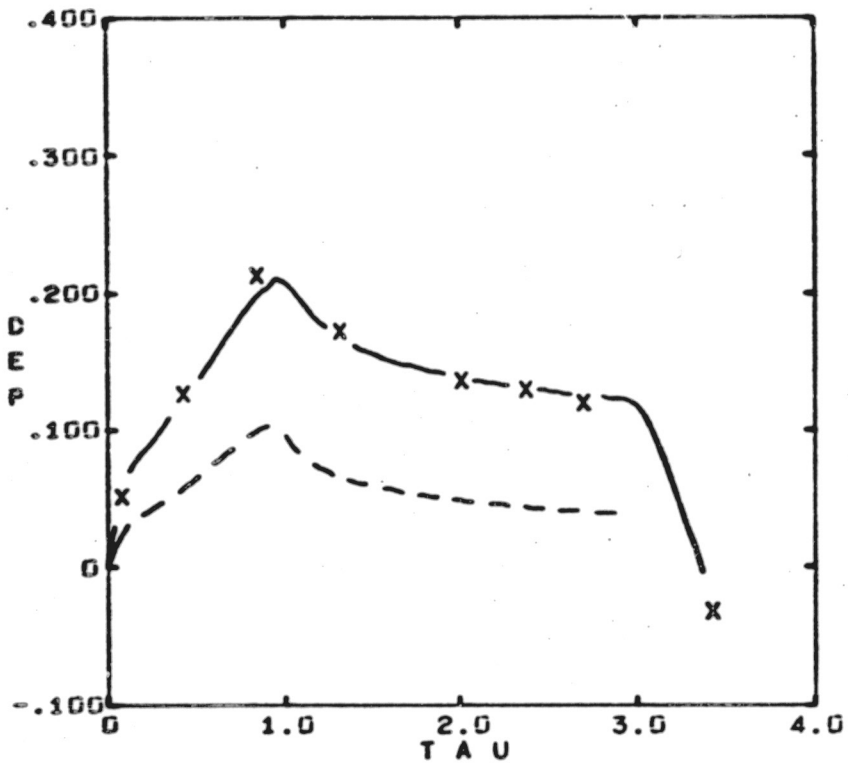
INITIAL TEMPERATURE 359.70
TAU-END OF TOTALITY 2.950

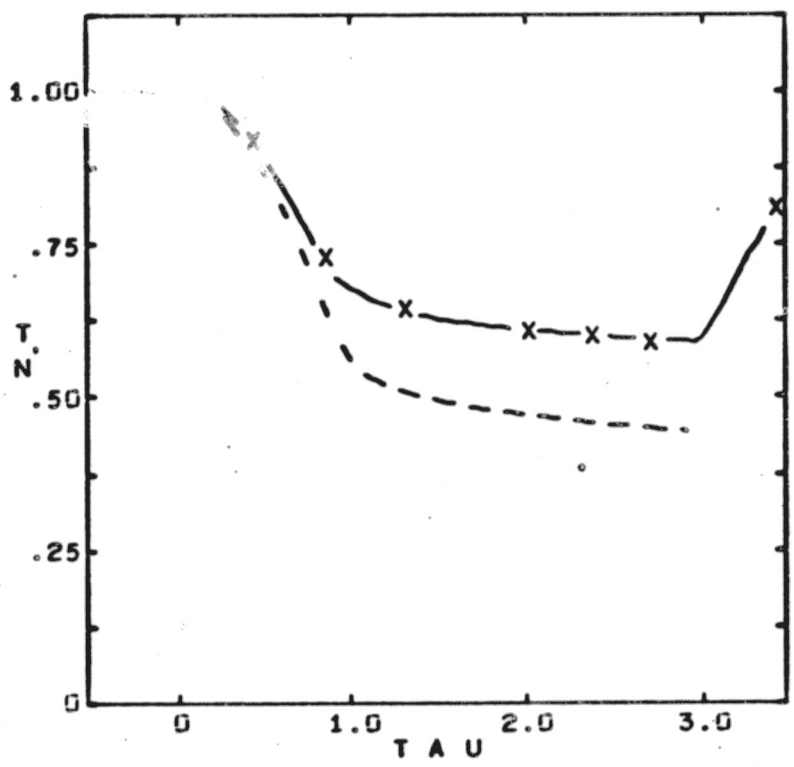
DIFFERENTIAL ENERGY DATA

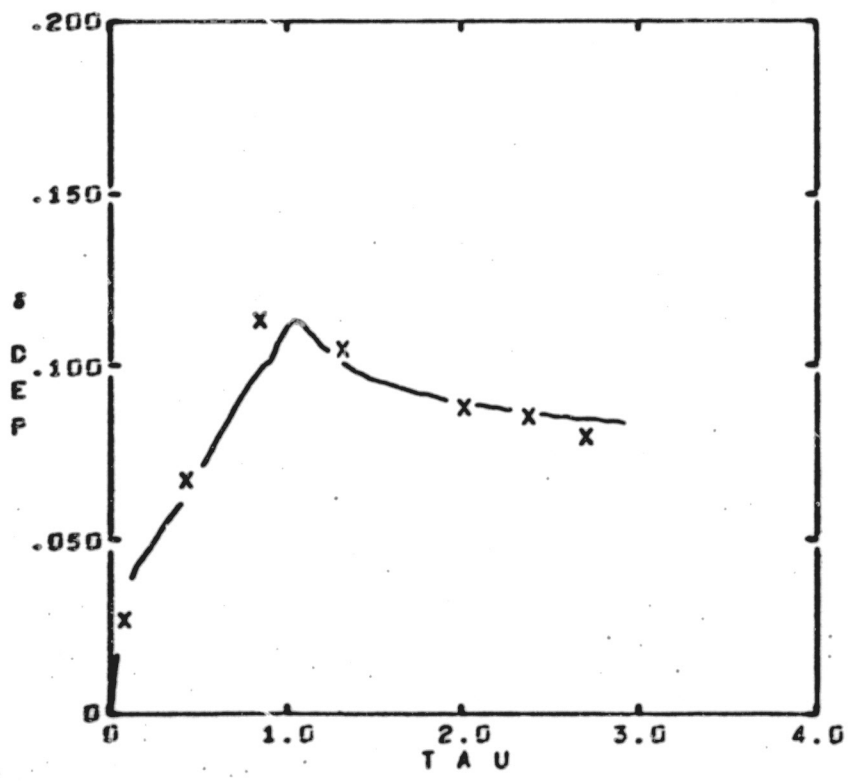
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0909	.0418	.0491
.50	.1341	.0649	.0692
.75	.1812	.0902	.0910
.93	.2120	.1067	.1053
1.0	.2083	.0967	.1116
1.5	.1559	.0597	.0962
2.0	.1385	.0491	.0894
2.5	.1285	.0427	.0858
3.0	.1214	.0382	.0832

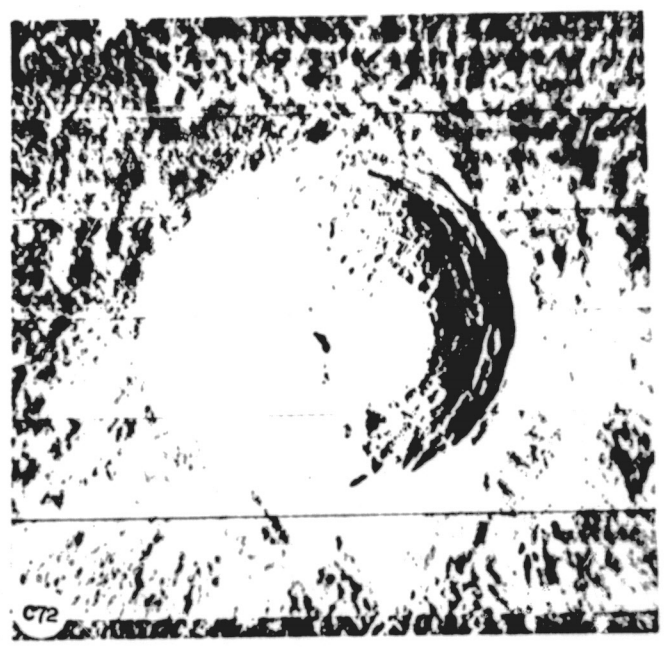
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.628	359.70		359.70	1.000	.0000
9H	0.086	361.59		361.59	1.005	.0519
10H	0.438	330.18		330.18	0.918	.1256
11H	0.854	261.59	0.277 -.942	262.83	0.731	.2127
12H	1.312	226.20	0.341 -.956	231.53	0.644	.1717
13H	2.008	212.97	0.356 -.190	218.74	0.608	.1368
14H	2.375	204.74	0.771 -.941	215.76	0.600	.1294
15H	2.704	206.45	0.522 -.775	211.81	0.589	.1202
16H	3.421	281.98	1.539 +.353	290.55	0.808	-.0322









117 (1D3) ARISTILLUS

LAMBDA= 1.24 E BETA=33.86 N XI=+.0179 ETA=+.5572 L+PL CODE = 10515 ALBEDO =.0978

13H FLAT MOON DATA
FM=.02424 FM'=.03483

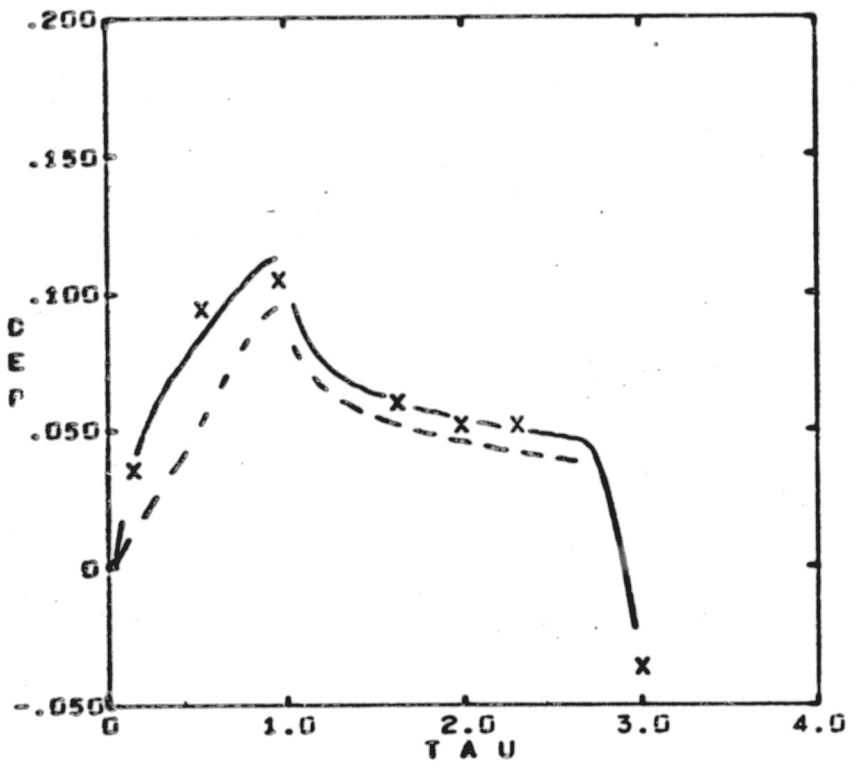
INITIAL TEMPERATURE 385.26
TAU-END OF TOTALITY 2.668

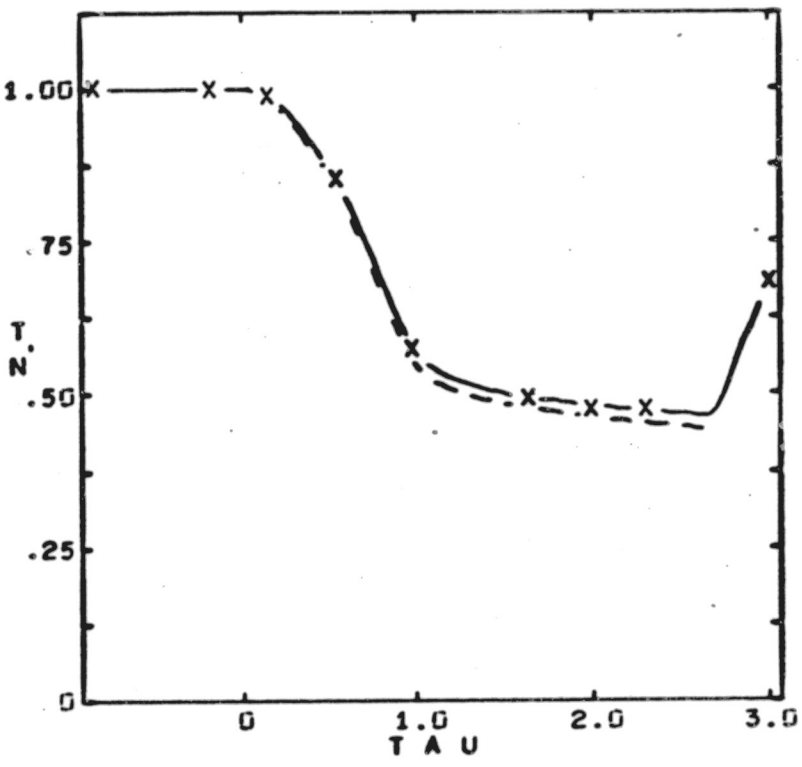
DIFFERENTIAL ENERGY DATA

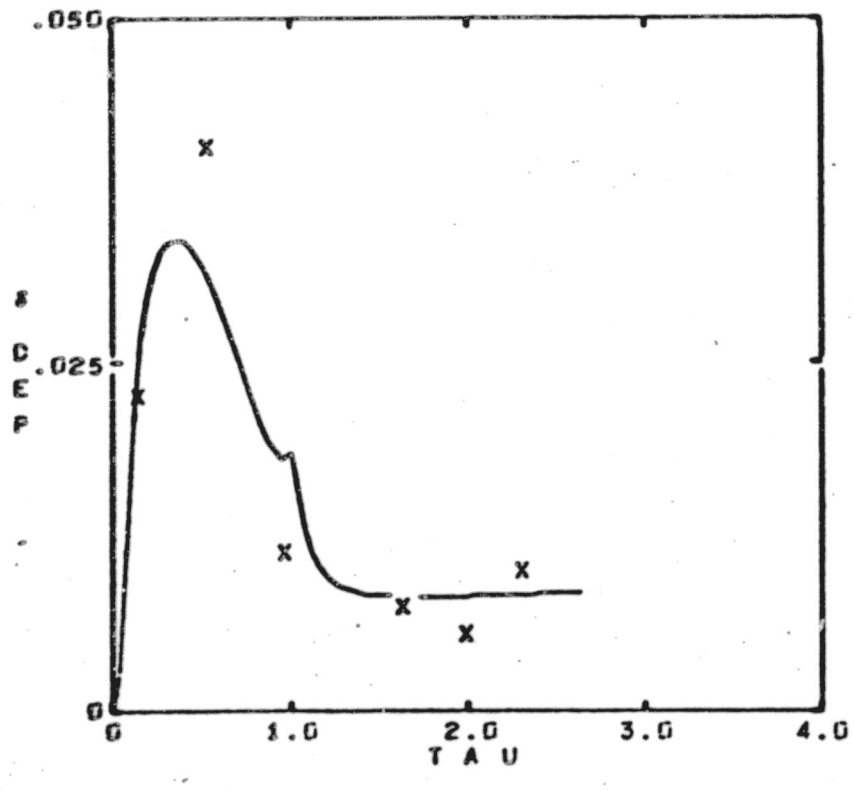
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0556	.0234	.0322
.50	.0818	.0496	.0322
.75	.1018	.0779	.0239
.93	.1138	.0969	.0169
1.0	.1064	.0878	.0186
1.5	.0635	.0552	.0083
2.0	.0538	.0456	.0082
2.5	.0481	.0396	.0085

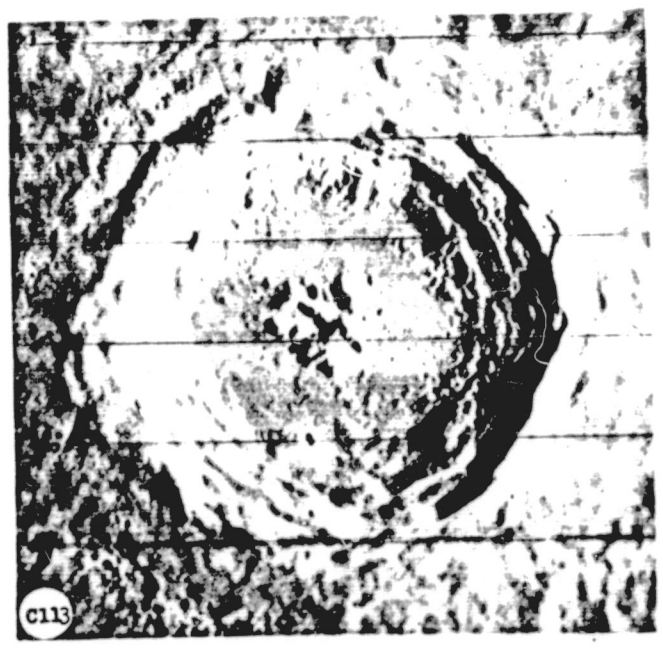
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.869	386.10		386.10	1.002	.0087
9H	-0.195	385.07		385.07	1.000	-.0020
10H	0.141	381.61		381.61	0.991	.0356
11H	0.537	327.22	0.384 +.690	328.57	0.853	.0944
12H	0.971	217.16	0.719 +.908	221.51	0.575	.1047
13H	1.632	185.87	0.811 +.706	190.24	0.494	.0595
14H	1.982	180.09	1.172 +.565	183.46	0.476	.0514
15H	2.294	180.23	0.566 +.841	183.91	0.477	.0519
16H	2.996	257.87	1.302 +.264	263.98	0.685	-.0363









118 (1C4) ARISTILLUS A

LAMBDA= 4.54 E BETA=33.59 N XI=+.0660 ETA=+.5533 L+PL CODE = 10565 ALBEDO =.0715

13H FLAT MOON DATA
FM=.00985 FM'=.01017

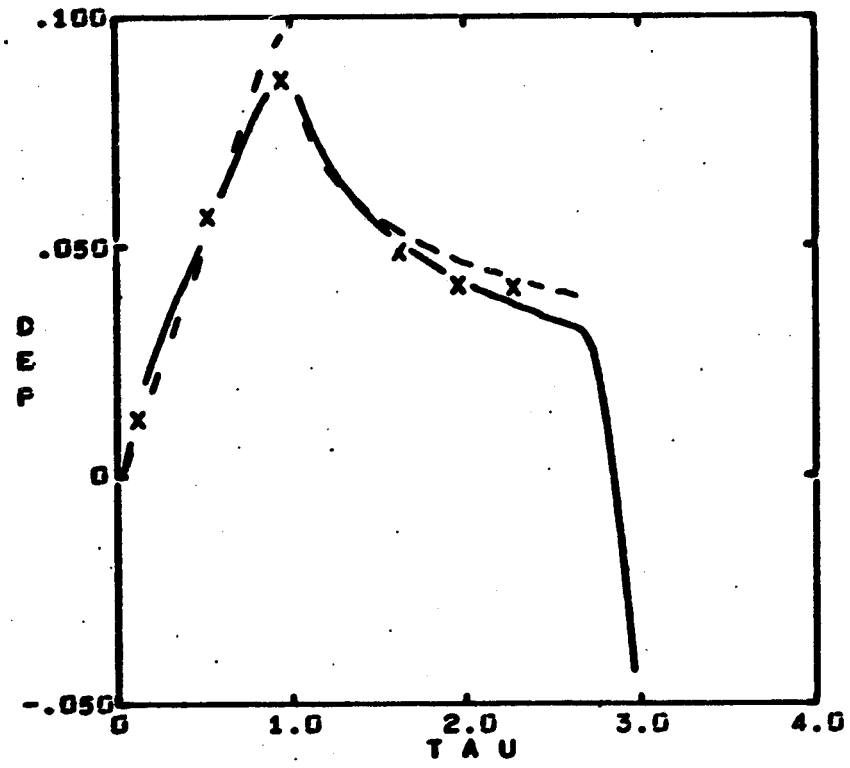
INITIAL TEMPERATURE 385.59
TAU-END OF TOTALITY 2.665

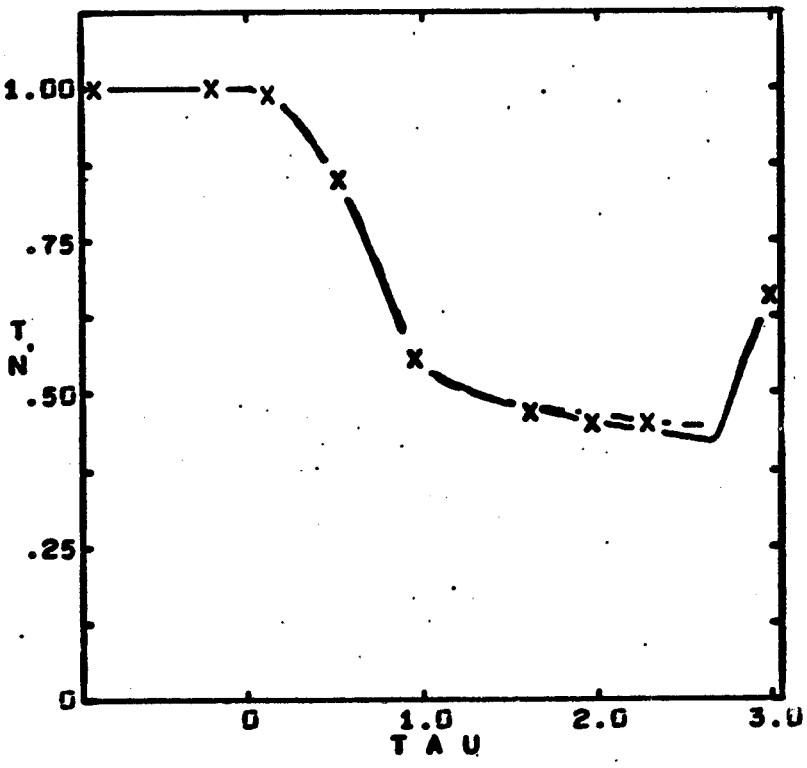
DIFFERENTIAL ENERGY DATA

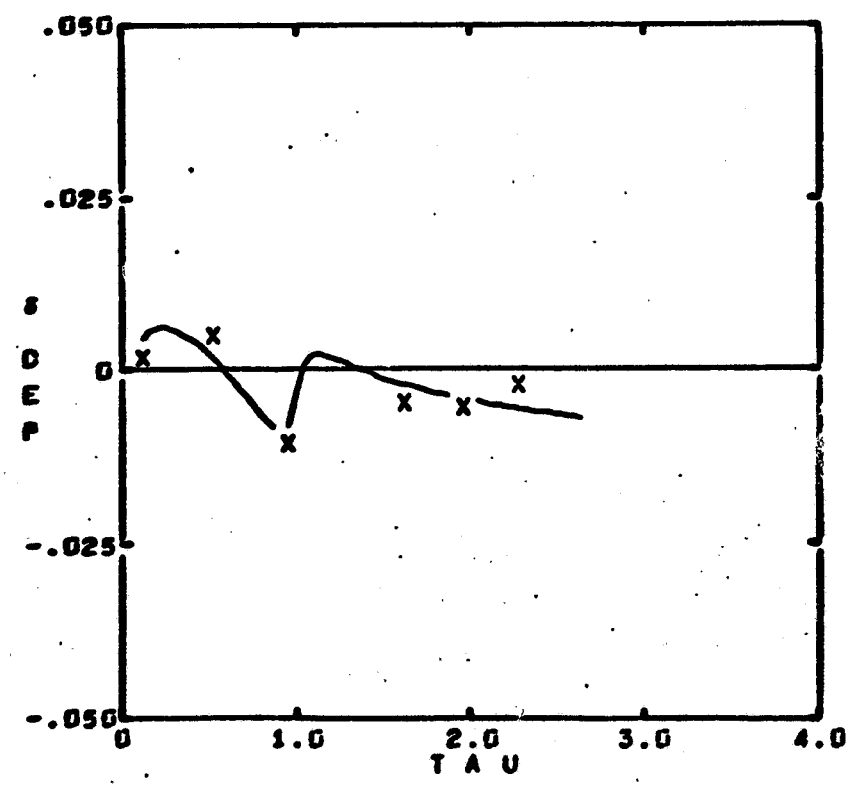
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0292	.0230	.0062
.50	.0519	.0497	.0022
.75	.0738	.0785	-.0047
.93	.0879	.0979	-.0100
1.0	.0860	.0887	-.0027
1.5	.0547	.0559	-.0012
2.0	.0419	.0463	-.0044
2.5	.0338	.0402	-.0064

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.887	385.29		385.29	0.999	-.0032
9H	-0.213	385.67		385.67	1.000	.0008
10H	0.122	381.17		381.17	0.989	.0118
11H	0.517	327.29	0.000 -.833	327.29	0.849	.0566
12H	0.952	215.27	0.000 -.794	215.27	0.558	.0865
13H	1.613	180.83	0.062 -.320	180.97	0.469	.0485
14H	1.962	173.60	0.231 +.549	173.93	0.451	.0414
15H	2.274	173.19	0.000 -.925	173.19	0.449	.0407
16H	2.978	253.62	0.000 +.602	253.62	0.658	-.0010







PHOTOGRAPH NOT AVAILABLE

119 (105) ARISTOTELES

LAMBDA=17.31 E BETA=50.14 N XI=+.1907 ETA=+.7676 L+PL CODE = 11796 ALBEDO =.1237

13H FLAT MOON DATA
FM=.04779 FM'=.04779

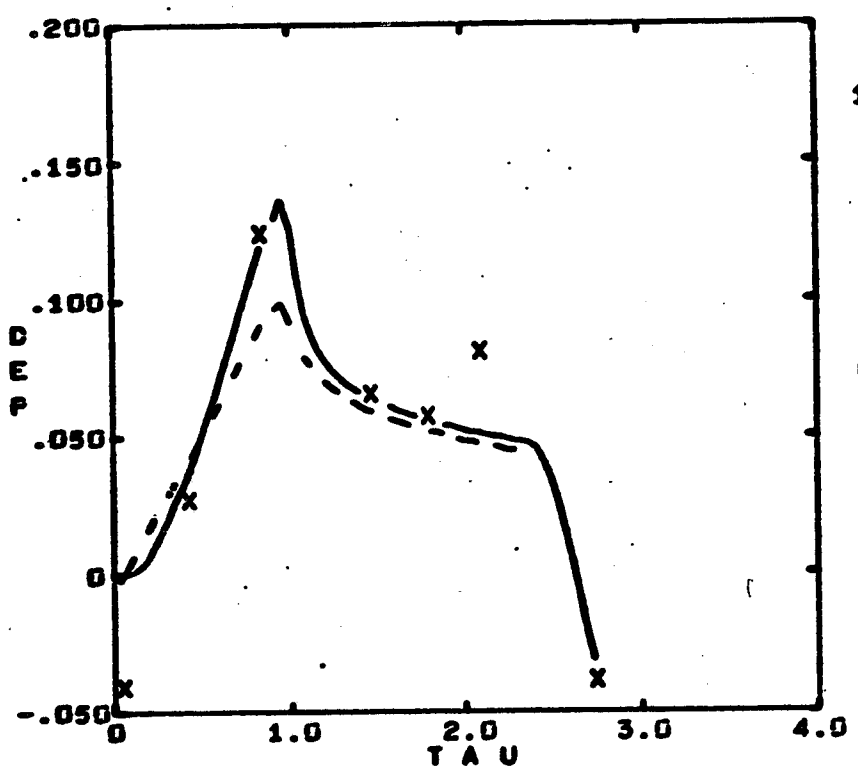
INITIAL TEMPERATURE 370.18
TAU-END OF TOTALITY 2.356

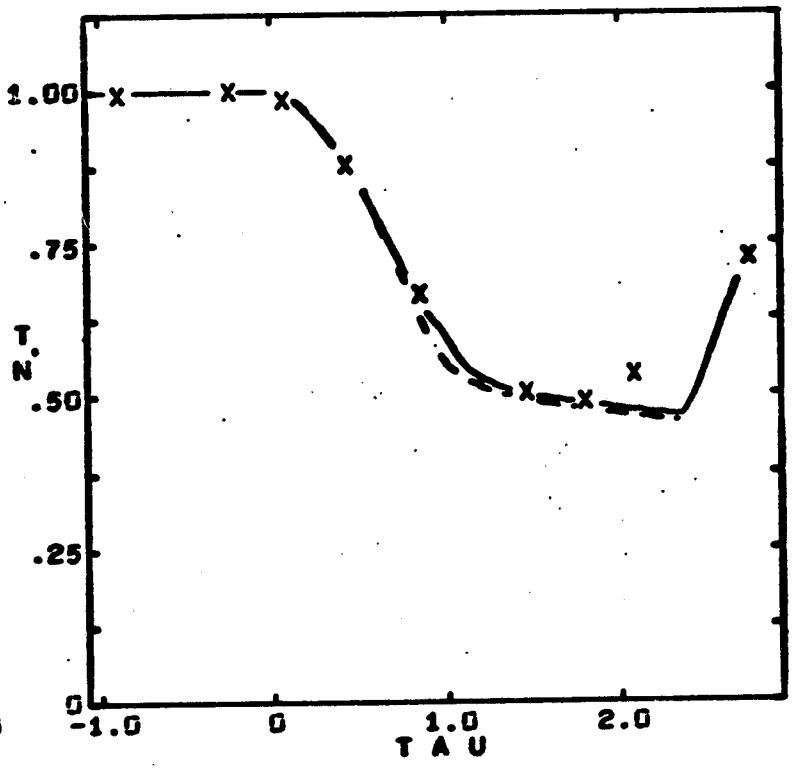
DIFFERENTIAL ENERGY DATA

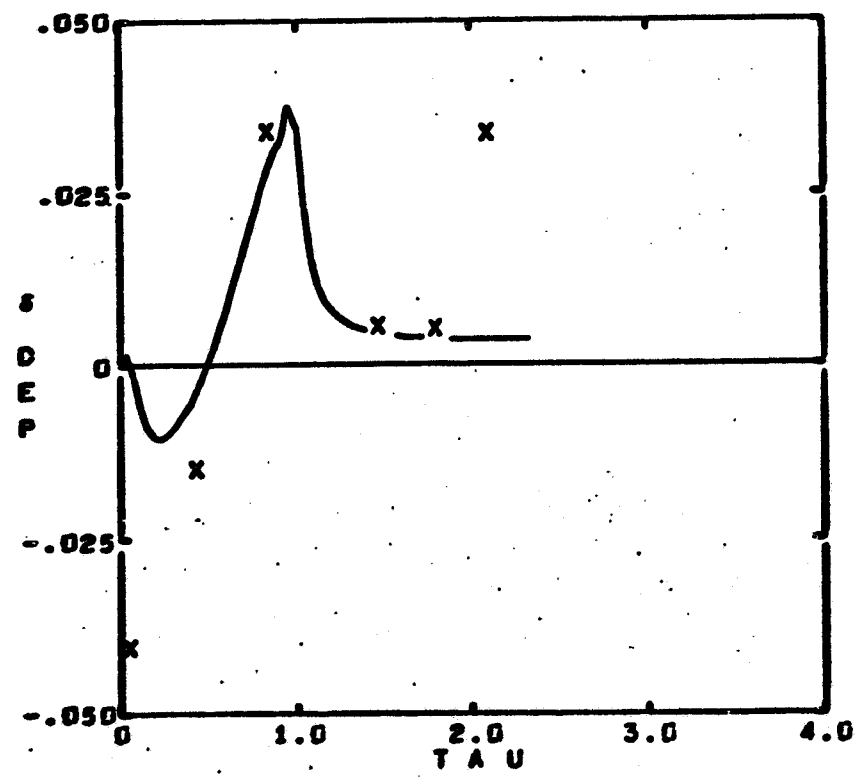
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0109	.0215	-.0106
.50	.0507	.0499	.0008
.75	.1016	.0804	.0212
.93	.1372	.1008	.0364
1.0	.1261	.0916	.0345
1.5	.0630	.0585	.0045
2.0	.0525	.0488	.0037
2.5	.0463	.0426	.0037

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.889	369.21		369.21	0.997	-.0105
9H	-0.255	370.46		370.46	1.001	.0030
10H	0.060	364.53		364.53	0.985	-.0411
11H	0.431	324.84		324.84	0.878	.0271
12H	0.840	231.76	1.650 +.536	246.30	0.665	.1244
13H	1.461	187.09	0.000 +.985	187.09	0.505	.0652
14H	1.789	181.36	0.000 +.477	181.36	0.490	.0576
15H	2.083	180.11	1.633 +.502	197.57	0.534	.0811
16H	2.742	260.22	0.869 +.432	268.12	0.724	-.0390







PHOTOGRAPH NOT AVAILABLE

120 (106) ATLAS A

LAMBDA=49.55 E BETA=45.32 N XI=+.5350 ETA=+.7111 L+PL CODE = 15731 ALBEDO =.1569

13H FLAT MOON DATA
FM=.05313 FM'=.10520

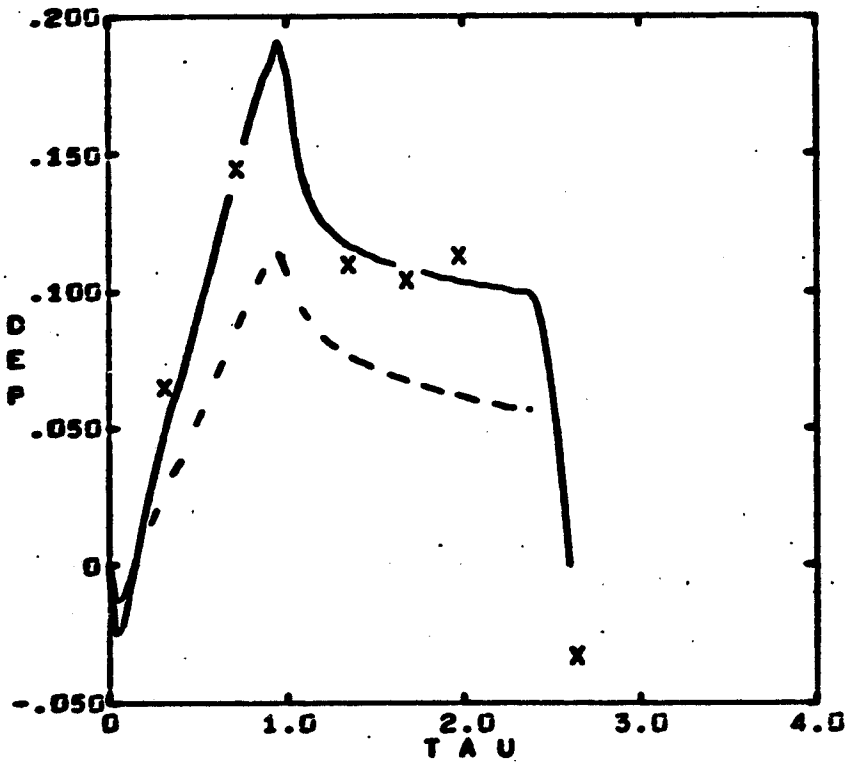
INITIAL TEMPERATURE 356.30
TAU-END OF TOTALITY 2.373

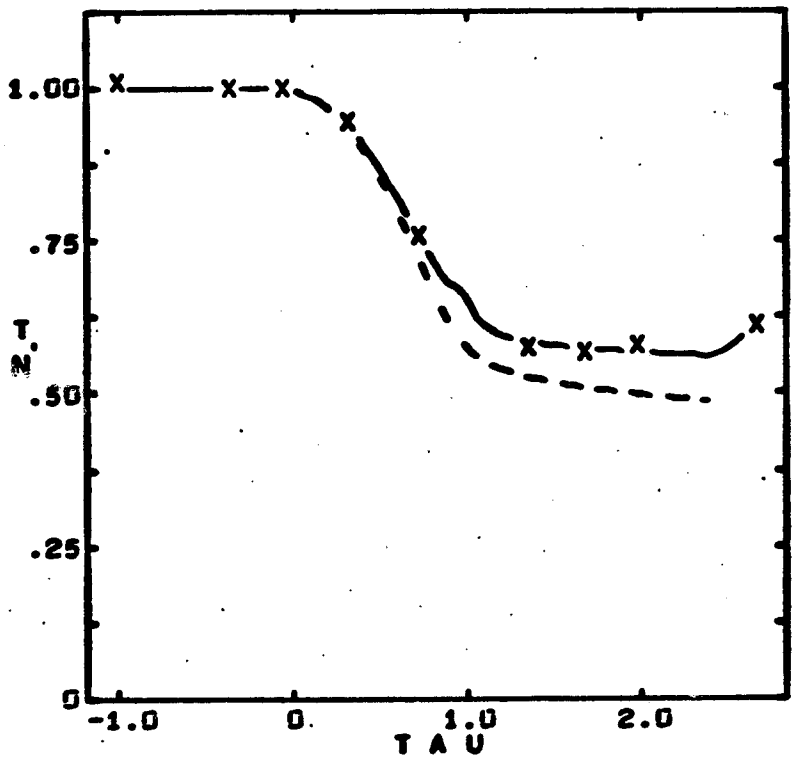
DIFFERENTIAL ENERGY DATA

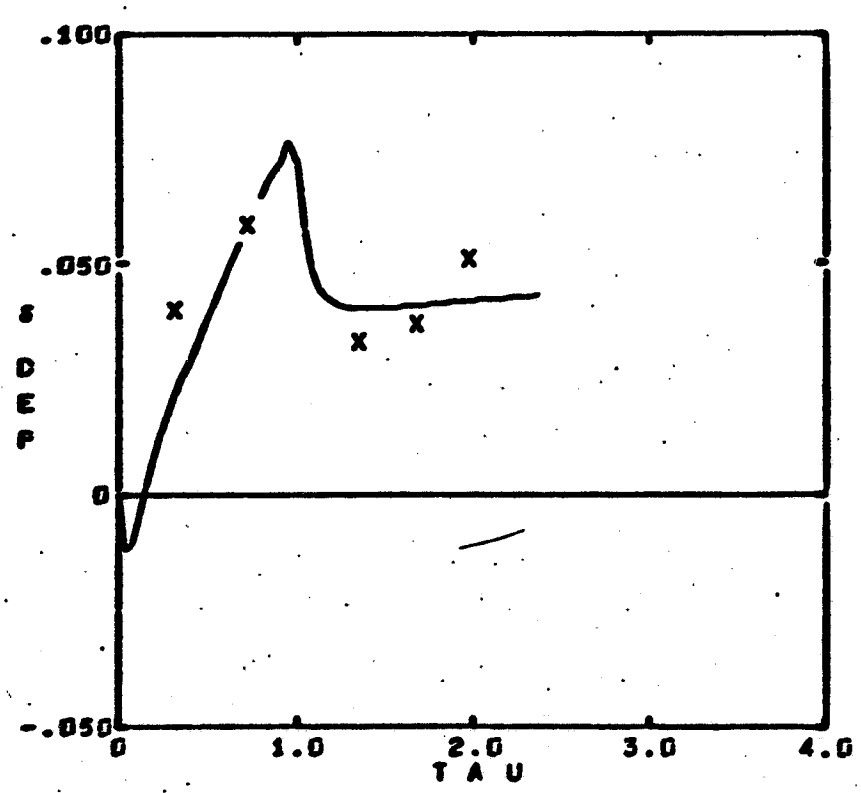
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0300	.0164	.0136
.50	.0922	.0535	.0387
.75	.1513	.0908	.0605
.93	.1903	.1157	.0746
1.0	.1790	.1066	.0724
1.5	.1119	.0716	.0403
2.0	.1033	.0613	.0420
2.5	.0980	.0545	.0435

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.016	359.94			359.94	1.010	.0414
9H	-0.381	356.07			356.07	0.999	-.0026
10H	-0.065	356.11			356.11	0.999	-.0021
11H	0.309	337.00			337.00	0.946	.0651
12H	0.719	264.89	0.362	-.739	270.45	0.759	.1449
13H	1.341	186.82	0.787	-.728	205.07	0.576	.1097
14H	1.672	174.96	0.806	+.330	202.42	0.568	.1042
15H	1.966	171.29	1.251	-.592	206.55	0.580	.1129
16H	2.641	217.79	0.000	-.044	217.79	0.611	-.0331







PHOTOGRAPH NOT AVAILABLE

121 (4C3) BEAUMONT C

LAMBDA=26.21 E BETA=17.07 S XI=+.4222 ETA=-.2935 L+PL CODE = 44229 ALBEDO =.1763

13H FLAT MOON DATA
FM=.02986 FM'=.04876

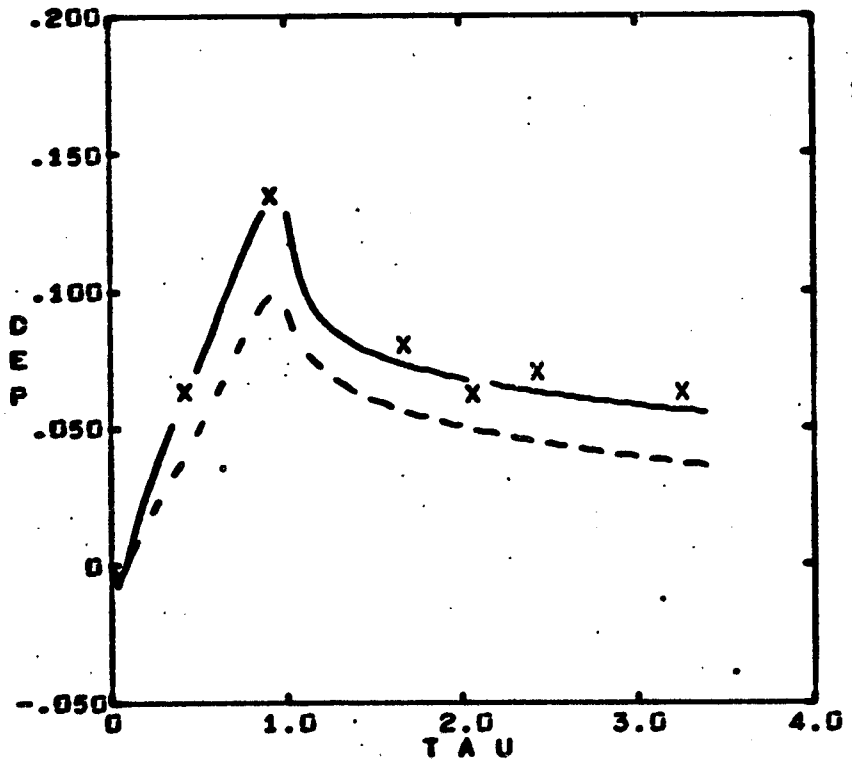
INITIAL TEMPERATURE 373.22
TAU-END OF TOTALITY 3.436

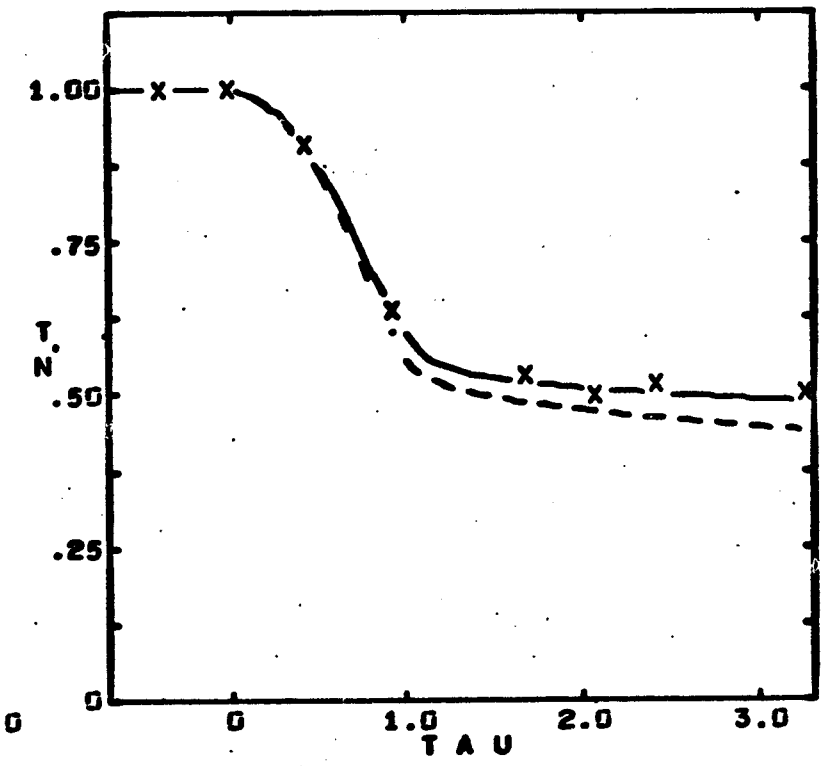
DIFFERENTIAL ENERGY DATA

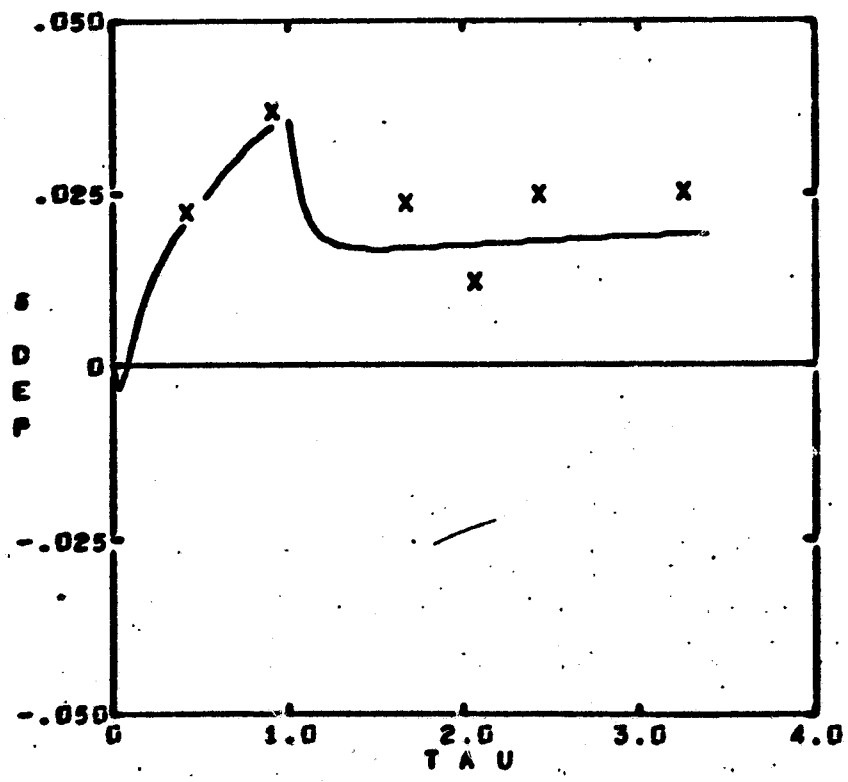
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0334	.0201	.0133
.50	.0735	.0498	.0237
.75	.1122	.0811	.0311
.93	.1375	.1022	.0353
1.0	.1288	.0931	.0357
1.5	.0771	.0602	.0169
2.0	.0679	.0505	.0174
2.5	.0624	.0443	.0181
3.0	.0584	.0396	.0188

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.177	375.02		375.02	1.005	.0194
9H	-0.407	373.71		373.71	1.001	.0053
10H	-0.027	373.15		373.15	1.000	-.0008
11H	0.423	339.31		339.31	0.909	.0628
12H	0.917	237.35	0.190 -.254	238.42	0.639	.1348
13H	1.669	191.25	0.451 -.184	198.48	0.532	.0800
14H	2.065	183.00	0.496 -.896	186.16	0.499	.0619
15H	2.422	188.45	0.276 -.823	192.06	0.515	.0701
16H	3.264	166.59	1.121 +.882	186.88	0.501	.0629







PHOTOGRAPH NOT AVAILABLE

122 (208) BESSARION

LAMBDA=37.26 W BETA=14.85 N XI=-.5852 ETA=+.2563 L+PL CODE = 25285 ALBEDO =.0892

13H FLAT MOON DATA
FM=.04724 FM'=.07383

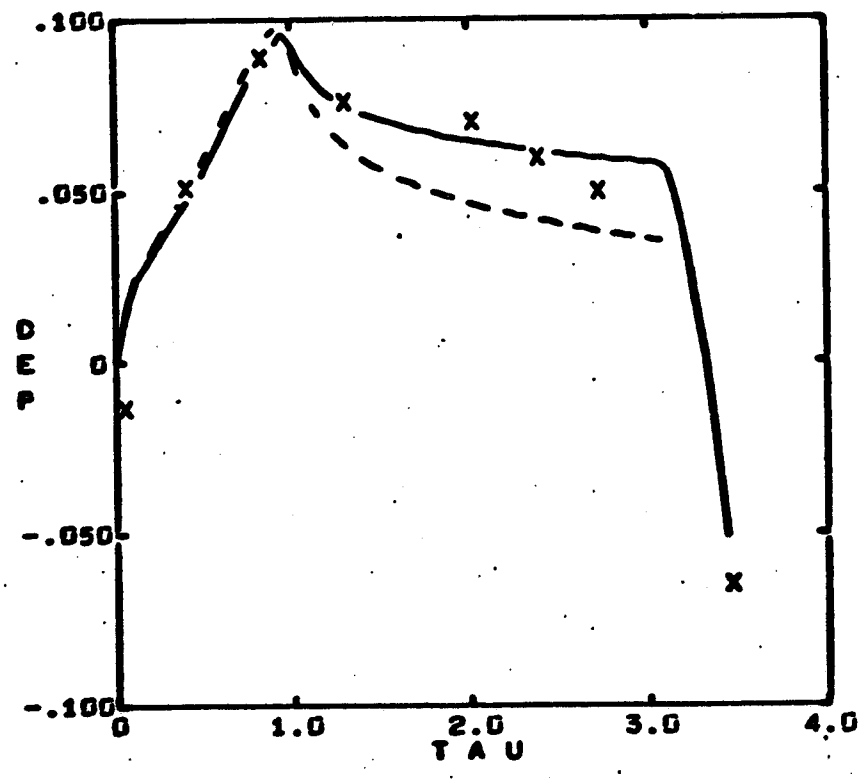
INITIAL TEMPERATURE 377.48
TAU-END OF TOTALITY 3.086

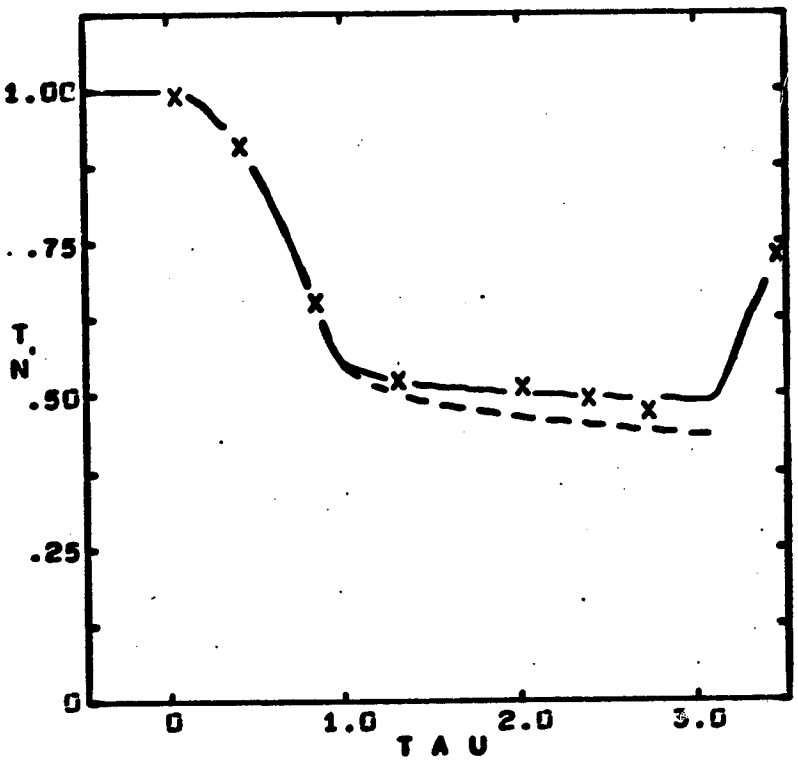
DIFFERENTIAL ENERGY DATA

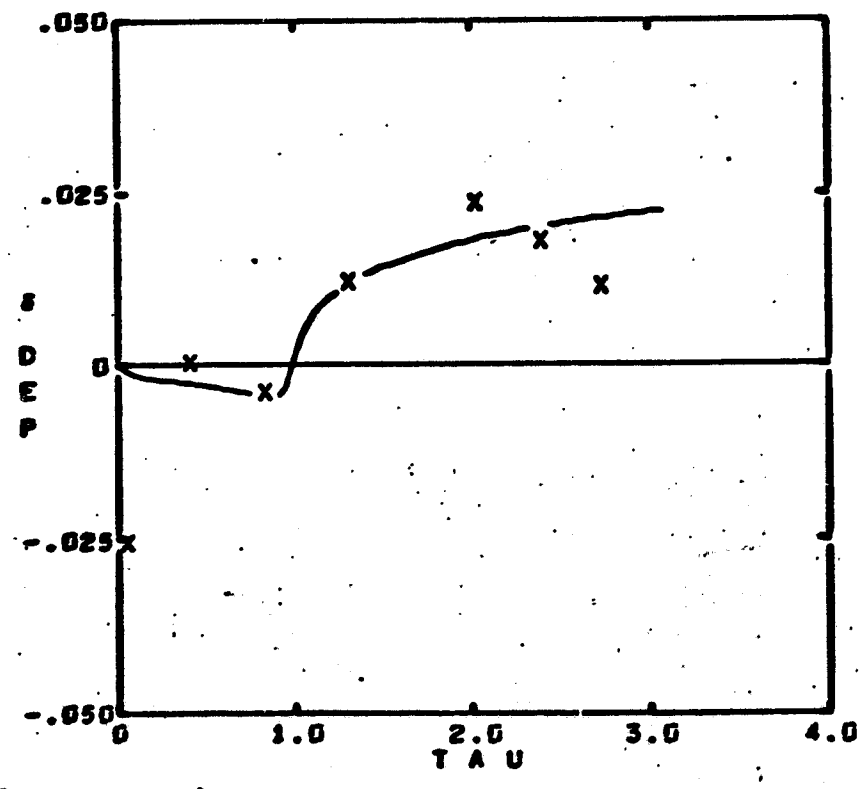
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0340	.0360	-.0020
.50	.0563	.0593	-.0030
.75	.0807	.0846	-.0039
.93	.0967	.1013	-.0046
1.0	.0929	.0916	.0013
1.5	.0708	.0565	.0143
2.0	.0646	.0464	.0182
2.5	.0609	.0404	.0205
3.0	.0582	.0360	.0222

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.680	377.48			377.48	1.000	.0000
9H	0.049	375.07			375.07	0.994	-.0133
10H	0.411	342.48			342.48	0.907	.0511
11H	0.836	245.51	0.000	-.774	245.51	0.650	.0889
12H	1.303	195.28	0.411	-.954	197.98	0.524	.0757
13H	2.016	183.79	0.503	-.175	193.96	0.514	.0697
14H	2.391	184.52	0.230	-.696	186.51	0.494	.0596
15H	2.728	177.47	0.204	+.910	178.31	0.472	.0498
16H	3.470	274.56	0.000	+.809	274.56	0.727	-.0650







PHOTOGRAPH NOT AVAILABLE

123 (2D9) BESSARION A

LAMBDA=39.77 W BETA=17.06 N XI=-.6116 ETA=+.2934 L+PL CONE = 26219 ALBEDO =.0743

13H FLAT MOON DATA
FM=.05730 FM'=.07322

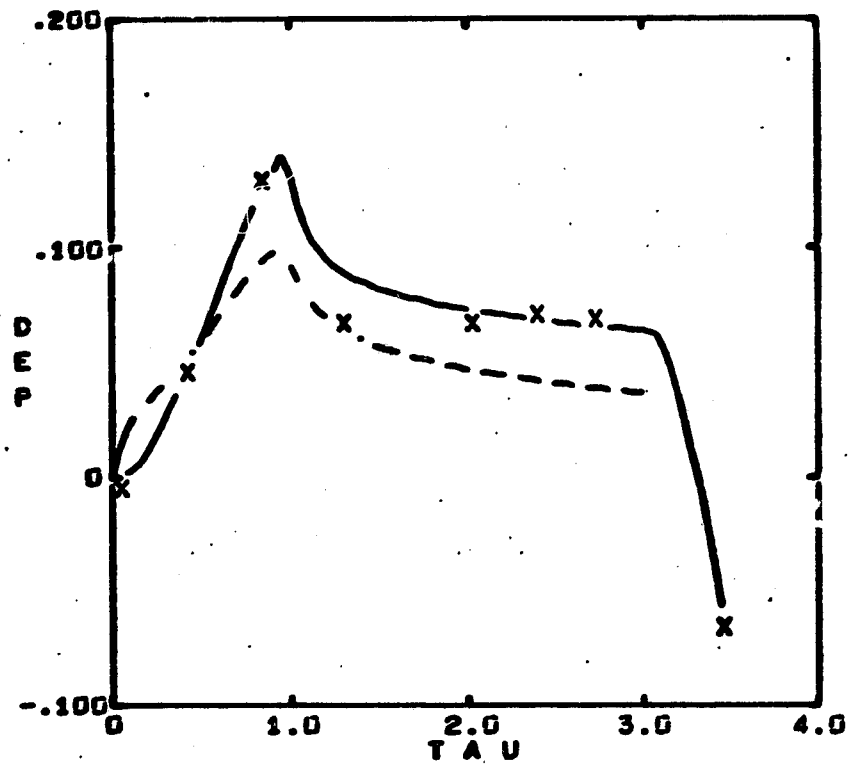
INITIAL TEMPERATURE 377.40
TAU-END OF TOTALITY 3.053

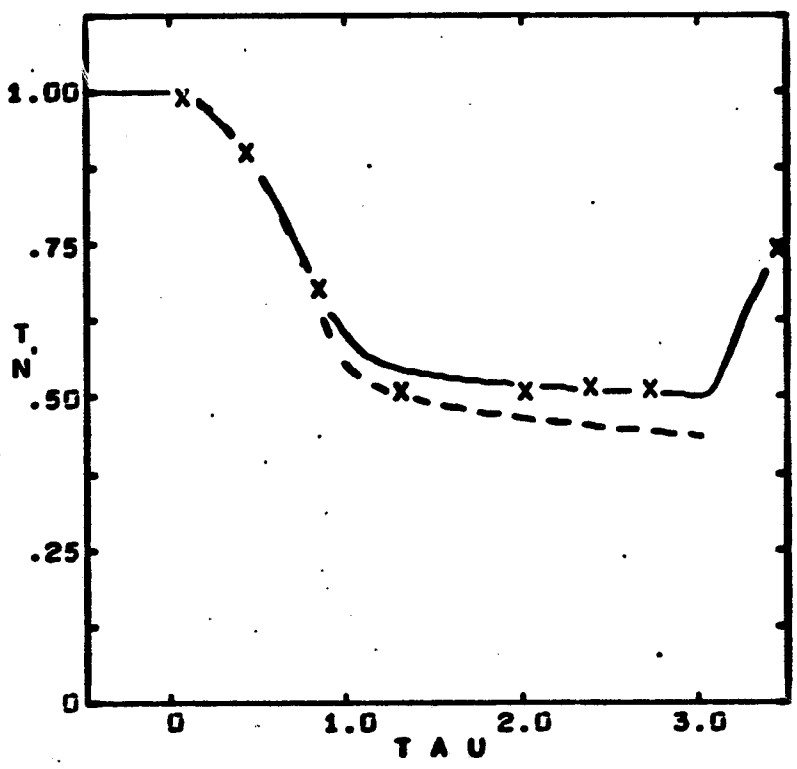
DIFFERENTIAL ENERGY DATA

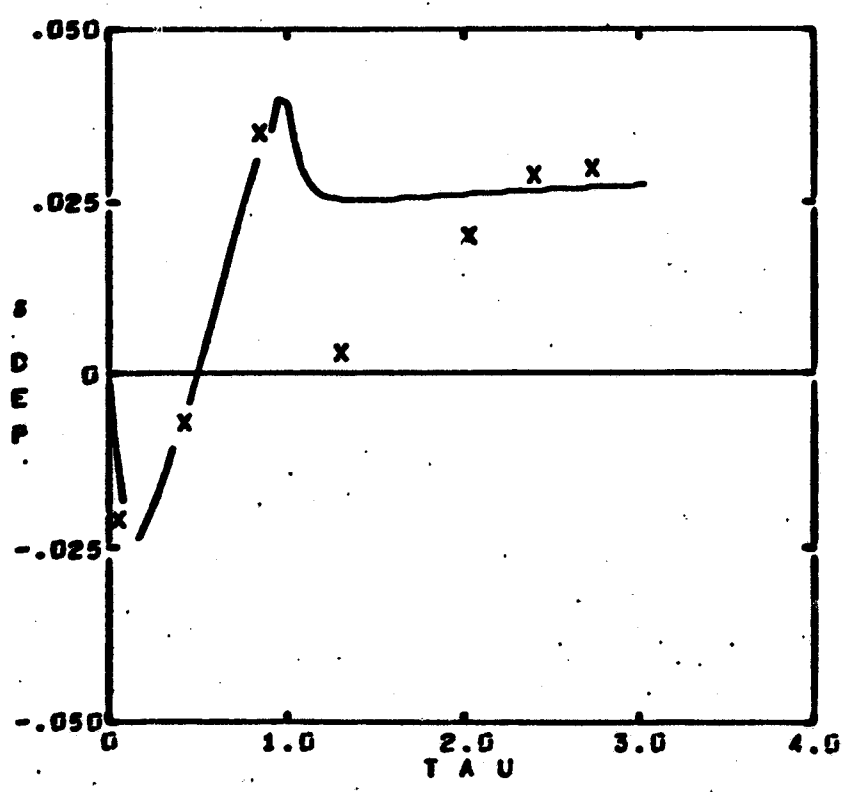
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0185	.0372	-.0187
.50	.0612	.0603	.0009
.75	.1092	.0856	.0236
.93	.1410	.1022	.0388
1.0	.1315	.0924	.0391
1.5	.0823	.0571	.0252
2.0	.0729	.0469	.0260
2.5	.0676	.0408	.0268
3.0	.0638	.0364	.0274

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.665	377.40			377.40	1.000	.0000
9H	0.060	375.29			375.29	0.994	-.0054
10H	0.420	339.98			339.98	0.901	.0453
11H	0.843	253.53	0.271	-.703	256.27	0.679	.1291
12H	1.307	192.07	0.000	+.224	192.07	0.509	.0671
13H	2.017	185.62	0.372	-.179	191.69	0.508	.0666
14H	2.389	192.65	0.165	-.689	194.72	0.516	.0709
15H	2.725	185.95	0.315	+.105	193.08	0.512	.0685
16H	3.460	281.32	0.000	+.235	281.32	0.745	-.0661







PHOTOGRAPH NOT AVAILABLE

LAMBDA=41.66 W BETA=16.79 N XI=-.6364 ETA=+.2889 L+PL CODE = 26238 ALBEDO =.0715

13H FLAT MOON DATA
FM=.03989 FM'=.08899

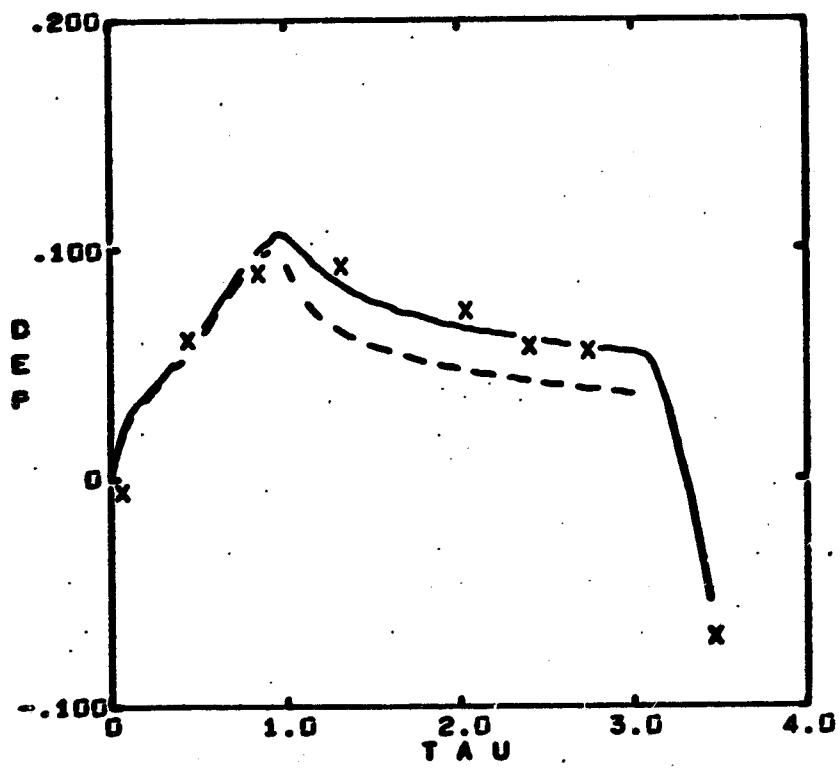
INITIAL TEMPERATURE 377.10
TAU-END OF TOTALITY 3.061

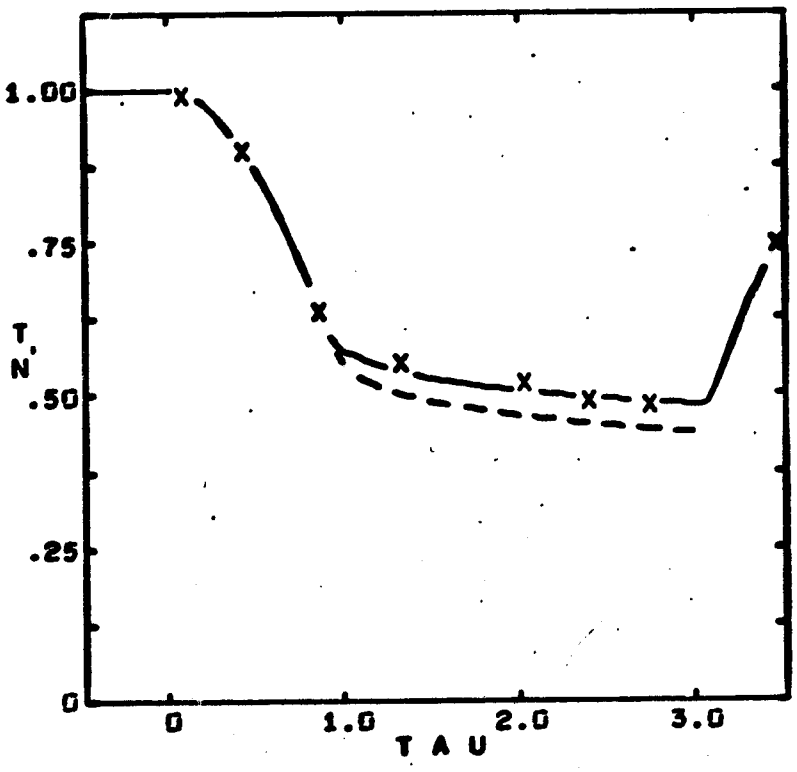
DIFFERENTIAL ENERGY DATA

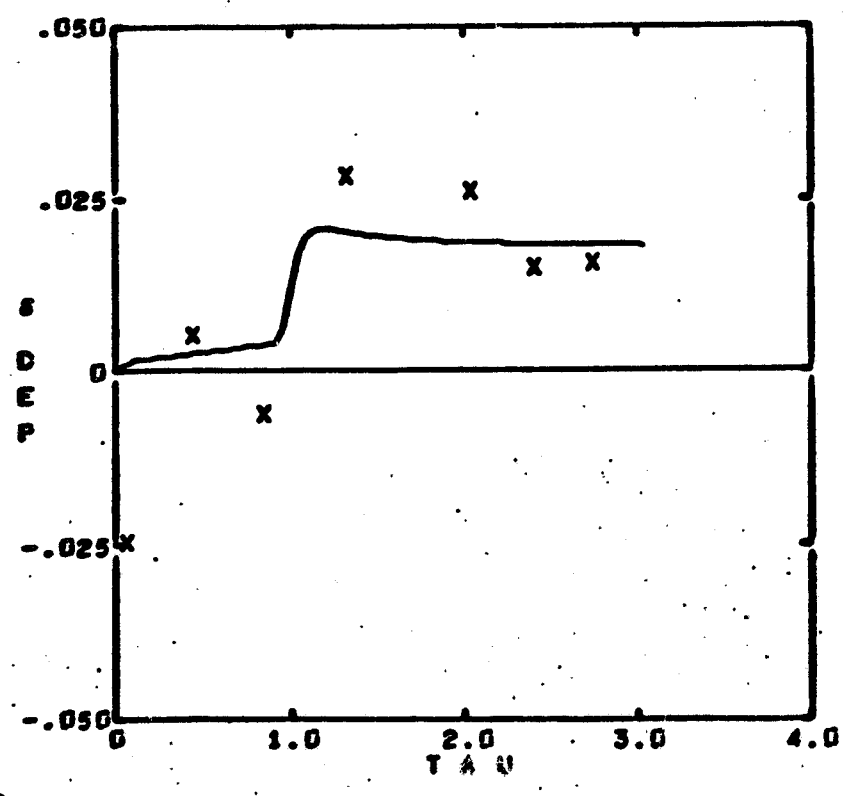
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0402	.0382	.0020
.50	.0641	.0613	.0028
.75	.0901	.0866	.0035
.93	.1072	.1032	.0040
1.0	.1057	.0933	.0124
1.5	.0772	.0576	.0196
2.0	.0661	.0474	.0187
2.5	.0596	.0412	.0184
3.0	.0550	.0368	.0182

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.656	377.10		377.10	1.000	.0000
9H	0.071	374.42		374.42	0.993	-.0058
10H	0.430	339.77		339.77	0.901	.0598
11H	0.854	239.96	0.000 -.807	239.96	0.636	.0897
12H	1.320	201.16	0.356 +.840	208.00	0.552	.0926
13H	2.030	177.79	0.754 -.022	196.10	0.520	.0731
14H	2.402	174.21	0.747 -.880	184.55	0.489	.0574
15H	2.739	182.49	0.000 -.779	182.49	0.484	.0548
16H	3.474	282.41	0.000 +.750	282.41	0.749	-.0695







PHOTOGRAPH NOT AVAILABLE

125 (2E2) BESSARION C

LAMBDA=42.56 W BETA=16.00 N XI=-.6502 ETA=+.2757 L+PL CODE = 26257 ALBEDO =.0701

13H FLAT MOON DATA
FM=.03460 FM'=.03460

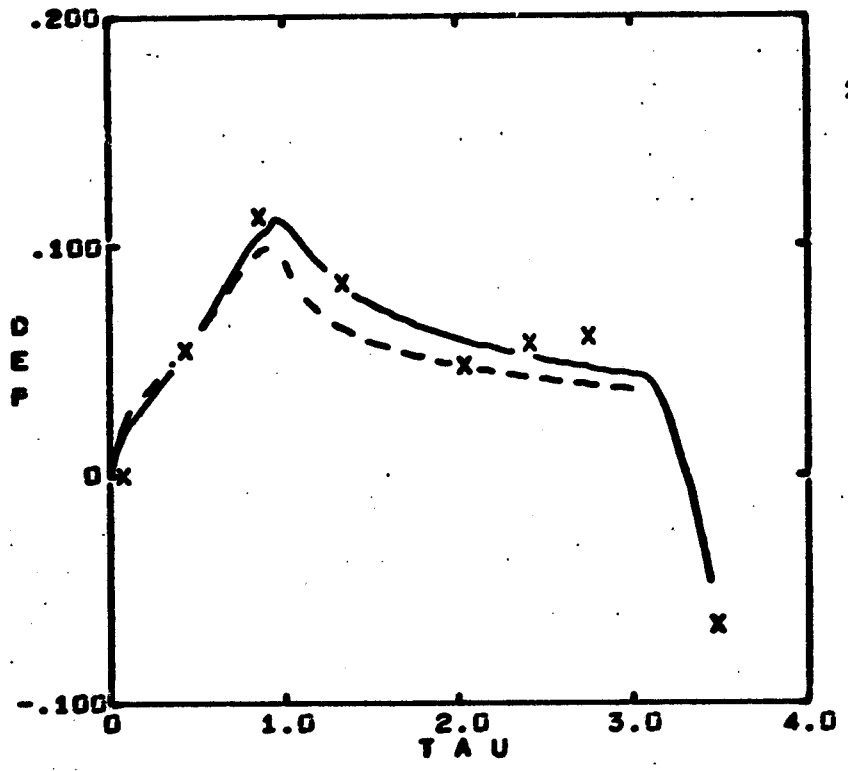
INITIAL TEMPERATURE 375.51
TAU-END OF TOTALITY 3.075

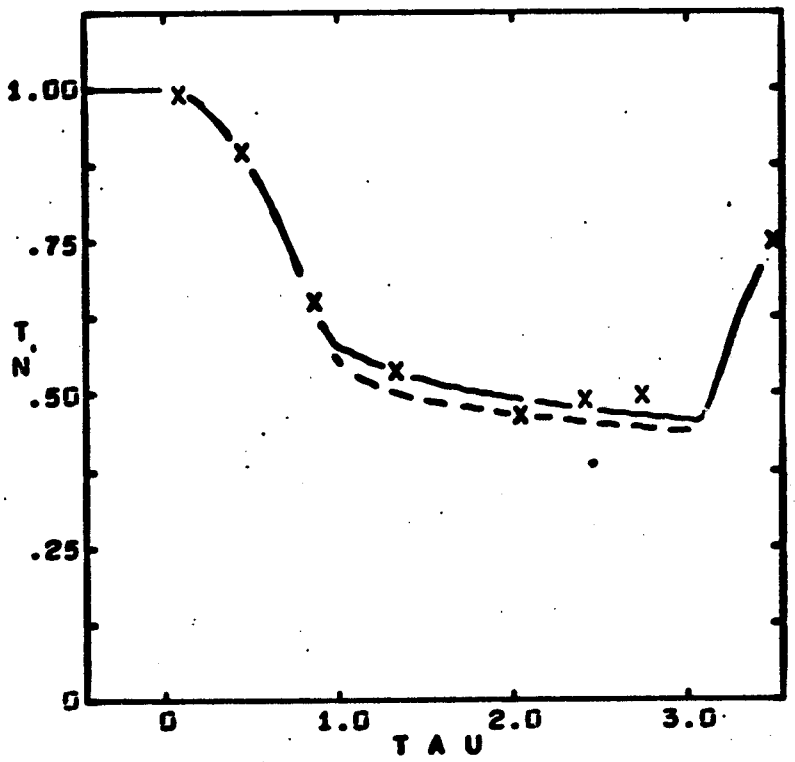
DIFFERENTIAL ENERGY DATA

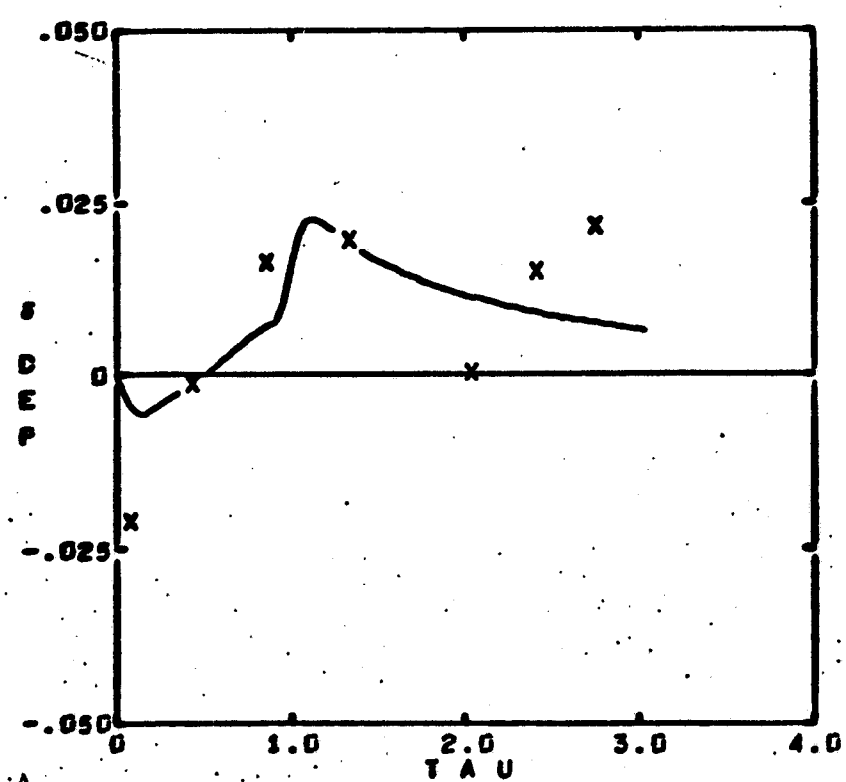
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0343	.0387	-.0044
.50	.0619	.0618	.0001
.75	.0922	.0871	.0051
.93	.1122	.1037	.0085
1.0	.1101	.0938	.0163
1.5	.0745	.0579	.0166
2.0	.0592	.0476	.0116
2.5	.0501	.0414	.0087
3.0	.0435	.0370	.0065

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.651	375.51		375.51	1.000	.0000
9H	0.077	373.07		373.07	0.993	-.0005
10H	0.437	336.57		336.57	0.896	.0546
11H	0.862	241.53	0.628 -.948	245.14	0.653	.1134
12H	1.329	200.16	0.185 -.815	201.97	0.538	.0837
13H	2.041	175.23	0.000 -.892	175.23	0.467	.0474
14H	2.414	176.28	0.641 -.795	183.76	0.489	.0573
15H	2.752	185.04	0.138 -.593	186.33	0.496	.0606
16H	3.488	282.00	0.000 +.483	282.00	0.751	-.0655







PHOTOGRAPH NOT AVAILABLE

C-4

126 (2E3) BESSARION C

LAMBDA=41.65 W BETA=19.76 N. XI=-.6255 ETA=+.3381 L+PL CODE = 26323 ALBEDO =.0733

13H FLAT MOON DATA
FM=.06329 FM'=.08710

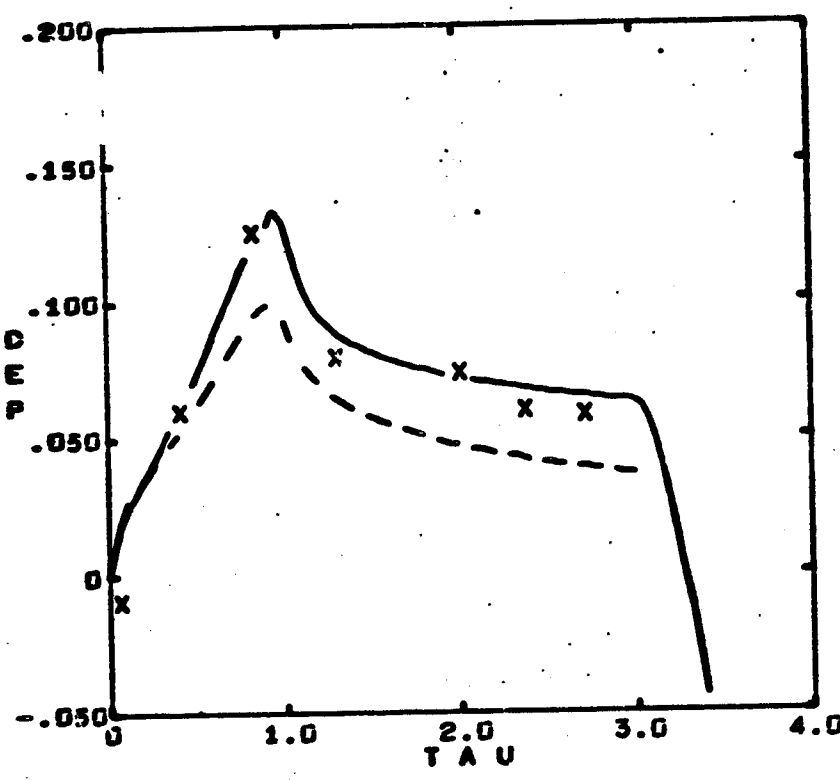
INITIAL TEMPERATURE 374.88
TAU-END OF TOTALITY 3.010

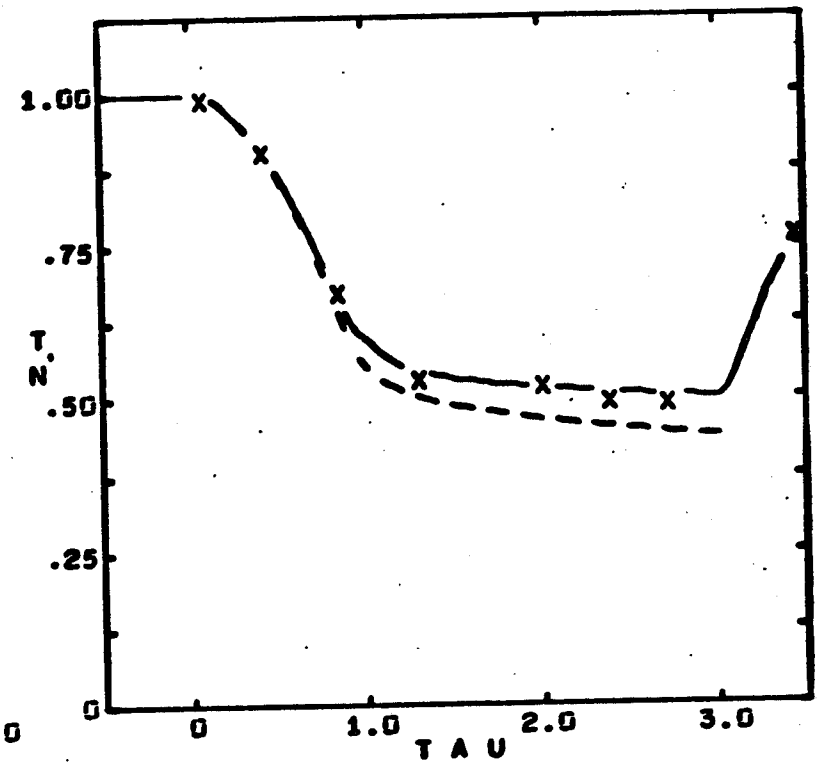
DIFFERENTIAL ENERGY DATA

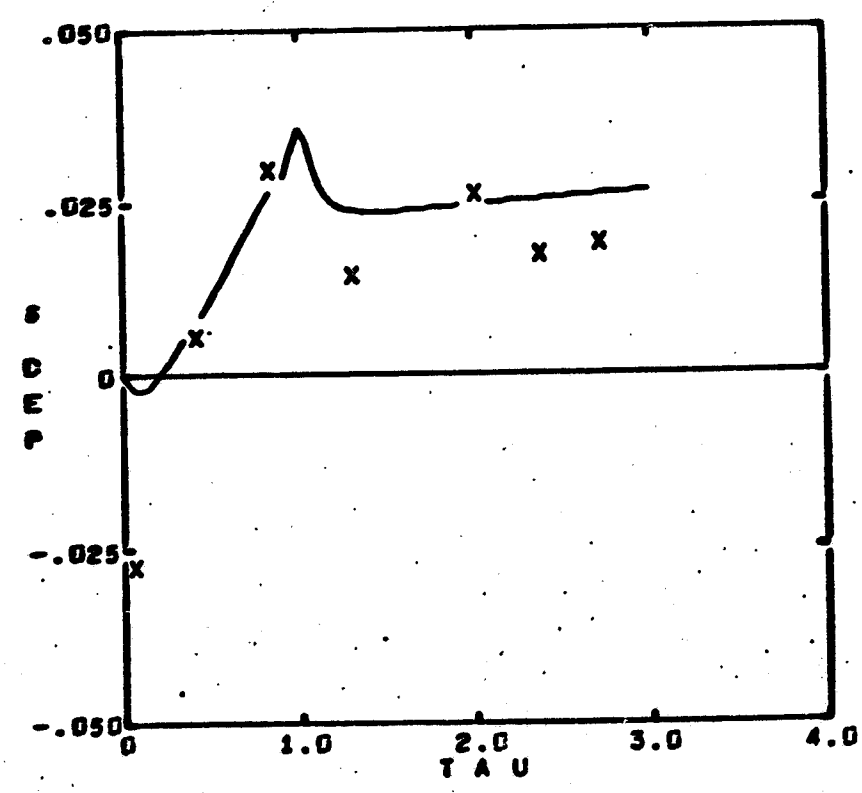
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0393	.0382	.0011
.50	.0726	.0613	.0113
.75	.1093	.0866	.0227
.93	.1335	.1032	.0303
1.0	.1291	.0933	.0358
1.5	.0813	.0576	.0237
2.0	.0720	.0474	.0246
2.5	.0668	.0412	.0256
3.0	.0633	.0368	.0265

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.655	374.88		374.88	1.000	.0000
9H	0.066	372.08		372.08	0.993	-.0097
10H	0.422	338.90		338.90	0.904	.0595
11H	0.843	252.54	0.088 -.623	253.15	0.675	.1247
12H	1.305	193.25	0.500 -.857	198.76	0.530	.0790
13H	2.008	186.25	0.432 +.007	195.08	0.520	.0733
14H	2.378	180.80	0.387 -.533	185.37	0.494	.0598
15H	2.711	181.23	0.284 -.097	184.21	0.491	.0583
16H	3.440	285.50	0.685 +.636	286.95	0.765	-.0610







PHOTOGRAPH NOT AVAILABLE

127 (1D7) BESSEL

LAMBDA=17.91 E BETA=21.72 N XI=+.2857 ETA=+.3700 L+PL CODE = 12567 ALBEDO =.0715

13H FLAT MOON DATA
FM=.07400 FM'=.09101

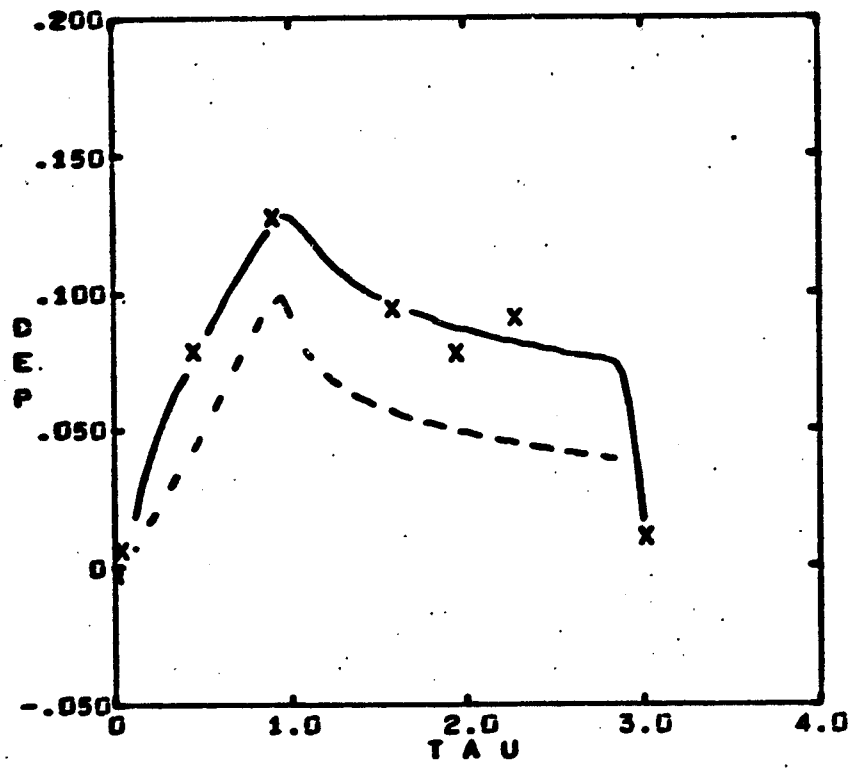
INITIAL TEMPERATURE 390.29
TAU-END OF TOTALITY 2.849

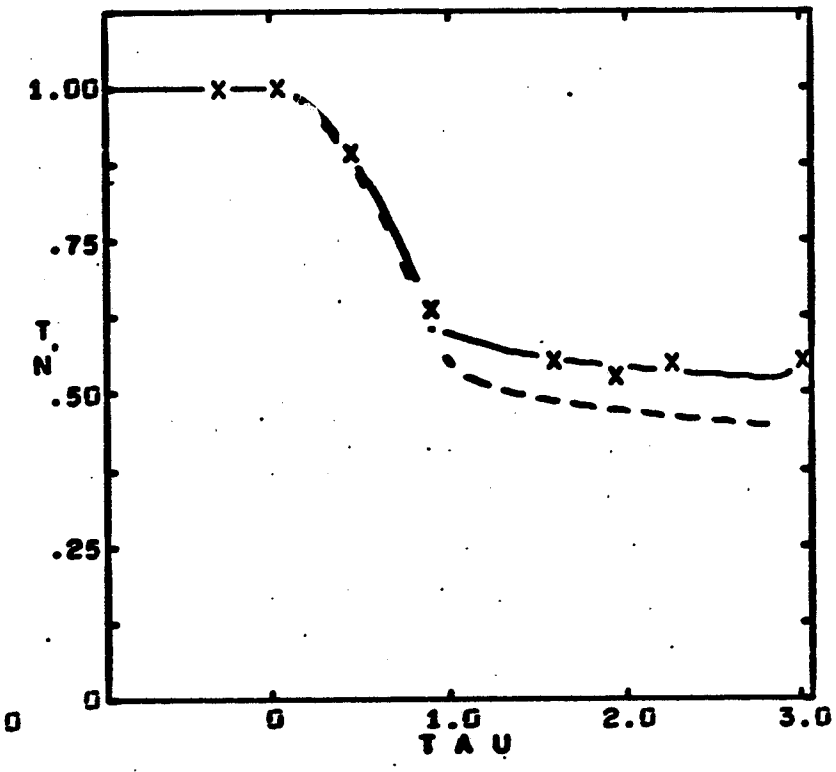
DIFFERENTIAL ENERGY DATA

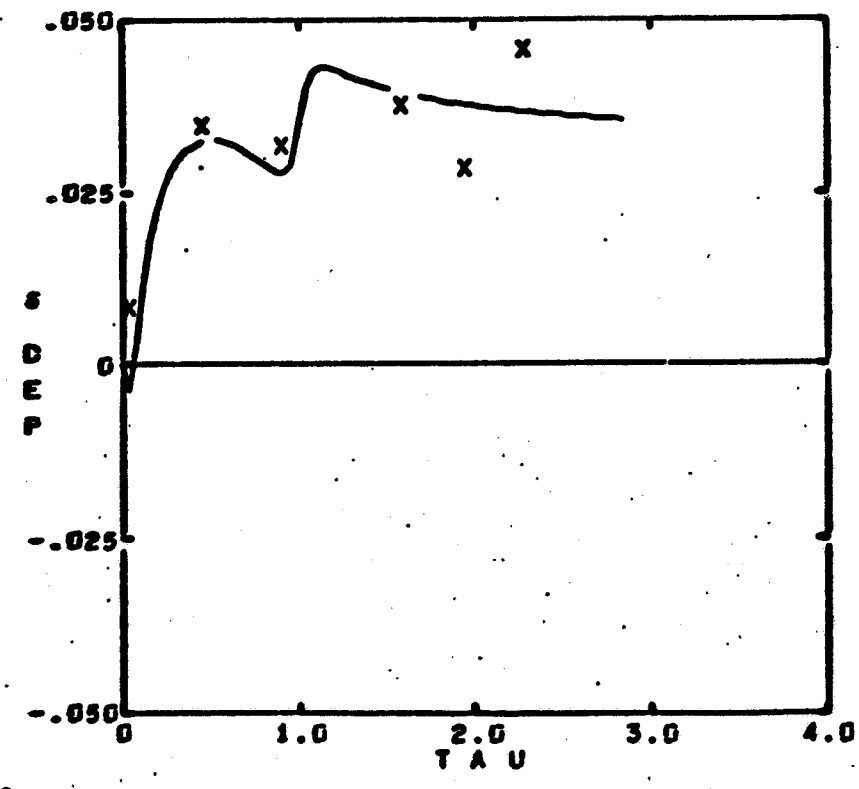
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0477	.0214	.0263
.50	.0827	.0499	.0328
.75	.1105	.0804	.0301
.93	.1275	.1009	.0266
1.0	.1273	.0917	.0356
1.5	.0985	.0586	.0399
2.0	.0864	.0489	.0375
2.5	.0788	.0427	.0361
3.0	.0732	.0381	.0351

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.002	391.63			391.63	1.003	.0139
9H	-0.305	389.88			389.88	0.999	-.0042
10H	0.042	389.95			389.95	0.999	.0062
11H	0.451	349.23			349.23	0.895	.0788
12H	0.900	248.08	0.160	-.393	248.89	0.638	.1273
13H	1.584	209.65	0.329	-.920	216.22	0.554	.0942
14H	1.945	198.68	0.437	+.740	206.28	0.529	.0780
15H	2.268	206.74	0.317	-.729	214.46	0.549	.0912
16H	3.009	213.88	0.416	+.603	216.03	0.554	.0107







PHOTOGRAPH
NOT
AVAILABLE

LAMBDA=20.98 E BETA=24.73 N XI=+.3252 ETA=+.4183 L+PL CODE = 13421 ALBEDO =.0692

13H FLAT MOON DATA
FM=.02532 FM'=.03750

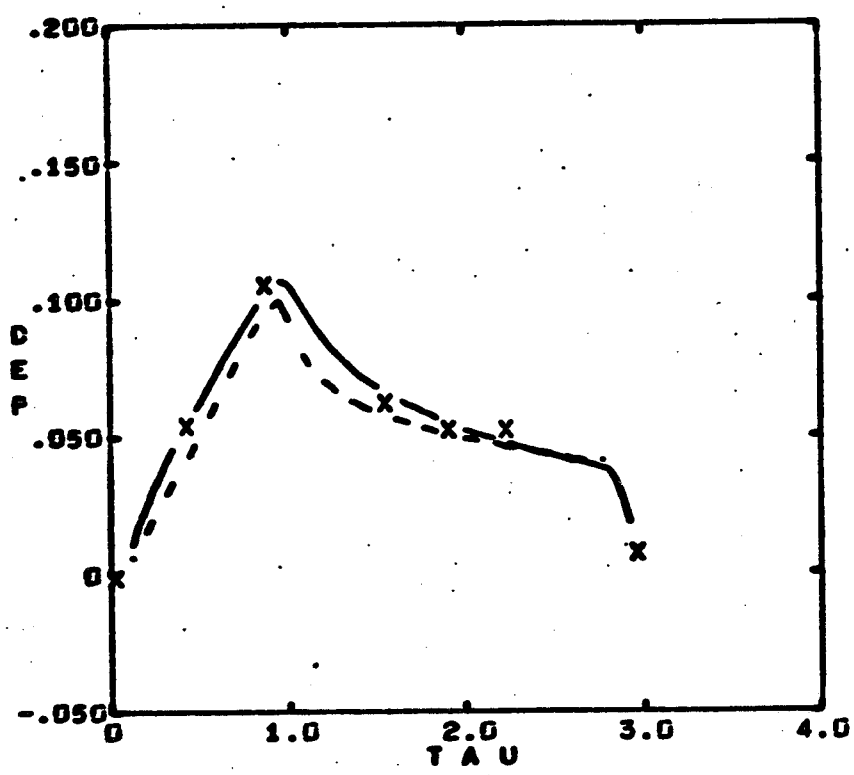
INITIAL TEMPERATURE 388.53
TAU-END OF TOTALITY 2.787

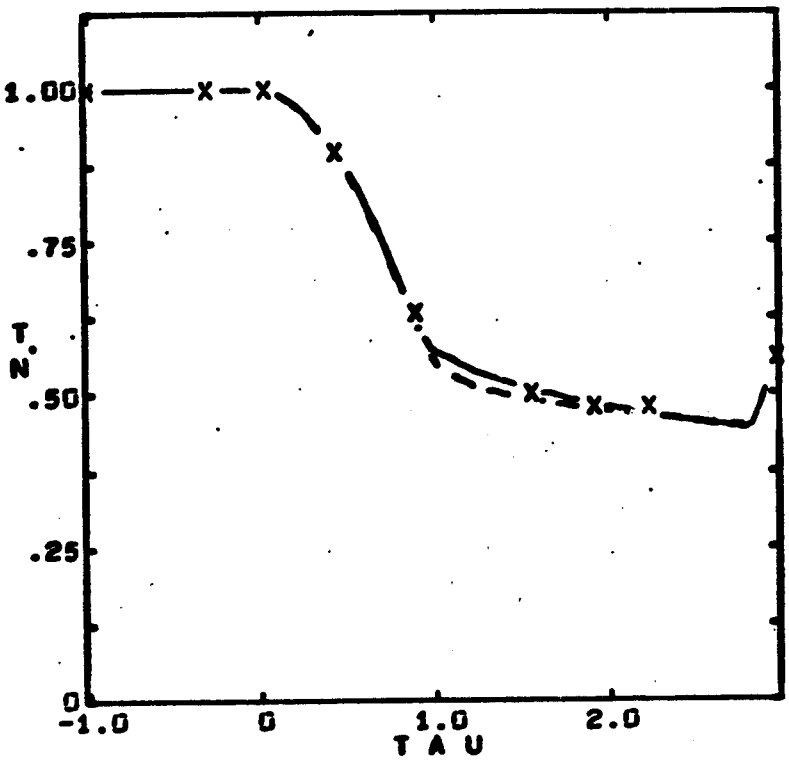
DIFFERENTIAL ENERGY DATA

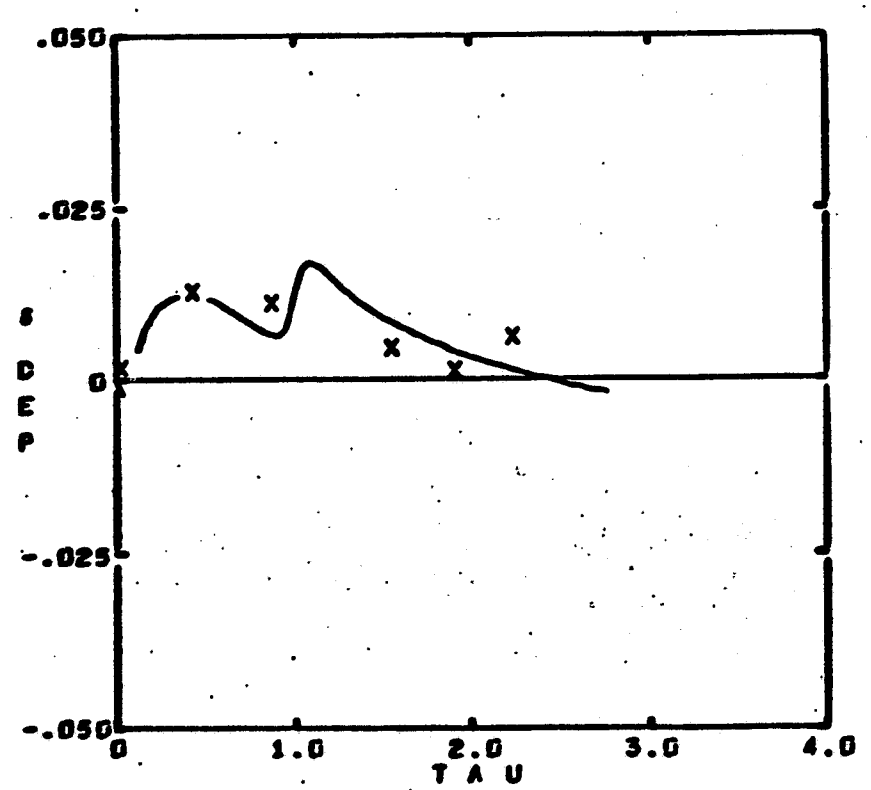
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0316	.0209	.0107
.50	.0619	.0499	.0120
.75	.0893	.0807	.0086
.93	.1069	.1014	.0055
1.0	.1051	.0922	.0129
1.5	.0684	.0592	.0092
2.0	.0529	.0495	.0034
2.5	.0429	.0433	-.0004

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.008	388.84			388.84	1.001	.0032
9H	-0.319	388.43			388.43	1.000	-.0010
10H	0.025	388.03			388.03	0.999	-.0009
11H	0.430	348.04			348.04	0.896	.0543
12H	0.874	243.30	0.463	-.983	245.69	0.632	.1054
13H	1.550	189.69	0.496	+.839	194.31	0.500	.0626
14H	1.908	182.47	0.513	+.597	185.68	0.478	.0522
15H	2.227	183.27	0.340	+.943	186.25	0.479	.0528
16H	2.960	217.28	0.221	+.624	218.29	0.562	.0073







PHOTOGRAPH NOT AVAILABLE

129 (109) BESSEL C

LAMBDA=19.84 E BETA=27.30 N XI=+.3016 ETA=+.4587 L+PL CODE = 13405 ALBEDO =.0694

13H FLAT MOON DATA
FM=.01771 FM'=.02534

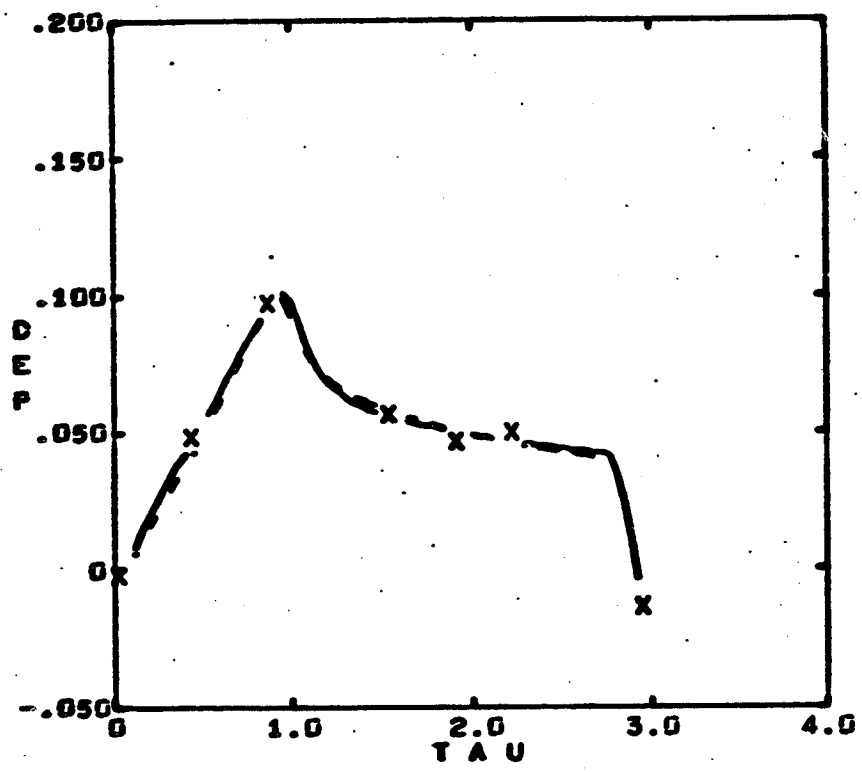
INITIAL TEMPERATURE 387.60
TAU-END OF TOTALITY 2.743

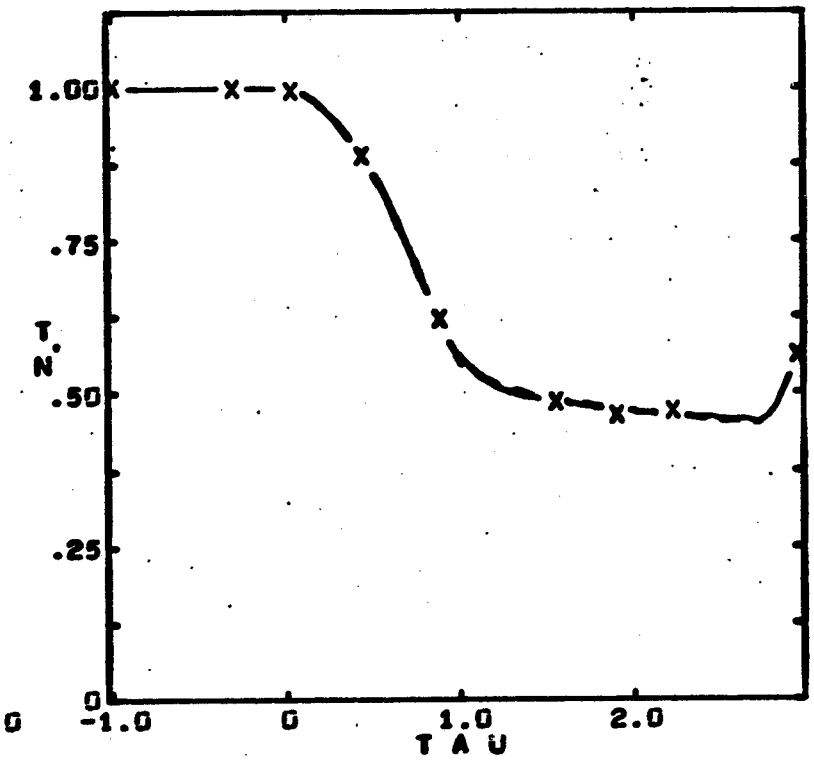
DIFFERENTIAL ENERGY DATA

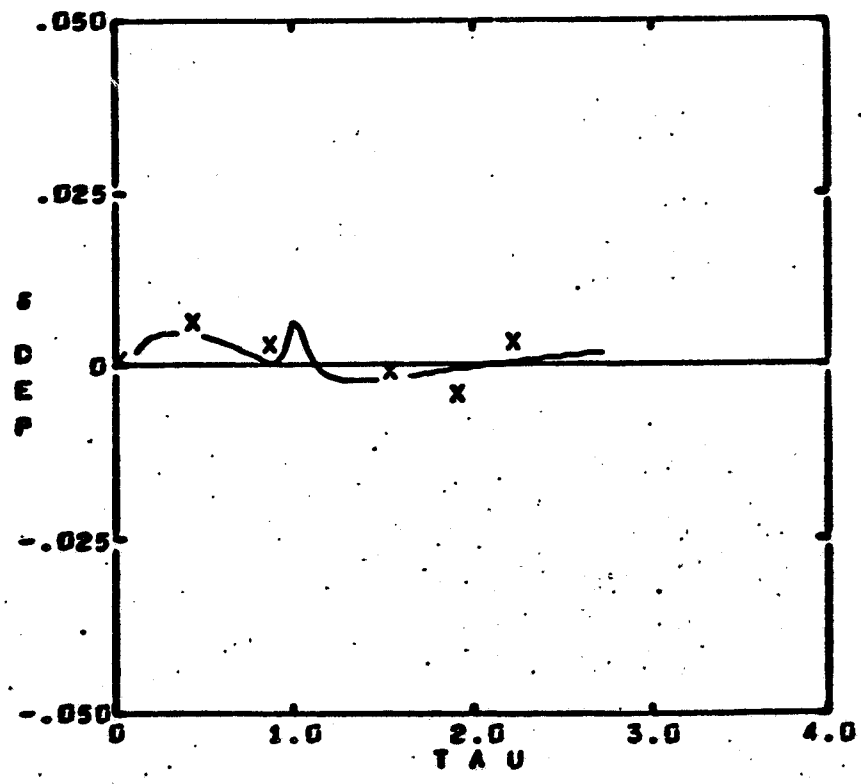
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0256	.0211	.0045
.50	.0542	.0499	.0043
.75	.0825	.0806	.0019
.93	.1011	.1013	-.0002
1.0	.0983	.0921	.0062
1.5	.0570	.0590	-.0020
2.0	.0490	.0492	-.0002
2.5	.0444	.0431	.0013

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.992	388.48			388.48	1.002	.0090
9H	-0.307	387.33			387.33	0.999	-.0028
10H	0.033	386.80			386.80	0.998	-.0018
11H	0.434	345.35			345.35	0.891	.0485
12H	0.875	241.36	0.000	-.218	241.36	0.623	.0971
13H	1.546	186.13	0.436	+.485	189.34	0.488	.0569
14H	1.900	180.21	0.000	-.137	180.21	0.465	.0467
15H	2.217	183.04	0.036	-.735	183.12	0.472	.0498
16H	2.942	218.86	0.000	+.704	218.86	0.565	-.0136







PHOTOGRAPH NOT AVAILABLE

130 (1E1) BESSEL E

LAMBDA=15.43 E BETA=13.61 N XI=+.2506 ETA=+.3356 L+PL CODE = 12353 ALBEDO =.0646

13H FLAT MOON DATA
FM=.03996 FM'=.04454

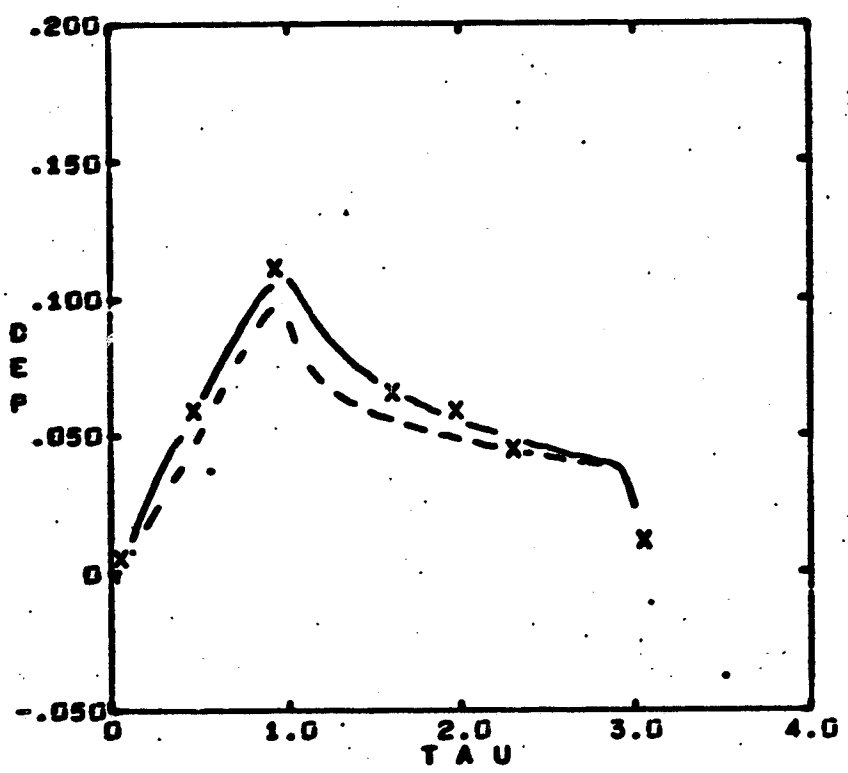
INITIAL TEMPERATURE 393.24
TAU-END OF TOTALITY 2.892

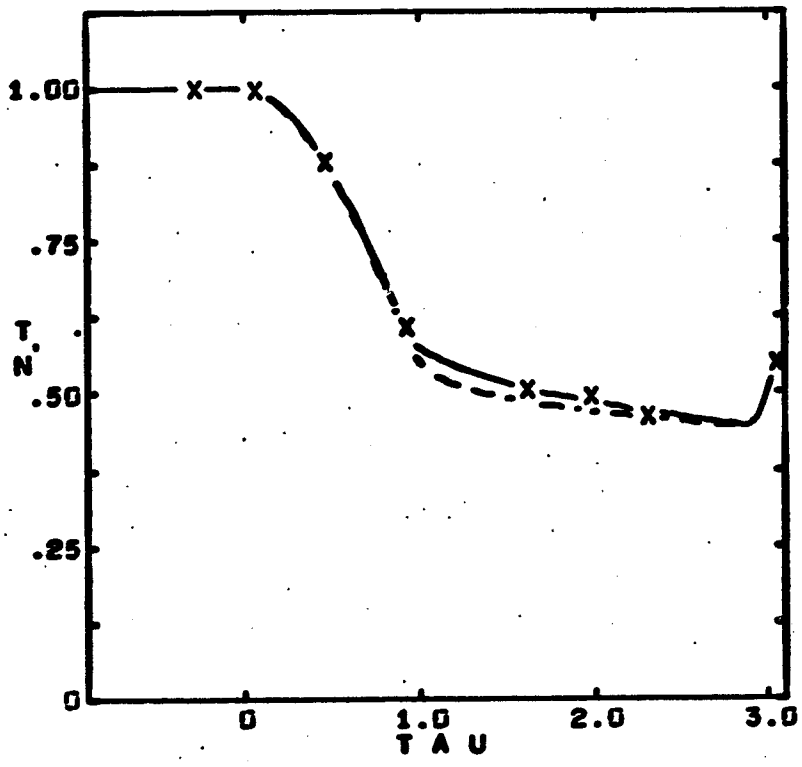
DIFFERENTIAL ENERGY DATA

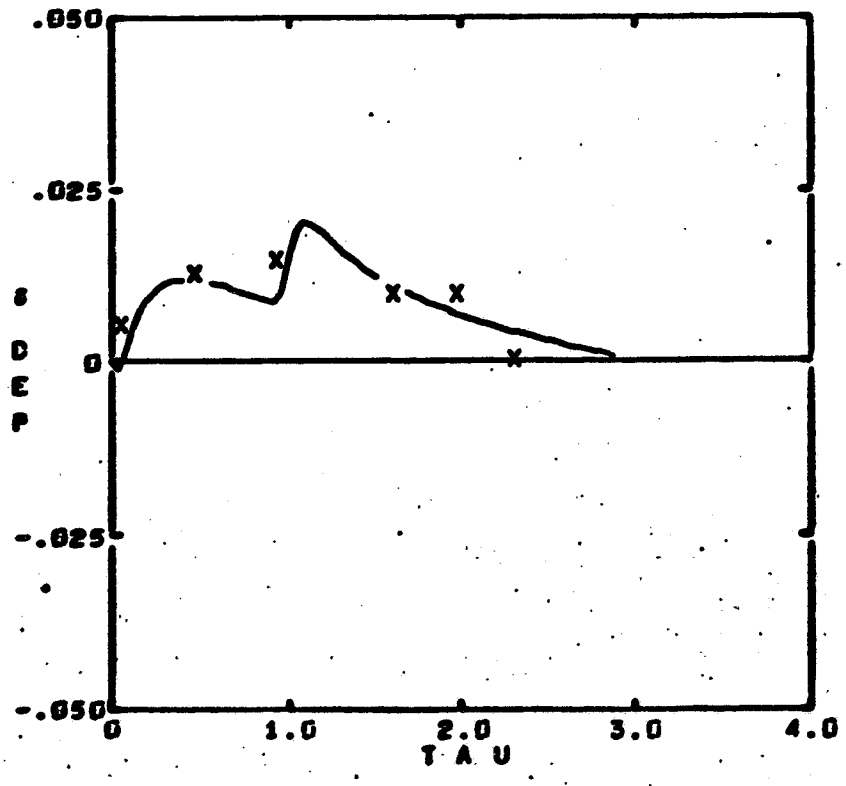
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0320	.0217	.0103
.50	.0619	.0500	.0119
.75	.0902	.0802	.0100
.93	.1086	.1005	.0081
1.0	.1070	.0913	.0157
1.5	.0708	.0582	.0126
2.0	.0552	.0484	.0068
2.5	.0453	.0423	.0030
3.0	.0379	.0376	.0003

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.996	394.45		394.45	1.003	.0123
9H	-0.292	392.89		392.89	0.999	-.0036
10H	0.057	392.19		392.19	0.997	.0051
11H	0.469	345.88		345.88	0.880	.0591
12H	0.922	236.84	0.351 -.769	238.98	0.608	.1111
13H	1.610	197.04	0.200 -.200	198.86	0.506	.0654
14H	1.975	192.44	0.189 +.583	193.71	0.493	.0589
15H	2.300	181.04	0.383 -.861	181.22	0.461	.0451
16H	3.046	211.12	0.731 +.974	215.71	0.549	.0118







PHOTOGRAPH NOT AVAILABLE

131 (1E2) BESSEL H

LAMBDA=19.98 E BETA=25.66 N XI=+.3080 ETA=+.4331 L+FL CODE = 13403 ALBEDO =.0677

13H FLAT MOON DATA
FM=.02136 FM'=.02136

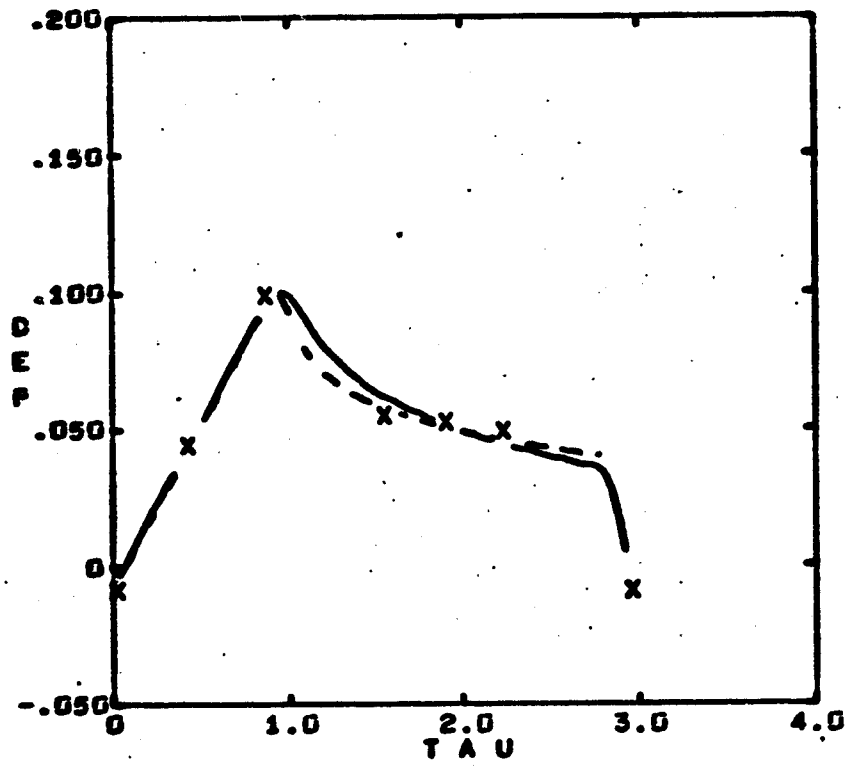
INITIAL TEMPERATURE 388.81
TAU-END OF TOTALITY 2.773

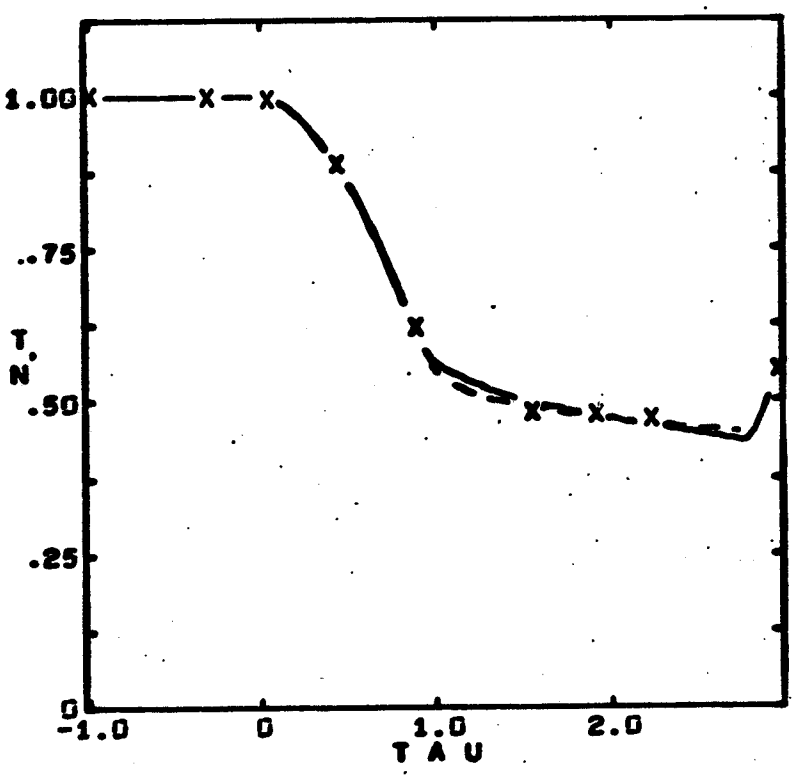
DIFFERENTIAL ENERGY DATA

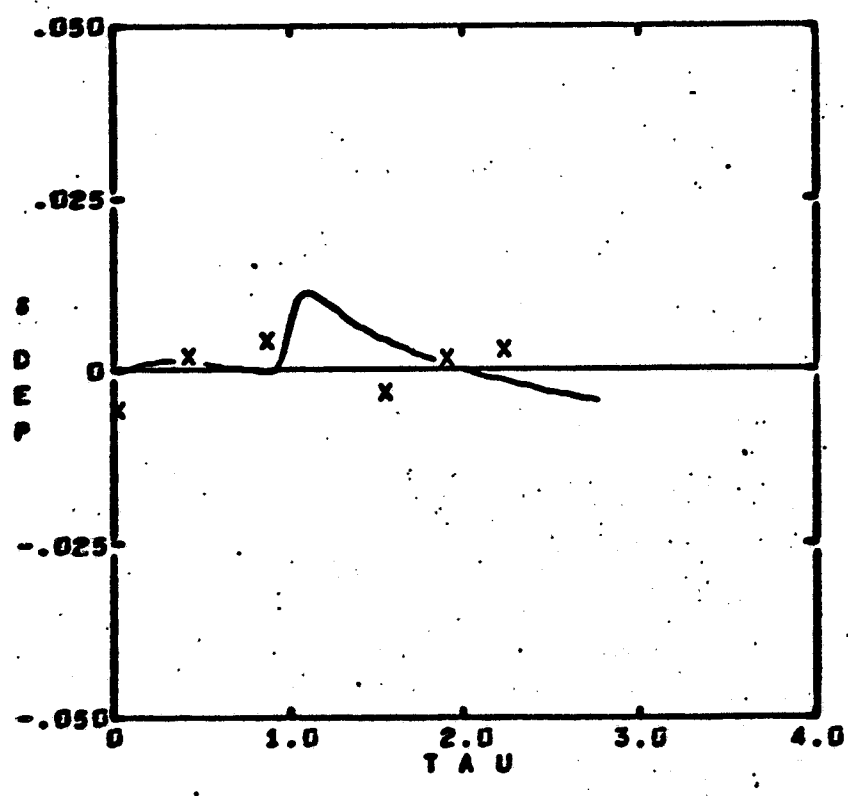
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0223	.0211	.0012
.50	.0510	.0499	.0011
.75	.0808	.0806	.0002
.93	.1008	.1013	-.0005
1.0	.0990	.0921	.0069
1.5	.0641	.0590	.0051
2.0	.0494	.0493	.0001
2.5	.0400	.0431	-.0031

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.999	389.68		389.68	1.002	.0090
9H	-0.311	388.54		388.54	0.999	-.0028
10H	0.031	387.40		387.40	0.996	-.0086
11H	0.434	345.92		345.92	0.890	.0441
12H	0.878	242.05	0.196 +.464	242.24	0.623	.0989
13H	1.552	187.99	0.000 -.495	187.99	0.484	.0546
14H	1.909	183.13	0.597 +.398	185.99	0.478	.0524
15H	2.227	181.82	0.326 +.380	183.09	0.471	.0492
16H	2.957	215.40	0.000 +.449	215.40	0.554	-.0083







PHOTOGRAPH NOT AVAILABLE

132 (3D7) BIRT

LAMBDA= 8.54 W BETA=22.33 S XI=-.1374 ETA=-.3800 L+PL CODE = 31338 ALBEDO =.1091

13H FLAT MOON DATA
FM=.07051 FM'=.08355

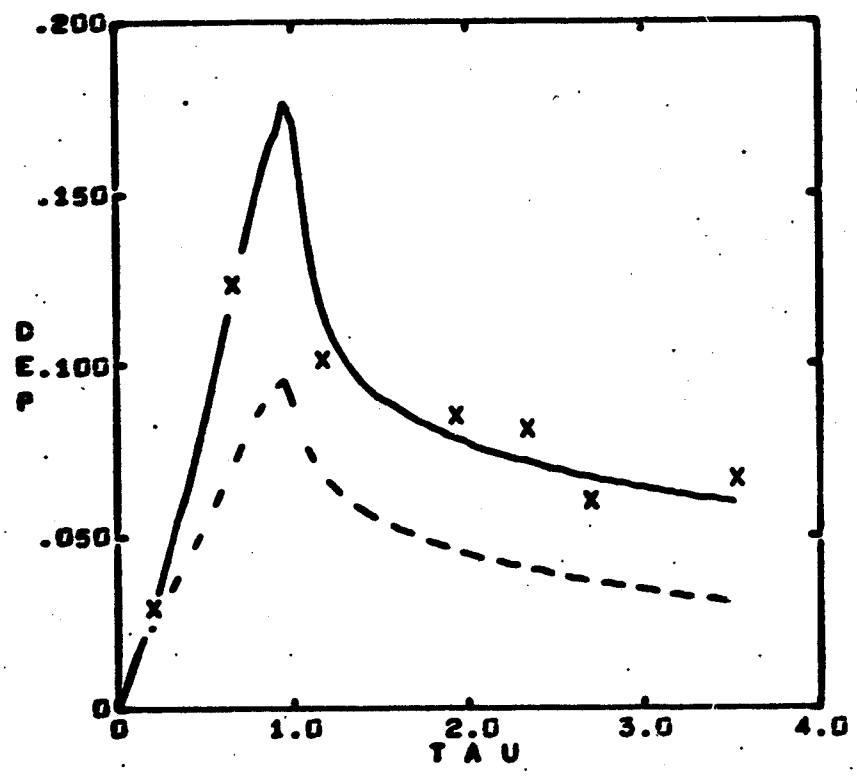
INITIAL TEMPERATURE 387.68
TAU-END OF TOTALITY 3.540

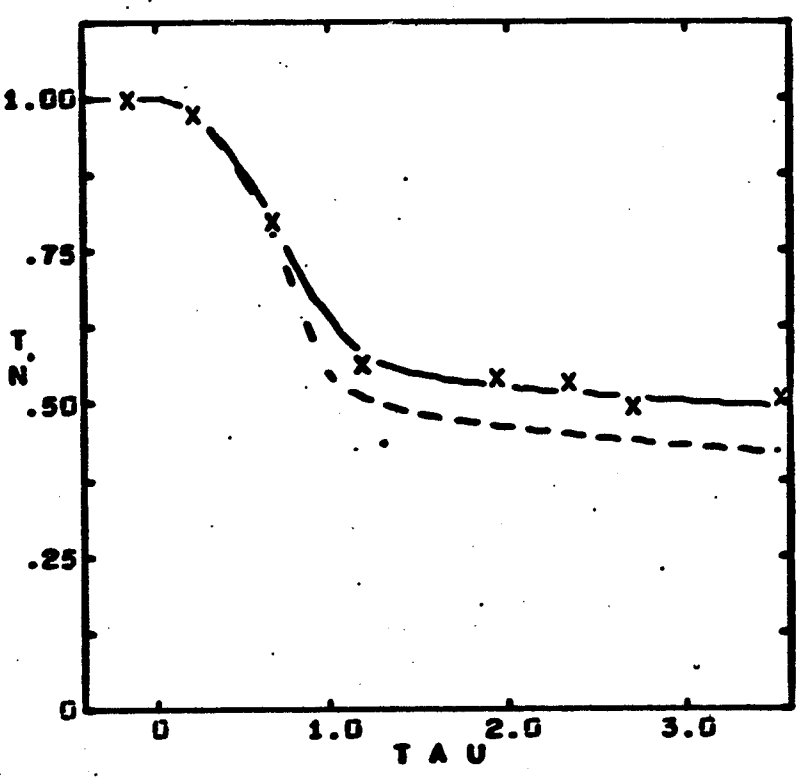
DIFFERENTIAL ENERGY DATA

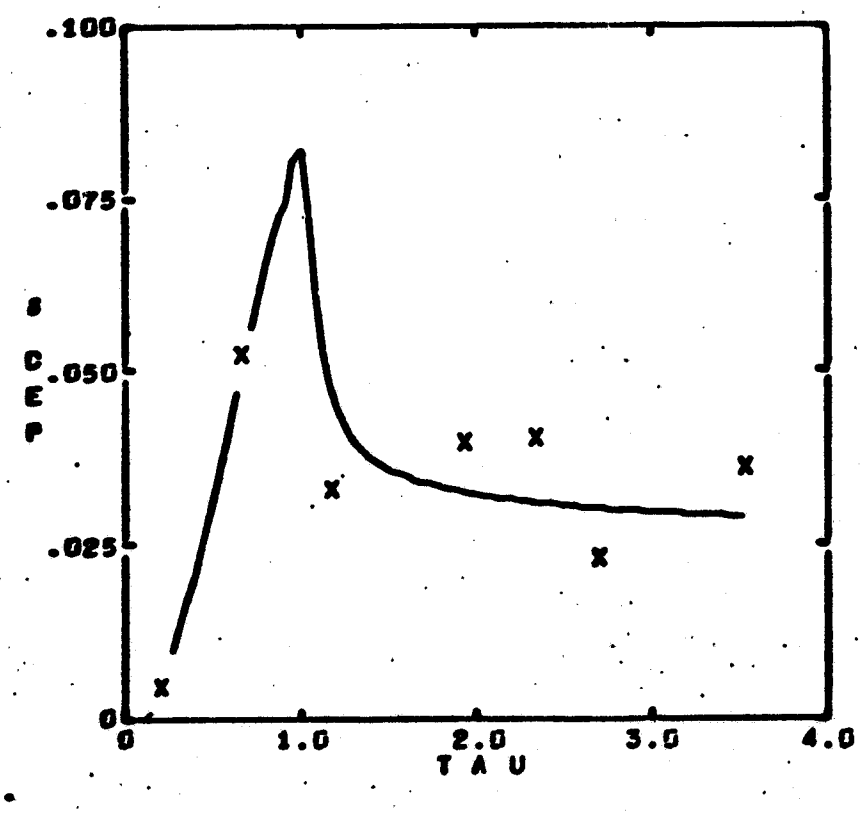
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0350	.0279	.0071
.50	.0838	.0528	.0310
.75	.1394	.0799	.0595
.93	.1768	.0979	.0789
1.0	.1704	.0885	.0819
1.5	.0906	.0548	.0358
2.0	.0771	.0450	.0321
2.5	.0696	.0389	.0307
3.0	.0642	.0345	.0297

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.956	389.07		389.07	1.004	.0144
9H	-0.172	387.43		387.43	0.999	-.0026
10H	0.215	377.51		377.51	0.974	.0293
11H	0.671	309.05	0.275 +.513	310.27	0.800	.1238
12H	1.172	215.42	0.236 -.824	216.69	0.564	.1013
13H	1.937	204.64	0.294 +.348	209.70	0.541	.0856
14H	2.337	189.84	0.700 +.366	206.88	0.534	.0811
15H	2.700	191.18	0.171 +.995	192.04	0.495	.0602
16H	3.534	184.43	0.537 -.970	197.22	0.509	.0670







PHOTOGRAPH NOT AVAILABLE

133 (1E3) BLAGG

LAMBDA= 0.40 E BETA= 1.17 N XI=+.0070 ETA=+.0204 L+PL CODE = 10022 ALBEDO =.0877

13H FLAT MOON DATA
FM=.01826 FM'=.01826

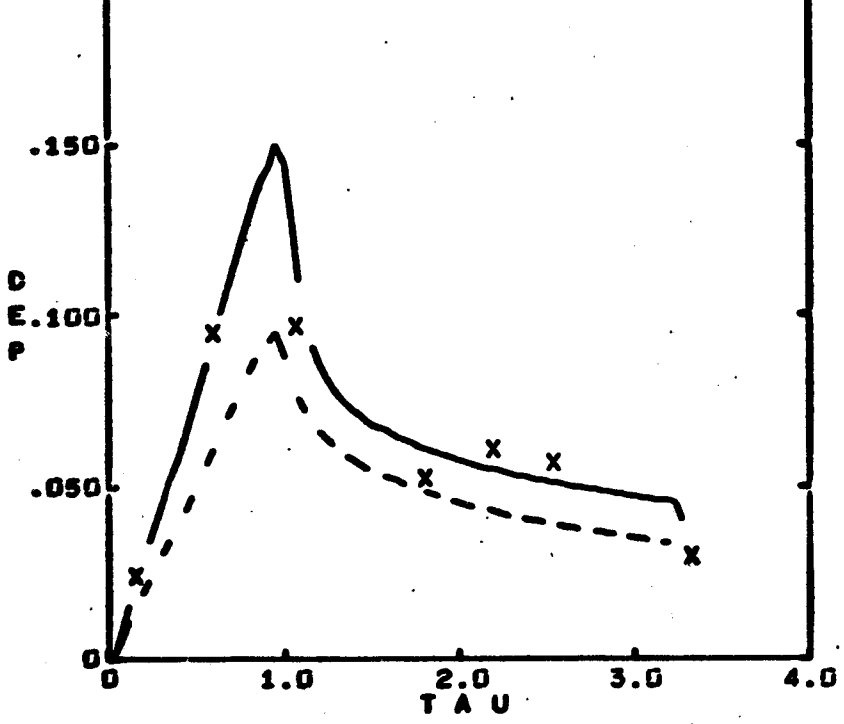
INITIAL TEMPERATURE 395.95
TAU-END OF TOTALITY 3.232

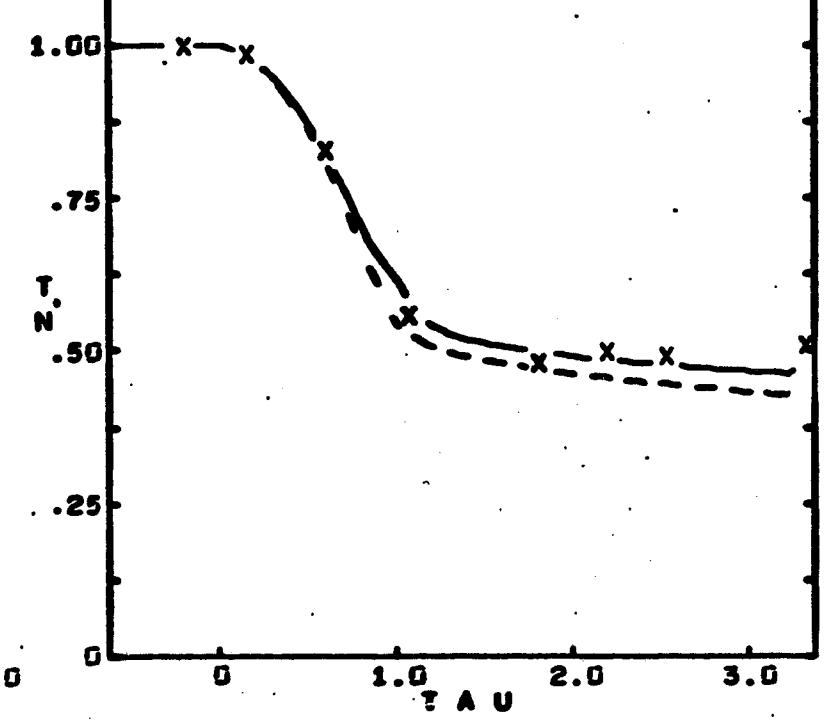
DIFFERENTIAL ENERGY DATA

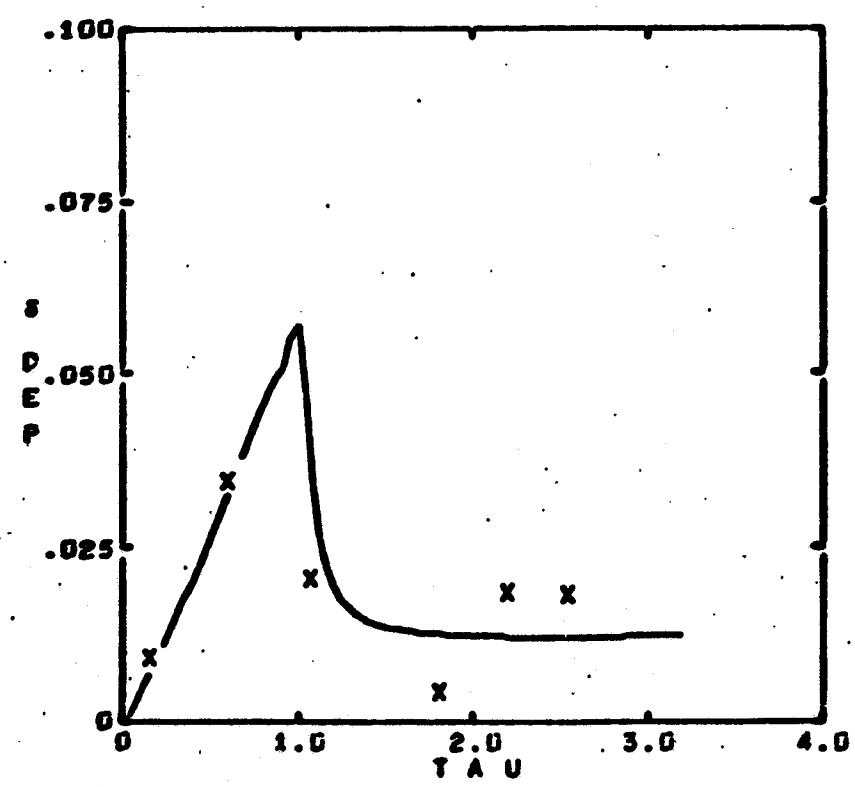
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0350	.0236	.0114
.50	.0756	.0496	.0260
.75	.1201	.0778	.0423
.93	.1509	.0967	.0533
1.0	.1448	.0877	.0571
1.5	.0686	.0550	.0136
2.0	.0578	.0455	.0123
2.5	.0517	.0395	.0122
3.0	.0473	.0351	.0122

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.954	397.10		397.10	1.003	.0117
9H	-0.207	395.70		395.70	0.999	-.0025
10H	0.162	389.82		389.82	0.985	.0241
11H	0.599	325.07	0.800 -.223	327.57	0.827	.0952
12H	1.077	216.38	0.491 -.333	220.84	0.558	.0968
13H	1.806	189.81	0.000 -.145	189.81	0.479	.0528
14H	2.190	191.60	0.417 -.466	197.06	0.498	.0614
15H	2.535	185.73	0.585 -.320	193.87	0.490	.0575
16H	3.326	195.03	0.798 -.116	201.44	0.509	.0298







PHOTOGRAPH NOT AVAILABLE

134 (2E4) BODE

LAMBDA= 2.43 W BETA= 6.72 N XI=-.0421 ETA=+.1171 L+PL CODE = 20141 ALBEDO =.1315

13H FLAT MOON DATA
FM=.00619 FM'=.00619

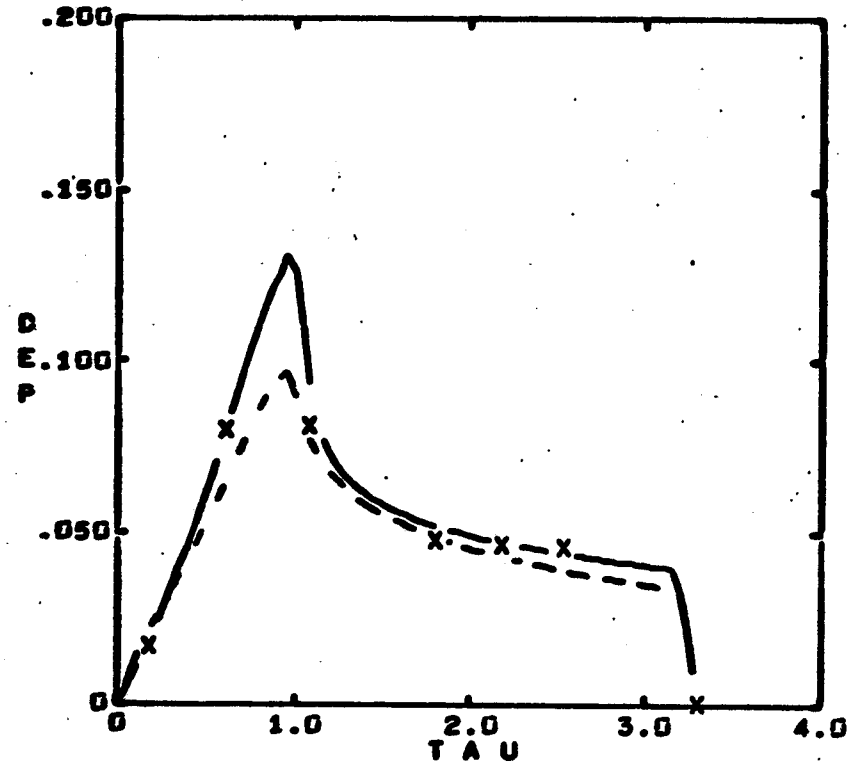
INITIAL TEMPERATURE 393.49
TAU-END OF TOTALITY 3.151

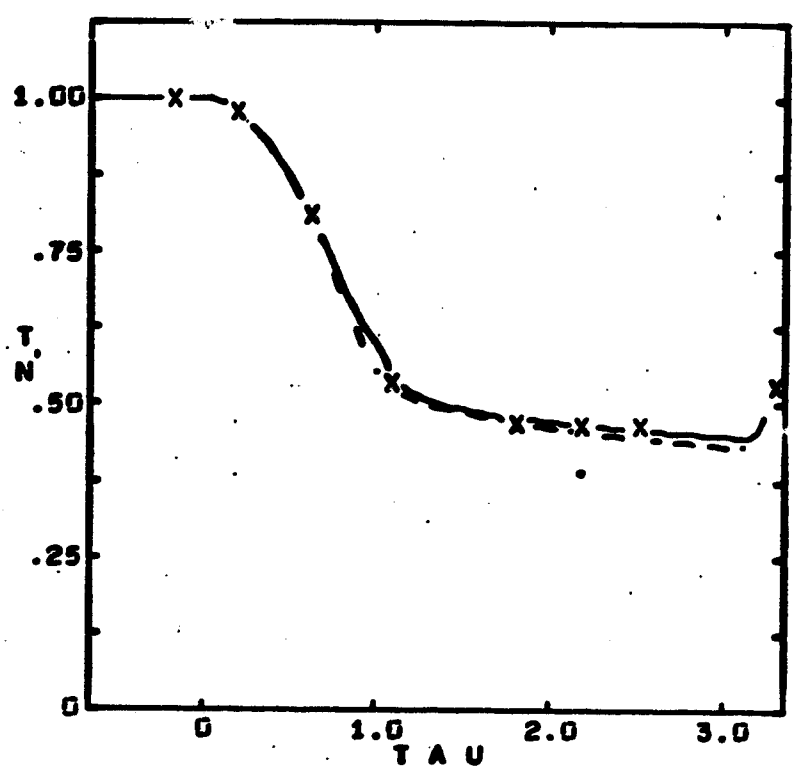
DIFFERENTIAL ENERGY DATA

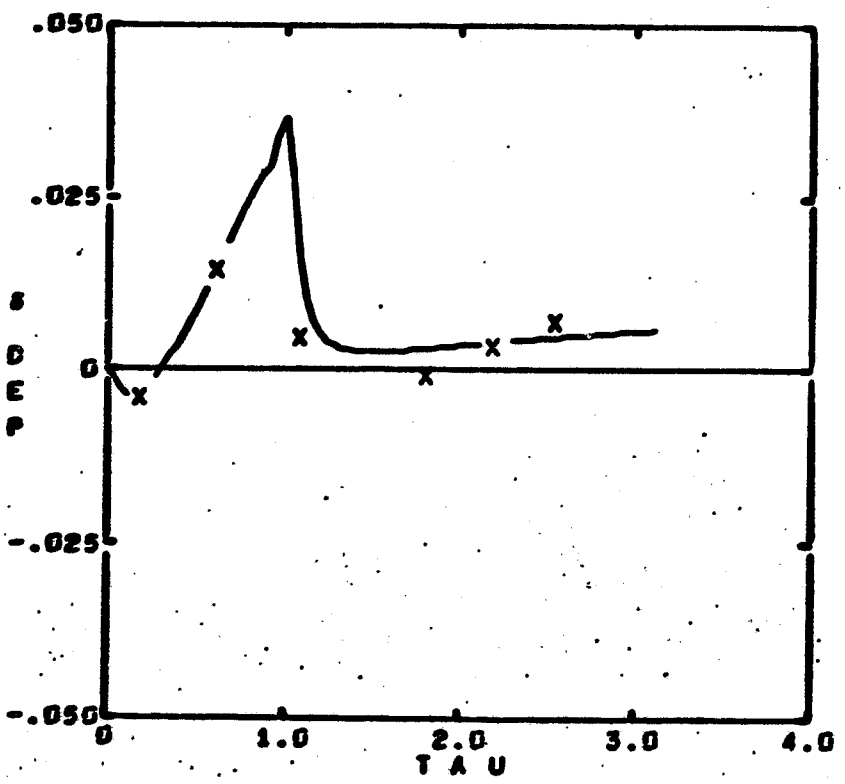
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0251	.0271	-.0020
.50	.0614	.0528	.0086
.75	.1030	.0807	.0223
.93	.1311	.0993	.0318
1.0	.1263	.0897	.0366
1.5	.0583	.0557	.0026
2.0	.0493	.0457	.0036
2.5	.0443	.0396	.0047
3.0	.0408	.0351	.0057

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.918	393.36			393.36	1.000	-.0013
9H	-0.182	393.51			393.51	1.000	.0003
10H	0.183	384.56			384.56	0.977	.0168
11H	0.614	318.75	0.000	-.776	318.75	0.810	.0799
12H	1.085	210.33	0.000	+.249	210.33	0.535	.0816
13H	1.806	184.25	0.000	+.116	184.25	0.468	.0481
14H	2.185	182.83	0.000	+.182	182.83	0.465	.0466
15H	2.525	182.60	0.000	+.249	182.60	0.464	.0464
16H	3.301	209.22	0.000	+.195	209.22	0.532	.0008







PHOTOGRAPH NOT AVAILABLE

135 (2E5) BODE A

LAMBDA= 1.15 W BETA= 9.00 N XI=-.0199 ETA=+.1565 L+PL CODE = 20115 ALBEDO =.0987

13H FLAT MOON DATA
FM=.06669 FM'=.10741

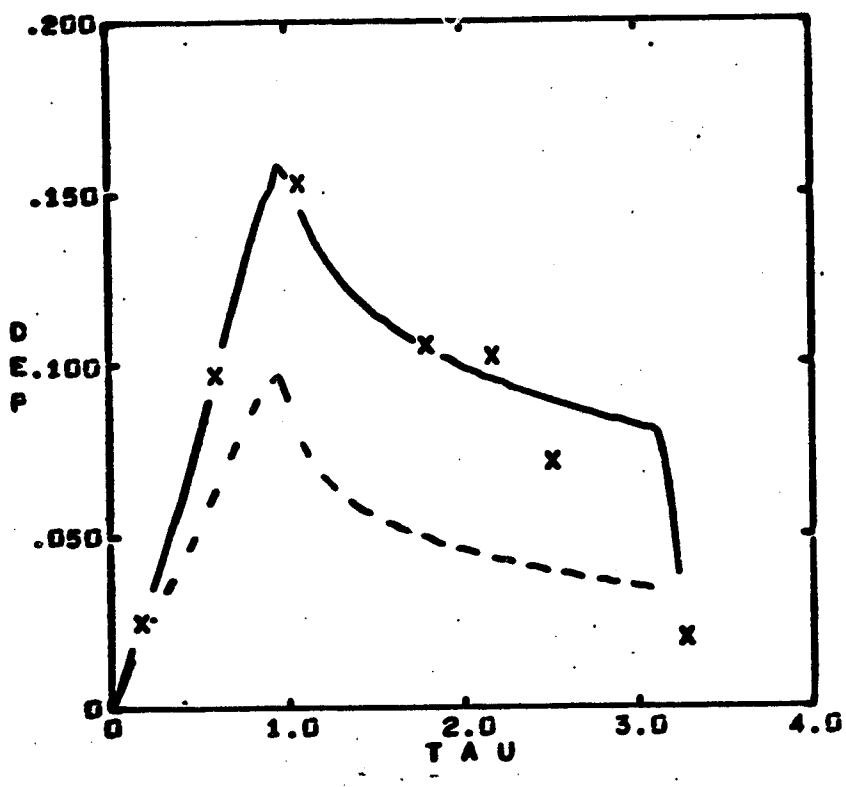
INITIAL TEMPERATURE 394.12
TAU-END OF TOTALITY 3.111

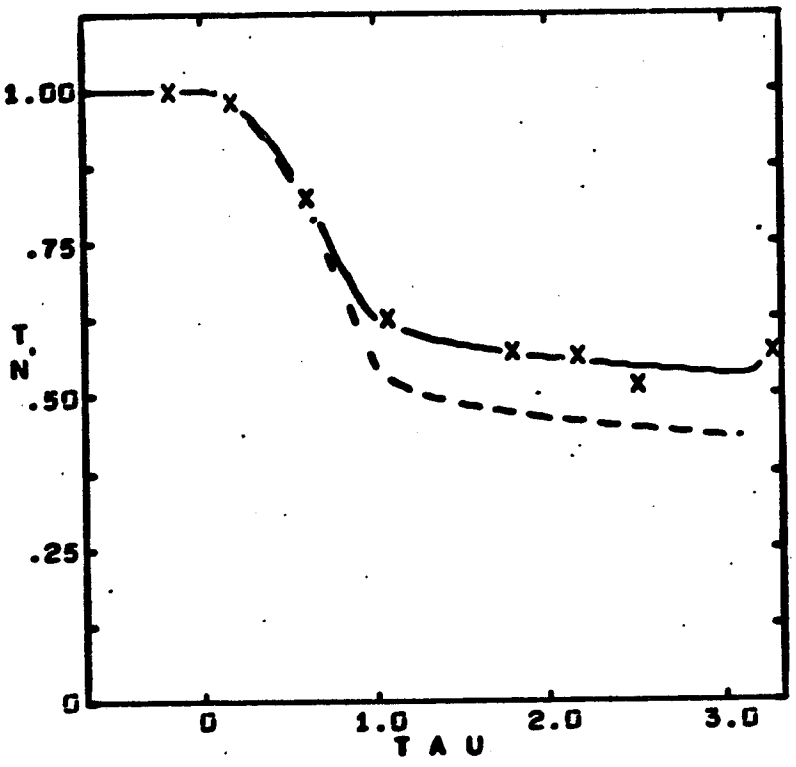
DIFFERENTIAL ENERGY DATA

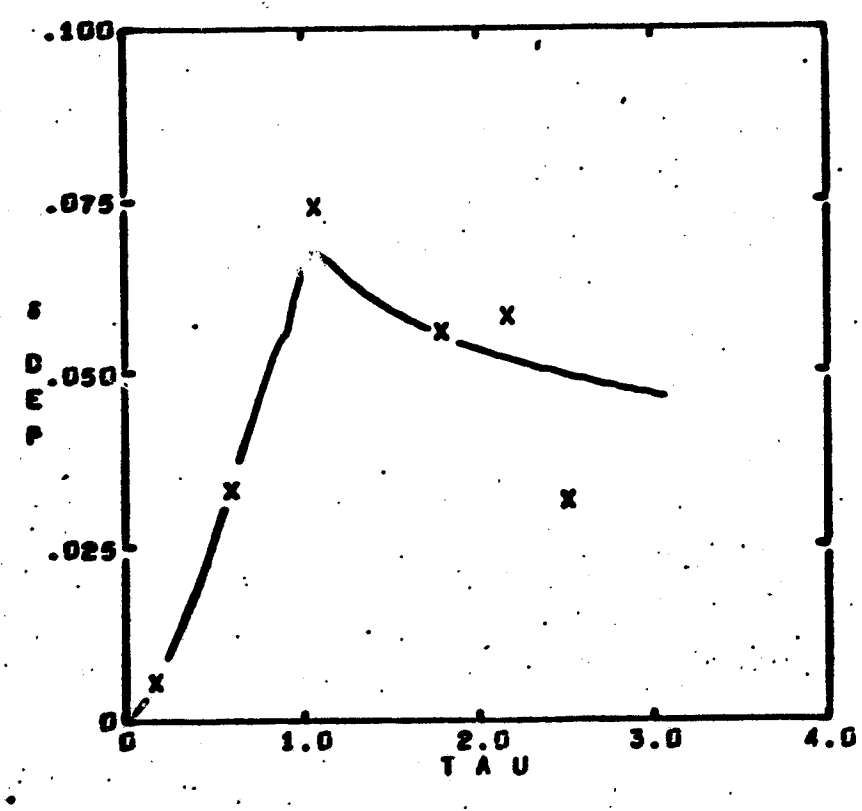
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0359	.0266	.0093
.50	.0785	.0525	.0260
.75	.1263	.0805	.0458
.93	.1584	.0993	.0591
1.0	.1548	.0898	.0650
1.5	.1149	.0558	.0591
2.0	.0993	.0459	.0534
2.5	.0894	.0397	.0497
3.0	.0821	.0352	.0469

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.921	395.65		395.65	1.004	.0157
9H	-0.189	393.80		393.80	0.999	-.0032
10H	0.173	386.99		386.99	0.982	.0248
11H	0.600	324.49	0.276 -.014	325.34	0.825	.0970
12H	1.070	245.42	0.108 +.492	246.55	0.626	.1532
13H	1.785	208.32	0.522 -.142	224.53	0.570	.1053
14H	2.163	207.83	0.409 +.947	222.74	0.565	.1020
15H	2.501	197.36	0.320 -.820	203.71	0.517	.0714
16H	3.271	219.66	0.448 +.711	225.42	0.572	.0204







PHOTOGRAPH NOT AVAILABLE

136 (2E6) BODE B

LAMBDA= 3.07 W BETA= 8.74 N XI=-.0529 ETA=+.1520 L+PL CODE = 20155 ALBEDO =.0946

13H FLAT MOON DATA
FM=.01789 FM'=.03568

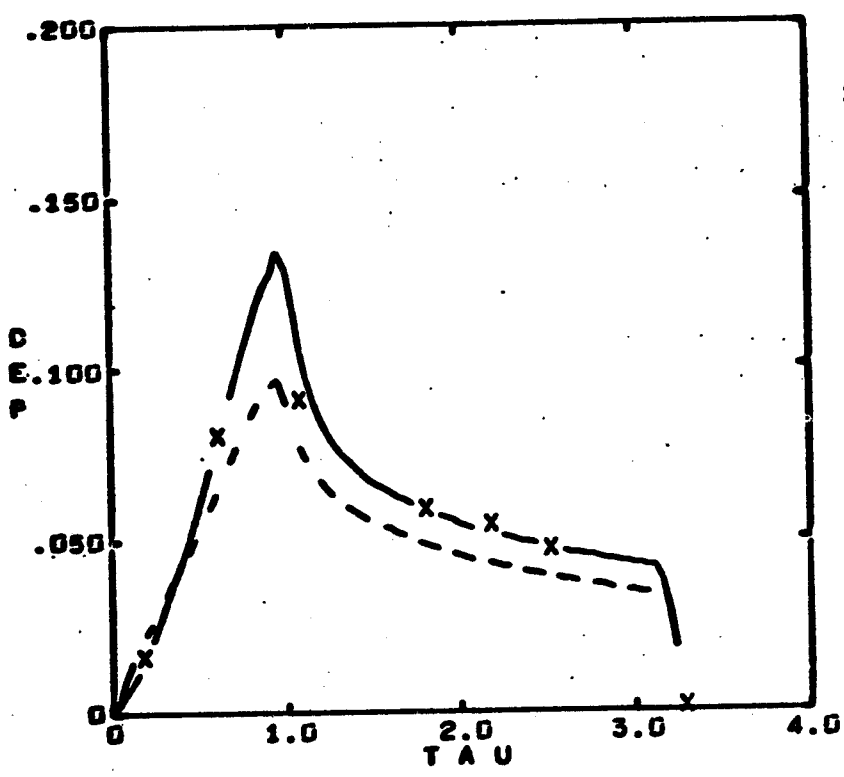
INITIAL TEMPERATURE 396.46
TAU-END OF TOTALITY 3.120

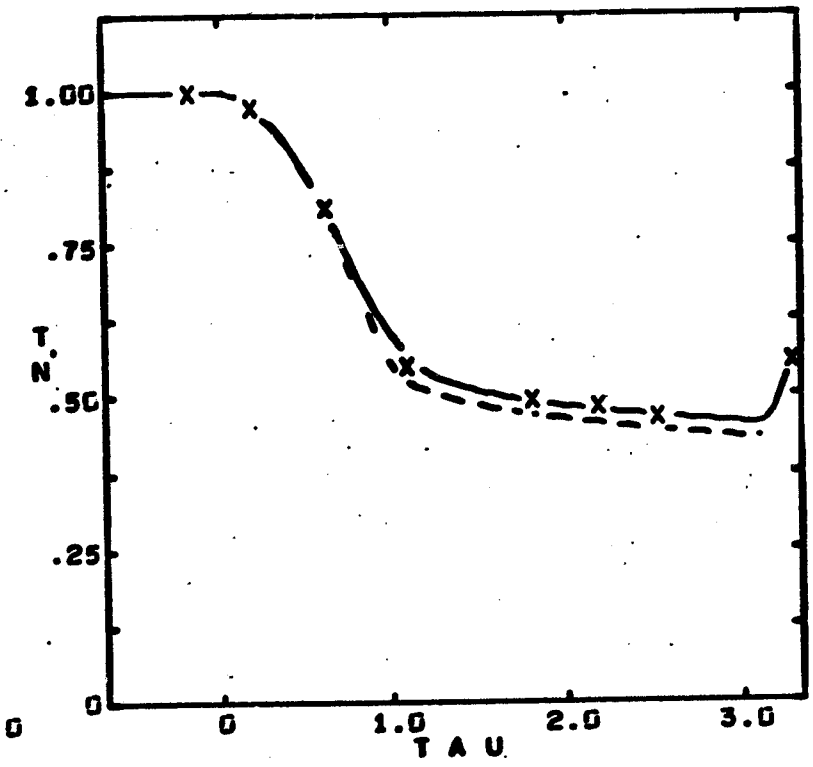
DIFFERENTIAL ENERGY DATA

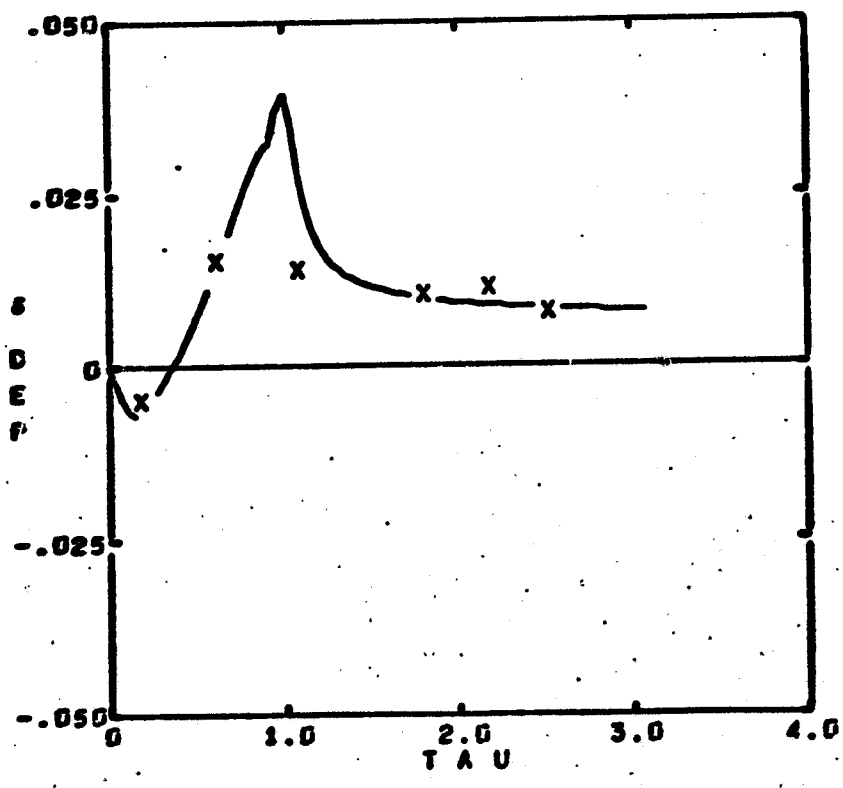
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0222	.0272	-.0050
.50	.0603	.0528	.0075
.75	.1044	.0806	.0238
.93	.1343	.0991	.0352
1.0	.1290	.0896	.0394
1.5	.0672	.0556	.0116
2.0	.0549	.0456	.0093
2.5	.0480	.0395	.0085
3.0	.0430	.0350	.0080

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.909	396.95		396.95	1.001	.0050
9H	-0.176	396.37		396.37	1.000	-.0010
10H	0.187	387.06		387.06	0.976	.0165
11H	0.615	319.52	1.717 -.661	320.85	0.809	.0809
12H	1.085	217.61	0.018 -.095	217.71	0.549	.0909
13H	1.802	188.59	0.566 +.062	195.63	0.493	.0593
14H	2.179	187.25	0.377 +.938	191.77	0.484	.0547
15H	2.518	162.50	0.334 -.892	184.95	0.467	.0474
16H	3.288	215.31	0.693 +.614	220.58	0.556	.0013







PHOTOGRAPH NOT AVAILABLE

137 (2E7) BODE C

LAMBDA= 4.74 W BETA=12.22 N XI=-.0808 ETA=+.2117 L+PL CODE = 20281 ALBEDO =.0614

13H FLAT MOON DATA
FM=.01089 FM'=.01089

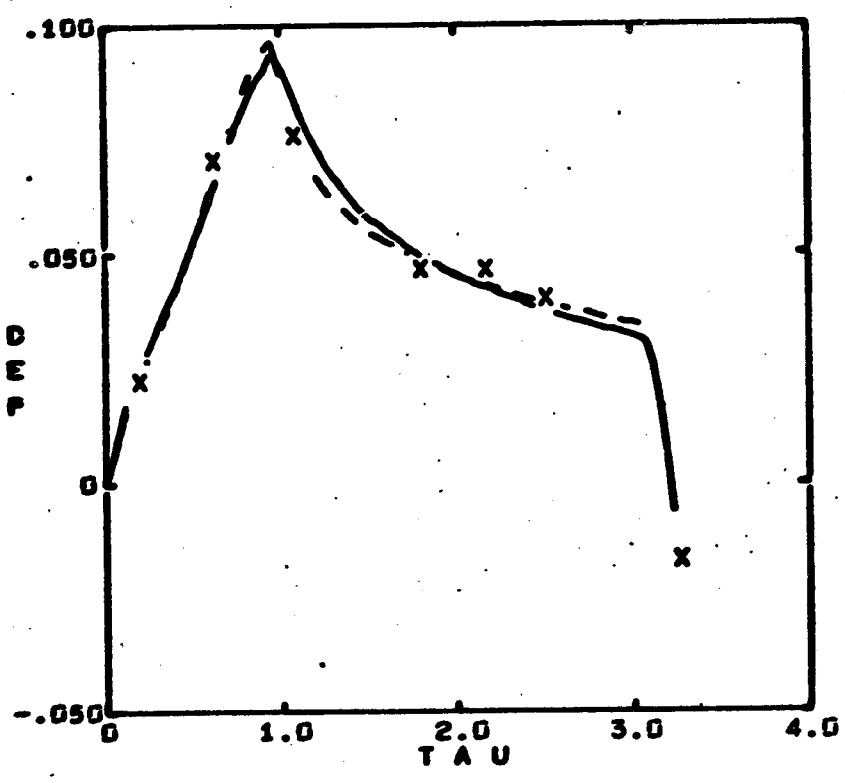
INITIAL TEMPERATURE 398.39
TAU-END OF TOTALITY 3.065

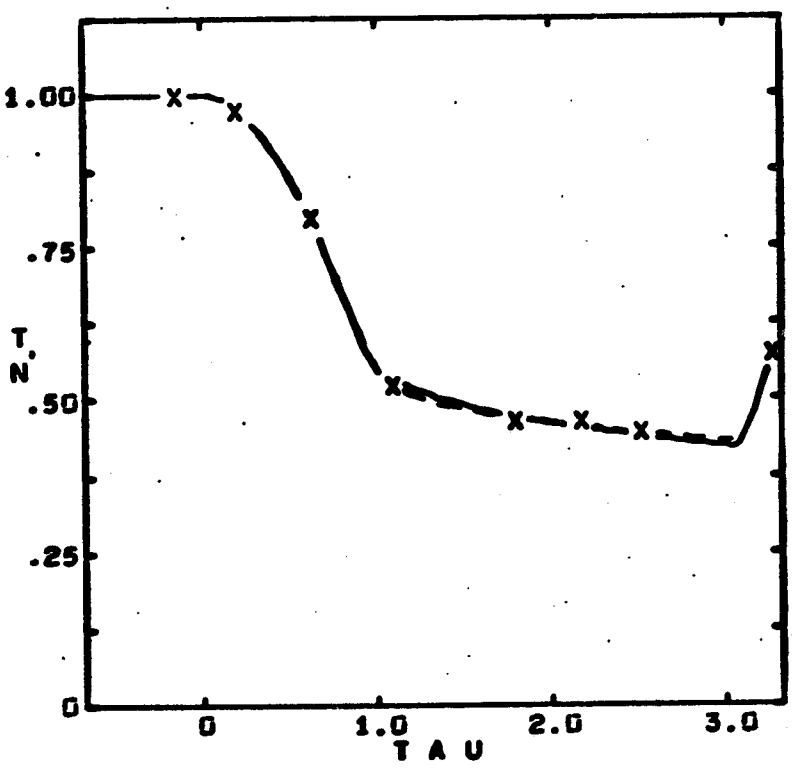
DIFFERENTIAL ENERGY DATA

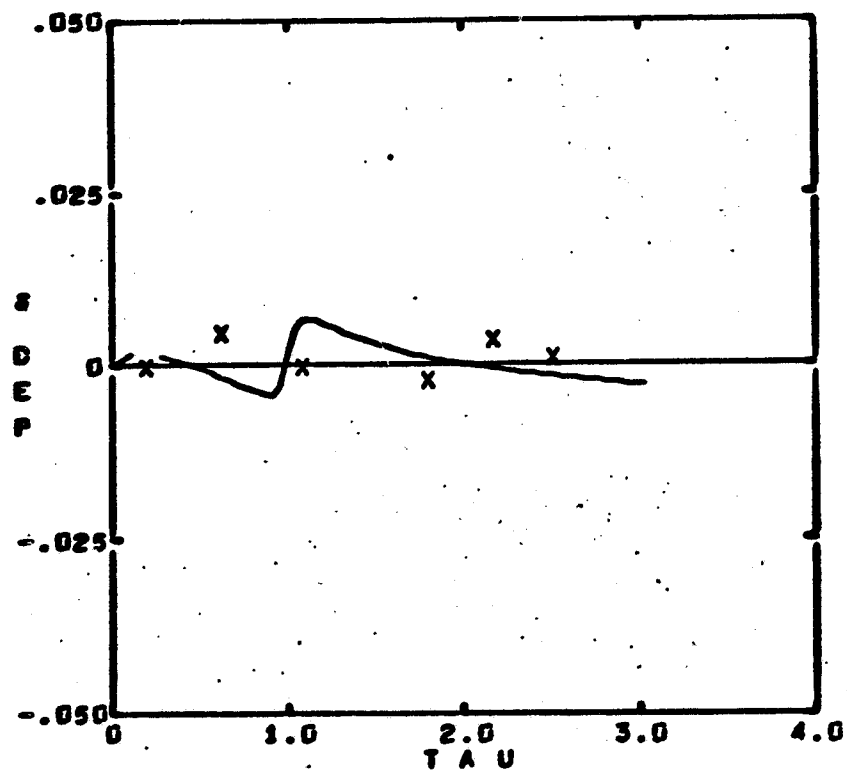
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0289	.0274	.0015
.50	.0523	.0527	-.0004
.75	.0773	.0803	-.0030
.93	.0938	.0987	-.0049
1.0	.0914	.0892	.0022
1.5	.0584	.0553	.0031
2.0	.0456	.0454	.0002
2.5	.0377	.0393	-.0016
3.0	.0320	.0349	-.0029

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.889	400.18		400.18	1.004	.0181
9H	-0.162	398.07		398.07	0.999	-.0033
10H	0.197	388.41		388.41	0.975	.0224
11H	0.622	318.36	0.000 -.865	318.36	0.799	.0707
12H	1.088	208.93	0.225 +.155	209.12	0.525	.0759
13H	1.798	185.04	0.000 -.869	185.04	0.464	.0465
14H	2.171	181.90	0.820 +.608	185.18	0.465	.0467
15H	2.507	178.55	0.000 -.903	178.55	0.448	.0403
16H	3.267	229.14	0.000 +.813	229.14	0.575	-.0167







PHOTOGRAPH NOT AVAILABLE

138 (2E8) BODE G

LAMBDA= 3.54 W BETA= 6.33 N XI=-.0613 ETA=+.1103 L+PL CODE = 20161 ALBEDO =.0979

13H FLAT MOON DATA
FM=.01809 FM'=.04171

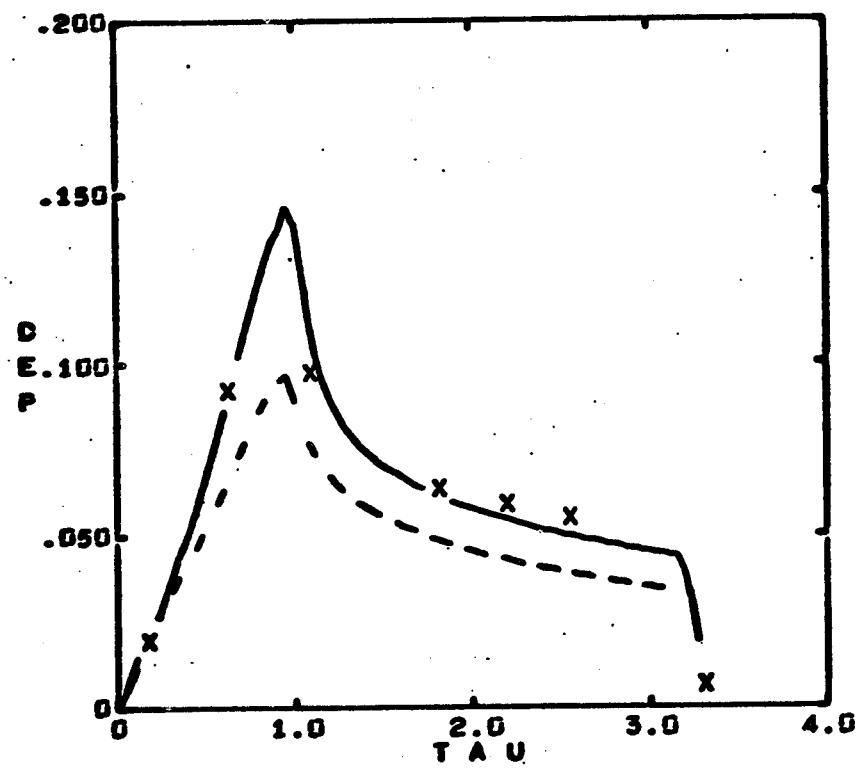
INITIAL TEMPERATURE 394.15
TAU-END OF TOTALITY 3.160

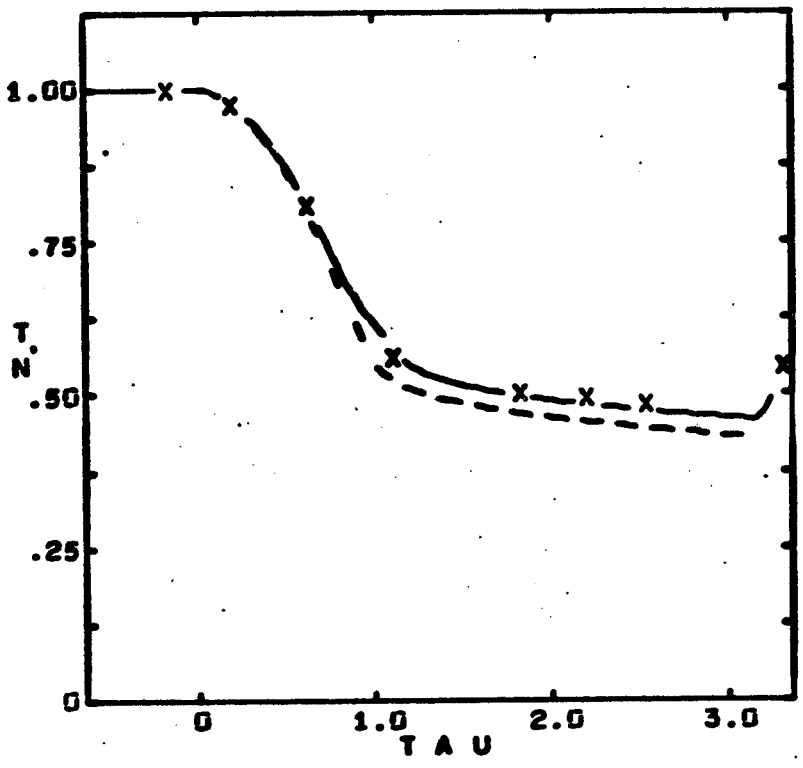
DIFFERENTIAL ENERGY DATA

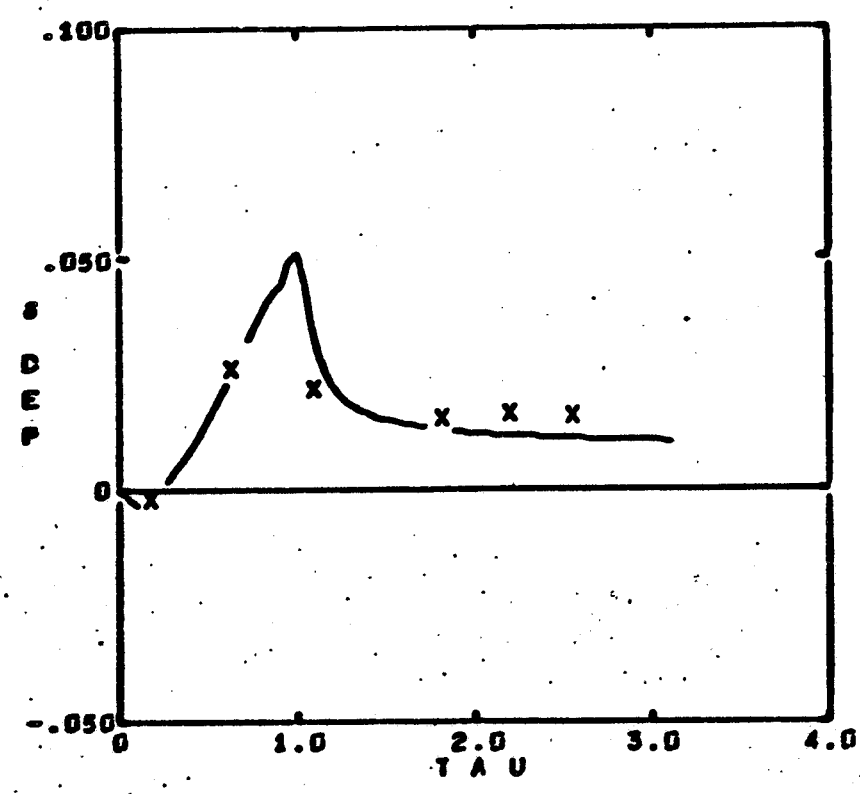
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0272	.0273	-.0001
.50	.0680	.0528	.0152
.75	.1148	.0805	.0343
.93	.1464	.0990	.0474
1.0	.1407	.0895	.0512
1.5	.0704	.0555	.0149
2.0	.0577	.0456	.0121
2.5	.0505	.0395	.0110
3.0	.0453	.0350	.0103

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.912	394.43		394.43	1.001	.0028
9H	-0.174	394.09		394.09	1.000	-.0005
10H	0.191	384.72		384.72	0.976	.0194
11H	0.622	318.83	0.321 +.028	319.58	0.811	.0922
12H	1.095	219.51	0.103 +.765	220.21	0.559	.0974
13H	1.817	188.79	0.624 -.054	198.17	0.503	.0639
14H	2.196	189.81	0.394 -.988	194.59	0.494	.0594
15H	2.537	189.57	0.142 -.804	191.04	0.465	.0552
16H	3.313	210.61	0.627 +.560	214.97	0.545	.0064







PHOTOGRAPH NOT AVAILABLE

139 (3C8) BONPLAND C

LAMBDA=18.23 W BETA=10.14 S XI=-.3080 ETA=-.1761 L+PL CODE = 33107 ALBEDO =.0687

13H FLAT MOON DATA
FM=.03589 FM'=.03923

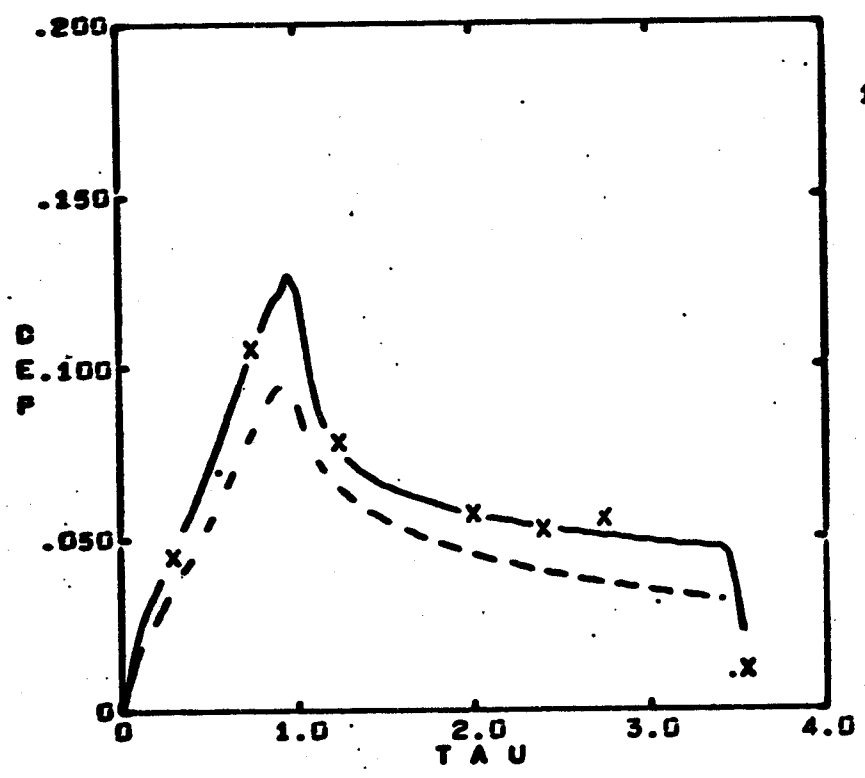
INITIAL TEMPERATURE 392.71
TAU-END OF TOTALITY 3.420

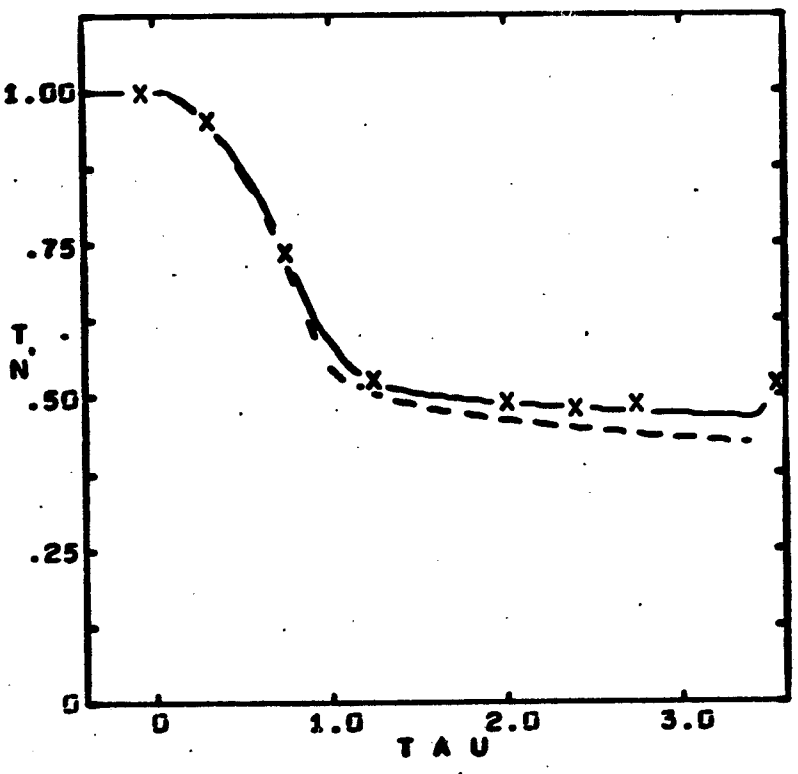
DIFFERENTIAL ENERGY DATA

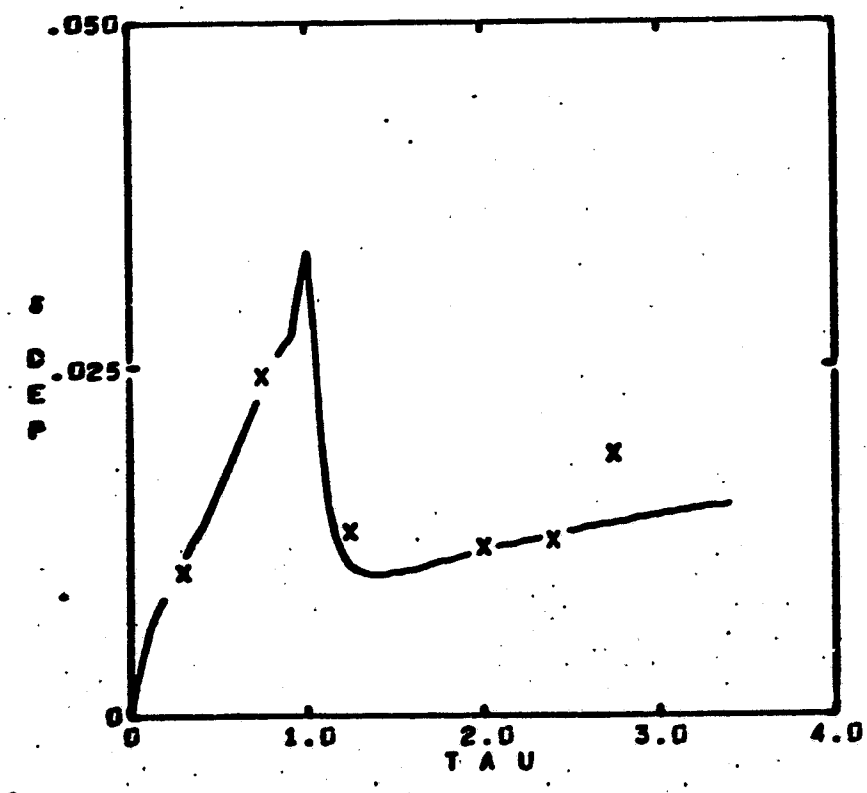
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0397	.0301	.0096
.50	.0708	.0545	.0163
.75	.1046	.0811	.0235
.93	.1270	.0987	.0283
1.0	.1225	.0892	.0333
1.5	.0654	.0551	.0103
2.0	.0571	.0453	.0118
2.5	.0525	.0393	.0132
3.0	.0493	.0349	.0144

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.852	394.84		394.84	1.005	.0219
9H	-0.083	392.50		392.50	0.999	-.0021
10H	0.298	374.04		374.04	0.952	.0447
11H	0.746	289.56	0.057 -.689	289.65	0.738	.1052
12H	1.239	206.98	1.466 -.591	207.61	0.529	.0761
13H	1.991	190.70	1.355 -.584	192.35	0.490	.0576
14H	2.384	186.86	0.585 +.535	188.43	0.480	.0530
15H	2.740	189.41	0.215 -.334	190.80	0.486	.0557
16H	3.546	204.49	0.000 +.609	204.49	0.521	.0114







PHOTOGRAPH NOT AVAILABLE

140 (3D9) BONPLAND E

LAMBDA=22.61 W BETA= 9.76 S XI=-.3789 ETA=-.1695 L↔PL CODE = 33176 ALBEDO =.0657

13H FLAT MOON DATA
FM=.05645 FM'=.05958

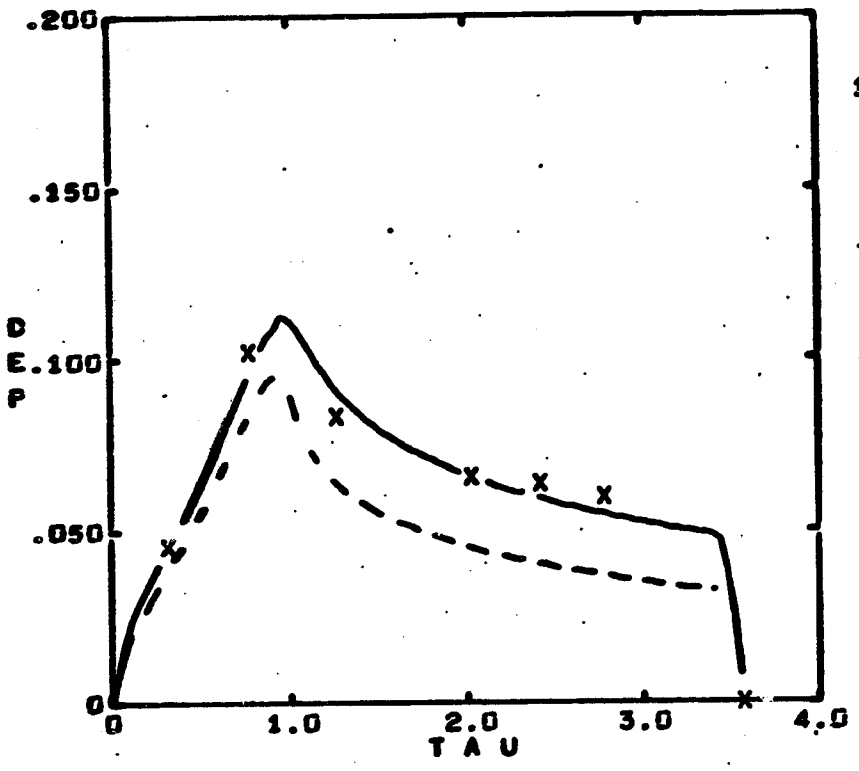
INITIAL TEMPERATURE 390.72
TAU-END OF TOTALITY 3.422

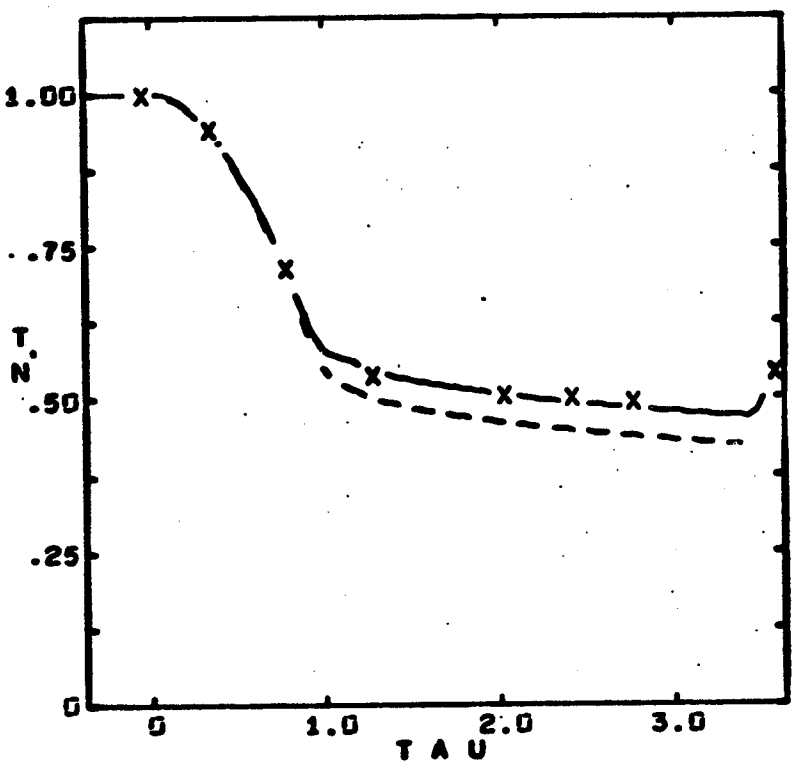
DIFFERENTIAL ENERGY DATA

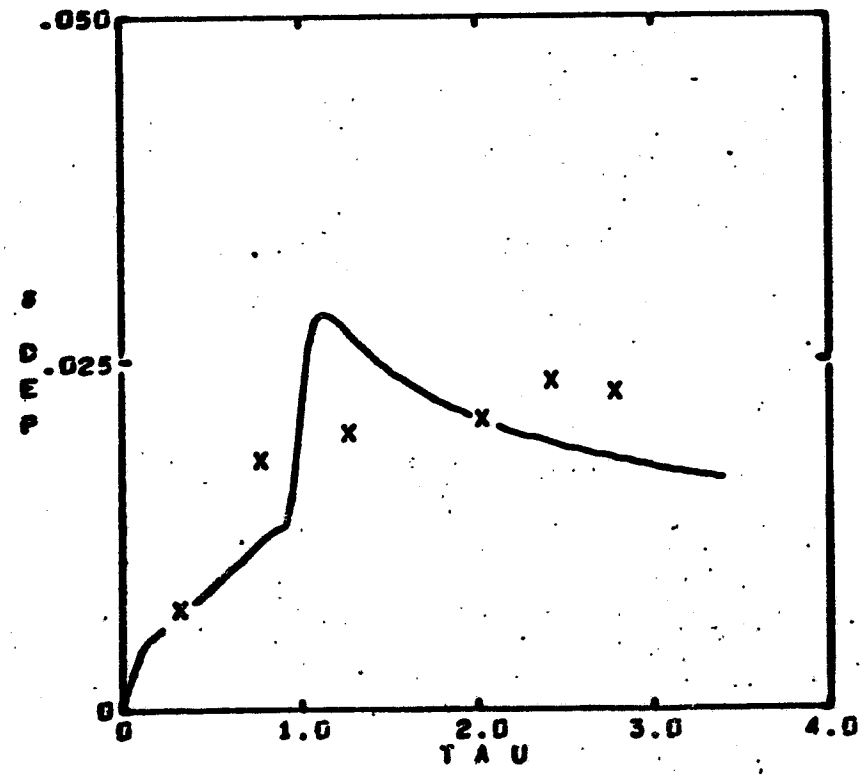
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0372	.0312	.0060
.50	.0642	.0554	.0088
.75	.0935	.0818	.0117
.93	.1129	.0992	.0137
1.0	.1114	.0896	.0218
1.5	.0797	.0554	.0243
2.0	.0663	.0455	.0208
2.5	.0583	.0395	.0188
3.0	.0525	.0351	.0174

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.821	392.10			392.10	1.004	.0142
9H	-0.050	390.63			390.63	1.000	-.0009
10H	0.329	367.93			367.93	0.942	.0455
11H	0.777	278.39	0.000	-.753	278.39	0.713	.1025
12H	1.270	207.67	0.273	-.989	210.03	0.538	.0835
13H	2.022	196.72	0.127	-.858	198.01	0.507	.0660
14H	2.416	196.06	0.047	+.719	196.50	0.503	.0640
15H	2.772	191.98	0.134	+.291	193.19	0.494	.0598
16H	3.575	211.44	0.000	+.517	211.44	0.541	.0000







PHOTOGRAPH NOT AVAILABLE

141 (1E4) BOSCOVICH A

LAMBDA=12.65 E BETA= 9.46 N XI=+.2160 ETA=+.1644 L+PL CODE = 12116 ALBEDO =.0908

13H FLAT MOON DATA
FM=.02316 FM'=.02750

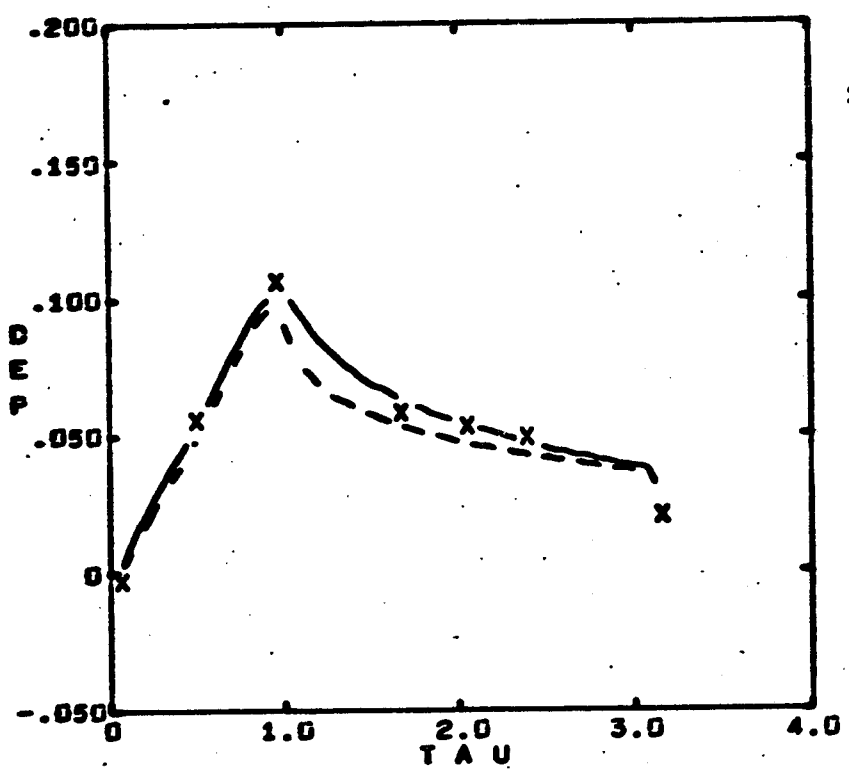
INITIAL TEMPERATURE 394.37
TAU-END OF TOTALITY 3.074

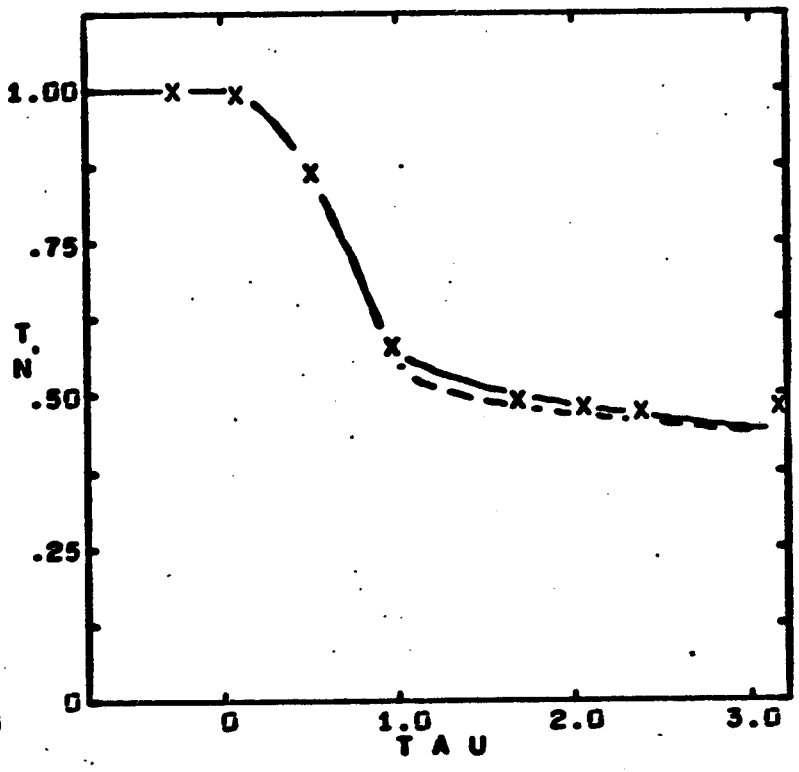
DIFFERENTIAL ENERGY DATA

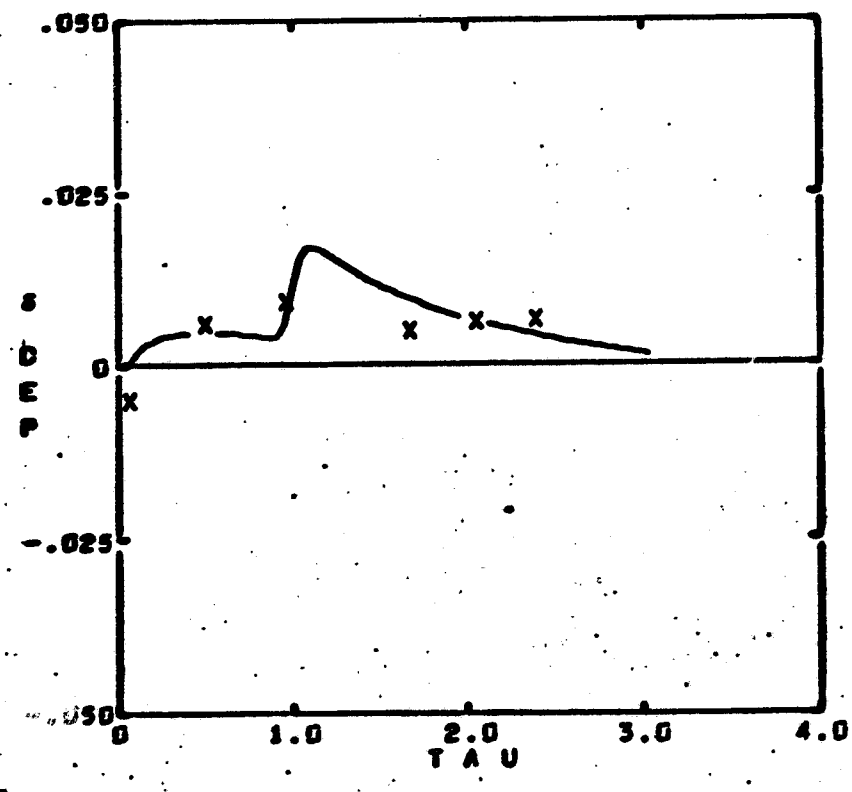
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0261	.0221	.0040
.50	.0547	.0499	.0048
.75	.0842	.0798	.0044
.93	.1037	.0999	.0038
1.0	.1024	.0907	.0117
1.5	.0691	.0576	.0115
2.0	.0547	.0478	.0069
2.5	.0455	.0417	.0038
3.0	.0388	.0371	.0017

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.013	396.27		396.27	1.005	.0194
9H	-0.286	393.83		393.83	0.999	-.0054
10H	0.074	391.73		391.73	0.993	-.0030
11H	0.498	341.36		341.36	0.866	.0556
12H	0.966	228.33	0.190 +.742	228.84	0.580	.1065
13H	1.676	192.18	0.249 -.442	193.91	0.492	.0585
14H	2.050	185.30	0.510 -.996	189.71	0.481	.0536
15H	2.387	185.16	0.116 +.199	186.15	0.472	.0496
16H	3.162	189.32	0.000 +.214	189.32	0.480	.0210







PHOTOGRAPH NOT AVAILABLE

142 (2E9) BRAYLEY

LAMBDA=36.89 W BETA=20.89 N XI=-.5608 ETA=+.3566 L+PL CODE = 25365 ALBEDO =.0709

13N FLAT MOON DATA
FM=.06343 FM'=.06343

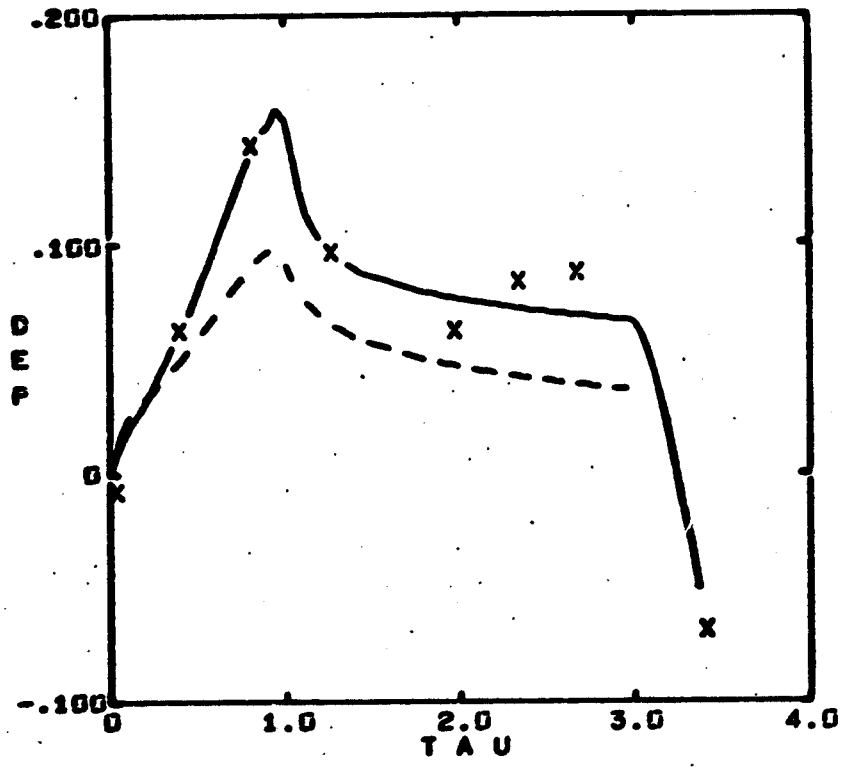
INITIAL TEMPERATURE 378.71
TAU-END OF TOTALITY 2.982

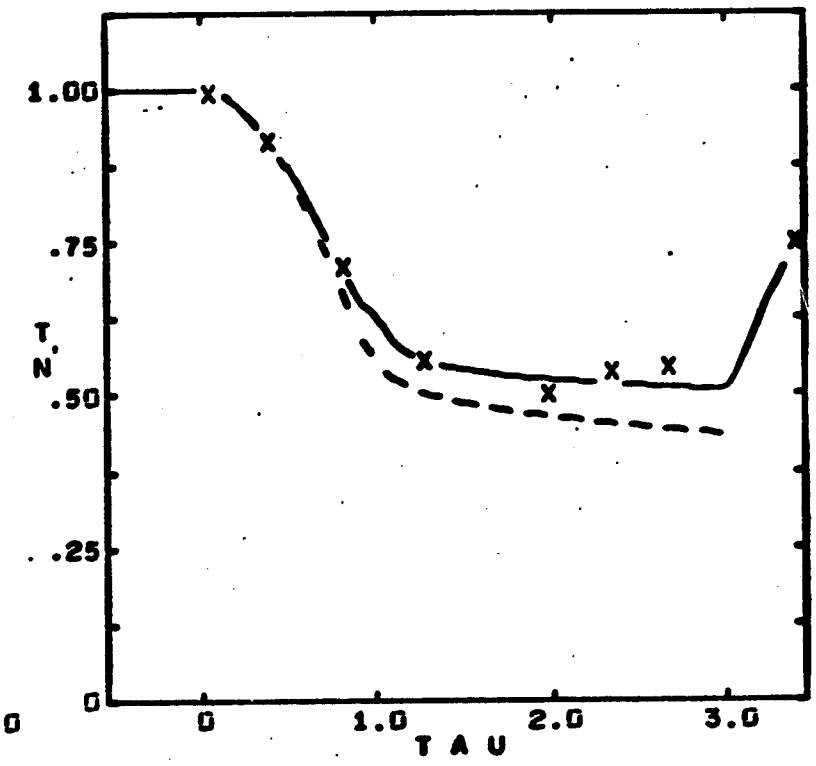
DIFFERENTIAL ENERGY DATA

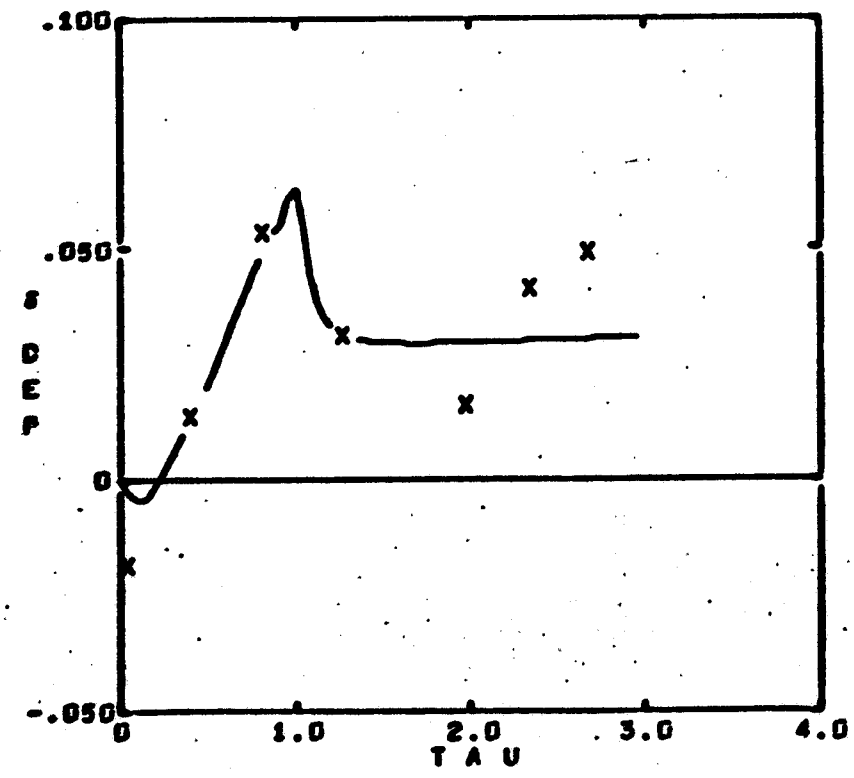
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0374	.0359	.0015
.50	.0803	.0591	.0212
.75	.1282	.0845	.0437
.93	.1598	.1012	.0586
1.0	.1541	.0914	.0627
1.5	.0860	.0564	.0296
2.0	.0759	.0464	.0295
2.5	.0704	.0403	.0301
3.0	.0666	.0359	.0307

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.678	378.71		378.71	1.000	.0000
9H	0.039	377.08		377.08	0.996	-.0087
10H	0.393	347.42		347.42	0.917	.0621
11H	0.812	267.63	0.237 +.902	266.96	0.710	.1436
12H	1.271	207.28	0.243 +.053	210.72	0.556	.0959
13H	1.972	189.43	0.000 +.017	189.43	0.500	.0626
14H	2.340	196.97	0.351 +.792	203.58	0.538	.0835
15H	2.672	205.38	0.108 +.775	206.15	0.544	.0878
16H	3.398	283.88	0.000 +.754	283.88	0.750	-.0669







PHOTOGRAPH NOT AVAILABLE

143 (2F1) BRAYLEY C

LAMBDA=39.42 W BETA=21.38 N XI=-.5913 ETA=+.3645 L+PL CODE = 25396 ALBEDO =.0648

13H FLAT MOON DATA
FM=.05781 FM'=.08065

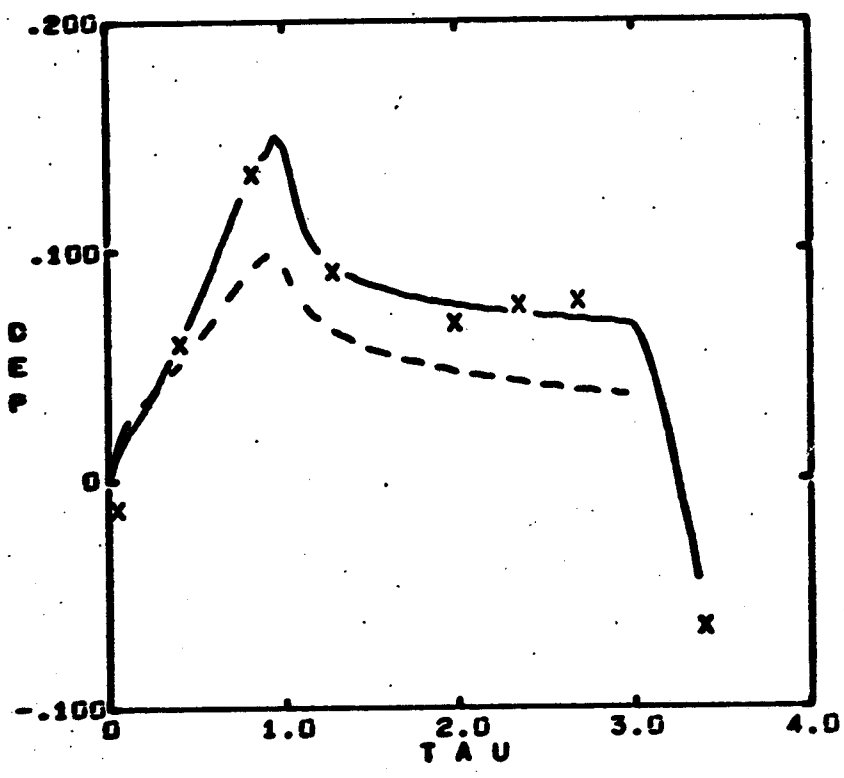
INITIAL TEMPERATURE 376.20
TAU-END OF TOTALITY 2.978

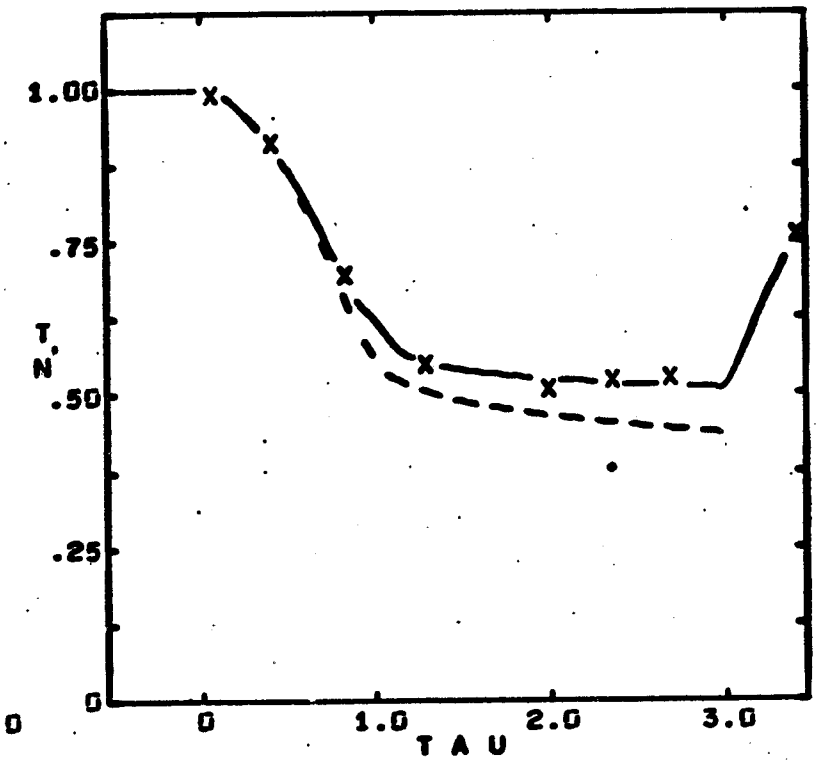
DIFFERENTIAL ENERGY DATA

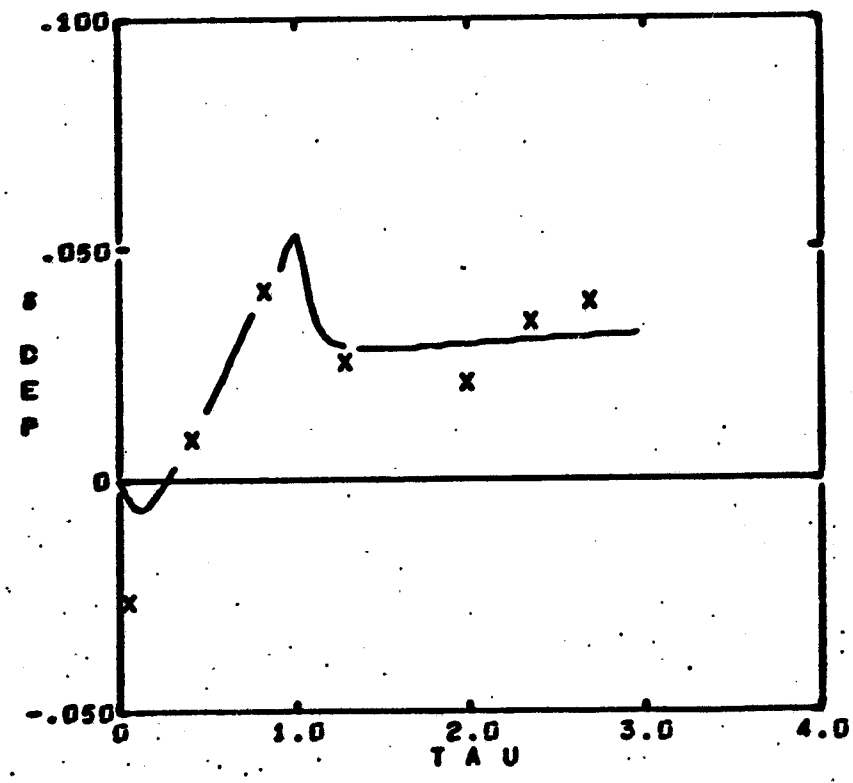
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0356	.0370	-.0014
.50	.0759	.0602	.0157
.75	.1207	.0855	.0352
.93	.1503	.1021	.0482
1.0	.1453	.0923	.0530
1.5	.0850	.0570	.0280
2.0	.0760	.0468	.0292
2.5	.0712	.0407	.0305
3.0	.0678	.0363	.0315

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.665	376.20		376.20	1.000	.0000
9H	0.052	373.73		373.73	0.993	-.0129
10H	0.405	342.78		342.78	0.911	.0595
11H	0.824	260.72	0.121 -.204	261.31	0.695	.1332
12H	1.283	203.57	0.341 +.147	206.19	0.548	.0902
13H	1.983	185.56	0.667 -.009	191.99	0.510	.0678
14H	2.351	197.12	0.068 +.324	197.67	0.525	.0762
15H	2.682	191.86	0.308 -.195	198.50	0.528	.0775
16H	3.407	286.58	0.000 +.503	286.58	0.762	-.0653







PHOTOGRAPH NOT AVAILABLE

LAMBDA=32.83 W BETA=20.02 N XI=-.5094 ETA=+.3424 L+PL CODE = 25304 ALBEDO =.0659

13H FLAT MOON DATA
FM=.03129 FM'=.03129

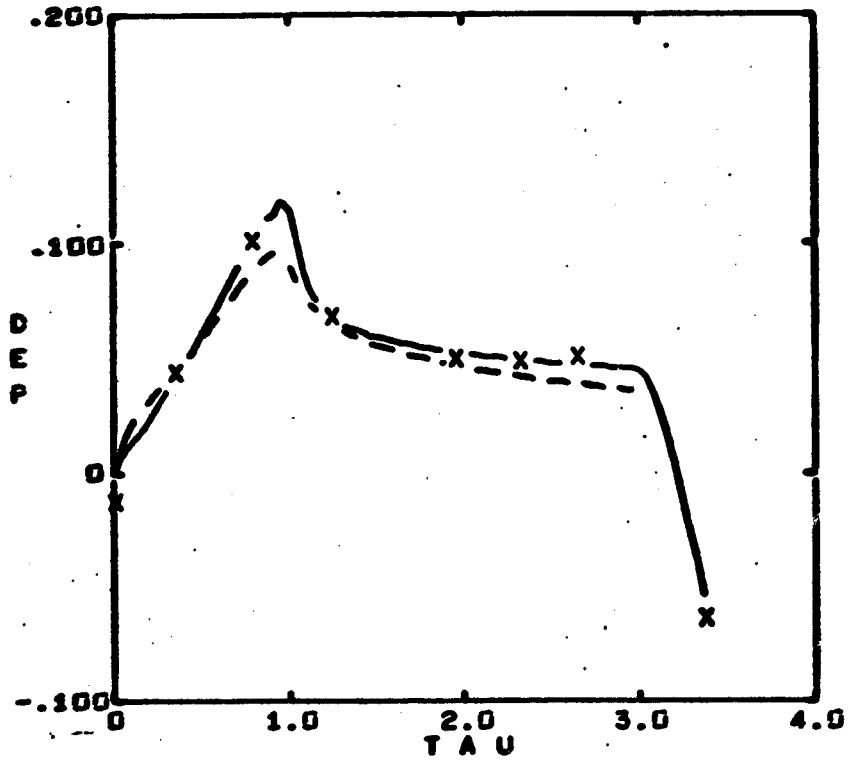
INITIAL TEMPERATURE 382.13
TAU-END OF TOTALITY 2.990

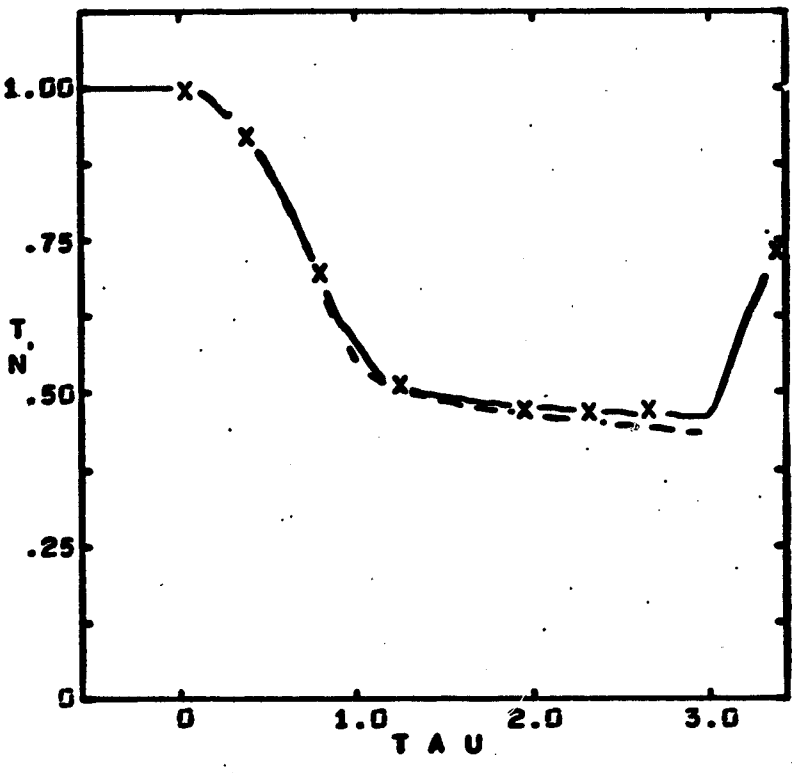
DIFFERENTIAL ENERGY DATA

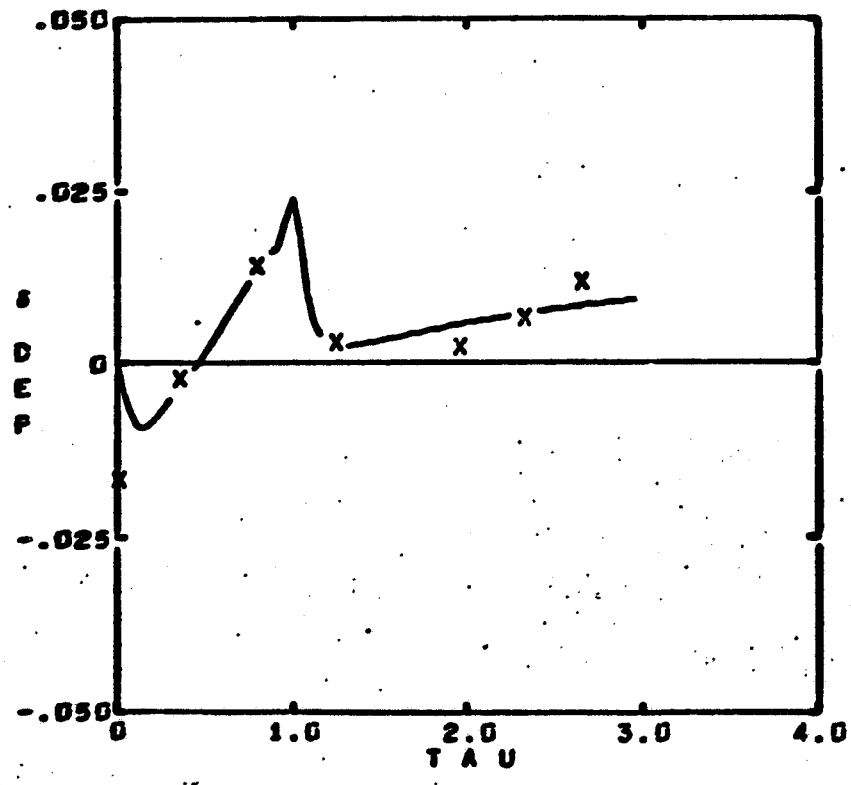
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0270	.0342	-.0072
.50	.0591	.0577	.0014
.75	.0949	.0833	.0116
.93	.1186	.1002	.0184
1.0	.1144	.0905	.0239
1.5	.0591	.0558	.0033
2.0	.0518	.0459	.0059
2.5	.0477	.0399	.0078
3.0	.0449	.0355	.0094

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.701	382.13		382.13	1.000	.0000
9H	0.018	380.69		380.69	0.996	-.0127
10H	0.372	351.72		351.72	0.920	.0432
11H	0.791	265.45	0.000 -.805	265.45	0.695	.1016
12H	1.252	195.25	0.000 +.559	195.25	0.511	.0682
13H	1.953	179.93	0.000 +.448	179.93	0.471	.0492
14H	2.322	176.83	0.423 +.403	179.29	0.469	.0485
15H	2.653	175.92	0.524 -.204	181.05	0.474	.0504
16H	3.383	280.64	0.000 +.466	280.64	0.734	-.0636







PHOTOGRAPH NOT AVAILABLE

145 (1ES) BRUCE

LAMBDA= 0.40 E BETA= 1.17 N XI=+.0070 ETA=+.0204 L+PL CODE = 10002 ALBEDO =.0877

13H FLAT MOON DATA
FM=.01826 FM'=.01826

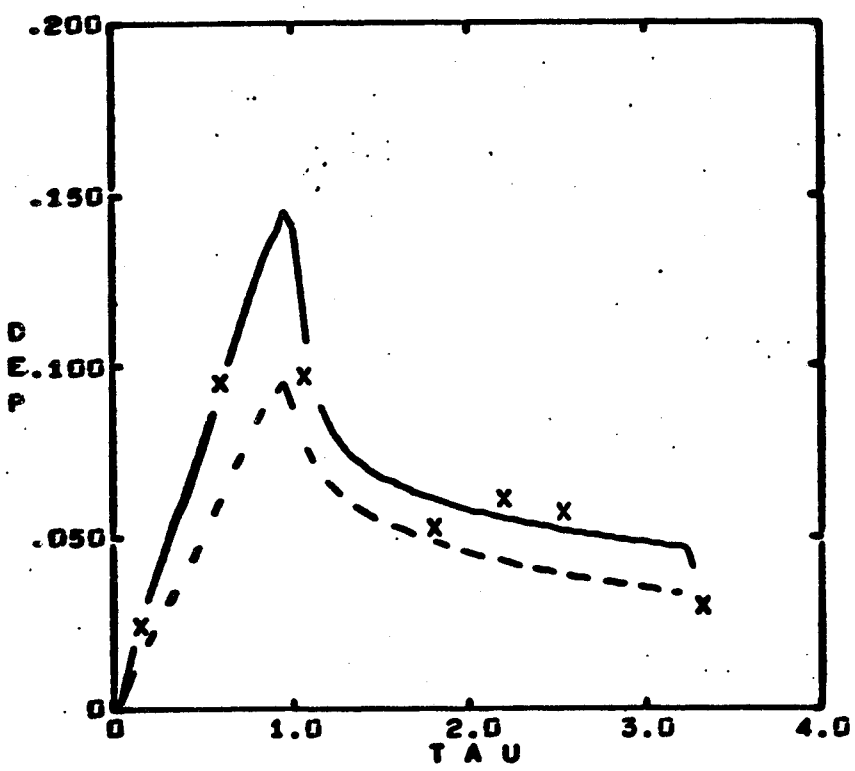
INITIAL TEMPERATURE 395.95
TAU-END OF TOTALITY 3.252

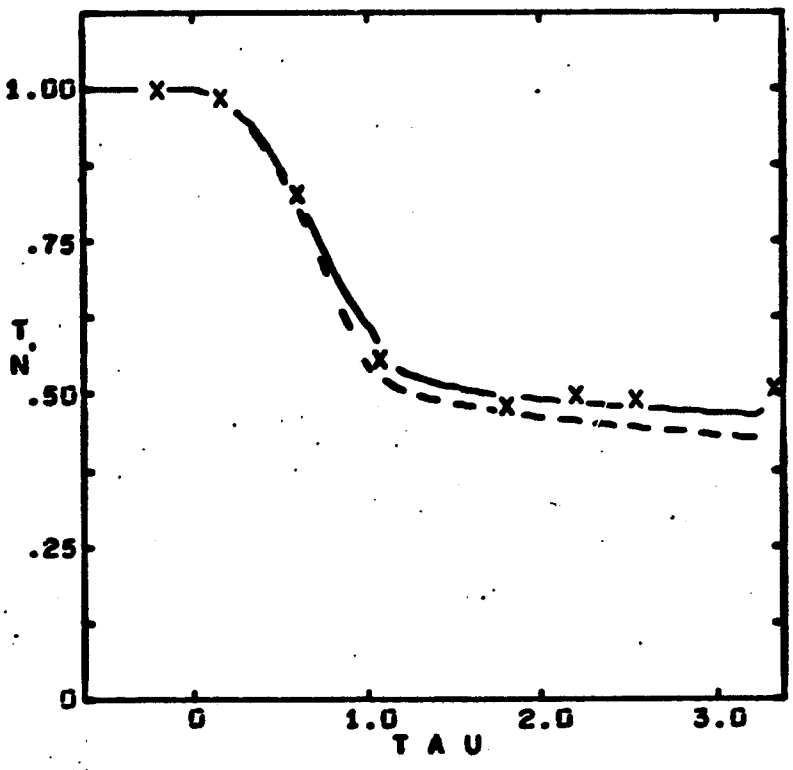
DIFFERENTIAL ENERGY DATA

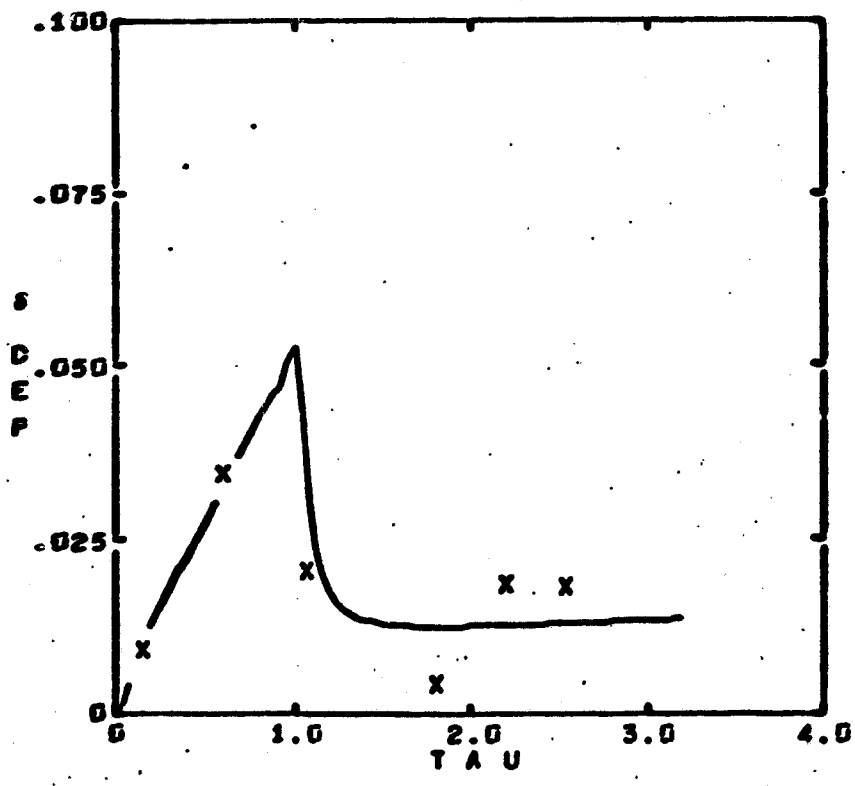
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0384	.0236	.0148
.50	.0770	.0496	.0274
.75	.1180	.0778	.0402
.93	.1452	.0967	.0485
1.0	.1404	.0877	.0527
1.5	.0679	.0550	.0129
2.0	.0580	.0455	.0125
2.5	.0524	.0395	.0129
3.0	.0485	.0351	.0134

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.954	397.10		397.10	1.003	.0117
9H	-0.207	395.70		395.70	0.999	-.0025
10H	0.162	389.82		389.82	0.985	.0241
11H	0.599	325.07	0.600 -.223	327.57	0.827	.0952
12H	1.077	216.38	0.491 -.333	220.64	0.558	.0968
13H	1.806	189.81	0.000 -.145	189.81	0.479	.0528
14H	2.190	191.60	0.417 -.466	197.06	0.498	.0614
15H	2.535	185.73	0.585 -.320	193.87	0.490	.0575
16H	3.326	195.03	0.798 -.116	201.44	0.509	.0298







PHOTOGRAPH NOT AVAILABLE

146 (4C4) BUCH DB

LAMBDA=17.01 E BETA=37.87 S XI=+.2309 ETA=-.6139 L+PL CODE = 42631 ALBEDO =.1454

13H FLAT MOON DATA
FM=.09253 FM'=.09611

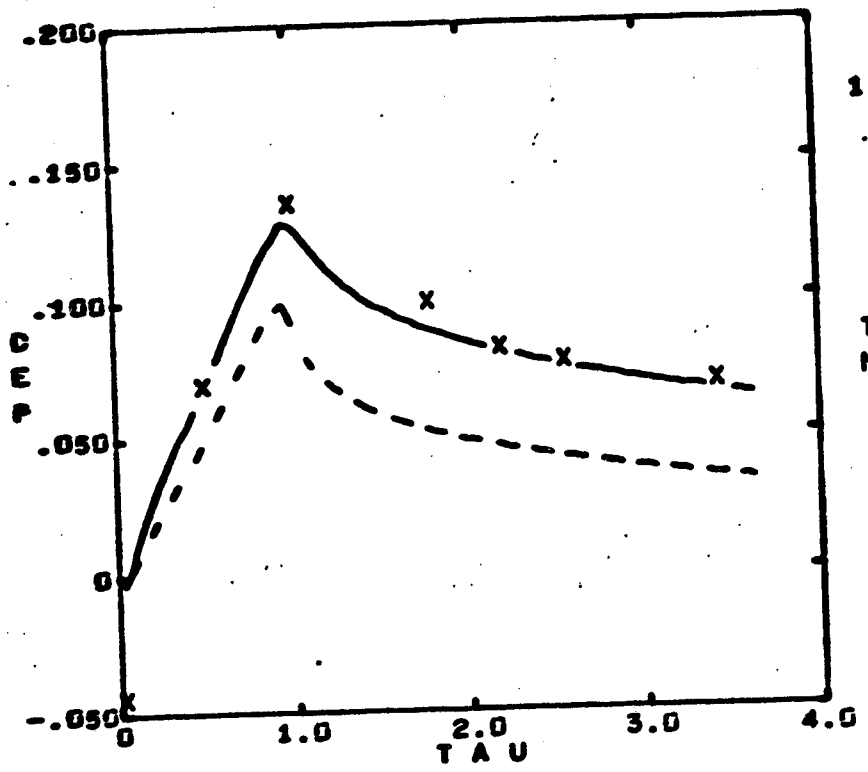
INITIAL TEMPERATURE 373.56
TAU-END OF TOTALITY 3.643

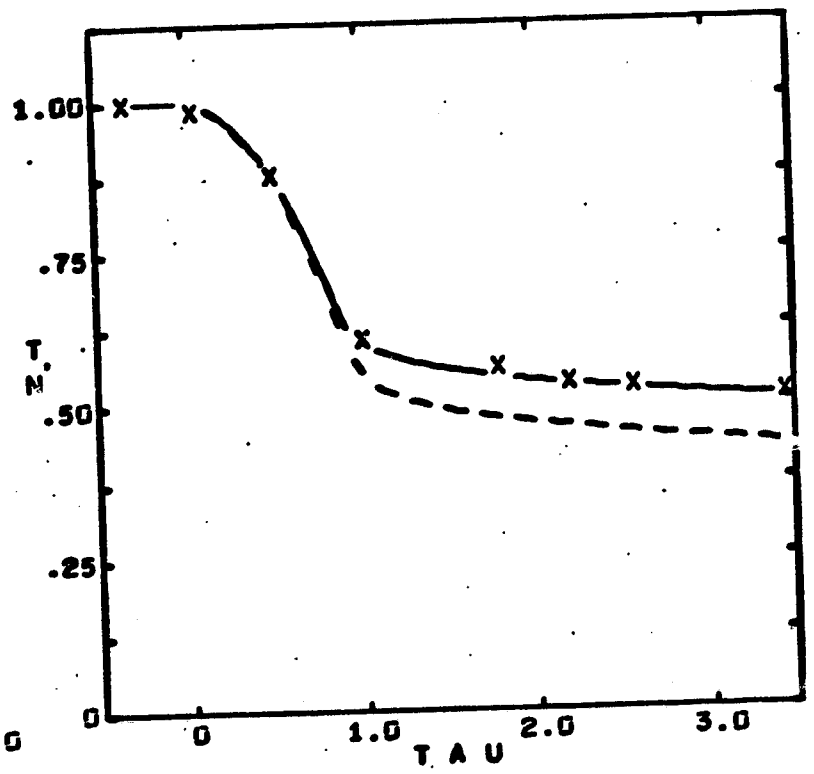
DIFFERENTIAL ENERGY DATA

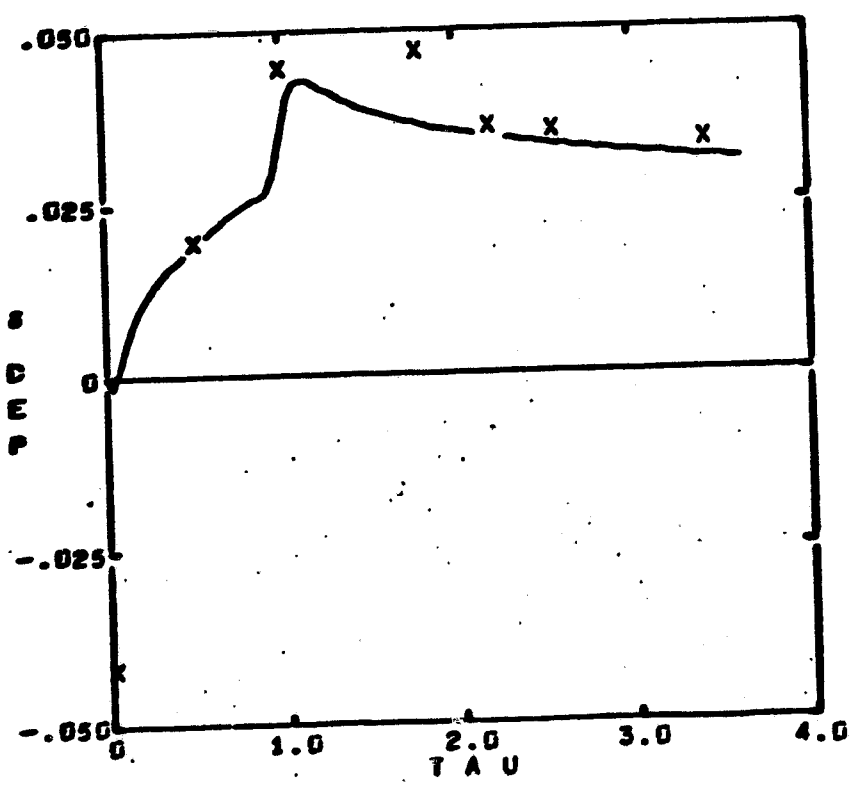
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0335	.0215	.0120
.50	.0691	.0499	.0192
.75	.1044	.0803	.0241
.93	.1276	.1008	.0268
1.0	.1273	.0916	.0357
1.5	.0969	.0584	.0385
2.0	.0839	.0487	.0352
2.5	.0759	.0425	.0334
3.0	.0699	.0379	.0320

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.154	374.24		374.24	1.002	.0072
9H	-0.358	373.35		373.35	0.999	-.0022
10H	0.034	368.79		368.79	0.987	-.0441
11H	0.498	327.89		327.89	0.878	.0695
12H	1.005	222.75	0.290 -.076	226.61	0.607	.1354
13H	1.782	208.27	0.118 +.374	209.66	0.561	.0992
14H	2.188	197.97	0.117 +.477	199.96	0.535	.0821
15H	2.557	188.33	0.478 -.972	197.01	0.527	.0774
16H	3.427	181.43	0.392 +.489	191.10	0.512	.0685







PHOTOGRAPH
NOT
AVAILABLE

147 (3E1) COMPANUS

LAMBDA=27.73 W BETA=27.97 S XI=-.4110 ETA=-.4690 L+PL CODE = 34416 ALBEDO =.0724

13H FLAT MOON DATA
FM=.02317 FM'=.02317

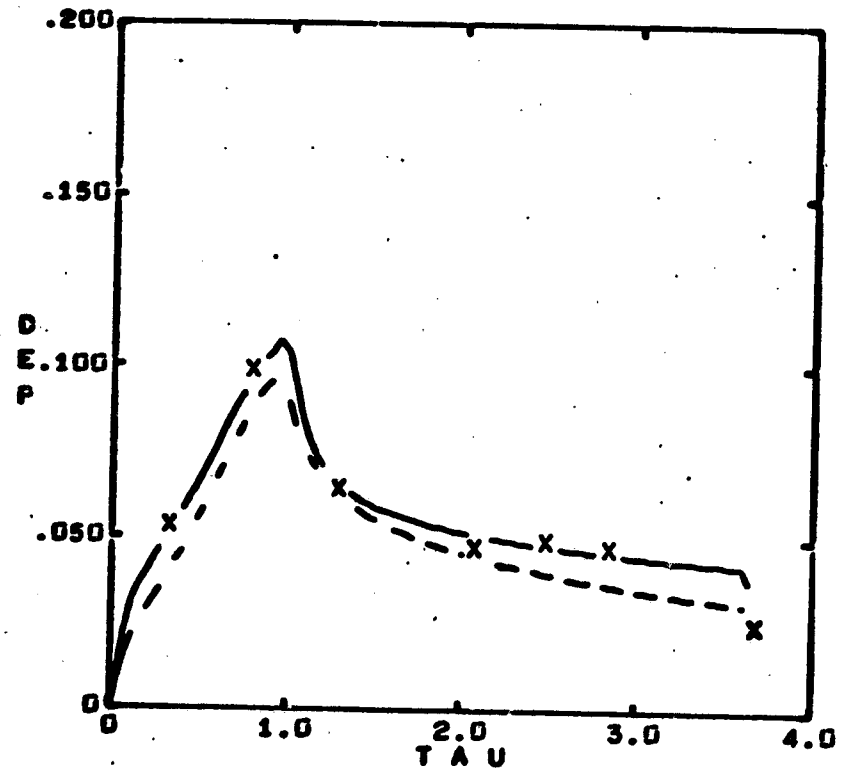
INITIAL TEMPERATURE 380.11
TAU-END OF TOTALITY 3.611

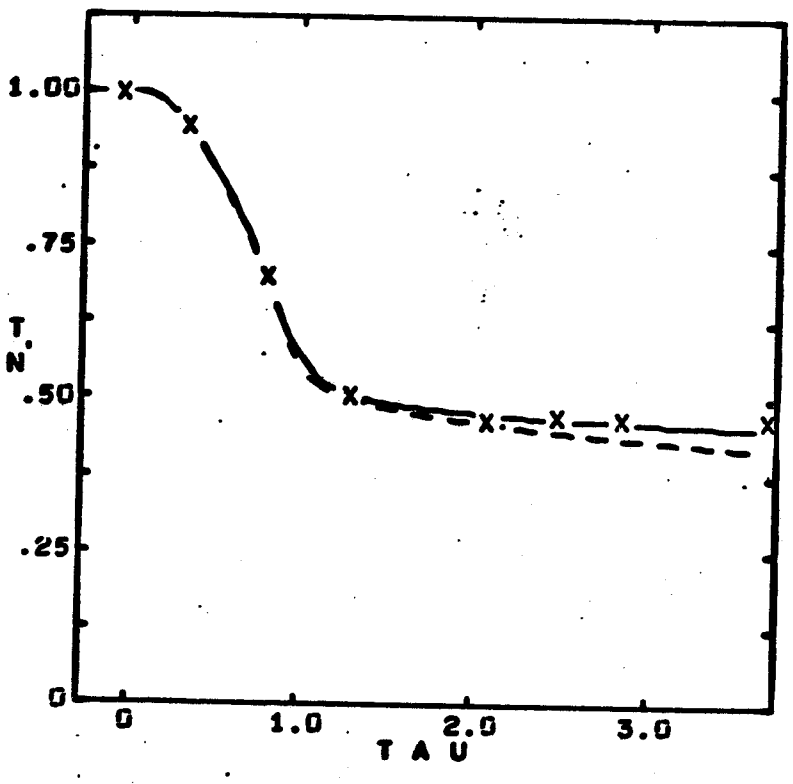
DIFFERENTIAL ENERGY DATA

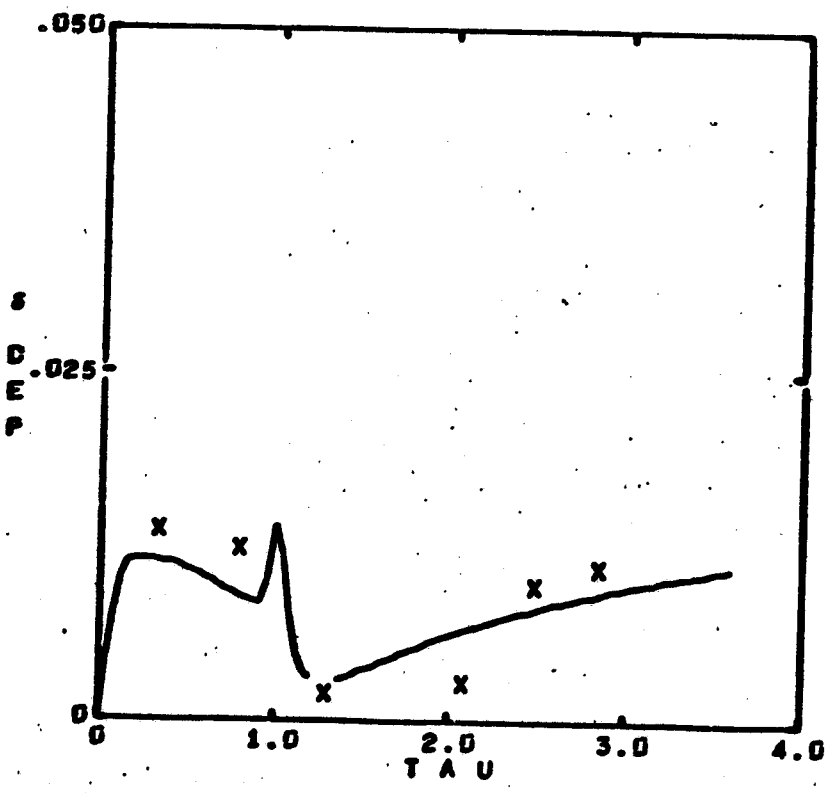
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0442	.0326	.0116
.50	.0673	.0564	.0109
.75	.0917	.0824	.0093
.93	.1077	.0996	.0081
1.0	.1039	.0899	.0140
1.5	.0591	.0555	.0036
2.0	.0518	.0456	.0062
2.5	.0477	.0396	.0081
3.0	.0448	.0352	.0096

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.852	380.74		380.74	1.002	.0067
9H	-0.058	380.06		380.06	1.000	-.0005
10H	0.331	358.95		358.95	0.944	.0535
11H	0.793	266.11	0.000 -.842	266.11	0.700	.0991
12H	1.298	191.54	0.000 -.791	191.54	0.504	.0645
13H	2.074	177.28	0.000 -.851	177.28	0.466	.0473
14H	2.476	175.72	1.278 -.717	179.32	0.472	.0495
15H	2.844	175.55	0.273 +.510	177.56	0.467	.0476
16H	3.679	177.96	0.000 -.508	177.96	0.468	.0251







PHOTOGRAPH NOT AVAILABLE

148 (2F3) CARLINI

LAMBDA=24.06 W BETA=33.71 N XI=-.3391 ETA=+.5550 L+PL CODE = 23535 ALBEDO =.0659

13H FLAT MOON DATA
FM=.08318 FM'=.11013

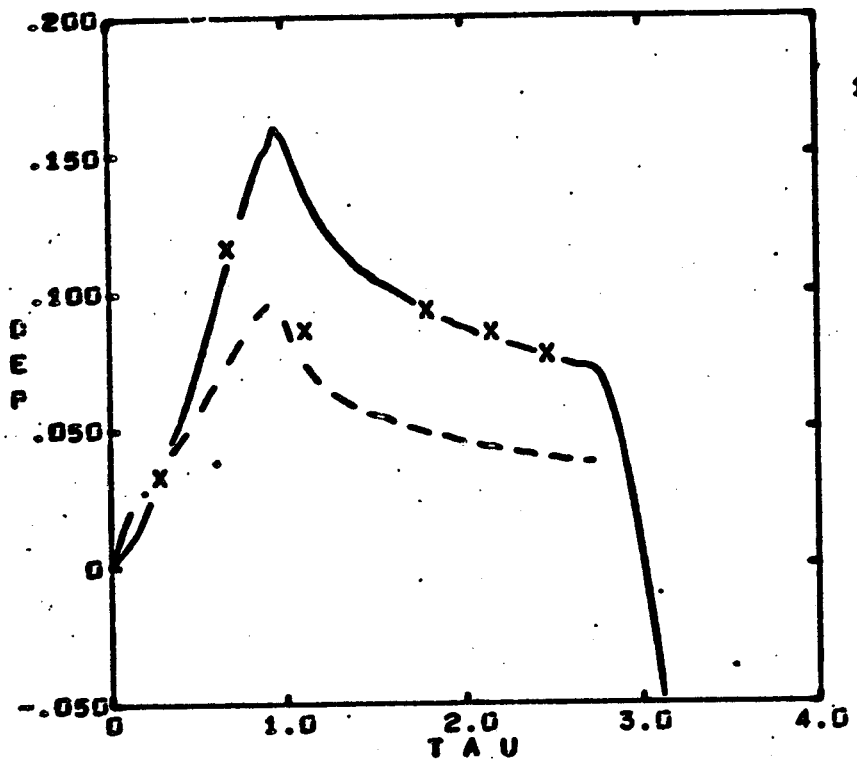
INITIAL TEMPERATURE 381.44
TAU-END OF TOTALITY 2.727

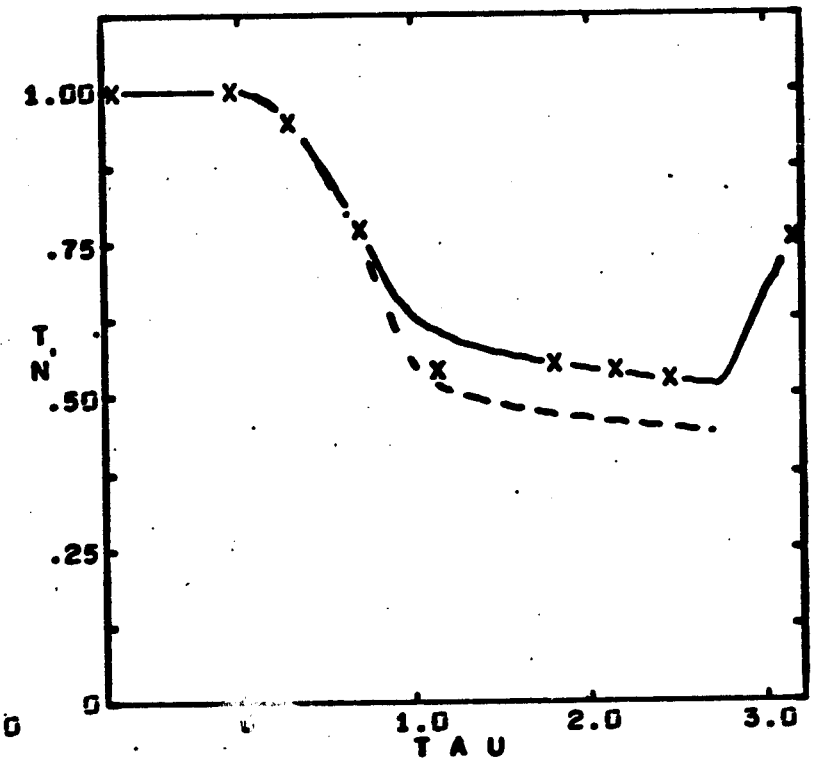
DIFFERENTIAL ENERGY DATA

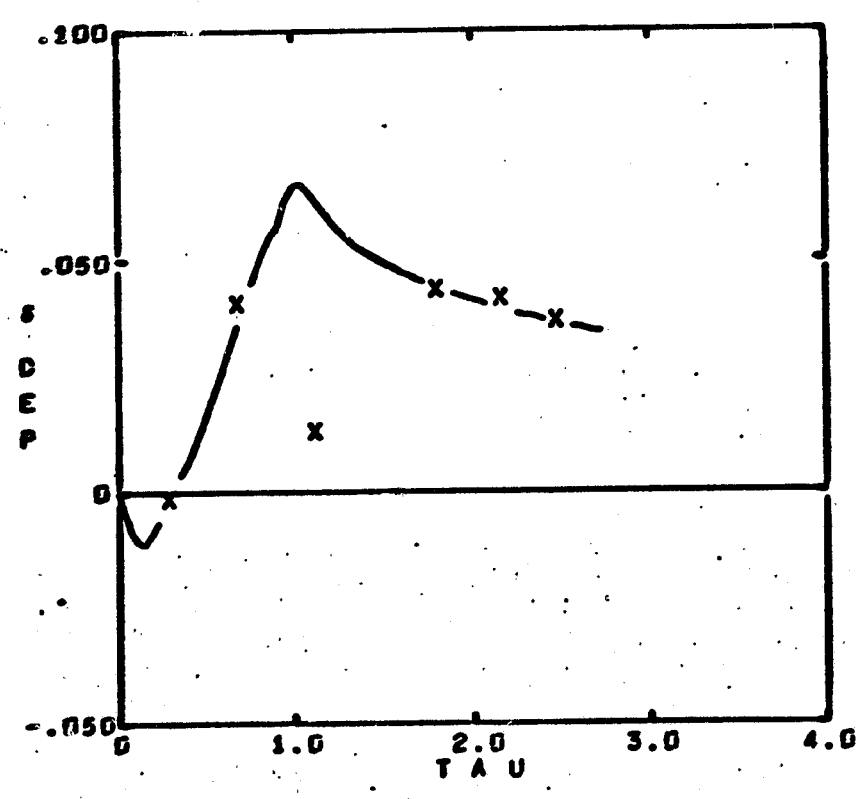
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0258	.0316	-.0058
.50	.0723	.0557	.0166
.75	.1255	.0820	.0435
.93	.1610	.0994	.0616
2.0	.1559	.0897	.0662
1.5	.1050	.0554	.0496
2.0	.0867	.0455	.0412
2.5	.0757	.0395	.0362
3.0	.0677	.0351	.0326

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.739	382.18			382.18	1.002	.0078
9H	-0.054	381.38			381.38	1.000	-.0006
10H	0.284	362.00			362.00	0.949	.0331
11H	0.684	294.04	0.213	-.279	295.30	0.774	.1158
12H	1.124	204.50	0.274	-.982	206.62	0.542	.0861
13H	1.793	200.44	0.370	+.225	210.57	0.552	.0929
14H	2.146	195.51	0.337	+.875	206.06	0.540	.0852
15H	2.462	193.78	0.319	-.268	200.87	0.527	.0769
16H	3.159	287.54	1.423	+.736	288.65	0.757	-.0669







PHOTOGRAPH NOT AVAILABLE

849 (2F4) CARLINI A

LAMBDA=26.57 W BETA=35.32 N XI=-.3650 ETA=+.5781 L+PL CODE = 23567 ALBEDO =.0657

13H FLAT MOON DATA
FM=.02570 FM'=.02605

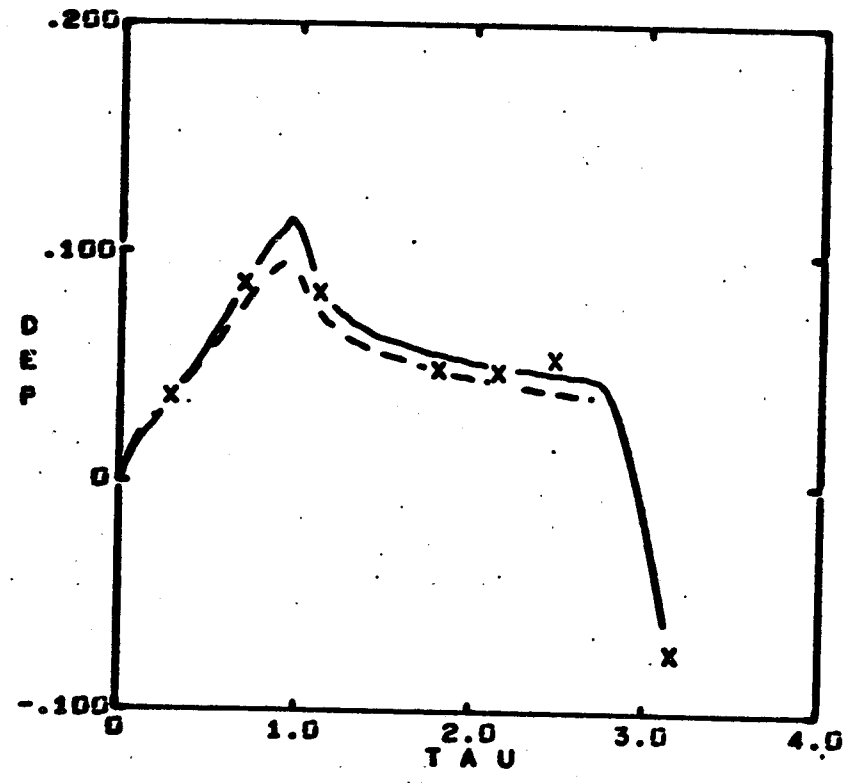
INITIAL TEMPERATURE 378.00
TAU-END OF TOTALITY 2.703

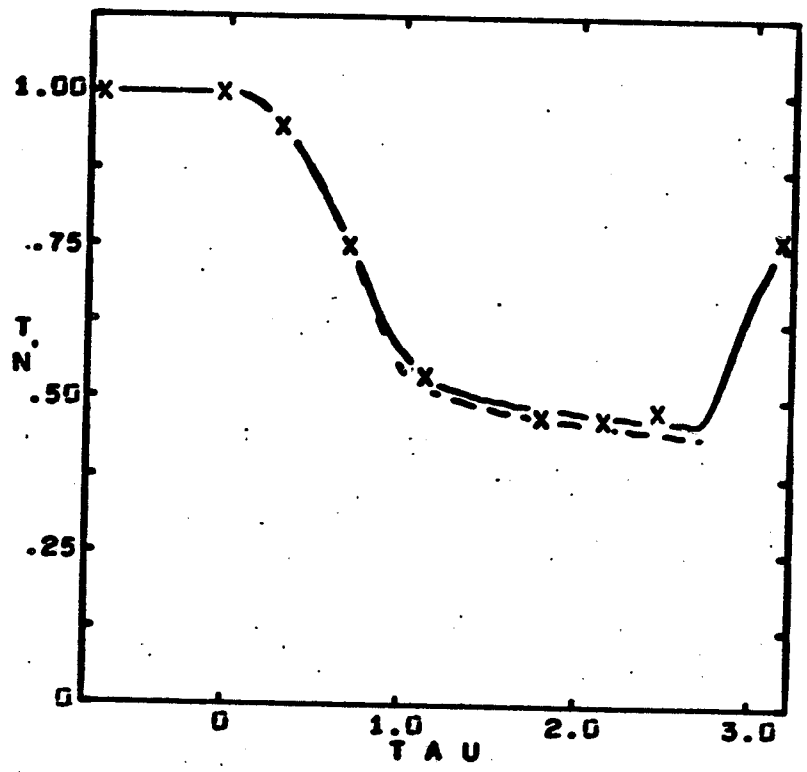
DIFFERENTIAL ENERGY DATA

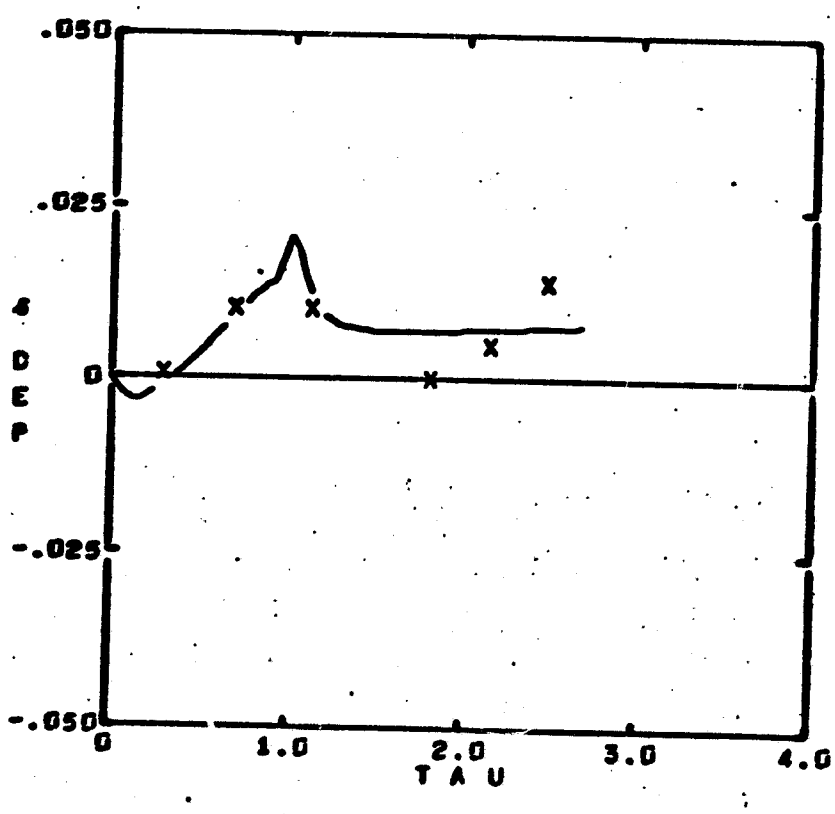
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0305	.0323	-.0018
.50	.0602	.0562	.0040
.75	.0931	.0823	.0108
.93	.1148	.0995	.0153
1.0	.1104	.0899	.0205
1.5	.0625	.0555	.0070
2.0	.0527	.0456	.0071
2.5	.0472	.0396	.0076
3.0	.0433	.0352	.0081

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.726	378.52		378.52	1.001	.0055
9H	-0.044	377.97		377.97	1.000	-.0003
10H	0.293	357.92		357.92	0.947	.0369
11H	0.691	284.46	0.000 -.616	284.46	0.753	.0866
12H	1.128	199.79	0.227 -.021	202.86	0.537	.0830
13H	1.795	176.98	1.779 -.310	177.91	0.471	.0491
14H	2.146	170.41	0.735 -.921	177.47	0.469	.0486
15H	2.461	179.18	0.257 -.603	182.19	0.482	.0540
16H	3.153	289.44	0.000 +.833	289.44	0.766	-.0740







PHOTOGRAPH NOT AVAILABLE

150 (2F5) CARLINI C

LAMBDA=15.99 W BETA=32.95 N XI=-.2311 ETA=+.5439 L+PL CODE = 22534 ALBEDO =.0694

13H FLAT MOON DATA
FM=.04616 FM'=.09093

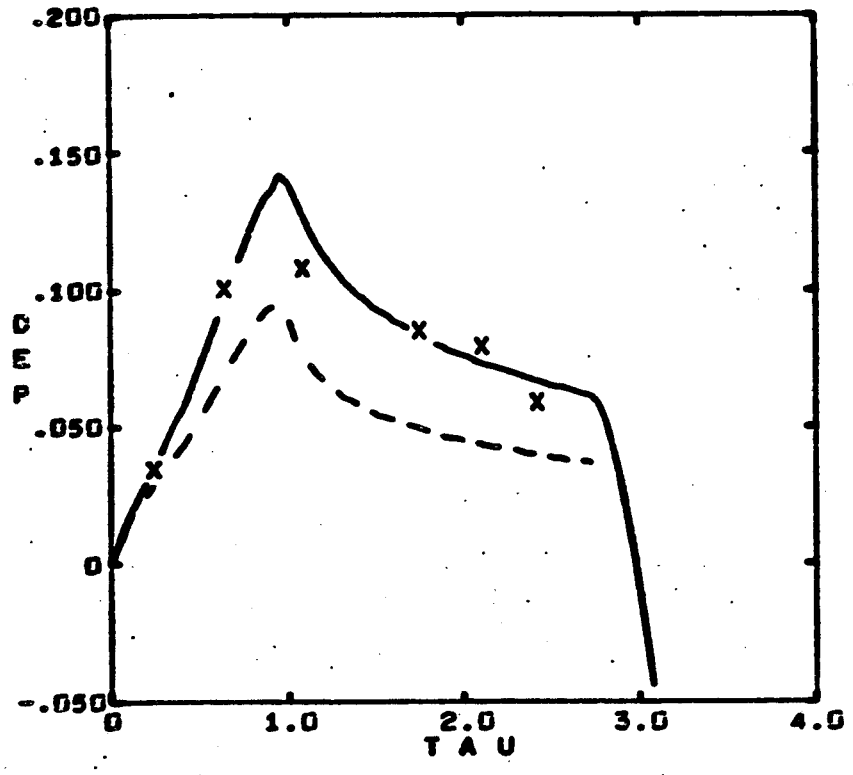
INITIAL TEMPERATURE 383.86
TAU-END OF TOTALITY 2.724

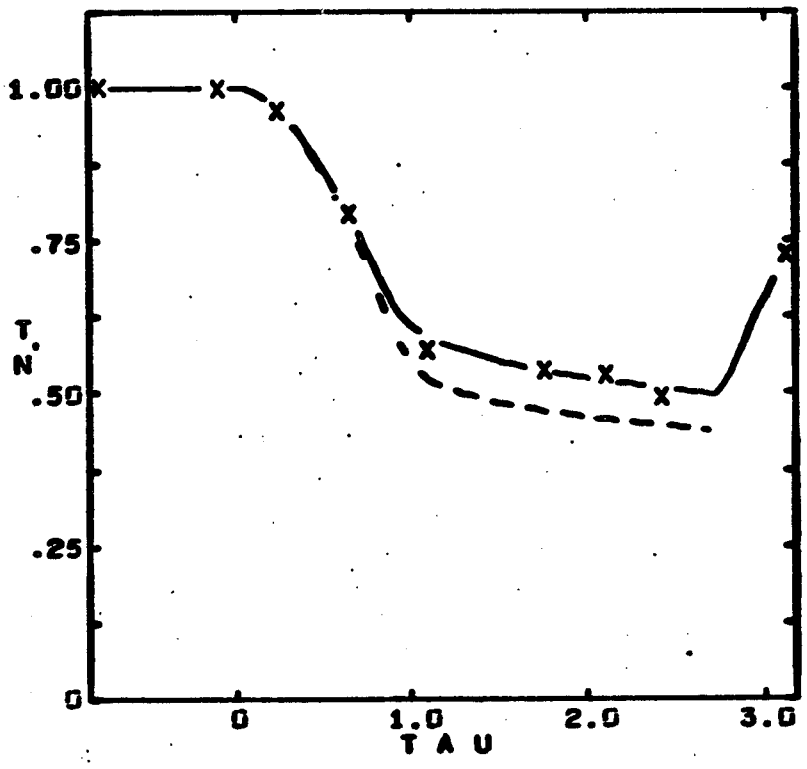
DIFFERENTIAL ENERGY DATA

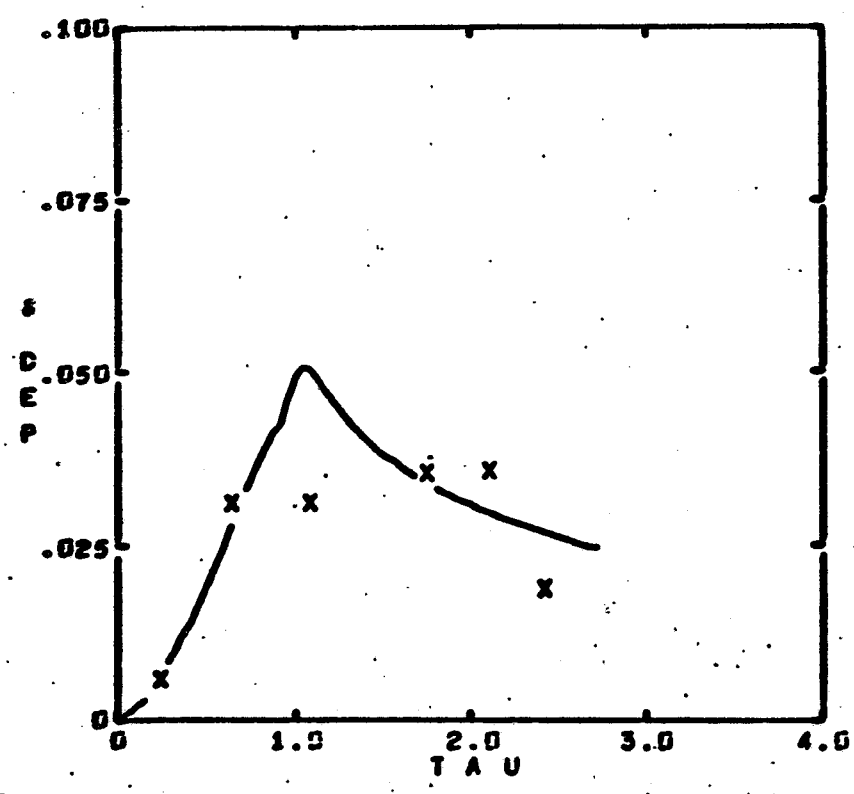
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0361	.0295	.0066
.50	.0735	.0540	.0195
.75	.1152	.0807	.0345
.93	.1430	.0984	.0446
1.0	.1385	.0889	.0496
1.5	.0931	.0550	.0381
2.0	.0759	.0452	.0307
2.5	.0654	.0392	.0262
3.0	.0576	.0348	.0228

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.780	385.30			385.30	1.004	.0151
9H	-0.097	383.68			383.68	1.000	-.0019
10H	0.241	369.99			369.99	0.964	.0345
11H	0.641	302.87	0.423	-.106	304.92	0.794	.1003
12H	1.081	217.29	0.195	+.698	219.99	0.573	.1079
13H	1.749	190.07	0.588	+.246	207.10	0.540	.0847
14H	2.102	199.63	0.237	+.568	203.81	0.531	.0795
15H	2.417	181.05	0.527	-.248	189.06	0.493	.0588
16H	3.119	279.85	0.000	+.178	279.65	0.729	-.0626







PHOTOGRAPH
NOT
AVAILABLE

151 (2F6) CARLINI G

LAMBDA=25.00 W BETA=32.60 N XI=-.3561 ETA=+.5387 L+FL CODE = 23553 ALBEDO =.0641

13M FLAT MOON DATA
FM=.04457 FM'=.04457

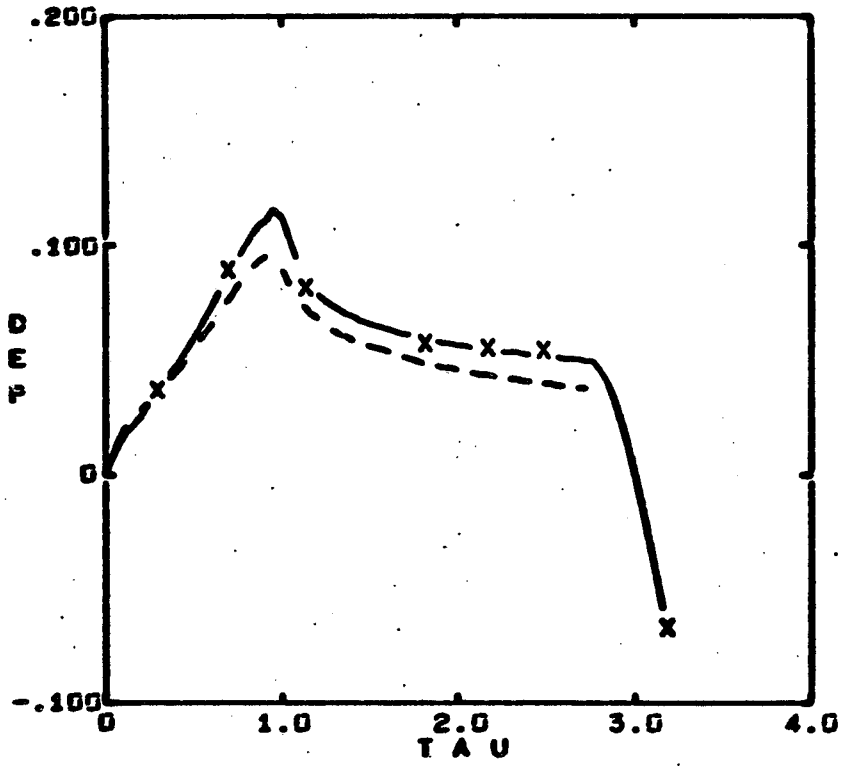
INITIAL TEMPERATURE 379.28
TAU-END OF TOTALITY 2.749

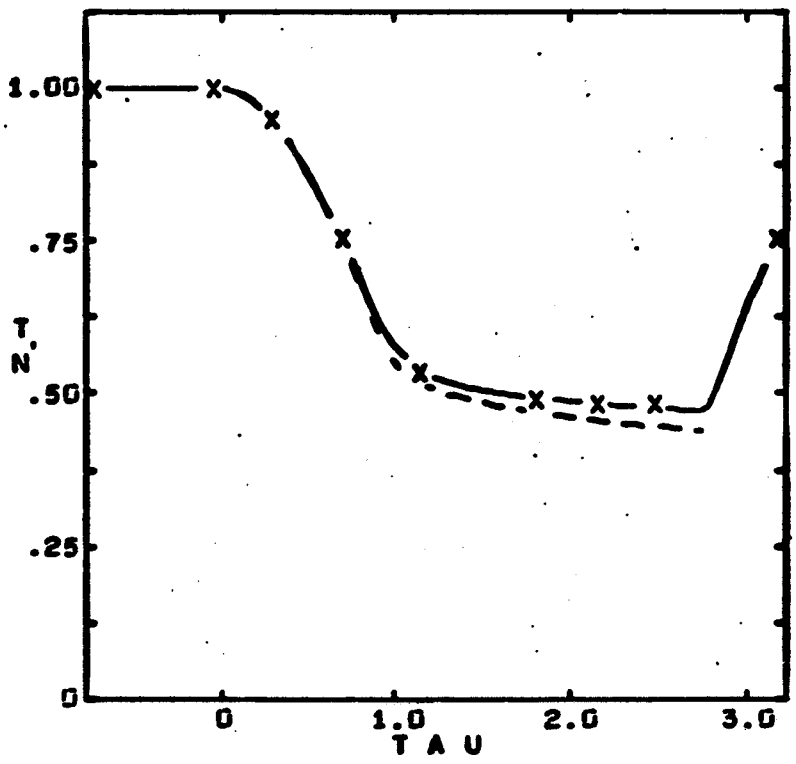
DIFFERENTIAL ENERGY DATA

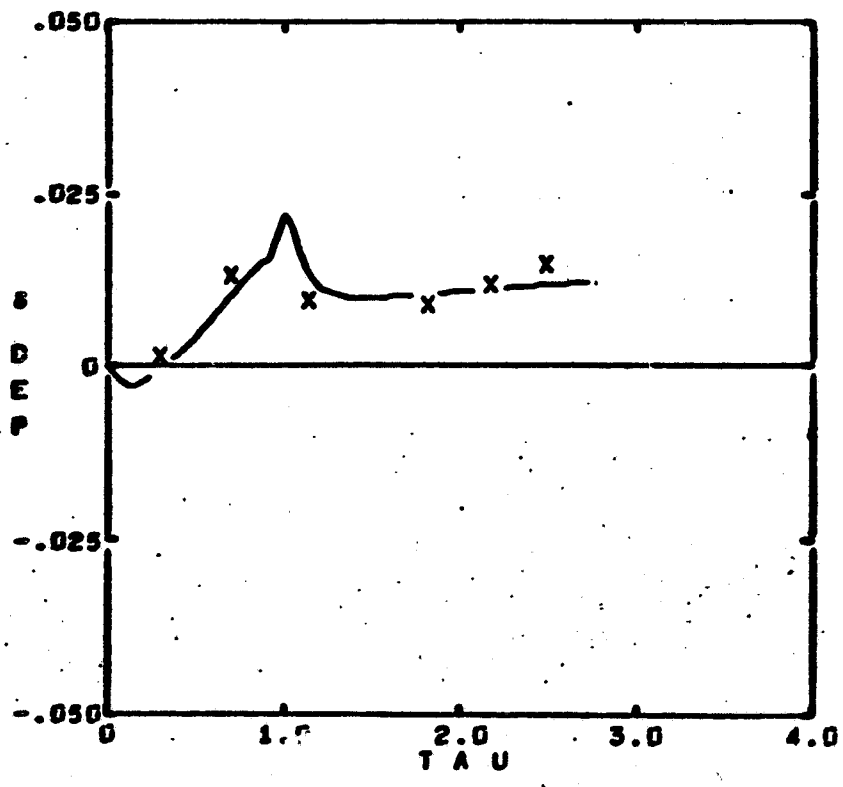
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0306	.0318	-.0012
.50	.0606	.0559	.0047
.75	.0940	.0821	.0119
.93	.1161	.0995	.0166
1.0	.1119	.0898	.0221
1.5	.0655	.0555	.0100
2.0	.0564	.0456	.0108
2.5	.0514	.0396	.0118
3.0	.0478	.0352	.0126

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8M	-0.734	380.04		380.04	1.002	.0081
9M	-0.047	379.23		379.23	1.000	-.0005
10M	0.293	359.28		359.28	0.947	.0370
11M	0.695	285.56	0.000 -.520	285.56	0.753	.0896
12M	1.135	199.99	0.490 -.248	202.79	0.535	.0817
13M	1.808	185.79	0.000 -.950	185.79	0.490	.0576
14M	2.161	180.22	0.429 -.899	184.01	0.485	.0554
15M	2.479	183.22	0.000 -.909	183.22	0.483	.0545
16M	3.179	286.65	0.000 +.381	286.65	0.756	-.0672







PHOTOGRAPH NOT AVAILABLE

152 (1E6) CASSINI A

LAMBDA= 4.77 E BETA=40.48 N XI=+.0632 ETA=+.6492 L+PL CODE = 10664 ALBEDO =.1210

13H FLAT MOON DATA
FM=.04276 FM'=.04713

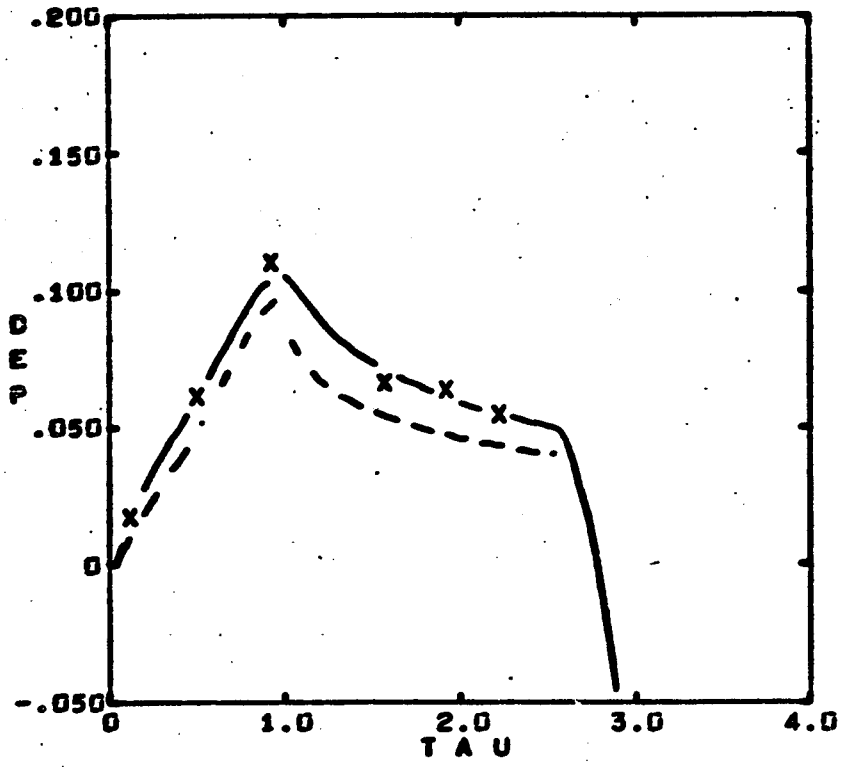
INITIAL TEMPERATURE 377.46
TAU-END OF TOTALITY 2.542

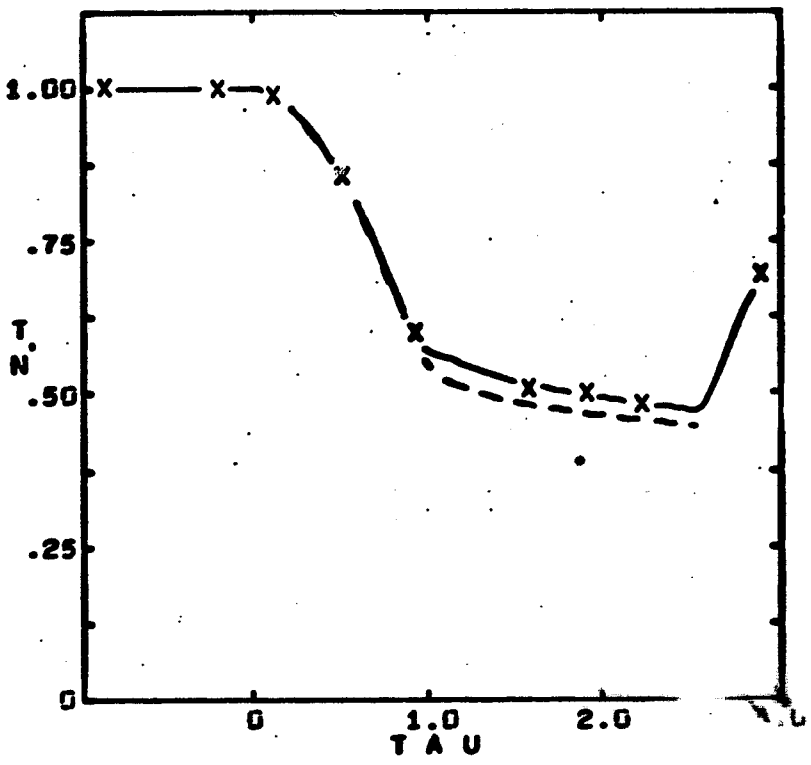
DIFFERENTIAL ENERGY DATA

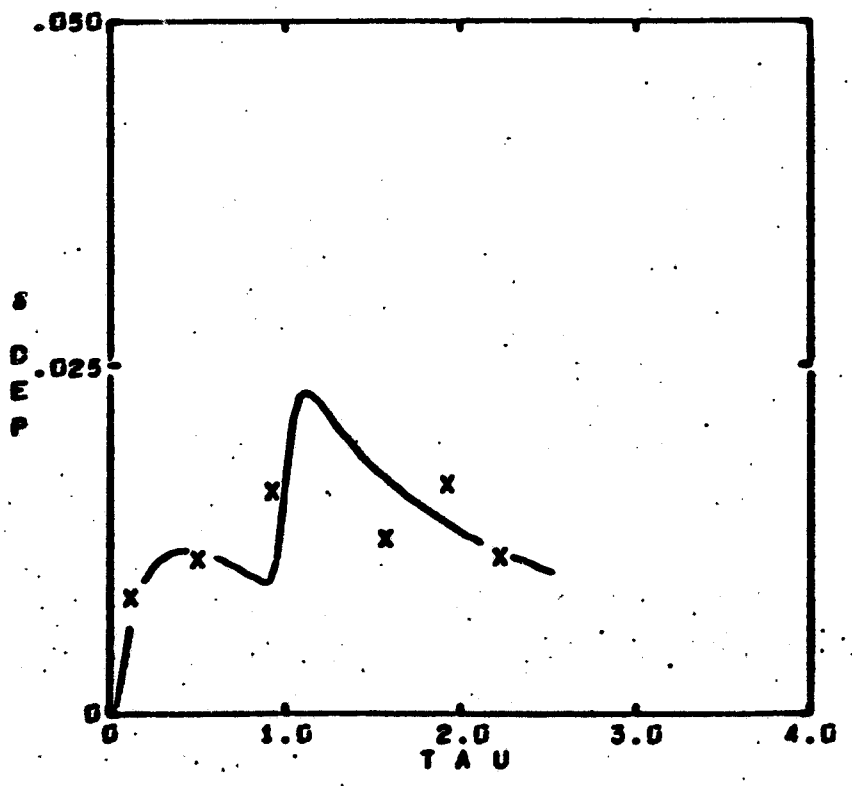
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0334	.0230	.0104
.50	.0614	.0497	.0117
.75	.0889	.0786	.0103
.93	.1069	.0979	.0090
1.0	.1058	.0888	.0170
1.5	.0736	.0559	.0177
2.0	.0593	.0463	.0130
2.5	.0504	.0403	.0101

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.869	379.02		379.02	1.004	.0166
9H	-0.211	377.08		377.08	0.999	-.0040
10H	0.117	373.94		373.94	0.991	.0178
11H	0.503	323.04	0.000 -.190	323.04	0.856	.0612
12H	0.927	224.95	0.329 -.226	226.81	0.601	.1099
13H	1.572	190.13	0.194 -.587	191.83	0.508	.0667
14H	1.914	185.15	0.366 +.464	189.84	0.503	.0640
15H	2.219	78.22	0.400 +.468	182.50	0.483	.0546
16H	2.903	262.79	0.000 +.842	262.79	0.696	-.0561







PHOTOGRAPH NOT AVAILABLE

153 (1E7) CASSINI C

LAMBDA= 7.80 E BETA=41.71 N. XI=+.1013 ETA=+.6654 L+PL CODE = 11606 ALBEDO =.1335

13H FLAT MOON DATA
FM=.04729 FM'=.05085

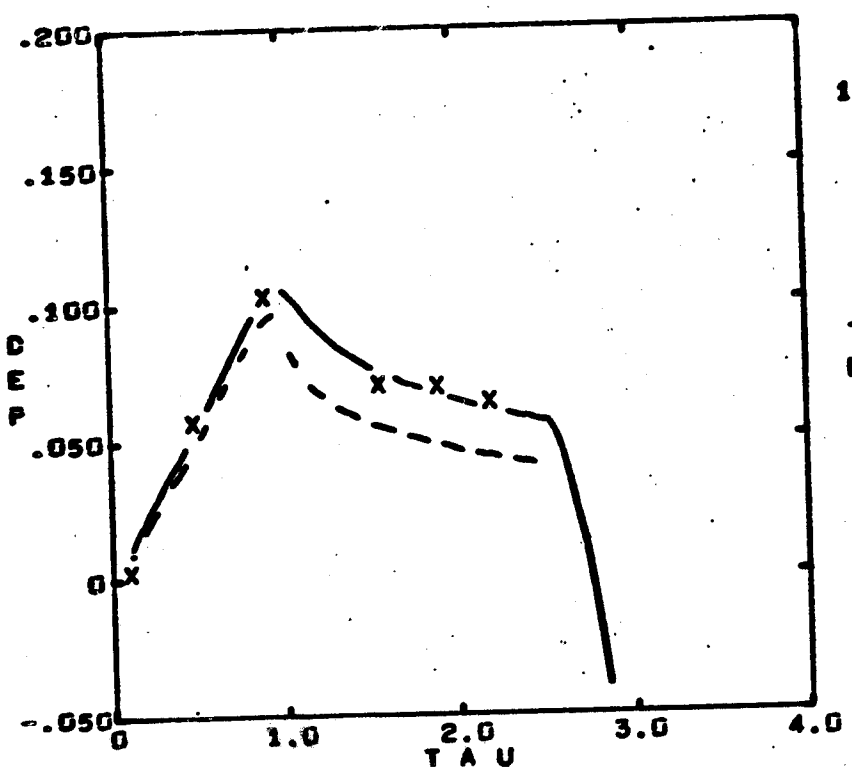
INITIAL TEMPERATURE 374.75
TAU-END OF TOTALITY 2.514

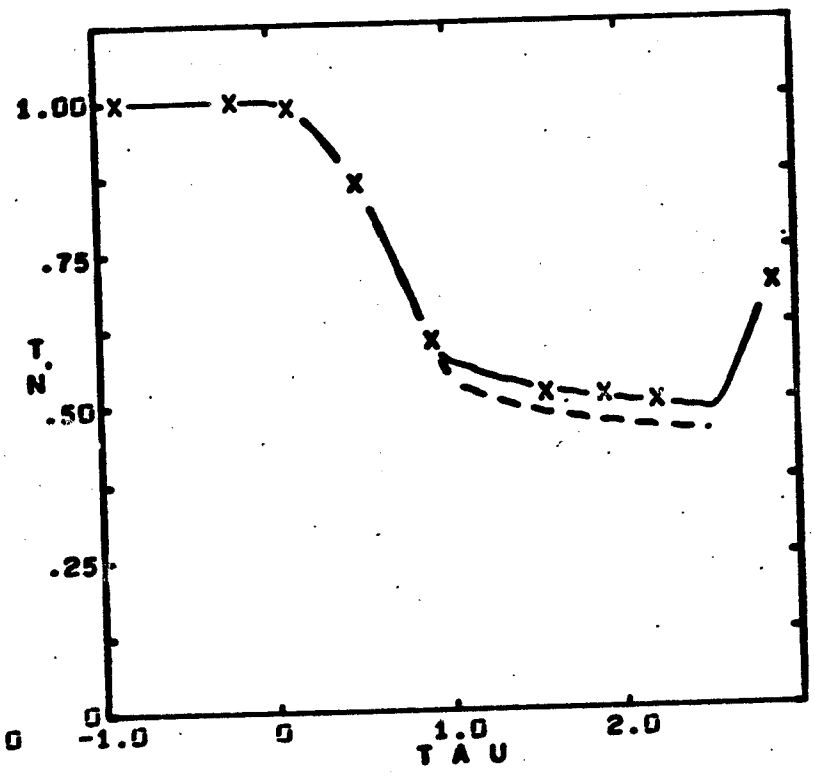
DIFFERENTIAL ENERGY DATA

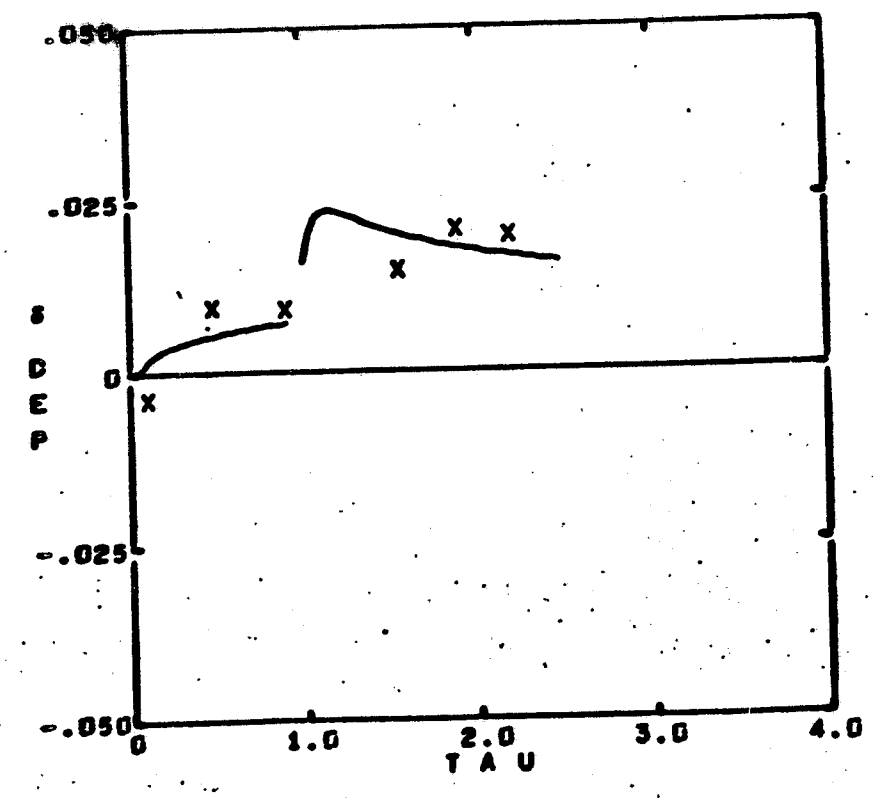
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0265	.0226	.0039
.50	.0553	.0498	.0055
.75	.0857	.0790	.0067
.93	.1059	.0987	.0072
1.0	.1053	.0895	.0158
1.5	.0770	.0565	.0205
2.0	.0644	.0469	.0175
2.3	.0566	.0408	.0158

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.880	375.43			375.43	1.002	.0073
9H	-0.224	374.58			374.58	1.000	-.0018
10H	0.101	370.95			370.95	0.990	.0030
11H	0.485	323.74			323.74	0.864	.0575
12H	0.906	225.15	0.353	-.013	226.69	0.605	.1032
13H	1.548	191.48	0.172	+.388	192.81	0.515	.0701
14H	1.888	179.69	0.585	+.293	192.34	0.513	.0694
15H	2.191	187.70	0.111	+.420	188.37	0.503	.0638
16H	2.872	259.57	0.000	+.438	259.57	0.693	-.0565







PHOTOGRAPH NOT AVAILABLE

154 (1E8) CASSINI K

LAMBDA= 4.08 E BETA=45.10 N XI=+.0502 ETA=+.7084 L+PL CODE = 10750 ALBEDO =.1399

13H FLAT MOON DATA
FM=.00706 FM'=.03162

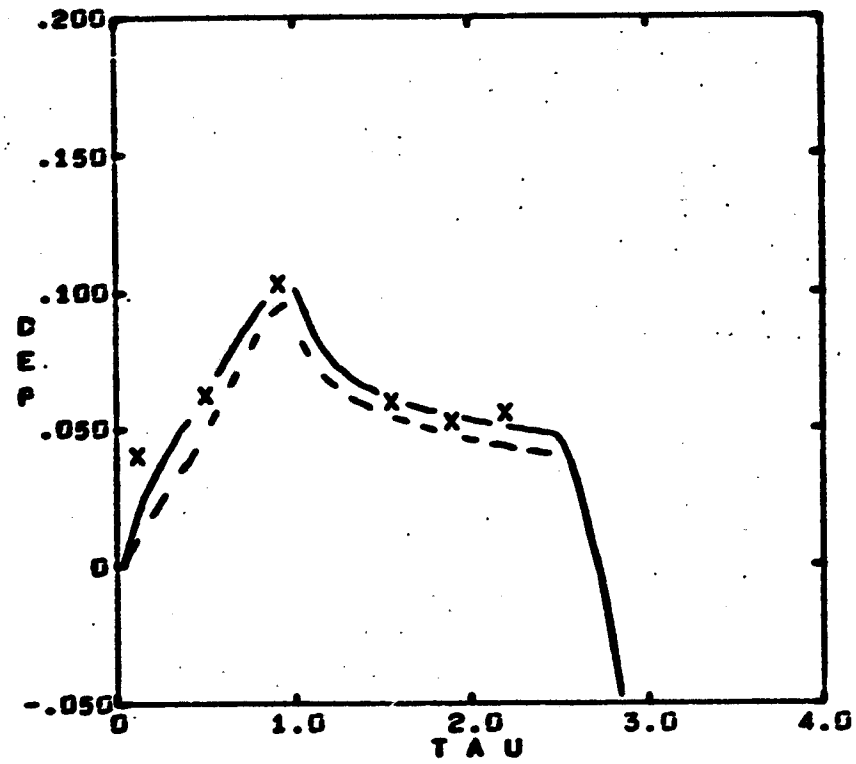
INITIAL TEMPERATURE 369.56
TAU-END OF TOTALITY 2.465

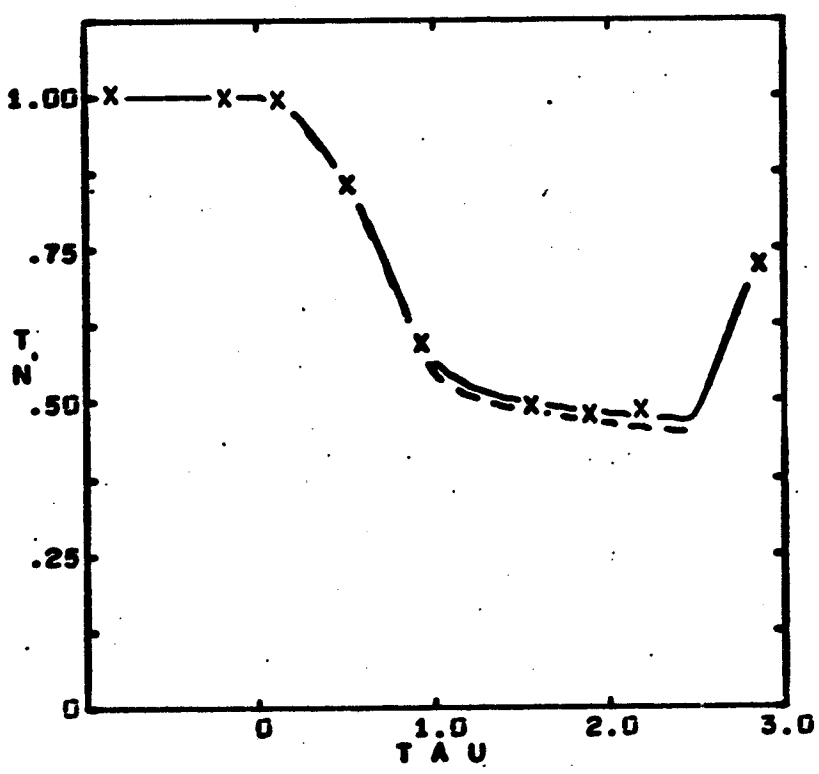
DIFFERENTIAL ENERGY DATA

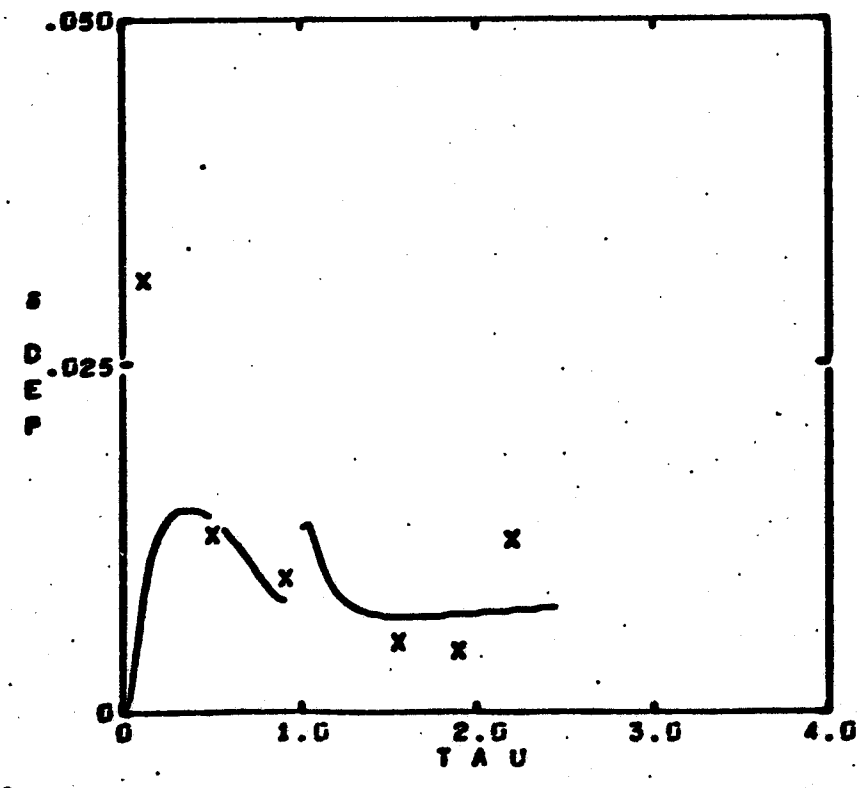
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0367	.0231	.0136
.50	.0635	.0497	.0138
.75	.0886	.0784	.0102
.93	.1048	.0977	.0071
1.0	.1017	.0886	.0131
1.5	.0626	.0558	.0068
2.0	.0532	.0462	.0070
2.5	.0477	.0401	.0076

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.853	371.84			371.84	1.006	.0250
9H	-0.205	369.01			369.01	0.999	-.0059
10H	0.117	368.21			368.21	0.996	.0407
11H	0.497	317.01			317.01	0.858	.0620
12H	0.916	219.72	0.405	-.848	221.22	0.599	.1031
13H	1.550	174.17	0.919	-.662	182.54	0.494	.0595
14H	1.886	172.87	0.491	+.094	176.73	0.478	.0523
15H	2.186	177.25	0.252	+.120	179.76	0.486	.0560
16H	2.858	267.39	0.000	+.794	267.39	0.724	-.0549







PHOTOGRAPH NOT AVAILABLE

155 (4C5) CATHARINA F

LAMBDA=23.09 E BETA=19.51 S XI=+.3696 ETA=-.3339 L+PL CODE = 43363 ALBEDO =.1399

13H FLAT MOON DATA
FM=.00628 FM'=.01401

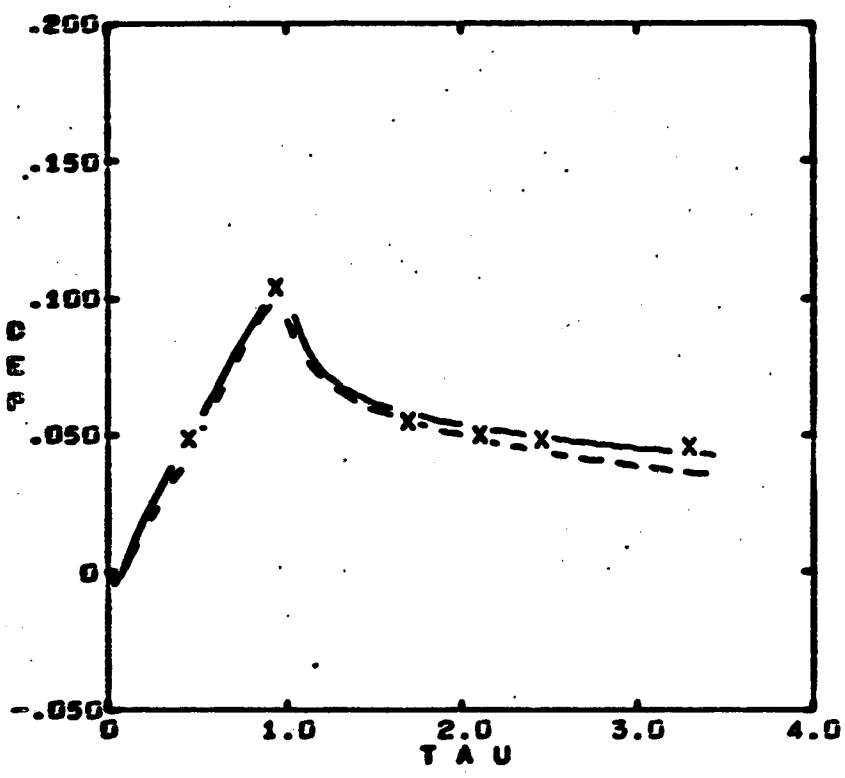
INITIAL TEMPERATURE 381.48
TAU-END OF TOTALITY 3.469

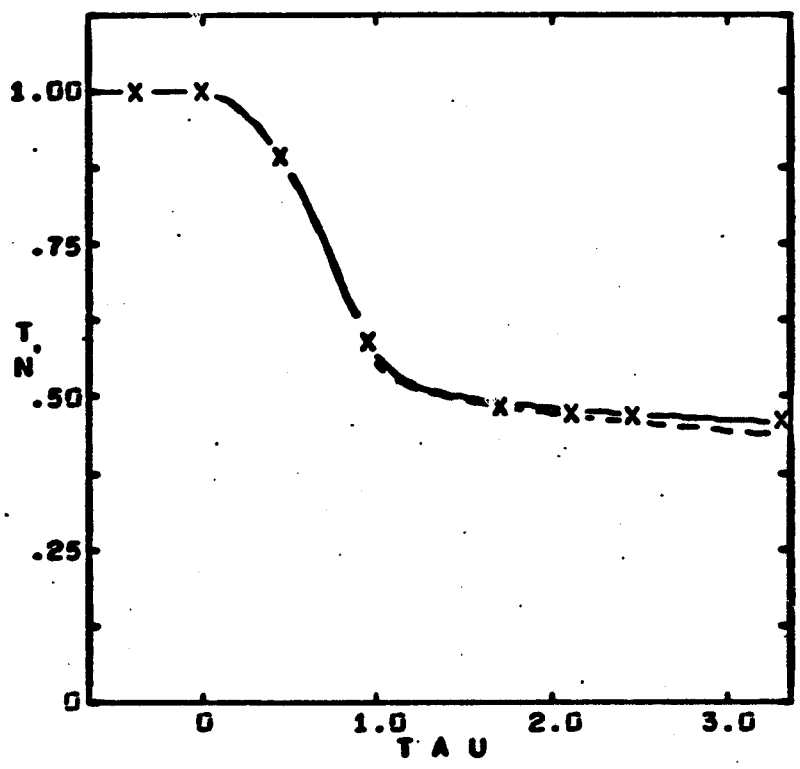
DIFFERENTIAL ENERGY DATA

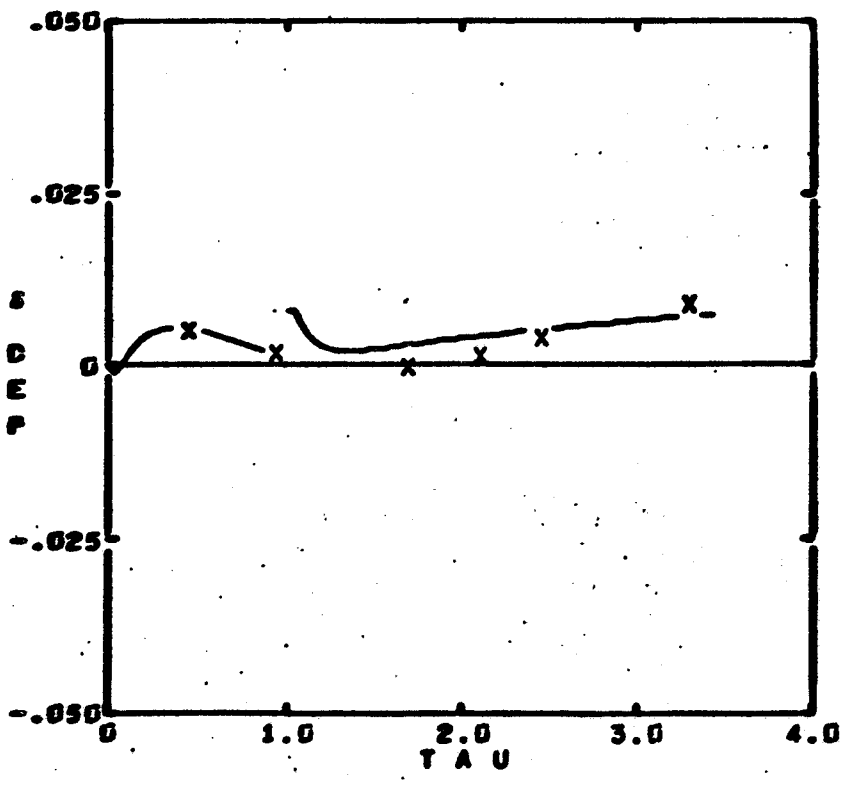
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0253	.0206	.0047
.50	.0549	.0498	.0051
.75	.0840	.0809	.0031
.93	.1031	.1017	.0014
1.0	.1005	.0926	.0079
1.5	.0619	.0596	.0023
2.0	.0538	.0499	.0039
2.5	.0490	.0437	.0053
3.0	.0455	.0390	.0065

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.163	387.63		387.63	1.016	.0660
9H	-0.388	381.47		381.47	1.000	-.0002
10H	-0.006	381.45		381.45	1.000	-.0003
11H	0.446	341.05		341.05	0.894	.0482
12H	0.942	225.12	0.000 -.824	225.12	0.590	.1036
13H	1.699	181.98	1.312 -.656	184.51	0.484	.0547
14H	2.095	179.64	1.417 -.743	180.21	0.472	.0498
15H	2.454	178.27	0.104 +.892	176.86	0.469	.0483
16H	3.300	170.31	0.753 +.563	176.40	0.462	.0457







PHOTOGRAPH NOT AVAILABLE

156 (1E9) CAUCHY

LAMBDA=38.68 E BETA= 9.59 N XI=+.6163 ETA=+.1666 L+PL CODE = 16116 ALBEDO =.0665

13H FLAT MOON DATA
FM=.06256 FM'=.06681

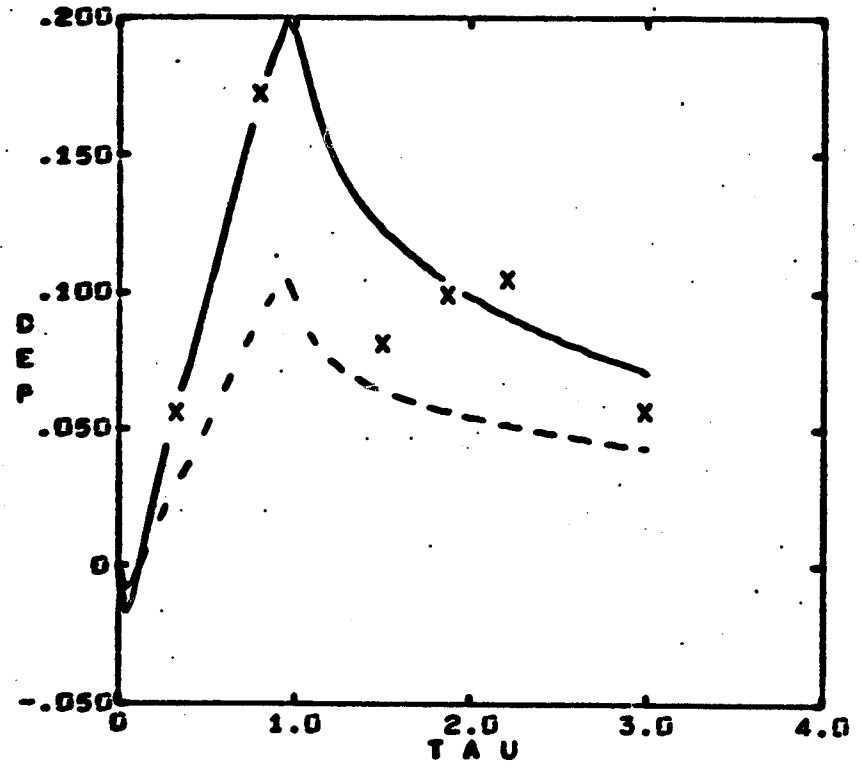
INITIAL TEMPERATURE 383.74
TAU-END OF TOTALITY 3.021

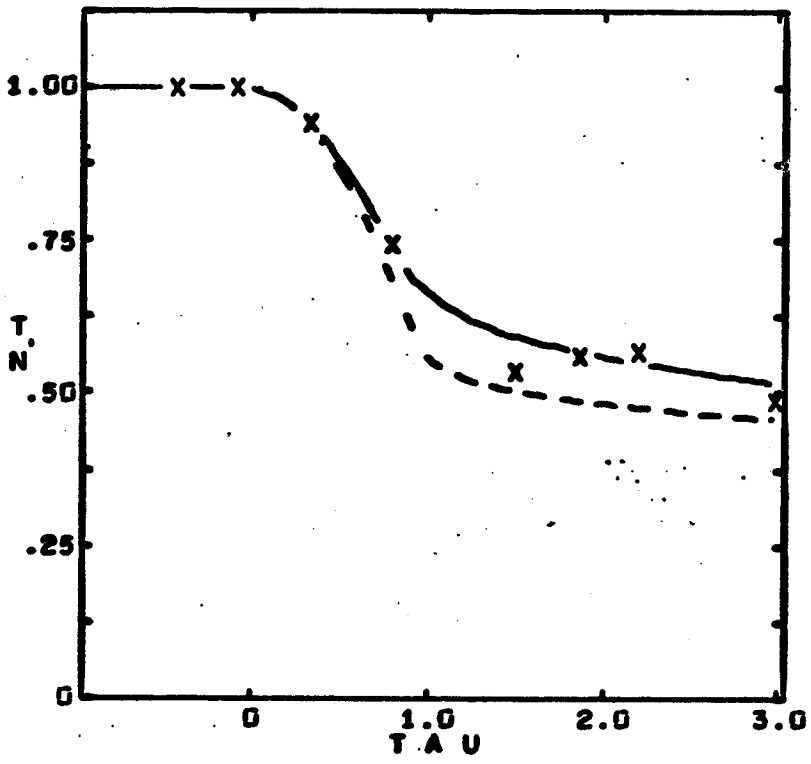
DIFFERENTIAL ENERGY DATA

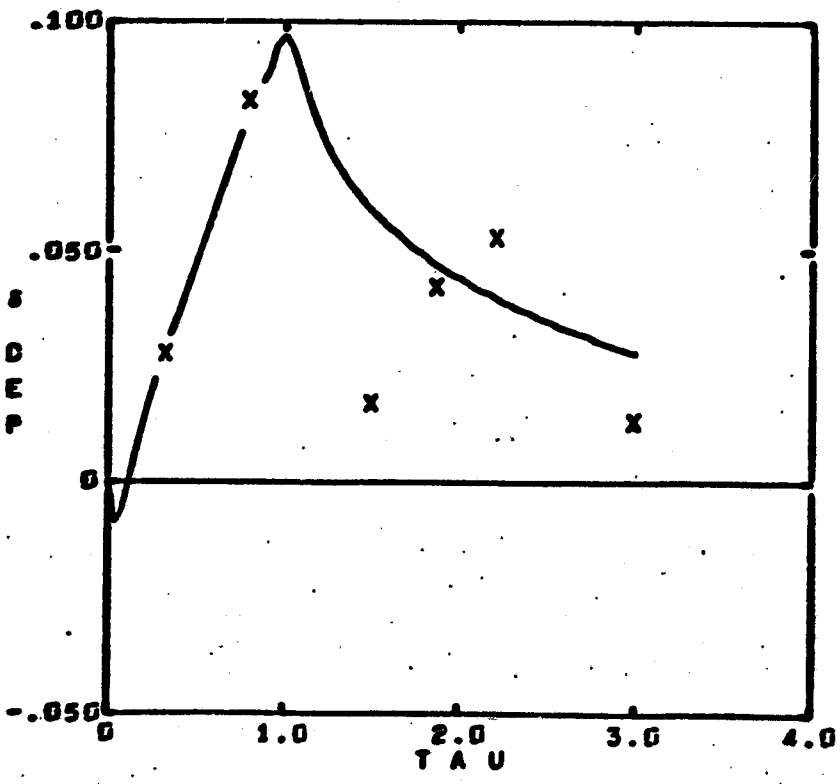
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0367	.0181	.0186
.50	.0980	.0506	.0474
.75	.1588	.0840	.0748
.93	.1991	.1064	.0927
1.0	.1942	.0974	.0968
1.3	.1232	.0641	.0591
2.0	.0984	.0543	.0441
2.5	.0826	.0480	.0346

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.168	385.26		385.26	1.004	.0160
9H	-0.448	384.11		384.11	1.001	.0039
10H	-0.092	383.54		383.54	0.999	-.0021
11H	0.329	361.40		361.40	0.942	.0560
12H	0.792	283.82	0.098 +.269	284.72	0.742	.1721
13H	1.496	202.73	0.398 +.764	204.83	0.534	.0812
14H	1.868	203.54	0.434 +.090	215.16	0.561	.0988
15H	2.201	210.66	0.304 +.923	218.32	0.569	.1048
16H	2.583	184.99	0.186 -.463	186.97	0.487	.0564







PHOTOGRAPH
NOT
AVAILABLE

LAMBDA=35.08 E BETA= 7.67 N XI=+.5696 ETA=+.1334 L+PL CODE = 15163 ALBEDO =.0593

13H FLAT MOON DATA
FM=.01844 FM'=.02751

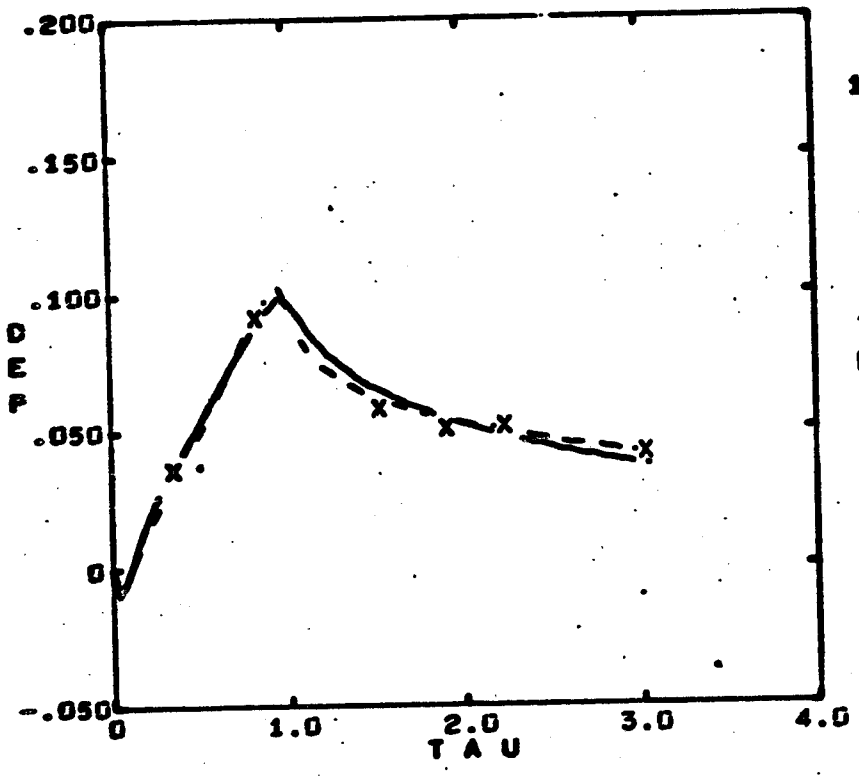
INITIAL TEMPERATURE 388.45
TAU-END OF TOTALITY 3.060

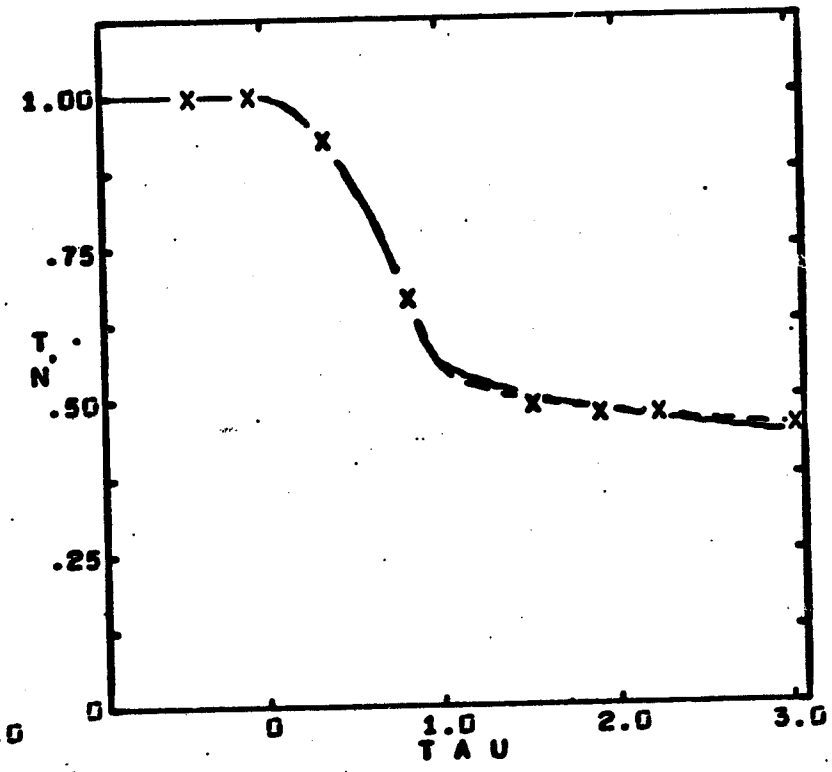
DIFFERENTIAL ENERGY DATA

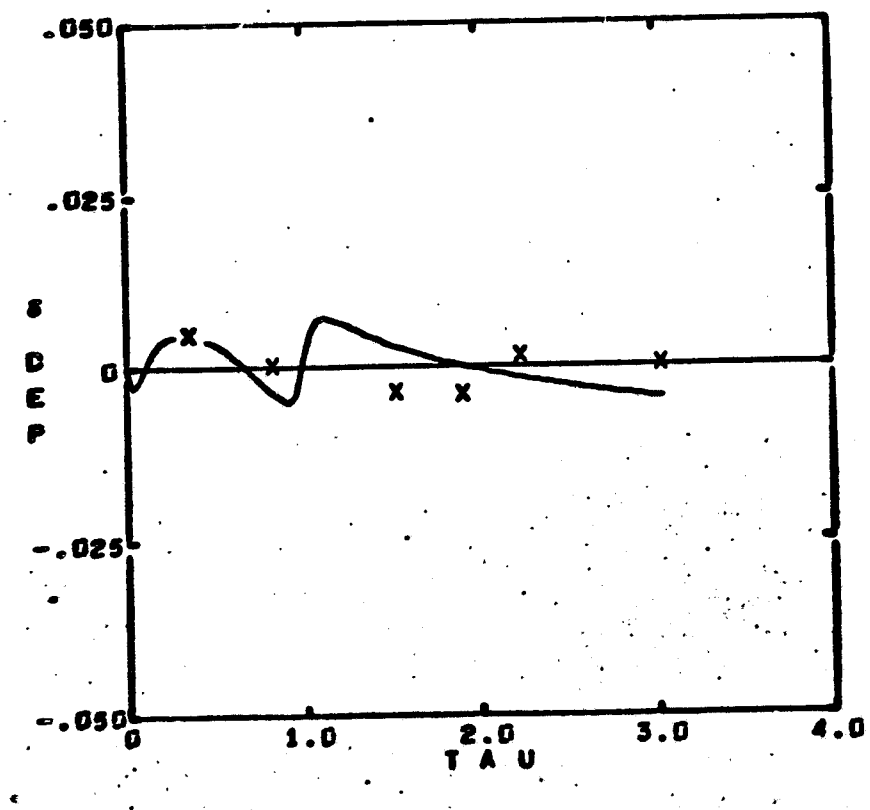
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0231	.0186	.0045
.50	.0535	.0501	.0034
.75	.0809	.0828	-.0019
.93	.0986	.1047	-.0061
1.0	.0973	.0956	.0017
1.5	.0659	.0626	.0033
2.0	.0525	.0529	-.0004
2.5	.0439	.0466	-.0027
3.0	.0374	.0418	-.0044

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.156	389.28		389.28	1.002	.0086
9H	-0.432	388.34		388.34	1.000	-.0011
10H	-0.073	388.41		388.41	1.000	-.0004
11H	0.351	360.36		360.36	0.928	.0361
12H	0.817	259.50	0.000 -.764	259.50	0.668	.0915
13H	1.526	187.16	0.595 +.259	191.01	0.492	.0585
14H	1.899	181.41	0.602 +.284	184.35	0.475	.0507
15H	2.235	183.36	0.351 +.913	184.99	0.476	.0514
16H	3.022	175.96	0.000 +.150	175.96	0.453	.0421







PHOTOGRAPH NOT AVAILABLE

158 (1F2) CAYLEY

LAMBDA=15.12 E BETA= 3.95 N XI=+.2602 ETA=+.0689 L+PL CODE = 12066 ALBEDO =.0990

13M FLAT MOON DATA
FM=.02005 FM'=.03705

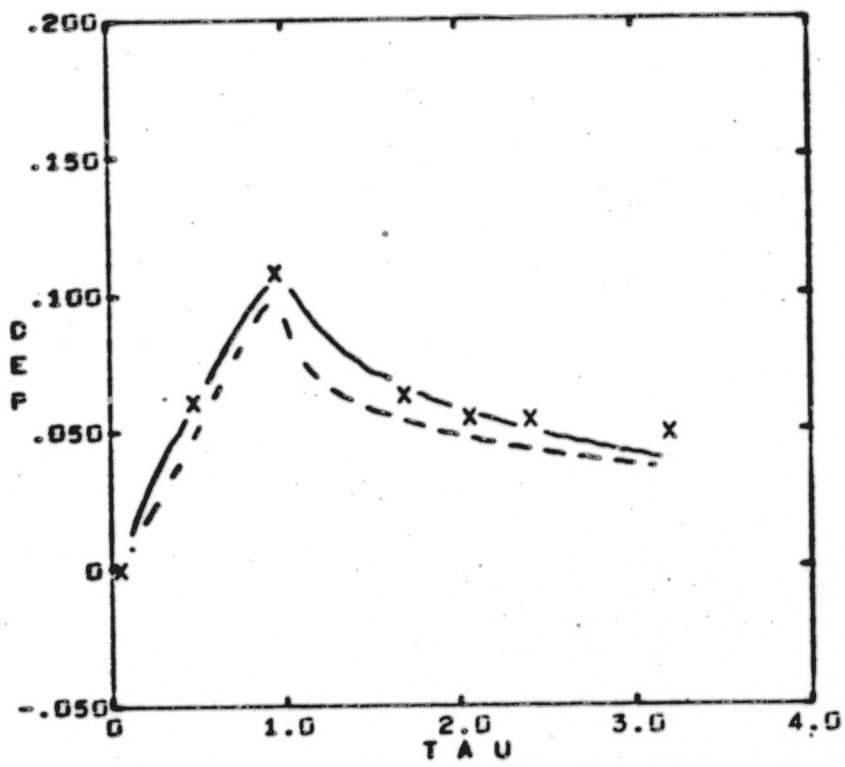
INITIAL TEMPERATURE 393.60
TAU-END OF TOTALITY 3.160

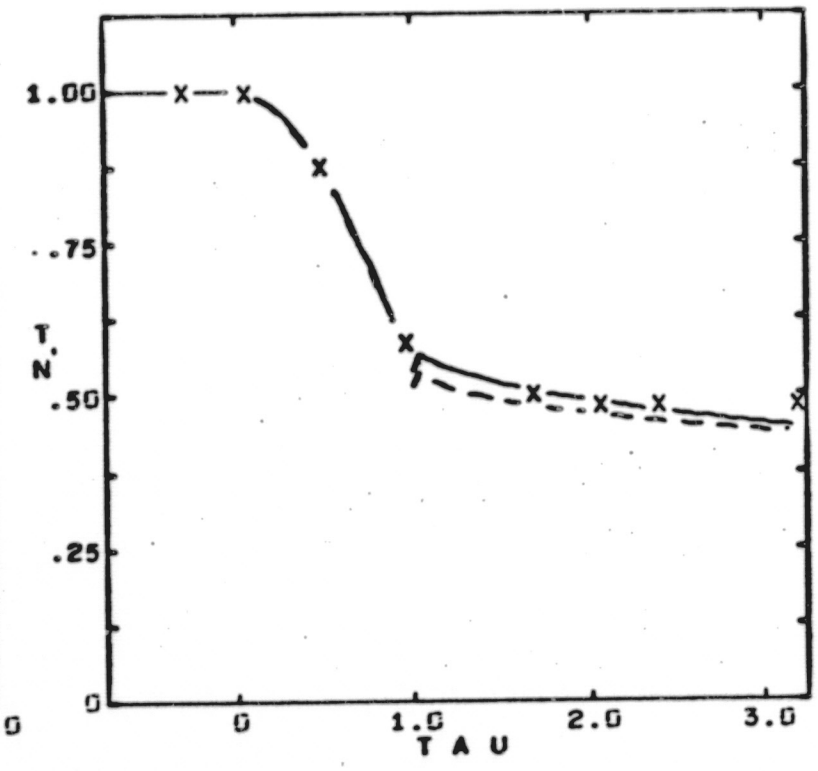
DIFFERENTIAL ENERGY DATA

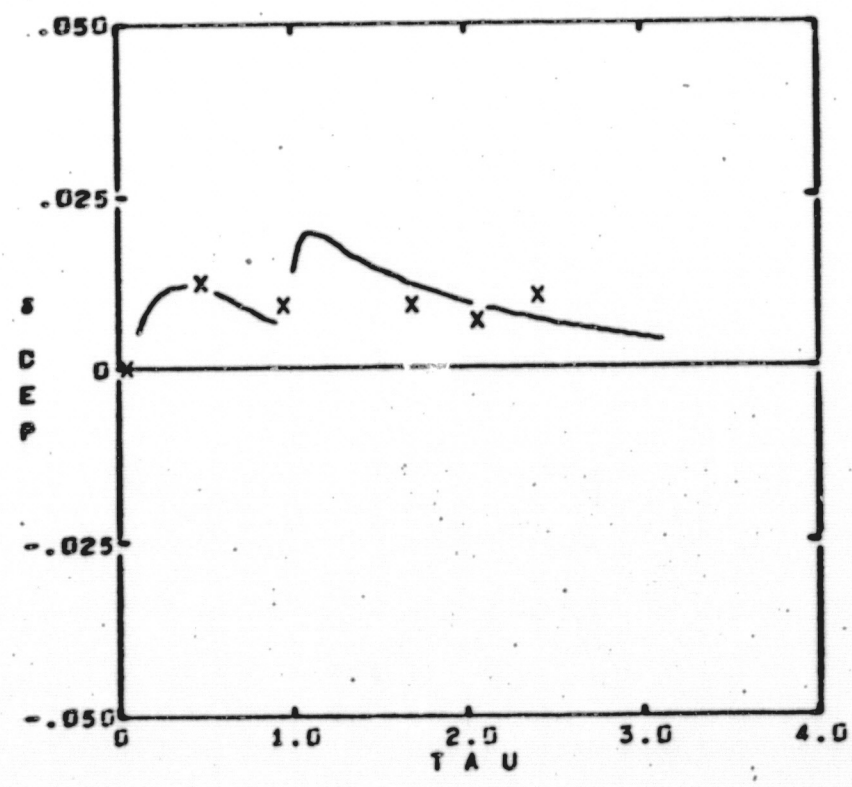
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0325	.0218	.0107
.50	.0616	.0500	.0116
.75	.0888	.0802	.0086
.93	.1064	.1005	.0059
1.0	.1053	.0913	.0140
1.5	.0724	.0581	.0143
2.0	.0579	.0484	.0095
2.5	.0488	.0422	.0066
3.0	.0420	.0376	.0044

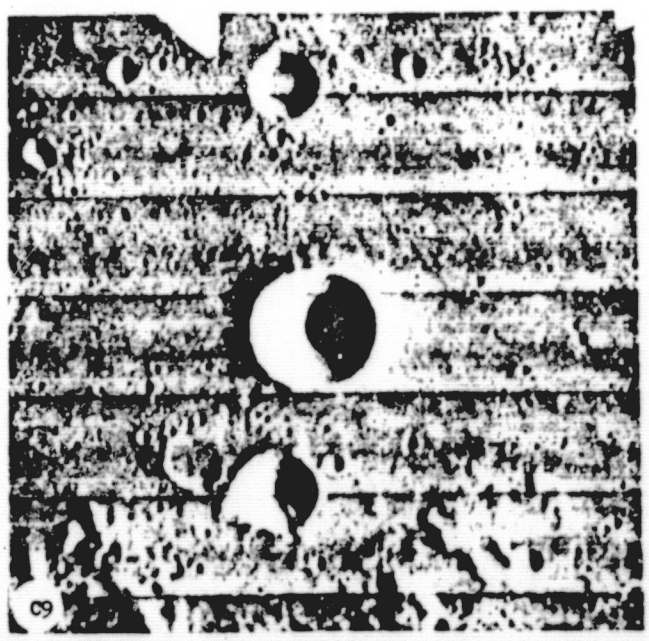
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.047	395.58		395.58	1.005	.0202
9H	-0.311	393.02		393.02	0.999	-.0059
10H	0.055	392.14		392.14	0.996	-.0003
11H	0.466	344.48		344.48	0.875	.0609
12H	0.960	228.63	0.374 +.884	230.24	0.585	.1080
13H	1.680	191.31	0.546 -.605	197.45	0.502	.0633
14H	2.059	185.41	0.719 -.988	190.30	0.483	.0546
15H	2.400	188.11	0.174 -.097	189.72	0.482	.0540
16H	3.190	183.32	0.740 +.925	190.59	0.484	.0492









259 (4C6) CENSORINUS

LAMBDA=32.68 E BETA= 0.40 S X1=+.5399 ETA=-.0009 L+PL CODE = 45030 ALBEDO =.1502

13H FLAT MOON DATA
FM=.07627 FM'=.09632

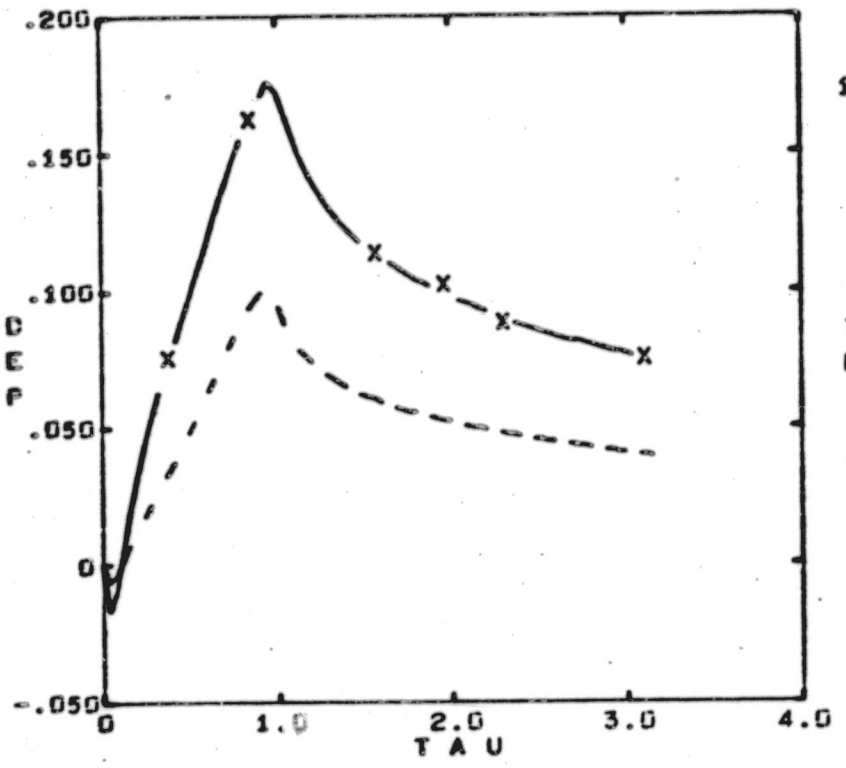
INITIAL TEMPERATURE 375.41
TAU-END OF TOTALITY 3.196

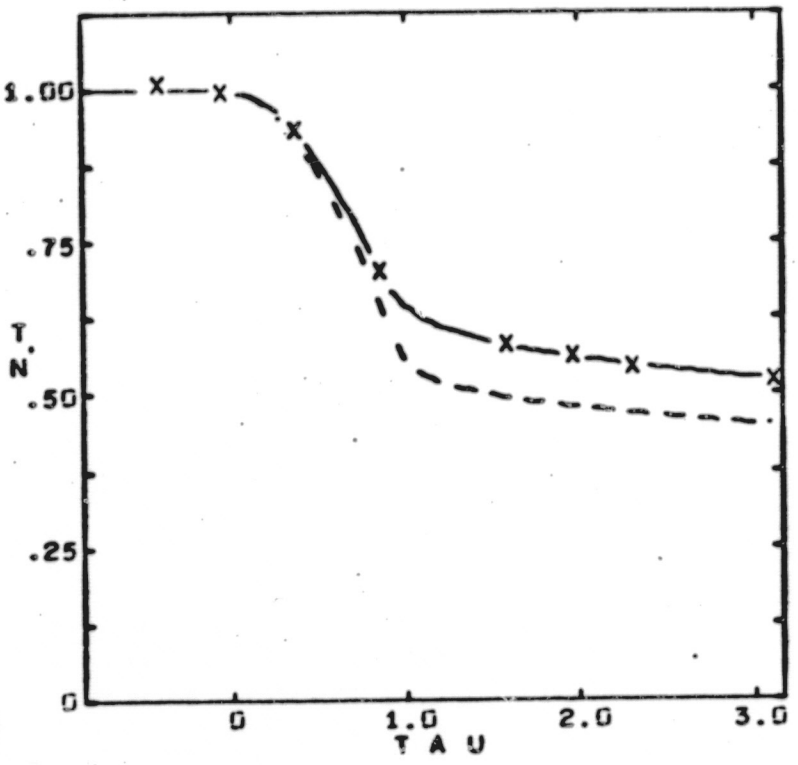
DIFFERENTIAL ENERGY DATA

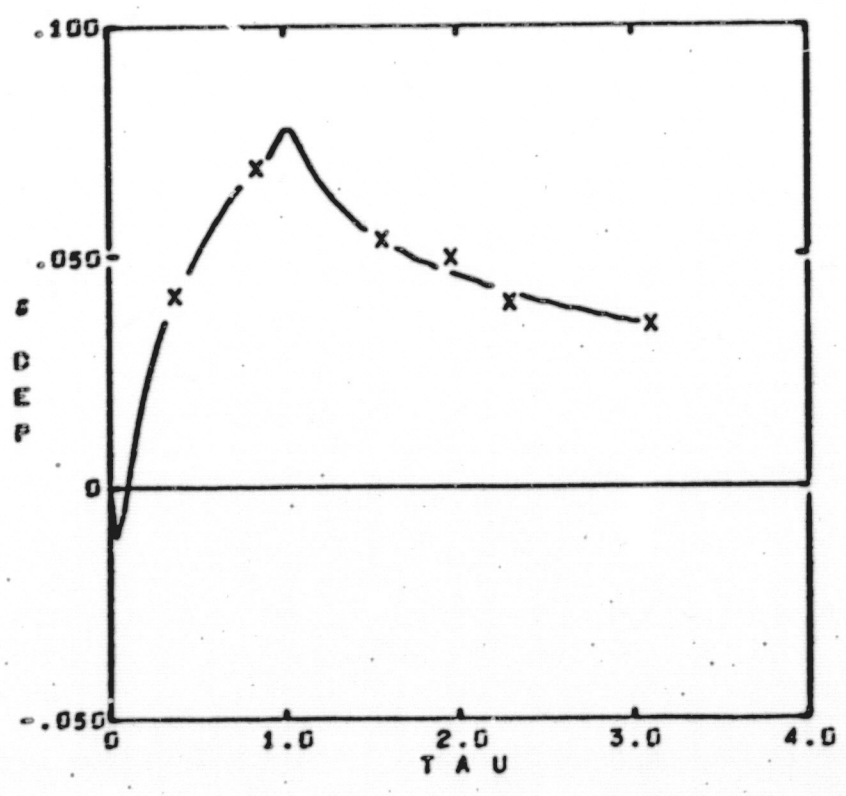
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0467	.0190	.0277
.50	.1006	.0500	.0506
.75	.1469	.0822	.0647
.93	.1762	.1038	.0724
1.0	.1724	.0948	.0776
1.5	.1168	.0618	.0550
2.0	.0977	.0521	.0456
2.5	.0857	.0459	.0398
3.0	.0767	.0411	.0356

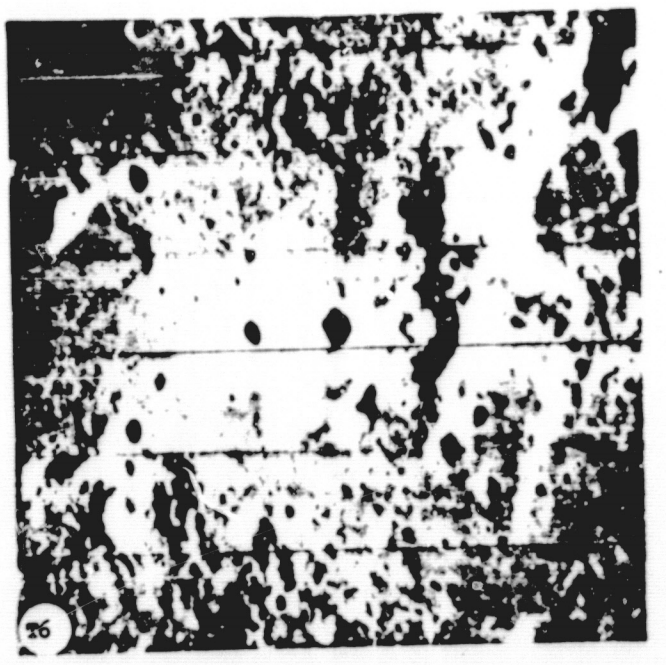
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.172	380.93		380.93	1.015	.0601
9H	-0.431	378.93		378.93	1.009	.0380
10H	-0.064	374.59		374.59	0.998	-.0088
11H	0.369	350.50		350.50	0.934	.0749
12H	0.845	263.34	0.203 +.225	264.47	0.704	.1624
13H	1.570	210.23	0.363 -.261	217.95	0.581	.1136
14H	1.952	209.67	0.199 +.923	212.29	0.565	.1023
15H	2.295	201.36	0.349 -.886	204.59	0.545	.0882
16H	3.102	188.35	0.620 +.961	196.74	0.524	.0754









160 (1F3) CEPHEUS A

LAMBDA=46.46 E BETA=41.03 N XI=+.5469 ETA=+.6564 L+PL CODE = 15645 ALBEDO =.1345

13H FLAT MOON DATA
FM=.02565 FM'=.11245

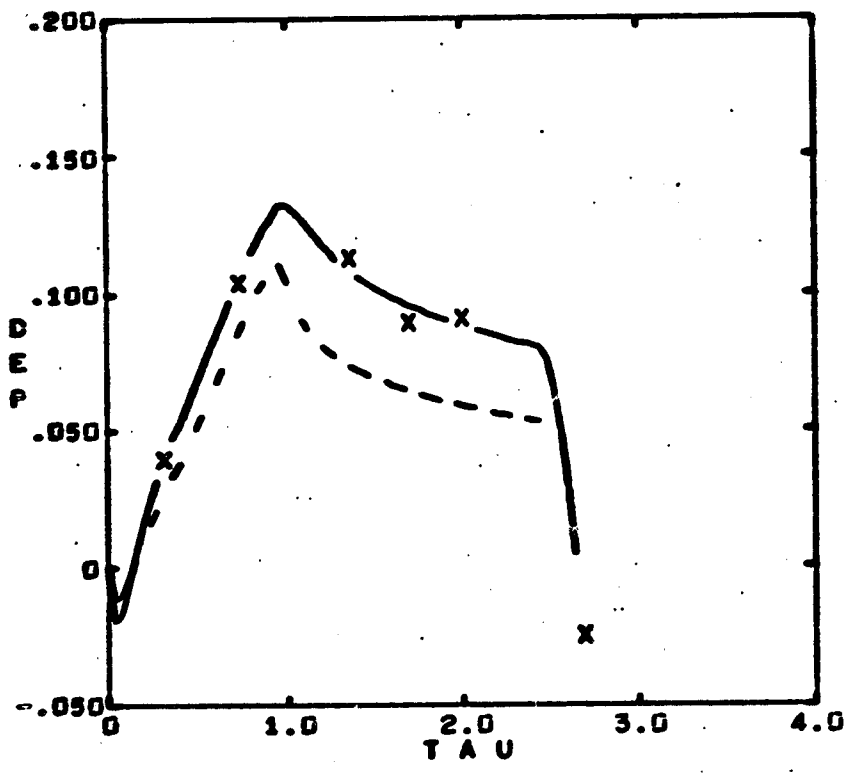
INITIAL TEMPERATURE 363.26
TAU-END OF TOTALITY 2.448

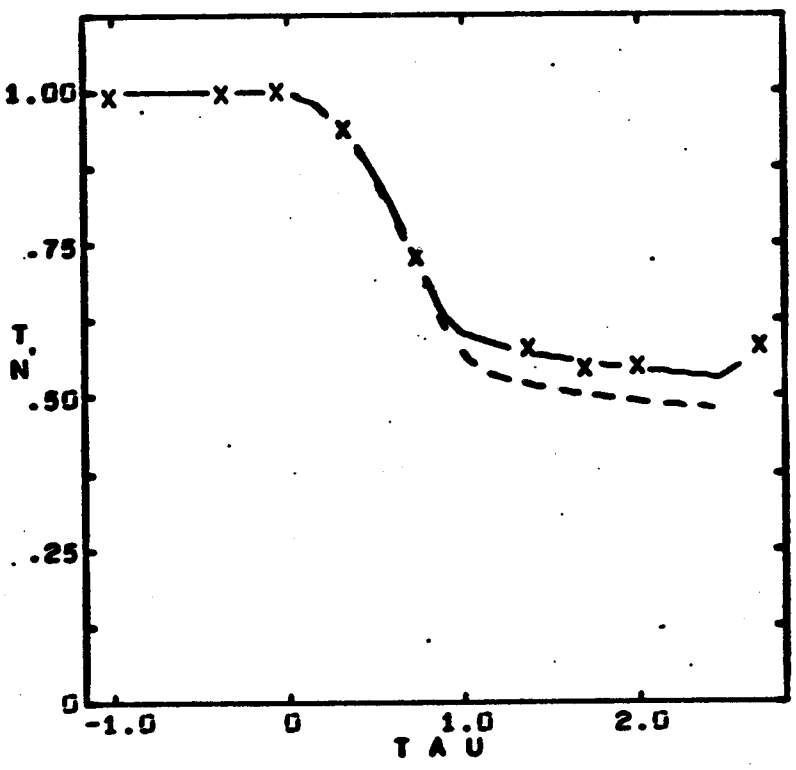
DIFFERENTIAL ENERGY DATA

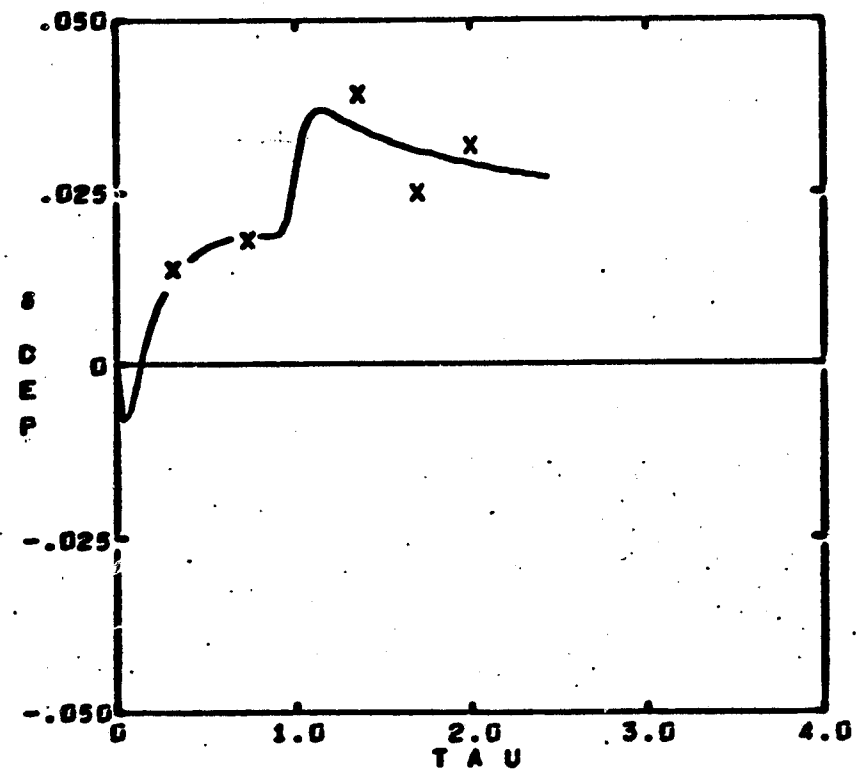
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0260	.0169	.0091
.50	.0696	.0525	.0171
.75	.1073	.0886	.0187
.93	.1314	.1127	.0187
1.0	.1320	.1036	.0284
1.5	.1020	.0691	.0329
2.0	.0881	.0590	.0291
2.5	.0792	.0524	.0268

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.034	360.92		360.92	0.994	-.0254
9H	-0.388	362.50		362.50	0.998	-.0083
10H	-0.067	363.54		363.54	1.001	.0031
11H	0.312	340.69		340.69	0.938	.0395
12H	0.729	264.81	0.244 +.066	265.12	0.730	.1037
13H	1.361	179.35	0.864 -.695	210.49	0.579	.1127
14H	1.696	173.69	0.786 +.353	198.66	0.547	.0894
15H	1.995	161.42	1.192 -.621	199.35	0.548	.0907
16H	2.682	211.71	0.000 -.629	211.71	0.583	-.0250







PHOTOGRAPH
NOT
AVAILABLE

161 (1F4) CHLADNI

LAMBDA= 1.14 E BETA= 3.99 N XI=+.0198 ETA=+.0696 L+PL CODE = 10016 ALBEDO =.1348

13H FLAT MOON DATA
FM=.00919 FM'=.02612

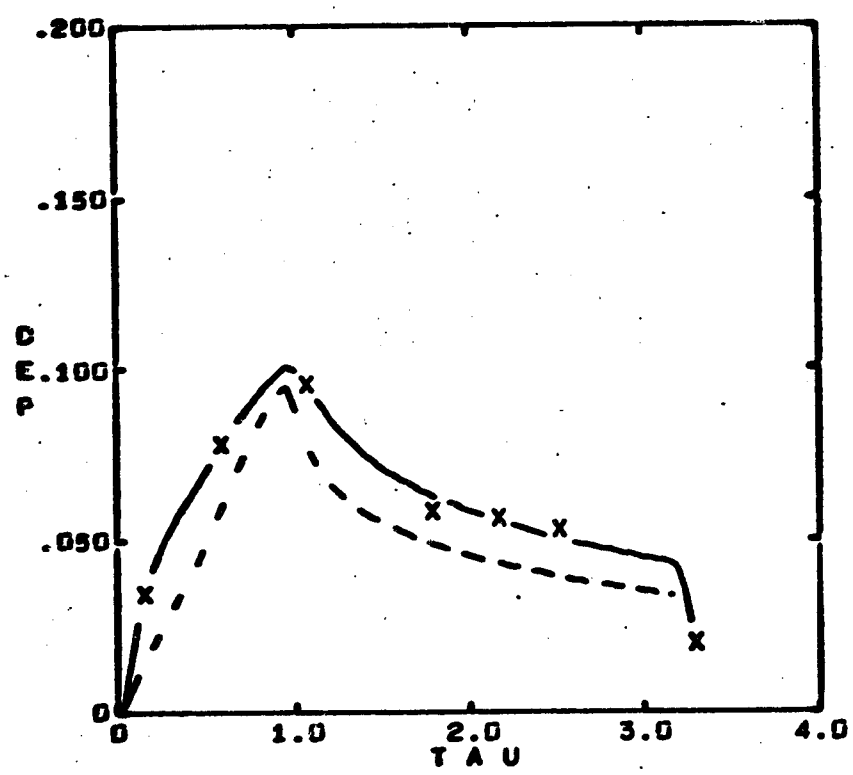
INITIAL TEMPERATURE 392.18
TAU-END OF TOTALITY 3.187

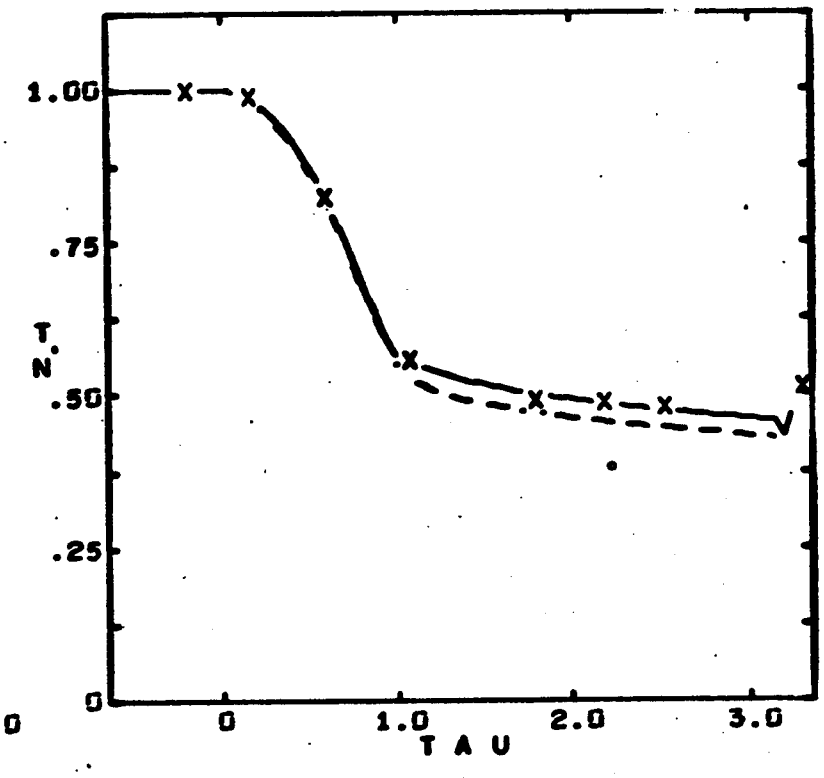
DIFFERENTIAL ENERGY DATA

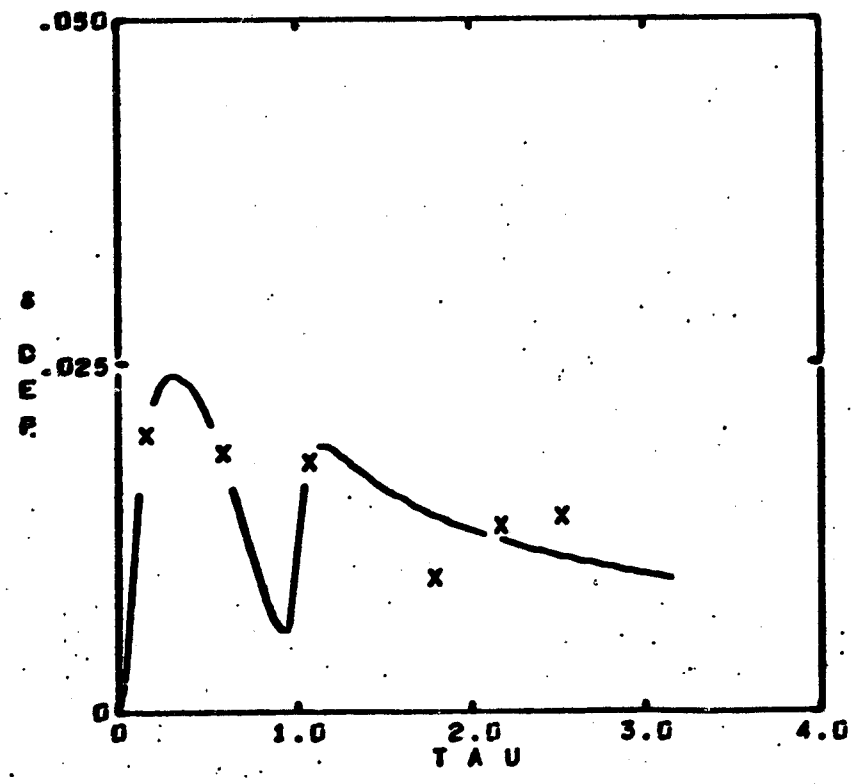
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0471	.0235	.0236
.50	.0706	.0496	.0210
.75	.0894	.0779	.0115
.93	.1008	.0969	.0039
1.0	.0998	.0878	.0120
1.5	.0711	.0552	.0159
2.0	.0586	.0456	.0130
2.5	.0508	.0396	.0112
3.0	.0451	.0352	.0099

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.951	393.95		393.95	1.005	.0182
9H	-0.210	391.79		391.79	0.999	-.0040
10H	0.156	387.59		387.59	0.988	.0344
11H	0.590	323.27	0.000 -.747	323.27	0.824	.0784
12H	1.065	215.28	0.290 +.226	218.16	0.556	.0958
13H	1.790	186.23	0.916 -.029	192.94	0.492	.0586
14H	2.170	190.99	0.064 -.084	191.35	0.488	.0567
15H	2.513	187.94	0.089 +.082	188.55	0.481	.0534
16H	3.297	197.16	0.518 +.845	200.38	0.511	.0203







PHOTOGRAPH NOT AVAILABLE

162 (3E2) CICHUS B

LAMBDA=19.30 W BETA=33.17 S XI=-.2767 ETA=-.5471 L+PL CODE = 32574 ALBEDO =.1870

13H FLAT MOON DATA
FM=.01469 FM'=.01951

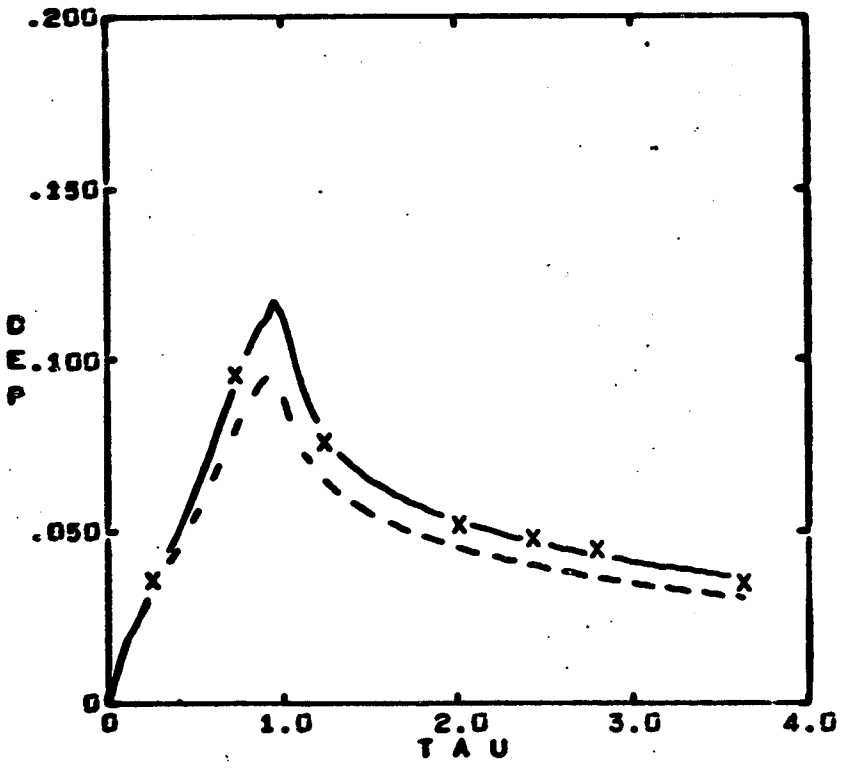
INITIAL TEMPERATURE 372.13
TAU-END OF TOTALITY 3.642

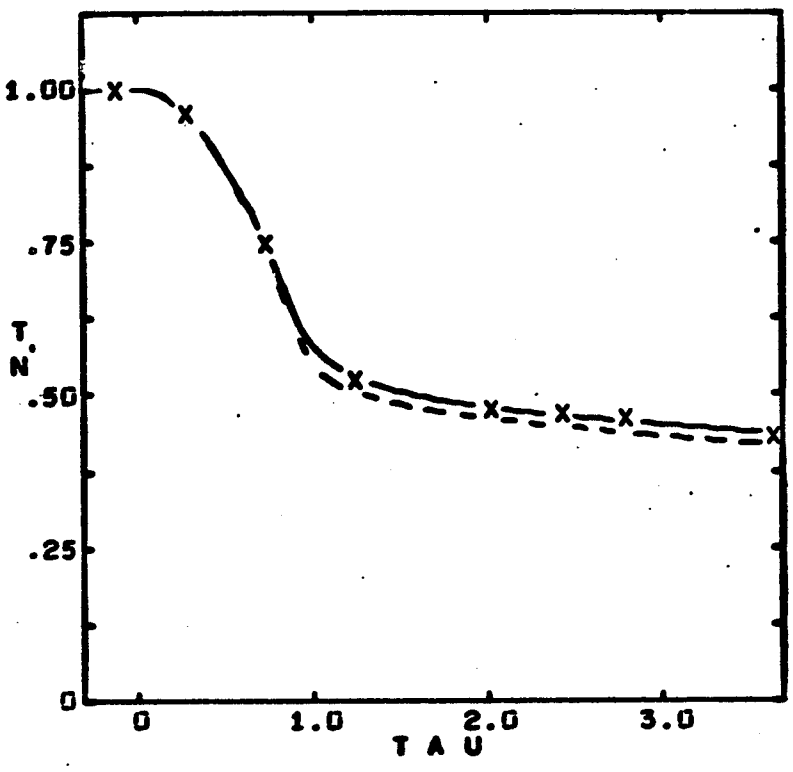
DIFFERENTIAL ENERGY DATA

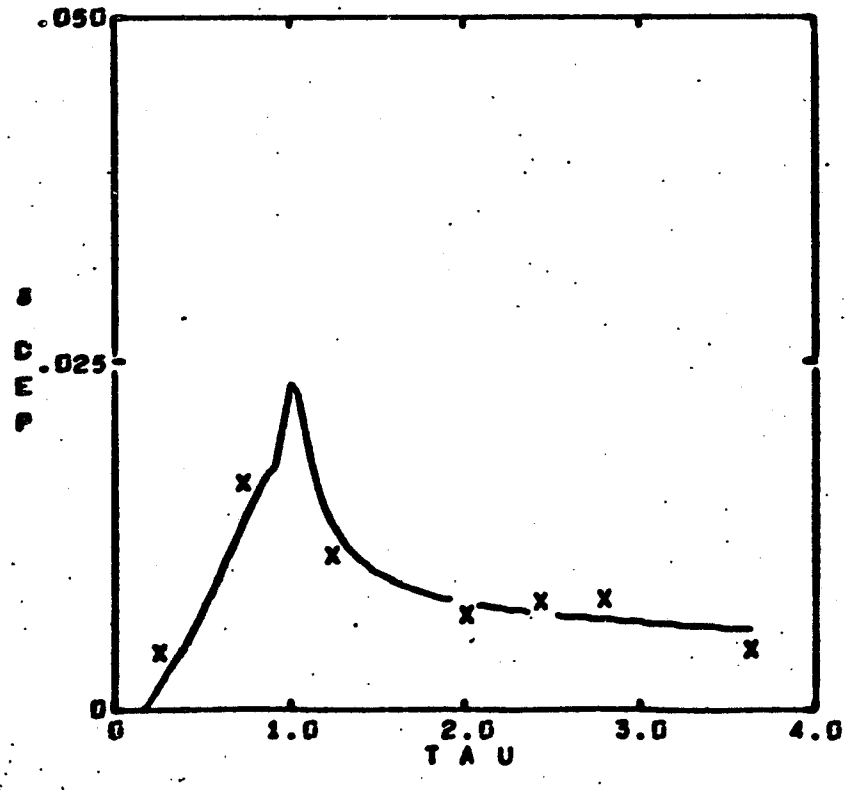
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0316	.0303	.0013
.50	.0618	.0547	.0071
.75	.0952	.0813	.0139
.93	.1174	.0989	.0185
1.0	.1128	.0894	.0234
1.5	.0651	.0552	.0099
2.0	.0531	.0454	.0077
2.5	.0462	.0394	.0068
3.0	.0413	.0350	.0063

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.922	374.09			374.09	1.005	.0211
9H	-0.125	371.87			371.87	0.999	-.0028
10H	0.266	357.66			357.66	0.961	.0359
11H	0.729	277.91	0.000	-.861	277.91	0.747	.0955
12H	1.238	195.25	0.133	-.490	195.51	0.525	.0762
13H	2.015	175.80	0.484	+.410	177.72	0.478	.0520
14H	2.420	173.43	0.099	+.732	174.17	0.468	.0480
15H	2.790	168.27	0.532	-.895	171.07	0.460	.0447
16H	3.635	161.01	0.000	+.013	161.01	0.433	.0350







PHOTOGRAPH NOT AVAILABLE

163 (3E3) CICHUS C

LAMBDA=21.82 W BETA=33.56 S XI=-.3097 ETA=-.5528 L↔PL CODE = 33505 ALBEDO =.1524

13M FLAT MOON DATA
FM=.01270 FM'=.02690

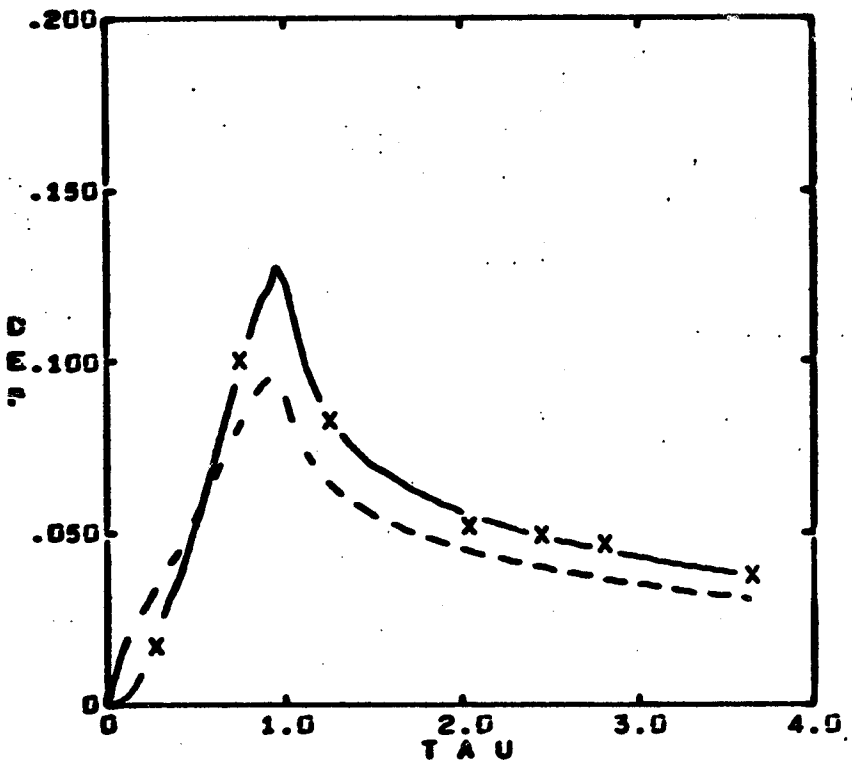
INITIAL TEMPERATURE 376.03
TAU-END OF TOTALITY 3.647

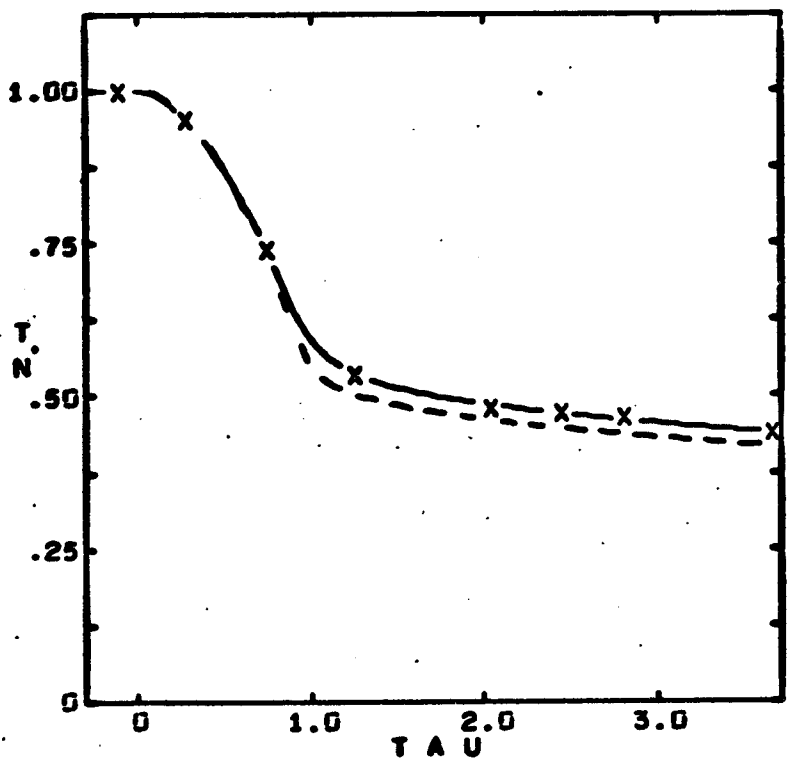
DIFFERENTIAL ENERGY DATA

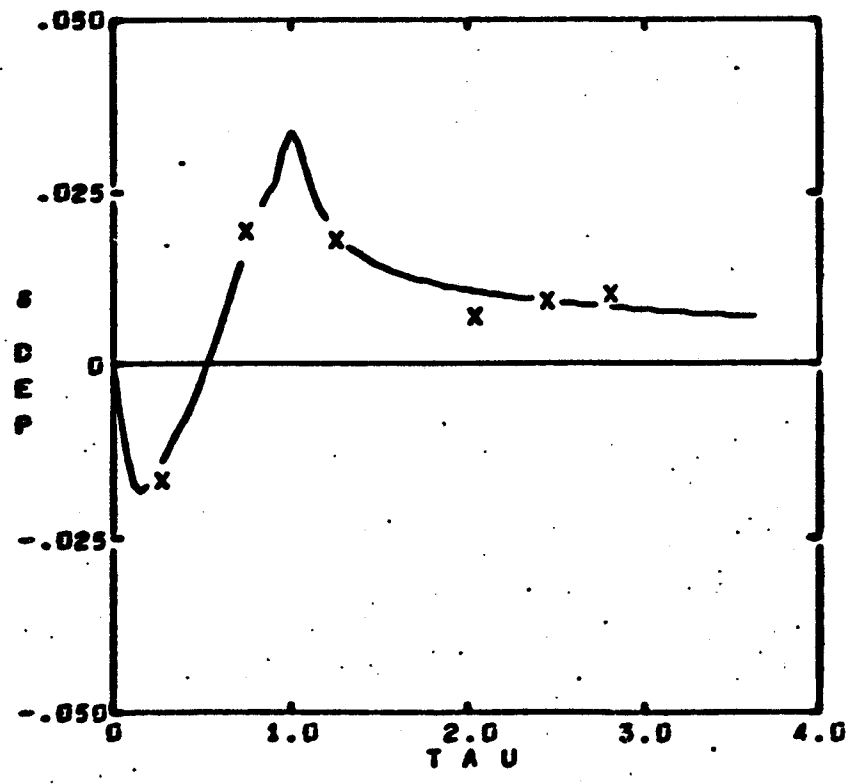
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0154	.0310	-.0156
.50	.0539	.0552	-.0013
.75	.0985	.0817	.0168
.93	.1284	.0992	.0292
1.0	.1233	.0896	.0337
1.5	.0697	.0554	.0143
2.0	.0562	.0455	.0107
2.5	.0485	.0394	.0091
3.0	.0430	.0351	.0079

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8M	-0.909	375.96		375.96	1.000	-.0007
9M	-0.110	376.04		376.04	1.000	.0001
10M	0.281	357.65		357.65	0.951	.0171
11M	0.744	276.30	0.299 -.545	277.85	0.739	.1004
12M	1.253	199.89	0.253 +.868	201.57	0.536	.0826
13M	2.031	173.99	0.529 +.440	179.70	0.478	.0522
14M	2.436	174.33	0.229 -.737	177.33	0.472	.0495
15M	2.806	171.79	0.404 -.759	175.05	0.466	.0470
16M	3.650	165.48	0.000 -.424	165.46	0.440	.0374







PHOTOGRAPH NOT AVAILABLE

164 (1F5) CONON

LAMBDA= 1.98 E BETA=21.67 N XI=+.0321 ETA=+.3692 L+PL CODE = 10336 ALBEDO =.1270

13H FLAT MOON DATA
FM=.02091 FM'=.02303

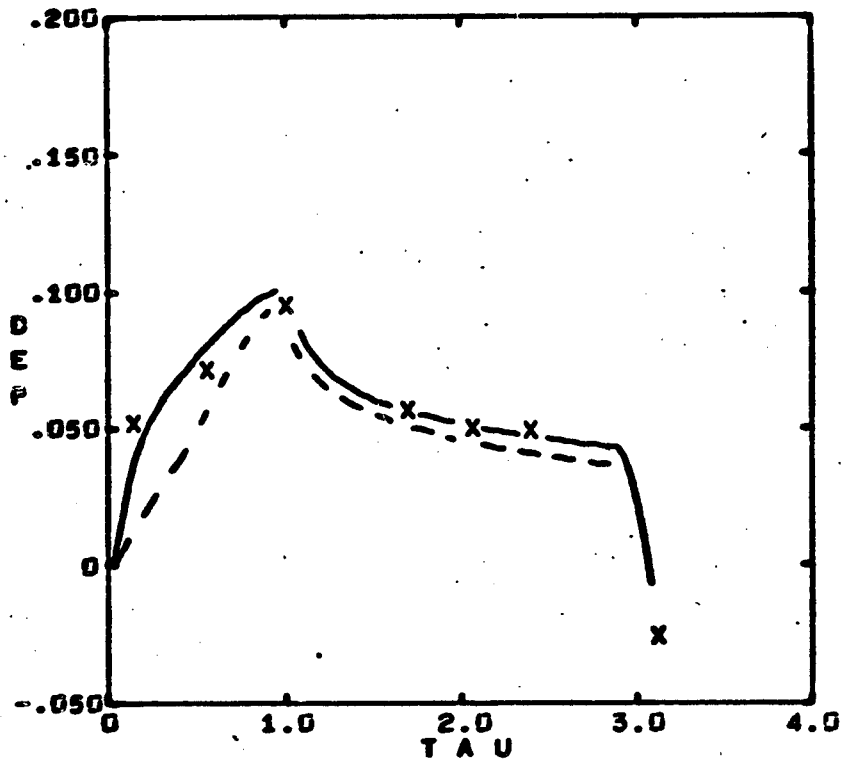
INITIAL TEMPERATURE 387.65
TAU-END OF TOTALITY 2.886

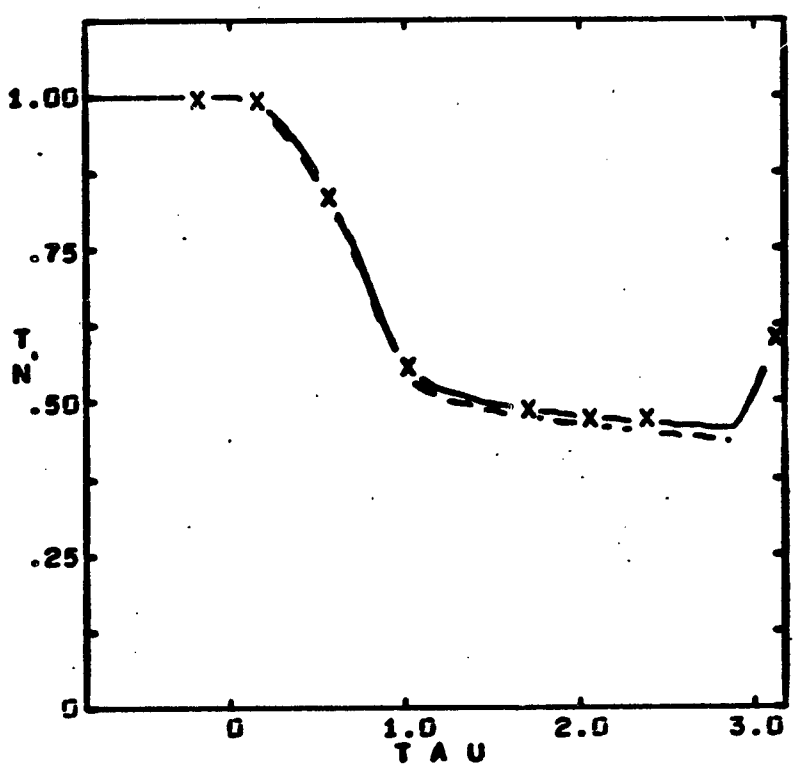
DIFFERENTIAL ENERGY DATA

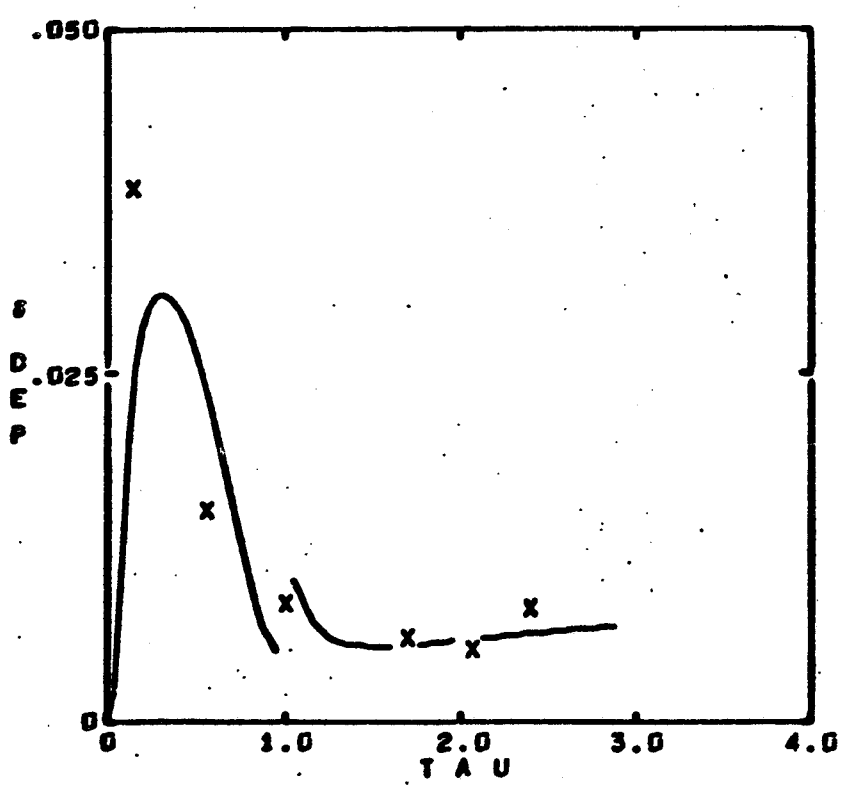
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0534	.0233	.0301
.50	.0761	.0496	.0265
.75	.0915	.0781	.0134
.93	.1004	.0971	.0033
1.0	.0974	.0880	.0094
1.5	.0607	.0553	.0054
2.0	.0516	.0458	.0058
2.5	.0462	.0398	.0064
3.0	.0423	.0353	.0070

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.907	391.21			391.21	1.009	.0373
9H	-0.204	386.85			386.85	0.998	-.0082
10H	0.146	385.45			385.45	0.994	.0517
11H	0.557	324.02	0.000	-.891	324.02	0.836	.0712
12H	1.009	214.06	0.166	-.199	215.15	0.555	.0949
13H	1.697	188.43	0.201	+.608	189.24	0.488	.0568
14H	2.060	178.79	0.755	+.966	183.47	0.473	.0502
15H	2.386	181.06	0.371	-.612	182.47	0.471	.0491
16H	3.122	233.69	0.000	+.327	233.69	0.603	-.0254







PHOTOGRAPH
NOT
AVAILABLE

165 (4C7) COOK G

LAMBDA=48.70 E BETA=18.89 S XI=+.7108 ETA=-.3237 L+PL CODE = 47312 ALBEDO =.0855

19H FLAT MOON DATA
FM=.01728 FM'=.08353

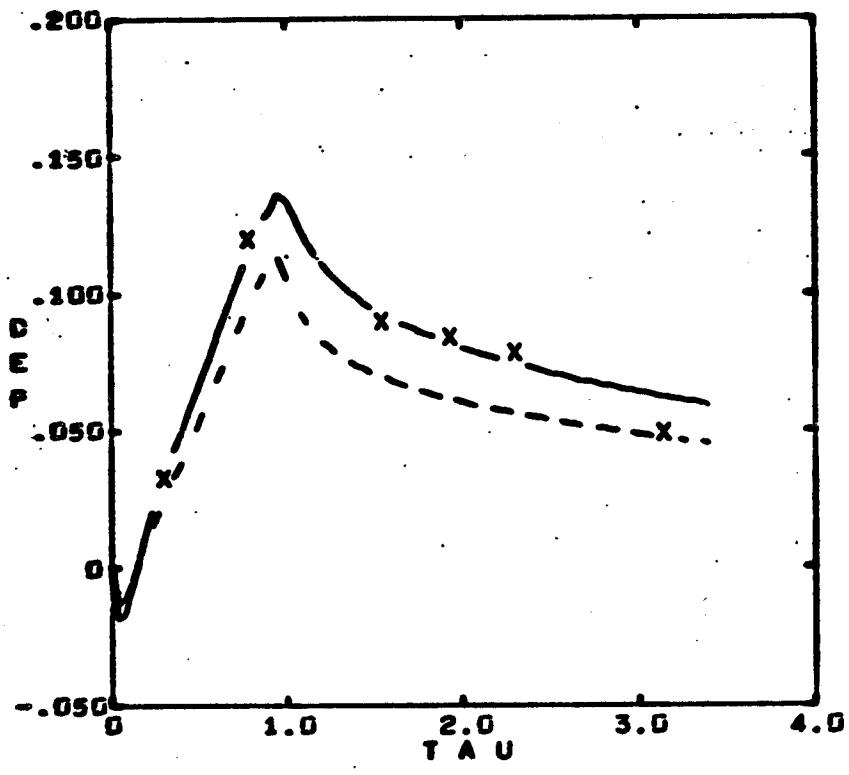
INITIAL TEMPERATURE 369.61
TAU-END OF TOTALITY 3.432

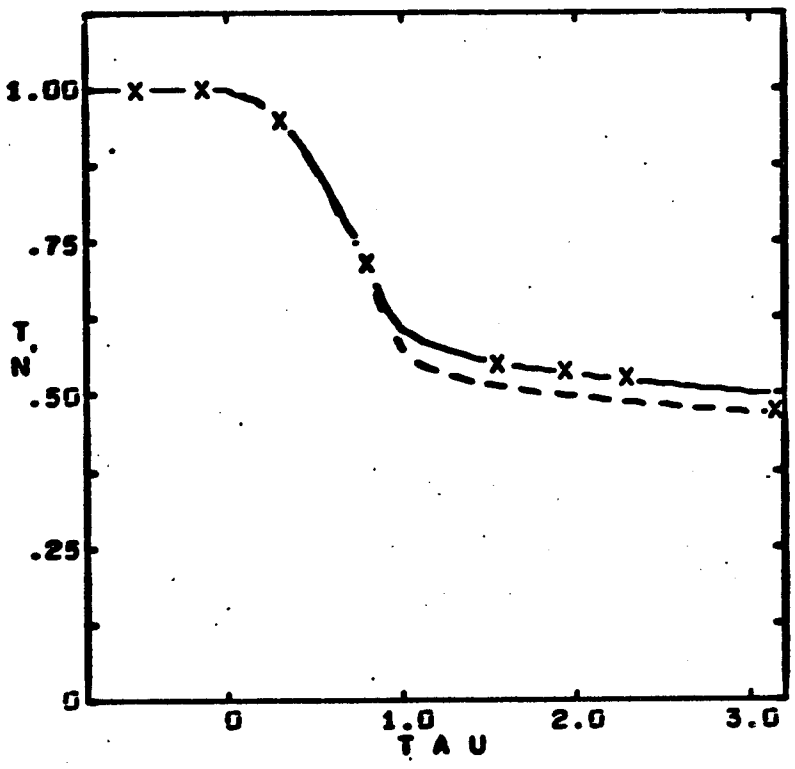
DIFFERENTIAL ENERGY DATA

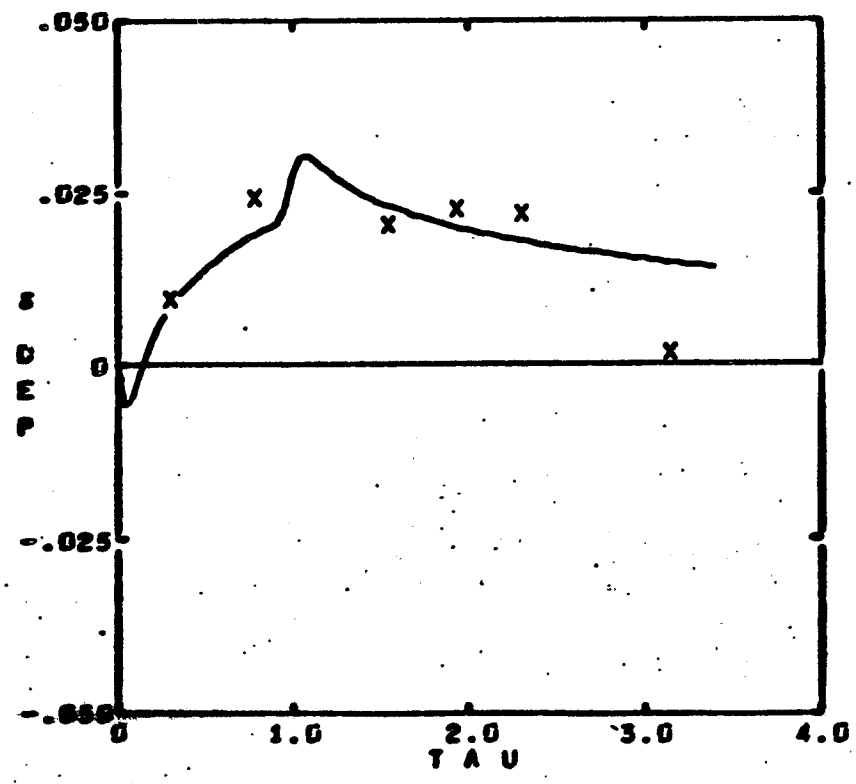
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0226	.0166	.0060
.50	.0672	.0532	.0140
.75	.1086	.0902	.0184
.93	.1357	.1149	.0208
1.0	.1335	.1057	.0278
1.5	.0944	.0709	.0235
2.0	.0802	.0606	.0196
2.5	.0710	.0539	.0171
3.0	.0640	.0487	.0153

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.302	371.09		371.09	1.004	.0161
9H	-0.534	369.81		369.81	1.001	.0022
10H	-0.152	369.38		369.38	0.999	-.0025
11H	0.297	350.94		350.94	0.949	.0330
12H	0.790	256.43	1.049 +.221	264.34	0.715	.1200
13H	1.542	178.97	1.102 +.177	202.55	0.548	.0902
14H	1.937	176.44	0.786 +.438	199.07	0.539	.0842
15H	2.293	181.43	0.563 +.342	195.52	0.529	.0783
16H	3.147	163.52	1.675 +.690	174.04	0.471	.0492







PHOTOGRAPH NOT AVAILABLE

866 (2F7) COPERNICUS

LAMBDA=19.98 W BETA= 9.65 N XI=-.3369 ETA=+.1676 L+PL CODE = 23136 ALBEDO =.1425

13H FLAT MOON DATA
FM=.05115 FM'=.07482

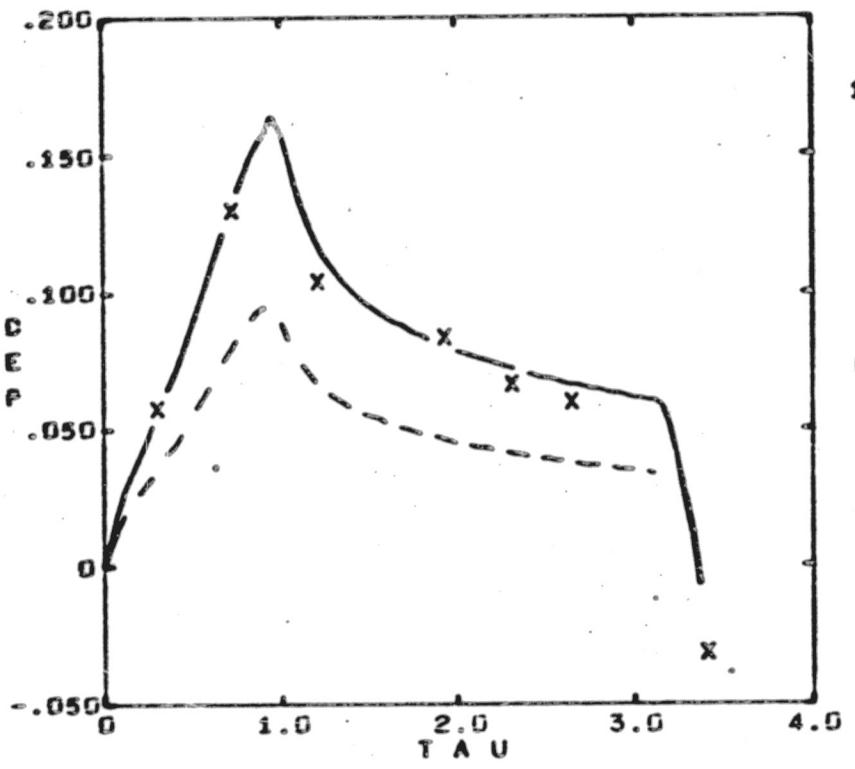
INITIAL TEMPERATURE 382.34
TAU-END OF TOTALITY 3.140

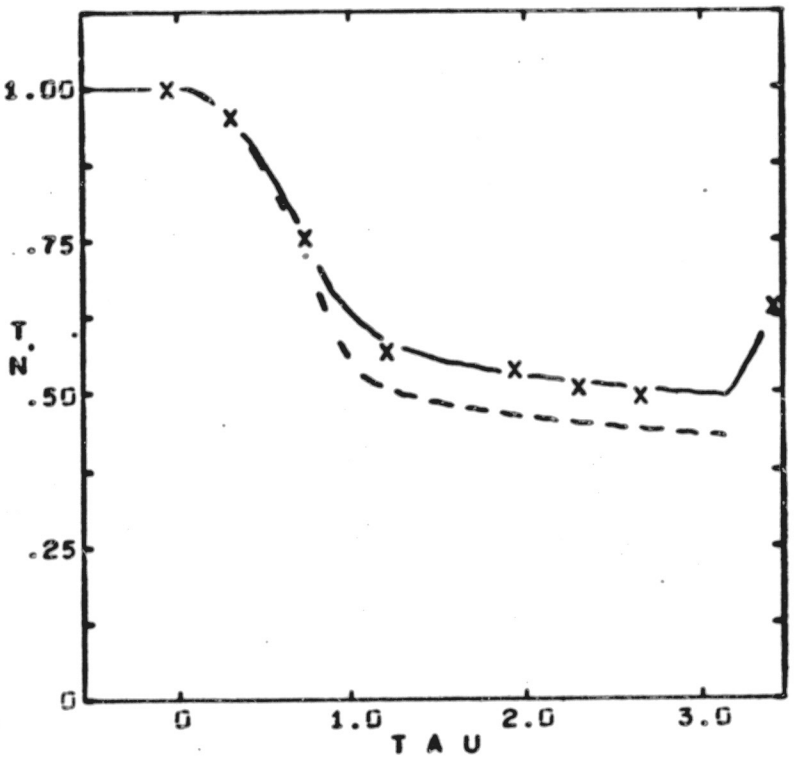
DIFFERENTIAL ENERGY DATA

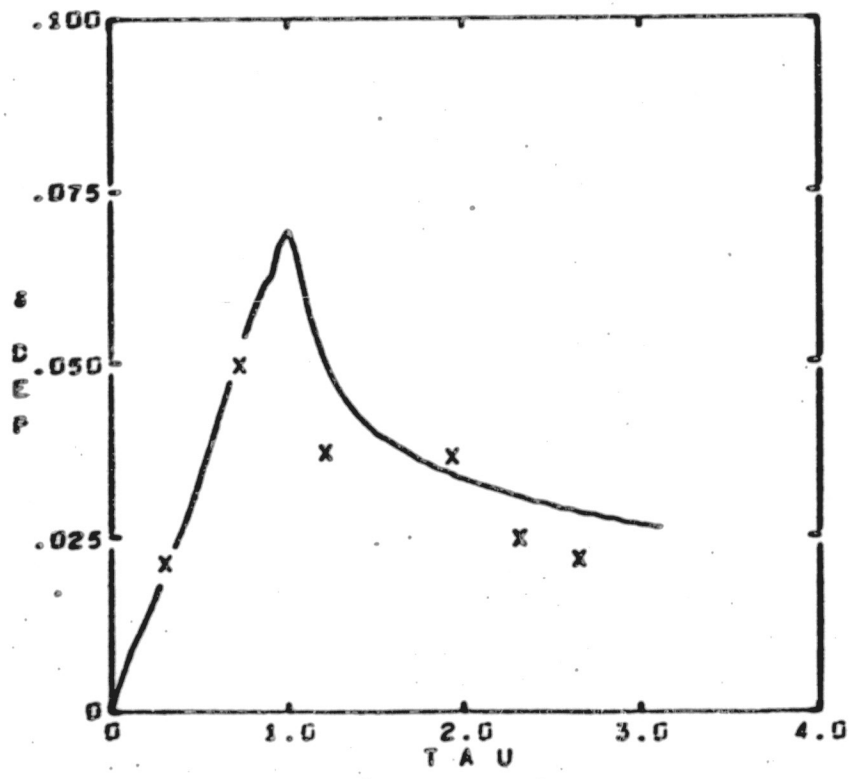
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0467	.0305	.0162
.50	.0884	.0549	.0335
.75	.1344	.0815	.0529
.93	.1648	.0991	.0657
1.0	.1587	.0895	.0692
1.5	.0953	.0553	.0403
2.0	.0787	.0454	.0333
2.5	.0688	.0394	.0294
3.0	.0618	.0350	.0268

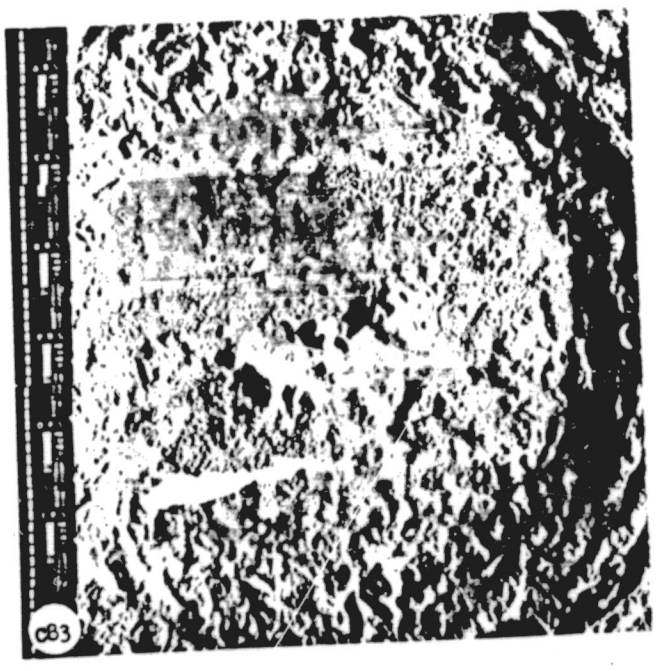
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.792	383.03		383.03	1.002	.0072
9H	-0.056	382.29		382.29	1.000	-.0005
10H	0.308	363.56		363.56	0.951	.0570
11H	0.737	286.86	1.709 +.674	288.51	0.755	.1299
12H	1.209	217.03	0.000 -.090	217.03	0.568	.1038
13H	1.929	195.92	0.737 -.184	205.29	0.537	.0831
14H	2.305	194.07	0.000 -.140	194.07	0.508	.0664
15H	2.647	188.98	0.000 -.098	188.98	0.494	.0597
16H	3.407	245.02	0.000 +.214	245.02	0.641	-.0312









167 (1F6) CANIELL

LAMBDA=31.17 E BETA=35.41 N XI=+.4218 ETA=+.5794 L+PL CODE = 14527 ALBEDO =.0935

13H FLAT MOON DATA
FM=.04440 FM'=.08000

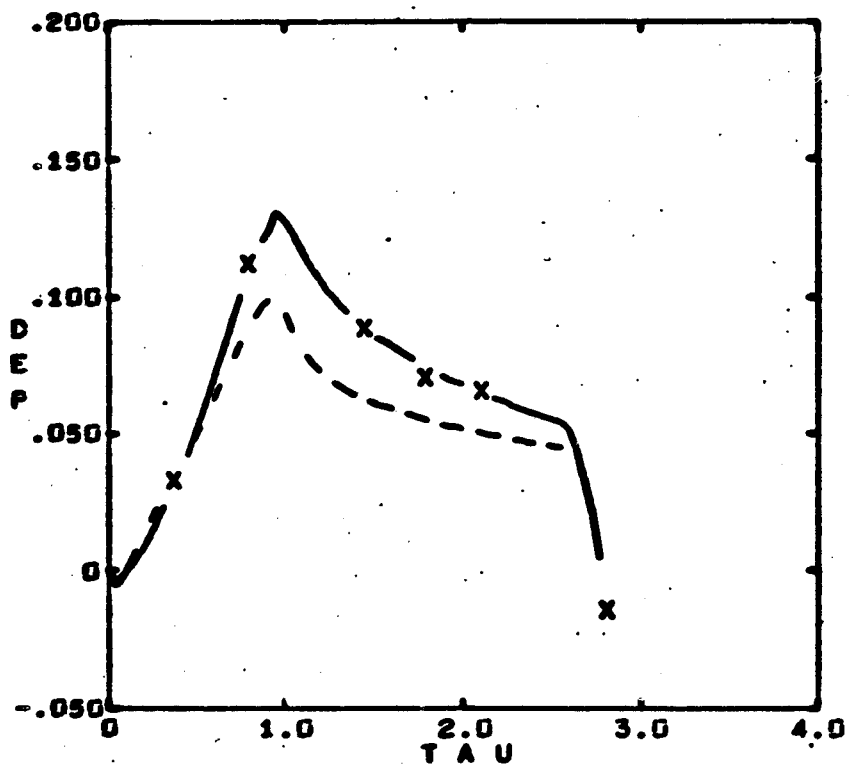
INITIAL TEMPERATURE 376.67
TAU-END OF TOTALITY 2.573

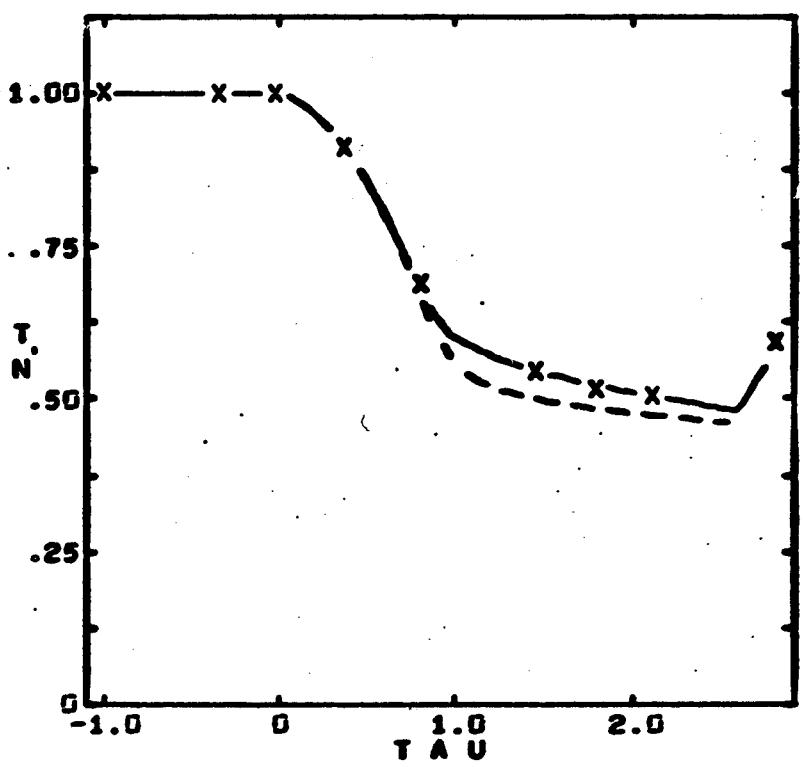
DIFFERENTIAL ENERGY DATA

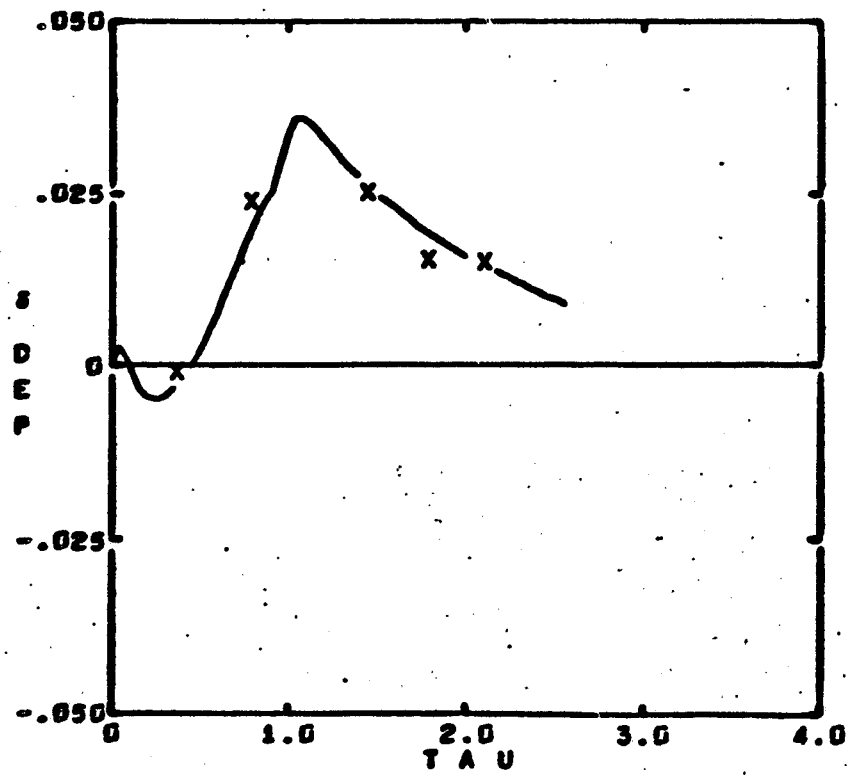
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0144	.0193	-.0049
.50	.0524	.0499	.0025
.75	.0986	.0819	.0167
.93	.1309	.1033	.0276
1.0	.1278	.0943	.0335
1.5	.0863	.0613	.0250
2.0	.0676	.0516	.0160
2.5	.0551	.0454	.0097

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.009	377.69		377.69	1.003	.0108
9H	-0.348	377.39		377.39	1.002	.0076
10H	-0.017	376.62		376.62	1.000	-.0006
11H	0.371	343.74		343.74	0.913	.0333
12H	0.798	258.91	0.160 -.076	259.67	0.689	.1117
13H	1.446	192.03	0.505 -.999	205.22	0.545	.0681
14H	1.790	185.85	0.558 +.541	194.06	0.515	.0704
15H	2.097	188.11	0.203 -.911	190.56	0.506	.0655
16H	2.800	223.41	0.000 +.466	223.41	0.593	-.0143







PHOTOGRAPH NOT AVAILABLE

168 (3E4) CARNEY C

LAMBDA=25.98 W BETA=14.12 S XI=-.4249 ETA=-.2439 L+PL CODE = 34224 ALBEDO =.0948

13H FLAT MOON DATA
FM=.05146 FM'=.05916

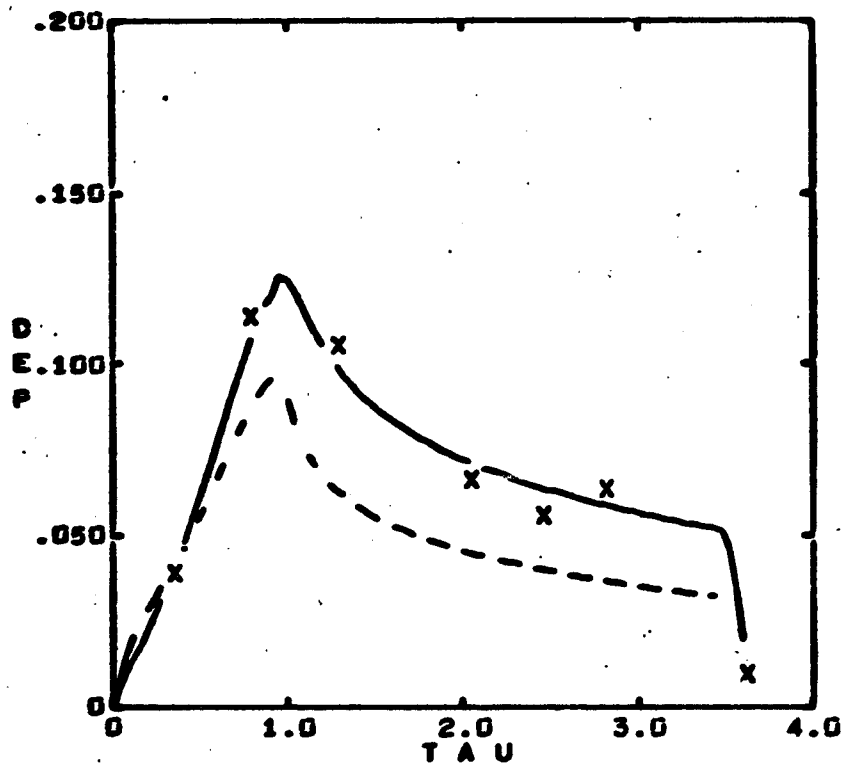
INITIAL TEMPERATURE 386.15
TAU-END OF TOTALITY 3.477

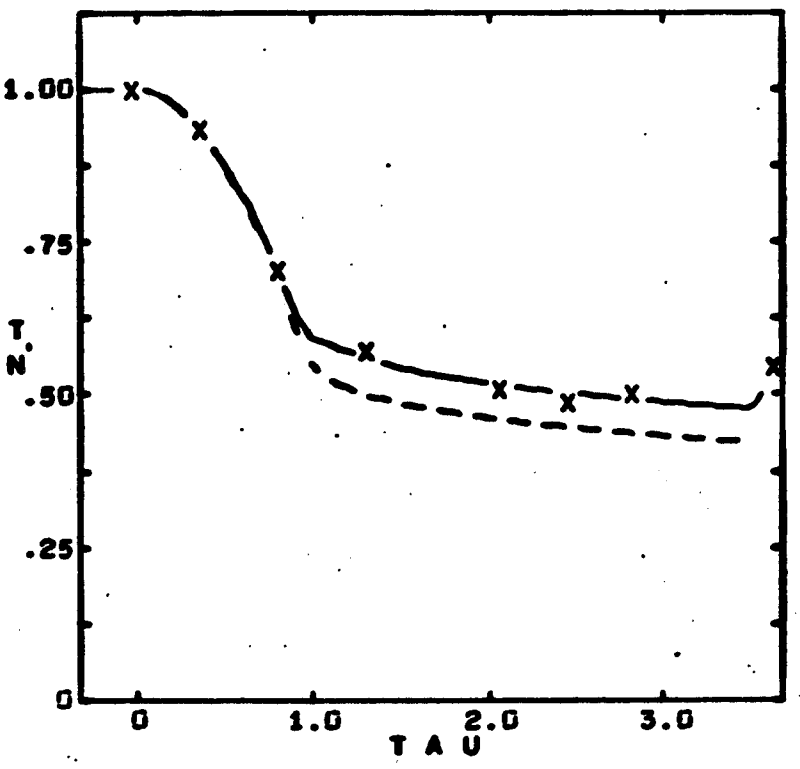
DIFFERENTIAL ENERGY DATA

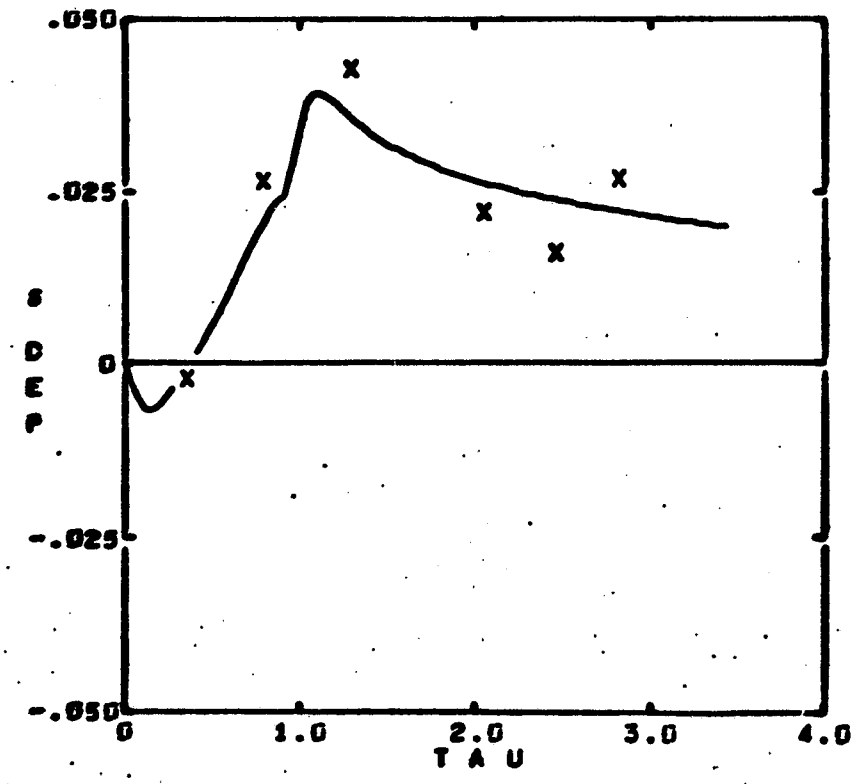
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0277	.0321	-.0044
.50	.0619	.0561	.0058
.75	.1003	.0822	.0181
.93	.1259	.0995	.0264
1.0	.1240	.0899	.0341
1.5	.0874	.0555	.0319
2.0	.0722	.0456	.0266
2.5	.0631	.0396	.0235
3.0	.0566	.0352	.0214

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.812	385.06			385.06	0.997	-.0112
9H	-0.035	386.19			386.19	1.000	.0005
10H	0.348	360.26			360.26	0.933	.0388
11H	0.800	271.54	0.638	-.915	271.93	0.704	.1137
12H	1.297	217.83	0.138	+.910	220.10	0.570	.1056
13H	2.055	192.43	0.278	+.194	196.23	0.508	.0667
14H	2.451	183.50	0.824	+.668	187.96	0.487	.0561
15H	2.812	184.73	0.495	+.835	193.98	0.502	.0637
16H	3.622	210.30	0.000	+.241	210.30	0.545	.0098







PHOTOGRAPH NOT AVAILABLE

169 (3E5) CAVY A

LAMBDA= 7.71 W BETA=12.21 S XI=-.1311 ETA=-.2115 L+PL CODE = 31231 ALBEDO =.1011

13H FLAT MOON DATA
FM=.04666 FM'=.05105

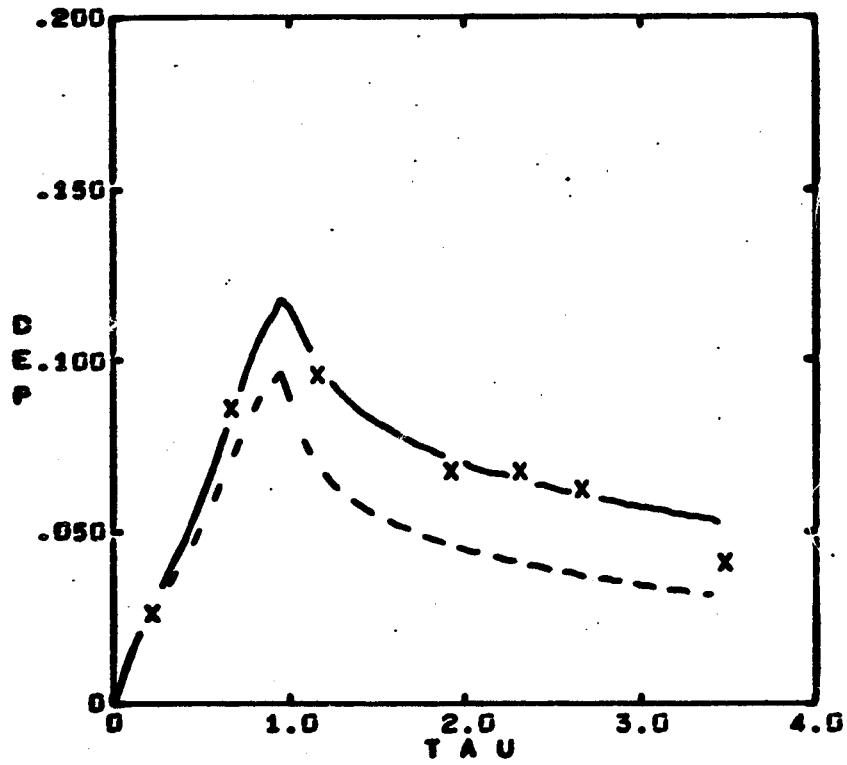
INITIAL TEMPERATURE 391.98
TAU-END OF TOTALITY 3.429

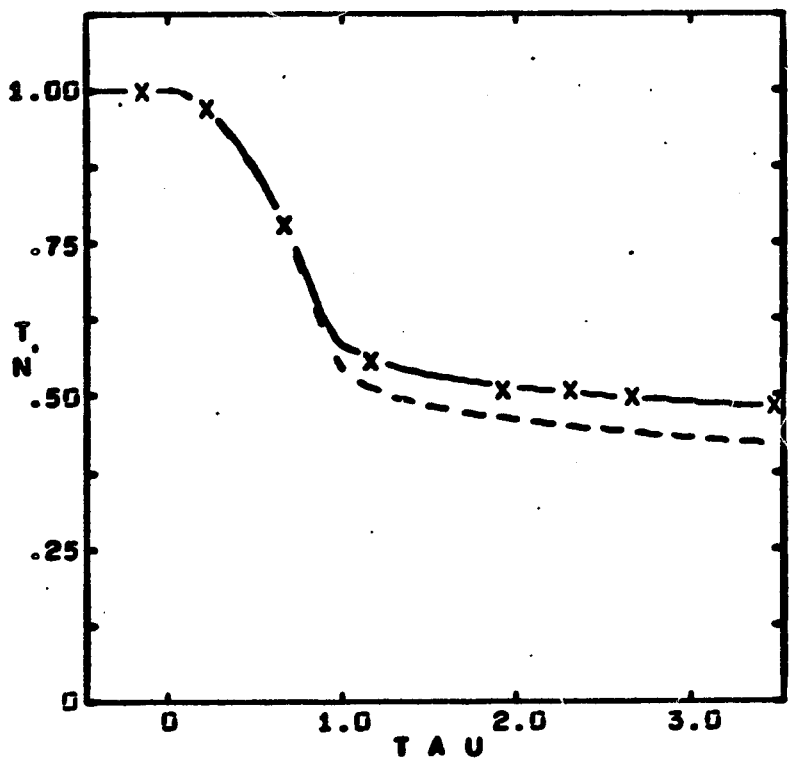
DIFFERENTIAL ENERGY DATA

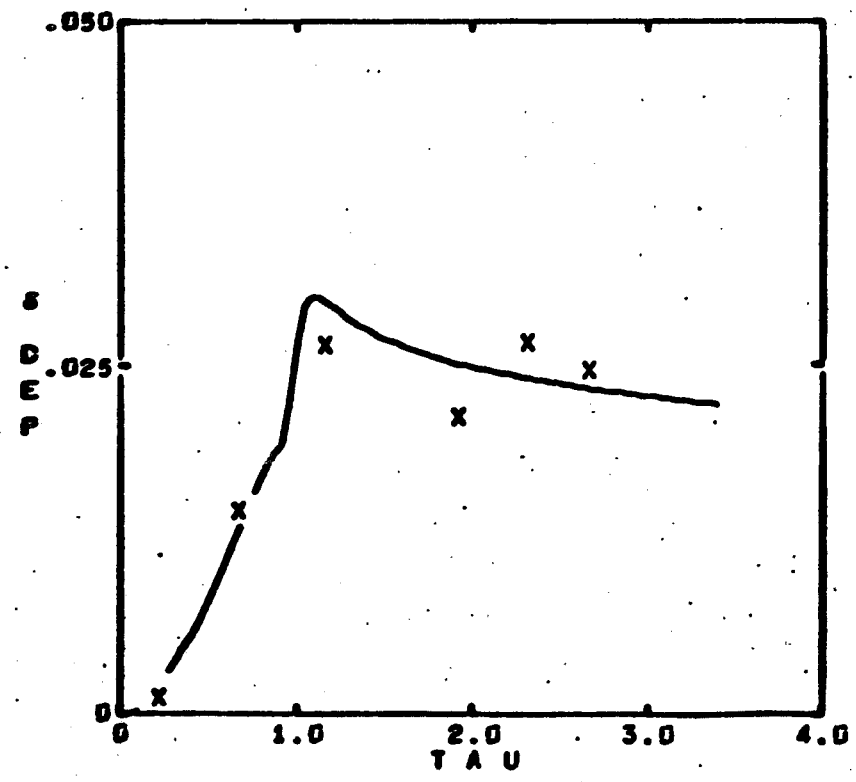
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0301	.0278	.0023
.50	.0611	.0528	.0083
.75	.0955	.0800	.0155
.93	.1184	.0981	.0203
1.0	.1153	.0886	.0267
1.5	.0818	.0549	.0269
2.0	.0700	.0451	.0249
2.5	.0627	.0390	.0237
3.0	.0574	.0346	.0228

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.932	392.59		392.59	1.002	.0063
9H	-0.161	391.87		391.87	1.000	-.0011
10H	0.218	380.82		380.82	0.972	.0260
11H	0.667	306.51	0.000 -.219	306.51	0.782	.0856
12H	1.161	215.73	0.261 +.506	218.12	0.556	.0959
13H	1.914	198.21	0.140 -.631	199.07	0.510	.0677
14H	2.307	193.23	0.388 +.315	199.98	0.510	.0677
15H	2.664	193.53	0.137 +.056	195.73	0.499	.0622
16H	3.480	186.92	0.250 +.132	190.02	0.485	.0410







PHOTOGRAPH NOT AVAILABLE

170 (3E6) CAVY G

LAMBDA= 5.06 W BETA=10.36 S XI=-.0867 ETA=-.1798 L+PL CODE = 30187 ALBEDO =.1224

13H FLAT MOON DATA
FM=.00440 FM'=.00440

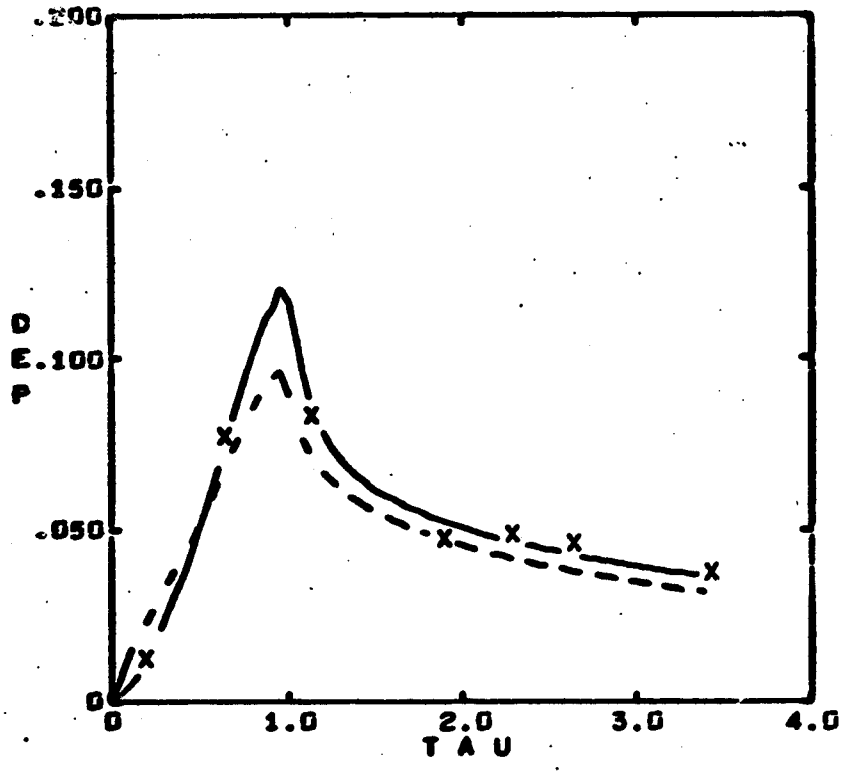
INITIAL TEMPERATURE 391.05
TAU-END OF TOTALITY 3.402

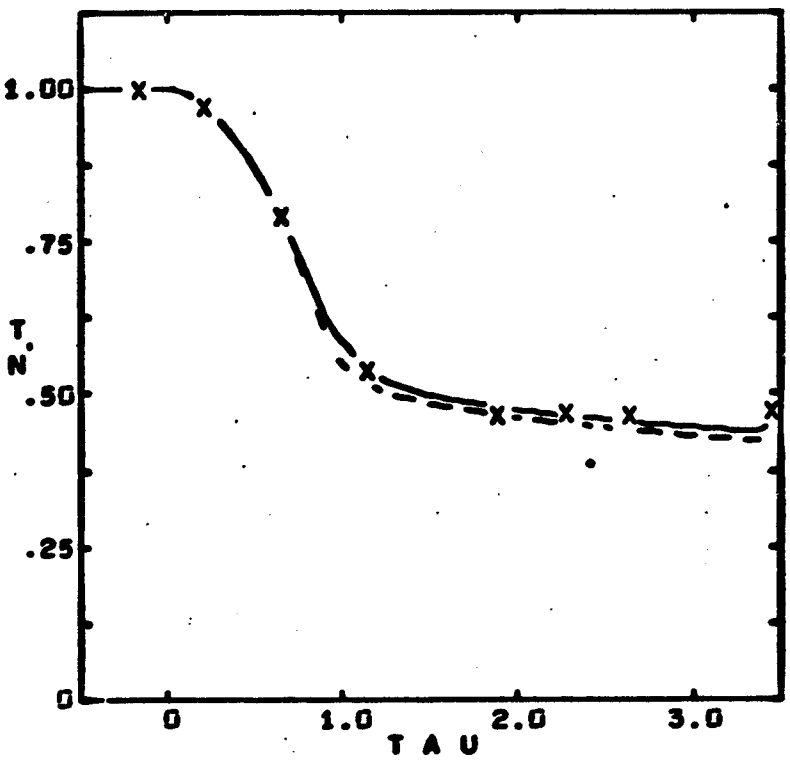
DIFFERENTIAL ENERGY DATA

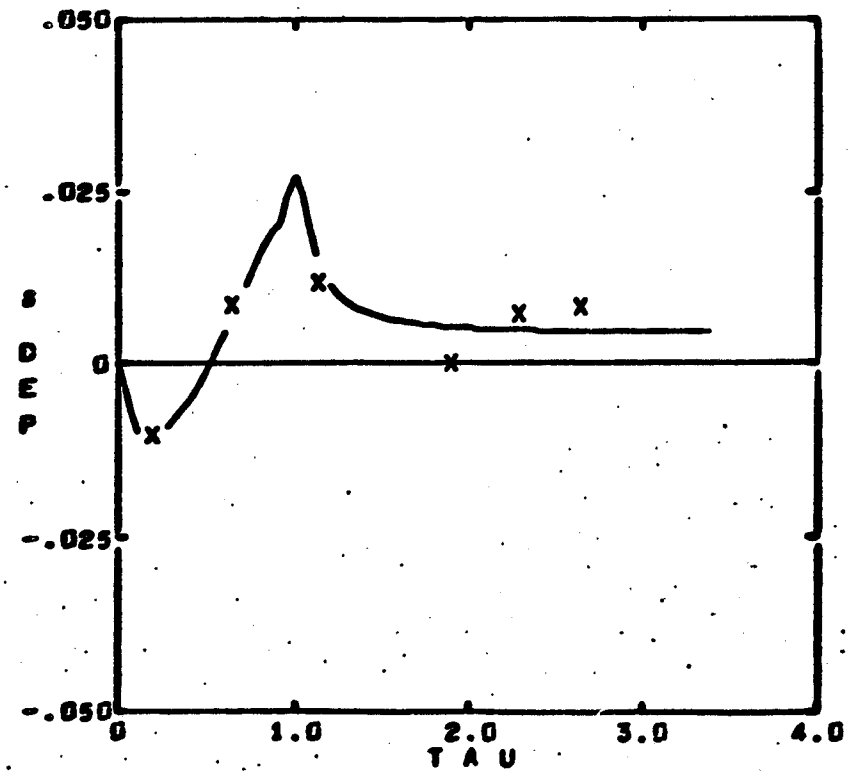
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0173	.0274	-.0101
.50	.0522	.0527	-.0005
.75	.0933	.0803	.0130
.93	.1210	.0986	.0224
1.0	.1164	.0891	.0273
1.5	.0619	.0552	.0067
2.0	.0506	.0454	.0052
2.5	.0441	.0393	.0048
3.0	.0395	.0348	.0047

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.946	393.15		393.15	1.005	.0217
9H	-0.178	390.65		390.65	0.999	-.0041
10H	0.200	380.36		380.36	0.973	.0125
11H	0.647	309.37	0.000 -.808	309.37	0.791	.0776
12H	1.138	209.44	0.249 +.736	210.08	0.537	.0833
13H	1.868	182.45	0.000 +.966	182.45	0.467	.0474
14H	2.281	182.87	0.251 -.359	183.98	0.470	.0490
15H	2.636	180.97	0.096 -.872	181.44	0.464	.0463
16H	3.449	178.26	1.091 +.314	185.14	0.473	.0380







PHOTOGRAPH NOT AVAILABLE

871 (1F7) DAWES

LAMBDA=26.34 E BETA=17.21 N. XI=+.4238 ETA=+.2959 L+PL CODE = 14229 ALBEDO =.0712

13M FLAT MOON DATA
FM=.11297 FM'=.13363

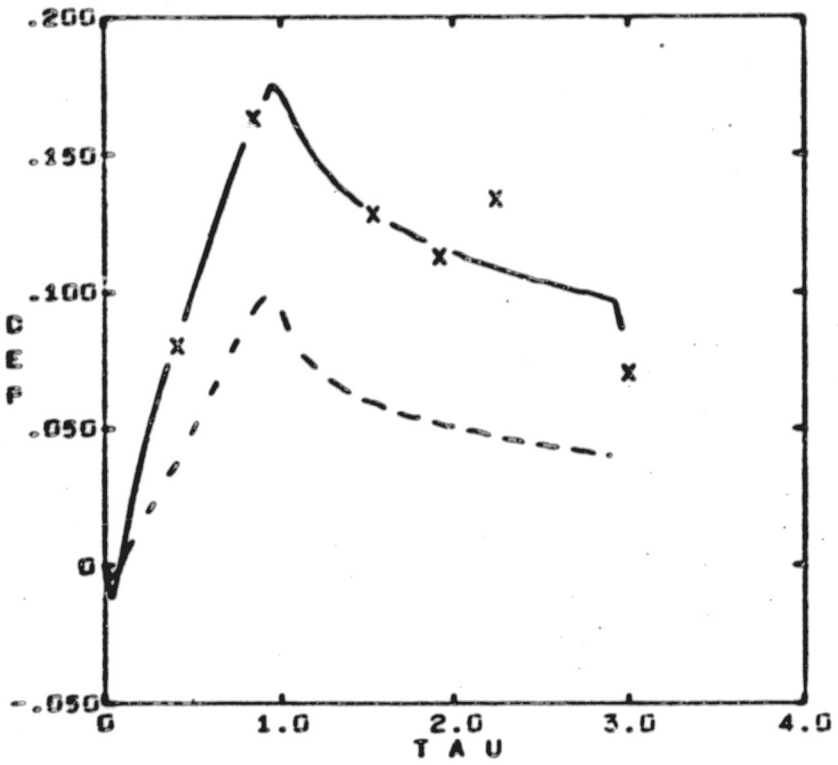
INITIAL TEMPERATURE 388.61
TAU-END OF TOTALITY 2.911

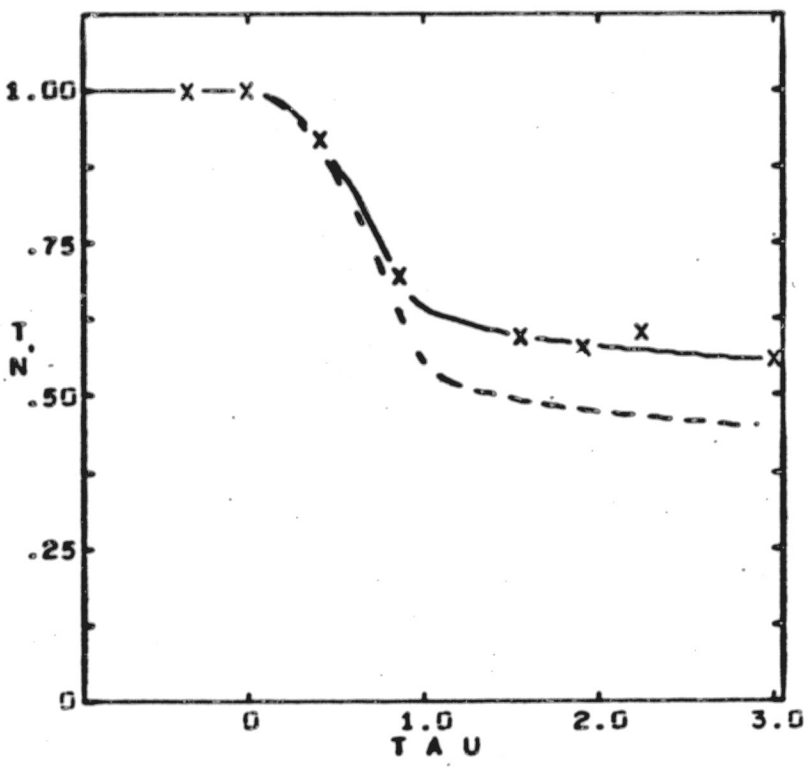
DIFFERENTIAL ENERGY DATA

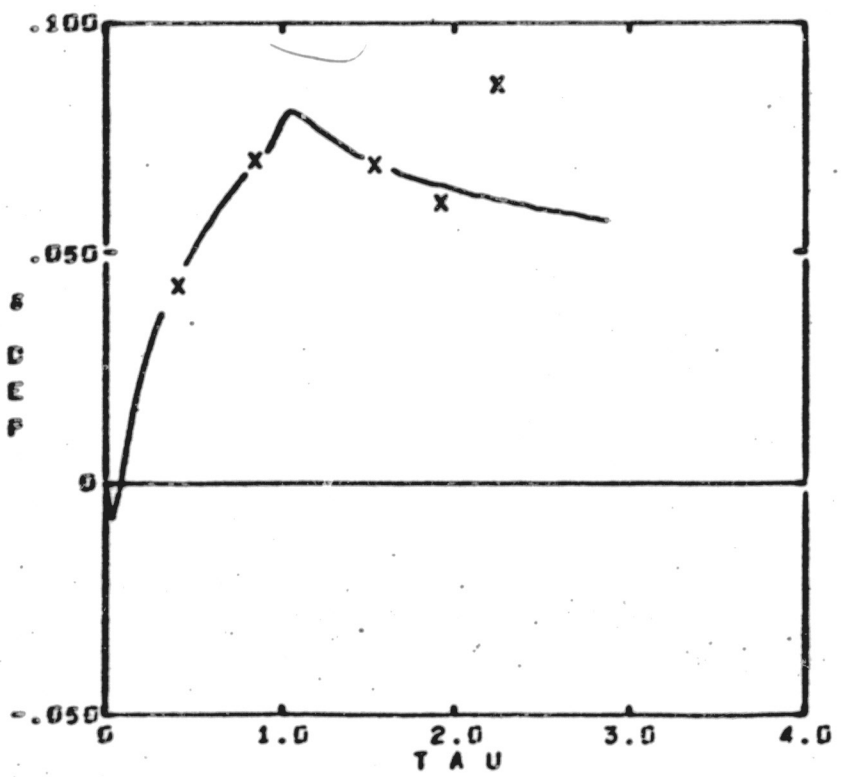
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0497	.0201	.0296
.50	.1009	.0498	.0511
.75	.1461	.0812	.0649
.93	.1749	.1022	.0727
1.0	.1722	.0931	.0791
1.5	.1304	.0602	.0702
2.0	.1142	.0505	.0637
2.5	.1038	.0443	.0595

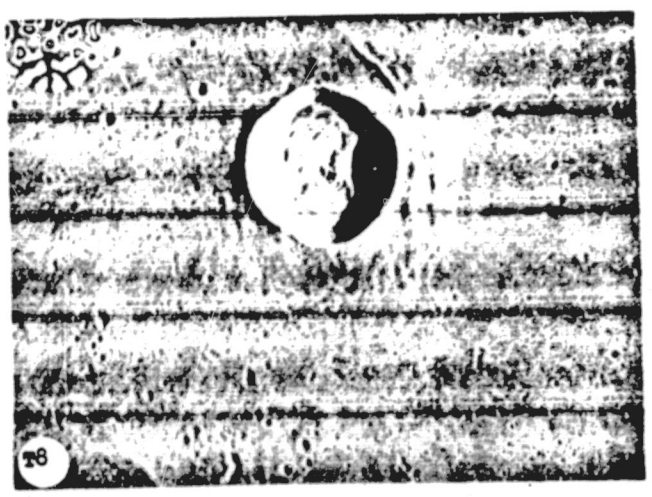
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8M	-1.068	389.64		389.64	1.003	.0107
9M	-0.363	388.03		388.03	0.999	-.0059
10M	-0.012	388.61		388.61	1.000	.0001
11M	0.401	357.19		357.19	0.919	.0805
12M	0.855	268.52	0.216 -.159	270.56	0.696	.1634
13M	1.546	224.59	0.314 +.867	232.54	0.598	.1282
14M	1.912	209.79	0.525 +.638	225.23	0.580	.1128
15M	2.238	230.82	0.132 -.888	235.11	0.605	.1340
16M	2.994	213.02	0.266 +.769	218.09	0.561	.0708









172 (2F8) DELISLE

LAMBDA=34.60 W BETA=29.97 N XI=-.4919 ETA=+.4995 L+PL CODE = 24499 ALBEDO =.0693

13H FLAT MOON DATA
FM=.04268 FM'=.05730

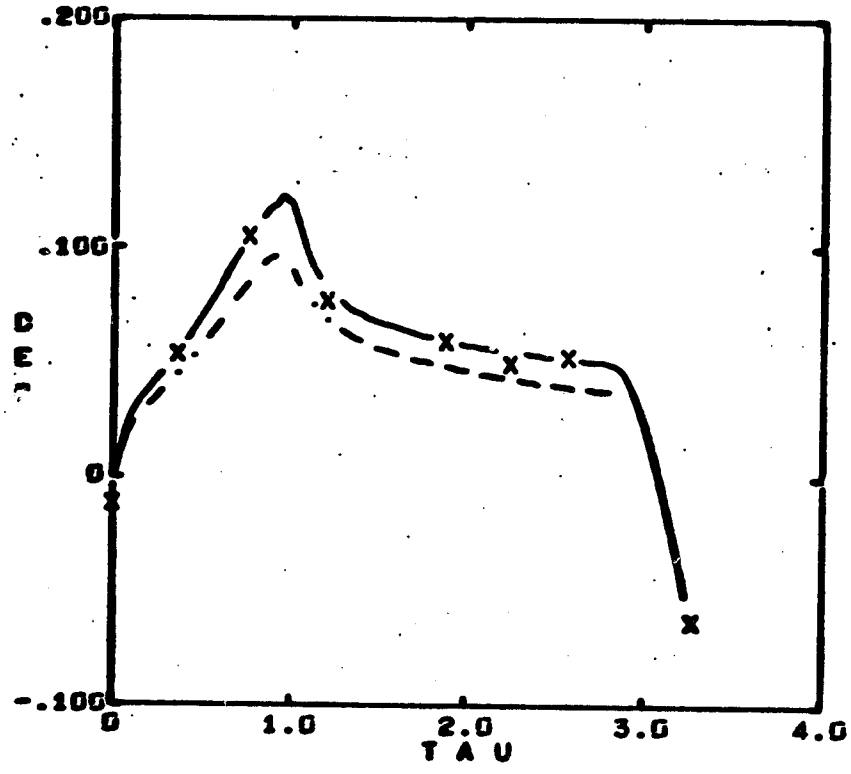
INITIAL TEMPERATURE 377.97
TAU-END OF TOTALITY 2.816

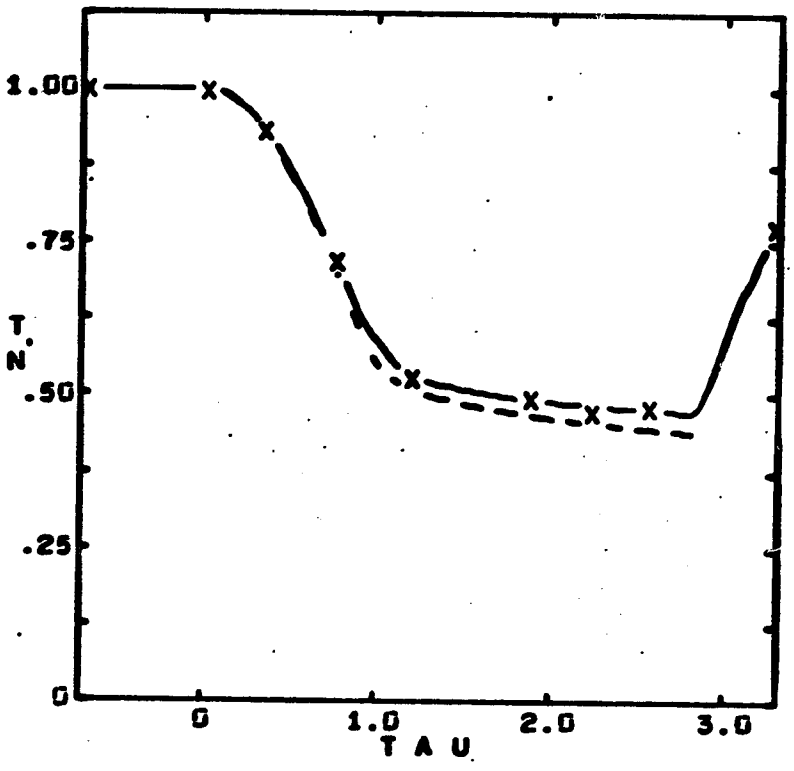
DIFFERENTIAL ENERGY DATA

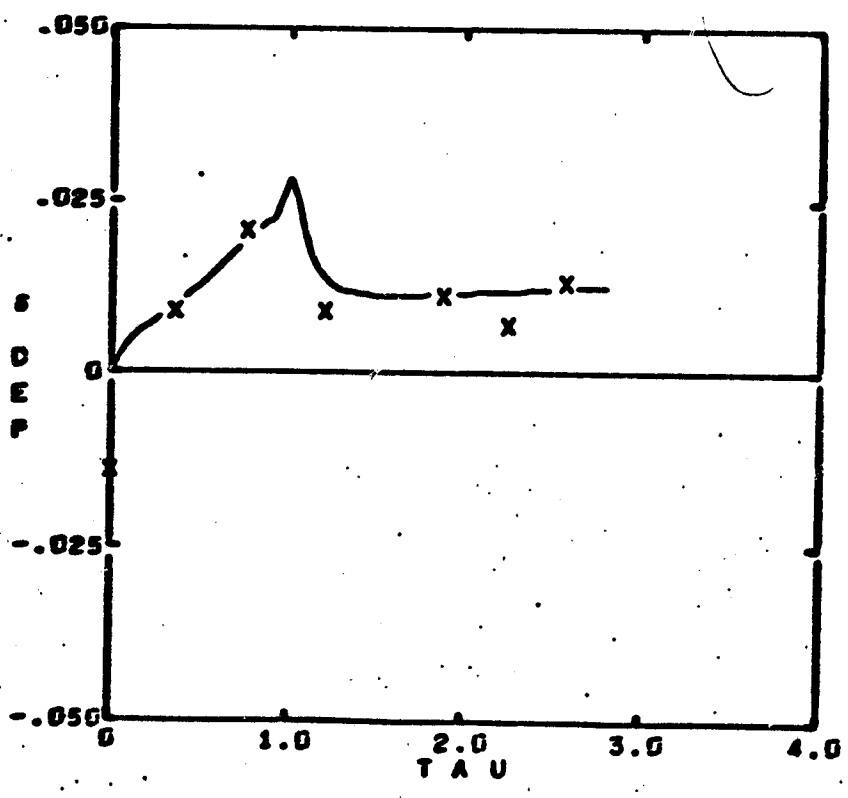
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0425	.0349	.0076
.50	.0714	.0582	.0132
.75	.1029	.0837	.0192
.93	.1236	.1005	.0231
1.0	.1189	.0908	.0281
1.5	.0674	.0560	.0114
2.0	.0577	.0460	.0117
2.5	.0522	.0400	.0122
3.0	.0485	.0356	.0129

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.688	377.97		377.97	1.000	-.0000
9H	0.007	376.73		376.73	0.997	-.0126
10H	0.353	351.44		351.44	0.930	.0529
11H	0.759	271.04	0.052 +.993	271.38	0.718	.1054
12H	1.205	198.48	0.044 +.336	199.05	0.527	.0769
13H	1.885	180.88	0.393 -.001	186.41	0.493	.0592
14H	2.244	178.54	0.000 -.090	178.54	0.472	.0498
15H	2.565	179.17	0.123 +.310	180.83	0.478	.0524
16H	3.270	289.68	0.692 +.595	294.18	0.778	-.0627







PHOTOGRAPH NOT AVAILABLE

173 (1F8) DESEILLIGNY

LAMBDA=20.57 E BETA=21.11 N XI=+.3278 ETA=+.3601 L+PL CODE = 13326 ALBEDO =.0643

13H FLAT MOON DATA
FM=.03587 FM'=.04640

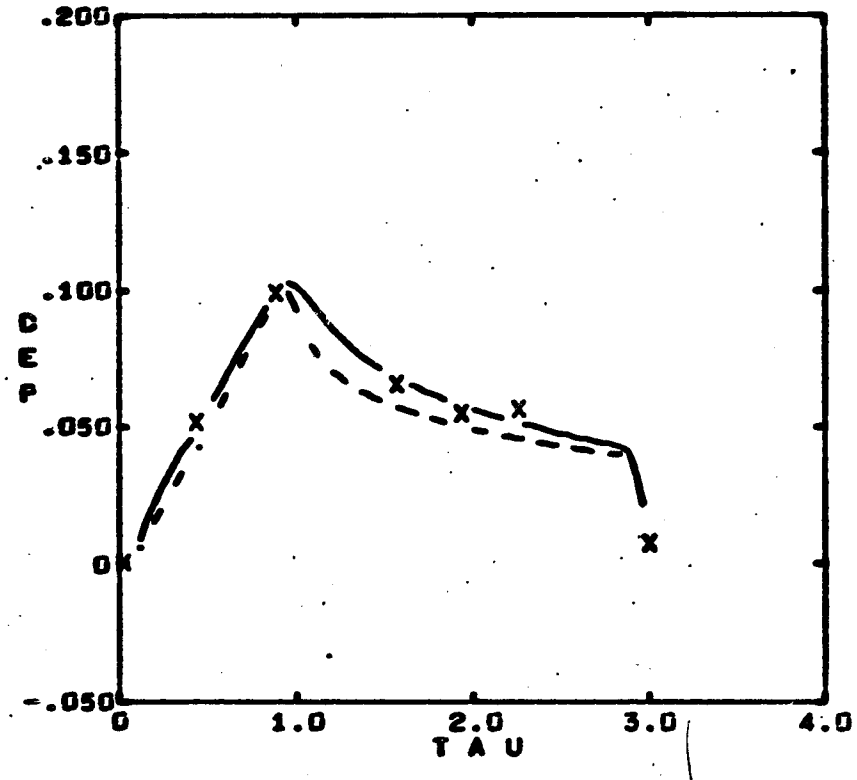
INITIAL TEMPERATURE 391.44
TAU-END OF TOTALITY 2.854

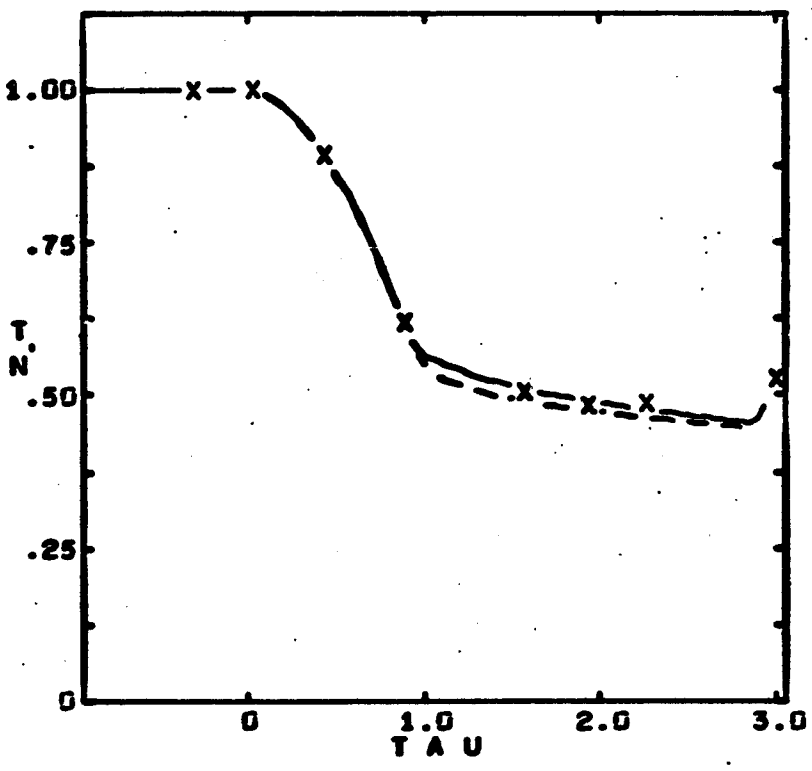
DIFFERENTIAL ENERGY DATA

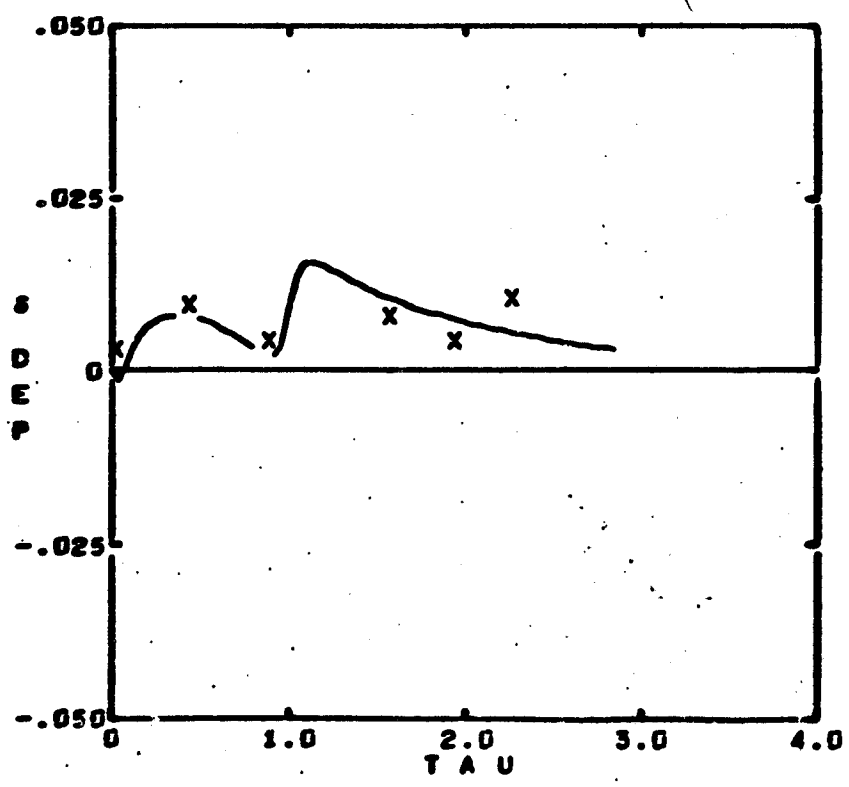
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0283	.0210	.0073
.50	.0574	.0499	.0075
.75	.0849	.0807	.0042
.93	.1027	.1014	.0013
1.0	.1017	.0922	.0095
1.5	.0703	.0591	.0112
2.0	.0564	.0494	.0070
2.5	.0476	.0432	.0044

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.020	391.75		391.75	1.001	.0032
9H	-0.322	391.34		391.34	1.000	-.0010
10H	0.025	391.05		391.05	0.999	.0002
11H	0.435	349.70		349.70	0.893	.0518
12H	0.885	240.30	1.422 -.602	242.48	0.619	.0993
13H	1.568	194.72	0.377 +.893	197.93	0.506	.0654
14H	1.930	183.29	0.629 +.736	189.42	0.464	.0548
15H	2.253	188.47	0.333 +.748	190.96	0.486	.0566
16H	2.997	206.02	0.000 +.478	206.02	0.526	.0075







PHOTOGRAPH NOT AVAILABLE

174 (1F9) DIONYSIUS

LAMBDA=17.32 E BETA= 2.79 N XI=+.2973 ETA=+.0486 L+PL CODE = 12094 ALBEDO =.1418

13H FLAT MOON DATA
FM=.07666 FM'=.11276

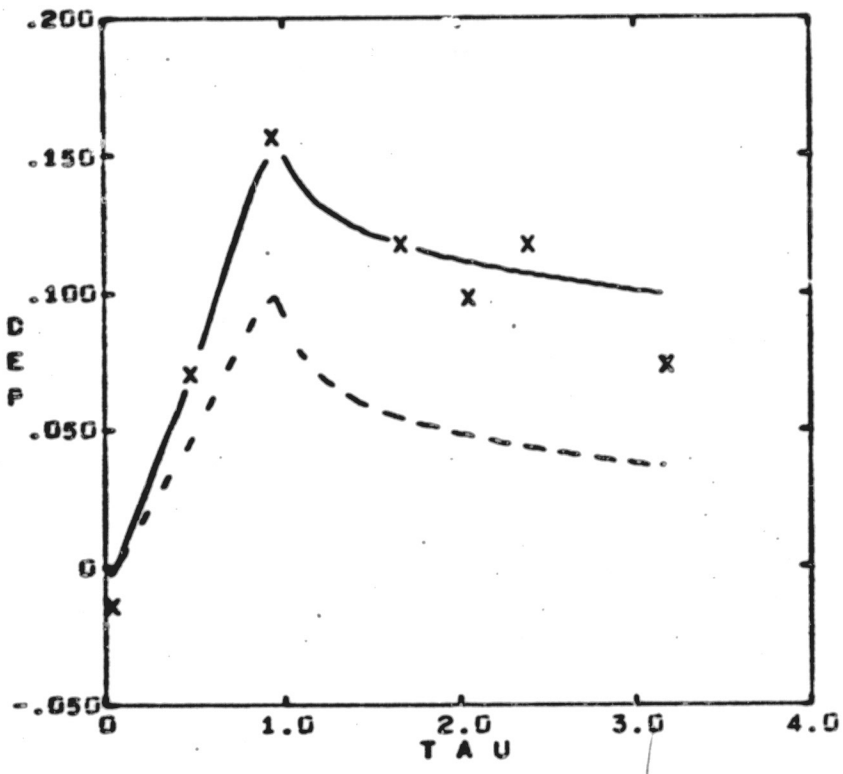
INITIAL TEMPERATURE 389.13
TAU-END OF TOTALITY 3.174

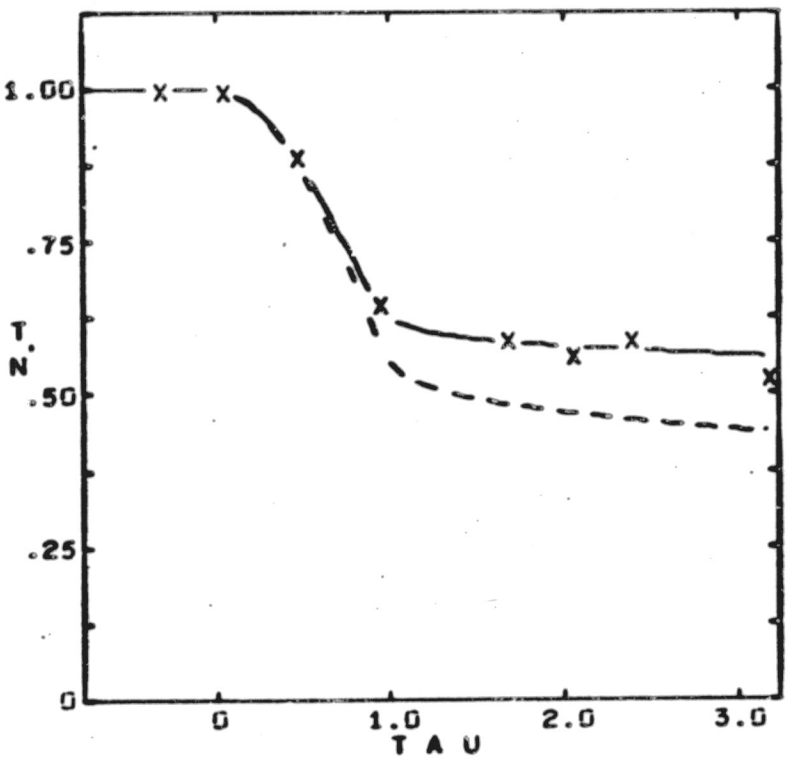
DIFFERENTIAL ENERGY DATA

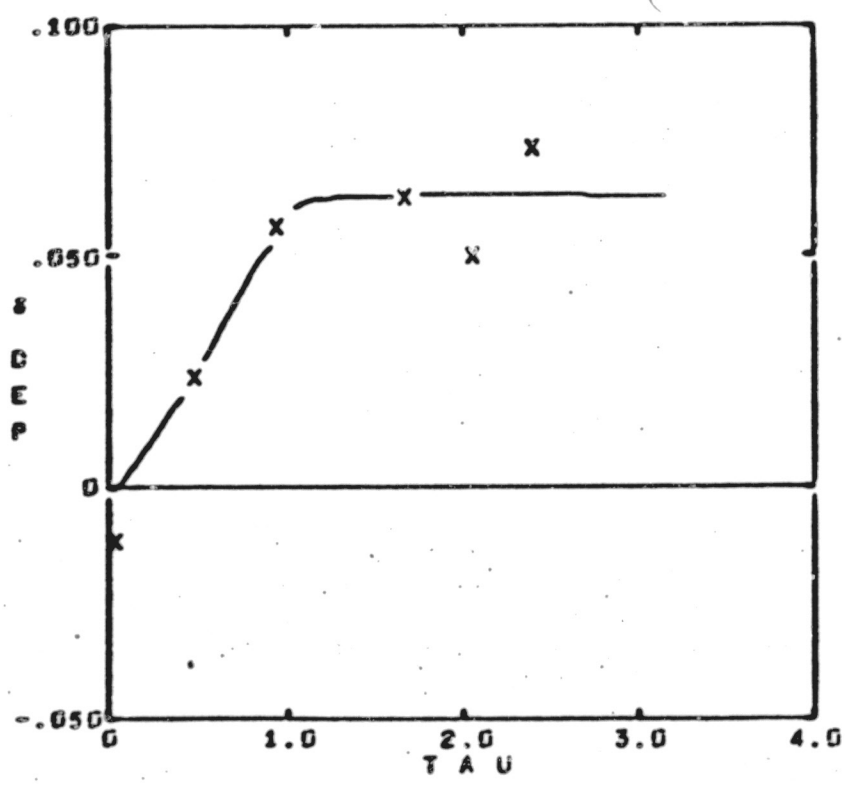
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0317	.0215	.0102
.50	.0756	.0499	.0257
.75	.1232	.0804	.0428
.93	.1553	.1008	.0545
1.0	.1501	.0916	.0585
1.5	.1214	.0585	.0629
2.0	.1119	.0488	.0631
2.5	.1057	.0426	.0631
3.0	.1010	.0380	.0630

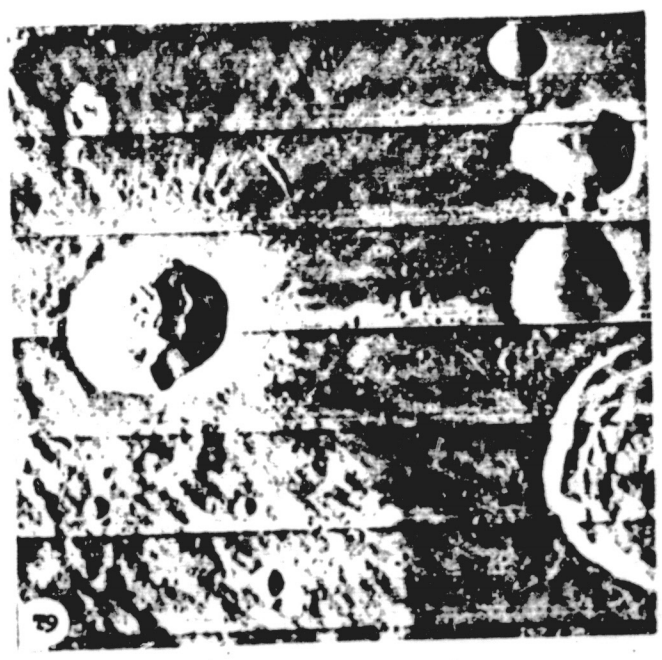
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.065	393.60		393.60	1.012	.0466
9H	-0.327	387.75		387.75	0.996	-.0141
10H	0.040	386.95		386.95	0.994	-.0140
11H	0.471	344.88		344.88	0.886	.0703
12H	0.946	249.35	0.193 +.743	250.59	0.644	.1572
13H	1.668	213.56	0.497 -.551	227.78	0.585	.1174
14H	2.048	208.38	0.484 -.996	217.97	0.560	.0984
15H	2.390	223.07	0.198 -.219	227.76	0.585	.1174
16H	3.184	199.69	0.459 +.897	203.45	0.523	.0738









875 (2F9) DIOPHANTUS

LAMBDA=34.24 W BETA=27.61 N XI=-.4986 ETA=+.4634 L+PL CODE = 24496 ALBEDO =.0724

13H FLAT MOON DATA
FM=.12315 FM'=.13647

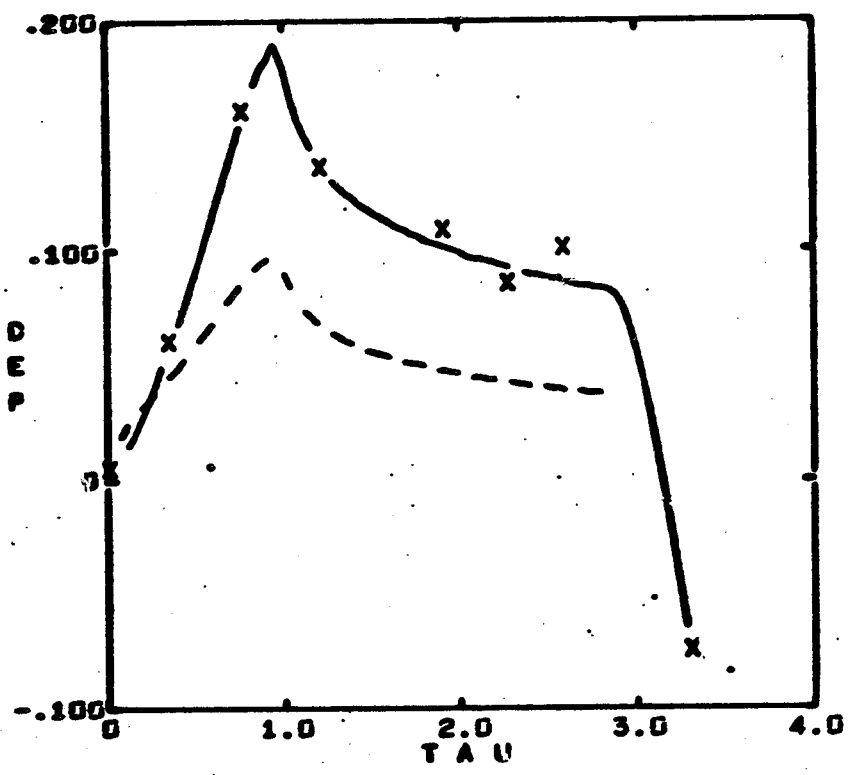
INITIAL TEMPERATURE 377.72
TAU-END OF TOTALITY 2.858

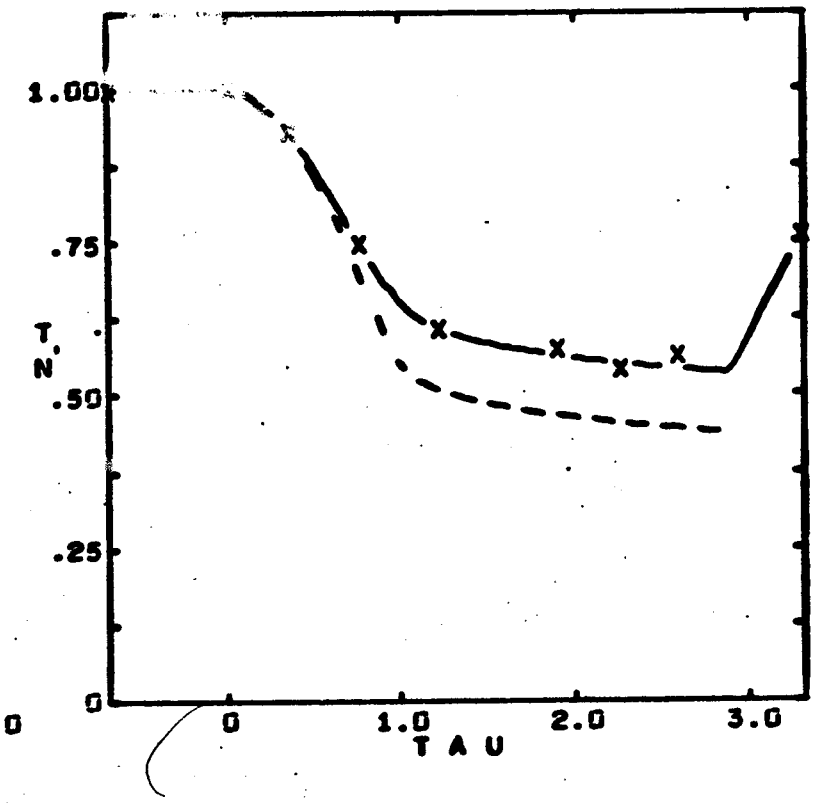
DIFFERENTIAL ENERGY DATA

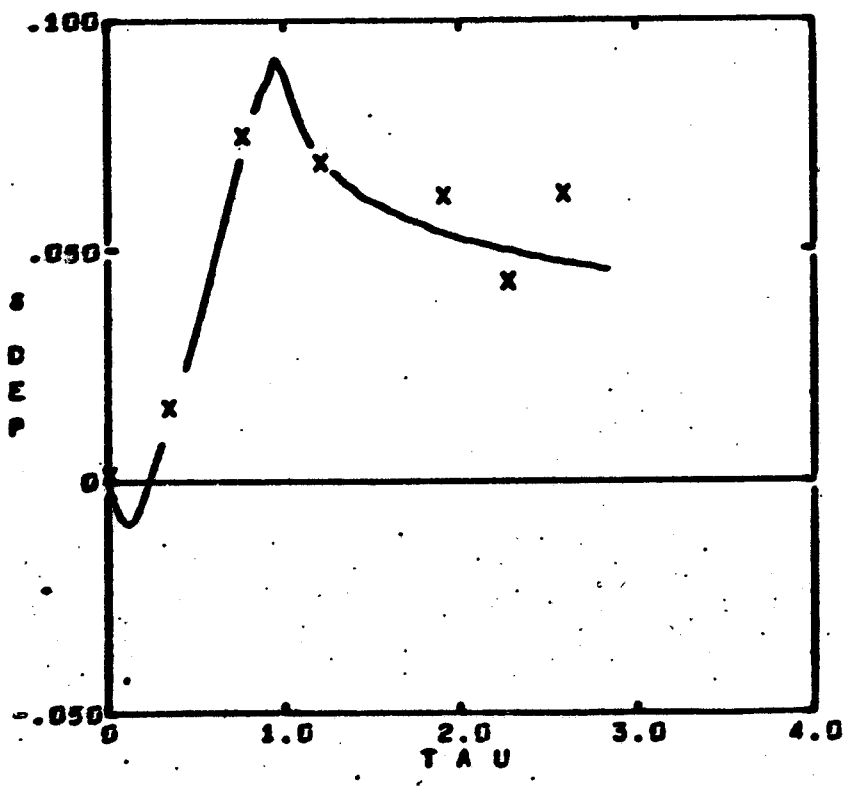
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0350	.0348	.0002
.50	.0900	.0581	.0319
.75	.1518	.0836	.0682
.93	.1928	.1004	.0924
1.0	.1789	.0907	.0882
1.5	.1166	.0560	.0606
2.0	.0988	.0460	.0528
2.5	.0881	.0400	.0481
3.0	.0803	.0356	.0447

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.689	377.72		377.72	1.000	.0000
9H	0.011	377.99		377.99	1.001	.0040
10H	0.358	351.43		351.43	0.930	.0605
11H	0.768	278.35	0.335 +.051	282.53	0.748	.1605
12H	1.218	225.89	0.231 -.876	229.58	0.608	.1365
13H	1.903	212.00	0.256 -.453	217.17	0.575	.1093
14H	2.264	201.28	0.228 +.776	204.45	0.541	.0858
15H	2.588	211.89	0.120 -.563	213.14	0.564	.1014
16H	3.298	287.95	0.000 +.429	287.95	0.762	-.0750







PHOTOGRAPH NOT AVAILABLE

LAMBDA=32.48 W BETA=29.06 N XI=-.4694 ETA=+.4857 L+PL CODE = 24468 ALBEDO =.0696

13H FLAT MOON DATA
FM=.05432 FM'=.06614

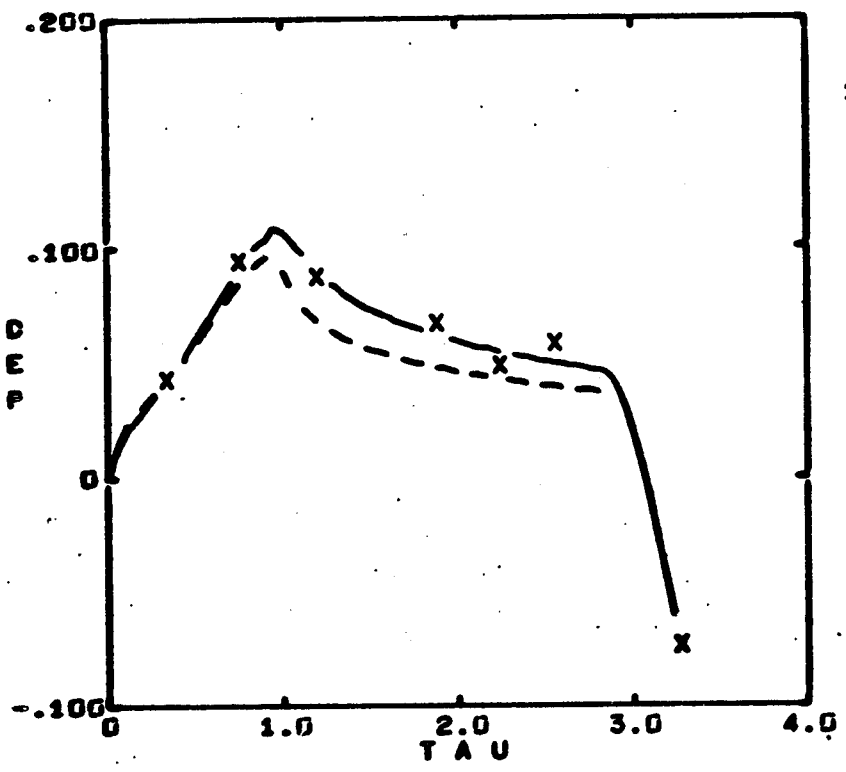
INITIAL TEMPERATURE 376.69
TAU-END OF TOTALITY 2.828

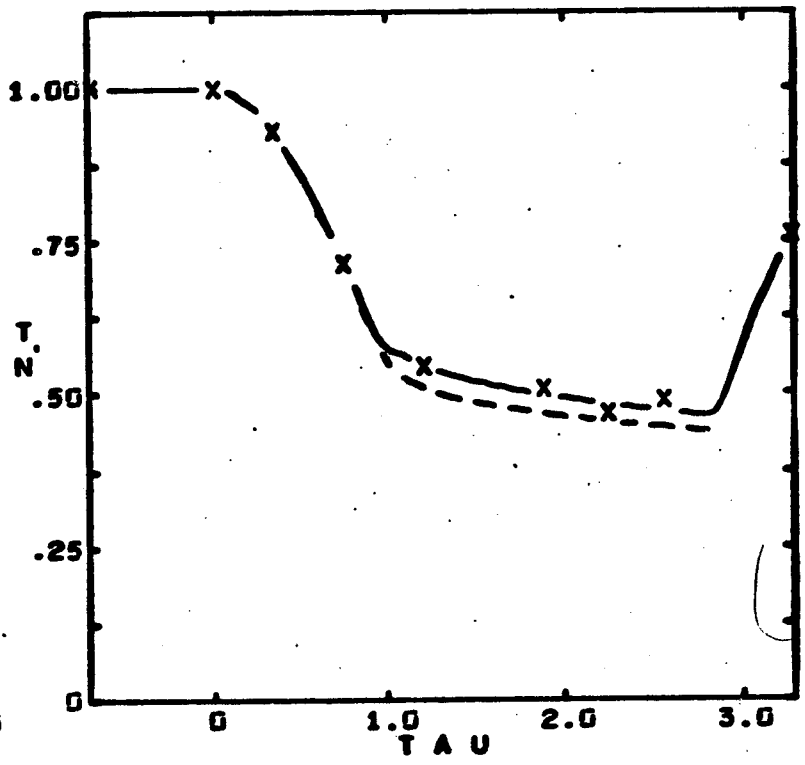
DIFFERENTIAL ENERGY DATA

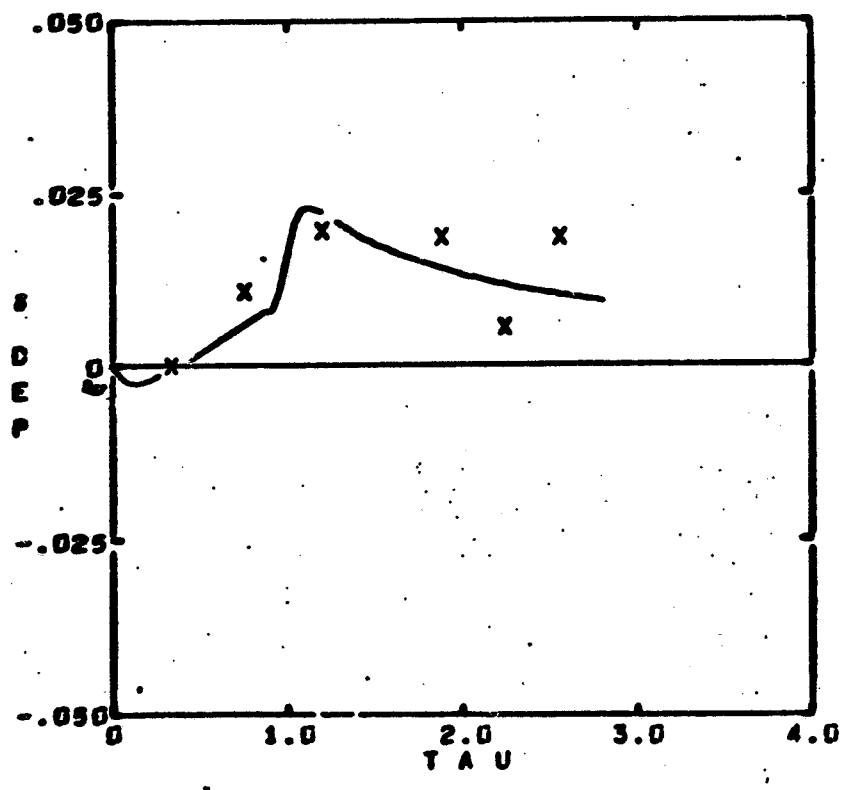
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0325	.0341	-.0016
.50	.0595	.0576	.0019
.75	.0892	.0832	.0060
.93	.1088	.1001	.0087
1.0	.1070	.0904	.0166
1.5	.0735	.0558	.0177
2.0	.0590	.0459	.0131
2.5	.0504	.0398	.0106
3.0	.0441	.0355	.0086

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.698	378.20			378.20	1.004	.0162
9H	-0.002	376.68			376.68	1.000	-.0000
10H	0.345	350.31			350.31	0.930	.0427
11H	0.752	269.66	0.000	-.778	269.66	0.716	.0943
12H	1.199	202.39	0.331	-.149	205.03	0.544	.0878
13H	1.881	186.73	0.342	-.161	191.30	0.508	.0665
14H	2.240	176.62	0.000	+.208	176.62	0.469	.0483
15H	2.562	182.43	0.266	-.157	184.71	0.490	.0578
16H	3.270	287.52	0.000	+.383	287.52	0.763	-.0733







PHOTOGRAPH NOT AVAILABLE

177 (4C8) DOLLOND E

LAMBDA=15.73 E BETA=10.24 S XI=+.2668 ETA=-.1778 L+PL CODE = 42167 ALBEDO =.1898

13H FLAT MOON DATA
FM=.02352 FM'=.02784

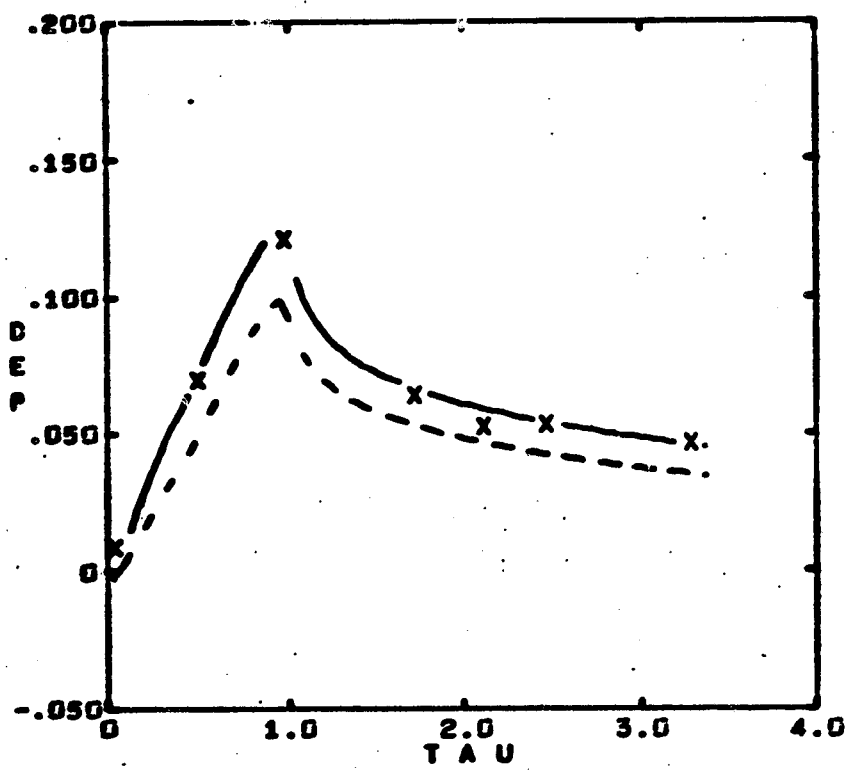
INITIAL TEMPERATURE 383.32
TAU-END OF TOTALITY 3.366

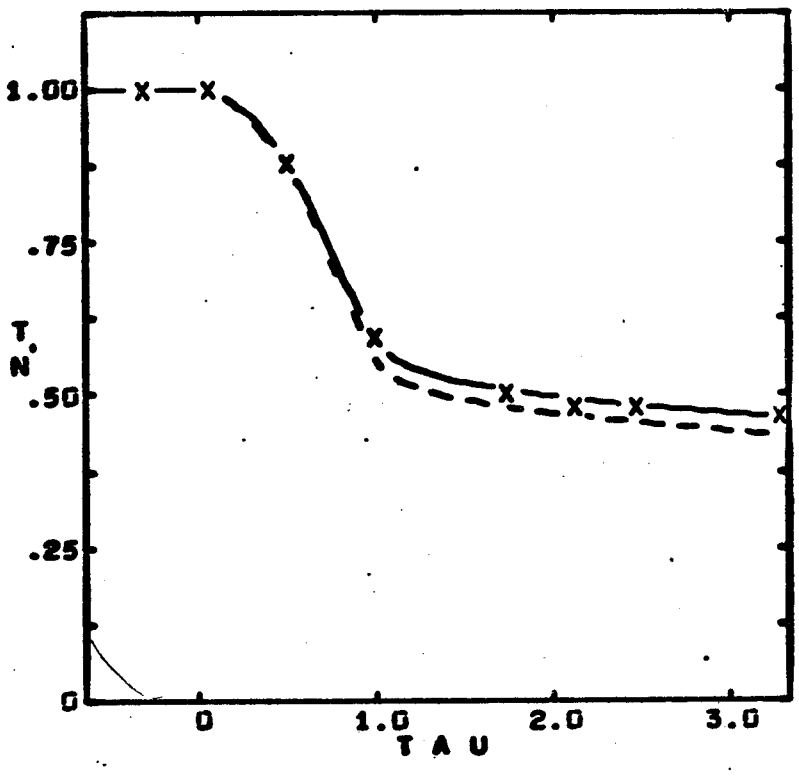
DIFFERENTIAL ENERGY DATA

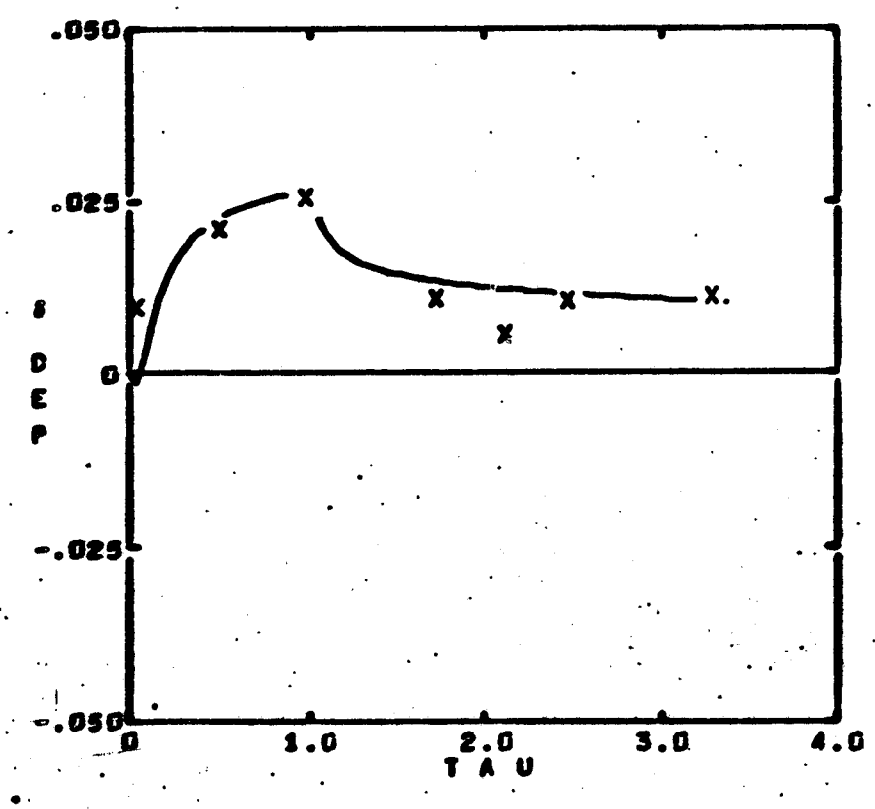
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0378	.0217	.0161
.50	.0726	.0499	.0227
.75	.1054	.0802	.0252
.93	.1267	.1006	.0261
1.0	.1168	.0914	.0254
1.5	.0726	.0582	.0144
2.0	.0610	.0485	.0125
2.5	.0538	.0423	.0115
3.0	.0484	.0377	.0107

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.093	384.60		384.60	1.003	.0134
9H	-0.330	382.94		382.94	0.999	-.0040
10H	0.046	383.12		383.12	0.999	.0083
11H	0.491	336.73		336.73	0.878	.0698
12H	0.980	226.72	0.144 +.631	227.47	0.593	.1209
13H	1.725	191.58	0.310 -.063	192.82	0.503	.0640
14H	2.116	183.64	0.000 +.872	183.64	0.479	.0527
15H	2.468	182.44	0.562 +.858	184.07	0.480	.0532
16H	3.292	177.69	0.143 +.622	178.13	0.465	.0466







PHOTOGRAPH NOT AVAILABLE

178 (3E7) DOPPELMAYER K

LAMBDA=40.66 W BETA=23.98 S XI=-.5953 ETA=-.4064 L+PL CODE = 35490 ALBEDO =.0651

13H FLAT MOON DATA
FM=.03868 FM'=.08377

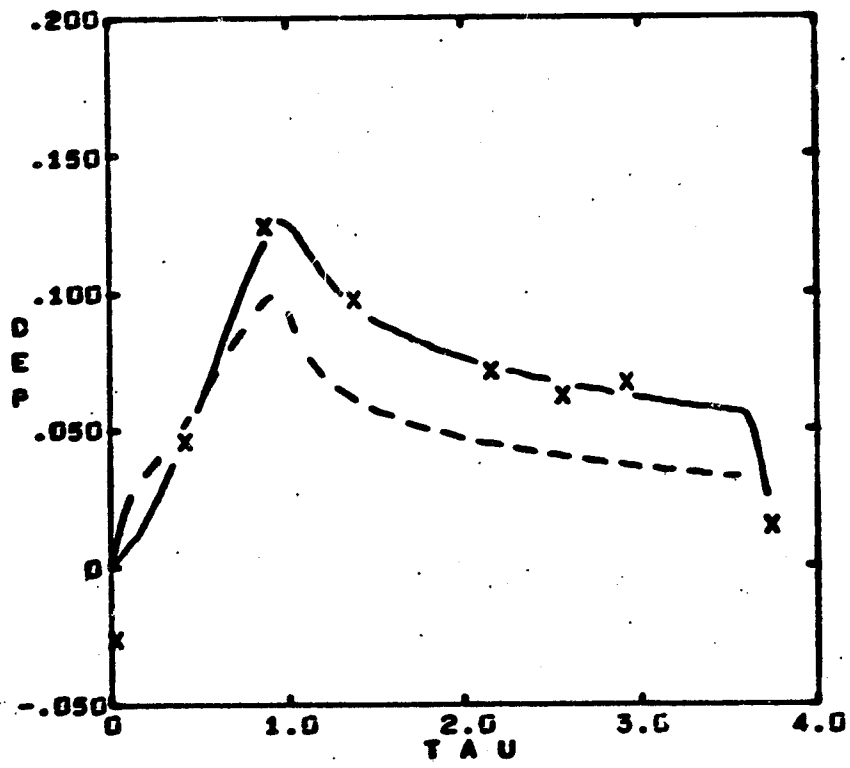
INITIAL TEMPERATURE 373.49
TAU-END OF TOTALITY 3.590

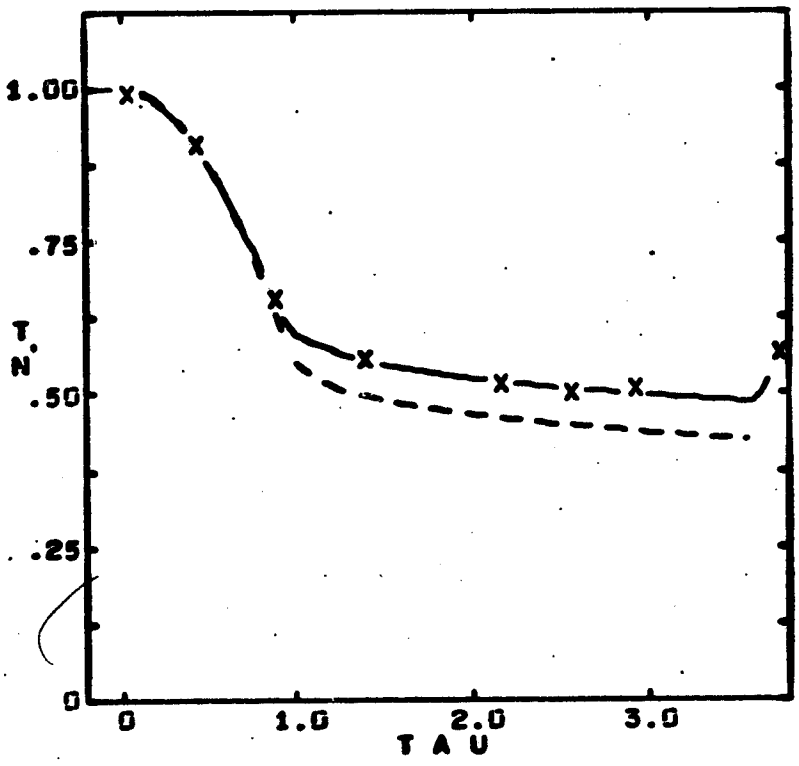
DIFFERENTIAL ENERGY DATA

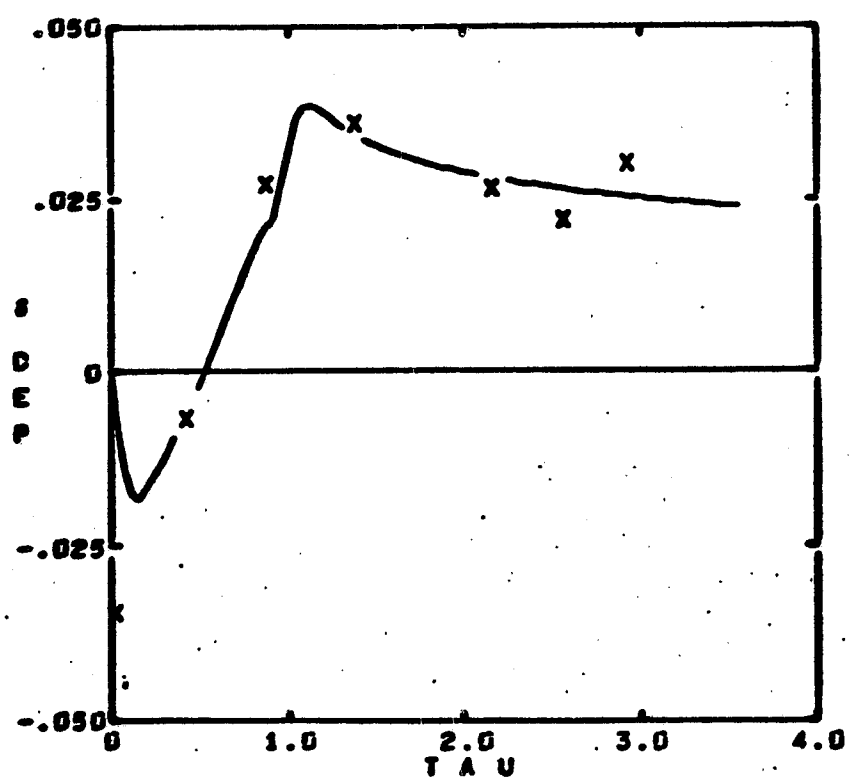
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0228	.0376	-.0148
.50	.0594	.0608	-.0014
.75	.1003	.0861	.0142
.93	.1272	.1026	.0246
1.0	.1253	.0928	.0325
1.5	.0902	.0573	.0329
2.0	.0760	.0471	.0289
2.5	.0676	.0410	.0266
3.0	.0617	.0365	.0252

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.762	373.49			373.49	1.000	.0000
9H	0.030	370.55			370.55	0.992	-.0262
10H	0.418	338.71			338.71	0.907	.0460
11H	0.878	242.48	0.321	-.060	244.90	0.656	.1241
12H	1.382	205.48	0.234	+.435	208.57	0.558	.0973
13H	2.154	176.85	0.772	+.343	193.21	0.517	.0716
14H	2.557	183.00	0.504	-.046	186.72	0.500	.0625
15H	2.923	186.35	0.322	+.792	190.29	0.509	.0674
16H	3.745	202.42	1.653	-.316	212.05	0.568	.0152







PHOTOGRAPH NOT AVAILABLE

179 (262) DRAPER C

LAMBDA=21.47 W BETA=17.06 N XI=-.3499 ETA=+.2933 L+PL CODE = 23249 ALBEDO =.0665

13H FLAT MOON DATA
FM=.03621 FM'=.08405

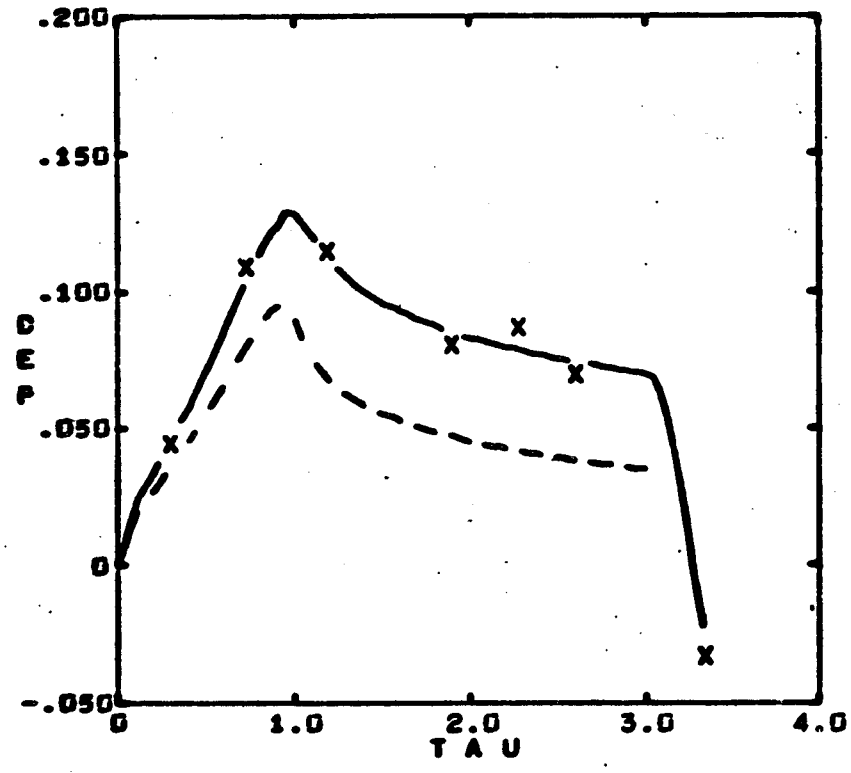
INITIAL TEMPERATURE 388.79
TAU-END OF TOTALITY 3.019

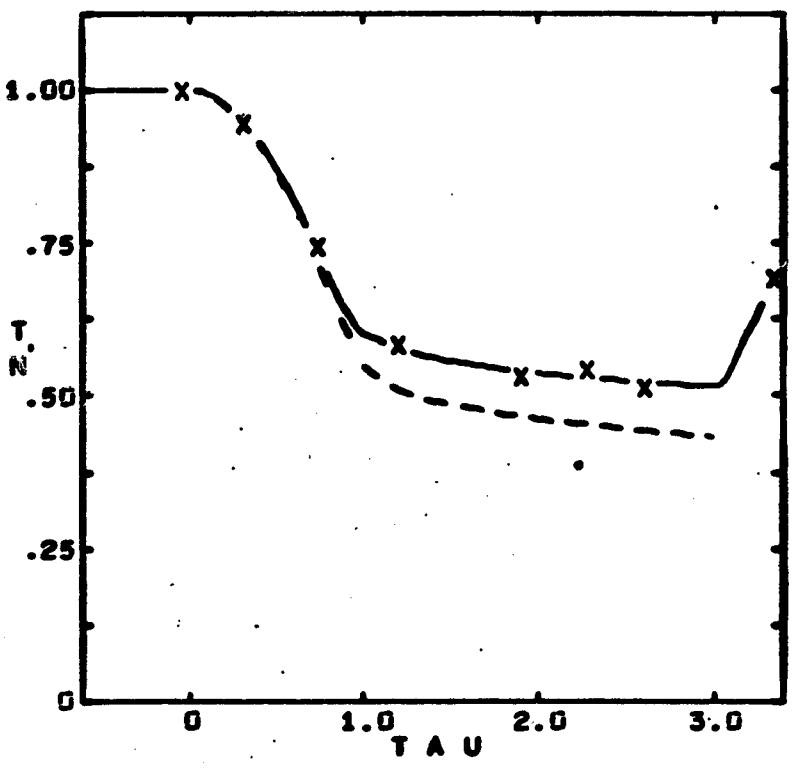
DIFFERENTIAL ENERGY DATA

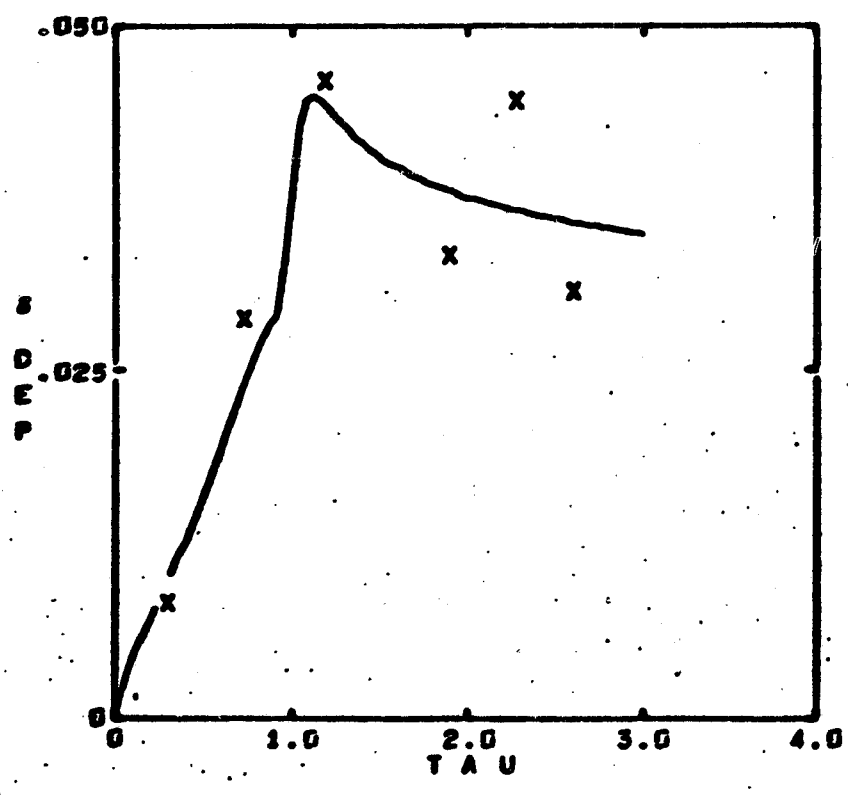
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0391	.0309	.0082
.50	.0712	.0552	.0160
.75	.1062	.0816	.0246
.93	.1294	.0992	.0302
1.0	.1281	.0896	.0385
1.5	.0958	.0553	.0405
2.0	.0830	.0455	.0375
2.5	.0754	.0394	.0360
3.0	.0700	.0351	.0349

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.769	390.44		390.44	1.004	.0170
9H	-0.049	388.69		388.69	1.000	-.0011
10H	0.307	367.98		367.98	0.946	.0444
11H	0.730	287.17	0.569 +.749	289.67	0.745	.1084
12H	1.191	224.31	0.127 -.135	225.94	0.581	.1141
13H	1.897	188.36	0.748 -.136	207.07	0.533	.0805
14H	2.267	198.59	0.417 -.871	210.93	0.543	.0866
15H	2.601	194.31	0.295 +.985	199.45	0.513	.0693
16H	3.342	266.02	0.555 +.542	269.26	0.693	-.0332







PHOTOGRAPH NOT AVAILABLE

180 (4C9) E. PICKERING

LAMBDA= 7.02 E BETA= 2.87 S XI=+.1221 ETA=-.0500 L+PL CODE = 41025 ALBEDO =.1716

13H FLAT MOON DATA
FM=.04543 FM'=.06972

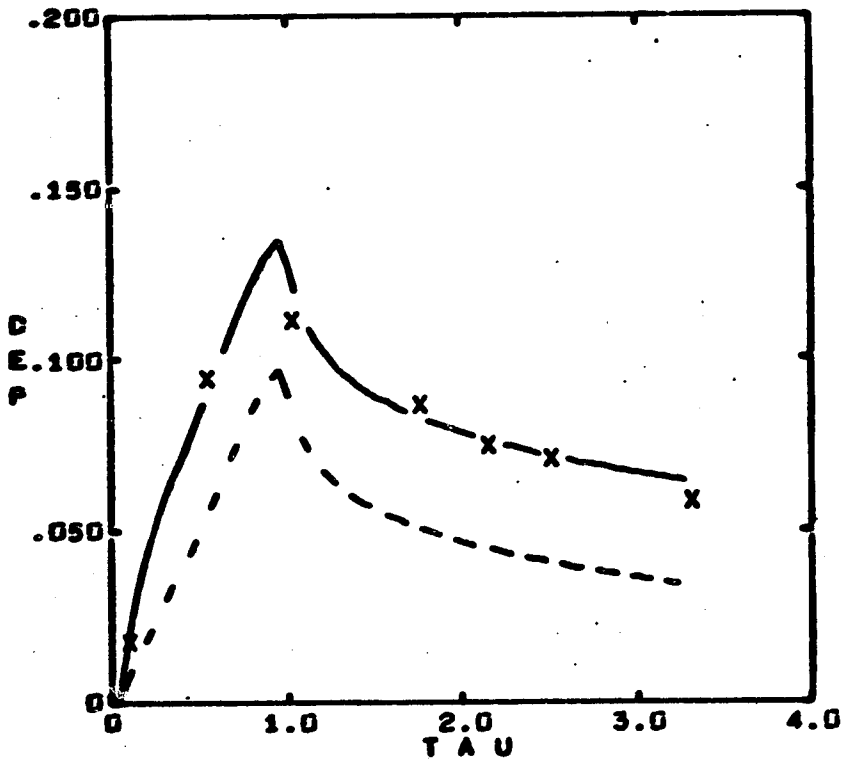
INITIAL TEMPERATURE 388.67
TAU-END OF TOTALITY 3.279

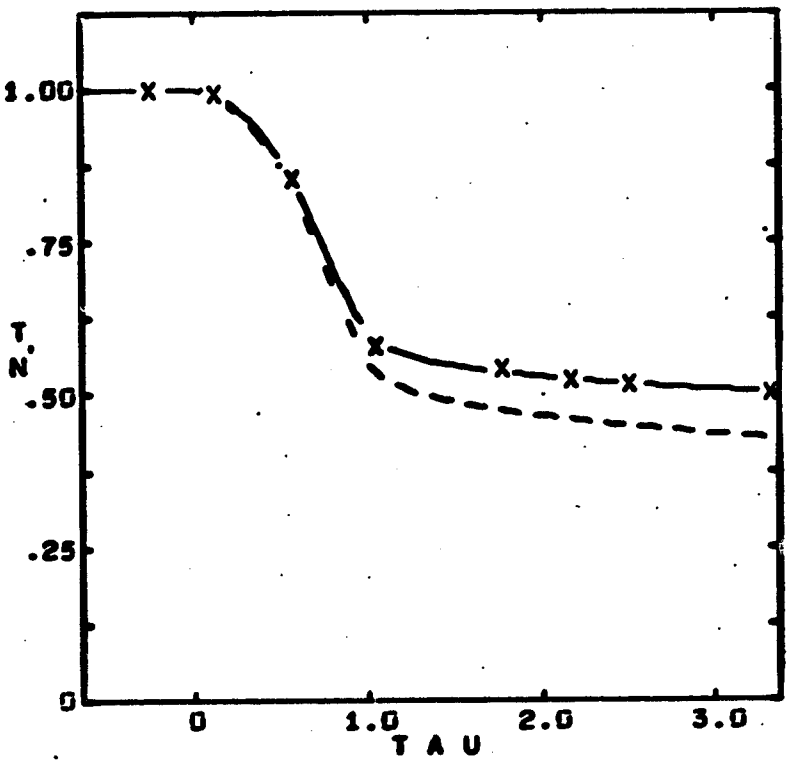
DIFFERENTIAL ENERGY DATA

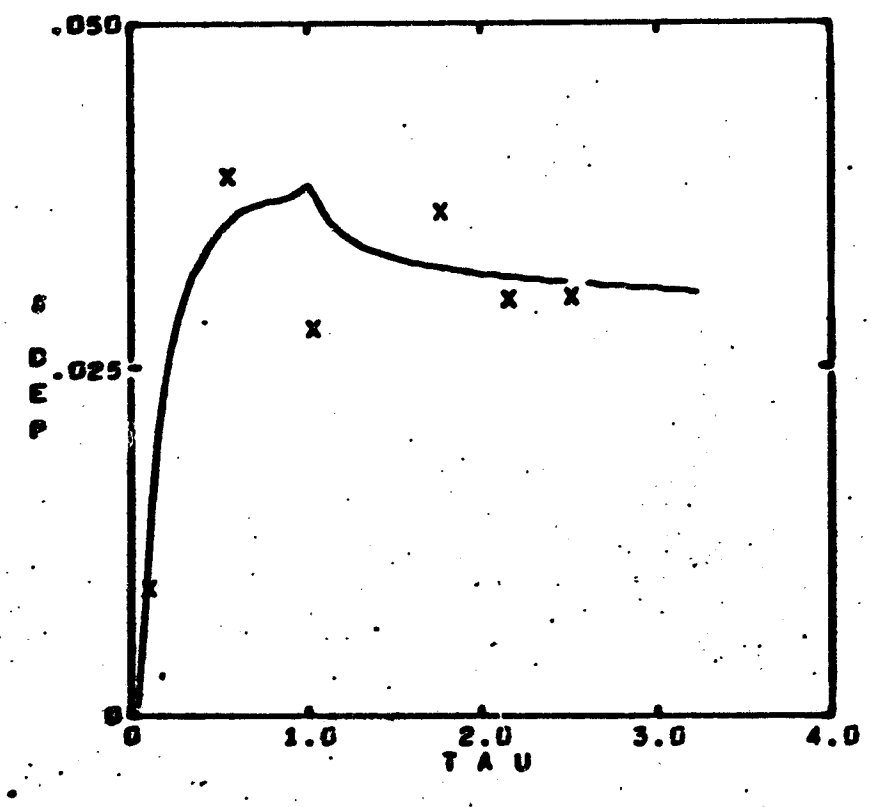
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0498	.0227	.0271
.50	.0847	.0497	.0350
.75	.1159	.0789	.0370
.93	.1357	.0985	.0372
1.0	.1276	.0893	.0383
1.5	.0893	.0564	.0329
2.0	.0785	.0467	.0318
2.5	.0718	.0406	.0312
3.0	.0668	.0361	.0307

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.011	390.54		390.54	1.005	.0195
9H	-0.260	388.18		388.18	0.999	-.0050
10H	0.113	385.84		385.84	0.993	.0176
11H	0.552	331.75	1.627 -.579	332.23	0.855	.0946
12H	1.034	221.96	0.482 +.978	224.49	0.578	.1113
13H	1.768	201.31	0.454 +.075	210.95	0.543	.0868
14H	2.154	191.48	0.625 +.935	203.10	0.523	.0746
15H	2.503	194.57	0.354 +.860	200.48	0.516	.0708
16H	3.306	185.66	0.610 +.800	195.28	0.502	.0588







PHOTOGRAPH NOT AVAILABLE

101 (161) EGEDE A

LAMBDA=10.48 E BETA=51.48 N XI=+.1133 ETA=+.7824 L+PL CODE = 11718 ALBEDO =.1159

13M FLAT MOON DATA
FM=.00558 FM'=.14451

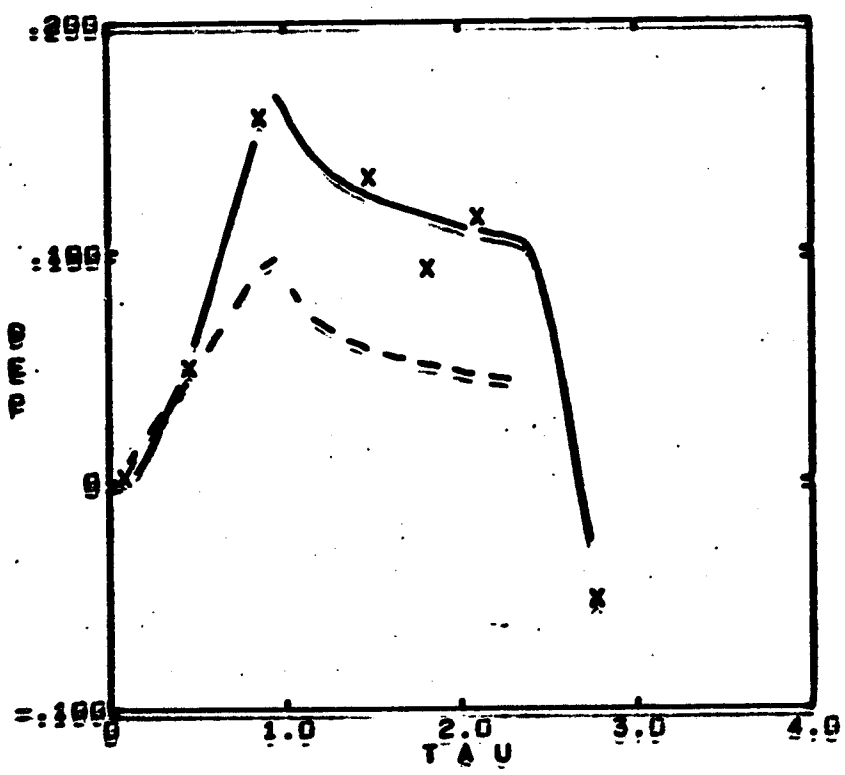
INITIAL TEMPERATURE 366.98
TAU=END OF TOTALITY 2.349

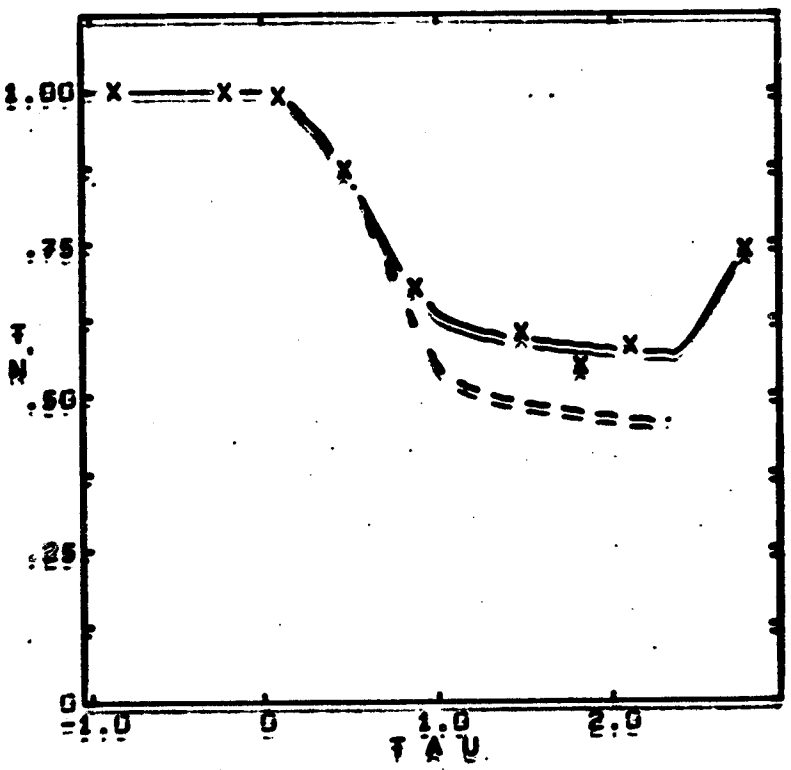
DIFFERENTIAL ENERGY DATA

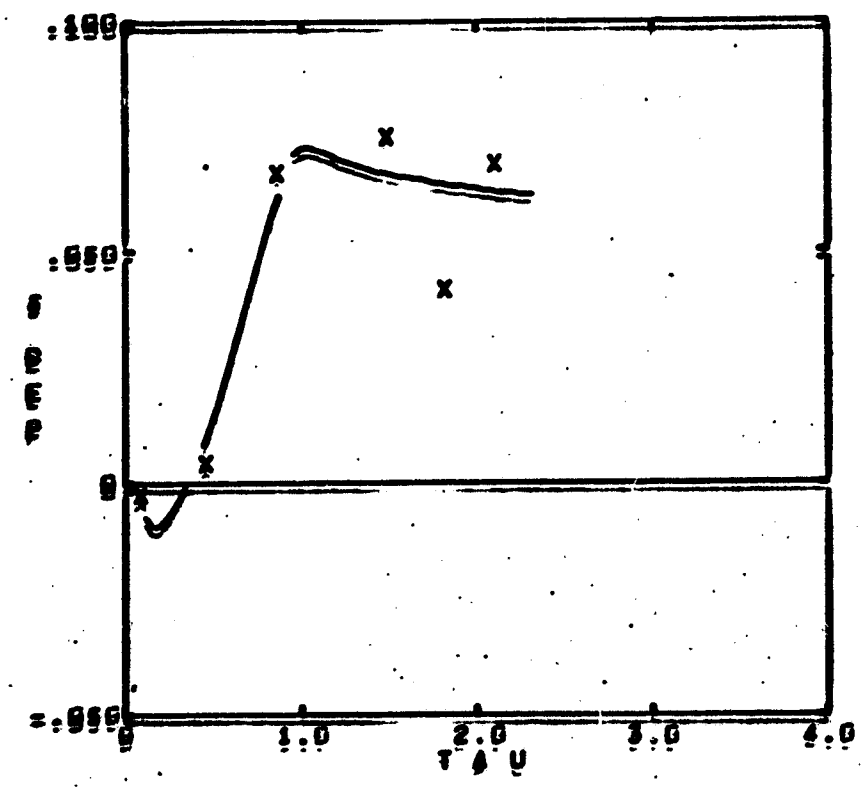
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0145	.0223	-.0078
.50	.0641	.0498	.0143
.75	.1265	.0795	.0470
.93	.1699	.0994	.0705
1.0	.1627	.0902	.0725
1.5	.1240	.0571	.0669
2.0	.1111	.0474	.0637
2.5	.1027	.0413	.0614

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8M	-0.859	368.10		368.10	1.003	.0123
9M	-0.228	366.68		366.68	0.999	-.0032
10M	0.088	363.85		363.85	0.991	.0016
11M	0.459	319.63		319.63	0.871	.0491
12M	0.866	245.59	0.177 -.123	249.00	0.679	.1592
13M	1.485	170.30	1.465 -.648	221.54	0.604	.1328
14M	1.815	179.23	0.908 +.202	202.19	0.551	.0922
15M	2.107	204.18	0.274 -.020	213.72	0.582	.1150
16M	2.762	267.85	0.597 -.040	270.99	0.738	-.0518







PHOTOGRAPH NOT AVAILABLE

182 (3E8) EUCLIDES

LAMBDA=29.50 W BETA= 7.38 S XI=-.4883 ETA=-.1285 L+PL CODE = 34182 ALBEDO =.1264

13H FLAT MOON DATA
FM=.05671 FM'=.06907

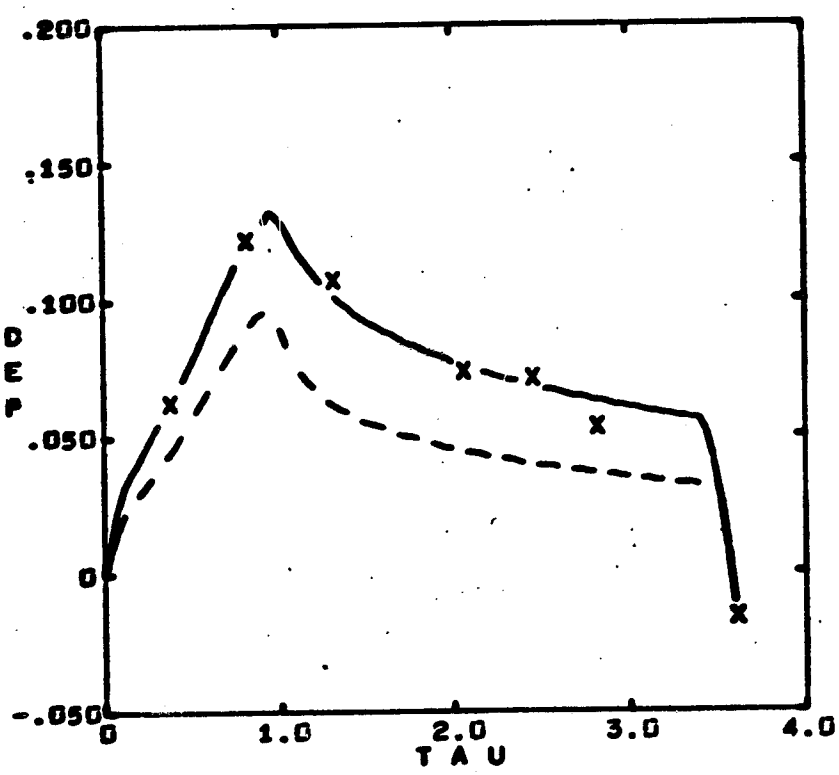
INITIAL TEMPERATURE 379.75
TAU-END OF TOTALITY 3.402

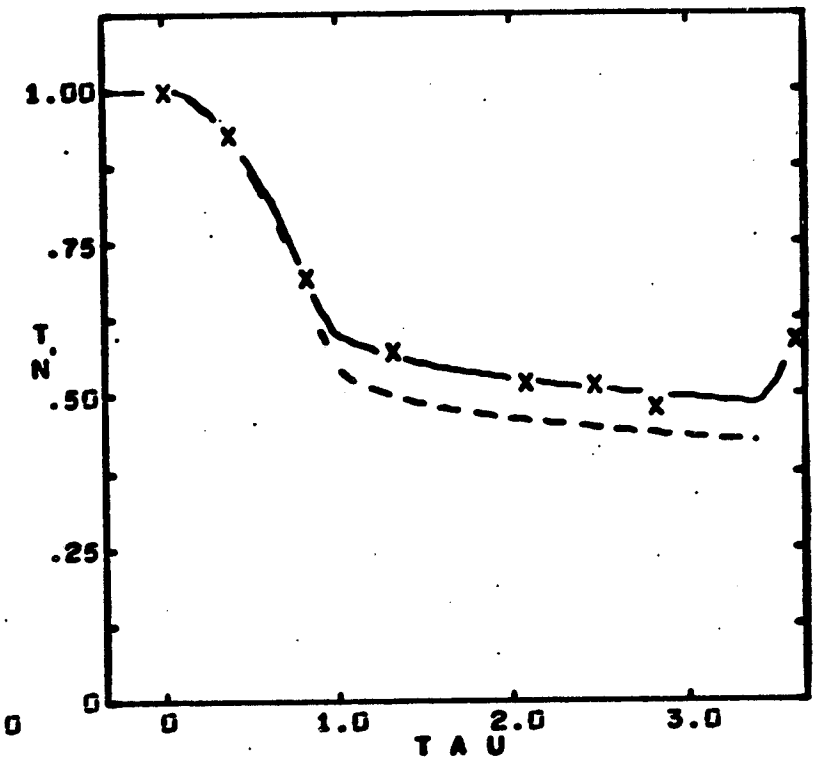
DIFFERENTIAL ENERGY DATA

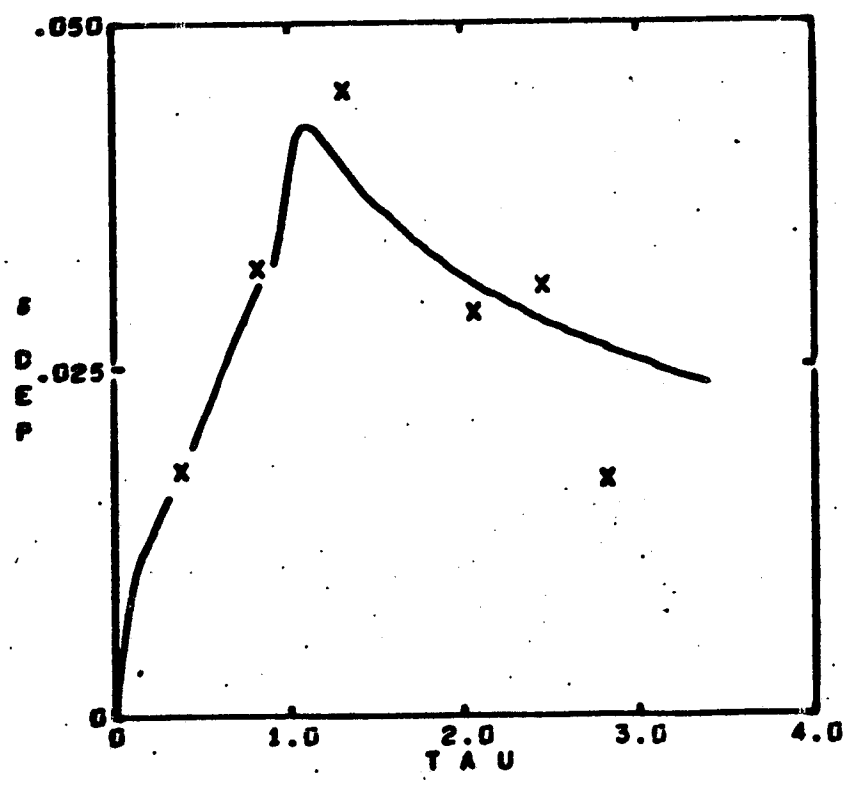
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0470	.0331	.0139
.50	.0778	.0568	.0210
.75	.1112	.0827	.0285
.93	.1332	.0997	.0335
1.0	.1292	.0900	.0392
1.5	.0924	.0556	.0368
2.0	.0773	.0457	.0316
2.5	.0678	.0396	.0282
3.0	.0608	.0353	.0255

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.770	381.24		381.24	1.004	.0158
9H	-0.001	379.75		379.75	1.000	-.0000
10H	0.377	352.42		352.42	0.928	.0624
11H	0.825	260.35	0.543 +.948	262.38	0.691	.1219
12H	1.316	216.42	0.060 +.274	217.14	0.572	.1069
13H	2.066	193.12	0.268 -.134	197.90	0.521	.0737
14H	2.458	192.03	0.258 +.018	196.08	0.516	.0711
15H	2.813	181.92	0.257 -.822	182.81	0.481	.0537
16H	3.609	224.44	0.000 +.187	224.44	0.591	-.0159







PHOTOGRAPH NOT AVAILABLE

863 (3E9) EUCLIDES B

LAMBDA=30.30 W BETA=11.77 S XI=-.4939 ETA=-.2039 L+PL CODE = 34290 ALBEDO =.0696

13H FLAT MOON DATA
FM=.03343 FM'=.03343

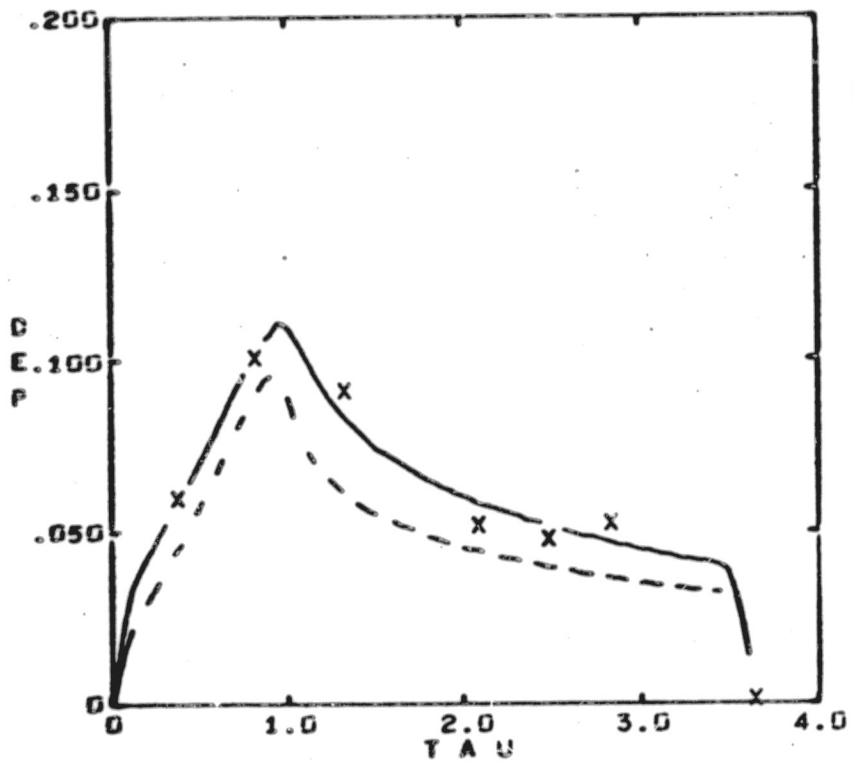
INITIAL TEMPERATURE 384.01
TAU-END OF TOTALITY 3.456

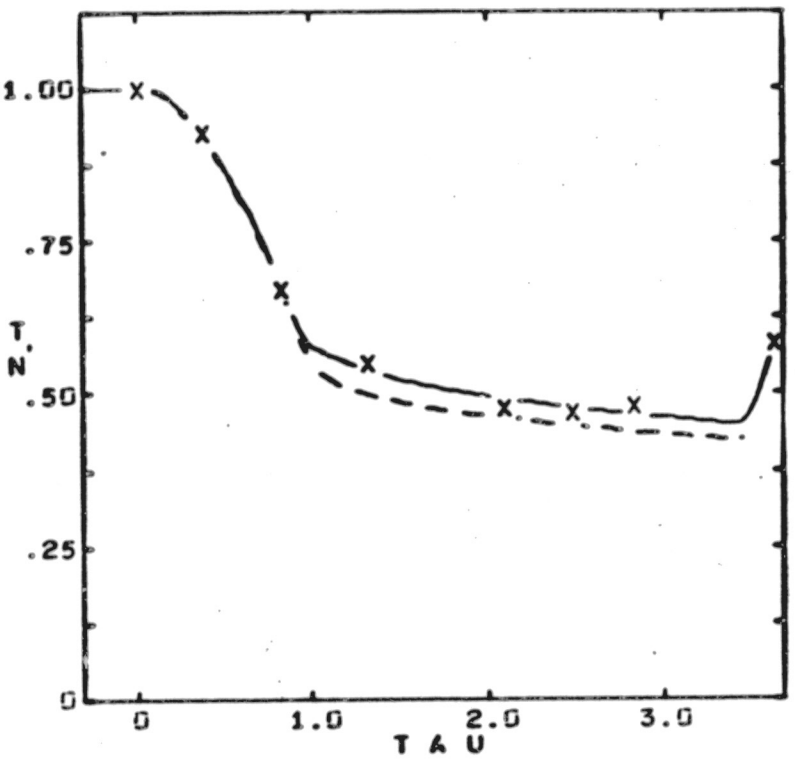
DIFFERENTIAL ENERGY DATA

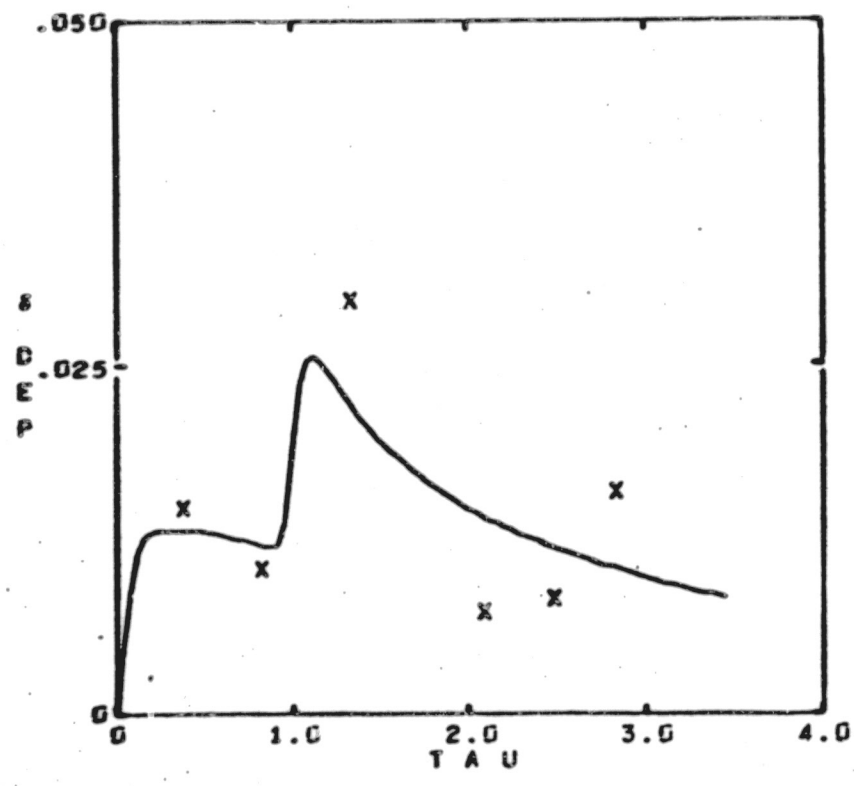
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0465	.0334	.0131
.50	.0701	.0570	.0131
.75	.0952	.0828	.0124
.93	.1116	.0998	.0118
1.0	.1097	.0901	.0196
1.5	.0752	.0556	.0196
2.0	.0604	.0457	.0147
2.5	.0515	.0397	.0118
3.0	.0451	.0353	.0098

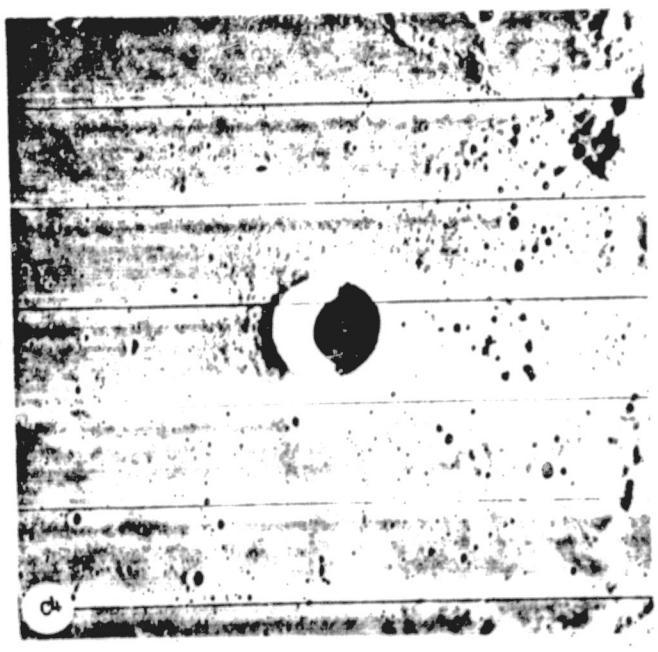
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.778	385.45		385.45	1.004	.0151
9H	-0.002	384.01		384.01	1.000	-.0000
10H	0.379	355.99		355.99	0.927	.0600
11H	0.830	257.60	0.000 -.206	257.60	0.671	.1007
12H	1.325	209.90	0.127 -.338	211.07	0.550	.0913
13H	2.082	183.31	0.000 -.207	183.31	0.477	.0519
14H	2.476	179.98	0.000 -.211	179.98	0.469	.0482
15H	2.835	183.93	0.000 -.195	183.93	0.479	.0526
16H	3.639	221.17	0.413 -.481	223.59	0.582	.0010









184 (3F1) EUCLIDES C

LAMBDA=30.00 W BETA=13.27 S XI=-.4866 ETA=-.2296 L+PL CODE = 34282 ALBEDO =.0681

13H FLAT MOON DATA
FM=.05618 FM'=.06992

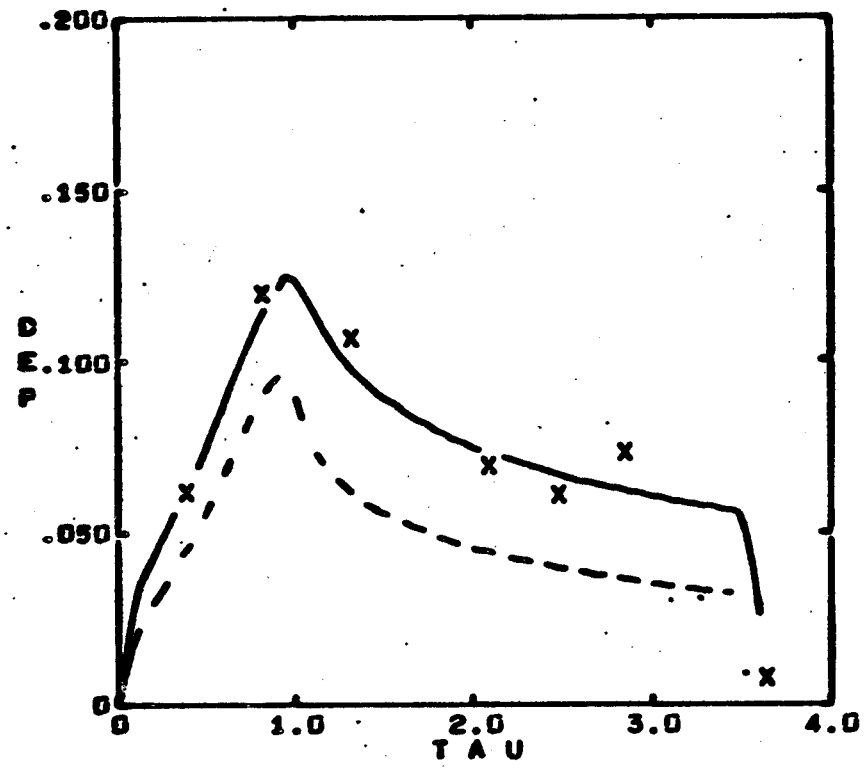
INITIAL TEMPERATURE 384.58
TAU-END OF TOTALITY 3.473

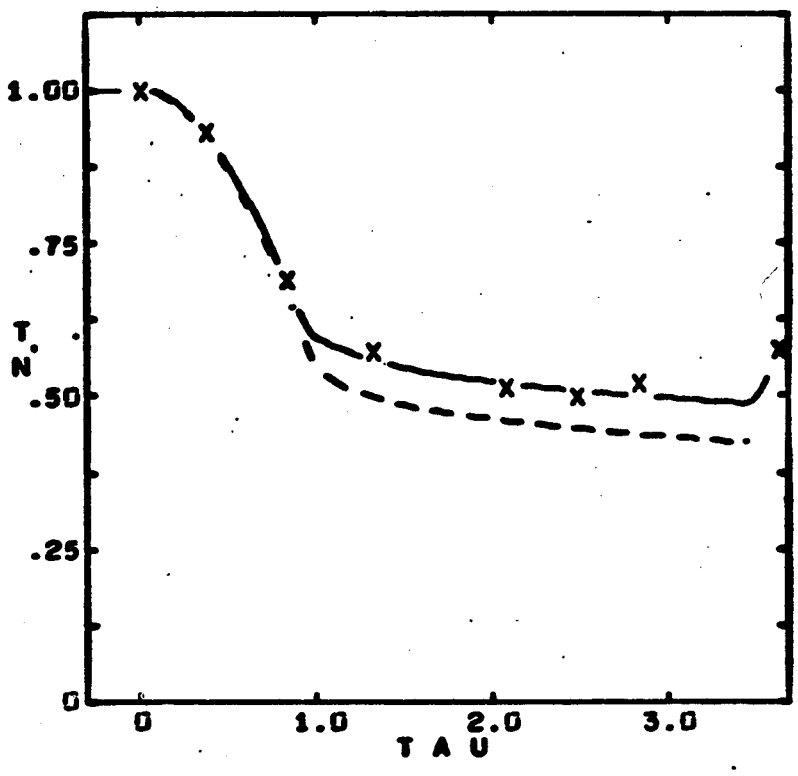
DIFFERENTIAL ENERGY DATA

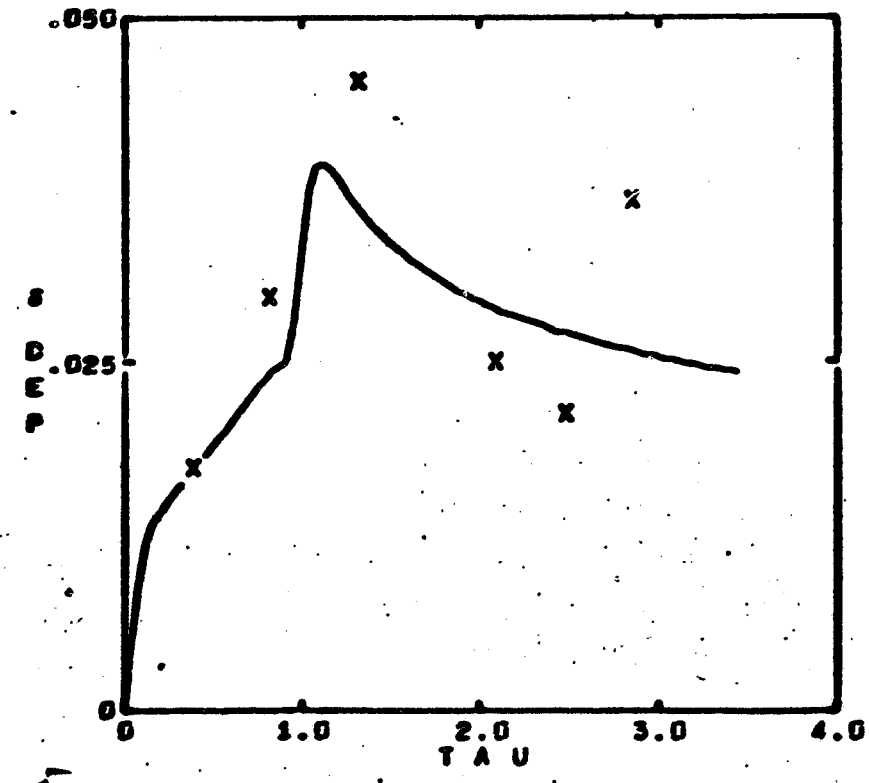
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0483	.0333	.0150
.50	.0761	.0569	.0192
.75	.1058	.0827	.0231
.93	.1254	.0997	.0257
1.0	.1236	.0901	.0335
1.5	.0892	.0556	.0336
2.0	.0751	.0457	.0294
2.5	.0667	.0397	.0270
3.0	.0607	.0353	.0254

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.784	385.83			385.83	1.003	.0131
9H	-0.007	384.57			384.57	1.000	-.0001
10H	0.375	357.40			357.40	0.929	.0620
11H	0.828	261.83	0.465	-.969	264.35	0.687	.1198
12H	1.323	217.41	0.159	-.191	219.92	0.572	.1069
13H	2.083	192.11	0.328	+.981	197.49	0.514	.0695
14H	2.479	184.82	0.497	+.947	191.33	0.498	.0613
15H	2.838	196.36	0.188	+.733	200.15	0.520	.0734
16H	3.644	220.03	0.343	-.445	221.68	0.576	.0074







PHOTOGRAPH NOT AVAILABLE

C-5

LAMBDA=29.14 W BETA=23.27 N XI=-.4473 ETA=+.3951 L+PL CODE = 24349 ALBEDO =.0839

13H FLAT MOON DATA
FM=.07607 FM'=.07674

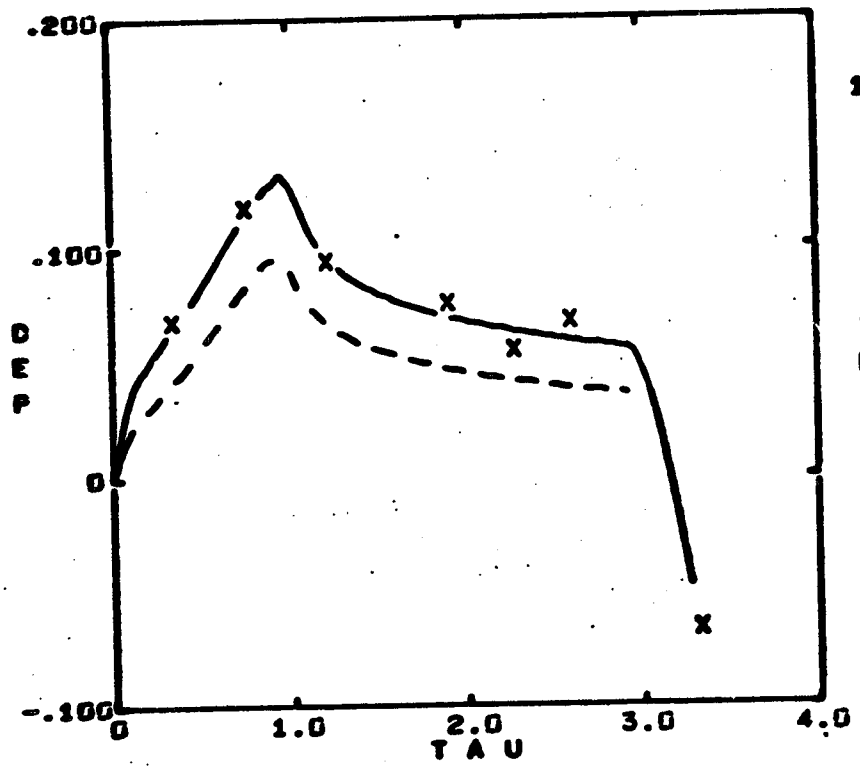
INITIAL TEMPERATURE 380.83
TAU-END OF TOTALITY 2.926

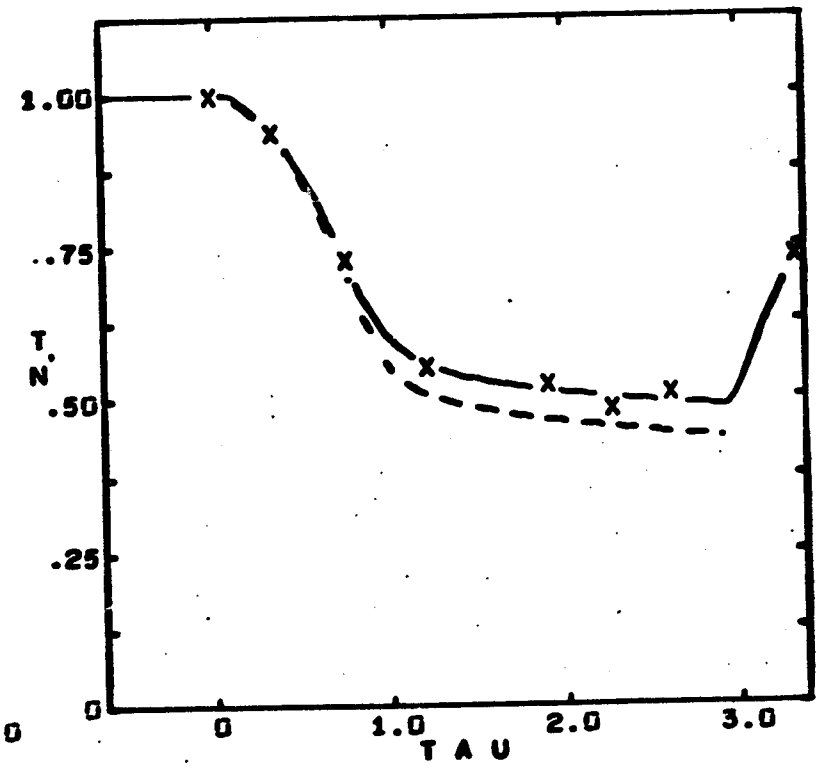
DIFFERENTIAL ENERGY DATA

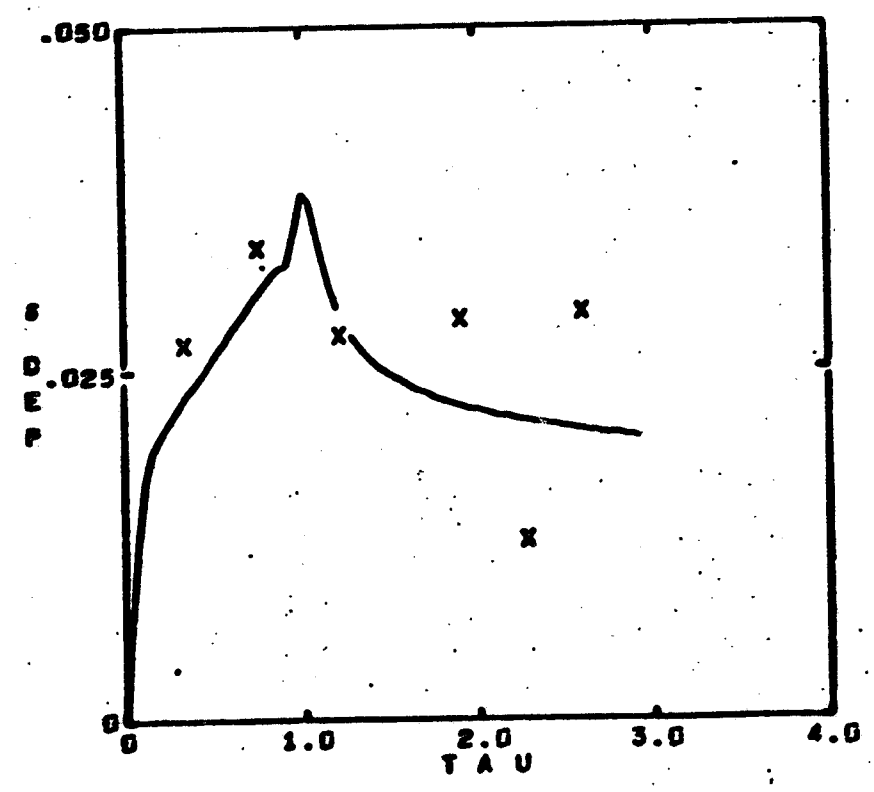
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0543	.0330	.0213
.50	.0828	.0567	.0261
.75	.1132	.0826	.0306
.93	.1331	.0997	.0334
1.0	.1280	.0900	.0380
1.5	.0804	.0556	.0248
2.0	.0679	.0456	.0223
2.5	.0606	.0396	.0210
3.0	.0554	.0353	.0201

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.718	382.40		382.40	1.004	.0166
9H	-0.009	380.81		380.81	1.000	-.0002
10H	0.343	357.81		357.81	0.940	.0683
11H	0.757	274.82	0.418 +.628	277.81	0.729	.1174
12H	1.212	206.62	0.447 +.925	211.28	0.555	.0947
13H	1.906	198.57	0.056 -.785	199.86	0.525	.0759
14H	2.271	180.94	0.563 +.952	184.44	0.484	.0550
15H	2.599	192.[illegible]	0.116 -.714	194.44	0.511	.0679
16H	3.321	278.87	0.000 +.631	278.87	0.732	-.0673







PHOTOGRAPH NOT AVAILABLE

LAMBDA=27.33 W BETA=20.68 N XI=-.4295 ETA=+.3531 L+PL CODE = 24325 ALBEDO =.0700

13H FLAT MOON DATA
FM=.02169 FM'=.02169

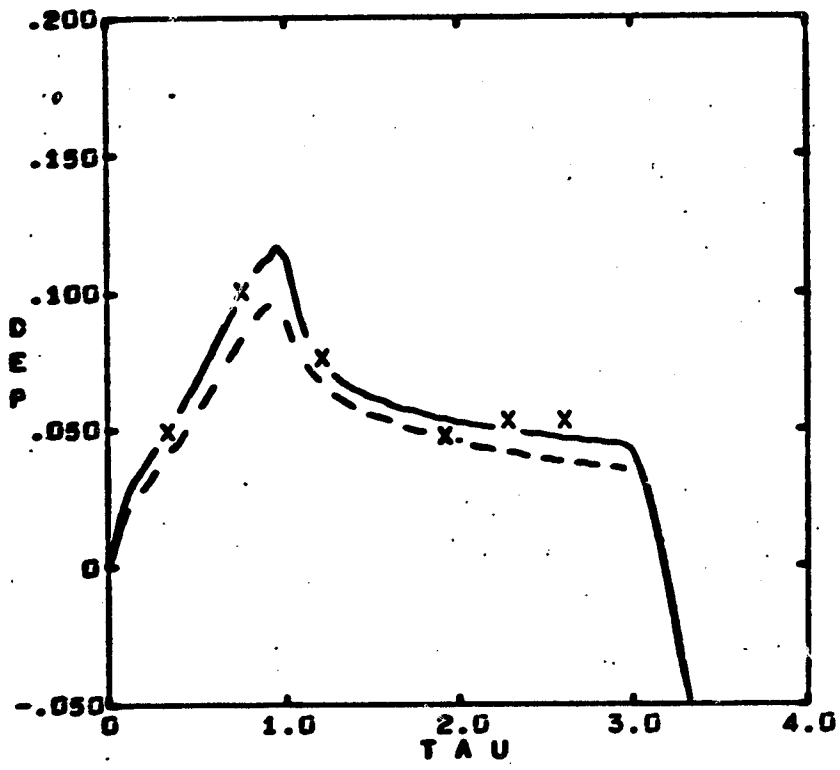
INITIAL TEMPERATURE 384.03
TAU-END OF TOTALITY 2.968

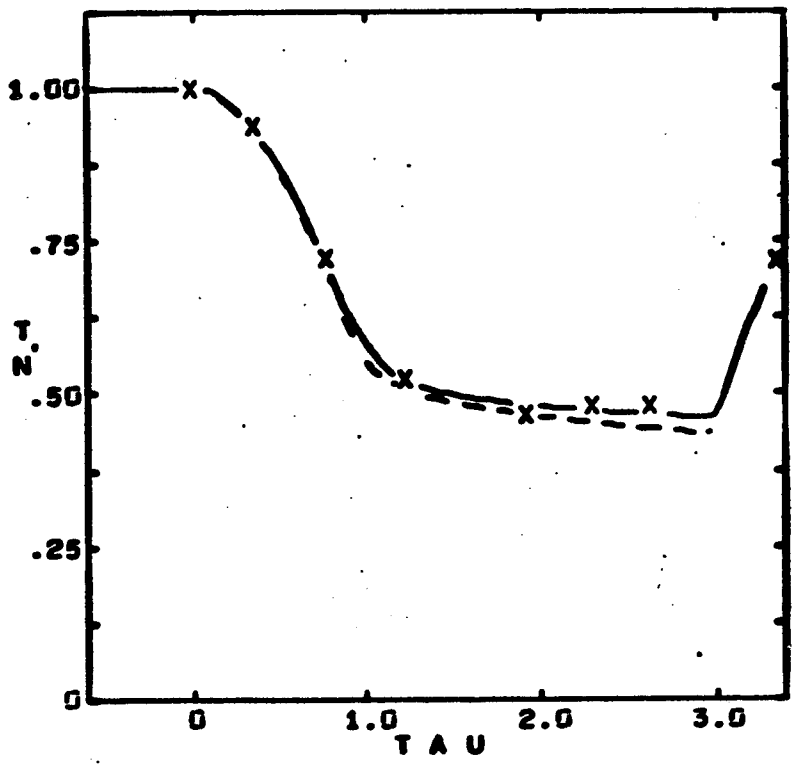
DIFFERENTIAL ENERGY DATA

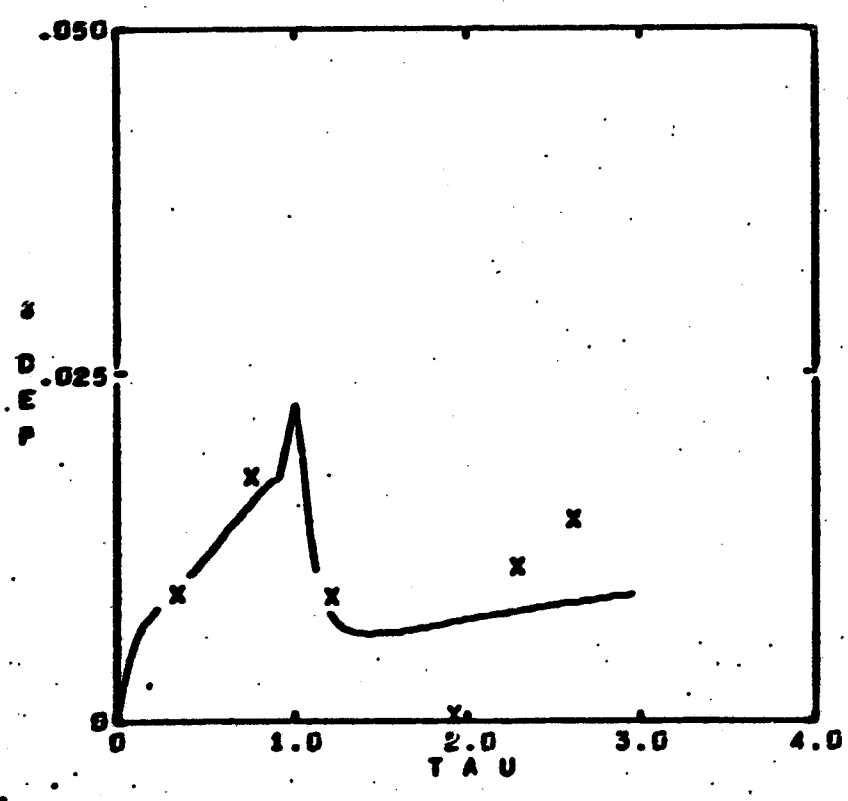
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0407	.0325	.0082
.50	.0682	.0563	.0119
.75	.0979	.0824	.0155
.93	.1175	.0995	.0180
1.0	.1127	.0899	.0228
1.5	.0618	.0555	.0063
2.0	.0529	.0456	.0073
2.5	.0479	.0396	.0083
3.0	.0444	.0352	.0092

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.731	385.65		385.65	1.004	.0170
9H	-0.015	384.00		384.00	1.000	-.0004
10H	0.338	359.49		359.49	0.936	.0496
11H	0.755	276.09	0.300 -.494	276.66	0.720	.1005
12H	1.213	200.13	0.453 -.815	201.54	0.525	.0759
13H	1.913	179.22	0.000 +.050	179.22	0.467	.0474
14H	2.280	183.77	0.090 +.277	184.22	0.480	.0530
15H	2.611	183.99	0.064 -.569	184.20	0.480	.0529
16H	3.340	276.31	0.000 +.821	276.31	0.719	-.0578







PHOTOGRAPH NOT AVAILABLE

LAMBDA= 3.84 E BETA=21.41 S XI=+.0623 ETA=-.3651 L+PL CODE = 40366 ALBEDO =.1068

19H FLAT MOON DATA
FM=.00195 FM'=.01154

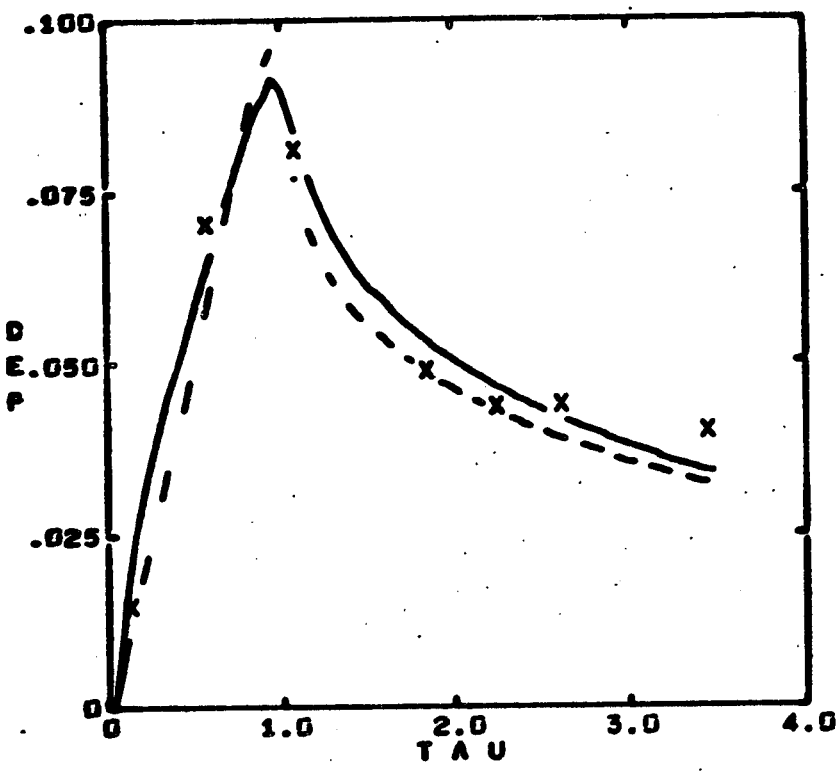
INITIAL TEMPERATURE 390.83
TAU-END OF TOTALITY 3.515

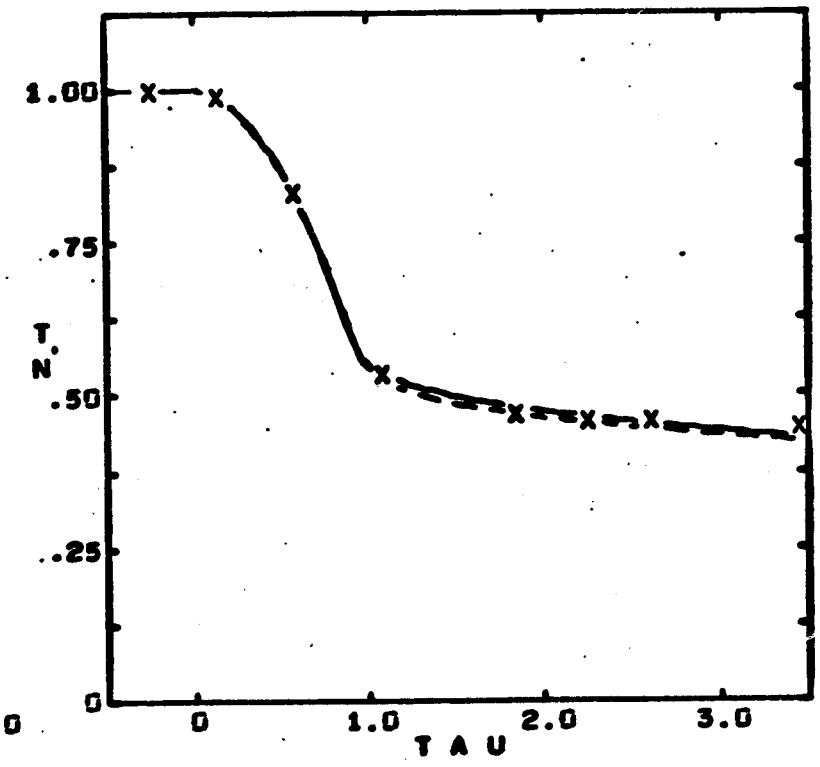
DIFFERENTIAL ENERGY DATA

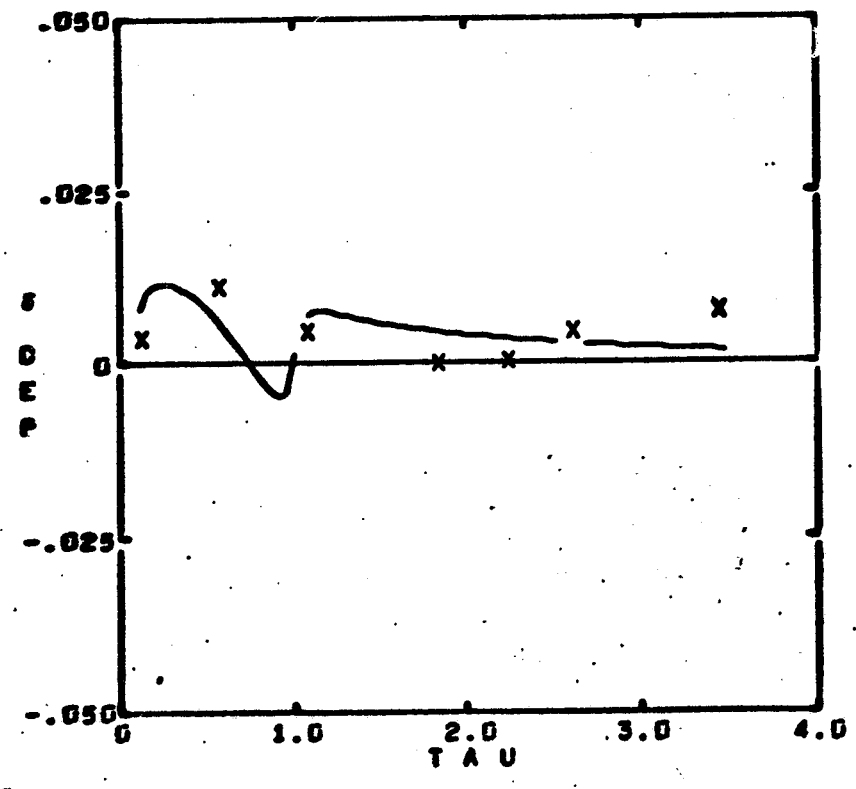
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0348	.0231	.0117
.50	.0577	.0497	.0080
.75	.0783	.0784	-.0001
.93	.0914	.0976	-.0062
1.0	.0899	.0885	.0014
1.5	.0616	.0557	.0059
2.0	.0503	.0461	.0042
2.5	.0432	.0401	.0031
3.0	.0380	.0356	.0024

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.039	391.05		391.05	1.001	.0022
9H	-0.258	390.78		390.78	1.000	-.0006
10H	0.127	386.77		386.77	0.990	.0145
11H	0.582	323.40	0.667 -.757	324.49	0.830	.0702
12H	1.081	204.57	1.551 -.636	208.63	0.534	.0812
13H	1.844	180.24	1.134 -.665	183.69	0.470	.0488
14H	2.242	175.23	0.935 -.115	178.50	0.457	.0435
15H	2.603	174.96	1.165 +.490	176.92	0.458	.0439
16H	3.443	173.76	0.280 +.420	174.92	0.448	.0401







PHOTOGRAPH NOT AVAILABLE

188 (3F2) FLAMSTEED

LAMBDA=44.25 W BETA= 4.48 S XI=-.6956 ETA=-.0781 L+PL CODE = 36097 ALBEDO =.0643

13H FLAT MOON DATA
FM=.06169 FM'=.10514

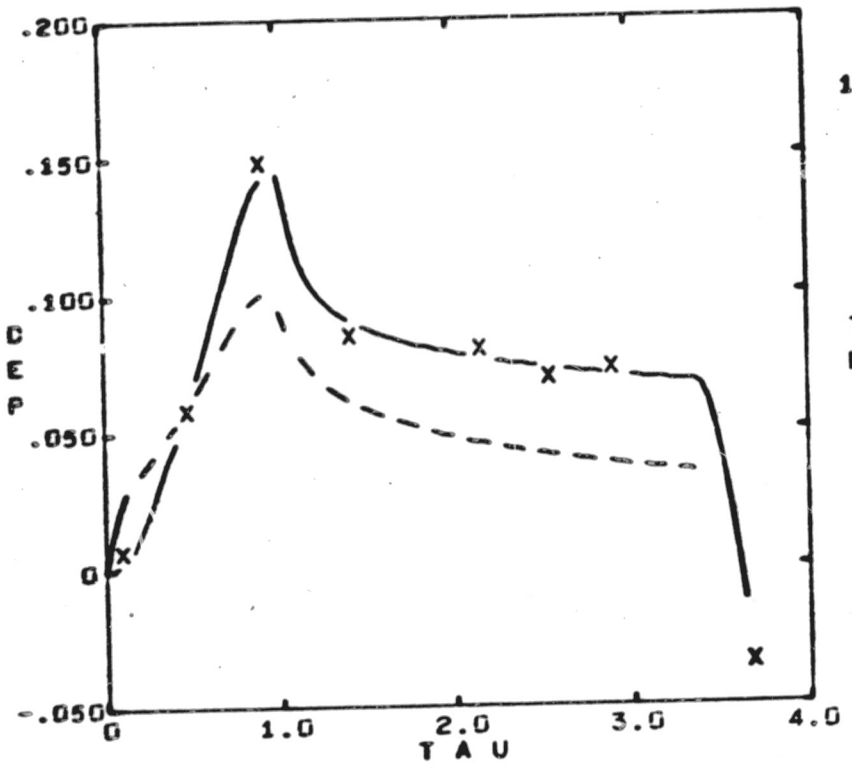
INITIAL TEMPERATURE 377.27
TAU-END OF TOTALITY 3.385

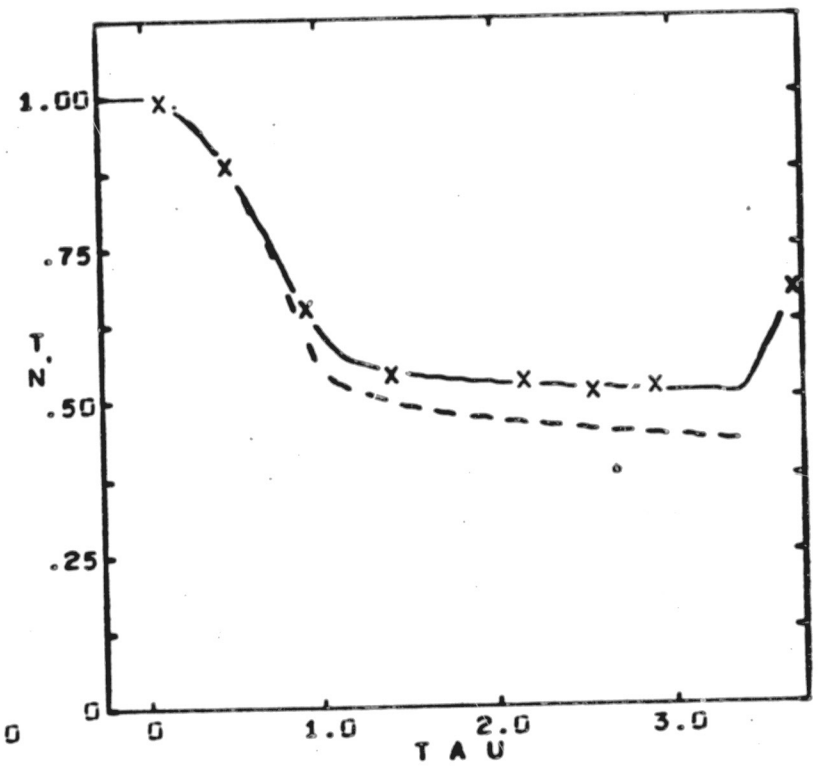
DIFFERENTIAL ENERGY DATA

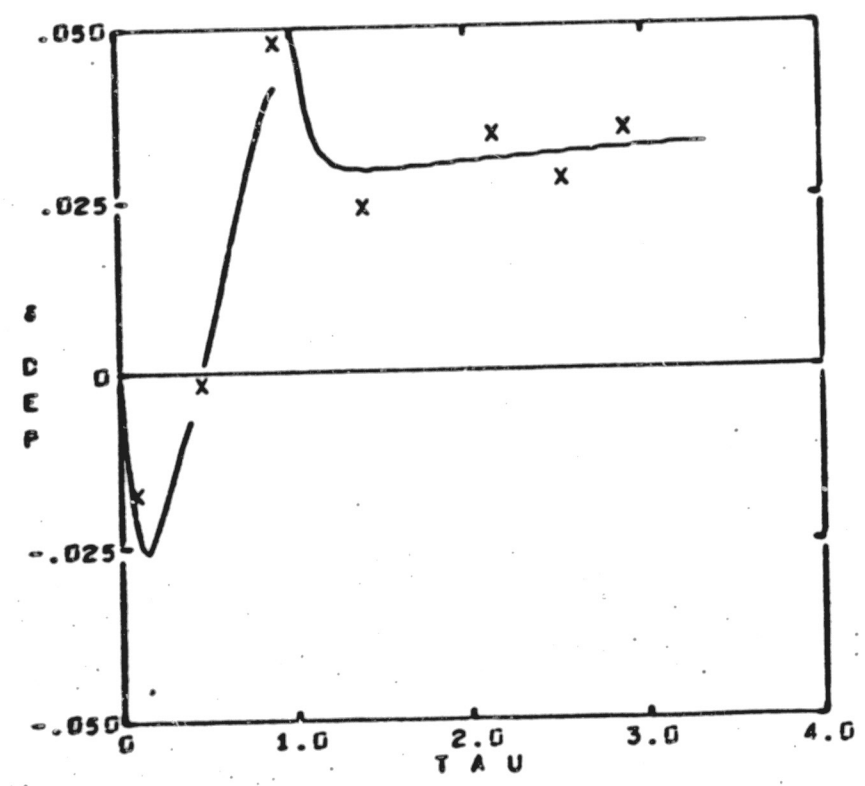
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0201	.0397	-.0196
.50	.0657	.0628	.0029
.75	.1167	.0880	.0287
.93	.1503	.1046	.0457
1.0	.1446	.0947	.0499
1.5	.0878	.0585	.0293
2.0	.0784	.0481	.0303
2.5	.0733	.0418	.0315
3.0	.0697	.0373	.0324

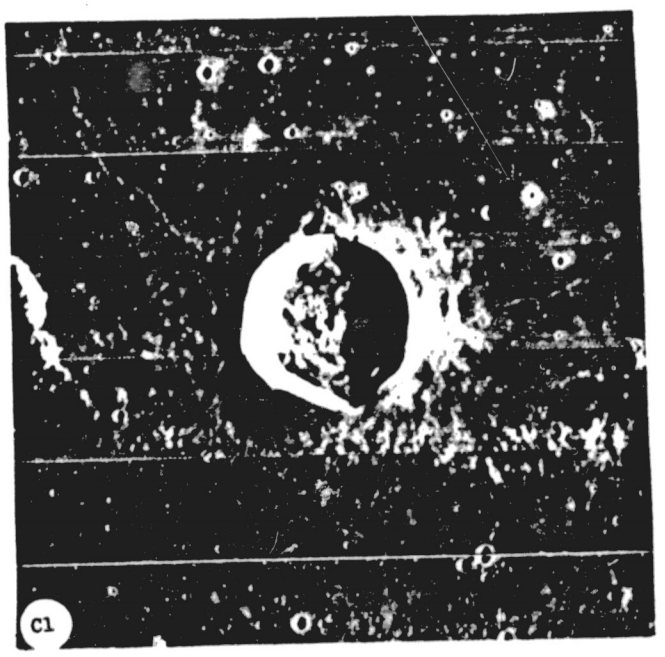
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.674	377.27		377.27	1.000	.0000
9H	0.092	374.83		374.83	0.994	.0069
10H	0.470	333.86		333.86	0.885	.0585
11H	0.916	237.70	0.395 +.658	245.86	0.652	.1487
12H	1.405	202.53	0.111 +.606	203.92	0.540	.0853
13H	2.155	184.66	0.540 +.669	200.75	0.532	.0802
14H	2.546	171.52	0.836 +.678	193.60	0.513	.0693
15H	2.900	192.64	0.171 +.903	196.21	0.520	.0732
16H	3.684	255.01	0.000 +.736	255.01	0.676	-.0349









189 (3F3) FLAMSTEED A

LAMBDA=42.92 W BETA= 7.87 S XI=-.6745 ETA=-.1370 L+PL CODE = 36173 ALBEDO =.0660

13H FLAT MOON DATA
FM=.07210 FM'=.08192

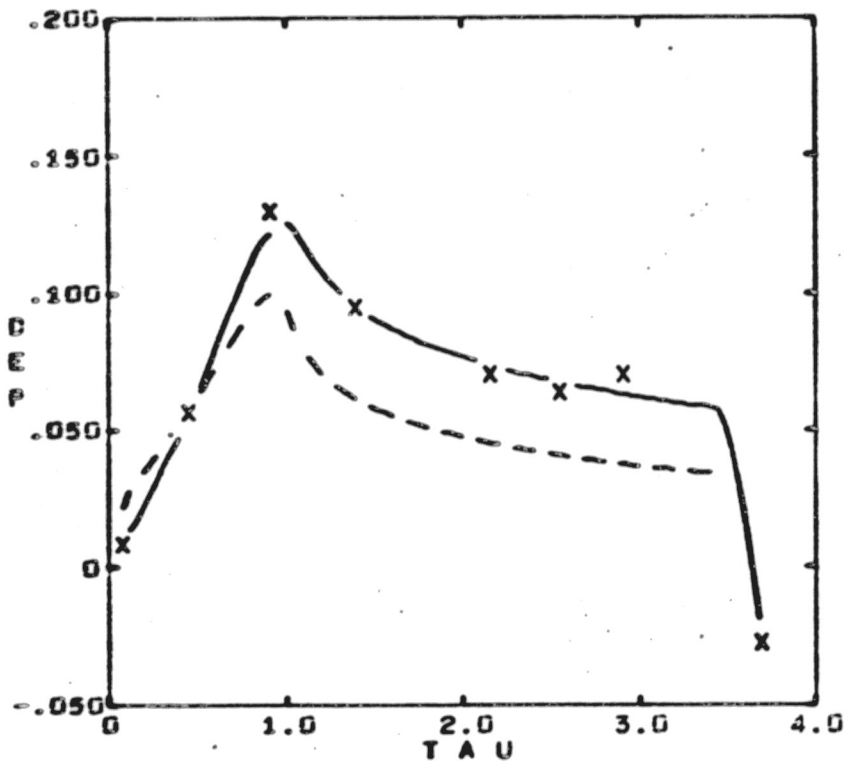
INITIAL TEMPERATURE 377.69
TAU-END OF TOTALITY 3.426

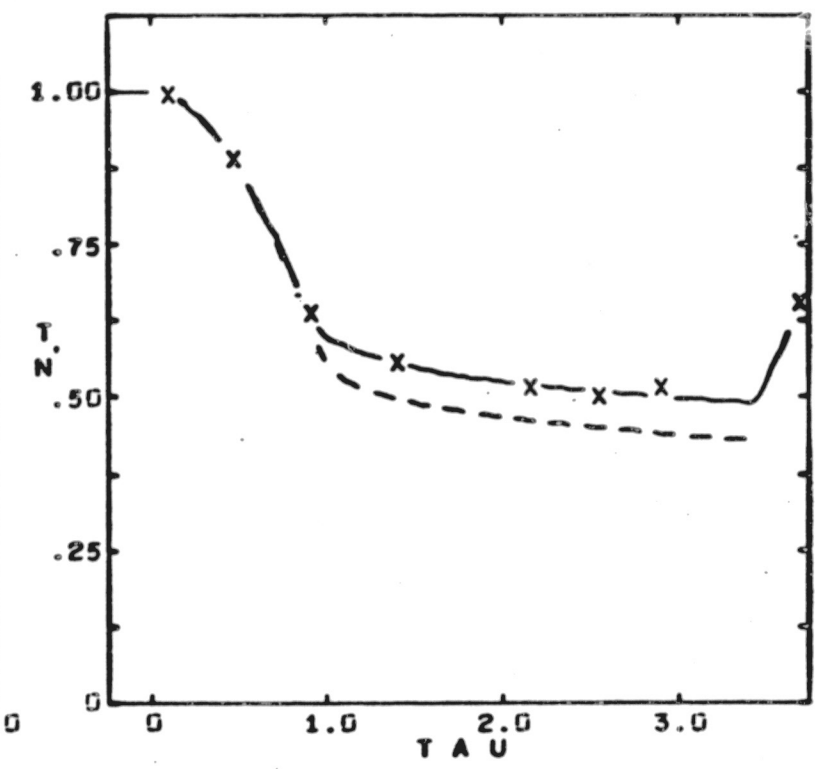
DIFFERENTIAL ENERGY DATA

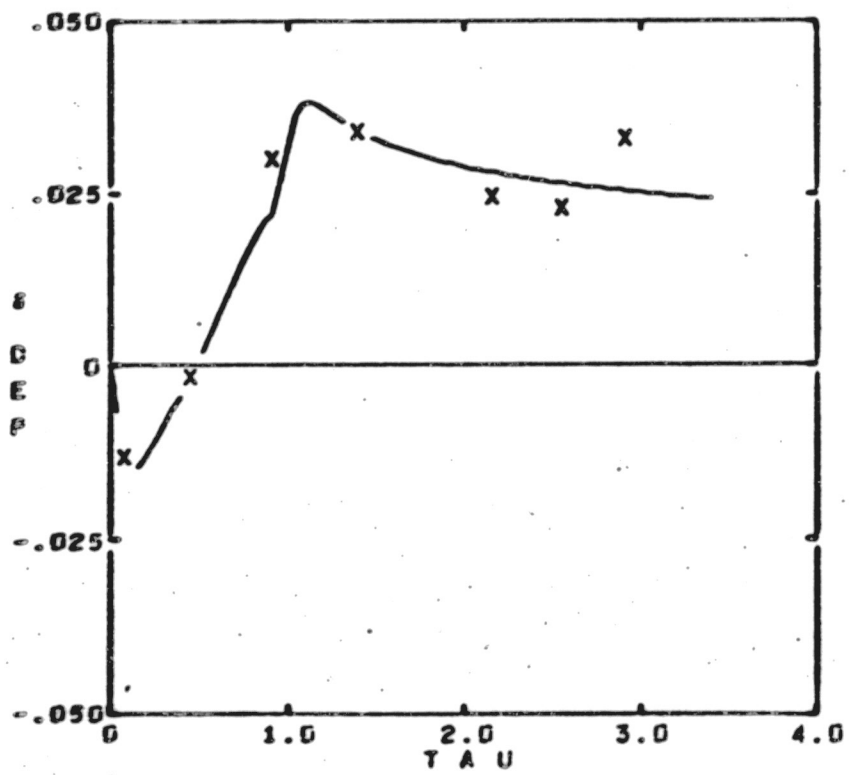
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0274	.0389	-.0115
.50	.0628	.0620	.0008
.75	.1022	.0873	.0149
.95	.1281	.1038	.0243
1.0	.1261	.0940	.0321
1.5	.0908	.0580	.0328
2.0	.0765	.0477	.0288
2.5	.0681	.0415	.0266
3.0	.0621	.0370	.0251

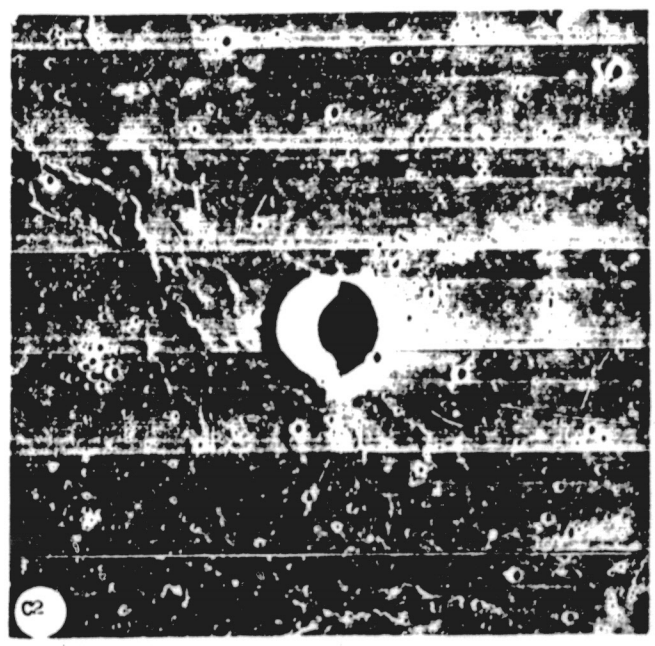
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.690	377.69		377.69	1.000	.0000
9H	0.080	375.99		375.99	0.995	.0082
10H	0.460	336.02		336.02	0.890	.0566
11H	0.910	236.26	0.419 +.883	240.92	0.678	.1297
12H	1.402	207.11	0.169 +.153	209.82	0.556	.0952
13H	2.156	189.52	0.246 +.753	194.37	0.515	.0701
14H	2.548	183.13	0.428 +.944	190.02	0.503	.0641
15H	2.906	191.99	0.165 +.969	194.79	0.516	.0707
16H	3.697	247.02	0.000 +.554	247.02	0.654	-.0275









LAMBDA=43.71 W BETA= 5.94 S XI=-.6873 ETA=-.1034 L+PL CODE = 36180 ALBEDO =.0596

13H FLAT MOON DATA
FM=.11431 FM'=.11651

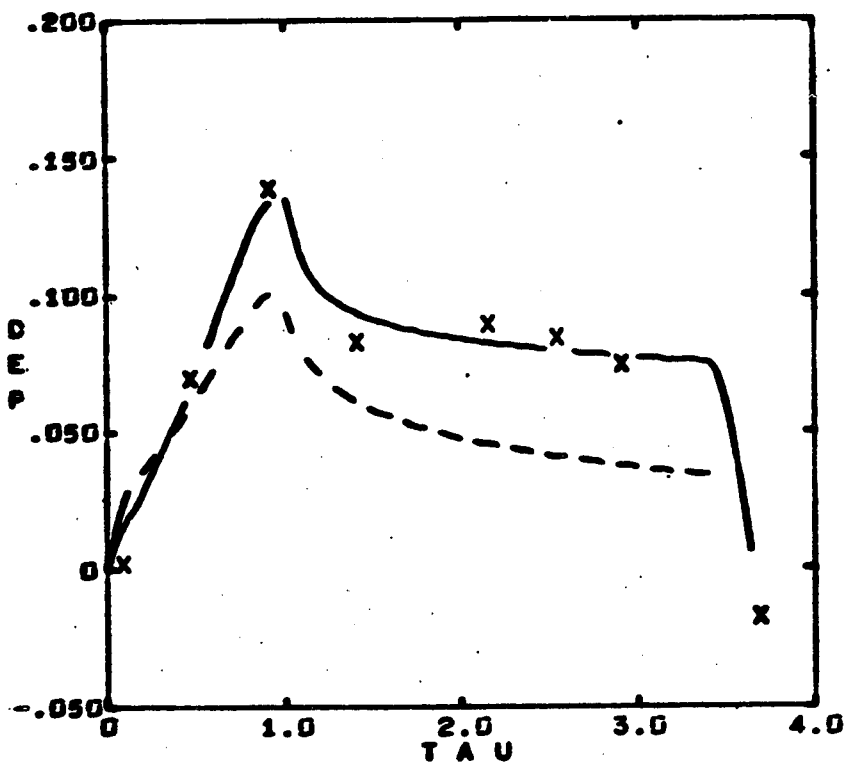
INITIAL TEMPERATURE 376.41
TAU-END OF TOTALITY 3.403

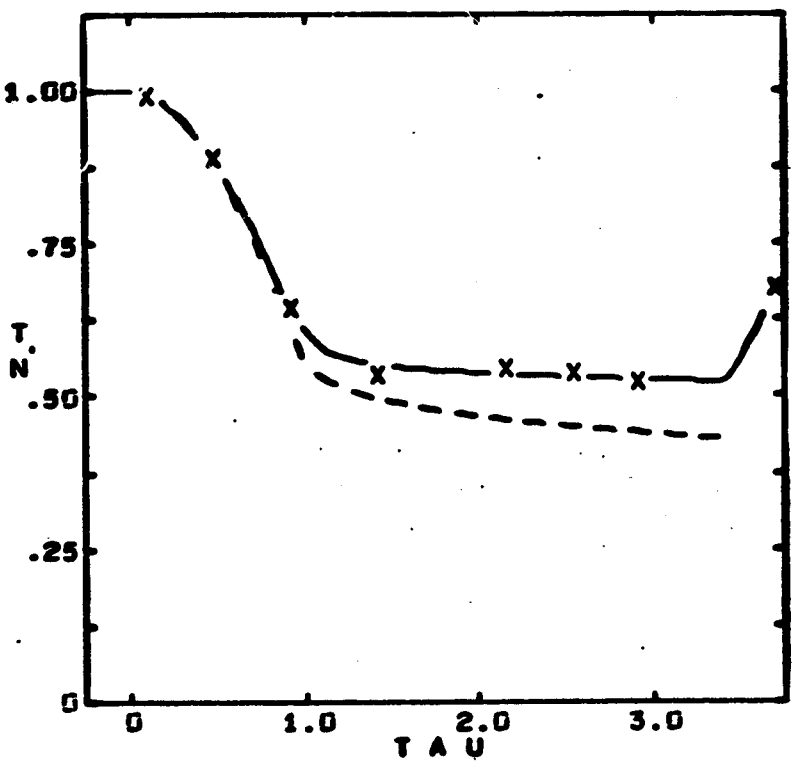
DIFFERENTIAL ENERGY DATA

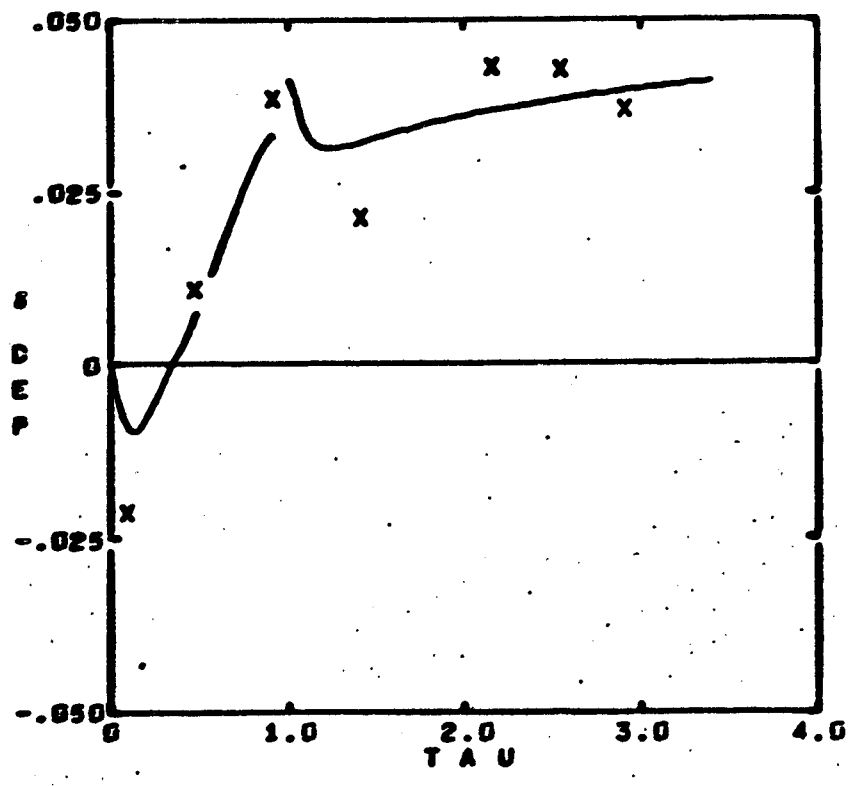
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0339	.0394	-.0055
.50	.0713	.0625	.0088
.75	.1128	.0877	.0251
.93	.1401	.1043	.0358
1.0	.1357	.0944	.0413
1.5	.0912	.0583	.0329
2.0	.0840	.0479	.0361
2.5	.0800	.0417	.0383
3.0	.0772	.0372	.0400

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.681	376.41		376.41	1.000	.0000
9H	0.088	373.69		373.69	0.993	.0020
10H	0.466	335.40		335.40	0.891	.0700
11H	0.914	242.12	0.032 +.869	242.40	0.644	.1386
12H	1.405	200.64	0.137 -.848	201.83	0.536	.0827
13H	2.155	204.75	0.038 +.992	205.60	0.546	.0890
14H	2.547	194.15	0.316 -.777	202.63	0.538	.0840
15H	2.903	195.47	0.096 +.170	196.86	0.523	.0748
16H	3.690	250.75	1.560 +.411	255.27	0.678	-.0179







PHOTOGRAPH NOT AVAILABLE

191 (3F5) FLAMSTEED C

LAMBDA=46.22 W BETA= 5.50 S XI=-.7187 ETA=-.0958 L→PL CODE = 37019 ALBEDO =.0651

13H FLAT MOON DATA
FM=.05593 FM'=.05907

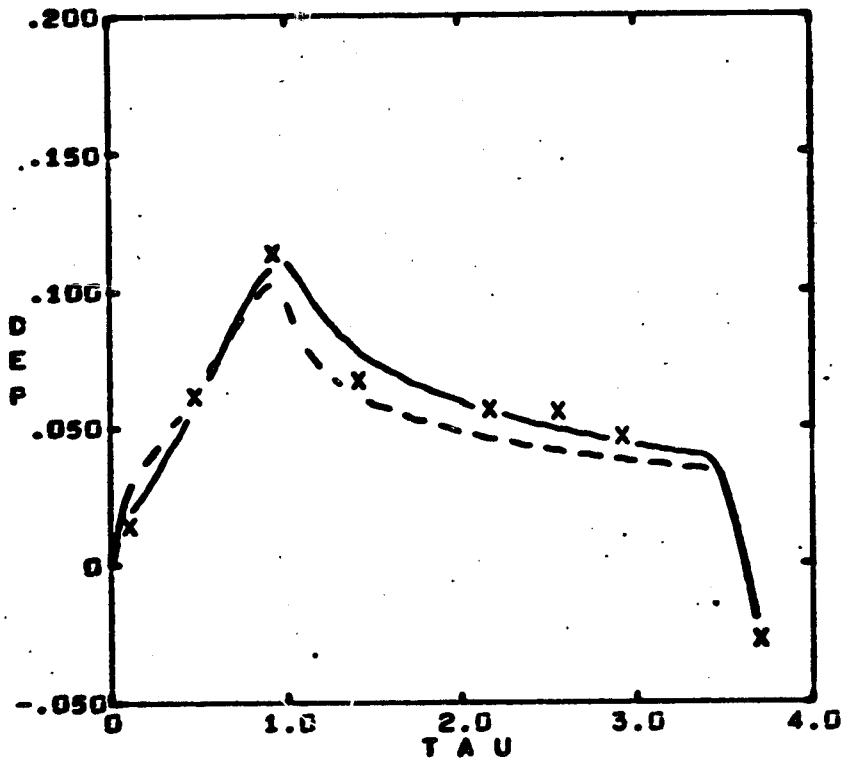
INITIAL TEMPERATURE 373.37
TAU-END OF TOTALITY 3.400

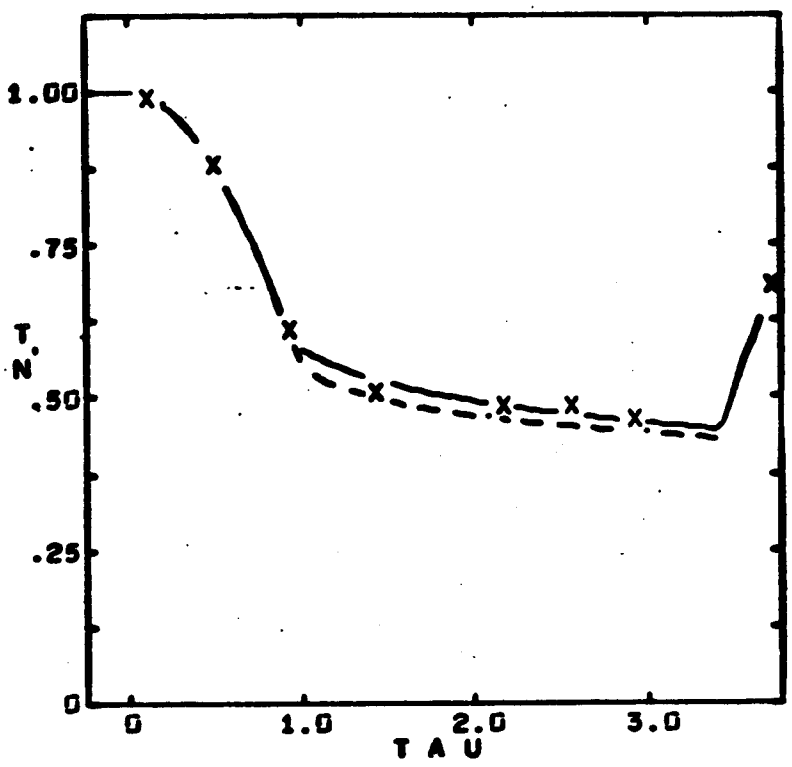
DIFFERENTIAL ENERGY DATA

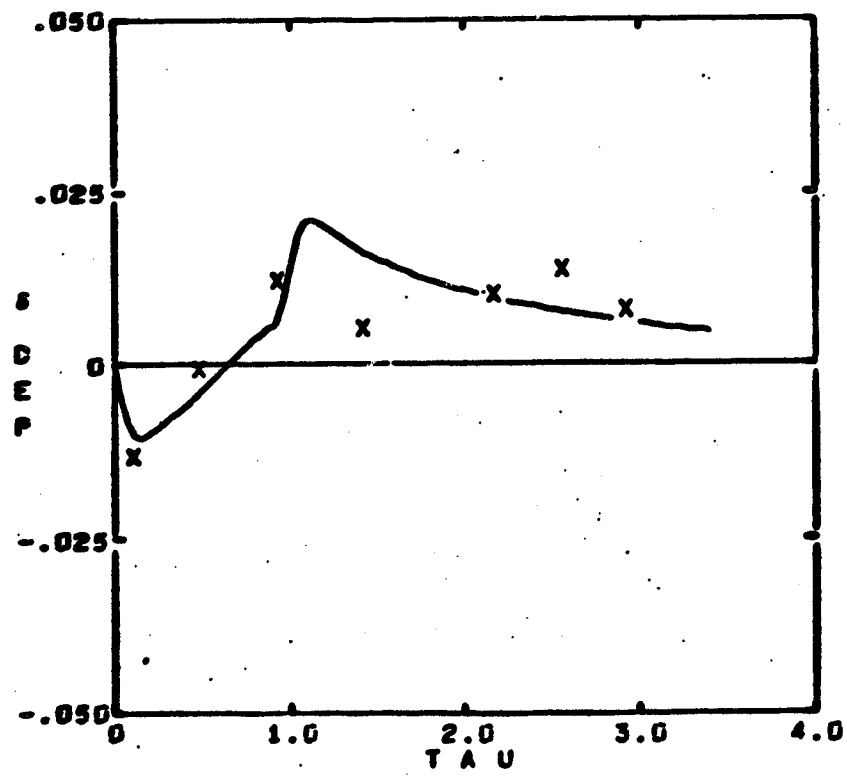
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0317	.0409	-.0092
.50	.0603	.0640	-.0037
.75	.0918	.0893	.0025
.93	.1125	.1058	.0067
1.0	.1103	.0958	.0145
1.5	.0746	.0592	.0154
2.0	.0594	.0487	.0107
2.5	.0503	.0424	.0079
3.0	.0439	.0378	.0061

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.667	373.37			373.37	1.000	.0000
9H	0.102	371.03			371.03	0.994	.0140
10H	0.480	329.00			329.00	0.881	.0615
11H	0.927	226.48	0.302	-.391	227.97	0.611	.1139
12H	1.419	188.52	0.253	-.937	190.06	0.509	.0671
13H	2.168	180.89	0.114	-.015	182.03	0.488	.0565
14H	2.560	180.15	0.120	-.946	181.27	0.485	.0556
15H	2.916	172.73	0.119	+.171	173.41	0.464	.0465
16H	3.701	255.57	0.000	+.790	255.57	0.684	-.0270







PHOTOGRAPH NOT AVAILABLE

192 (3F6) FRA MAURO C

LAMBDA=21.64 W BETA= 5.43 S XI=-.3671 ETA=-.0947 L+PL CODE = 33069 ALBEDO =.0721

13H FLAT MOON DATA
FM=.02815 FM'=.03217

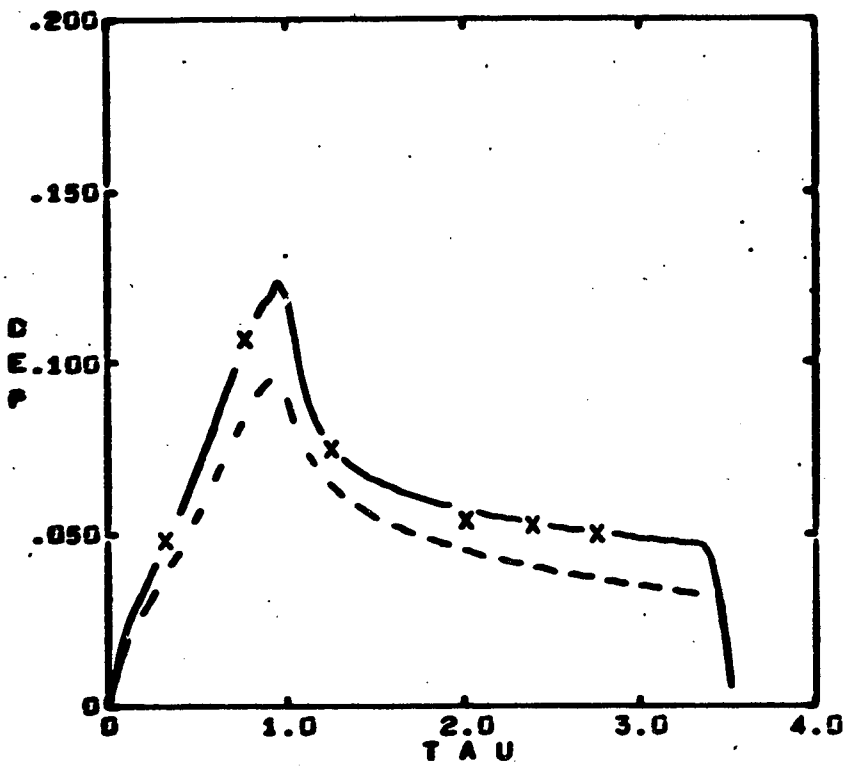
INITIAL TEMPERATURE 391.13
TAU-END OF TOTALITY 3.3[illegible]

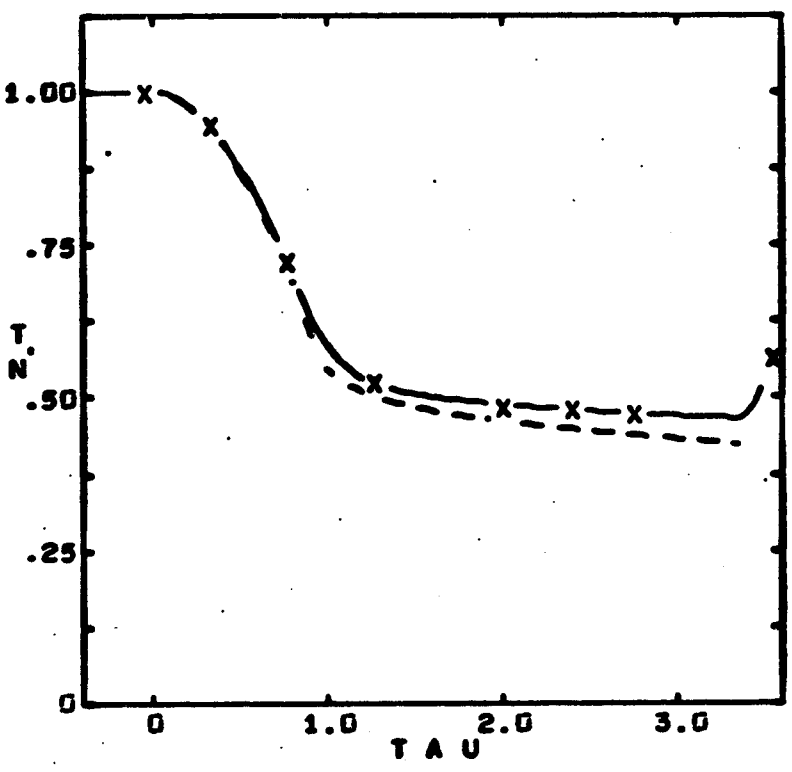
DIFFERENTIAL ENERGY DATA

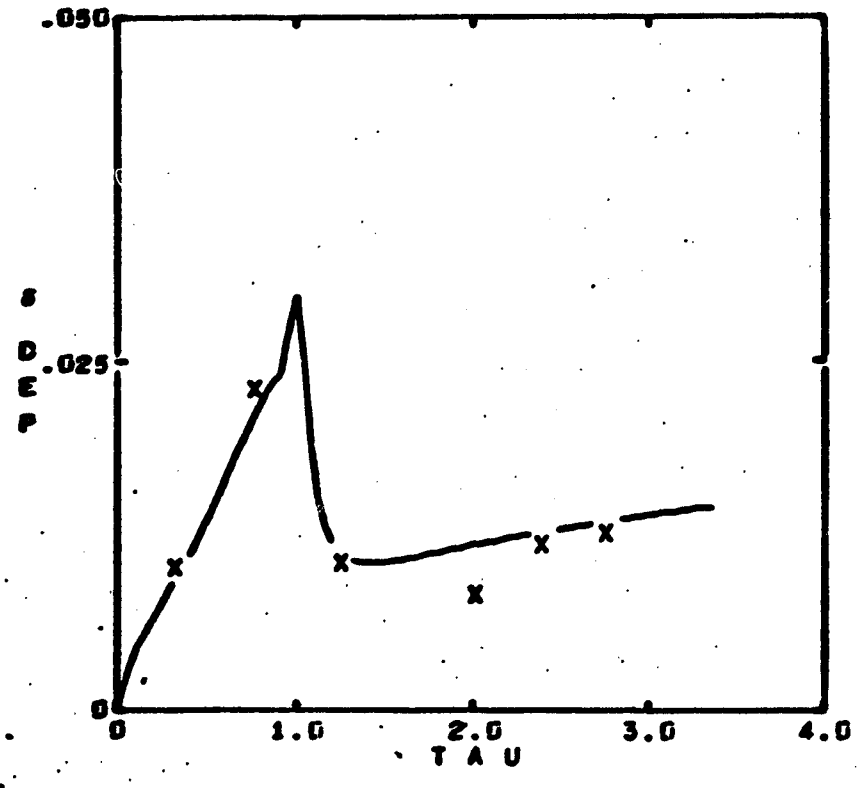
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0383	.0309	.0074
.50	.0689	.0552	.0137
.75	.1023	.0817	.0206
.93	.1243	.0992	.0251
1.0	.1194	.0896	.0298
1.5	.0659	.0553	.0106
2.0	.0573	.0455	.0118
2.5	.0524	.0394	.0130
3.0	.0490	.0351	.0139

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.816	392.02		392.02	1.002	.0091
9H	-0.052	391.08		391.08	1.000	-.0006
10H	0.324	369.15		369.15	0.944	.0481
11H	0.769	277.18	1.308 -.699	281.99	0.721	.1067
12H	1.258	203.28	0.233 +.571	204.51	0.523	.0747
13H	2.004	186.45	0.248 +.550	188.34	0.482	.0538
14H	2.394	180.06	0.656 +.405	187.18	0.479	.0525
15H	2.747	183.29	0.252 +.492	184.76	0.472	.0498
16H	3.542	220.93	0.000 +.206	220.93	0.565	-.0052







PHOTOGRAPH NOT AVAILABLE

193 (3F7) FRA MAURO D

LAMBDA=17.58 W BETA= 4.81 S XI=-.3009 ETA=-.0838 L+PL CODE = 33008 ALBEDO =.0921

13H FLAT MOON DATA
FM=.03602 FM'=.03652

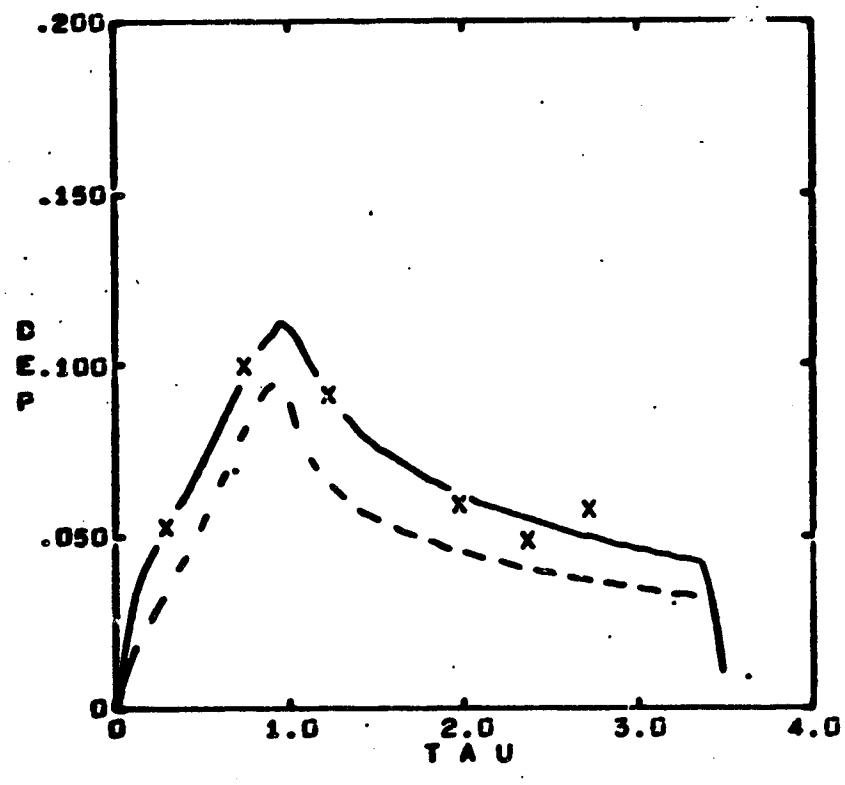
INITIAL TEMPERATURE 389.65
TAU-END OF TOTALITY 3.350

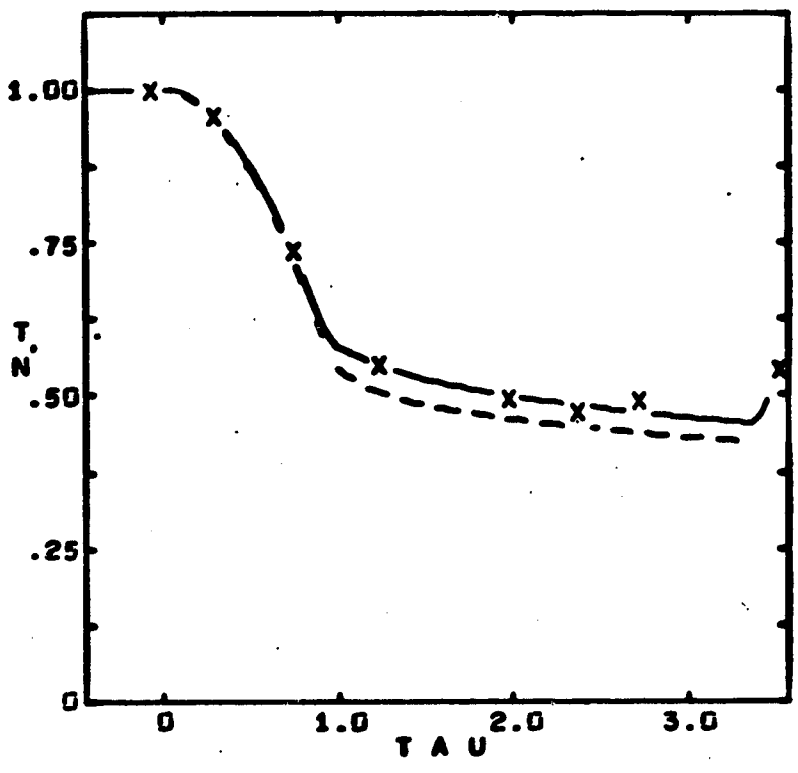
DIFFERENTIAL ENERGY DATA

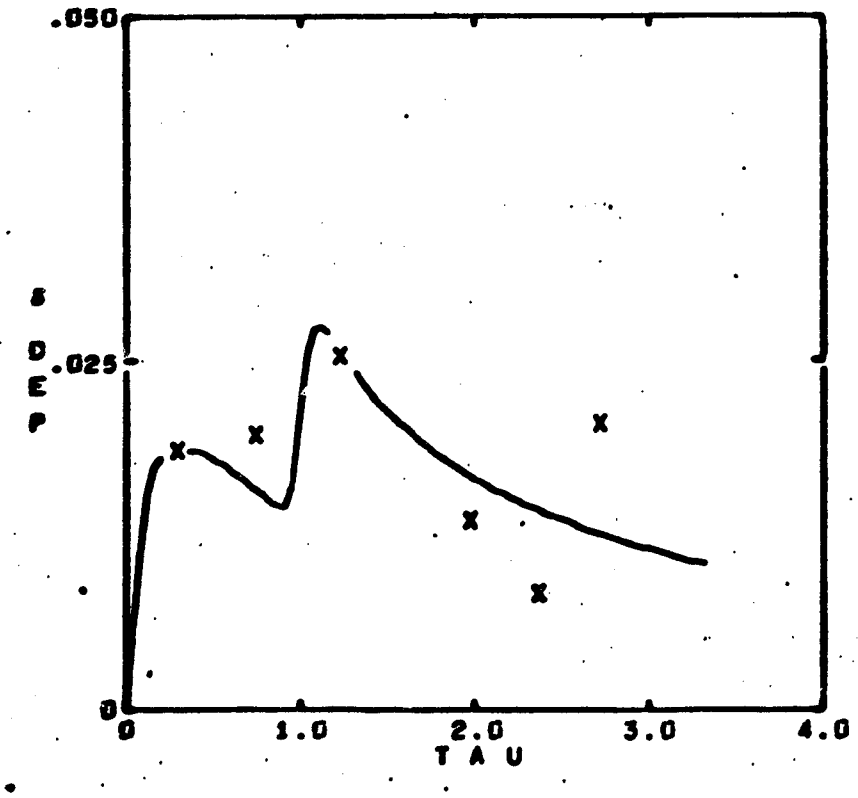
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0483	.0299	.0184
.50	.0723	.0543	.0180
.75	.0967	.0810	.0157
.93	.1126	.0986	.0140
1.0	.1108	.0891	.0217
1.5	.0765	.0551	.0214
2.0	.0617	.0453	.0164
2.5	.0528	.0392	.0136
3.0	.0463	.0349	.0114

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.642	391.92		391.92	1.006	.0234
9H	-0.080	389.44		389.44	0.999	-.0022
10H	0.295	372.22		372.22	0.955	.0526
11H	0.740	287.41	0.000 -.818	287.41	0.738	.0997
12H	1.226	212.15	0.172 -.222	214.03	0.549	.0910
13H	1.971	191.46	0.075 +.510	192.20	0.493	.0592
14H	2.360	181.03	0.392 -.532	183.34	0.471	.0490
15H	2.712	189.97	0.124 -.370	190.98	0.490	.0577
16H	3.507	211.11	0.000 +.167	211.11	0.542	-.0018







PHOTOGRAPH NOT AVAILABLE

194 (3F8) FRA MAURO H

LAMBDA=15.53 W BETA= 4.15 S XI=-.2671 ETA=-.0724 L+PL CODE = 32067 ALBEDO =.0974

13H FLAT MOON DATA
FM=.02121 FM'=.02679

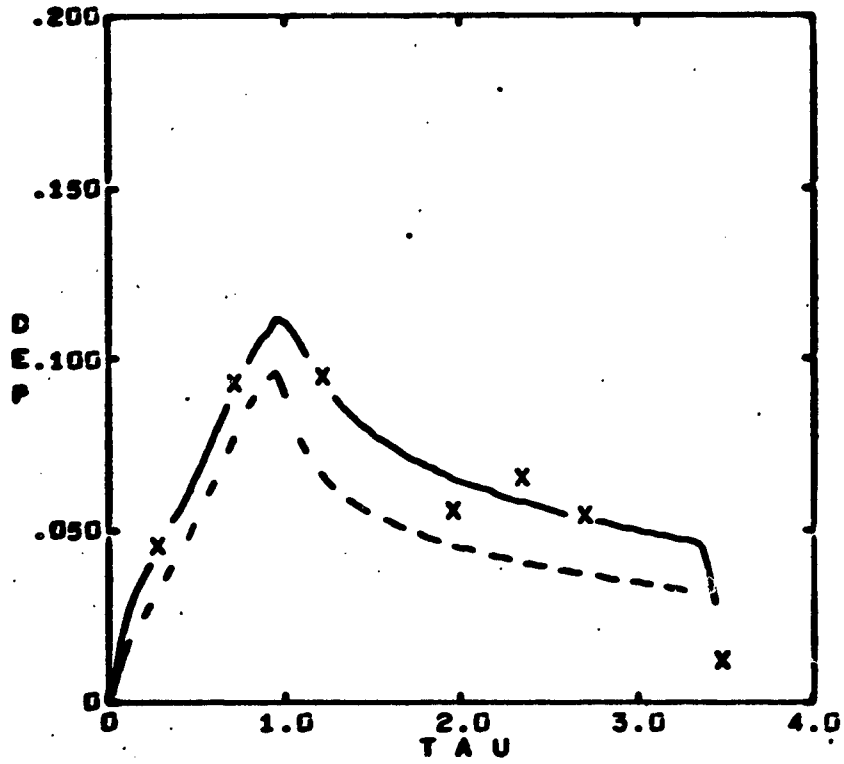
INITIAL TEMPERATURE 390.69
TAU-END OF TOTALITY 3.338

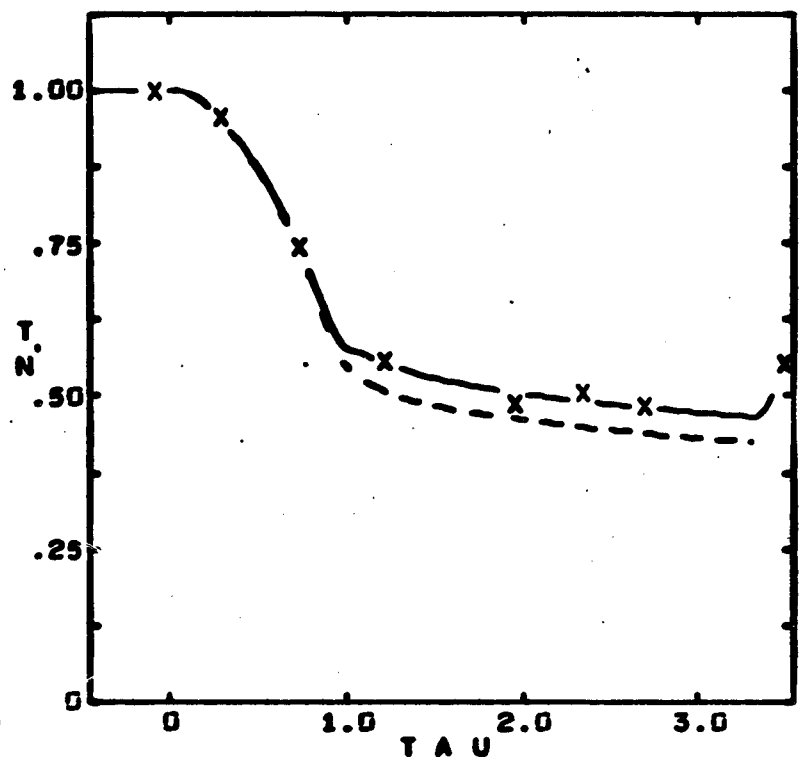
DIFFERENTIAL ENERGY DATA

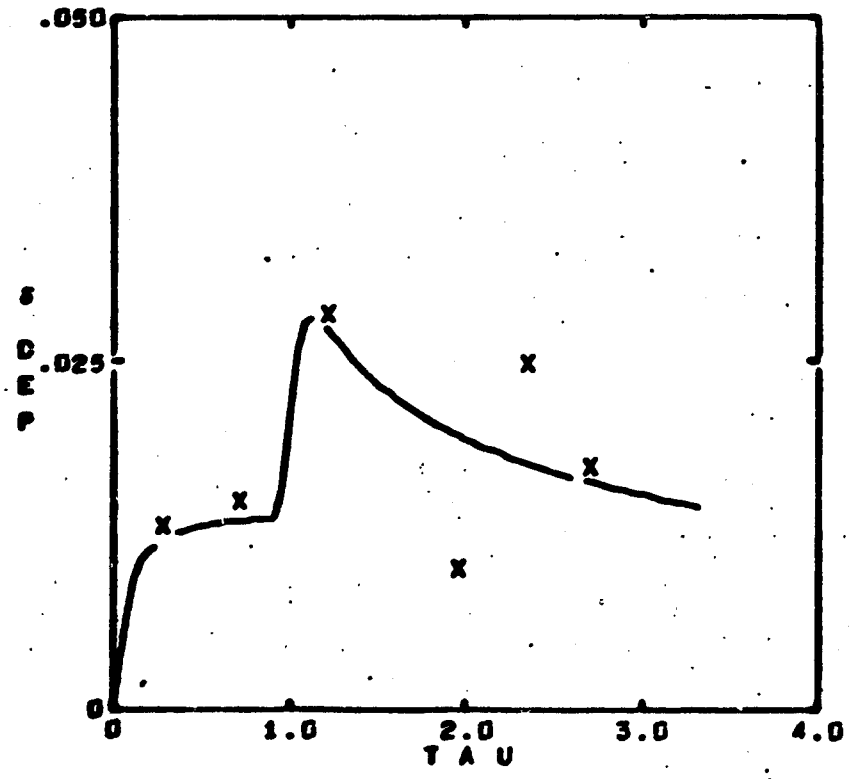
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0412	.0294	.0118
.50	.0670	.0539	.0131
.75	.0942	.0806	.0136
.93	.1120	.0983	.0137
1.0	.1105	.0888	.0217
1.5	.0783	.0549	.0234
2.0	.0645	.0451	.0194
2.5	.0562	.0391	.0171
3.0	.0501	.0348	.0153

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.854	392.41		392.41	1.004	.0177
9H	-0.094	390.50		390.50	1.000	-.0019
10H	0.281	374.21		374.21	0.958	.0453
11H	0.724	291.13	0.000 -.810	291.13	0.745	.0929
12H	1.210	211.87	0.315 +.741	216.80	0.555	.0948
13H	1.952	186.49	0.362 -.183	189.95	0.486	.0559
14H	2.342	189.01	0.438 -.626	197.80	0.506	.0657
15H	2.694	184.15	0.408 +.912	189.03	0.484	.0548
16H	3.488	212.18	0.463 +.666	216.26	0.554	.0120







PHOTOGRAPH NOT AVAILABLE

LAMBDA=18.71 W BETA= 0.96 N XI=-.3208 ETA=+.0168 L+PL CODE = 23021 ALBEDO =.1093

13H FLAT MOON DATA
FM=.03814 FM'=.10517

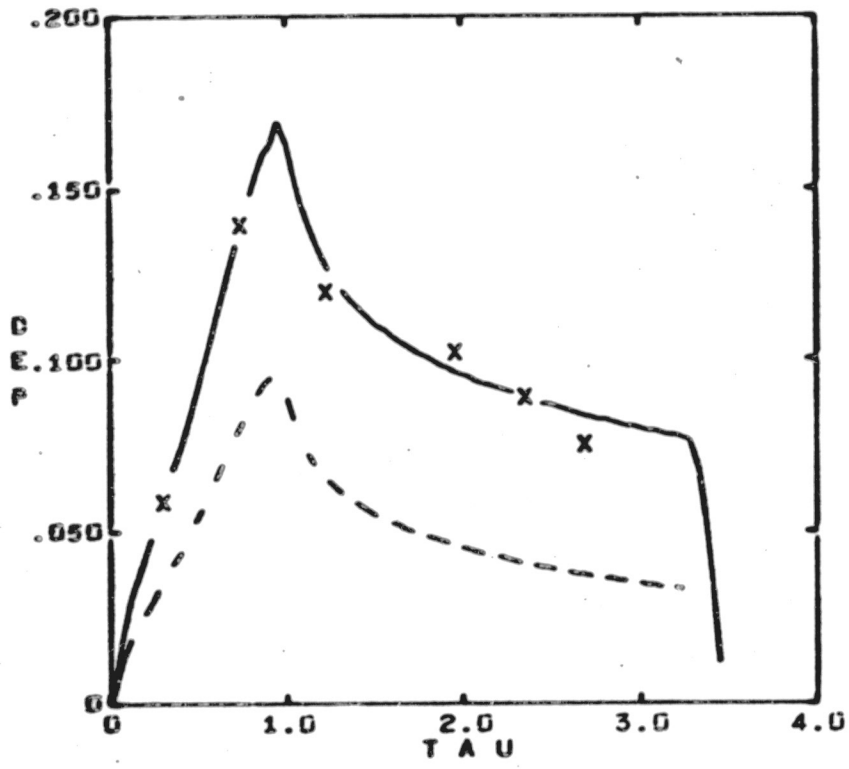
INITIAL TEMPERATURE 386.45
TAU-END OF TOTALITY 3.271

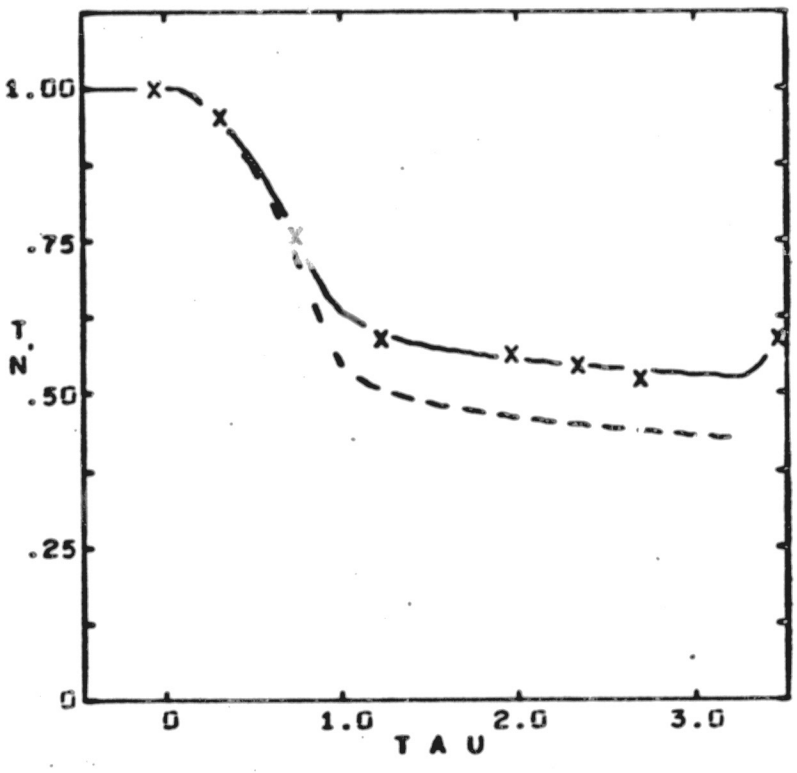
DIFFERENTIAL ENERGY DATA

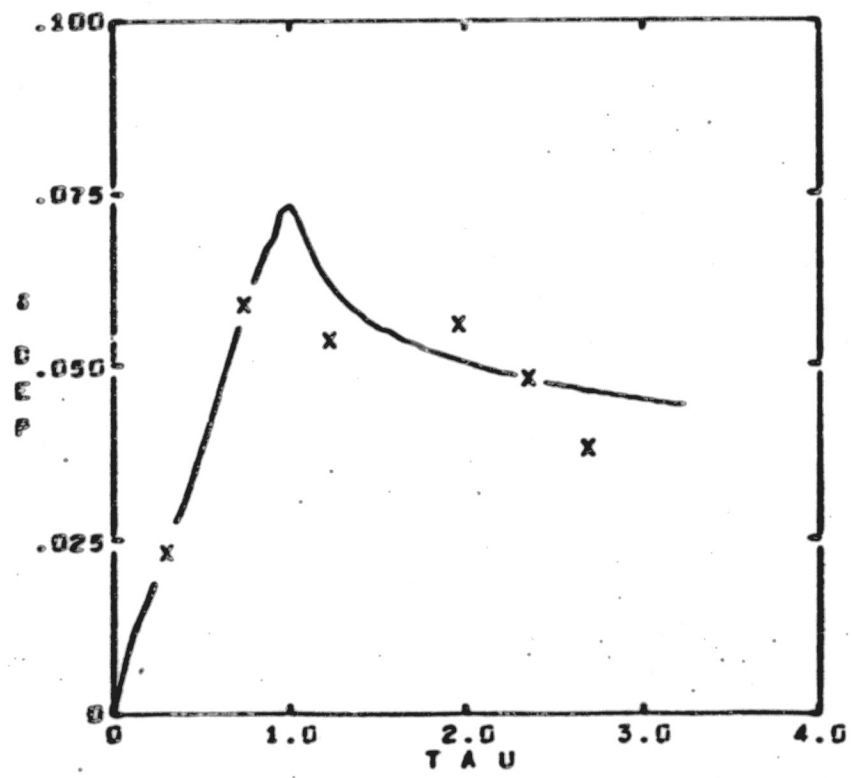
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0498	.0302	.0196
.50	.0925	.0546	.0379
.75	.1392	.0812	.0580
.93	.1702	.0988	.0714
1.0	.1626	.0893	.0733
1.5	.1110	.0552	.0558
2.0	.0957	.0453	.0504
2.5	.0866	.0393	.0473
3.0	.0800	.0349	.0451

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.820	389.55		389.55	1.008	.0324
9H	-0.067	386.19		386.19	0.999	-.0026
10H	0.303	368.50		368.50	0.954	.0583
11H	0.743	289.29	0.491 -.951	292.93	0.758	.1395
12H	1.224	223.08	0.243 -.377	227.30	0.588	.1197
13H	1.959	191.89	0.702 -.228	218.36	0.565	.1019
14H	2.344	210.73	0.053 -.390	211.26	0.547	.0893
15H	2.692	195.97	0.345 -.929	202.52	0.524	.0754
16H	3.474	227.50	0.000 +.358	227.50	0.589	-.0108









LAMBDA=11.56 W BETA= 2.15 N XI=-.2002 ETA=+.0376 LUNAR CODE = 22003 ALBEDO =.0748

13H FLAT MOON DATA
FM=.01167 FM'=.01167

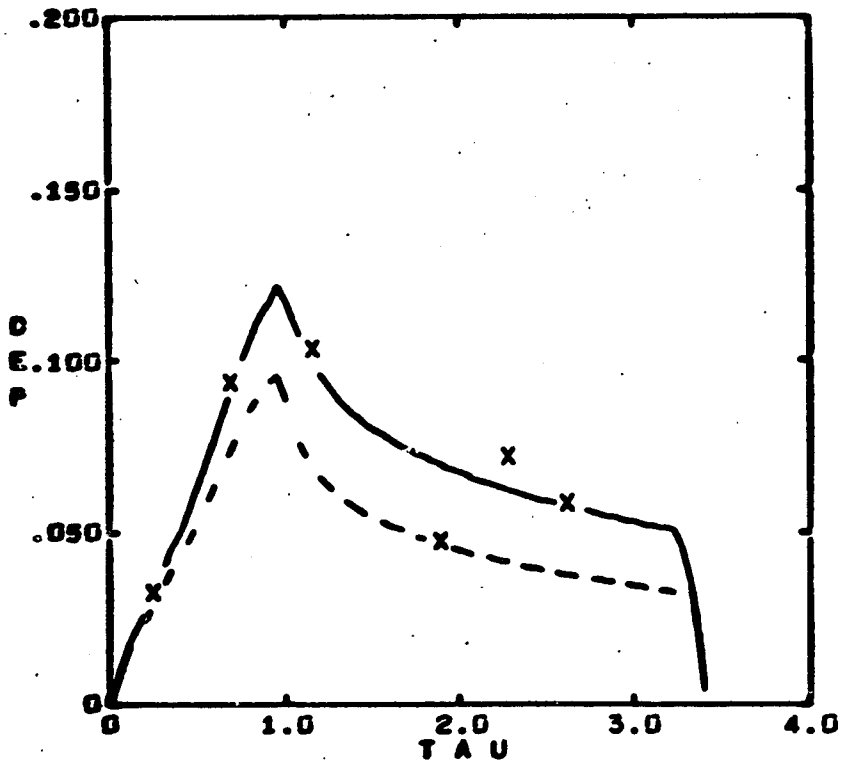
INITIAL TEMPERATURE 394.65
TAU-END OF TOTALITY 3.240

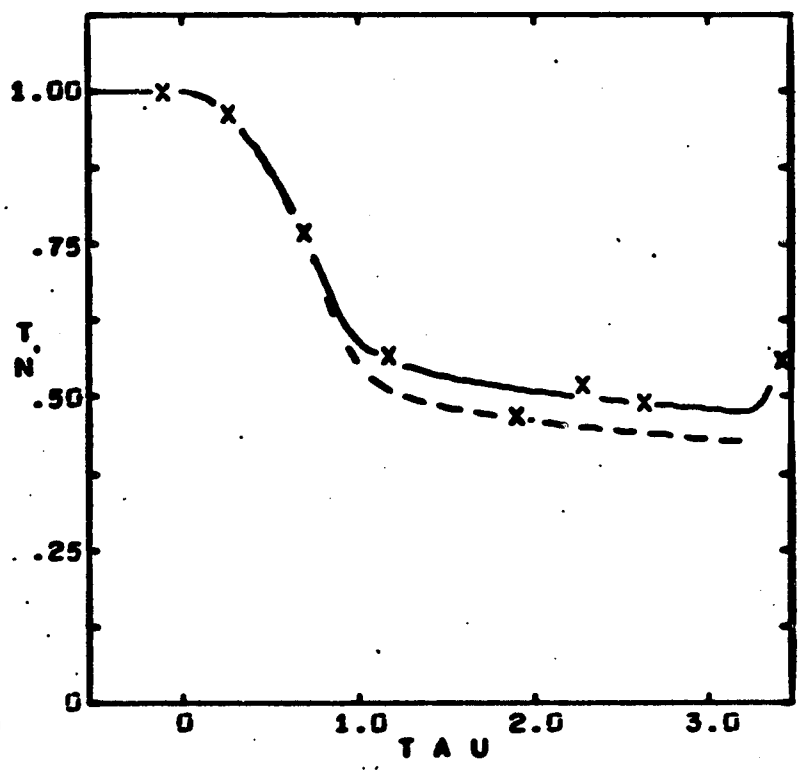
DIFFERENTIAL ENERGY DATA

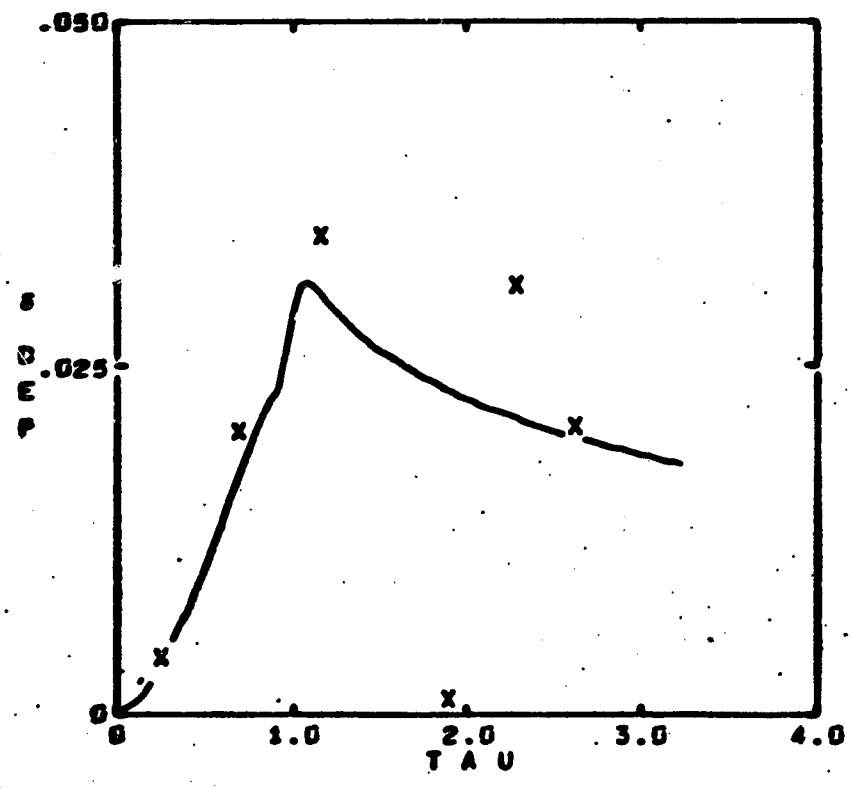
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0319	.0284	.0035
.50	.0637	.0531	.0106
.75	.0989	.0800	.0189
.93	.1224	.0978	.0246
1.0	.1175	.0884	.0291
1.5	.0809	.0547	.0262
2.0	.0675	.0449	.0226
2.5	.0592	.0389	.0203
3.0	.0531	.0345	.0186

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.865	396.77		396.77	1.005	.0217
9H	-0.118	394.36		394.36	0.999	-.0029
10H	0.251	380.06		380.06	0.963	.0326
11H	0.688	303.70	0.000 +.839	303.70	0.770	.0937
12H	1.167	222.45	0.165 -.692	223.71	0.567	.1032
13H	1.898	184.23	0.000 +.834	184.23	0.467	.0475
14H	2.282	204.22	0.145 +.149	204.50	0.518	.0721
15H	2.628	194.01	0.000 +.820	194.01	0.492	.0584
16H	3.411	220.45	0.000 +.784	220.45	0.559	-.0012







PHOTOGRAPH NOT AVAILABLE

LAMBDA=11.79 W BETA= 3.33 N XI=-.2040 ETA=+.0580 L+PL CODE = 22005 ALBEDO =.0726

13H FLAT MOON DATA
FM=.07008 FM'=.13340

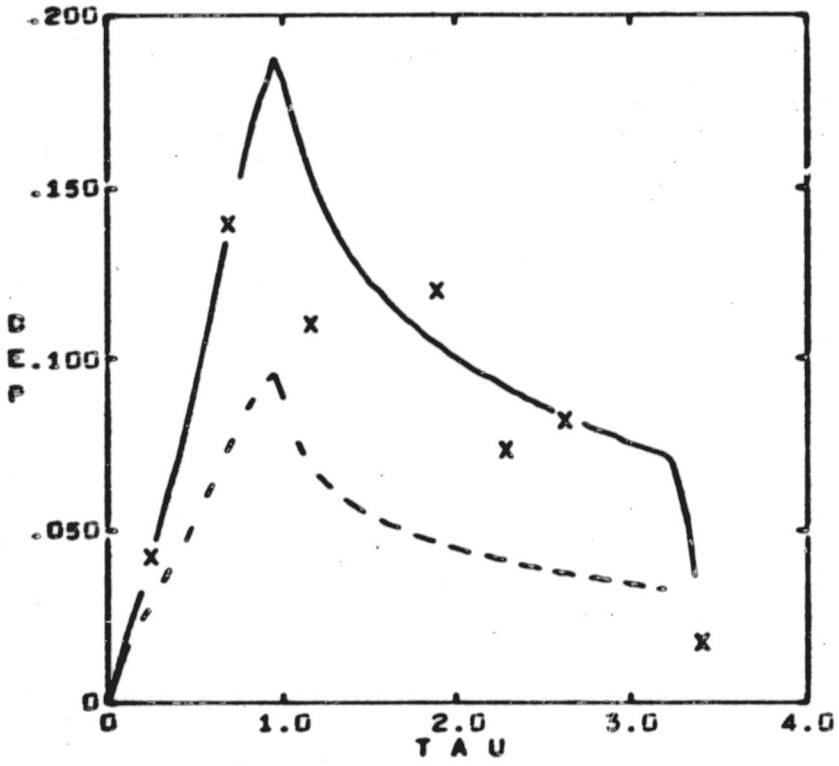
INITIAL TEMPERATURE 397.01
TAU-END OF TOTALITY 3.223

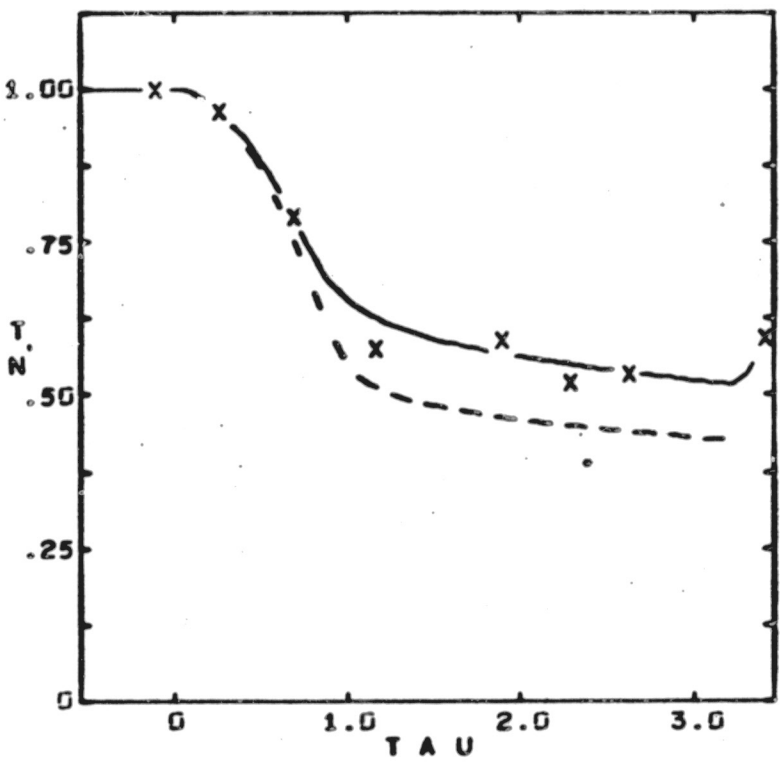
DIFFERENTIAL ENERGY DATA

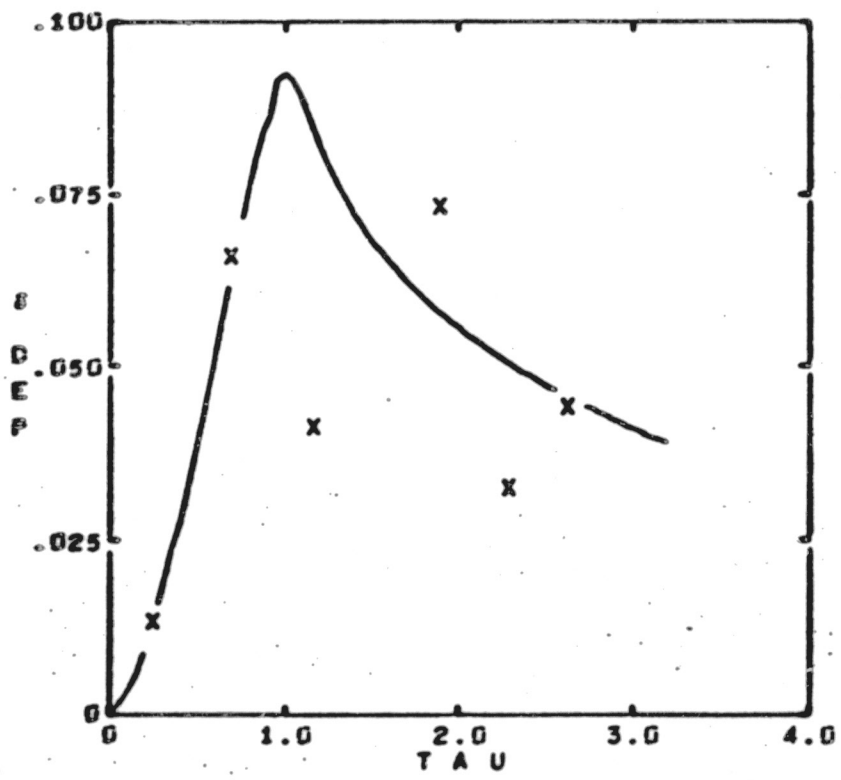
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0414	.0285	.0129
.50	.0926	.0531	.0395
.75	.1503	.0800	.0703
.93	.1889	.0979	.0910
1.0	.1811	.0884	.0927
1.5	.1231	.0547	.0684
2.0	.1005	.0449	.0556
2.5	.0862	.0389	.0473
3.0	.0756	.0345	.0411

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.861	397.11		397.11	1.005	.0214
9H	-0.116	394.73		394.73	0.999	-.0029
10H	0.253	381.19		381.19	0.965	.0422
11H	0.689	310.96	0.234 +.789	313.19	0.793	.1397
12H	1.166	218.91	0.564 -.814	227.60	0.576	.1102
13H	1.896	207.27	0.533 -.096	232.38	0.588	.1198
14H	2.277	194.42	0.536 -.942	205.85	0.521	.0738
15H	2.623	202.93	0.391 +.857	211.42	0.535	.0821
16H	3.402	225.54	0.596 +.830	234.05	0.593	.0172









LAMBDA=12.02 W BETA= 1.94 N. XI=-.2081 ETA=+.0339 L+PL CODE = 22003 ALBEDO =.0798

13H FLAT MOON DATA
FM=.04696 FM'=.04696

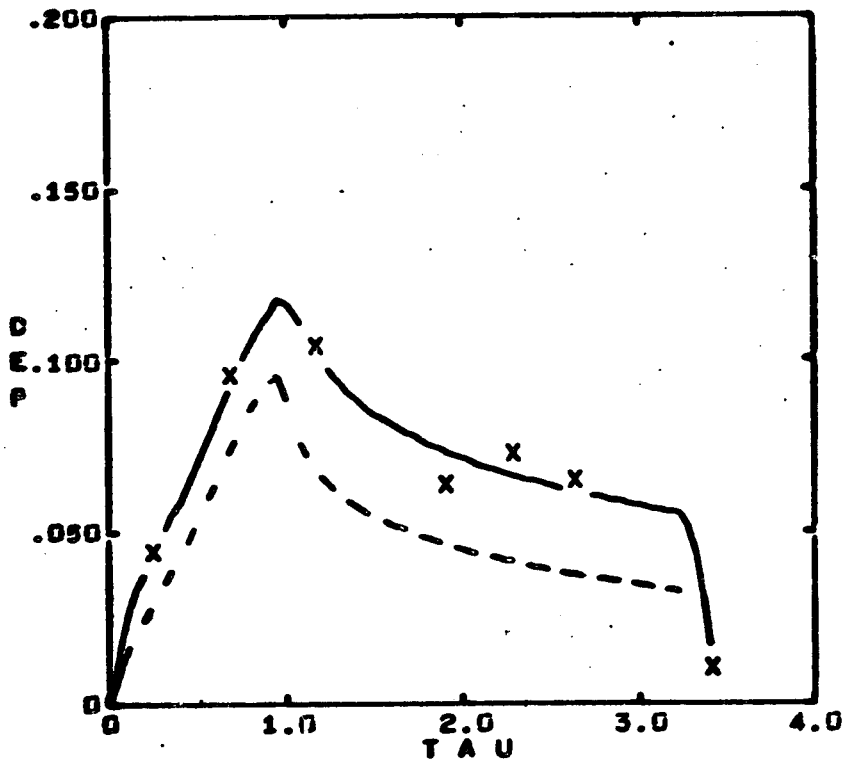
INITIAL TEMPERATURE 394.01
TAU-END OF TOTALITY 3.244

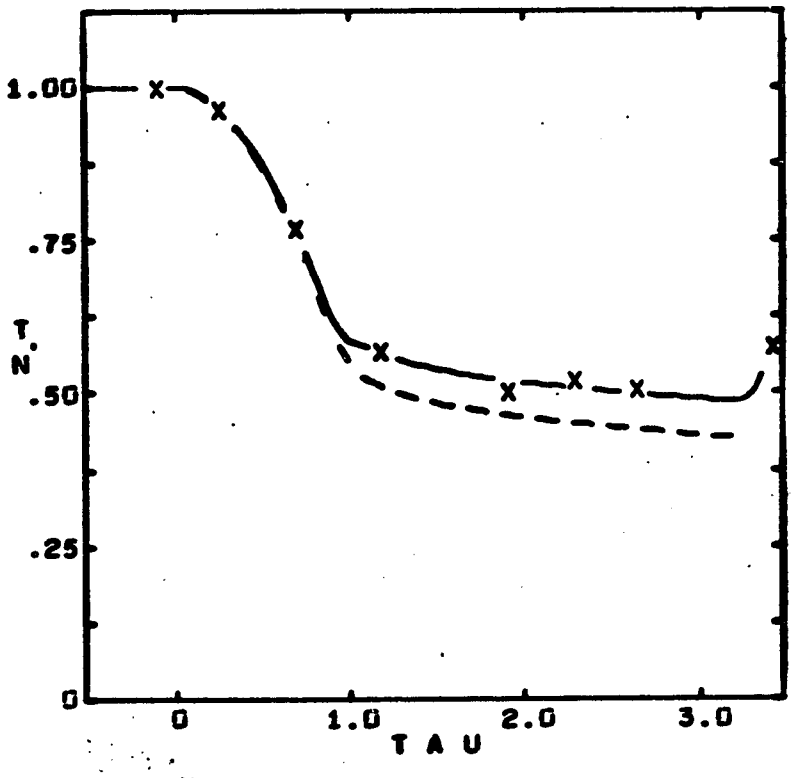
DIFFERENTIAL ENERGY DATA

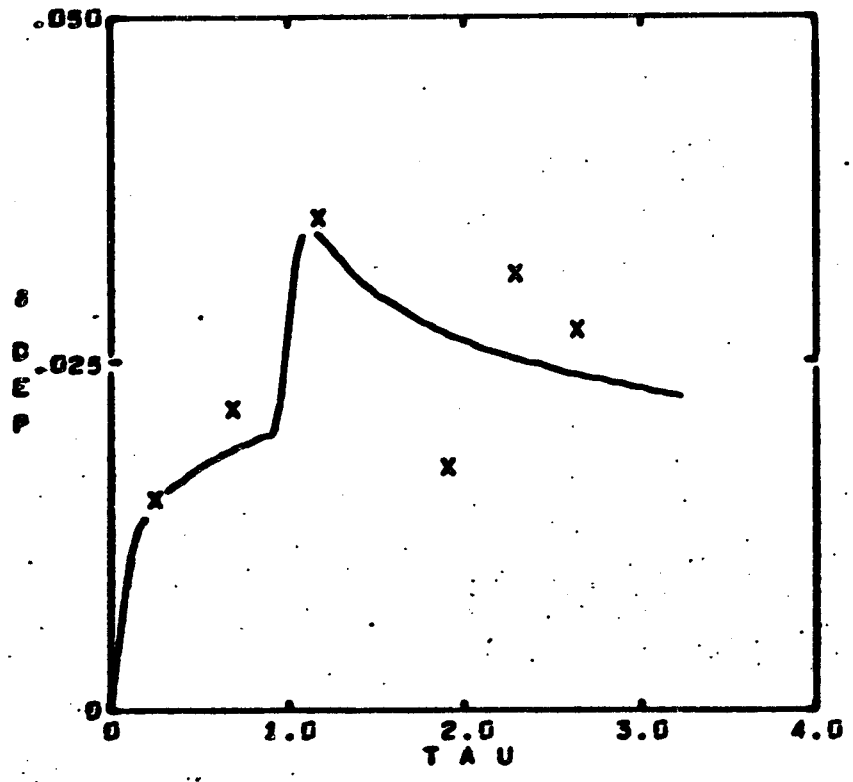
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0432	.0285	.0147
.50	.0706	.0532	.0174
.75	.0991	.0801	.0190
.93	.1178	.0979	.0199
1.0	.1165	.0884	.0281
1.5	.0847	.0547	.0300
2.0	.0714	.0449	.0265
2.5	.0634	.0389	.0245
3.0	.0576	.0345	.0231

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.864	395.45		395.45	1.004	.0147
9H	-0.115	393.82		393.82	1.000	-.0019
10H	0.255	380.33		380.33	0.965	.0441
11H	0.691	302.68	0.000 -.803	302.68	0.768	.0954
12H	1.171	221.96	1.040 -.781	223.71	0.568	.1039
13H	1.902	198.07	0.000 +.929	198.07	0.503	.0639
14H	2.286	193.51	0.720 -.792	204.50	0.519	.0726
15H	2.632	192.80	0.508 -.868	198.90	0.505	.0649
16H	3.416	221.07	0.860 +.851	226.97	0.576	.0105







PHOTOGRAPH NOT AVAILABLE

199 (3F9) GASSENDI A

LAMBDA=39.72 W BETA=15.53 S XI=-.6157 ETA=-.2677 L+PL CODE = 36216 ALBEDO =.1133

13H FLAT MOON DATA
FM=.05963 FM'=.06700

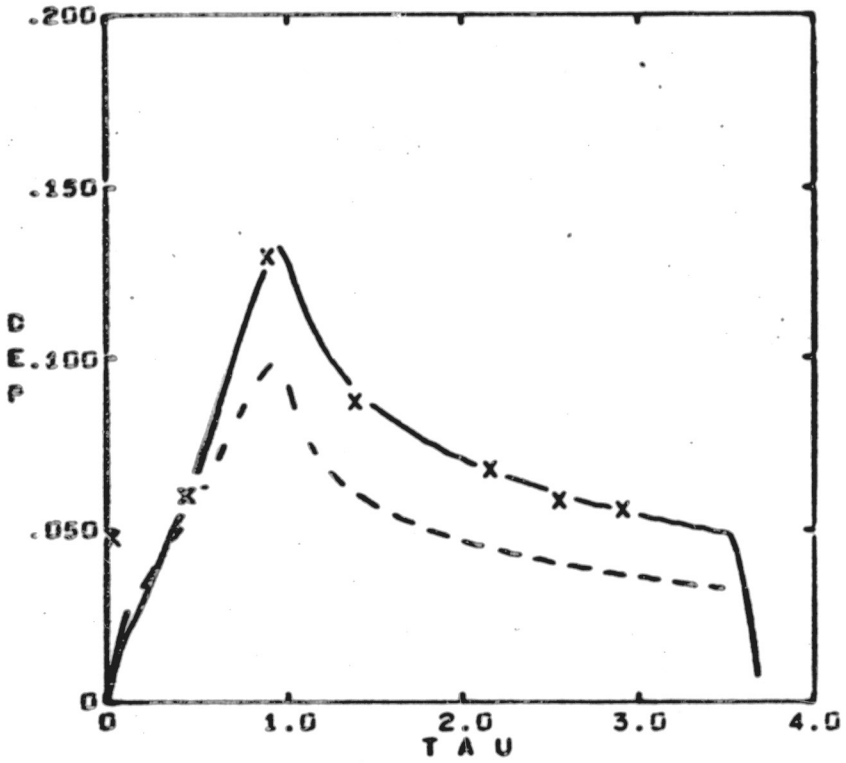
INITIAL TEMPERATURE 373.88
TAU-END OF TOTALITY 3.509

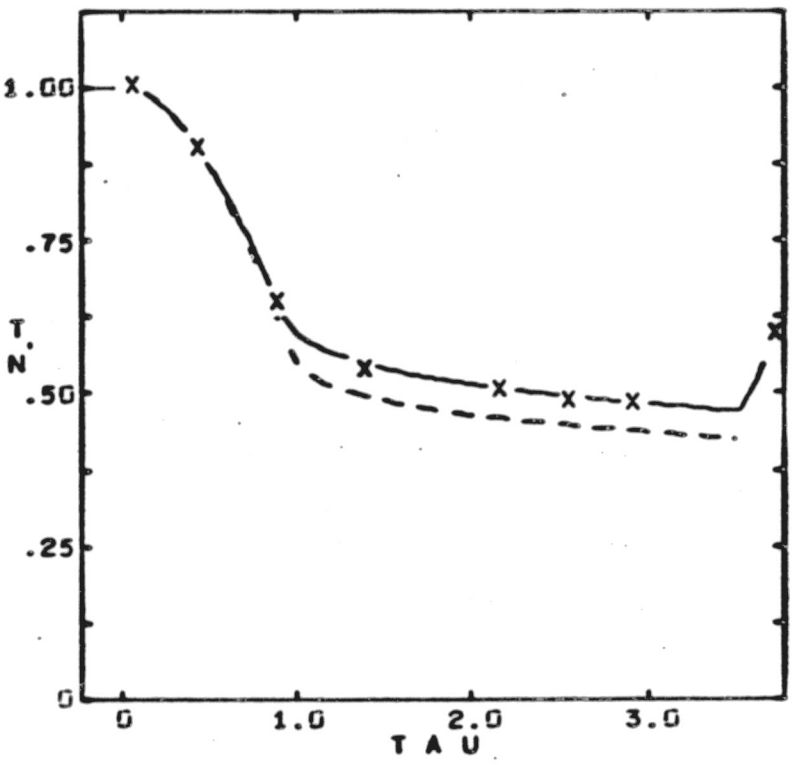
DIFFERENTIAL ENERGY DATA

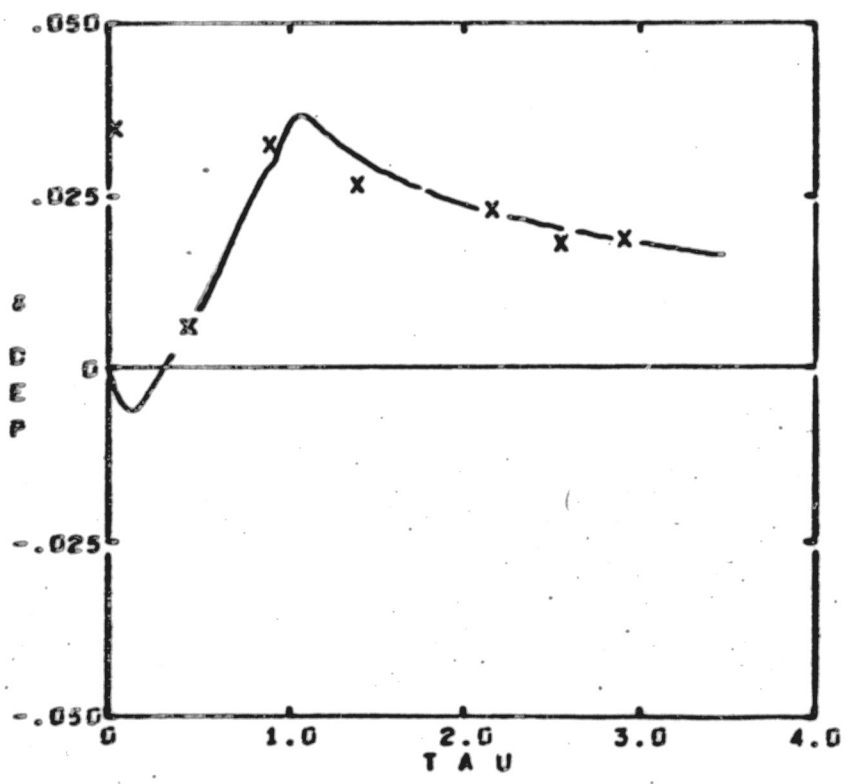
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0345	.0371	-.0026
.50	.0695	.0603	.0092
.75	.1084	.0856	.0228
.93	.1340	.1022	.0318
1.0	.1280	.0924	.0356
1.5	.0859	.0570	.0289
2.0	.0706	.0469	.0237
2.5	.0612	.0408	.0204
3.0	.0545	.0364	.0181

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.733	373.88		373.88	1.000	.0000
9H	0.048	377.26		377.26	1.009	.0474
10H	0.433	338.06		338.06	0.904	.0597
11H	0.887	242.87	0.268 +.392	244.28	0.653	.1296
12H	1.335	196.81	0.549 -.321	203.19	0.543	.0872
13H	2.148	186.74	0.214 -.184	190.79	0.510	.0678
14H	2.546	181.85	0.344 +.197	183.80	0.492	.0584
15H	2.908	181.09	0.206 +.707	181.73	0.486	.0558
16H	3.715	220.88	1.363 -.340	225.16	0.602	-.0074







PHOTOGRAPH NOT AVAILABLE

200 (361) GASSENDI F

LAMBDA=44.91 W BETA=15.02 S XI=-.6819 ETA=-.2592 L↔PL CODE = 36285 ALBEDO =.0793

13H FLAT MOON DATA
FM=.04283 FM'=.04586

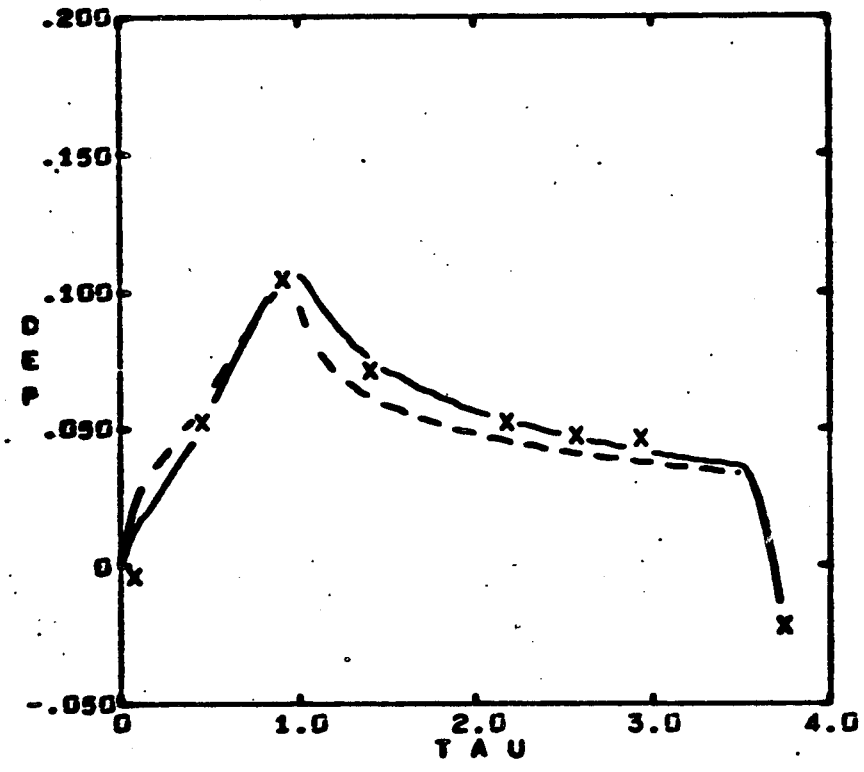
INITIAL TEMPERATURE 371.22
TAU-END OF TOTALITY 3.509

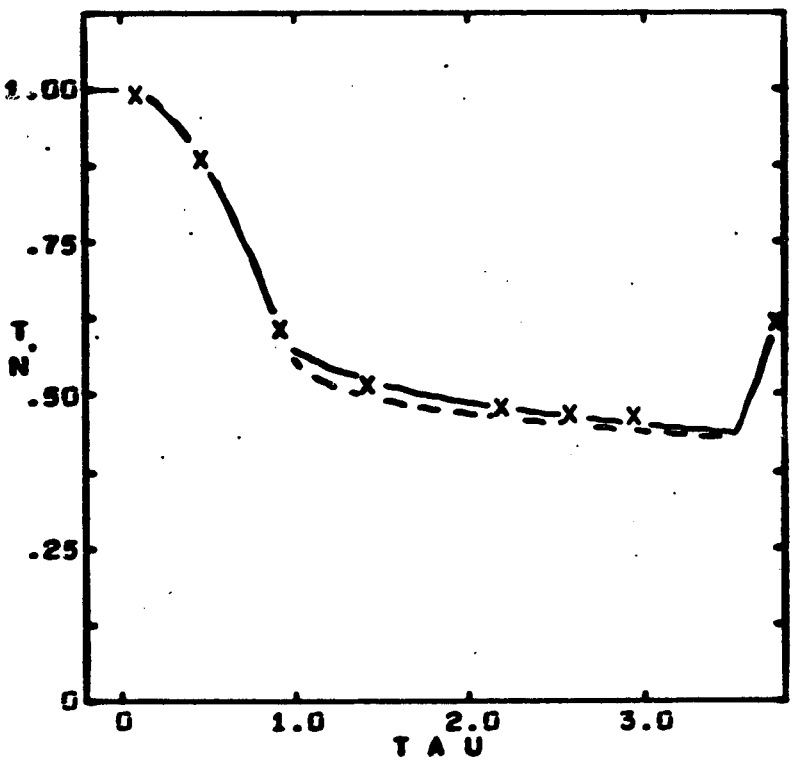
DIFFERENTIAL ENERGY DATA

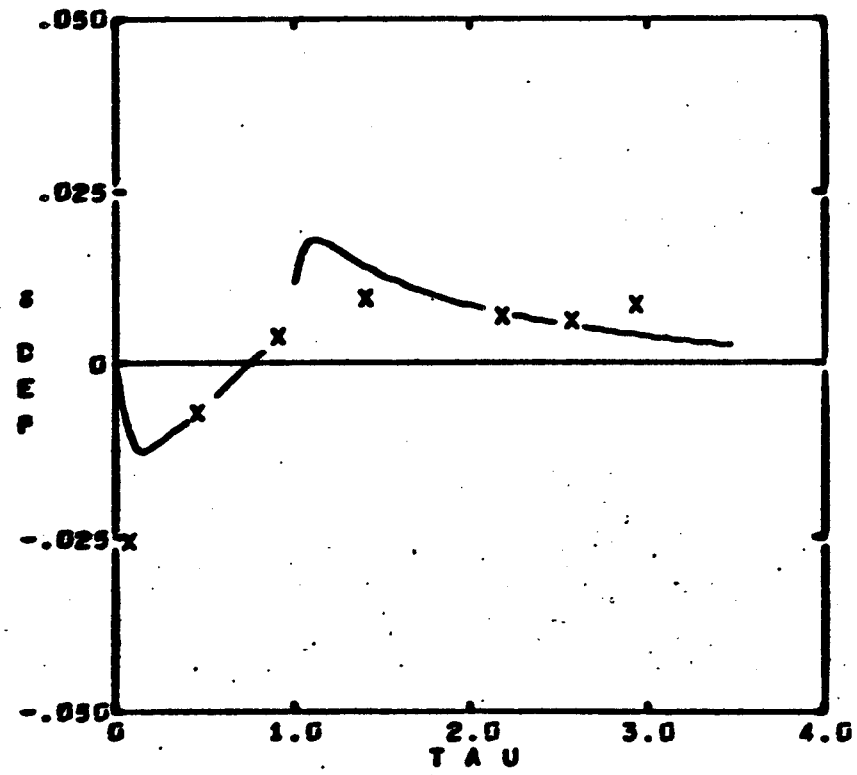
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0287	.0401	-.0114
.50	.0570	.0632	-.0062
.75	.0883	.0884	-.0001
.93	.1088	.1050	.0038
1.0	.1066	.0950	.0116
1.5	.0716	.0587	.0129
2.0	.0567	.0482	.0085
2.5	.0478	.0420	.0058
3.0	.0415	.0375	.0040

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.704	371.22		371.22	1.000	.0000
9H	0.078	368.55		368.55	0.993	-.0038
10H	0.462	329.62		329.62	0.888	.0525
11H	0.916	224.41	0.301 +.227	225.89	0.608	.1049
12H	1.416	189.61	0.188 -.648	191.64	0.516	.0710
13H	2.178	176.69	0.122 -.873	177.90	0.479	.0527
14H	2.575	168.84	0.340 +.174	173.38	0.467	.0476
15H	2.937	171.38	0.118 +.657	172.38	0.464	.0465
16H	3.742	229.72	0.000 +.112	229.72	0.619	-.0215







PHOTOGRAPH NOT AVAILABLE

201 (362) GASSENDI G

LAMB 4.56 W BETA=16.74 S XI=-.6719 ETA=-.2881 L+PL CODE = 36278 ALBEDO =.0813

13H FLAT MOON DATA
FM=.02937 FM'=.03823

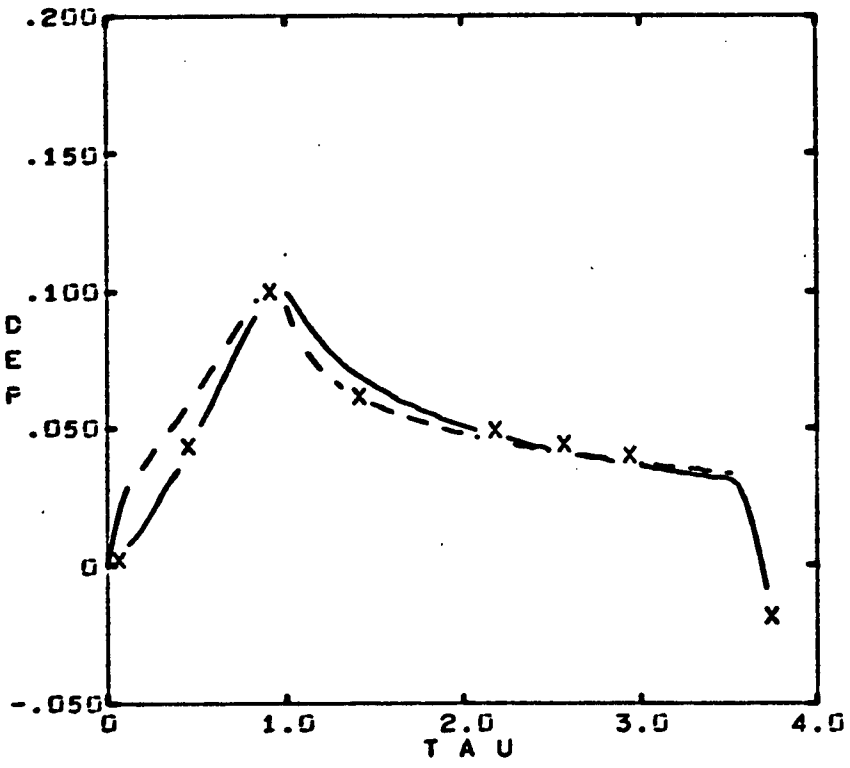
INITIAL TEMPERATURE 372.13
TAU-END OF TOTALITY 3.527

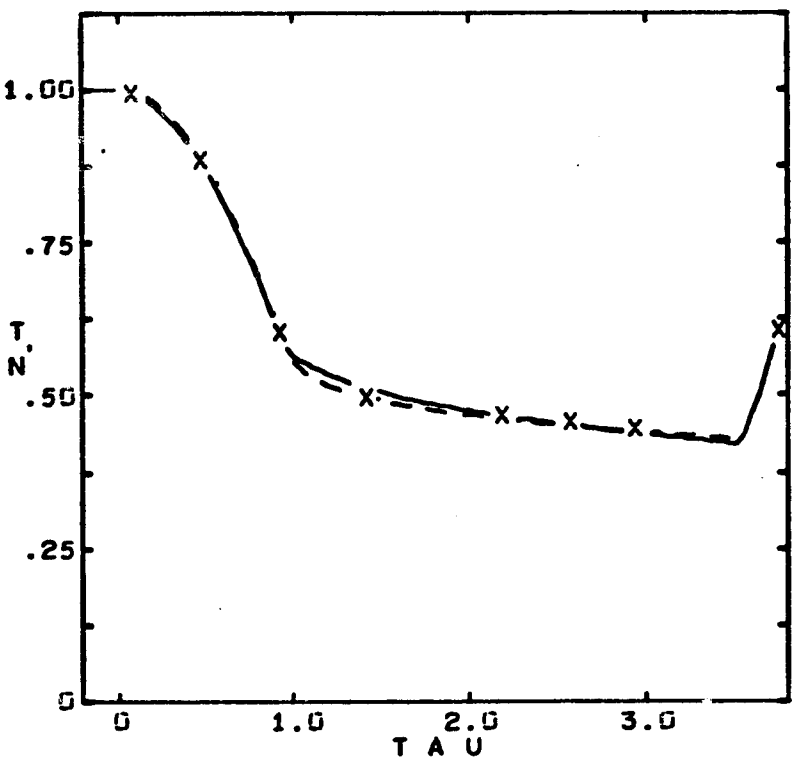
DIFFERENTIAL ENERGY DATA

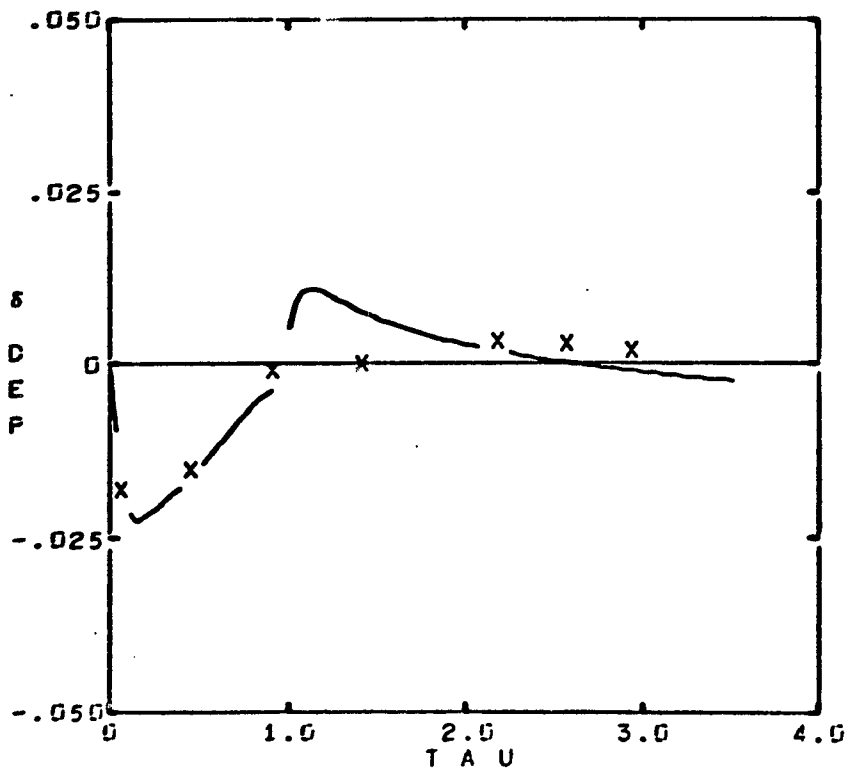
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0186	.0398	-.0212
.50	.0480	.0630	-.0150
.75	.0806	.0882	-.0076
.93	.1021	.1048	-.0027
1.0	.0997	.0948	.0049
1.5	.0652	.0586	.0066
2.0	.0510	.0481	.0029
2.5	.0424	.0419	.0005
3.0	.0363	.0374	-.0011

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.712	372.13		372.13	1.000	-.0000
9H	0.072	370.33		370.33	0.995	.0023
10H	0.457	330.20		330.20	0.887	.0434
11H	0.913	224.24	0.271 +.074	225.40	0.606	.0998
12H	1.413	182.46	0.364 -.795	185.30	0.498	.0615
13H	2.178	171.85	0.283 +.632	175.09	0.470	.0490
14H	2.575	166.08	0.405 +.121	170.55	0.458	.0441
15H	2.939	164.99	0.190 +.361	166.45	0.447	.0400
16H	3.746	225.98	0.000 +.417	225.98	0.607	-.0180







PHOTOGRAPH NOT AVAILABLE

202 (363) GASSENDI J

LAMBDA=36.99 W BETA=21.59 S XI=-.5595 ETA=-.3680 L+PL CODE = 35356 ALBEDO =.0605

13H FLAT MOON DATA
FM=.04664 FM'=.07169

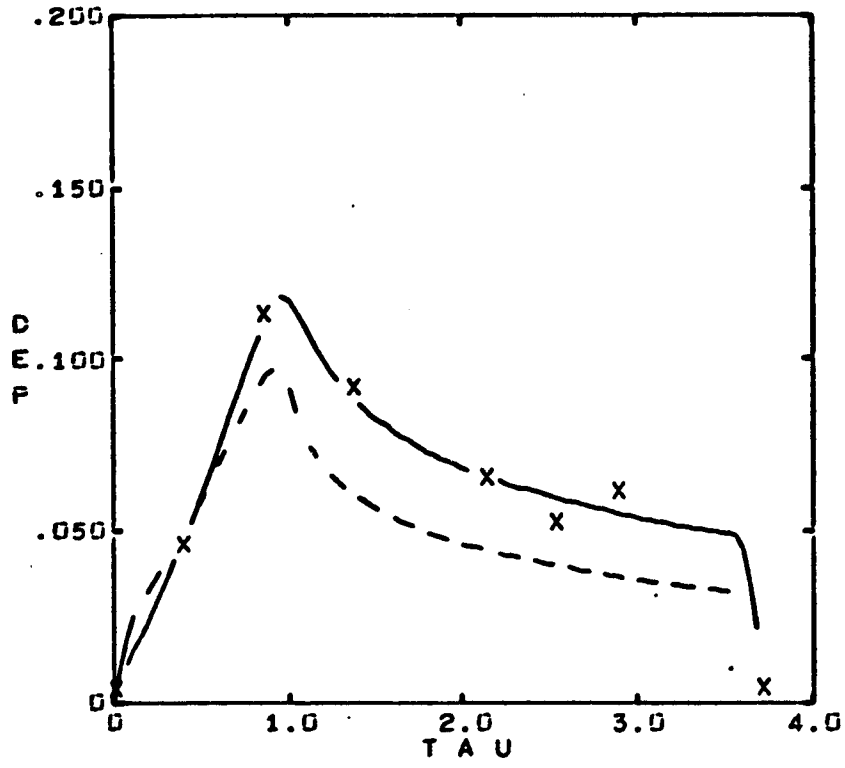
INITIAL TEMPERATURE 378.95
TAU-END OF TOTALITY 3.566

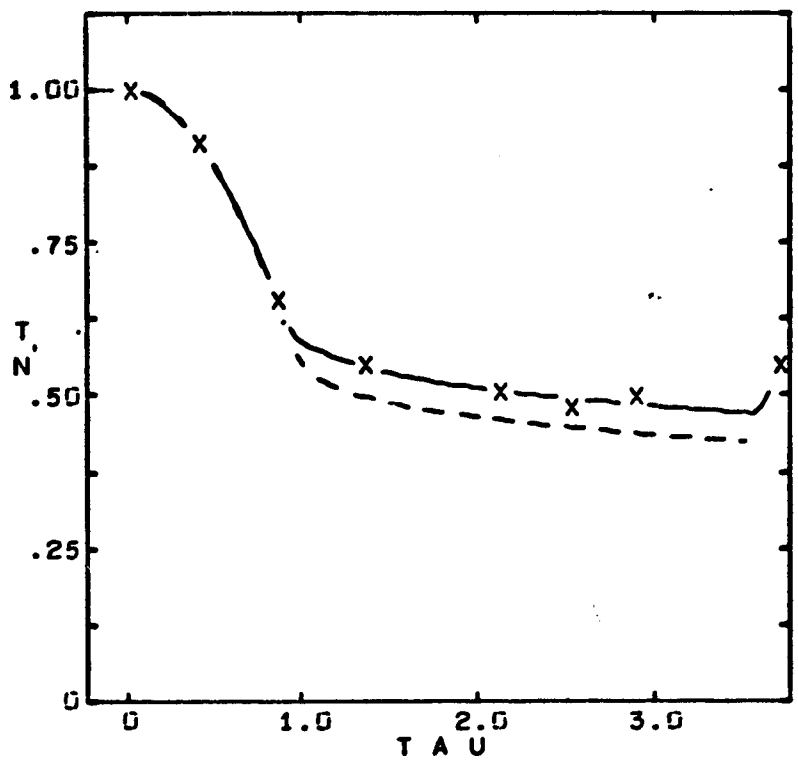
DIFFERENTIAL ENERGY DATA

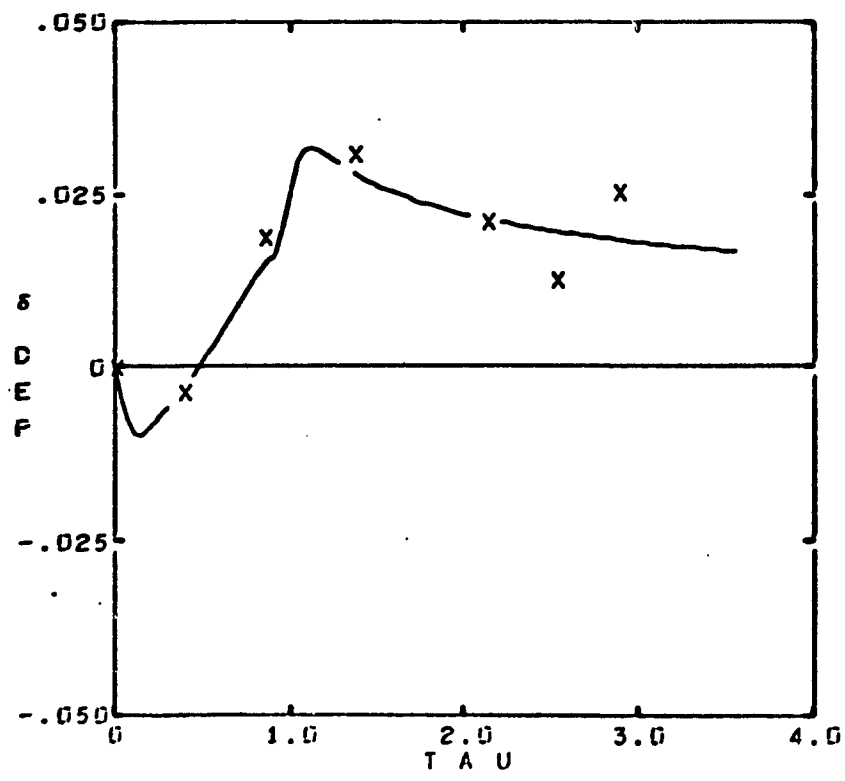
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0282	.0359	-.0077
.50	.0600	.0592	.0008
.75	.0955	.0845	.0110
.93	.1189	.1012	.0177
1.0	.1170	.0915	.0255
1.5	.0827	.0565	.0262
2.0	.0685	.0464	.0221
2.5	.0601	.0403	.0198
3.0	.0541	.0360	.0181

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.773	378.95		378.95	1.000	.0000
9H	0.016	379.16		379.16	1.001	.0041
10H	0.403	346.05		346.05	0.913	.0461
11H	0.863	247.80	0.507 +.946	246.96	0.657	.1132
12H	1.364	204.39	0.255 +.137	206.49	0.550	.0916
13H	2.133	182.62	0.483 +.231	191.81	0.506	.0656
14H	2.535	180.00	0.283 +.894	181.47	0.479	.0526
15H	2.900	181.68	0.396 -.983	189.15	0.499	.0621
16H	3.719	208.49	0.000 +.162	208.49	0.550	.0047







PHOTOGRAPH NOT AVAILABLE

203 (3G4) GASSENDI L

LAMBDA=41.62 W BETA=20.34 S XI=-.6228 ETA=-.3476 L+FL CODE = 36324 ALBEDO =.0628

13H FLAT MOON DATA
FM=.03929 FM'=.05837

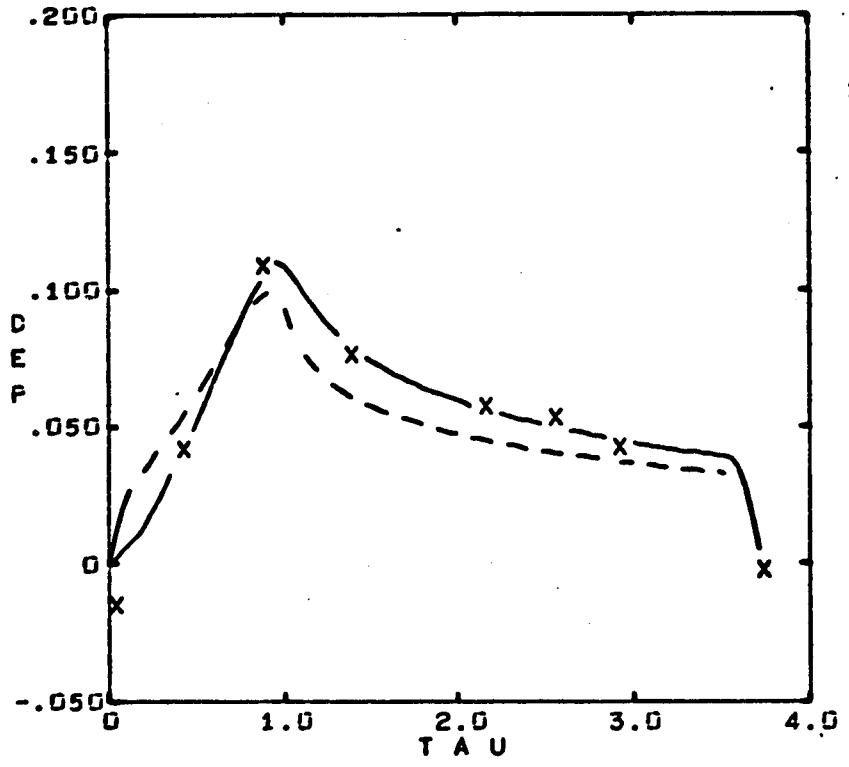
INITIAL TEMPERATURE 375.22
TAU-END OF TOTALITY 3.559

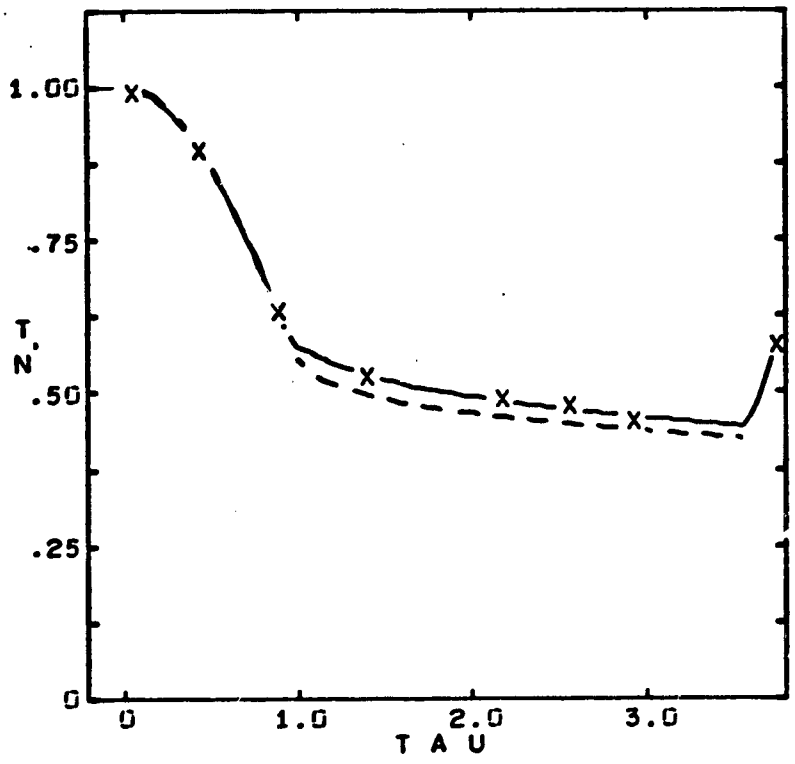
DIFFERENTIAL ENERGY DATA

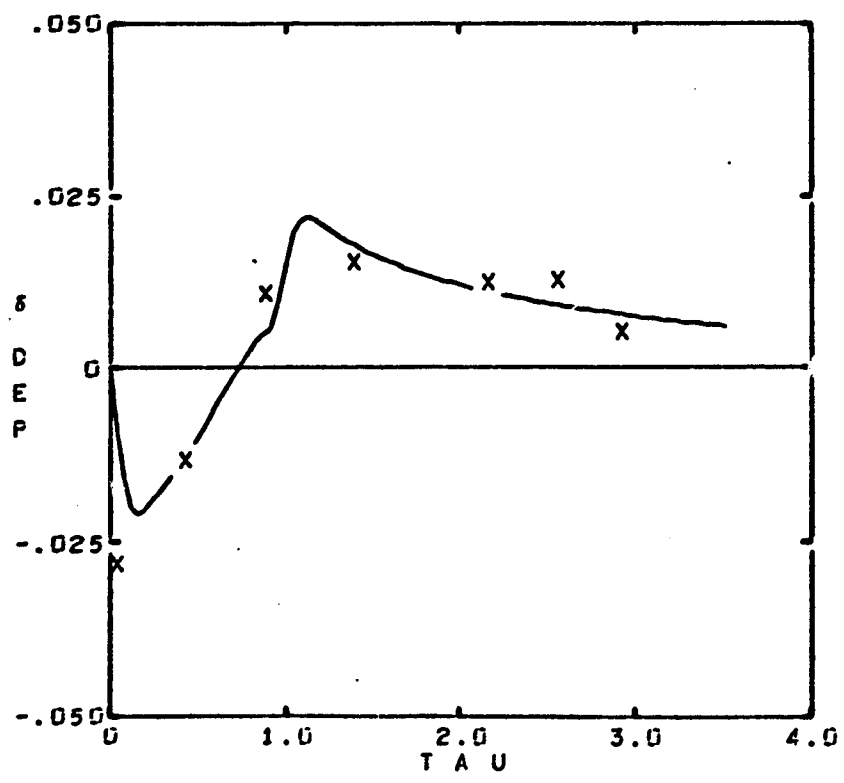
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0192	.0382	-.0190
.50	.0513	.0613	-.0100
.75	.0871	.0866	.0005
.93	.1107	.1031	.0076
1.0	.1087	.0933	.0154
1.5	.0742	.0576	.0166
2.0	.0594	.0473	.0121
2.5	.0506	.0412	.0094
3.0	.0443	.0368	.0075

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.742	375.22			375.22	1.000	.0000
9H	0.046	372.82			372.82	0.994	-.0150
10H	0.433	337.10			337.10	0.898	.0417
11H	0.891	237.10	0.000	-.759	237.10	0.632	.1089
12H	1.393	194.79	0.313	+.695	197.24	0.526	.0764
13H	2.161	177.10	0.605	+.440	183.94	0.490	.0577
14H	2.562	176.34	0.502	+.162	180.38	0.481	.0534
15H	2.926	170.57	0.000	+.444	170.57	0.455	.0427
16H	3.741	216.06	0.589	+.151	217.76	0.580	-.0017







PHOTOGRAPH NOT AVAILABLE

LAMBDA=39.01 W BETA=18.59 S XI=-.5966 ETA=-.3188 L+PL CODE = 35391 ALBEDO =.0821

13M FLAT MOON DATA
FM=.02748 FM'=.02748

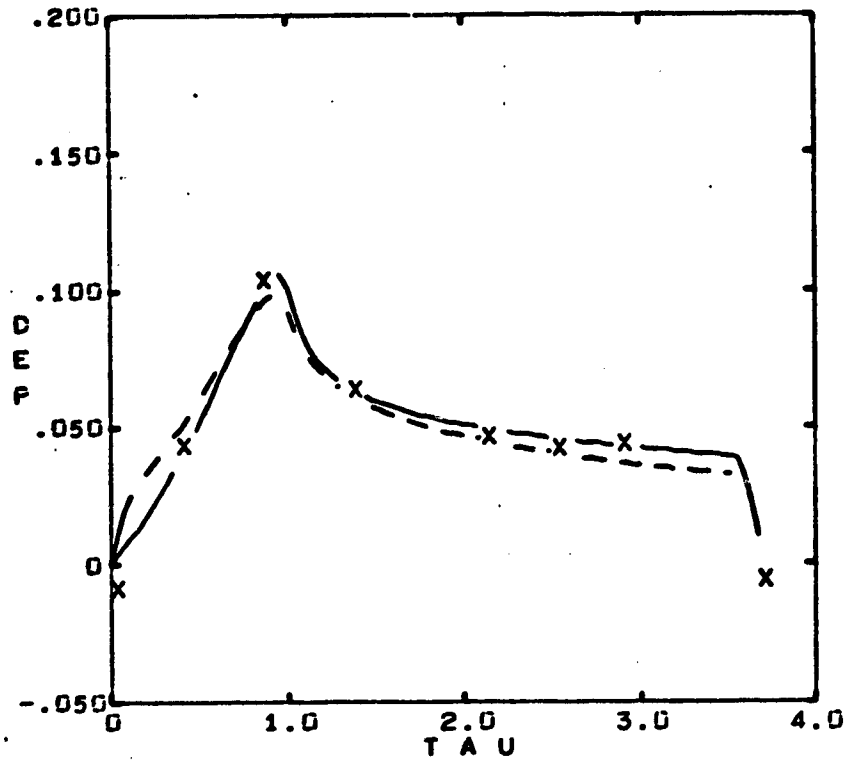
INITIAL TEMPERATURE 375.76
TAU-END OF TOTALITY 3.539

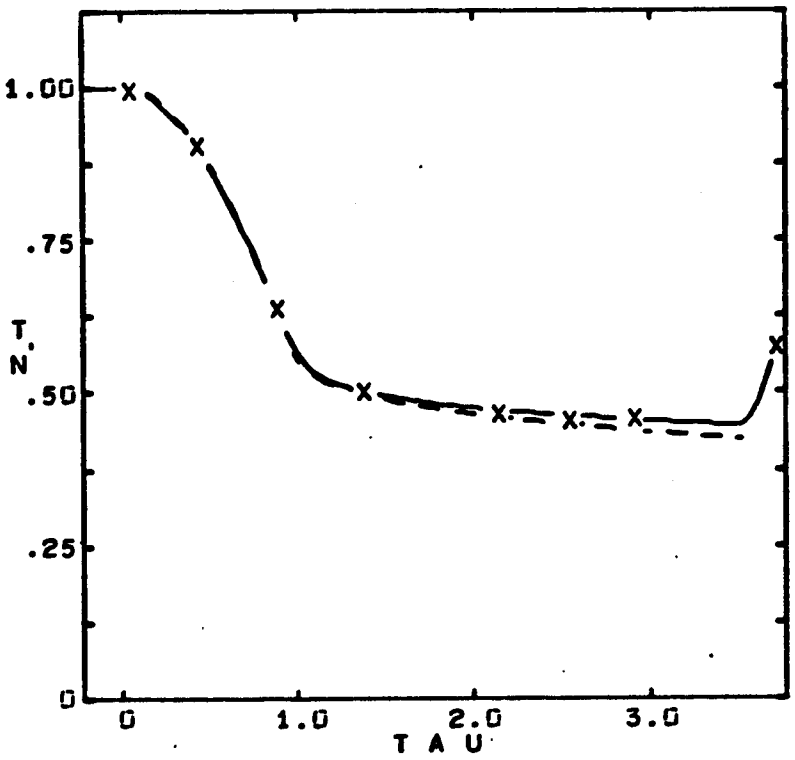
DIFFERENTIAL ENERGY DATA

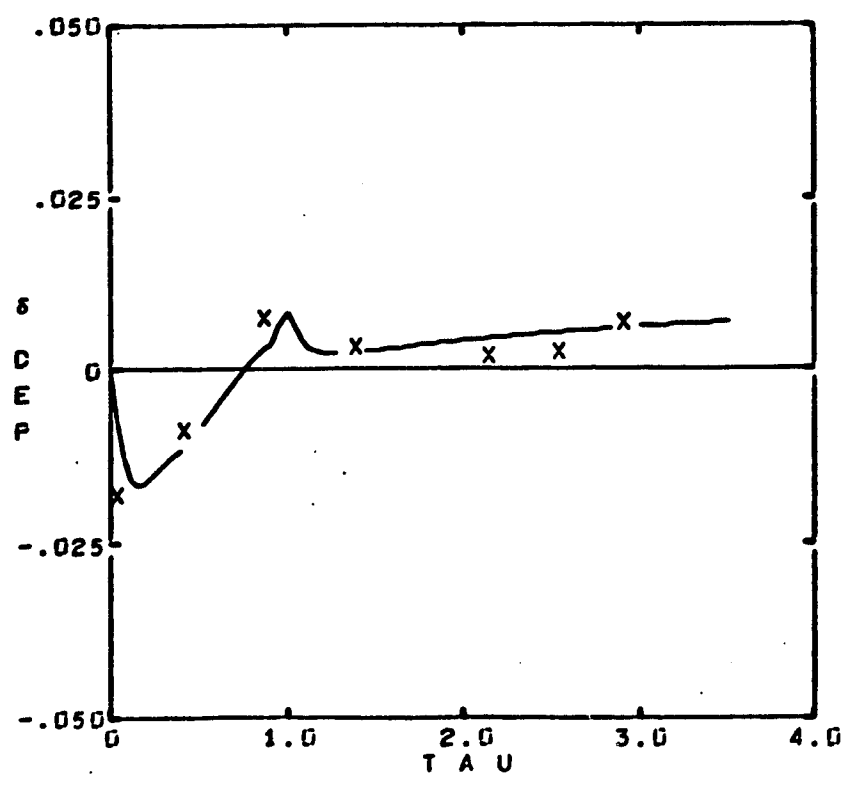
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0215	.0368	-.0153
.50	.0514	.0600	-.0086
.75	.0848	.0853	-.0005
.93	.1069	.1019	.0050
1.0	.1003	.0922	.0081
1.5	.0597	.0569	.0028
2.0	.0510	.0468	.0042
2.5	.0460	.0407	.0053
3.0	.0425	.0363	.0062

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.749	375.76		375.76	1.000	.0000
9H	0.037	374.32		374.32	0.996	-.0082
10H	0.422	339.61		339.61	0.904	.0437
11H	0.879	238.95	0.000 -.279	238.95	0.636	.1040
12H	1.380	189.06	0.000 -.062	189.06	0.503	.0641
13H	2.146	174.70	0.000 -.050	174.70	0.465	.0467
14H	2.544	171.20	0.000 -.226	171.20	0.456	.0431
15H	2.908	172.18	0.000 -.169	172.18	0.458	.0441
16H	3.722	215.88	0.000 +.293	215.88	0.575	-.0056







PHOTOGRAPH NOT AVAILABLE

205 (366) GASSENDI O

LAMBDA=35.01 W BETA=21.93 S XI=-.5322 ETA=-.3734 L•PL CODE = 35337 ALBEDO =.0615

13H FLAT MOON DATA
FM=.02209 FM'=.05668

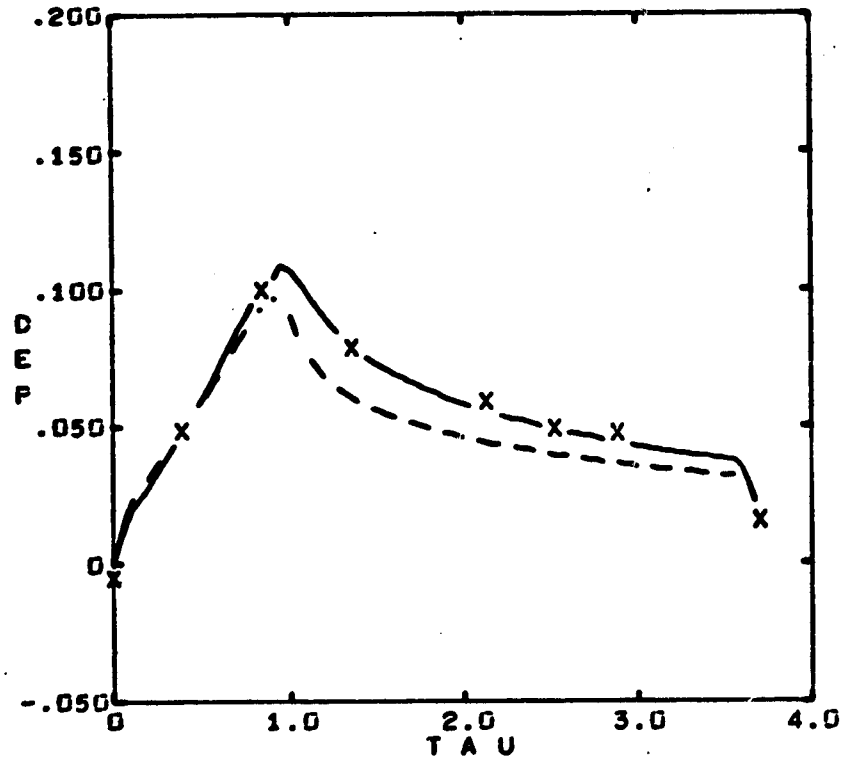
INITIAL TEMPERATURE 380.38
TAU-END OF TOTALITY 3.567

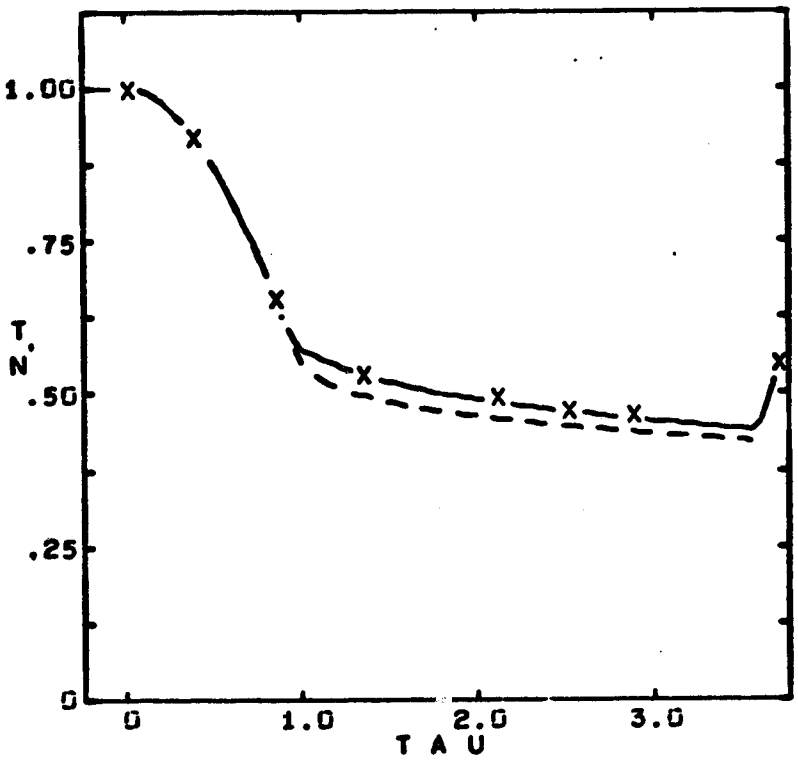
DIFFERENTIAL ENERGY DATA

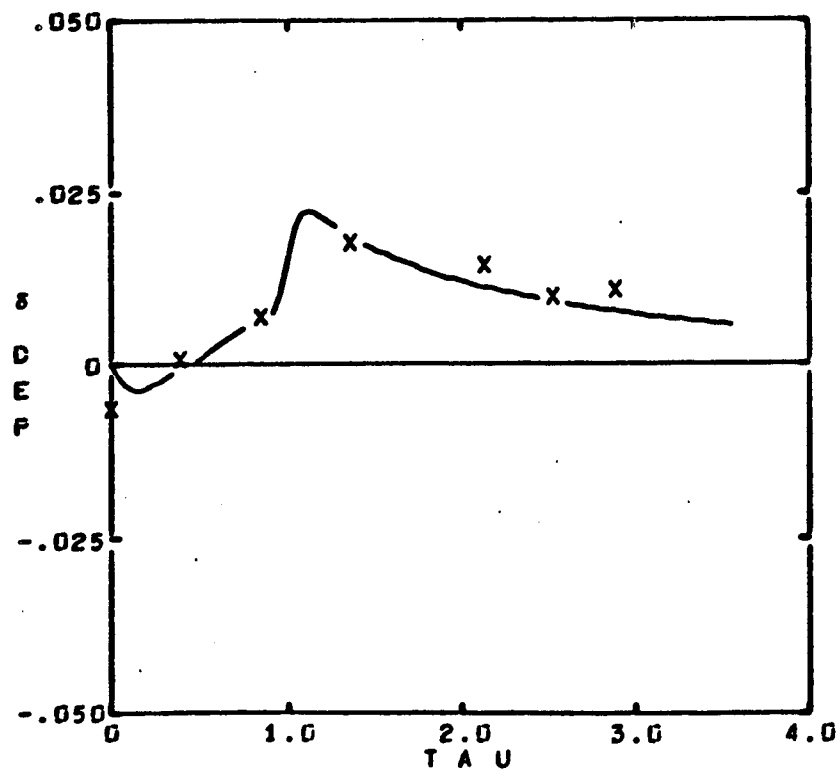
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0323	.0350	-.0027
.50	.0593	.0584	.0009
.75	.0891	.0838	.0053
.93	.1087	.1006	.0081
1.0	.1068	.0909	.0159
1.5	.0728	.0561	.0167
2.0	.0582	.0461	.0121
2.5	.0494	.0400	.0094
3.0	.0431	.0357	.0074

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.785	380.38			380.38	1.000	.0000
9H	0.004	379.85			379.85	0.999	-.0054
10H	0.391	349.66			349.66	0.919	.0486
11H	0.849	249.43	0.000	-.588	249.43	0.656	.0998
12H	1.352	196.12	0.373	+.426	201.49	0.530	.0787
13H	2.121	174.50	0.652	+.407	187.34	0.493	.0568
14H	2.523	173.16	0.715	+.032	179.52	0.472	.0496
15H	2.887	171.68	0.611	+.871	177.44	0.466	.0474
16H	3.708	204.69	1.576	+.304	209.61	0.551	.0156







PHOTOGRAPH NOT AVAILABLE

206 (367) GASSENDI Y

LAMBDA=38.41 W BETA=20.89 S XI=-.5804 ETA=-.3565 L+PL CODE = 35385 ALBEDO =.0597

13H FLAT MOON DATA
FM=.04171 FM'=.04171

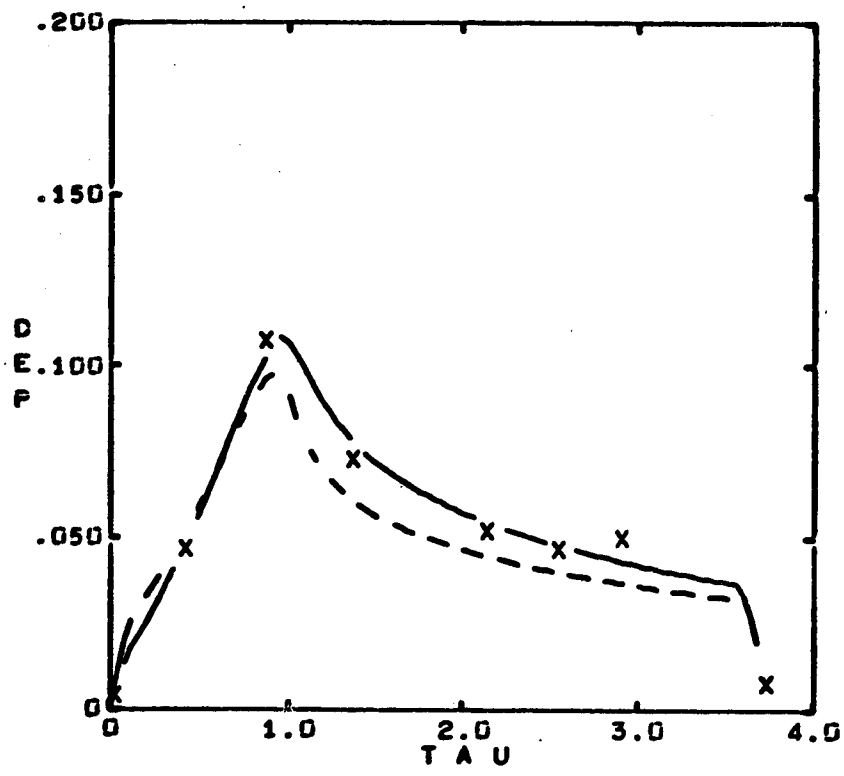
INITIAL TEMPERATURE 377.49
TAU-END OF TOTALITY 3.561

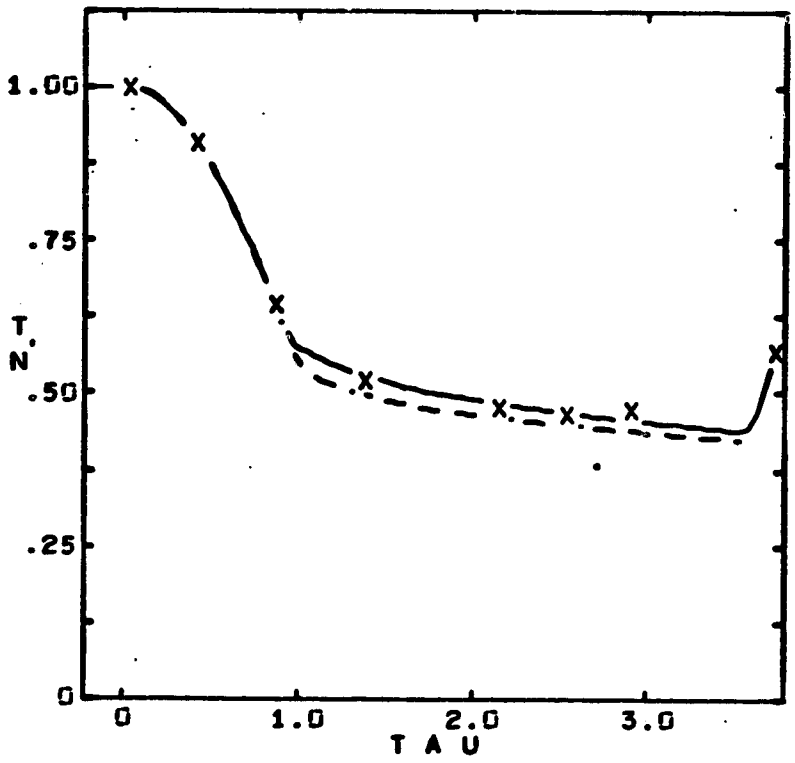
DIFFERENTIAL ENERGY DATA

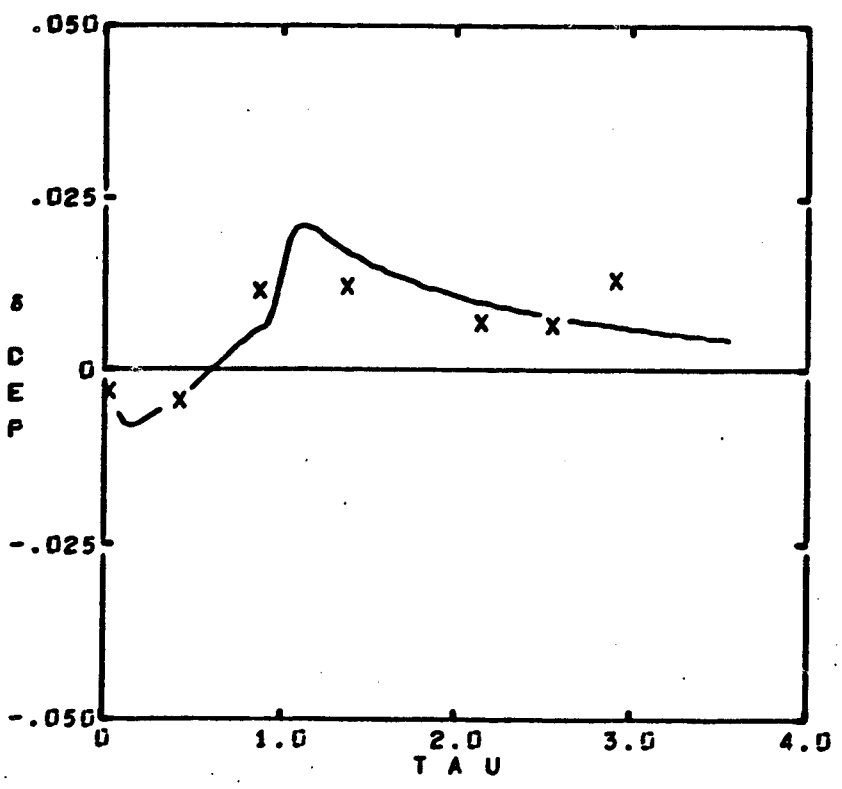
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0296	.0365	-.0069
.50	.0575	.0598	-.0023
.75	.0885	.0851	.0034
.93	.1088	.1017	.0071
1.0	.1068	.0919	.0149
1.5	.0722	.0568	.0154
2.0	.0575	.0466	.0109
2.5	.0486	.0406	.0080
3.0	.0423	.0362	.0061

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.762	377.49			377.49	1.000	.0000
9H	0.026	377.50			377.50	1.000	.0041
10H	0.413	343.19			343.19	0.909	.0469
11H	0.672	243.20	0.000	-.787	243.20	0.644	.1073
12H	1.374	194.79	0.247	-.106	196.32	0.520	.0732
13H	2.142	180.02	0.000	-.441	180.02	0.477	.0517
14H	2.543	175.54	0.000	-.764	175.54	0.465	.0468
15H	2.908	175.95	0.406	-.977	178.59	0.473	.0501
16H	3.725	211.44	1.080	+.208	214.92	0.569	.0077







PHOTOGRAPH NOT AVAILABLE

207 (1G2) GEMINUS G

LAMBDA=48.55 E BETA=30.84 N XI=+.6435 ETA=+.5127 L+FL CODE = 16541 ALBEDO =.1329

13H FLAT MOON DATA
FM=.02440 FM'=.02440

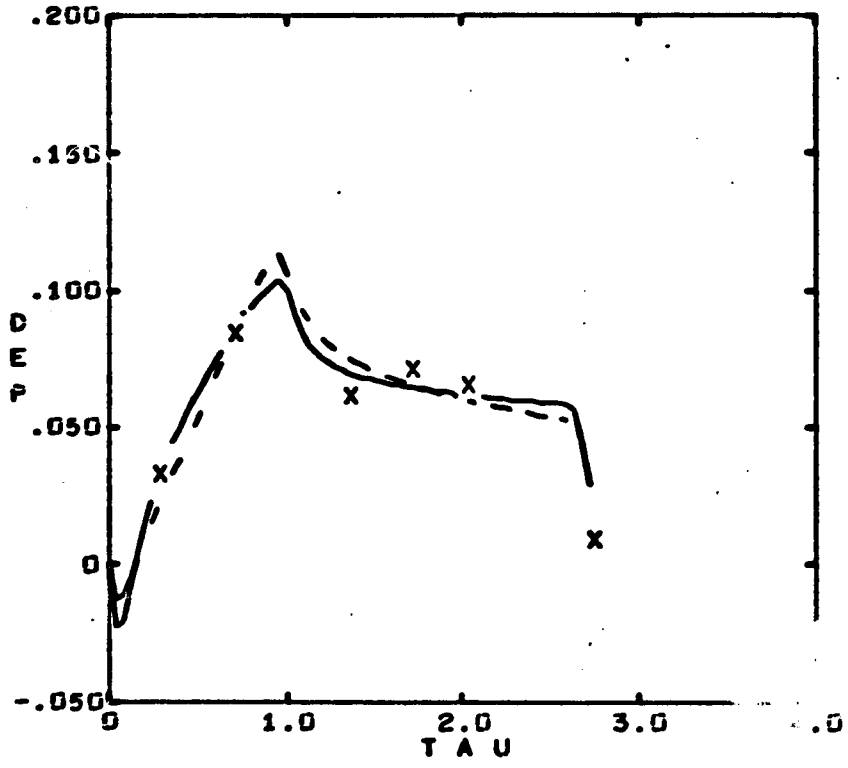
INITIAL TEMPERATURE 363.88
TAU-END OF TOTALITY 2.623

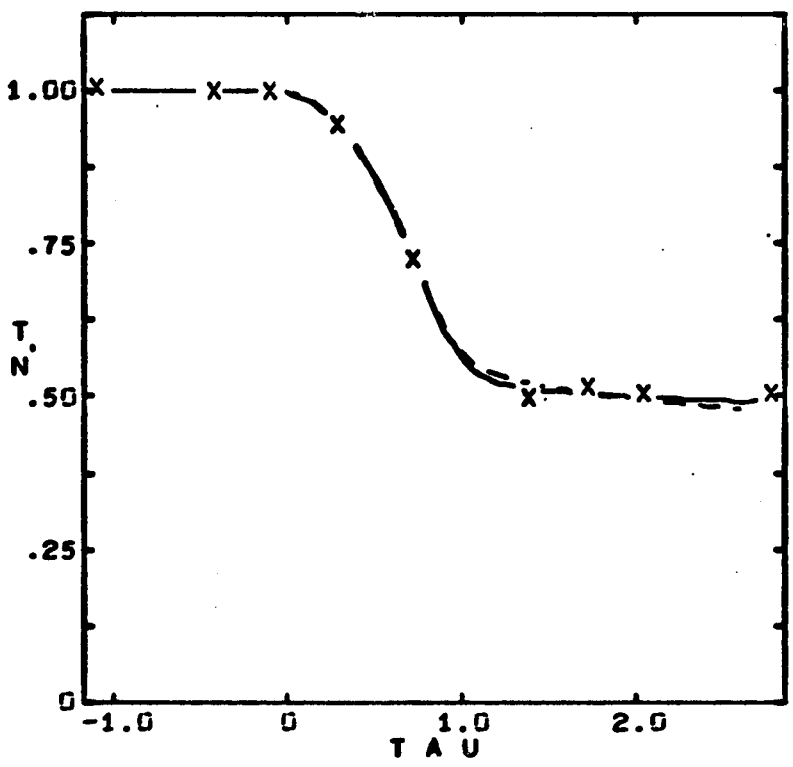
DIFFERENTIAL ENERGY DATA

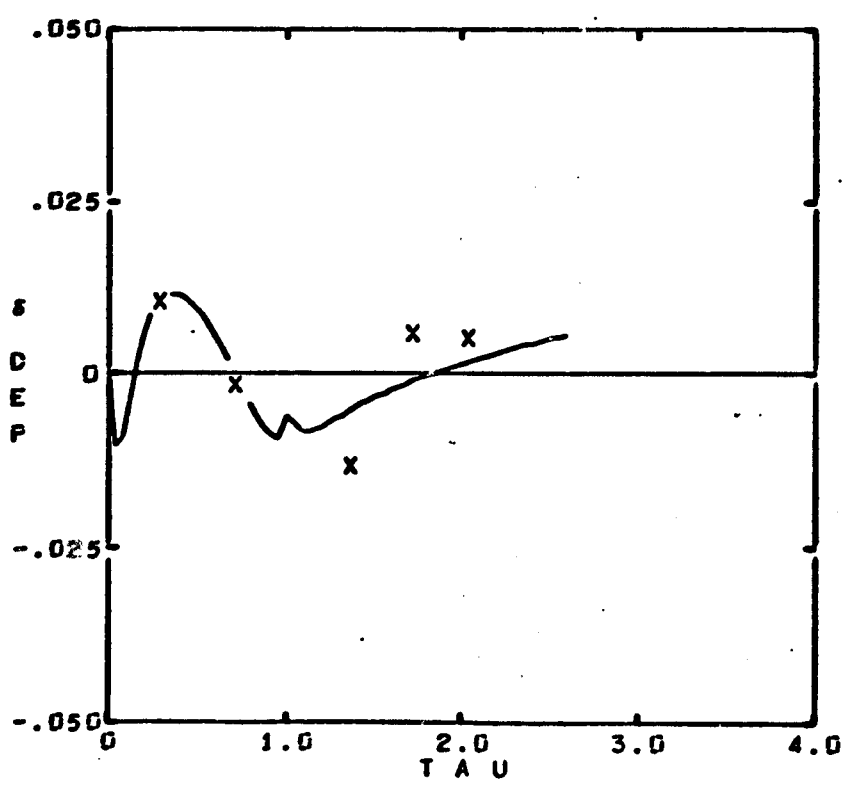
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0256	.0166	.0090
.50	.0627	.0532	.0095
.75	.0885	.0901	-.0016
.93	.1036	.1147	-.0111
1.0	.0996	.1056	-.0060
1.5	.0673	.0708	-.0035
2.0	.0621	.0605	.0016
2.5	.0589	.0538	.0051

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.102	366.10		366.10	1.006	.0246
9H	-0.435	364.19		364.19	1.001	.0033
10H	-0.101	363.61		363.61	0.999	-.0030
11H	0.291	344.12		344.12	0.946	.0333
12H	0.723	262.25	0.517 -.914	264.34	0.726	.0845
13H	1.377	181.13	0.000 +.196	181.13	0.498	.0614
14H	1.724	172.53	0.763 +.310	188.14	0.517	.0715
15H	2.033	180.99	0.253 -.552	183.93	0.505	.0653
16H	2.754	183.87	0.000 +.728	183.87	0.505	.0093







PHOTOGRAPH NOT AVAILABLE

LAMBDA=49.43 E BETA=13.20 N XI=+.7396 ETA=+.2283 L+FL CODE = 17232 ALBEDO =.1308

13H FLAT MOON DATA
FM=.01935 FM'=.02437

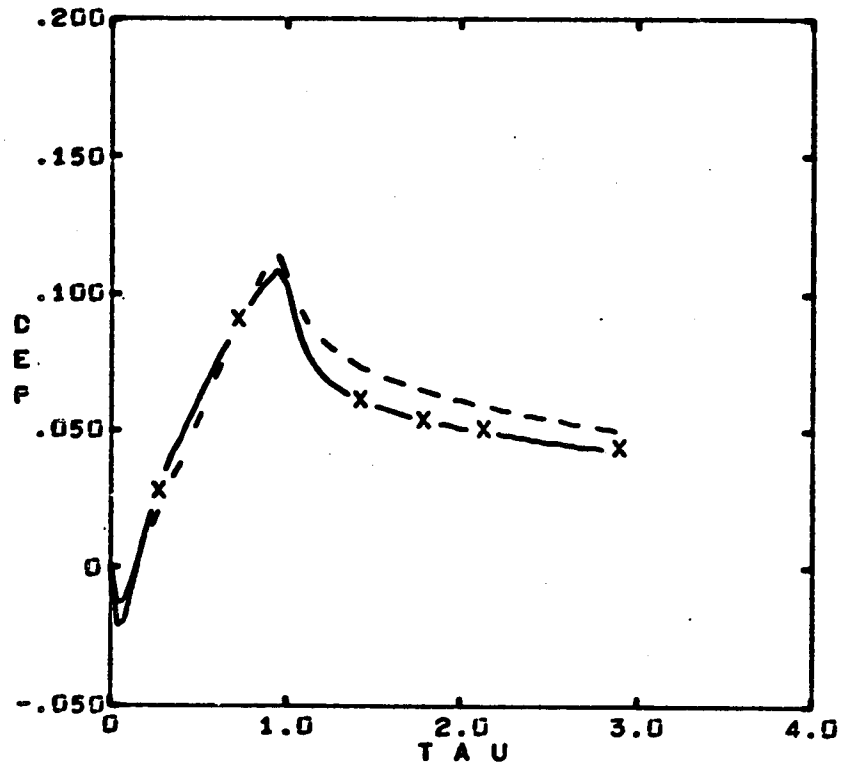
INITIAL TEMPERATURE 367.04
TAU-END OF TOTALITY 2.940

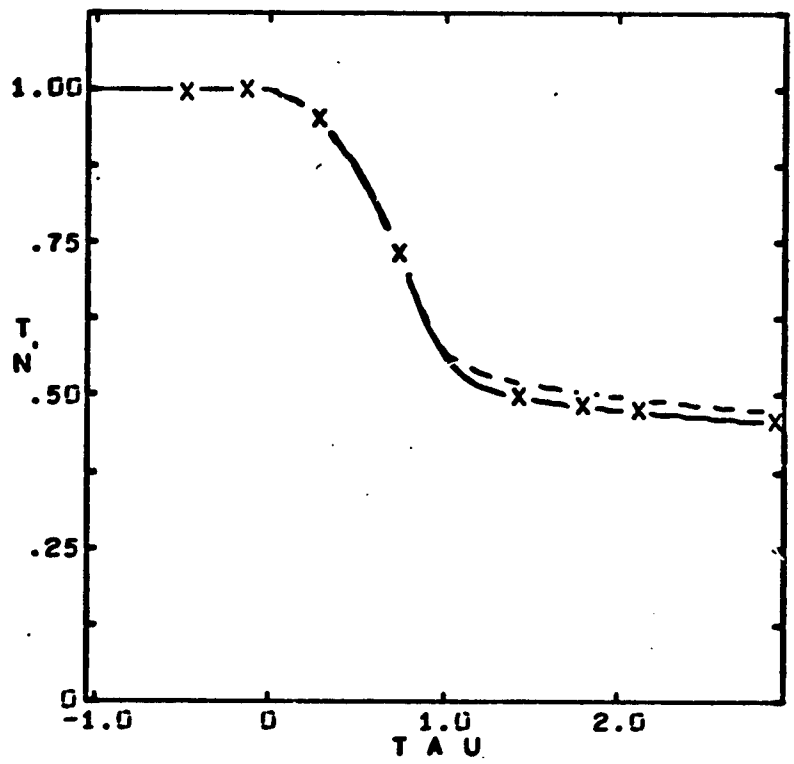
DIFFERENTIAL ENERGY DATA

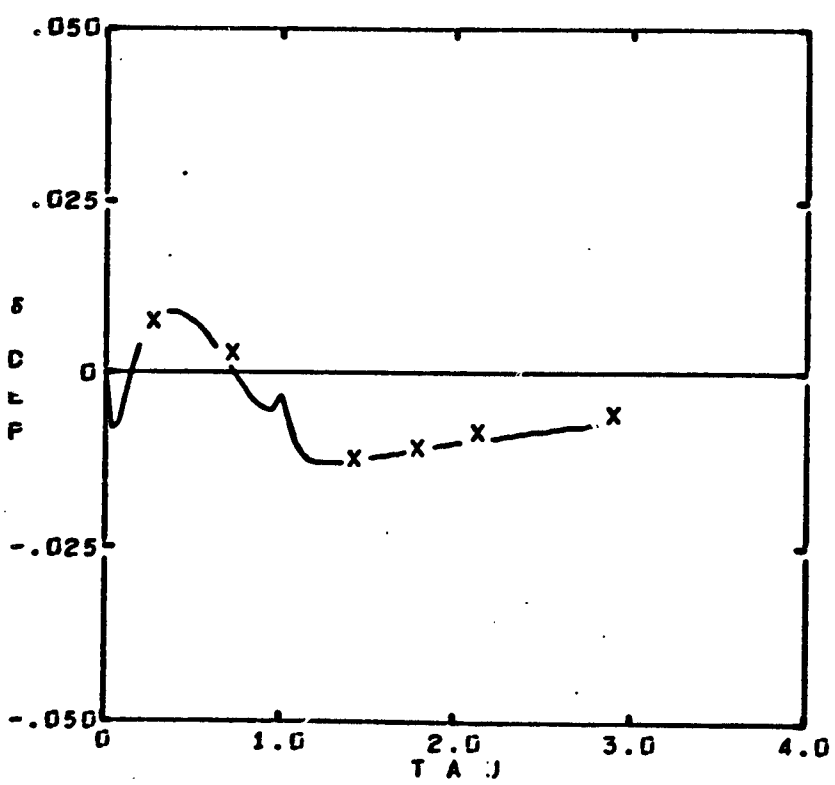
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0231	.0164	.0067
.50	.0610	.0535	.0075
.75	.0906	.0907	-.0001
.93	.1088	.1156	-.0068
1.0	.1032	.1065	-.0033
1.5	.0592	.0715	-.0123
2.0	.0511	.0612	-.0101
2.5	.0461	.0544	-.0083

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.202	365.39		365.39	0.995	-.0179
9H	-0.493	366.28		366.28	0.998	-.0082
10H	-0.141	367.45		367.45	1.001	.0045
11H	0.275	349.59		349.59	0.952	.0278
12H	0.732	268.45	0.000 -.819	268.45	0.731	.0911
13H	1.426	181.78	1.550 -.437	182.73	0.498	.0614
14H	1.793	172.43	0.822 +.208	177.12	0.483	.0542
15H	2.120	171.80	0.579 -.093	174.45	0.475	.0510
16H	2.895	168.61	0.000 -.390	168.61	0.459	.0445







PHOTOGRAPH NOT AVAILABLE

209 (4D2) GOCLENIUS A

LAMBDA=50.39 E BETA= 6.93 S XI=+.7648 ETA=-.1207 L+FL CODE = 47162 ALBEDO =.0653

13H FLAT MOON DATA
FM=.03209 FM'=.03209

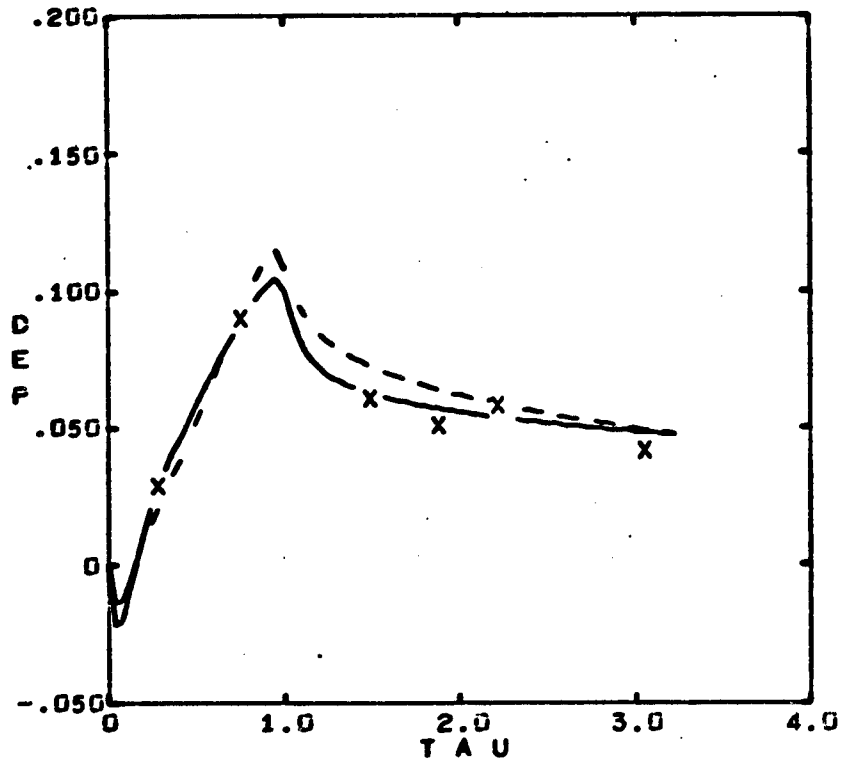
INITIAL TEMPERATURE 374.47
TAU-END OF TOTALITY 3.269

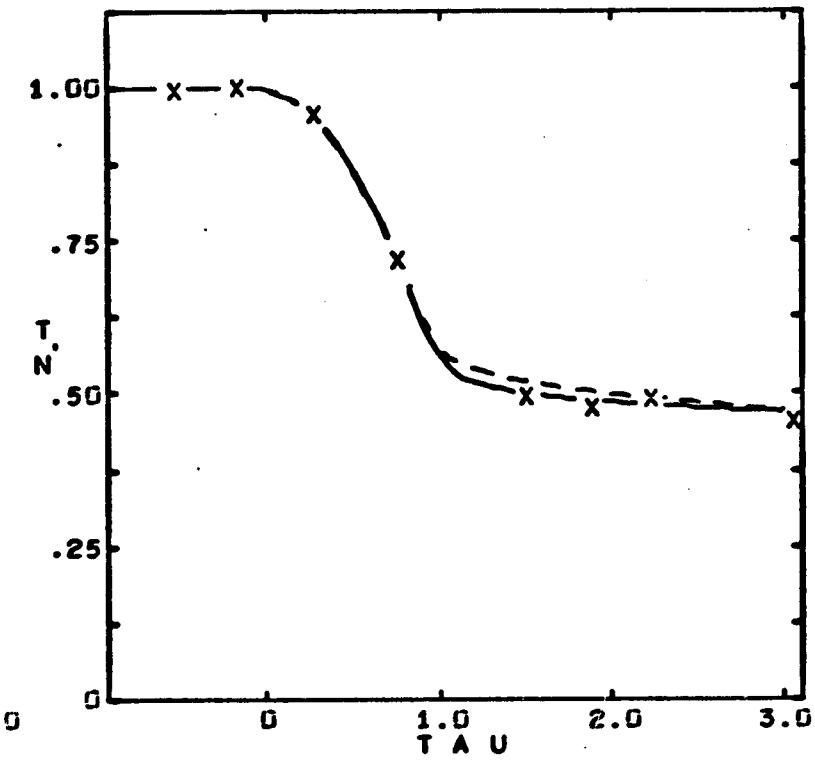
DIFFERENTIAL ENERGY DATA

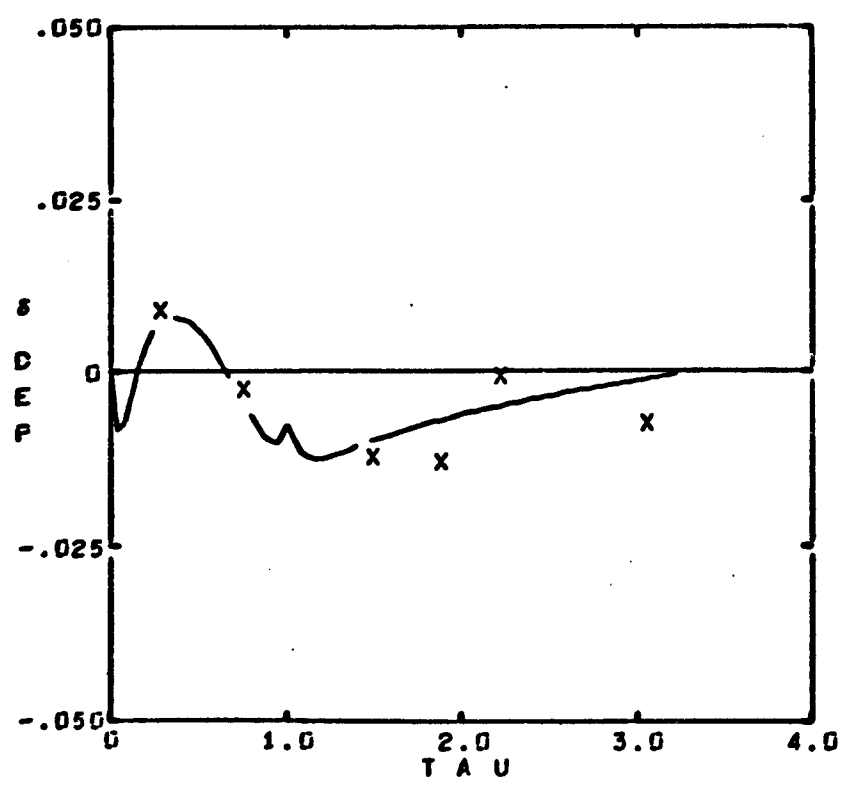
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0225	.0162	.0063
.50	.0596	.0538	.0058
.75	.0876	.0915	-.0039
.93	.1046	.1167	-.0121
1.0	.0998	.1075	-.0077
1.5	.0625	.0723	-.0098
2.0	.0558	.0619	-.0061
2.5	.0517	.0551	-.0034
3.0	.0487	.0499	-.0012

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.284	375.40		375.40	1.002	.0100
9H	-0.535	373.85		373.85	0.998	-.0066
10H	-0.164	374.54		374.54	1.000	.0008
11H	0.276	357.43		357.43	0.954	.0291
12H	0.757	267.11	1.599 +.654	268.48	0.717	.0900
13H	1.490	185.65	0.000 +.565	185.65	0.496	.0604
14H	1.876	178.06	0.000 +.624	178.06	0.475	.0511
15H	2.223	177.64	1.783 +.688	183.89	0.491	.0581
16H	3.052	169.73	0.000 -.205	169.73	0.453	.0422







PHOTOGRAPH NOT AVAILABLE

210 (1G4) GODIN

LAMBDA=10.20 E BETA= 1.83 N XI=+.1770 ETA=+.0320 L+PL CODE = 11073 ALBEDO =.1408

13H FLAT MOON DATA
FM=.08436 FM'=.10453

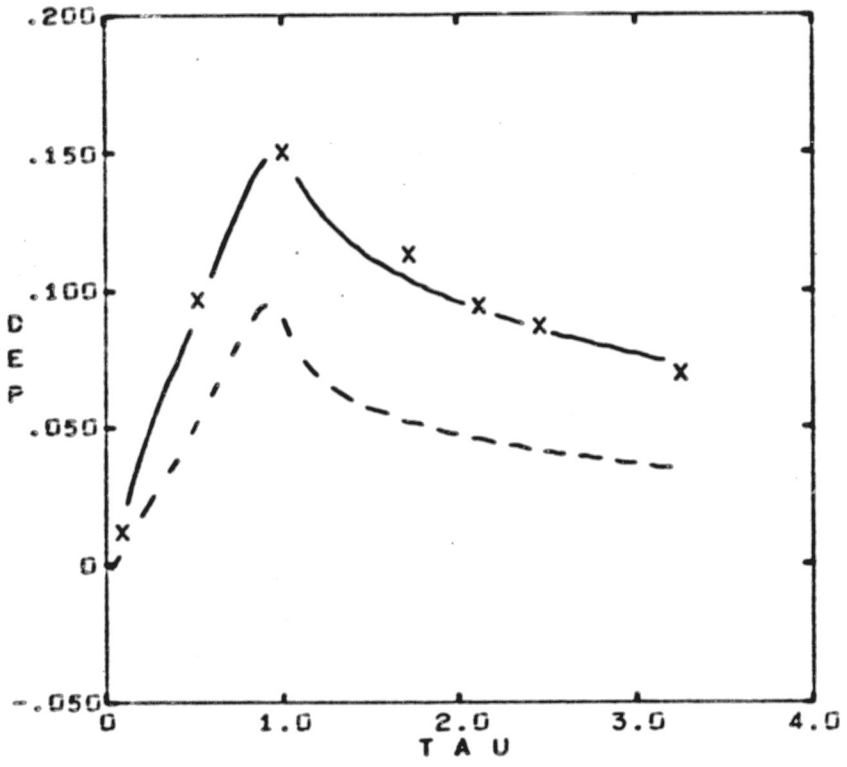
INITIAL TEMPERATURE 391.82
TAU-END OF TOTALITY 3.203

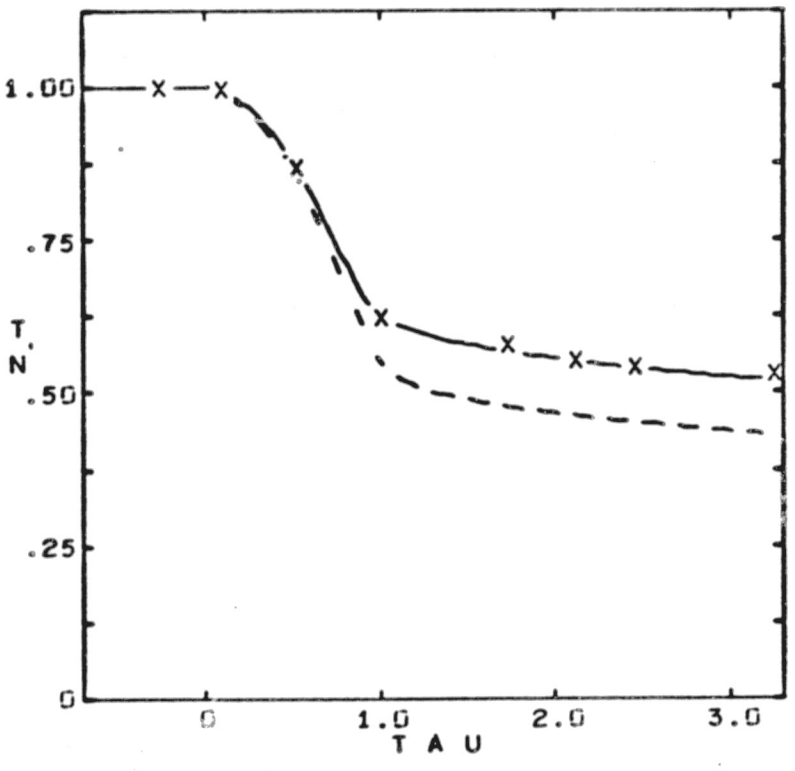
DIFFERENTIAL ENERGY DATA

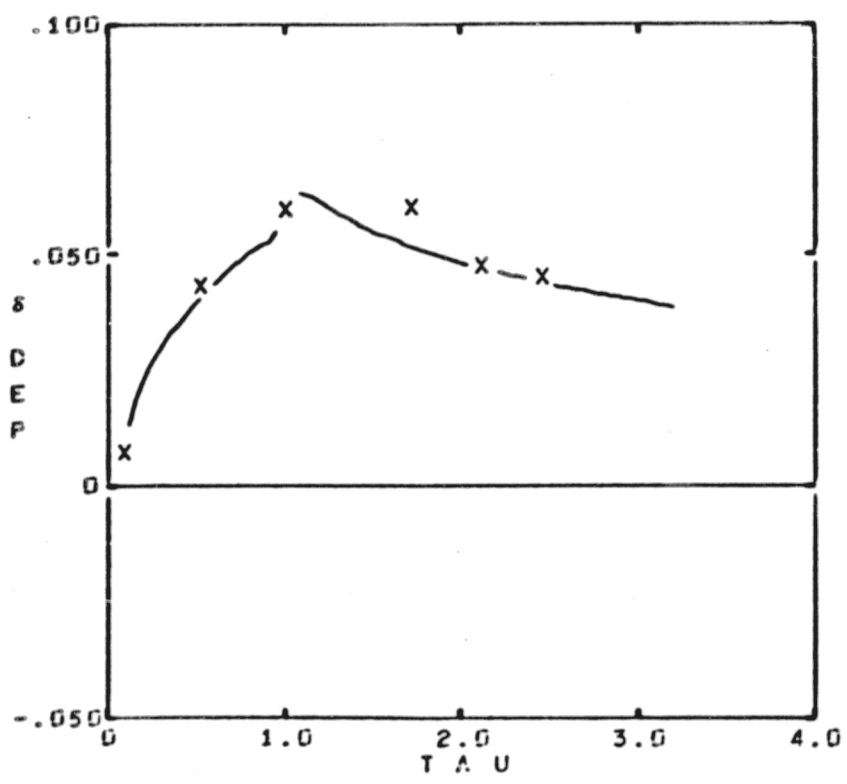
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0486	.0224	.0262
.50	.0893	.0498	.0395
.75	.1279	.0795	.0484
.93	.1528	.0993	.0535
1.0	.1501	.0902	.0599
1.5	.1122	.0571	.0551
2.0	.0956	.0474	.0482
2.5	.0848	.0412	.0436
3.0	.0766	.0367	.0399

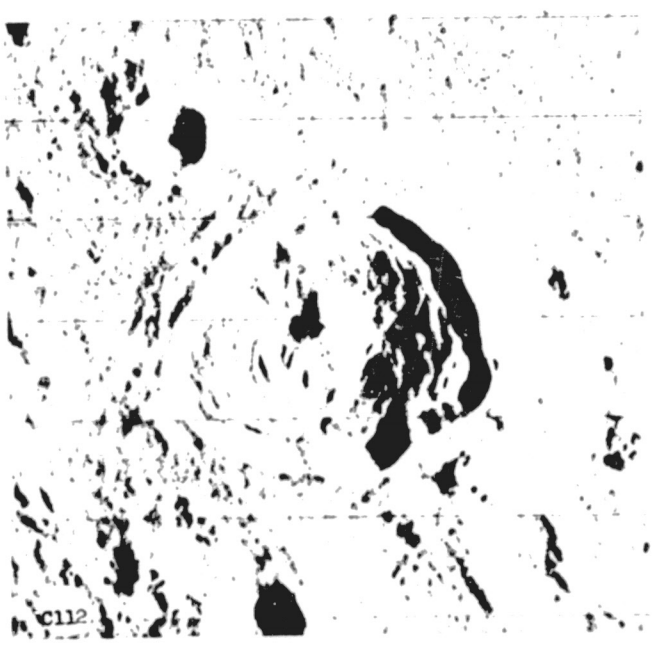
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.019	392.16		392.16	1.001	.0035
9H	-0.278	391.72		391.72	1.000	-.0010
10H	0.090	389.80		389.80	0.995	.0121
11H	0.524	339.47	0.360 +.607	340.56	0.869	.0961
12H	1.000	238.39	0.459 +.651	243.91	0.623	.1501
13H	1.726	216.91	0.428 +.325	226.94	0.579	.1125
14H	2.108	206.58	1.005 +.709	216.80	0.553	.0937
15H	2.452	204.87	0.425 +.545	212.69	0.543	.0868
16H	3.245	194.94	0.953 +.717	208.23	0.531	.0697









211 (165) GROVE

LAMBDA=32.97 E BETA=40.32 N XI=+.4149 ETA=+.6471 L+PL CODE = 14614 ALBEDO =.1088

13H FLAT MOON DATA
FM=.00673 FM'=.00673

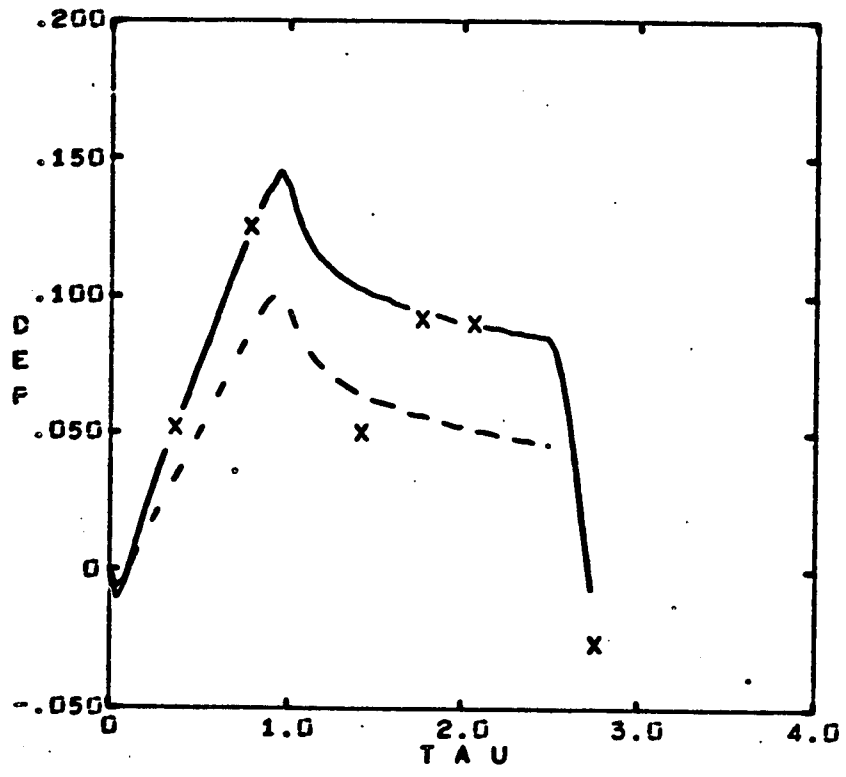
INITIAL TEMPERATURE 372.37
TAU-END OF TOTALITY 2.484

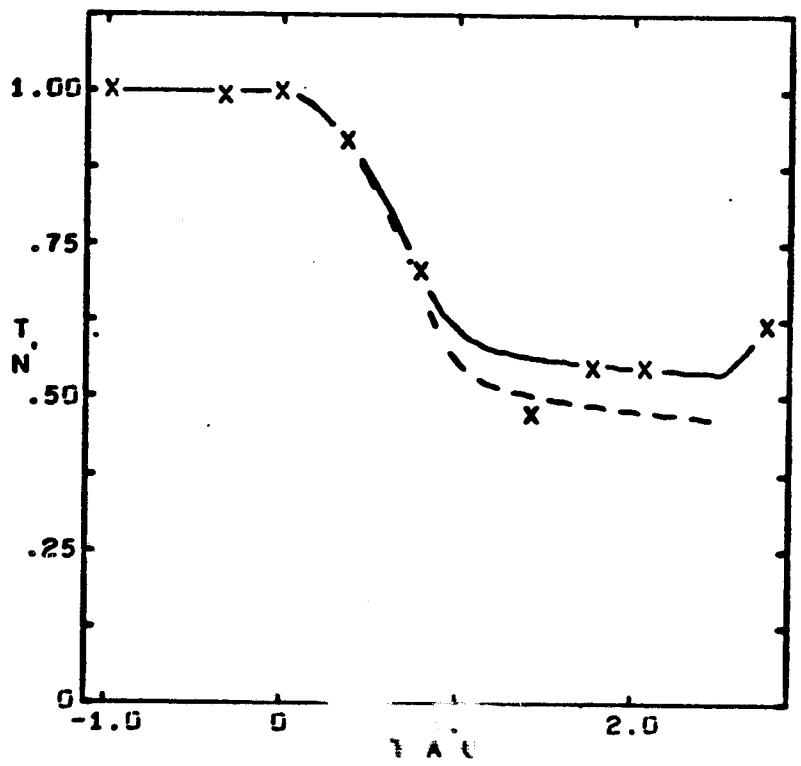
DIFFERENTIAL ENERGY DATA

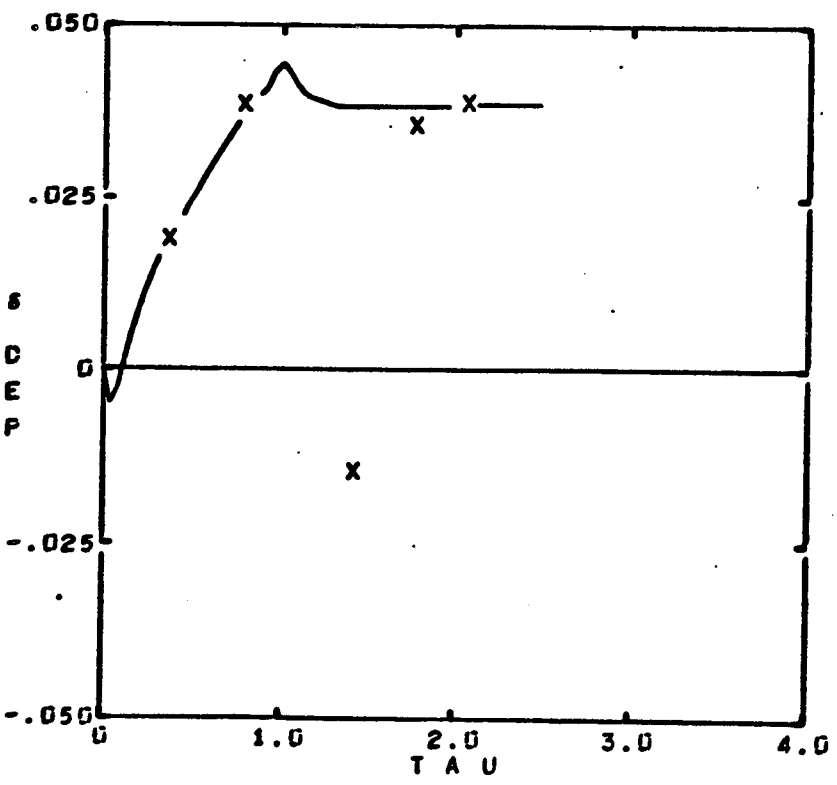
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0311	.0190	.0121
.50	.0751	.0500	.0251
.75	.1178	.0823	.0355
.93	.1459	.1039	.0420
1.0	.1394	.0949	.0445
1.5	.1001	.0619	.0 92
2.0	.0906	.0522	.03 1
2.5	.0847	.0460	.03

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.992	373.68		373.68	1.004	.0142
9H	-0.341	369.56		369.56	0.992	-.0298
10H	-0.018	372.49		372.49	1.000	.0013
11H	0.364	342.78		342.78	0.921	.0520
12H	0.784	257.92	0.399 +.766	263.15	0.707	.1252
13H	1.421	175.82	0.000 -.867	175.82	0.472	.0497
14H	1.758	182.21	0.761 +.336	204.99	0.550	.0918
15H	2.060	194.18	0.440 +.597	204.12	0.548	.0903
16H	2.748	230.69	0.000 +.210	230.69	0.620	-.0262







PHOTOGRAPH NOT AVAILABLE

LAMBDA=39.68 W BETA=32.63 N XI=-.5365 ETA=+.5422 L+PL CODE = 25534 ALBEDO =.0675

13H FLAT MOON DATA
FM=.05053 FM'=.05369

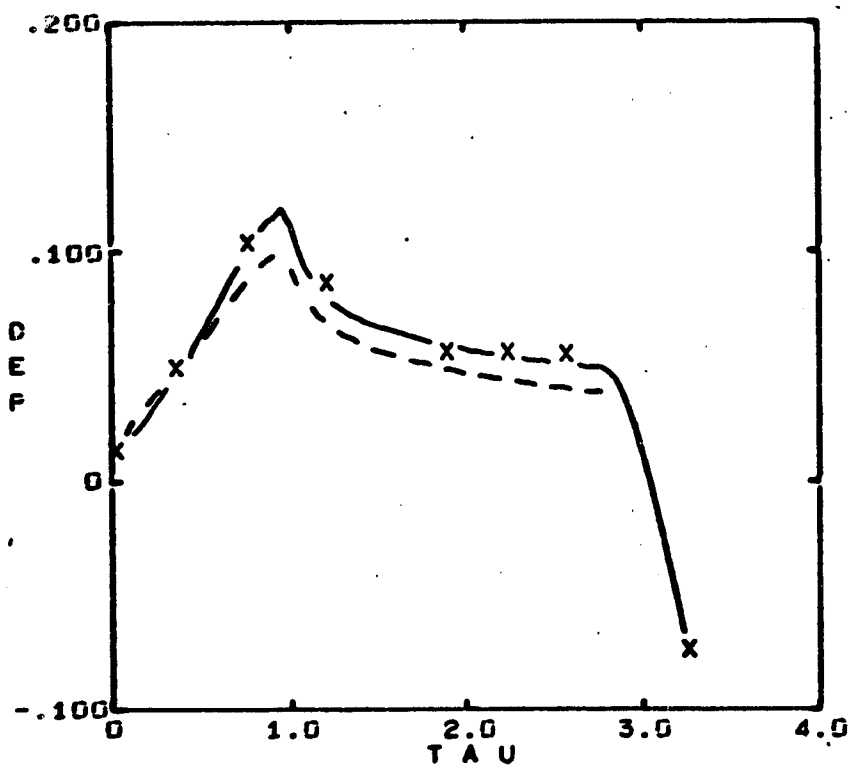
INITIAL TEMPERATURE 372.46
TAU-END OF TOTALITY 2.773

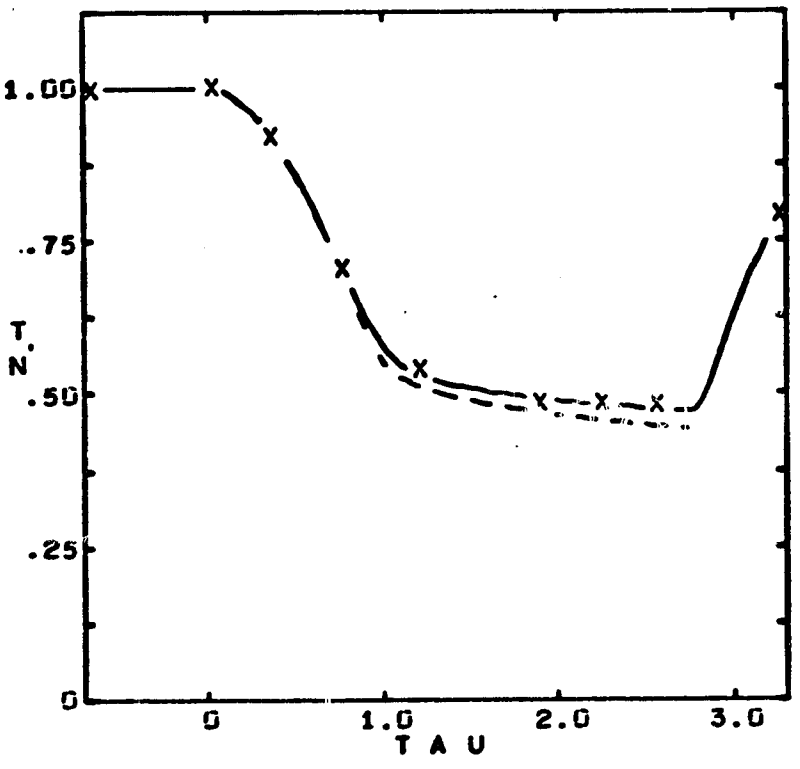
DIFFERENTIAL ENERGY DATA

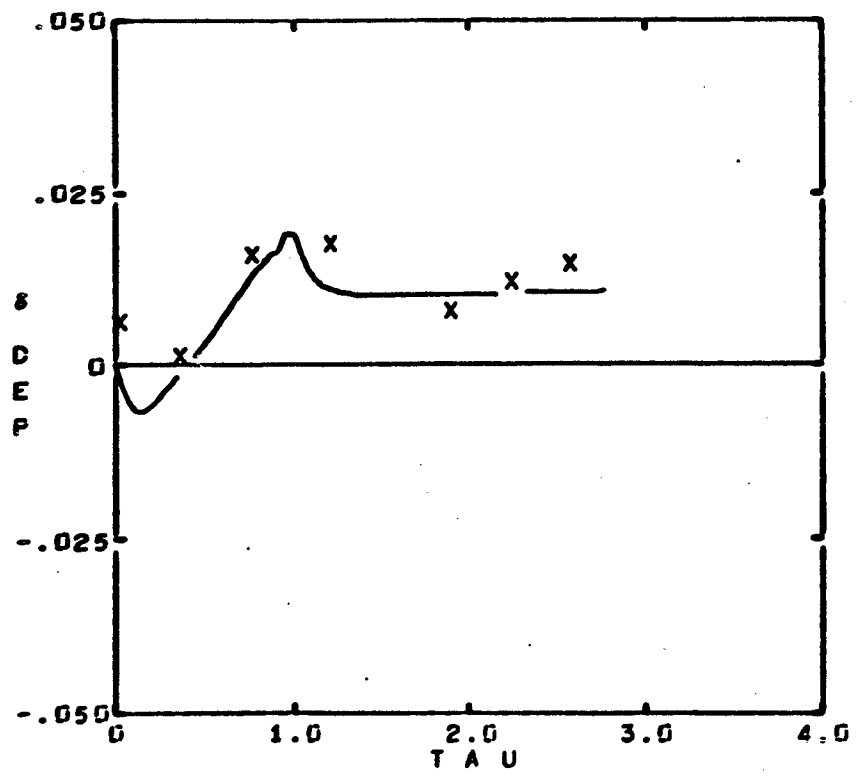
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0324	.0371	-.0047
.50	.0634	.0603	.0031
.75	.0976	.0856	.0120
.93	.1202	.1022	.0180
1.0	.1114	.0924	.0190
1.5	.0672	.0570	.0102
2.0	.0572	.0469	.0103
2.5	.0514	.0408	.0106
3.0	.0472	.0364	.0108

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.665	372.46		372.46	1.000	.0000
9H	0.025	373.31		373.31	1.002	.0132
10H	0.366	343.58		343.58	0.922	.0490
11H	0.770	261.71	0.376 +.070	263.79	0.708	.1037
12H	1.213	197.37	0.284 -.750	201.87	0.542	.0863
13H	1.888	180.01	0.278 -.187	181.73	0.488	.0567
14H	2.244	180.21	0.137 +.544	181.03	0.486	.0558
15H	2.563	175.07	0.314 -.620	180.28	0.484	.0549
16H	3.259	294.58	0.659 +.632	295.89	0.794	-.0734







PHOTOGRAPH
NOT
AVAILABLE

213 (368) GUERICKE C

LAMBDA=11.53 W BETA=11.55 S XI=-.1959 ETA=-.2002 L+PL CODE = 31290 ALBEDO =.0754

13H FLAT MOON DATA
FM=.11538 FM'=.13722

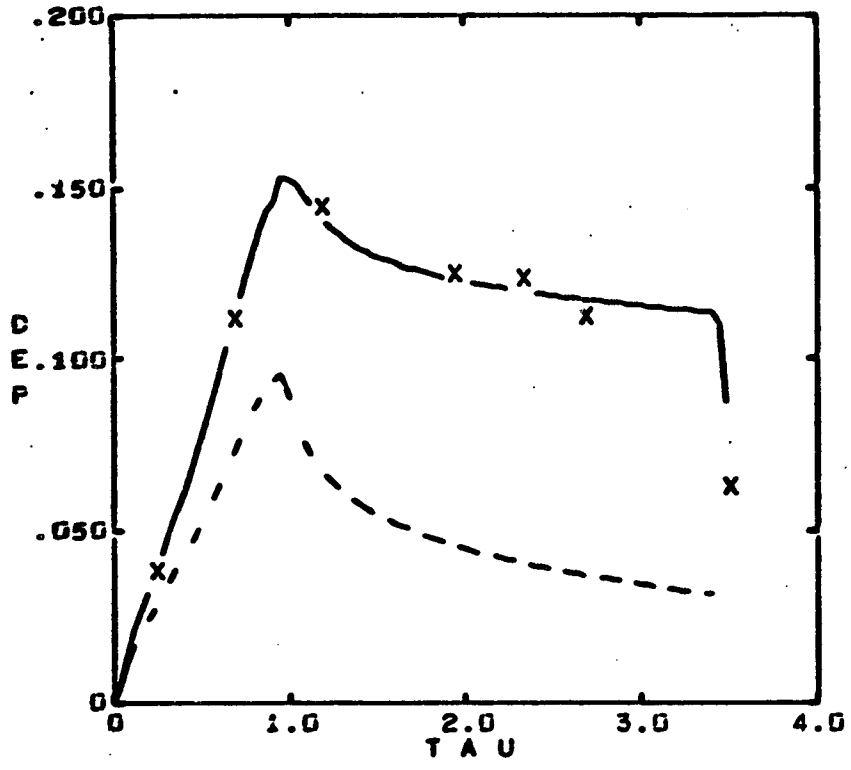
INITIAL TEMPERATURE 392.17
TAU-END OF TOTALITY 3.427

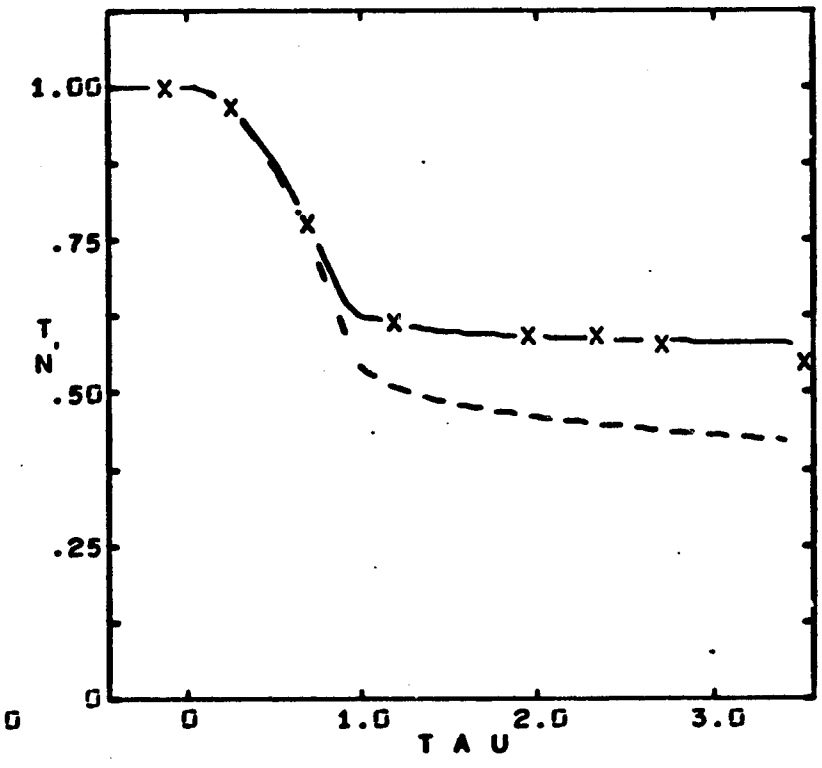
DIFFERENTIAL ENERGY DATA

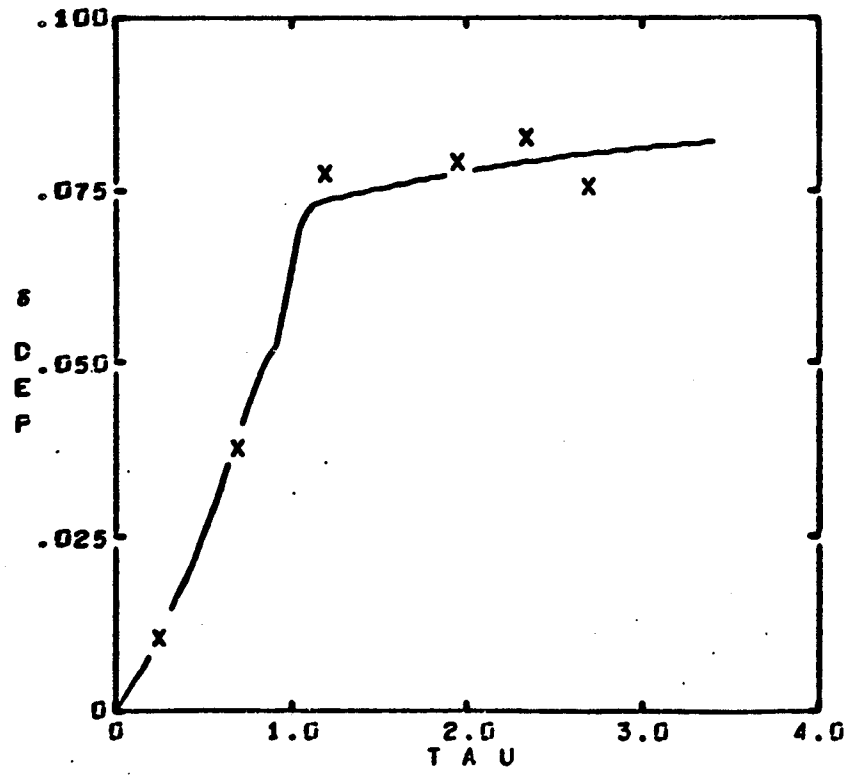
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0387	.0284	.0103
.50	.0787	.0531	.0256
.75	.1232	.0800	.0432
.93	.1529	.0978	.0551
1.0	.1526	.0884	.0642
1.5	.1299	.0547	.0752
2.0	.1226	.0449	.0777
2.5	.1185	.0389	.0796
3.0	.1156	.0345	.0811

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.903	393.50		393.50	1.003	.0136
9H	-0.132	391.98		391.98	1.000	-.0020
10H	0.247	379.13		379.13	0.967	.0386
11H	0.696	304.22	0.061 +.608	304.53	0.777	.1122
12H	1.189	236.44	0.223 +.696	241.87	0.617	.1447
13H	1.942	224.39	0.255 -.740	233.08	0.594	.1248
14H	2.336	226.13	0.236 +.369	232.48	0.593	.1235
15H	2.692	225.02	0.091 +.249	227.25	0.579	.1128
16H	3.505	208.99	0.352 +.813	216.00	0.551	.0632







PHOTOGRAPH NOT AVAILABLE

214 (369) GUERICKE E

LAMBDA=12.02 W BETA=10.00 S XI=-.2051 ETA=-.1737 L+PL CODE = 32107 ALBEDO =.0685

13H FLAT MOON DATA
FM=.02249 FM'=.02249

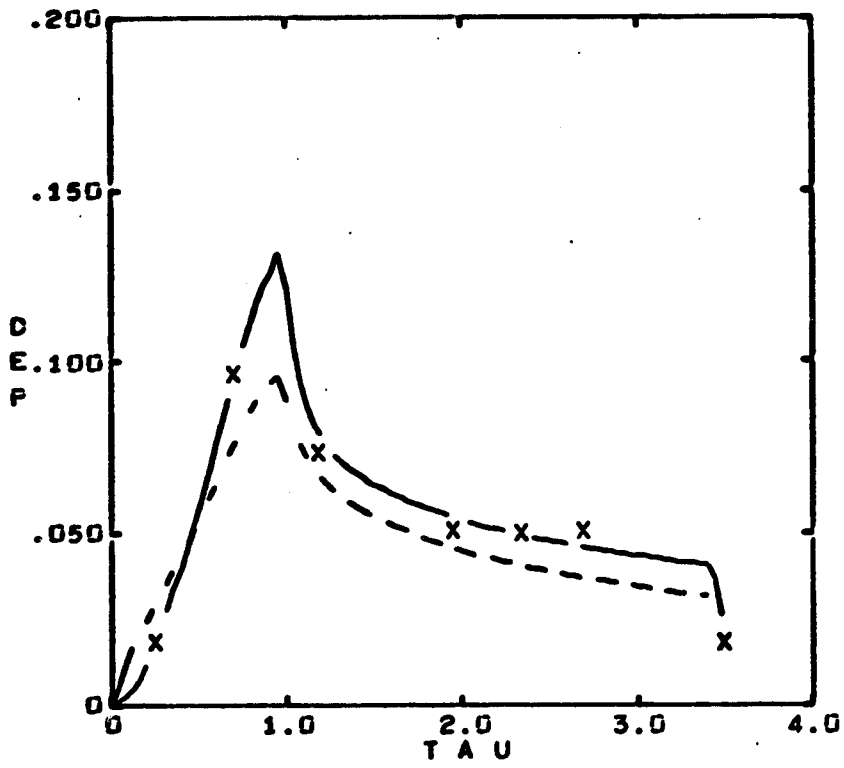
INITIAL TEMPERATURE 395.84
TAU-END OF TOTALITY 3.409

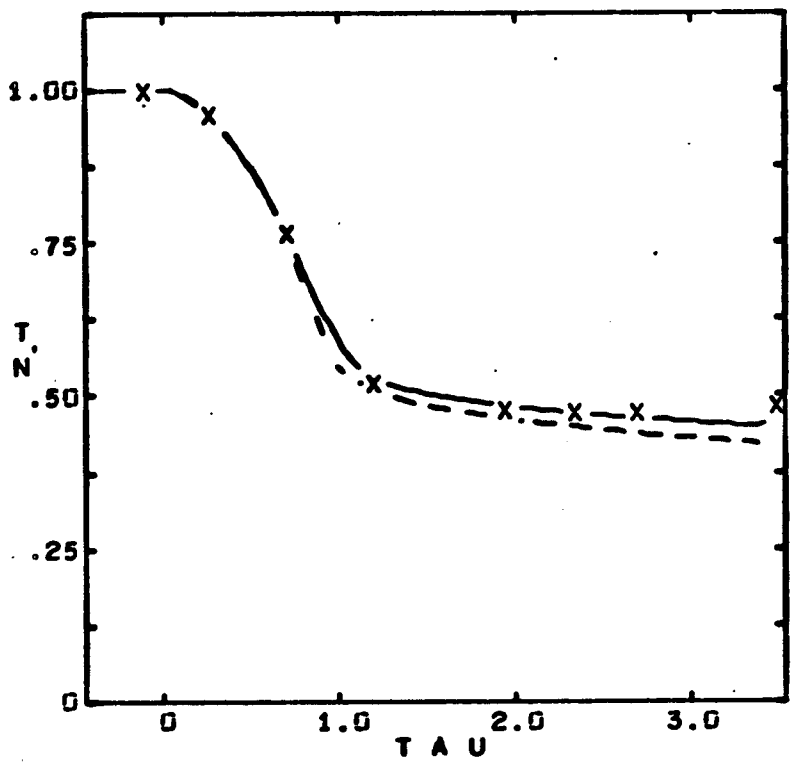
DIFFERENTIAL ENERGY DATA

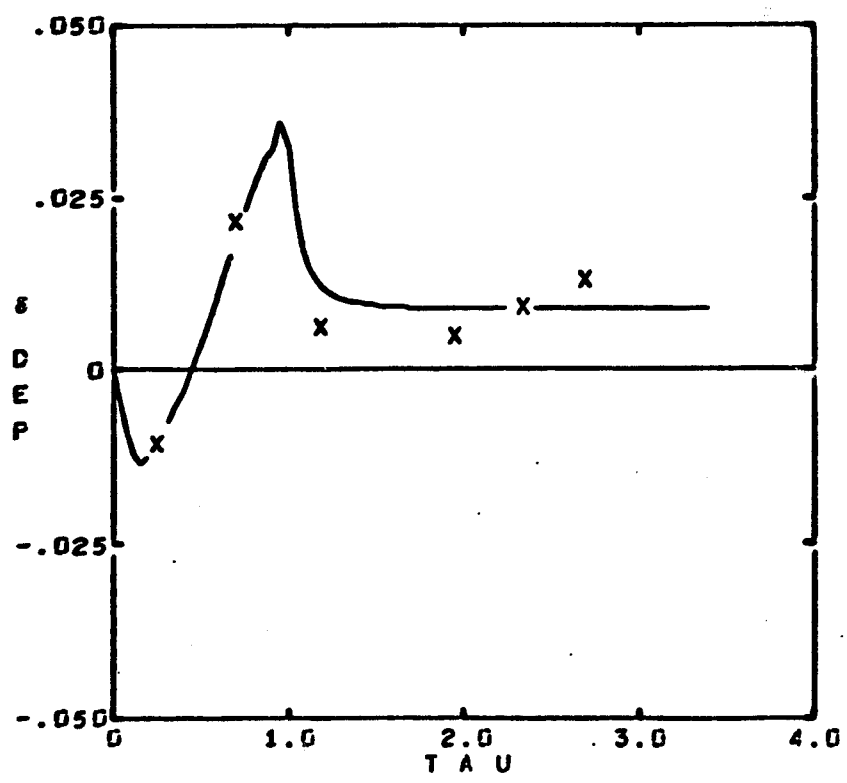
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0176	.0285	-.0109
.50	.0566	.0532	.0034
.75	.1022	.0801	.0221
.93	.1330	.0979	.0351
1.0	.1209	.0884	.0325
1.5	.0641	.0547	.0094
2.0	.0538	.0449	.0089
2.5	.0478	.0389	.0089
3.0	.0435	.0345	.0090

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.895	396.72		396.72	1.002	.0089
9H	-0.126	395.71		395.71	1.000	-.0013
10H	0.252	379.80		379.80	0.959	.0181
11H	0.700	300.56	1.677 -.698	302.89	0.765	.0963
12H	1.192	206.14	0.000 -.188	206.14	0.521	.0736
13H	1.942	187.82	0.000 -.194	187.82	0.474	.0507
14H	2.335	187.01	0.000 -.175	187.01	0.472	.0498
15H	2.690	187.58	0.000 -.184	187.58	0.474	.0504
16H	3.500	191.77	0.000 +.463	191.77	0.484	.0182







PHOTOGRAPH NOT AVAILABLE

215 (3H1) GUERICKE H

LAMBDA=14.25 W BETA=12.43 S XI=-.2404 ETA=-.2152 L+FL CODE = 32241 ALBEDO =.1102

13H FLAT MOON DATA
FM=.02315 FM'=.05924

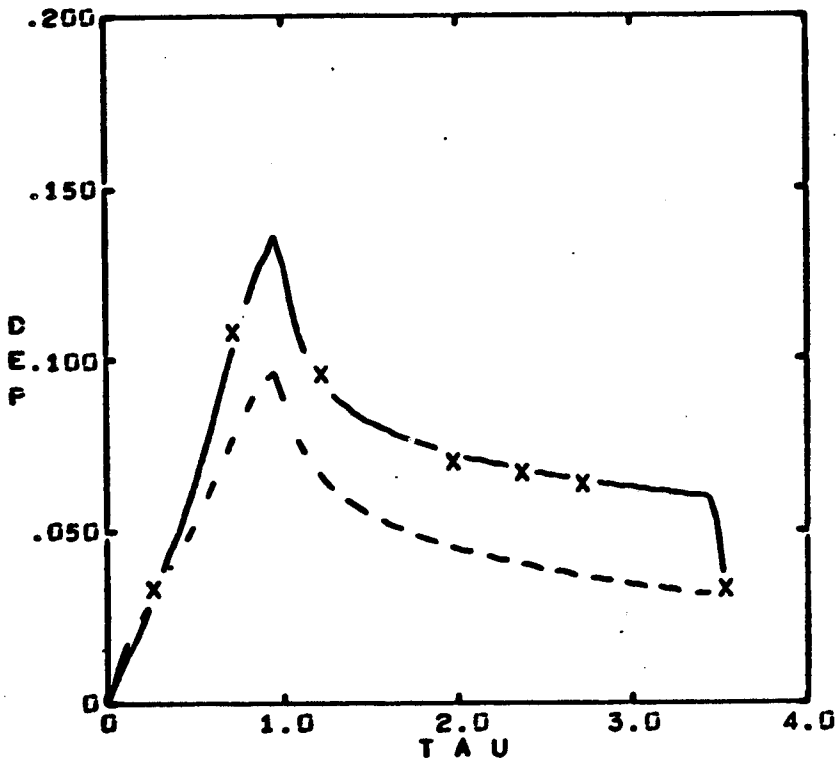
INITIAL TEMPERATURE 390.39
TAU-END OF TOTALITY 3.441

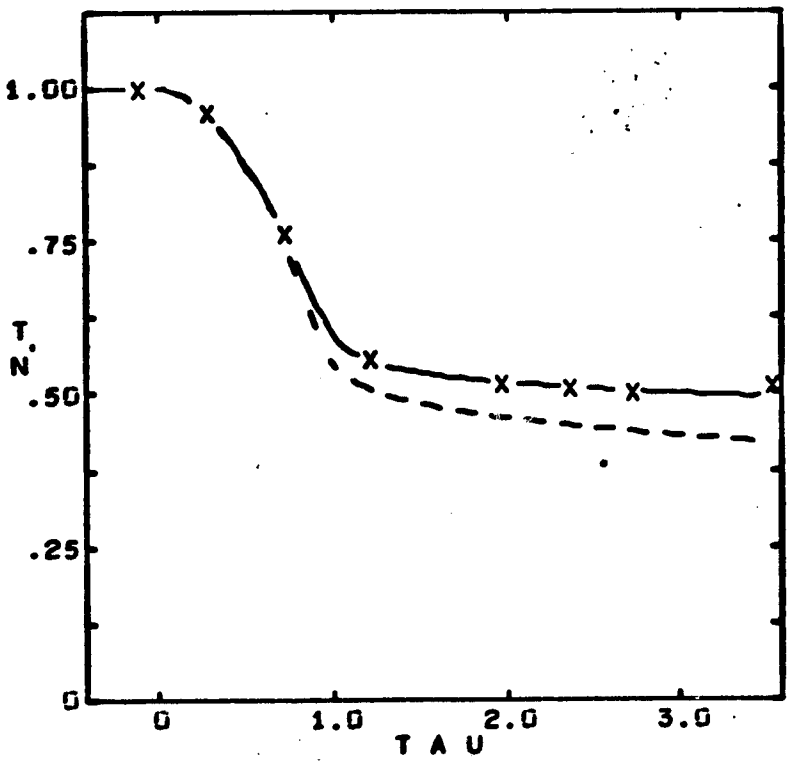
DIFFERENTIAL ENERGY DATA

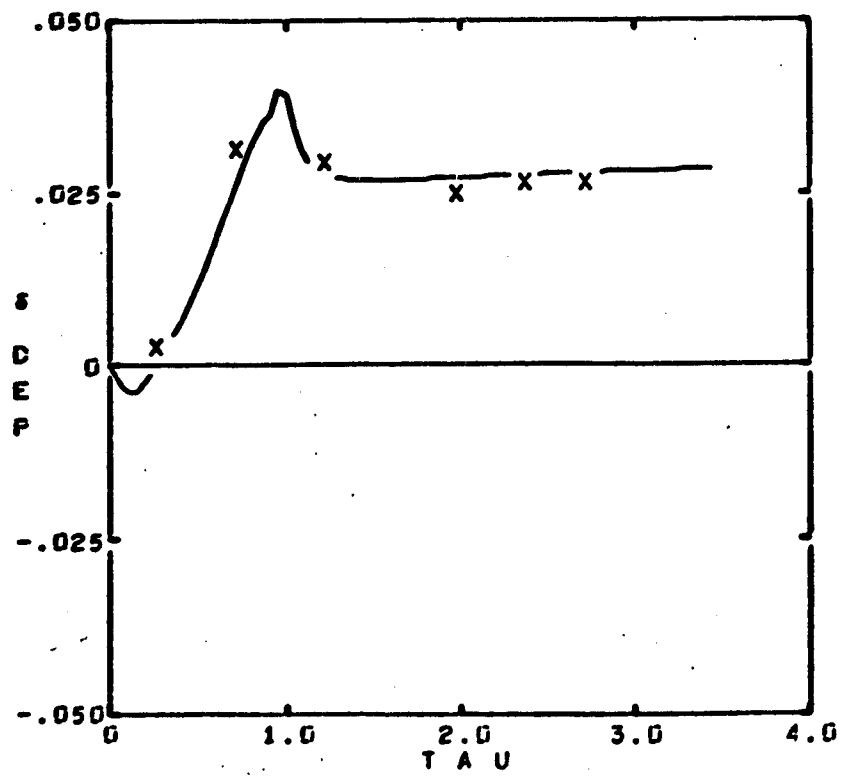
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0284	.0290	-.0006
.50	.0660	.0536	.0124
.75	.1086	.0804	.0282
.93	.1371	.0981	.0390
1.0	.1278	.0887	.0391
1.5	.0817	.0549	.0268
2.0	.0723	.0451	.0272
2.5	.0668	.0391	.0277
3.0	.0628	.0347	.0281

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.887	391.24		391.24	1.002	.0088
9H	-0.114	390.28		390.28	1.000	-.0011
10H	0.266	374.62		374.62	0.960	.0331
11H	0.717	295.64	0.395 +.907	296.86	0.760	.1083
12H	1.210	207.26	1.059 +.698	217.09	0.556	.0956
13H	1.964	186.87	1.018 +.677	201.13	0.515	.0705
14H	2.360	182.89	1.350 +.584	198.79	0.509	.0672
15H	2.717	191.11	0.369 +.803	196.07	0.502	.0636
16H	3.530	190.04	1.382 +.632	199.49	0.511	.0334







PHOTOGRAPH NOT AVAILABLE

216 (166) HADLEY A

LAMBDA= 6.58 E BETA=25.00 N XI=+.1039 ETA=+.4226 L+FL CODE = 11402 ALBEDO =.0904

13H FLAT MOON DATA
FM=.03055 FM'=.03377

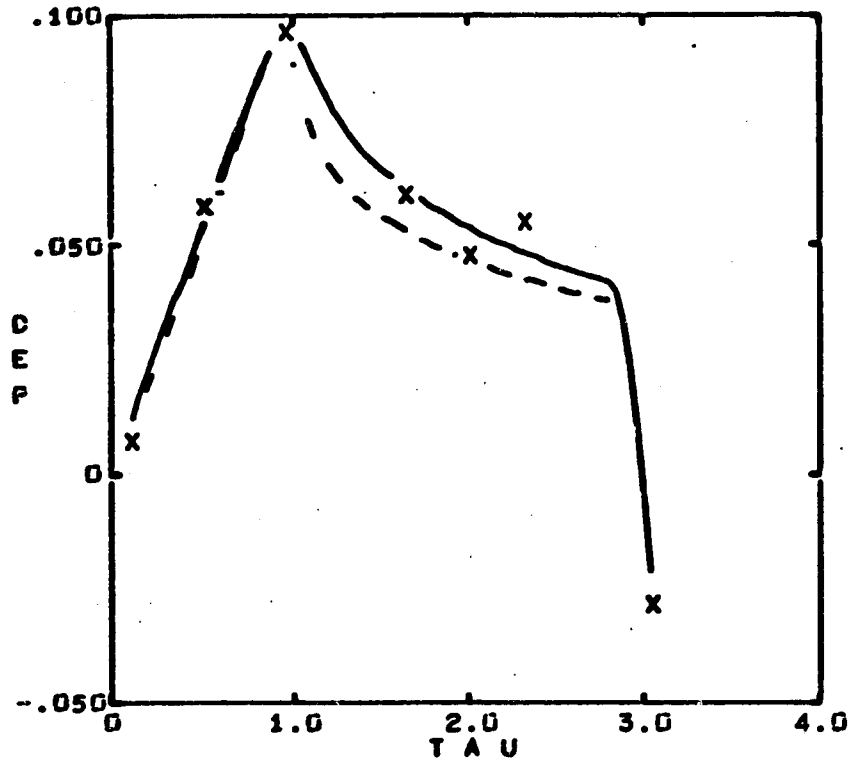
INITIAL TEMPERATURE 389.94
TAU-END OF TOTALITY 2.815

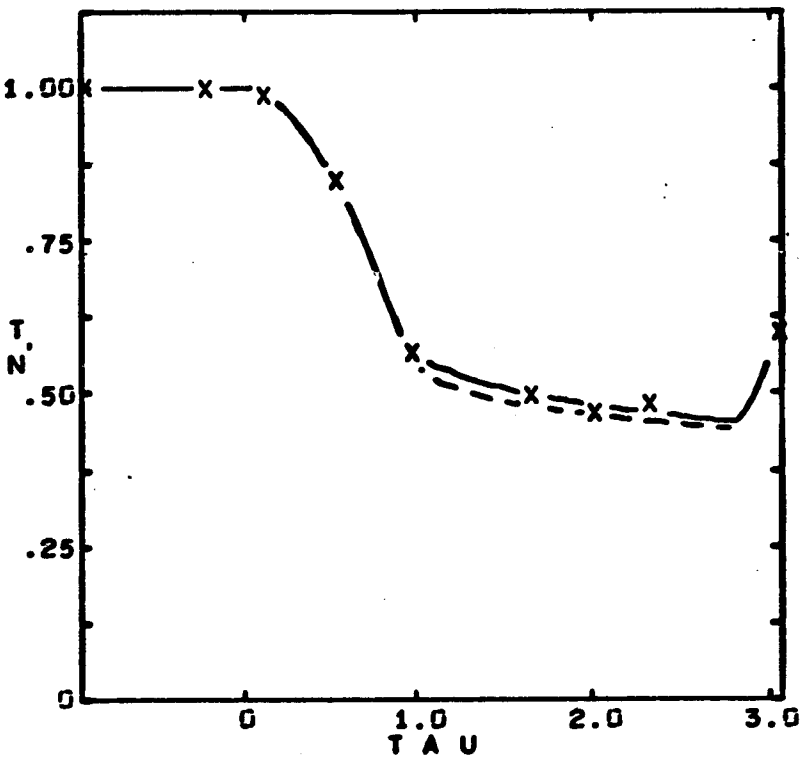
DIFFERENTIAL ENERGY DATA

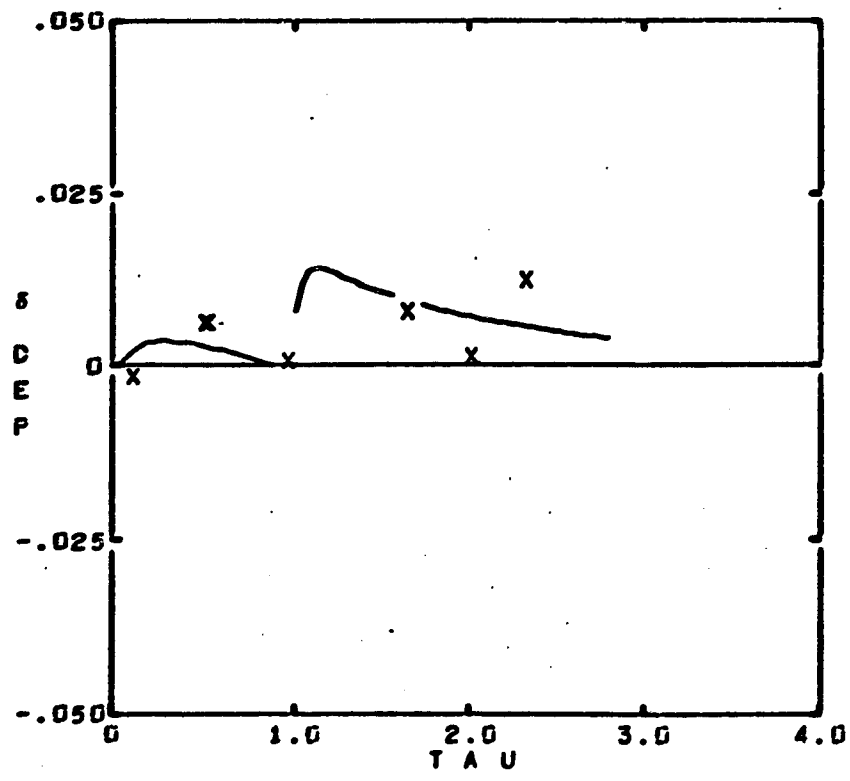
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0263	.0228	.0035
.50	.0527	.0497	.0030
.75	.0799	.0789	.0010
.93	.0980	.0984	-.0004
1.0	.0969	.0892	.0077
1.5	.0669	.0563	.0106
2.0	.0538	.0466	.0072
2.5	.0456	.0406	.0050
3.0	.0395	.0361	.0034

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.925	391.52		391.52	1.004	.0163
9H	-0.231	389.54		389.54	0.999	-.0041
10H	0.114	385.70		385.70	0.989	.0073
11H	0.521	331.64	0.000 -.768	331.64	0.850	.0386
12H	0.966	219.97	0.202 -.256	220.66	0.566	.0964
13H	1.647	191.82	0.172 +.713	193.60	0.496	.0608
14H	2.006	180.17	0.619 +.782	182.41	0.468	.0479
15H	2.327	186.77	0.216 -.801	188.89	0.484	.0551
16H	3.055	234.31	0.000 +.253	234.31	0.601	-.0266







PHOTOGRAPH NOT AVAILABLE

217 (3H2) HAICINGER J

LAMBDA=24.35 W BETA=37.93 S XI=-.3252 ETA=-.6147 L+FL CODE = 33621 ALBEDO =.1433

13H FLAT MOON DATA
FM=.03355 FM'=.04694

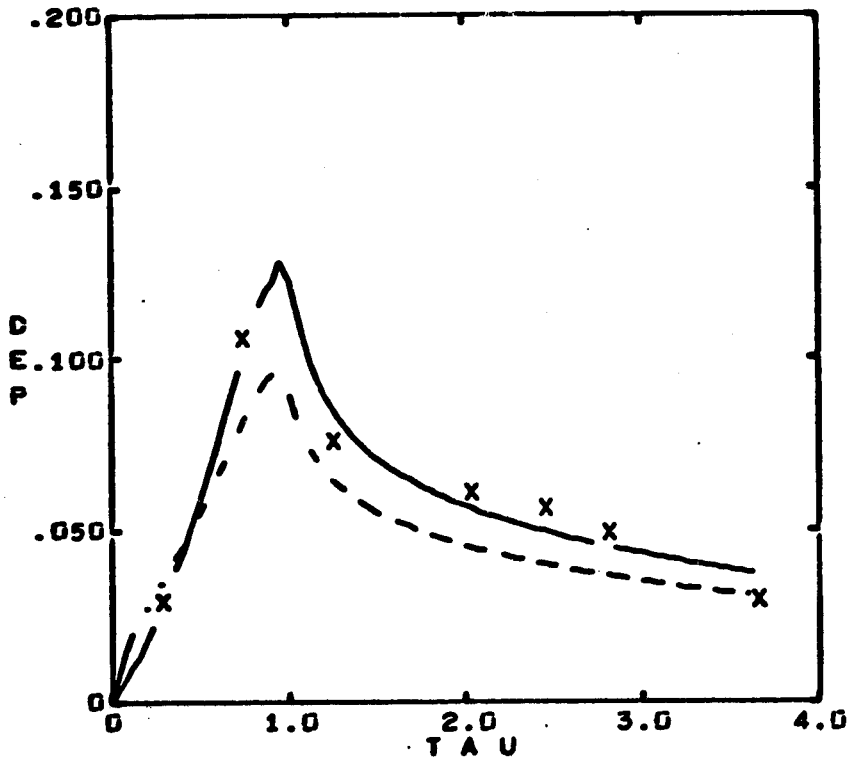
INITIAL TEMPERATURE 370.01
TAU-END OF TOTALITY 3.678

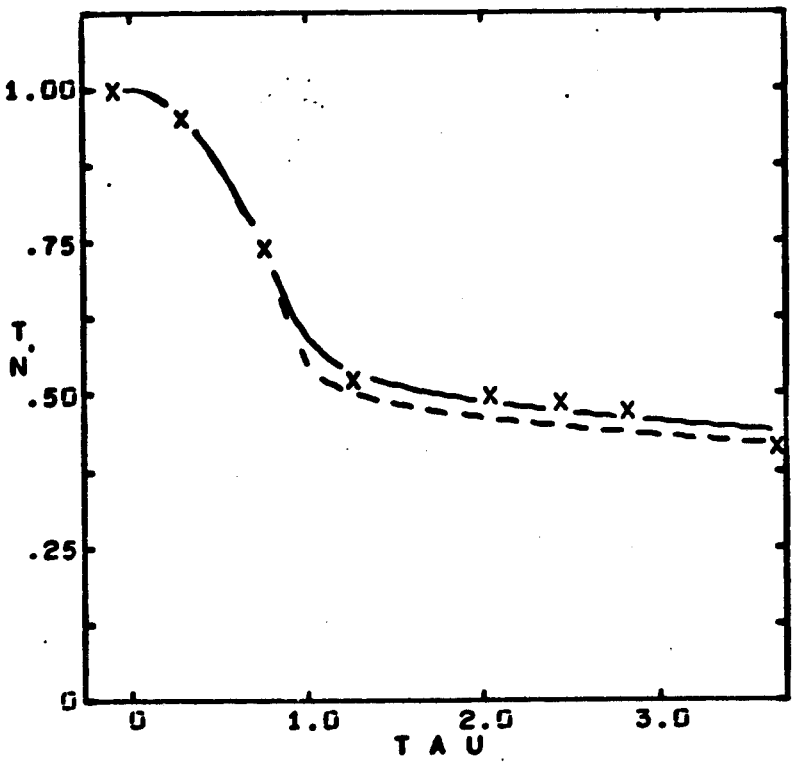
DIFFERENTIAL ENERGY DATA

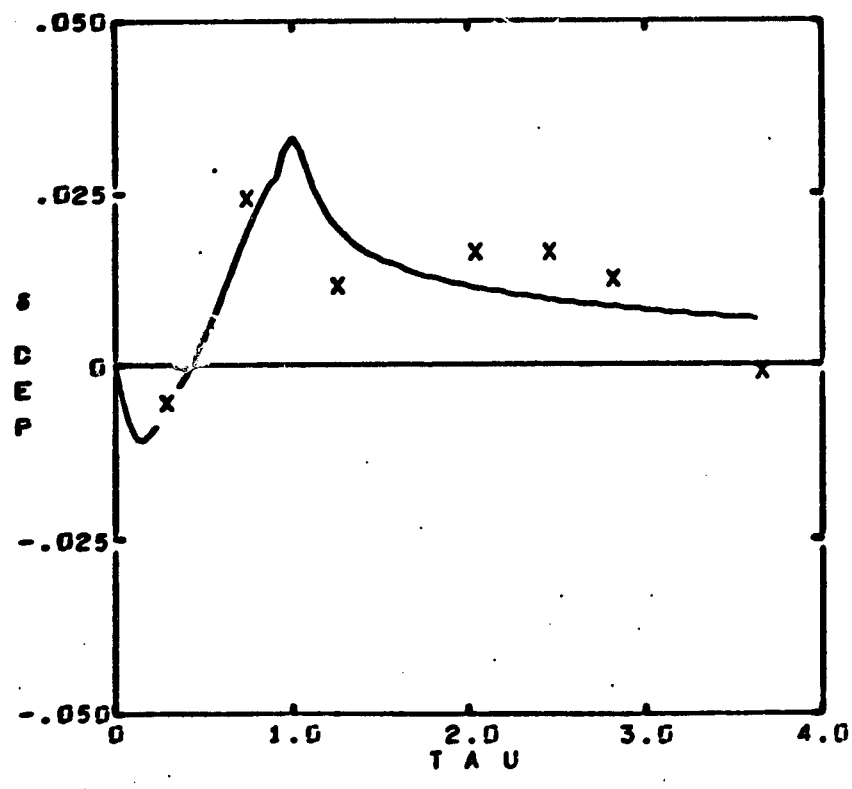
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0235	.0316	-.0081
.50	.0600	.0557	.0043
.75	.1014	.0820	.0194
.93	.1291	.0994	.0297
1.0	.1229	.0898	.0331
1.5	.0709	.0554	.0155
2.0	.0571	.0455	.0116
2.5	.0490	.0395	.0095
3.0	.0432	.0352	.0080

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.912	370.62		370.62	1.002	.0066
9H	-0.111	369.94		369.94	1.000	-.0008
10H	0.282	353.10		353.10	0.954	.0292
11H	0.749	273.62	0.000 -.692	273.62	0.739	.1063
12H	1.260	192.48	0.500 -.519	194.25	0.525	.0760
13H	2.041	179.26	0.532 +.402	184.14	0.498	.0613
14H	2.448	174.72	0.559 +.109	180.46	0.488	.0566
15H	2.819	171.98	0.344 -.925	174.30	0.471	.0492
16H	3.668	153.64	0.000 +.747	153.64	0.415	.0297







PHOTOGRAPH NOT AVAILABLE

218 (3H3) HEINSIUS A

LAMBDA=17.51 W BETA=39.68 S XI=-.2315 ETA=-.6385 L+FL CODE = 32633 ALBEDO =.1568

13H FLAT MOON DATA
FM=.03247 FM'=.09370

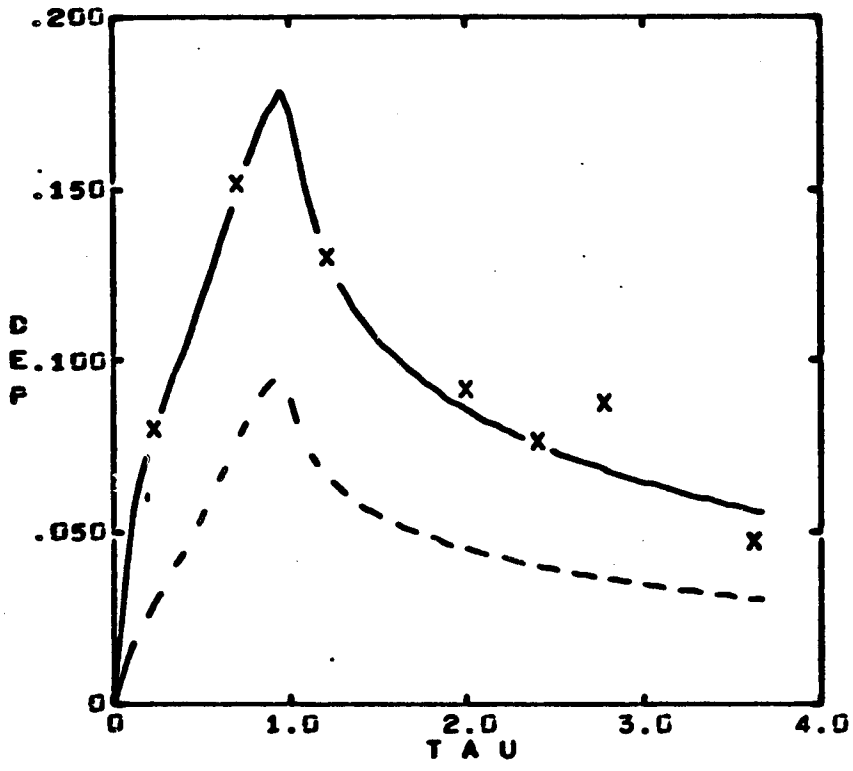
INITIAL TEMPERATURE 369.41
TAU-END OF TOTALITY 3.683

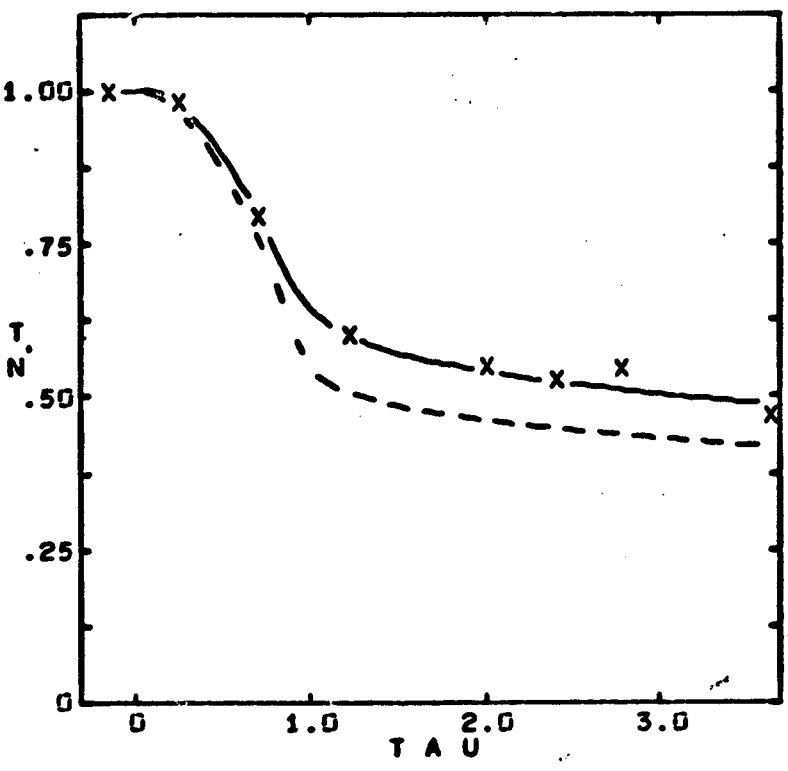
DIFFERENTIAL ENERGY DATA

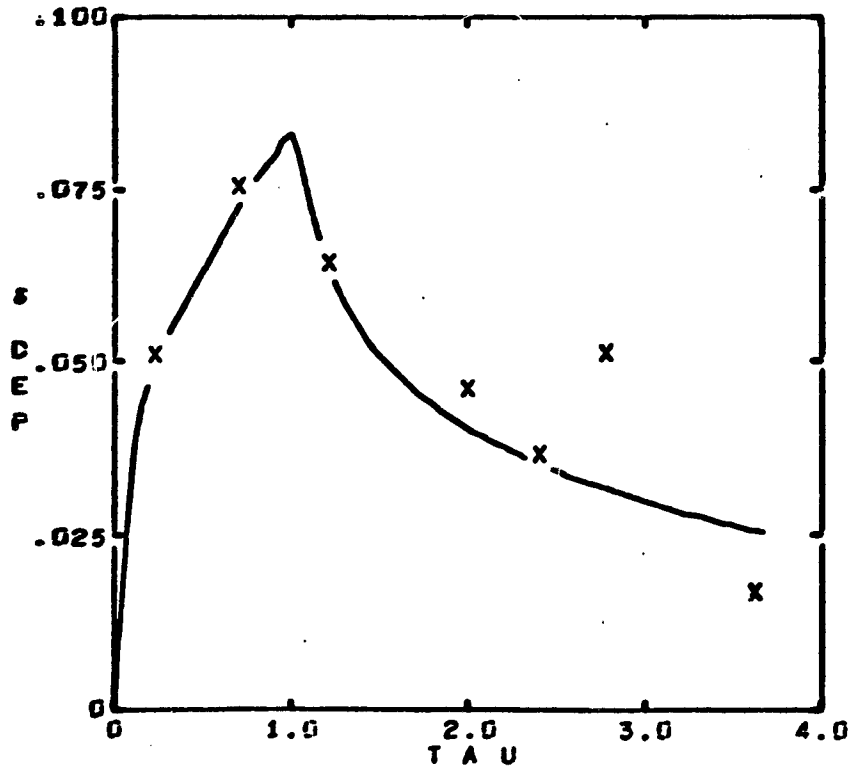
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0798	.0299	.0499
.50	.1173	.0543	.0630
.75	.1552	.0810	.0742
.93	.1798	.0986	.0812
1.0	.1722	.0891	.0831
1.5	.1060	.0551	.0509
2.0	.0857	.0453	.0404
2.5	.0735	.0392	.0343
3.0	.0647	.0349	.0298

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.957	367.18		367.18	0.994	-.0239
9H	-0.154	369.76		369.76	1.001	.0039
10H	0.239	362.47		362.47	0.981	.0798
11H	0.704	290.00	0.440 +.109	293.58	0.795	.1518
12H	1.216	219.29	0.267 +.339	222.02	0.601	.1305
13H	1.997	180.42	0.811 +.292	203.25	0.550	.0916
14H	2.405	193.26	0.156 +.366	194.62	0.527	.0770
15H	2.776	198.75	0.138 +.762	201.26	0.545	.0881
16H	3.632	172.57	0.000 -.221	172.57	0.467	.0476







PHOTOGRAPH
NOT
AVAILABLE

219 (2H1) HEIS C

LAMBDA=31.03 W BETA=31.62 N XI=-.4390 ETA=+.5243 L+PL CODE = 24532 ALBEDO =.0665

13H FLAT MOON DATA
FM=.02836 FM'=.09820

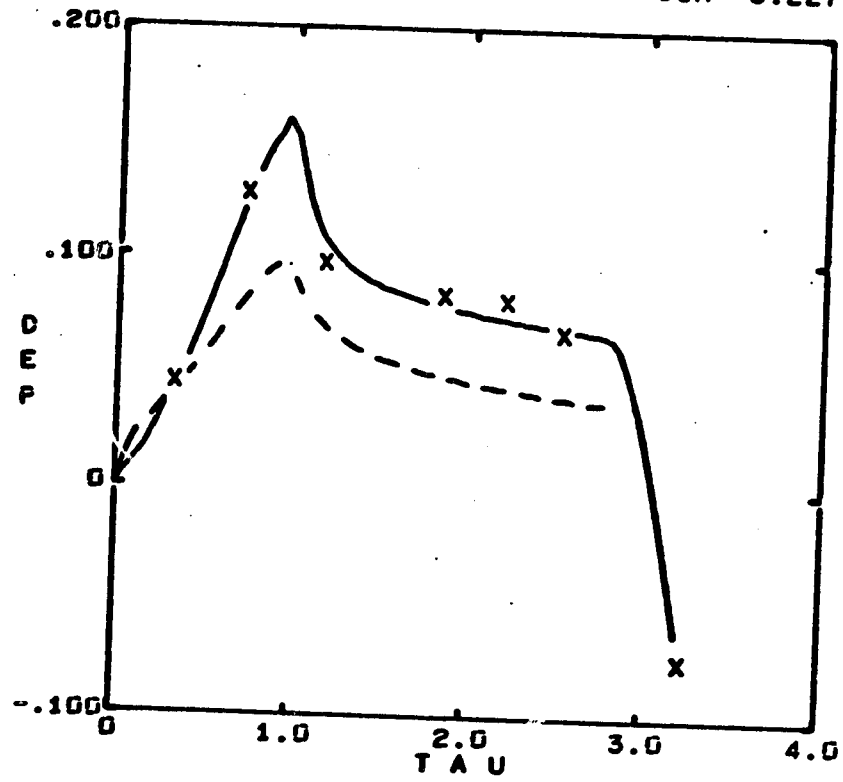
INITIAL TEMPERATURE 377.28
TAU-END OF TOTALITY 2.779

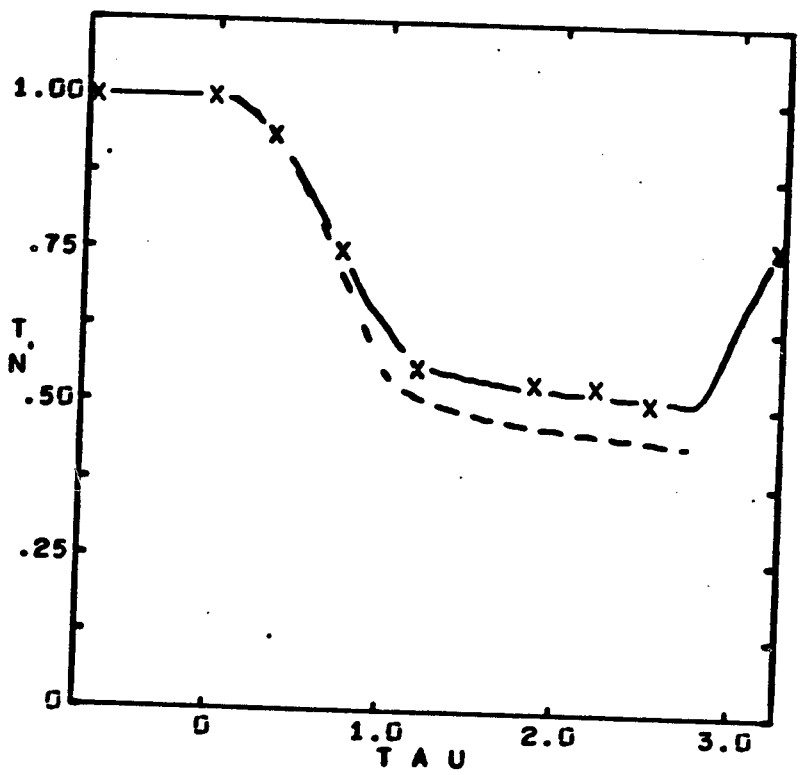
DIFFERENTIAL ENERGY DATA

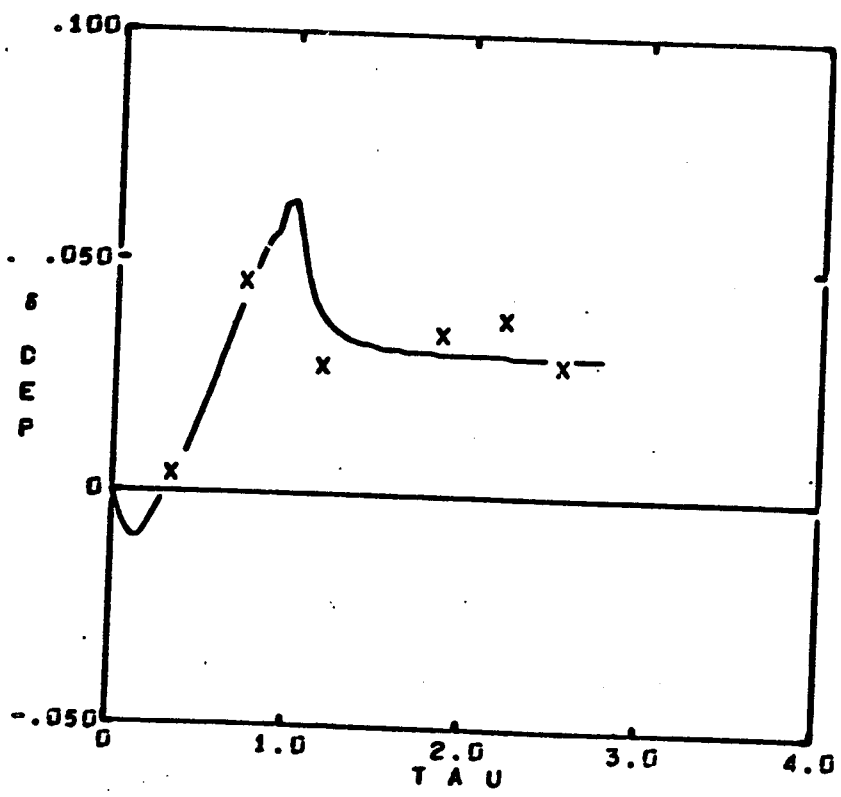
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0295	.0336	-.0041
.50	.0751	.0572	.0179
.75	.1265	.0829	.0436
.93	.1606	.0999	.0607
1.0	.1533	.0902	.0631
1.5	.0875	.0557	.0319
2.0	.0763	.0457	.0306
2.5	.0699	.0397	.0302
3.0	.0655	.0354	.0301

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.705	377.87		377.87	1.002	.0063
9H	-0.014	377.26		377.26	1.000	-.0001
10H	0.329	353.23		353.23	0.936	.0441
11H	0.733	271.88	1.272 +.607	282.79	0.750	.1271
12H	1.176	201.60	1.473 +.693	210.74	0.559	.0973
13H	1.851	176.99	0.985 +.505	202.68	0.537	.0833
14H	2.207	171.92	1.444 +.685	201.61	0.534	.0815
15H	2.527	174.20	1.201 +.557	192.65	0.511	.0680
16H	3.227	288.98	0.000 +.214	288.98	0.766	-.0752







PHOTOGRAPH NOT AVAILABLE

220 (167) HERCULES C

LAMBDA=35.33 E BETA=42.71 N XI=+.4249 ETA=+.6783 L+PL CODE = 14627 ALBEDO =.1084

13H FLAT MOON DATA
FM=.05398 FM'=.14126

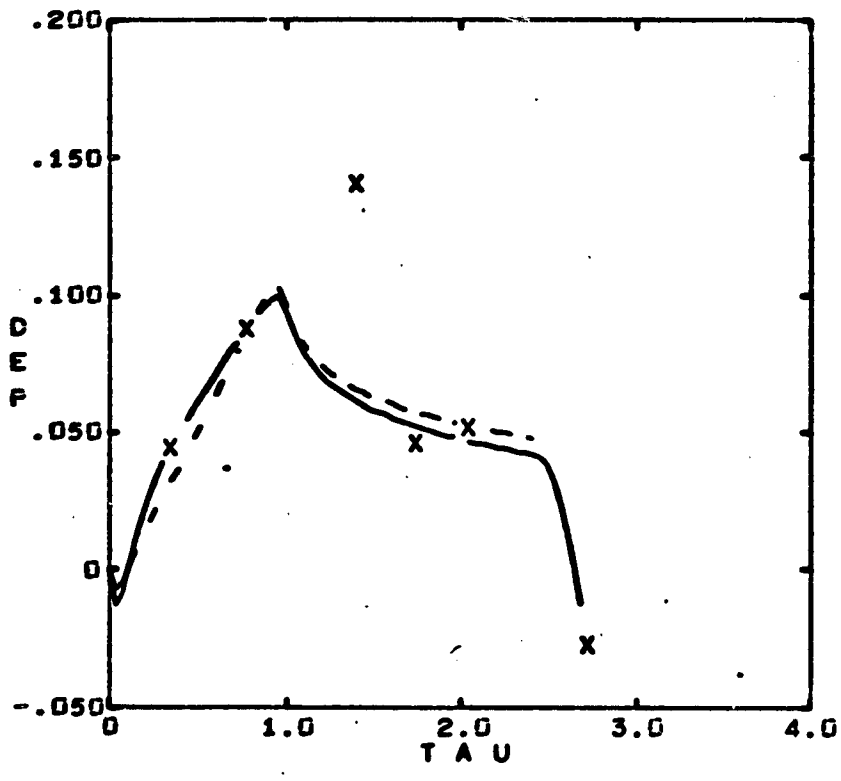
INITIAL TEMPERATURE 365.81
TAU-END OF TOTALITY 2.440

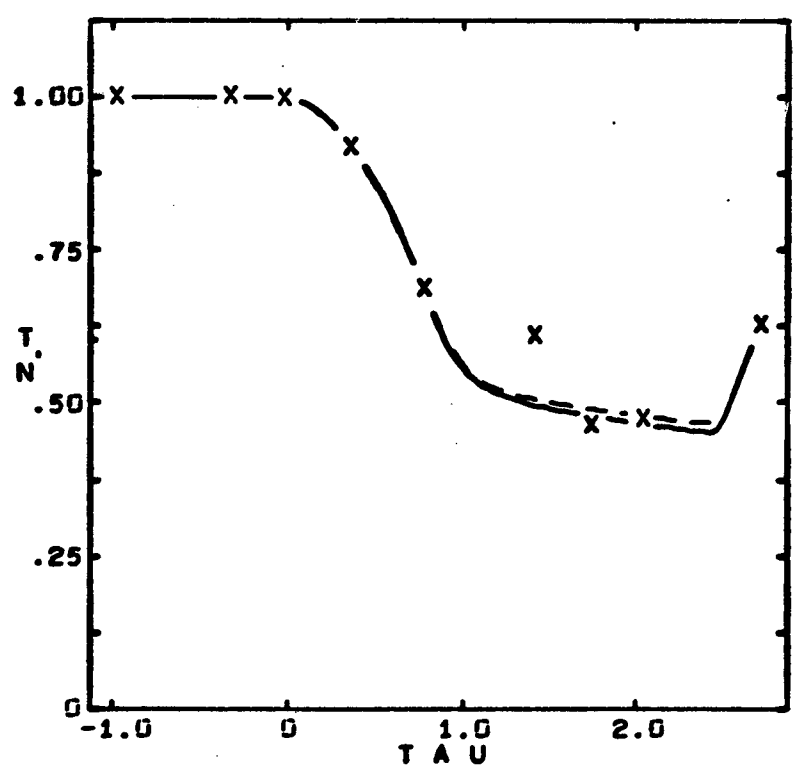
DIFFERENTIAL ENERGY DATA

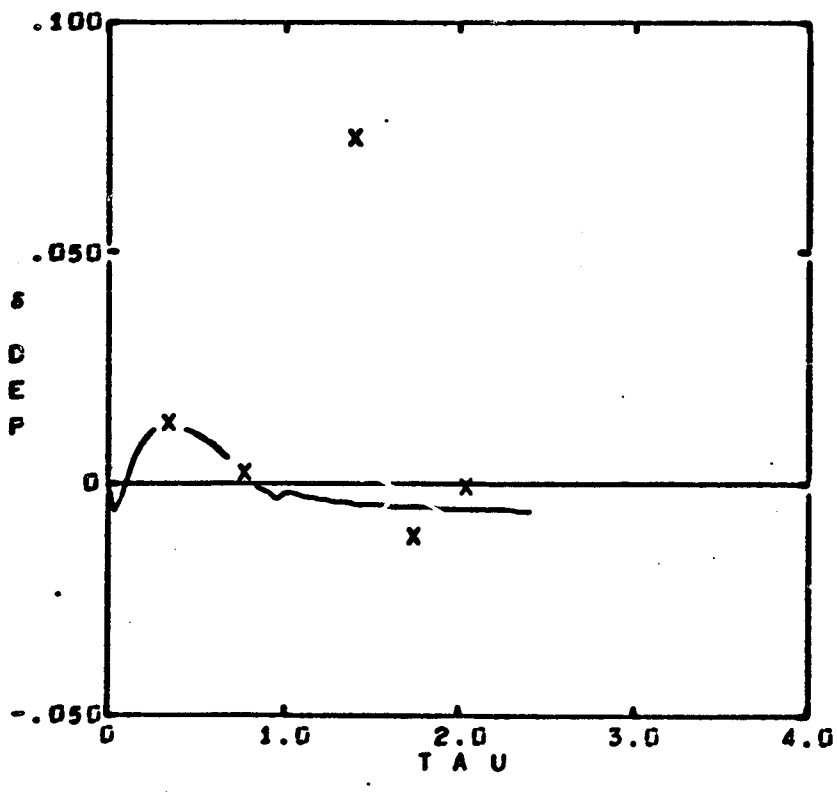
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0291	.0186	.0105
.50	.0608	.0502	.0106
.75	.0855	.0828	.0027
.93	.1007	.1048	-.0041
1.0	.0935	.0957	-.0022
1.5	.0580	.0627	-.0047
2.0	.0475	.0530	-.0055
2.5	.0407	.0467	-.0060

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.987	367.35		367.35	1.004	.0170
9H	-0.343	366.70		366.70	1.002	.0098
10H	-0.023	365.71		365.71	1.000	-.0010
11H	0.355	337.02		337.02	0.921	.0447
12H	0.772	251.26	0.000 +.355	251.26	0.687	.0878
13H	1.403	191.88	0.696 +.557	223.93	0.612	.1404
14H	1.737	169.59	0.000 +.214	169.59	0.464	.0462
15H	2.036	174.61	0.000 +.356	174.61	0.477	.0519
16H	2.717	231.05	0.000 +.141	231.05	0.632	-.0272







PHOTOGRAPH
NOT
AVAILABLE

221 (168) HERCULES G

LAMBDA=39.08 E BETA=46.38 N XI=+.4349 ETA=+.7239 L+PL CODE = 14732 ALBEDO =.1292

13H FLAT MOON DATA
FM=.00949 FM'=.08407

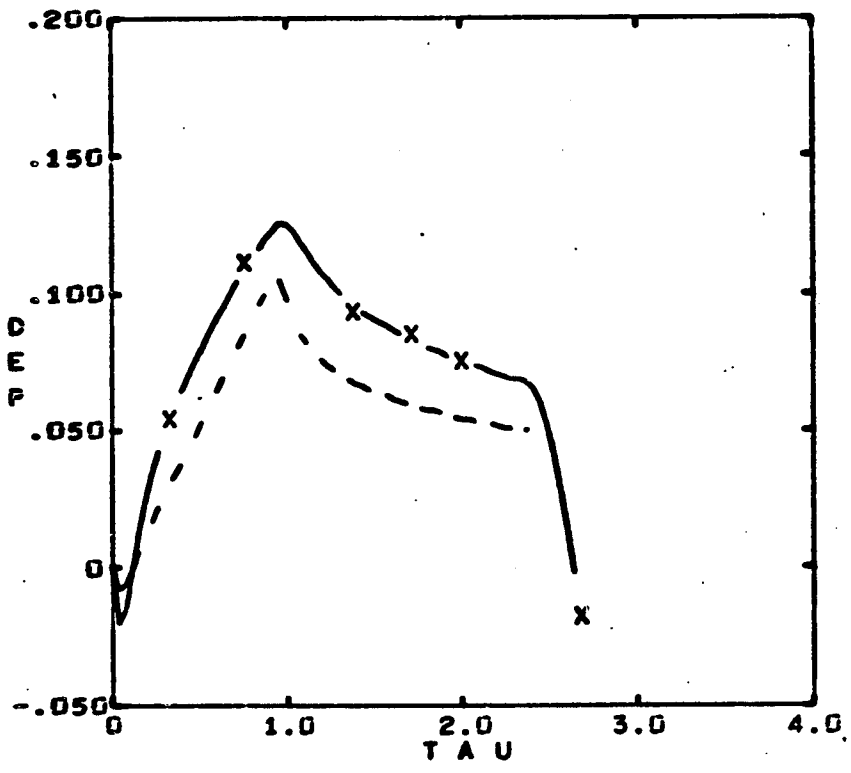
INITIAL TEMPERATURE 361.15
TAU-END OF TOTALITY 2.373

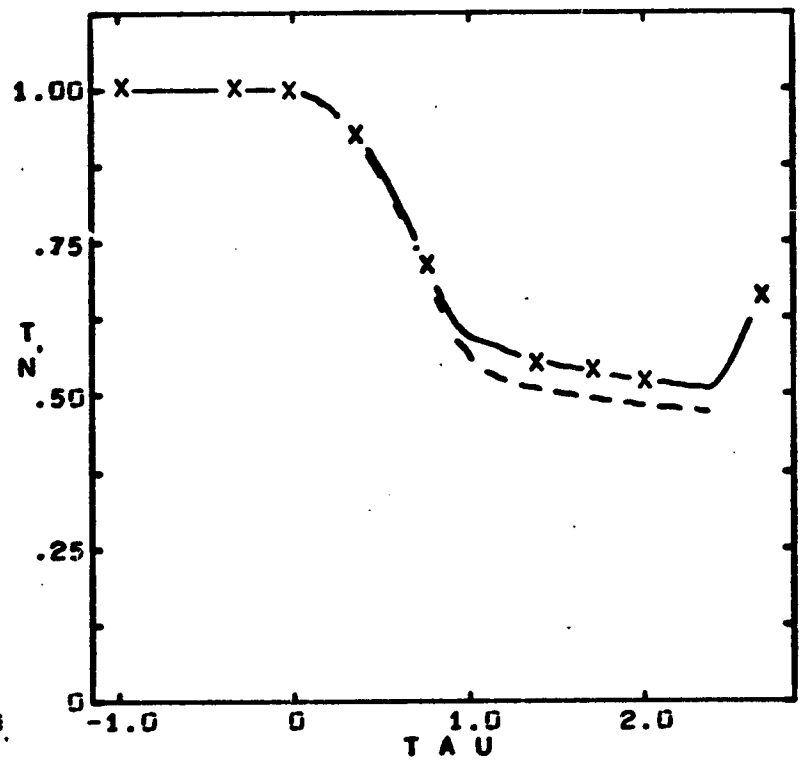
DIFFERENTIAL ENERGY DATA

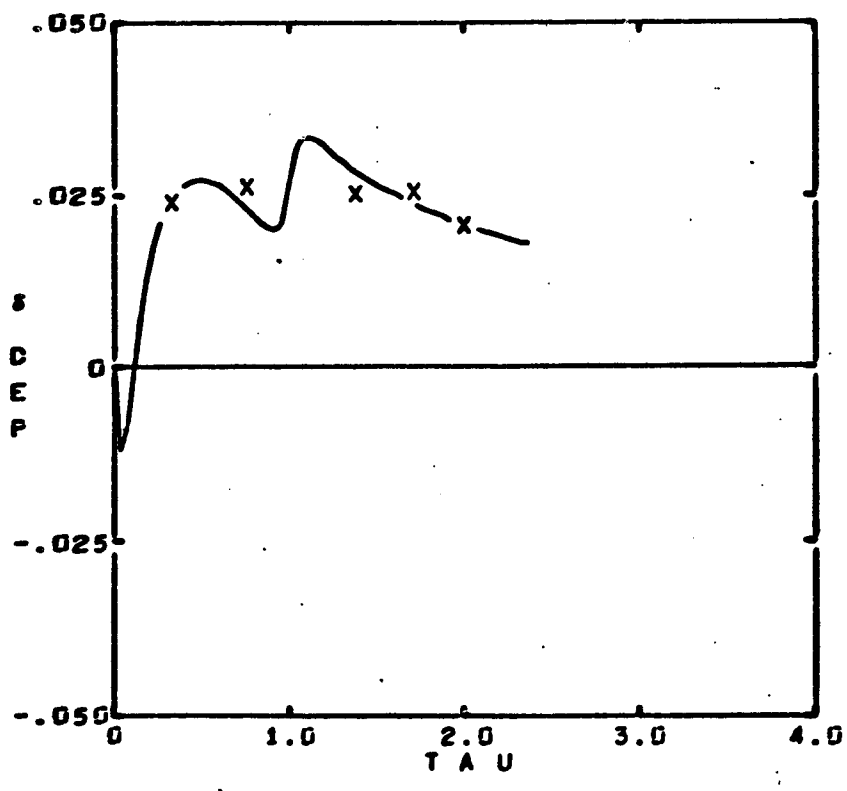
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0366	.0180	.0186
.50	.0778	.0506	.0272
.75	.1074	.0842	.0232
.93	.1251	.1066	.0185
1.0	.1248	.0976	.0272
1.5	.0908	.0643	.0265
2.0	.0752	.0545	.0207
2.5	.0651	.0481	.0170

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.979	363.42			363.42	1.006	.0253
9H	-0.345	363.14			363.14	1.006	.0222
10H	-0.028	360.92			360.92	0.999	-.0025
11H	0.345	335.02			335.02	0.928	.0543
12H	0.755	256.93	0.612	-.804	257.89	0.714	.1110
13H	1.377	173.03	1.456	-.713	199.62	0.553	.0933
14H	1.708	186.77	0.698	+.215	195.11	0.540	.0852
15H	2.002	168.31	1.261	-.504	189.13	0.524	.0752
16H	2.674	234.55	1.265	+.271	238.78	0.661	-.0178







PHOTOGRAPH
NOT
AVAILABLE

LAMBDA=33.93 W BETA=13.33 S XI=-.5431 ETA=-.2306 L+FL CODE = 35243 ALBEDO =.0668

13H FLAT MOON DATA
FM=.07829 FM'=.07716

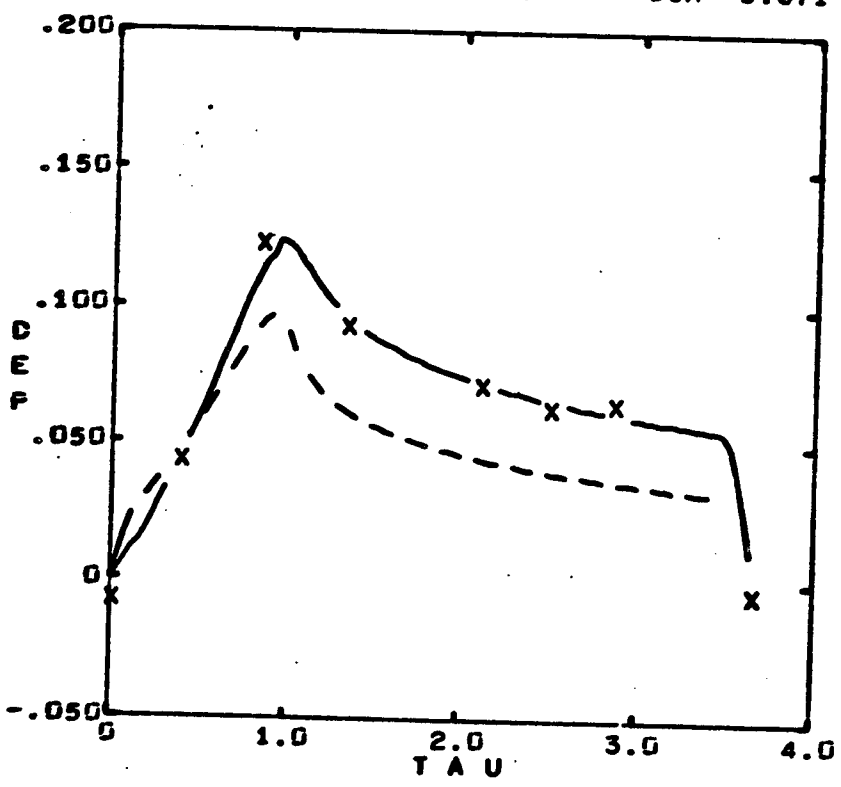
INITIAL TEMPERATURE 384.26
TAU-END OF TOTALITY 3.479

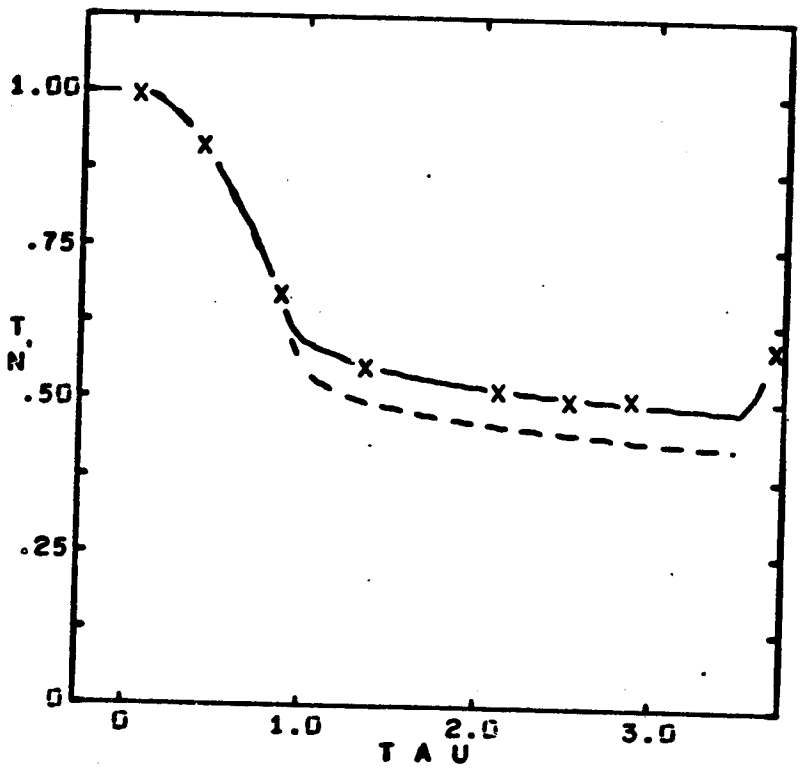
DIFFERENTIAL ENERGY DATA

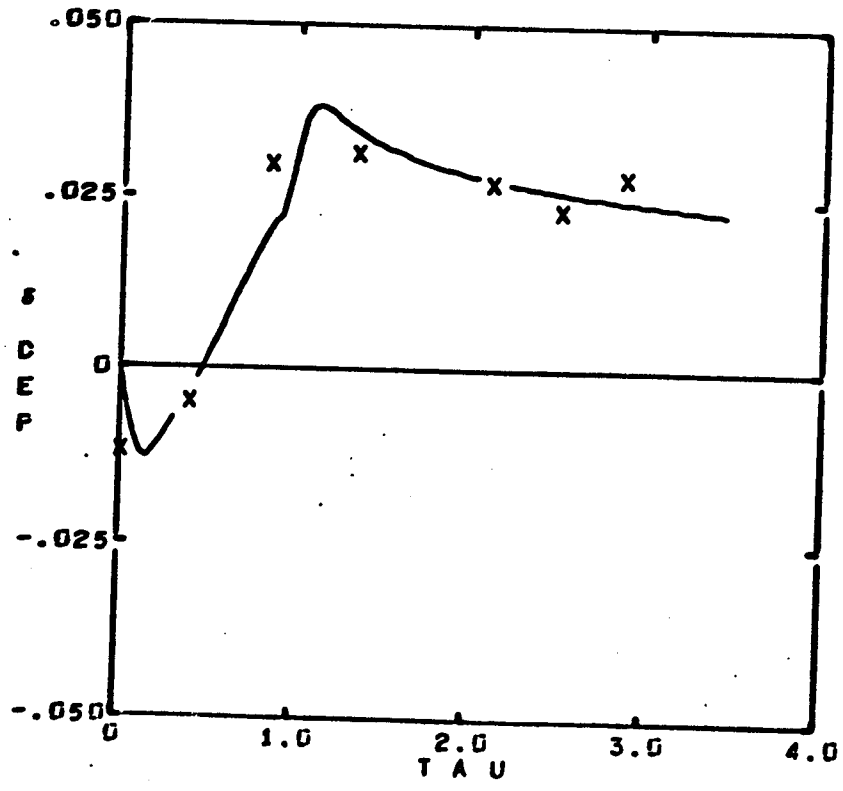
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0247	.0346	-.0099
.50	.0596	.0580	.0016
.75	.0988	.0836	.0152
.93	.1248	.1004	.0244
1.0	.1229	.0907	.0322
1.5	.0884	.0560	.0324
2.0	.0742	.0460	.0282
2.5	.0658	.0399	.0259
3.0	.0598	.0356	.0242

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.761	384.28		384.26	1.000	.0000
9H	0.018	383.32		383.32	0.998	-.0078
10H	0.400	350.88		350.88	0.913	.0436
11H	0.854	255.93	0.347 +.841	257.83	0.671	.1226
12H	1.349	206.93	0.281 -.020	211.88	0.551	.0924
13H	2.109	198.07	0.053 +.174	198.79	0.517	.0716
14H	2.505	185.64	0.422 +.772	192.57	0.501	.0631
15H	2.865	191.35	0.160 -.250	193.90	0.505	.0648
16H	3.671	221.73	0.975 -.318	226.24	0.589	-.0035







PHOTOGRAPH
NOT
AVAILABLE

223 (2M2) HERODOTUS A

LAMBDA=52.03 W BETA=21.49 N XI=-.7335 ETA=+.3664 L+PL CODE = 27336 ALBEDO =.0698

13H FLAT MOON DATA
FM=.04806 FM'=.09087

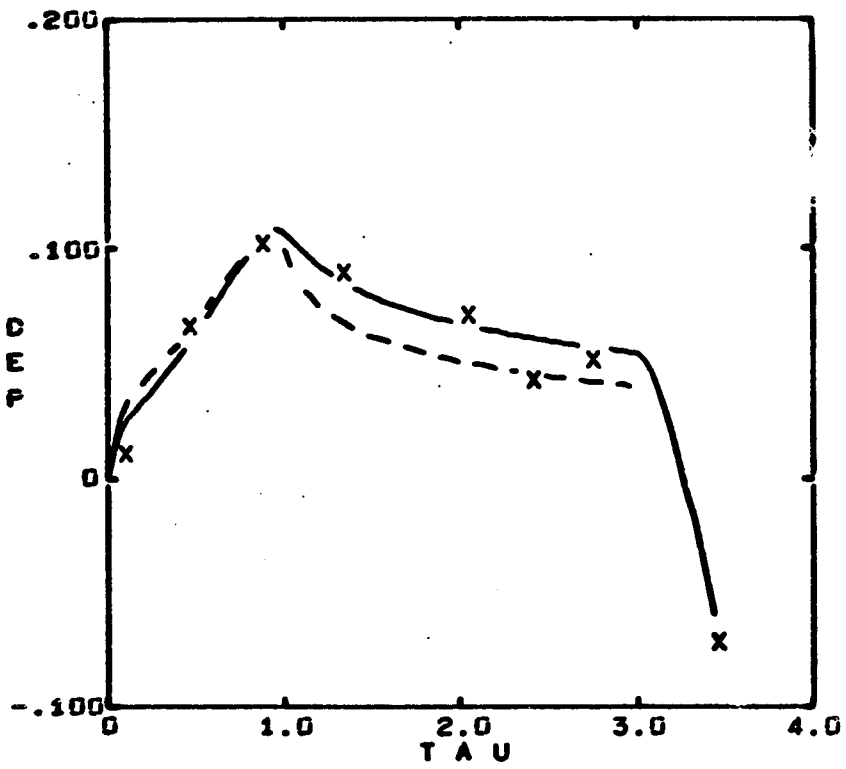
INITIAL TEMPERATURE 364.73
TAU-END OF TOTALITY 2.995

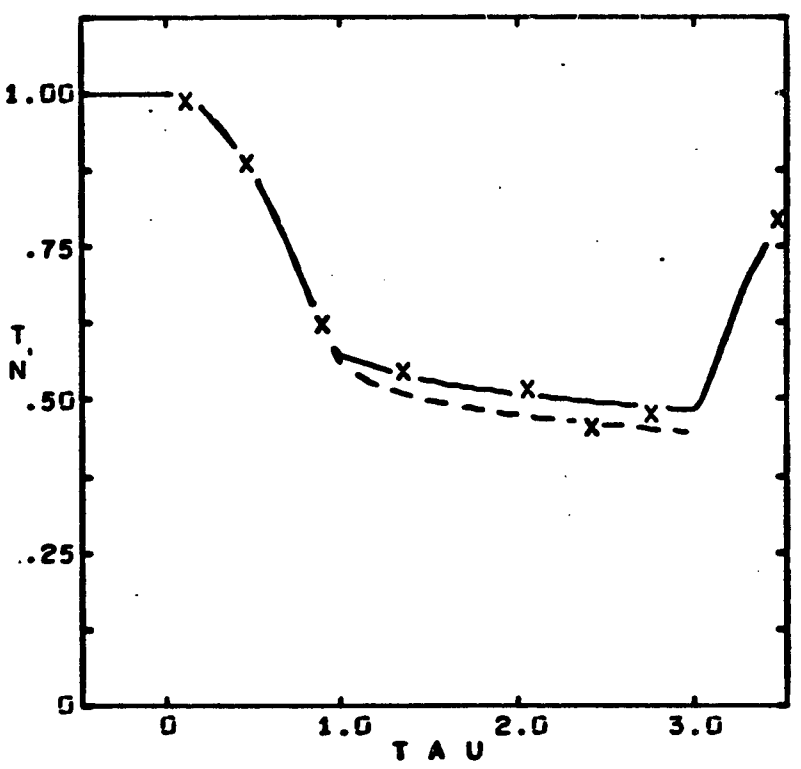
DIFFERENTIAL ENERGY DATA

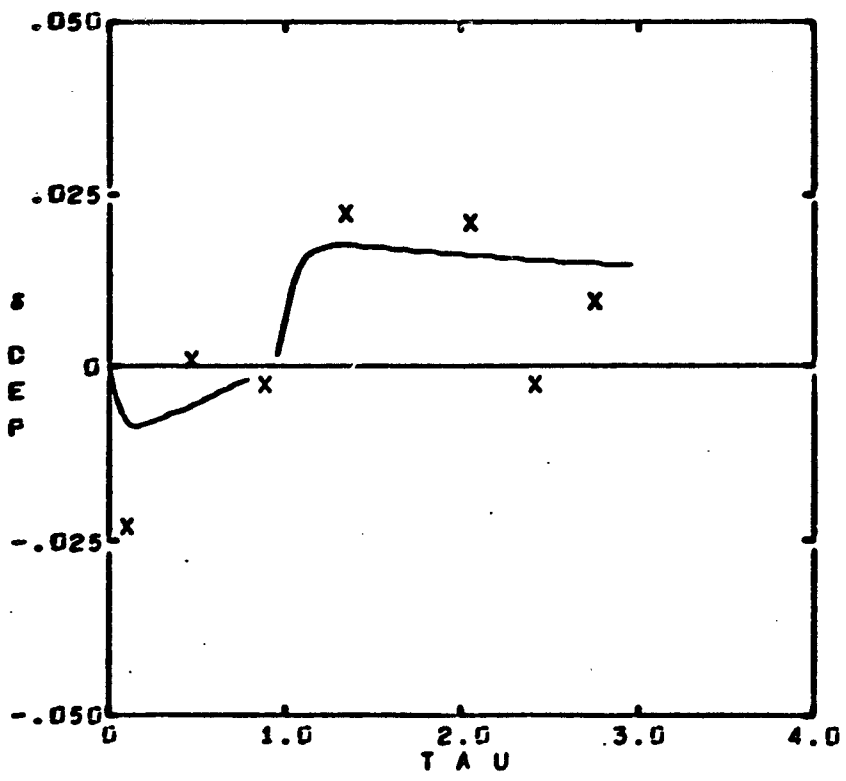
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0371	.0450	-.0079
.50	.0629	.0682	-.0053
.75	.0914	.0936	-.0022
.93	.1100	.1102	-.0002
1.0	.1072	.0999	.0073
1.5	.0791	.0617	.0174
2.0	.0670	.0507	.0163
2.5	.0596	.0442	.0154
3.0	.0542	.0395	.0147

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.607	364.73			364.73	1.000	.0000
9H	0.111	361.32			361.32	0.991	.0099
10H	0.466	322.80			322.80	0.885	.0658
11H	0.885	227.59	0.000	-.629	227.59	0.624	.1024
12H	1.347	194.23	0.343	-.936	199.59	0.547	.0897
13H	2.049	172.61	0.654	-.070	188.17	0.516	.0708
14H	2.417	165.86	0.000	+.919	165.86	0.455	.0428
15H	2.750	169.88	0.342	-.838	173.46	0.476	.0512
16H	3.471	289.26	0.000	+.385	289.26	0.793	-.0717







PHOTOGRAPH NOT AVAILABLE

224 (3H5) HERSCHEL

LAMBDA= 2.07 W BETA= 5.67 S XI=-.0360 ETA=-.0988 L+PL CODE = 30039 ALBEDO =.1214

13H FLAT MOON DATA
FM=.00834 FM'=.01614

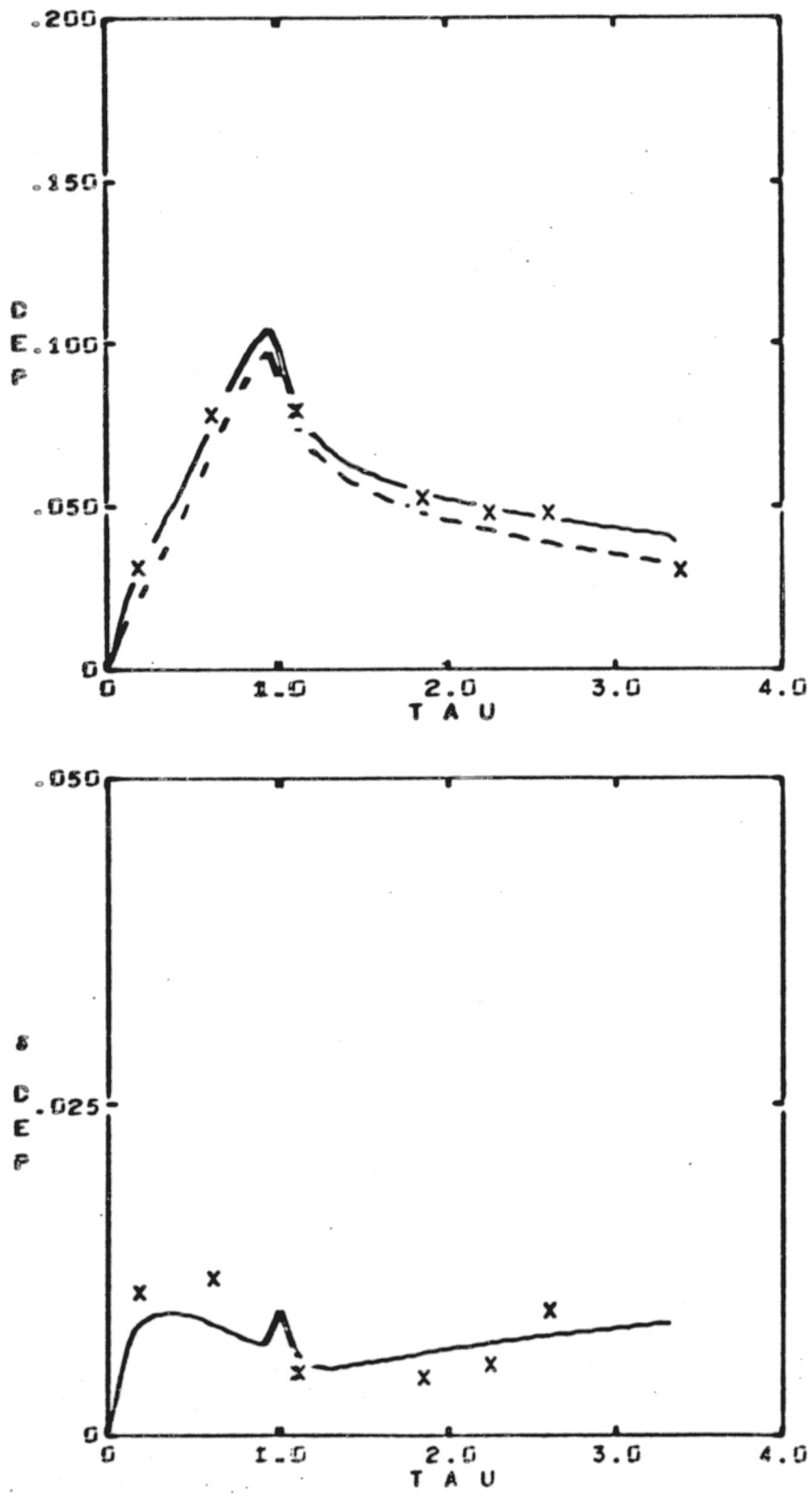
INITIAL TEMPERATURE 393.73
TAU-END OF TOTALITY 3.335

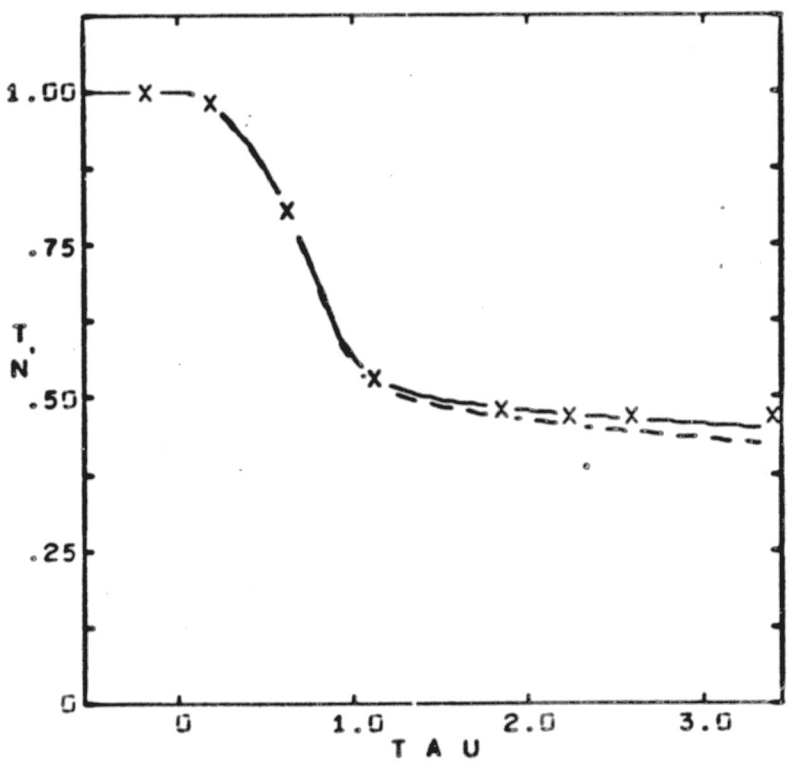
DIFFERENTIAL ENERGY DATA

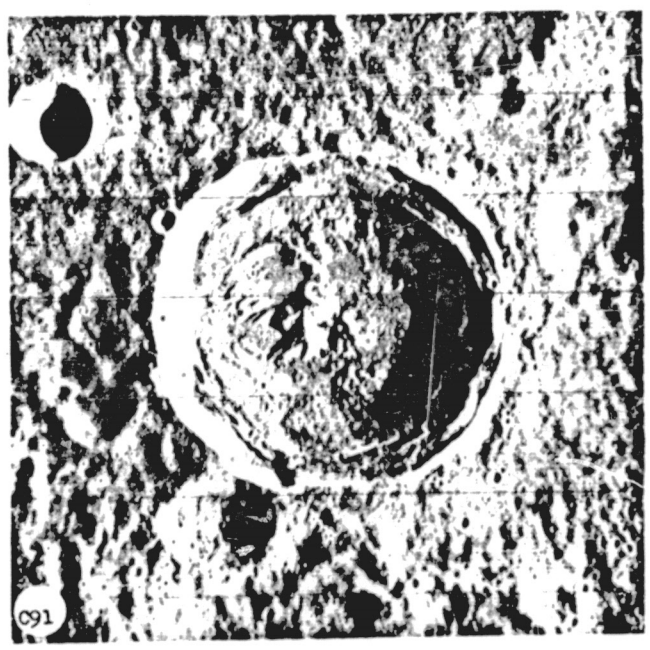
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0360	.0271	.0089
.50	.0617	.0528	.0089
.75	.0884	.0807	.0077
.93	.1059	.0993	.0066
1.0	.0992	.0898	.0094
1.5	.0611	.0557	.0054
2.0	.0523	.0458	.0065
2.5	.0470	.0397	.0073
3.0	.0432	.0352	.0080

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.954	392.59		392.59	0.997	-.0116
9H	-0.196	393.97		393.97	1.001	.0024
10H	0.180	386.82		386.82	0.982	.0311
11H	0.623	317.39	0.133 +.623	317.50	0.806	.0784
12H	1.109	208.91	0.000 +.572	208.91	0.531	.0792
13H	1.851	185.27	0.871 +.107	188.58	0.479	.0526
14H	2.240	183.61	0.236 -.085	184.23	0.468	.0479
15H	2.591	182.55	0.625 +.340	184.51	0.469	.0482
16H	3.396	183.54	1.031 +.370	185.25	0.470	.0307







225 (3H6) HERSCHEL C

LAMBDA= 3.16 W BETA= 5.00 S. XI=-.0550 ETA=-.0871 L+PL CODE = 30058 ALBEDO =.1206

13H FLAT MOON DATA
FM=.00291 FM'=.00291

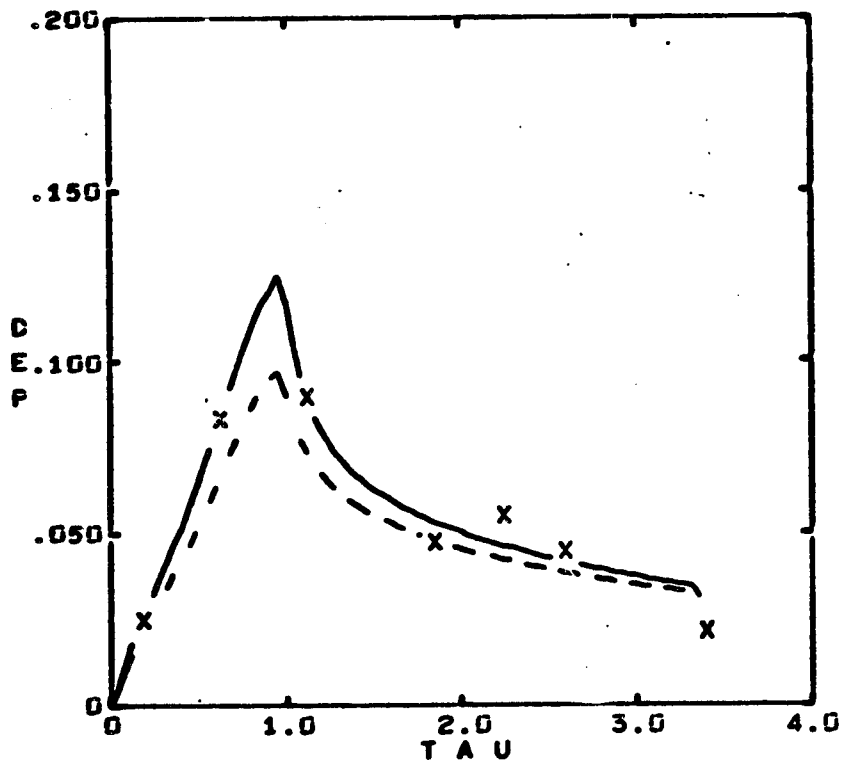
INITIAL TEMPERATURE 392.09
TAU-END OF TOTALITY 3.328

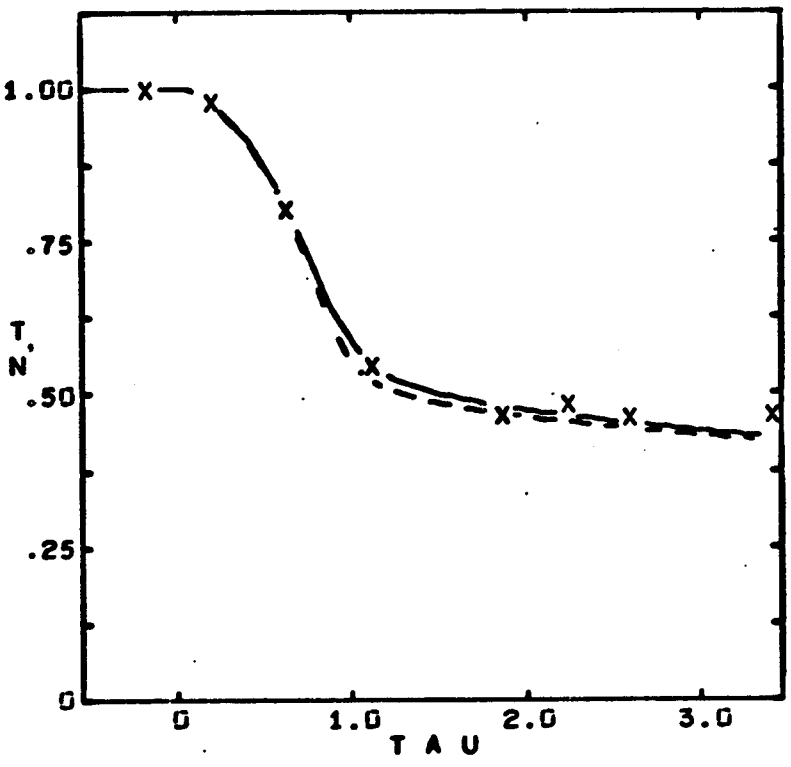
DIFFERENTIAL ENERGY DATA

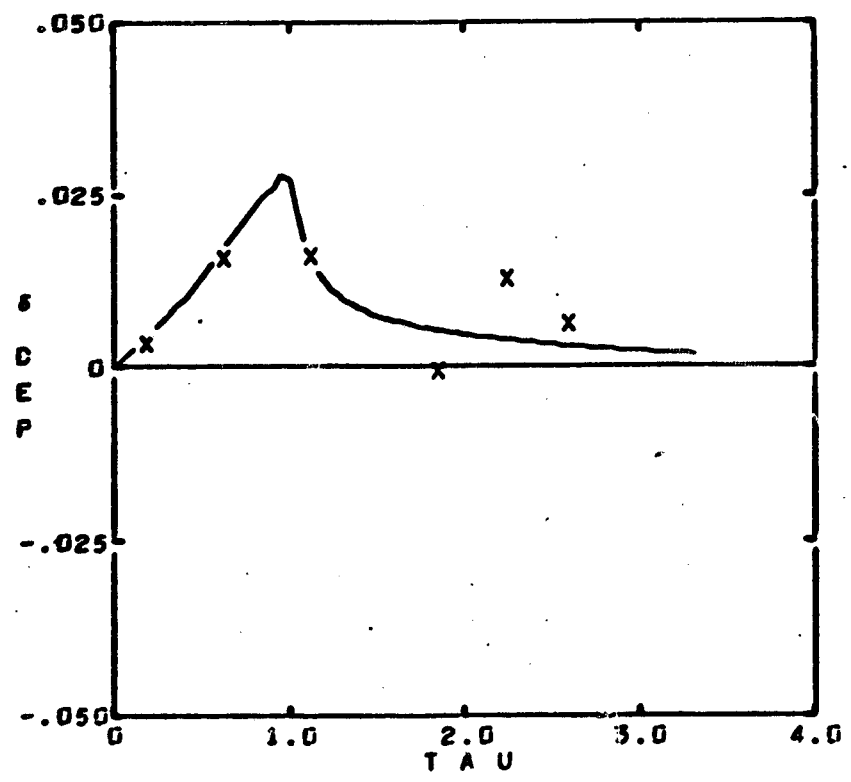
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0331	.0272	.0059
.50	.0659	.0528	.0131
.75	.1020	.0806	.0214
.93	.1261	.0991	.0270
1.0	.1167	.0896	.0271
1.5	.0631	.0555	.0076
2.0	.0504	.0456	.0048
2.5	.0429	.0395	.0034
3.0	.0374	.0350	.0024

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.944	394.26		394.26	1.006	.0223
9H	-0.187	391.66		391.66	0.999	-.0044
10H	0.188	383.77		383.77	0.979	.0250
11H	0.631	315.05	0.000 -.486	315.05	0.803	.0830
12H	1.117	210.49	0.399 -.743	214.60	0.547	.0897
13H	1.857	182.93	0.000 -.239	182.93	0.467	.0474
14H	2.246	186.59	0.333 -.825	190.17	0.485	.0553
15H	2.596	180.40	0.000 -.448	180.40	0.460	.0448
16H	3.400	181.80	0.000 +.206	181.80	0.464	.0216







PHOTOGRAPH NOT AVAILABLE

226 (3H7) HESIODUS B

LAMBDA=17.47 W BETA=27.10 S XI=-.2673 ETA=-.4556 L+PL CODE = 32465 ALBEDO =.0663

13H FLAT MOON DATA
FM=.04786 FM'=.06377

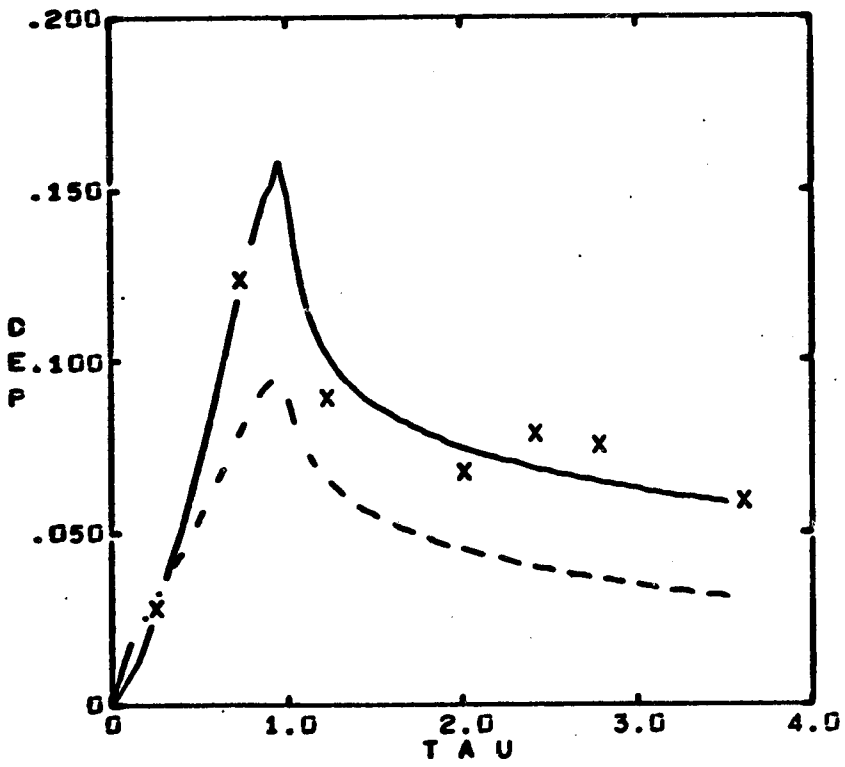
INITIAL TEMPERATURE 387.46
TAU-END OF TOTALITY 3.594

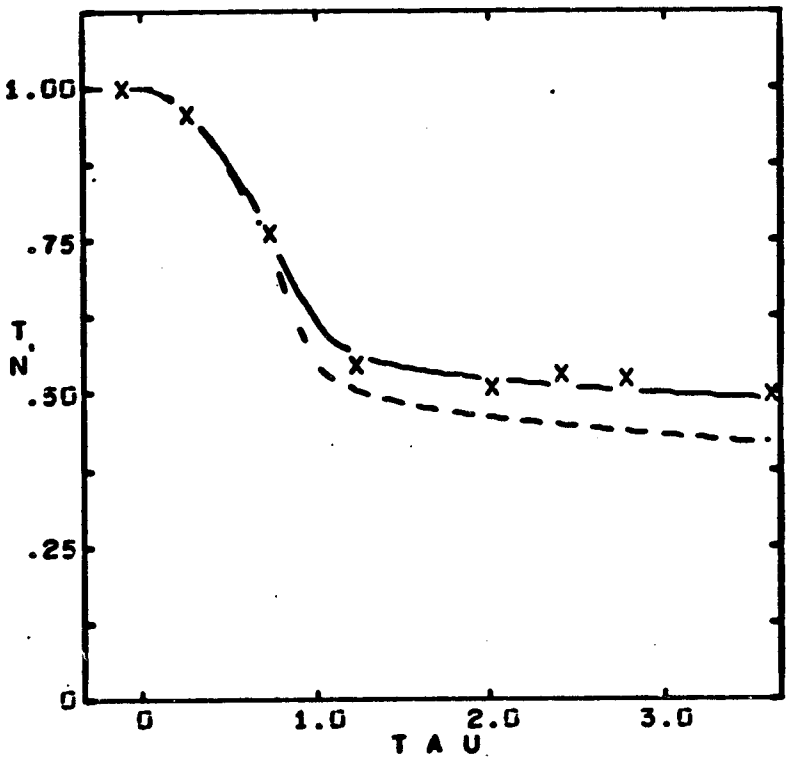
DIFFERENTIAL ENERGY DATA

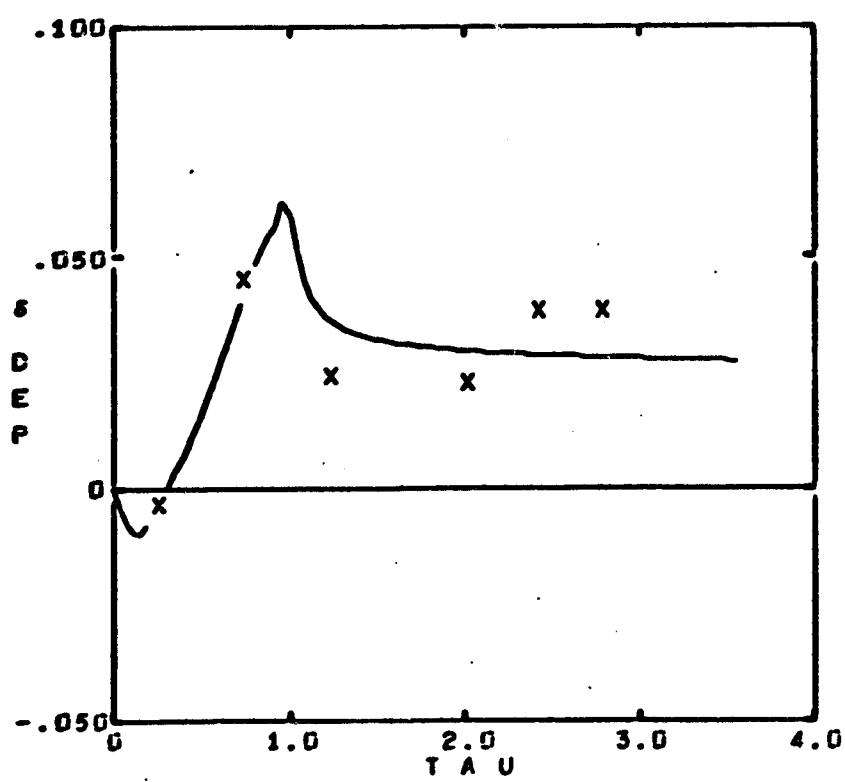
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0250	.0299	-.0049
.50	.0709	.0543	.0166
.75	.1239	.0810	.0429
.93	.1594	.0986	.0608
1.0	.1481	.0891	.0590
1.5	.0871	.0551	.0320
2.0	.0749	.0453	.0236
2.5	.0679	.0392	.0287
3.0	.0628	.0349	.0279

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.911	387.17		387.17	0.999	-.0030
9H	-0.121	387.50		387.50	1.000	.0004
10H	0.269	371.16		371.16	0.958	.0278
11H	0.728	295.30	0.128 +.584	295.78	0.763	.1239
12H	1.233	207.89	0.358 +.965	211.80	0.547	.0893
13H	2.005	191.37	0.475 +.853	197.65	0.510	.0677
14H	2.407	197.41	0.352 +.178	205.15	0.529	.0786
15H	2.774	200.92	0.114 +.835	202.90	0.524	.0752
16H	3.612	172.05	0.845 -.184	193.10	0.498	.0590







PHOTOGRAPH NOT AVAILABLE

227 (3H8) HESIODUS E

LAMBDA=15.29 W BETA=27.86 S XI=-.2332 ETA=-.4673 L+PL CODE = 32436 ALBEDO =.0733

13H FLAT MOON DATA
FM=.05804 FM'=.06565

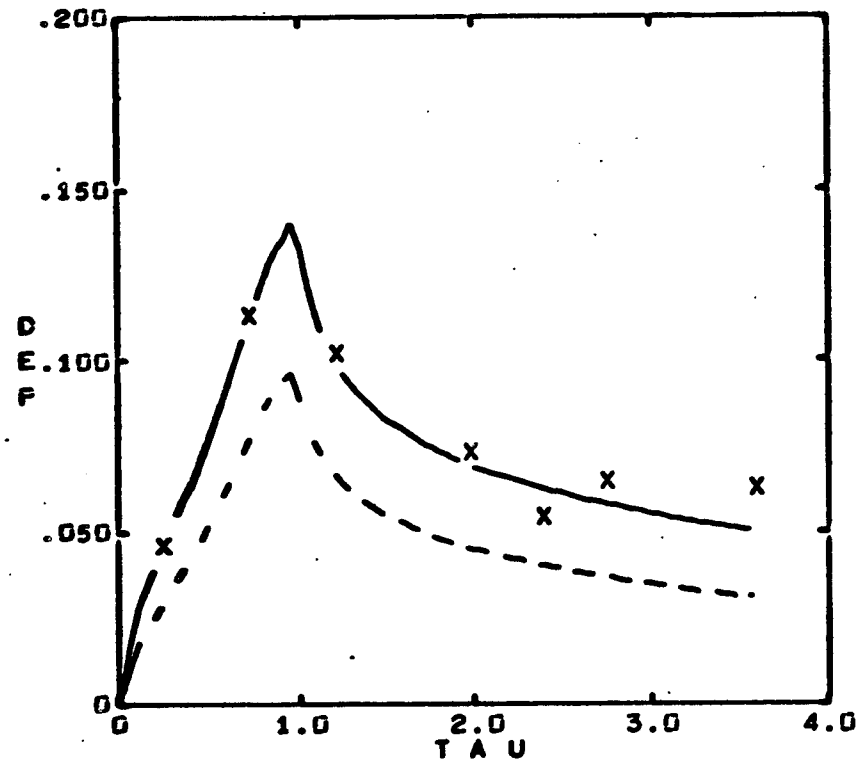
INITIAL TEMPERATURE 383.71
TAU-END OF TOTALITY 3.598

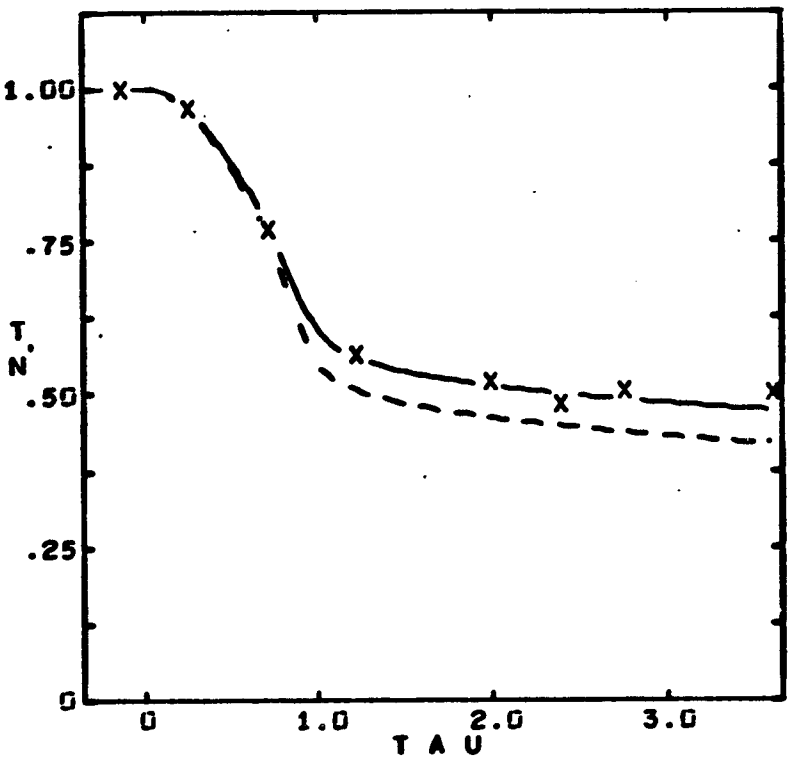
DIFFERENTIAL ENERGY DATA

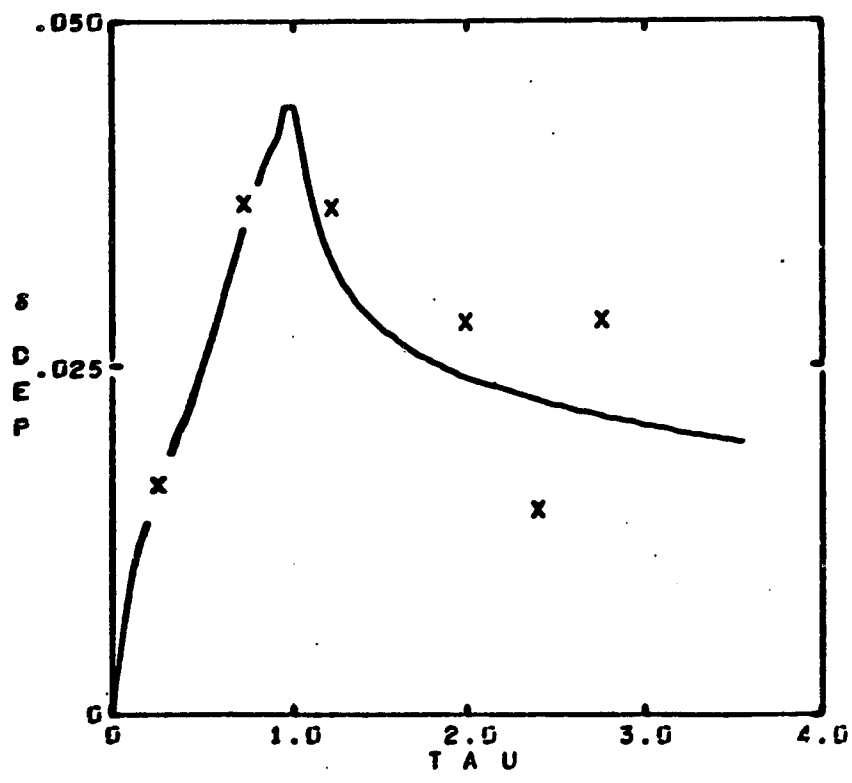
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0451	.0293	.0158
.50	.0796	.0538	.0258
.75	.1167	.0806	.0361
.93	.1413	.0983	.0430
1.0	.1327	.0888	.0439
1.5	.0827	.0549	.0278
2.0	.0693	.0451	.0242
2.5	.0613	.0391	.0222
3.0	.0555	.0348	.0207

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.929	384.16		384.16	1.001	.0048
9H	-0.137	383.64		383.64	1.000	-.0007
10H	0.252	371.47		371.47	0.968	.0459
11H	0.713	294.47	0.190 +.932	294.68	0.768	.1135
12H	1.217	214.70	0.123 +.009	217.02	0.566	.1023
13H	1.990	195.81	0.248 +.452	199.80	0.521	.0735
14H	2.393	181.26	0.473 +.476	185.76	0.484	.0549
15H	2.758	185.53	0.534 +.885	193.74	0.505	.0650
16H	3.600	177.78	0.792 -.175	192.21	0.501	.0629







PHOTOGRAPH NOT AVAILABLE

228 (4D3) HIPPARCHUS C

LAMBDA= 8.25 E BETA= 7.39 S XI=+.1423 ETA=-.1287 L+PL CODE = 41142 ALBEDO =.2015

13H FLAT MOON DATA
FM=.01200 FM'=.03740

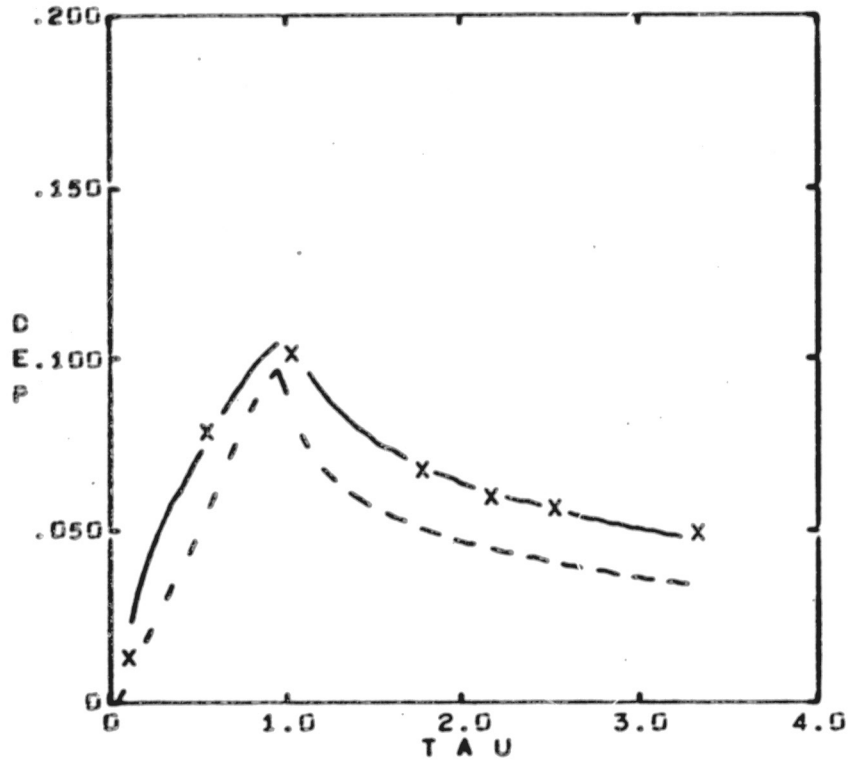
INITIAL TEMPERATURE 386.03
TAU-END OF TOTALITY 3.341

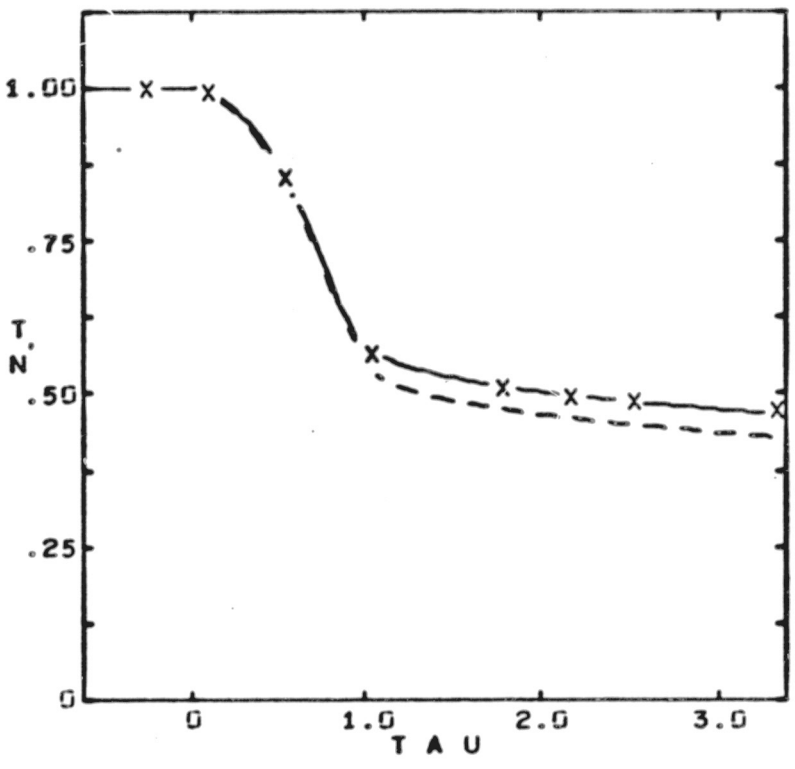
DIFFERENTIAL ENERGY DATA

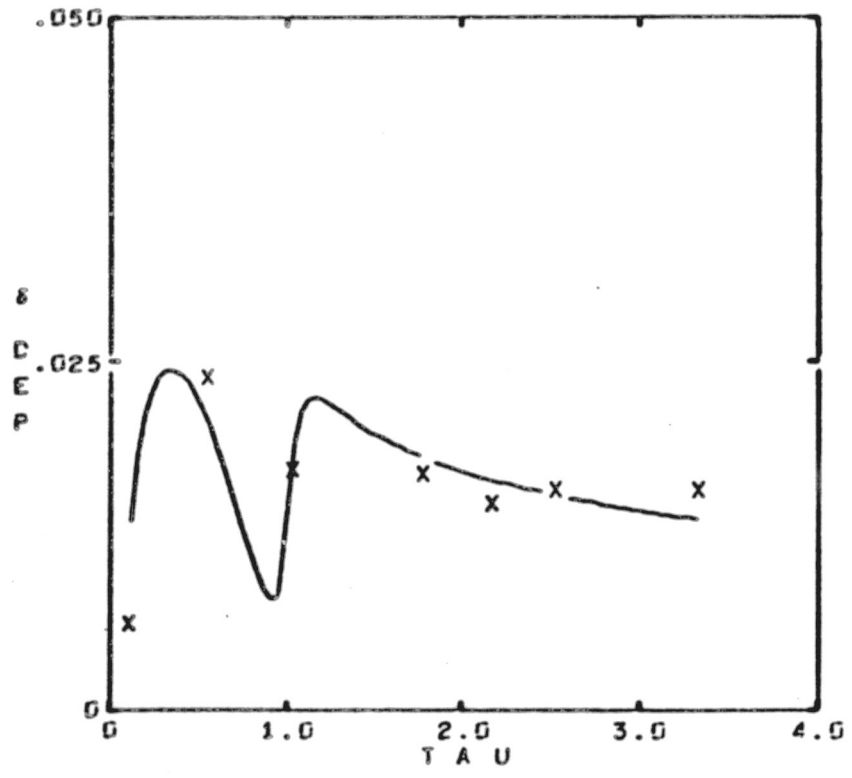
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0457	.0226	.0231
.50	.0720	.0498	.0222
.75	.0924	.0791	.0133
.93	.1048	.0988	.0060
1.0	.1042	.0897	.0145
1.5	.0764	.0566	.0198
2.0	.0640	.0470	.0170
2.5	.0563	.0409	.0154
3.0	.0506	.0363	.0143

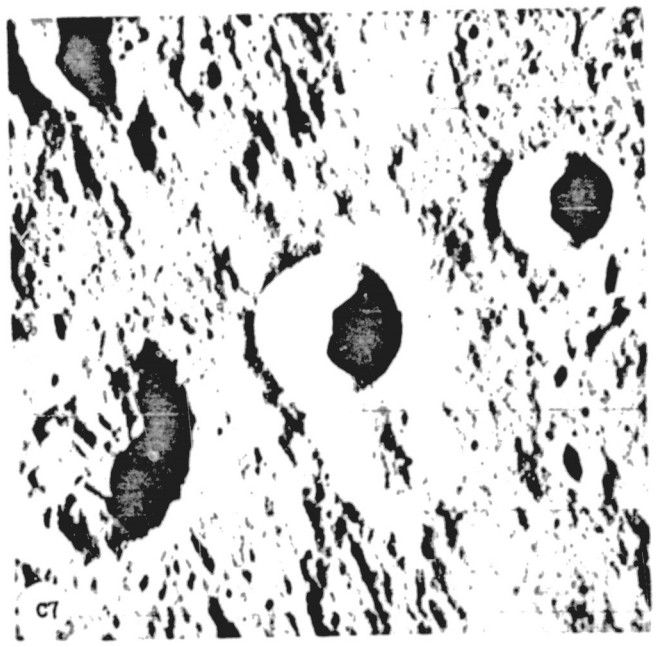
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.034	388.21		388.21	1.006	.0228
9H	-0.274	385.45		385.45	0.999	-.0060
10H	0.102	383.48		383.48	0.993	.0131
11H	0.545	329.19	0.000 -.147	329.19	0.853	.0789
12H	1.031	214.36	0.750 -.735	217.89	0.564	.1015
13H	1.774	187.60	0.805 -.091	196.85	0.510	.0676
14H	2.163	185.62	0.548 -.896	190.75	0.494	.0596
15H	2.515	187.83	0.081 -.995	188.26	0.488	.0566
16H	3.328	177.96	0.626 +.298	182.20	0.472	.0496









229 (4D4) HIPPARCHUS G

LAMBDA= 7.43 E BETA= 5.02 S XI=+.1289 ETA=-.0875 L+PL CODE = 41028 ALBEDO =.1396

13H FLAT MOON DATA
FM=.01267 FM'=.03518

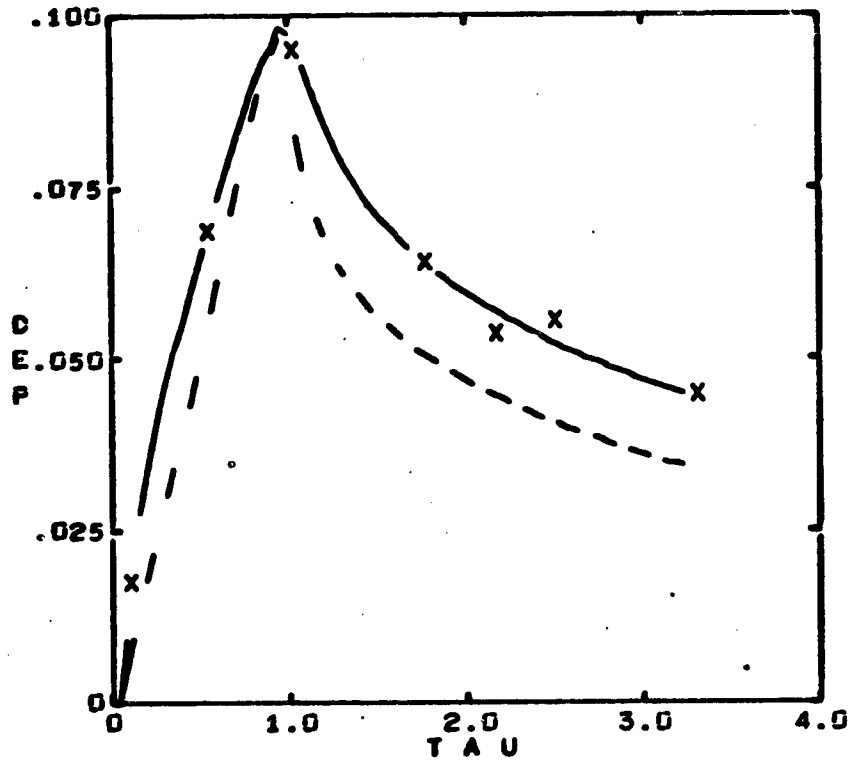
INITIAL TEMPERATURE 391.38
TAU-END OF TOTALITY 3.309

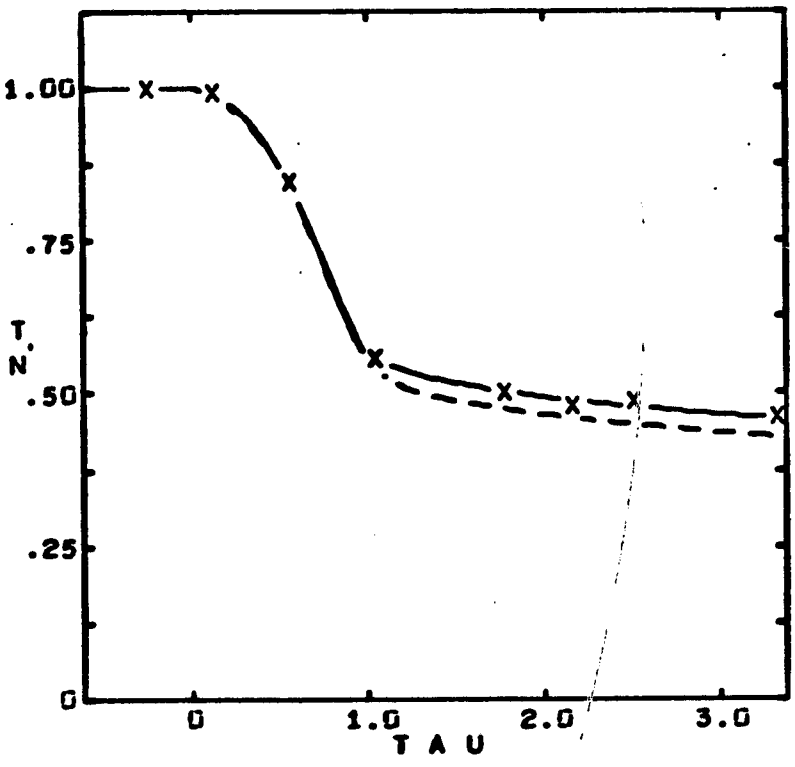
DIFFERENTIAL ENERGY DATA

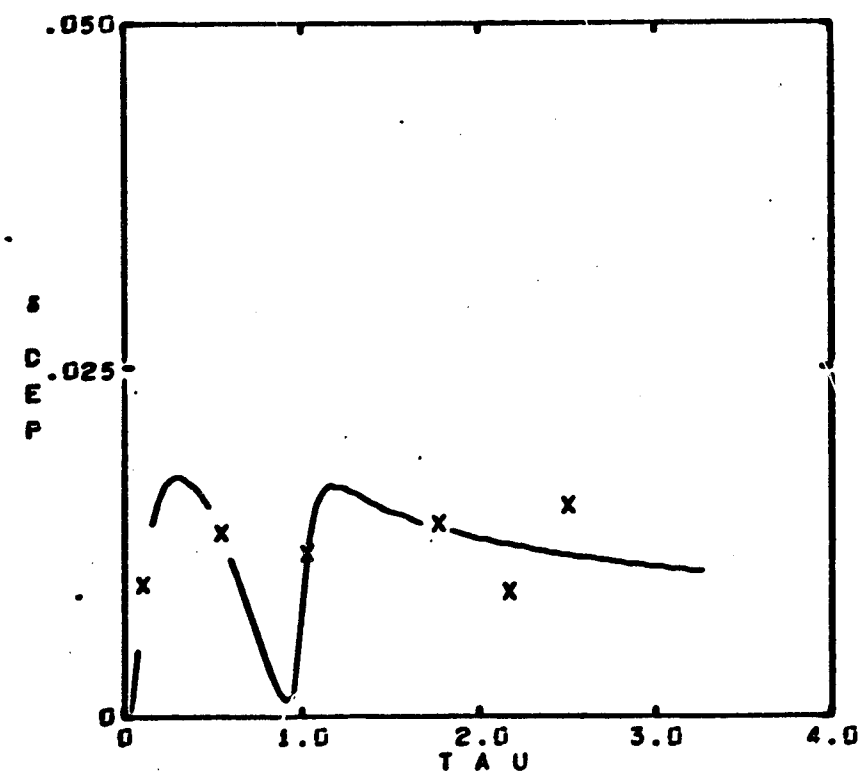
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0394	.0227	.0167
.50	.0642	.0498	.0144
.75	.0850	.0790	.0060
.93	.0980	.0986	-.0006
1.0	.0974	.0894	.0080
1.5	.0712	.0565	.0147
2.0	.0596	.0468	.0128
2.5	.0523	.0407	.0116
3.0	.0469	.0362	.0107

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.020	392.58		392.58	1.003	.0123
9H	-0.265	391.07		391.07	0.999	-.0032
10H	0.109	388.78		388.78	0.993	.0174
11H	0.550	330.94	0.000 -.767	330.94	0.846	.0687
12H	1.035	215.30	0.407 -.847	217.35	0.555	.0951
13H	1.773	188.15	0.671 -.193	197.05	0.503	.0643
14H	2.160	182.41	0.644 -.835	188.30	0.481	.0536
15H	2.510	187.30	0.314 -.714	190.11	0.486	.0557
16H	3.318	176.30	0.504 +.727	180.93	0.462	.0448







PHOTOGRAPH NOT AVAILABLE

230 (405) HIPPARCHUS K

LAMBDA= 2.19 E BETA= 6.96 S XI=+.0379 ETA=-.1212 L+PL CODE = 40132 ALBEDO =.1211

13H FLAT MOON DATA
FM=.01644 FM'=.02431

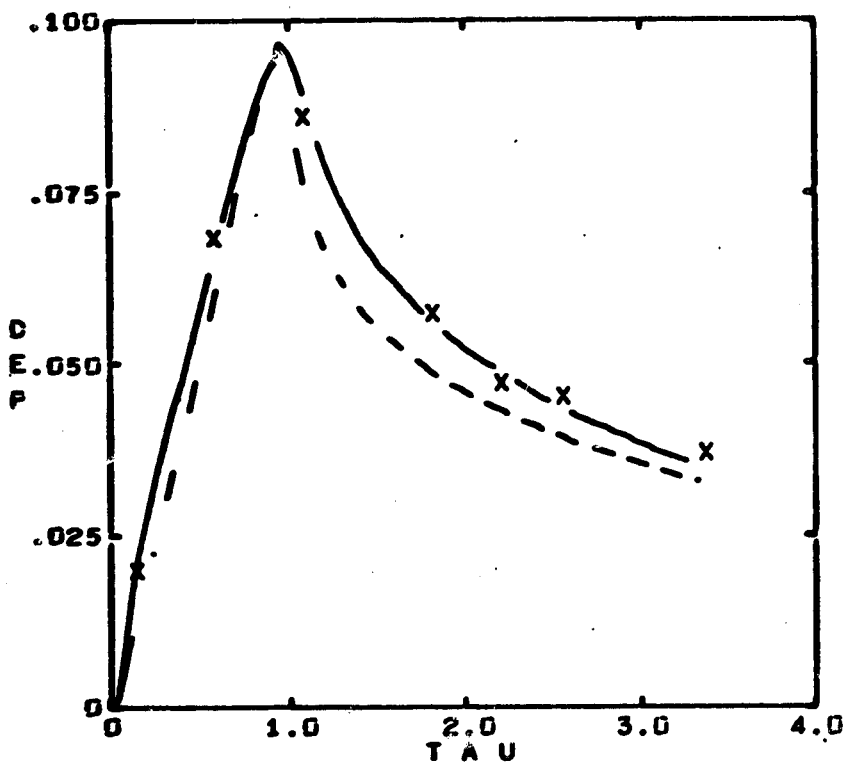
INITIAL TEMPERATURE 392.39
TAU-END OF TOTALITY 3.345

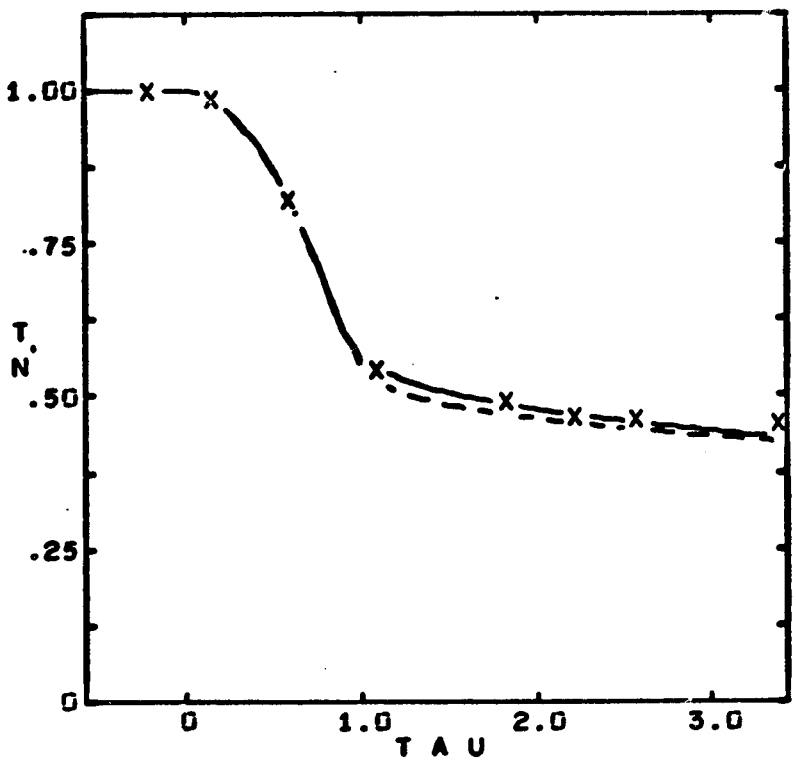
DIFFERENTIAL ENERGY DATA

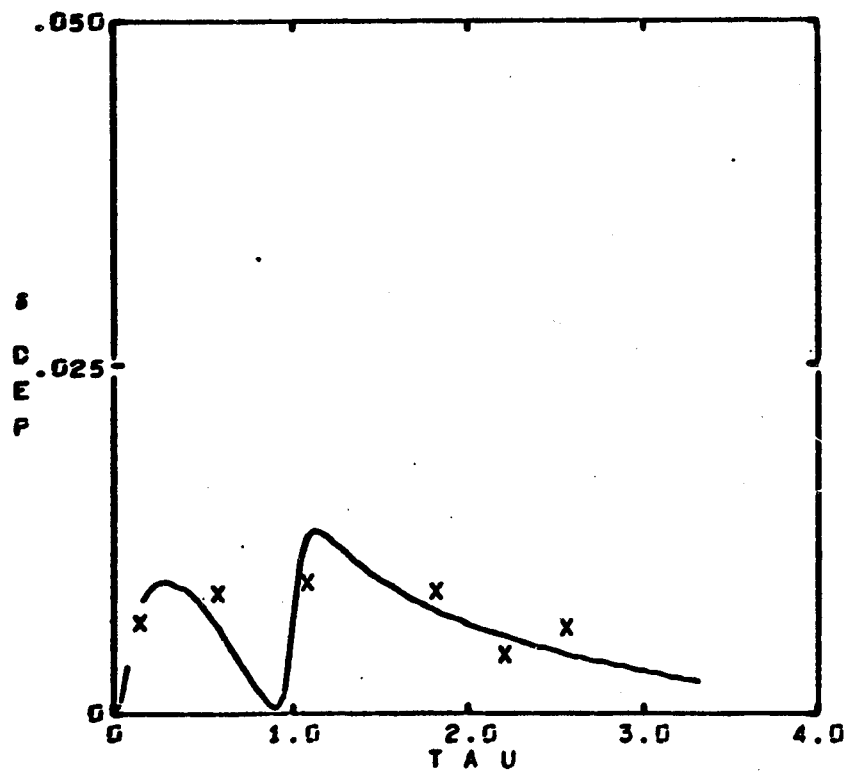
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0326	.0233	.0093
.50	.0572	.0496	.0076
.75	.0810	.0781	.0029
.93	.0965	.0972	-.0007
1.0	.0952	.0881	.0071
1.5	.0649	.0554	.0095
2.0	.0522	.0458	.0064
2.5	.0442	.0398	.0044
3.0	.0384	.0354	.0030

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.989	394.13			394.13	1.004	.0178
9H	-0.228	391.99			391.99	0.999	-.0041
10H	0.147	387.26			387.26	0.987	.0199
11H	0.590	322.63	0.000	-.798	322.63	0.822	.0684
12H	1.077	212.18	0.036	-.075	212.51	0.542	.0860
13H	1.820	188.98	0.473	-.076	192.06	0.489	.0574
14H	2.210	182.37	0.273	-.263	183.00	0.466	.0473
15H	2.562	179.65	0.308	-.891	181.05	0.461	.0453
16H	3.372	177.54	0.000	+.776	177.54	0.452	.0370







PHOTOGRAPH NOT AVAILABLE

231 (2H3) HORTENSIUS A

LAMBDA=30.70 W BETA= 4.37 N XI=-.5091 ETA=+.0762 L+PL CODE = 25007 ALBEDO =.0742

13H FLAT MOON DATA
FM=.01089 FM'=.01570

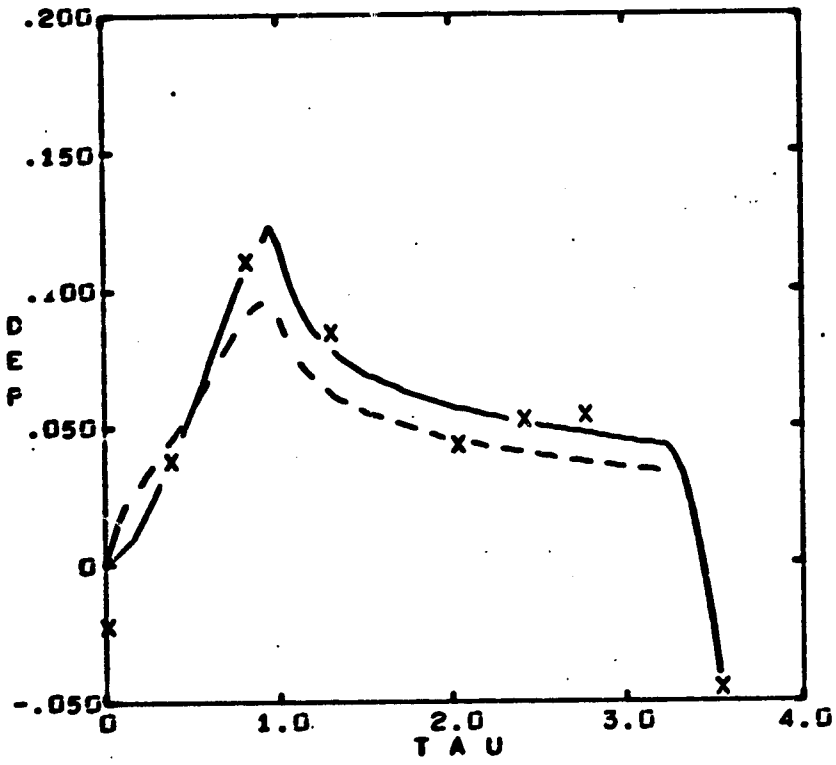
INITIAL TEMPERATURE 386.56
TAU-END OF TOTALITY 3.242

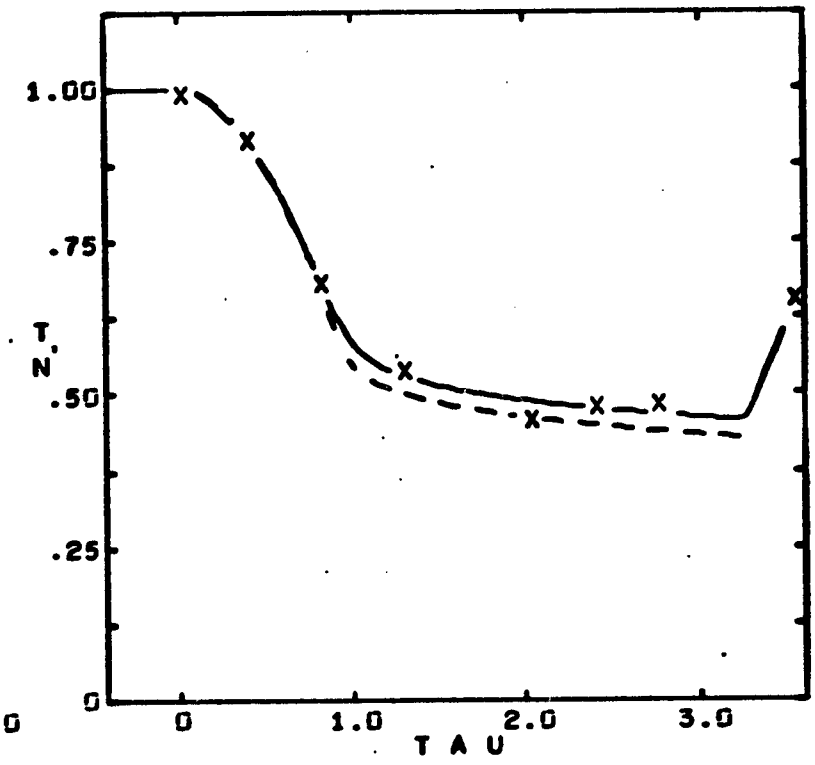
DIFFERENTIAL ENERGY DATA

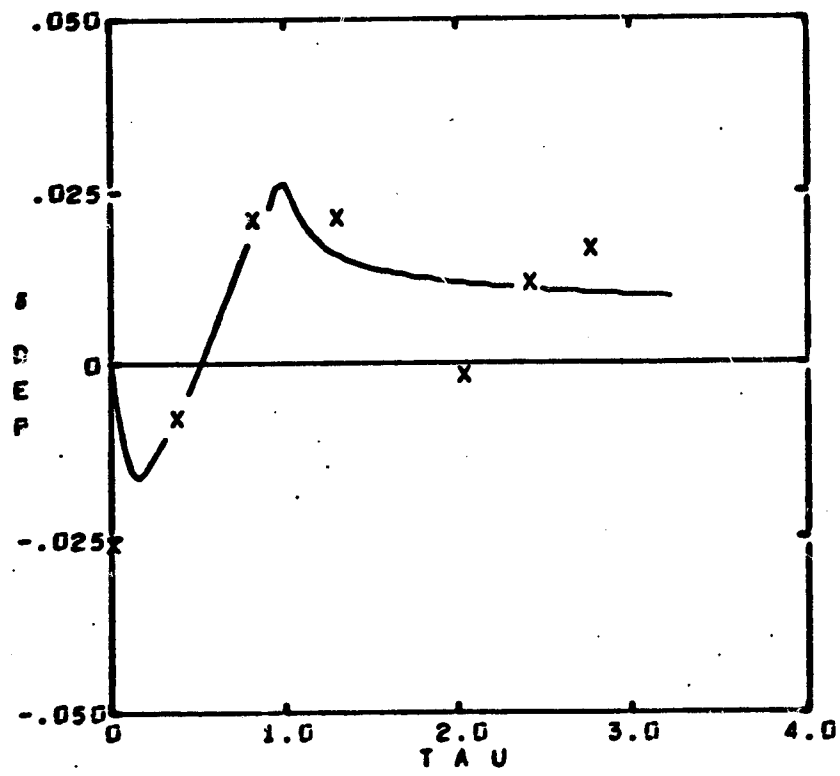
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0200	.0335	-.0135
.50	.0562	.0571	-.0009
.75	.0972	.0829	.0143
.93	.1245	.0998	.0247
1.0	.1162	.0902	.0260
1.5	.0697	.0557	.0140
2.0	.0576	.0457	.0119
2.5	.0505	.0397	.0108
3.0	.0454	.0354	.0100

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.733	386.56		386.56	1.000	.0000
9H	0.015	384.18		384.18	0.994	-.0227
10H	0.384	354.10		354.10	0.916	.0379
11H	0.822	261.72	0.481 +.998	263.71	0.682	.1106
12H	1.300	205.70	0.175 -.005	208.04	0.538	.0839
13H	2.032	174.80	0.509 -.106	176.90	0.458	.0439
14H	2.415	183.73	0.163 -.342	185.08	0.479	.0526
15H	2.762	184.10	0.227 -.811	186.30	0.482	.0539
16H	3.531	253.07	0.000 +.407	253.07	0.655	-.0452







PHOTOGRAPH NOT AVAILABLE

232 (2H4) HORTENSIUS B

LAMBDA=29.44 W BETA= 5.27 N XI=-.4895 ETA=+.0918 L+FL CODE = 24089 ALBEDO =.0758

13H FLAT MOON DATA
FM=.00359 FM'=.01435

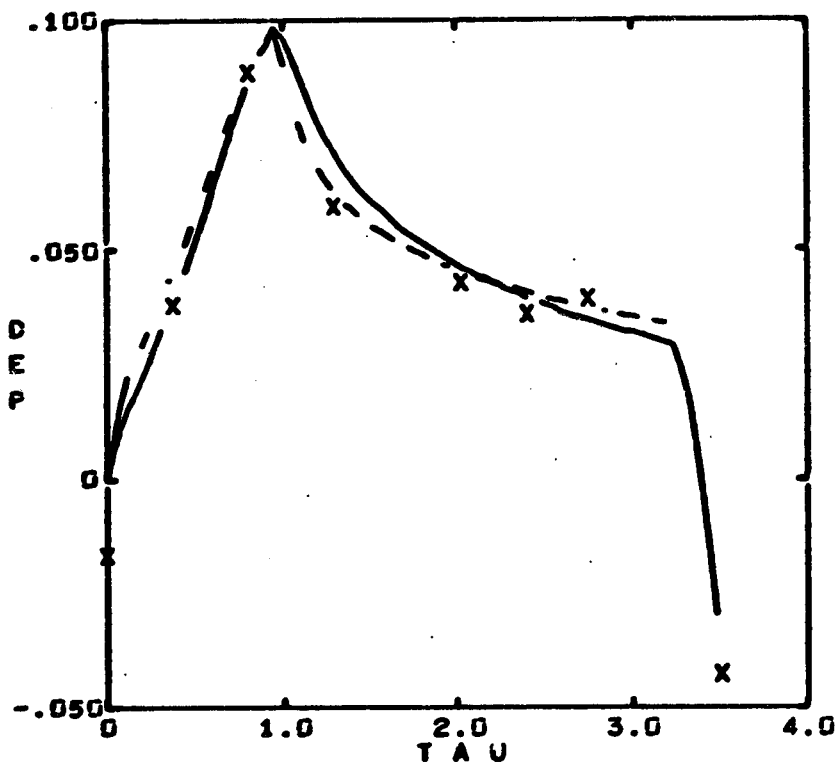
INITIAL TEMPERATURE 387.38
TAU-END OF TOTALITY 3.226

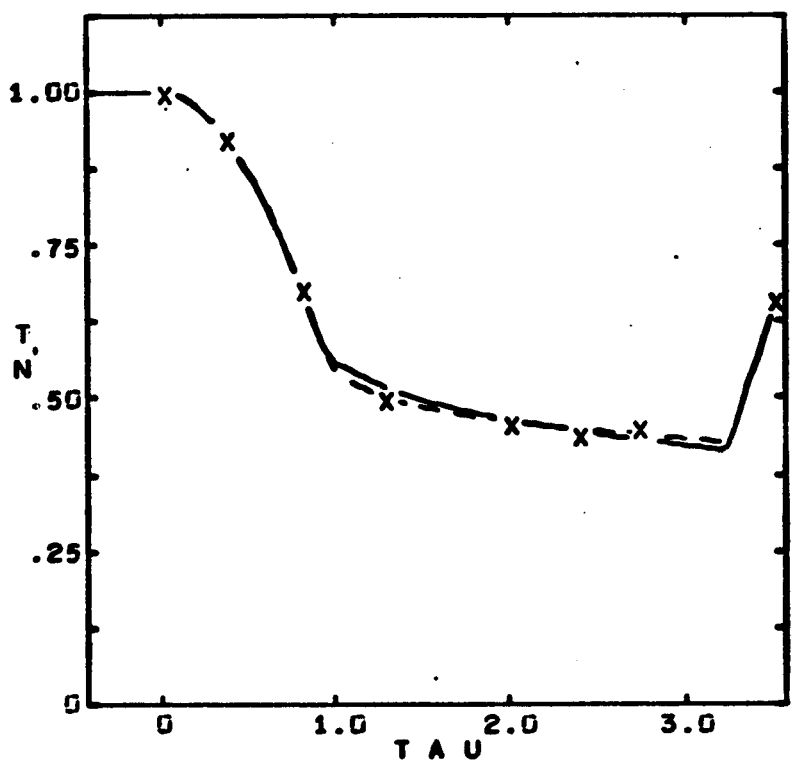
DIFFERENTIAL ENERGY DATA

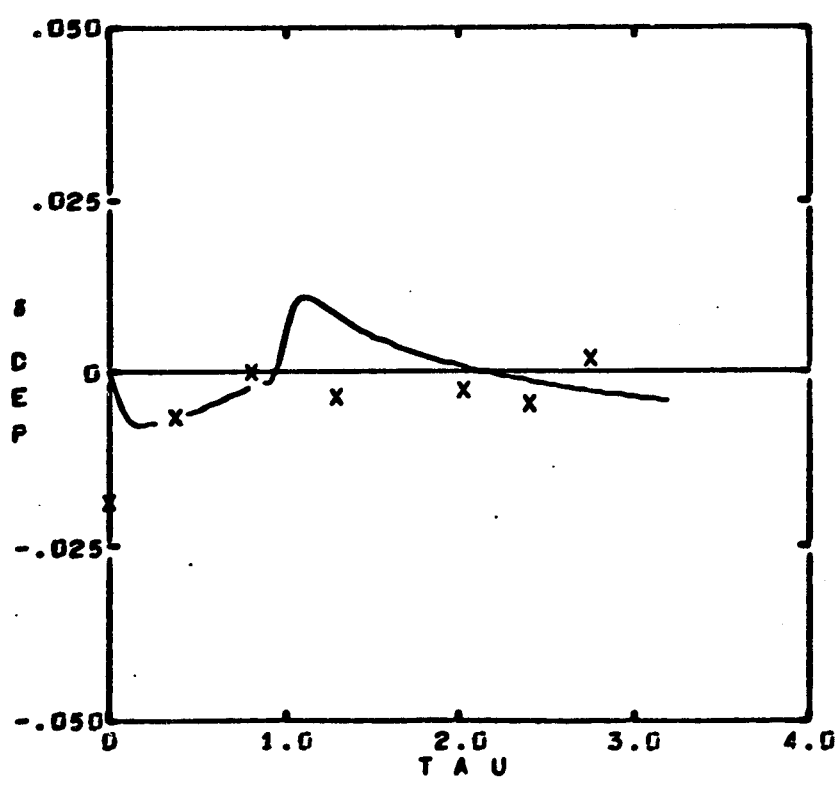
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0256	.0331	-.0075
.50	.0513	.0568	-.0055
.75	.0799	.0826	-.0027
.93	.0988	.0997	-.0009
1.0	.0963	.0900	.0063
1.5	.0610	.0556	.0054
2.0	.0467	.0457	.0010
2.5	.0380	.0396	-.0016
3.0	.0318	.0353	-.0035

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.740	387.38		387.38	1.000	.0000
9H	0.008	385.67		385.67	0.996	-.0170
10H	0.376	356.15		356.15	0.919	.0381
11H	0.811	260.51	0.000 +.151	260.51	0.672	.0886
12H	1.290	191.43	0.000 -.299	191.43	0.494	.0596
13H	2.019	172.68	1.245 +.536	176.19	0.455	.0428
14H	2.401	168.93	0.000 -.006	168.93	0.436	.0362
15H	2.747	171.33	1.637 +.725	172.47	0.445	.0393
16H	3.514	253.77	0.000 +.498	253.77	0.655	-.0427







PHOTOGRAPH NOT AVAILABLE

233 (2H5) HORTENSIUS C

LAMBDA=26.70 W BETA= 5.94 N XI=-.4469 ETA=+.1034 L+FL CODE = 24140 ALBEDO =.0771

13H FLAT MOON DATA
FM=.01505 FM'=.04368

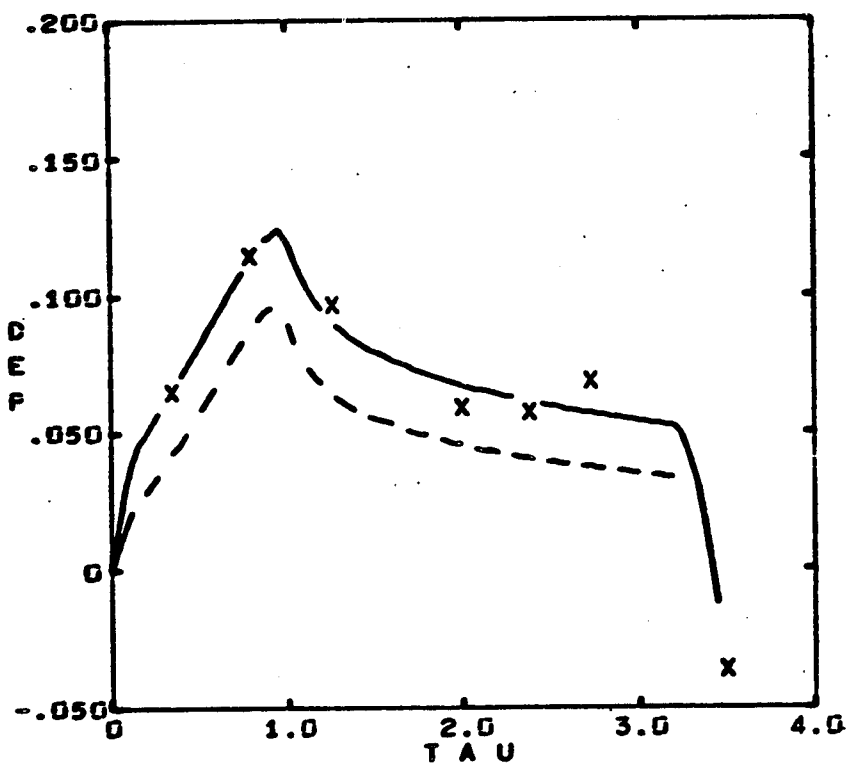
INITIAL TEMPERATURE 386.83
TAU-END OF TOTALITY 3.211

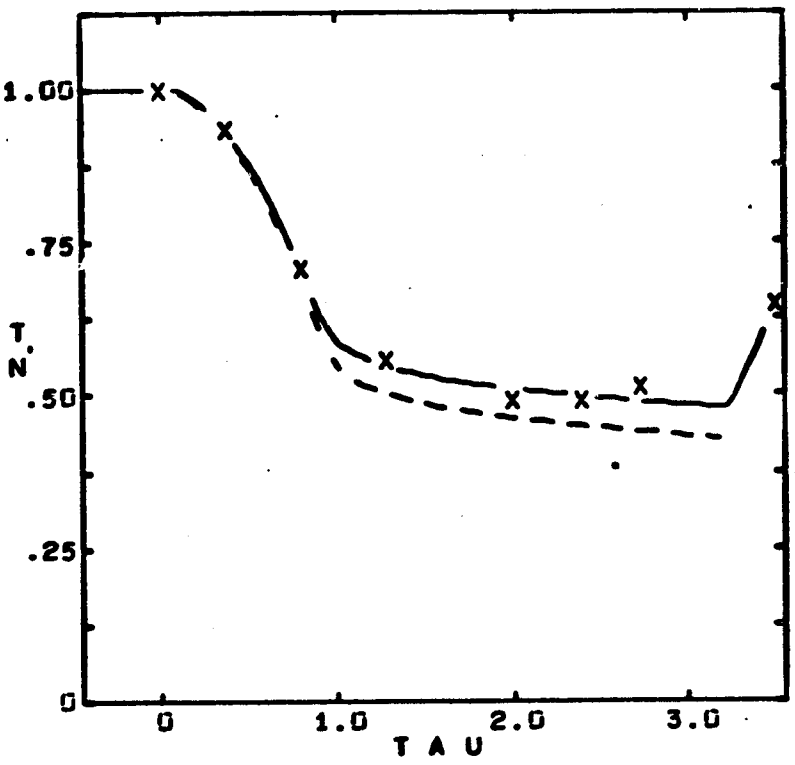
DIFFERENTIAL ENERGY DATA

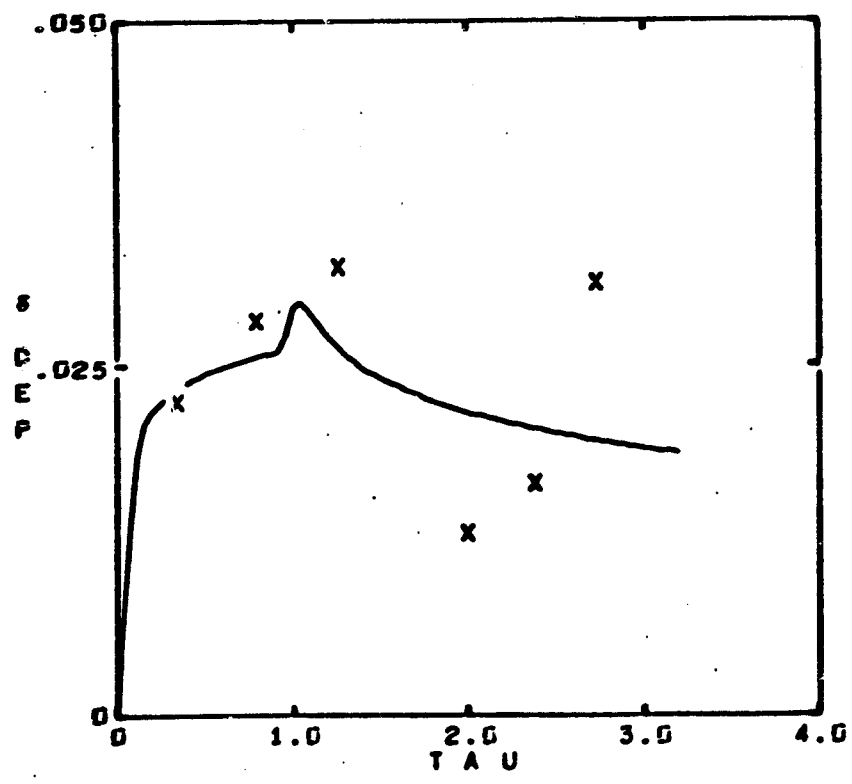
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0546	.0323	.0223
.50	.0806	.0562	.0244
.75	.1079	.0823	.0256
.93	.1256	.0995	.0261
1.0	.1191	.0899	.0292
1.5	.0797	.0555	.0242
2.0	.0673	.0456	.0217
2.5	.0598	.0396	.0202
3.0	.0543	.0352	.0191

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.756	388.11		388.11	1.003	.0133
9H	-0.010	386.82		386.82	1.000	-.0002
10H	0.357	361.78		361.78	0.935	.0646
11H	0.791	273.17	0.158 +.583	273.73	0.708	.1148
12H	1.269	209.10	0.392 -.915	215.43	0.557	.0962
13H	1.996	178.65	0.889 -.086	190.38	0.492	.0587
14H	2.377	182.24	0.471 -.846	189.37	0.490	.0574
15H	2.722	195.72	0.153 +.366	197.99	0.512	.0686
16H	3.489	251.41	0.000 +.739	251.41	0.650	-.0360







PHOTOGRAPH NOT AVAILABLE

234 (4D6) ISIDORUS A

LAMBDA=33.18 E BETA= 8.01 S XI=+.5419 ETA=-.1393 L+PL CODE = 45143 ALBEDO =.1108

13H FLAT MOON DATA
FM=.03982 FM'=.04383

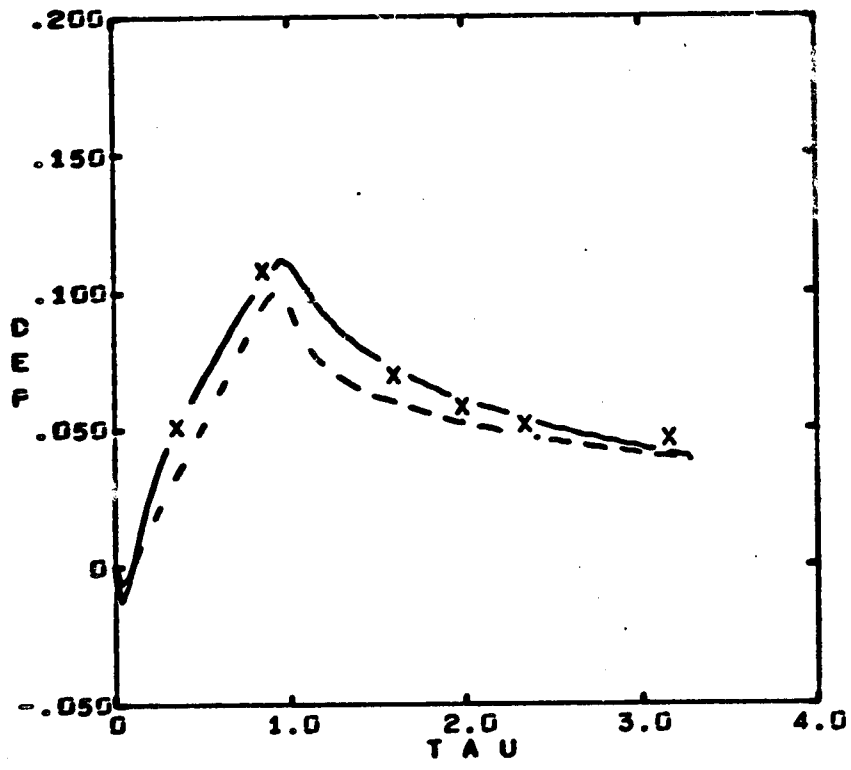
INITIAL TEMPERATURE 383.36
TAU-END OF TOTALITY 3.308

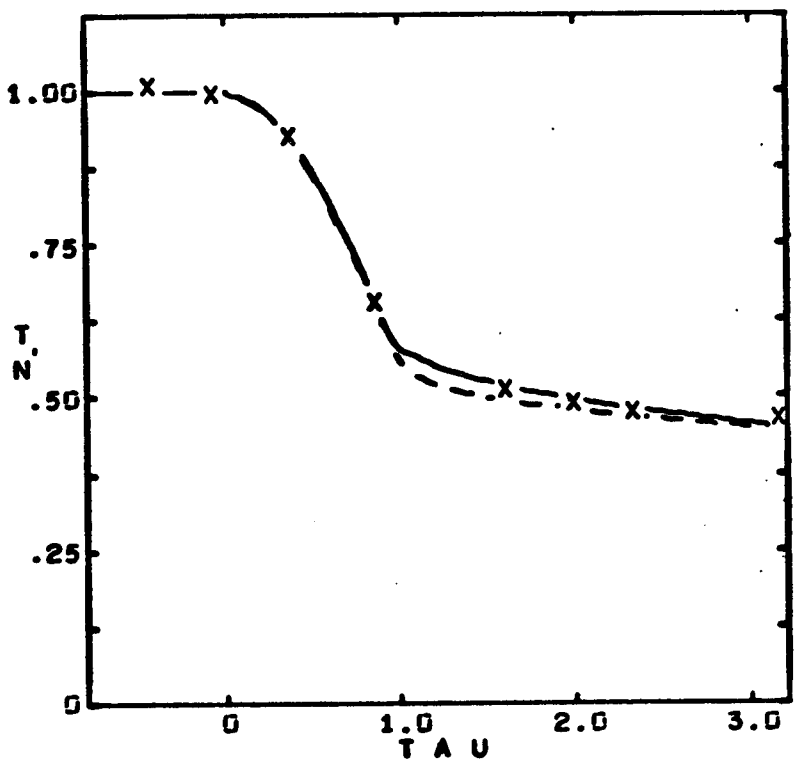
DIFFERENTIAL ENERGY DATA

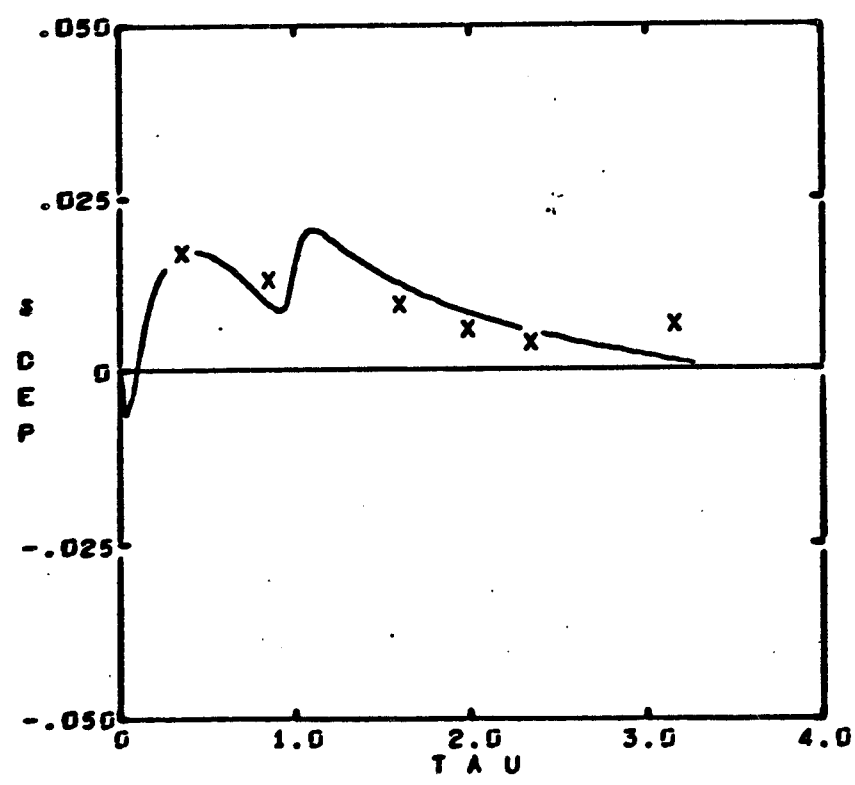
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0325	.0190	.0135
.50	.0670	.0500	.0170
.75	.0944	.0823	.0121
.93	.1113	.1040	.0073
1.0	.1103	.0949	.0154
1.5	.0757	.0620	.0137
2.0	.0605	.0523	.0082
2.5	.0508	.0460	.0048
3.0	.0434	.0413	.0021

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.199	386.64			386.64	1.009	.0347
9H	-0.444	388.32			388.32	1.013	.0528
10H	-0.071	382.38			382.38	0.997	-.0102
11H	0.372	355.02			355.02	0.926	.0510
12H	0.855	248.39	0.905	-.688	251.37	0.656	.1079
13H	1.503	195.17	0.200	-.452	196.68	0.513	.0693
14H	1.981	182.56	0.643	+.981	188.47	0.492	.0584
15H	2.330	179.90	0.388	-.391	183.11	0.478	.0520
16H	3.158	169.69	0.657	+.690	178.16	0.465	.0466







PHOTOGRAPH NOT AVAILABLE

235 (4D7) ISIDORUS C

LAMBDA=34.08 E BETA= 4.26 S XI=+.5588 ETA=-.0742 L+PL CODE = 45057 ALBEDO =.1160

13H FLAT MOON DATA
FM=.05591 FM'=.07464

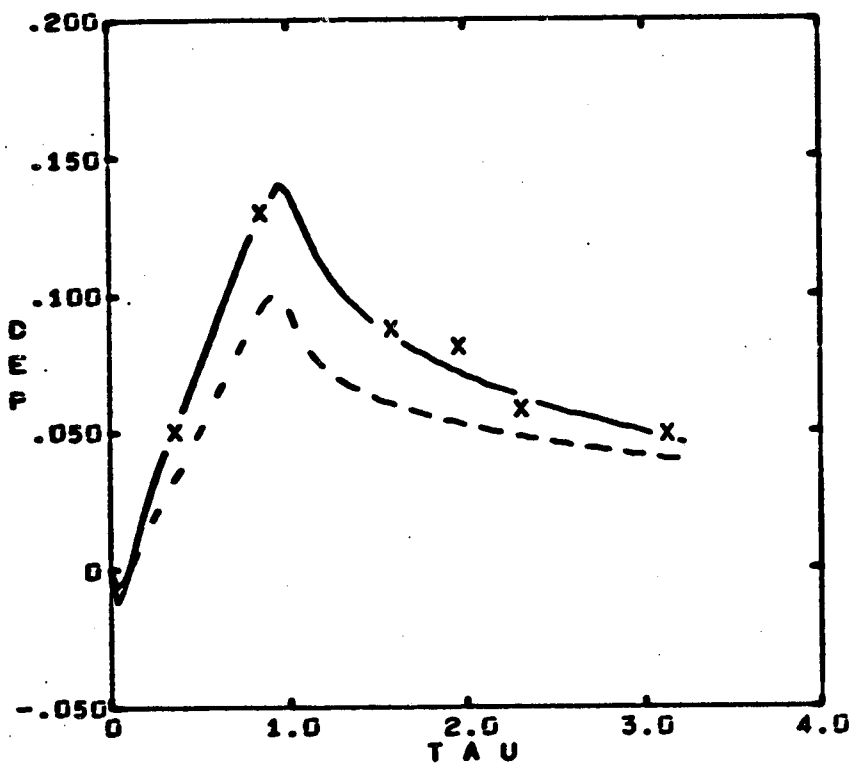
INITIAL TEMPERATURE 383.49
TAU-END OF TOTALITY 3.252

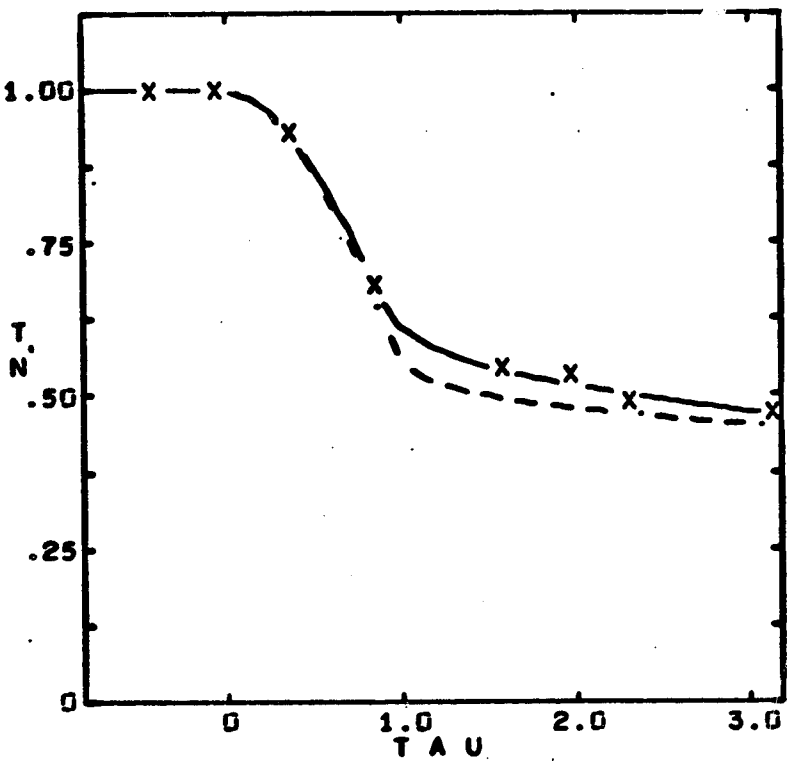
DIFFERENTIAL ENERGY DATA

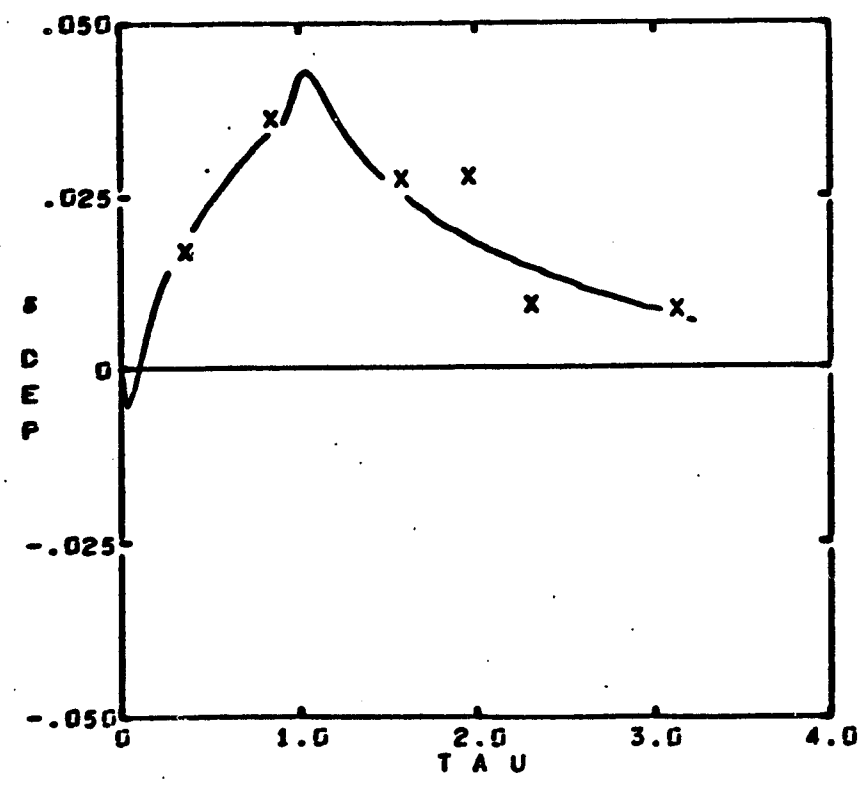
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0312	.0188	.0124
.50	.0740	.0501	.0239
.75	.1142	.0825	.0317
.93	.1405	.1043	.0362
1.0	.1373	.0952	.0421
1.5	.0892	.0623	.0269
2.0	.0708	.0526	.0182
2.5	.0589	.0463	.0126
3.0	.0500	.0415	.0085

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.192	385.33			385.33	1.005	.0194
9H	-0.444	383.15			383.15	0.999	-.0035
10H	-0.074	383.43			383.43	1.000	-.0006
11H	0.363	356.22			356.32	0.929	.0499
12H	0.843	261.03	0.094	-.693	261.60	0.682	.1300
13H	1.574	201.58	0.396	-.139	208.78	0.544	.0879
14H	1.960	199.25	0.273	+.724	204.67	0.534	.0811
15H	2.306	185.48	0.361	+.831	186.10	0.491	.0579
16H	3.124	177.14	0.634	+.846	180.46	0.471	.0491







PHOTOGRAPH NOT AVAILABLE

236 (4C8) ISIDORUS E

LAMBDA=32.61 E BETA= 5.37 S XI=+.5366 ETA=-.0936 L+FL CODE = 45039 ALBEDO =.1194

13H FLAT MOON DATA
FM=.00966 FM'=.01272

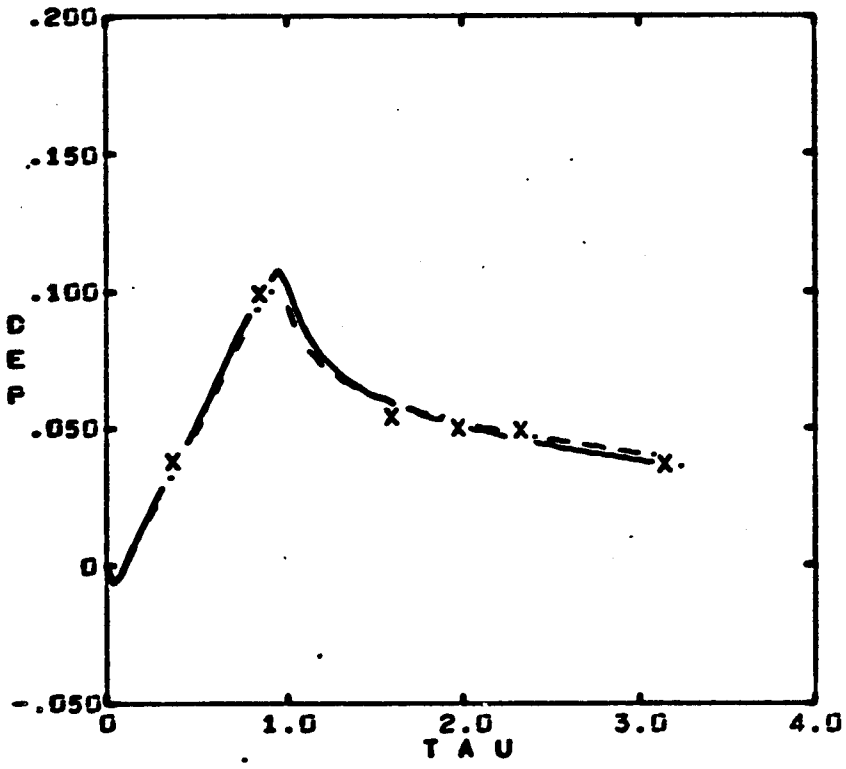
INITIAL TEMPERATURE 384.78
TAU-END OF TOTALITY 3.271

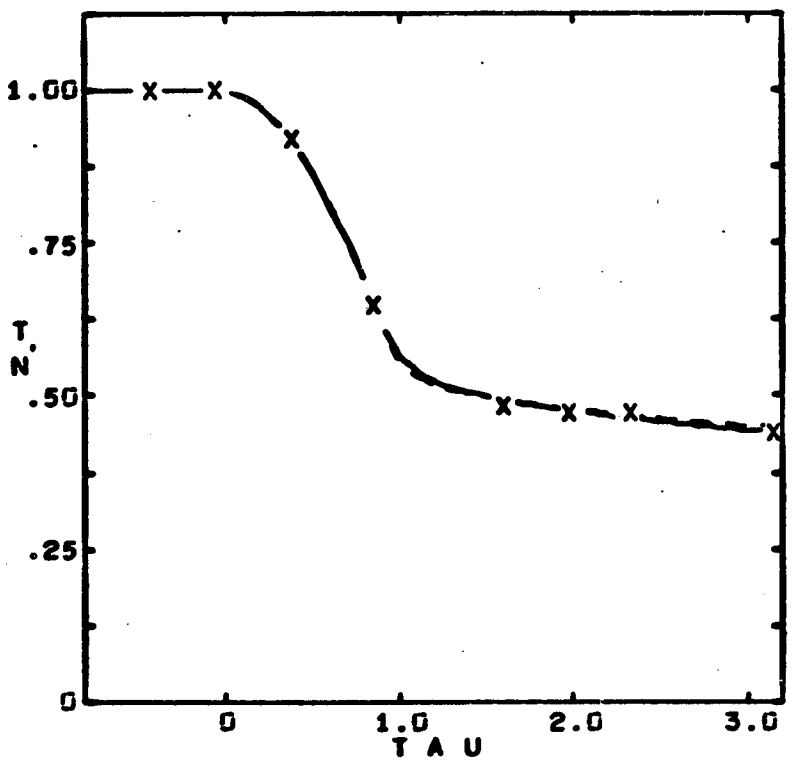
DIFFERENTIAL ENERGY DATA

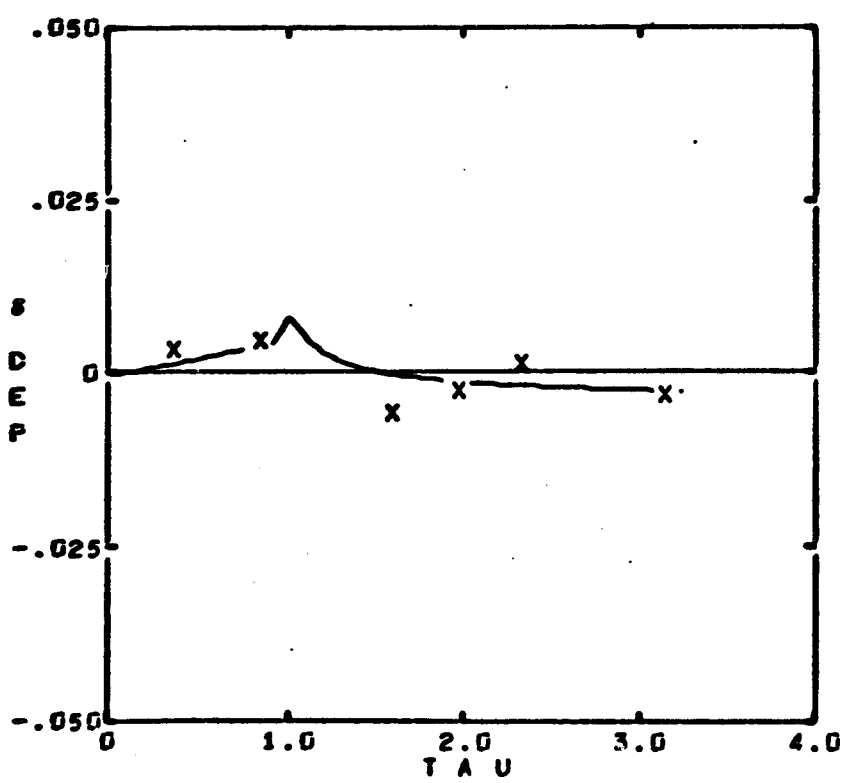
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0198	.0190	.0008
.50	.0520	.0500	.0020
.75	.0856	.0822	.0034
.93	.1081	.1038	.0043
1.0	.1025	.0947	.0078
1.5	.0620	.0618	.0002
2.0	.0508	.0521	-.0013
2.5	.0438	.0458	-.0020
3.0	.0385	.0411	-.0026

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.188	387.62		387.62	1.007	.0299
9H	-0.437	384.82		384.82	1.000	.0004
10H	-0.066	384.62		384.62	1.000	-.0017
11H	0.373	354.28		354.28	0.921	.0376
12H	0.854	249.26	0.000 +.994	249.26	0.648	.0989
13H	1.588	184.03	1.153 +.293	185.41	0.482	.0539
14H	1.974	180.09	0.792 +.511	181.82	0.473	.0499
15H	2.321	181.15	0.156 -.043	181.31	0.471	.0493
16H	3.141	168.45	0.000 -.017	168.45	0.438	.0367







PHOTOGRAPH NOT AVAILABLE

237 (169) JANSEN 6

LAMBDA=26.66 E BETA=10.67 N XI=+.4410 ETA=+.1851 L+FL CODE = 14148 ALBEDO =.0725

13H FLAT MOON DATA
FM=.10959 FM'=.13776

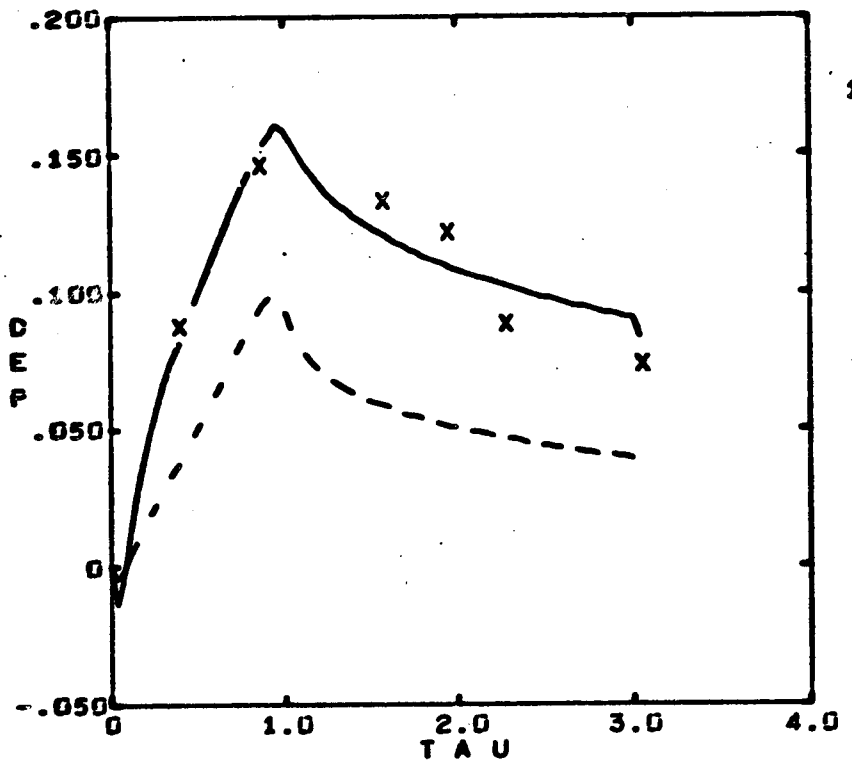
INITIAL TEMPERATURE 389.85
TAU-END OF TOTALITY 3.025

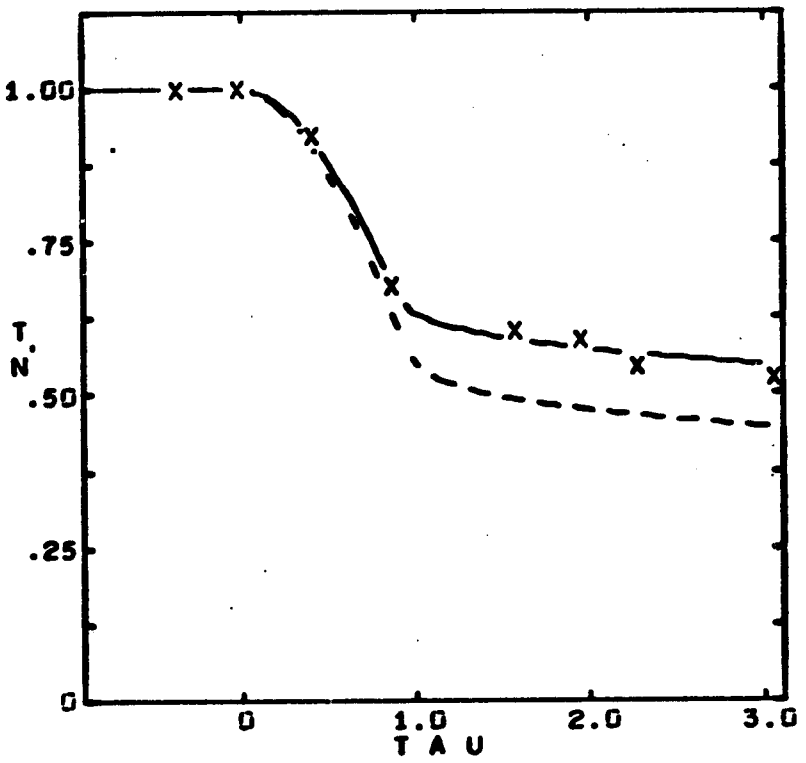
DIFFERENTIAL ENERGY DATA

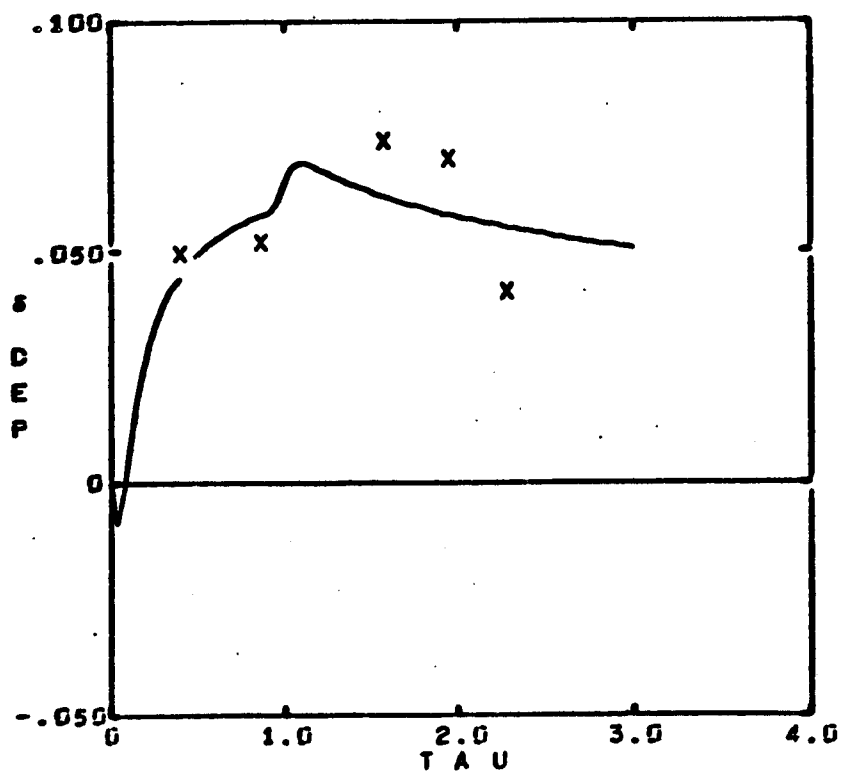
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0517	.0200	.0317
.50	.0991	.0498	.0493
.75	.1372	.0812	.0560
.93	.1607	.1023	.0584
1.0	.1586	.0932	.0654
1.5	.1231	.0603	.0628
2.0	.1080	.0506	.0574
2.5	.0981	.0444	.0537
3.0	.0904	.0397	.0507

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.096	391.37		391.37	1.004	.0157
9H	-0.377	390.22		390.22	1.001	.0038
10H	-0.019	389.81		389.81	1.000	-.0005
11H	0.402	359.50		359.50	0.922	.0875
12H	0.864	263.09	0.183 +.293	264.39	0.678	.1462
13H	1.570	224.33	0.354 +.409	235.34	0.604	.1328
14H	1.942	225.68	0.169 +.781	230.33	0.591	.1218
15H	2.274	209.03	0.189 -.083	212.47	0.545	.0882
16H	3.051	205.26	0.178 -.968	206.02	0.528	.0738







PHOTOGRAPH
NOT
AVAILABLE

238 (1H1) JANSEN C

LAMBDA=29.18 E BETA=16.22 N XI=+.4681 ETA=+.2794 L+PL CODE = 14267 ALBEDO =.0601

13H FLAT MOON DATA
FM=.03625 FM'=.03625

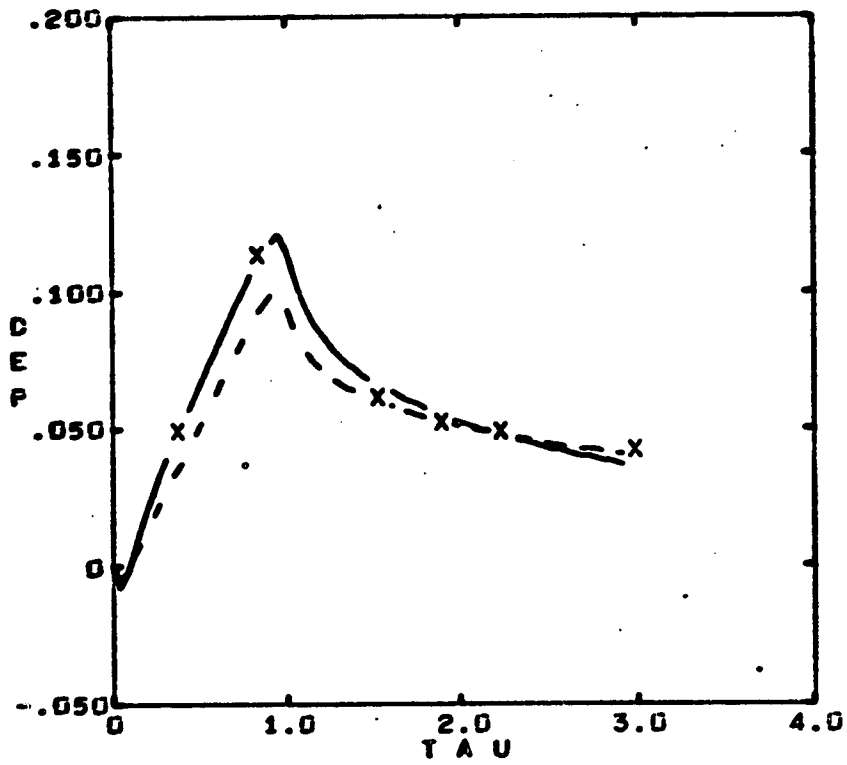
INITIAL TEMPERATURE 390.27
TAU-END OF TOTALITY 2.923

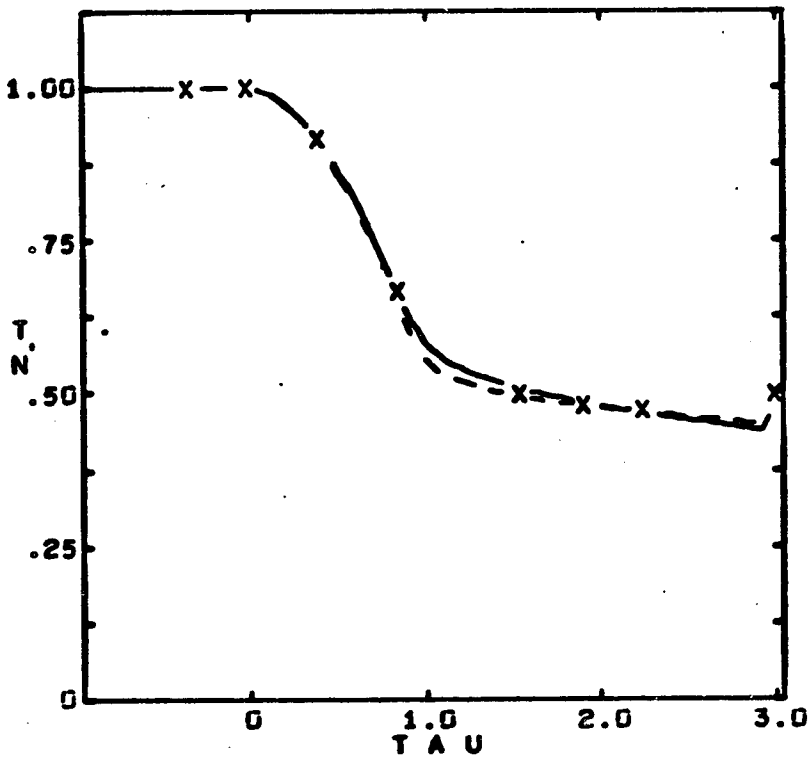
DIFFERENTIAL ENERGY DATA

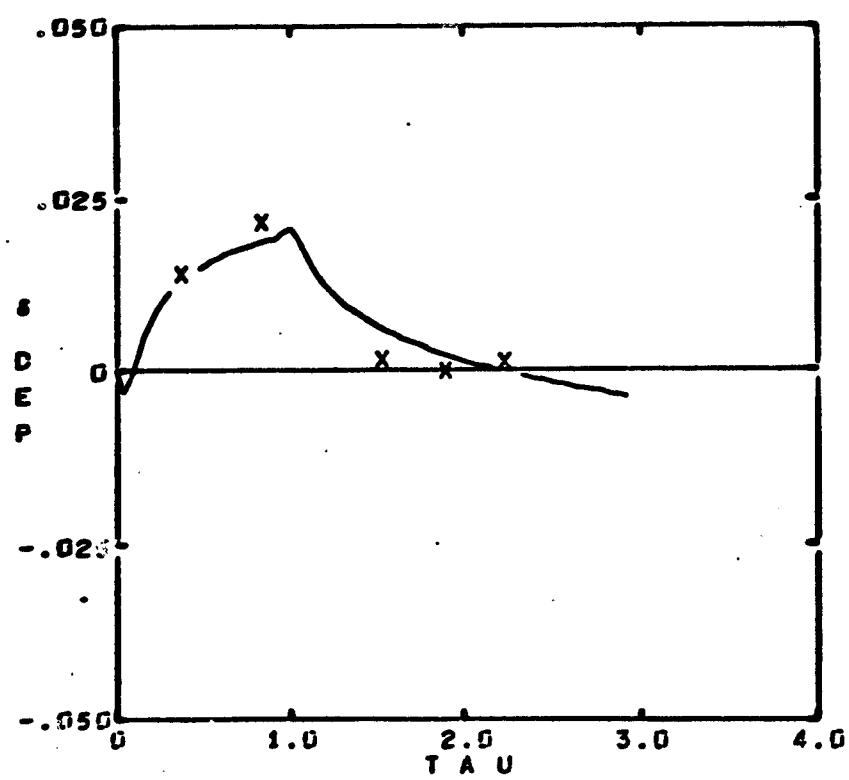
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0288	.0196	.0092
.50	.0650	.0498	.0152
.75	.0995	.0815	.0180
.93	.1220	.1028	.0192
1.0	.1144	.0937	.0207
1.5	.0674	.0608	.0066
2.0	.0526	.0511	.0015
2.5	.0433	.0449	-.0016

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.089	391.36		391.36	1.003	.0113
9H	-0.382	389.95		389.95	0.999	-.0033
10H	-0.031	390.26		390.26	1.000	-.0001
11H	0.383	357.86		357.86	0.917	.0495
12H	0.839	260.23	0.094 +.224	260.55	0.668	.1137
13H	1.531	194.49	0.000 +.079	194.49	0.496	.0617
14H	1.897	186.99	0.000 +.145	186.99	0.479	.0527
15H	2.225	184.22	0.000 +.086	184.22	0.472	.0497
16H	2.985	191.38	0.293 -.744	193.72	0.496	.0430







PHOTOGRAPH NOT AVAILABLE

239 (1H2) JANSEN C

LAMBDA=28.43 E BETA=15.71 N XI=+.4583 ETA=+.2707 L+FL CODE = 14257 ALBEDO =.0615

13H FLAT MOON DATA
FM=.04824 FM'=.04928

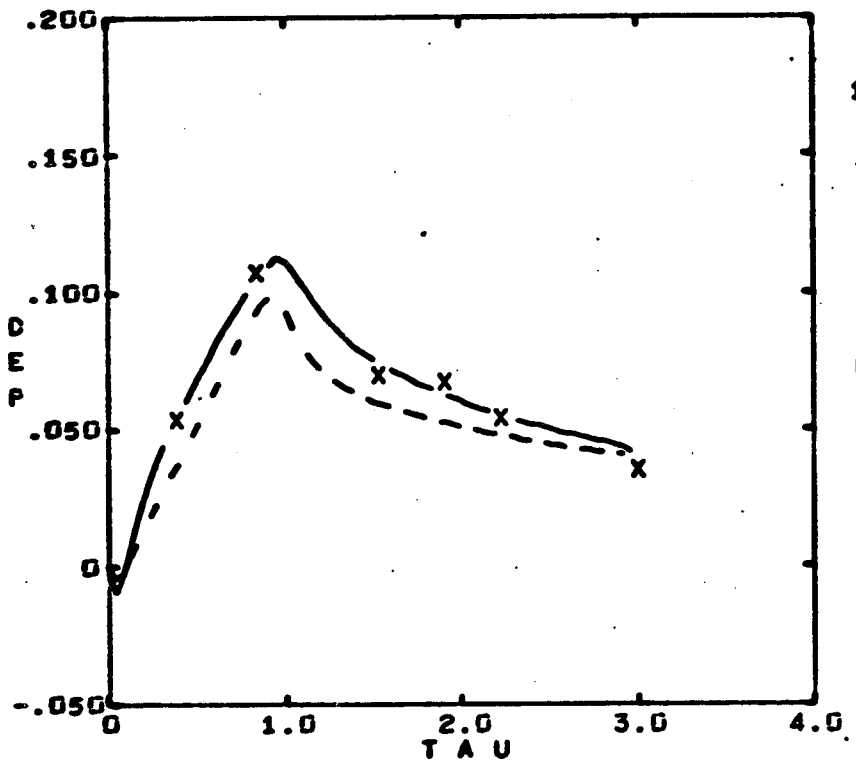
INITIAL TEMPERATURE 390.22
TAU-END OF TOTALITY 2.933

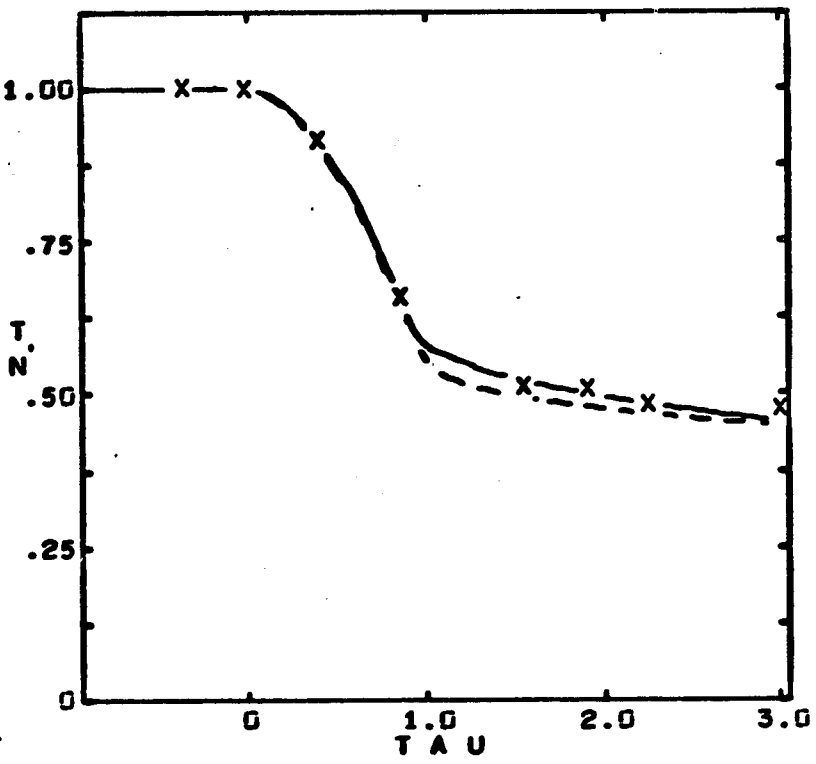
DIFFERENTIAL ENERGY DATA

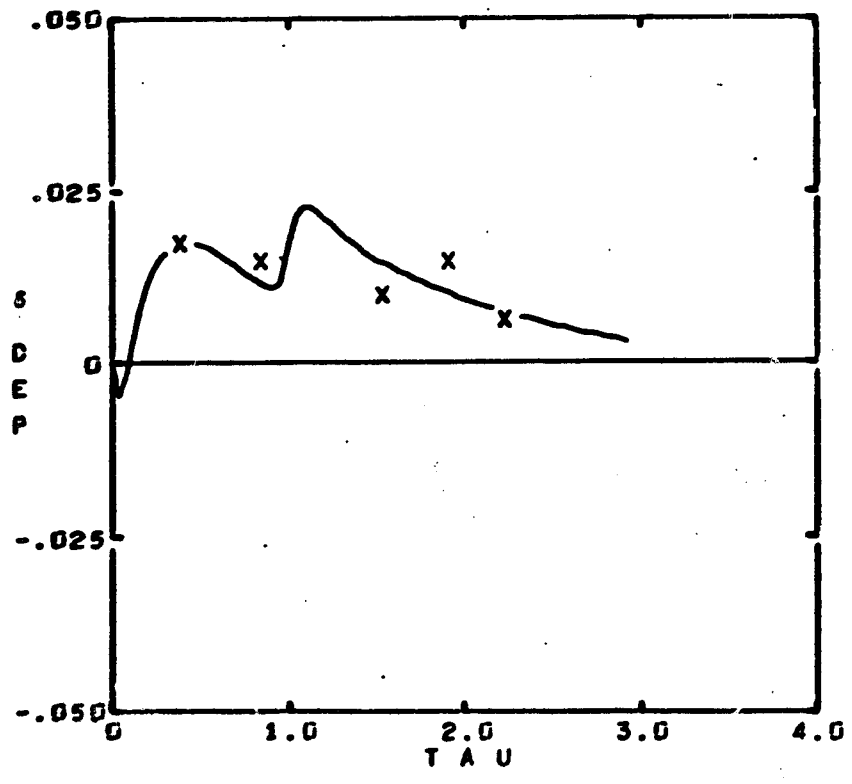
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0336	.0197	.0139
.50	.0671	.0498	.0173
.75	.0949	.0814	.0135
.93	.1123	.1026	.0097
1.0	.1112	.0935	.0177
1.5	.0759	.0606	.0153
2.0	.0603	.0510	.0093
2.5	.0503	.0447	.0056

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.087	391.95		391.95	1.004	.0179
9H	-0.378	391.18		391.18	1.002	.0099
10H	-0.027	390.11		390.11	1.000	-.0011
11H	0.388	357.53		357.53	0.916	.0536
12H	0.845	256.68	0.000 -.080	256.68	0.658	.1071
13H	1.538	199.37	0.088 -.424	200.32	0.513	.0694
14H	1.905	196.17	0.270 +.705	198.79	0.509	.0674
15H	2.232	186.05	0.328 +.040	188.35	0.483	.0543
16H	2.994	186.27	0.000 -.814	186.27	0.477	.0351







PHOTOGRAPH NOT AVAILABLE

240 (1H3) JANSEN E

LAMBDA=27.83 E BETA=14.47 N XI=+.4520 ETA=+.2498 L+PL CODE = 14254 ALBEDO =.0638

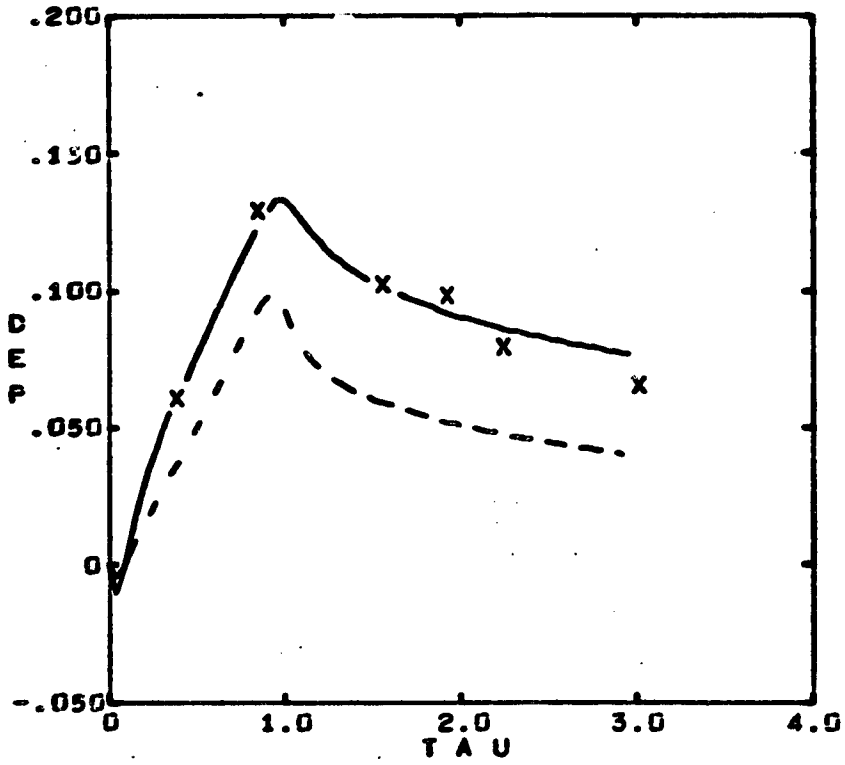
13H FLAT MOON DATA
FM=.09604 FM'=.10221

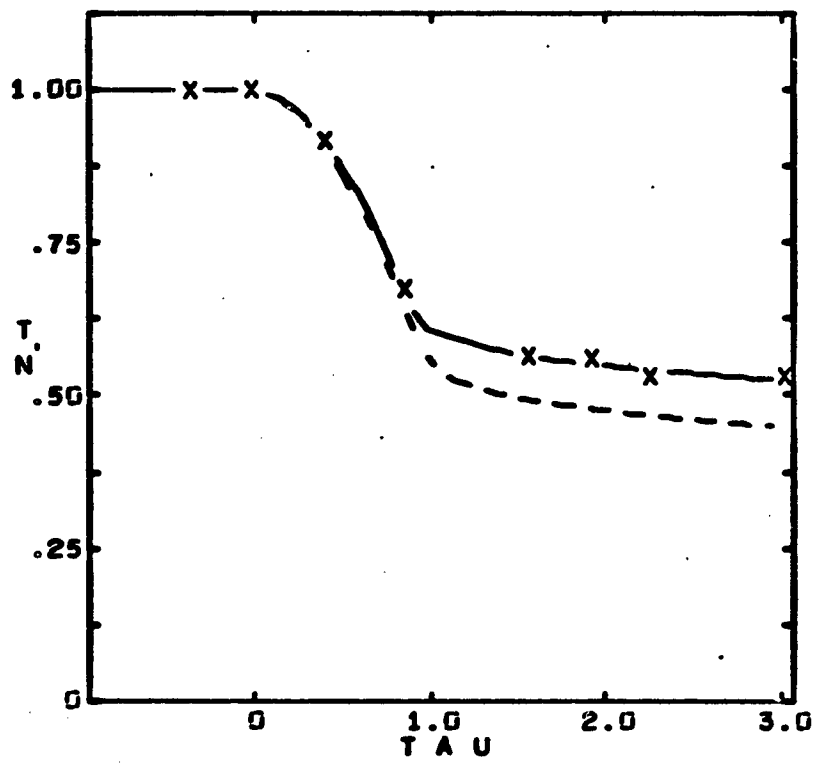
INITIAL TEMPERATURE 390.53
TAU-END OF TOTALITY 2.956

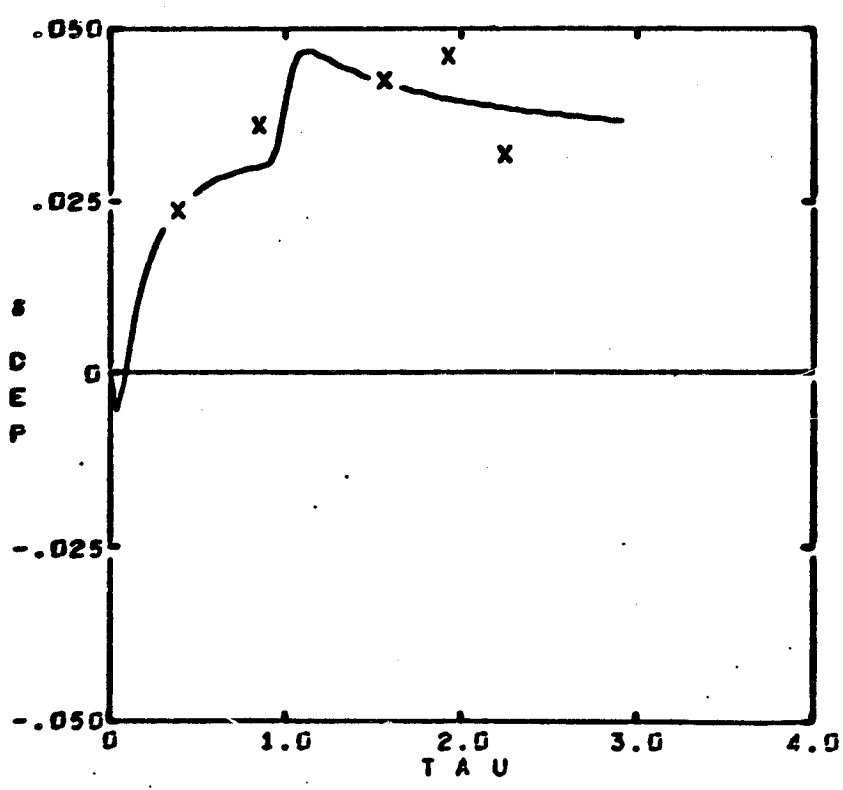
DIFFERENTIAL ENERGY DATA

ECLIPSE TEMPERATURE DATA

TAU	DEP	DEP-SMOOTH	δDEP	SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
.25	.0369	.0198	.0171	8H	-1.088	391.69		391.69	1.003	.0120
.50	.0762	.0498	.0264	9H	-0.378	390.49		390.49	1.000	-.0004
.75	.1107	.0813	.0294	10H	-0.024	390.51		390.51	1.000	-.0002
.93	.1327	.1025	.0302	11H	0.393	358.03		358.03	0.917	.0604
1.0	.1328	.0934	.0394	12H	0.851	259.79	0.201 -.997	262.54	0.672	.1290
1.5	.1031	.0605	.0426	13H	1.547	218.22	0.111 +.202	220.65	0.565	.1019
2.0	.0903	.0508	.0395	14H	1.915	215.67	0.174 +.525	218.62	0.560	.0982
2.5	.0823	.0446	.0377	15H	2.244	199.99	0.303 +.138	207.29	0.531	.0794
3.0	.0763	.0399	.0364	16H	3.010	200.33	0.347 +.793	207.34	0.531	.0658







PHOTOGRAPH
NOT
AVAILABLE

241 (1H) JANSEN F

LAMBDA=31.10 E BETA=12.61 N XI=+.5041 ETA=+.2183 L+PL CODE = 15201 ALBEDO =.0670

13H FLAT MOON DATA
FM=.08887 FM'=.09850

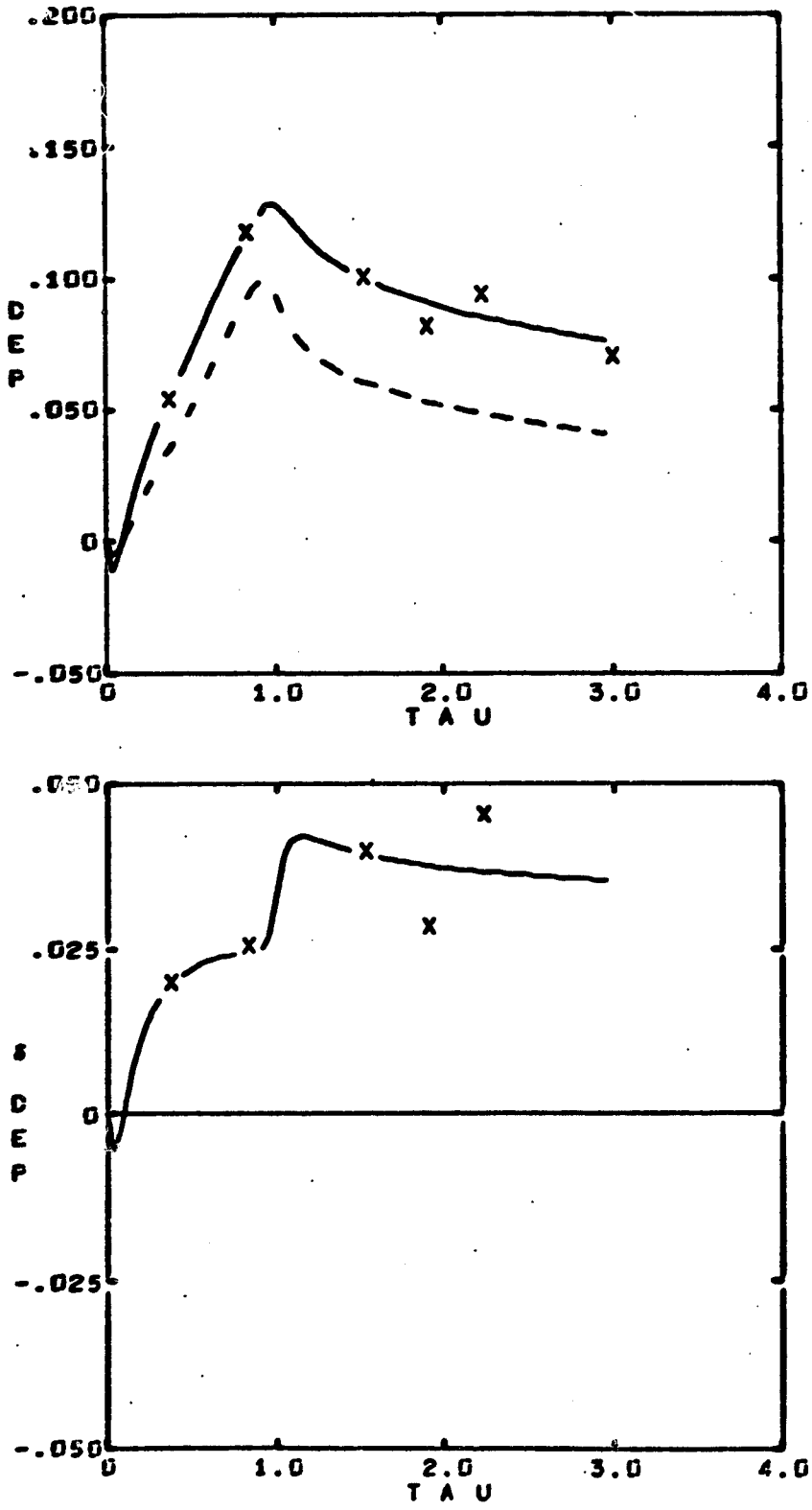
INITIAL TEMPERATURE 388.47
TAU-END OF TOTALITY 2.983

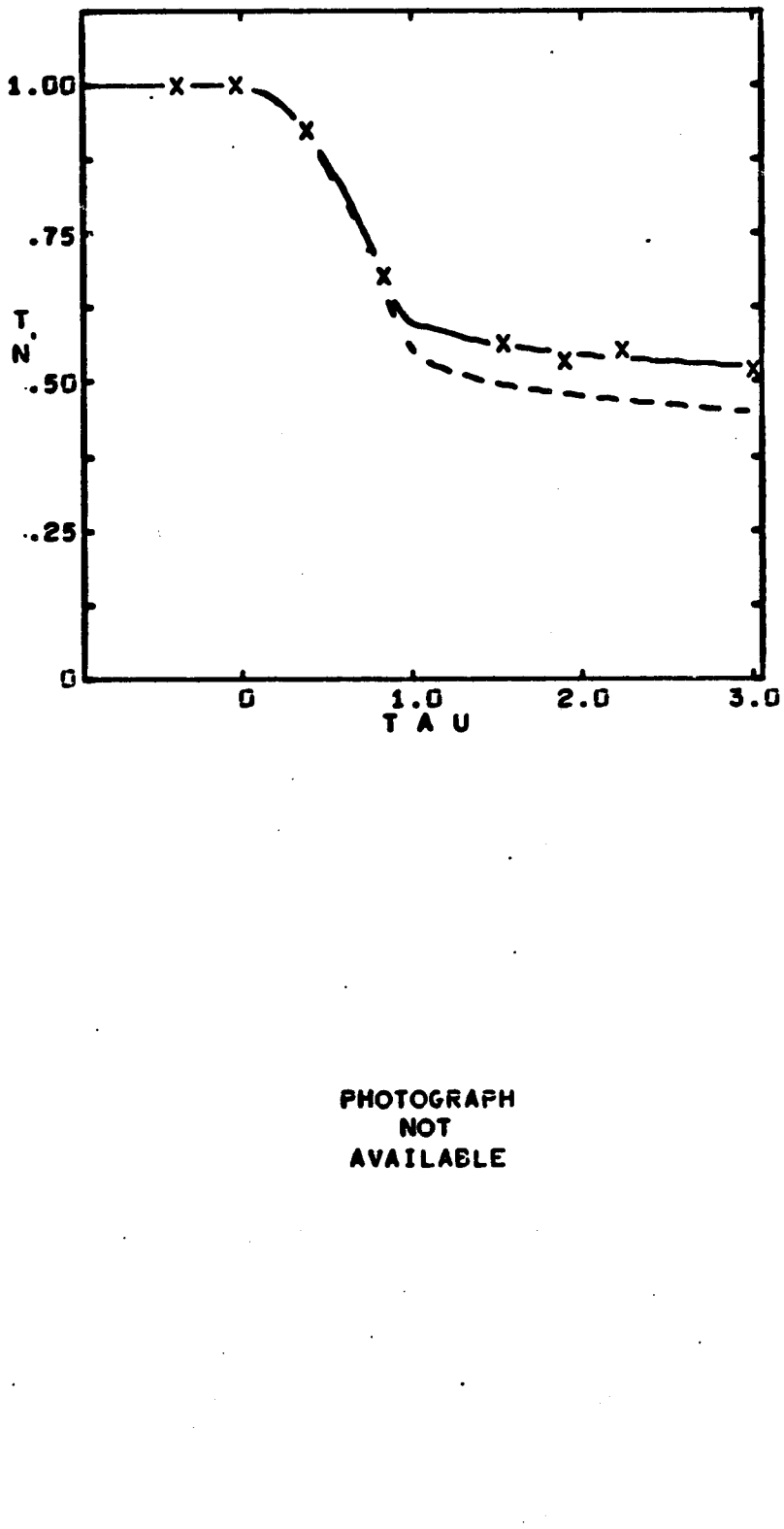
DIFFERENTIAL ENERGY DATA

TAU	DEP	DEP-SMOOTH	δDEP
.25	.0333	.0193	.0140
.50	.0719	.0499	.0220
.75	.1060	.0818	.0242
.93	.1278	.1033	.0245
1.0	.1281	.0942	.0339
1.5	.1008	.0613	.0395
2.0	.0890	.0516	.0374
2.5	.0815	.0454	.0361
3.0	.0760	.0407	.0353

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.114	390.10			390.10	1.004	.0169
9H	-0.400	388.73			388.73	1.001	.0028
10H	-0.045	388.37			388.37	1.000	-.0010
11H	0.374	358.64			358.64	0.923	.0543
12H	0.833	260.63	0.383	-.038	262.60	0.676	.1173
13H	1.533	214.89	0.229	+.905	218.59	0.563	.1003
14H	1.903	201.21	0.273	+.737	207.71	0.535	.0817
15H	2.233	214.24	0.087	+.541	214.99	0.553	.0938
16H	3.005	199.43	0.167	+.839	202.14	0.520	.0700





PHOTOGRAPH
NOT
AVAILABLE

242 (1H5) JANSEN G

LAMBDA=26.01 E BETA= 9.31 N XI=+.4328 ETA=+.1617 L+FL CODE = 14136 ALBEDO =.0597

13H FLAT MOON DATA
FM=.01760 FM'=.01760

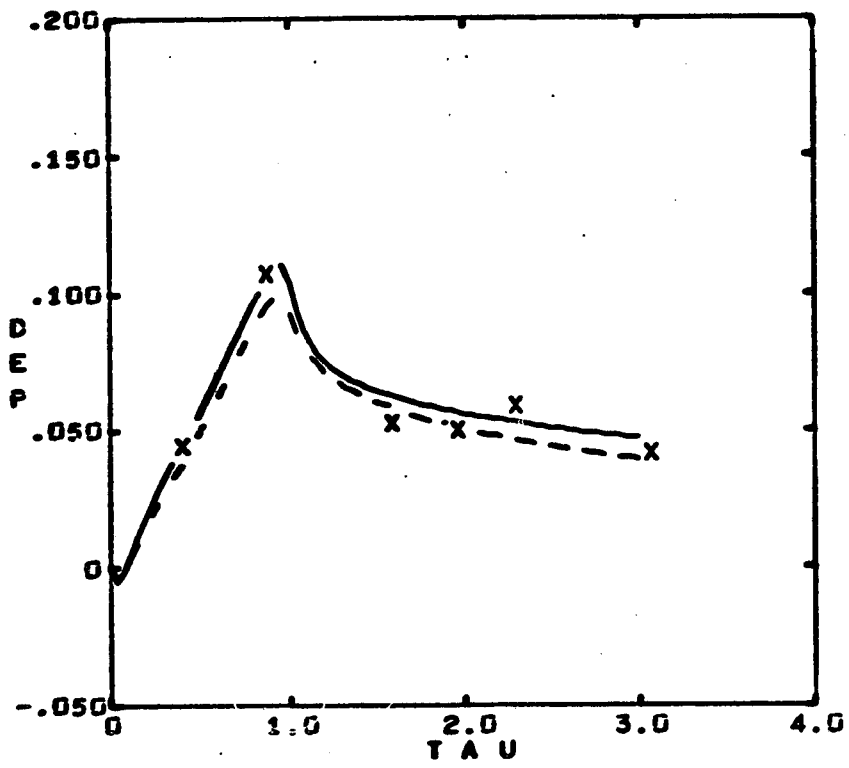
INITIAL TEMPERATURE 393.73
TAU-END OF TOTALITY 3.049

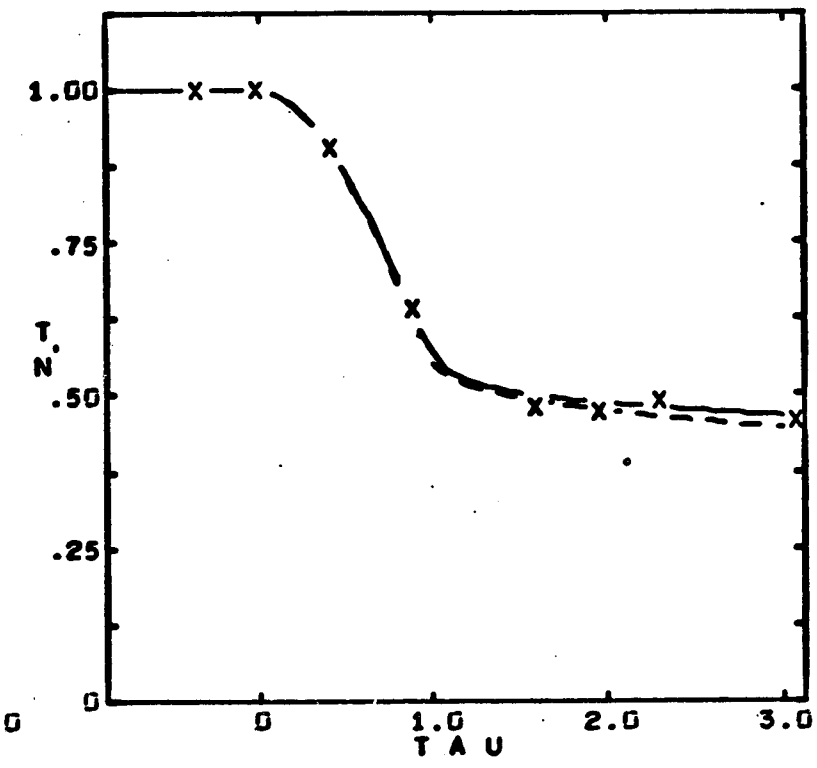
DIFFERENTIAL ENERGY DATA

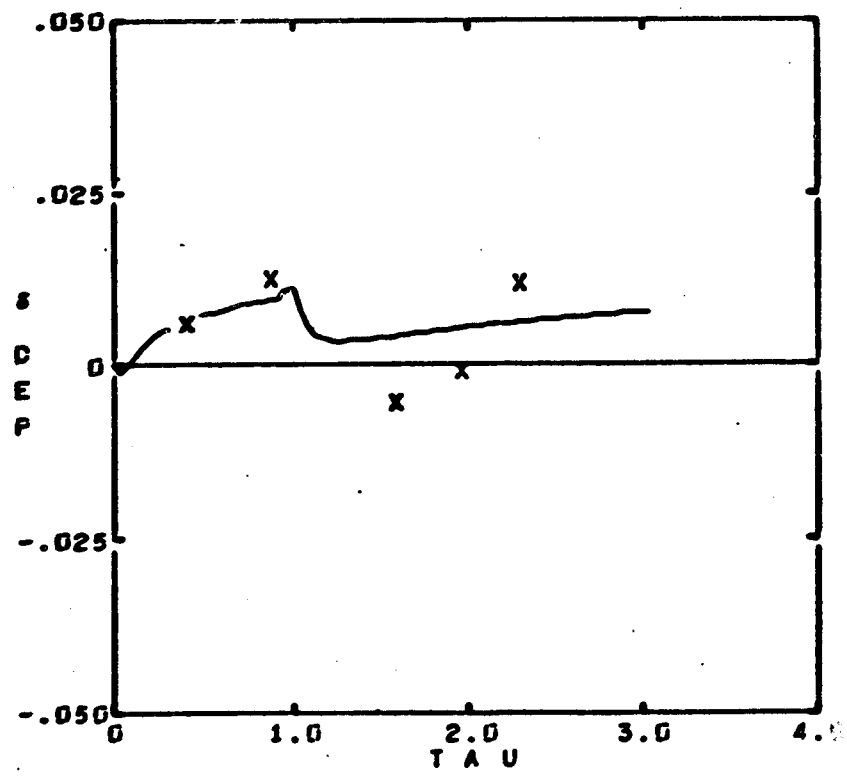
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0245	.0201	.0044
.50	.0571	.0498	.0073
.75	.0901	.0811	.0090
.93	.1120	.1022	.0098
1.0	.1042	.0931	.0111
1.5	.0642	.0601	.0041
2.0	.0560	.0505	.0055
2.5	.0510	.0443	.0067
3.0	.0473	.0396	.0077

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.098	394.38		394.38	1.002	.0066
9H	-0.375	393.63		393.63	1.000	-.0010
10H	-0.017	393.72		393.72	1.000	-.0001
11H	0.407	356.90		356.90	0.906	.0445
12H	0.872	251.73	0.000 +.940	251.73	0.639	.1073
13H	1.580	188.80	0.000 +.546	188.80	0.480	.0529
14H	1.952	186.47	0.000 +.594	186.47	0.474	.0503
15H	2.287	192.89	0.144 -.603	193.78	0.492	.0587
16H	3.067	180.61	0.000 +.853	180.61	0.459	.0421







PHOTOGRAPH NOT AVAILABLE

243 (1H6) JANSEN L

LAMBDA=30.09 E BETA=14.70 N XI=+.4849 ETA=+.2537 L+PL CODE = 14285 ALBEDO =.0623

13H FLAT MOON DATA
FM=.05773 FM'=.05714

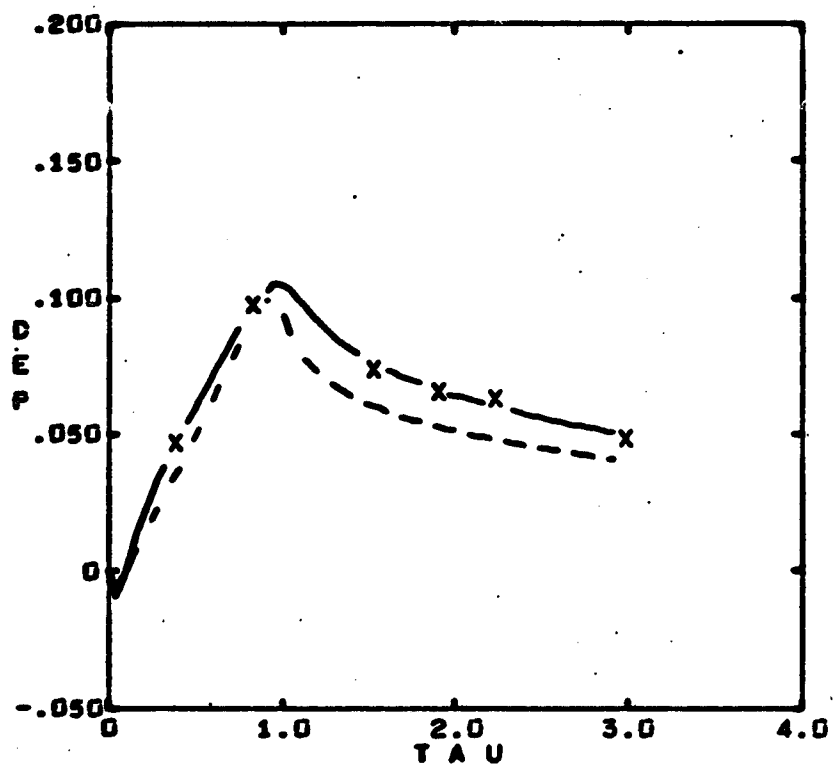
INITIAL TEMPERATURE 390.21
TAU-END OF TOTALITY 2.948

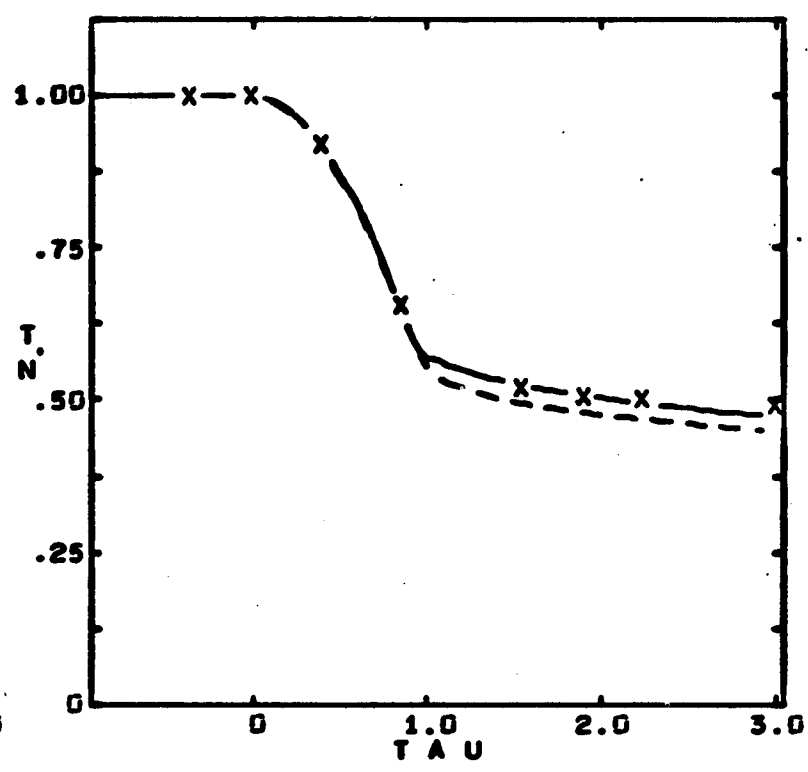
DIFFERENTIAL ENERGY DATA

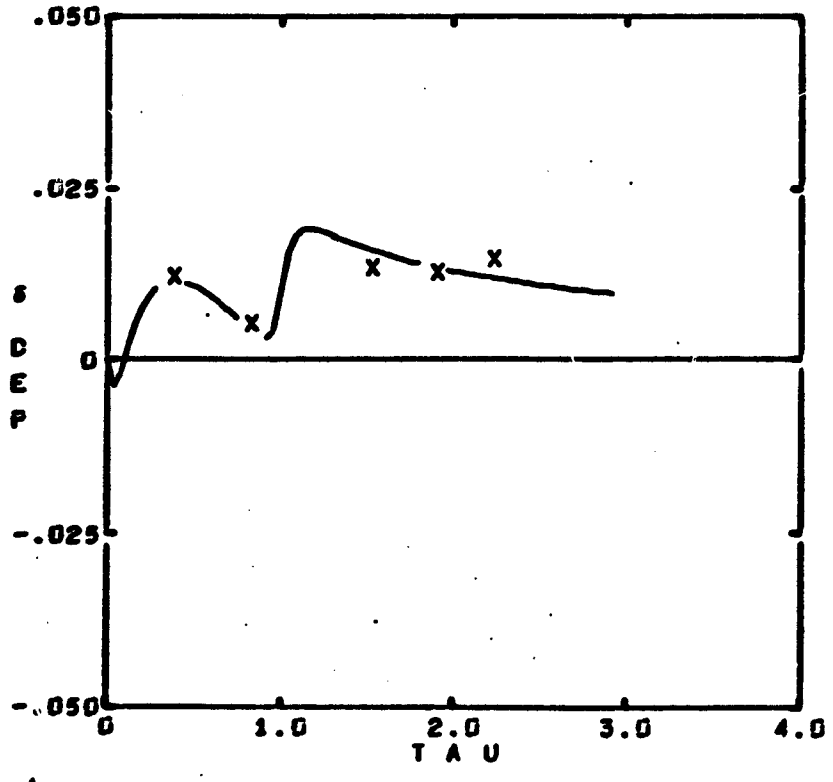
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0291	.0194	.0097
.50	.0607	.0498	.0109
.75	.0878	.0816	.0062
.93	.1050	.1030	.0020
1.0	.1048	.0939	.0109
1.5	.0771	.0610	.0161
2.0	.0643	.0513	.0130
2.5	.0561	.0451	.0110

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.100	391.46		391.46	1.003	.0128
9H	-0.390	390.11		390.11	1.000	-.0010
10H	-0.037	390.18		390.18	1.000	-.0003
11H	0.379	358.35		358.35	0.918	.0470
12H	0.836	255.78	0.000 +.865	255.78	0.655	.0971
13H	1.531	202.82	0.037 -.015	203.35	0.521	.0737
14H	1.899	192.60	0.329 +.516	197.49	0.506	.0656
15H	2.227	194.02	0.138 +.233	195.53	0.501	.0630
16H	2.992	184.70	0.681 -.832	191.61	0.491	.0481







PHOTOGRAPH NOT AVAILABLE

C.6

244 (1H7) JANSEN U

LAMBDA=32.32 E BETA=11.95 N XI=+.5230 ETA=+.2070 L+PL CODE = 15220 ALBEDO =.0601

13H FLAT MOON DATA
FM=.03127 FM'=.03127

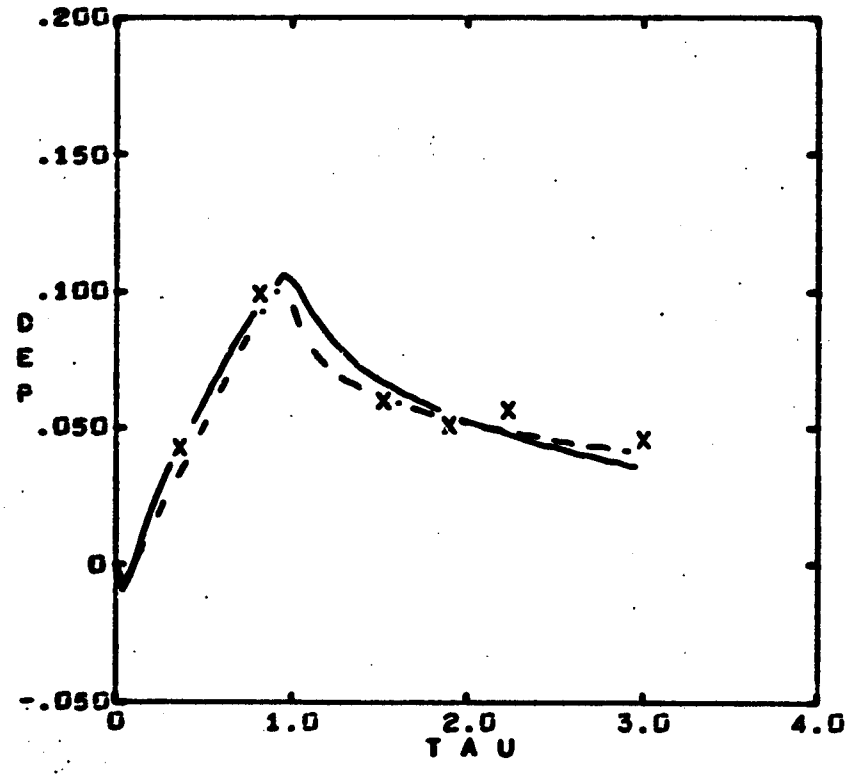
INITIAL TEMPERATURE 388.85
TAU-END OF TOTALITY 2.992

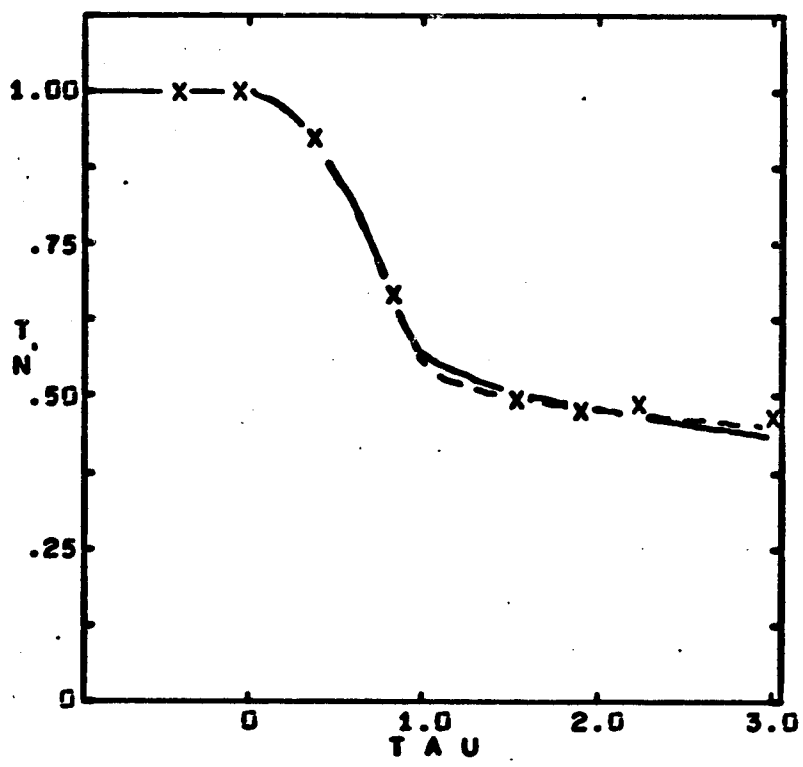
DIFFERENTIAL ENERGY DATA

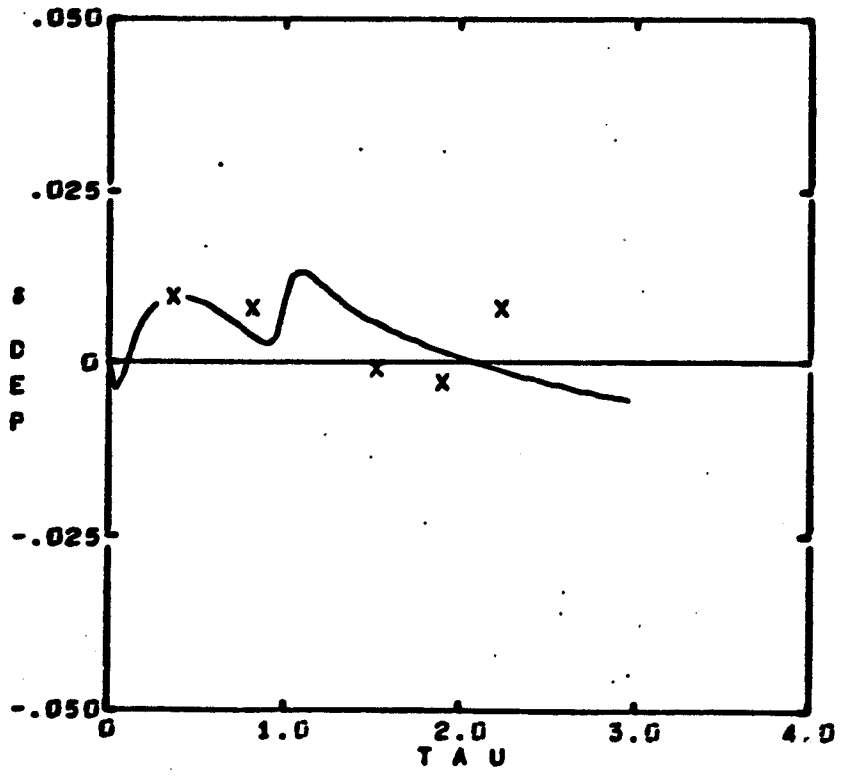
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0270	.0191	.0079
.50	.0592	.0499	.0093
.75	.0875	.0821	.0054
.93	.1056	.1037	.0019
1.0	.1039	.0946	.0093
1.5	.0679	.0617	.0062
2.0	.0526	.0520	.0006
2.5	.0428	.0458	-.0030
3.0	.0355	.0410	-.0055

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.124	390.35		390.35	1.004	.0155
9H	-0.408	388.92		388.92	1.000	.0007
10H	-0.054	388.77		388.77	1.000	-.0008
11H	0.367	358.78		358.78	0.923	.0431
12H	0.826	258.14	0.187 -.217	258.91	0.666	.0992
13H	1.528	192.44	0.000 +.553	192.44	0.495	.0600
14H	1.898	183.15	0.548 +.927	184.58	0.475	.0508
15H	2.229	188.61	0.247 +.888	189.85	0.488	.0568
16H	3.003	181.32	0.000 +.398	181.32	0.466	.0462







PHOTOGRAPH NOT AVAILABLE

245 (1H8) JANSEN T

LAMBDA=33.46 E BETA=11.35 N XI=+.5406 ETA=+.1968 L+PL CODE = 15149 ALBEDO =.0582

13H FLAT MOON DATA
FM=.01683 FM'=.01683

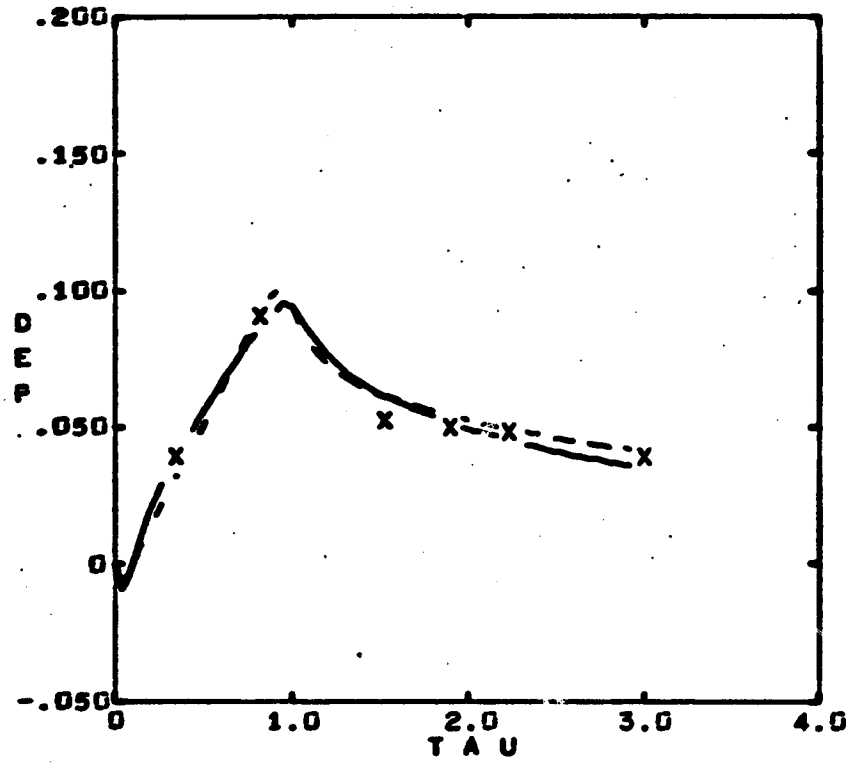
INITIAL TEMPERATURE 389.18
TAU-END OF TOTALITY 3.000

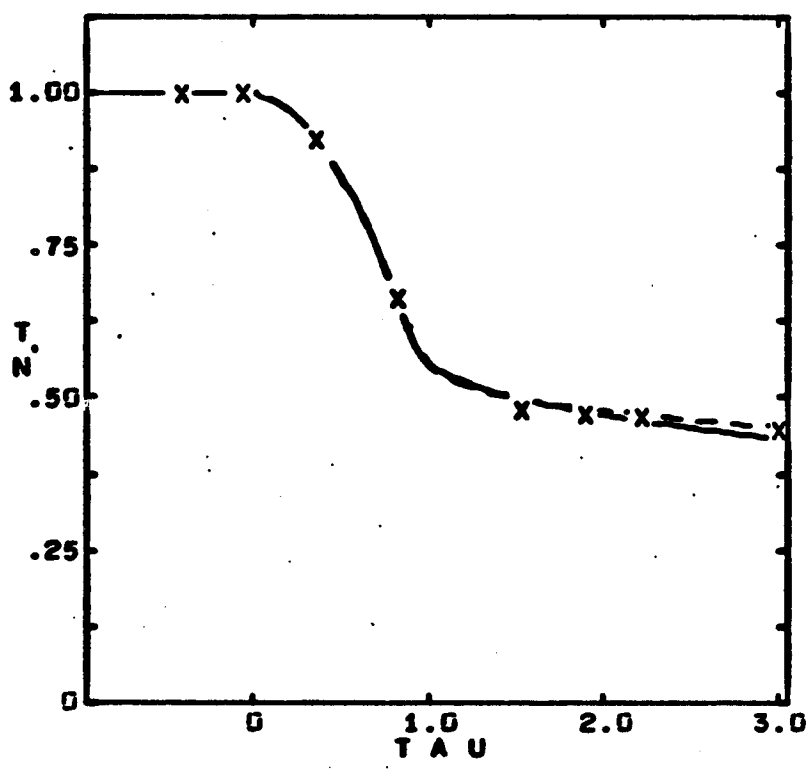
DIFFERENTIAL ENERGY DATA

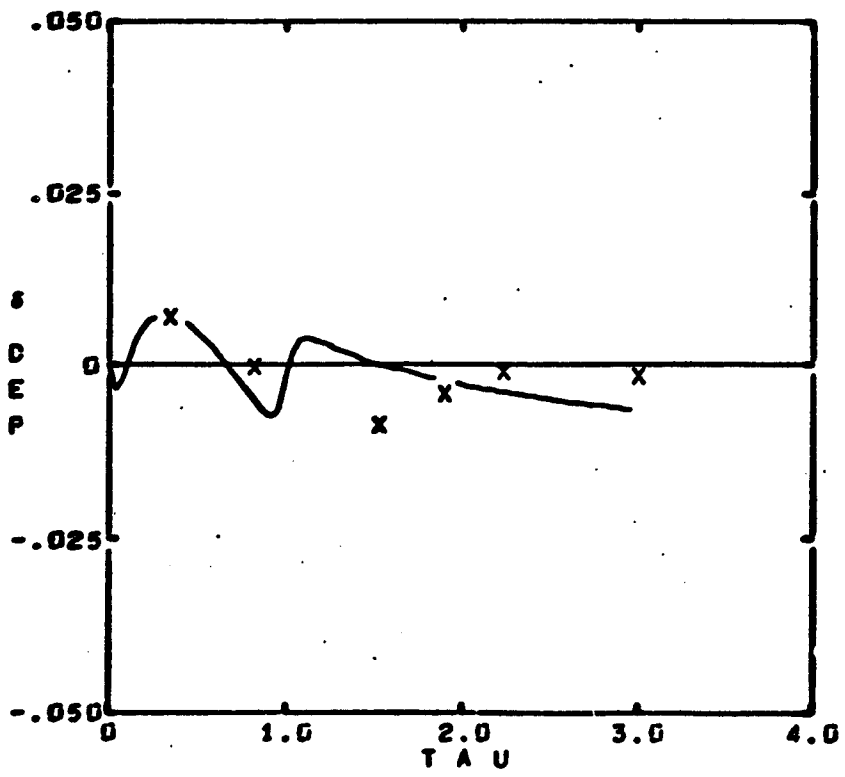
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0256	.0189	.0067
.50	.0550	.0500	.0050
.75	.0798	.0824	-.0026
.93	.0954	.1041	-.0087
1.0	.0938	.0950	-.0012
1.5	.0625	.0621	.0004
2.0	.0496	.0524	-.0028
2.5	.0412	.0461	-.0049

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.133	389.84			389.84	1.002	.0069
9H	-0.416	389.22			389.22	1.000	.0004
10H	-0.061	389.14			389.14	1.000	-.0004
11H	0.360	359.72			359.72	0.924	.0394
12H	0.820	258.18	0.000	-.283	258.18	0.663	.0906
13H	1.523	186.65	0.000	-.171	186.65	0.480	.0529
14H	1.893	183.99	0.000	-.195	183.99	0.473	.0500
15H	2.225	182.56	0.000	-.201	182.56	0.469	.0484
16H	3.000	173.81	0.000	+.385	173.81	0.447	.0398







PHOTOGRAPH NOT AVAILABLE

246 (4D9) KAISER C

LAMBDA= 9.69 E BETA=36.54 S XI=+.1352 ETA=-.5954 L+PL CODE = 41539 ALBEDO =.1697

13H FLAT MOON DATA
FM=.02475 FM'=.02937

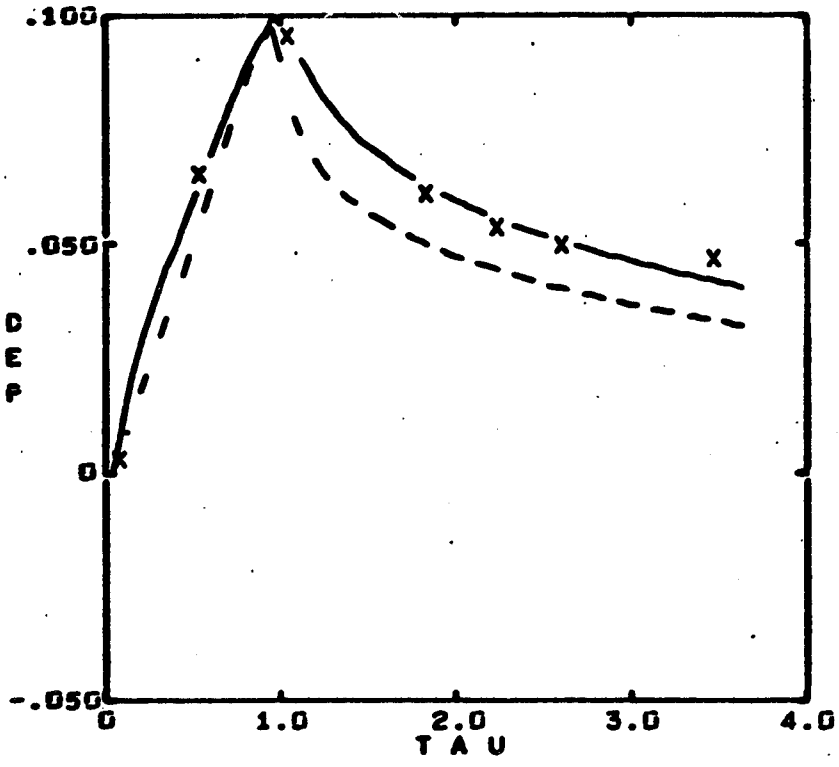
INITIAL TEMPERATURE 372.37
TAU-END OF TOTALITY 3.640

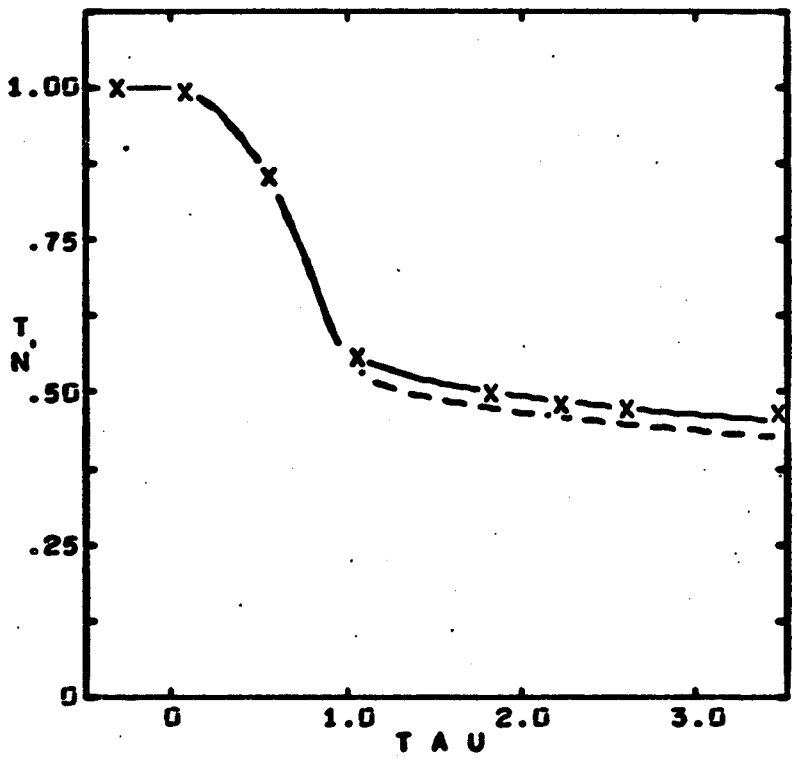
DIFFERENTIAL ENERGY DATA

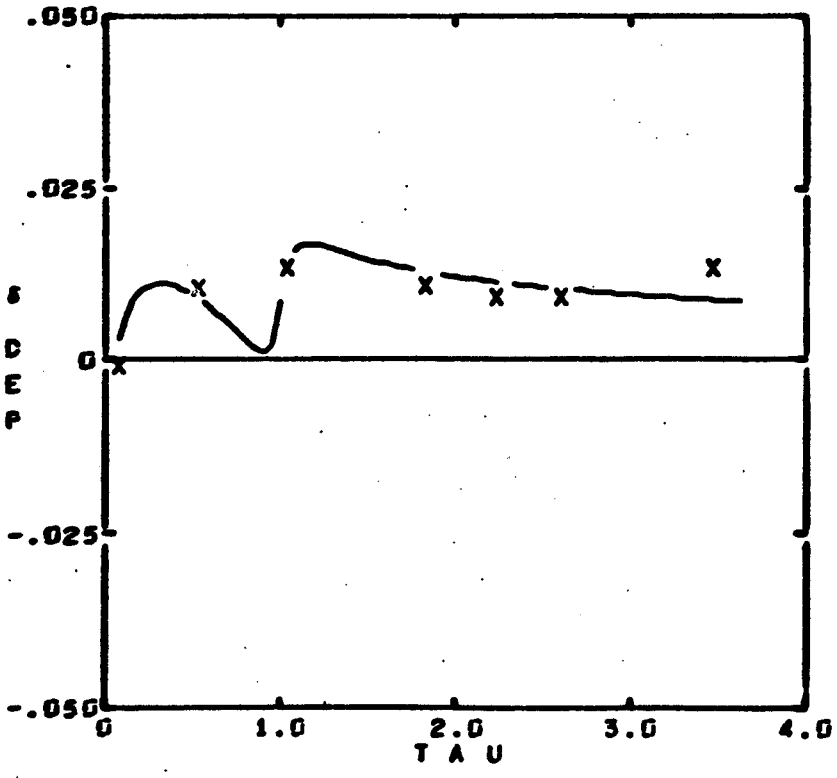
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0331	.0224	.0107
.50	.0594	.0498	.0096
.75	.0836	.0794	.0042
.93	.0992	.0992	.0000
1.0	.0986	.0900	.0086
1.5	.0716	.0570	.0146
2.0	.0594	.0473	.0121
2.5	.0518	.0411	.0107
3.0	.0461	.0366	.0095

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.110	373.40		373.40	1.003	.0111
9H	-0.313	372.08		372.08	0.999	-.0031
10H	0.078	370.35		370.35	0.995	.0025
11H	0.542	317.57	0.000 -.767	317.57	0.853	.0653
12H	1.050	205.61	0.379 -.014	206.95	0.556	.0954
13H	1.826	183.39	0.260 +.134	185.09	0.497	.0610
14H	2.231	175.89	0.380 +.407	179.04	0.481	.0534
15H	2.600	174.26	0.297 +.713	175.59	0.472	.0494
16H	3.465	171.04	0.312 -.806	172.97	0.464	.0466







PHOTOGRAPH NOT AVAILABLE

247 (2H6) KEPLER

LAMBDA=37.97 W BETA= 8.13 N XI=-.6091 ETA=+.1414 L+PL CODE = 26104 ALBEDO =.1157

13H FLAT MOON DATA
FM=.07247 FM'=.09082

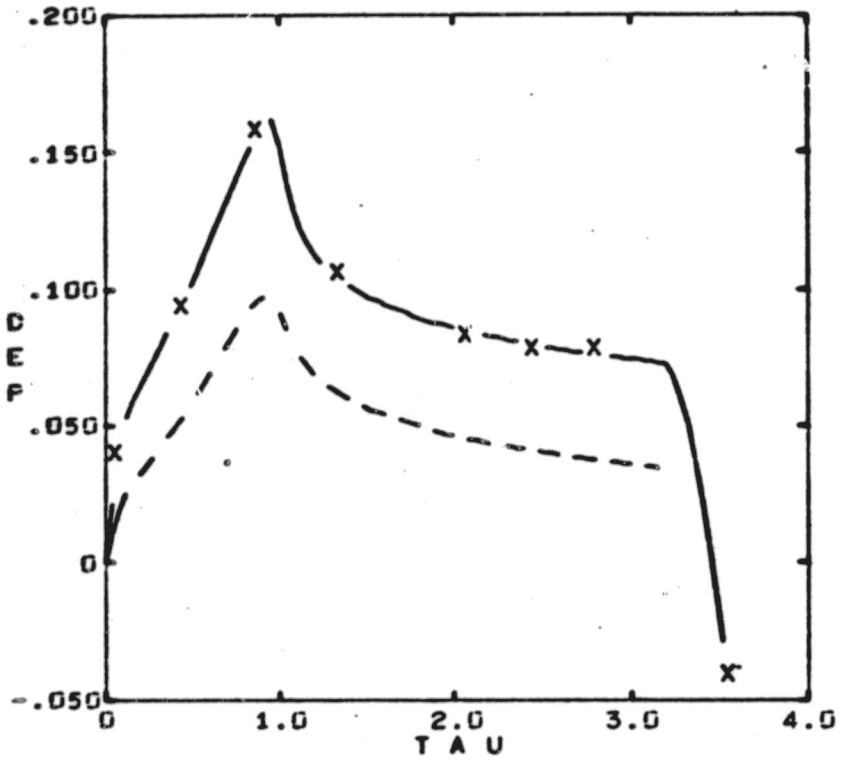
INITIAL TEMPERATURE 375.32
TAU-END OF TOTALITY 3.196

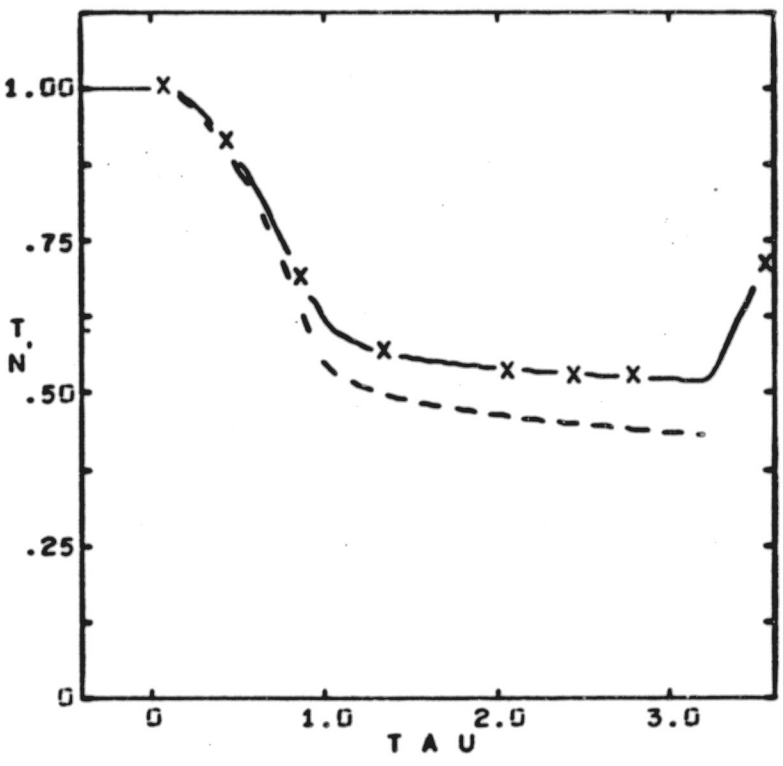
DIFFERENTIAL ENERGY DATA

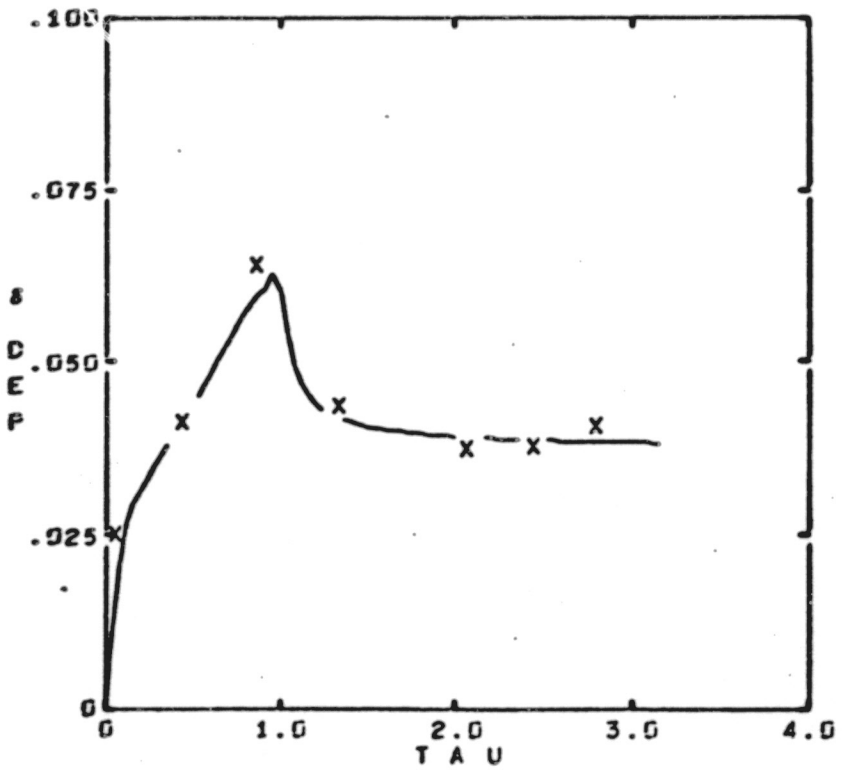
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0698	.0363	.0335
.50	.1037	.0596	.0441
.75	.1401	.0849	.0552
.93	.1639	.1016	.0623
1.0	.1521	.0918	.0603
1.5	.0973	.0567	.0406
2.0	.0858	.0466	.0392
2.5	.0791	.0405	.0386
3.0	.0744	.0361	.0383

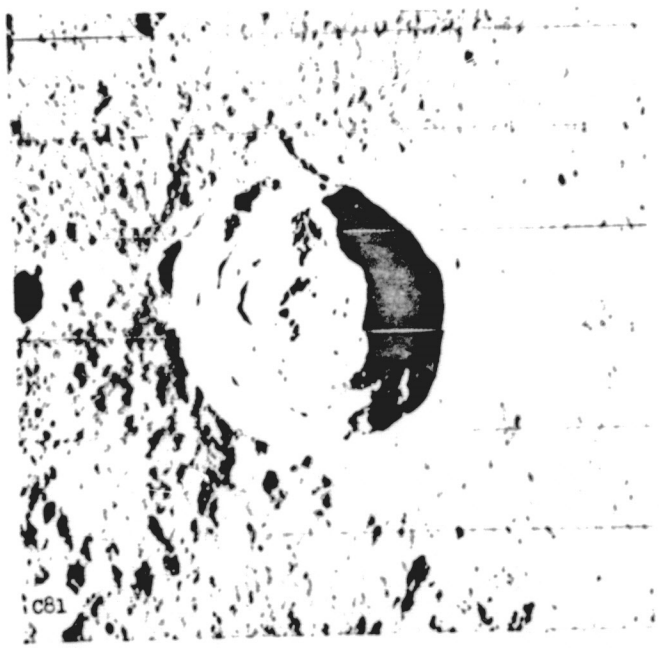
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.684	375.32		375.32	1.000	.0000
9H	0.059	377.54		377.54	1.006	.0399
10H	0.426	343.70		343.70	0.916	.0937
11H	0.860	255.73	0.602 +.782	259.82	0.692	.1588
12H	1.335	205.87	0.553 +.628	214.11	0.570	.1059
13H	2.062	193.38	0.433 +.088	201.52	0.537	.0831
14H	2.442	194.22	0.510 -.950	198.97	0.530	.0790
15H	2.787	196.54	0.249 +.736	198.62	0.529	.0784
16H	3.543	266.55	0.363 +.303	268.01	0.714	-.0400









246 (2H7) KEPLER A

LAMBDA=36.09 W BETA= 7.13 N XI=-.5845 ETA=+.1242 L+PL CODE = 25182 ALBEDO =.1125

13H FLAT MOON DATA
FM=.04778 FM'=.06198.

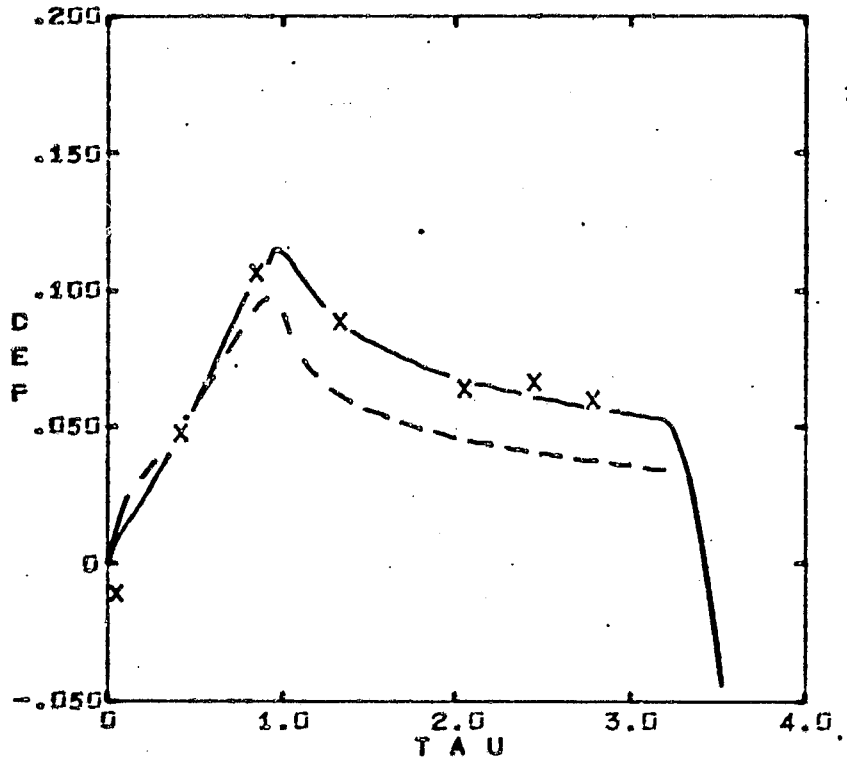
INITIAL TEMPERATURE 379.53
TAU-END OF TOTALITY 3.208

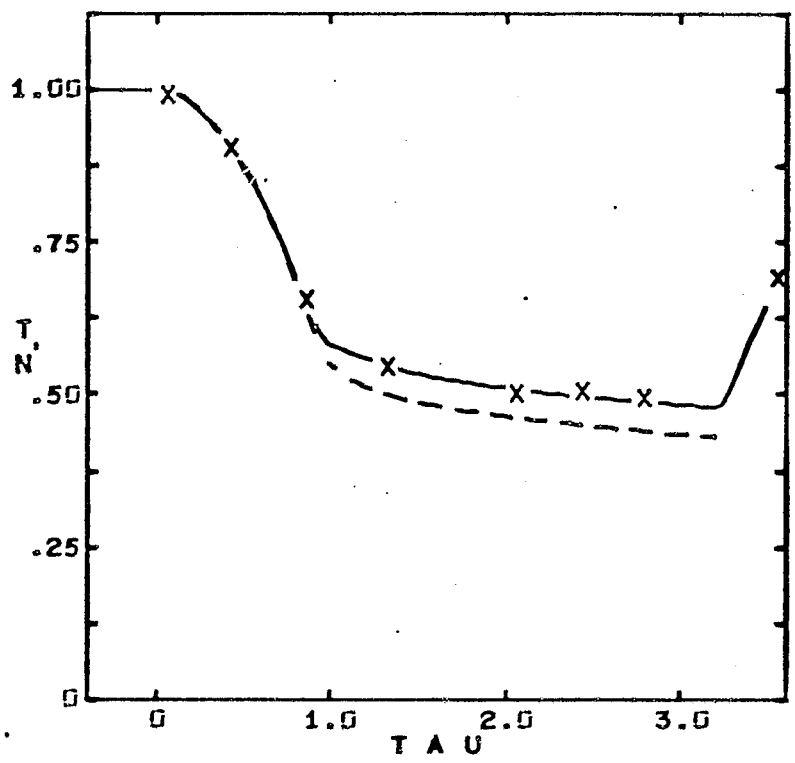
DIFFERENTIAL ENERGY DATA

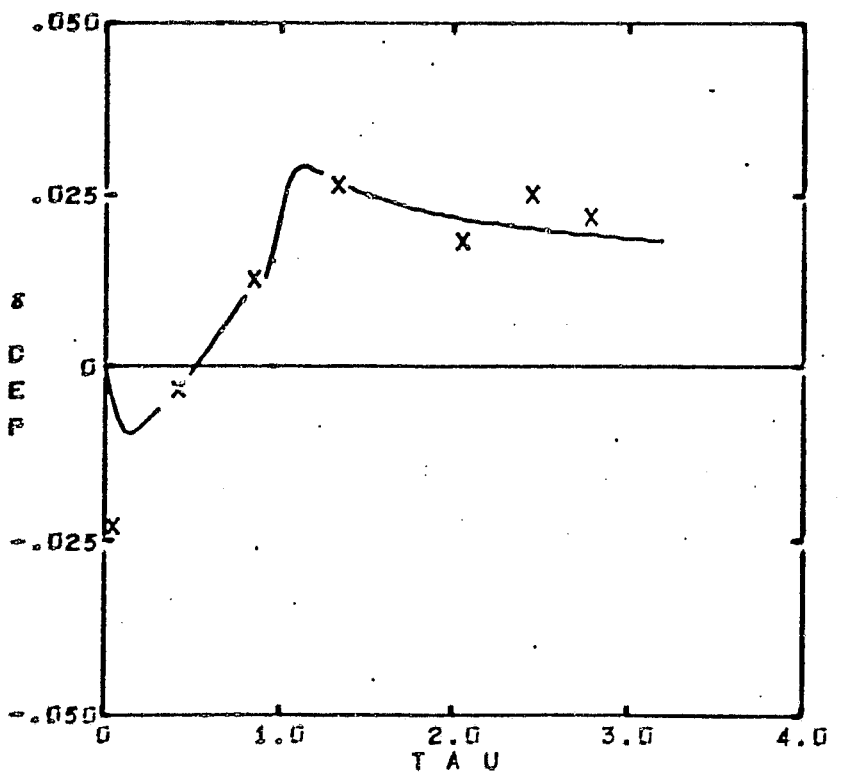
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0277	.0355	-.0078
.50	.0584	.0588	-.0004
.75	.0927	.0842	.0085
.93	.1153	.1009	.0144
1.0	.1135	.0912	.0223
1.5	.0813	.0563	.0250
2.0	.0681	.0463	.0218
2.5	.0602	.0402	.0200
3.0	.0546	.0358	.0188

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.697	379.53		379.53	1.000	.0000
9H	0.049	377.37		377.37	0.994	-.0109
10H	0.416	343.43		343.43	0.905	.0475
11H	0.850	246.73	0.785 -.999	249.11	0.656	.1061
12H	1.328	199.26	0.377 +.762	207.04	0.546	.0886
13H	2.055	185.37	0.314 -.211	190.84	0.503	.0639
14H	2.437	178.26	0.591 -.752	192.43	0.507	.0661
15H	2.780	182.28	0.325 -.132	187.46	0.494	.0595
16H	3.541	262.09	0.000 +.803	262.09	0.691	-.0539







PHOTOGRAPH NOT AVAILABLE

249 (2H8) KEPLER C

LAMBDA=41.79 W BETA=10.01 N XI=-.6563 ETA=+.1739 L+PL CODE = 26157 ALBEDO =.0699

13H FLAT MOON DATA
FM=.02876 FM'=.02876

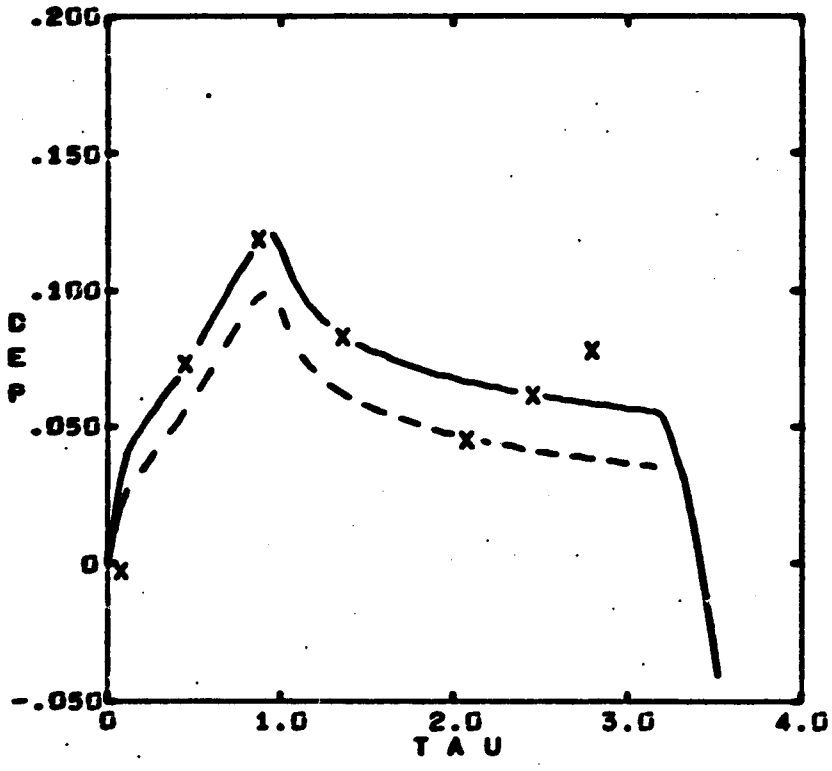
INITIAL TEMPERATURE 376.90
TAU-END OF TOTALITY 3.172

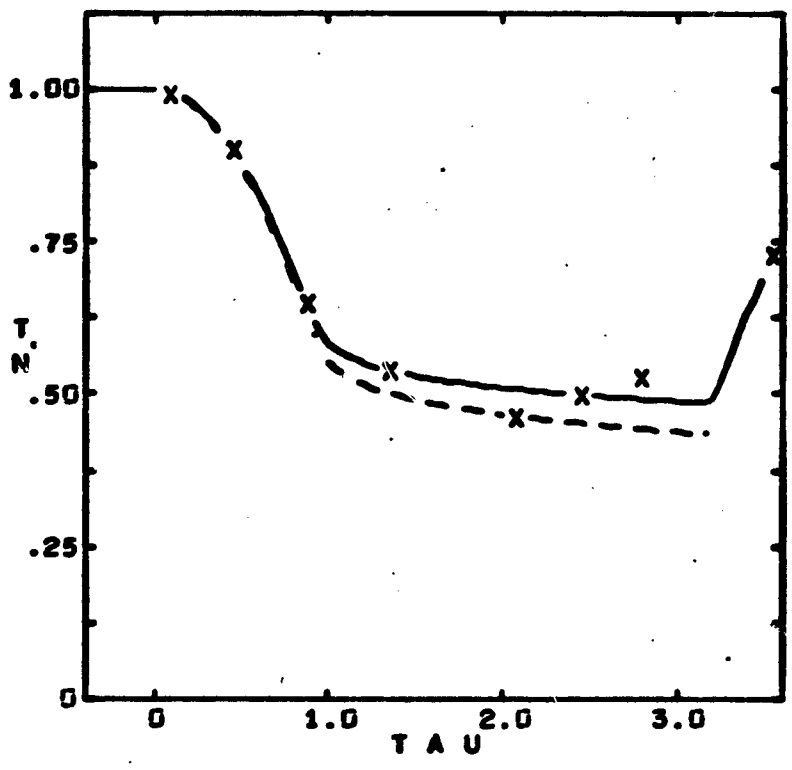
DIFFERENTIAL ENERGY DATA

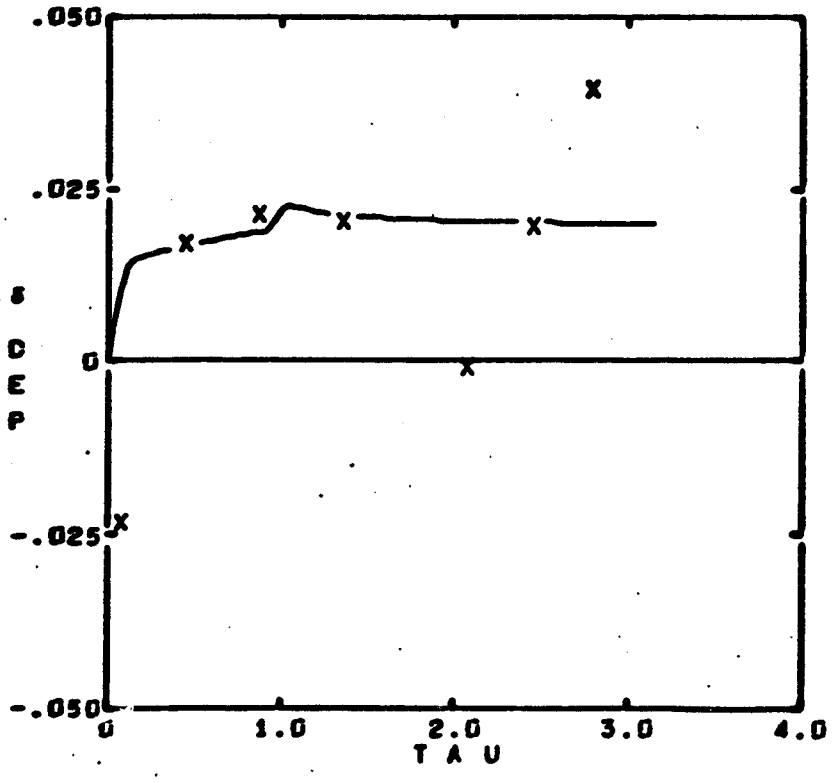
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0539	.0383	.0156
.50	.0784	.0614	.0170
.75	.1049	.0867	.0182
.93	.1222	.1032	.0190
1.0	.1153	.0934	.0219
1.5	.0786	.0577	.0209
2.0	.0678	.0474	.0204
2.5	.0614	.0412	.0202
3.0	.0568	.0368	.0200

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.661	376.90		376.90	1.000	.0000
9H	0.080	374.12		374.12	0.993	-.0025
10H	0.445	339.11		339.11	0.900	.0733
11H	0.877	243.12	0.160 +.567	244.10	0.648	.1187
12H	1.352	197.60	0.431 +.943	202.29	0.537	.0830
13H	2.075	173.97	0.000 -.074	173.97	0.462	.0454
14H	2.453	177.05	0.626 -.950	187.53	0.498	.0613
15H	2.796	197.10	0.122 +.283	199.28	0.529	.0781
16H	3.548	275.17	0.000 +.212	275.17	0.730	-.0537







PHOTOGRAPH NOT AVAILABLE

250 (3H9) KIES A

LAMBDA=22.69 W BETA=28.30 S XI=-.3396 ETA=-.4741 L↔PL CODE = 33437 ALBEDO =.1293

13H FLAT MOON DATA
FM=.02452 FM'=.03068

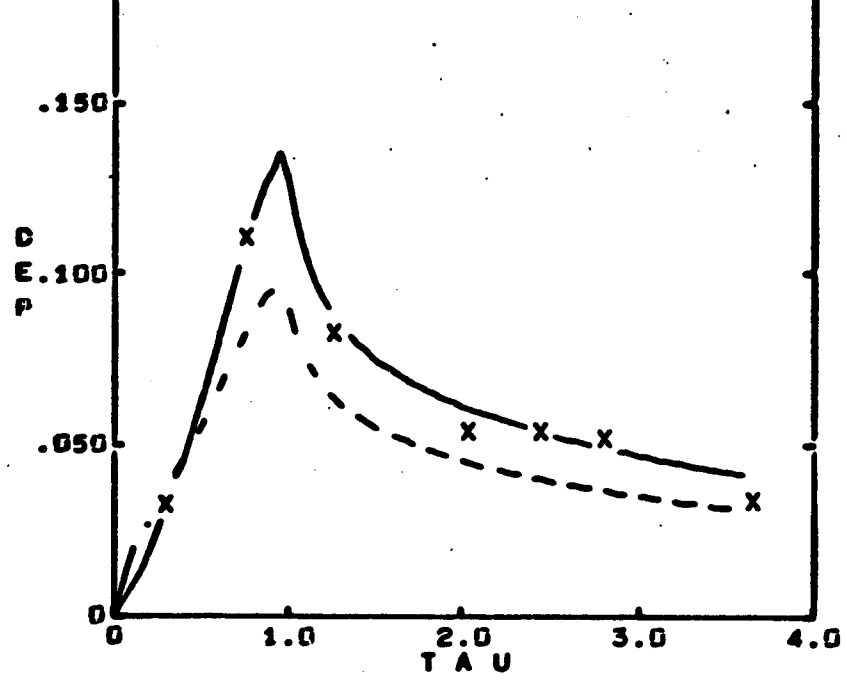
INITIAL TEMPERATURE 379.05
TAU-END OF TOTALITY 3.609

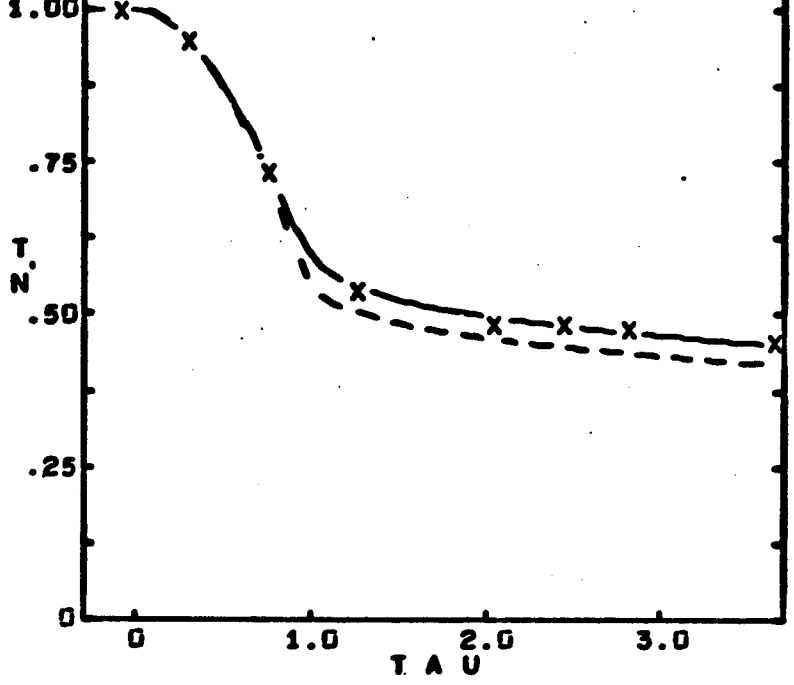
DIFFERENTIAL ENERGY DATA

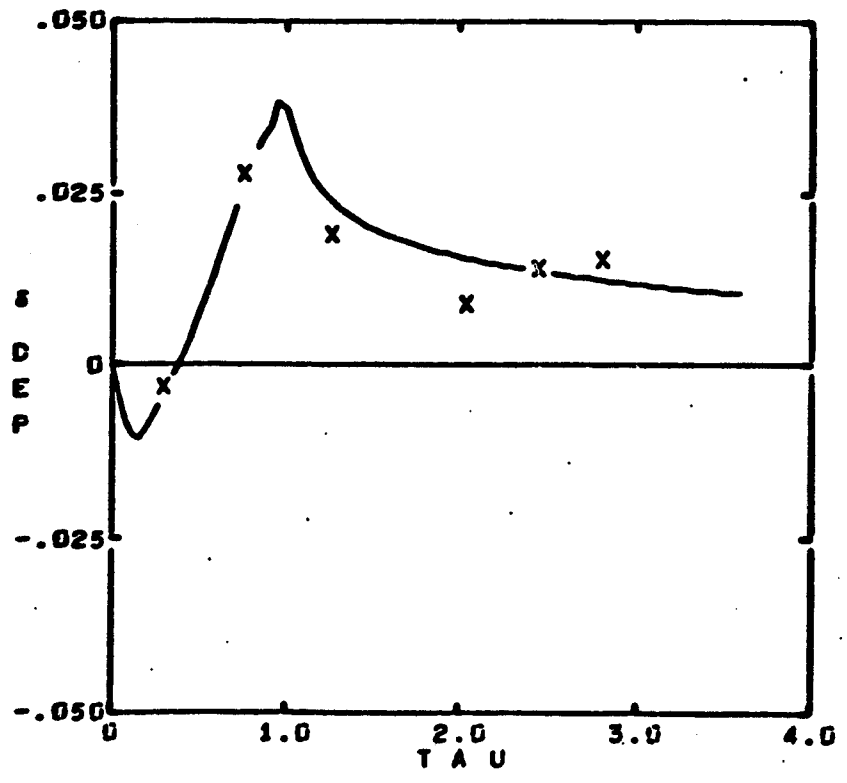
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0240	.0312	-.0072
.50	.0629	.0554	.0075
.75	.1073	.0818	.0255
.93	.1368	.0992	.0376
1.0	.1270	.0896	.0374
1.5	.0752	.0554	.0198
2.0	.0613	.0455	.0158
2.5	.0530	.0395	.0135
3.0	.0470	.0351	.0119

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.884	380.75		380.75	1.004	.0181
9H	-0.091	378.88		378.88	1.000	-.0018
10H	0.299	359.92		359.92	0.950	.0327
11H	0.761	275.48	1.502 -.593	277.75	0.733	.1108
12H	1.266	198.24	0.426 +.185	203.39	0.537	.0829
13H	2.041	179.94	0.389 +.306	182.73	0.482	.0540
14H	2.443	180.46	0.267 +.242	182.90	0.483	.0542
15H	2.810	180.14	0.090 +.857	181.02	0.476	.0520
16H	3.648	172.53	0.000 +.992	172.53	0.455	.0336







PHOTOGRAPH NOT AVAILABLE

251 (3J1) KIES C

LAMBDA=18.47 W BETA=24.89 S XI=-.2874 ETA=-.4208 L+PL CODE = 32482 ALBEDO =.0649

13H FLAT MOON DATA
FM=.04237 FM'=.05304

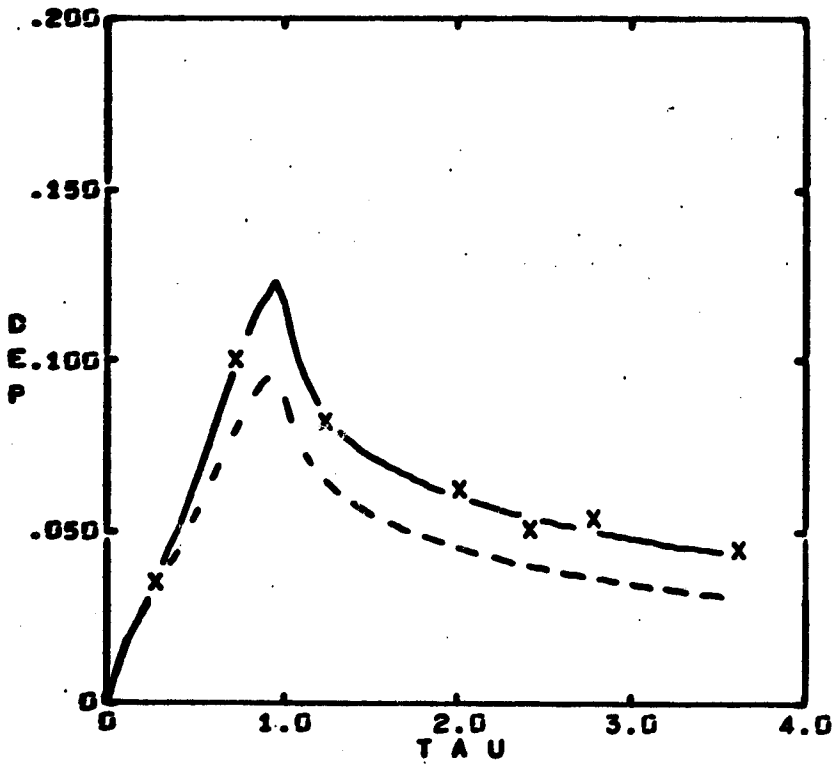
INITIAL TEMPERATURE 387.25
TAU-END OF TOTALITY 3.576

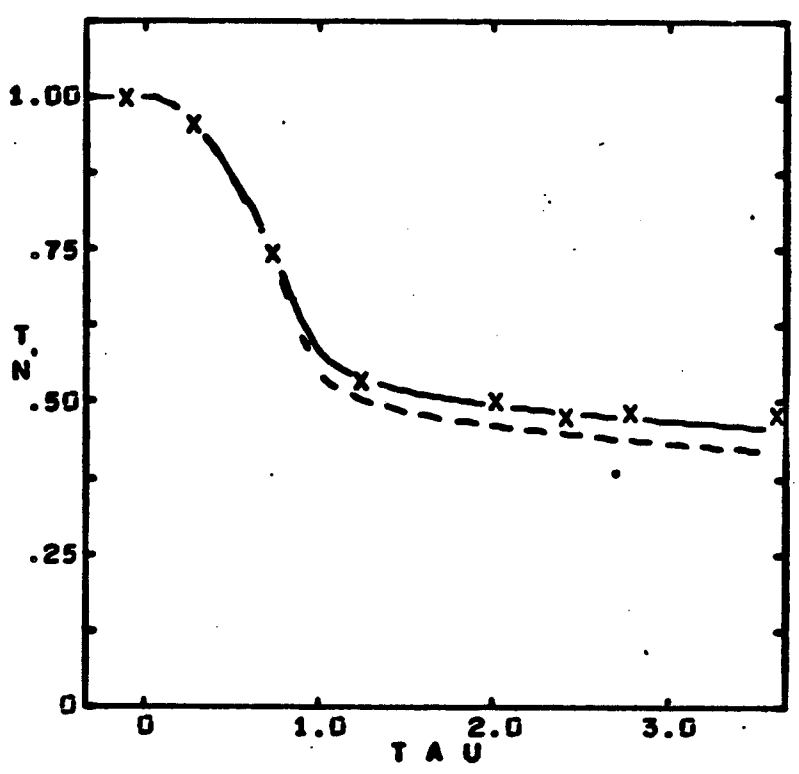
DIFFERENTIAL ENERGY DATA

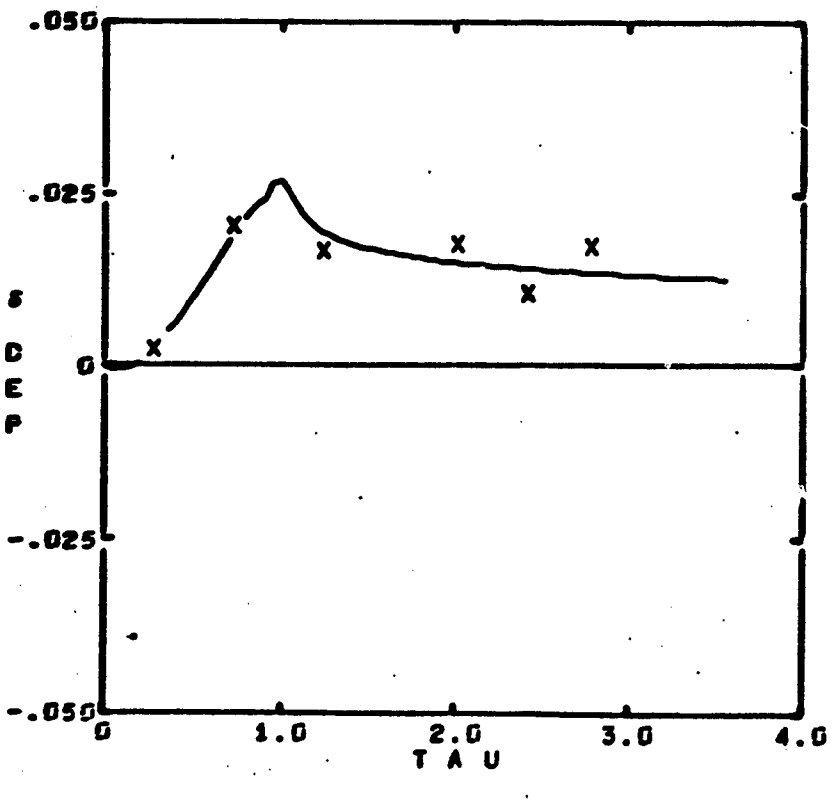
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0319	.0301	.0018
.50	.0644	.0545	.0099
.75	.1005	.0812	.0193
.93	.1246	.0988	.0258
1.0	.1162	.0892	.0270
1.5	.0722	.0552	.0170
2.0	.0504	.0453	.0151
2.5	.0533	.0393	.0140
3.0	.0482	.0349	.0133

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.898	387.66			387.66	1.001	.0042
9H	-0.110	387.20			387.20	1.000	-.0005
10H	0.279	370.41			370.41	0.957	.0351
11H	0.738	287.57	0.000	-.814	287.57	0.743	.1004
12H	1.242	205.07	0.349	-.978	207.06	0.535	.0817
13H	2.012	189.59	0.375	+.994	193.84	0.501	.0628
14H	2.412	178.91	0.480	+.494	183.70	0.474	.0506
15H	2.778	184.46	0.281	-.737	186.76	0.482	.0541
16H	3.612	183.50	0.225	-.335	186.05	0.480	.0452







PHOTOGRAPH NOT AVAILABLE

252 (2H9) KIRCH

LAMBDA= 5.60 W BETA=39.21 N. XI=-.0756 ETA=+.6322 L+PL CODE = 20673 ALBEDO =.0734

13M FLAT MOON DATA
FM=.05283 FM'=.05666

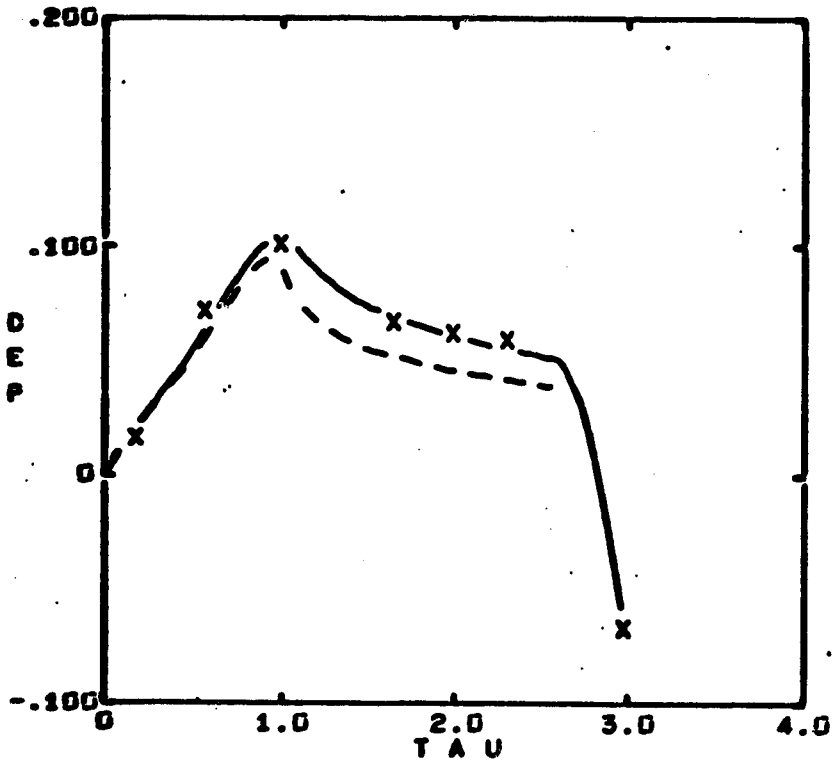
INITIAL TEMPERATURE 382.13
TAU-END OF TOTALITY 2.588

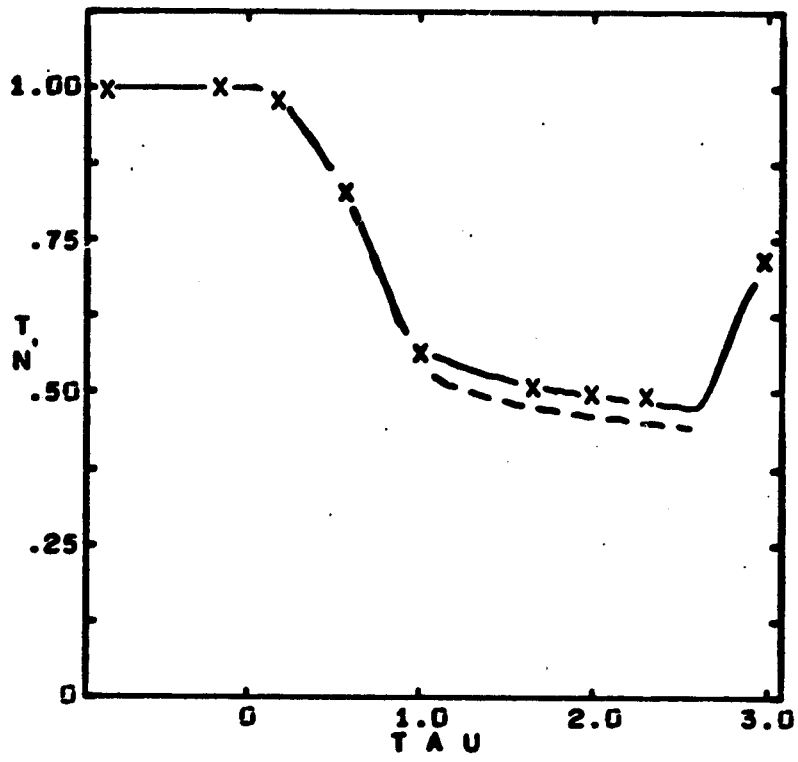
DIFFERENTIAL ENERGY DATA

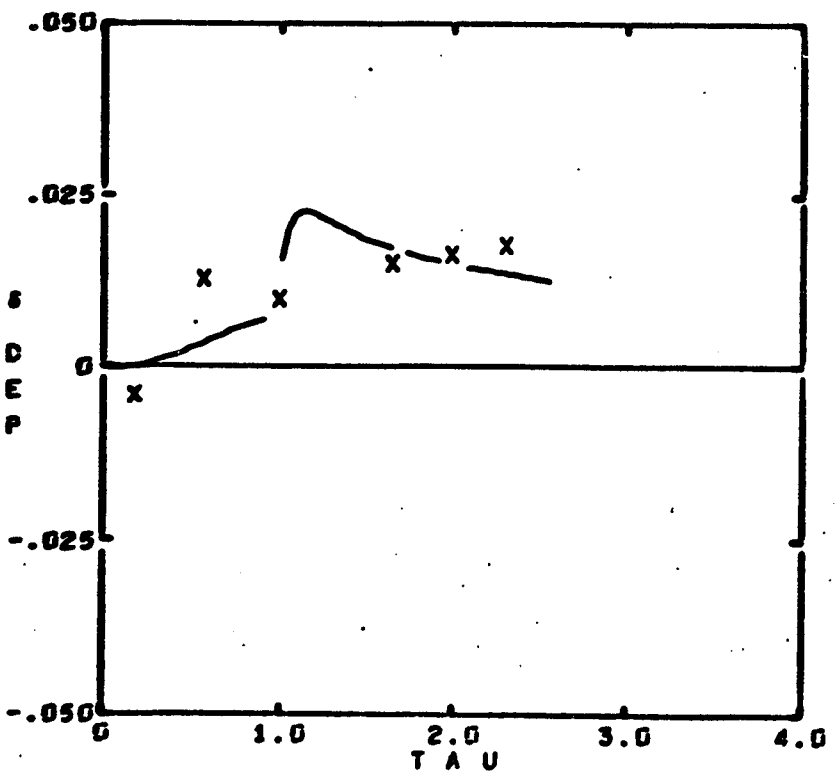
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0281	.0275	.0006
.50	.0556	.0527	.0029
.75	.0857	.0802	.0055
.95	.1058	.0985	.0073
1.0	.1046	.0890	.0156
1.5	.0738	.0551	.0187
2.0	.0603	.0453	.0150
2.5	.0521	.0392	.0129

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
6H	-0.823	381.48		381.48	0.998	-.0068
9H	-0.158	382.25		382.25	1.000	.0013
10H	0.173	373.64		373.64	0.978	.0164
11H	0.562	314.14	0.640 +.093	316.07	0.827	.0722
12H	0.990	214.12	0.188 -.306	215.83	0.565	.1010
13H	1.641	192.83	0.108 +.178	194.29	0.508	.0668
14H	1.986	189.55	0.147 +.552	190.58	0.499	.0619
15H	2.293	185.79	0.241 +.447	188.43	0.493	.0591
16H	2.979	274.44	0.000 +.617	274.44	0.718	-.0668







PHOTOGRAPH NOT AVAILABLE

253 (2J1) KIRCH E

LAMBDA= 6.91 W BETA=36.47 N XI=-.0967 ETA=+.5944 L+PL CODE = 20599 ALBEDO =.0705

13H FLAT MOON DATA
FM=.05090 FM'=.05226

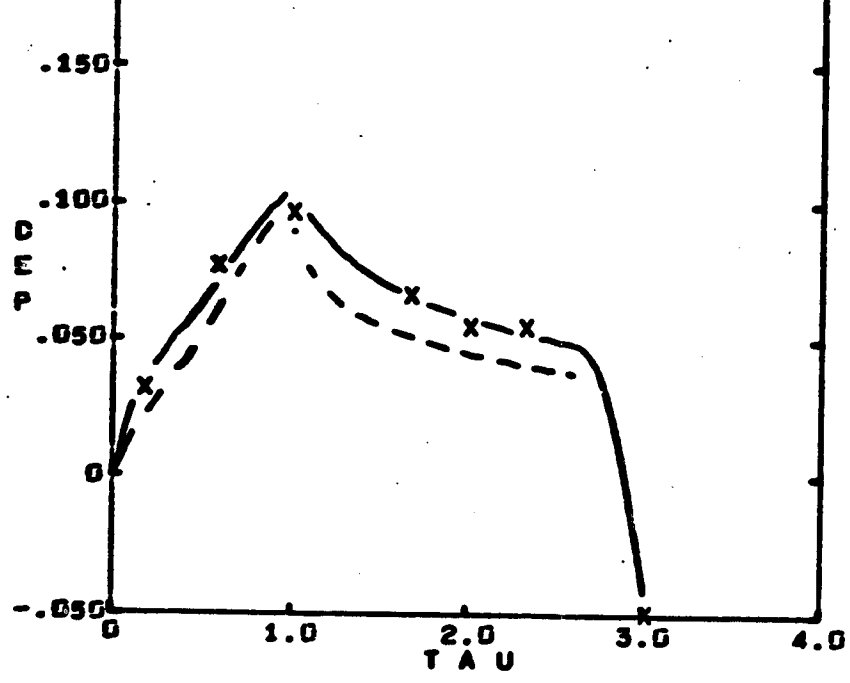
INITIAL TEMPERATURE 381.61
TAU-END OF TOTALITY 2.640

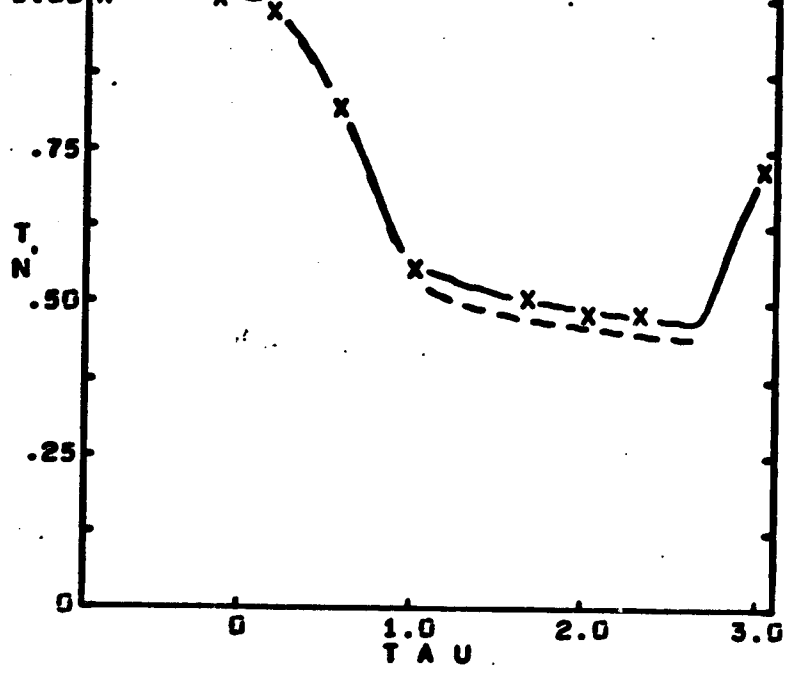
DIFFERENTIAL ENERGY DATA

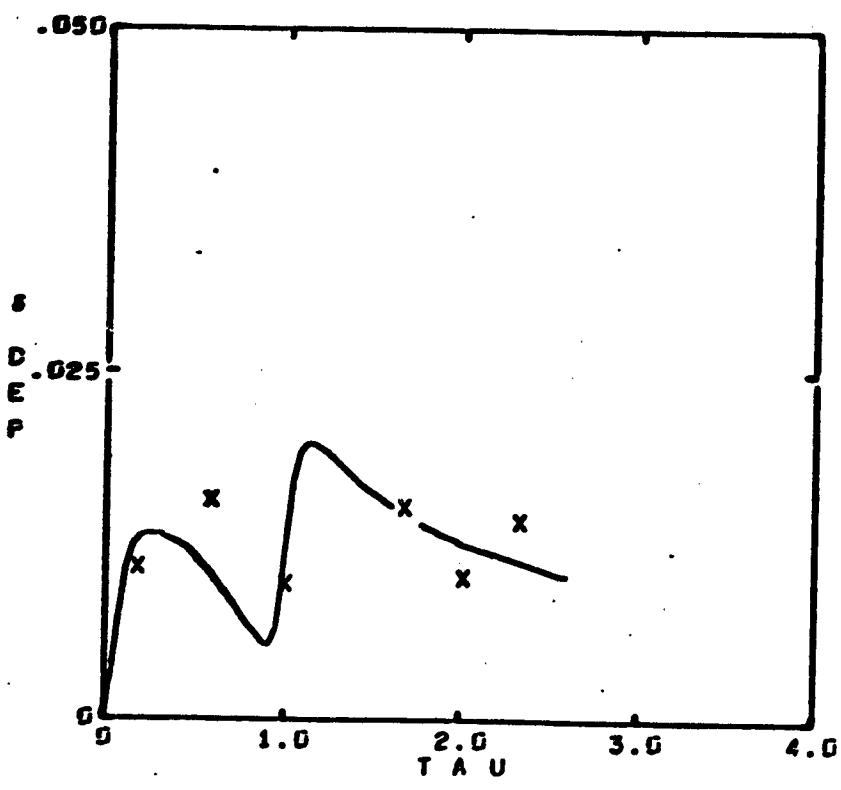
TAU	DEP	DEP-SMOOTH	SDEP
.25	.0410	.0277	.0133
.50	.0643	.0527	.0116
.75	.0676	.0801	.0075
.93	.1028	.0982	.0046
1.0	.1015	.0888	.0127
1.5	.0712	.0550	.0162
2.0	.0579	.0451	.0128
2.5	.0498	.0391	.0107
3.0	.0438	.0347	.0091

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.821	382.88		382.88	1.003	.0133
9H	-0.150	381.38		381.38	0.999	-.0024
10H	0.183	373.81		373.81	0.980	.0325
11H	0.577	313.51	0.000 -.796	313.51	0.822	.0768
12H	1.010	211.29	0.247 -.807	212.77	0.558	.0966
13H	1.667	193.12	0.064 -.877	193.63	0.507	.0663
14H	2.015	181.87	0.265 +.682	184.97	0.485	.0552
15H	2.326	181.62	0.320 +.602	184.98	0.485	.0552
16H	3.019	272.85	1.513 +.310	275.11	0.721	-.0494







PHOTOGRAPH
NOT
AVAILABLE

254 (2J2) LA HIRE A

LAMBDA=23.42 W BETA=28.49 N XI=-.3493 ETA=+.4770 L+PL CODE = 23447 ALBEDO =.0640

13H FLAT MOON DATA
FM=.04075 FM'=.05648

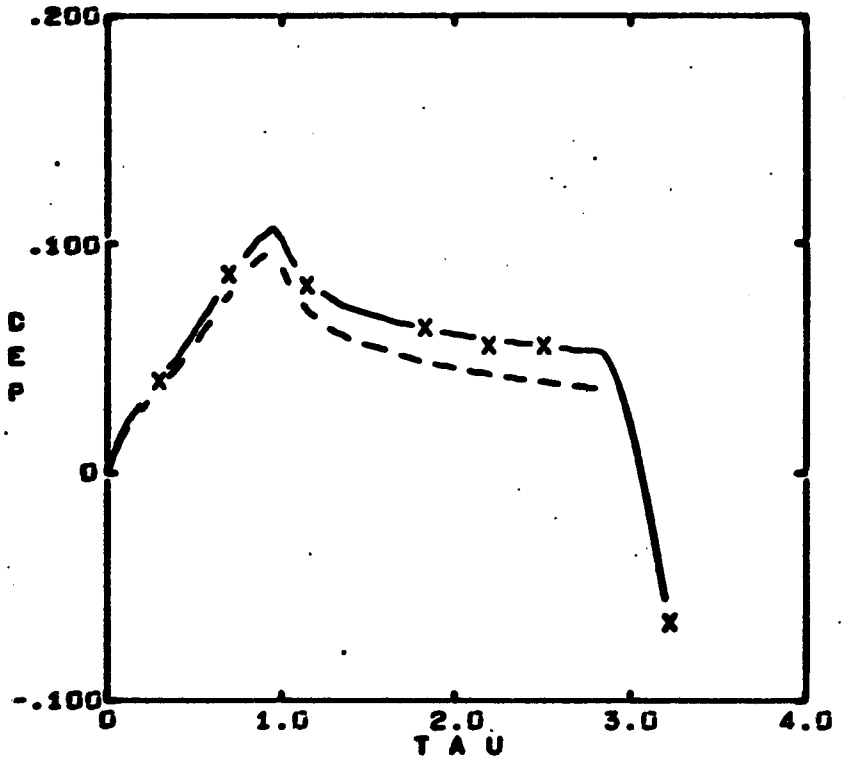
INITIAL TEMPERATURE 383.37
TAU-END OF TOTALITY 2.820

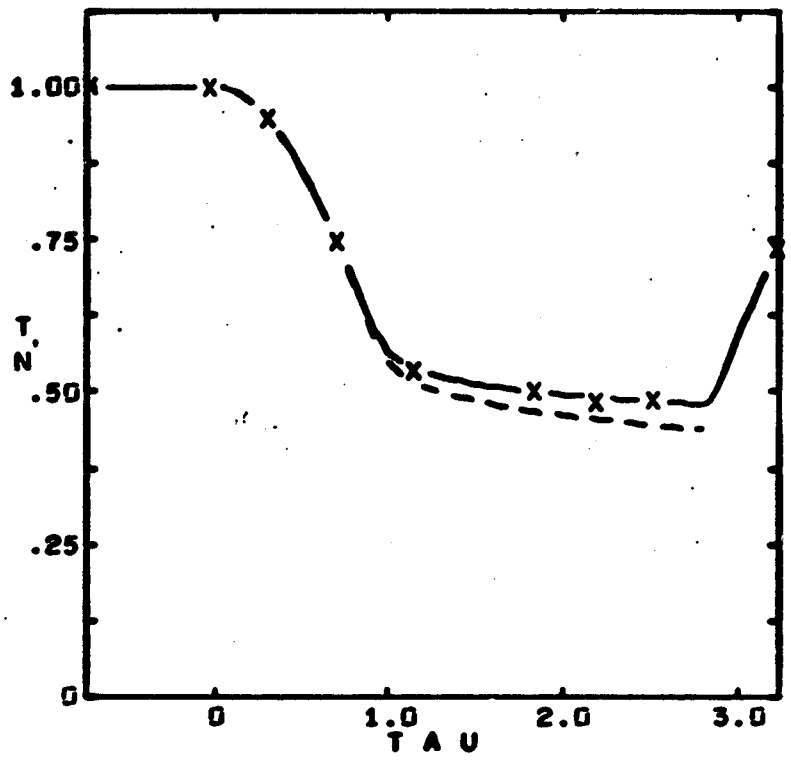
DIFFERENTIAL ENERGY DATA

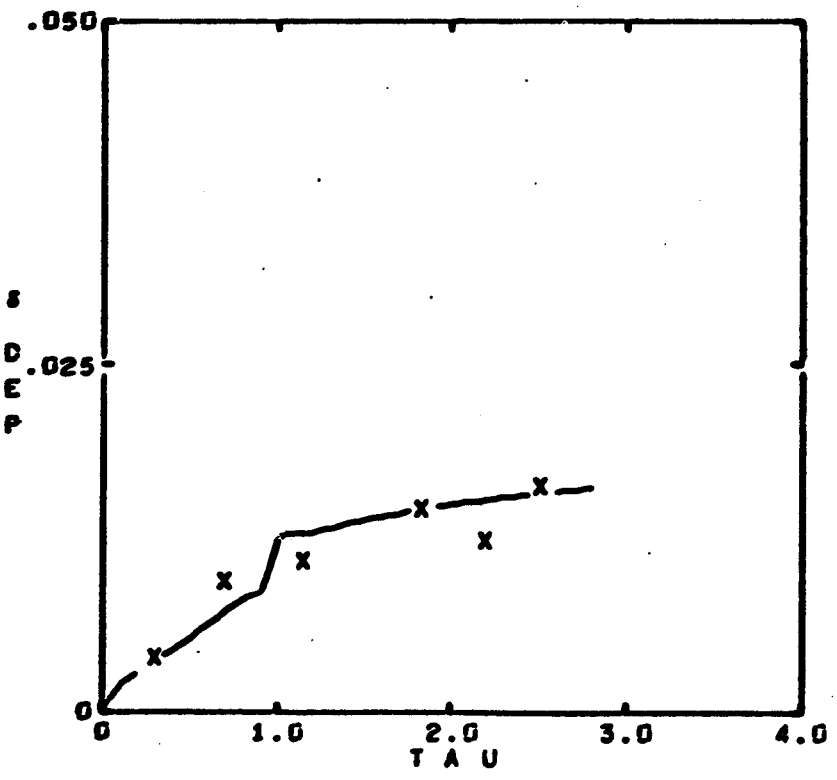
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0345	.0314	.0031
.50	.0608	.0556	.0052
.75	.0894	.0819	.0075
.93	.1083	.0993	.0090
1.0	.1020	.0897	.0123
1.5	.0692	.0554	.0138
2.0	.0604	.0455	.0149
2.5	.0552	.0395	.0157
3.0	.0515	.0351	.0164

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.745	384.43		384.43	1.003	.0111
9H	-0.050	383.30		383.30	1.000	-.0007
10H	0.296	363.30		363.30	0.948	.0395
11H	0.703	286.40	0.000 -.761	286.40	0.747	.0864
12H	1.149	202.17	0.411 +.032	205.07	0.535	.0819
13H	1.830	186.58	0.495 -.238	192.01	0.501	.0629
14H	2.188	180.03	0.516 -.932	185.90	0.485	.0553
15H	2.510	183.19	0.278 -.251	186.25	0.486	.0557
16H	3.221	281.75	0.000 +.386	281.75	0.735	-.0657







PHOTOGRAPH NOT AVAILABLE

255 (2J3) LA HIRE B

LAMBDA=22.99 W BETA=27.66 N XI=-.3460 ETA=+.4642 L+PL CODE = 23446 ALBEDO =.0643

13H FLAT MOON DATA
FM=.03681 FM'=.05231

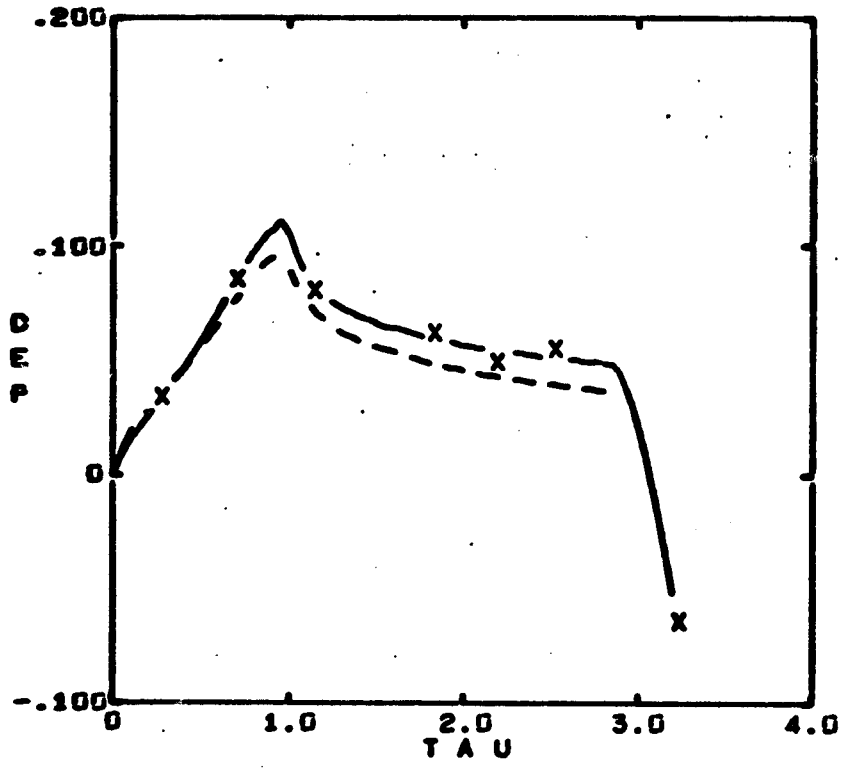
INITIAL TEMPERATURE 384.34
TAU-END OF TOTALITY 2.834

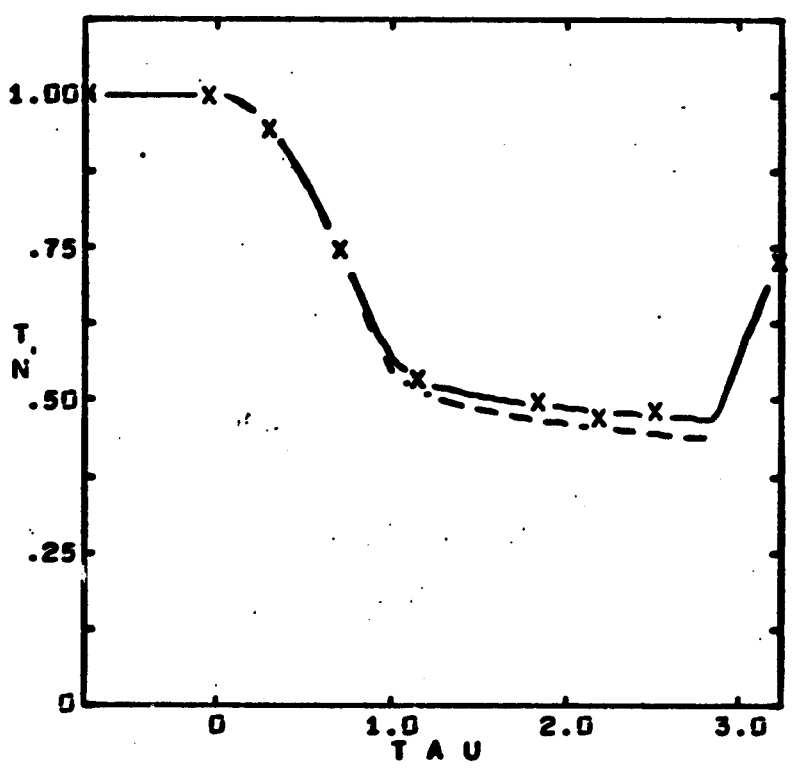
DIFFERENTIAL ENERGY DATA

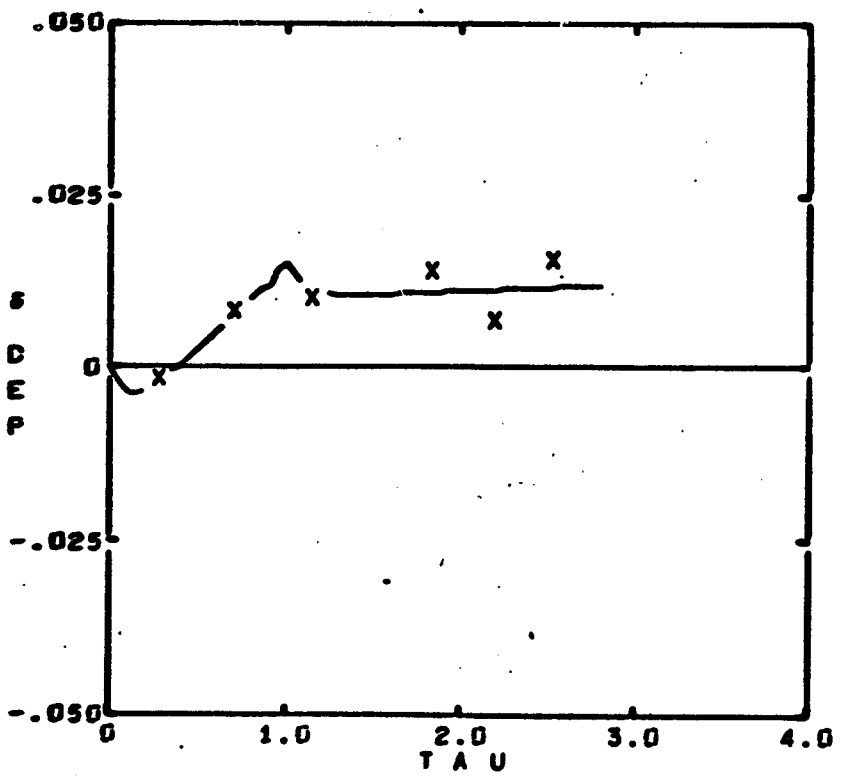
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0287	.0313	-.0026
.50	.0580	.0555	.0025
.75	.0906	.0818	.0088
.93	.1123	.0993	.0130
1.0	.1047	.0897	.0150
1.5	.0660	.0554	.0106
2.0	.0567	.0455	.0112
2.5	.0511	.0395	.0116
3.0	.0472	.0351	.0121

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.748	385.79		385.79	1.004	.0151
9H	-0.051	384.25		384.25	1.000	-.0010
10H	0.295	363.67		363.67	0.946	.0337
11H	0.703	286.80	0.000 -.657	286.80	0.746	.0852
12H	1.151	199.70	1.113 +.665	205.07	0.534	.0810
13H	1.833	185.57	0.814 +.742	192.01	0.500	.0623
14H	2.193	181.50	0.000 +.886	181.50	0.472	.0497
15H	2.515	179.61	1.047 +.742	186.25	0.485	.0551
16H	3.228	280.59	0.000 +.460	280.59	0.730	-.0644







PHOTOGRAPH NOT AVAILABLE

256 (3J2) LALANDE

LAMBDA= 8.61 W BETA= 4.44 S XI=-.1492 ETA=-.0775 L+PL CODE = 31047 ALBEDO =.1223

13H FLAT MOON DATA
FM=.04408 FM'=.08590

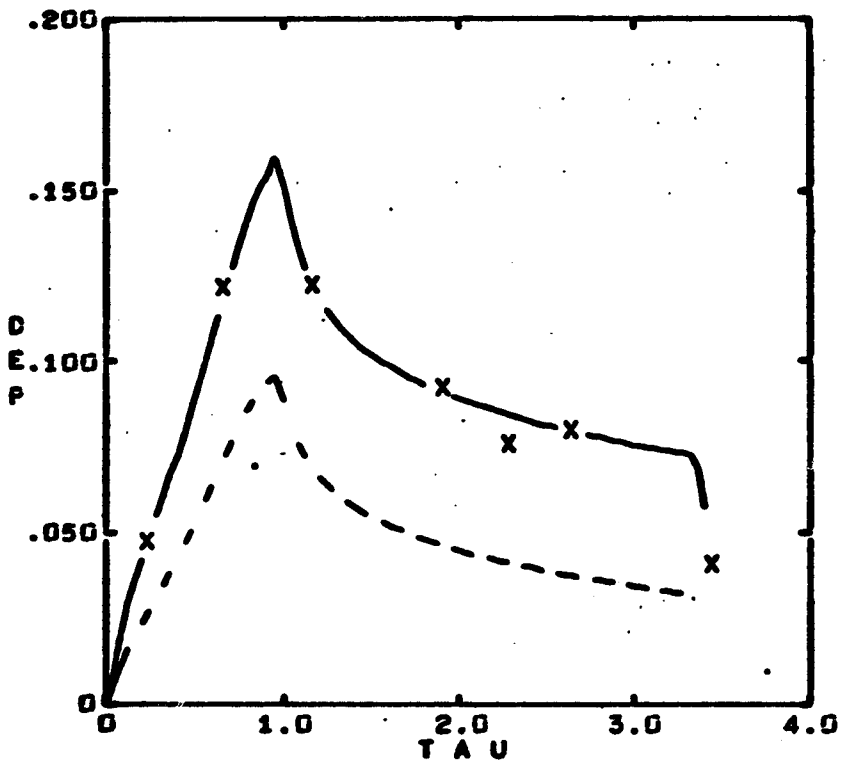
INITIAL TEMPERATURE 389.24
TAU-END OF TOTALITY 3.330

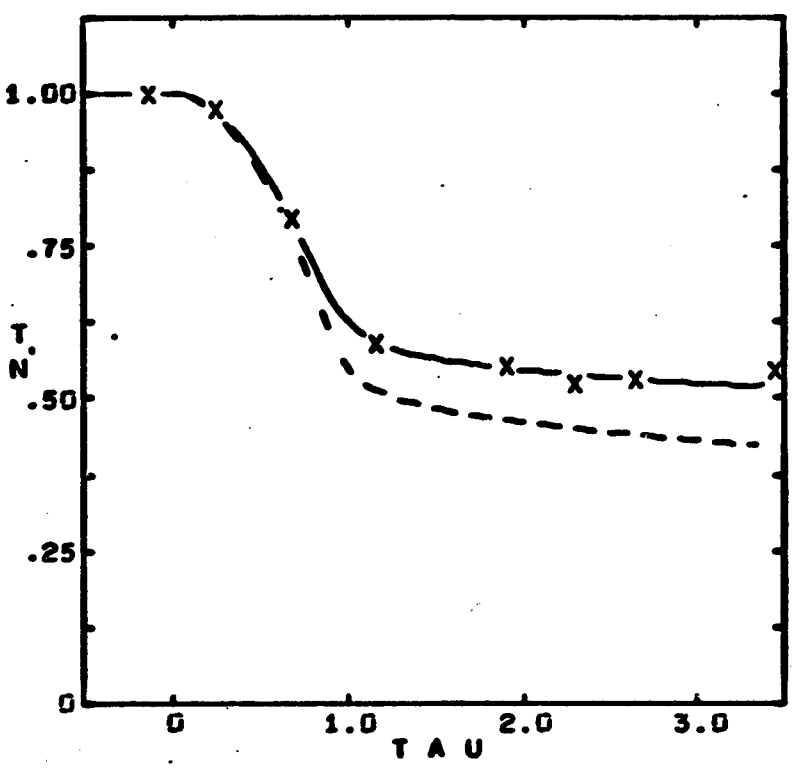
DIFFERENTIAL ENERGY DATA

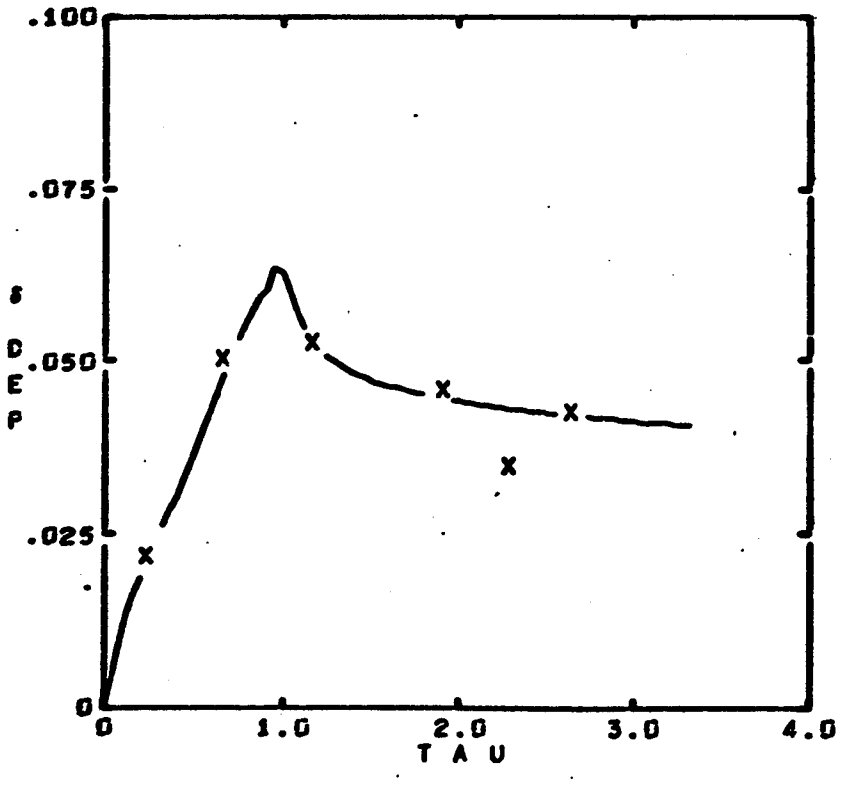
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0498	.0279	.0219
.50	.0896	.0528	.0368
.75	.1323	.0799	.0524
.93	.1606	.0979	.0627
1.0	.1513	.0885	.0628
1.5	.1020	.0547	.0473
2.0	.0891	.0450	.0441
2.5	.0814	.0389	.0425
3.0	.0758	.0345	.0413

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.904	390.28		390.28	1.003	.0106
9H	-0.145	389.08		389.08	1.000	-.0017
10H	.229	379.18		379.18	0.974	.0476
11H	.671	307.80	0.626 -.892	310.02	0.796	.1219
12H	1.157	227.29	0.285 -.602	230.13	0.591	.1222
13H	1.900	197.96	0.718 -.255	214.57	0.551	.0923
14H	2.287	203.29	0.259 -.768	204.51	0.525	.0762
15H	2.639	201.75	0.341 -.841	207.21	0.532	.0803
16H	3.438	197.36	0.803 +.618	212.25	0.545	.0407







PHOTOGRAPH NOT AVAILABLE

257 (3J3) LALANDE A

LAMBDA= 9.77 W BETA= 6.62 S XI=-.1686 ETA=-.1153 L+PL CODE = 31161 ALBEDO =.1032

13H FLAT MOON DATA
FM=.05370 FM'=.07915

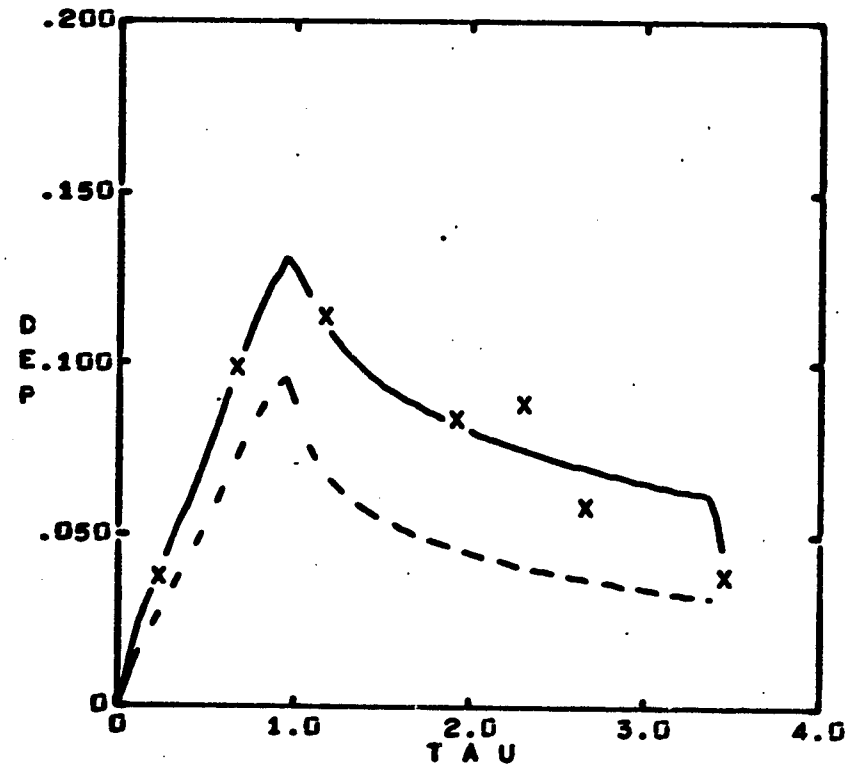
INITIAL TEMPERATURE 392.81
TAU-END OF TOTALITY 3.361

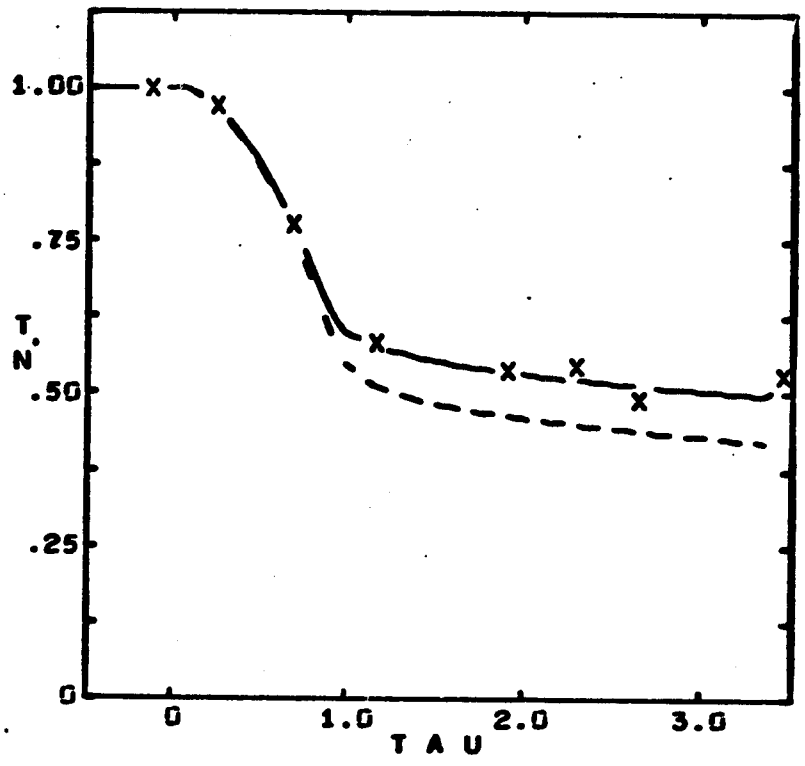
DIFFERENTIAL ENERGY DATA

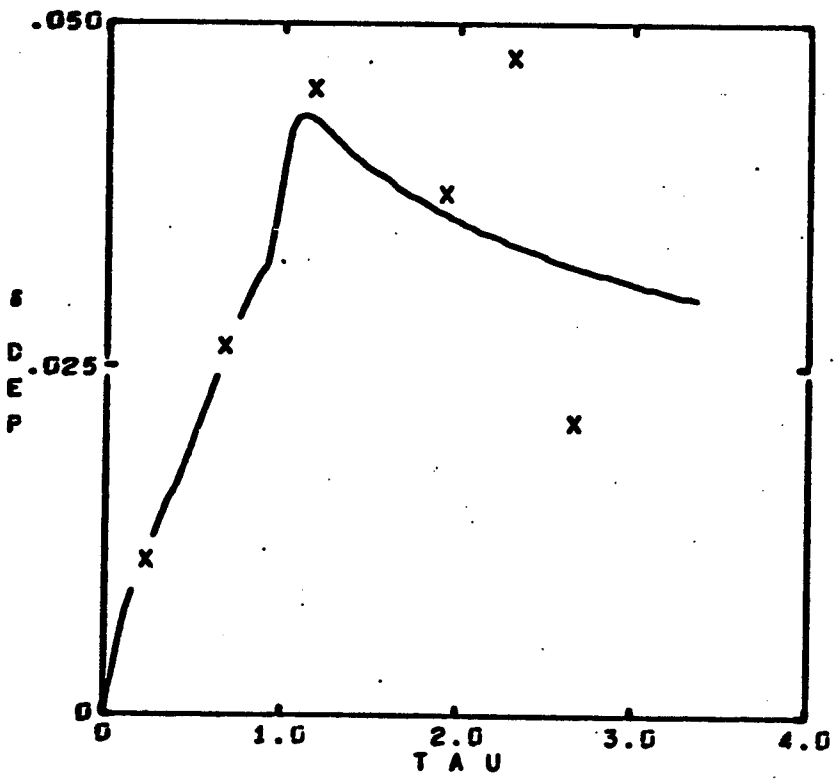
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0399	.0281	.0118
.50	.0726	.0528	.0198
.75	.1079	.0798	.0281
.93	.1313	.0977	.0336
1.0	.1278	.0883	.0395
1.5	.0941	.0546	.0395
2.0	.0805	.0448	.0357
2.5	.0719	.0388	.0331
3.0	.0655	.0344	.0311

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.902	394.58		394.58	1.005	.0182
9H	-0.139	392.54		392.54	0.999	-.0028
10H	0.237	380.73		380.73	0.969	.0380
11H	0.682	305.56	0.078 +.560	305.74	0.778	.0991
12H	1.170	223.46	0.261 -.973	226.09	0.581	.1137
13H	1.914	201.27	0.402 -.140	211.34	0.538	.0838
14H	2.306	208.55	0.233 -.784	214.25	0.545	.0885
15H	2.659	190.58	0.310 -.916	193.08	0.492	.0584
16H	3.461	202.79	0.383 +.557	209.24	0.533	.0362







PHOTOGRAPH NOT AVAILABLE

LAMBDA= 8.99 W BETA= 3.12 S XI=-.1561 ETA=-.0544 L+PL CODE = 31055 ALBEDO =.1098

13H FLAT MOON DATA
FM=.01933 FM'=.01933

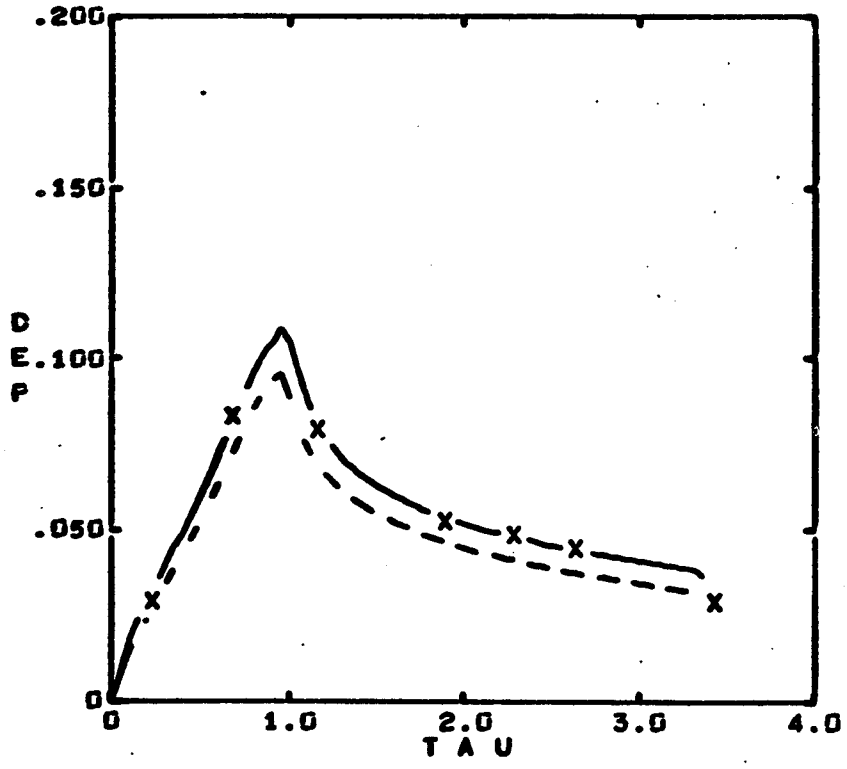
INITIAL TEMPERATURE 392.44
TAU-END OF TOTALITY 3.312

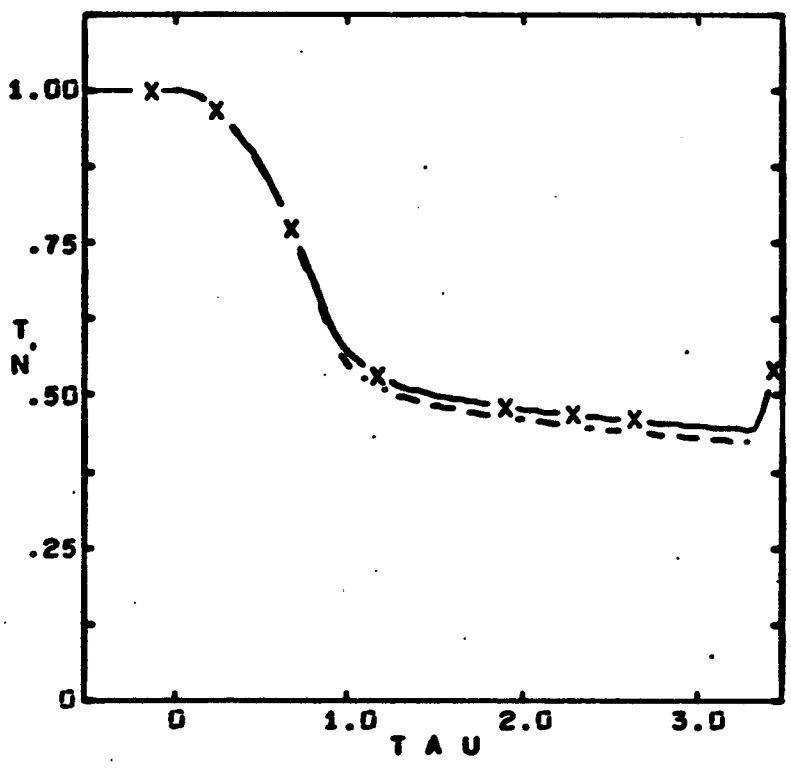
DIFFERENTIAL ENERGY DATA

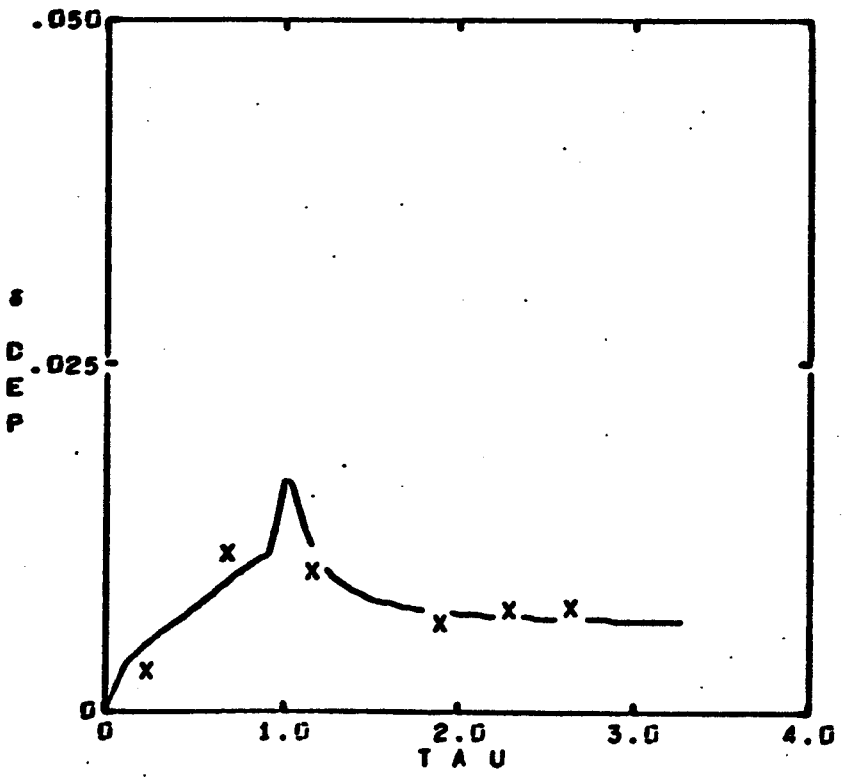
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0329	.0279	.0050
.50	.0603	.0528	.0075
.75	.0899	.0799	.0100
.93	.1095	.0979	.0116
1.0	.1050	.0884	.0166
1.5	.0628	.0547	.0081
2.0	.0520	.0449	.0071
2.5	.0456	.0389	.0067
3.0	.0410	.0345	.0065

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.898	393.67		393.67	1.003	.0127
9H	-0.141	392.24		392.24	1.000	-.0020
10H	0.233	379.89		379.89	0.968	.0292
11H	0.674	303.98	0.000 -.243	303.98	0.775	.0830
12H	1.159	208.29	0.000 -.193	208.29	0.531	.0794
13H	1.897	188.07	0.000 -.887	188.07	0.479	.0527
14H	2.286	184.26	0.000 -.202	184.26	0.470	.0486
15H	2.635	180.85	0.000 -.224	180.85	0.461	.0451
16H	3.432	194.31	1.616 -.390	212.26	0.541	.0295







PHOTOGRAPH NOT AVAILABLE

259 (2J4) LAMBERT

LAMBDA=20.94 W BETA=25.77 N XI=-.3219 ETA=+.4347 L+PL CODE = 23423 ALBEDO =.0685

13H FLAT MOON DATA
FM=.04922 FM'=.04924

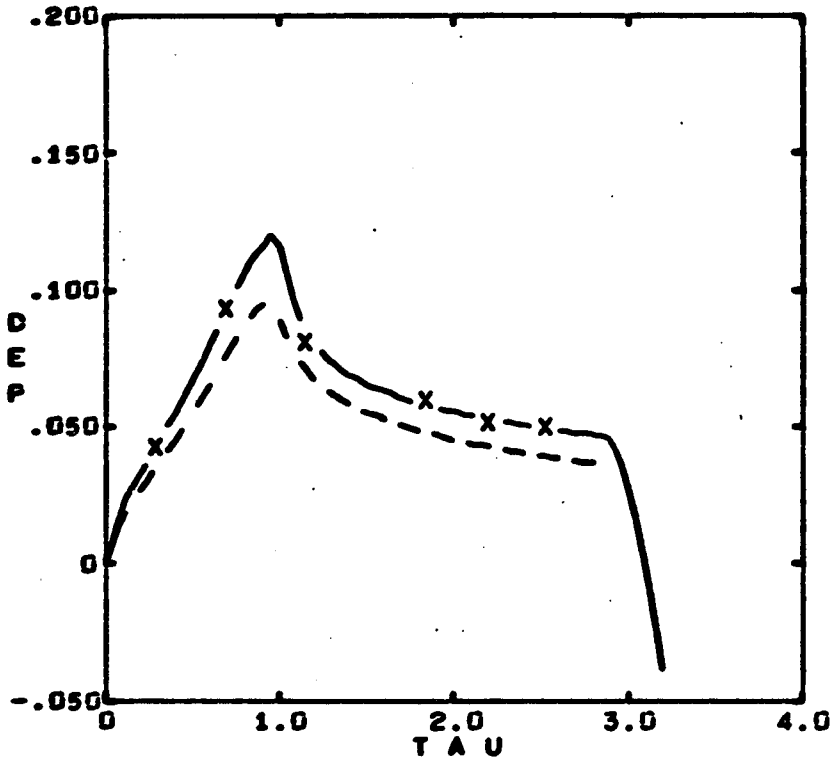
INITIAL TEMPERATURE 389.07
TAU-END OF TOTALITY 2.864

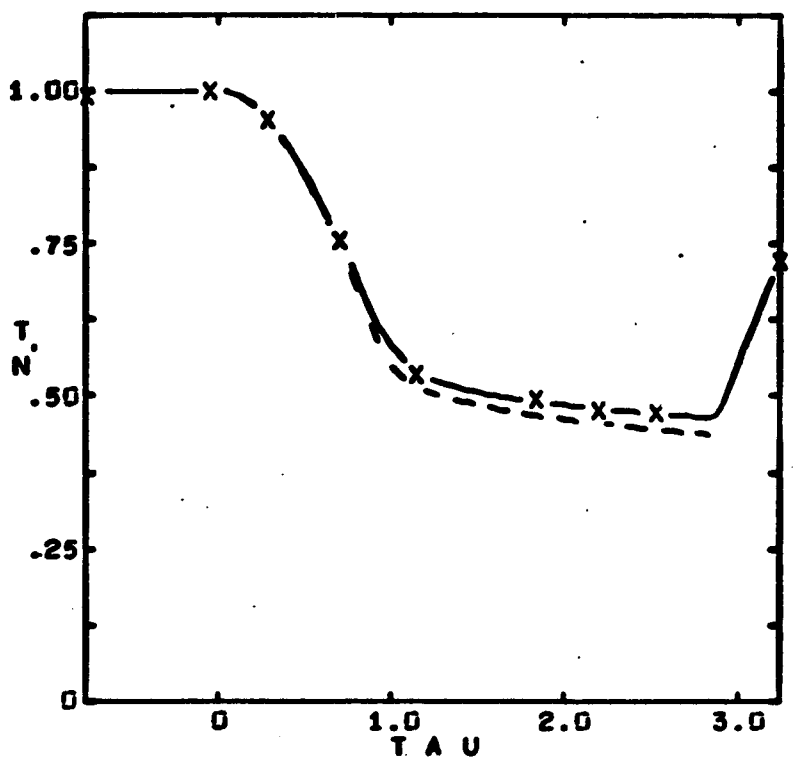
DIFFERENTIAL ENERGY DATA

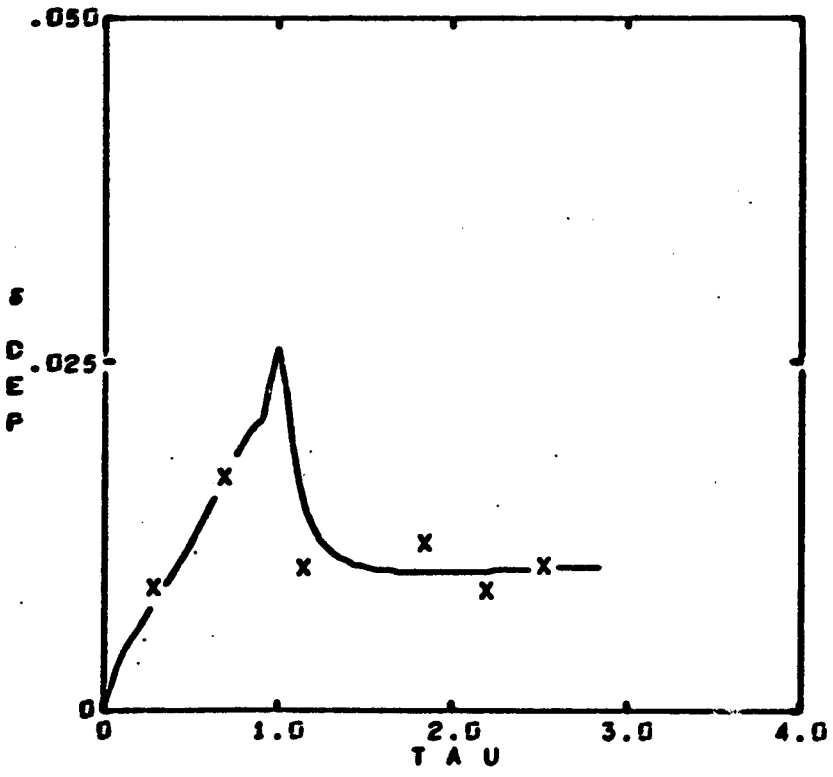
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0375	.0308	.0067
.50	.0672	.0551	.0121
.75	.0995	.0816	.0179
.93	.1209	.0991	.0218
1.0	.1157	.0895	.0262
1.5	.0656	.0553	.0103
2.0	.0554	.0455	.0099
2.5	.0496	.0394	.0102
3.0	.0454	.0351	.0103

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.761	386.47		386.47	0.993	-.0265
9H	-0.060	389.28		389.28	1.001	.0021
10H	0.287	370.43		370.43	0.952	.0428
11H	0.697	291.81	0.423 +.370	294.07	0.756	.0929
12H	1.148	201.72	0.456 +.475	207.69	0.534	.0812
13H	1.834	191.80	0.188 -.353	192.64	0.495	.0601
14H	2.195	177.37	0.698 +.975	185.27	0.476	.0514
15H	2.520	181.73	0.283 +.571	183.70	0.472	.0497
16H	3.238	274.84	1.067 +.374	280.17	0.720	-.0538







PHOTOGRAPH NOT AVAILABLE

260 (2J5) LANSBERG A

LAMBDA=31.09 W BETA= 0.18 N XI=-.5164 ETA=+.0032 L+PL CODE = 25010 ALBEDO =.0724

13H FLAT MOON DATA
FM=.04404 FM'=.04916

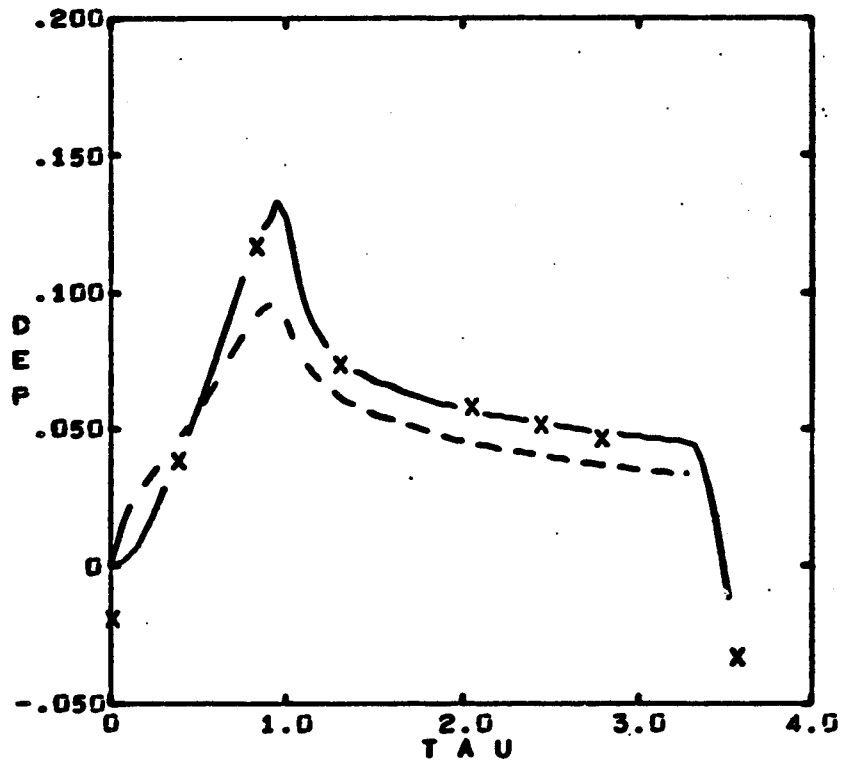
INITIAL TEMPERATURE 386.13
TAU-END OF TOTALITY 3.303

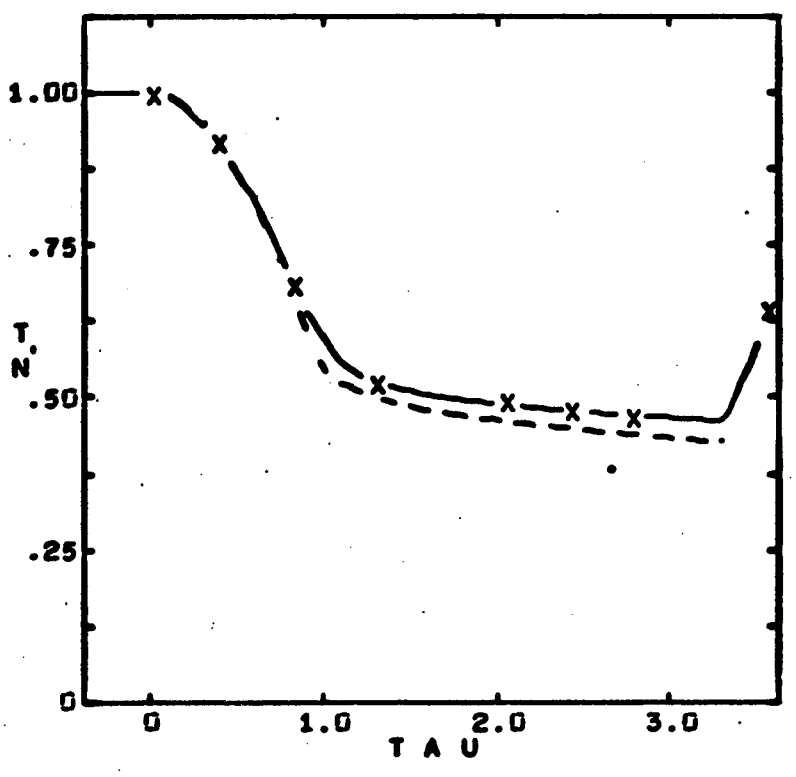
DIFFERENTIAL ENERGY DATA

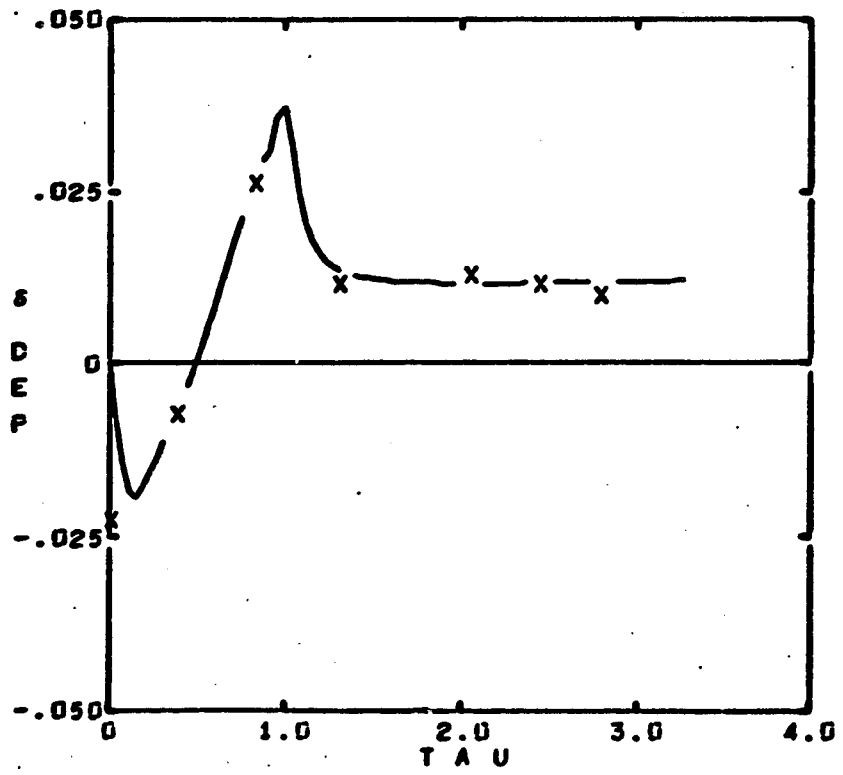
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0183	.0336	-.0153
.50	.0582	.0572	.0010
.75	.1036	.0829	.0207
.93	.1339	.0999	.0340
1.0	.1276	.0902	.0374
1.5	.0680	.0557	.0123
2.0	.0574	.0457	.0117
2.5	.0515	.0397	.0118
3.0	.0473	.0354	.0119

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.740	386.13		386.13	1.000	.0000
9H	0.016	384.09		384.09	0.995	-.0192
10H	0.390	353.10		353.10	0.914	.0390
11H	0.831	261.57	0.224 +.828	263.02	0.681	.1166
12H	1.314	196.79	0.399 +.155	201.16	0.521	.0737
13H	2.053	187.45	0.223 -.236	189.46	0.491	.0580
14H	2.439	181.12	0.335 +.234	184.18	0.477	.0518
15H	2.789	177.10	0.293 +.121	179.79	0.466	.0470
16H	3.568	246.95	0.000 +.200	246.95	0.640	-.0333







PHOTOGRAPH NOT AVAILABLE

261 (3J5) LANSBERG C

LAMBDA=30.59 W BETA= 3.00 S XI=-.5082 ETA=-.0523 L+PL CODE = 35005 ALBEDO =.0774

13H FLAT MOON DATA
FM=.06767 FM'=.07915

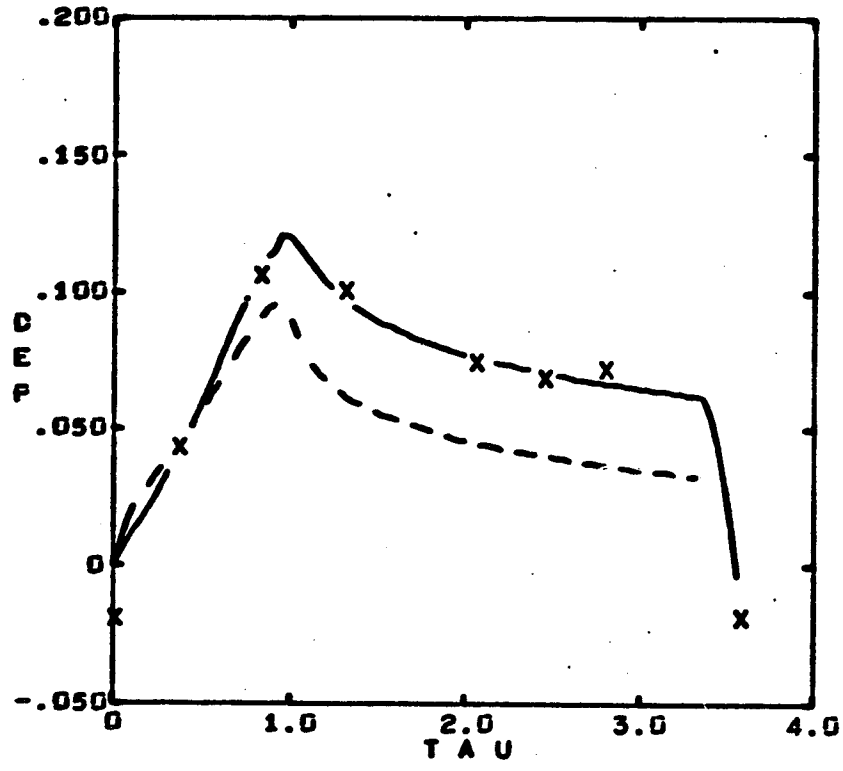
INITIAL TEMPERATURE 385.23
TAU-END OF TOTALITY 3.347

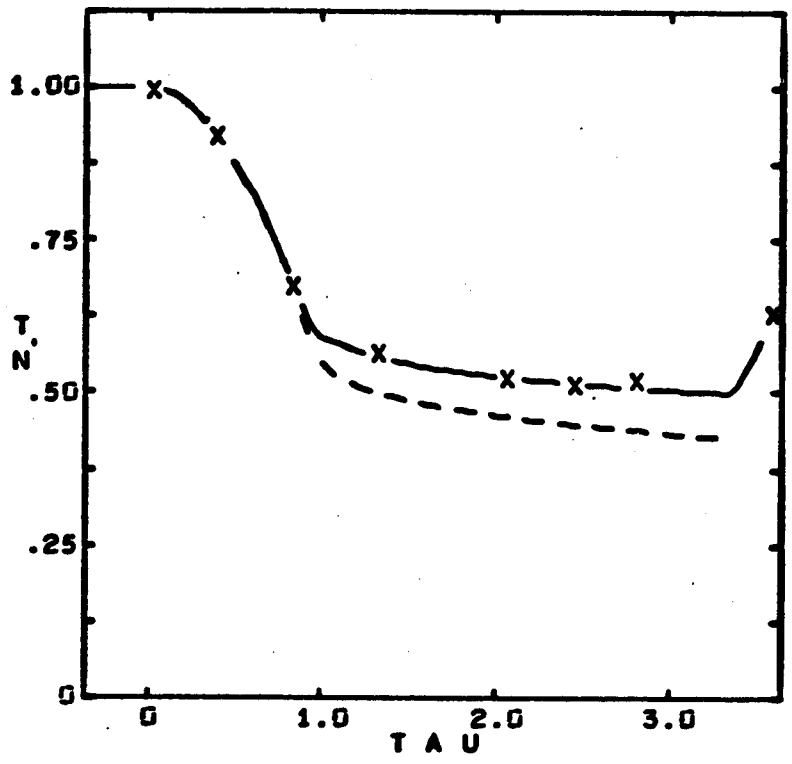
DIFFERENTIAL ENERGY DATA

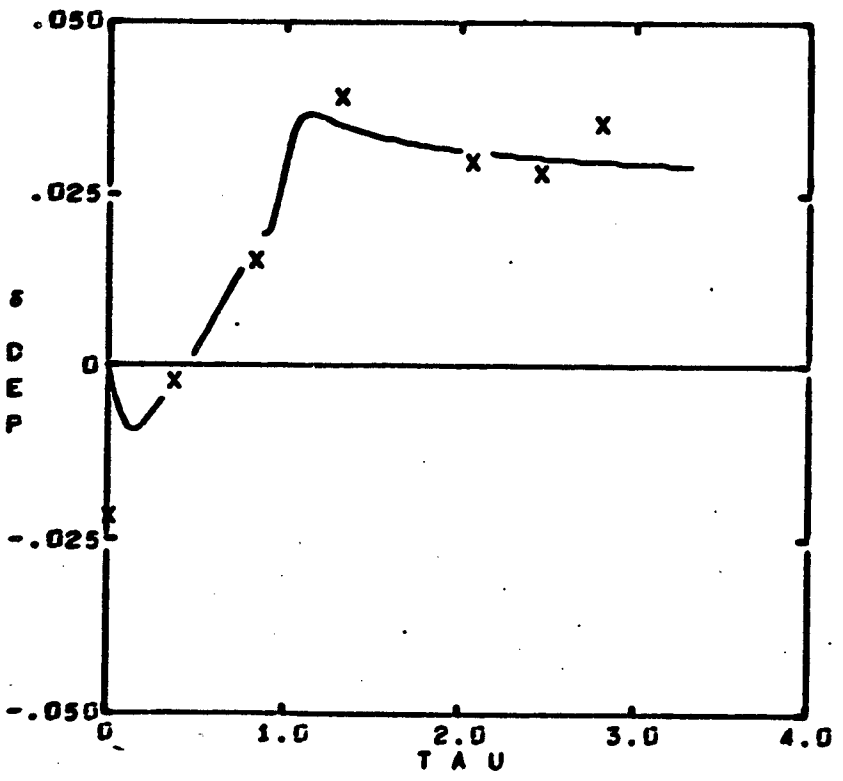
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0263	.0335	-.0072
.50	.0595	.0571	.0024
.75	.0966	.0828	.0138
.93	.1213	.0998	.0215
1.0	.1198	.0902	.0296
1.5	.0892	.0556	.0336
2.0	.0771	.0457	.0314
2.5	.0699	.0397	.0302
3.0	.0649	.0353	.0296

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.751	385.23			385.23	1.000	.0000
9H	0.011	383.27			383.27	0.995	-.0191
10H	0.386	353.62			353.62	0.918	.0438
11H	0.830	259.52	0.000	-.869	259.52	0.674	.1059
12H	1.317	214.28	0.193	+.835	217.15	0.564	.1010
13H	2.061	196.87	0.237	-.782	201.41	0.523	.0747
14H	2.450	195.22	0.153	+.632	197.06	0.512	.0685
15H	2.802	198.00	0.150	+.617	199.75	0.519	.0723
16H	3.588	237.42	1.975	+.290	242.26	0.629	-.0160







PHOTOGRAPH NOT AVAILABLE

262 (3J6) LANSBERG E

LAMBDA=30.28 W BETA= 1.83 S XI=-.5040 ETA=-.0319 L+PL CODE = 35003 ALBEDO =.0697

13H FLAT MOON DATA
FM=.03140 FM'=.03140

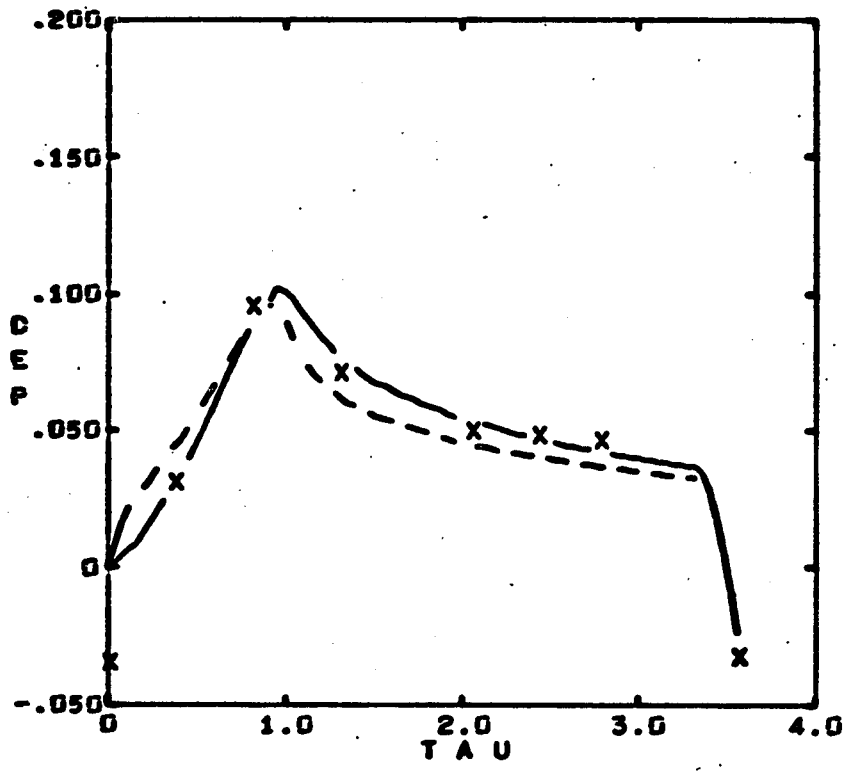
INITIAL TEMPERATURE 386.71
TAU-END OF TOTALITY 3.330

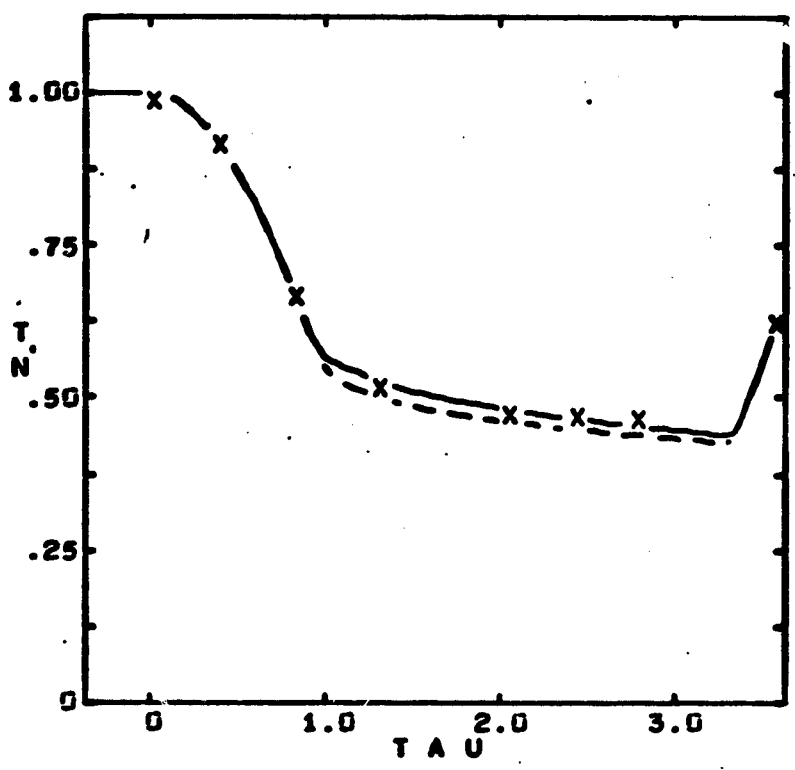
DIFFERENTIAL ENERGY DATA

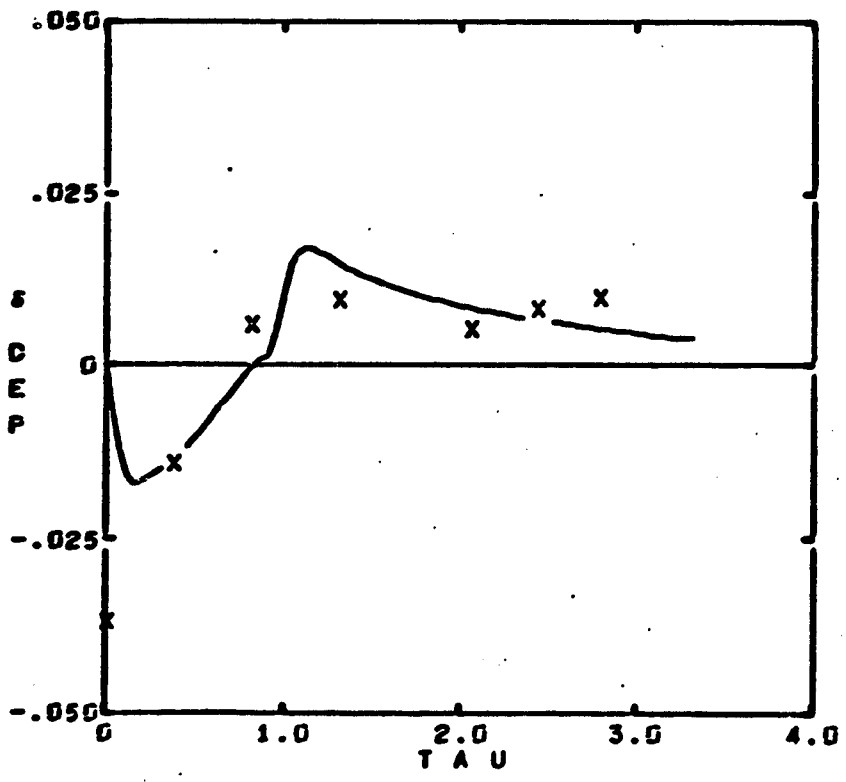
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0173	.0333	-.0160
.50	.0469	.0570	-.0101
.75	.0804	.0828	-.0024
.93	.1026	.0998	.0028
1.0	.1007	.0901	.0106
1.5	.0683	.0556	.0127
2.0	.0544	.0457	.0087
2.5	.0461	.0397	.0064
3.0	.0401	.0353	.0048

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.750	386.71		386.71	1.000	-.0000
9H	0.010	383.20		383.20	0.991	-.0349
10H	0.384	353.69		353.69	0.915	.0314
11H	0.827	258.18	0.000 -.898	258.18	0.668	.0959
12H	1.313	200.07	0.000 -.085	200.07	0.517	.0716
13H	2.055	183.06	0.000 -.089	183.06	0.473	.0502
14H	2.443	181.47	0.000 -.083	181.47	0.469	.0485
15H	2.794	180.00	0.000 -.064	180.00	0.465	.0469
16H	3.578	240.52	0.000 +.214	240.52	0.622	-.0318







PHOTOGRAPH NOT AVAILABLE

263 (4E1) LANGRENUS

LAMBDA=60.92 E BETA= 8.90 S XI=+.8634 ETA=-.1547 L+PL CODE = 48163 ALBEDO =.1315

13H FLAT MOON DATA
FM=.08292 FM'=.08549

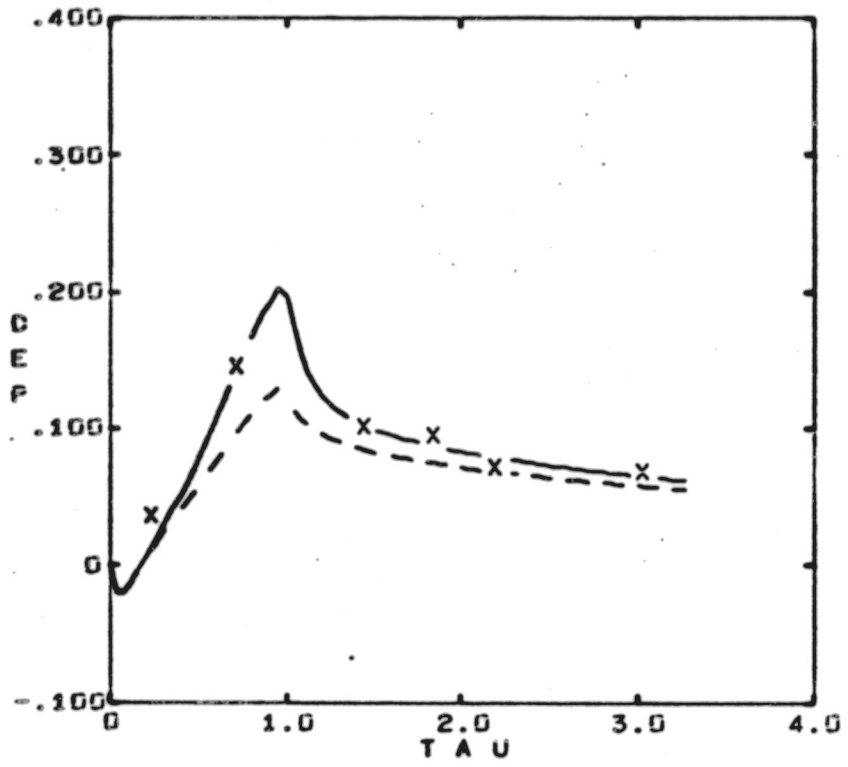
INITIAL TEMPERATURE 353.65
TAU-END OF TOTALITY 3.287

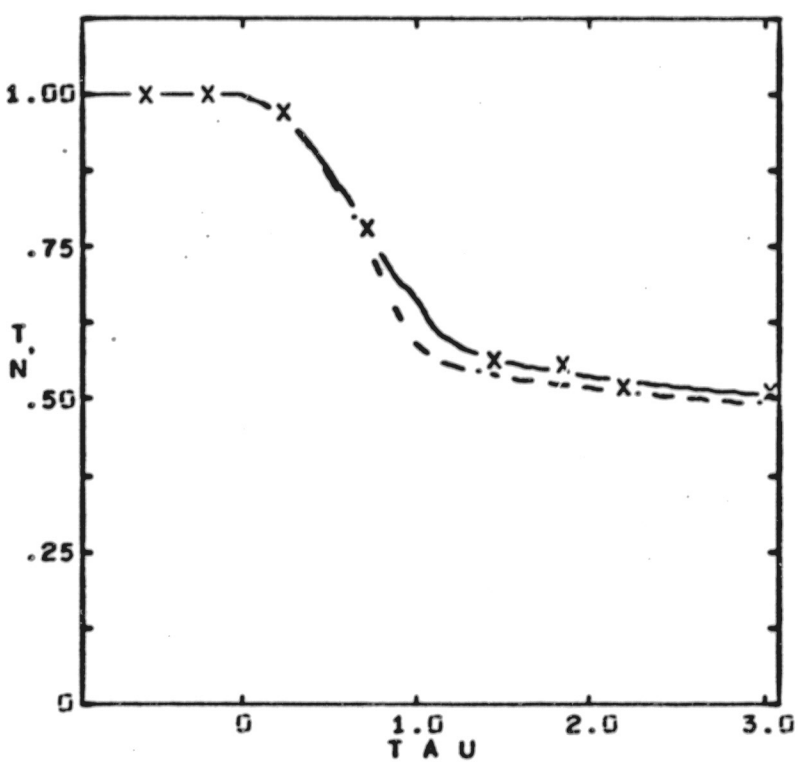
DIFFERENTIAL ENERGY DATA

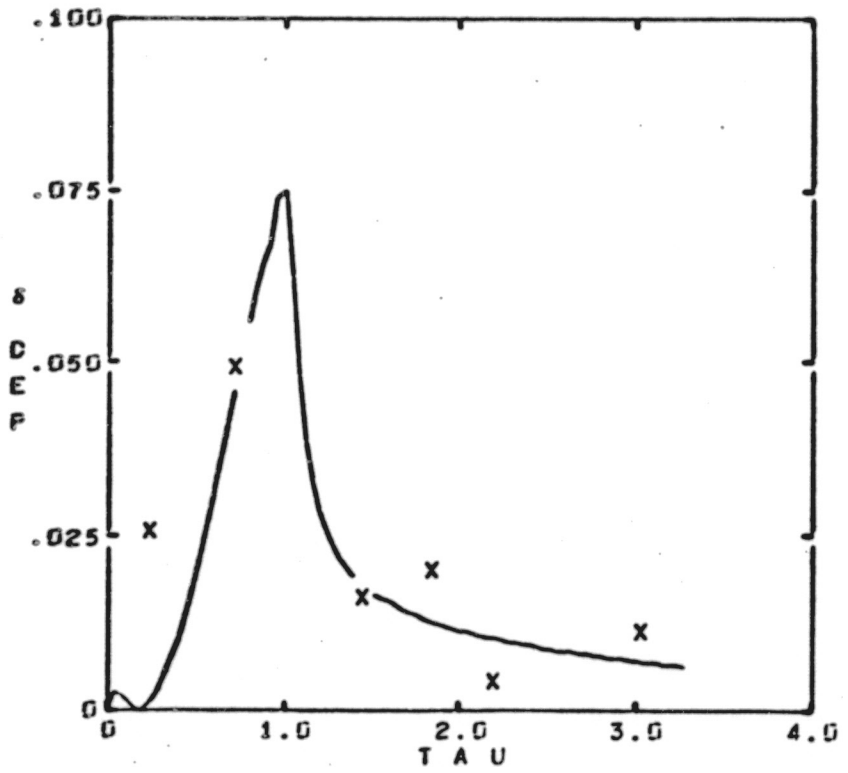
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0149	.0138	.0011
.50	.0780	.0581	.0199
.75	.1510	.1014	.0496
.93	.2020	.1303	.0717
1.0	.1959	.1210	.0749
1.5	.1002	.0831	.0171
2.0	.0834	.0719	.0115
2.5	.0733	.0645	.0088
3.0	.0658	.0587	.0071

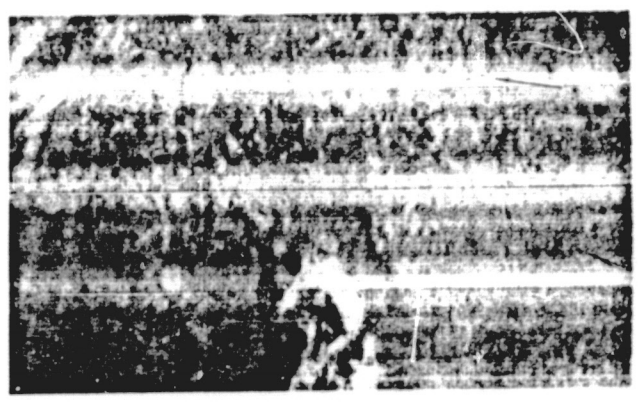
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.330	355.16		355.16	1.004	.0172
9H	-0.579	353.71		353.71	1.000	.0007
10H	-0.206	353.40		353.40	0.999	-.0029
11H	0.233	342.91		342.91	0.970	.0362
12H	0.716	268.22	1.369 -.662	275.47	0.779	.1452
13H	1.451	198.32	0.132 +.431	199.37	0.564	.1010
14H	1.839	187.88	0.394 +.737	196.31	0.555	.0949
15H	2.186	183.80	0.000 -.422	183.80	0.520	.0730
16H	3.024	177.72	0.499 +.795	181.75	0.514	.0698









NASA-LRC LUNAR ORI
SPACECRAFT FRAME NO. 04
SITE 10B GRE O
C114 DATE: 13 Nov 1967 TIME:

264 (4E2) LANGRENUS C

LAMBDA=60.07 E BETA= 5.60 S XI=+.8625 ETA=-.0975 L+PL CODE = 48069 ALBEDO =.0707

13H FLAT MOON DATA
FM=.03942 FM'=.04588

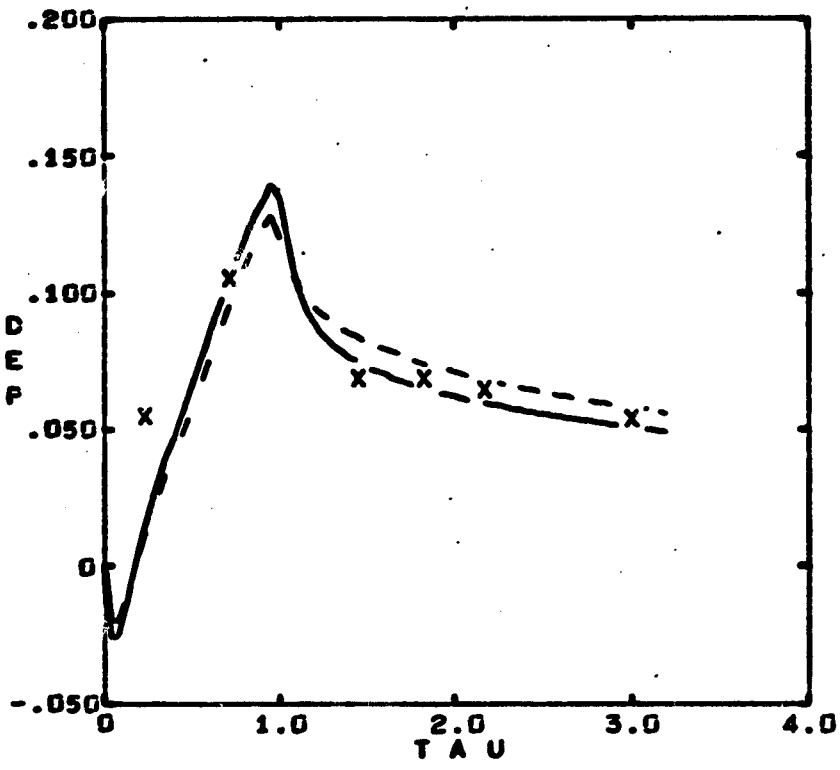
INITIAL TEMPERATURE 364.69
TAU-END OF TOTALITY 3.239

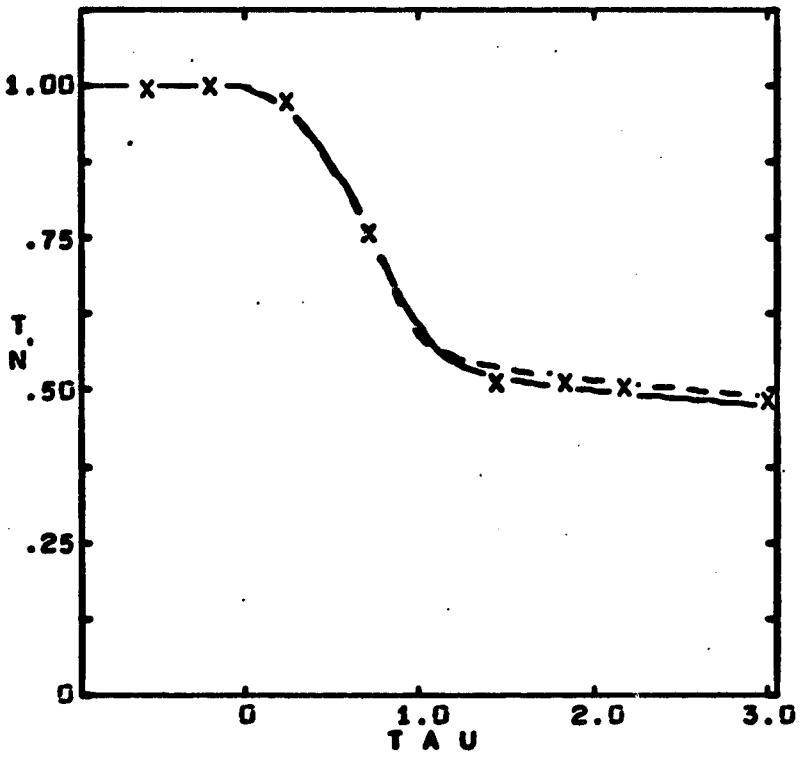
DIFFERENTIAL ENERGY DATA

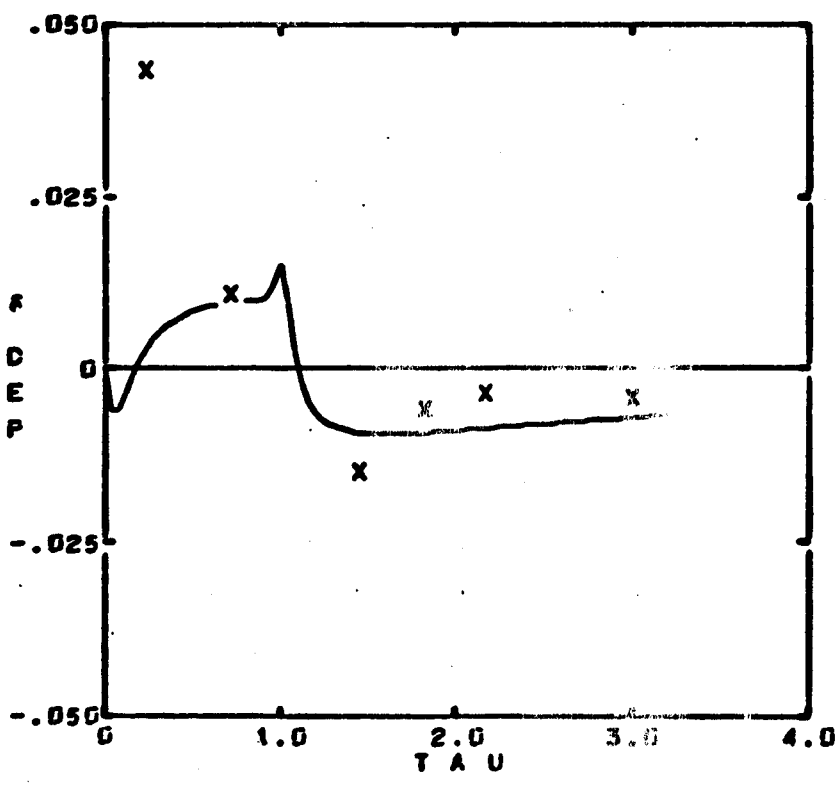
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0173	.0141	.0032
.50	.0661	.0577	.0084
.75	.1103	.1005	.0098
.93	.1391	.1291	.0100
1.0	.1351	.1198	.0153
1.5	.0729	.0822	-.0093
2.0	.0622	.0711	-.0089
2.5	.0557	.0637	-.0080
3.0	.0509	.0579	-.0070

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.318	367.46			367.46	1.008	.0307
9H	-0.573	363.38			363.38	0.996	-.0143
10H	-0.203	364.72			364.72	1.000	.0004
11H	0.234	355.34			355.34	0.974	.0546
12H	0.713	276.49	0.063	+.491	276.60	0.758	.1053
13H	1.443	183.34	0.340	+.372	187.03	0.513	.0692
14H	1.928	178.57	0.452	+.742	186.52	0.511	.0684
15H	2.172	179.76	0.341	-.188	184.11	0.505	.0650
16H	3.001	163.11	0.708	-.457	175.60	0.482	.0538







PHOTOGRAPH NOT AVAILABLE

265 (4E3) LANGRENUS C

LAMBDA=55.75 E BETA=10.43 S XI=+.8129 ETA=-.1810 L+PL CODE = 48118 ALBEDO =.0780

13H FLAT MOON DATA
FM=.02702 FM'=.03717

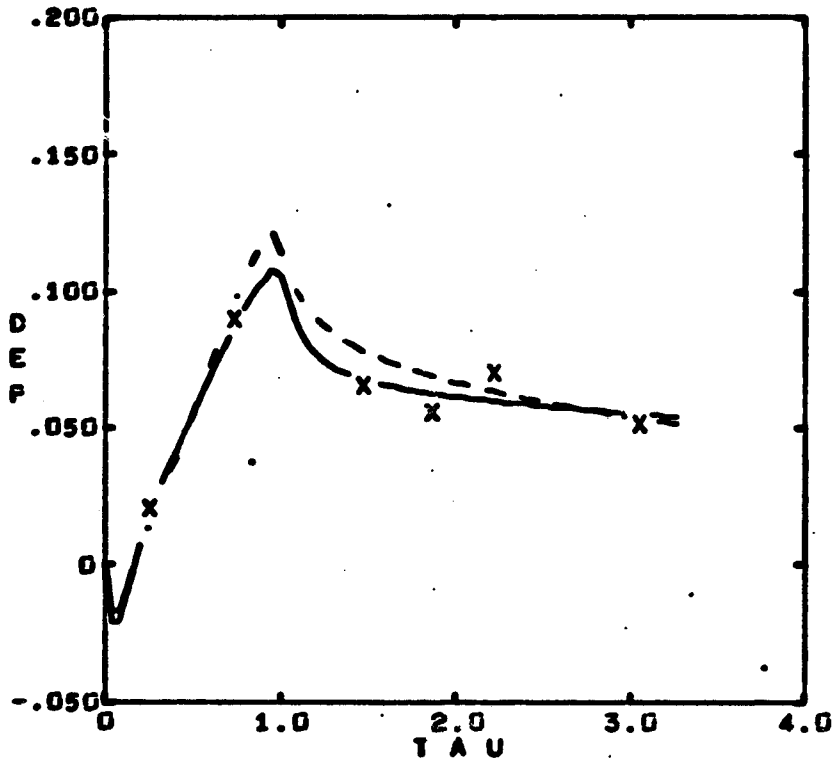
INITIAL TEMPERATURE 365.65
TAU-END OF TOTALITY 3.314

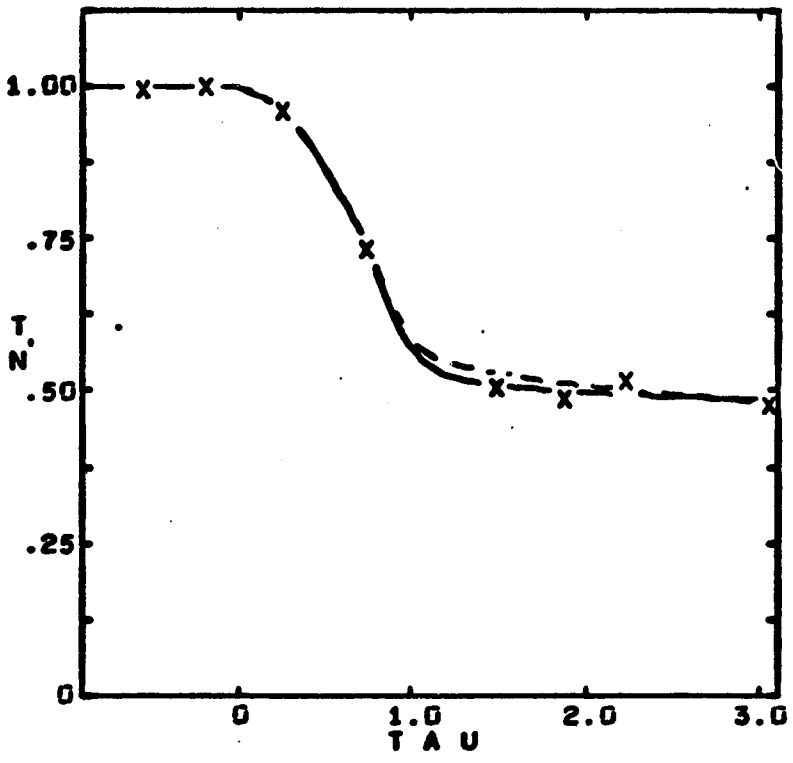
DIFFERENTIAL ENERGY DATA

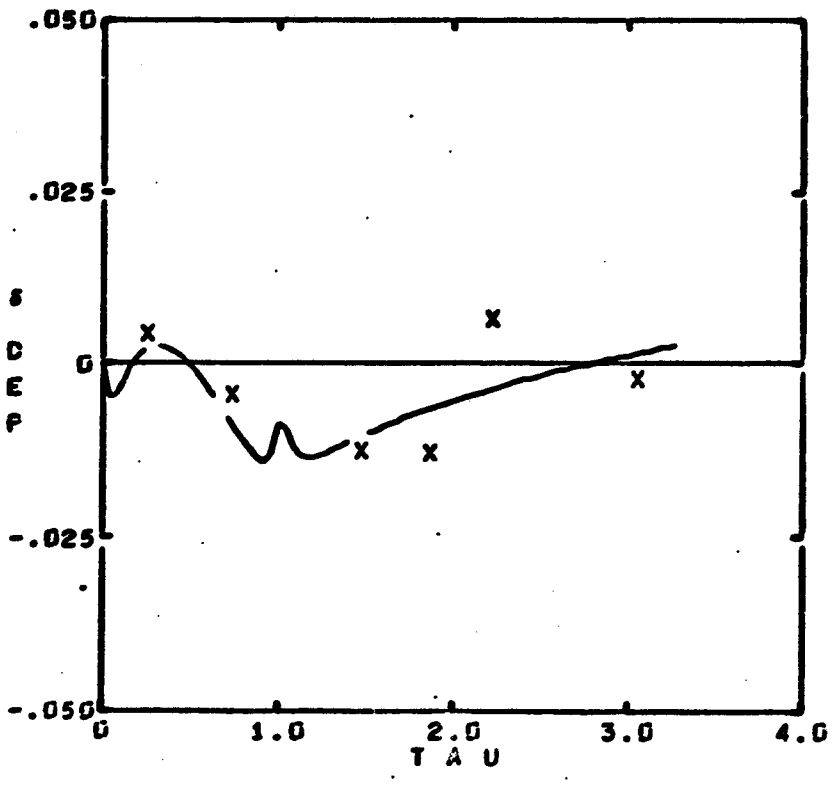
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0174	.0152	.0022
.50	.0556	.0559	-.0003
.75	.0874	.0962	-.0088
.93	.1075	.1232	-.0157
1.0	.1053	.1140	-.0087
1.5	.0673	.0775	-.0102
2.0	.0615	.0667	-.0052
2.5	.0580	.0596	-.0016
3.0	.0554	.0541	.0013

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.315	365.84		365.84	1.001	.0021
9H	-0.560	364.95		364.95	0.998	-.0076
10H	-0.187	365.86		365.86	1.001	.0023
11H	0.255	350.57		350.57	0.959	.0205
12H	0.739	266.50	0.343 -.060	267.54	0.732	.0902
13H	1.478	180.69	0.458 +.058	185.12	0.506	.0657
14H	1.867	173.48	0.556 +.321	177.95	0.487	.0561
15H	2.216	187.48	0.116 -.508	188.20	0.515	.0702
16H	3.054	170.36	0.701 +.085	174.06	0.476	.0513







PHOTOGRAPH NOT AVAILABLE

LAMBDA=26.85 W BETA=43.68 N XI=-.3267 ETA=+.6906 L+PL CODE = 23629 ALBEDO =.0666

13H FLAT MOON DATA
FM=.09004 FM'=.10132

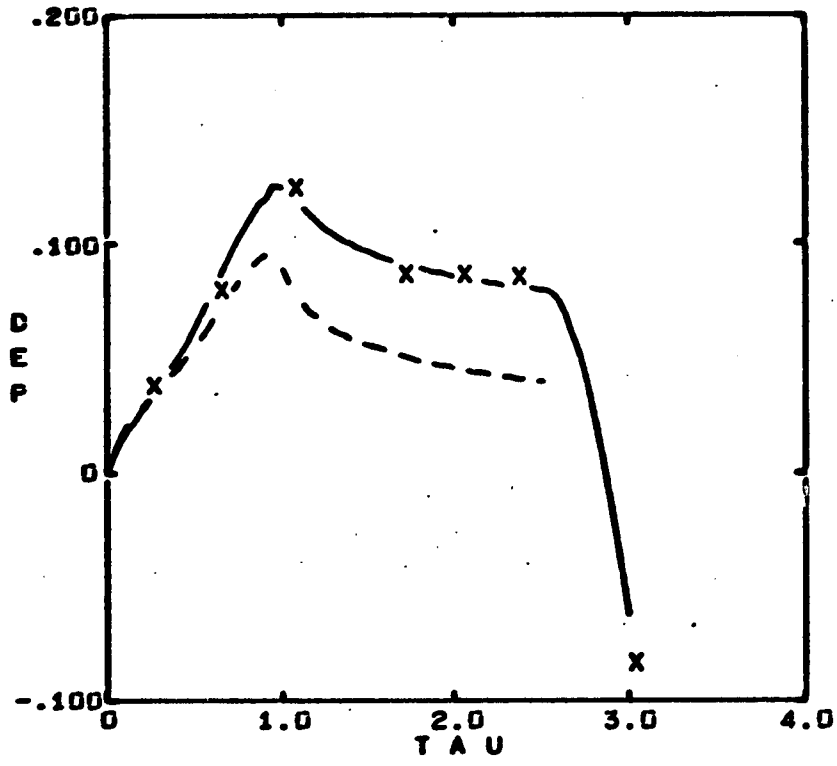
INITIAL TEMPERATURE 370.61
TAU-END OF TOTALITY 2.554

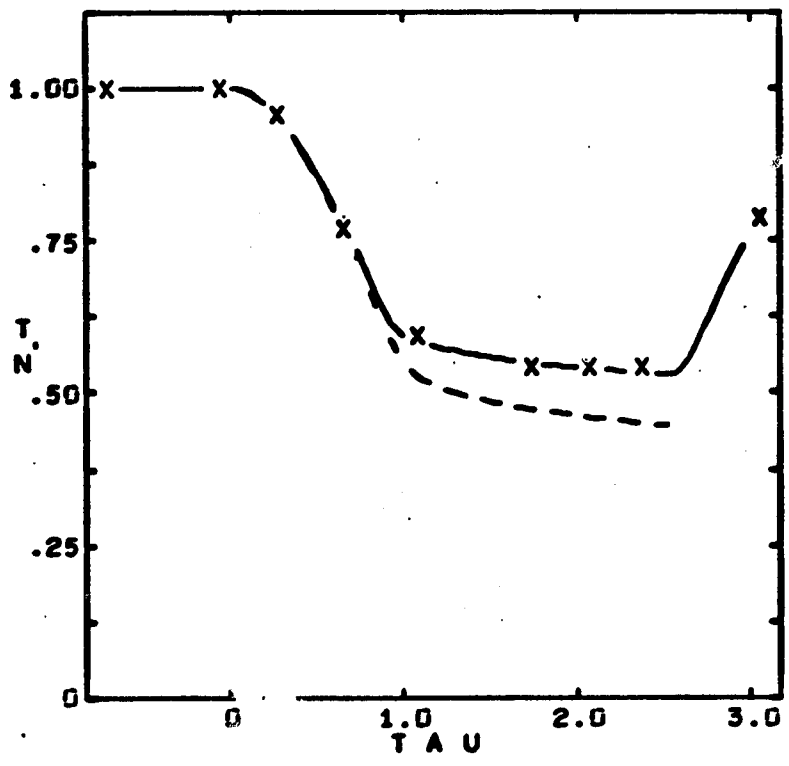
DIFFERENTIAL ENERGY DATA

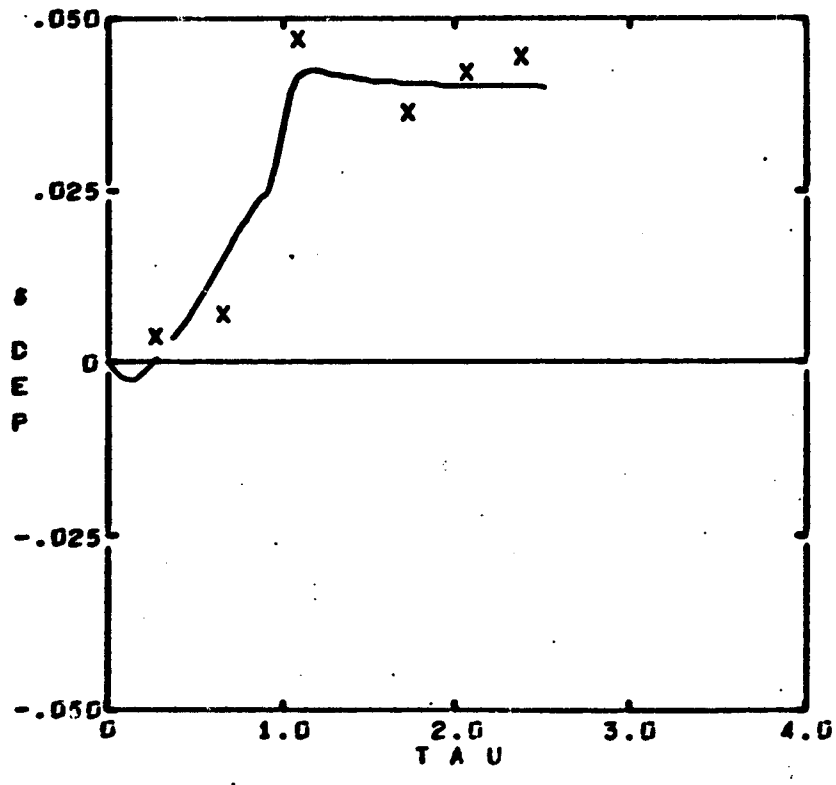
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0322	.0323	-.0001
.50	.0650	.0562	.0088
.75	.1015	.0823	.0192
.93	.1257	.0995	.0262
1.0	.1245	.0899	.0346
1.5	.0966	.0555	.0411
2.0	.0859	.0456	.0403
2.5	.0796	.0396	.0400
3.0	.0752	.0352	.0400

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.723	371.06		371.06	1.001	.0050
9H	-0.063	370.57		370.57	1.000	-.0004
10H	0.266	354.00		354.00	0.955	.0375
11H	0.653	285.75	0.000 -.579	285.75	0.771	.0793
12H	1.078	220.10	0.049 +.506	220.28	0.594	.1248
13H	1.725	196.66	0.228 +.116	201.04	0.542	.0866
14H	2.067	191.97	0.353 +.620	201.26	0.543	.0870
15H	2.373	198.34	0.114 -.174	200.32	0.541	.0854
16H	3.044	291.27	0.000 +.192	291.27	0.786	-.0840







PHOTOGRAPH NOT AVAILABLE

LAMBDA=19.79 W BETA=45.46 N XI=-.2375 ETA=+.7127 L+PL CODE = 22731 ALBEDO =.0672

13H FLAT MOON DATA
FM=.04721 FM'=.05374

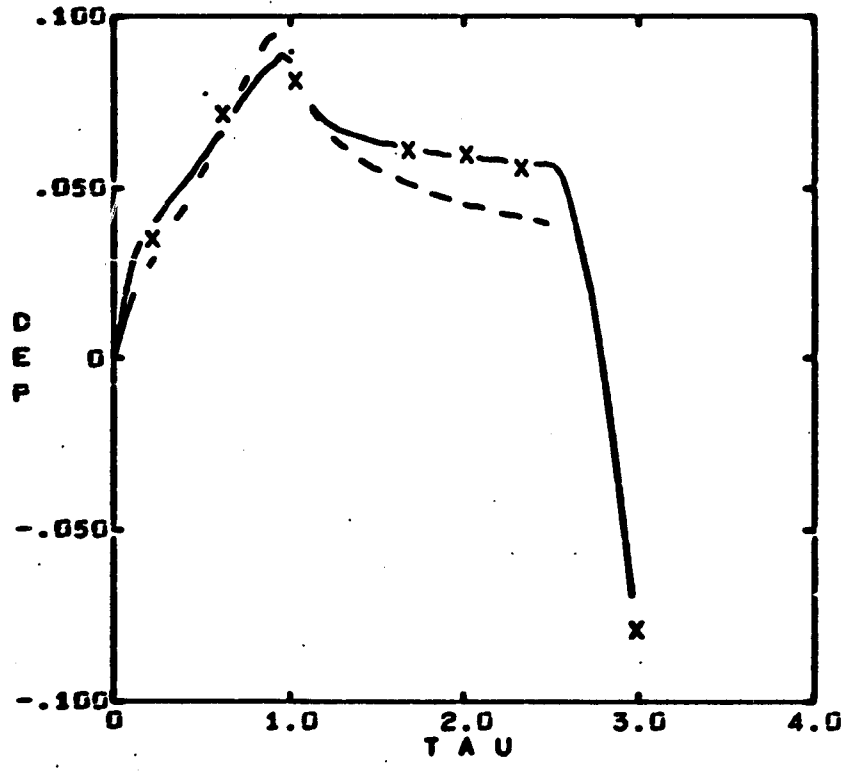
INITIAL TEMPERATURE 373.23
TAU-END OF TOTALITY 2.510

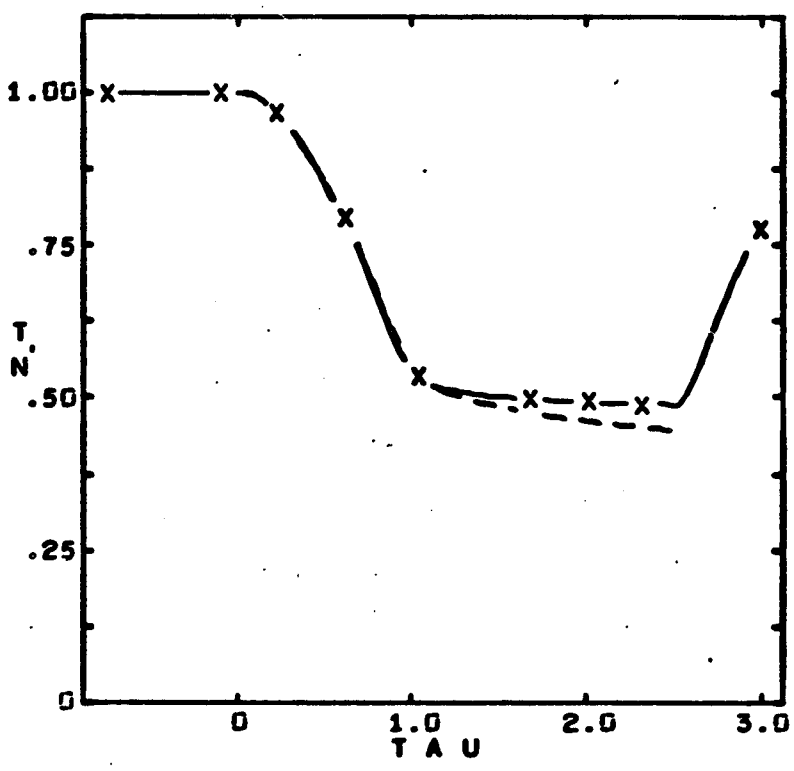
DIFFERENTIAL ENERGY DATA

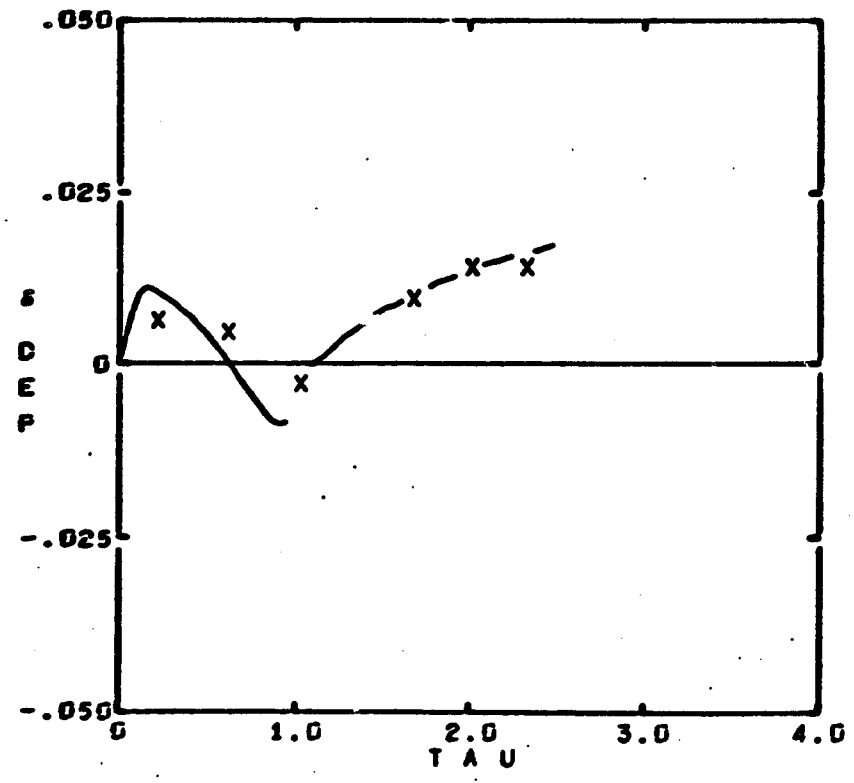
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0407	.0305	.0102
.50	.0568	.0549	.0039
.75	.0771	.0814	-.0043
.93	.0889	.0990	-.0101
1.0	.0866	.0895	-.0029
1.5	.0632	.0553	.0079
2.0	.0591	.0454	.0137
2.5	.0568	.0394	.0174

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.752	373.55		373.55	1.001	.0034
9H	-0.098	373.19		373.19	1.000	-.0004
10H	0.228	360.76		360.76	0.967	.0350
11H	0.612	296.14	0.000 -.759	296.14	0.793	.0714
12H	1.033	198.99	0.000 +.453	198.99	0.533	.0808
13H	1.674	182.94	0.300 +.182	185.36	0.497	.0608
14H	2.013	180.77	0.333 +.557	184.29	0.494	.0594
15H	2.316	180.14	0.153 +.104	181.27	0.486	.0556
16H	2.984	289.57	0.000 +.569	289.57	0.776	-.0795







PHOTOGRAPH
NOT
AVAILABLE

268 (3J7) LETRONNE F

LAMBDA=46.05 W BETA= 9.22 S XI=-.7106 ETA=-.1603 L+PL CODE = 37116 ALBEDO =.0670

13H FLAT MOON DATA
FM=.08826 FM'=.08873

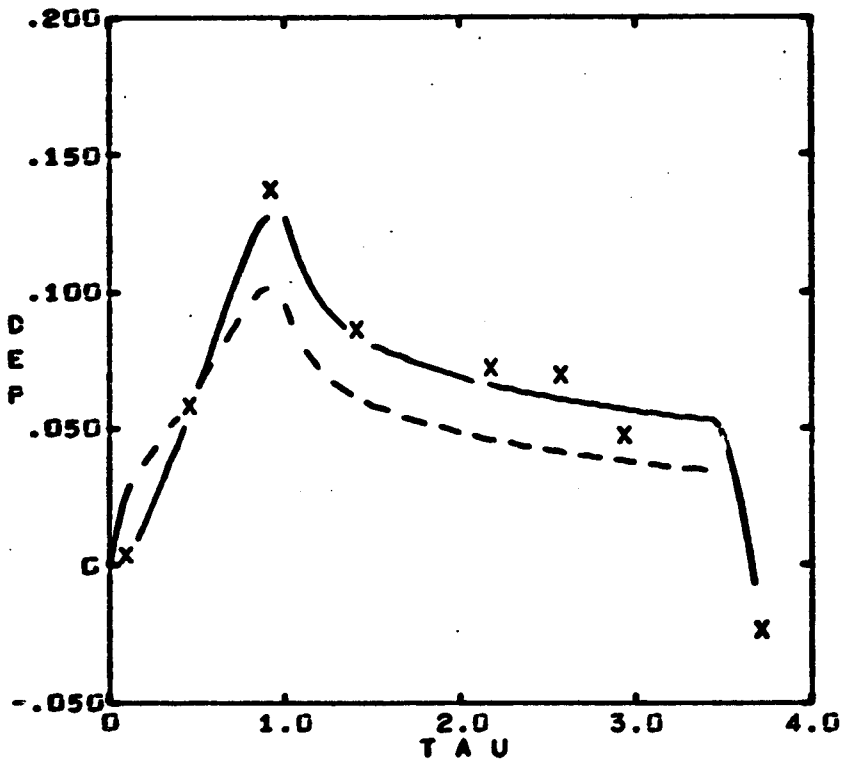
INITIAL TEMPERATURE 373.18
TAU-END OF TOTALITY 3.446

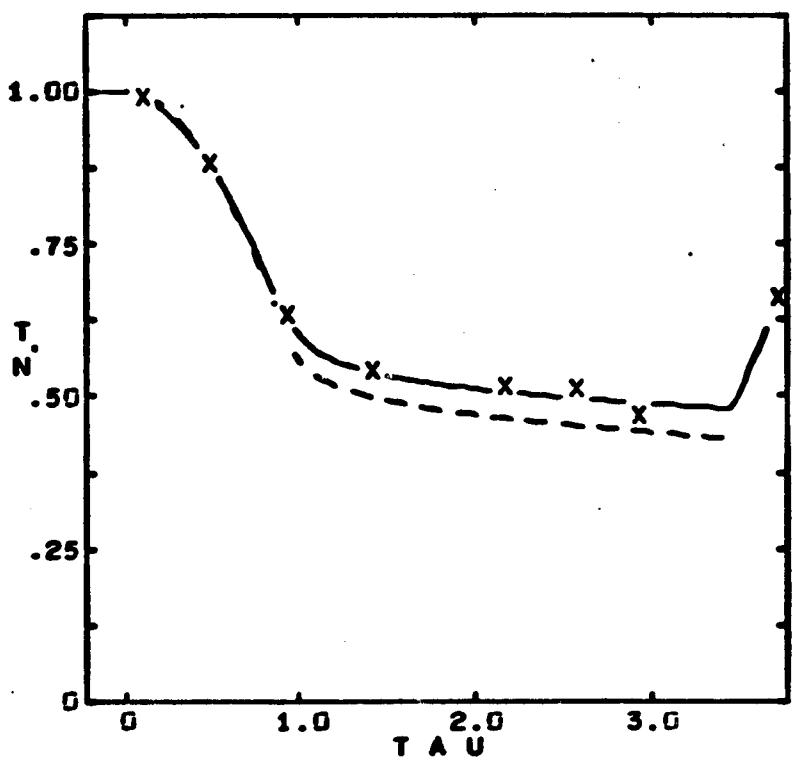
DIFFERENTIAL ENERGY DATA

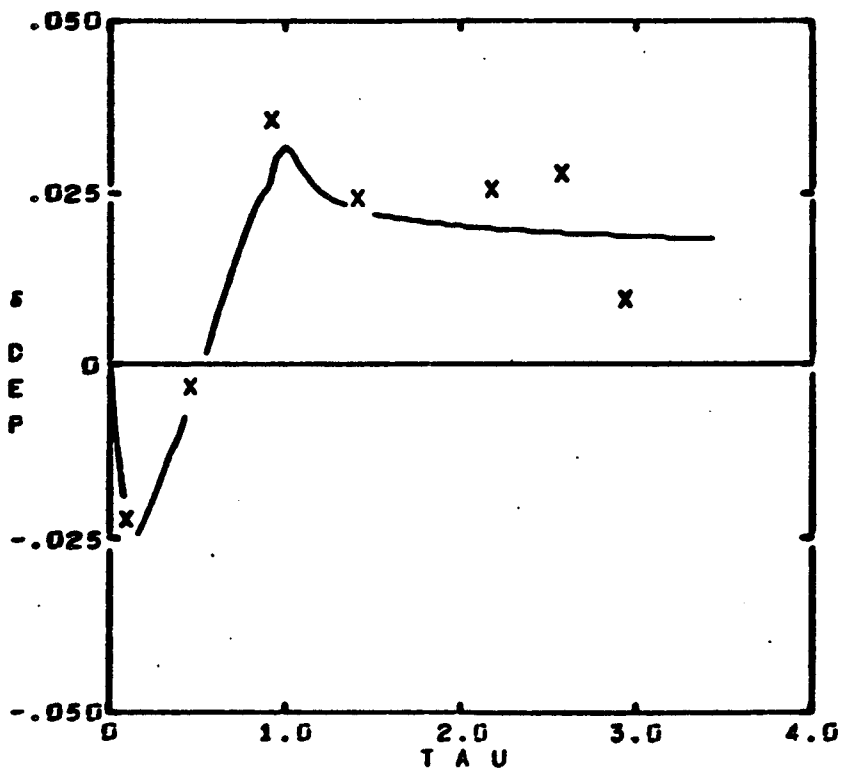
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0209	.0408	-.0199
.50	.0609	.0639	-.0030
.75	.1055	.0892	.0163
.93	.1347	.1057	.0290
1.0	.1275	.0957	.0318
1.5	.0812	.0591	.0221
2.0	.0688	.0486	.0202
2.5	.0616	.0423	.0193
3.0	.0565	.0378	.0187

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.678	373.18		373.18	1.000	.0000
9H	0.095	370.27		370.27	0.992	.0037
10H	0.477	329.19		329.19	0.882	.0585
11H	0.927	232.57	0.421 +.835	236.97	0.635	.1372
12H	1.420	197.66	0.298 -.008	202.00	0.541	.0859
13H	2.177	192.95	0.014 -.847	193.13	0.518	.0717
14H	2.571	182.32	0.422 +.808	191.66	0.514	.0696
15H	2.929	173.27	0.157 -.497	174.63	0.468	.0480
16H	3.720	247.14	0.000 +.803	247.14	0.662	-.0236







PHOTOGRAPH NOT AVAILABLE

269 (2J8) LE VERRIER C

LAMBDA=12.31 W BETA=39.69 N XI=-.1641 ETA=+.6386 L+PL CODE = 21663 ALBEDO =.0702

13H FLAT MOON DATA
FM=.02208 FM'=.02208

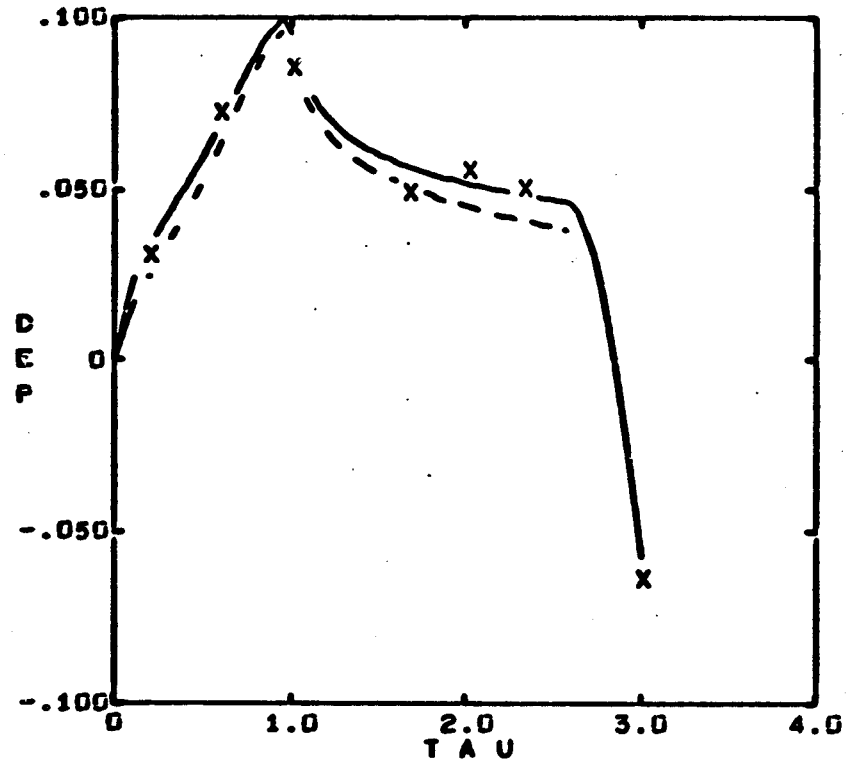
INITIAL TEMPERATURE 380.20
TAU-END OF TOTALITY 2.595

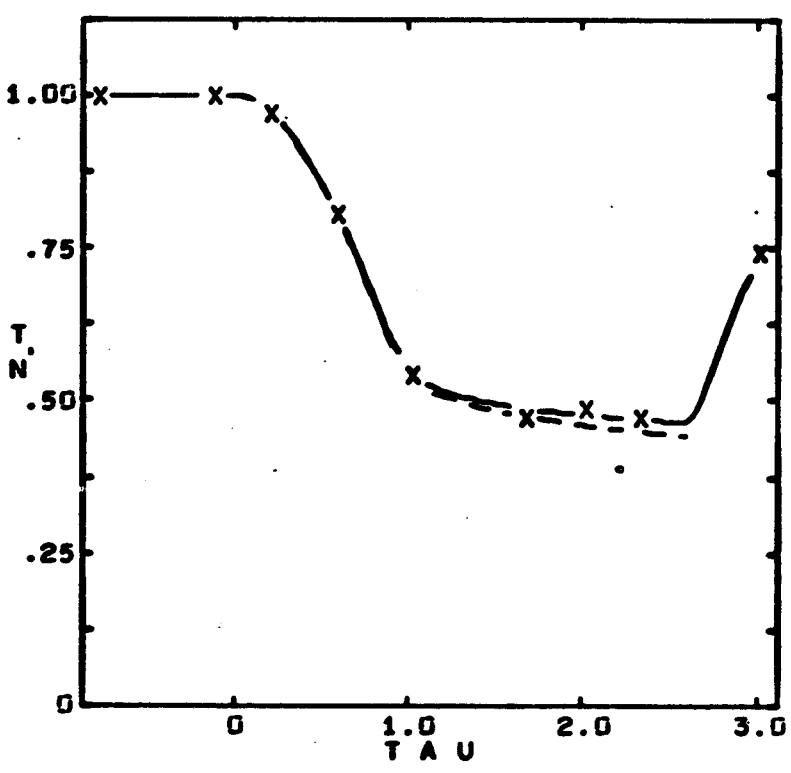
DIFFERENTIAL ENERGY DATA

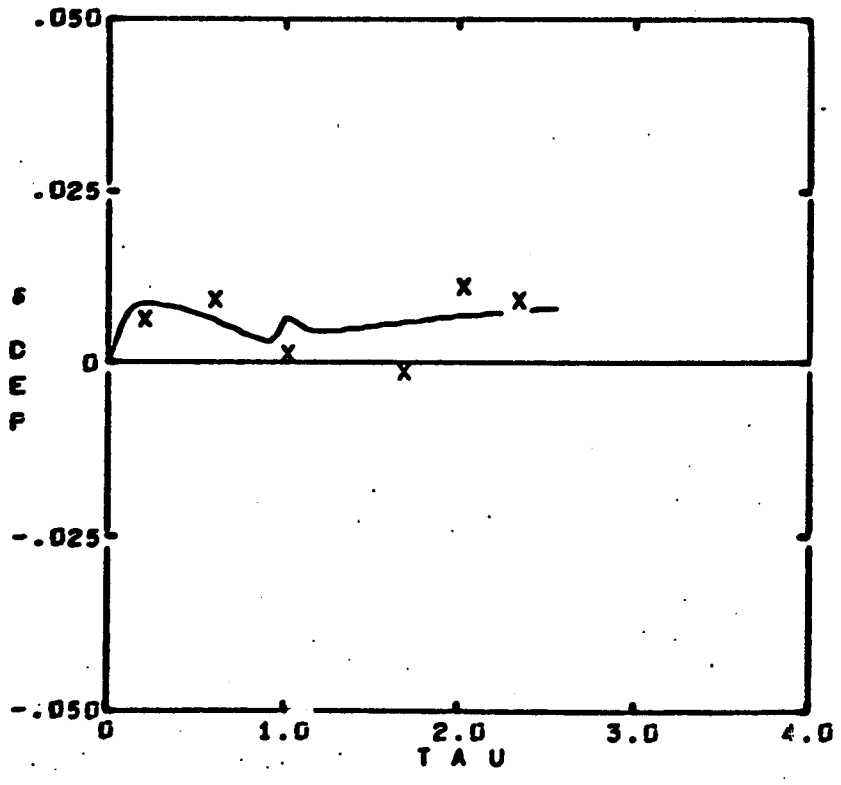
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0372	.0286	.0086
.50	.0604	.0532	.0072
.75	.0846	.0801	.0045
.93	.1005	.0979	.0026
1.0	.0952	.0885	.0067
1.5	.0600	.0547	.0053
2.0	.0518	.0449	.0069
2.5	.0469	.0389	.0080
3.0	.0434	.0346	.0088

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.790	380.12		380.12	1.000	-.0009
9H	-0.124	380.22		380.22	1.000	.0001
10H	0.207	369.74		369.74	0.972	.0309
11H	0.597	306.49	0.000 -.720	306.49	0.806	.0728
12H	1.025	203.54	0.409 -.093	205.55	0.541	.0854
13H	1.678	179.19	0.000 +.205	179.19	0.471	.0493
14H	2.022	180.45	0.333 +.177	184.85	0.486	.0559
15H	2.330	174.09	0.513 +.180	179.91	0.473	.0501
16H	3.014	281.44	1.485 +.583	283.28	0.745	-.0634







PHOTOGRAPH NOT AVAILABLE

270 (2J9) LE VERRIER E

LAMBDA=16.95 W BETA=42.35 N XI=-.2155 ETA=+.6736 L+PL CODE = 22617 ALBEDO =.0673

13H FLAT MOON DATA
FM=.06740 FM'=.06875

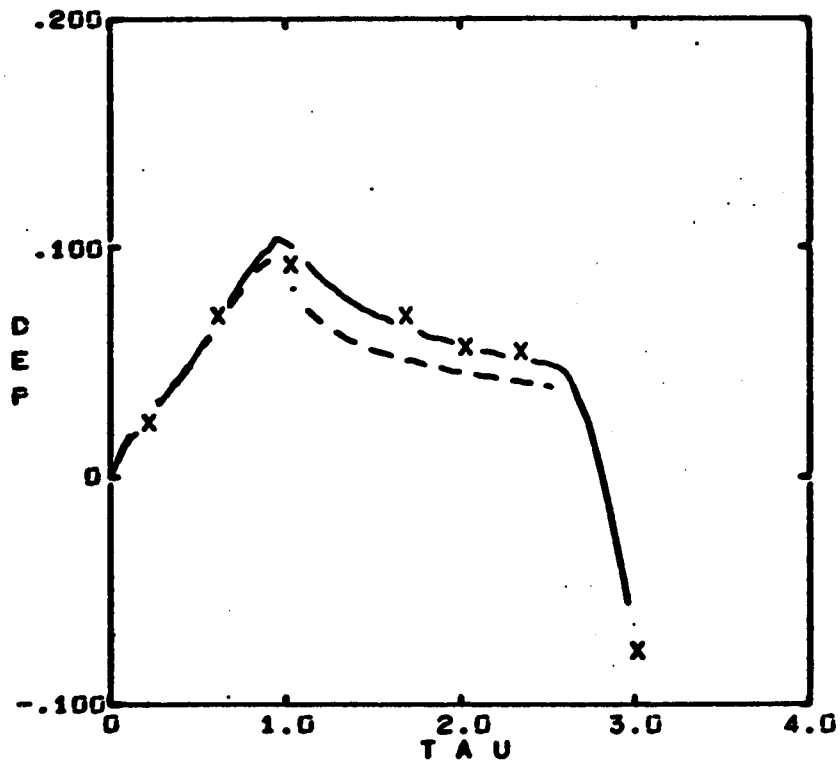
INITIAL TEMPERATURE 377.16
TAU-END OF TOTALITY 2.558

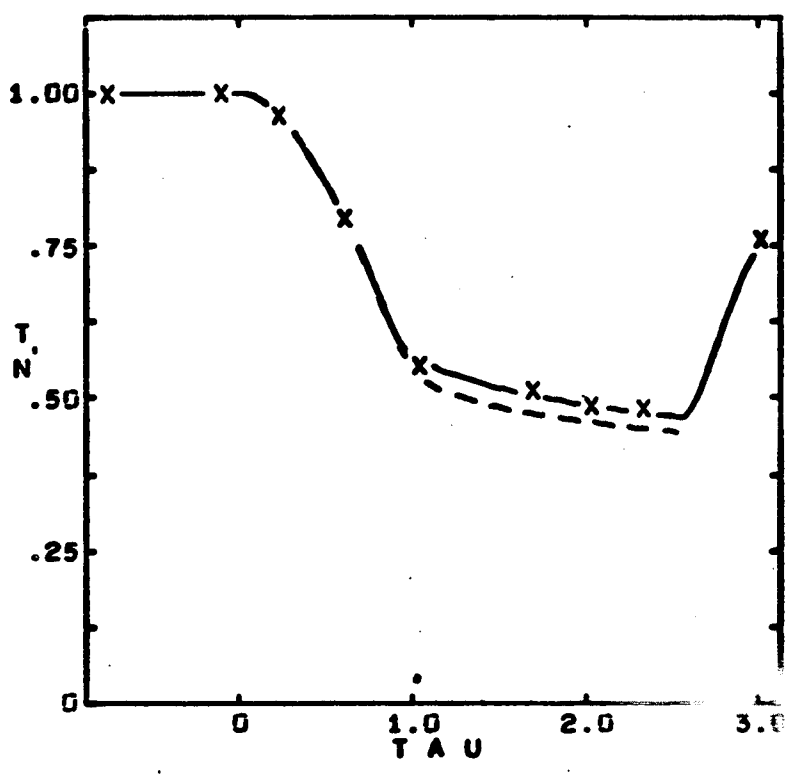
DIFFERENTIAL ENERGY DATA

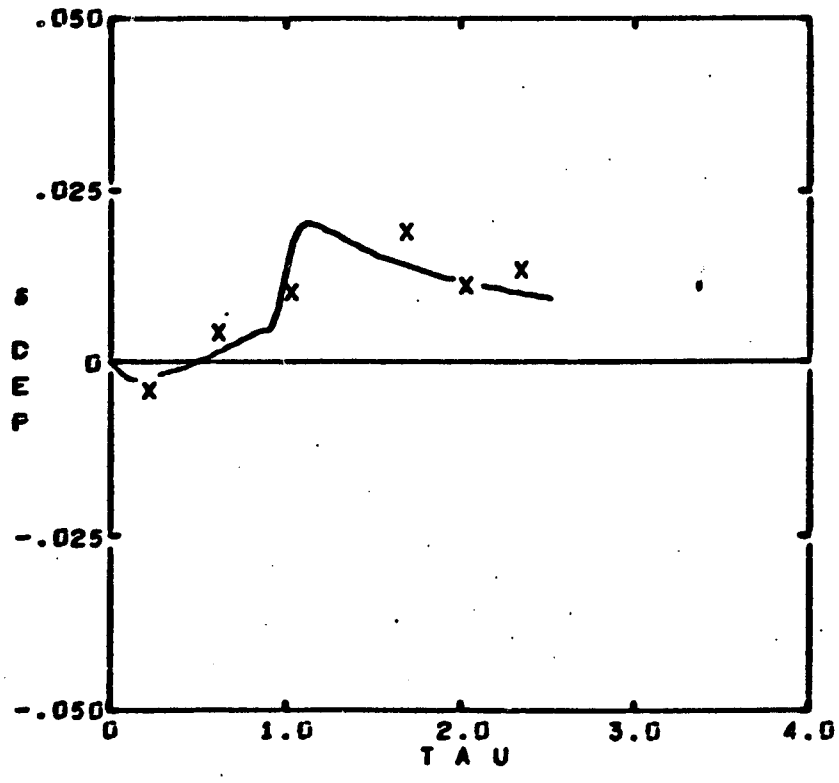
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0276	.0297	-.0021
.50	.0544	.0542	.0002
.75	.0841	.0809	.0032
.93	.1039	.0985	.0054
1.0	.1024	.0890	.0134
1.5	.0708	.0550	.0158
2.0	.0571	.0452	.0119
2.5	.0487	.0392	.0095
3.0	.0426	.0348	.0078

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.766	377.23		377.23	1.000	.0008
9H	-0.105	377.15		377.15	1.000	-.0001
10H	0.224	363.94		363.94	0.965	.0232
11H	0.610	299.93	0.000 -.792	299.93	0.795	.0703
12H	1.0 7	207.64	0.082 -.749	208.12	0.552	.0927
13H	1.68	193.23	0.057 +.361	193.73	0.514	.0696
14H	2.02	179.85	0.314 +.723	183.40	0.486	.0559
15H	2.332	181.82	0.059 -.005	182.28	0.483	.0546
16H	3.008	287.03	0.000 +.119	287.03	0.761	-.0762







PHOTOGRAPH NOT AVAILABLE

271 (1H9) LICK C

LAMBDA=52.71 E BETA=13.16 N XI=+.7747 ETA=+.2276 L+PL CODE = 17272 ALBEDO =.0698

13H FLAT MOON DATA
FM=.04293 FM'=.05442

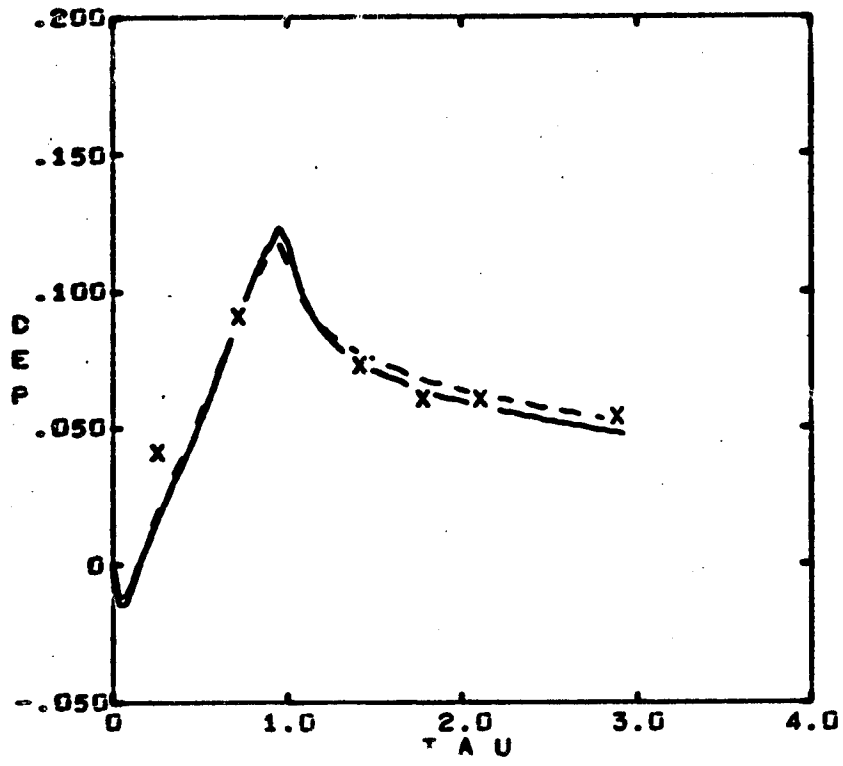
INITIAL TEMPERATURE 372.25
TAU-END OF TOTALITY 2.936

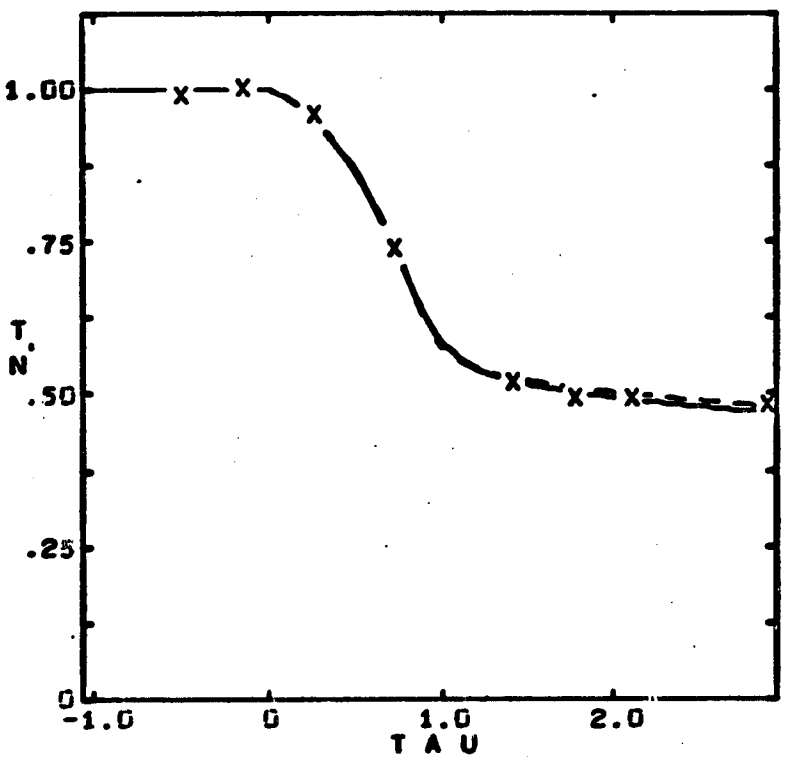
DIFFERENTIAL ENERGY DATA

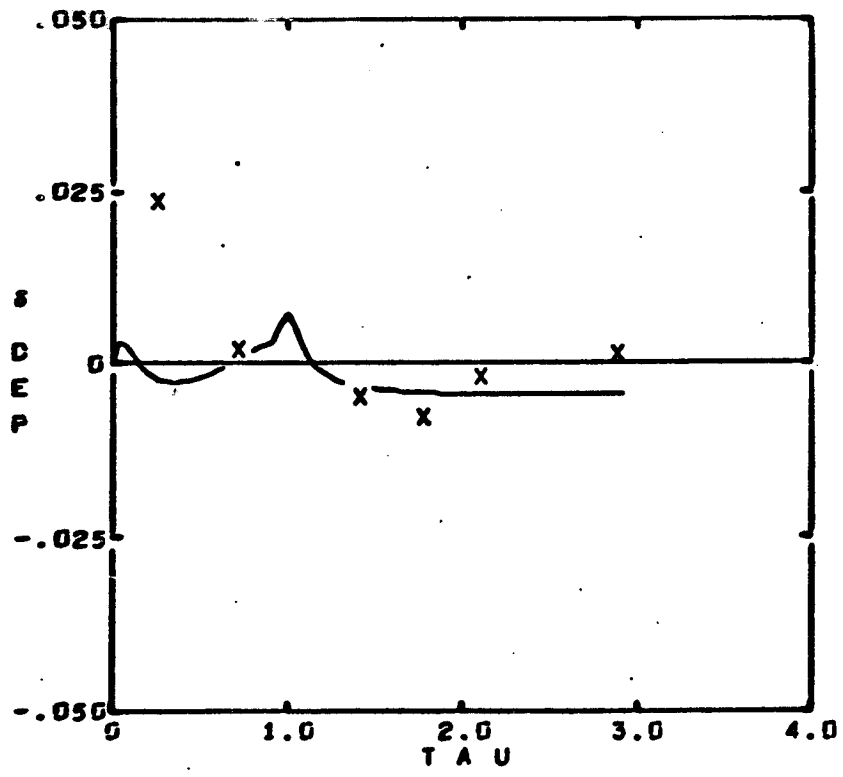
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0138	.0158	-.0020
.50	.0527	.0547	-.0020
.75	.0946	.0935	.0011
.93	.1232	.1194	.0038
1.0	.1175	.1102	.0073
1.5	.0708	.0745	-.0037
2.0	.0596	.0639	-.0043
2.5	.0526	.0570	-.0044

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.214	371.49			371.49	0.998	-.0082
9H	-0.507	370.04			370.04	0.994	-.0235
10H	-0.154	373.02			373.02	1.002	.0083
11H	0.261	357.68			357.68	0.961	.0413
12H	0.717	274.44	0.287	-.894	275.94	0.741	.0906
13H	1.411	189.01	0.341	+.940	193.17	0.519	.0725
14H	1.778	180.73	0.386	+.557	184.51	0.496	.0604
15H	2.105	183.80	0.077	-.955	184.54	0.496	.0604
16H	2.881	163.02	1.211	-.711	179.72	0.483	.0543







PHOTOGRAPH
NOT
AVAILABLE

272 (1J1) LINNE

LAMBDA=11.79 E BETA=27.70 N XI=+.1809 ETA=+.4649 L+PL CODE = 11486 ALBEDO =.0683

13H FLAT MOON DATA
FM=.07587 FM'=.08041

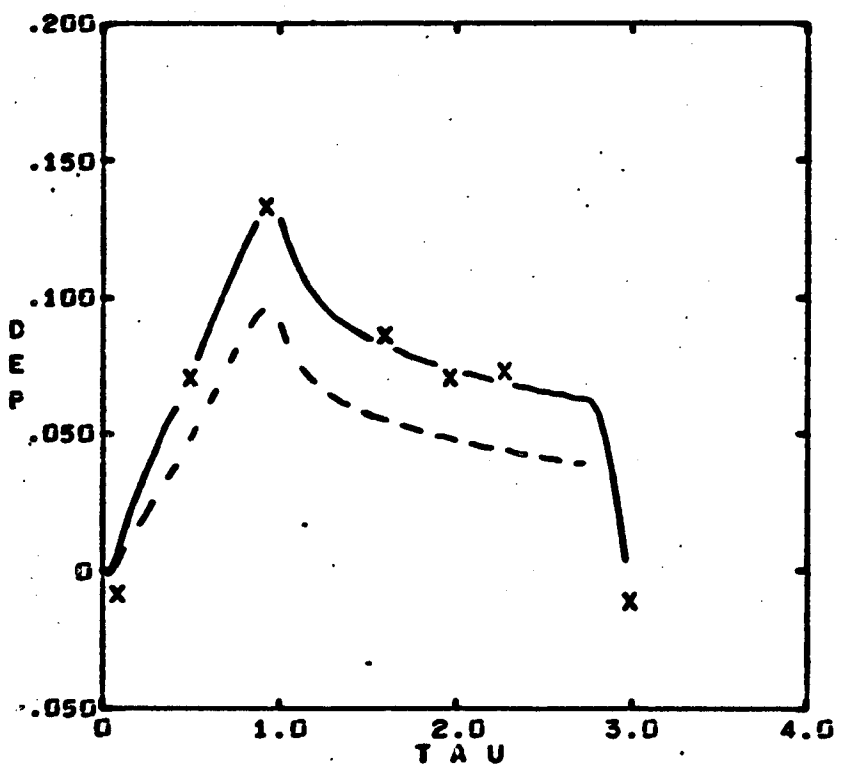
INITIAL TEMPERATURE 388.72
TAU-END OF TOTALITY 2.754

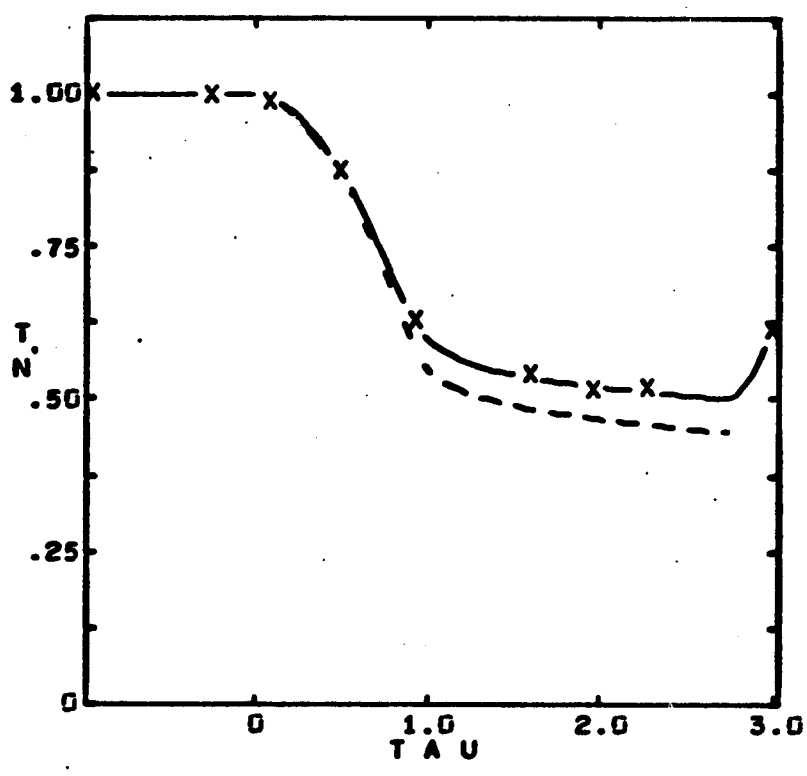
DIFFERENTIAL ENERGY DATA

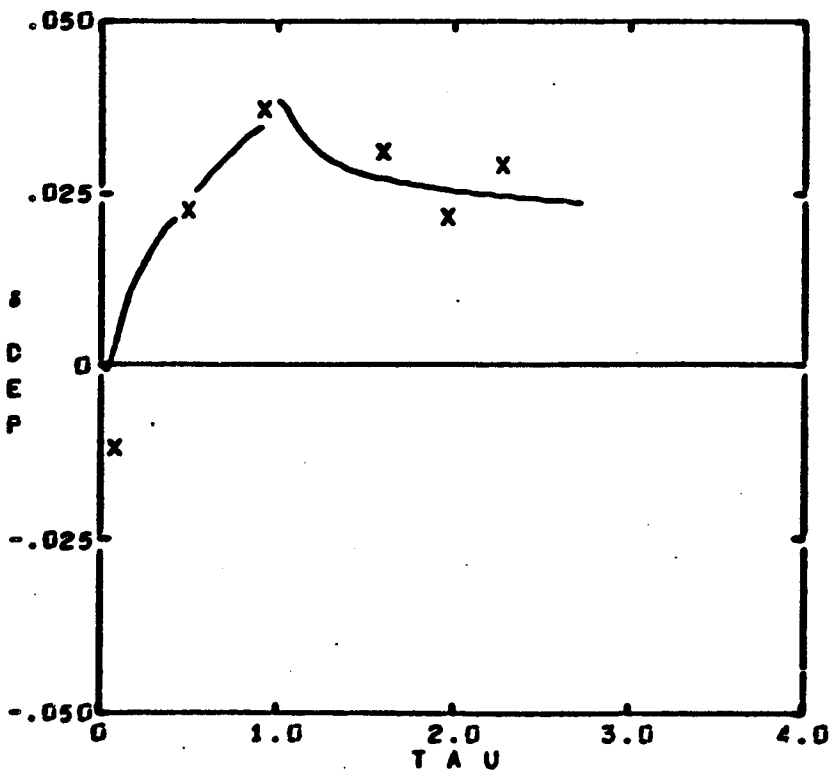
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0376	.0222	.0154
.50	.0744	.0499	.0245
.75	.1109	.0797	.0312
.93	.1349	.0997	.0352
1.0	.1290	.0905	.0385
1.5	.0851	.0574	.0277
2.0	.0730	.0477	.0253
2.5	.0656	.0415	.0241

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.946	390.29		390.29	1.004	.0162
9H	-0.260	388.29		388.29	0.999	-.0044
10H	0.081	385.06		385.06	0.991	-.0086
11H	0.483	339.91		339.91	0.874	.0704
12H	0.925	237.31	0.495 -.650	244.19	0.628	.1329
13H	1.597	208.81	0.142 -.796	210.57	0.542	.0861
14H	1.952	197.05	0.257 +.763	200.06	0.515	.0702
15H	2.269	199.27	0.232 +.582	202.18	0.520	.0732
16H	2.991	237.06	0.452 +.096	238.97	0.615	-.0112







PHOTOGRAPH NOT AVAILABLE

273 (1J2) LINNE A

LAMBDA=14.36 E BETA=28.93 N XI=+.2170 ETA=+.4838 L+PL CODE = 12418 ALBEDO =.0641

13H FLAT MOON DATA
FM=.01793 FM'=.01793

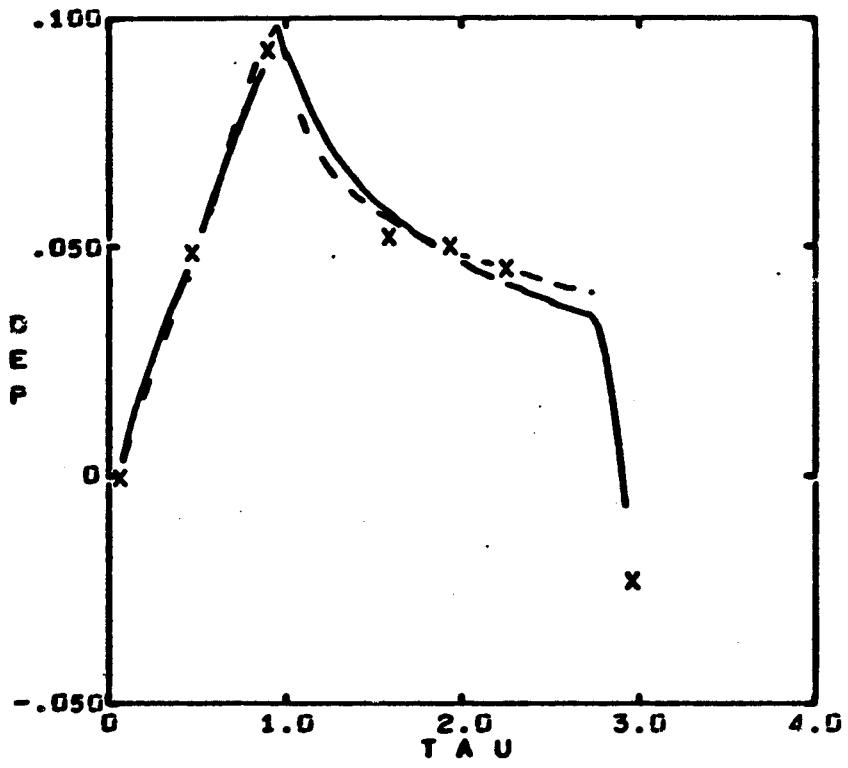
INITIAL TEMPERATURE 389.62
TAU-END OF TOTALITY 2.726

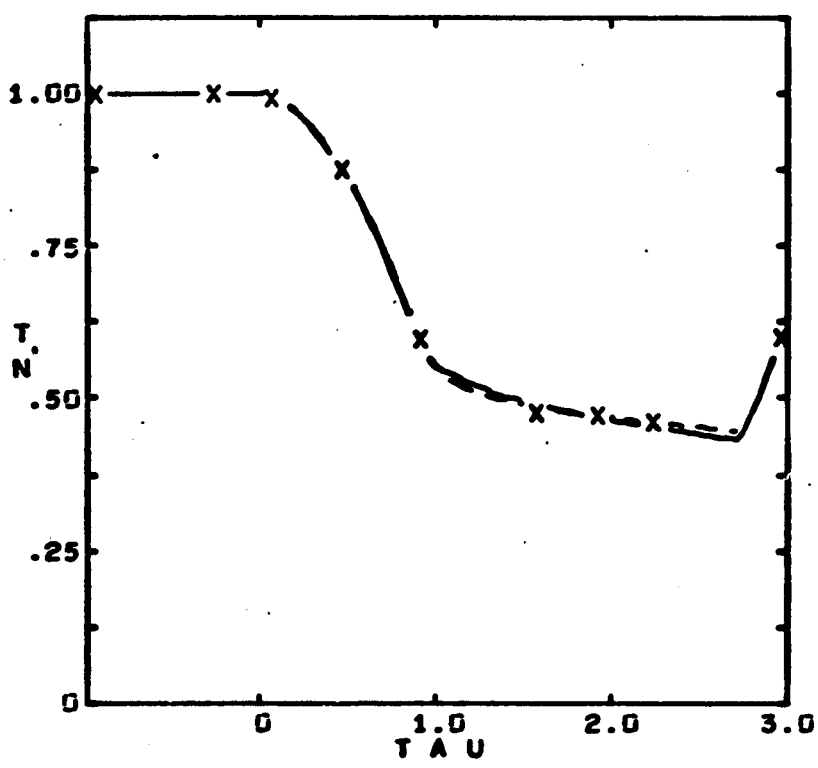
DIFFERENTIAL ENERGY DATA

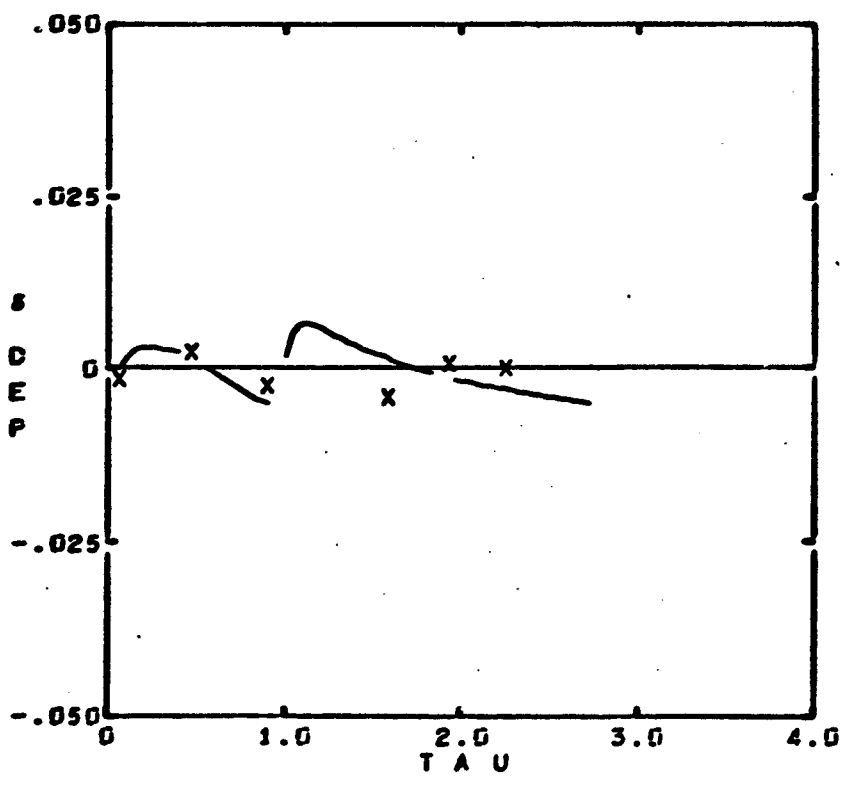
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0250	.0219	.0031
.50	.0510	.0499	.0011
.75	.0772	.0801	-.0029
.93	.0944	.1003	-.0059
1.0	.0926	.0911	.0015
1.5	.0601	.0579	.0022
2.0	.0465	.0482	-.0017
2.5	.0379	.0420	-.0041

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.955	389.84		389.84	1.001	.0022
9H	-0.274	389.56		389.56	1.000	-.0006
10H	0.066	387.53		387.53	0.995	-.0005
11H	0.466	340.66		340.66	0.874	.0484
12H	0.905	232.41	0.000 +.778	232.41	0.596	.0930
13H	1.573	185.97	0.000 +.814	185.97	0.477	.0519
14H	1.927	180.20	0.575 +.347	184.19	0.473	.0500
15H	2.243	179.55	0.000 +.803	179.55	0.461	.0451
16H	2.962	233.45	0.000 +.014	233.45	0.599	-.0230







PHOTOGRAPH
NOT
AVAILABLE

274 (1J3) LUTHER

LAMBDA=24.12 E BETA=33.15 N XI=+.3421 ETA=+.5469 L+PL CODE = 13544 ALBEDO =.0721

13H FLAT MOON DATA
FM=.03760 FM'=.04002

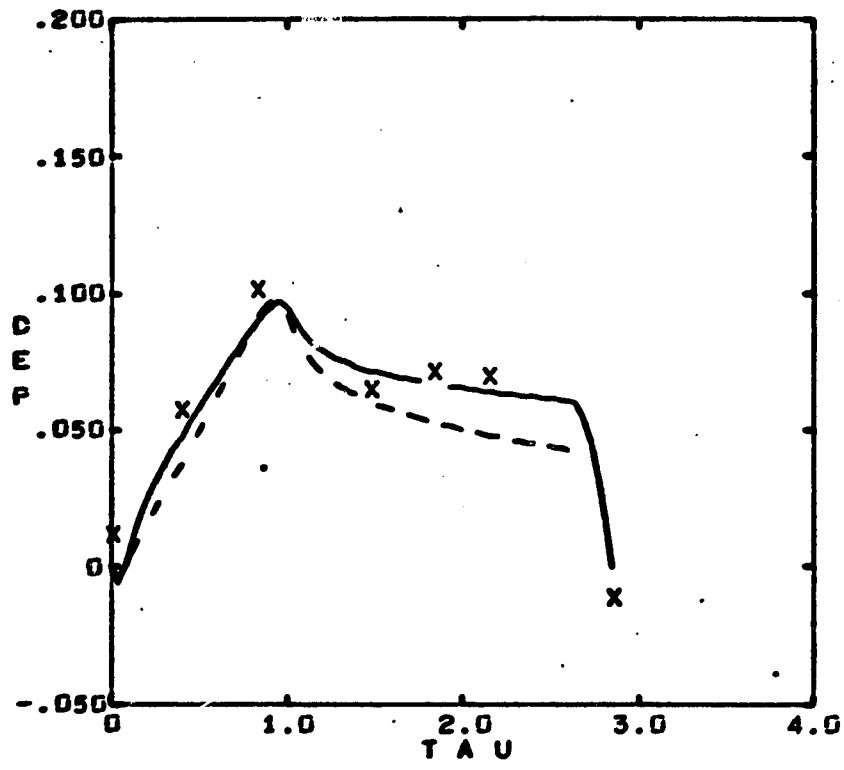
INITIAL TEMPERATURE 381.49
TAU-END OF TOTALITY 2.628

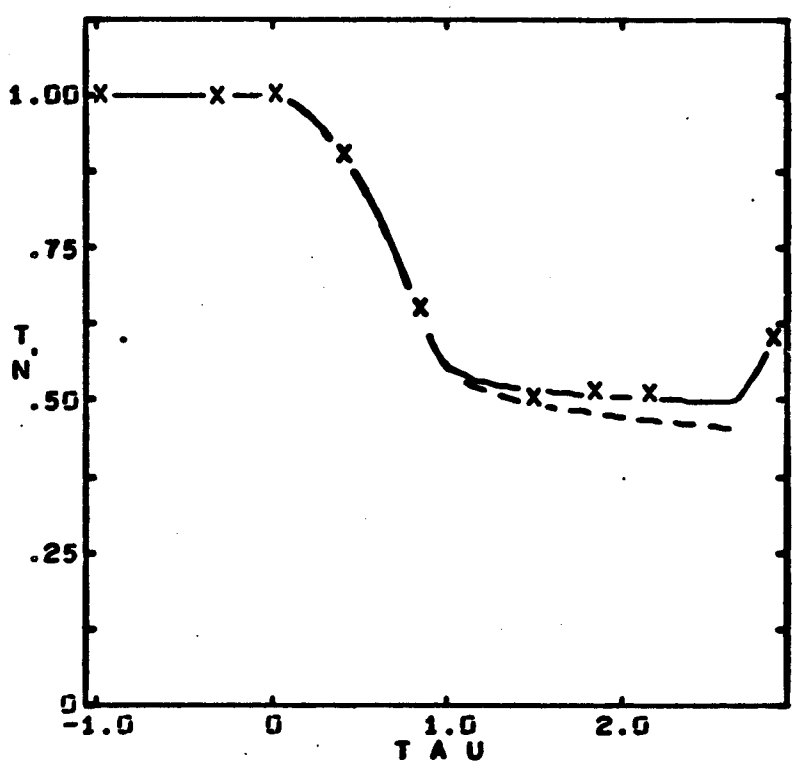
DIFFERENTIAL ENERGY DATA

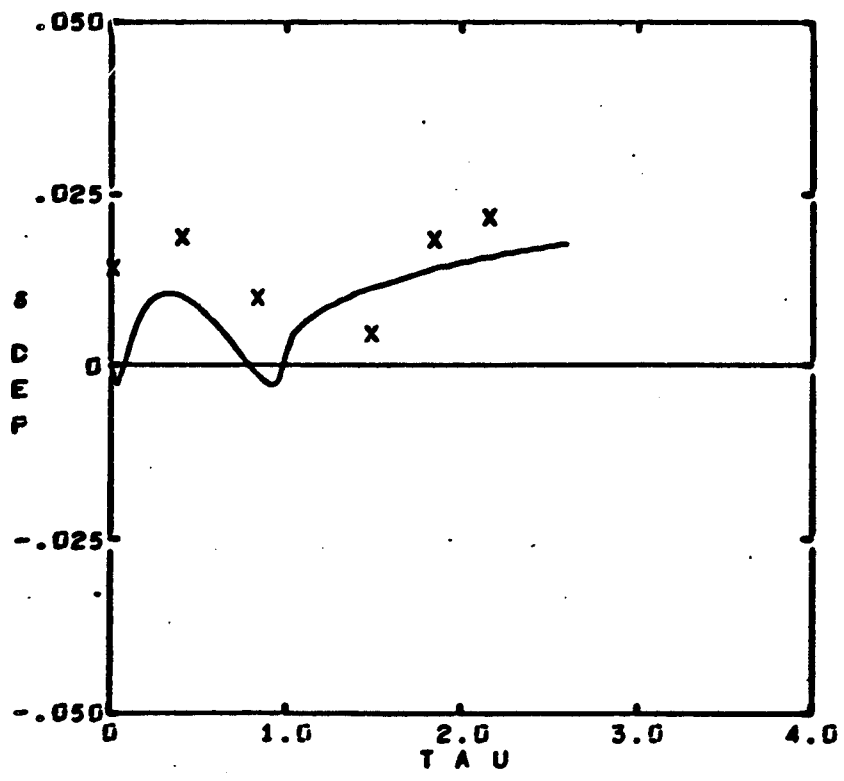
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0301	.0204	.0097
.50	.0584	.0498	.0086
.75	.0825	.0809	.0016
.93	.0977	.1018	-.0041
1.0	.0948	.0927	.0021
1.5	.0712	.0598	.0114
2.0	.0651	.0501	.0150
2.5	.0614	.0439	.0175

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.988	383.14		383.14	1.004	.0174
9H	-0.320	380.96		380.96	0.999	-.0056
10H	0.014	382.44		382.44	1.002	.0116
11H	0.407	345.31		345.31	0.905	.0572
12H	0.839	247.35	0.427 -.932	248.58	0.652	.1011
13H	1.494	191.41	0.468 -.967	192.34	0.504	.0646
14H	1.841	186.32	0.557 +.215	196.97	0.516	.0711
15H	2.151	190.84	0.293 +.238	195.98	0.514	.0697
16H	2.860	230.96	0.000 +.263	230.96	0.605	-.0109







PHOTOGRAPH NOT AVAILABLE

275 (1J4) LYELL B

LAMBDA=38.46 E BETA=14.39 N XI=+.6024 ETA=+.2485 L+PL CODE = 16204 ALBEDO =.0619

13H FLAT MOON DATA
FM=.02741 FM'=.02741

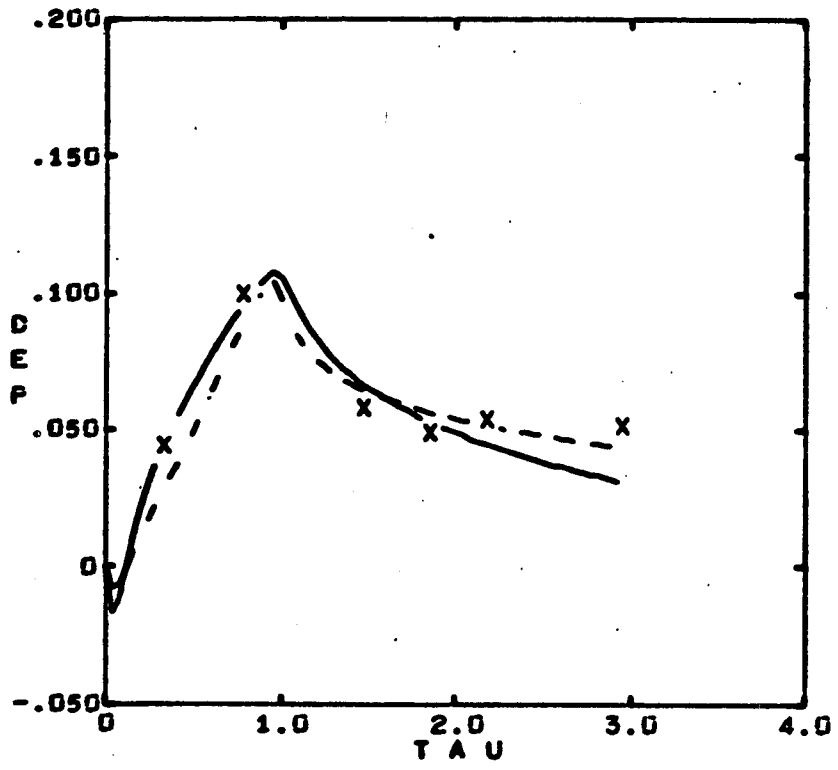
INITIAL TEMPERATURE 384.11
TAU-END OF TOTALITY 2.937

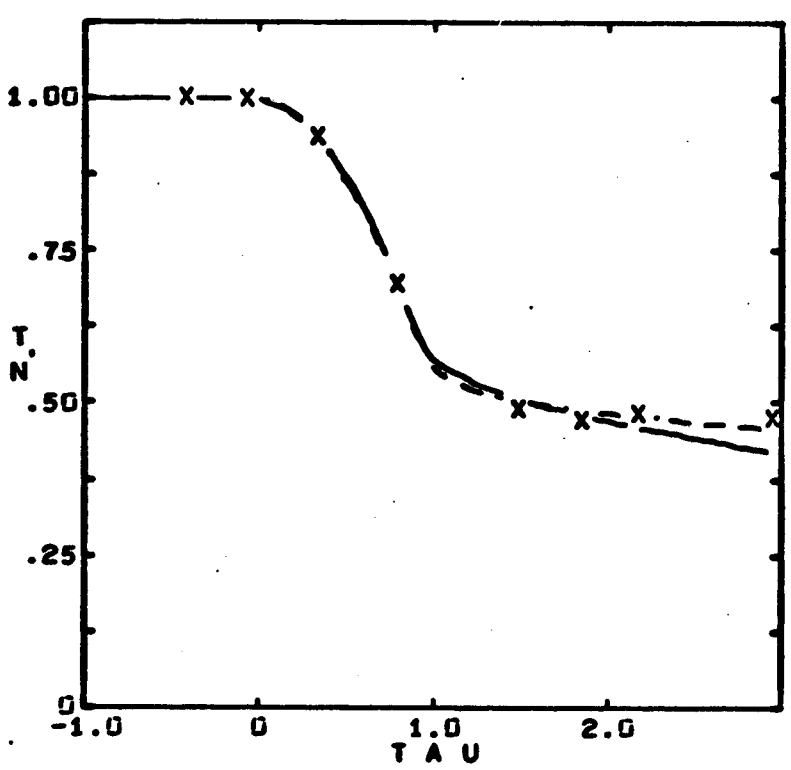
DIFFERENTIAL ENERGY DATA

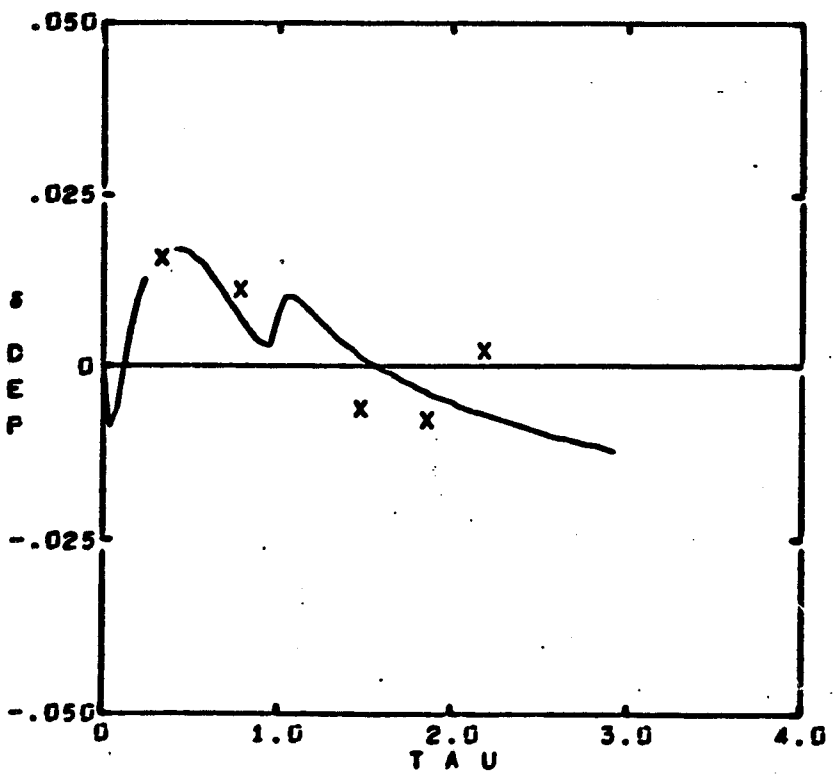
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0316	.0181	.0135
.50	.0668	.0505	.0163
.75	.0923	.0839	.0086
.93	.1078	.1063	.0015
1.0	.1051	.0973	.0078
1.5	.0653	.0640	.0013
2.0	.0490	.0542	-.0052
2.5	.0385	.0479	-.0094

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.145	385.34		385.34	1.003	.0129
9H	-0.437	384.92		384.92	1.002	.0085
10H	-0.085	383.86		383.86	0.999	-.0026
11H	0.331	359.92		359.92	0.937	.0442
12H	0.787	264.43	1.511 +.391	267.20	0.696	.1000
13H	1.481	188.66	0.000 +.365	188.86	0.492	.0584
14H	1.848	180.84	0.000 +.356	180.84	0.471	.0491
15H	2.175	185.31	0.000 +.349	185.31	0.482	.0542
16H	2.944	177.84	0.658 -.577	183.23	0.477	.0514







PHOTOGRAPH NOT AVAILABLE

276 (1J5) MACLEAR

LAMBDA=61.61 E BETA=67.40 N XI=+.3381 ETA=+.9232 L+PL CODE = 13138 ALBEDO =.1716

13H FLAT MOON DATA
FM=.00512 FM'=.05110

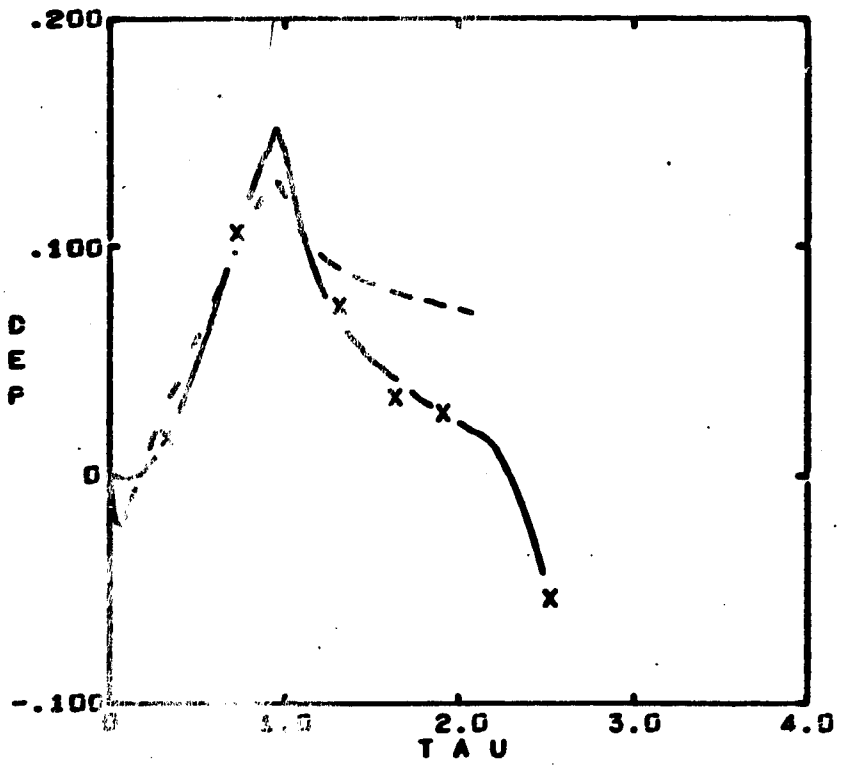
INITIAL TEMPERATURE 331.56
TAU-END OF TOTALITY 2.088

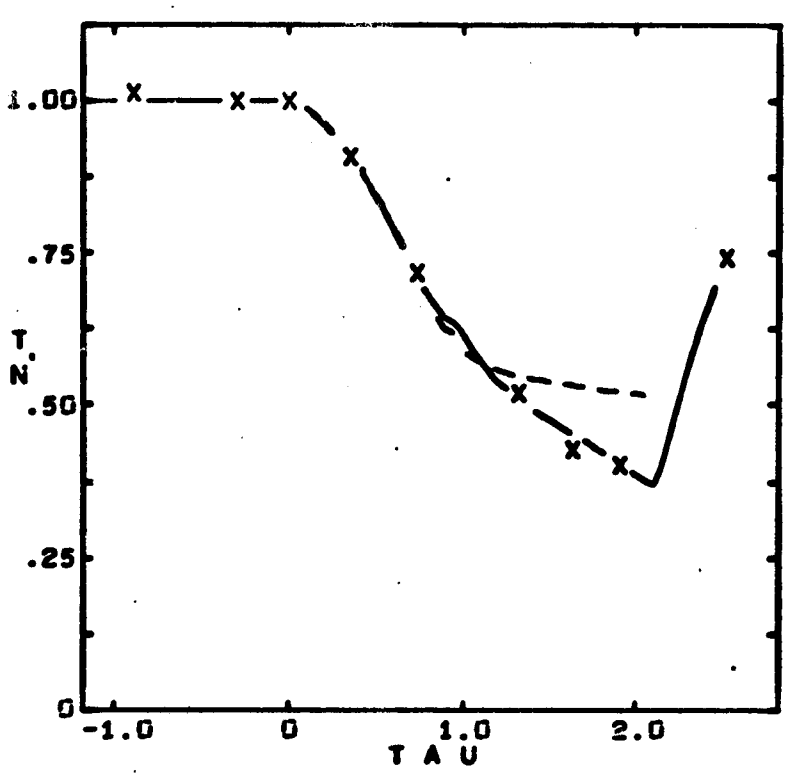
DIFFERENTIAL ENERGY DATA

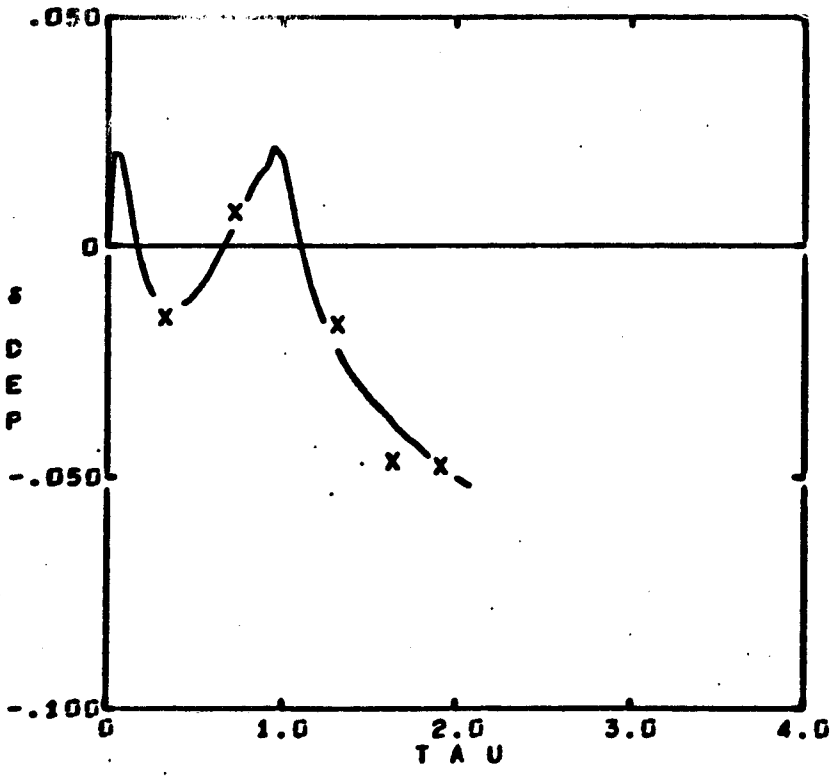
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0051	.0136	-.0085
.50	.0476	.0583	-.0107
.75	.1081	.1020	.0061
.93	.1523	.1312	.0211
1.0	.1413	.1219	.0194
1.5	.0510	.0838	-.0328
2.0	.0225	.0726	-.0501
2.5	.0042	.0652	-.0610

ECLIPSE TEMPERATURE DATA

SCAN	TA'	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.895	336.94			336.94	1.016	.0664
9H	-0.299	332.12			332.12	1.002	.0068
10H	-0.003	331.54			331.54	1.000	-.0003
11H	0.347	301.53			301.53	0.909	.0158
12H	0.732	229.06	1.530	-.551	237.72	0.717	.1064
13H	1.315	156.28	1.831	+.341	172.79	0.521	.0738
14H	1.615	142.14	0.000	-.193	142.14	0.429	.0338
15H	1.901	134.03	0.000	+.130	134.03	0.404	.0267
16H	2.521	225.89	1.586	-.721	246.13	0.742	-.0543







PHOTOGRAPH NOT AVAILABLE

277 (196) MACROBIUS A

LAMBDA=40.37 E BETA=19.54 N XI=+.6104 ETA=+.3345 L+FL CODE = 16313 ALBEDO =.1168

13H FLAT MOON DATA
FM=.08162 FM'=.10641

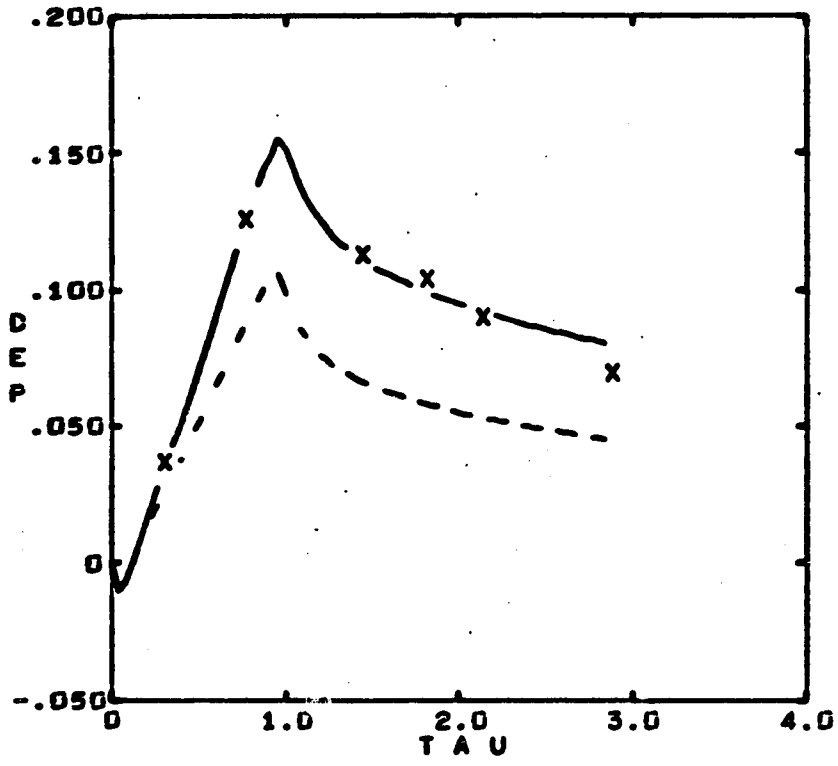
INITIAL TEMPERATURE 376.92
TAU-END OF TOTALITY 2.842

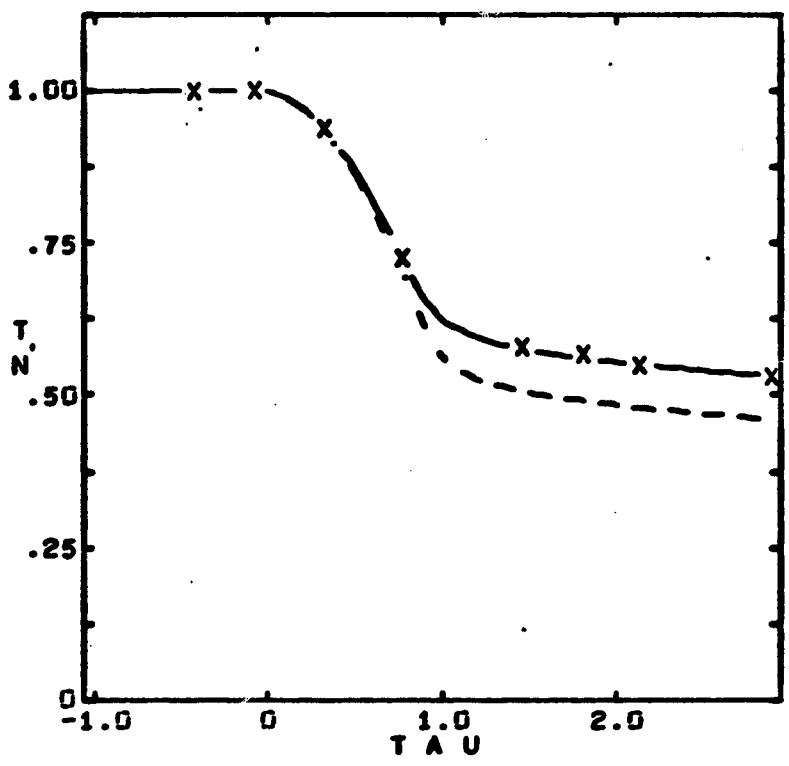
DIFFERENTIAL ENERGY DATA

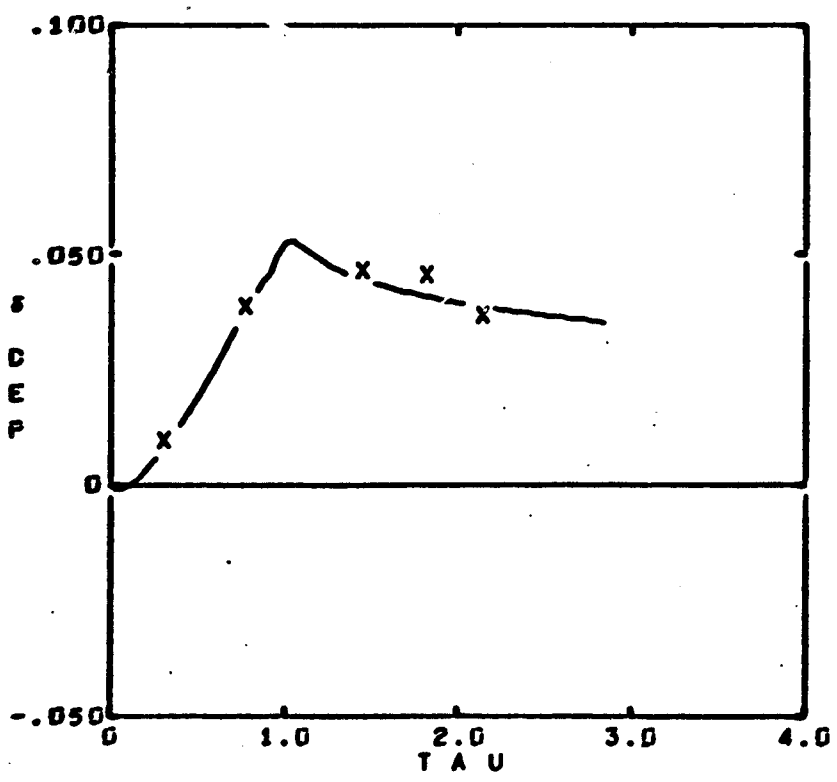
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0223	.0178	.0045
.50	.0694	.0508	.0186
.75	.1206	.0847	.0359
.93	.1555	.1074	.0481
1.0	.1509	.0984	.0525
1.5	.1088	.0649	.0439
2.0	.0947	.0551	.0396
2.5	.0855	.0487	.0368

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.130	376.71		376.71	0.999	-.0022
9H	-0.434	376.34		376.34	0.998	-.0061
10H	-0.087	377.05		377.05	1.000	.0014
11H	0.321	353.38		353.38	0.938	.0367
12H	0.770	271.97	0.267 -.263	273.05	0.724	.1260
13H	1.451	207.92	0.487 +.932	218.57	0.580	.1131
14H	1.813	198.25	0.537 +.079	214.06	0.568	.1040
15H	2.136	206.32	0.090 -.112	206.60	0.548	.0903
16H	2.889	174.67	1.050 -.407	200.69	0.532	.0694







PHOTOGRAPH NOT AVAILABLE

LAMBDA=45.02 E BETA=20.84 N XI=+.6611 ETA=+.3558 L+PL CODE = 16365 ALBEDO =.1222

13H FLAT MOON DATA
FM=.00739 FM'=.00739

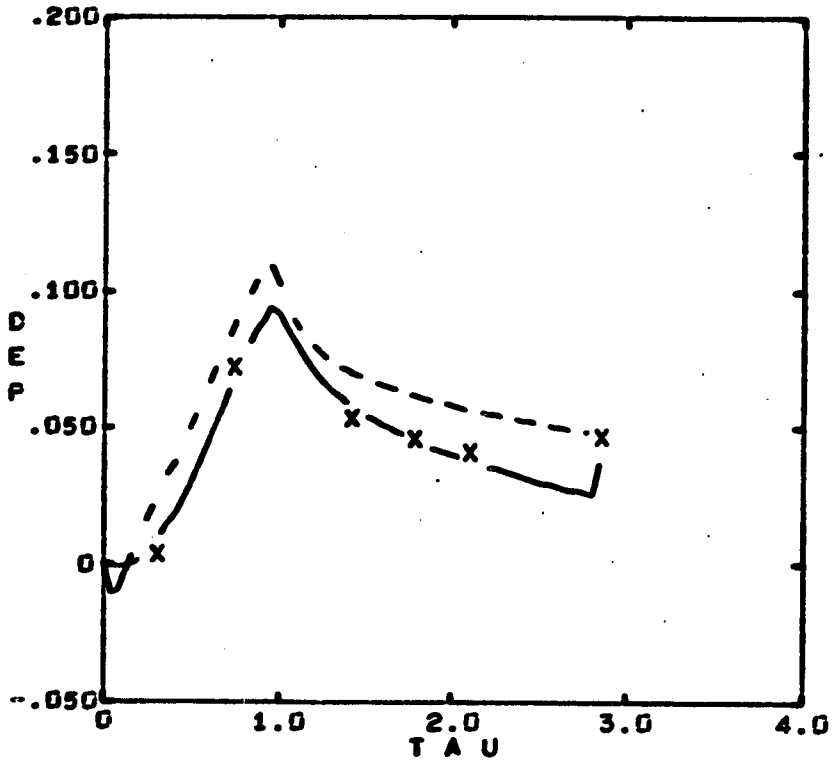
INITIAL TEMPERATURE 370.45
TAU-END OF TOTALITY 2.810

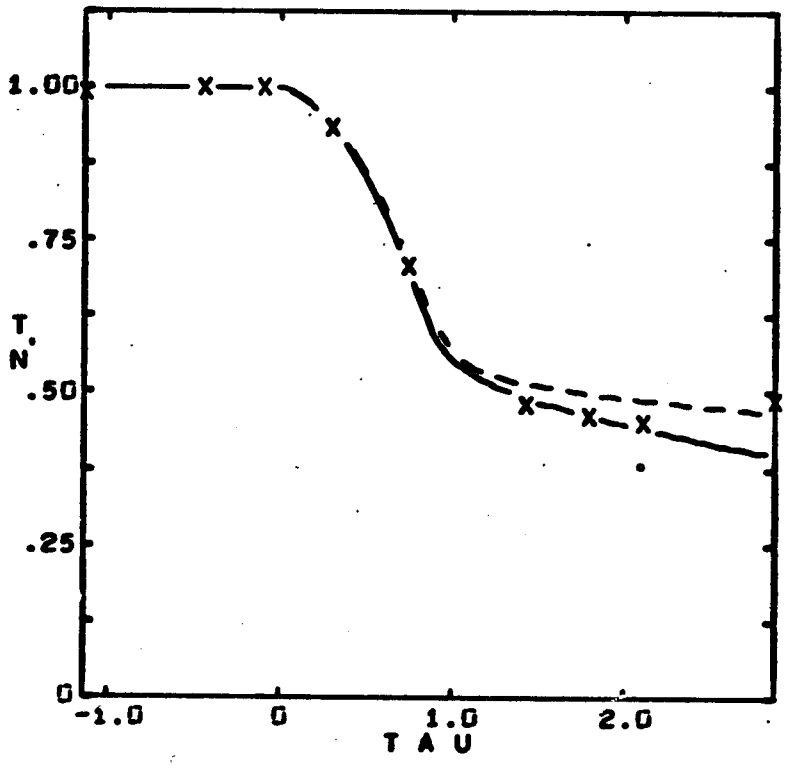
DIFFERENTIAL ENERGY DATA

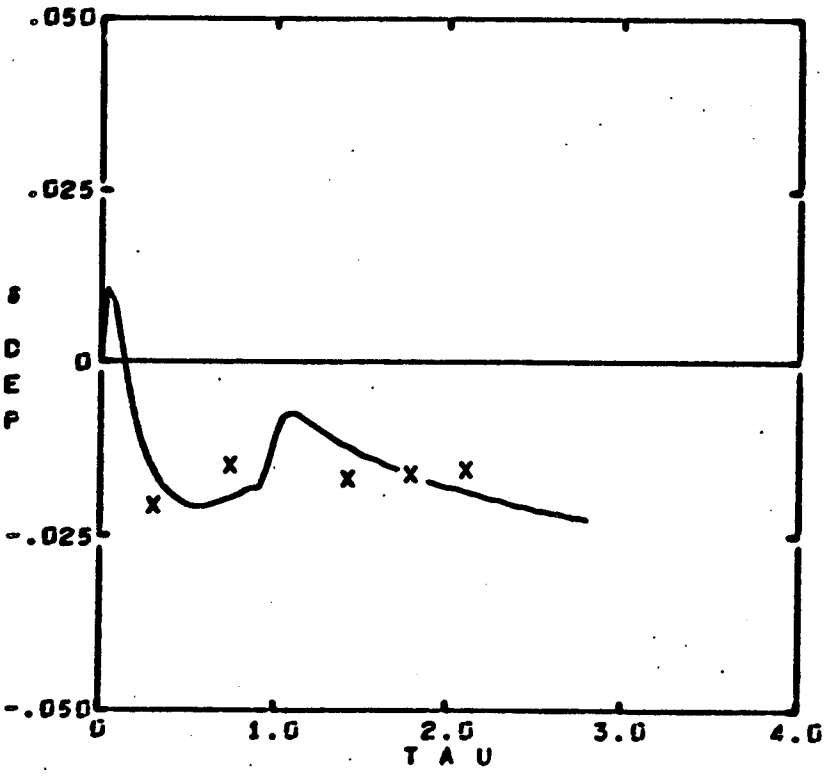
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0049	.0171	-.0122
.50	.0316	.0521	-.0205
.75	.0680	.0876	-.0196
.93	.0942	.1113	-.0171
1.0	.0914	.1022	-.0108
1.5	.0549	.0680	-.0131
2.0	.0400	.0580	-.0180
2.5	.0303	.0514	-.0211

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.144	368.13			368.13	0.994	-.0248
9H	-0.453	370.02			370.02	0.999	-.0046
10H	-0.108	370.76			370.76	1.001	.0034
11H	0.298	346.61			346.61	0.936	.0033
12H	0.745	261.33	0.000	-.812	261.33	0.705	.0721
13H	1.422	178.09	0.000	-.860	178.09	0.481	.0534
14H	1.783	171.25	0.000	-.842	171.25	0.462	.0457
15H	2.103	166.77	0.000	-.876	166.77	0.450	.0411
16H	2.853	172.28	0.641	-.296	180.06	0.486	.0464







PHOTOGRAPH NOT AVAILABLE

279 (4E4) MADLER

LAMBDA=29.77 E BETA=10.99 S XI=+.4874 ETA=-.1907 L+PL CODE = 44189 ALBEDO =.1425

13M FLAT MOON DATA
FM=.03588 FM'=.03588

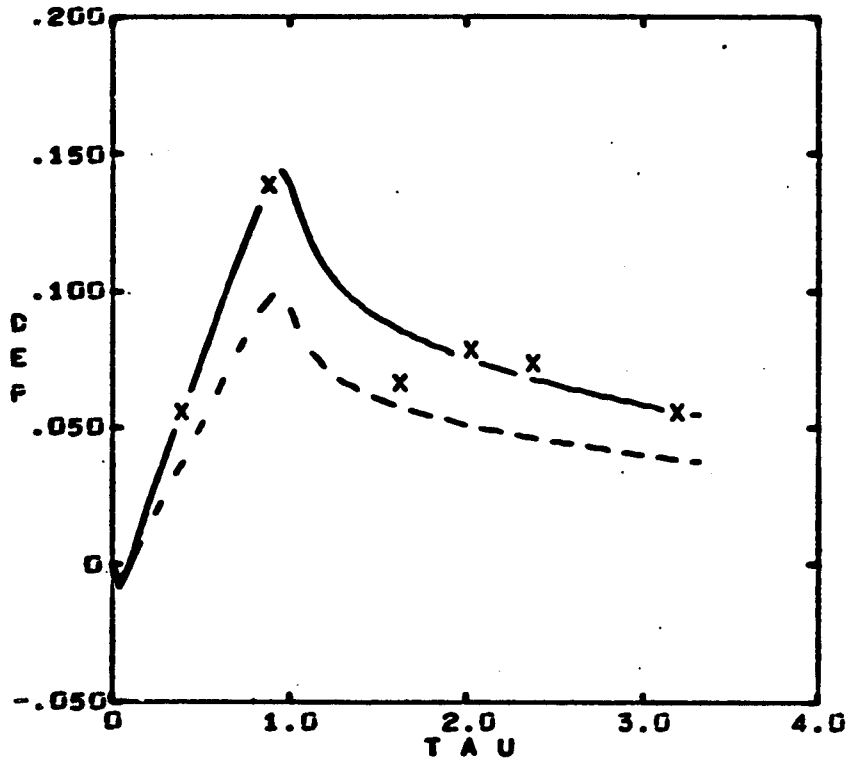
INITIAL TEMPERATURE 382.62
TAU-END OF TOTALITY 3.354

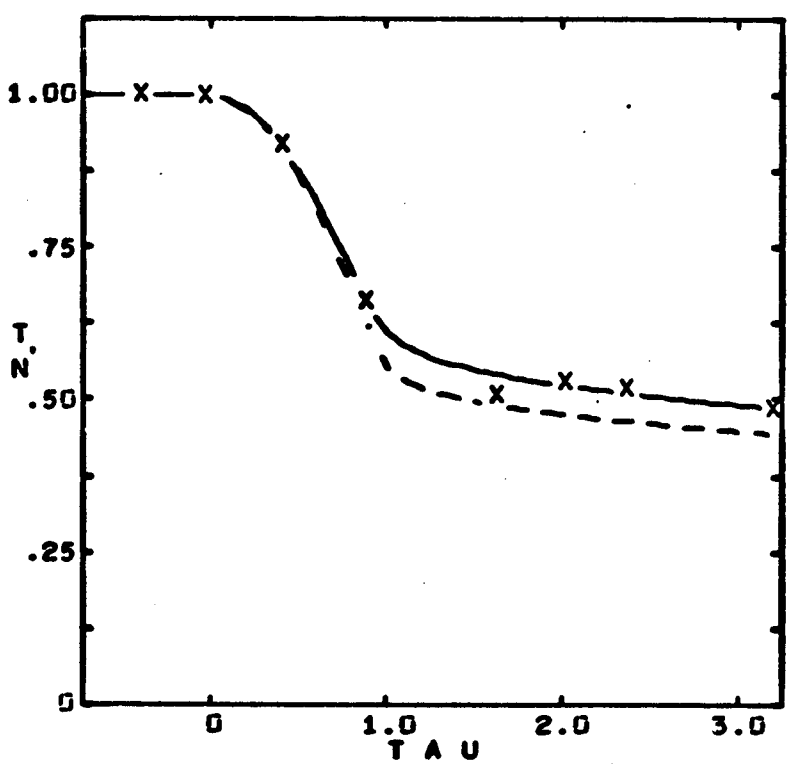
DIFFERENTIAL ENERGY DATA

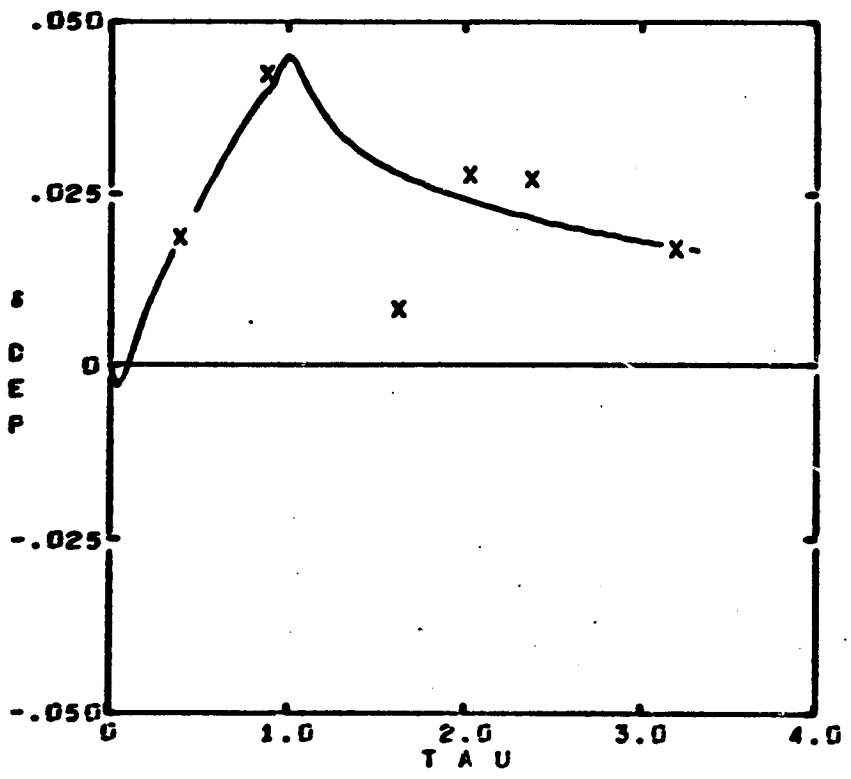
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0303	.0195	.0108
.50	.0731	.0498	.0233
.75	.1162	.0816	.0346
.93	.1447	.1029	.0418
1.0	.1388	.0938	.0450
1.5	.0907	.0609	.0298
2.0	.0754	.0512	.0242
2.5	.0657	.0450	.0207
3.0	.0585	.0403	.0182

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.186	386.43			386.43	1.010	.0404
9H	-0.425	383.97			383.97	1.004	.0142
10H	-0.050	382.30			382.30	0.999	-.0033
11H	0.396	351.19			351.19	0.918	.0556
12H	0.882	251.03	0.242	-.049	253.90	0.664	.1389
13H	1.626	194.09	0.000	-.030	194.09	0.507	.0662
14H	2.017	199.28	0.288	+.415	202.77	0.530	.0789
15H	2.369	193.66	0.396	-.039	199.34	0.521	.0737
16H	3.200	185.59	0.124	+.866	185.99	0.486	.0558







PHOTOGRAPH NOT AVAILABLE

280 (1J8) MANILIUS

LAMBDA= 9.09 E BETA=14.47 N XI=+.1529 ETA=+.2499 L+PL CODE = 11254 ALBEDO =.1258

13H FLAT MOON DATA
FM=.01836 FM'=.02467

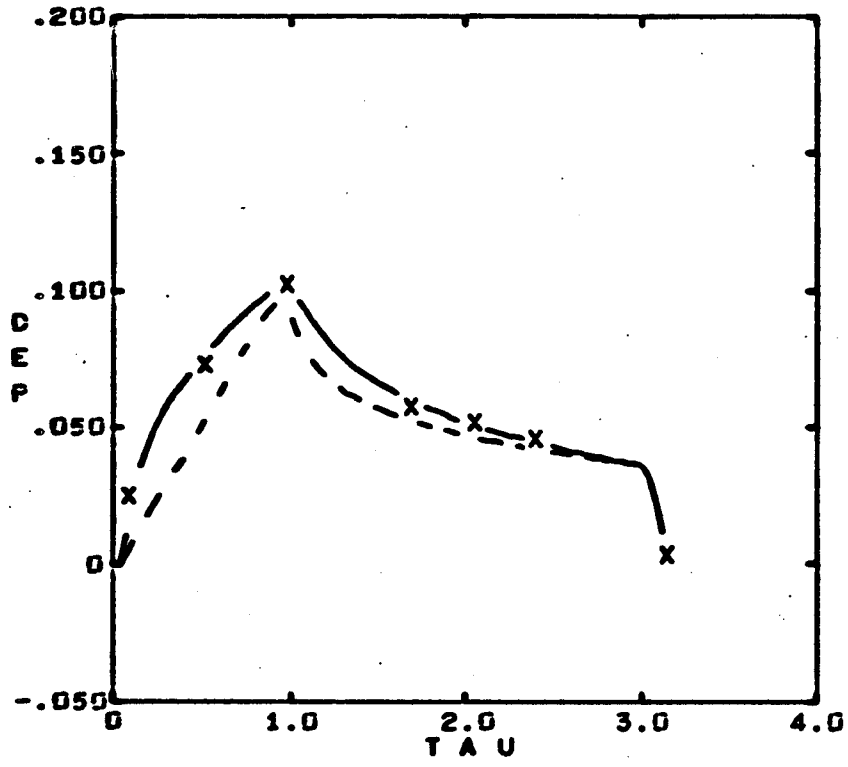
INITIAL TEMPERATURE 392.15
TAU-END OF TOTALITY 2.997

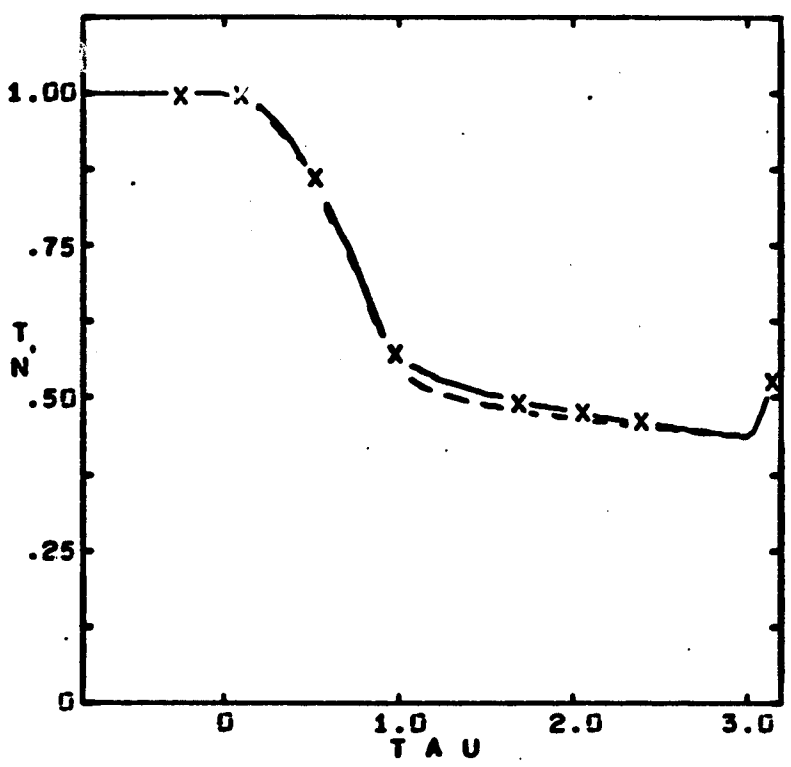
DIFFERENTIAL ENERGY DATA

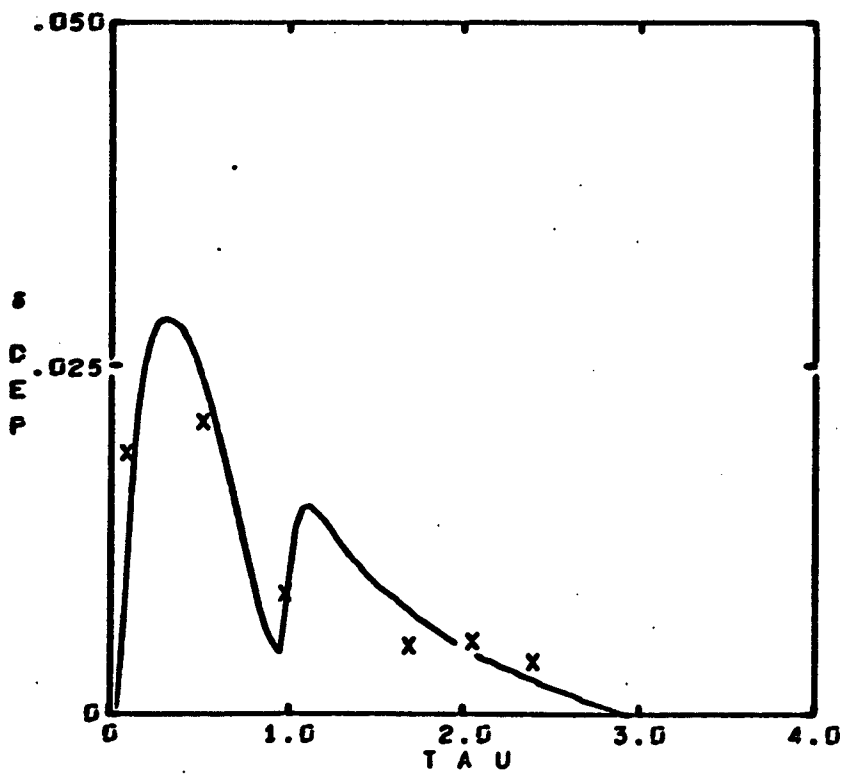
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0498	.0225	.0273
.50	.0747	.0498	.0249
.75	.0917	.0793	.0124
.93	.1015	.0990	.0025
1.0	.0998	.0899	.0099
1.5	.0662	.0568	.0094
2.0	.0519	.0471	.0048
2.5	.0429	.0410	.0019
3.0	.0362	.0365	-.0003

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.973	394.83		394.83	1.007	.0276
9H	-0.257	391.44		391.44	0.998	-.0072
10H	0.099	390.78		390.78	0.997	.0250
11H	0.519	337.34	0.000 -.141	337.34	0.860	.0729
12H	0.980	222.06	0.454 -.772	223.33	0.570	.1024
13H	1.680	189.54	0.407 +.044	192.06	0.490	.0575
14H	2.051	186.15	0.208 +.987	186.97	0.477	.0517
15H	2.383	181.02	0.286 -.046	181.61	0.463	.0460
16H	3.142	206.61	0.000 +.196	206.61	0.527	.0040







PHOTOGRAPH NOT AVAILABLE

281 (1J9) MANILIUS D

LAMBDA= 7.01 E BETA=13.23 N XI=+.1188 ETA=+.2289 L+PL CODE = 11212 ALBEDO =.0648

13H FLAT MOON DATA
FM=.01556 FM'=.01888

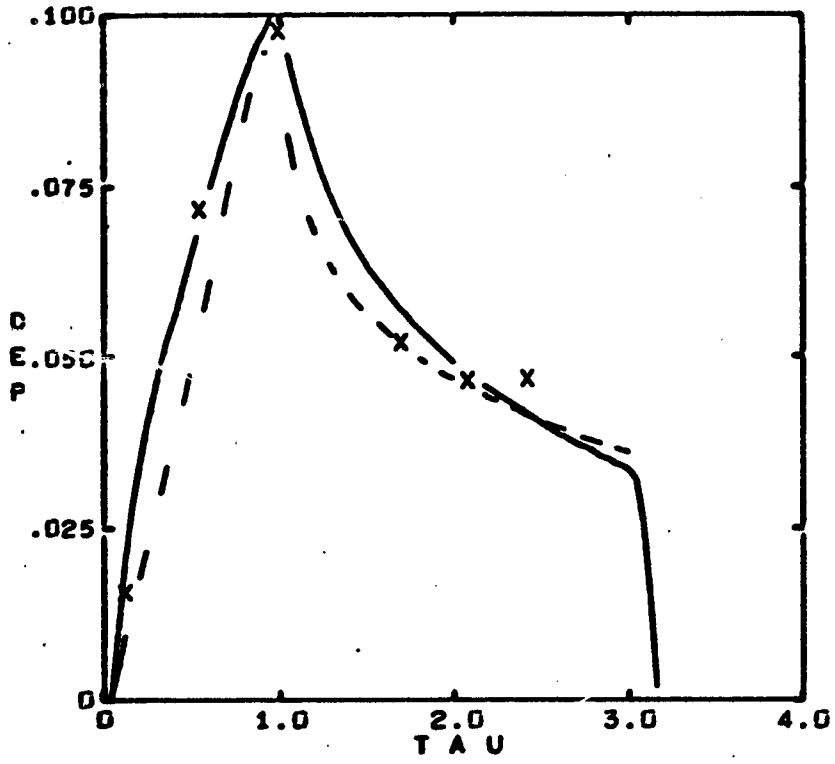
INITIAL TEMPERATURE 396.74
TAU-END OF TOTALITY 3.023

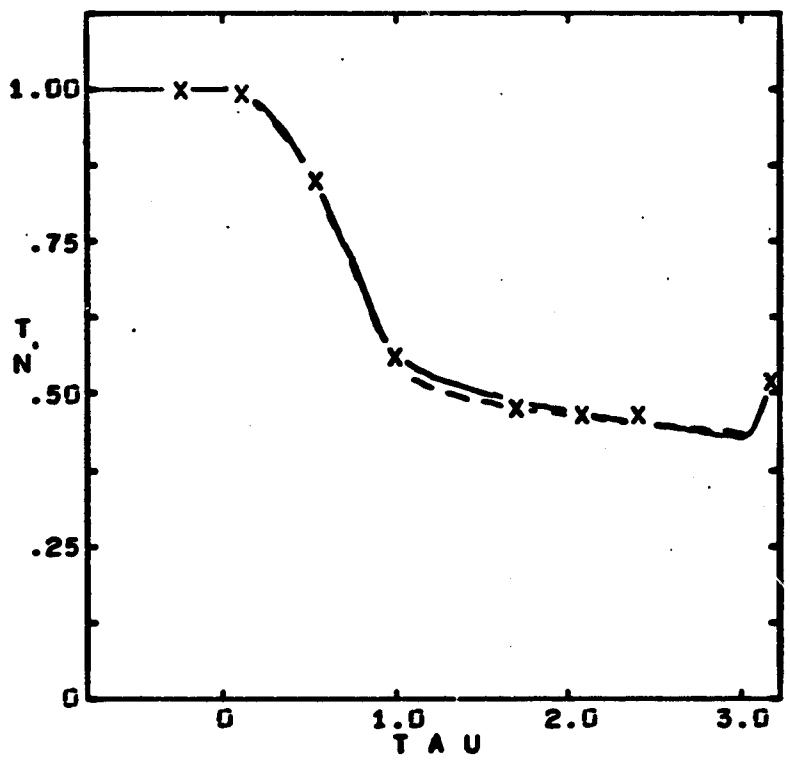
DIFFERENTIAL ENERGY DATA

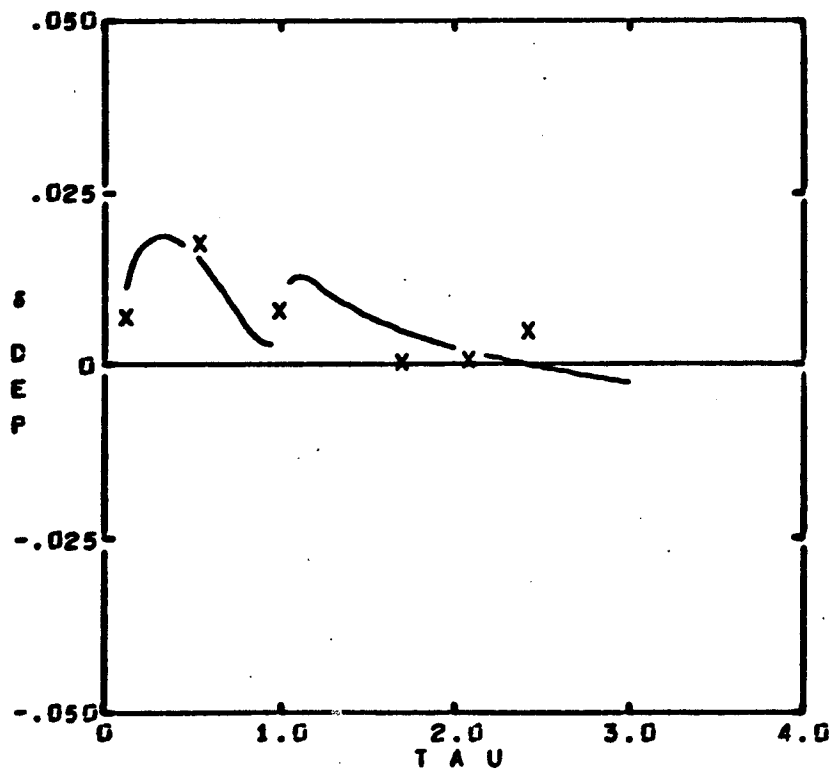
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0408	.0227	.0181
.50	.0659	.0497	.0162
.75	.0868	.0789	.0079
.93	.0998	.0985	.0013
1.0	.0978	.0893	.0085
1.5	.0635	.0564	.0071
2.0	.0493	.0467	.0026
2.5	.0403	.0406	-.0003
3.0	.0337	.0361	-.0024

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.964	398.69		398.69	1.005	.0198
9H	-0.243	396.25		396.25	0.999	-.0049
10H	0.113	393.48		393.48	0.992	.0156
11H	0.534	336.84	1.406 -.696	337.80	0.851	.0716
12H	0.998	221.65	0.067 -.232	221.83	0.559	.0977
13H	1.702	188.51	0.277 +.286	189.52	0.478	.0521
14H	2.073	183.41	0.549 +.896	184.25	0.464	.0465
15H	2.407	183.40	0.305 +.030	184.51	0.465	.0468
16H	3.169	205.72	0.000 +.187	205.72	0.519	-.0020







PHOTOGRAPH NOT AVAILABLE

282 (1K1) MANNERS

LAMBDA=20.01 E BETA= 4.58 N XI=+.3411 ETA=+.0799 L+PL CODE = 13047 ALBEDO =.0687

13H FLAT MOON DATA
FM=.04659 FM'=.06841

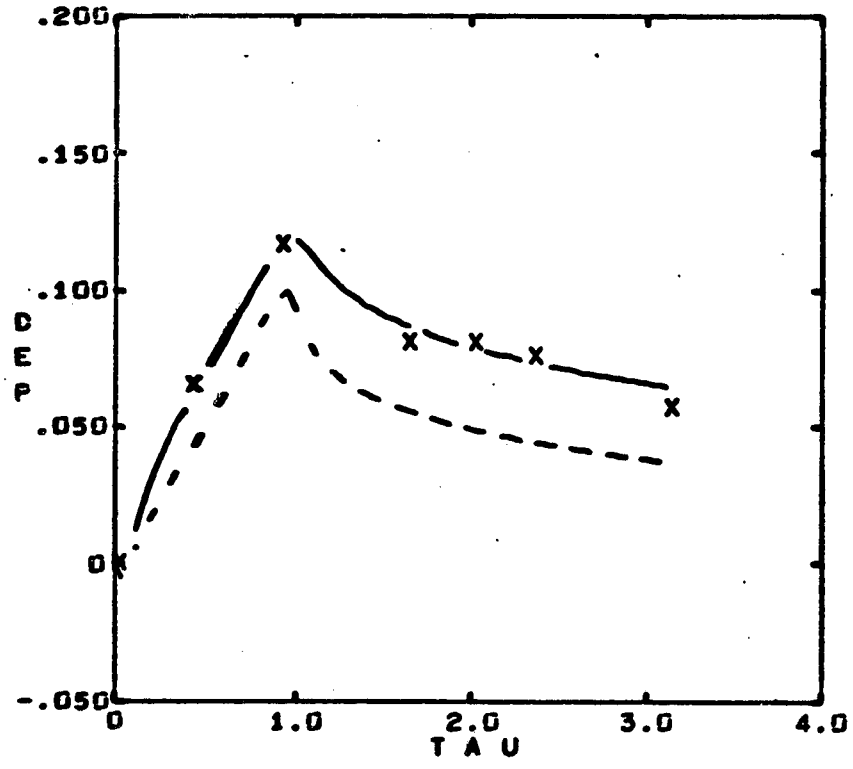
INITIAL TEMPERATURE 395.12
TAU-END OF TOTALITY 3.140

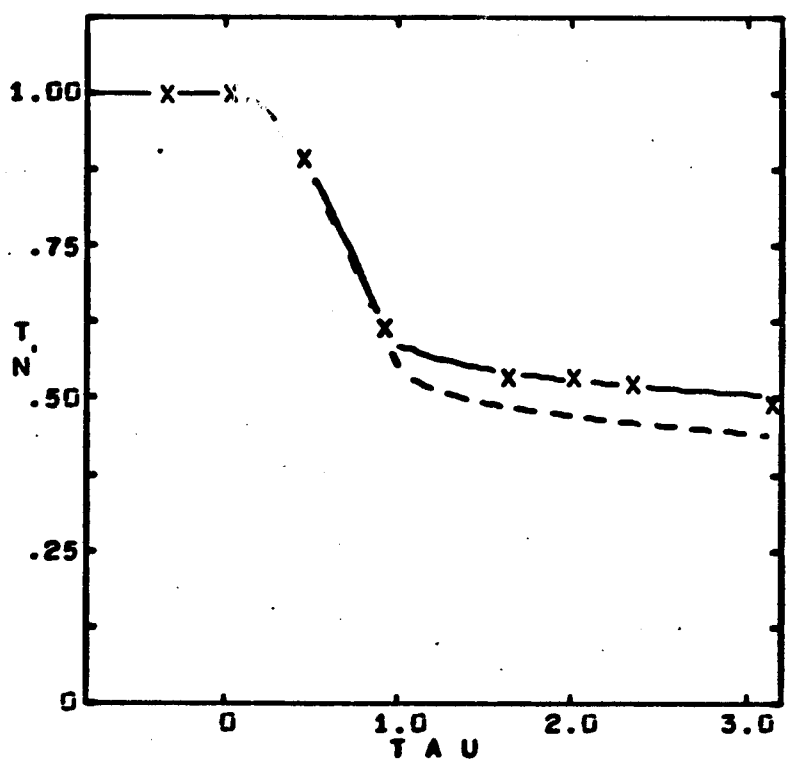
DIFFERENTIAL ENERGY DATA

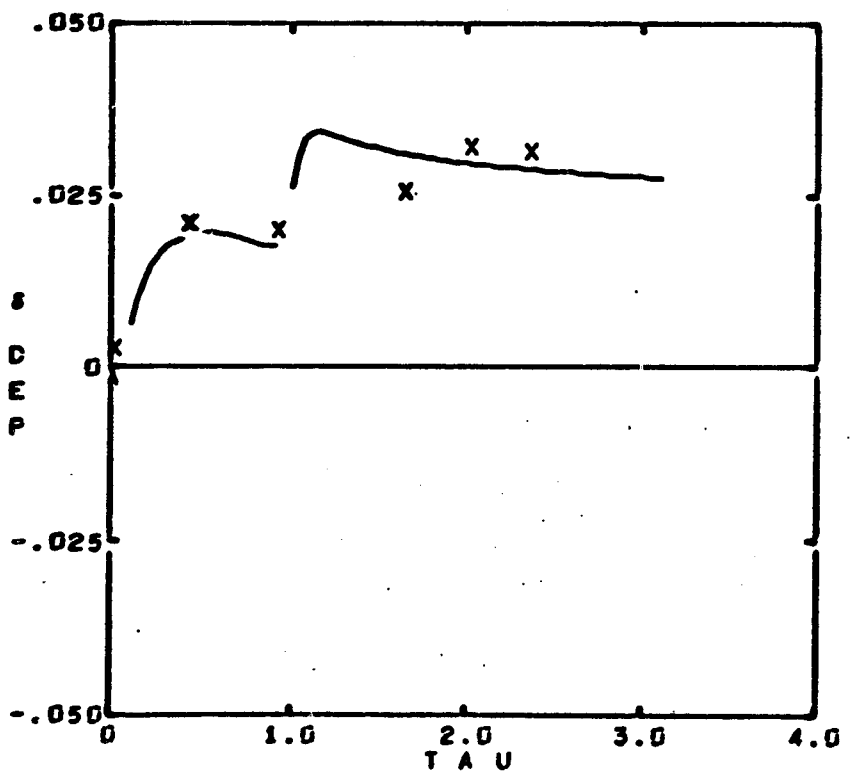
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0362	.0211	.0151
.50	.0695	.0499	.0196
.75	.0992	.0806	.0186
.93	.1183	.1013	.0170
1.0	.1181	.0921	.0260
1.5	.0908	.0590	.0318
2.0	.0790	.0493	.0297
2.5	.0716	.0431	.0285
3.0	.0661	.0384	.0277

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.077	396.60		396.60	1.004	.0151
9H	-0.343	394.64		394.64	0.999	-.0048
10H	0.022	394.84		394.84	0.999	.0003
11H	0.451	353.20		353.20	0.894	.0652
12H	0.922	242.84	0.184 +.831	243.38	0.616	.1170
13H	1.641	201.38	0.564 -.187	211.01	0.534	.0813
14H	2.019	209.65	0.127 +.698	210.78	0.533	.0810
15H	2.359	203.31	0.252 -.749	207.53	0.525	.0761
16H	3.149	185.05	0.583 +.403	193.94	0.491	.0572







PHOTOGRAPH
NOT
AVAILABLE

283 (1K2) MARALDI

LAMBDA=34.85 E BETA=19.39 N XI=+.5390 ETA=+.3320 L+PL CODE = 15333 ALBEDO =.0748

13H FLAT MOON DATA
FM=.01772 FM'=.01772

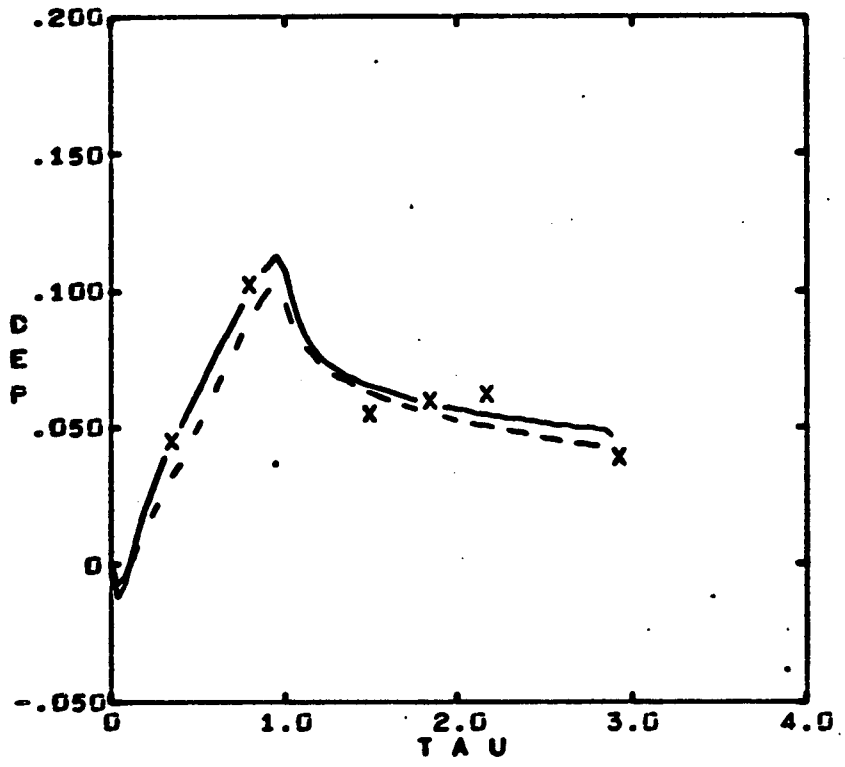
INITIAL TEMPERATURE 383.57
TAU-END OF TOTALITY 2.855

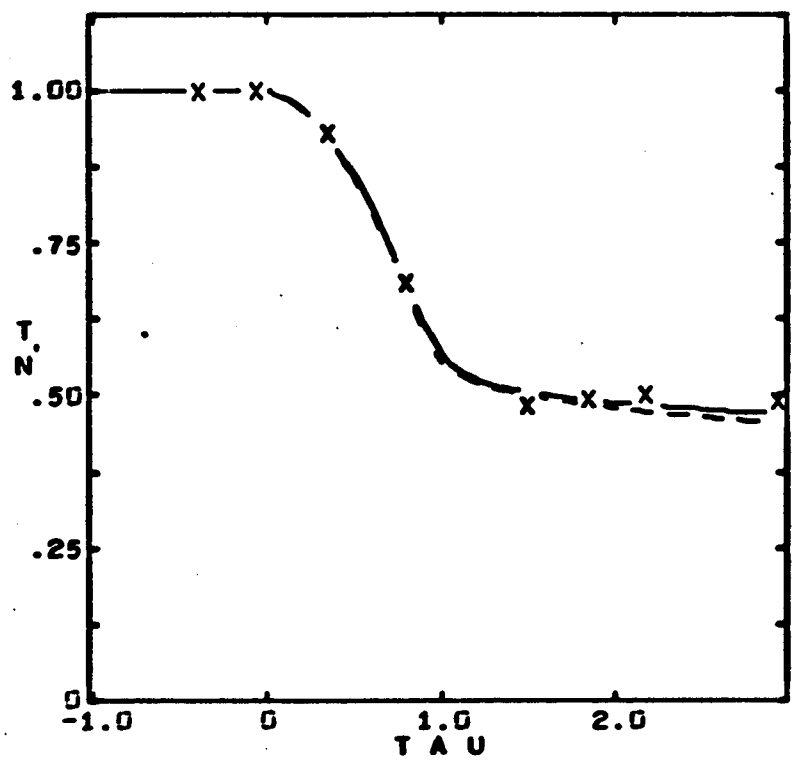
DIFFERENTIAL ENERGY DATA

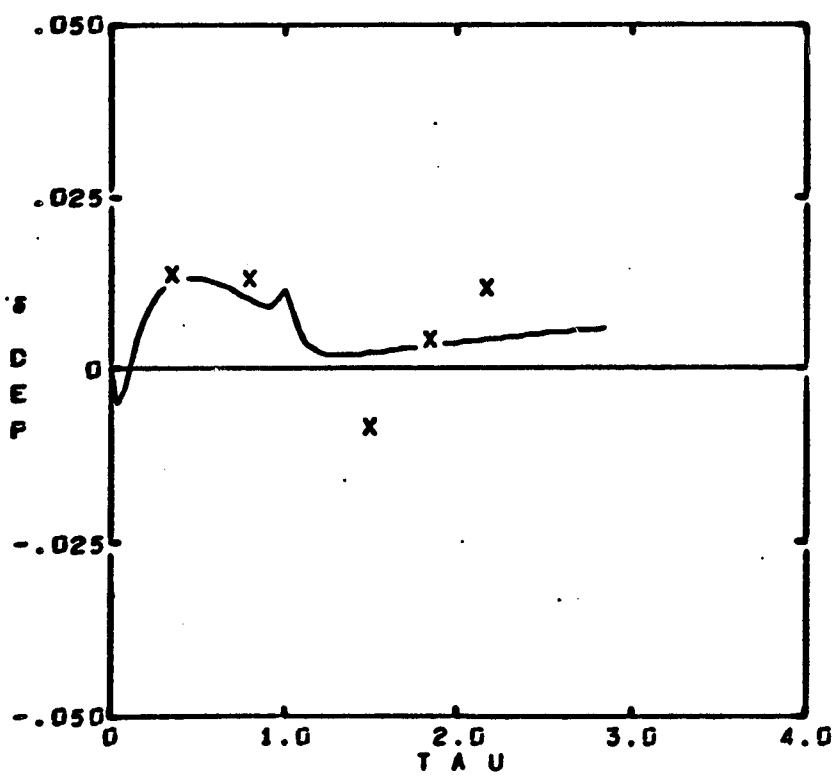
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0284	.0187	.0097
.50	.0633	.0501	.0132
.75	.0936	.0827	.0109
.93	.1128	.1046	.0082
1.0	.1071	.0955	.0116
1.5	.0649	.0625	.0024
2.0	.0567	.0528	.0039
2.5	.0517	.0465	.0052

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.105	384.56		384.56	1.003	.0104
9H	-0.406	384.18		384.18	1.002	.0064
10H	-0.059	383.42		383.42	1.000	-.0015
11H	0.350	356.28		356.28	0.929	.0450
12H	0.800	259.50	0.861 +.988	263.16	0.686	.1022
13H	1.484	185.44	0.000 -.021	185.44	0.483	.0546
14H	1.846	179.65	1.128 +.684	189.49	0.494	.0596
15H	2.169	178.78	1.082 +.732	191.74	0.500	.0624
16H	2.921	187.65	0.488 +.602	188.81	0.492	.0394







PHOTOGRAPH
NOT
AVAILABLE

284 (1K3) MARALDI B

LAMBDA=36.79 E BETA=14.35 N XI=+.5802 ETA=+.2479 L+FL CODE = 15284 ALBEDO =.0640

13H FLAT MOON DATA
FM=.06674 FM'=.08075

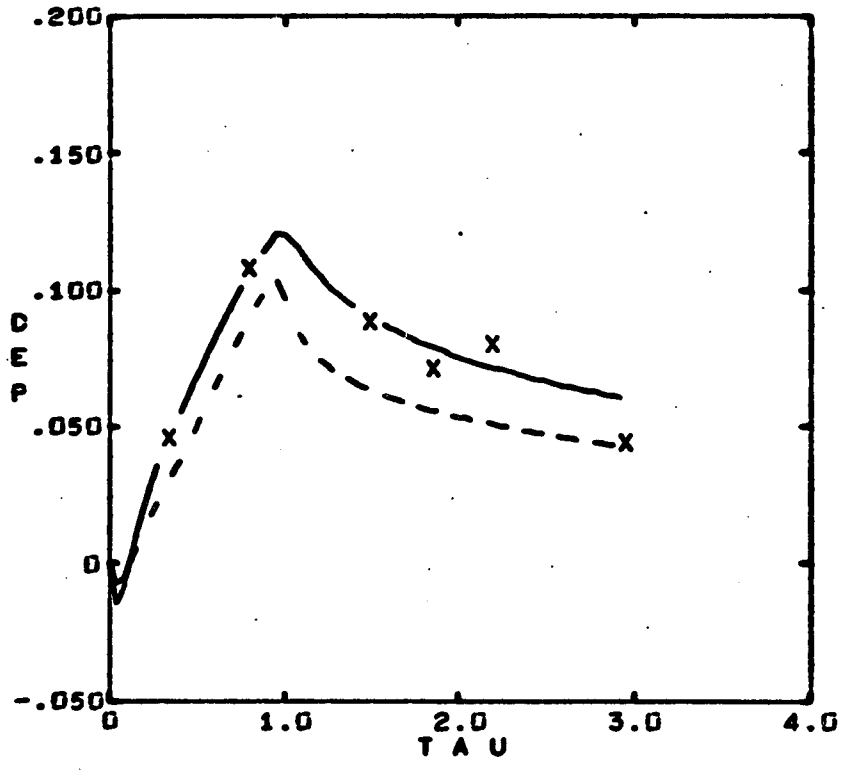
INITIAL TEMPERATURE 384.75
TAU-END OF TOTALITY 2.941

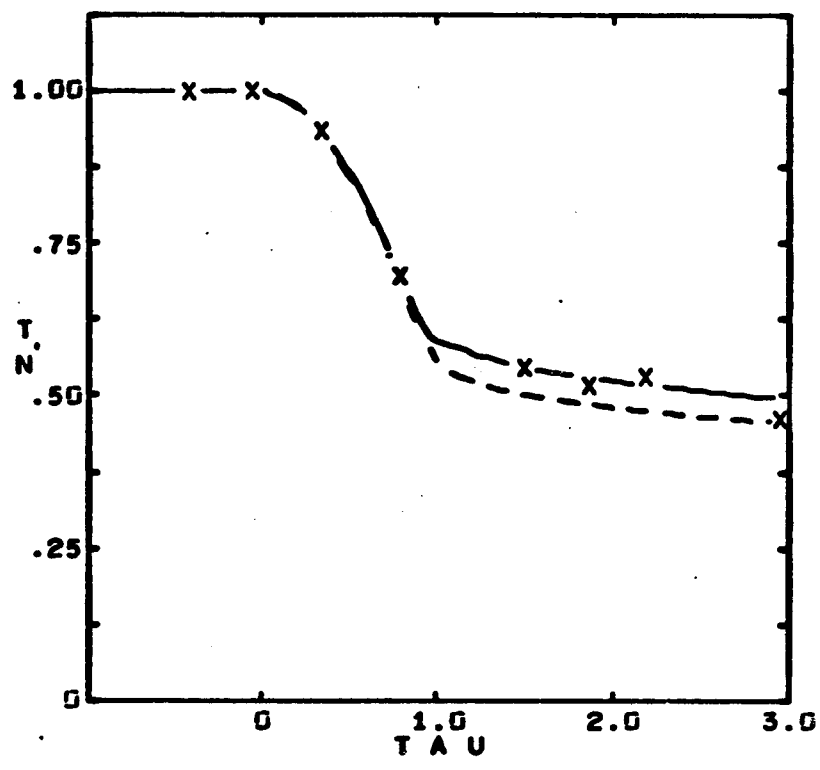
DIFFERENTIAL ENERGY DATA

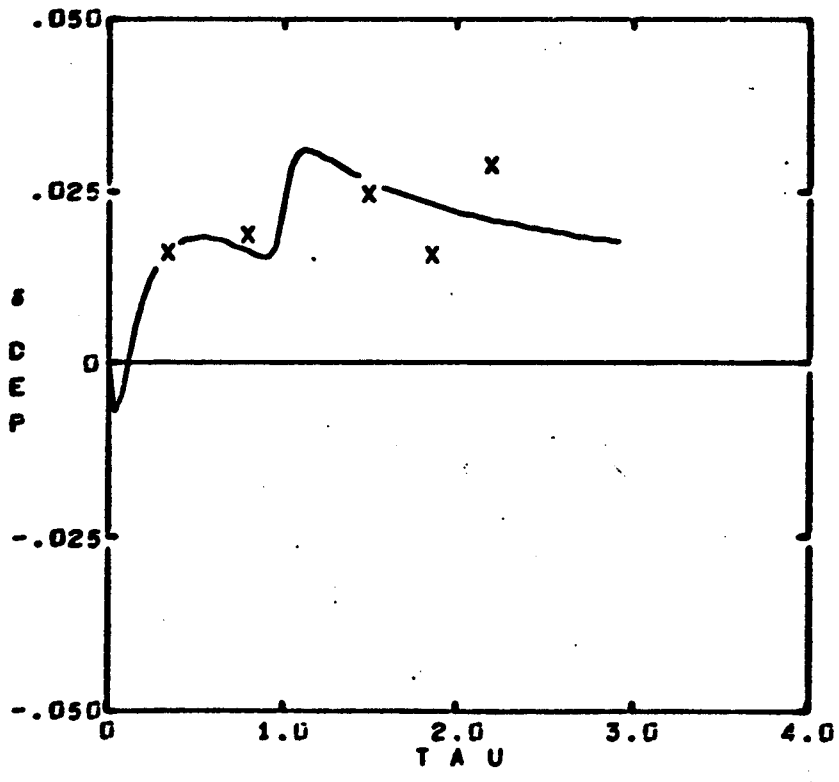
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0308	.0184	.0124
.50	.0696	.0503	.0183
.75	.1002	.0833	.0169
.93	.1200	.1055	.0145
1.0	.1200	.0964	.0236
1.5	.0896	.0633	.0263
2.0	.0756	.0536	.0220
2.5	.0666	.0472	.0194

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.137	385.96			385.96	1.003	.0127
9H	-0.429	384.61			384.61	1.000	-.0014
10H	-0.076	384.69			384.69	1.000	-.0006
11H	0.340	359.35			359.35	0.934	.0461
12H	0.797	264.00	0.741	-.786	267.20	0.694	.1080
13H	1.491	204.41	0.287	-.910	209.69	0.545	.0882
14H	1.858	193.39	0.424	+.800	198.91	0.517	.0714
15H	2.186	202.54	0.131	+.663	204.50	0.532	.0798
16H	2.954	177.63	0.000	-.456	177.63	0.462	.0441







PHOTOGRAPH NOT AVAILABLE

285 (1K4) MARALDI M

LAMBDA=39.09 E BETA=17.46 N XI=+.6015 ETA=+.3001 L+PL CODE = 16300 ALBEDO =.0684

13N FLAT MOON DATA
FM=.02512 FM'=.03092

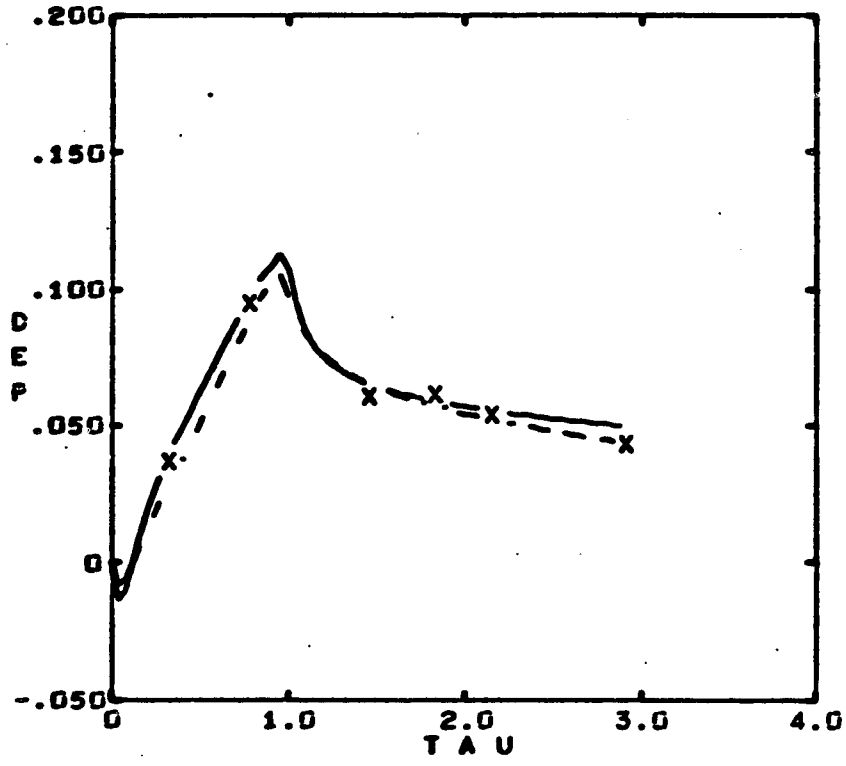
INITIAL TEMPERATURE 381.81
TAU-END OF TOTALITY 2.681

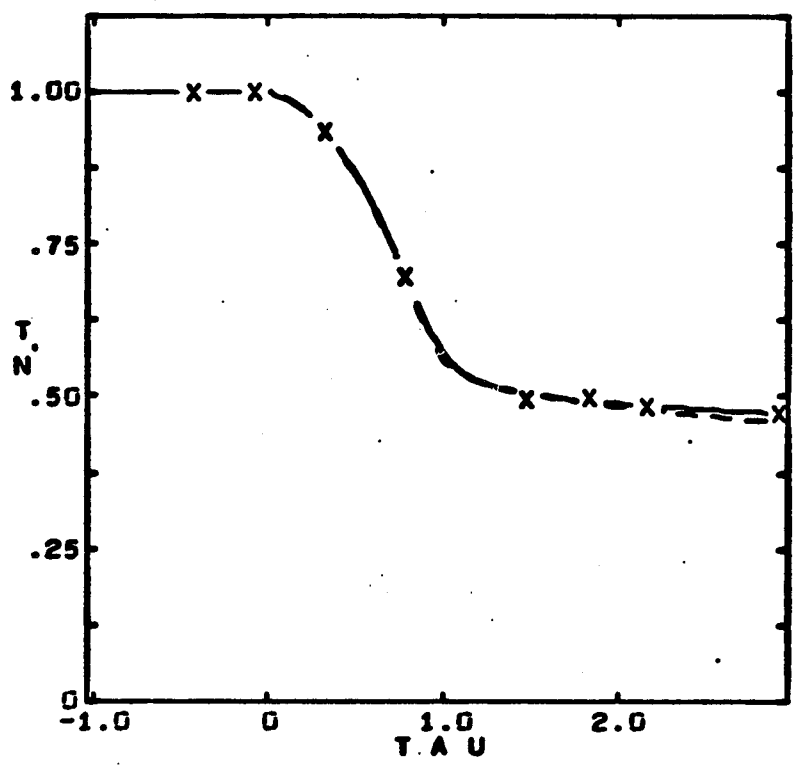
DIFFERENTIAL ENERGY DATA

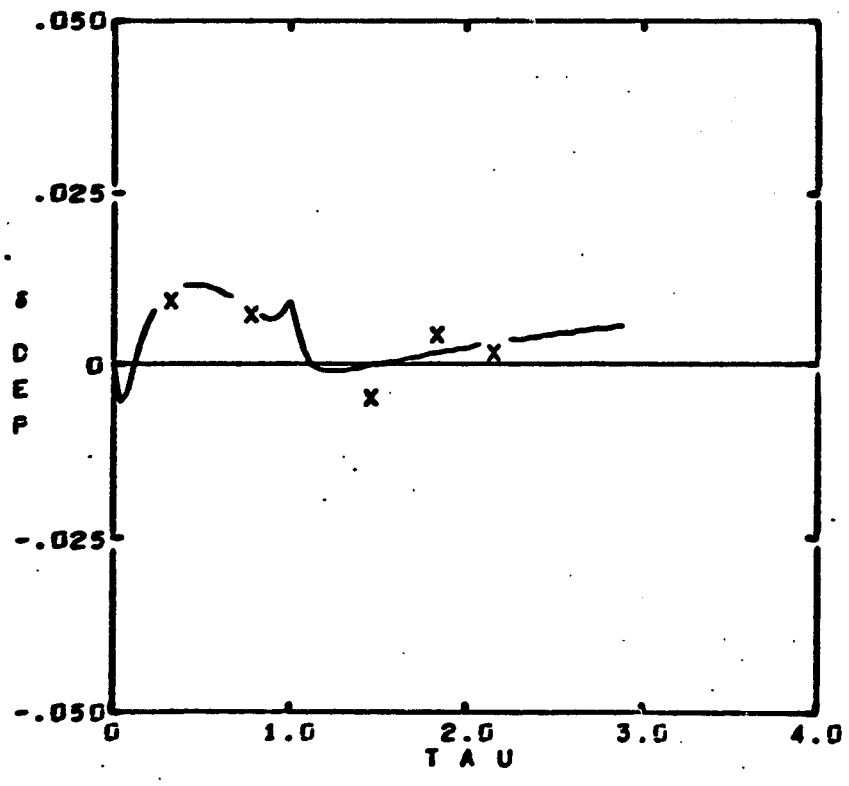
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0264	.0180	.0084
.50	.0622	.0506	.0116
.75	.0929	.0842	.0087
.93	.1123	.1066	.0057
1.0	.1068	.0976	.0092
1.5	.0644	.0643	.0001
2.0	.0571	.0545	.0026
2.5	.0527	.0481	.0046

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.135	381.95		381.95	1.000	.0015
9H	-0.433	382.01		382.01	1.001	.0022
10H	-0.085	381.76		381.76	1.000	-.0005
11H	0.327	357.33		357.33	0.936	.0371
12H	0.779	265.67	0.288 -.167	266.25	0.697	.0952
13H	1.466	187.34	0.442 +.333	189.25	0.496	.0604
14H	1.829	182.43	0.662 +.365	190.18	0.498	.0616
15H	2.154	181.80	0.427 +.067	184.18	0.482	.0541
16H	2.914	180.32	0.000 +.400	180.32	0.472	.0438







PHOTOGRAPH NOT AVAILABLE

286 (2K1) MARIUS

LAMBDA=50.75 W BETA=11.88 N XI=-.7578 ETA=+.2058 L+PL CODE = 27250 ALBEDO =.0598

13H FLAT MOON DATA
FM=.06181 FM'=.08692

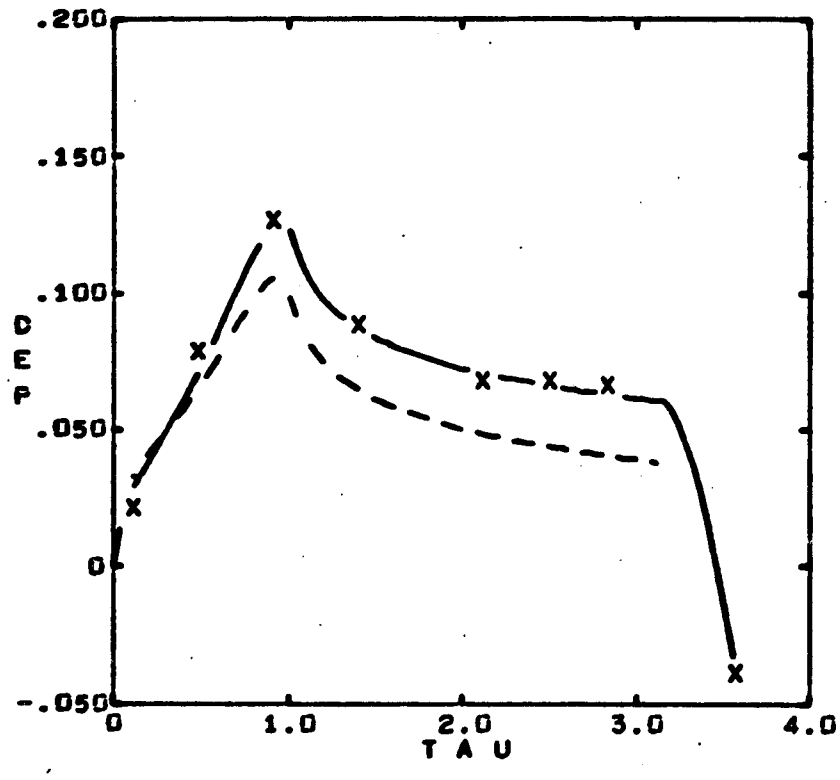
INITIAL TEMPERATURE 370.12
TAU-END OF TOTALITY 3.155

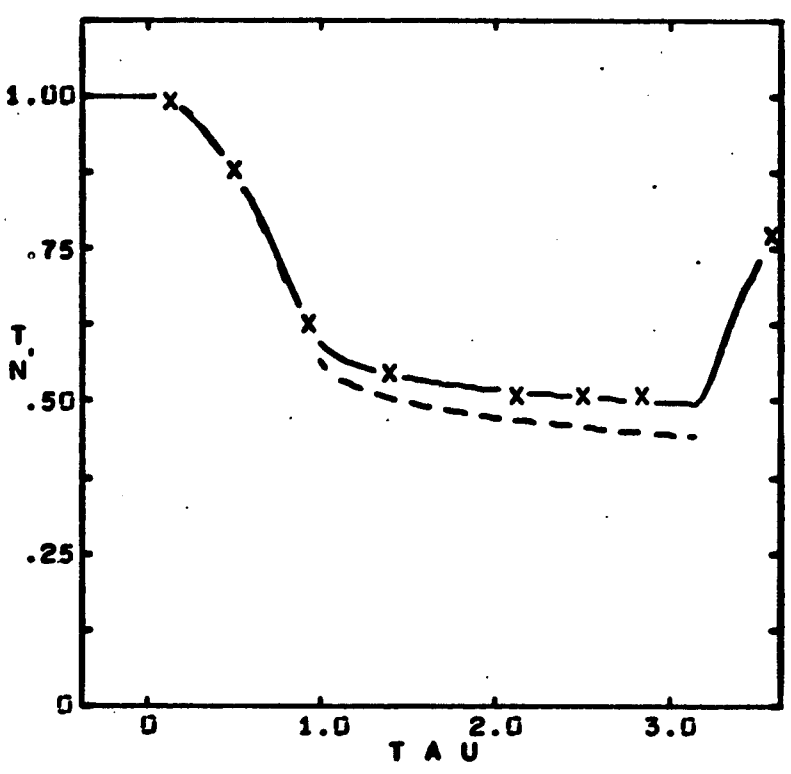
DIFFERENTIAL ENERGY DATA

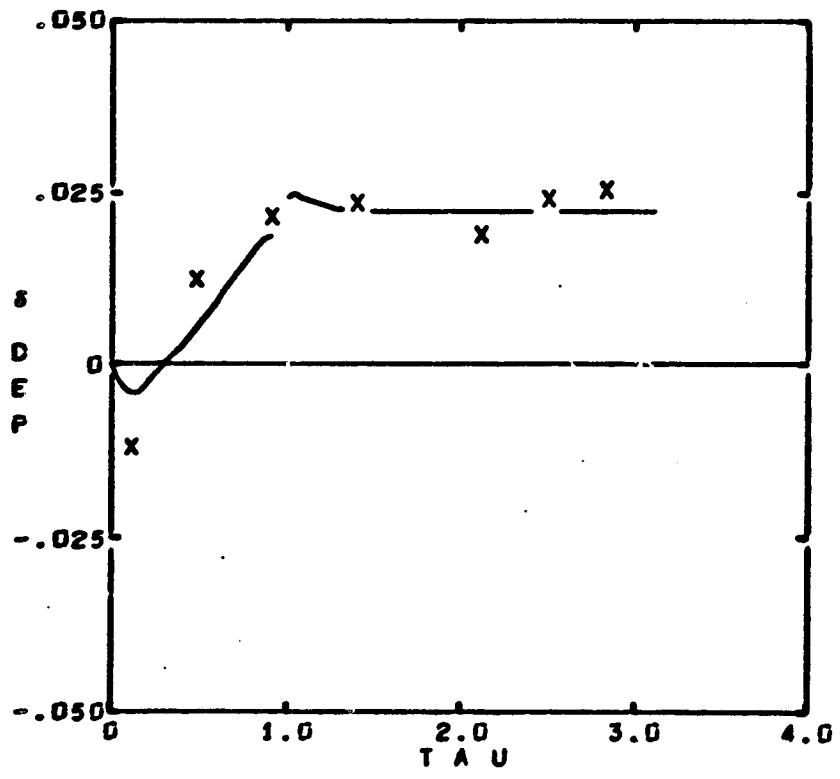
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0424	.0440	-.0016
.50	.0732	.0672	.0060
.75	.1071	.0925	.0146
.93	.1293	.1091	.0202
1.0	.1231	.0989	.0242
1.5	.0834	.0611	.0223
2.0	.0724	.0502	.0222
2.5	.0660	.0438	.0222
3.0	.0615	.0391	.0224

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.615	370.12		370.12	1.000	.0000
9H	0.124	367.02		367.02	0.992	.0219
10H	0.488	325.90		325.90	0.881	.0785
11H	0.919	220.50	0.737 +.659	232.37	0.628	.1266
12H	1.391	187.43	0.717 +.453	201.85	0.545	.0885
13H	2.113	179.14	0.513 +.317	188.75	0.510	.0676
14H	2.491	188.11	0.115 +.837	188.98	0.511	.0680
15H	2.833	168.31	0.802 +.541	187.71	0.507	.0662
16H	3.577	284.30	0.548 +.256	286.62	0.774	-.0386







PHOTOGRAPH NOT AVAILABLE

287 (2K2) MARIUS A

LAMBDA=45.96 W BETA=12.60 N XI=-.7016 ETA=+.2181 L+PL CODE = 27201 ALBEDO =.0682

13H FLAT MOON DATA
FM=.08630 FM'=.19259

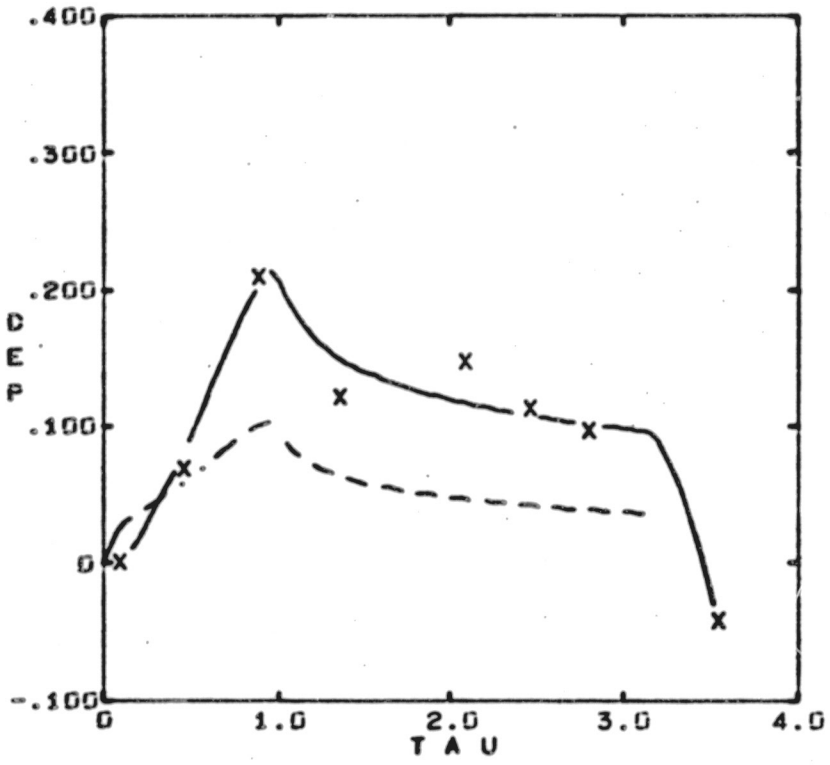
INITIAL TEMPERATURE 373.91
TAU-END OF TOTALITY 3.137

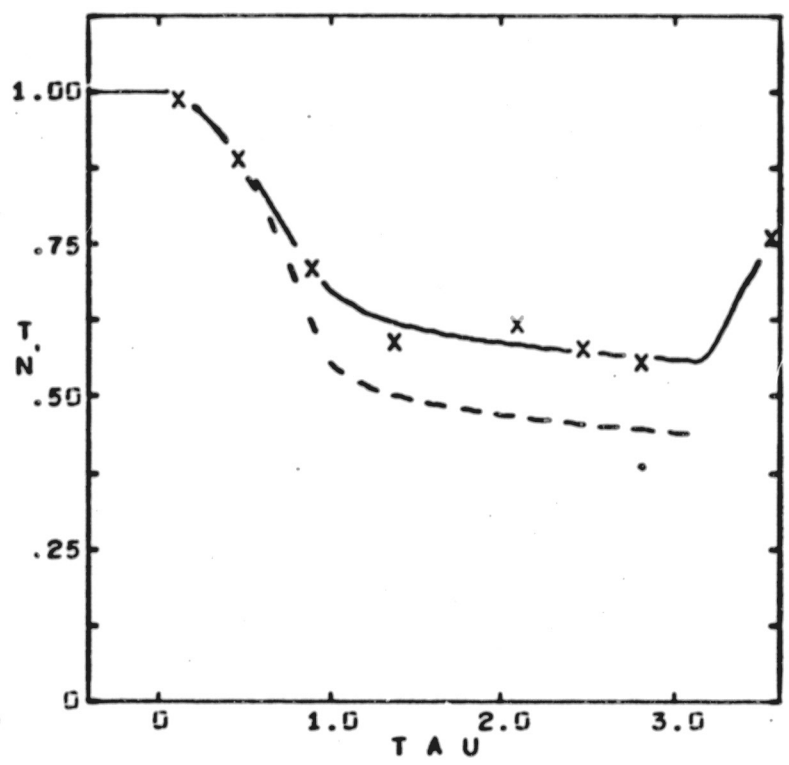
DIFFERENTIAL ENERGY DATA

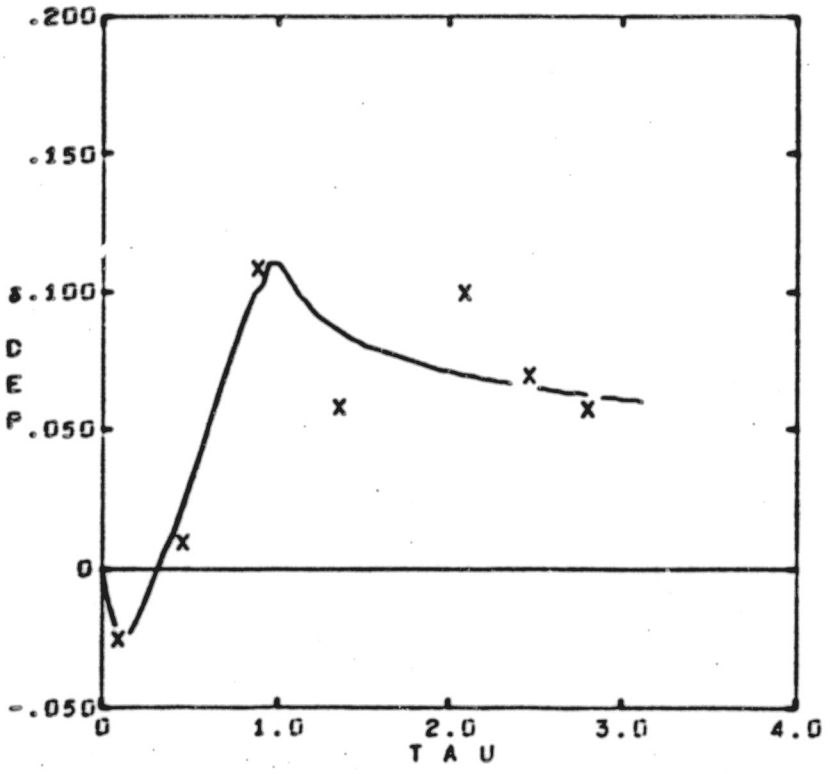
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0291	.0407	-.0116
.50	.0947	.0638	.0309
.75	.1678	.0891	.0787
.93	.2159	.1057	.1102
1.0	.2059	.0957	.1102
1.5	.1401	.0591	.0810
2.0	.1196	.0486	.0710
2.5	.1074	.0423	.0651
3.0	.0987	.0378	.0609

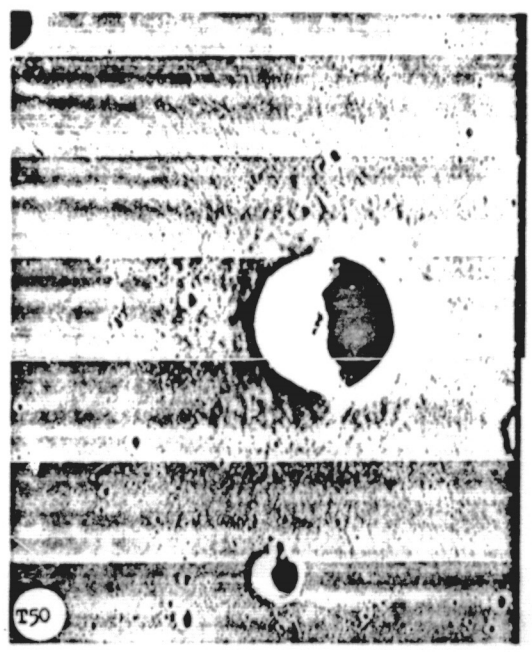
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.637	373.91		373.91	1.000	.0000
9H	0.099	370.38		370.38	0.991	.0006
10H	0.463	332.59		332.59	0.889	.0695
11H	0.893	257.18	0.281 +.818	265.80	0.711	.2098
12H	1.363	217.98	0.154 -.258	220.96	0.591	.1220
13H	2.083	192.08	0.651 -.054	231.46	0.619	.1468
14H	2.460	209.96	0.287 -.517	216.50	0.579	.1124
15H	2.801	201.82	0.247 +.903	208.51	0.558	.0967
16H	3.545	282.21	0.617 -.061	285.00	0.762	-.0420









288 (2K3) MARIUS B

LAMBDA=47.25 W BETA=16.33 N X|=-.7047 ETA=+.2811 L+PL CODE = 27208 ALBEDO =.0654

13H FLAT MOON DATA
FM=.03954 FM'=.10524

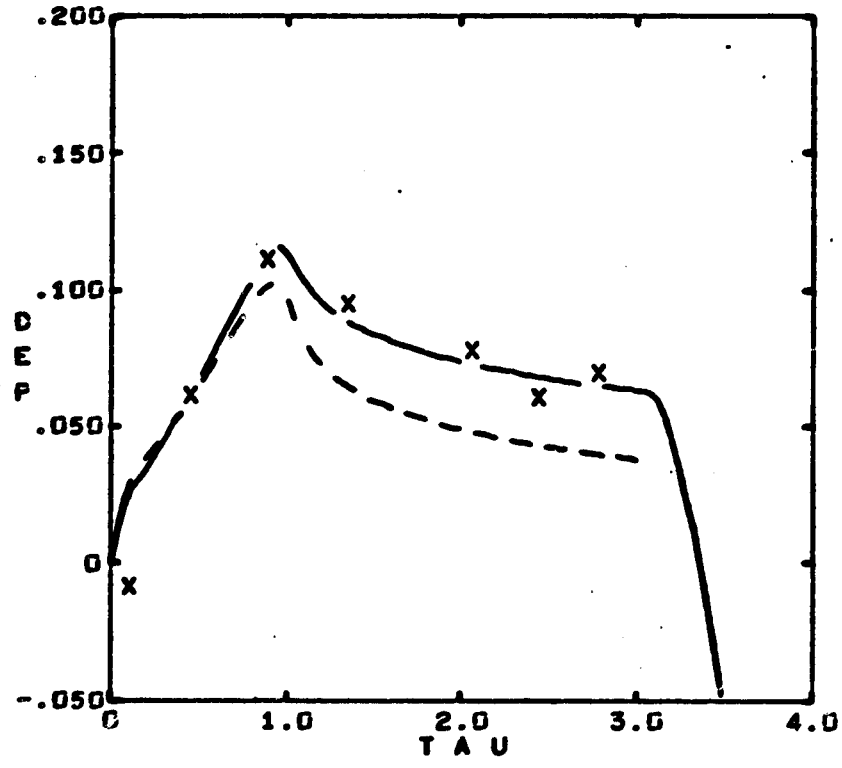
INITIAL TEMPERATURE 372.27
TAU-END OF TOTALITY 3.077

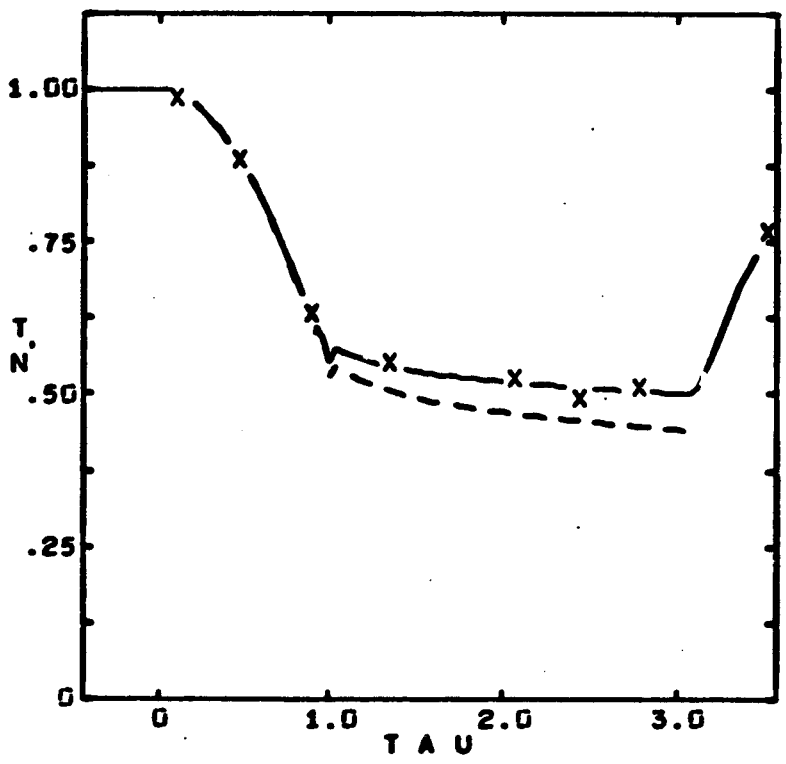
DIFFERENTIAL ENERGY DATA

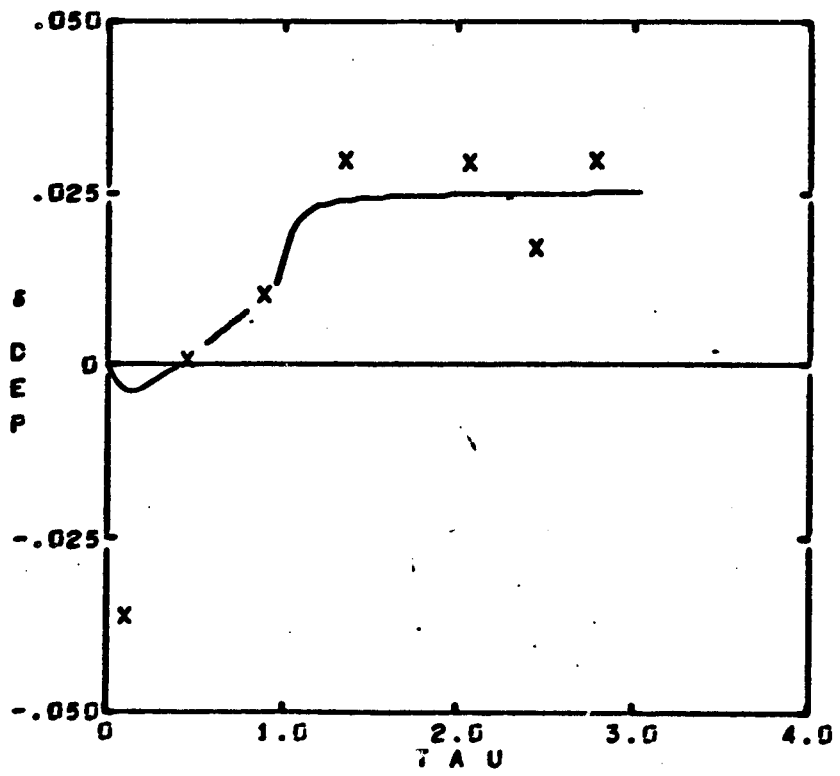
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0390	.0416	-.0026
.50	.0666	.0647	.0019
.75	.0969	.0900	.0069
.93	.1168	.1065	.0103
1.0	.1125	.0965	.0160
1.5	.0839	.0596	.0243
2.0	.0738	.0490	.0248
2.5	.0677	.0427	.0250
3.0	.0632	.0381	.0251

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8K	-0.629	372.27			372.27	1.000	.0000
9H	0.100	367.74			367.74	0.988	-.0087
10H	0.460	330.39			330.39	0.887	.0616
11H	0.885	235.70	0.065	-.286	236.06	0.634	.1115
12H	1.353	201.70	0.256	-.996	206.46	0.555	.0946
13H	2.065	173.58	0.993	-.093	196.36	0.527	.0774
14H	2.438	181.60	0.237	-.467	184.51	0.496	.0603
15H	2.776	189.47	0.094	+.799	191.42	0.514	.0699
16H	3.510	286.46	0.000	+.818	286.46	0.769	-.0604







PHOTOGRAPH
NOT
AVAILABLE

289 (2K4) MARIUS BC

LAMBDA=48.22 W BETA=15.37 N XI=-.7190 ETA=+.2650 L+PL CODE = 27216 ALBEDO =.0629

13H FLAT MOON DATA
FM=.04880 FM'=.04880

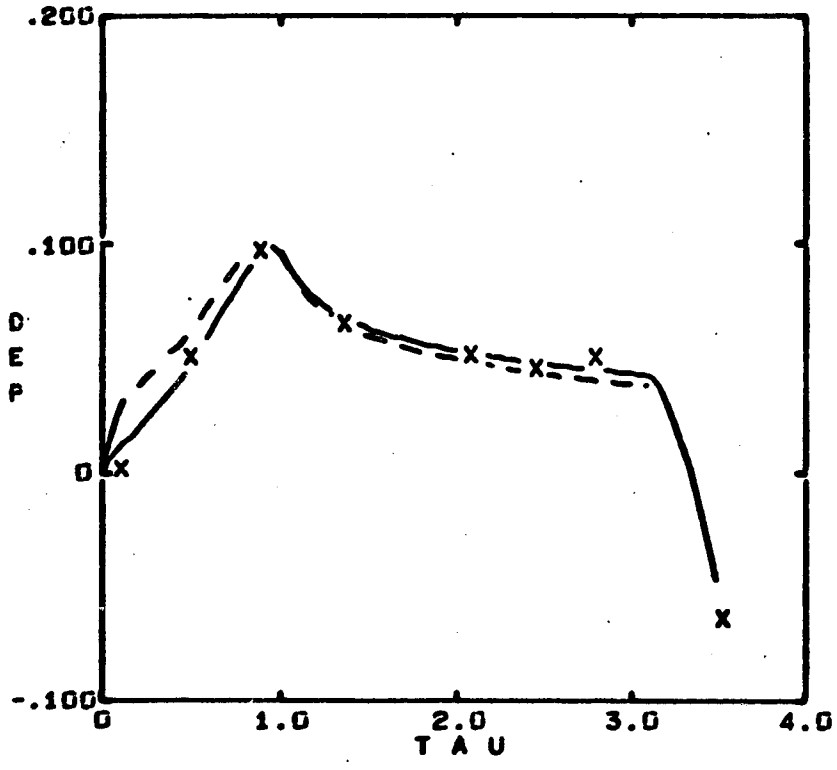
INITIAL TEMPERATURE 370.93
TAU-END OF TOTALITY 3.095

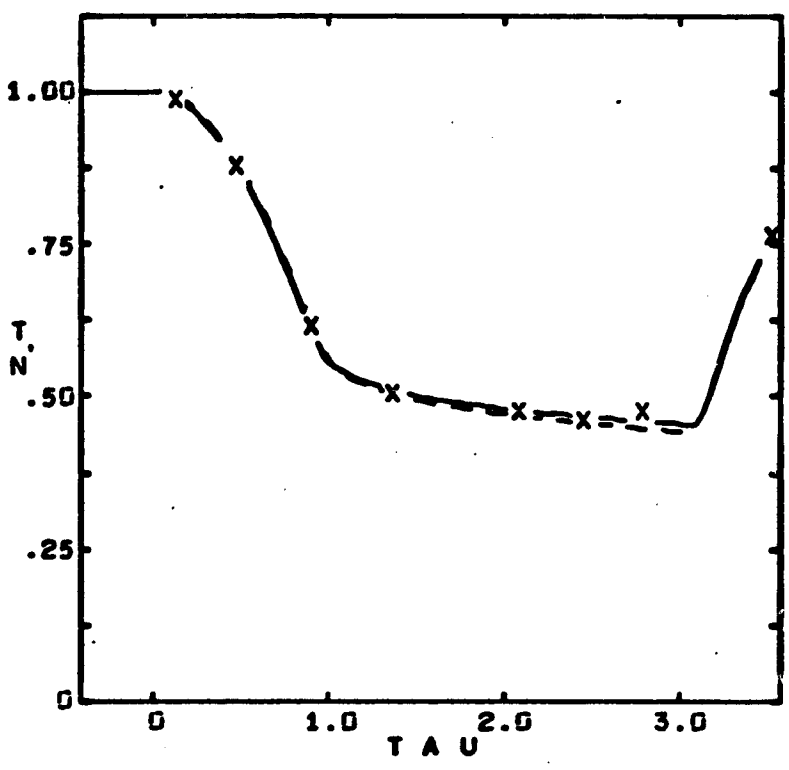
DIFFERENTIAL ENERGY DATA

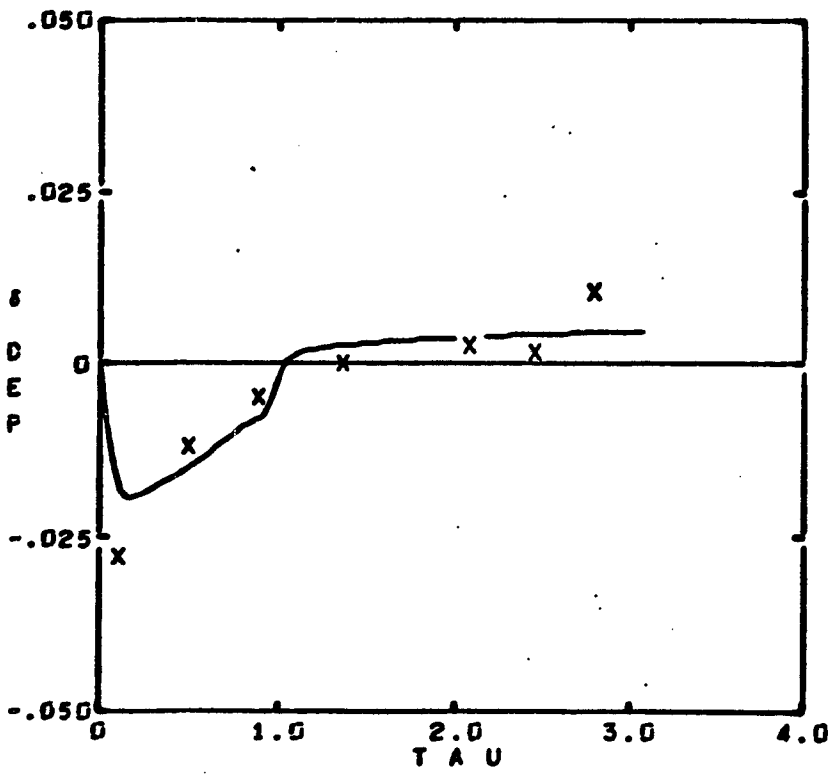
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0238	.0422	-.0184
.50	.0508	.0654	-.0146
.75	.0807	.0907	-.0100
.93	.1003	.1072	-.0069
1.0	.0953	.0971	-.0018
1.5	.0630	.0600	.0030
2.0	.0532	.0493	.0039
2.5	.0473	.0429	.0044
3.0	.0432	.0384	.0048

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.625	370.93		370.93	1.000	.0000
9H	0.107	367.01		367.01	0.989	.0016
10H	0.468	326.36		326.36	0.880	.0501
11H	0.894	227.69	0.000 -.937	227.69	0.614	.0978
12H	1.361	187.32	0.000 -.208	187.32	0.505	.0650
13H	2.077	176.29	0.000 -.813	176.29	0.475	.0510
14H	2.451	171.13	0.000 -.924	171.13	0.461	.0453
15H	2.790	176.02	0.000 -.243	176.02	0.475	.0507
16H	3.526	284.50	0.000 +.184	284.50	0.767	-.0637







PHOTOGRAPH NOT AVAILABLE

290 (2K5) MARIUS C

LAMBDA=47.56 W BETA=13.98 N XI=-.7161 ETA=+.2416 L+PL CODE = 27214 ALBEDO =.0648

13H FLAT MOON DATA
FM=.04707 FM'=.10545

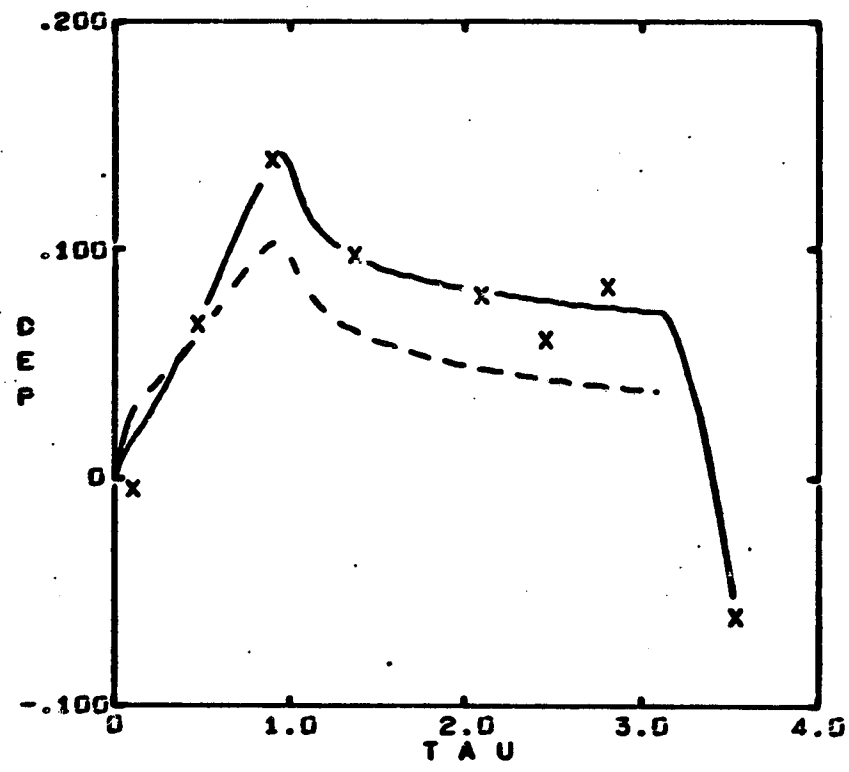
INITIAL TEMPERATURE 372.61
TAU-END OF TOTALITY 3.117

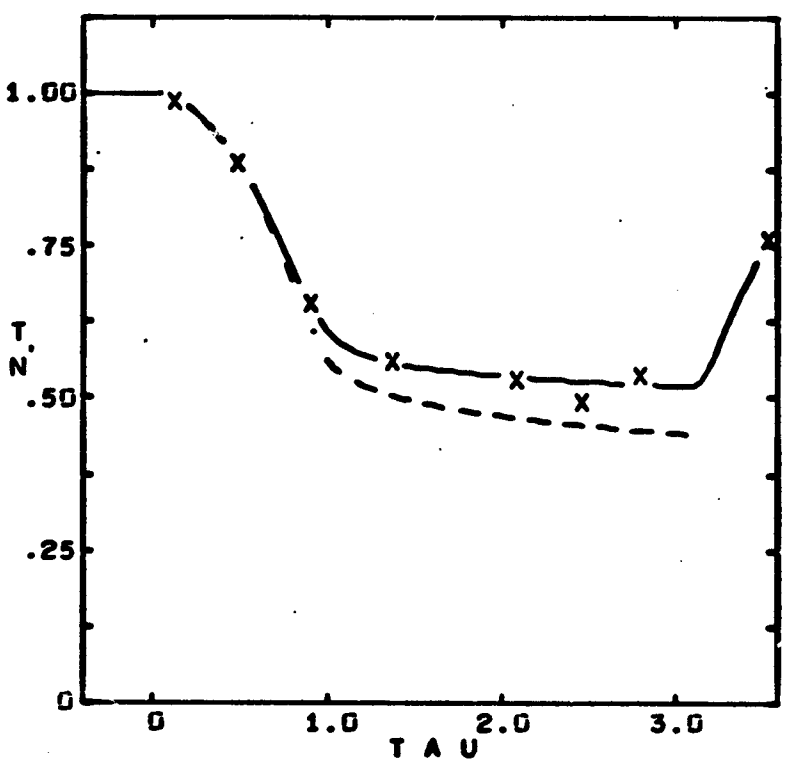
DIFFERENTIAL ENERGY DATA

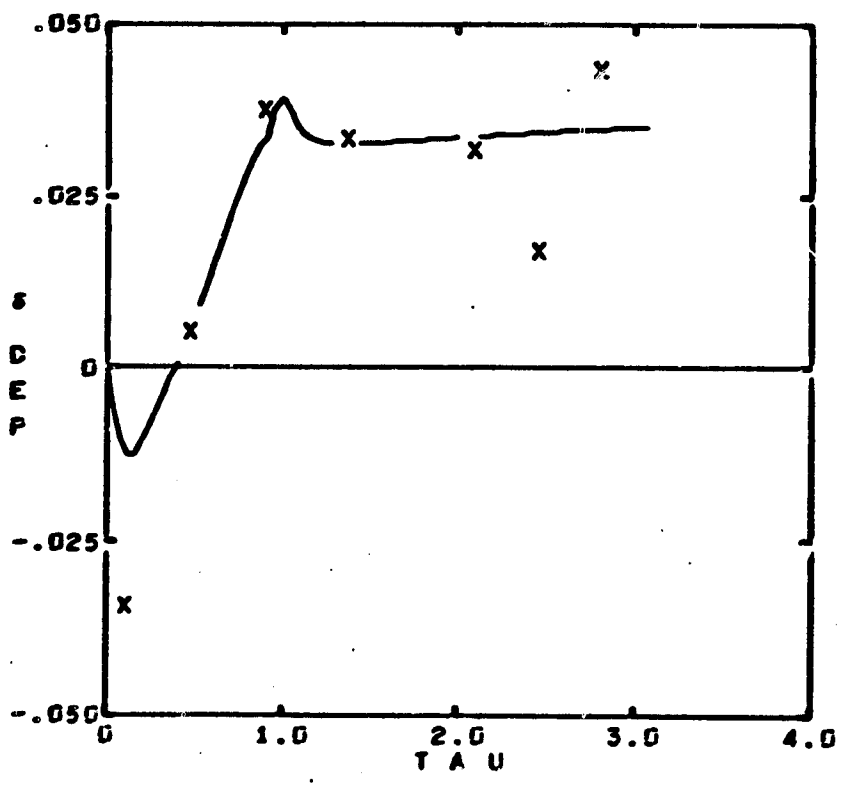
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0338	.0418	-.0080
.50	.0724	.0649	.0075
.75	.1151	.0902	.0249
.93	.1431	.1068	.0363
1.0	.1361	.0967	.0394
1.5	.0924	.0597	.0327
2.0	.0827	.0491	.0336
2.5	.0771	.0427	.0344
3.0	.0732	.0382	.0350

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.629	372.61		372.61	1.000	-.0000
9H	0.106	368.04		368.04	0.988	-.0057
10H	0.468	330.19		330.19	0.886	.0670
11H	0.896	240.69	0.262 -.348	243.62	0.654	.1395
12H	1.366	199.06	0.464 -.860	208.29	0.559	.0976
13H	2.083	176.23	1.073 -.162	197.93	0.531	.0796
14H	2.458	182.69	0.537 -.705	184.68	0.496	.0603
15H	2.798	196.89	0.224 -.611	200.12	0.537	.0832
16H	3.538	283.81	0.000 +.183	283.81	0.762	-.0606







PHOTOGRAPH NOT AVAILABLE

291 (2K6) MARIUS C

LAMBDA=44.96 W BETA=11.41 N XI=-.6927 ETA=+.1978 L+PL CODE = 26199 ALBEDO =.0589

13H FLAT MOON DATA
FM=.04263 FM'=.04263

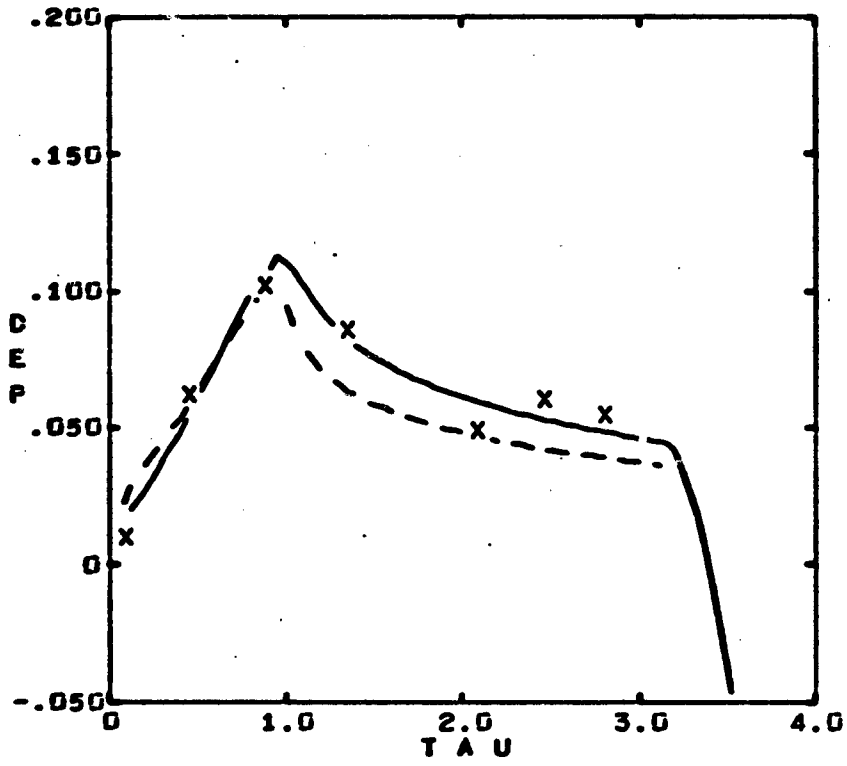
INITIAL TEMPERATURE 375.59
TAU-END OF TOTALITY 3.155

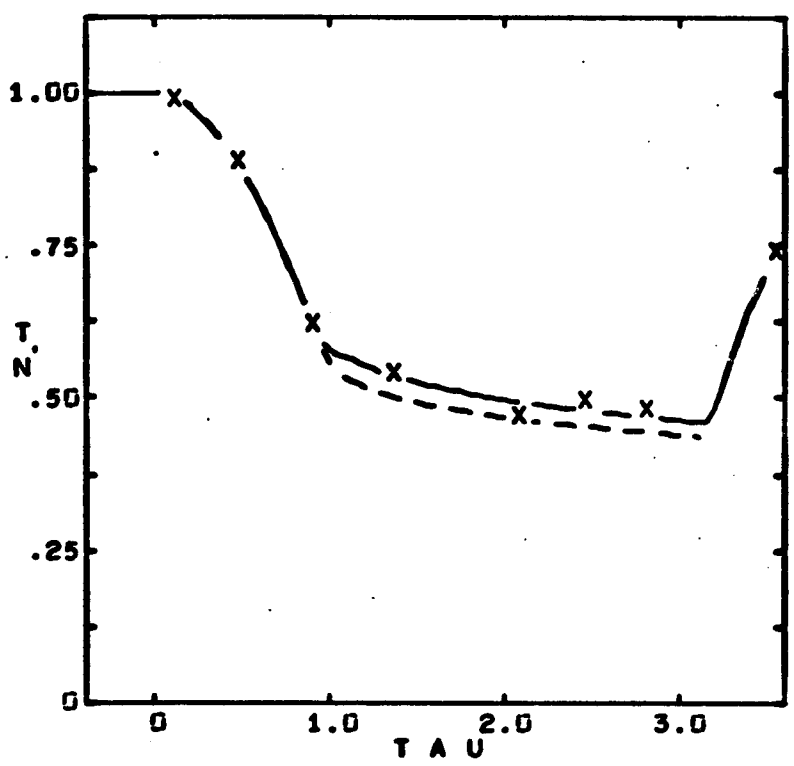
DIFFERENTIAL ENERGY DATA

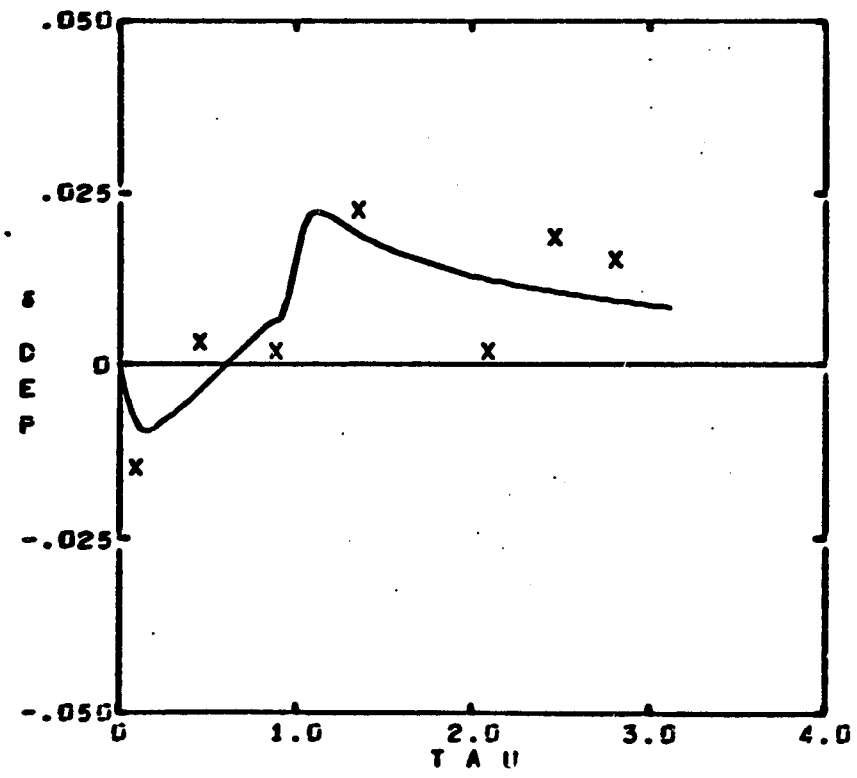
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0318	.0401	-.0083
.50	.0604	.0632	-.0028
.75	.0920	.0885	.0035
.93	.1127	.1050	.0077
1.0	.1107	.0951	.0156
1.5	.0759	.0587	.0172
2.0	.0613	.0483	.0130
2.5	.0525	.0420	.0105
3.0	.0463	.0375	.0088

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.642	375.59		375.59	1.000	.0000
9H	0.095	373.20		373.20	0.994	.0105
10H	0.460	333.90		333.90	0.889	.0626
11H	0.890	233.55	0.000 +.801	233.55	0.622	.1021
12H	1.363	203.47	0.000 +.765	203.47	0.542	.0861
13H	2.084	176.72	0.000 +.605	176.72	0.471	.0490
14H	2.463	186.65	0.000 +.725	186.65	0.497	.0610
15H	2.804	181.63	0.000 +.799	181.63	0.484	.0547
16H	3.552	279.35	0.000 +.479	279.35	0.744	-.0588







PHOTOGRAPH NOT AVAILABLE

292 (2K7) MARIUS H

LAMBDA=54.83 W BETA=17.38 N XI=-.7801 ETA=+.2987 L+PL CODE = 27289 ALBEDO =.0609

13H FLAT MOON DATA
FM=.05202 FM'=.09053

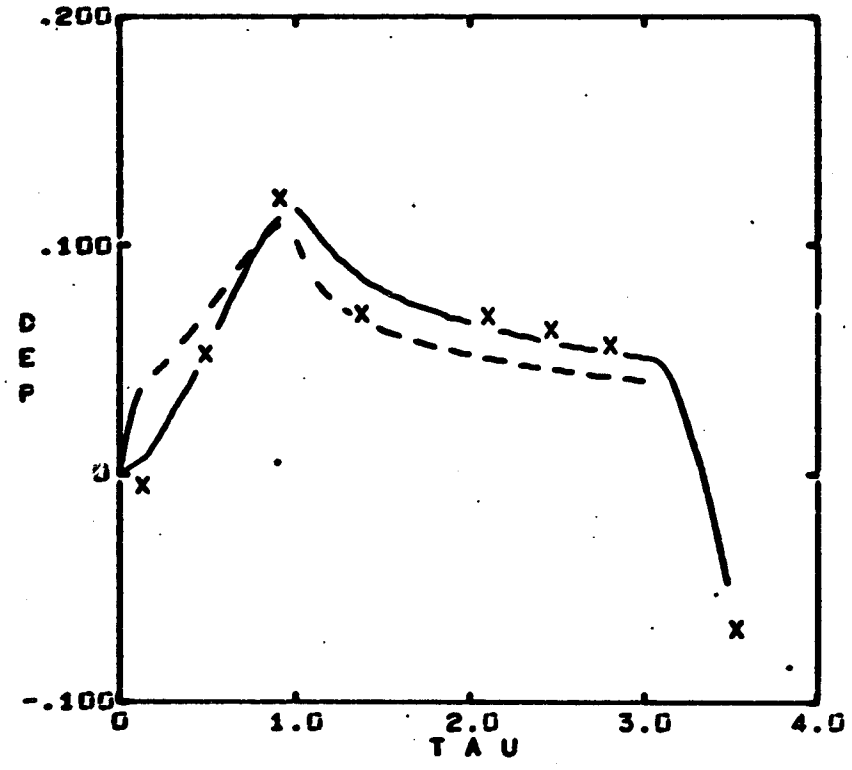
INITIAL TEMPERATURE 363.46
TAU-END OF TOTALITY 3.070

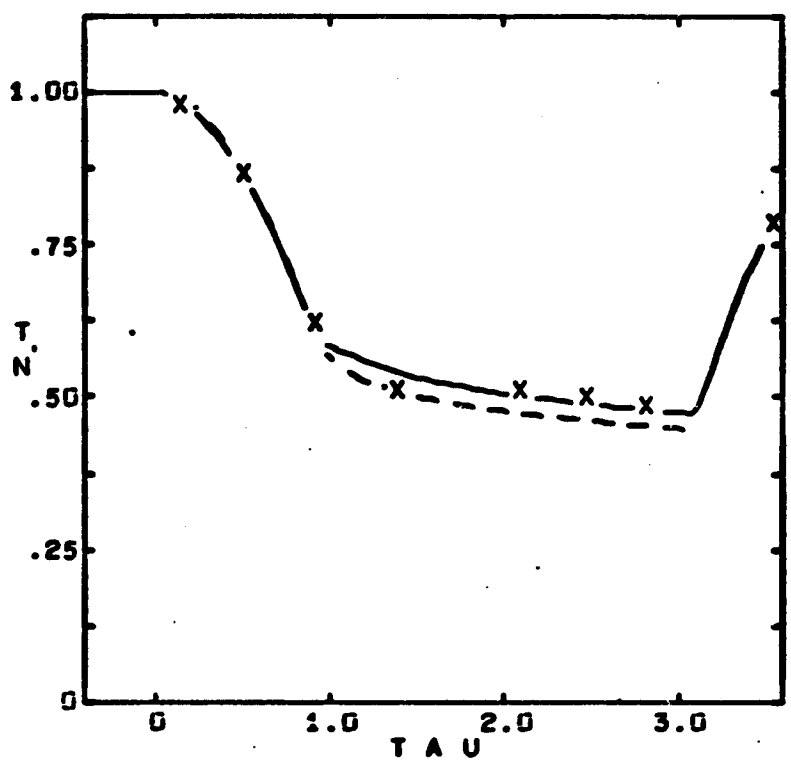
DIFFERENTIAL ENERGY DATA

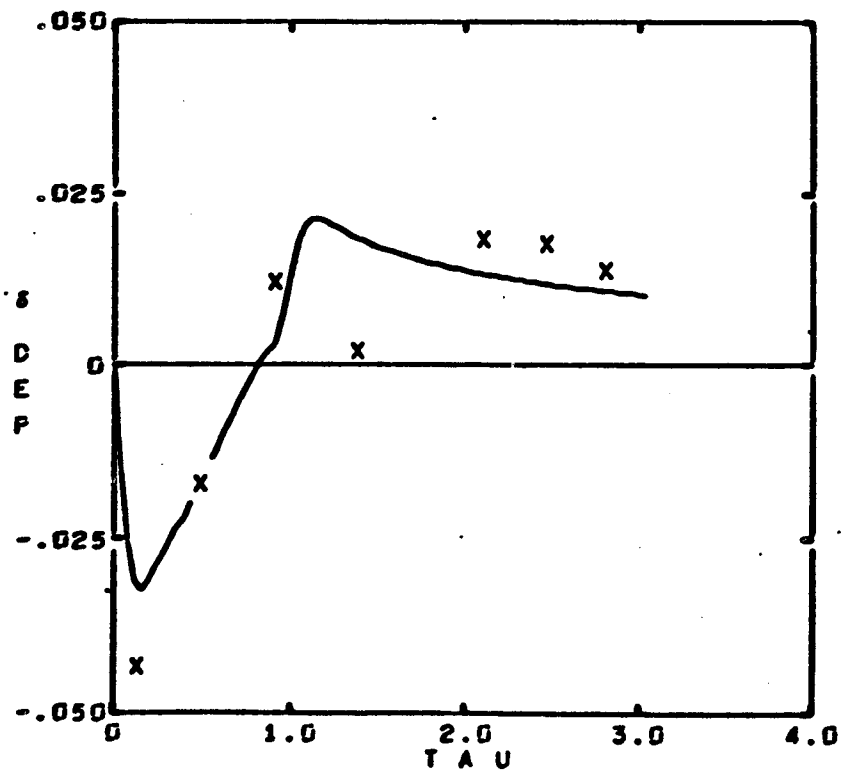
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0185	.0473	-.0288
.50	.0537	.0705	-.0168
.75	.0925	.0960	-.0035
.93	.1178	.1127	.0051
1.0	.1156	.1022	.0134
1.5	.0804	.0631	.0173
2.0	.0657	.0519	.0138
2.5	.0570	.0452	.0118
3.0	.0508	.0404	.0104

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	N'	DEP'
8H	-0.596	363.46		363.46	1.000	.0000
9H	0.133	357.16		357.16	0.983	-.0056
10H	0.492	315.44		315.44	0.868	.0526
11H	0.916	224.12	0.306 -.673	226.30	0.623	.1206
12H	1.382	183.44	0.520 -.864	186.63	0.513	.0695
13H	2.095	172.08	0.802 -.178	186.16	0.512	.0688
14H	2.467	178.34	0.287 -.433	182.21	0.501	.0632
15H	2.804	173.14	0.322 -.766	176.70	0.486	.0559
16H	3.534	286.62	0.000 +.915	286.62	0.789	-.0676







PHOTOGRAPH NOT AVAILABLE

293 (2K8) MARKOV E

LAMBDA=59.88 W BETA=50.52 N XI=-.5499 ETA=+.7719 L+PL CODE = 25747 ALBEDO =.0722

13H FLAT MOON DATA
FM=.04839 FM'=.07841

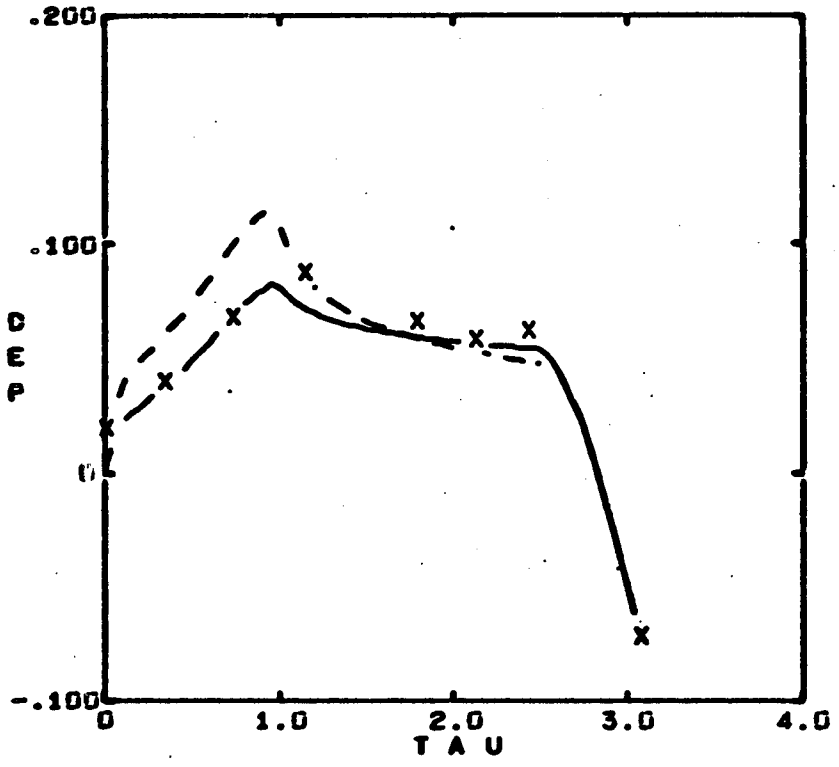
INITIAL TEMPERATURE 343.51
TAU-END OF TOTALITY 2.485

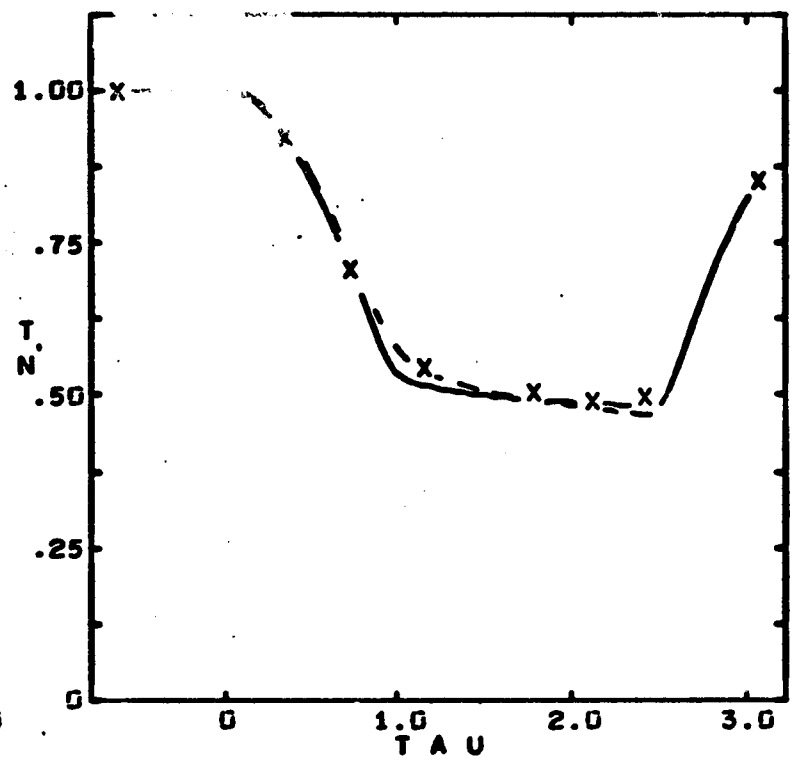
DIFFERENTIAL ENERGY DATA

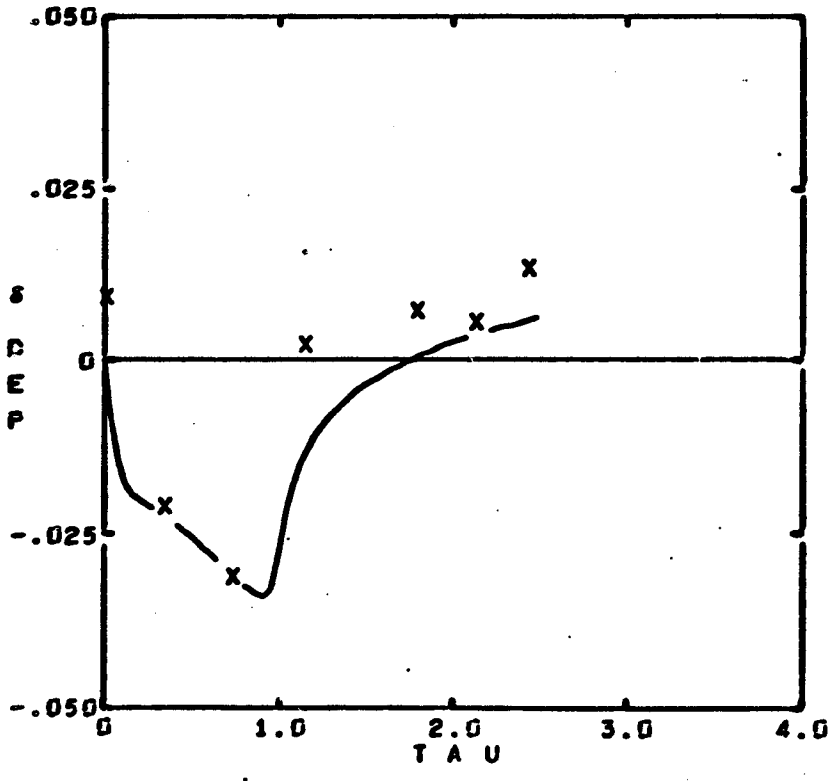
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0312	.0520	-.0208
.50	.0496	.0753	-.0257
.75	.0697	.1011	-.0314
.93	.0829	.1180	-.0351
1.0	.0802	.1071	-.0269
1.5	.0627	.0662	-.0035
2.0	.0571	.0544	.0027
2.5	.0538	.0474	.0064
3.0	.0514	.0425	.0089

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.632	343.51		343.51	1.000	.0000
9H	0.020	344.91		344.91	1.004	.0194
10H	0.344	317.73		317.73	0.925	.0394
11H	0.726	243.34	0.000 -.211	243.34	0.708	.0678
12H	1.145	184.41	0.156 -.724	186.95	0.544	.0877
13H	1.783	161.99	0.465 +.426	173.95	0.506	.0658
14H	2.121	164.36	0.234 +.707	168.67	0.491	.0581
15H	2.422	165.47	0.377 -.342	171.39	0.499	.0620
16H	3.074	292.99	0.000 -.176	292.99	0.853	-.0723







PHOTOGRAPH NOT AVAILABLE

294 (1K5) MASKELYNE

LAMBDA=30.04 E BETA= 2.17 N XI=+.5002 ETA=+.0379 L+PL CODE = 15003 ALBEDO =.0711

13H FLAT MOON DATA
FM=.05705 FM'=.07221

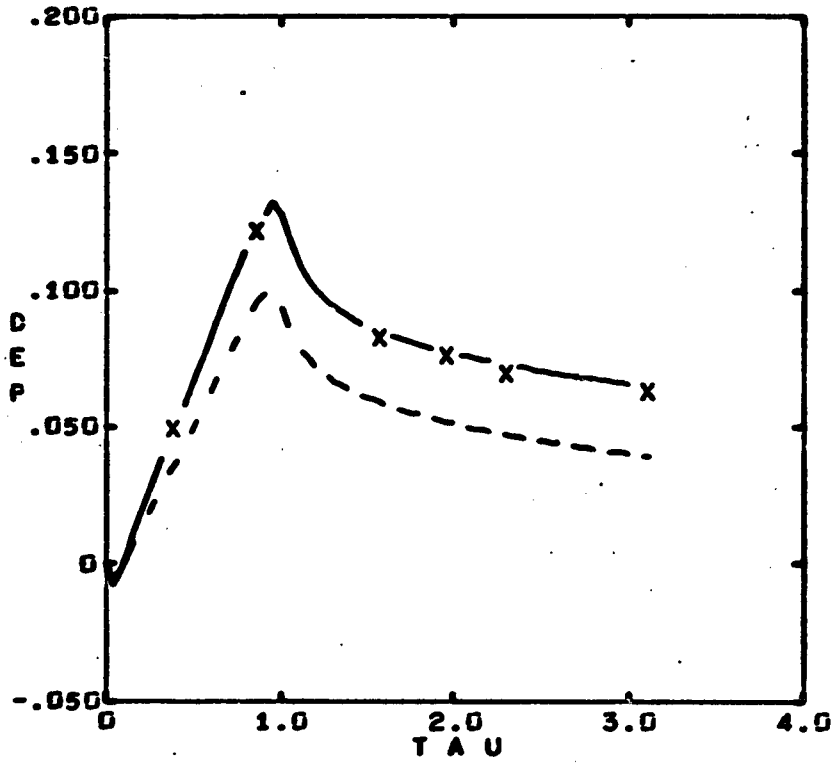
INITIAL TEMPERATURE 391.15
TAU-END OF TOTALITY 3.160

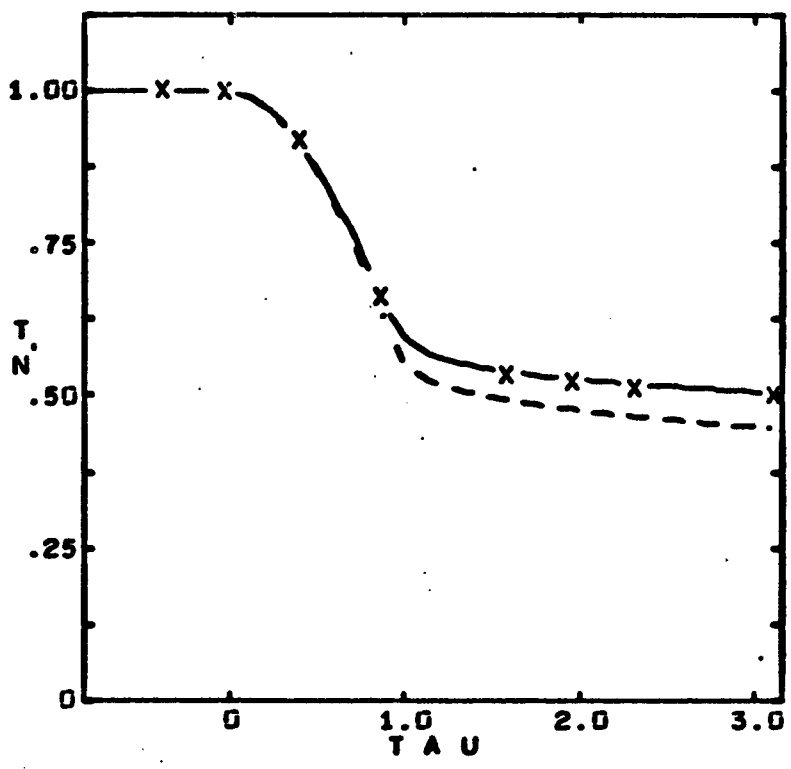
DIFFERENTIAL ENERGY DATA

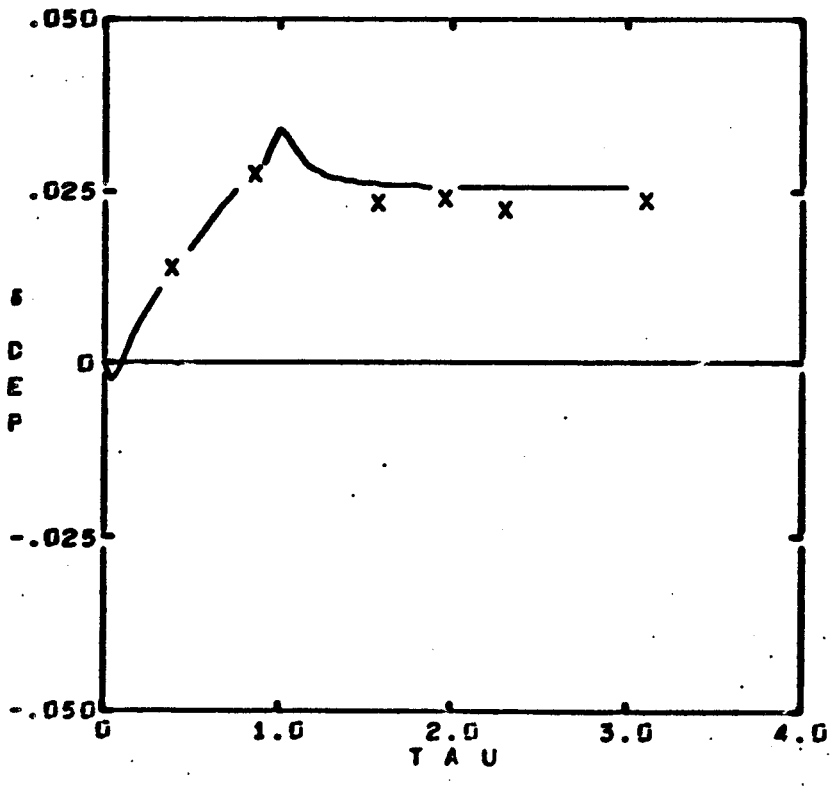
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0276	.0194	.0082
.50	.0670	.0498	.0172
.75	.1065	.0816	.0249
.93	.1328	.1030	.0298
1.0	.1278	.0939	.0339
1.5	.0872	.0610	.0262
2.0	.0769	.0513	.0256
2.5	.0706	.0451	.0255
3.0	.0658	.0404	.0254

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.148	393.95		393.95	1.007	.0289
9H	-0.411	392.55		392.55	1.004	.0144
10H	-0.047	390.88		390.88	0.999	-.0028
11H	0.385	359.27		359.27	0.918	.0494
12H	0.858	258.99	0.016 +.300	259.69	0.664	.1217
13H	1.578	203.71	0.345 -.217	209.62	0.536	.0825
14H	1.959	201.35	1.607 +.321	205.28	0.525	.0759
15H	2.300	197.39	0.374 -.687	201.03	0.514	.0698
16H	3.099	184.18	1.110 +.203	195.99	0.501	.0630







PHOTOGRAPH NOT AVAILABLE

295 (1K6) MASKELYNE G

LAMBDA=26.70 E BETA= 2.31 N XI=+.4489 ETA=+.0403 L+PL CODE = 14044 ALBEDO =.0615

13H FLAT MOON DATA
FM=.05120 FM'=.05975

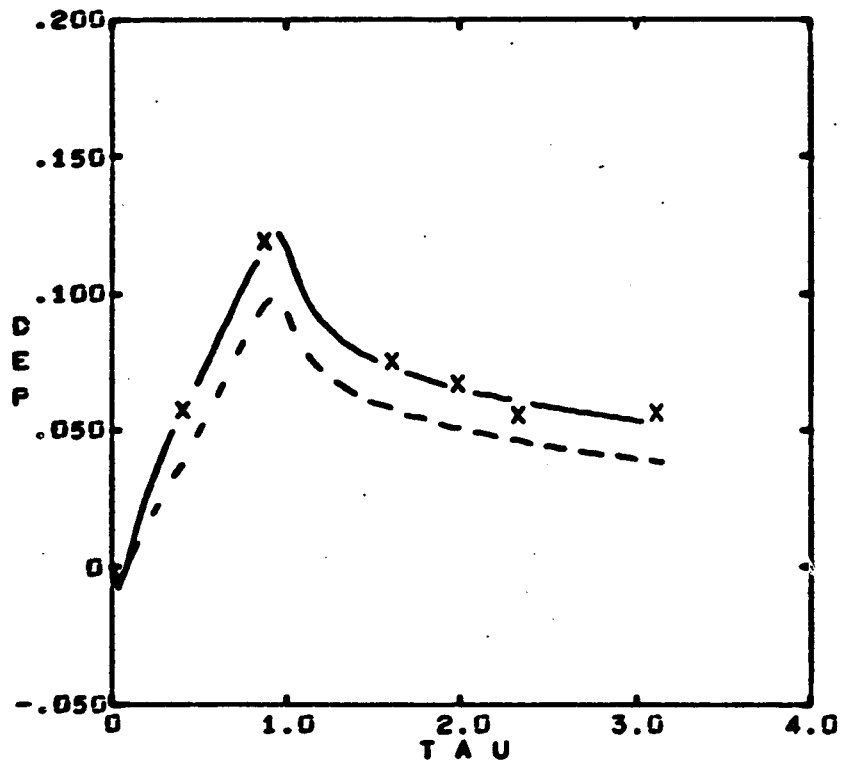
INITIAL TEMPERATURE 392.65
TAU-END OF TOTALITY 3.163

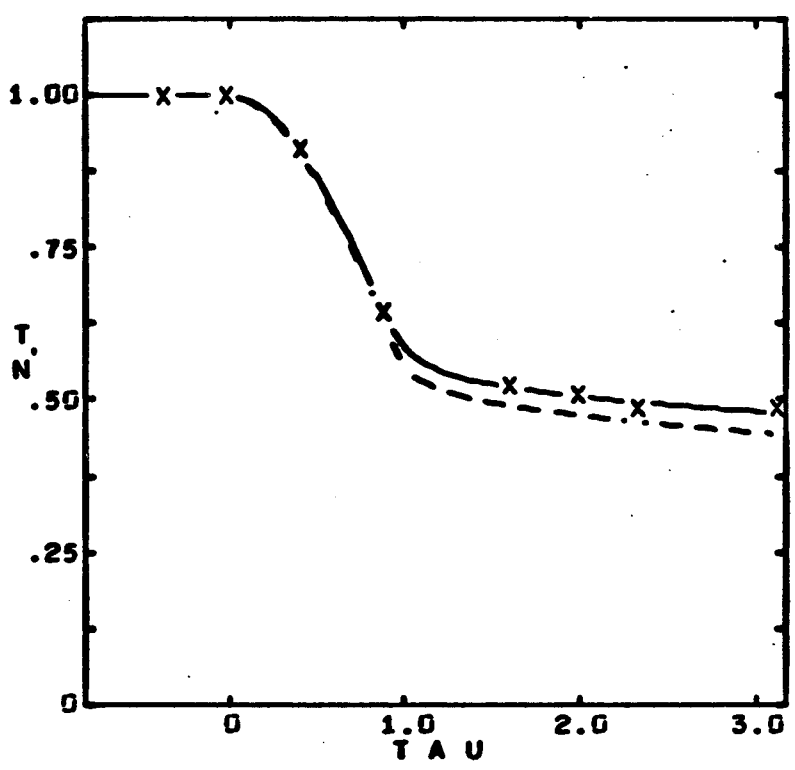
DIFFERENTIAL ENERGY DATA

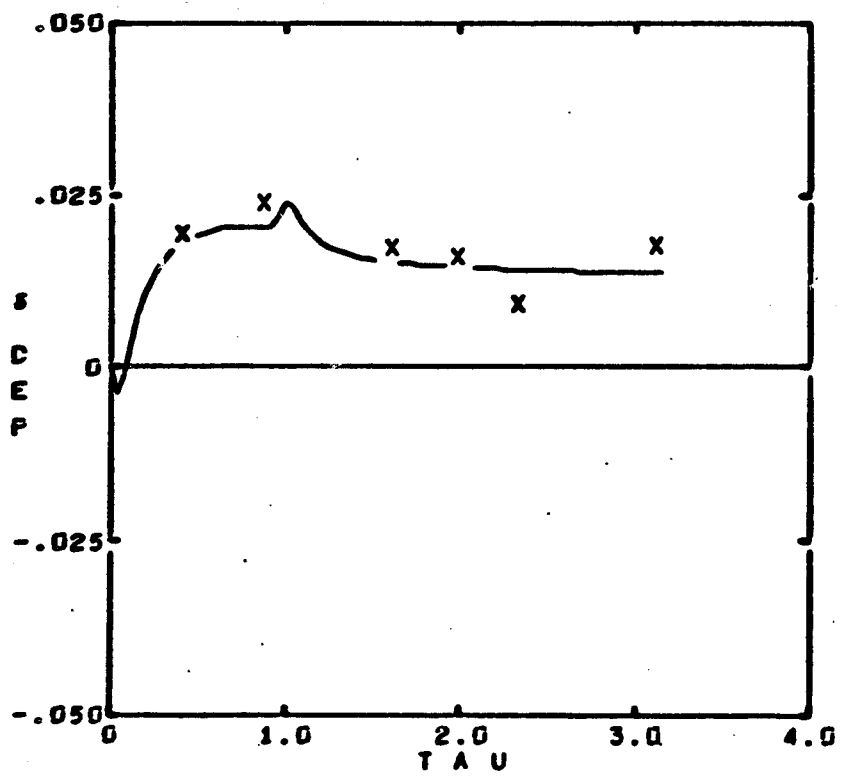
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0332	.0200	.0132
.50	.0691	.0498	.0193
.75	.1016	.0812	.0204
.93	.1225	.1023	.0202
1.0	.1172	.0932	.0240
1.5	.0759	.0603	.0156
2.0	.0651	.0506	.0145
2.5	.0585	.0444	.0141
3.0	.0535	.0397	.0138

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.127	393.90		393.90	1.003	.0128
9H	-0.390	392.75		392.75	1.000	.0011
10H	-0.025	392.61		392.61	1.000	-.0004
11H	0.406	358.19		358.19	0.912	.0576
12H	0.880	252.83	0.189 +.402	253.77	0.646	.1195
13H	1.601	202.21	0.265 -.322	205.53	0.523	.0751
14H	1.982	193.71	0.370 +.857	199.67	0.509	.0669
15H	2.322	188.58	0.282 -.037	190.82	0.486	. 9
16H	3.121	187.98	0.312 +.368	191.41	0.487	.0565







PHOTOGRAPH NOT AVAILABLE

296 (1K7) MASKELYNE H

LAMBDA=32.28 E BETA= 4.92 N XI=+.5321 ETA=+.0857 L+PL CODE = 15038 ALBEDO =.0666

13H FLAT MOON DATA
FM=.02439 FM'=.02439

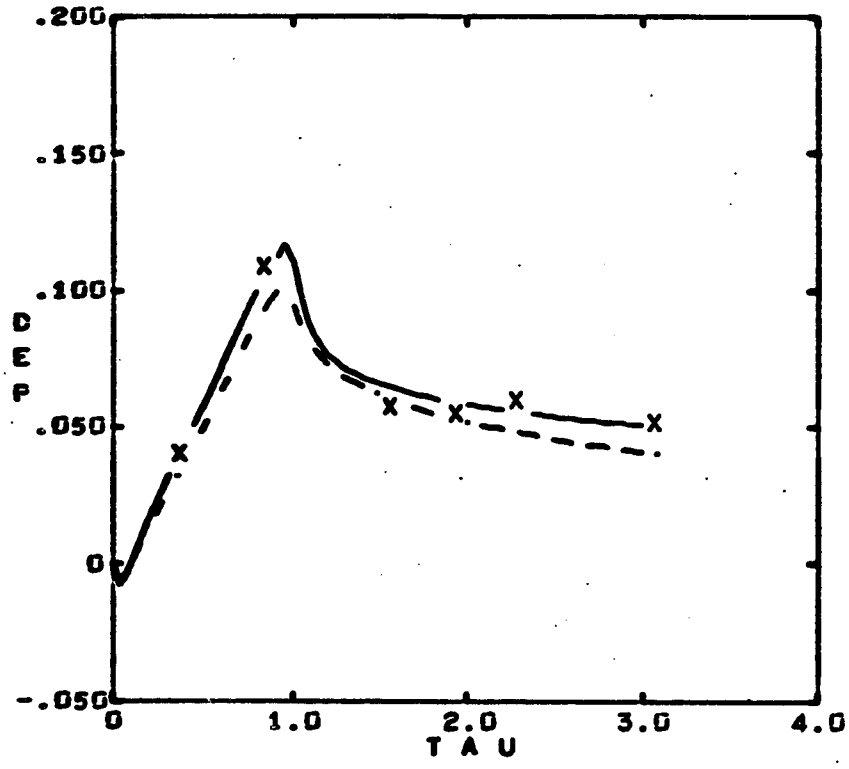
INITIAL TEMPERATURE 389.15
TAU-END OF TOTALITY 3.111

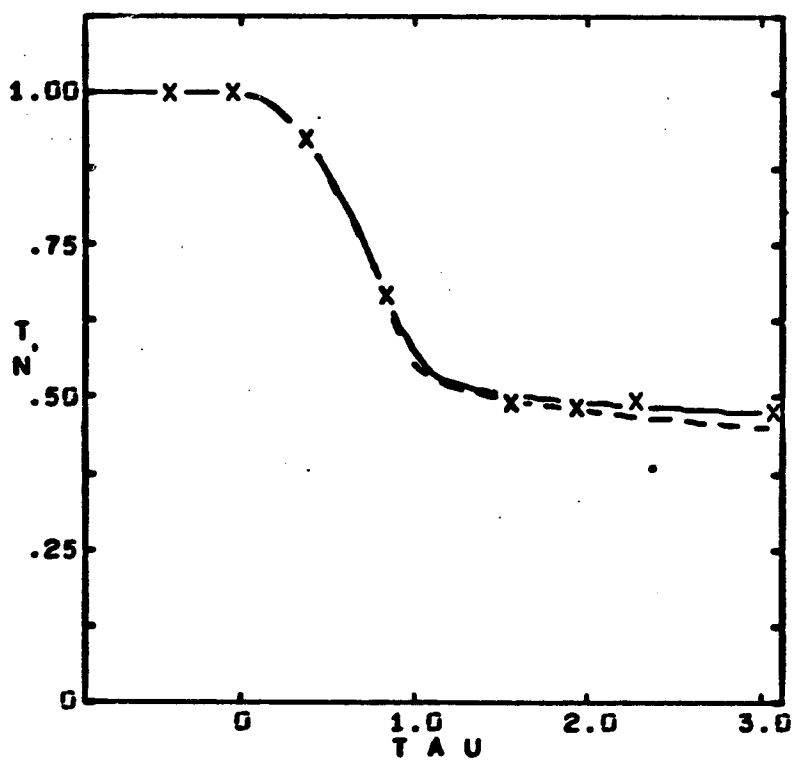
DIFFERENTIAL ENERGY DATA

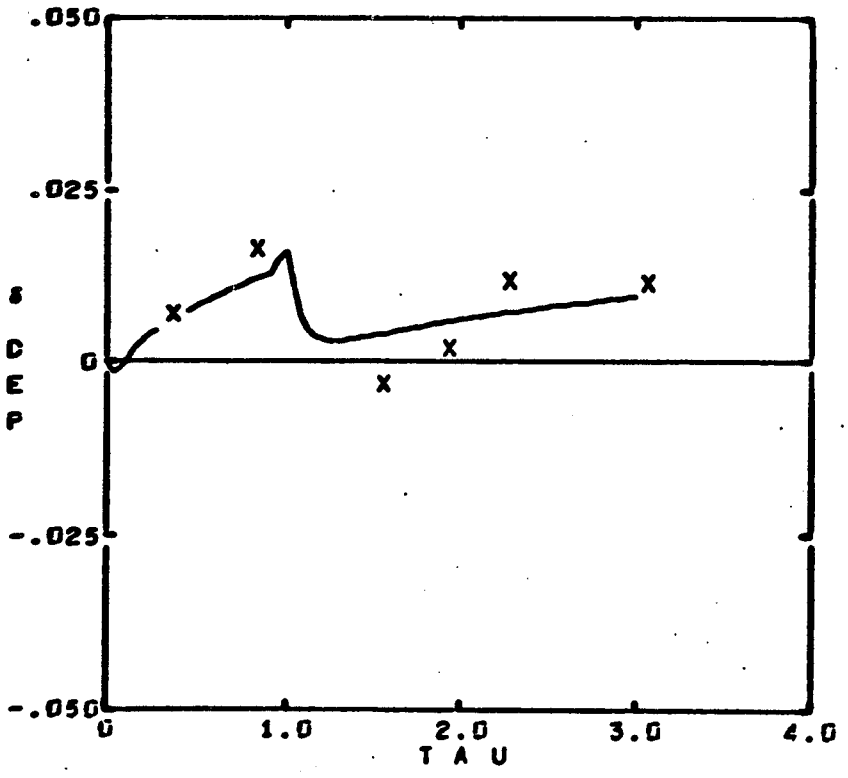
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0233	.0191	.0042
.50	.0582	.0499	.0083
.75	.0933	.0821	.0112
.93	.1167	.1037	.0130
1.0	.1106	.0946	.0160
1.5	.0656	.0617	.0039
2.0	.0582	.0520	.0062
2.5	.0538	.0457	.0081
3.0	.0506	.0410	.0096

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.151	390.37		390.37	1.003	.0126
9H	-0.420	389.85		389.85	1.002	.0073
10H	-0.059	388.98		388.98	1.000	-.0017
11H	0.369	358.85		358.85	0.922	.0406
12H	0.839	259.18	0.139 +.973	259.32	0.666	.1090
13H	1.554	190.39	0.000 +.159	190.39	0.489	.0573
14H	1.930	186.40	0.372 +.739	188.67	0.485	.0553
15H	2.269	191.23	0.209 -.428	192.73	0.495	.0602
16H	3.062	183.54	0.393 +.238	185.89	0.478	.0521







PHOTOGRAPH NOT AVAILABLE

LAMBDA=29.69 E BETA= 3.24 N XI=+.4945 ETA=+.0566 L+PL CODE = 14095 ALBEDO =.0638

13H FLAT MOON DATA
FM=.02163 FM'=.02163

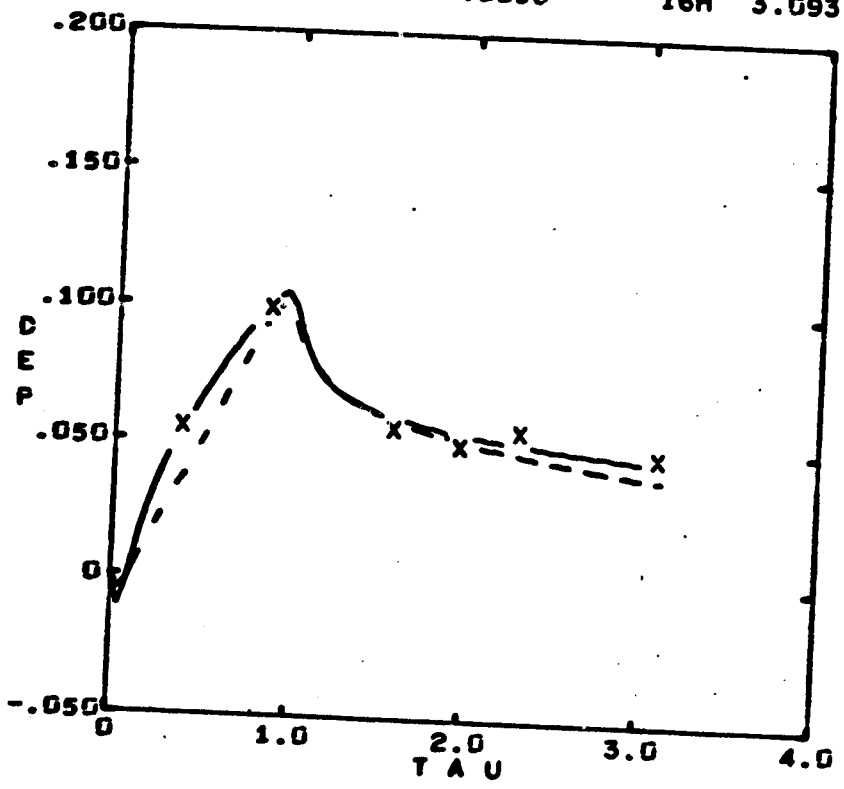
INITIAL TEMPERATURE 391.52
TAU-END OF TOTALITY 3.143

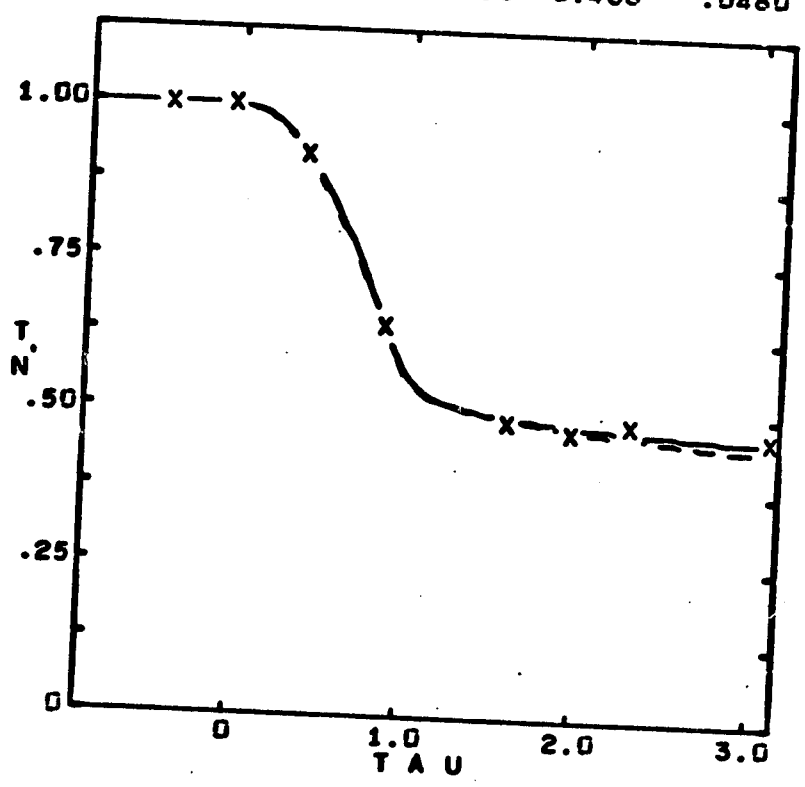
DIFFERENTIAL ENERGY DATA

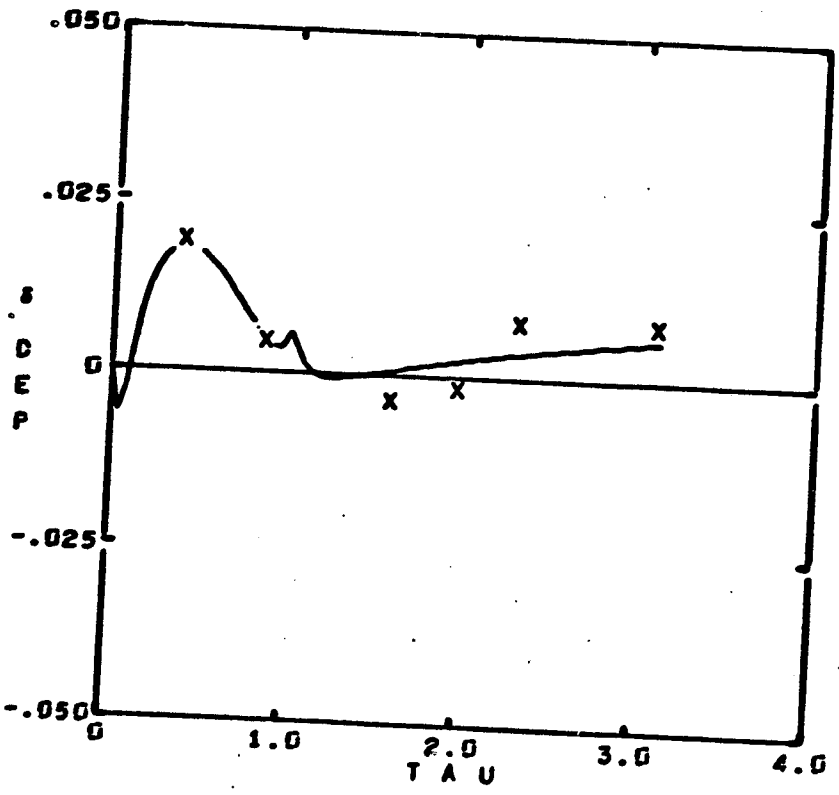
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0349	.0195	.0154
.50	.0667	.0498	.0169
.75	.0906	.0816	.0090
.93	.1051	.1029	.0022
1.0	.0999	.0938	.0061
1.5	.0614	.0609	.0005
2.0	.0539	.0512	.0027
2.5	.0495	.0450	.0045
3.0	.0461	.0403	.0058

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.142	393.00			393.00	1.004	.0152
9H	-0.408	390.96			390.96	0.999	-.0057
10H	-0.043	391.52			391.52	1.000	.0000
11H	0.387	360.03			360.03	0.920	.0548
12H	0.859	251.43	0.000	-.165	251.43	0.642	.0987
13H	1.578	190.02	0.000	-.251	190.02	0.485	.0555
14H	1.956	185.43	0.000	-.220	185.43	0.474	.0503
15H	2.296	190.25	0.000	-.307	190.25	0.486	.0558
16H	3.093	183.21	0.000	-.143	183.21	0.468	.0480







PHOTOGRAPH NOT AVAILABLE

298 (1K9) MASKELYNE N

LAMBDA=30.34 E BETA= 5.34 N XI=+.5030 ETA=+.0930 L+PL CODE = 15009 ALBEDO =.0639

13H FLAT MOON DATA
FM=.03104 FM'=.03499

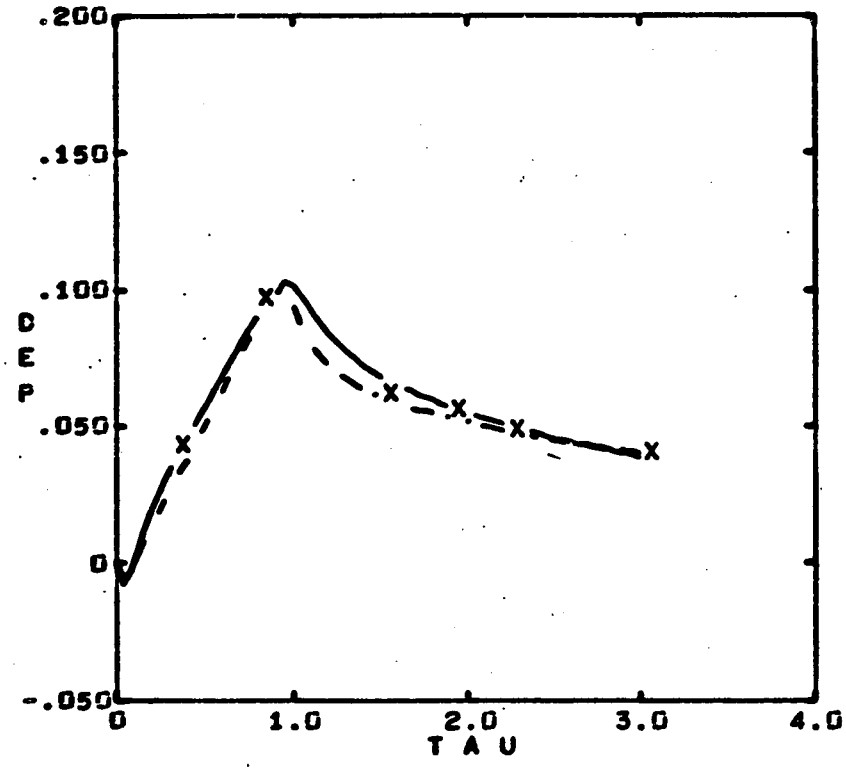
INITIAL TEMPERATURE 390.45
TAU-END OF TOTALITY 3.108

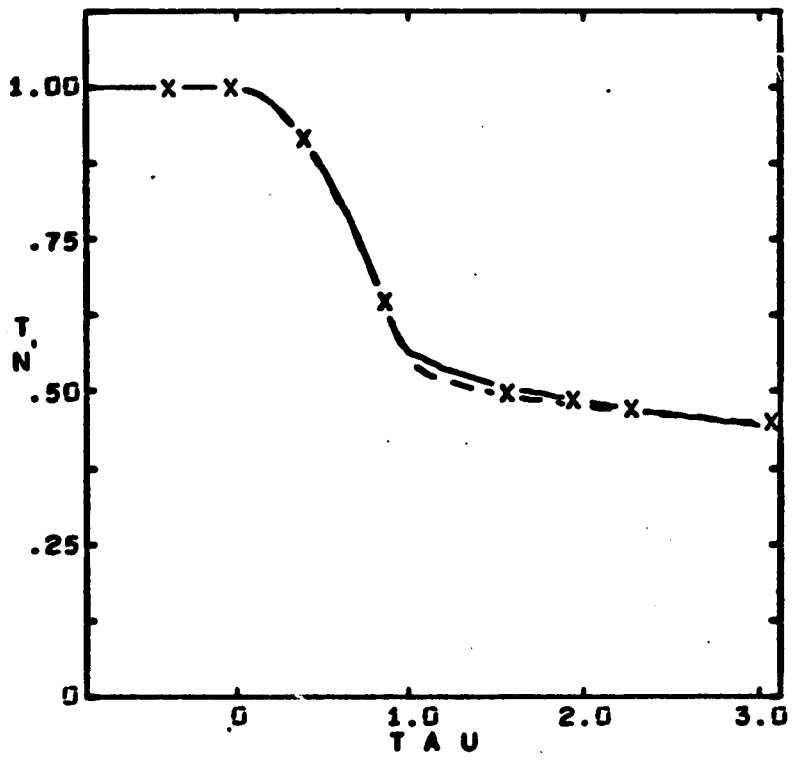
DIFFERENTIAL ENERGY DATA

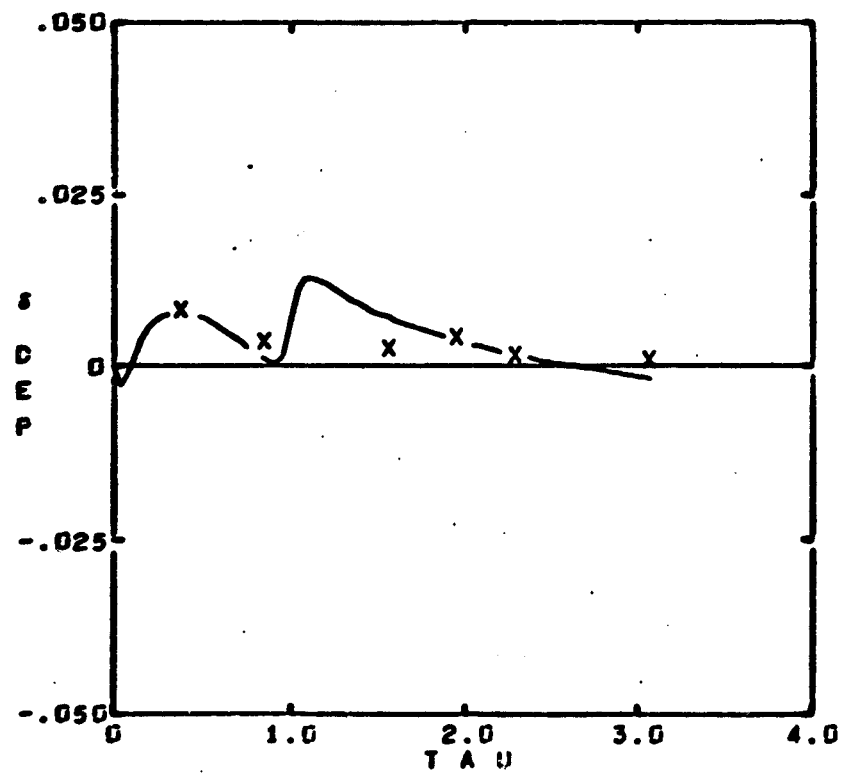
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0262	.0194	.0068
.50	.0569	.0498	.0071
.75	.0847	.0817	.0030
.93	.1025	.1031	-.0006
1.0	.1014	.0940	.0074
1.5	.0690	.0611	.0079
2.0	.0549	.0514	.0035
2.5	.0458	.0452	.0006
3.0	.0390	.0405	-.0015

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.139	392.28		392.28	1.005	.0189
9H	-0.408	390.97		390.97	1.001	.0053
10H	-0.047	390.32		390.32	1.000	-.0014
11H	0.382	358.32		358.32	0.918	.0436
12H	0.850	252.60	0.000 -.773	252.60	0.647	.0969
13H	1.565	193.43	0.259 +.392	195.01	0.499	.0622
14H	1.942	187.14	0.365 +.712	190.54	0.488	.0567
15H	2.279	183.31	0.216 -.015	184.02	0.471	.0493
16H	3.071	175.85	0.000 -.795	175.85	0.450	.0411







PHOTOGRAPH NOT AVAILABLE

299 (1L1) MASKELYNE W

LAMBDA=29.21 E BETA= 0.86 N XI=+.4680 ETA=+.0150 L+PL CODE = 14081 ALBEDO =.0633

13H FLAT MOON DATA
FM=.01103 FM'=.01103

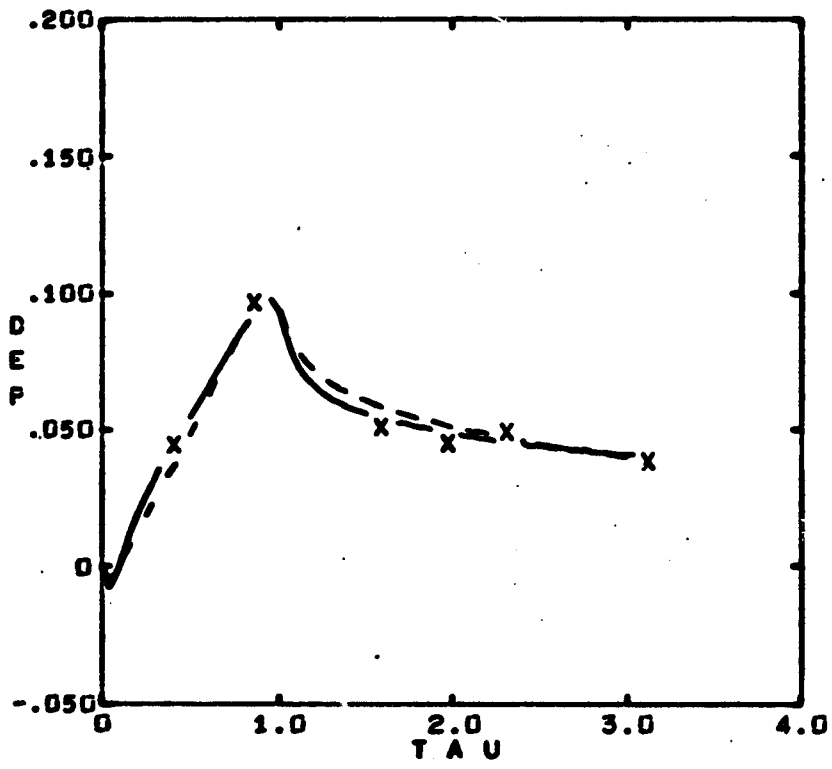
INITIAL TEMPERATURE 391.37
TAU-END OF TOTALITY 3.182

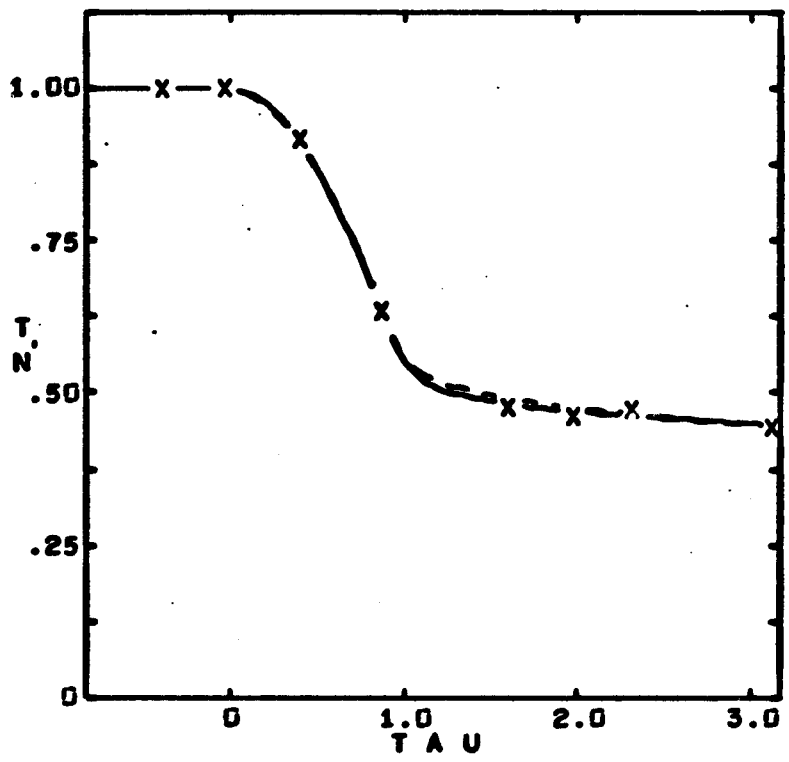
DIFFERENTIAL ENERGY DATA

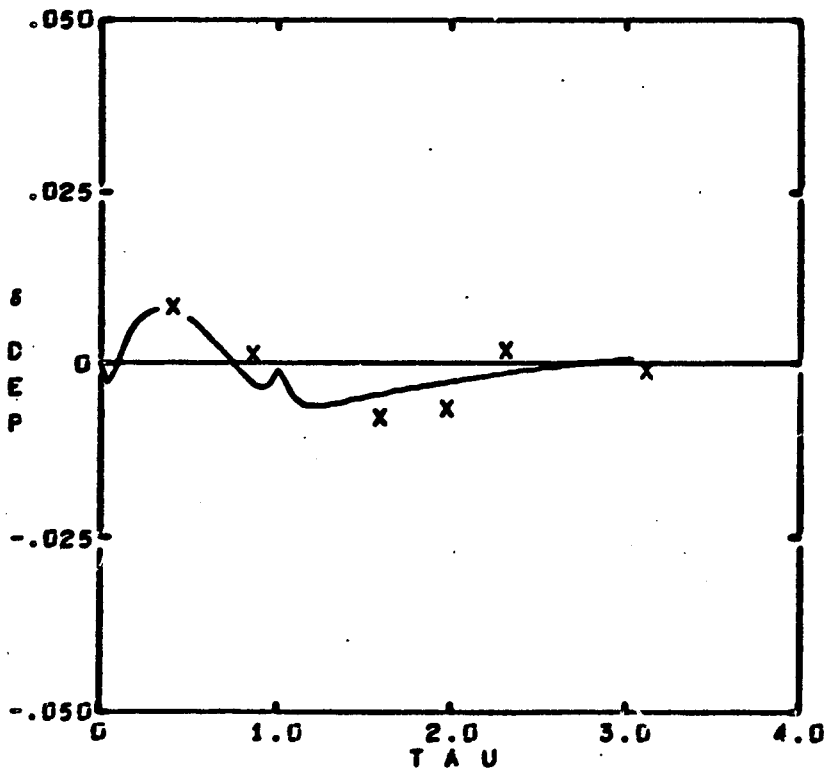
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0269	.0196	.0073
.50	.0561	.0498	.0063
.75	.0817	.0815	.0002
.93	.0980	.1028	-.0048
1.0	.0929	.0937	-.0008
1.5	.0560	.0608	-.0048
2.0	.0487	.0511	-.0024
2.5	.0442	.0449	-.0007
3.0	.0410	.0402	.0008

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.147	393.28		393.28	1.005	.0197
9H	-0.408	391.09		391.09	0.999	-.0029
10H	-0.041	391.33		391.33	1.000	-.0004
11H	0.391	358.02		358.02	0.915	.0446
12H	0.866	248.35	0.000 +.830	248.35	0.635	.0962
13H	1.589	185.97	0.000 +.804	185.97	0.475	.0510
14H	1.970	180.40	0.000 +.773	180.40	0.461	.0451
15H	2.312	184.32	0.000 -.996	184.32	0.471	.0492
16H	3 116	173.46	0.000 +.787	173.46	0.443	.0386







PHOTOGRAPH NOT AVAILABLE

300 (1L?) MASKELYNE X

LAMBDA=27.39 E BETA= 1.32 N XI=+.4600 ETA=+.0230 L+PL CODE = 14062 ALBEDO =.0641

13H FLAT MOON DATA
FM=.03218 FM'=.03216

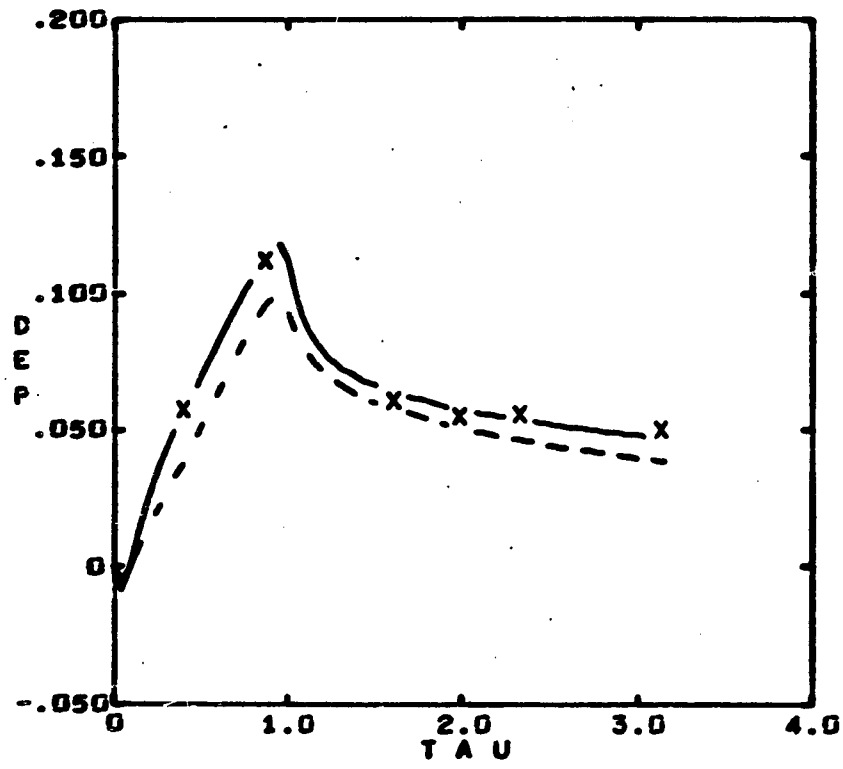
INITIAL TEMPERATURE 391.68
TAU-END OF TOTALITY 3.178

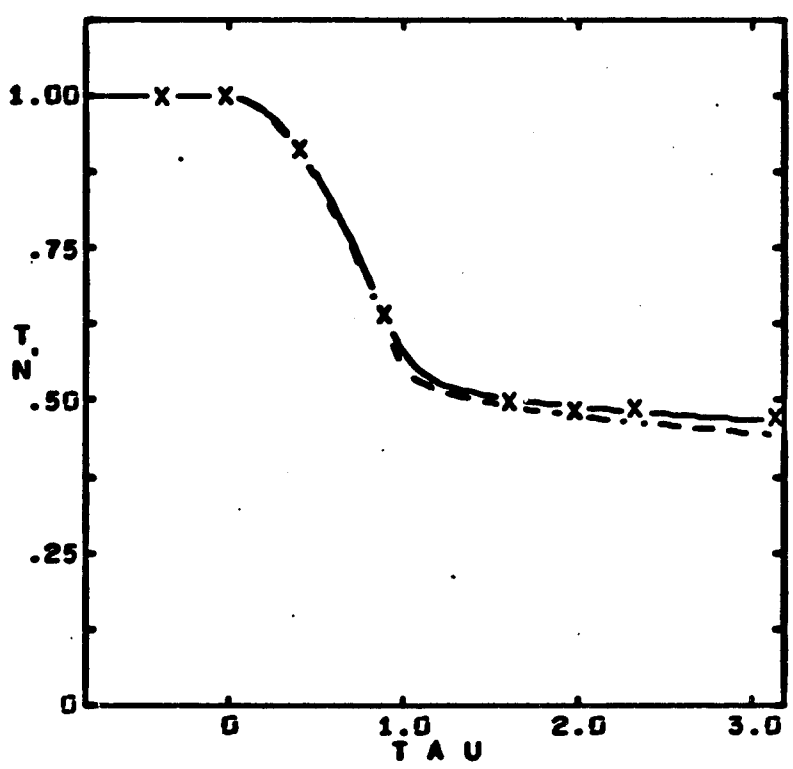
DIFFERENTIAL ENERGY DATA

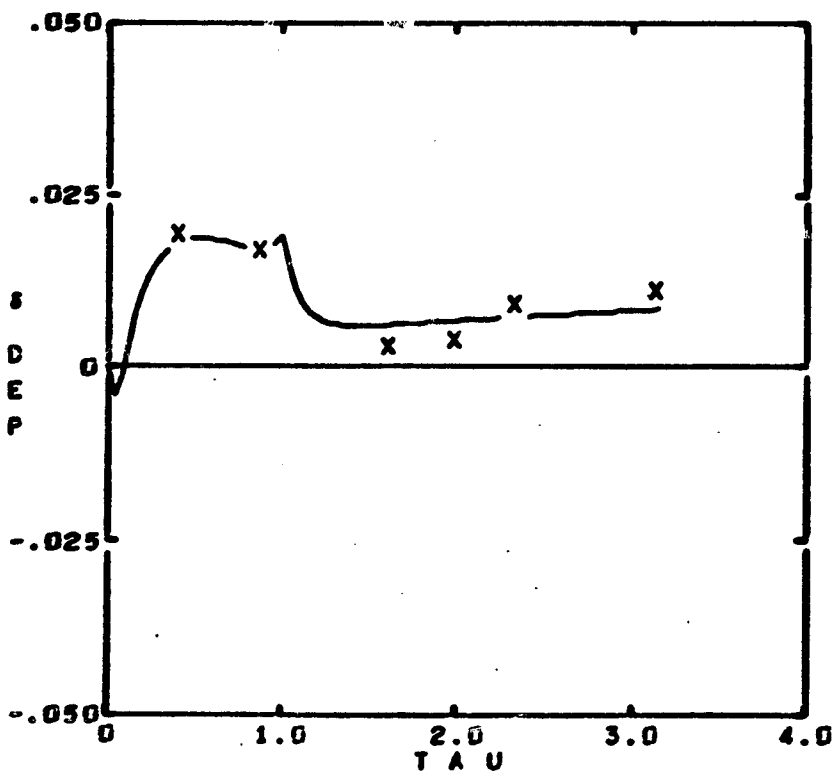
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0335	.0199	.0136
.50	.0685	.0498	.0187
.75	.0991	.0813	.0178
.93	.1186	.1024	.0162
1.0	.1122	.0933	.0189
1.5	.0665	.0604	.0061
2.0	.0575	.0507	.0068
2.5	.0521	.0445	.0076
3.0	.0481	.0398	.0083

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.135	393.03		393.03	1.003	.0138
9H	-0.396	391.24		391.24	0.999	-.0045
10H	-0.030	391.68		391.68	1.000	-.0000
11H	0.402	358.01		358.01	0.914	.0573
12H	0.877	251.40	0.000 -.844	251.40	0.642	.1124
13H	1.600	194.64	0.000 -.856	194.64	0.497	.0610
14H	1.981	189.87	0.000 +.785	189.87	0.485	.0552
15H	2.322	186.04	0.511 -.164	190.25	0.486	.0557
16H	3.124	184.77	0.114 +.709	185.18	0.473	.0500







PHOTOGRAPH
NOT
AVAILABLE

301 (1L3) MASON C

LAMBDA=33.83 E BETA=42.87 N XI=+.4080 ETA=+.6804 L+PL CODE = 14608 ALBEDO =.1025

13H FLAT MOON DATA
FM=.01602 FM'=.14126

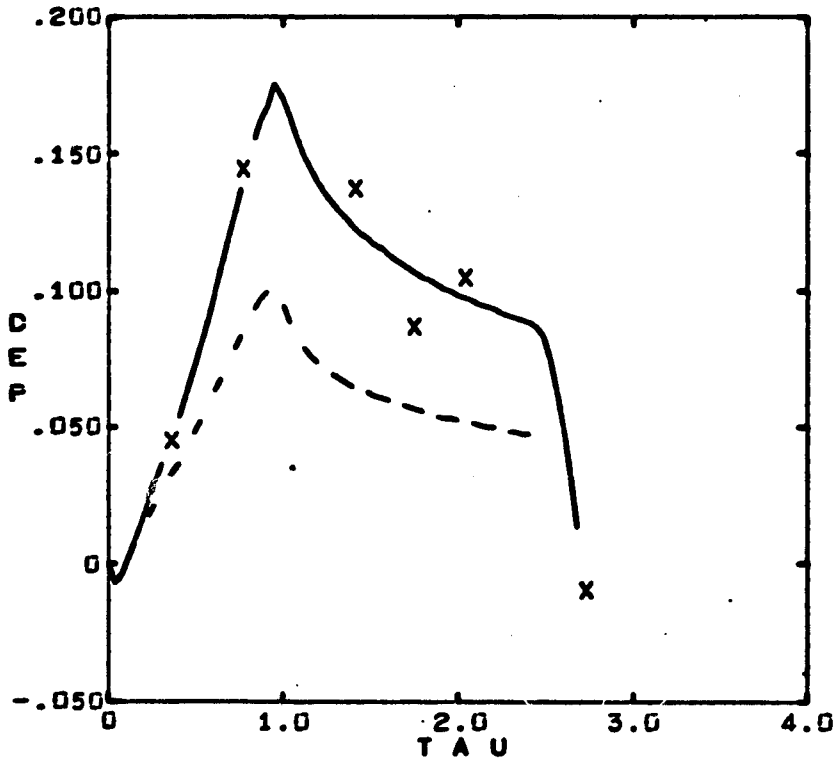
INITIAL TEMPERATURE 368.10
TAU-END OF TOTALITY 2.440

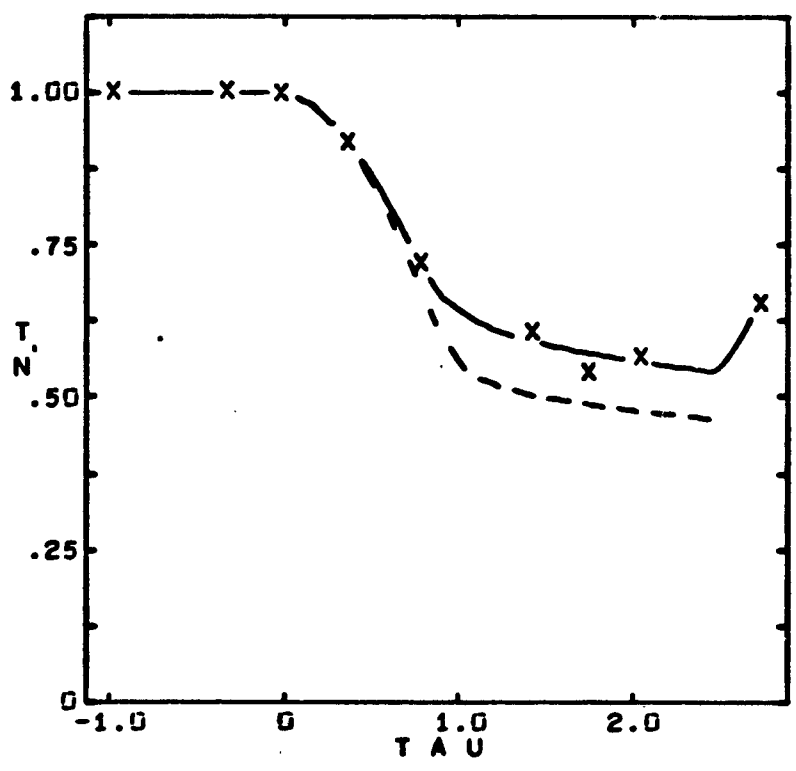
DIFFERENTIAL ENERGY DATA

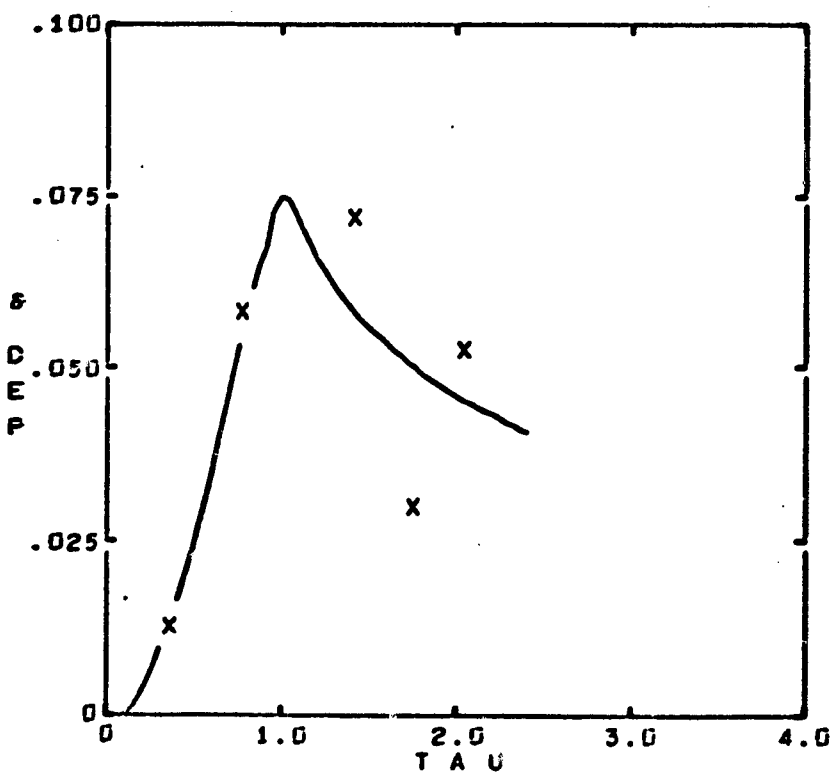
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0239	.0189	.0050
.50	.0756	.0500	.0256
.75	.1348	.0825	.0523
.93	.1755	.1042	.0713
1.0	.1701	.0952	.0749
1.5	.1179	.0622	.0557
2.0	.0985	.0525	.0460
2.5	.0858	.0462	.0396

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.981	370.18		370.18	1.006	.0227
9H	-0.338	369.30		369.30	1.003	.0131
10H	-0.016	368.01		368.01	1.000	-.0010
11H	0.362	338.10		338.10	0.918	.0453
12H	0.777	261.76	0.307 +.181	266.14	0.723	.1442
13H	1.409	178.07	1.128 -.716	223.93	0.608	.1369
14H	1.744	177.56	0.951 +.124	199.82	0.543	.0868
15H	2.042	190.91	0.529 +.299	209.39	0.569	.1047
16H	2.723	234.82	0.666 -.817	240.80	0.654	-.0096







PHOTOGRAPH NOT AVAILABLE

302 (1L4) MENELAUS

LAMBDA=15.95 E BETA=16.27 N XI=+.2638 ETA=+.2801 L+PL CODE = 12268 ALBEDO =.1474

13H FLAT MOON DATA
FM=.03032 FM'=.06208

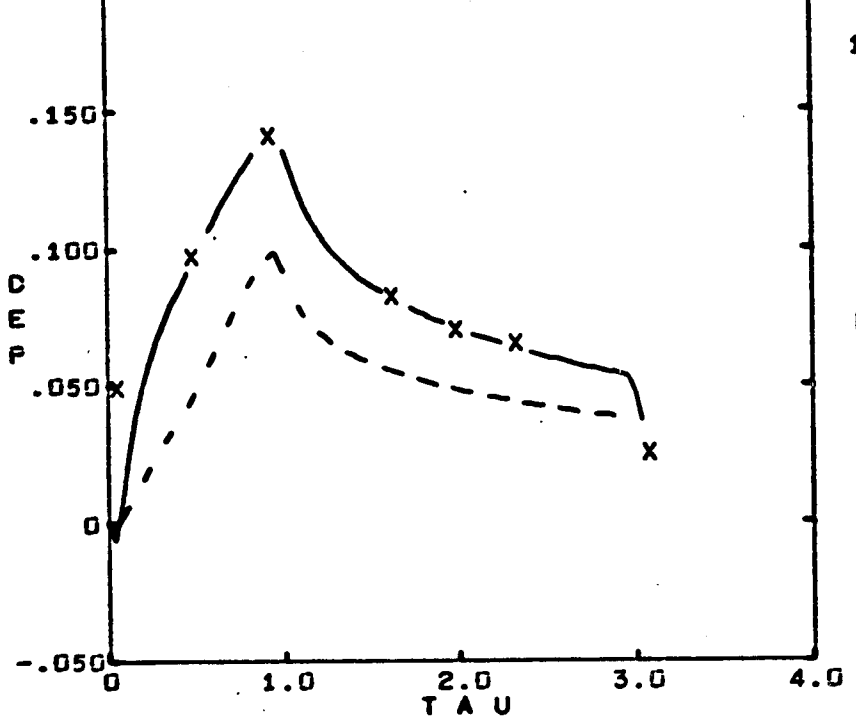
INITIAL TEMPERATURE 384.76
TAU-END OF TOTALITY 2.950

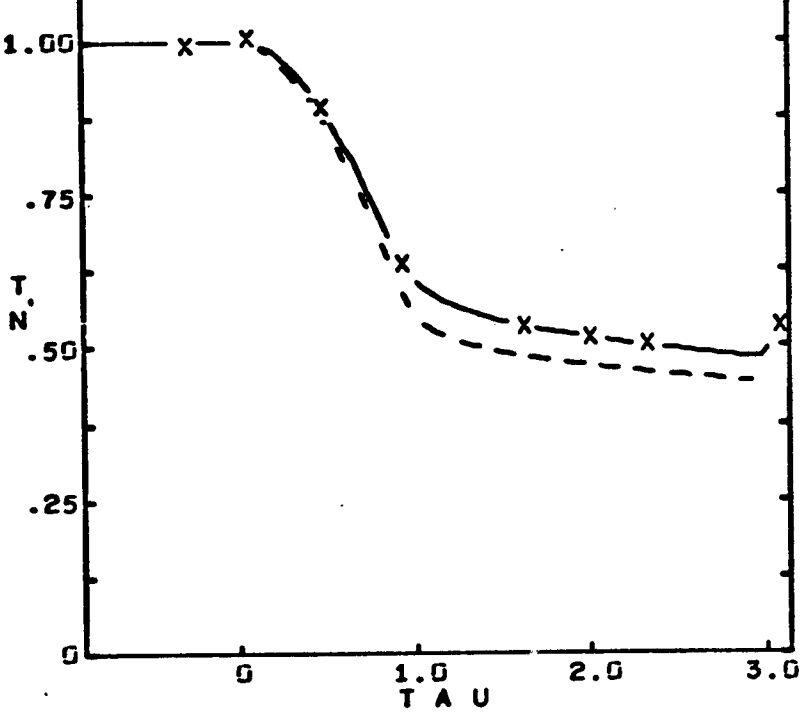
DIFFERENTIAL ENERGY DATA

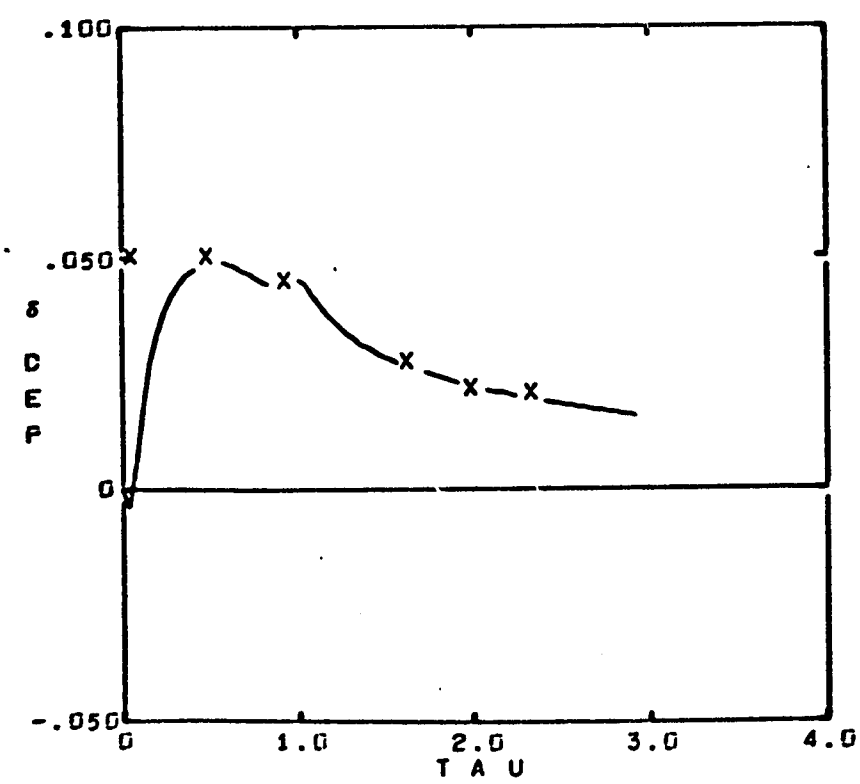
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0610	.0216	.0394
.50	.0990	.0499	.0491
.75	.1263	.0802	.0461
.93	.1423	.1006	.0417
1.0	.1364	.0914	.0450
1.5	.0867	.0582	.0285
2.0	.0705	.0485	.0220
2.5	.0605	.0423	.0182
3.0	.0530	.0377	.0153

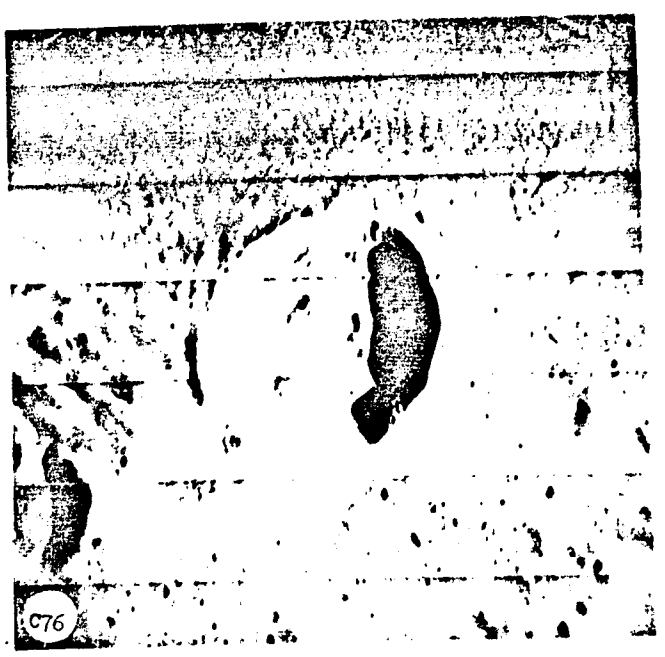
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.011	389.49		389.49	1.012	.0501
9H	-0.300	383.35		383.35	0.996	-.0145
10H	0.053	388.15		388.15	1.009	.0496
11H	0.469	343.92		343.92	0.894	.0970
12H	0.926	236.46	0.608 +.828	245.37	0.638	.1416
13H	1.622	193.92	0.629 +.467	206.39	0.536	.0828
14H	1.990	192.27	0.410 +.685	198.31	0.515	.0706
15H	2.318	186.40	0.704 -.900	194.42	0.505	.0652
16H	3.075	195.20	0.648 +.534	205.43	0.534	.0253









C-7

303 (1L5) MENELAUS A

LAMBDA=13.40 E BETA=17.06 N XI=+.2215 ETA=+.2934 L+PL CODE = 12229 ALBEDO =.0709

13H FLAT MOON DATA
FM=.01774 FM'=.03812

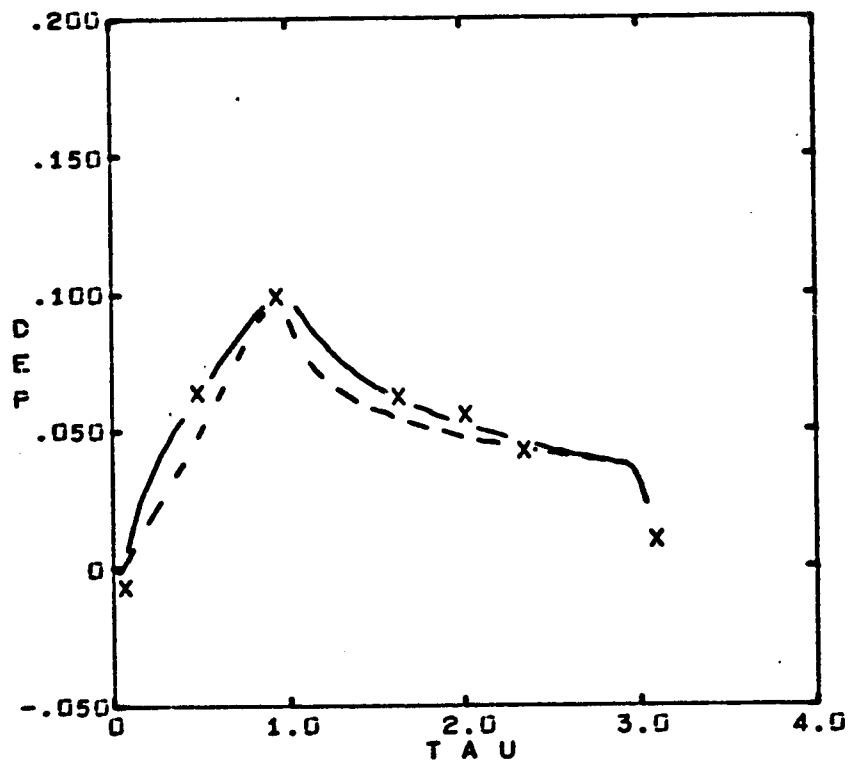
INITIAL TEMPERATURE 394.81
TAU-END OF TOTALITY 2.942

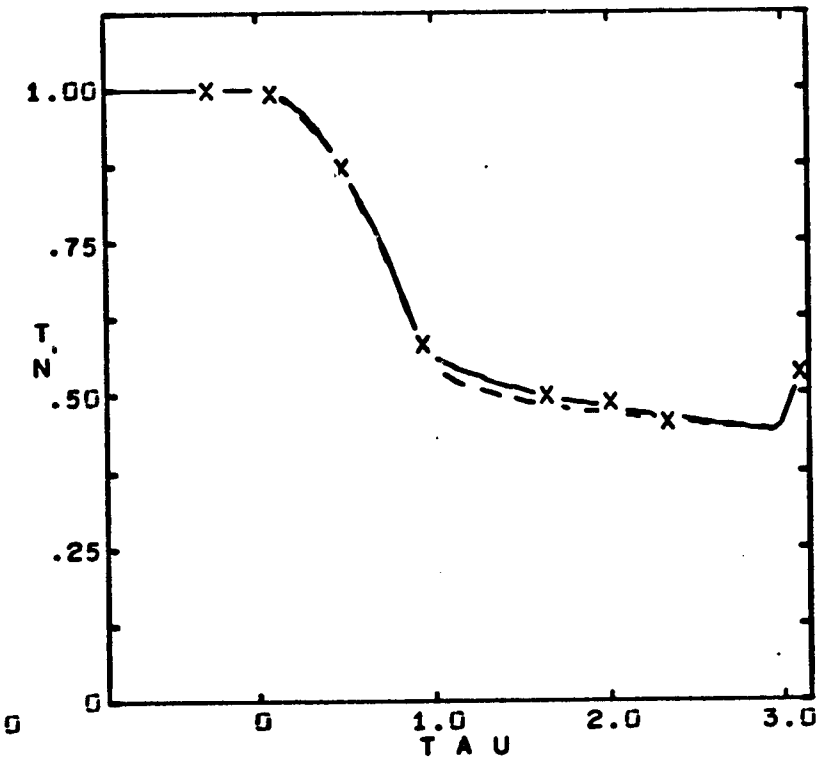
DIFFERENTIAL ENERGY DATA

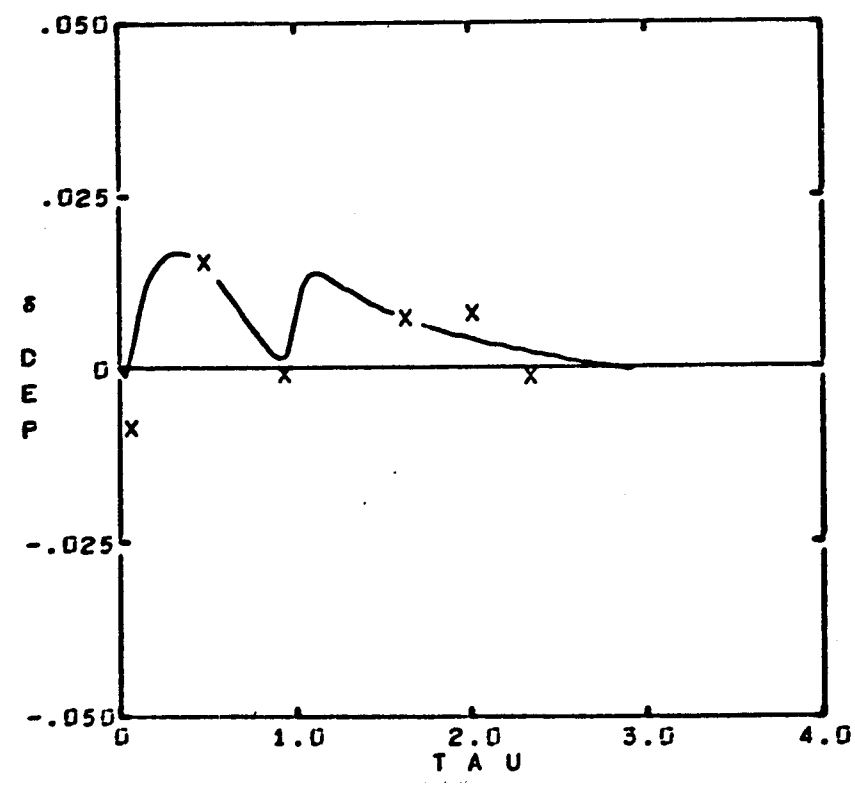
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0378	.0220	.0158
.50	.0644	.0499	.0145
.75	.0863	.0799	.0064
.93	.0999	.1001	-.0002
1.0	.0986	.0909	.0077
1.5	.0664	.0577	.0087
2.0	.0523	.0480	.0043
2.5	.0434	.0418	.0016
3.0	.0368	.0372	-.0004

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.992	396.55		396.55	1.004	.0178
9H	-0.283	394.31		394.31	0.999	-.0050
10H	0.070	391.93		391.93	0.993	-.0069
11H	0.486	344.85		344.85	0.873	.0635
12H	0.943	228.40	0.539 +.859	229.64	0.582	.0990
13H	1.637	188.91	0.535 +.345	196.93	0.499	.0619
14H	2.004	188.66	0.308 +.574	192.12	0.487	.0561
15H	2.332	179.3[illegible]	0.000 +.996	179.35	0.454	.0426
16H	3.086	205.30	0.748 +.644	210.85	0.534	.0101







PHOTOGRAPH
NOT
AVAILABLE

304 (4E5) MESSIER A

LAMBDA=46.92 E BETA= 1.99 S XI=+.7299 ETA=-.0348 L+PL CODE = 47023 ALBEDO =.0705

13H FLAT MOON DATA
FM=.11120 FM'=.13673

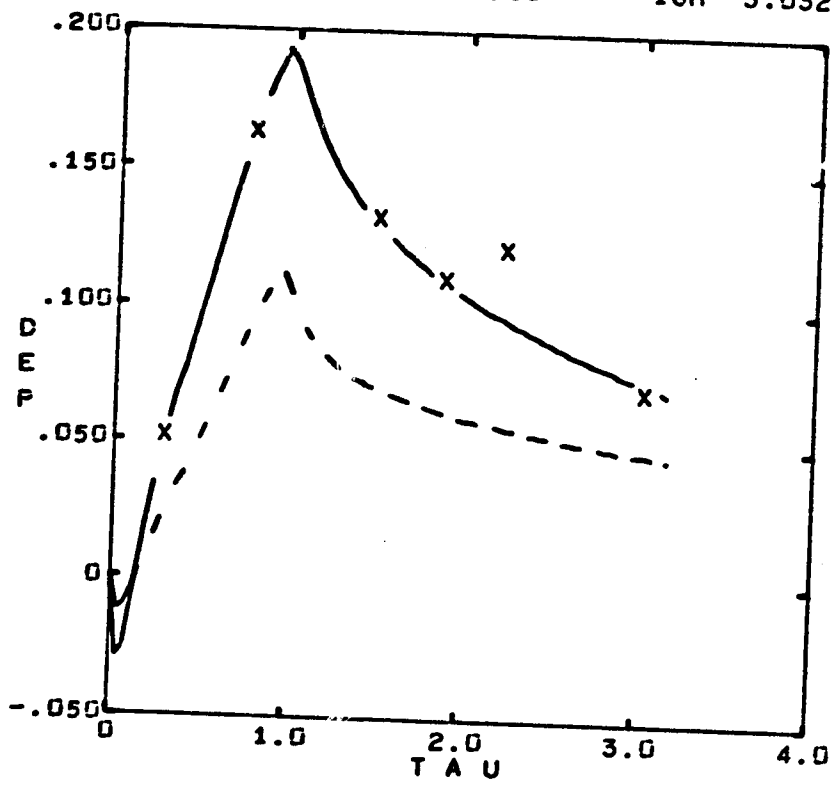
INITIAL TEMPERATURE 376.77
TAU-END OF TOTALITY 3.199

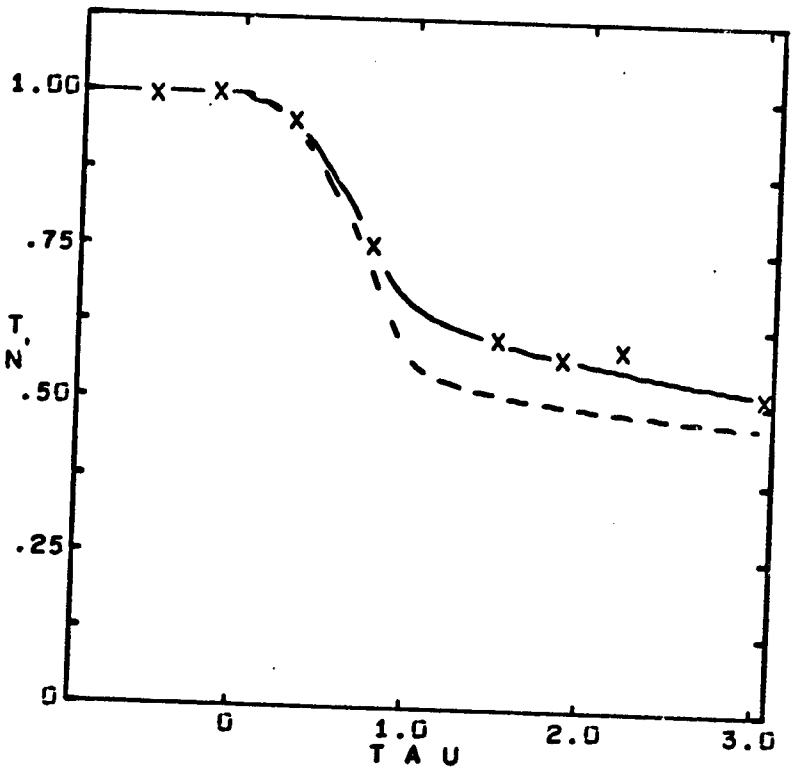
DIFFERENTIAL ENERGY DATA

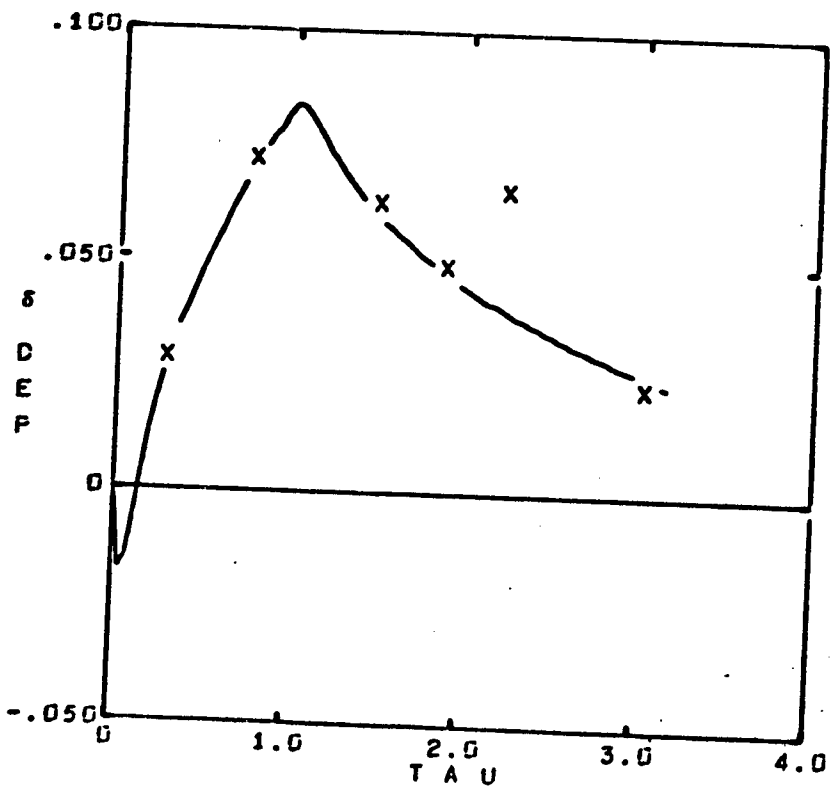
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0377	.0169	.0208
.50	.1020	.0527	.0493
.75	.1577	.0889	.0688
.93	.1933	.1131	.0802
1.0	.1877	.1040	.0837
1.5	.1288	.0695	.0593
2.0	.1036	.0593	.0443
2.5	.0867	.0527	.0340
3.0	.0736	.0476	.0260

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.253	378.19			378.19	1.004	.0152
9H	-0.512	375.28			375.28	0.996	-.0157
10H	-0.145	377.02			377.02	1.001	.0027
11H	0.289	360.15			360.15	0.956	.0515
12H	0.766	277.98	0.651	-.762	284.81	0.756	.1635
13H	1.490	217.48	0.488	+.190	227.27	0.603	.1324
14H	1.873	213.44	0.657	-.862	217.25	0.577	.1106
15H	2.216	208.24	0.514	-.661	222.71	0.591	.1221
16H	3.032	194.09	0.000	-.892	194.09	0.515	.0704







PHOTOGRAPH
NOT
AVAILABLE

305 (4E6) MESSIER 6

LAMBDA=48.00 E BETA= 0.88 S XI=+.7430 ETA=-.0153 LVPL CODE = 47041 ALBEDO =.0650

13H FLAT MOON DATA
FM=.01730 FM'=.01730

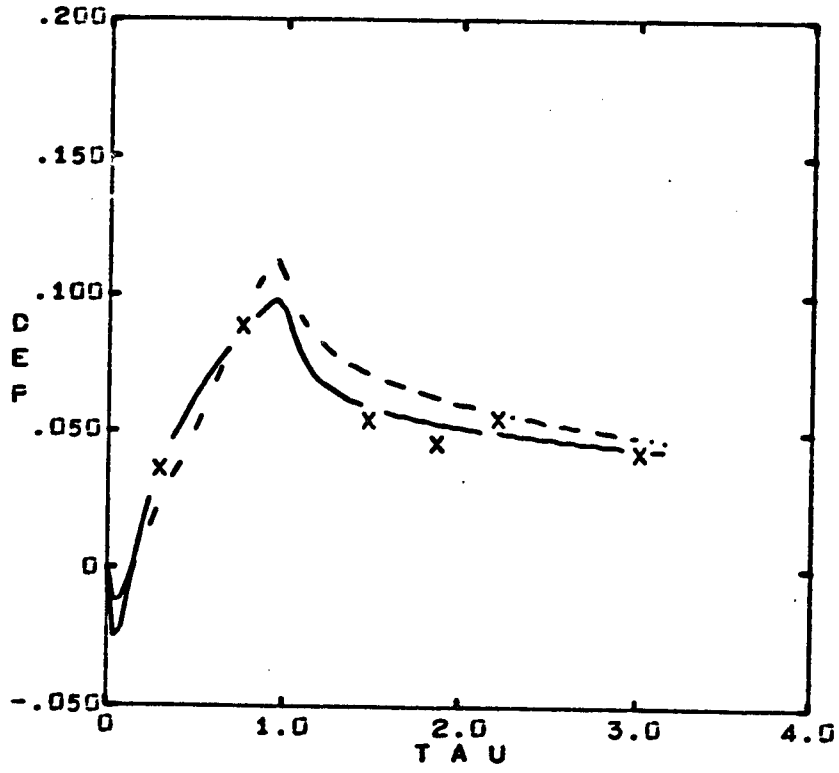
INITIAL TEMPERATURE 376.45
TAU-END OF TOTALITY 3.180

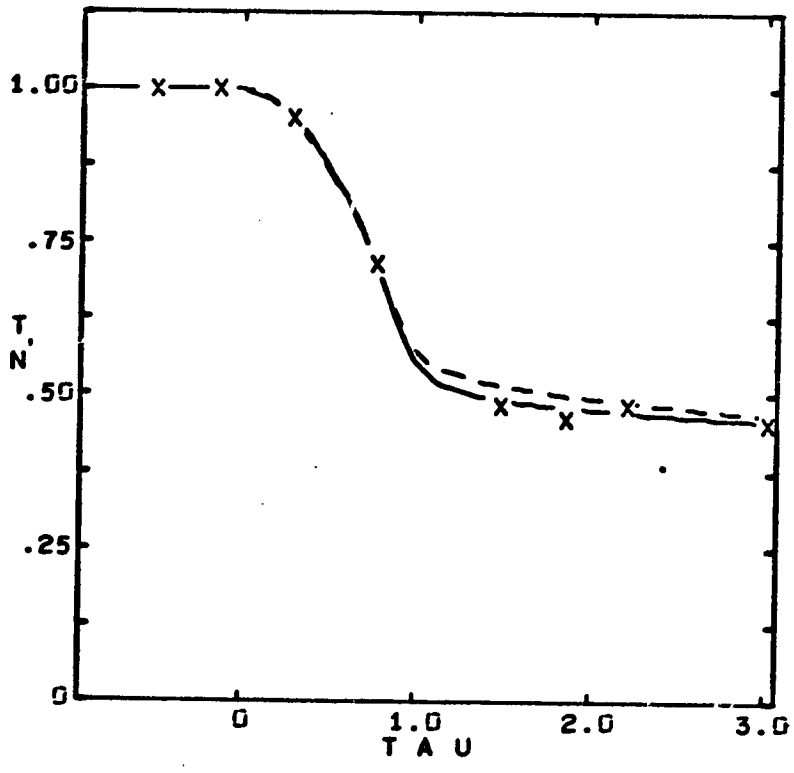
DIFFERENTIAL ENERGY DATA

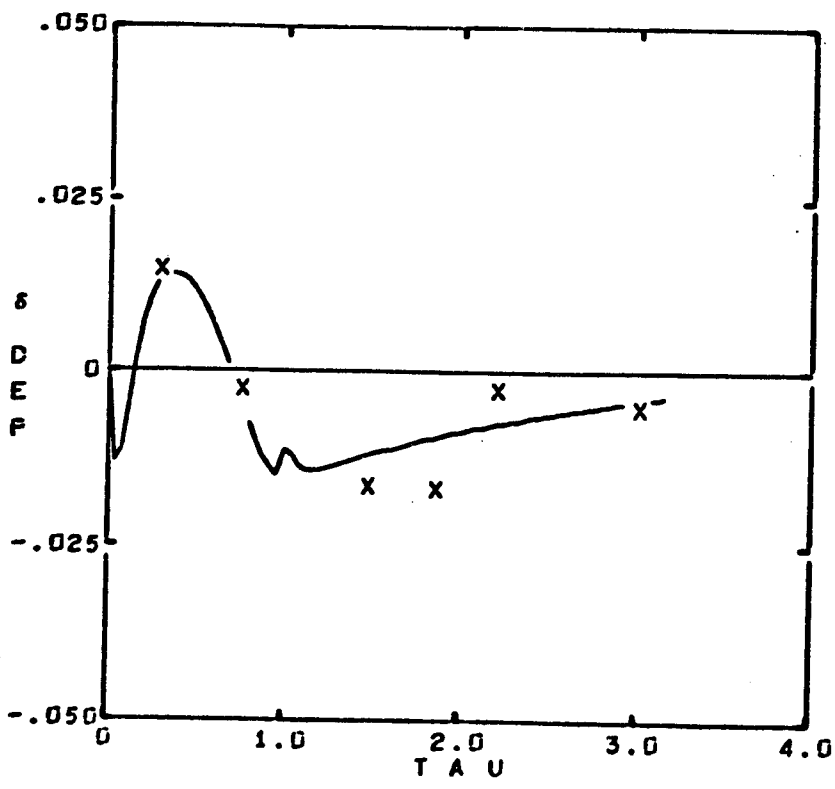
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0280	.0167	.0113
.50	.0641	.0530	.0111
.75	.0859	.0897	-.0038
.93	.0977	.1142	-.0165
1.0	.0937	.1051	-.0114
1.5	.0585	.0703	-.0118
2.0	.0516	.0601	-.0085
2.5	.0474	.0534	-.0060
3.0	.0442	.0483	-.0041

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.254	377.69		377.69	1.003	.0133
9H	-0.516	377.02		377.02	1.002	.0061
10H	-0.149	376.14		376.14	0.999	-.0033
11H	0.283	358.98		358.98	0.954	.0364
12H	0.758	268.68	0.000 -.044	268.68	0.714	.0883
13H	1.481	181.78	0.000 -.029	181.78	0.483	.0544
14H	1.862	174.07	0.000 -.033	174.07	0.462	.0457
15H	2.204	182.13	0.000 -.056	182.13	0.484	.0548
16H	3.017	171.56	0.000 -.261	171.56	0.456	.0431







PHOTOGRAPH NOT AVAILABLE

306 (4E7) MESSIER G

LAMBDA=52.86 E BETA= 5.38 S XI=+.7937 ETA=-.0938 L+PL CODE = 47099 ALBEDO =.0666

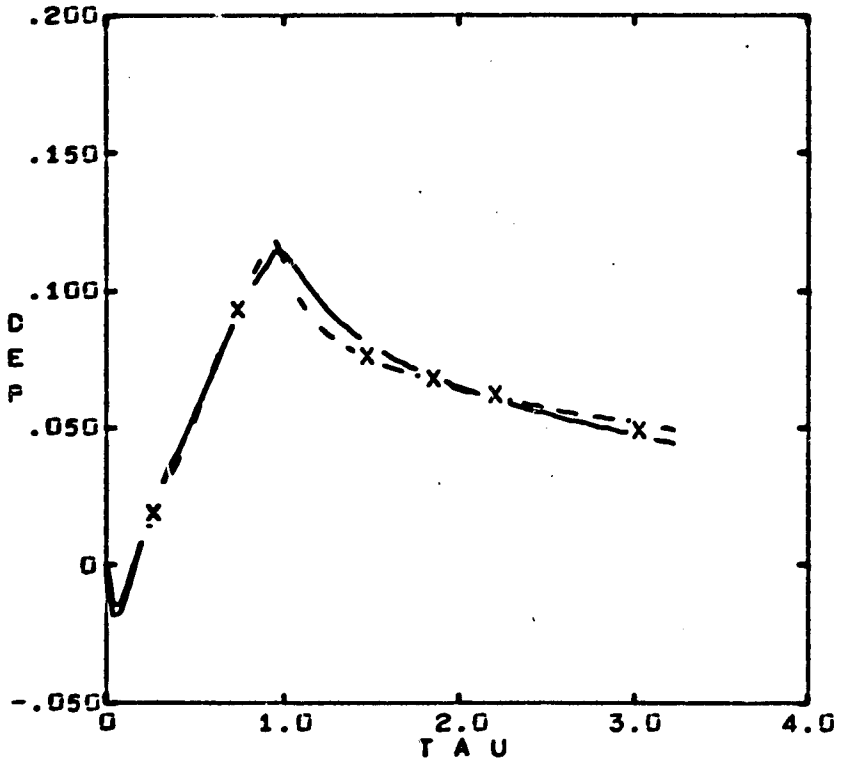
13H FLAT MOON DATA
FM=.05567 FM'=.06361

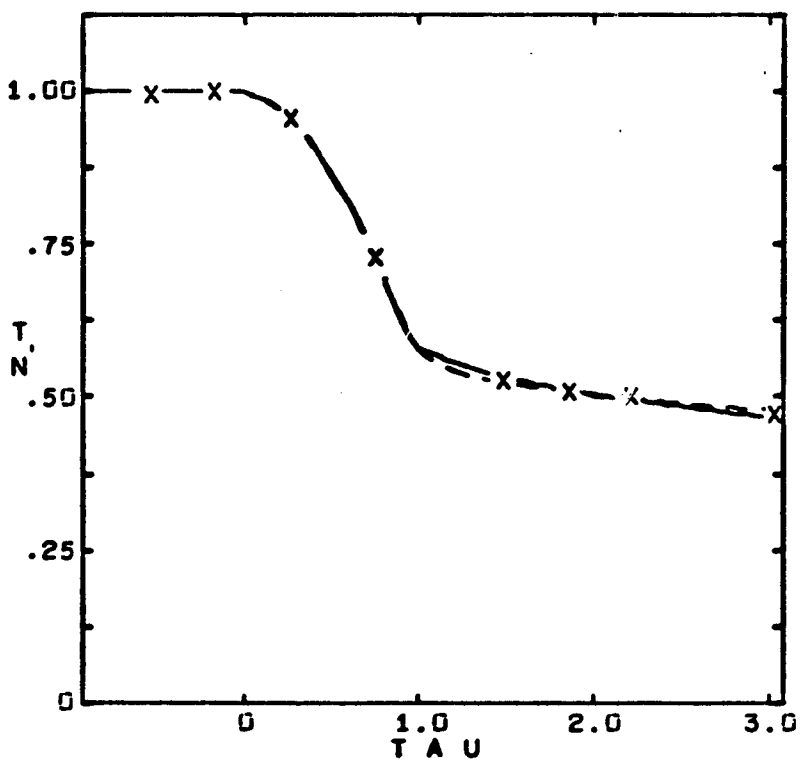
INITIAL TEMPERATURE 373.71
TAU-END OF TOTALITY 3.243

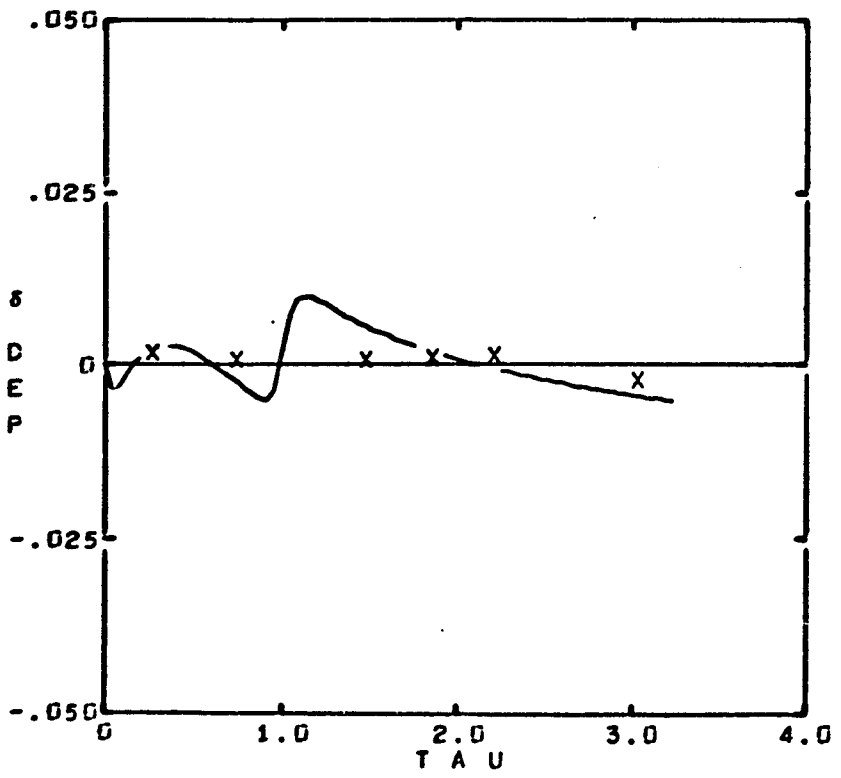
DIFFERENTIAL ENERGY DATA

ECLIPSE TEMPERATURE DATA

TAU	DEP	DEP-SMOOTH	δDEP	SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
.25	.0179	.0158	.0021	8H	-1.290	374.61		374.61	1.002	.0096
.50	.0565	.0547	.0018	9H	-0.543	372.41		372.41	0.997	-.0138
.75	.0912	.0936	-.0024	10H	-0.174	374.00		374.00	1.001	.0032
.93	.1137	.1196	-.0059	11H	0.262	357.23		357.23	0.956	.0195
1.0	.1132	.1104	.0028	12H	0.742	272.12	0.139 +.276	272.87	0.730	.0931
1.5	.0800	.0746	.0054	13H	1.472	193.33	0.234 +.193	196.38	0.525	.0763
2.0	.0649	.0641	.0008	14H	1.858	189.50	0.142 +.695	190.57	0.510	.0676
2.5	.0550	.0571	-.0021	15H	2.203	184.78	0.181 +.909	186.82	0.500	.0624
3.0	.0475	.0518	-.0043	16H	3.029	170.55	0.586 +.842	176.20	0.471	.0494







PHOTOGRAPH NOT AVAILABLE

307 (2K9) MILICHIUS

LAMBDA=30.18 W BETA=10.01 N XI=-.4951 ETA=+.1738 L+PL CODE = 24197 ALBEDO =.0815

13H FLAT MOON DATA
FM=.04214 FM'=.11919

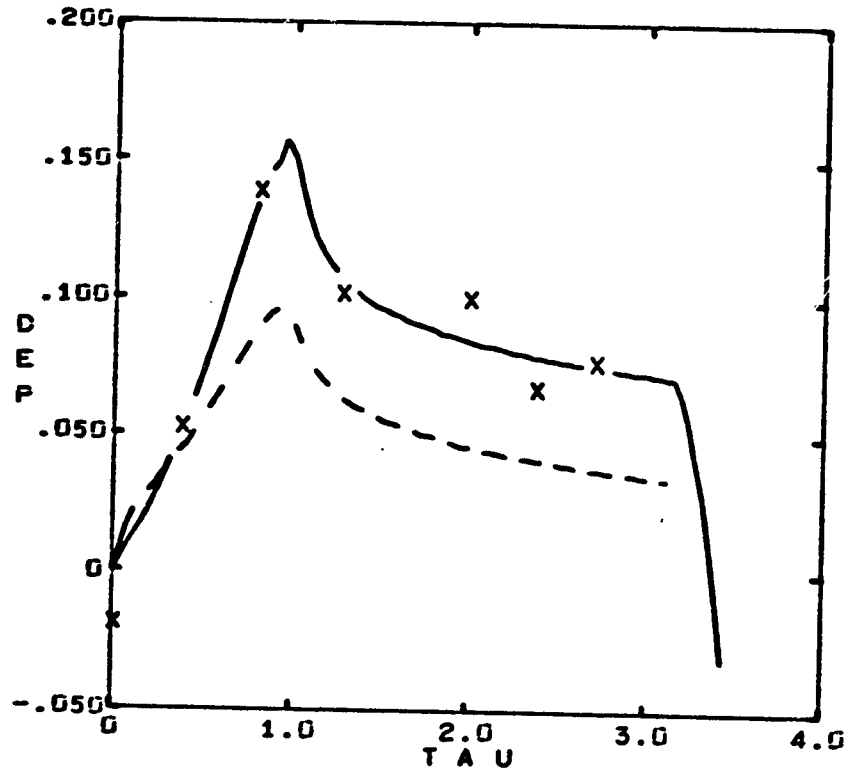
INITIAL TEMPERATURE 385.19
TAU-END OF TOTALITY 3.153

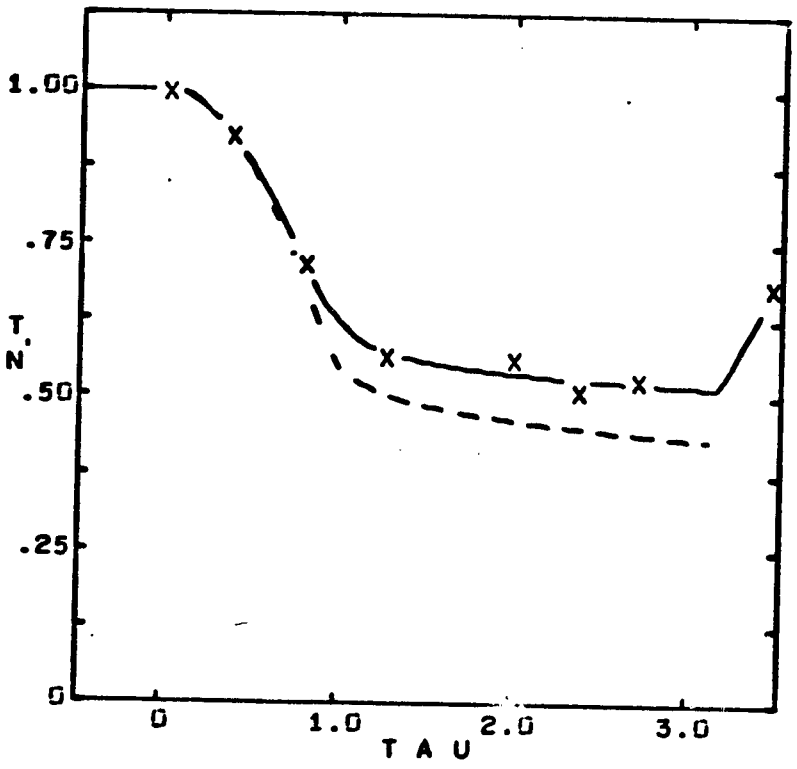
DIFFERENTIAL ENERGY DATA

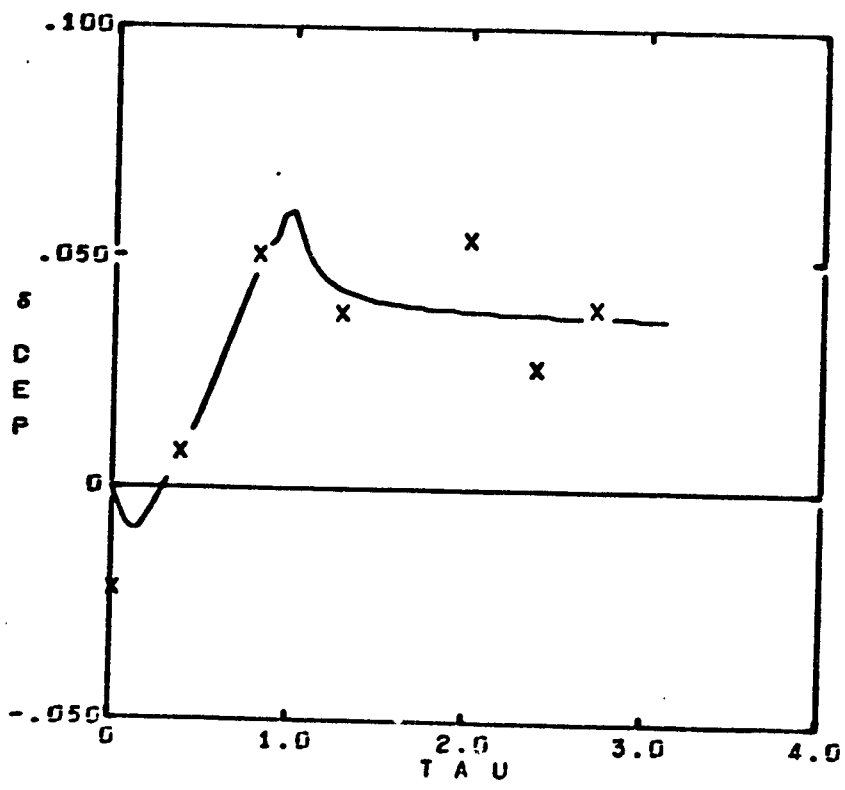
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0300	.0333	-.0033
.50	.0744	.0570	.0174
.75	.1244	.0828	.0416
.93	.1577	.0998	.0579
1.0	.1499	.0901	.0598
1.5	.0960	.0556	.0404
2.0	.0841	.0457	.0384
2.5	.0773	.0397	.0376
3.0	.0725	.0353	.0372

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.727	385.19			385.19	1.000	.0000
9H	0.012	383.18			383.18	0.995	-.0195
10H	0.376	355.73			355.73	0.924	.0526
11H	0.806	274.54	0.035	-.768	274.75	0.713	.1390
12H	1.278	207.59	0.548	-.883	217.47	0.565	.1016
13H	2.000	186.85	0.696	-.014	216.52	0.562	.0998
14H	2.378	185.56	0.461	-.425	196.08	0.509	.0672
15H	2.720	196.94	0.263	-.940	203.02	0.527	.0772
16H	3.474	262.35	0.000	+.215	262.35	0.681	-.0506







PHOTOGRAPH
NOT
AVAILABLE

308 (2L1) MILICHIUS A

LAMBDA=32.03 W BETA= 9.25 N XI=-.5234 ETA=+.1608 L+PL CODE = 25126 ALBEDO =.0729

13H FLAT MOON DATA
FM=.03037 FM'=.03037

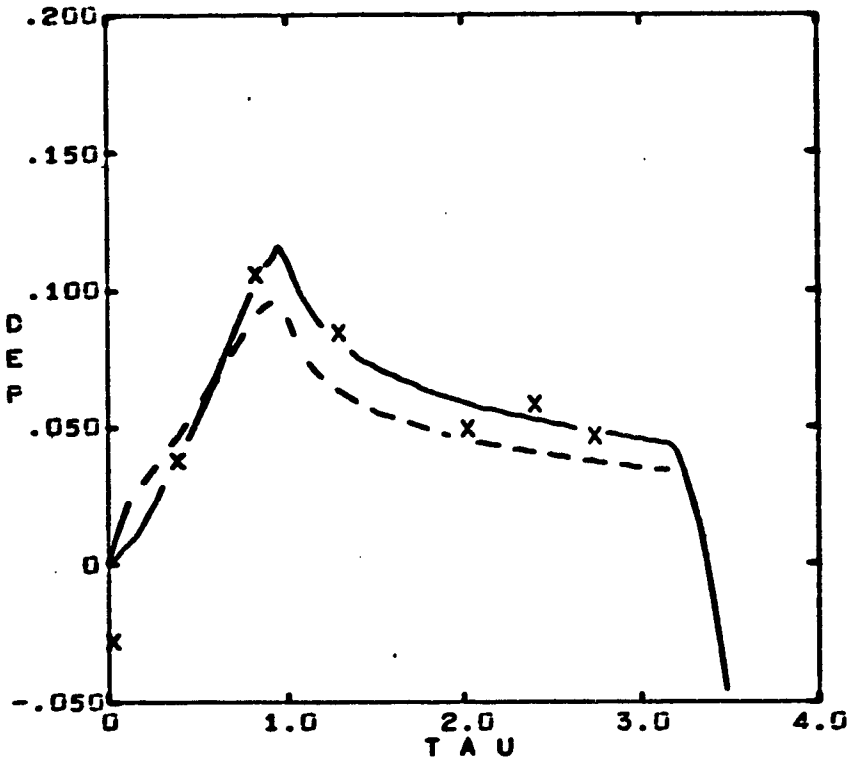
INITIAL TEMPERATURE 385.05
TAU-END OF TOTALITY 3.168

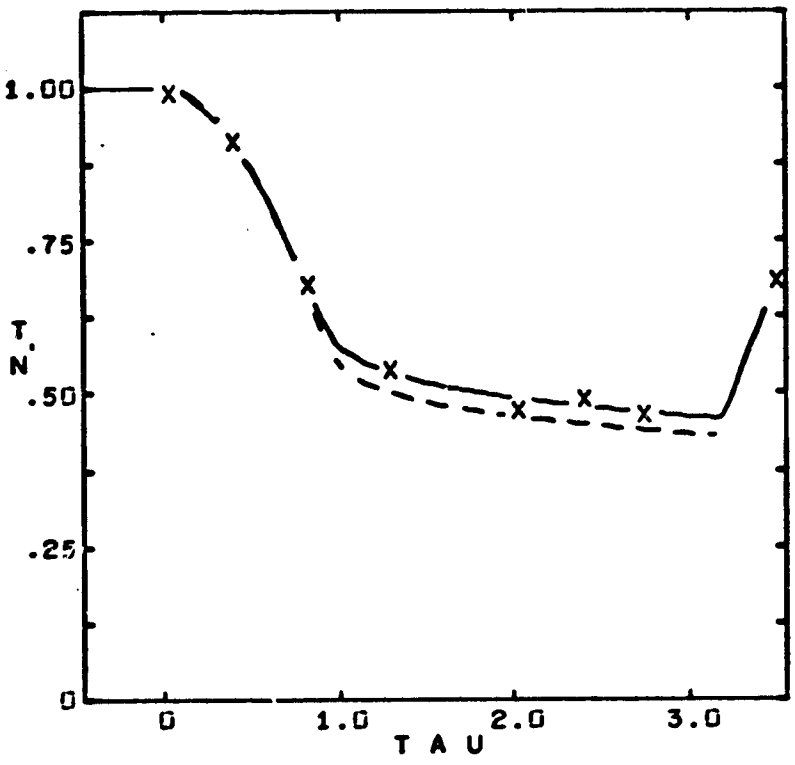
DIFFERENTIAL ENERGY DATA

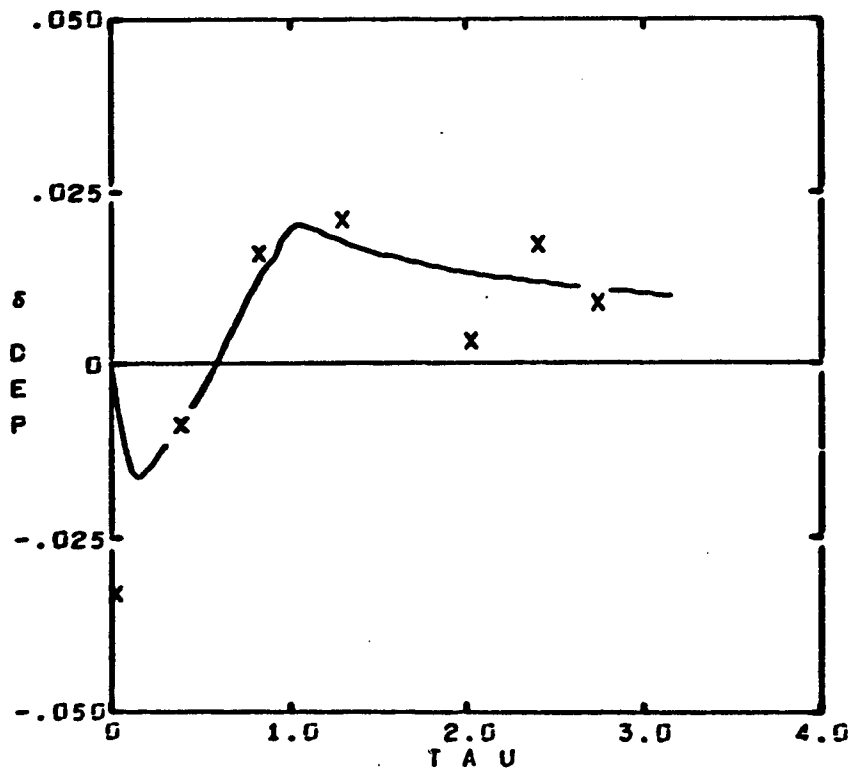
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0199	.0340	-.0141
.50	.0538	.0575	-.0037
.75	.0921	.0831	.0090
.93	.1175	.1000	.0175
1.0	.1099	.0904	.0195
1.5	.0718	.0558	.0160
2.0	.0591	.0458	.0133
2.5	.0513	.0398	.0115
3.0	.0457	.0354	.0103

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.718	385.05		385.05	1.000	.0000
9H	0.023	382.01		382.01	0.992	-.0279
10H	0.388	351.84		351.84	0.914	.0378
11H	0.819	258.03	0.683 -.995	261.61	0.679	.1058
12H	1.294	206.58	0.099 -.652	207.23	0.538	.0839
13H	2.016	181.25	0.000 -.812	181.25	0.471	.0491
14H	2.396	176.04	0.688 -.695	189.15	0.491	.0582
15H	2.737	174.84	0.353 -.178	178.92	0.465	.0466
16H	3.494	263.45	0.000 +.791	263.45	0.684	-.0526







PHOTOGRAPH NOT AVAILABLE

309 (4E8) MOLTKE

LAMBDA=24.18 E BETA= 0.57 S XI=+.4096 ETA=-.0100 L+FL CODE = 44001 ALBEDO =.0713

13H FLAT MOON DATA
FM=.04822 FM'=.07333

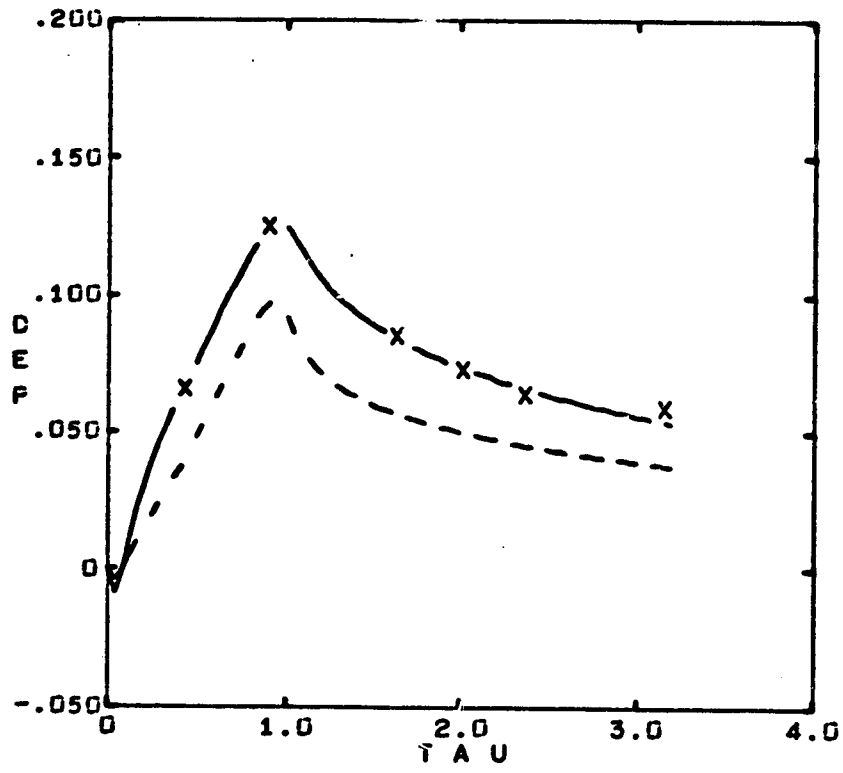
INITIAL TEMPERATURE 391.04
TAU-END OF TOTALITY 3.213

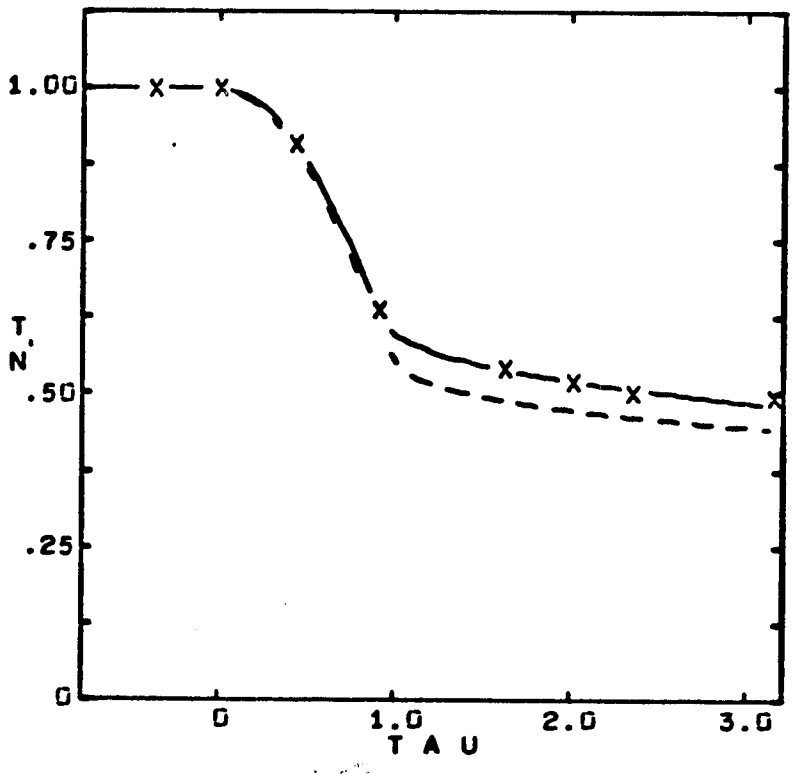
DIFFERENTIAL ENERGY DATA

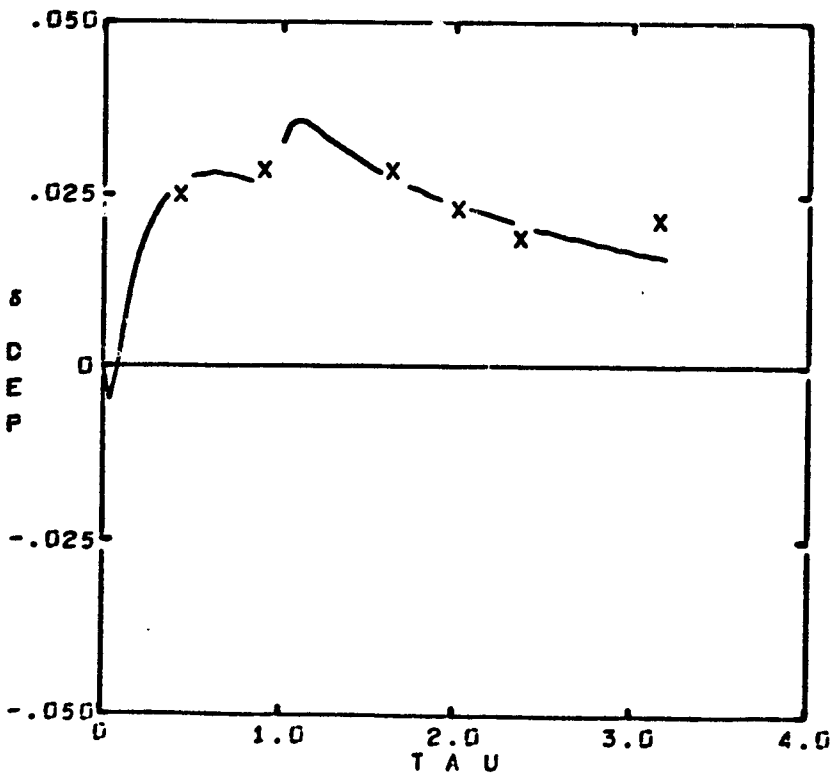
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0404	.0204	.0200
.50	.0774	.0498	.0276
.75	.1085	.0809	.0276
.93	.1280	.1019	.0261
1.0	.1252	.0927	.0325
1.5	.0889	.0598	.0291
2.0	.0736	.0501	.0235
2.5	.0636	.0439	.0197
3.0	.0560	.0392	.0168

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.120	394.23		394.23	1.008	.0330
9H	-0.378	391.17		391.17	1.000	.0013
10H	-0.009	391.02		391.02	1.000	-.0003
11H	0.425	354.62		354.62	0.907	.0657
12H	0.903	247.11	0.331 +.781	249.00	0.637	.1252
13H	1.629	201.45	0.448 -.457	211.24	0.540	.0851
14H	2.012	194.18	0.557 +.959	203.25	0.520	.0730
15H	2.356	193.57	0.240 -.156	196.85	0.503	.0642
16H	3.161	187.04	0.433 +.518	193.02	0.494	.0594







PHOTOGRAPH NOT AVAILABLE

310 (3J8) MOSTING

LAMBDA=17.14 W BETA= 5.85 S XI=-.2932 ETA=-.1019 L+FL CODE = 31001 ALBEDO =.0844

13H FLAT MOON DATA
FM=.00218 FM'=.00218

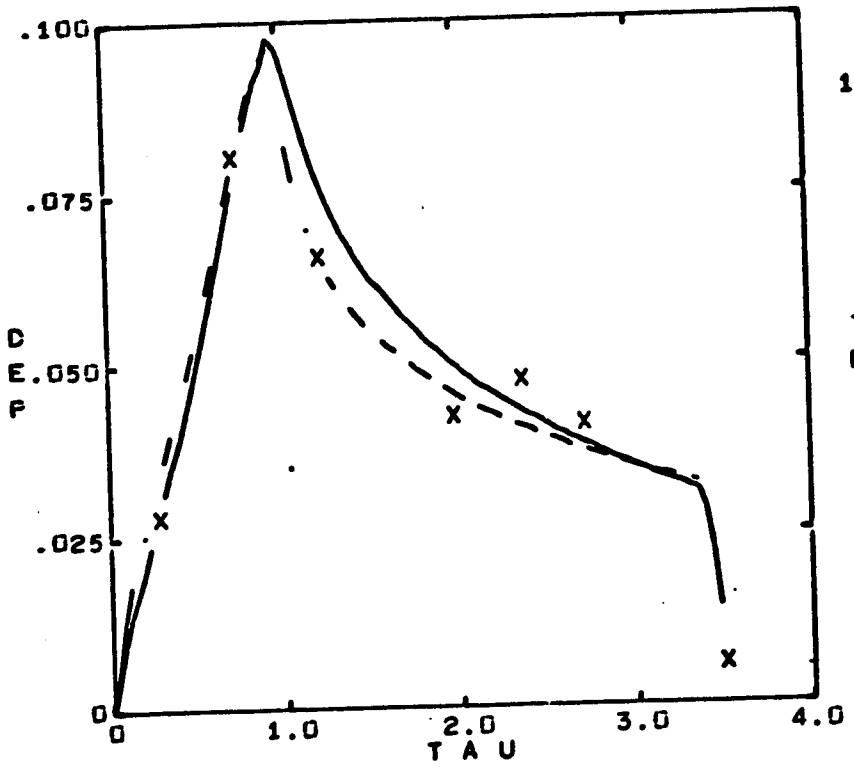
INITIAL TEMPERATURE 392.68
TAU-END OF TOTALITY 3.363

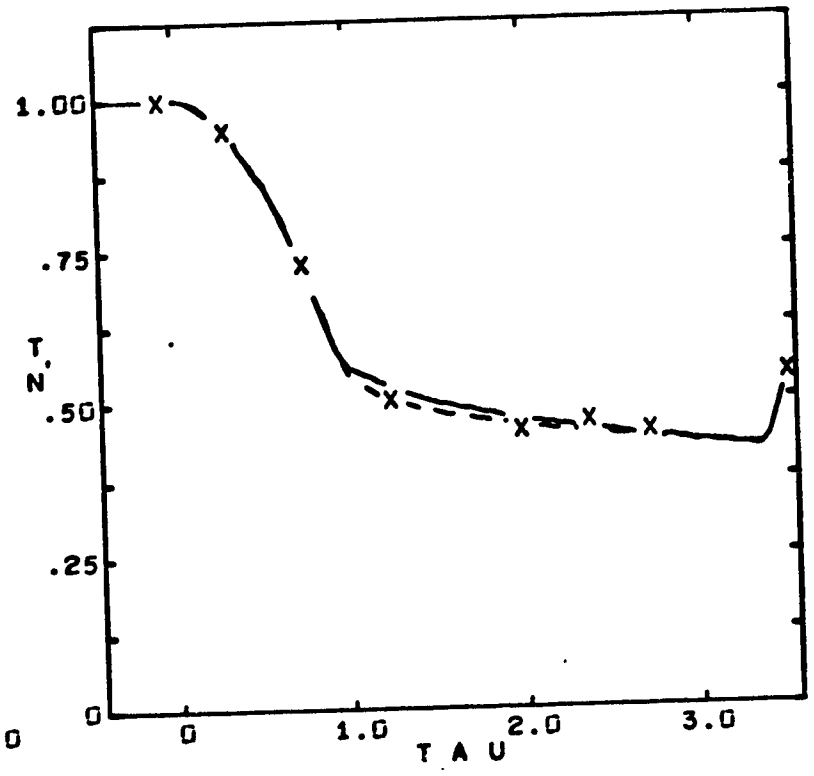
DIFFERENTIAL ENERGY DATA

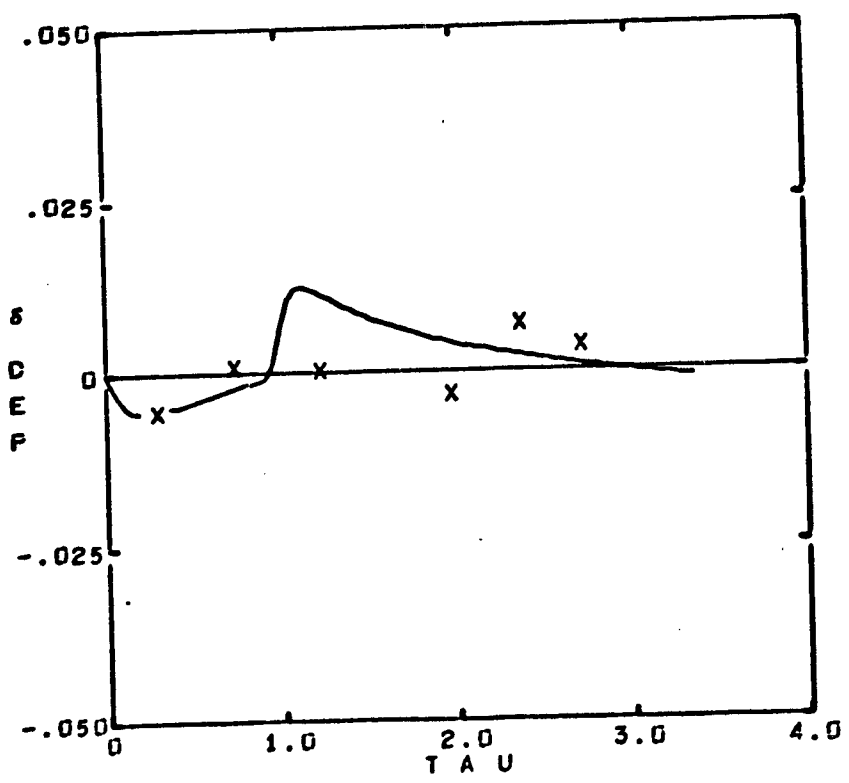
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0245	.0298	-.0053
.50	.0502	.0542	-.0040
.75	.0789	.0809	-.0020
.93	.0979	.0986	-.0007
1.0	.0959	.0890	.0069
1.5	.0631	.0551	.0080
2.0	.0493	.0452	.0041
2.5	.0410	.0392	.0018
3.0	.0349	.0348	.0001

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.848	393.35		393.35	1.002	.0068
9H	-0.084	392.61		392.61	1.000	-.0007
10H	0.292	372.77		372.77	0.949	.0281
11H	0.736	285.99	0.000 -.799	285.99	0.728	.0805
12H	1.225	198.97	0.000 +.708	198.97	0.507	.0659
13H	1.971	178.24	0.000 +.786	178.24	0.454	.0425
14H	2.361	178.69	1.725 +.758	183.34	0.467	.0475
15H	2.714	176.75	0.000 +.795	176.75	0.450	.0410
16H	3.512	208.04	1.174 +.512	212.64	0.542	.0057







PHOTOGRAPH
NOT
AVAILABLE

311 (3J9) MOSTING A

LAMBDA= 5.17 W BETA= 3.20 S XI=-.0900 ETA=-.0559 L+PL CODE = 30095 ALBEDO =.1340

13H FLAT MOON DATA
FM=.05661 FM'=.07430

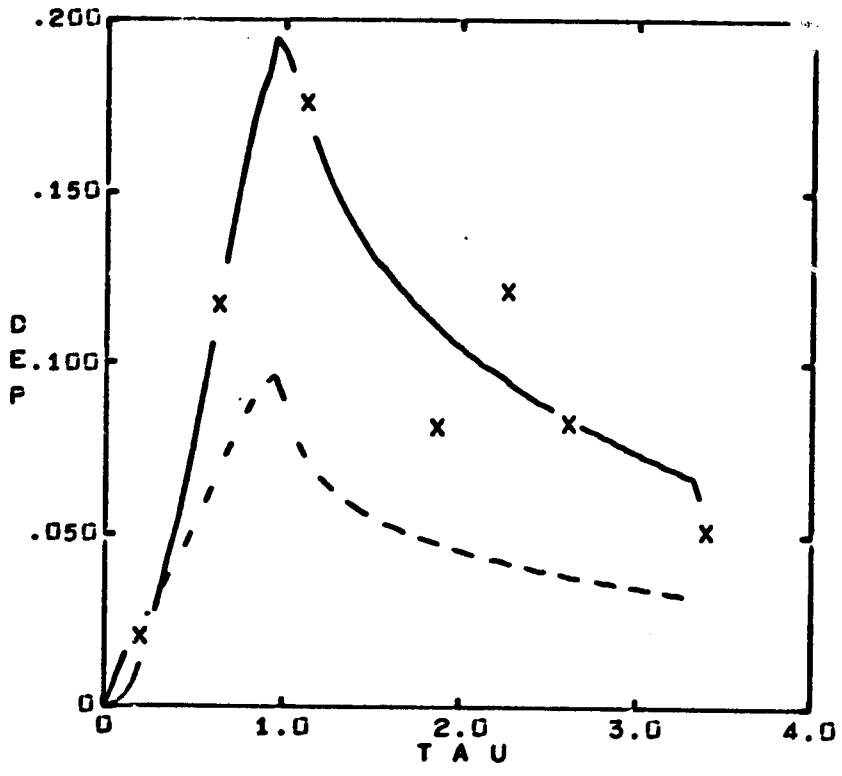
INITIAL TEMPERATURE 389.36
TAU-END OF TOTALITY 3.306

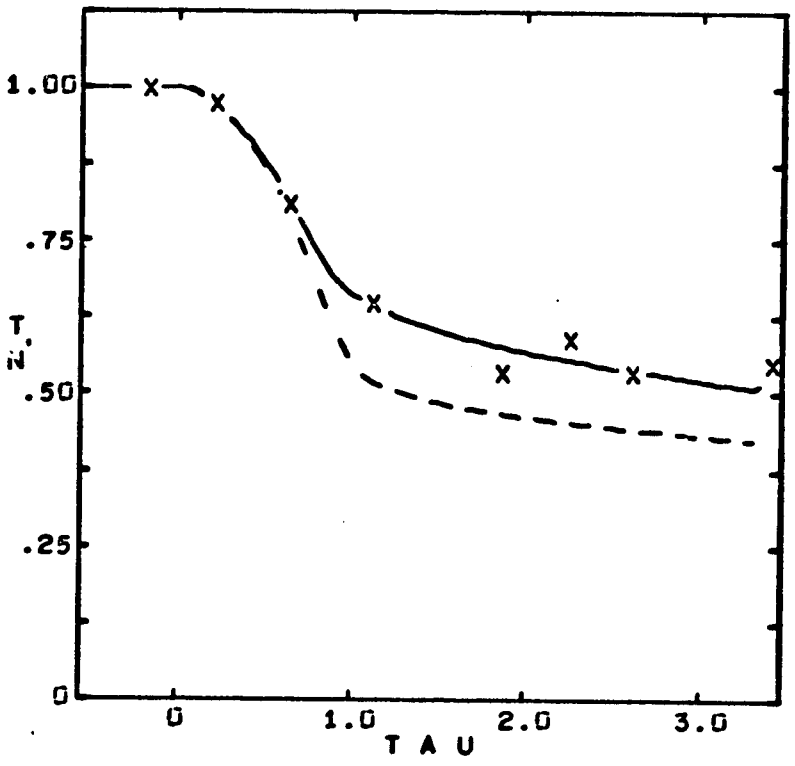
DIFFERENTIAL ENERGY DATA

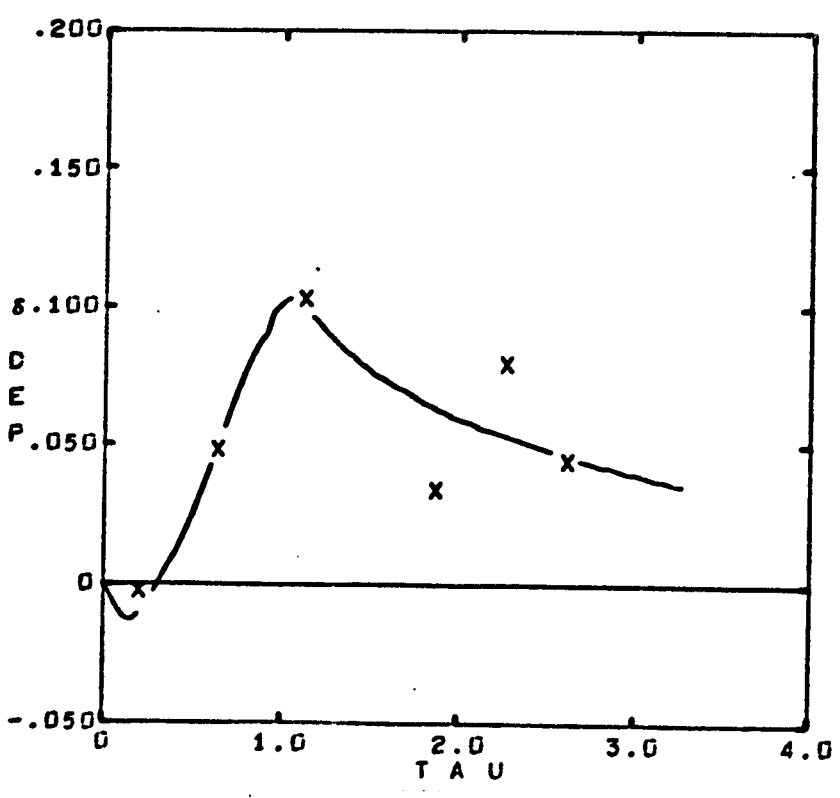
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0211	.0274	-.0063
.50	.0790	.0527	.0263
.75	.1481	.0802	.0679
.93	.1950	.0985	.0965
1.0	.1907	.0891	.1016
1.5	.1318	.0552	.0766
2.0	.1045	.0453	.0592
2.5	.0870	.0393	.0477
3.0	.0740	.0348	.0392

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.925	392.19		392.19	1.007	.0293
9H	-0.169	388.85		388.85	0.999	-.0053
10H	0.204	379.02		379.02	0.973	.0200
11H	0.645	315.16	0.062 +.181	315.58	0.811	.1169
12H	1.129	246.18	0.194 -.946	252.05	0.647	.1756
13H	1.867	203.92	0.505 -.105	207.92	0.534	.0813
14H	2.255	211.55	0.461 -.671	229.76	0.590	.1212
15H	2.604	202.64	0.305 +.005	208.64	0.536	.0825
16H	3.403	200.53	0.499 +.766	213.55	0.548	.0512







PHOTOGRAPH
NOT
AVAILABLE

312 (3K1) MOSTING C

LAMBDA= 8.08 W BETA= 1.80 S XI=-.1405 ETA=-.0314 L+FL CODE = 31043 ALBEDO =.0786

13H FLAT MOON DATA
FM=.02606 FM'=.07045

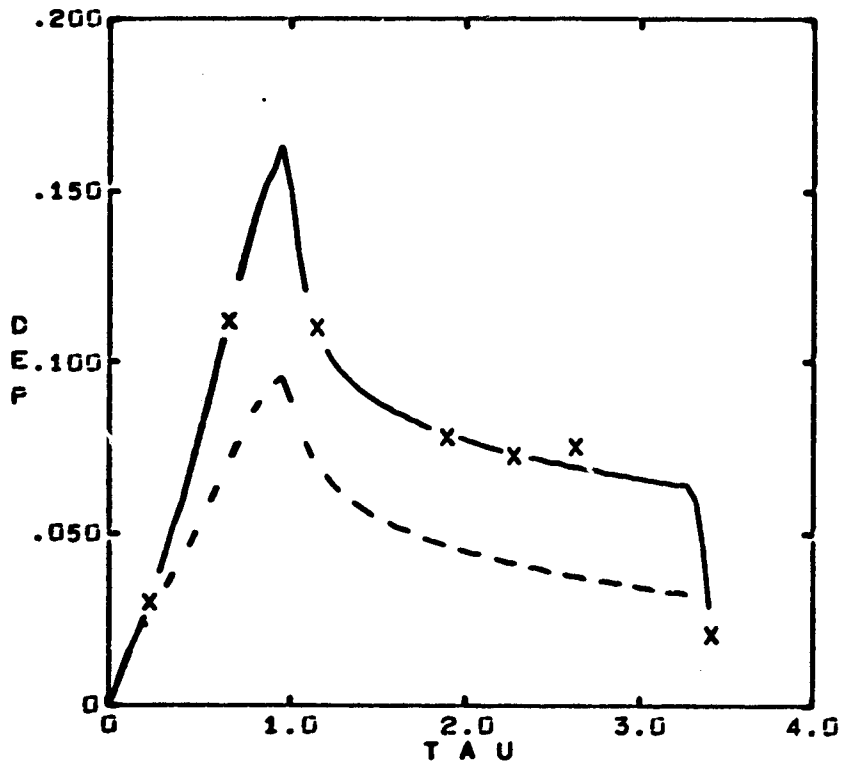
INITIAL TEMPERATURE 394.34
TAU-END OF TOTALITY 3.292

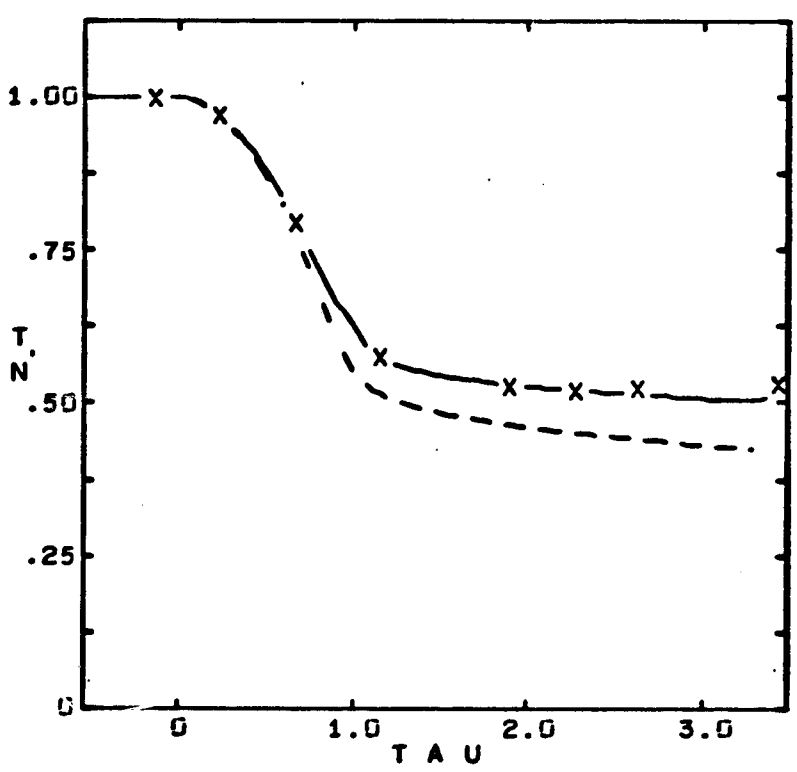
DIFFERENTIAL ENERGY DATA

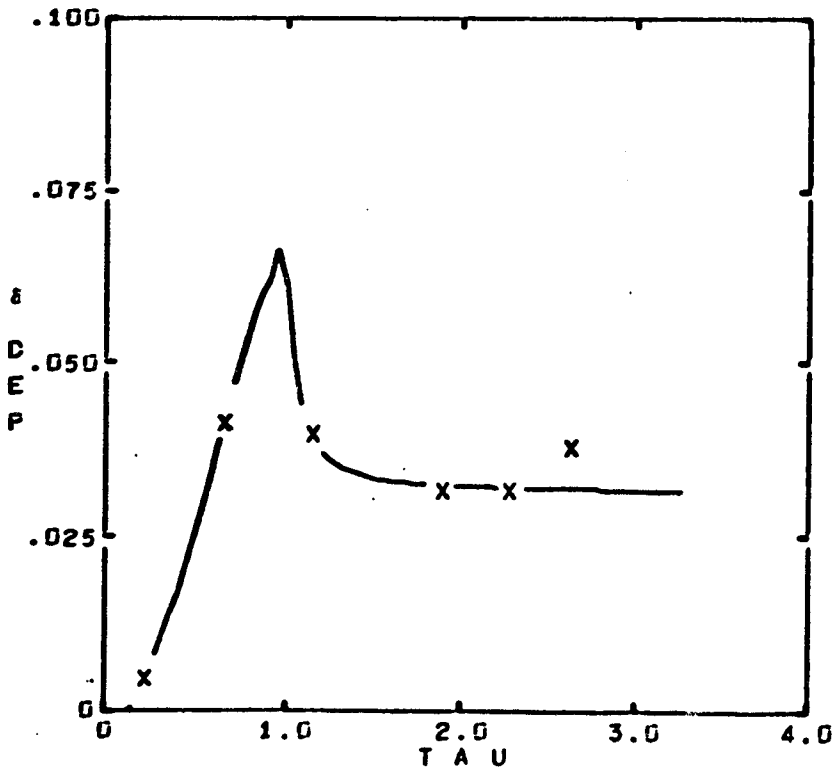
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0336	.0278	.0058
.50	.0785	.0528	.0257
.75	.1296	.0799	.0497
.93	.1638	.0980	.0658
1.0	.1499	.0886	.0613
1.5	.0882	.0548	.0334
2.0	.0772	.0450	.0322
2.5	.0708	.0390	.0318
3.0	.0662	.0346	.0316

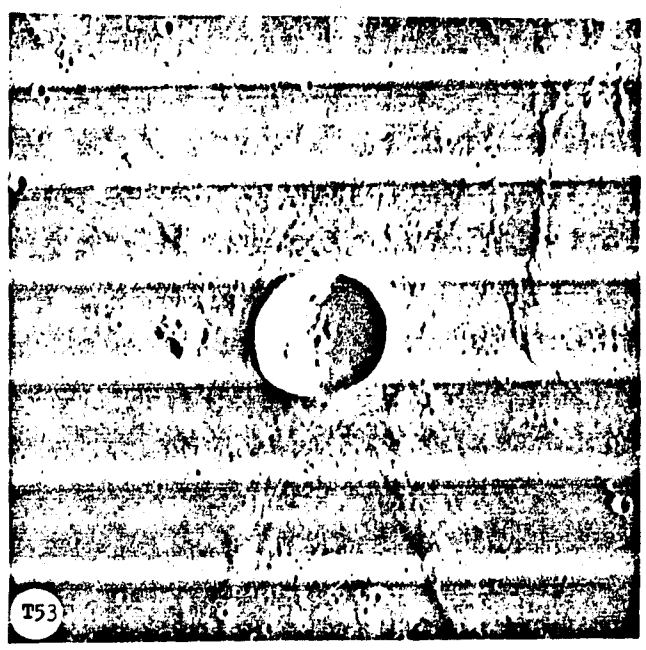
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.900	396.29		396.29	1.005	.0199
9H	-0.147	394.02		394.02	0.999	-.0032
10H	0.226	382.51		382.51	0.970	.0301
11H	0.666	312.99	0.197 -.964	313.32	0.795	.1122
12H	1.149	220.63	0.328 -.982	227.07	0.576	.1099
13H	1.886	191.05	0.939 -.144	208.66	0.529	.0784
14H	2.272	193.14	0.512 -.778	205.01	0.520	.0730
15H	2.621	206.10	0.053 -.321	206.65	0.524	.0754
16H	3.414	206.69	0.319 +.484	208.85	0.530	.0206









313 (1L6) NEWCOMB Q

LAMBDA=42.98 E BETA=30.40 N XI=+.5880 ETA=+.5060 L+PL CODE = 15580 ALBEDO =.1351

13H FLAT MOON DATA
FM=.01376 FM'=.01376

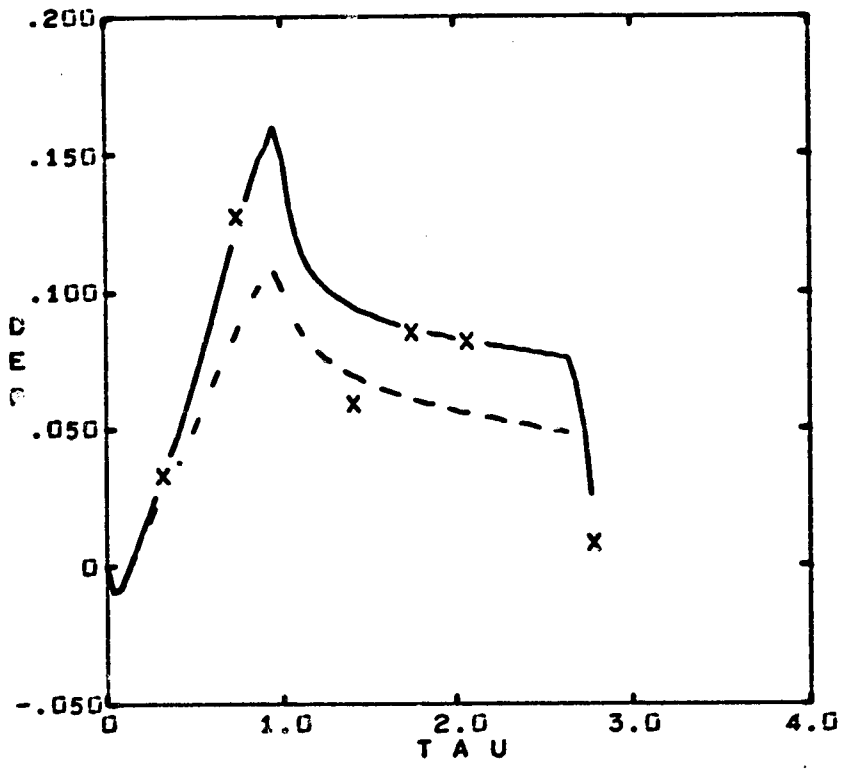
INITIAL TEMPERATURE 363.97
TAU-END OF TOTALITY 2.640

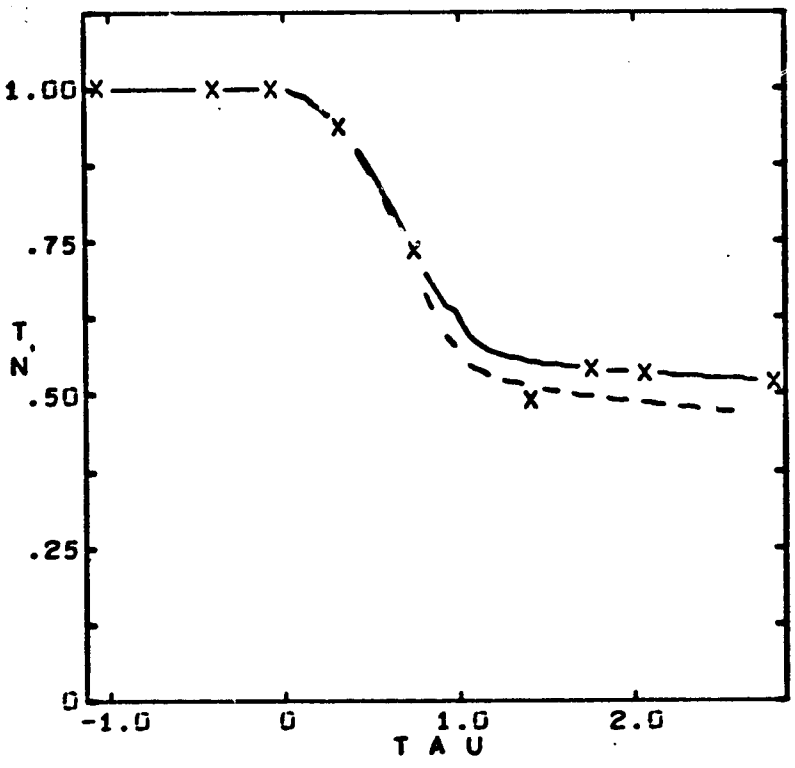
DIFFERENTIAL ENERGY DATA

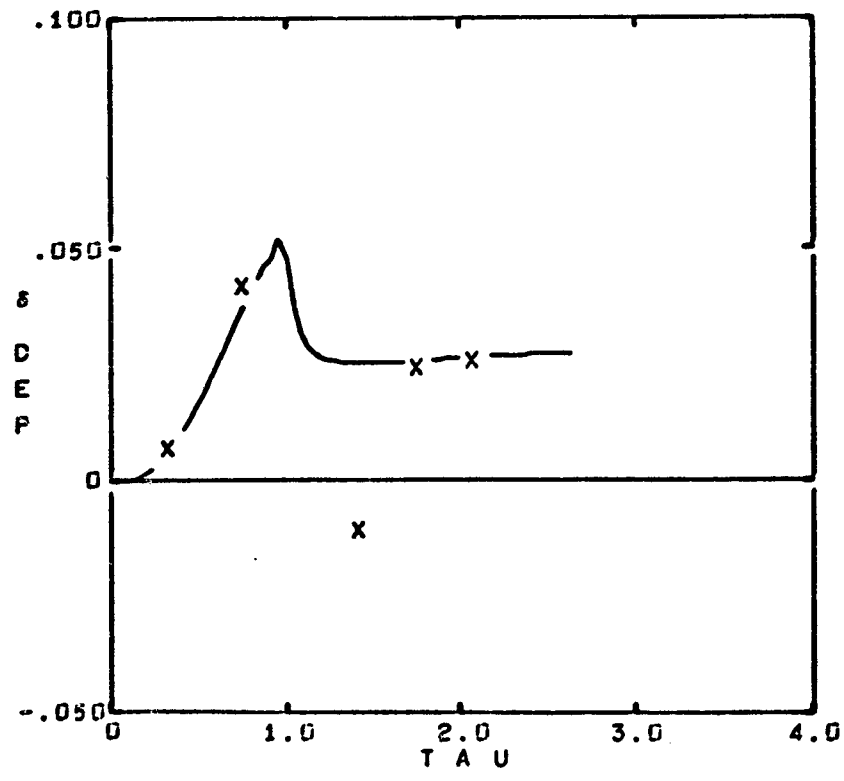
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0202	.0175	.0027
.50	.0687	.0515	.0172
.75	.1230	.0863	.0367
.93	.1603	.1096	.0507
1.0	.1484	.1005	.0479
1.5	.0918	.0667	.0251
2.0	.0828	.0567	.0261
2.5	.0773	.0502	.0271

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.084	364.98		364.98	1.003	.0111
9H	-0.414	364.71		364.71	1.002	.0081
10H	-0.080	363.76		363.76	0.999	-.0024
11H	0.314	341.09		341.09	0.937	.0328
12H	0.746	258.84	1.250 -.632	268.63	0.738	.1277
13H	1.403	179.17	0.000 -.774	179.17	0.492	.0587
14H	1.751	181.41	0.930 -.386	196.73	0.541	.0854
15H	2.062	177.04	0.976 -.523	194.51	0.534	.0816
16H	2.782	189.32	0.000 +.410	189.32	0.520	.0087







PHOTOGRAPH NOT AVAILABLE

314 (4E9) NICOLAI A

LAMBDA=23.63 E BETA=42.42 S XI=+.2959 ETA=-.6746 L+PL CODE = 42697 ALBEDO =.1545

13H FLAT MOON DATA
FM=.06823 FM'=.08220

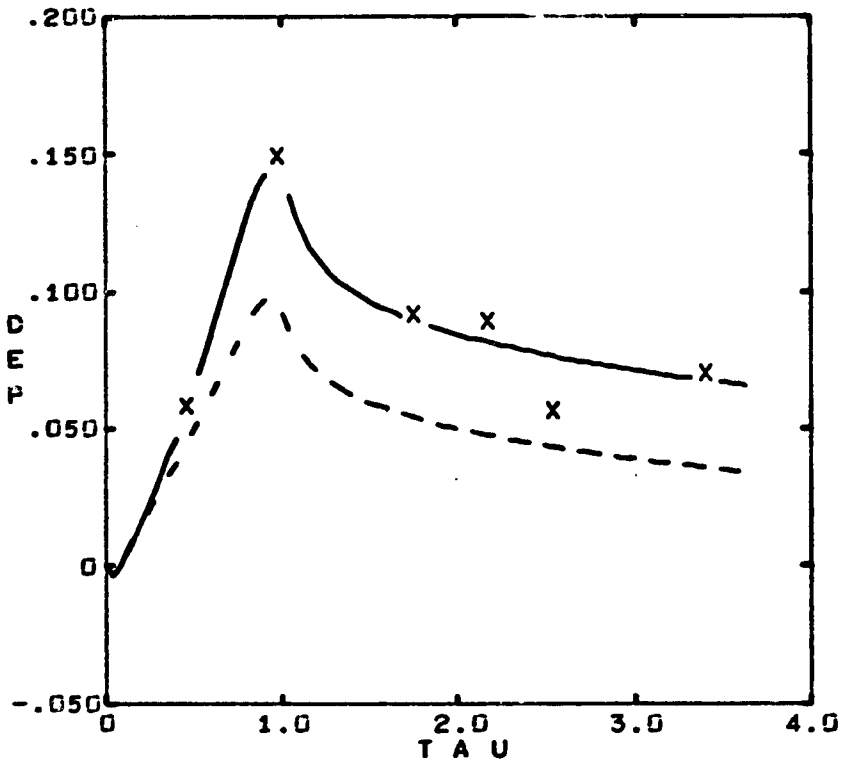
INITIAL TEMPERATURE 365.24
TAU-END OF TOTALITY 3.668

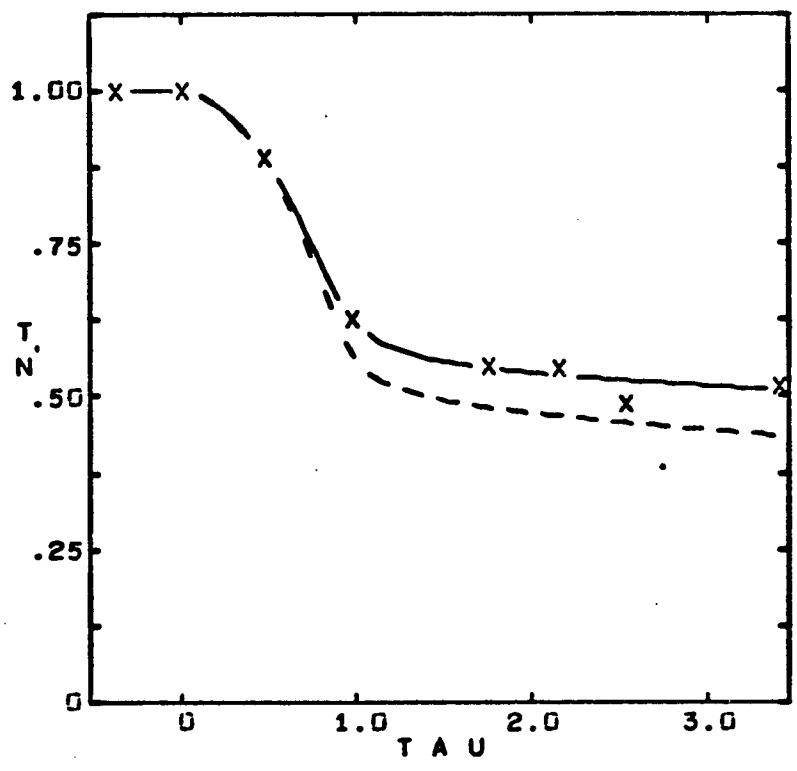
DIFFERENTIAL ENERGY DATA

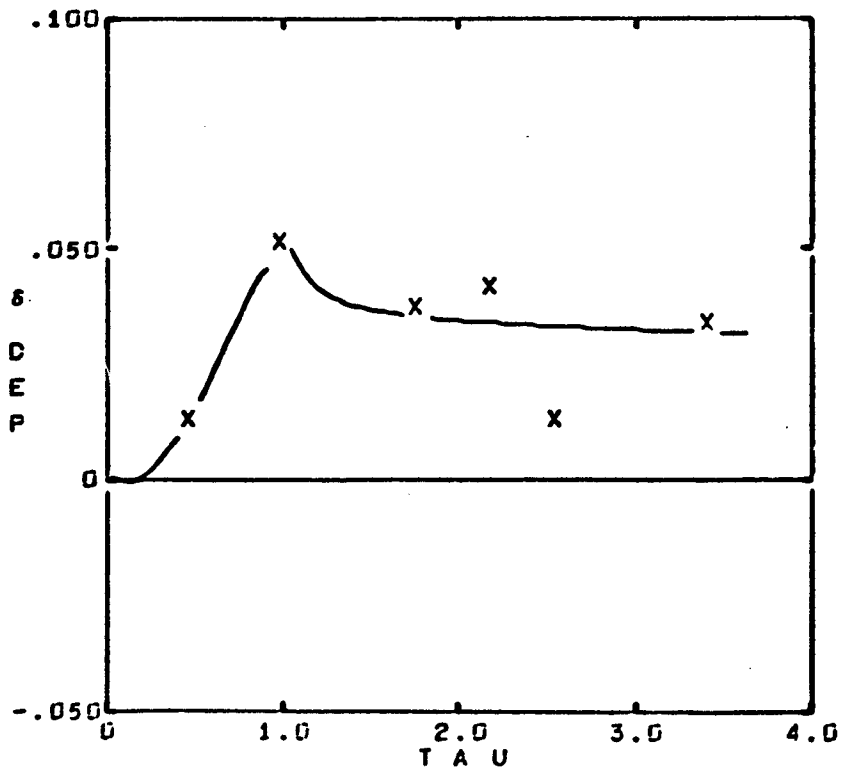
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0221	.0205	.0016
.50	.0655	.0498	.0157
.75	.1158	.0809	.0349
.93	.1504	.1018	.0486
1.0	.1449	.0926	.0523
1.5	.0964	.0597	.0367
2.0	.0843	.0500	.0343
2.5	.0769	.0438	.0331
3.0	.0714	.0391	.0323

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.192	366.34		366.34	1.003	.0121
9H	-0.394	365.89		365.89	1.002	.0071
10H	-0.000	365.24		365.24	1.000	-.0000
11H	0.464	325.32		325.32	0.891	.0586
12H	0.974	228.27	0.114 -.764	228.84	0.627	.1493
13H	1.754	195.66	0.256 -.835	200.92	0.550	.0916
14H	2.161	195.74	0.197 +.798	199.70	0.547	.0894
15H	2.530	177.33	0.058 +.237	177.94	0.487	.0563
16H	3.409	168.02	0.686 +.422	187.93	0.515	.0701







PHOTOGRAPH NOT AVAILABLE

315 (3K2) NICOLLET

LAMBDA=12.45 W BETA=21.91 S XI=-.2000 ETA=-.3731 L+PL CODE = 32307 ALBEDO =.0709

13H FLAT MOON DATA
FM=.09461 FM'=.10590

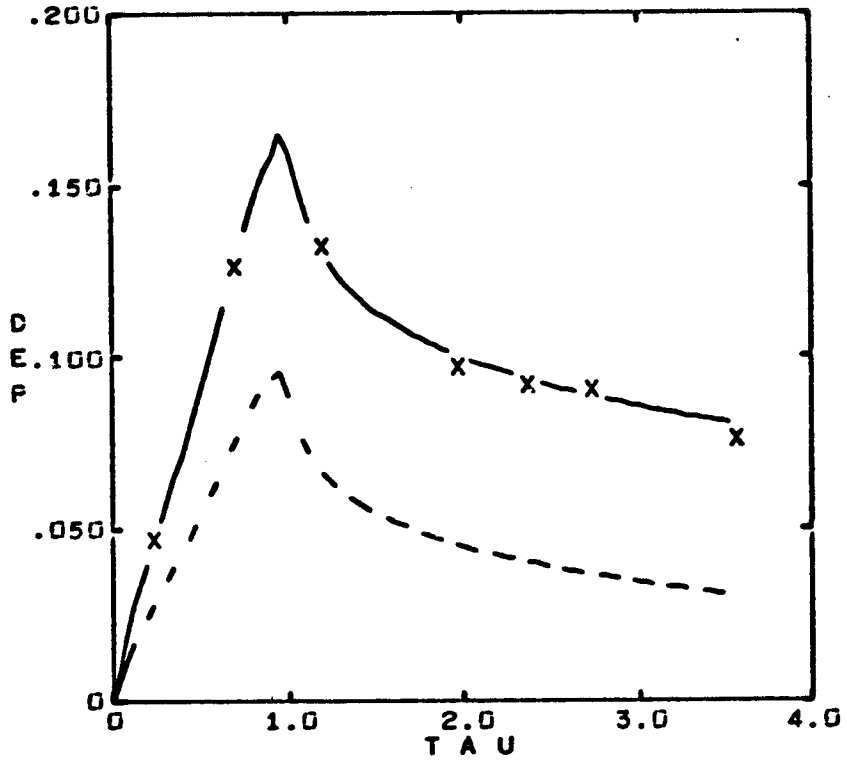
INITIAL TEMPERATURE 389.61
TAU-END OF TOTALITY 3.541

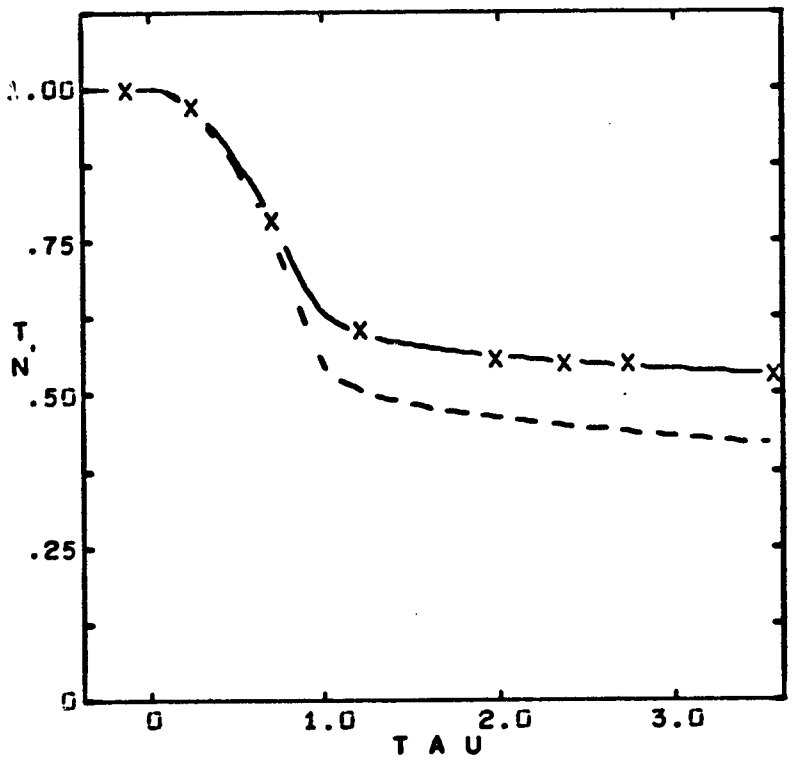
DIFFERENTIAL ENERGY DATA

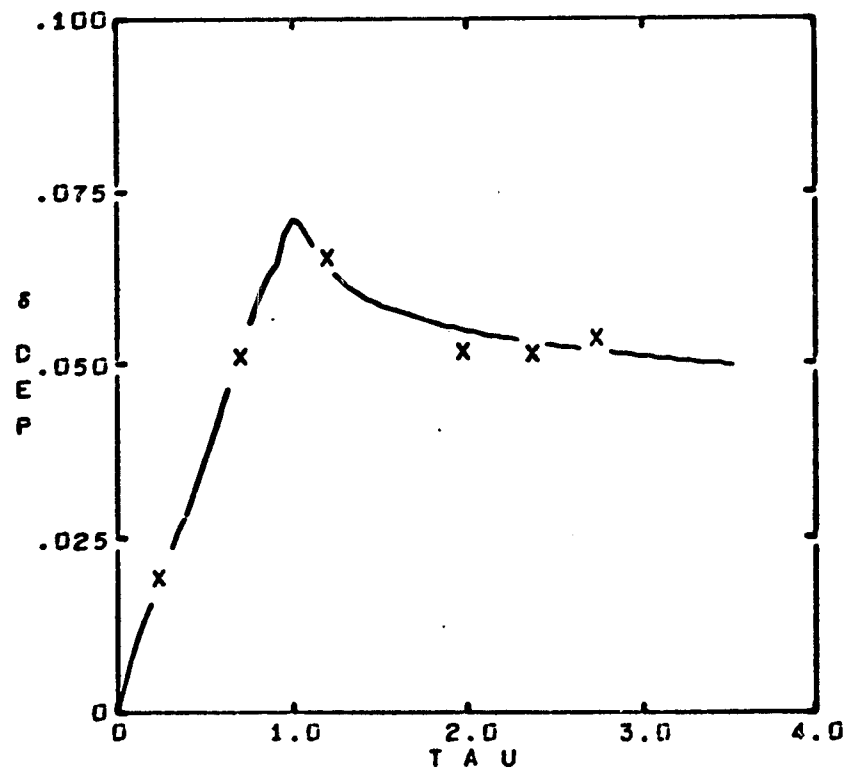
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0473	.0286	.0187
.50	.0892	.0533	.0359
.75	.1350	.0801	.0549
.93	.1654	.0979	.0675
1.0	.1595	.0885	.0710
1.5	.1134	.0547	.0587
2.0	.0998	.0449	.0549
2.5	.0916	.0389	.0527
3.0	.0856	.0346	.0510

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.928	391.01		391.01	1.004	.0145
9H	-0.144	389.39		389.39	0.999	-.0022
10H	0.242	378.31		378.31	0.971	.0470
11H	0.700	302.56	0.407 +.995	305.04	0.783	.1261
12H	1.200	229.12	0.269 +.048	234.83	0.603	.1320
13H	1.966	213.05	0.212 +.861	217.51	0.558	.0971
14H	2.366	206.93	0.280 +.815	214.45	0.550	.0918
15H	2.729	211.47	0.114 -.014	213.67	0.548	.0905
16H	3.561	206.18	0.128 -.192	206.67	0.530	.0761







PHOTOGRAPH
NOT
AVAILABLE

316 (2L2) OLBERS (?)

LAMBDA=75.69 W BETA= 7.12 N XI=-.9615 ETA=+.1239 L+FL CODE = 29162 ALBEDO =.1231

13H FLAT MOON DATA
FM= 0.000 FM'= 0.000

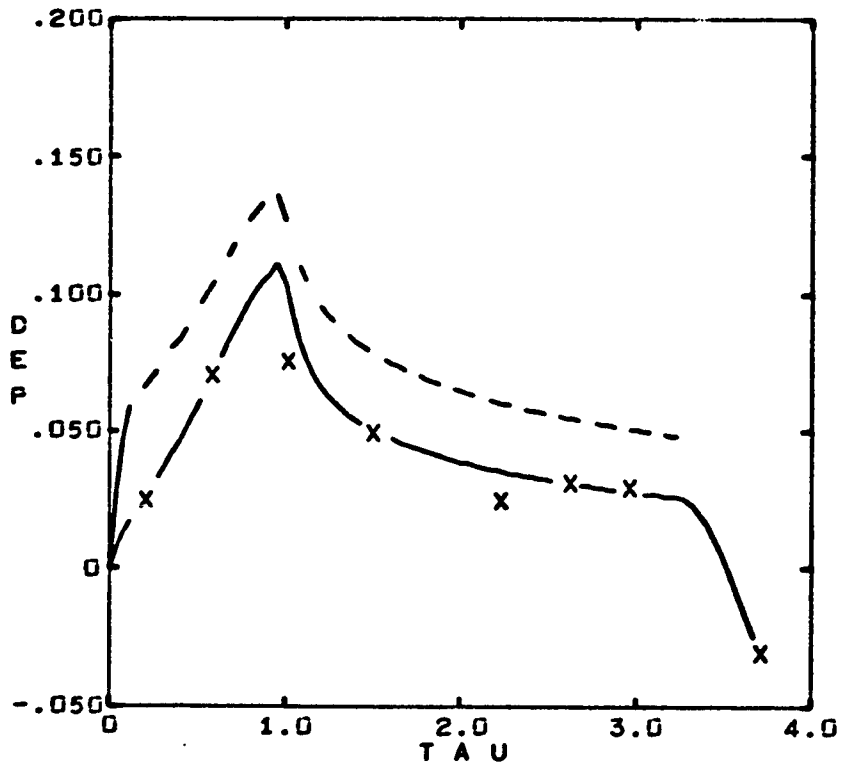
INITIAL TEMPERATURE 326.20
TAU-END OF TOTALITY 3.252

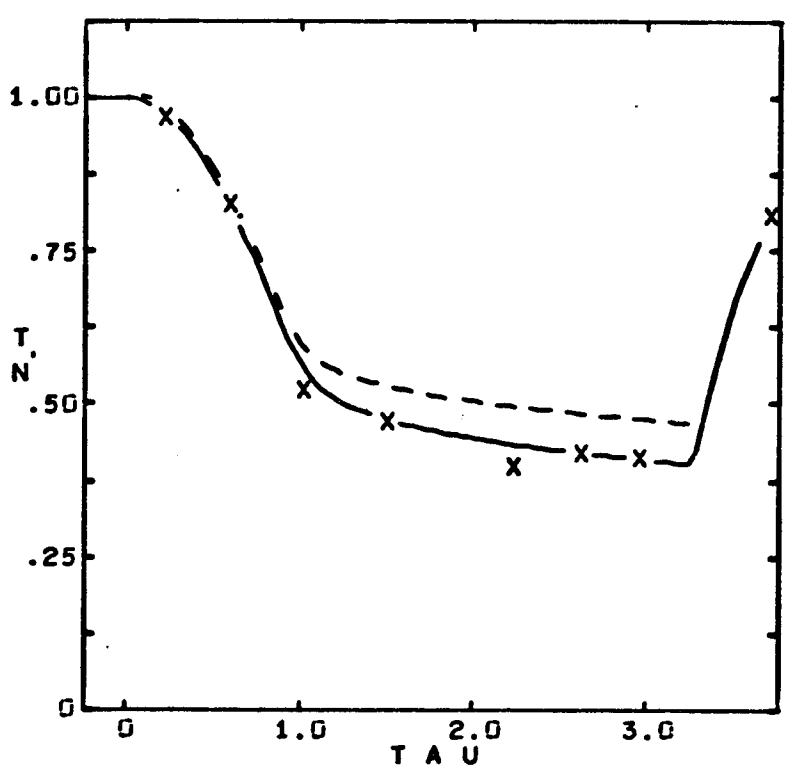
DIFFERENTIAL ENERGY DATA

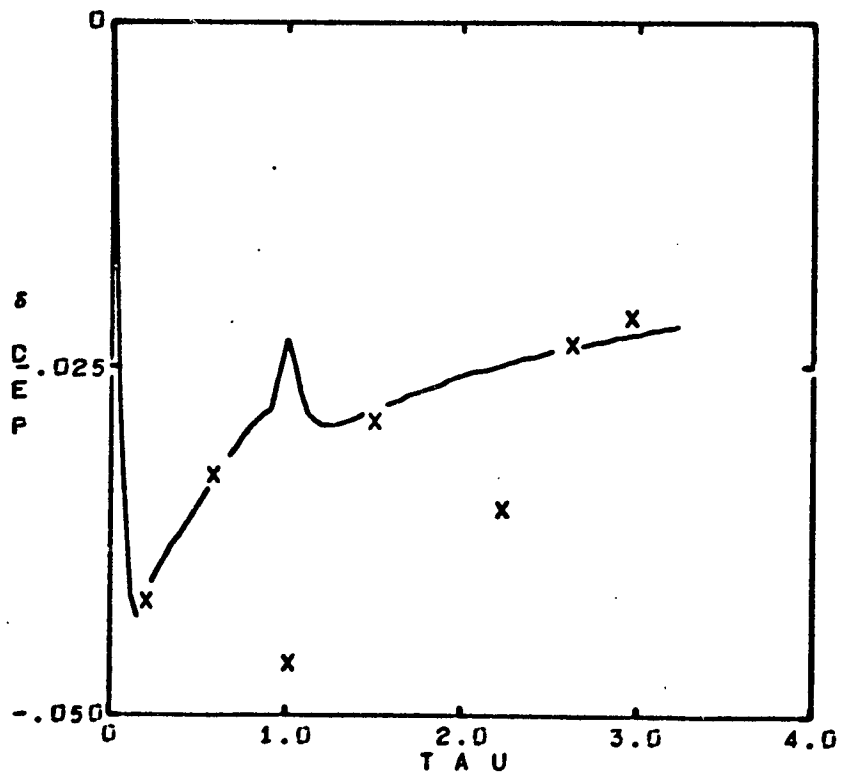
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0295	.0699	-.0404
.50	.0592	.0941	-.0349
.75	.0913	.1215	-.0302
.93	.1121	.1394	-.0273
1.0	.1040	.1270	-.0230
1.5	.0504	.0784	-.0280
2.0	.0389	.0645	-.0256
2.5	.0324	.0563	-.0239
3.0	.0279	.0505	-.0226

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.537	326.20		326.20	1.000	.0000
9H	0.213	317.10		317.10	0.972	.0250
10H	0.583	269.53	0.000 -.803	269.53	0.826	.0704
11H	1.020	171.10	0.000 +.808	171.10	0.525	.0757
12H	1.500	153.89	0.000 +.827	153.89	0.472	.0495
13H	2.234	129.79	0.000 +.846	129.79	0.398	.0251
14H	2.617	137.46	0.000 +.740	137.46	0.421	.0315
15H	2.964	135.28	0.000 +.809	135.28	0.415	.0296
16H	3.714	263.72	0.000 -.820	263.72	0.808	-.0306







PHOTOGRAPH NOT AVAILABLE

317 (3K3) OPELT K

LAMBDA=17.04 W BETA=13.59 S XI=-.2849 ETA=-.2350 L+FL CODE = 32283 ALBEDO =.0723

13H FLAT MOON DATA
FM=.03002 FM'=.03002

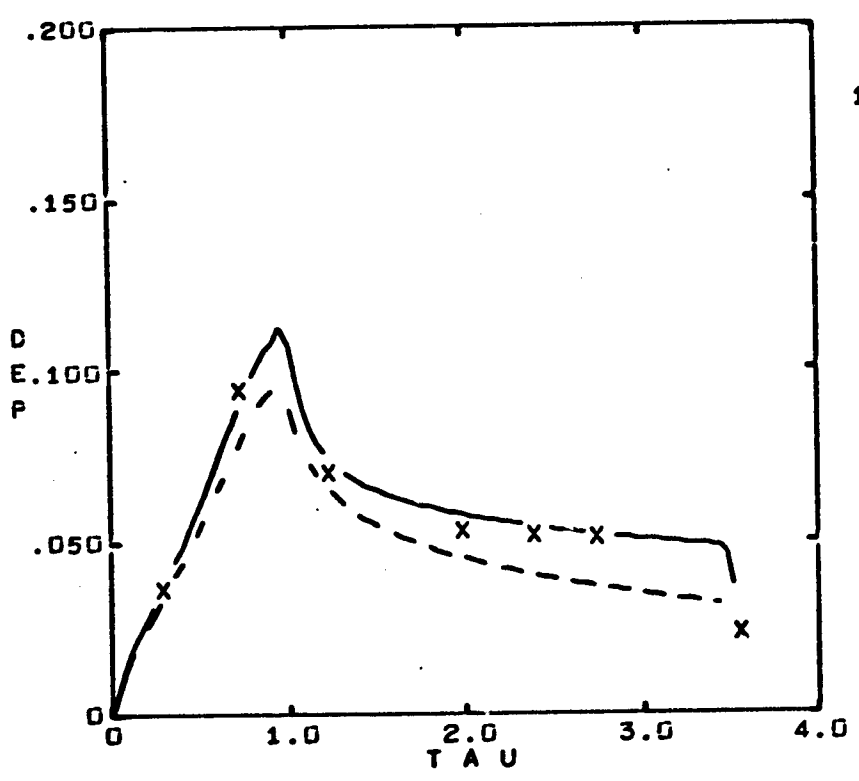
INITIAL TEMPERATURE 392.11
TAU-END OF TOTALITY 3.459

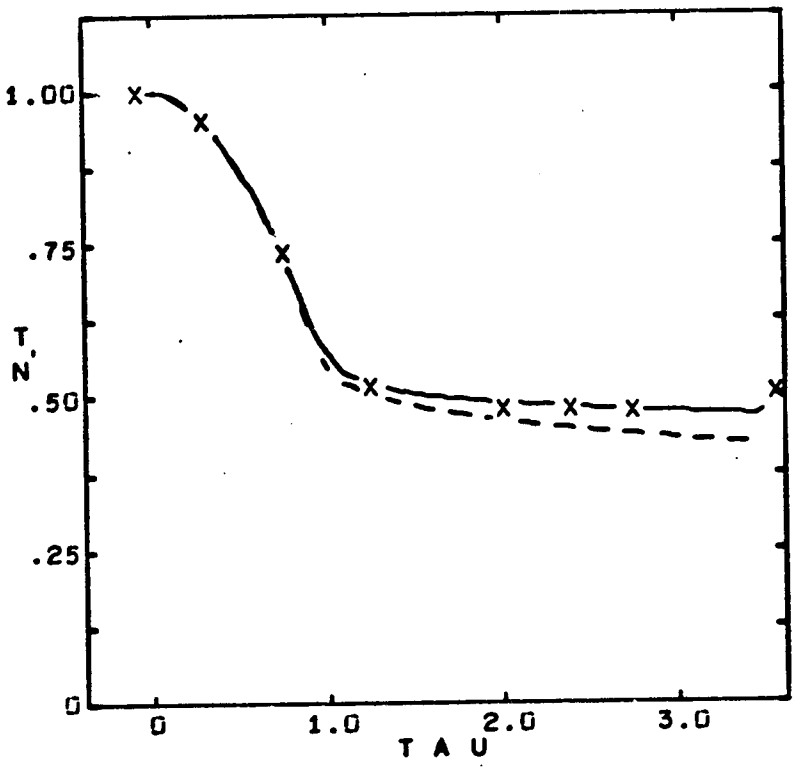
DIFFERENTIAL ENERGY DATA

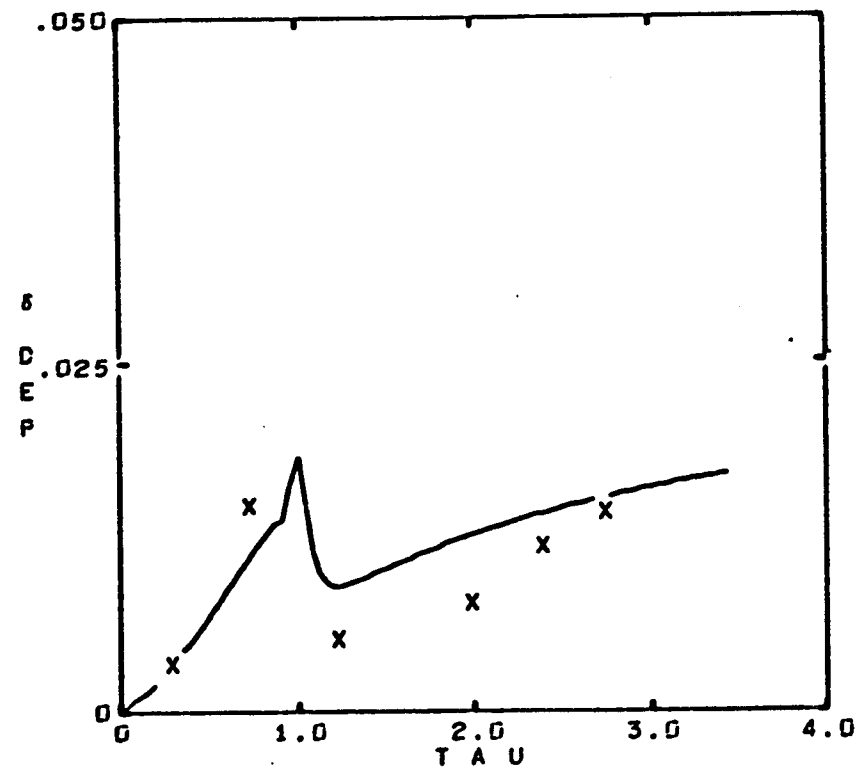
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0324	.0297	.0027
.50	.0609	.0542	.0067
.75	.0922	.0809	.0113
.93	.1130	.0985	.0145
1.0	.1073	.0890	.0183
1.5	.0652	.0551	.0101
2.0	.0579	.0452	.0127
2.5	.0538	.0392	.0146
3.0	.0508	.0348	.0160

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.870	393.37		393.37	1.003	.0129
9H	-0.096	391.97		391.97	1.000	-.0014
10H	0.286	374.12		374.12	0.954	.0365
11H	0.737	289.33	0.000 -.624	289.33	0.738	.0944
12H	1.231	201.99	0.000 -.830	201.99	0.515	.0704
13H	1.989	188.29	0.000 -.194	188.29	0.480	.0532
14H	2.384	184.74	0.465 +.771	187.53	0.478	.0523
15H	2.743	183.85	0.318 -.721	186.57	0.476	.0512
16H	3.557	193.95	0.689 +.753	197.91	0.505	.0235







PHOTOGRAPH
NOT
AVAILABLE

318 (3K4) PALISA P

LAMBDA= 7.33 W BETA= 9.66 S XI=-.1258 ETA=-.1678 L+PL CODE = 31126 ALBEDO =.0977

13H FLAT MOON DATA
FM=.01548 FM'=.01955

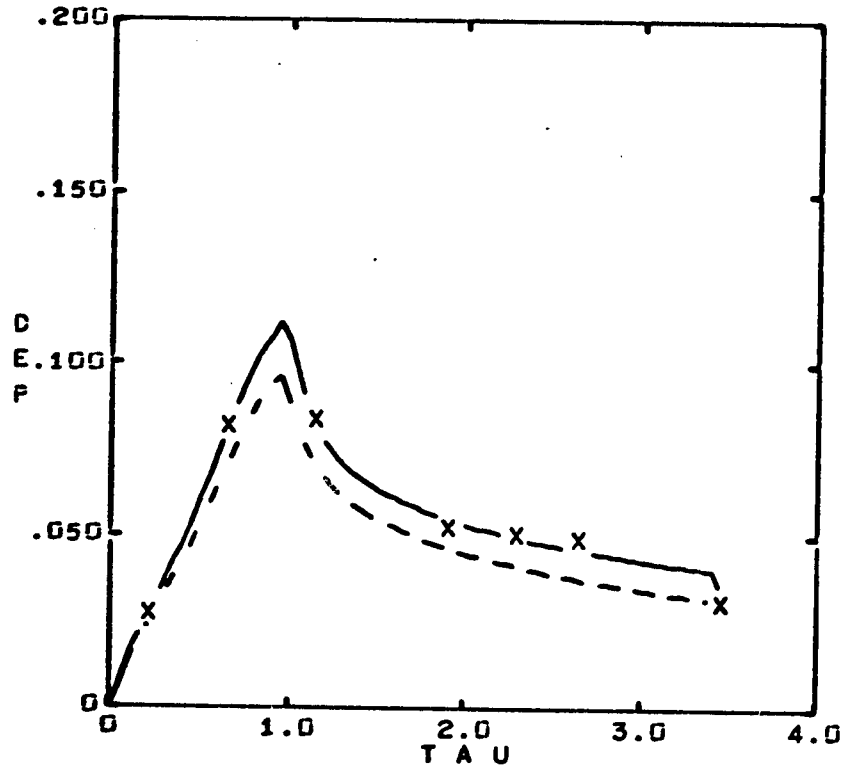
INITIAL TEMPERATURE 392.93
TAU-END OF TOTALITY 3.397

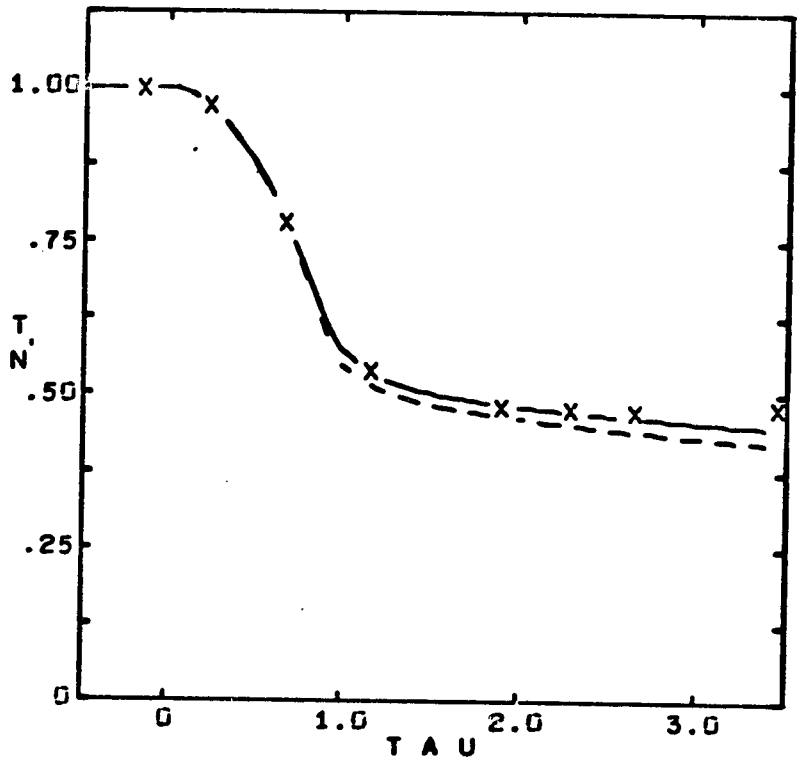
DIFFERENTIAL ENERGY DATA

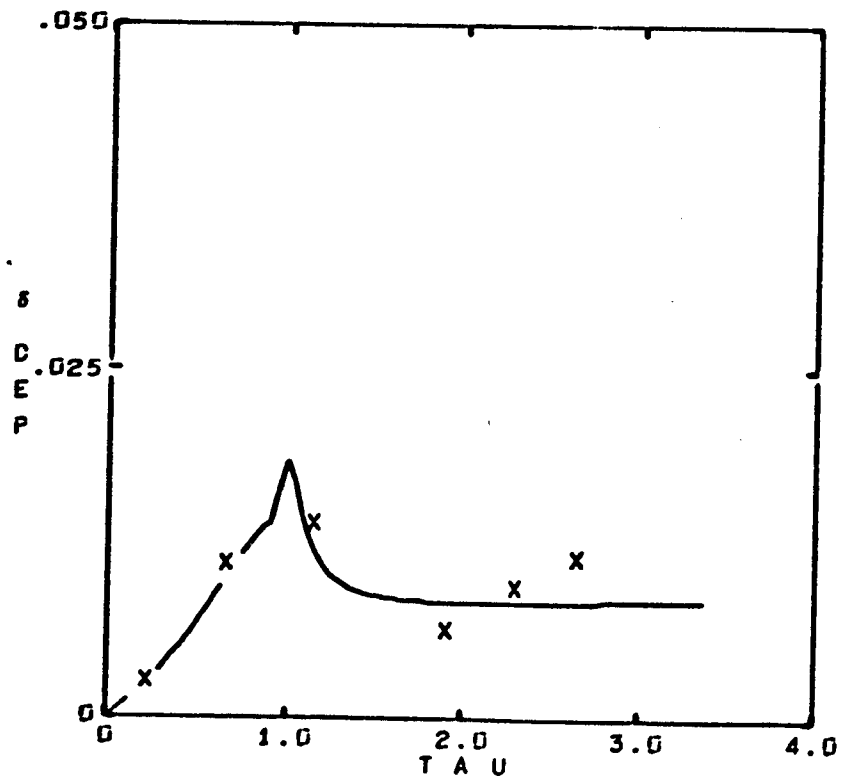
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0306	.0277	.0029
.50	.0597	.0527	.0070
.75	.0915	.0800	.0115
.93	.1128	.0981	.0147
1.0	.1070	.0887	.0183
1.5	.0637	.0549	.0088
2.0	.0534	.0451	.0083
2.5	.0474	.0391	.0083
3.0	.0430	.0346	.0084

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.928	393.87		393.87	1.002	.0096
9H	-0.161	392.77		392.77	1.000	-.0017
10H	0.217	381.98		381.98	0.972	.0273
11H	0.664	307.21	0.000 -.786	307.21	0.782	.0817
12H	1.155	207.65	0.344 +.367	211.37	0.538	.0837
13H	1.904	186.44	0.273 -.508	188.40	0.479	.0528
14H	2.296	183.58	0.320 -.333	186.38	0.474	.0506
15H	2.651	183.86	0.235 +.055	185.00	0.471	.0491
16H	3.462	183.72	0.595 +.425	188.00	0.478	.0313







PHOTOGRAPH
NOT
AVAILABLE

319 (1L7) PALLAS N

LAMBDA= 0.51 E BETA= 7.02 N XI=+.0088 ETA=+.1223 L+PL CODE = 10102 ALBEDO =.1101

13H FLAT MOON DATA
FM=.01516 FM'=.01891

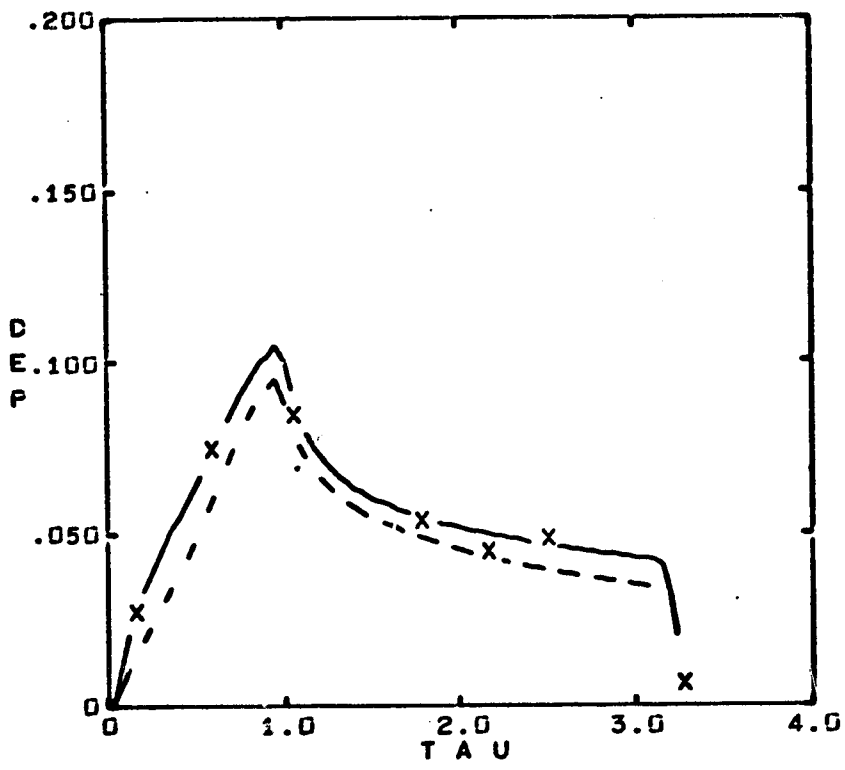
INITIAL TEMPERATURE 394.57
TAU-END OF TOTALITY 3.140

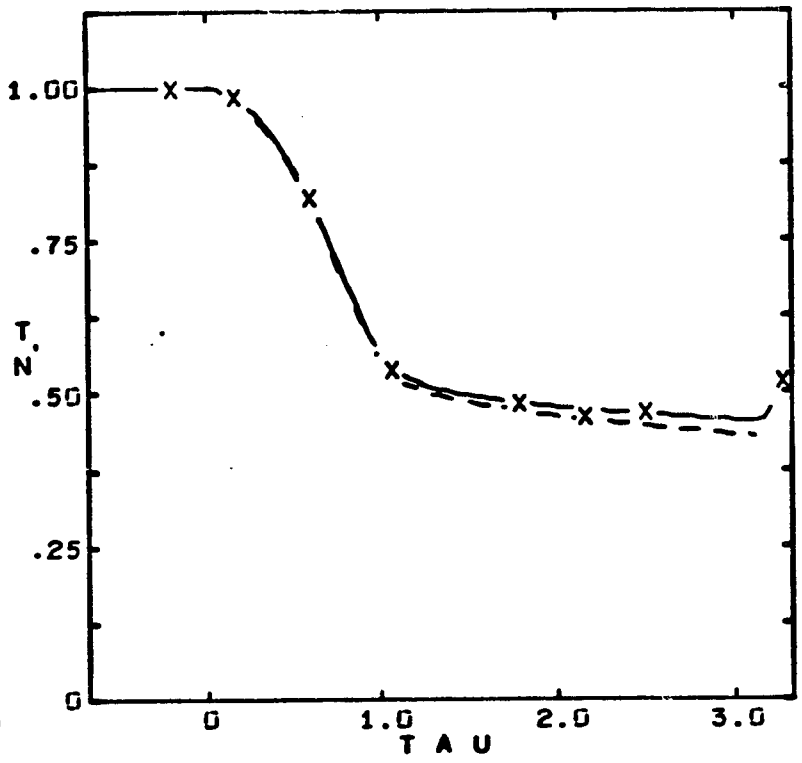
DIFFERENTIAL ENERGY DATA

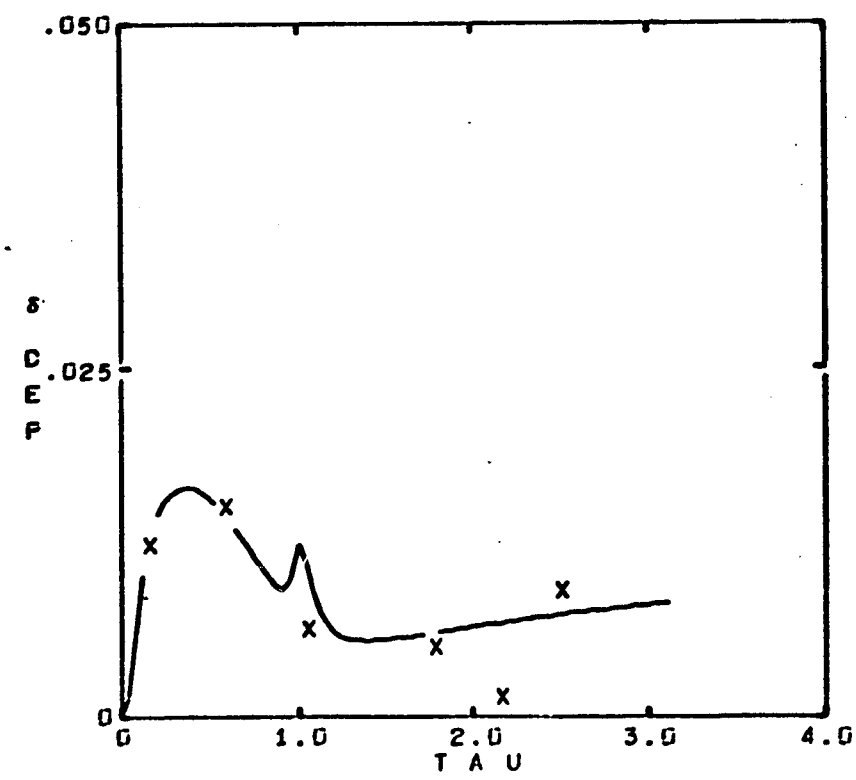
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0391	.0235	.0156
.50	.0652	.0496	.0156
.75	.0894	.0778	.0116
.93	.1050	.0967	.0083
1.0	.1001	.0877	.0124
1.5	.0606	.0550	.0056
2.0	.0519	.0455	.0064
2.5	.0468	.0395	.0073
3.0	.0431	.0351	.0080

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.937	396.33		396.33	1.004	.0180
9H	-0.203	394.19		394.19	0.999	-.0039
10H	0.162	388.71		388.71	0.985	.0274
11H	0.591	324.13	0.000 -.545	324.13	0.821	.0750
12H	1.062	211.99	0.199 -.319	212.63	0.539	.0843
13H	1.782	188.32	0.312 -.483	190.21	0.482	.0540
14H	2.160	181.51	0.000 +.912	181.51	0.460	.0448
15H	2.500	185.00	0.120 -.382	185.32	0.470	.0487
16H	3.275	205.03	0.000 +.511	205.03	0.520	.0062







PHOTOGRAPH
NOT
AVAILABLE

320 (3K5) PARRY F

LAMBDA=14.72 W BETA= 7.65 S XI=-.2518 ETA=-.1332 L+PL CODE = 32153 ALBEDO =.0790

13H FLAT MOON DATA
FM=.04170 FM'=.04170

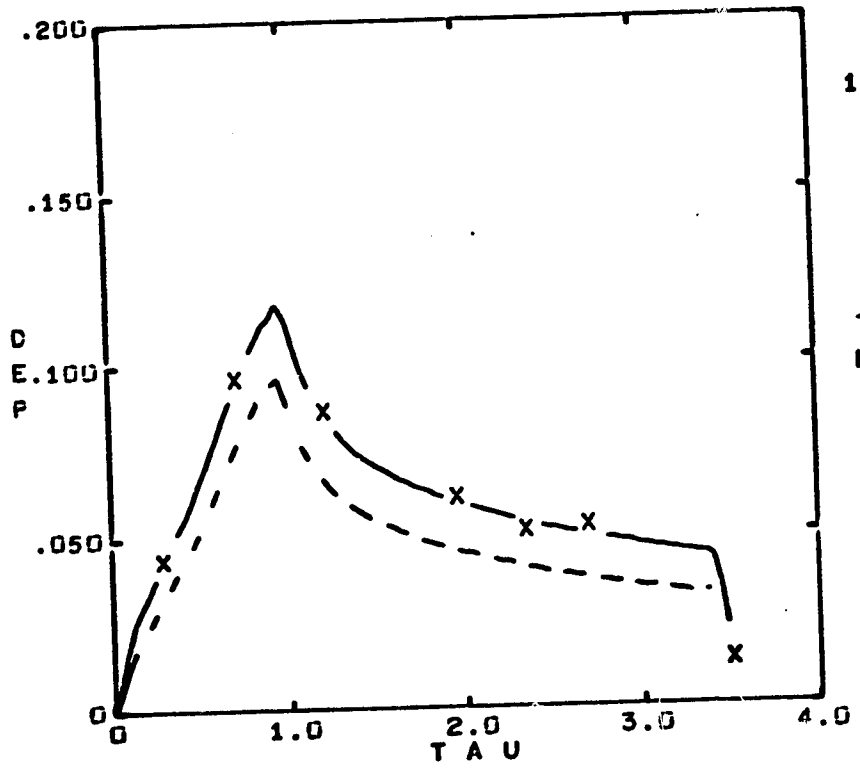
INITIAL TEMPERATURE 391.83
TAU-END OF TOTALITY 3.383

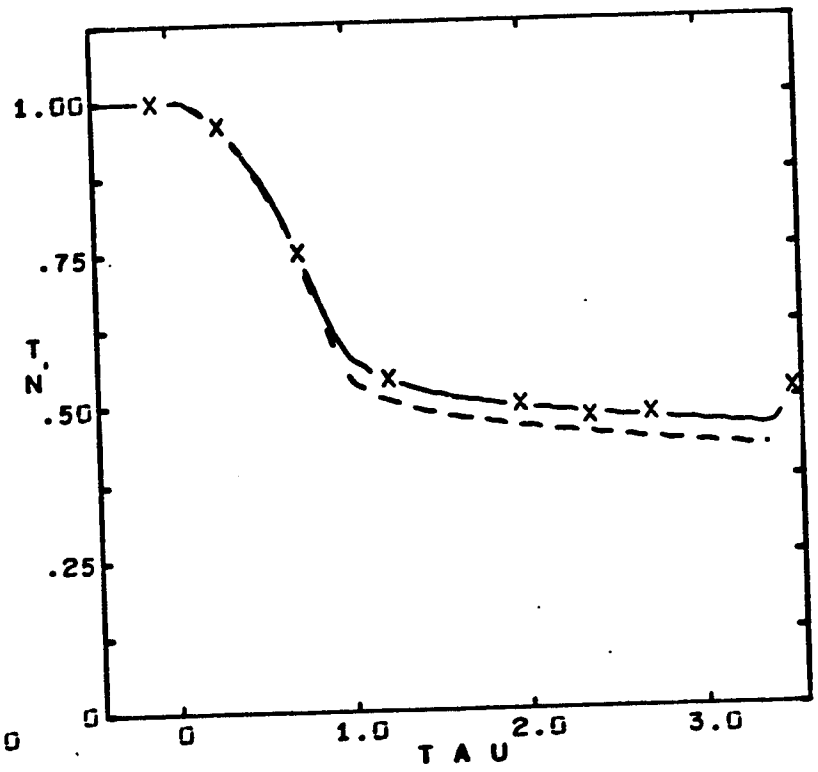
DIFFERENTIAL ENERGY DATA

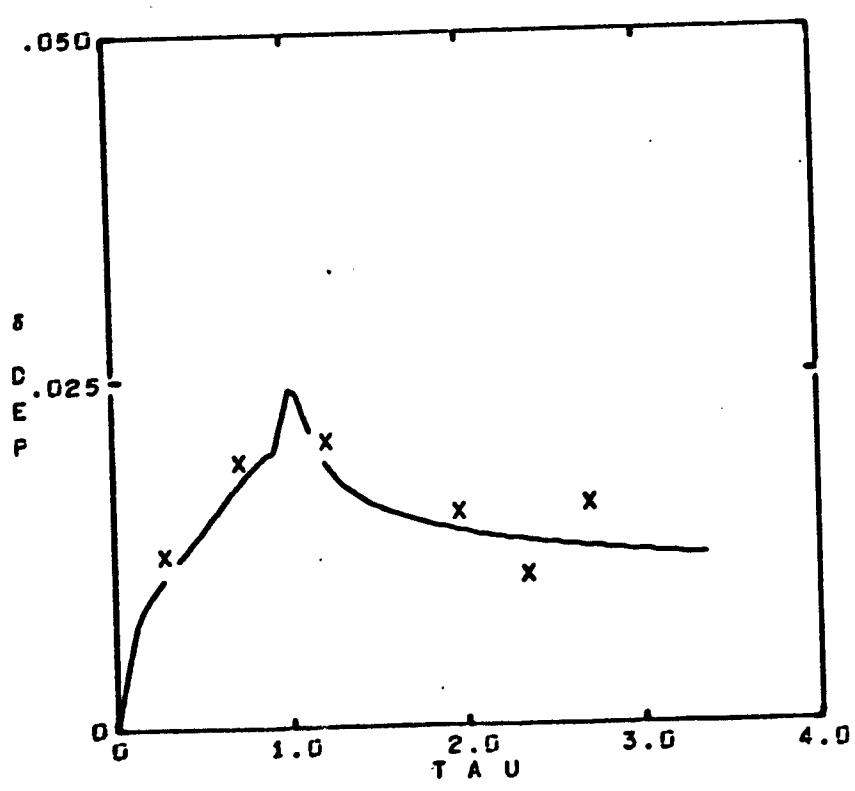
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0394	.0292	.0102
.50	.0679	.0537	.0142
.75	.0984	.0805	.0179
.93	.1185	.0982	.0203
1.0	.1130	.0887	.0243
1.5	.0707	.0549	.0158
2.0	.0590	.0451	.0139
2.5	.0521	.0391	.0130
3.0	.0471	.0347	.0124

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.870	393.18		393.18	1.003	.0139
9H	-0.104	391.66		391.66	1.000	-.0017
10H	0.273	376.18		376.18	0.960	.0436
11H	0.720	294.04	0.000 -.453	294.04	0.750	.0964
12H	1.209	211.15	0.249 -.334	212.72	0.543	.0869
13H	1.957	194.69	0.000 +.069	194.69	0.497	.0610
14H	2.348	185.08	0.388 -.022	186.57	0.476	.0514
15H	2.702	186.40	0.262 -.303	187.99	0.480	.0530
16H	3.505	202.44	0.000 +.442	202.44	0.517	.0127







PHOTOGRAPH
NOT
AVAILABLE

321 (4F1) PETAVIUS B

LAMBDA=57.10 E BETA=19.85 S XI=+.7897 ETA=-.3396 L+PL CODE = 47383 ALBEDO =.1441

13H FLAT MOON DATA
FM=.12429 FM'=.13912

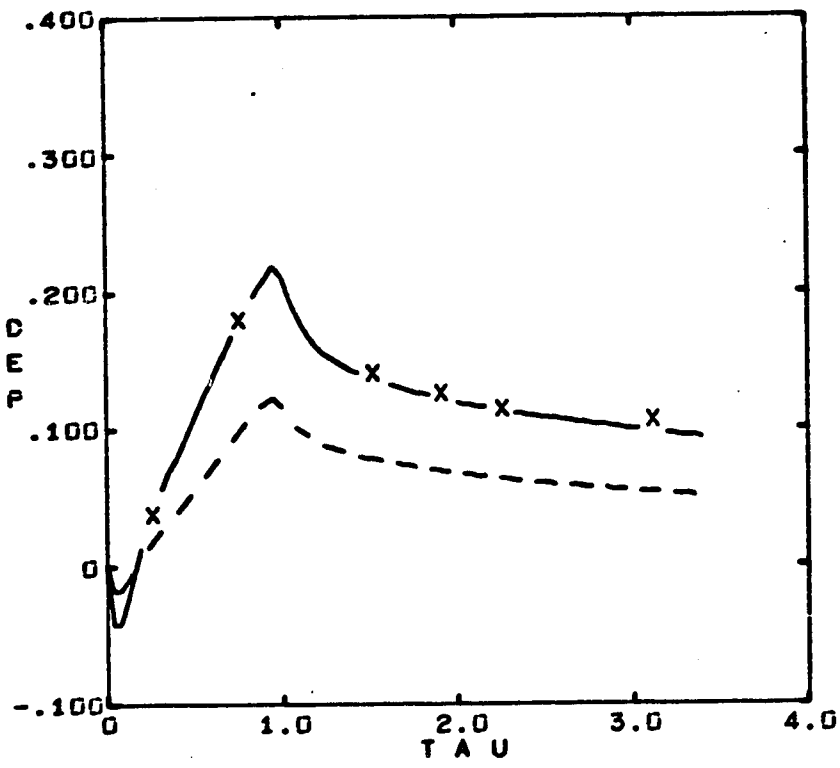
INITIAL TEMPERATURE 360.24
TAU-END OF TOTALITY 3.436

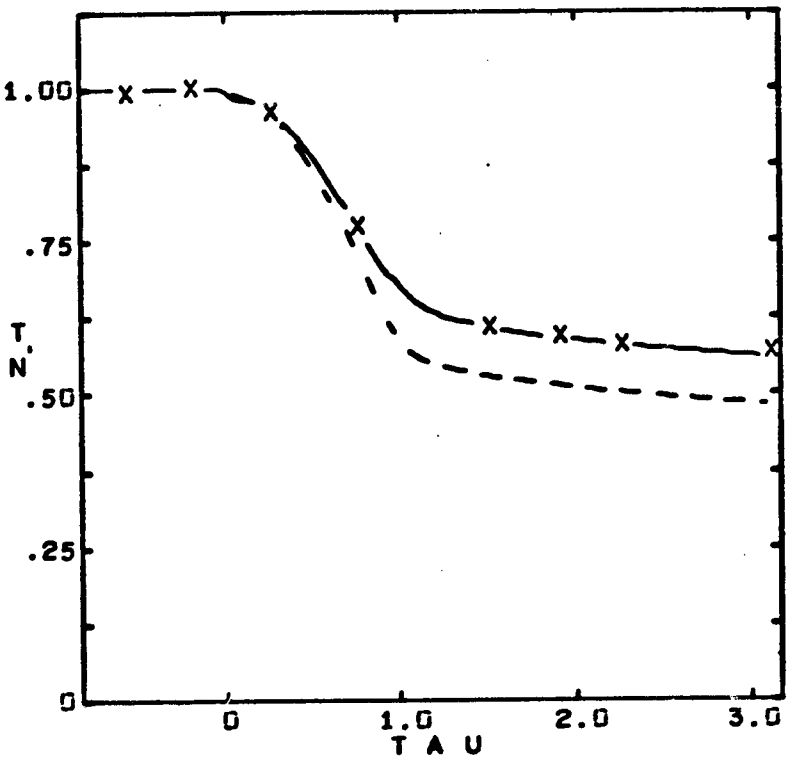
DIFFERENTIAL ENERGY DATA

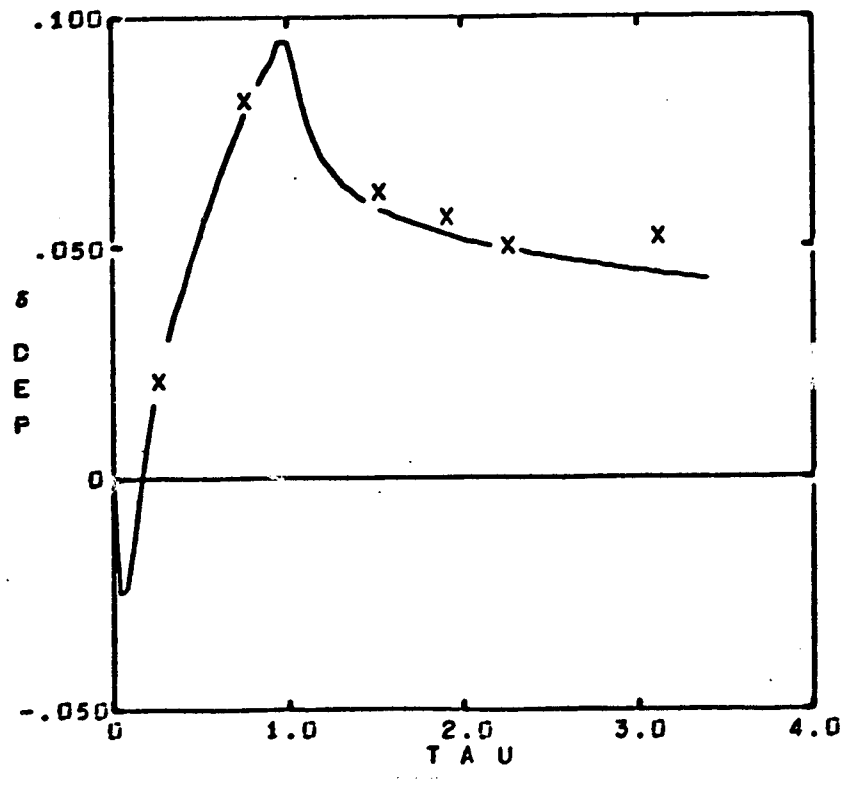
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0326	.0148	.0178
.50	.1096	.0565	.0531
.75	.1755	.0975	.0780
.93	.2176	.1250	.0926
1.0	.2106	.1158	.0948
1.5	.1375	.0789	.0586
2.0	.1197	.0681	.0516
2.5	.1086	.0609	.0477
3.0	.1001	.0553	.0448

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.337	358.85		358.85	0.996	-.0153
9H	-0.568	358.51		358.51	0.995	-.0191
10H	-0.187	361.00		361.00	1.002	.0085
11H	0.262	346.61		346.61	0.962	.0377
12H	0.756	276.42	0.230 +.324	279.09	0.775	.1803
13H	1.508	213.91	0.565 -.061	220.53	0.612	.1405
14H	1.904	213.50	0.160 +.965	214.75	0.596	.1263
15H	2.259	208.03	0.178 -.153	209.45	0.581	.1143
16H	3.118	204.27	0.095 -.048	205.73	0.571	.1064









RC LUNAR ORBITER PROJECT-N
FRAME NO. 053. 2 OF 3 HIGH

322 (2L3) PIAZZI SMYTH

LAMBDA= 3.23 W BETA=41.85 N XI=-.0420 ETA=+.6672 L+PL CODE = 20646 ALBEDO =.0729

13H FLAT MOON DATA
FM=.05657 FM'=.08889

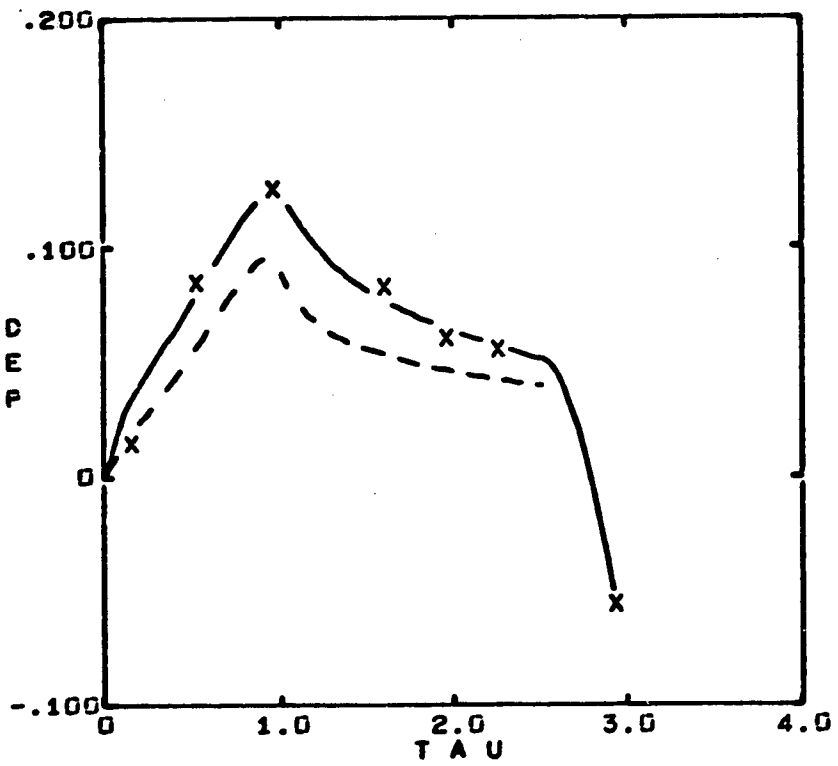
INITIAL TEMPERATURE 380.07
TAU-END OF TOTALITY 2.536

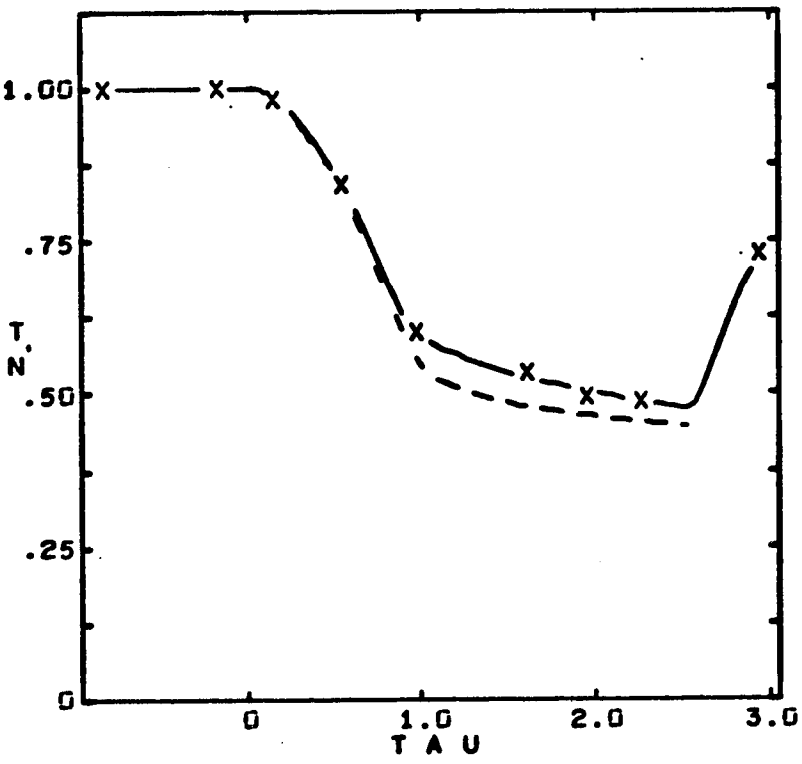
DIFFERENTIAL ENERGY DATA

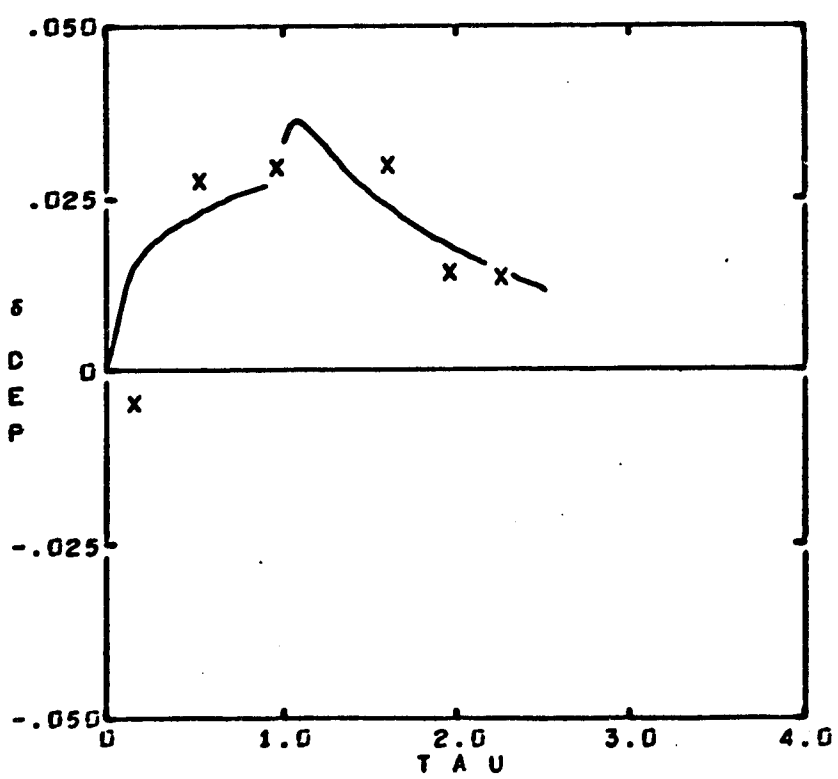
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0451	.0272	.0179
.50	.0752	.0528	.0224
.75	.1059	.0806	.0253
.93	.1261	.0991	.0270
1.0	.1227	.0895	.0332
1.5	.0815	.0555	.0260
2.0	.0631	.0456	.0175
2.5	.0514	.0395	.0119

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.828	379.93		379.93	1.000	-.0015
9H	-0.171	380.10		380.10	1.000	.0003
10H	0.156	372.91		372.91	0.981	.0140
11H	0.542	319.29	0.312 -.156	320.62	0.844	.0849
12H	0.966	224.27	0.252 -.870	228.84	0.602	.1257
13H	1.611	193.38	0.543 -.990	203.78	0.536	.0826
14H	1.952	180.48	0.592 +.229	188.49	0.496	.0605
15H	2.256	181.46	0.350 +.214	184.53	0.486	.0556
16H	2.935	273.65	0.661 +.680	277.45	0.730	-.0564







PHOTOGRAPH NOT AVAILABLE

323 (1L8) PICARD

LAMBDA=54.57 E BETA=14.55 N XI=+.7887 ETA=+.2513 L+PL CODE = 17285 ALBEDO =.0716

13H FLAT MOON DATA
FM=.03552 FM'=.04375

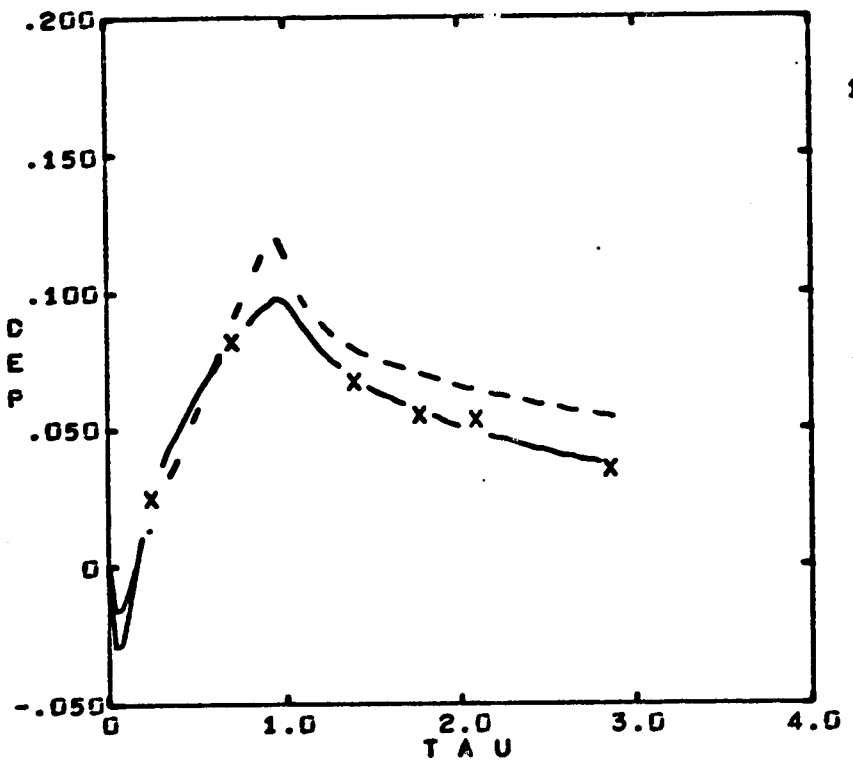
INITIAL TEMPERATURE 370.41
TAU-END OF TOTALITY 2.909

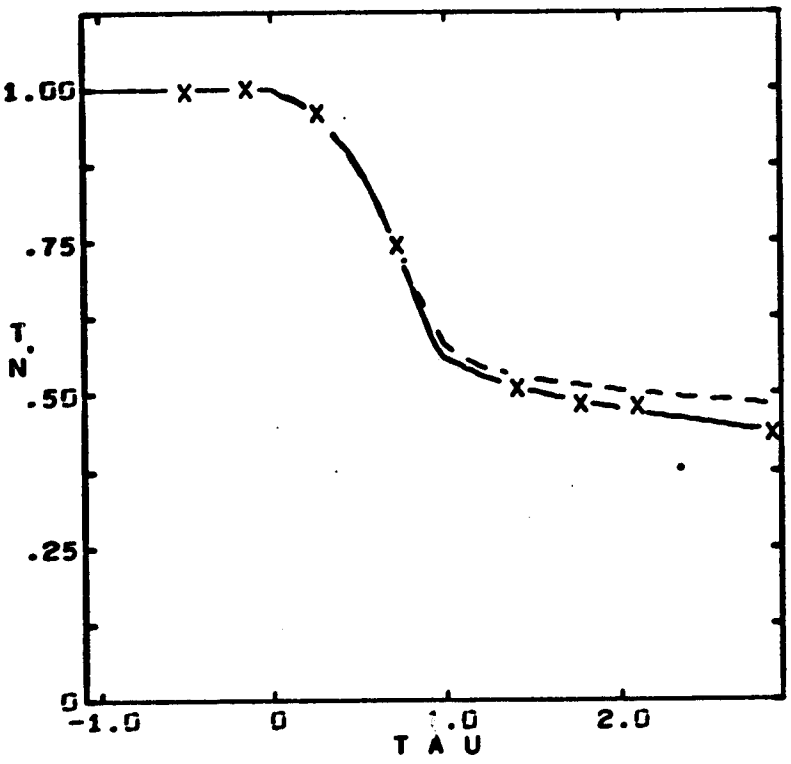
DIFFERENTIAL ENERGY DATA

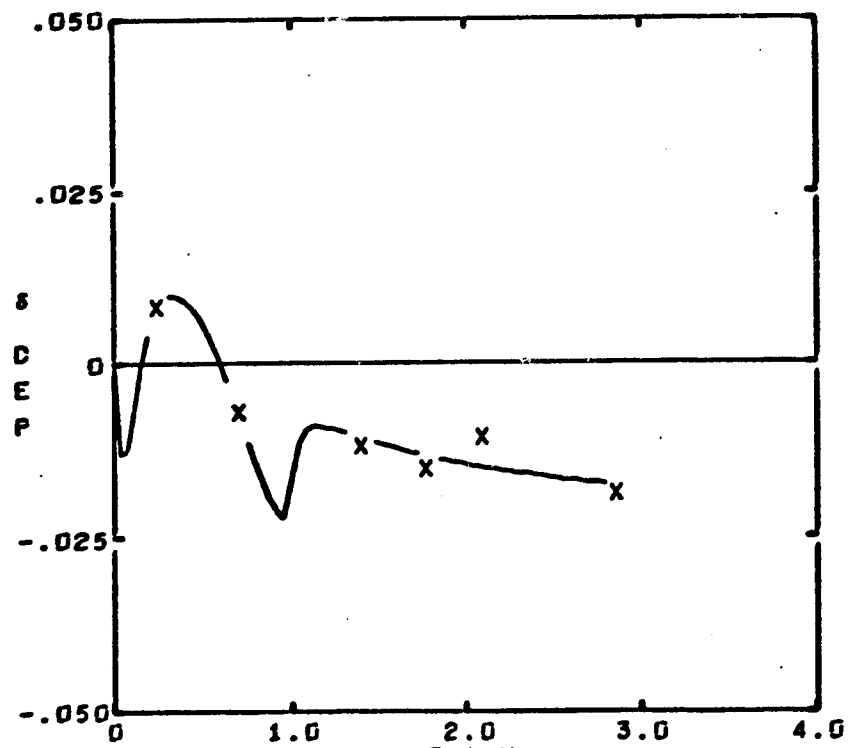
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0232	.0154	.0078
.50	.0614	.0554	.0060
.75	.0847	.0951	-.0104
.93	.0975	.1216	-.0241
1.0	.0964	.1124	-.0160
1.5	.0647	.0763	-.0116
2.0	.0511	.0656	-.0145
2.5	.0421	.0586	-.0165

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.214	370.93		370.93	1.001	.0056
9H	-0.510	369.18		369.18	0.997	-.0132
10H	-0.159	370.73		370.73	1.001	.0034
11H	0.254	354.88		354.88	0.958	.0245
12H	0.707	274.75	0.334 -.874	275.01	0.742	.0815
13H	1.398	185.25	0.483 +.933	188.86	0.510	.0676
14H	1.764	175.48	0.472 +.430	179.16	0.484	.0547
15H	2.090	175.10	0.505 +.738	178.19	0.481	.0536
16H	2.861	161.03	0.000 -.434	161.03	0.435	.0357







PHOTOGRAPH NOT AVAILABLE

324 (4F2) PICCOLOMINI C

LAMBDA=32.30 E BETA=26.92 S XI=+.4765 ETA=-.4528 L+PL CODE = 44475 ALBEDO =.1473

13H FLAT MOON DATA
FM=.03349 FM'=.03349

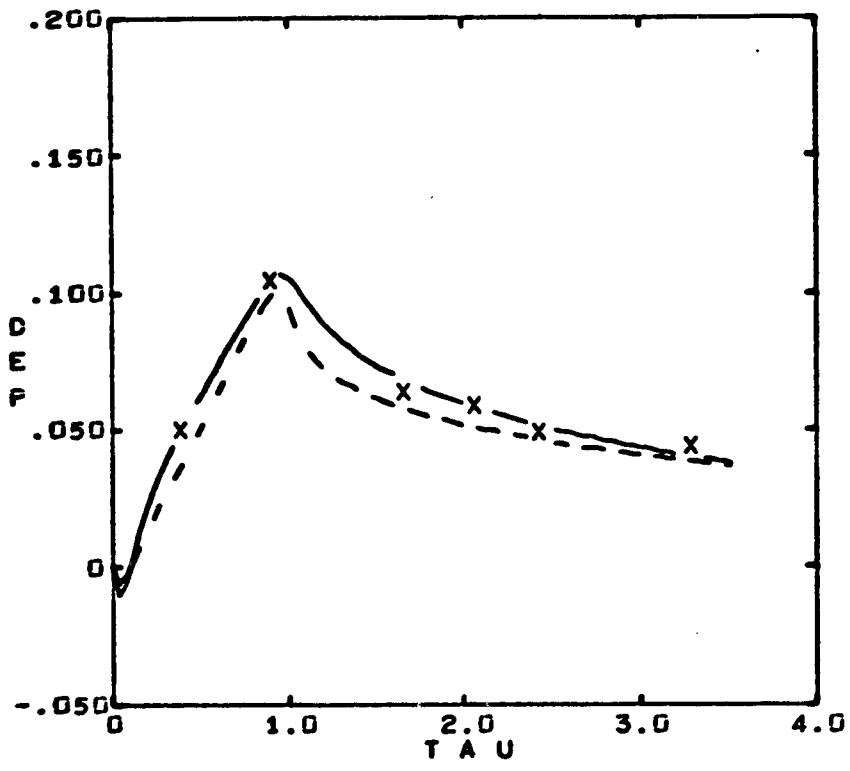
INITIAL TEMPERATURE 374.19
TAU-END OF TOTALITY 3.537

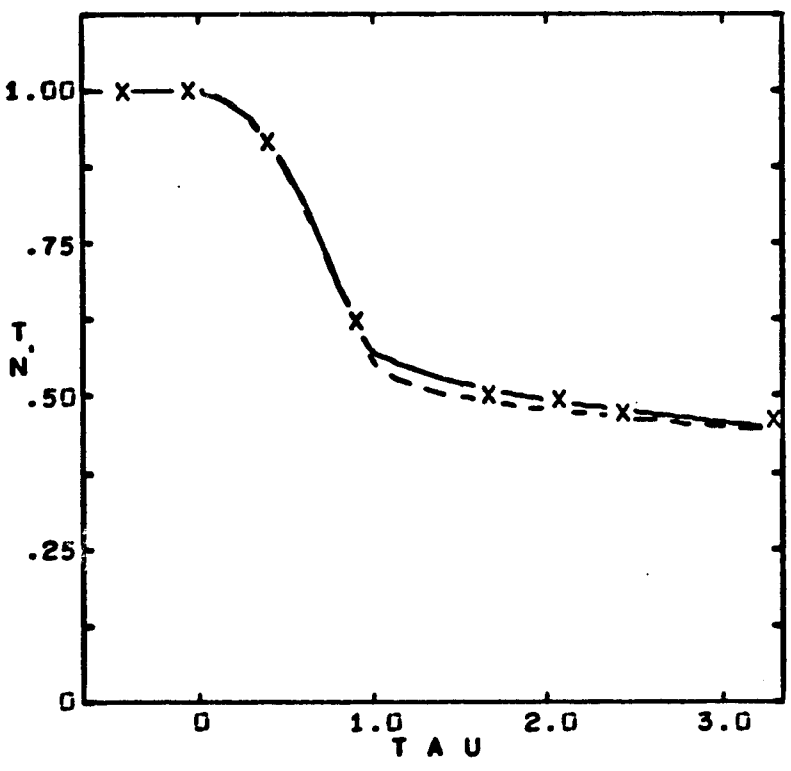
DIFFERENTIAL ENERGY DATA

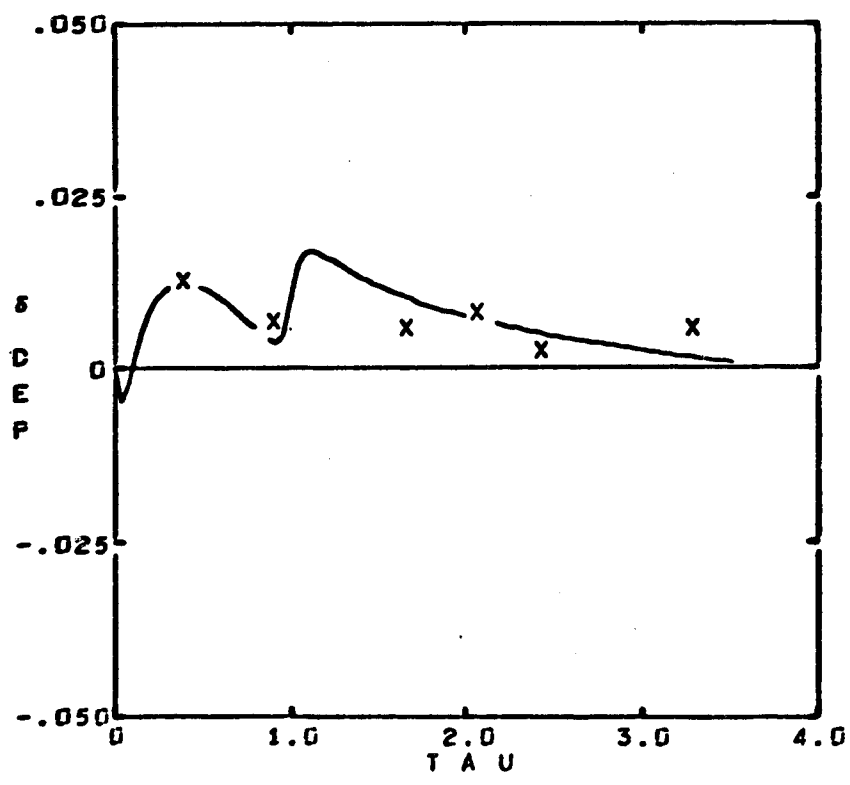
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0292	.0191	.0101
.50	.0617	.0499	.0118
.75	.0891	.0821	.0070
.93	.1063	.1037	.0026
1.0	.1055	.0946	.0109
1.5	.0737	.0617	.0120
2.0	.0596	.0520	.0076
2.5	.0505	.0458	.0047
3.0	.0436	.0410	.0026

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.230	375.92		375.92	1.005	.0186
9H	-0.447	373.89		373.89	0.999	-.0032
10H	-0.061	374.14		374.14	1.000	-.0005
11H	0.396	343.25		343.25	0.917	.0498
12H	0.896	233.45	0.000 -.802	233.45	0.624	.1050
13H	1.660	188.25	0.000 -.842	188.25	0.503	.0641
14H	2.062	181.11	0.392 -.629	184.75	0.494	.0594
15H	2.424	176.21	0.000 +.043	176.21	0.471	.0492
16H	3.286	166.84	0.399 +.530	172.08	0.460	.0447







PHOTOGRAPH NOT AVAILABLE

325 (4F3) PICCOLOMINI K

LAMBDA=29.76 E BETA=25.68 S XI=+.4473 ETA=-.4334 L+FL CODE = 44443 ALBEDO =.1330

13H FLAT MOON DATA
FM=.03424 FM'=.05147

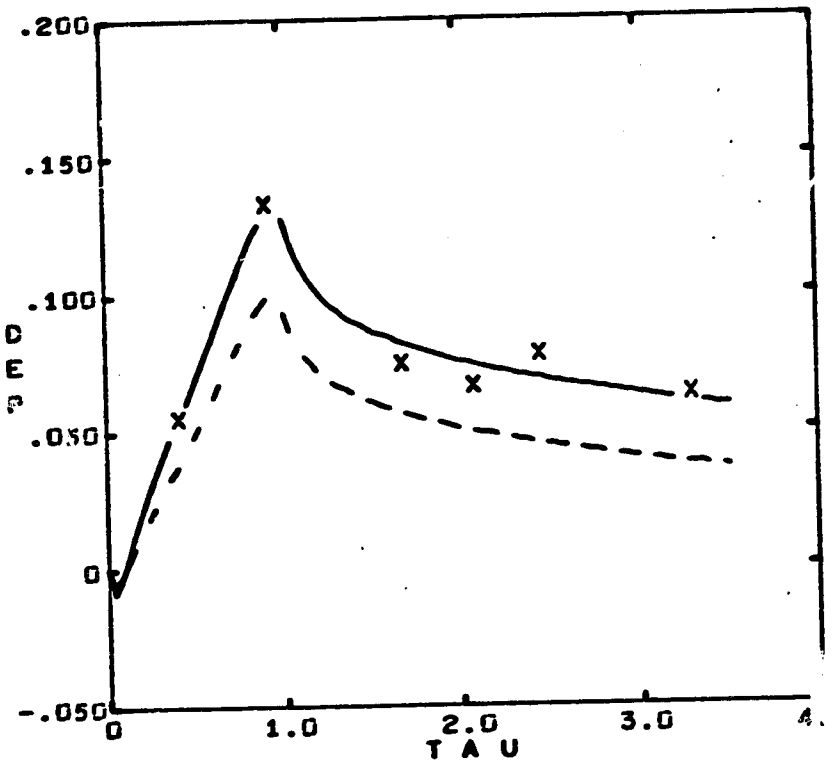
INITIAL TEMPERATURE 375.08
TAU-END OF TOTALITY 3.527

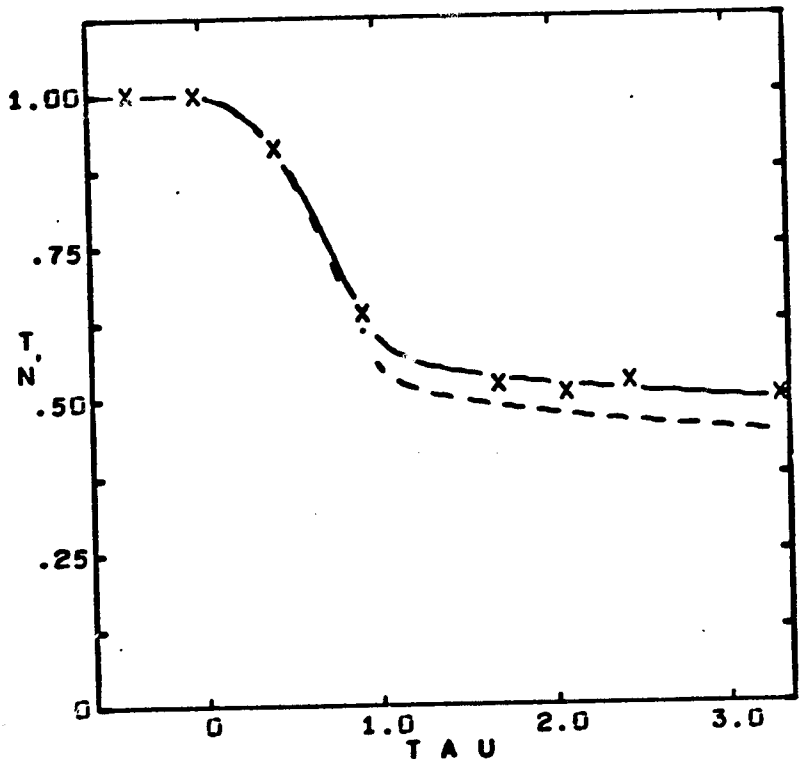
DIFFERENTIAL ENERGY DATA

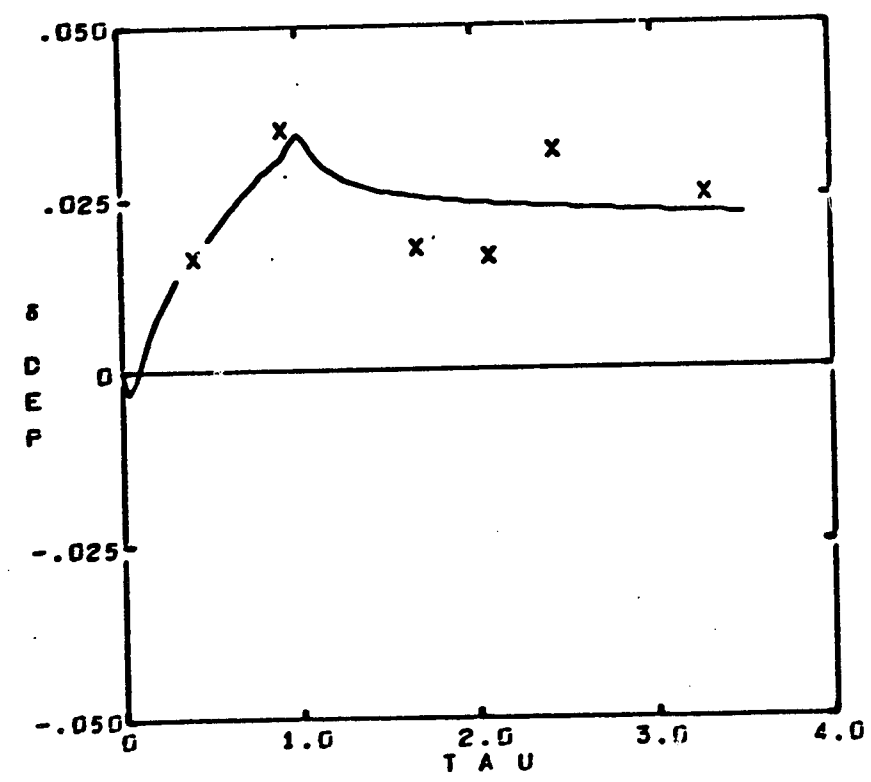
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0297	.0195	.0102
.50	.0696	.0498	.0198
.75	.1086	.0816	.0270
.93	.1344	.1029	.0315
1.0	.1282	.0938	.0344
1.5	.0868	.0609	.0259
2.0	.0756	.0512	.0244
2.5	.0685	.0450	.0235
3.0	.0632	.0403	.0229

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.214	377.62		377.62	1.007	.0274
9H	-0.433	376.51		376.51	1.004	.0153
10H	-0.046	374.83		374.83	0.999	-.0027
11H	0.409	342.56		342.56	0.913	.0549
12H	0.909	237.48	0.357 +.664	240.83	0.642	.1331
13H	1.672	189.59	0.500 -.016	196.09	0.523	.0747
14H	2.072	188.61	0.227 -.414	190.66	0.508	.0668
15H	2.434	196.76	0.088 +.709	197.95	0.528	.0776
16H	3.294	177.73	0.487 +.904	188.12	0.502	.0633







PHOTOGRAPH NOT AVAILABLE

326 (4F4) PICCOLOMINI L

LAMBDA=33.79 E BETA=26.11 S XI=+.4994 ETA=-.4401 L+PL CODE = 44494 ALBEDO =.1447

13H FLAT MOON DATA
FM=.04117 FM'=.04897

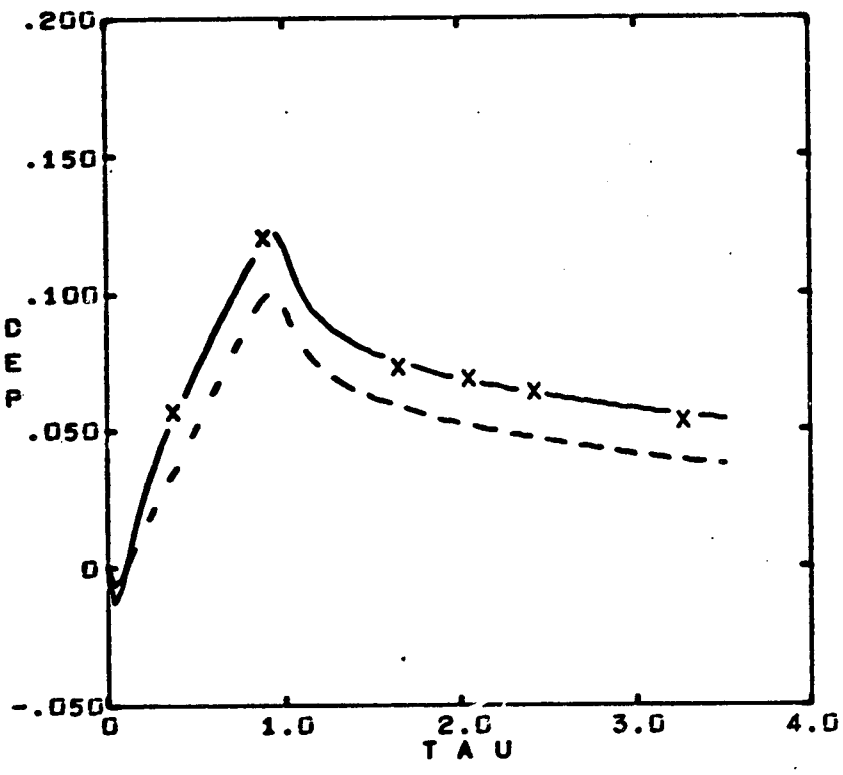
INITIAL TEMPERATURE 373.65
TAU-END OF TOTALITY 3.527

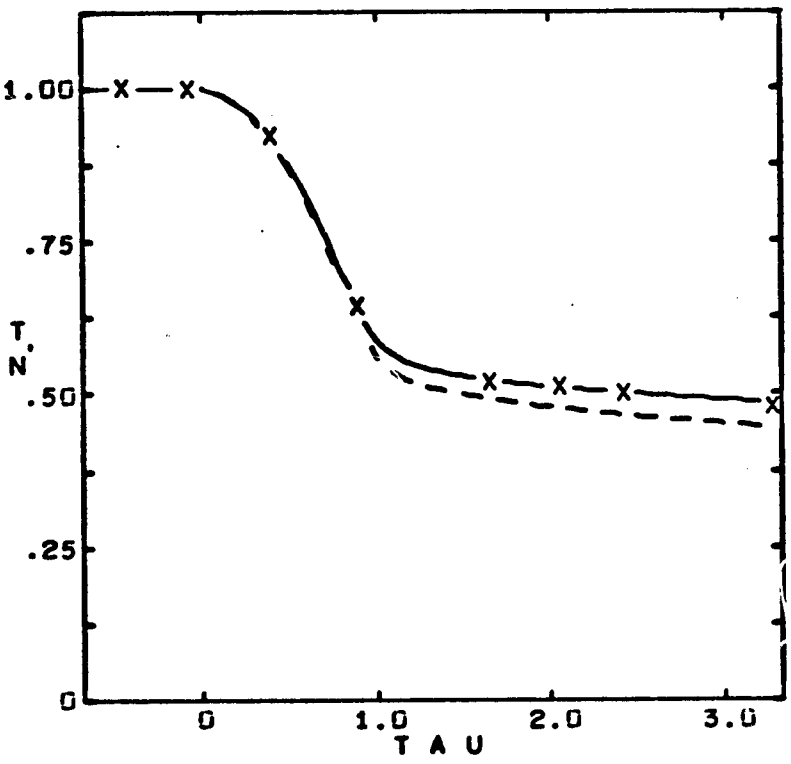
DIFFERENTIAL ENERGY DATA

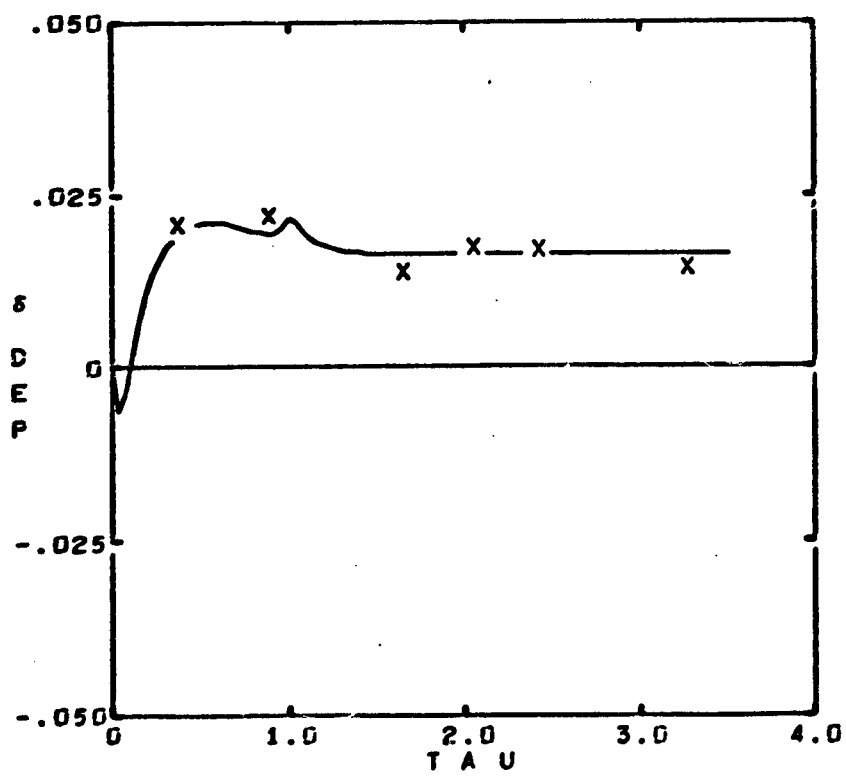
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0329	.0189	.0140
.50	.0708	.0500	.0208
.75	.1027	.0824	.0203
.93	.1227	.1042	.0185
1.0	.1169	.0951	.0218
1.5	.0786	.0622	.0164
2.0	.0687	.0525	.0162
2.5	.0626	.0462	.0164
3.0	.0579	.0414	.0165

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.237	376.13		376.13	1.007	.0267
9H	-0.456	374.44		374.44	1.002	.0085
10H	-0.071	373.39		373.39	0.999	-.0028
11H	0.386	345.08		345.08	0.924	.0565
12H	0.886	239.55	0.251 -.792	241.06	0.645	.1198
13H	1.649	191.07	0.314 -.129	193.96	0.519	.0726
14H	2.049	190.31	0.155 -.438	191.64	0.513	.0692
15H	2.411	184.59	0.265 -.895	188.11	0.503	.0642
16H	3.272	172.30	0.409 +.415	179.82	0.481	.0536







PHOTOGRAPH NOT AVAILABLE

327 (4F5) PICCOLOMINI M

LAMBDA=31.89 E BETA=27.89 S XI=+.4670 ETA=-.4677 L+FL CODE = 44466 ALBEDO =.1430

13H FLAT MOON DATA
FM=.01892 FM'=.01892

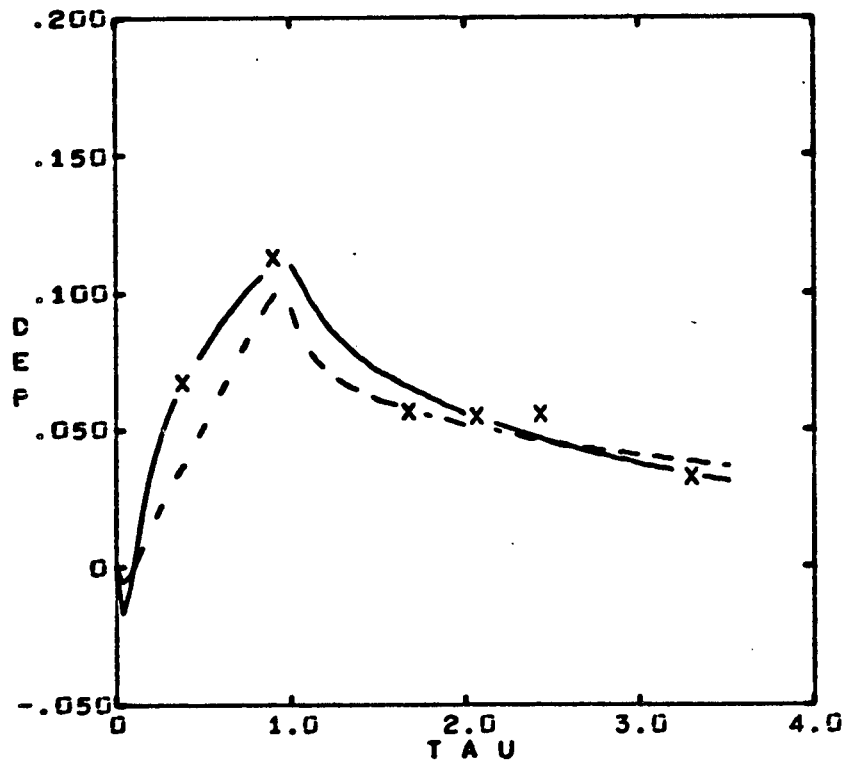
INITIAL TEMPERATURE 374.42
TAU-END OF TOTALITY 3.546

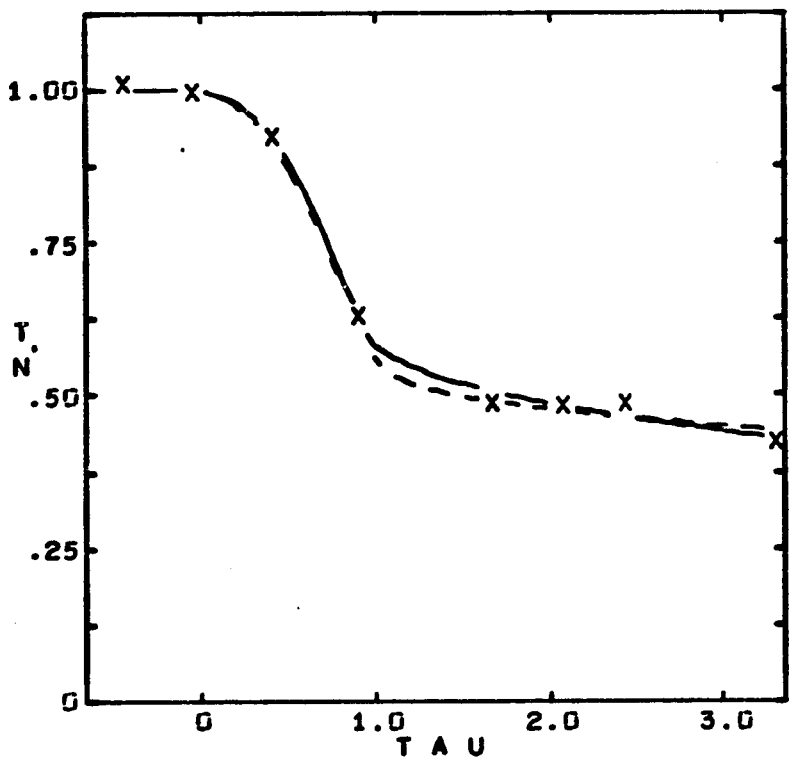
DIFFERENTIAL ENERGY DATA

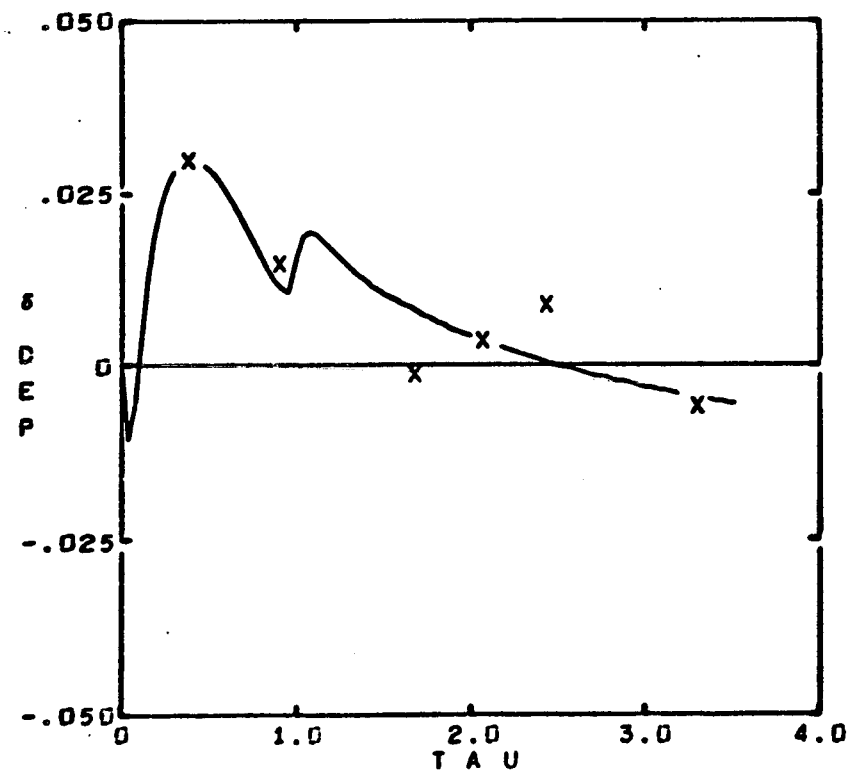
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0433	.0192	.0241
.50	.0785	.0499	.0286
.75	.1003	.0820	.0183
.93	.1122	.1036	.0086
1.0	.1103	.0945	.0158
1.5	.0722	.0616	.0106
2.0	.0561	.0519	.0042
2.5	.0457	.0456	.0001
3.0	.0379	.0409	-.0030

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.229	378.56		378.56	1.011	.0451
9H	-0.445	377.98		377.98	1.010	.0386
10H	-0.059	373.75		373.75	0.998	-.0071
11H	0.399	345.04		345.04	0.922	.0671
12H	0.901	233.17	0.467 +.897	235.22	0.628	.1130
13H	1.665	182.46	0.000 -.961	182.46	0.487	.0564
14H	2.067	181.09	0.000 -.928	181.09	0.484	.0547
15H	2.430	180.53	0.183 +.672	181.68	0.485	.0554
16H	3.293	159.46	0.000 +.851	159.46	0.426	.0329







PHOTOGRAPH NOT AVAILABLE

328 (2L4) PICO B

LAMBDA=15.34 W BETA=46.44 N XI=-.1823 ETA=+.7246 L+PL CODE = 21782 ALBEDO =.0694

13H FLAT MOON DATA
FM=.08605 FM'=.10356

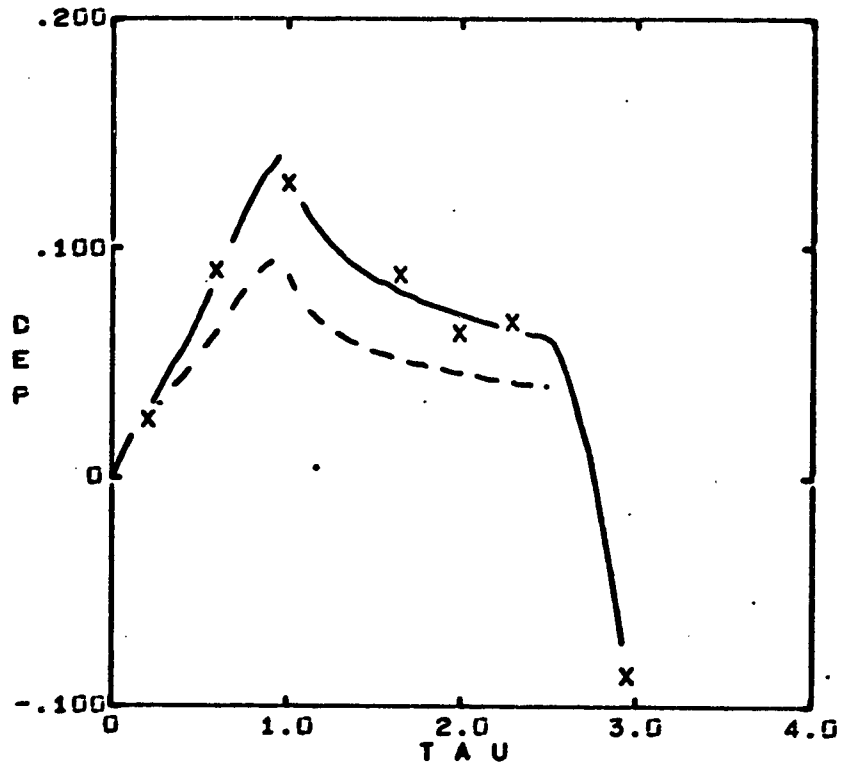
INITIAL TEMPERATURE 374.73
TAU-END OF TOTALITY 2.484

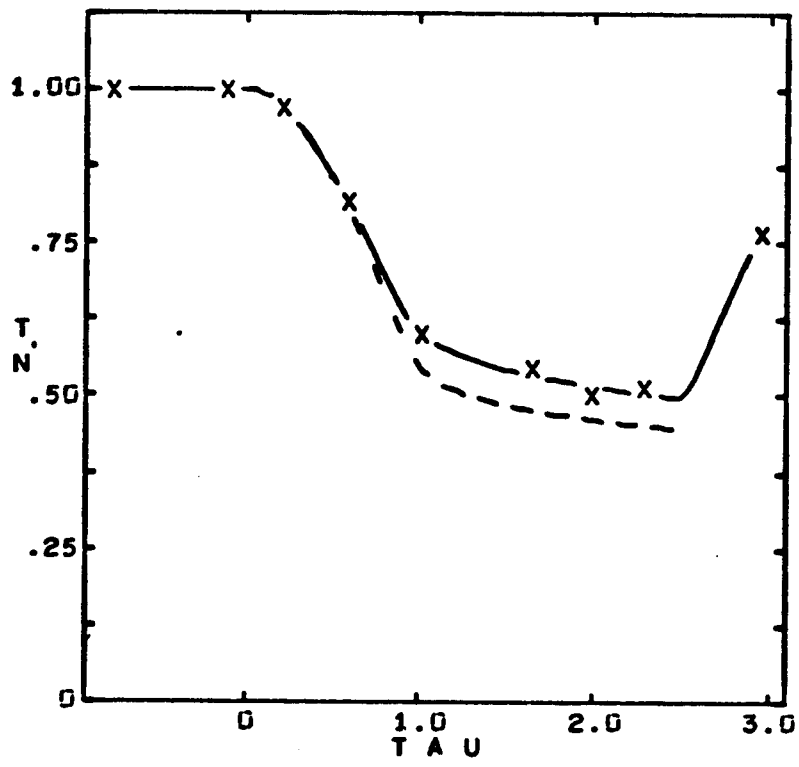
DIFFERENTIAL ENERGY DATA

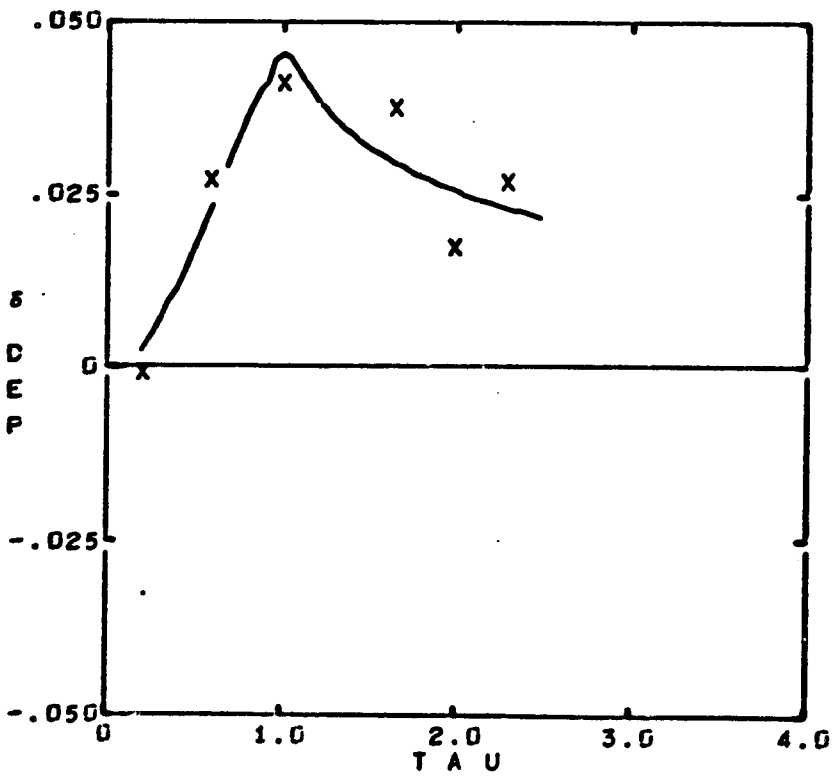
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0334	.0293	.0041
.50	.0713	.0538	.0175
.75	.1138	.0806	.0332
.93	.1421	.0983	.0438
1.0	.1341	.0888	.0453
1.5	.0866	.0549	.0317
2.0	.0706	.0451	.0255
2.5	.0606	.0391	.0215

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.769	374.41		374.41	0.999	-.0035
9H	-0.119	374.78		374.78	1.000	.0005
10H	0.206	363.62		363.62	0.970	.0246
11H	0.588	303.97	0.676 -.224	306.27	0.817	.0903
12H	1.006	222.58	0.214 -.542	224.54	0.599	.1289
13H	1.644	198.31	0.308 +.685	204.60	0.546	.0889
14H	1.982	183.23	0.304 +.651	187.70	0.501	.0629
15H	2.283	188.45	0.149 +.947	191.65	0.511	.0684
16H	2.948	286.26	0.000 +.746	286.26	0.764	-.0864







PHOTOGRAPH NOT AVAILABLE

329 (2L5) PICO C

LAMBDA= 6.62 W BETA=47.16 N XI=-.0784 ETA=+.7332 L+FL CODE = 20773 ALBEDO =.0708

13H FLAT MOON DATA
FM=.02888 FM'=.03831

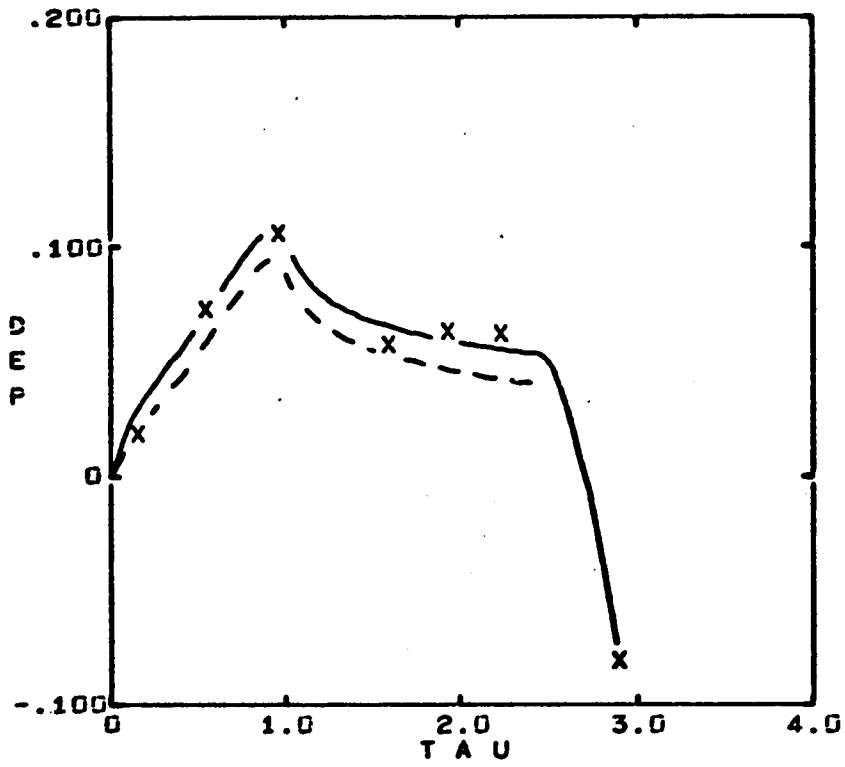
INITIAL TEMPERATURE 374.29
TAU-END OF TOTALITY 2.454

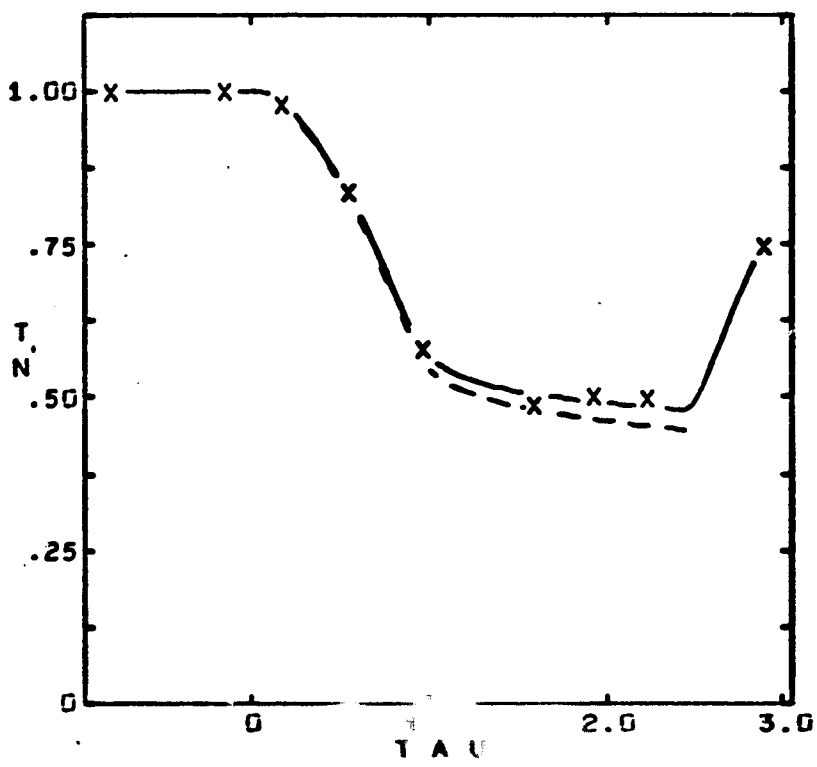
DIFFERENTIAL ENERGY DATA

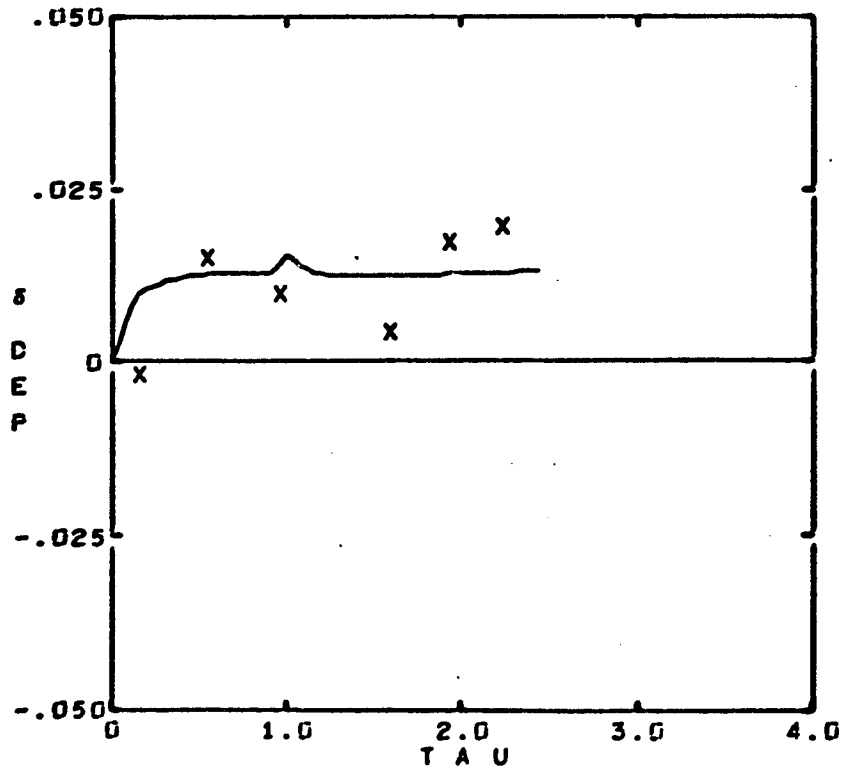
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0387	.0276	.0111
.50	.0653	.0527	.0126
.75	.0930	.0801	.0129
.93	.1112	.0983	.0129
1.0	.1043	.0888	.0155
1.5	.0674	.0550	.0124
2.0	.0580	.0452	.0128
2.5	.0523	.0391	.0132

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.804	375.03		375.03	1.002	.0079
9H	-0.157	374.15		374.15	1.000	-.0015
10H	0.164	366.72		366.72	0.980	.0178
11H	0.543	312.19	0.287 -.126	312.67	0.835	.0726
12H	0.961	215.02	0.265 -.952	217.11	0.580	.1062
13H	1.594	179.06	0.489 -.938	182.91	0.489	.0570
14H	1.929	180.70	0.465 +.080	187.95	0.502	.0636
15H	2.229	182.76	0.328 +.114	186.60	0.499	.0618
16H	2.894	279.65	0.000 +.040	279.65	0.747	-.0807







PHOTOGRAPH NOT AVAILABLE

330 (2L6) PICO E

LAMBDA=10.28 W BETA=42.95 N XI=-.1306 ETA=+.6814 L+PL CODE = 21638 ALBEDO =.0692

13H FLAT MOON DATA
FM=.06573 FM'=.08026

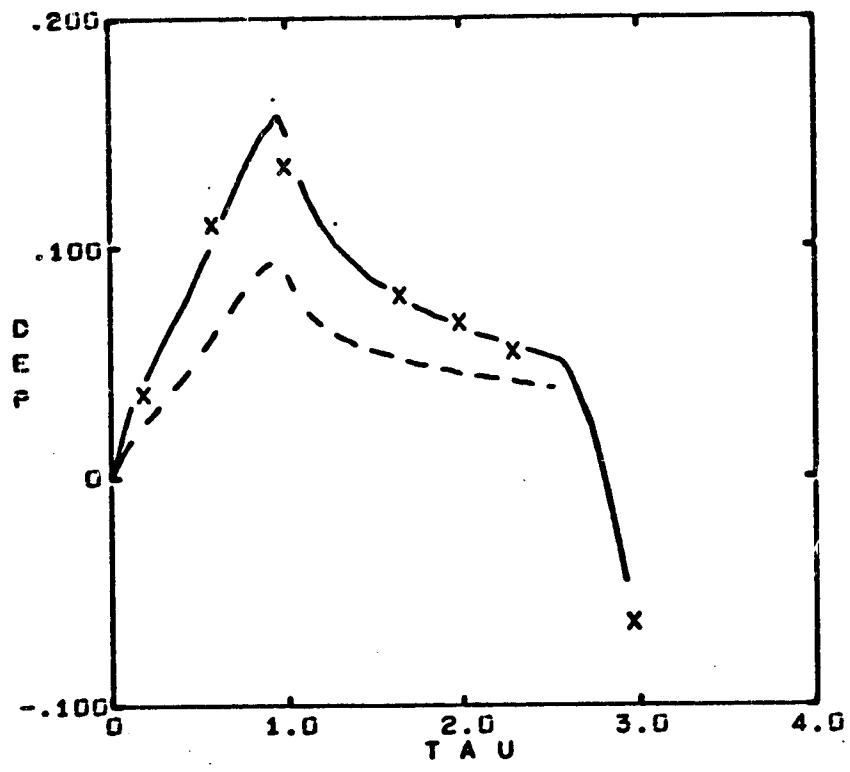
INITIAL TEMPERATURE 377.29
TAU-END OF TOTALITY 2.533

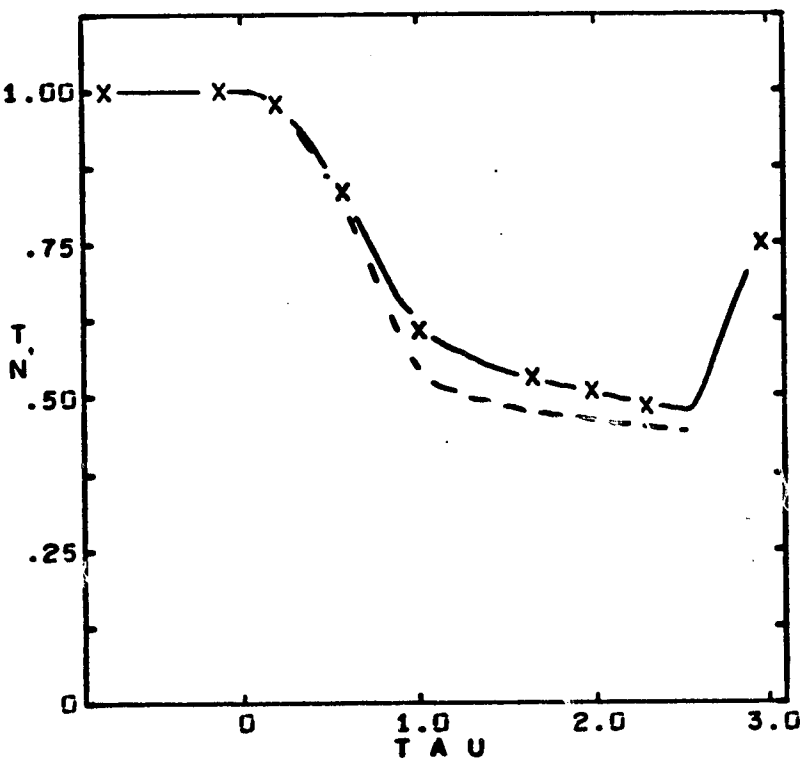
DIFFERENTIAL ENERGY DATA

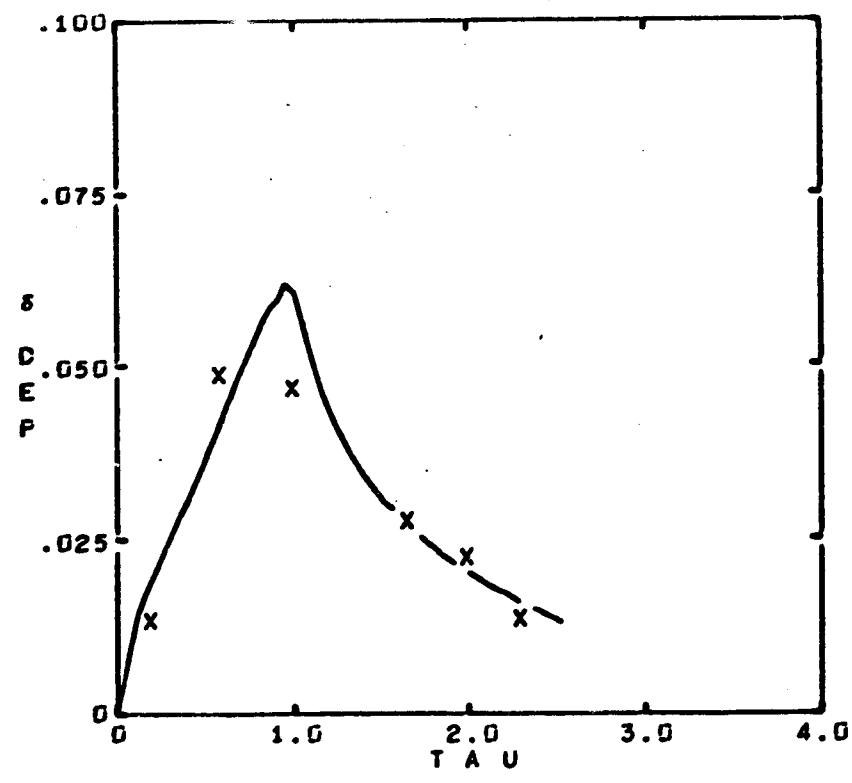
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0503	.0281	.0222
.50	.0896	.0529	.0367
.75	.1318	.0798	.0520
.93	.1597	.0977	.0620
1.0	.1487	.0883	.0604
1.5	.0856	.0546	.0310
2.0	.0649	.0448	.0201
2.5	.0522	.0388	.0134

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.794	377.82		377.82	1.001	.0057
9H	-0.137	377.19		377.19	1.000	-.0010
10H	0.189	369.13		369.13	0.978	.0359
11H	0.575	313.08	0.271 +.109	314.98	0.835	.1097
12H	0.999	218.13	0.439 -.710	228.85	0.607	.1354
13H	1.643	194.46	0.355 -.982	199.81	0.530	.0787
14H	1.984	184.91	0.491 +.176	192.26	0.510	.0674
15H	2.288	180.62	0.321 -.051	182.49	0.484	.0547
16H	2.963	282.39	0.411 +.128	283.54	0.752	-.0636







PHOTOGRAPH NOT AVAILABLE

331 (3K6) PITATUS J

LAMBDA=13.51 W BETA=26.48 S XI=-.2091 ETA=-.4459 L+PL CODE = 32404 ALBEDO =.0636

13H FLAT MOON DATA
FM=.03304 FM'=.03605

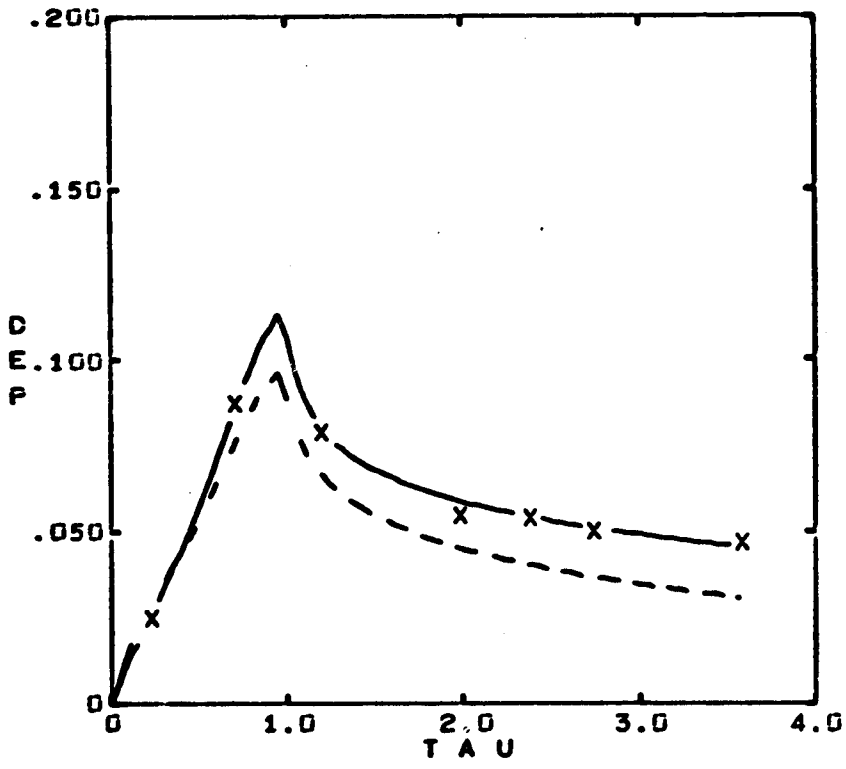
INITIAL TEMPERATURE 389.04
TAU-END OF TOTALITY 3.584

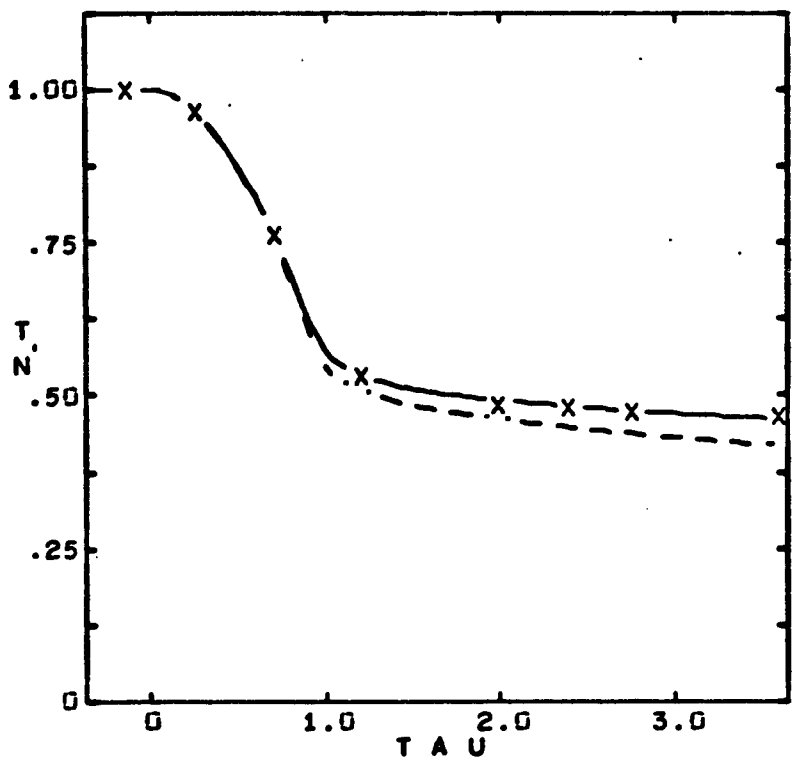
DIFFERENTIAL ENERGY DATA

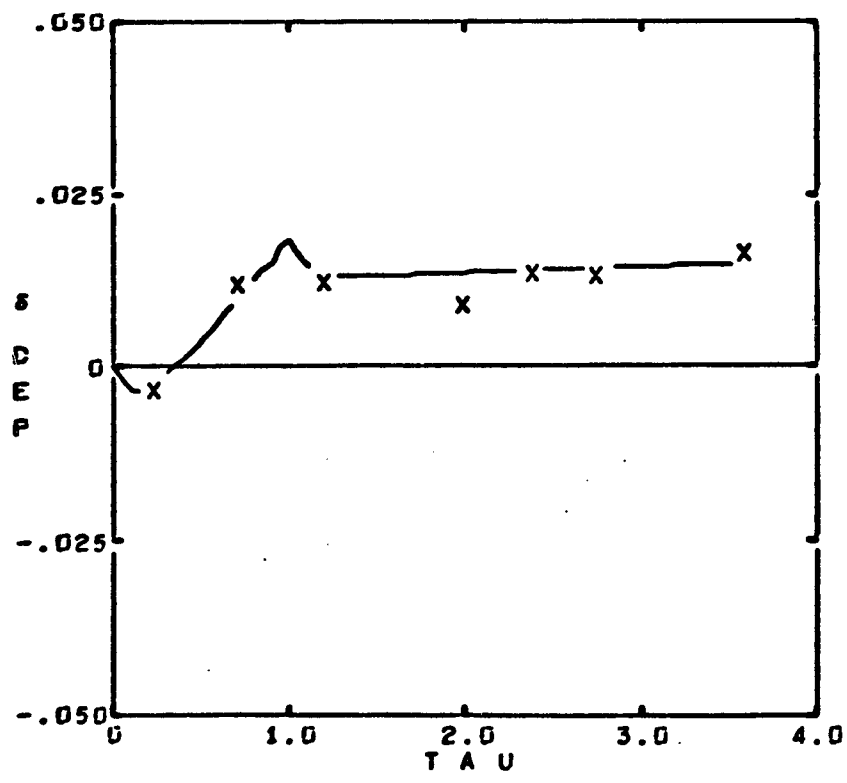
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0266	.0289	-.0023
.50	.0572	.0535	.0037
.75	.0915	.0803	.0112
.93	.1144	.0980	.0164
1.0	.1068	.0886	.0182
1.5	.0680	.0548	.0132
2.0	.0587	.0450	.0137
2.5	.0531	.0390	.0141
3.0	.0491	.0346	.0145

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.936	388.74			388.74	0.999	-.0031
9H	-0.146	389.09			389.09	1.000	.0005
10H	0.242	375.42			375.42	0.965	.0246
11H	0.703	295.86	0.000	-.773	295.86	0.760	.0873
12H	1.206	204.10	0.326	+.003	206.04	0.530	.0787
13H	1.977	187.20	0.270	-.113	187.92	0.483	.0544
14H	2.379	185.73	0.225	+.578	187.25	0.481	.0537
15H	2.744	179.27	0.558	+.915	184.00	0.473	.0500
16H	3.584	170.56	1.026	-.087	181.18	0.466	.0470







PHOTOGRAPH NOT AVAILABLE

332 (2L7) PITON B

LAMBDA= 0.15 W BETA=39.29 N XI=-.0020 ETA=+.6332 L+PL CODE = 20603 ALBEDO =.0781

13H FLAT MOON DATA
FM=.07145 FM'=.07595

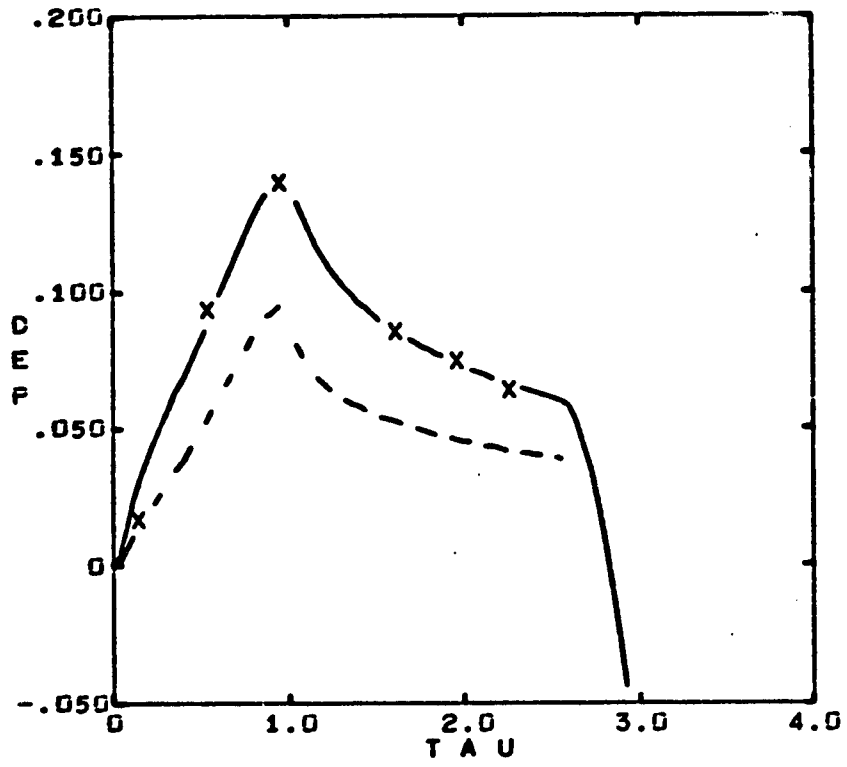
INITIAL TEMPERATURE 377.10
TAU-END OF TOTALITY 2.574

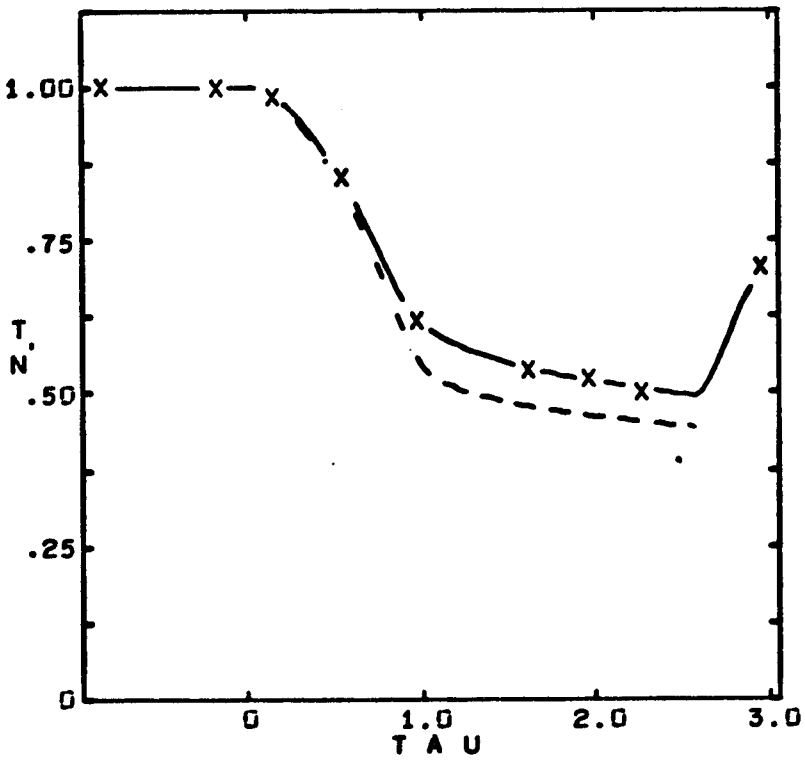
DIFFERENTIAL ENERGY DATA

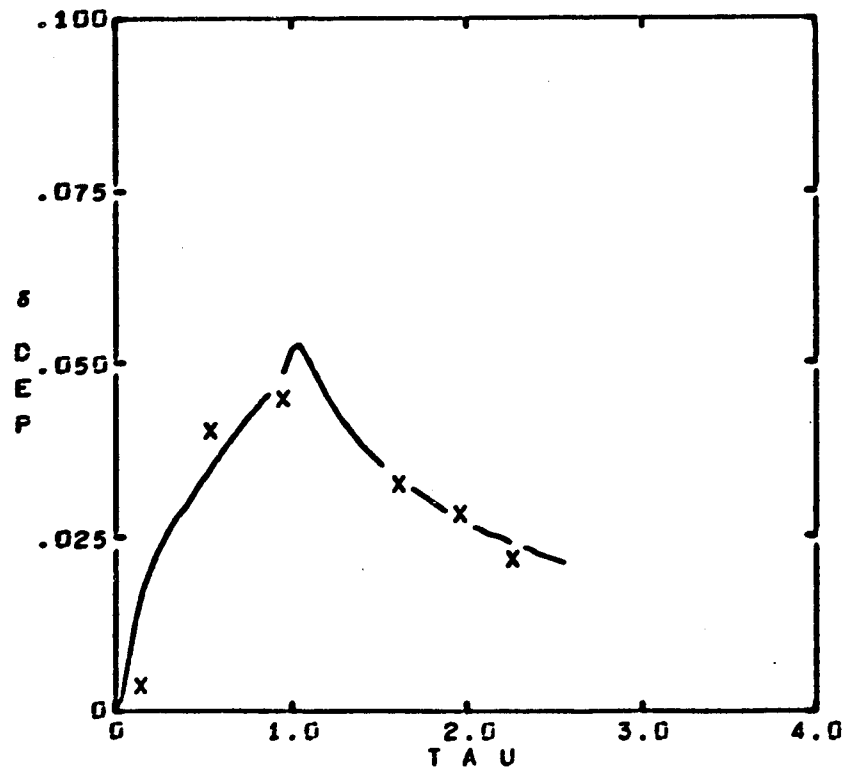
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0465	.0237	.0228
.50	.0832	.0497	.0335
.75	.1197	.0778	.0419
.93	.1436	.0966	.0470
1.0	.1396	.0876	.0520
1.5	.0905	.0549	.0356
2.0	.0724	.0454	.0270
2.5	.0611	.0394	.0217

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.850	378.55		378.55	1.004	.0155
9H	-0.186	376.78		376.78	0.999	-.0034
10H	0.143	371.47		371.47	0.985	.0170
11H	0.532	321.32	0.232 +.074	321.89	0.854	.0935
12H	0.959	226.73	0.397 -.616	233.72	0.620	.1397
13H	1.609	200.95	0.196 +.798	203.61	0.540	.0850
14H	1.952	189.35	0.522 +.171	196.86	0.522	.0743
15H	2.259	186.02	0.320 -.103	189.57	0.503	.0639
16H	2.945	266.44	0.000 +.946	266.44	0.707	-.0568







PHOTOGRAPH NOT AVAILABLE

333 (1L9) PLANA C

LAMBDA=27.12 E BETA=42.76 N XI=+.3347 ETA=+.6789 L+PL CODE = 13637 ALBEDO =.1117

13H FLAT MOON DATA
FM=.00478 FM'=.03348

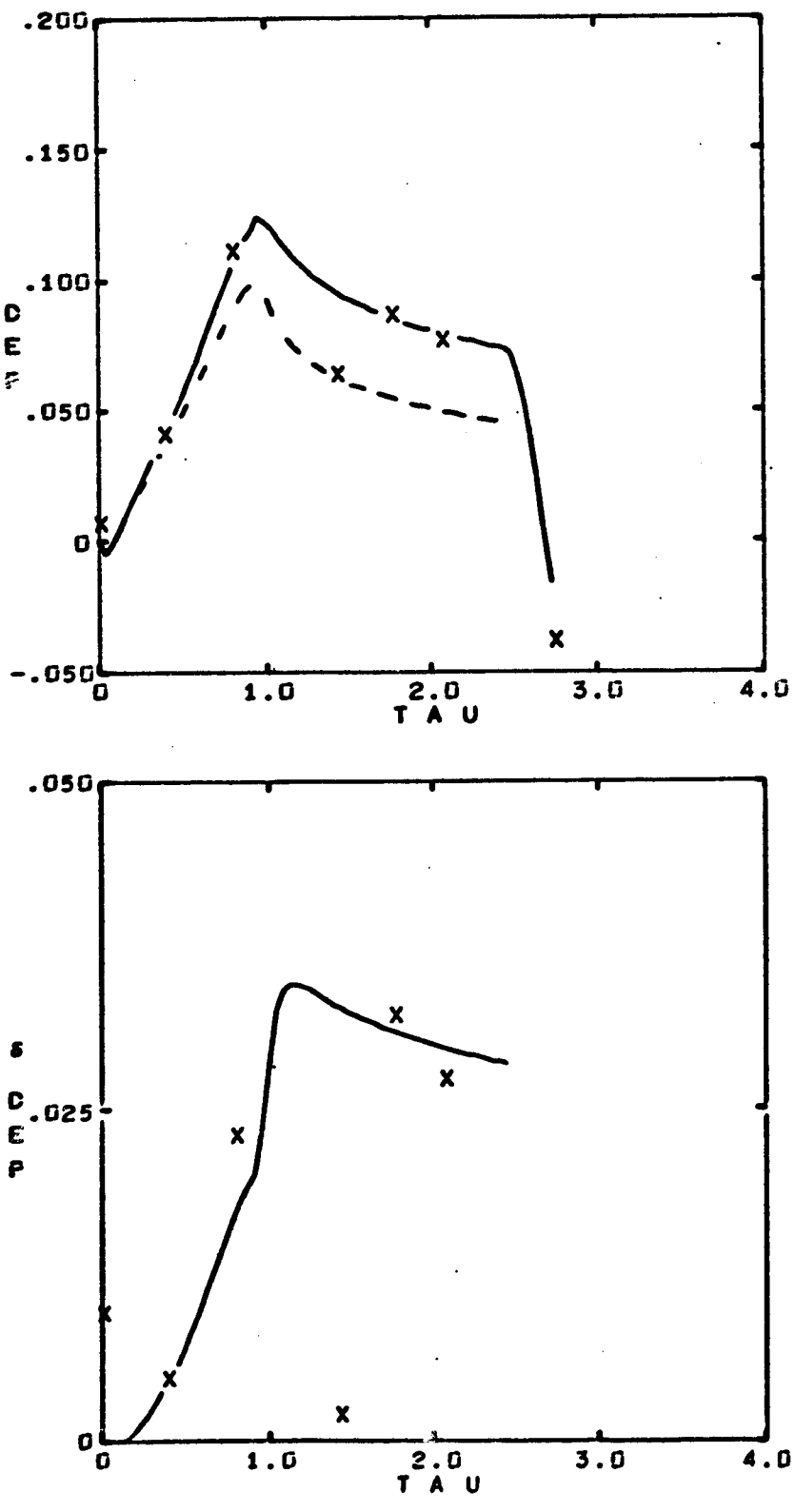
INITIAL TEMPERATURE 371.17
TAU-END OF TOTALITY 2.455

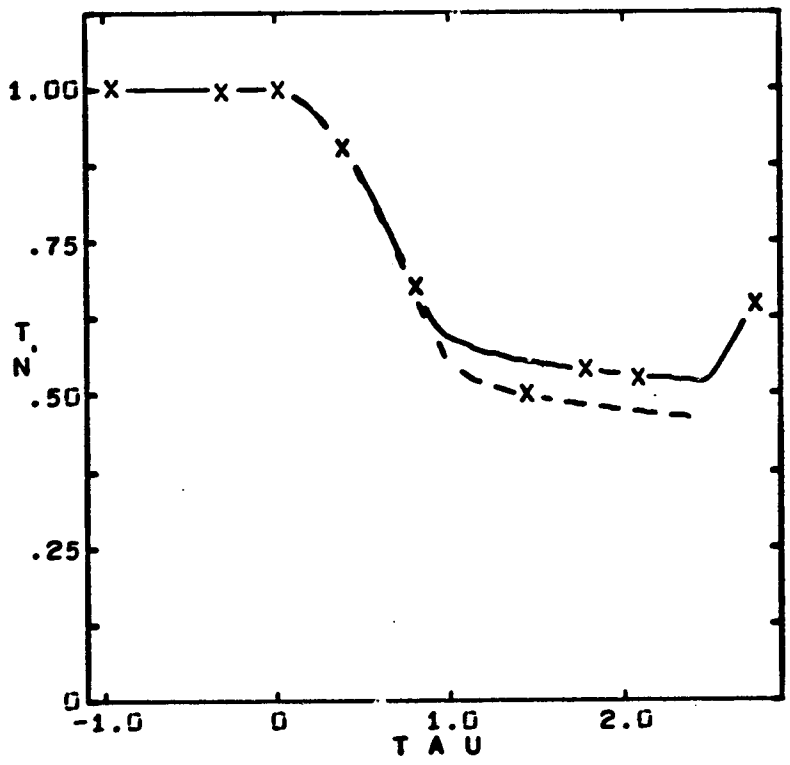
DIFFERENTIAL ENERGY DATA

TAU	DEP	DEP-SMOOTH	δDEP
.25	.0213	.0199	.0014
.50	.0573	.0498	.0075
.75	.0967	.0812	.0155
.93	.1235	.1024	.0211
1.0	.1221	.0933	.0288
1.5	.0927	.0604	.0323
2.0	.0806	.0507	.0299
2.5	.0728	.0445	.0283

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.957	373.09		373.09	1.005	.0209
9H	-0.310	370.54		370.54	0.998	-.0067
10H	0.011	371.73		371.73	1.002	.0072
11H	0.391	335.75		335.75	0.905	.0412
12H	0.808	249.03	0.302 +.962	251.96	0.679	.1113
13H	1.441	174.80	1.645 -.353	186.64	0.503	.0639
14H	1.777	169.10	0.887 +.371	201.31	0.542	.0865
15H	2.076	193.22	0.151 +.862	195.47	0.527	.0769
16H	2.757	241.08	0.000 +.840	241.08	0.650	-.0376





PHOTOGRAPH
NOT
AVAILABLE

334 (2L8) PLATO C

LAMBDA=14.50 W BETA=49.59 N XI=-.1623 ETA=+.7614 L+PL CODE = 21766 ALBEDO =.0850

13H FLAT MOON DATA
FM=.08587 FM'=.09484

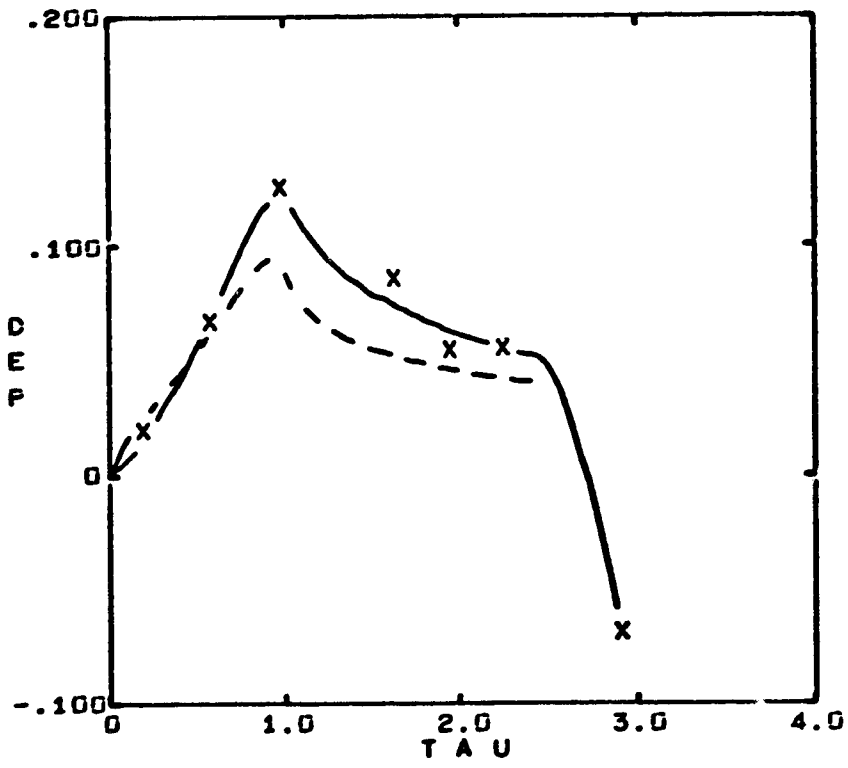
INITIAL TEMPERATURE 369.50
TAU-END OF TOTALITY 2.429

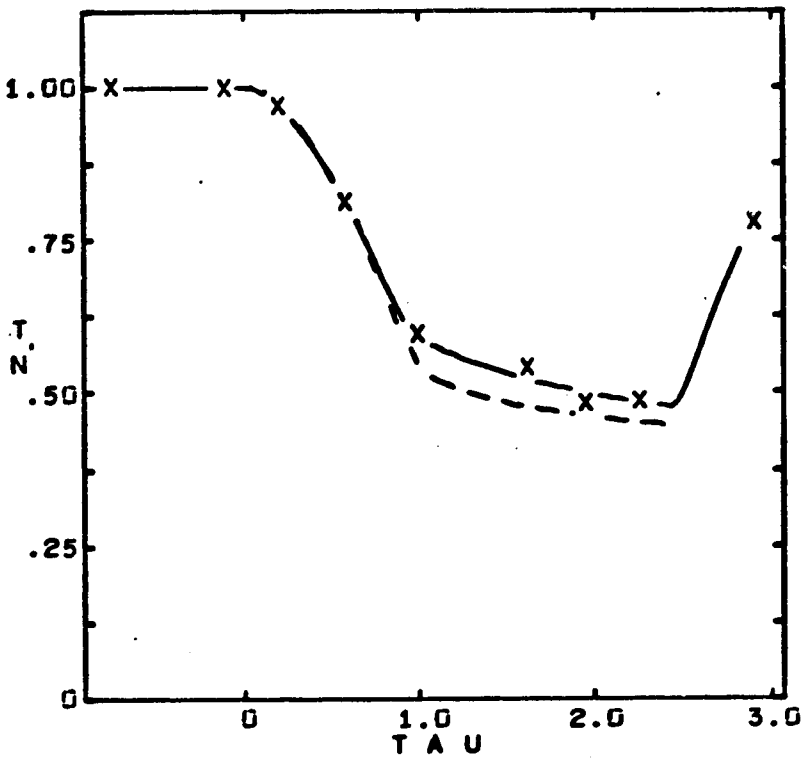
DIFFERENTIAL ENERGY DATA

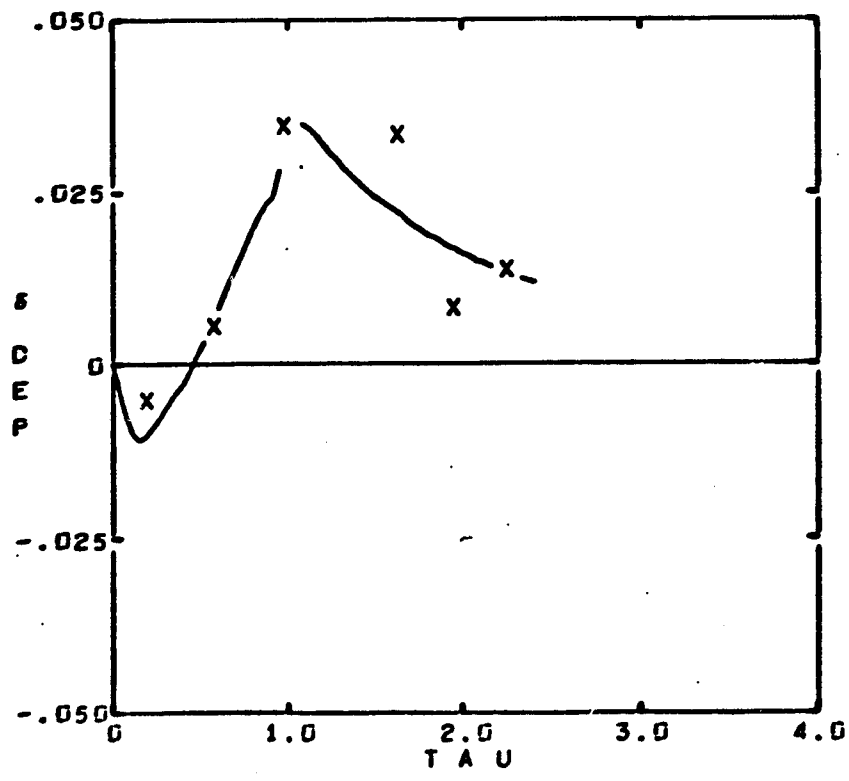
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0204	.0291	-.0087
.50	.0561	.0537	.0024
.75	.0973	.0804	.0169
.93	.1250	.0982	.0268
1.0	.1213	.0887	.0326
1.5	.0791	.0549	.0242
2.0	.0612	.0451	.0161
2.5	.0500	.0391	.0109

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.770	370.88		370.88	1.004	.0149
9H	-0.127	369.28		369.28	0.999	-.0024
10H	0.194	359.11		359.11	0.972	.0190
11H	0.572	301.15	0.000 -.052	301.15	0.815	.0669
12H	0.986	218.45	0.176 -.264	220.76	0.597	.1261
13H	1.617	196.54	0.193 +.863	199.74	0.541	.0854
14H	1.951	178.26	0.000 +.367	178.26	0.482	.0542
15H	2.248	179.34	0.000 +.377	179.34	0.485	.0555
16H	2.906	285.33	1.809 +.145	288.65	0.781	-.0685







PHOTOGRAPH NOT AVAILABLE

335 (2L9) PLATO E

LAMBDA=16.12 W BETA=49.67 N XI=-.1797 ETA=+.7623 L+FL CODE = 21776 ALBEDO =.0674

13H FLAT MOON DATA
FM=.07773 FM'=.09496

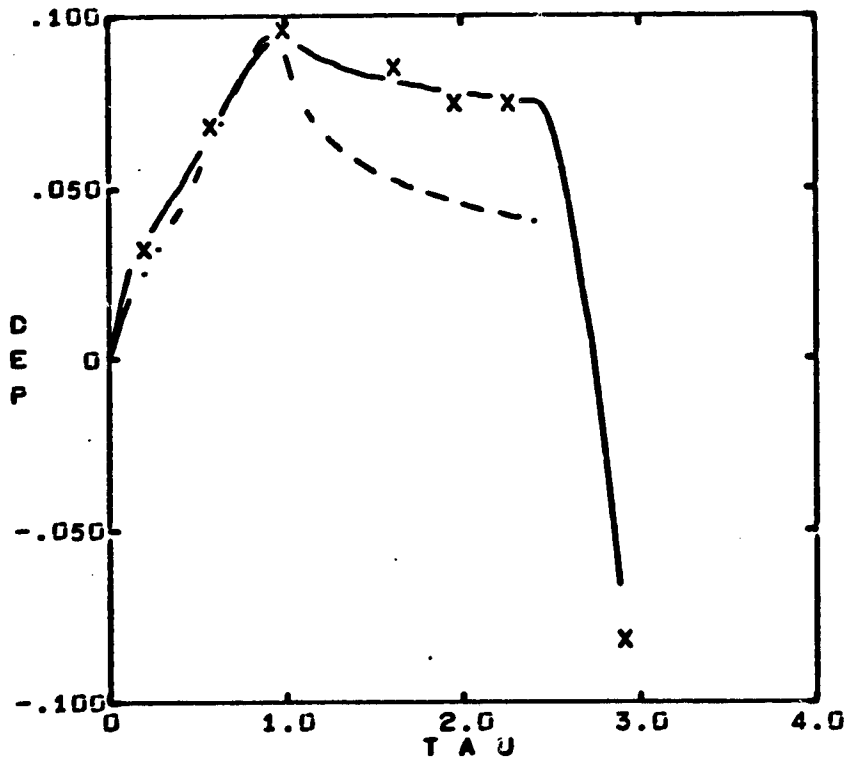
INITIAL TEMPERATURE 370.07
TAU-END OF TOTALITY 2.431

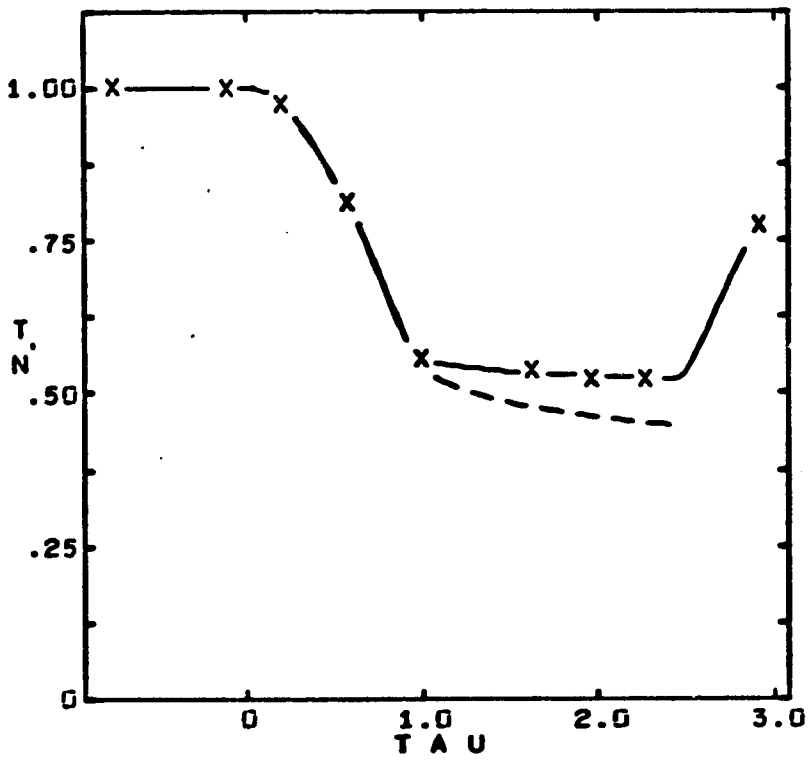
DIFFERENTIAL ENERGY DATA

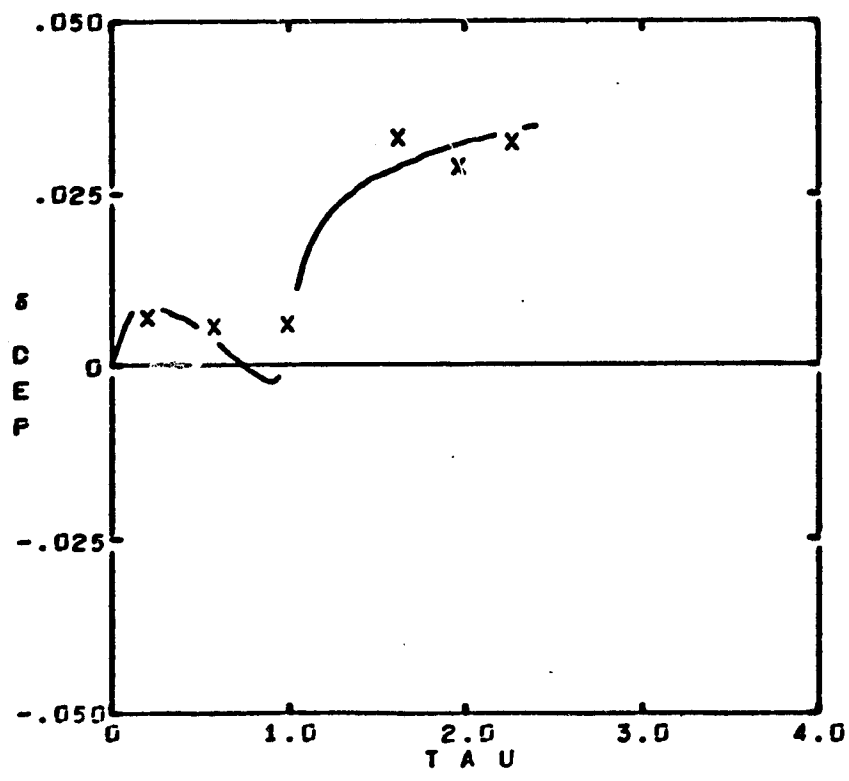
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0381	.0295	.0086
.50	.0592	.0540	.0052
.75	.0809	.0807	.0002
.93	.0950	.0984	-.0034
1.0	.0942	.0889	.0053
1.5	.0823	.0550	.0273
2.0	.0775	.0452	.0323
2.3	.0744	.0392	.0352

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.764	371.41			371.41	1.004	.0146
9H	-0.120	369.86			369.86	0.999	-.0023
10H	0.200	360.32			360.32	0.974	.0322
11H	0.578	300.30	0.000	-.517	300.30	0.811	.0679
12H	0.993	206.40	0.000	-.605	206.40	0.558	.0964
13H	1.624	192.99	1.761	-.674	199.74	0.540	.0849
14H	1.958	190.08	0.206	+.409	193.40	0.523	.0746
15H	2.256	189.80	0.226	+.543	193.21	0.522	.0743
16H	2.912	287.69	0.000	+.328	287.69	0.777	-.0819







PHOTOGRAPH NOT AVAILABLE

336 (2M1) PLATO J

LAMBDA= 4.56 W BETA=48.97 N XI=-.0522 ETA=+.7544 L+PL CODE = 20755 ALBEDO =.1039

13H FLAT MOON DATA
FM=.05010 FM'=.05533

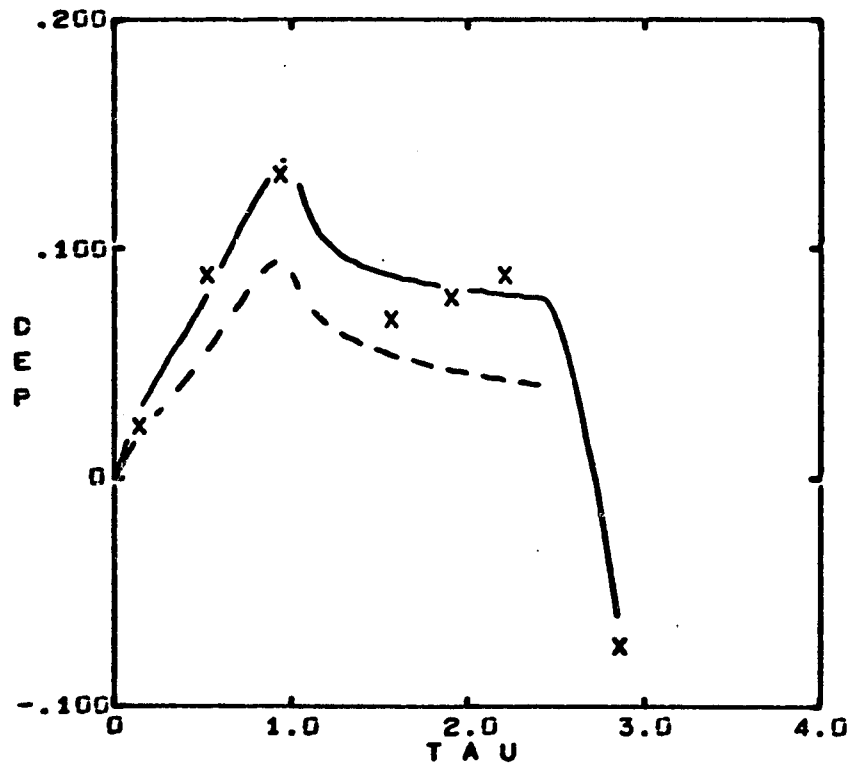
INITIAL TEMPERATURE 368.61
TAU-END OF TOTALITY 2.419

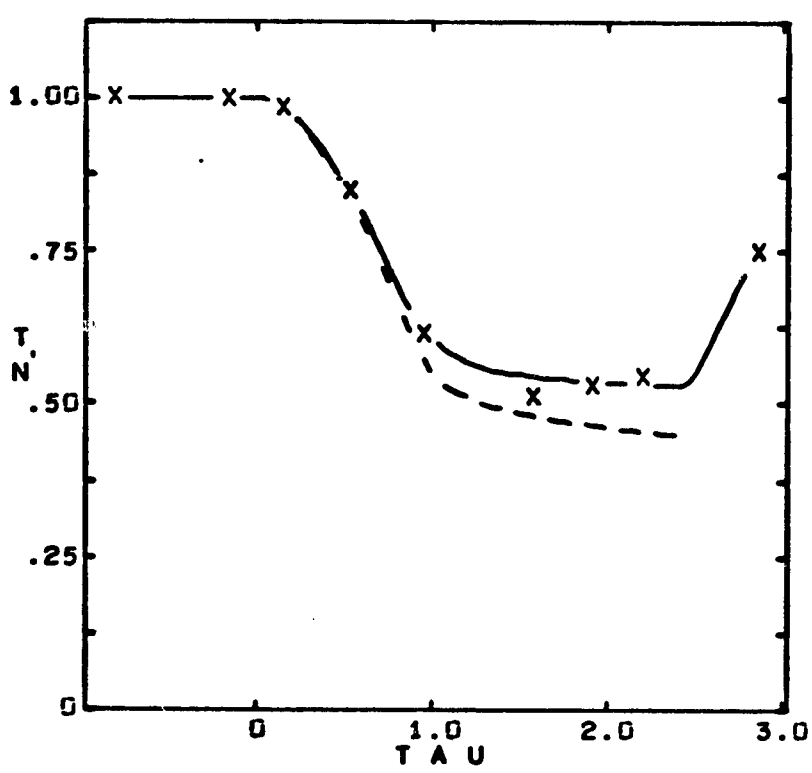
DIFFERENTIAL ENERGY DATA

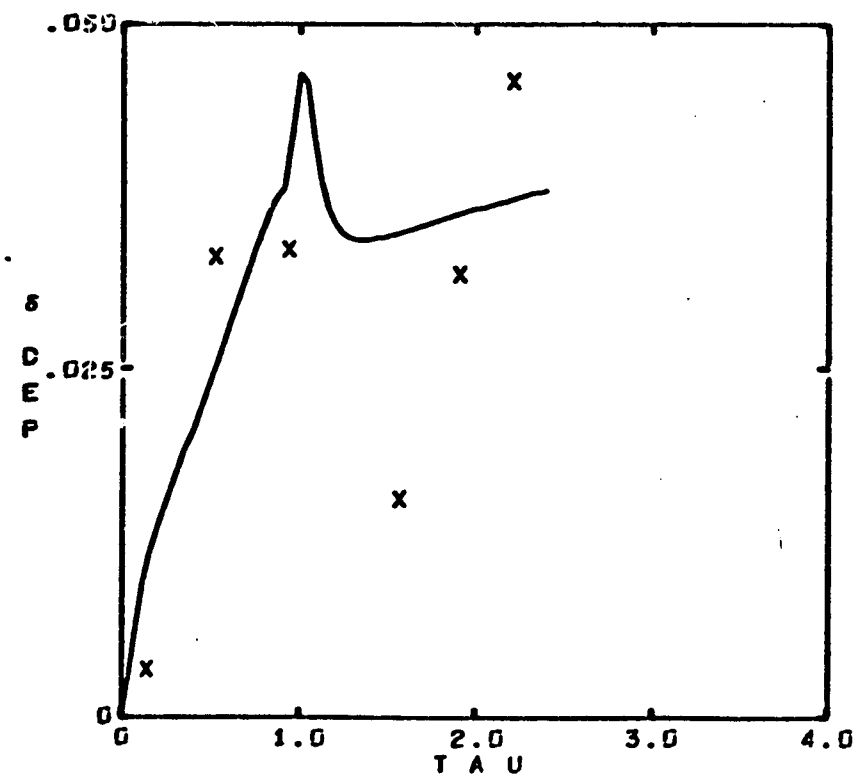
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0425	.0274	.0151
.50	.0770	.0527	.0243
.75	.1138	.0803	.0335
.93	.1382	.0987	.0395
1.0	.1356	.0892	.0464
1.5	.0899	.0553	.0346
2.0	.0820	.0454	.0366
2.5	.0776	.0393	.0383

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.809	369.78		369.78	1.003	.0127
9H	-0.167	368.36		368.36	0.999	-.0026
10H	0.152	362.61		362.61	0.984	.0220
11H	0.529	311.88	0.493 -.064	313.29	0.850	.0890
12H	0.943	222.45	0.313 -.682	227.43	0.617	.1321
13H	1.572	186.27	0.261 +.904	188.94	0.513	.0690
14H	1.906	176.04	0.642 +.215	195.27	0.530	.0788
15H	2.202	191.56	0.293 +.074	201.13	0.546	.0886
16H	2.863	277.44	0.000 +.110	277.44	0.753	-.0734







PHOTOGRAPH NOT AVAILABLE

337 (2M2) PLATO M

LAMBDA=15.48 W BETA=53.03 N XI=-.1605 ETA=+.7989 L+PL CODE = 21769 ALBEDO =.1417

13H FLAT MOON DATA
FM=.09499 FM'=.09629

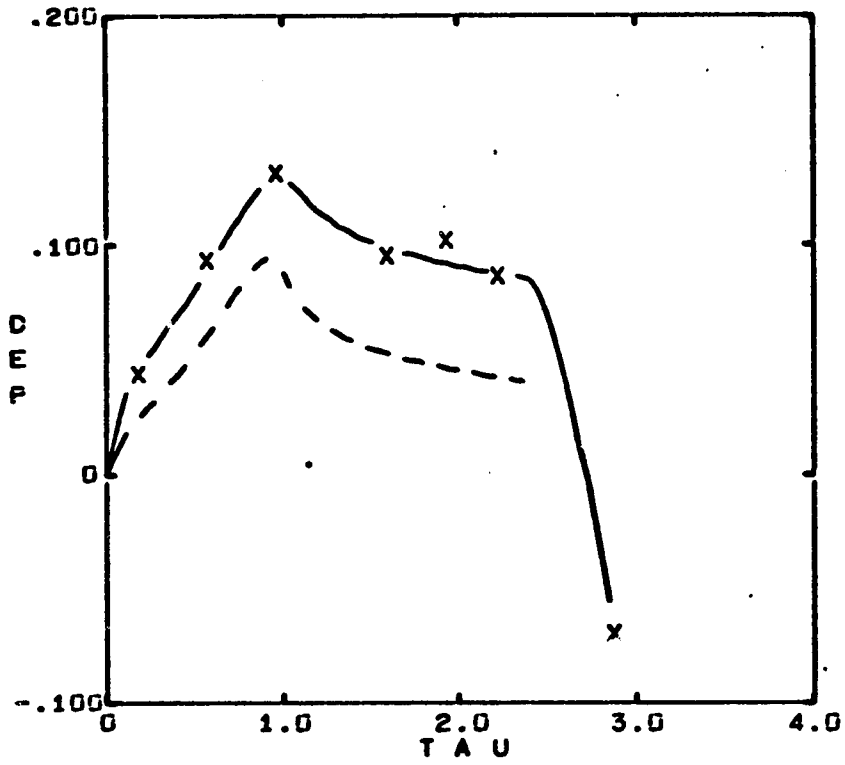
INITIAL TEMPERATURE 356.46
TAU-END OF TOTALITY 2.376

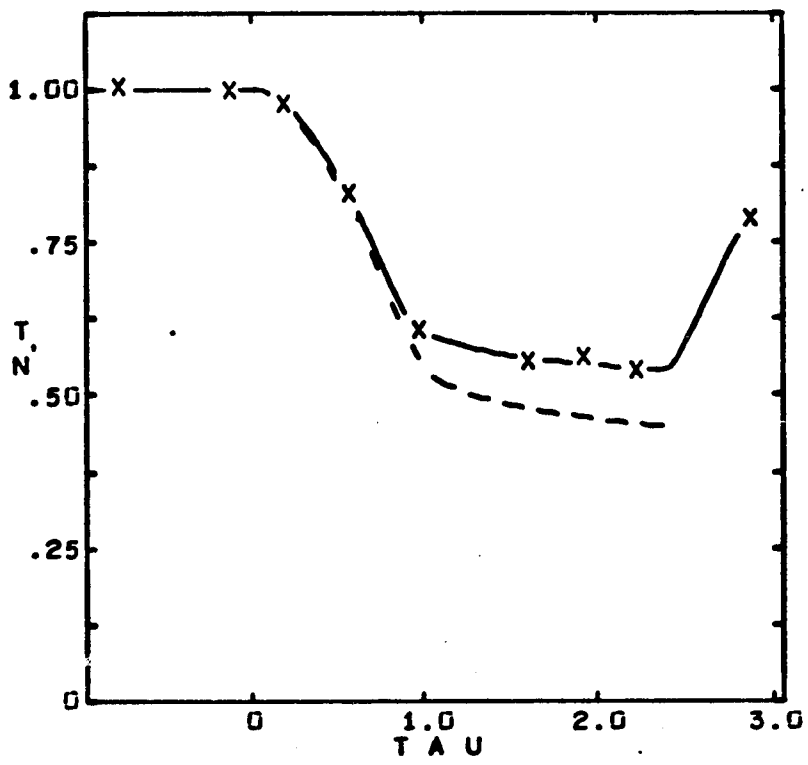
DIFFERENTIAL ENERGY DATA

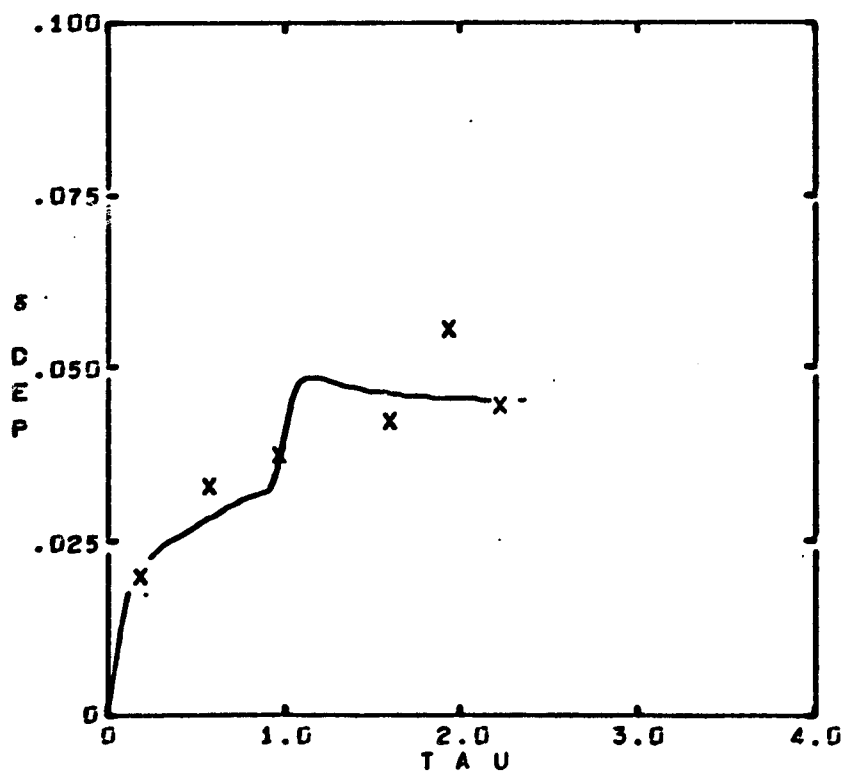
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0522	.0293	.0229
.50	.0812	.0539	.0273
.75	.1113	.0806	.0307
.93	.1309	.0983	.0326
1.0	.1299	.0888	.0411
1.5	.1016	.0549	.0467
2.0	.0906	.0451	.0455
2.5	.0842	.0391	.0451

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.764	358.63			358.63	1.006	.0245
9H	-0.127	356.10			356.10	0.999	-.0040
10H	0.189	349.21			349.21	0.980	.0436
11H	0.562	296.25	0.000	-.187	296.25	0.831	.0933
12H	0.972	206.56	0.591	-.238	216.30	0.607	.1317
13H	1.596	197.32	0.066	-.433	197.85	0.555	.0949
14H	1.926	199.59	0.076	-.060	201.38	0.565	.1019
15H	2.221	191.26	0.115	+.971	193.56	0.543	.0869
16H	2.870	281.97	0.000	+.650	281.97	0.791	-.0701







PHOTOGRAPH
NOT
AVAILABLE

338 (1M1) PLINIUS

LAMBDA=23.63 E BETA=15.34 N XI=+.3866 ETA=+.2646 L+PL CODE = 13286 ALBEDO =.0766

13H FLAT MOON DATA
FM=.04798 FM'=.05555

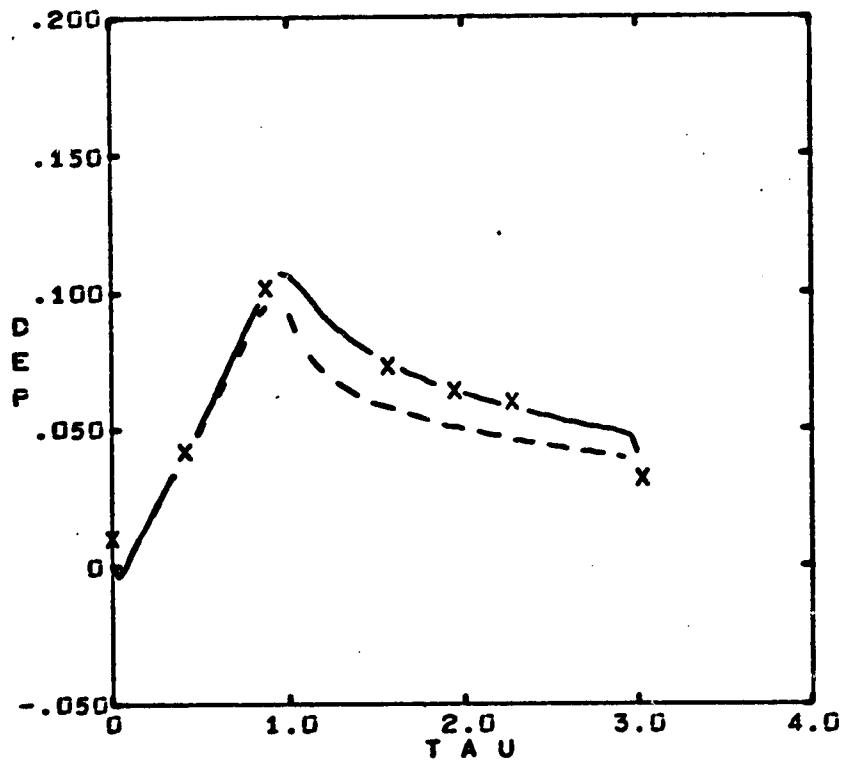
INITIAL TEMPERATURE 392.67
TAU-END OF TOTALITY 2.950

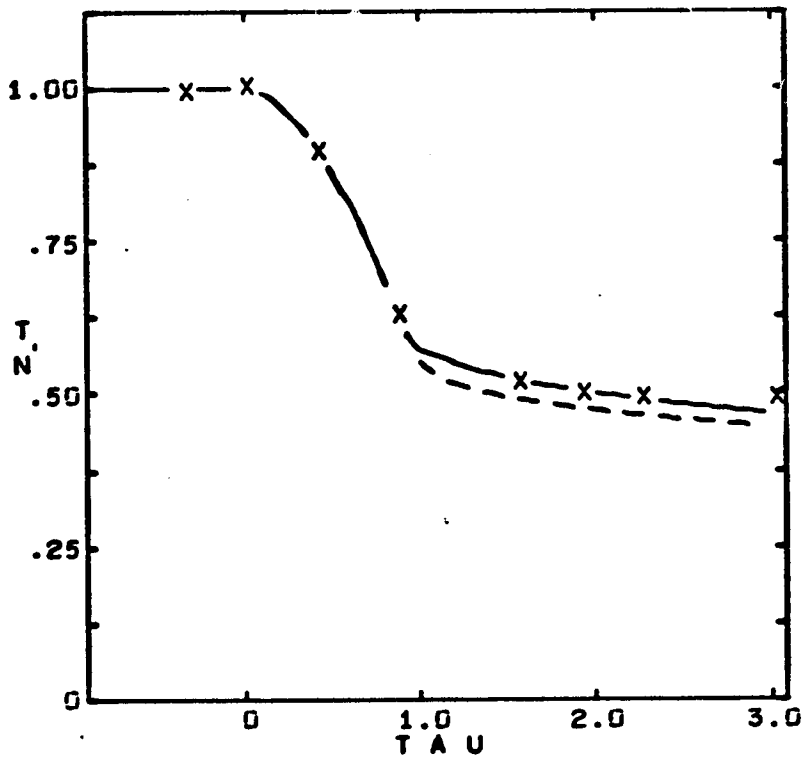
DIFFERENTIAL ENERGY DATA

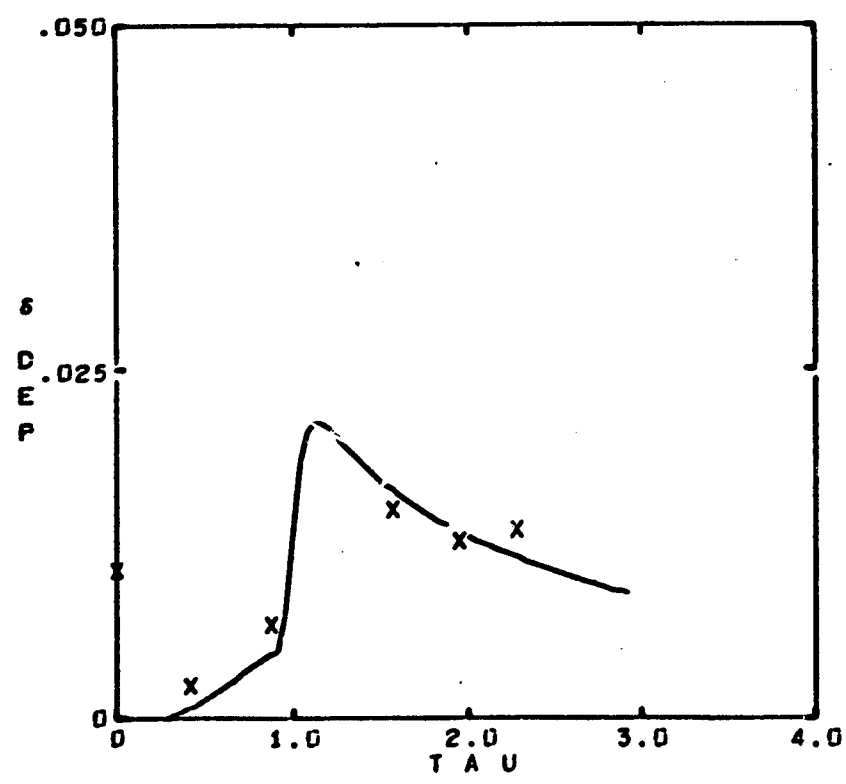
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0203	.0205	-.0002
.50	.0511	.0498	.0013
.75	.0844	.0809	.0035
.93	.1068	.1018	.0050
1.0	.1064	.0926	.0138
1.5	.0767	.0597	.0170
2.0	.0630	.0500	.0130
2.5	.0543	.0438	.0105
3.0	.0478	.0391	.0087

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.061	394.75		394.75	1.005	.0213
9H	-0.350	391.99		391.99	0.998	-.0070
10H	0.003	393.64		393.64	1.002	.0100
11H	0.419	353.01		353.01	0.899	.0423
12H	0.876	247.06	0.000 +.998	247.06	0.629	.1014
13H	1.571	200.22	0.411 -.881	203.97	0.519	.0728
14H	1.939	191.59	0.613 +.846	197.13	0.502	.0635
15H	2.269	188.58	0.609 -.615	194.19	0.495	.0598
16H	3.030	192.83	0.344 -.829	193.94	0.494	.0324







PHOTOGRAPH NOT AVAILABLE

339 (4F6) POLYBIUS A

LAMBDA=27.76 E BETA=21.78 S XI=+.4325 ETA=-.3710 L+FL CODE = 44339 ALBEDO =.1372

13H FLAT MOON DATA
FM=.00612 FM'=.00612

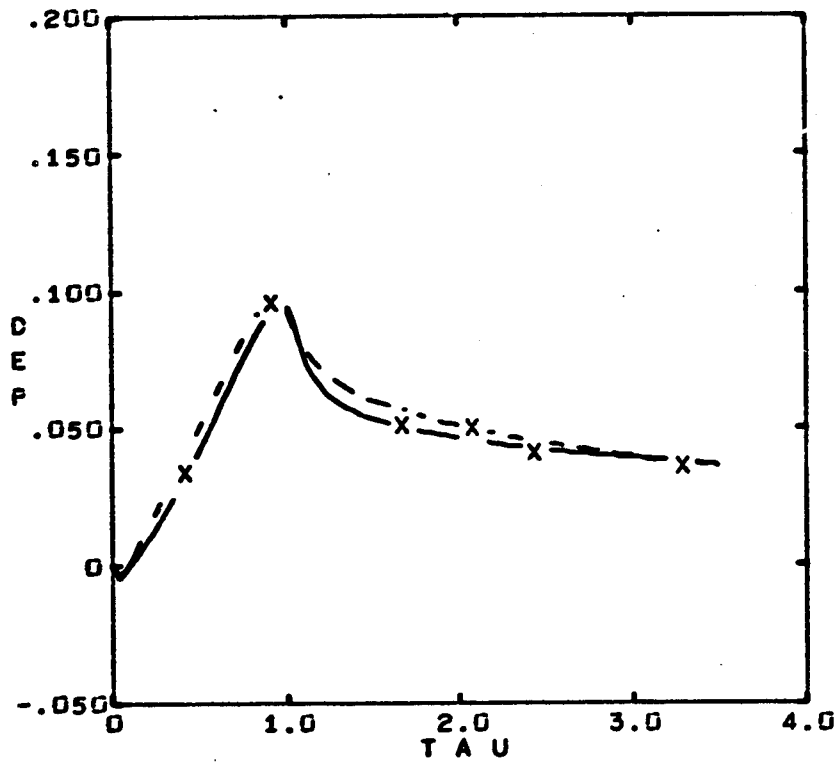
INITIAL TEMPERATURE 380.14
TAU-END OF TOTALITY 3.488

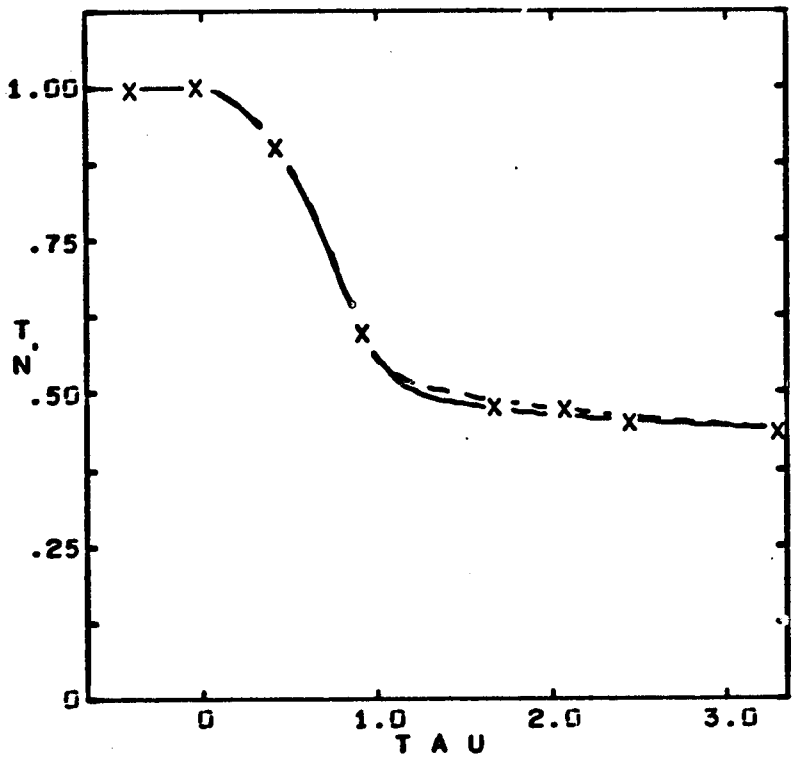
DIFFERENTIAL ENERGY DATA

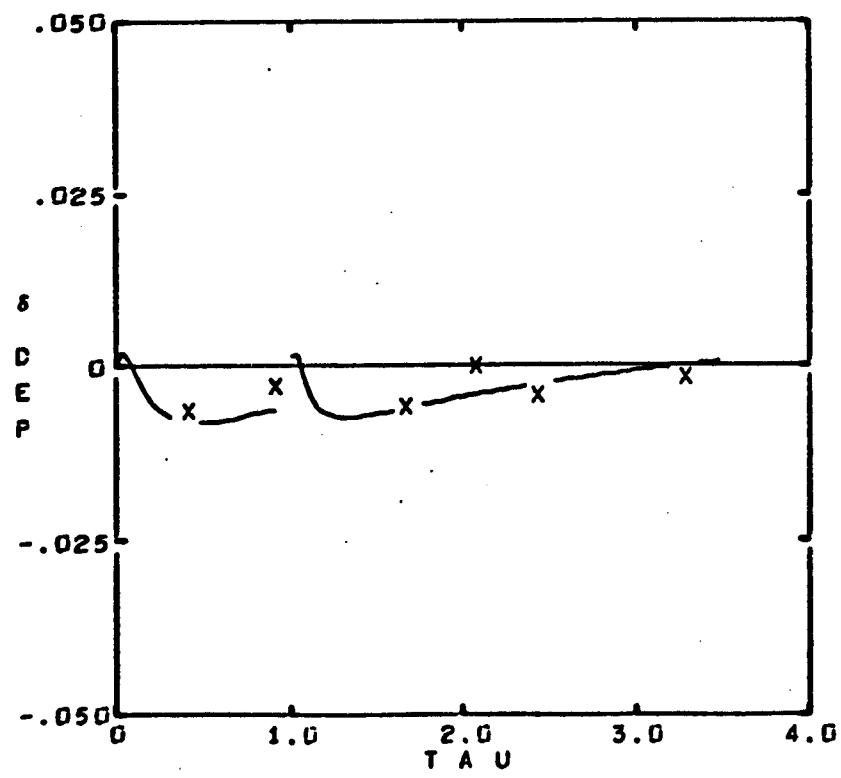
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0137	.0198	-.0061
.50	.0417	.0498	-.0081
.75	.0742	.0813	-.0071
.93	.0965	.1025	-.0060
1.0	.0949	.0934	.0015
1.5	.0537	.0605	-.0068
2.0	.0464	.0508	-.0044
2.5	.0423	.0446	-.0023
3.0	.0393	.0399	-.0006

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.197	381.32		381.32	1.003	.0124
9H	-0.419	378.79		378.79	0.996	-.0142
10H	-0.035	380.22		380.22	1.000	.0008
11H	0.418	342.91		342.91	0.902	.0334
12H	0.915	227.50	0.000 -.151	227.50	0.598	.0953
13H	1.673	180.50	0.000 +.815	180.50	0.475	.0508
14H	2.072	177.20	0.750 -.348	179.74	0.473	.0500
15H	2.431	171.36	0.000 -.114	171.36	0.451	.0413
16H	3.282	165.91	0.000 +.783	165.91	0.436	.0363







PHOTOGRAPH NOT AVAILABLE

340 (4F7) POLYBIUS B

LAMBDA=25.58 E BETA=25.54 S XI=+.3896 ETA=-.4312 L+PL CODE = 43483 ALBEDO =.1569

13H FLAT MOON DATA
FM=.08586 FM'=.09168

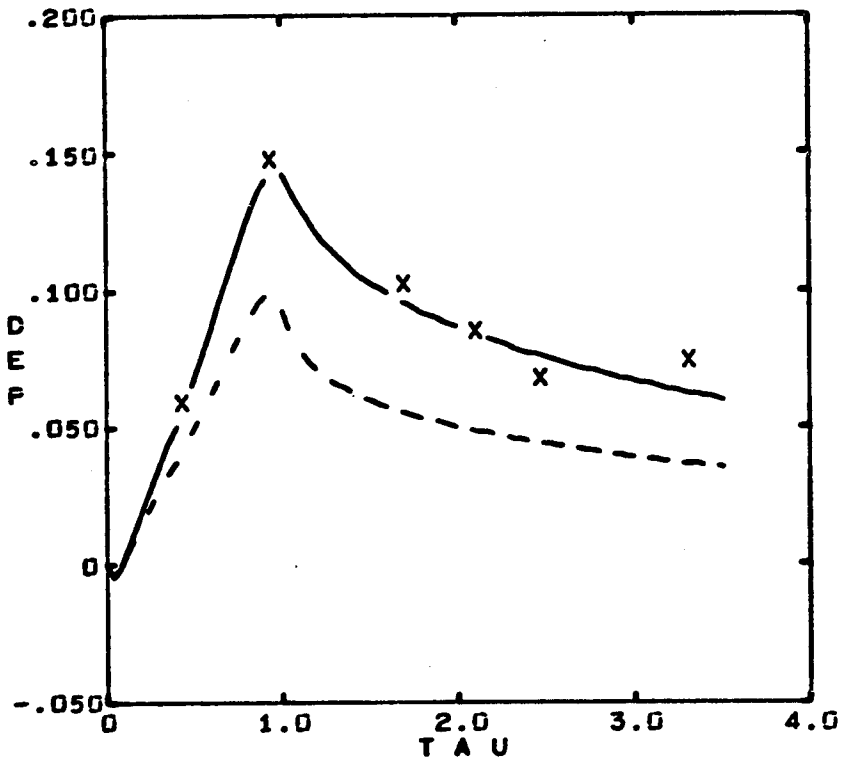
INITIAL TEMPERATURE 376.07
TAU-END OF TOTALITY 3.530

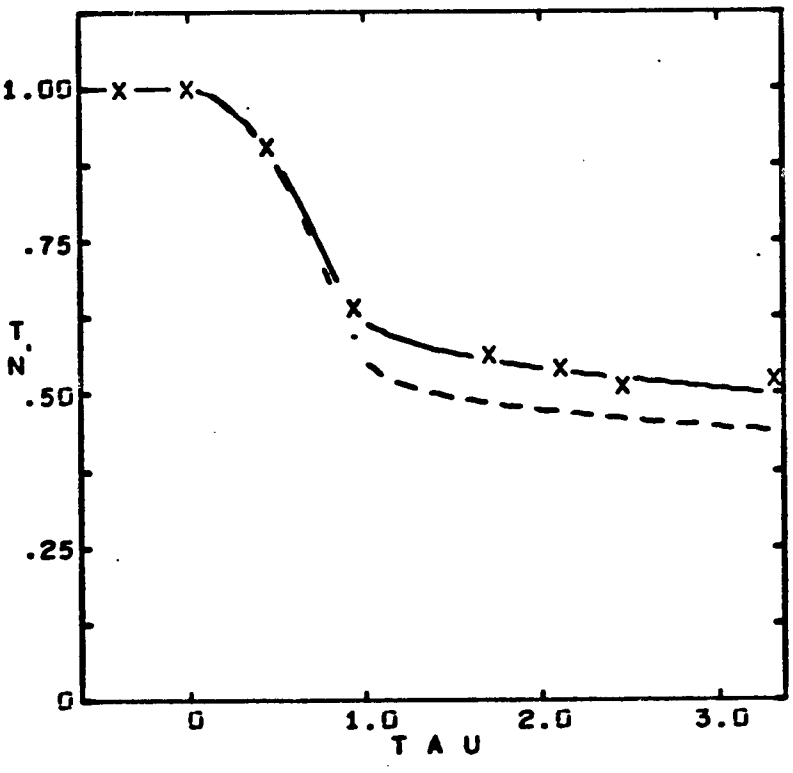
DIFFERENTIAL ENERGY DATA

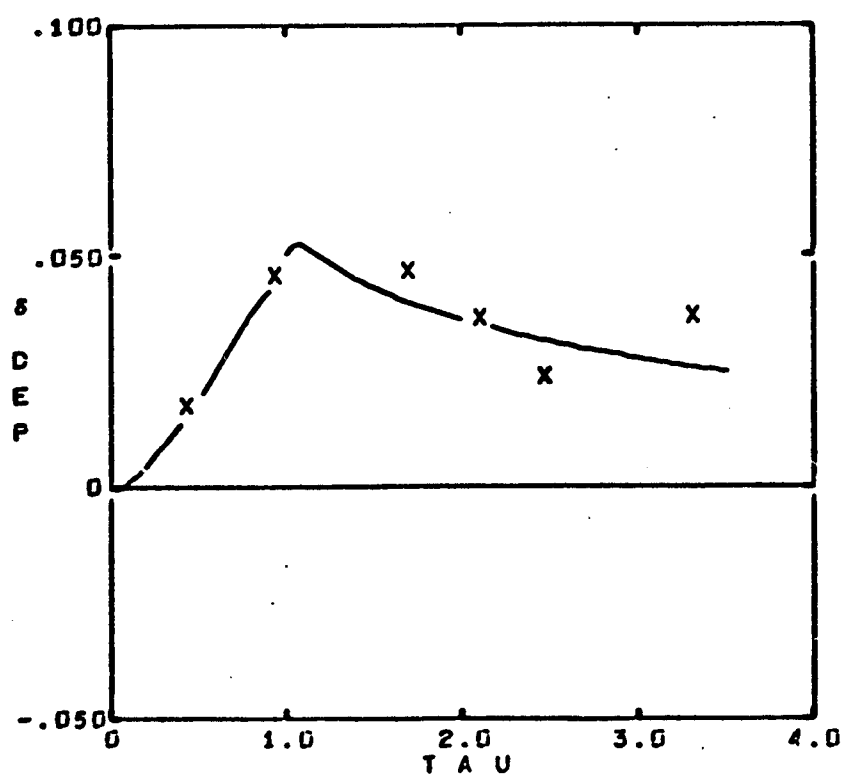
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0262	.0202	.0060
.50	.0687	.0498	.0189
.75	.1151	.0811	.0340
.93	.1465	.1021	.0444
1.0	.1433	.0930	.0503
1.5	.1030	.0600	.0430
2.0	.0863	.0504	.0359
2.5	.0754	.0442	.0312
3.0	.0671	.0395	.0276

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.189	376.49		376.49	1.001	.0045
9H	-0.407	375.92		375.92	1.000	-.0016
10H	-0.021	376.07		376.07	1.000	.0000
11H	0.435	339.63		339.63	0.903	.0593
12H	0.935	238.02	0.323 +.129	241.39	0.642	.1481
13H	1.699	210.33	0.148 -.370	212.53	0.565	.1020
14H	2.099	193.09	0.471 -.742	203.30	0.541	.0854
15H	2.460	188.13	0.420 +.861	192.27	0.511	.0683
16H	3.317	175.34	0.708 +.387	196.26	0.522	.0742







PHOTOGRAPH NOT AVAILABLE

341 (1M2) POSIDONIUS F

LAMBDA=27.55 E BETA=33.57 N XI=+.3854 ETA=+.5529 L+PL CODE = 13585 ALBEDO =.0737

13H FLAT MOON DATA
FM=.06538 FM'=.07422

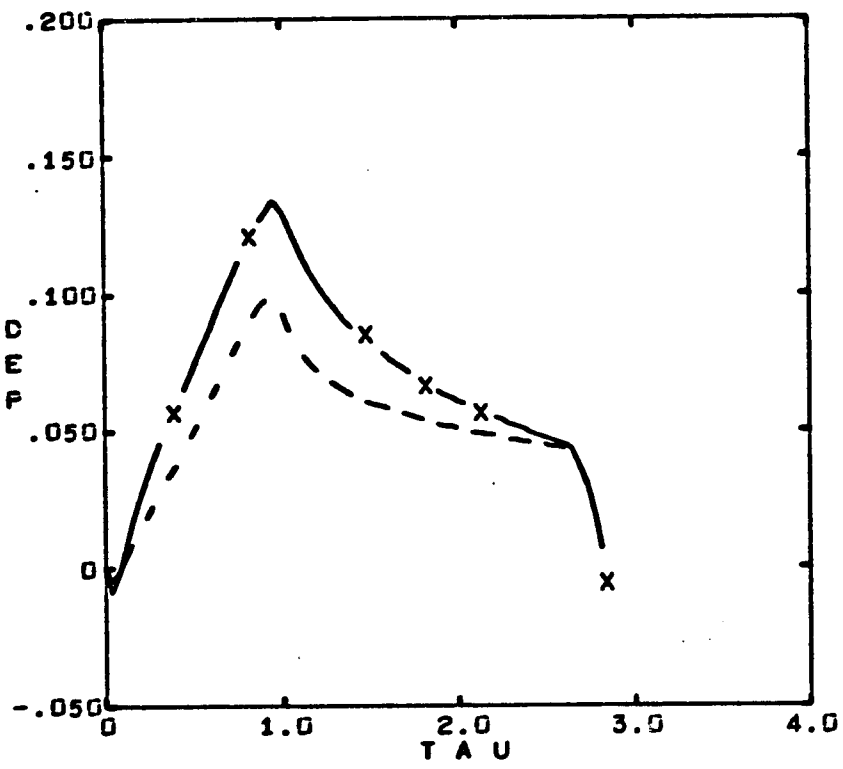
INITIAL TEMPERATURE 380.54
TAU-END OF TOTALITY 2.614

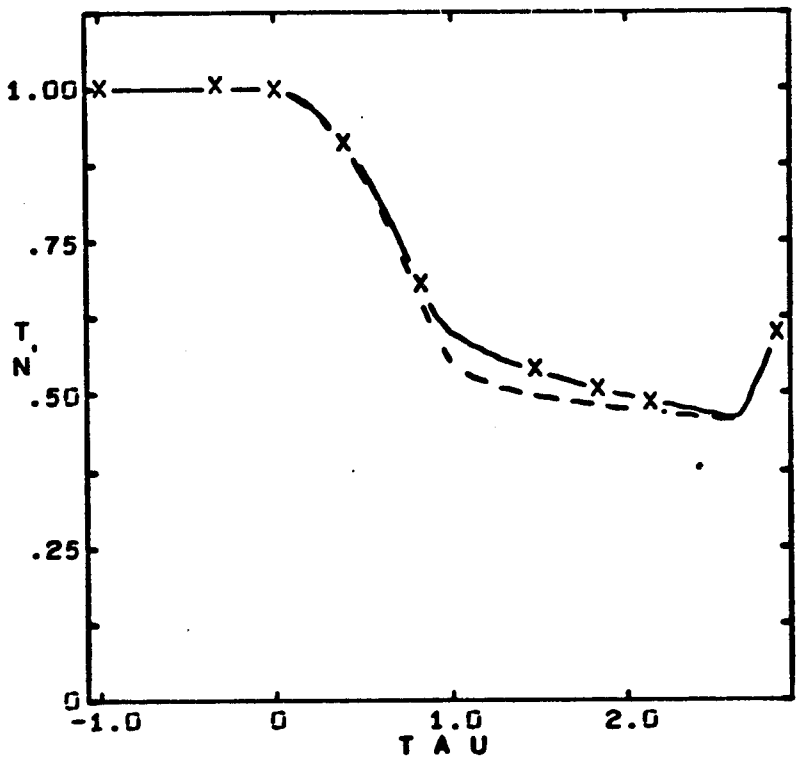
DIFFERENTIAL ENERGY DATA

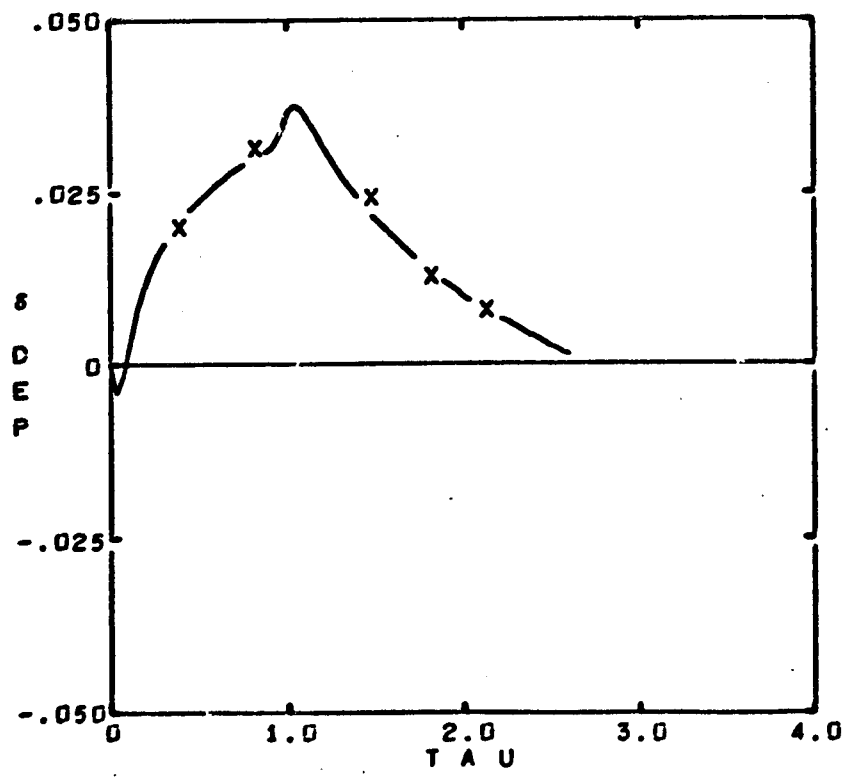
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0342	.0199	.0143
.50	.0737	.0498	.0239
.75	.1103	.0813	.0290
.93	.1340	.1025	.0315
1.0	.1299	.0934	.0365
1.5	.0815	.0604	.0211
2.0	.0608	.0508	.0100
2.5	.0472	.0446	.0026

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.002	382.13		382.13	1.004	.0168
9H	-0.335	382.77		382.77	1.006	.0236
10H	-0.002	380.52		380.52	1.000	-.0002
11H	0.389	347.31		347.31	0.913	.0564
12H	0.819	257.85	0.215 -.268	259.67	0.682	.1210
13H	1.473	201.29	0.246 +.997	205.68	0.540	.0853
14H	1.819	188.66	0.371 +.418	193.24	0.508	.0665
15H	2.128	184.90	0.241 +.209	185.92	0.489	.0575
16H	2.836	224.76	0.684 -.519	228.21	0.600	-.0055







PHOTOGRAPH NOT AVAILABLE

342 (1M3) PROCLUS

LAMBDA=46.95 E BETA=16.12 N XI=+.7020 ETA=+.2776 L+FL CODE = 17207 ALBEDO =.1827

13H FLAT MOON DATA
FM=.10152 FM =.12450

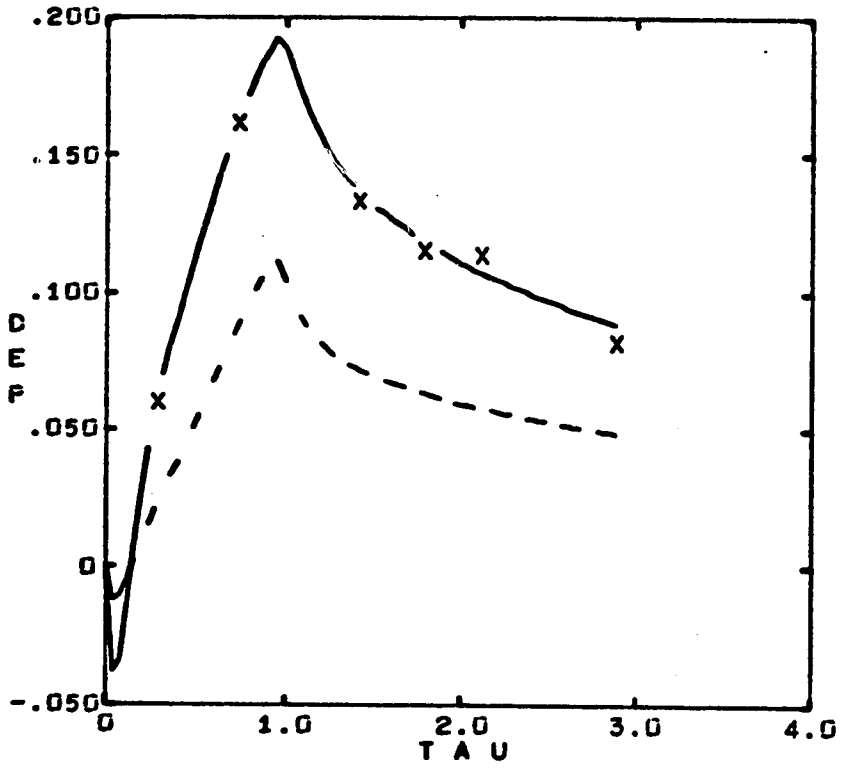
INITIAL TEMPERATURE 366.77
TAU-END OF TOTALITY 2.892

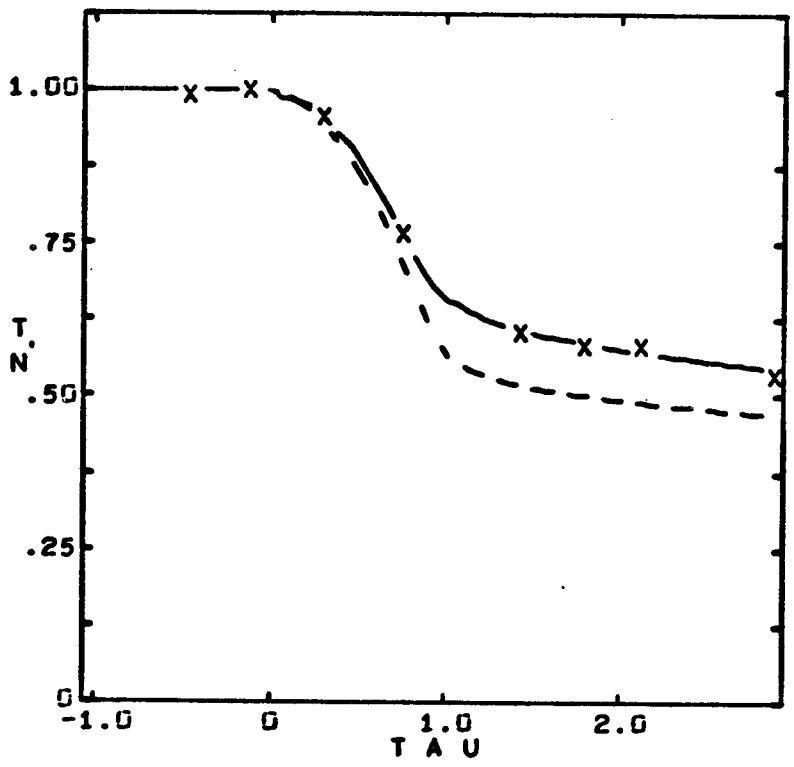
DIFFERENTIAL ENERGY DATA

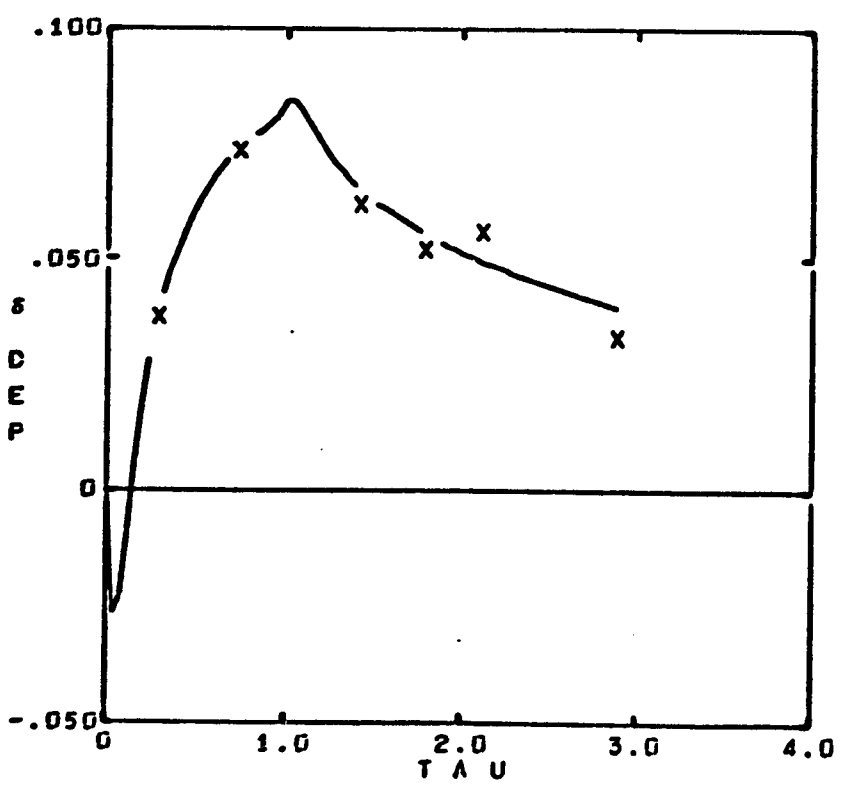
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0469	.0168	.0301
.50	.1141	.0527	.0614
.75	.1632	.0889	.0743
.93	.1924	.1132	.0792
1.0	.1885	.1040	.0845
1.5	.1321	.0695	.0626
2.0	.1107	.0594	.0513
2.5	.0967	.0527	.0440

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.177	367.70		367.70	1.003	.0102
9H	-0.475	364.52		364.52	0.994	-.0243
10H	-0.124	367.26		367.26	1.001	.0054
11H	0.288	350.99		350.99	0.957	.0599
12H	0.741	279.56	0.084 +.932	280.98	0.766	.1613
13H	1.429	213.21	0.321 -.999	221.69	0.604	.1335
14H	1.793	204.59	0.443 +.452	213.64	0.582	.1151
15H	2.118	206.60	0.374 +.583	212.96	0.581	.1137
16H	2.883	183.05	0.937 -.354	196.10	0.535	.0817







PHOTOGRAPH NOT AVAILABLE

343 (1M4) PROTAGORAS

LAMBDA= 7.32 E BETA=55.89 N XI=+.0714 ETA=+.8280 L+PL CODE = 10872 ALBEDO =.0874

13H FLAT MOON DATA
FM=.02231 FM'=.06169

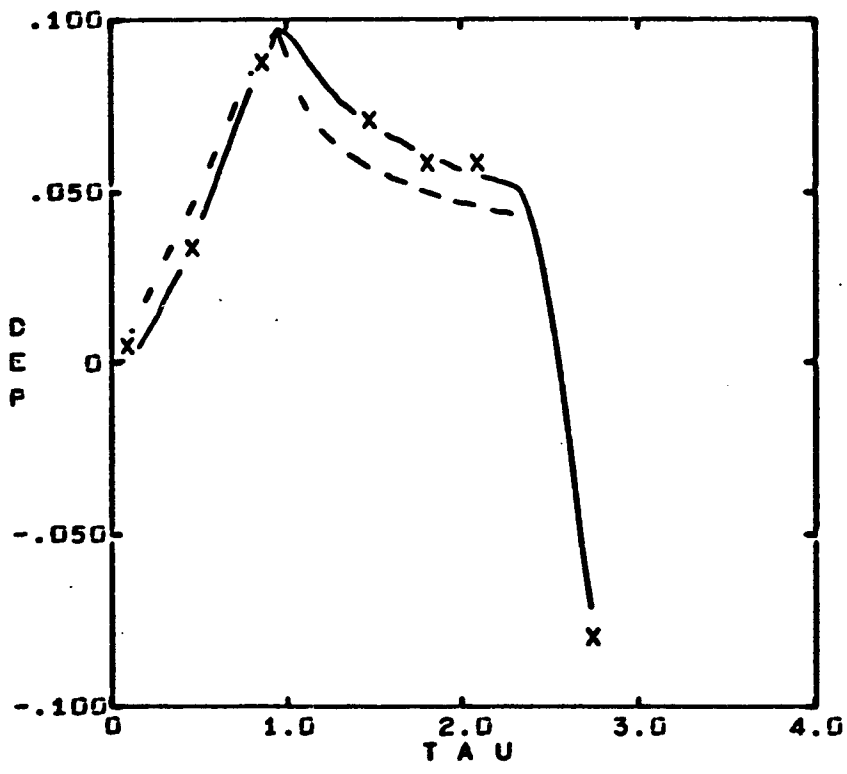
INITIAL TEMPERATURE 367.01
TAU-END OF TOTALITY 2.290

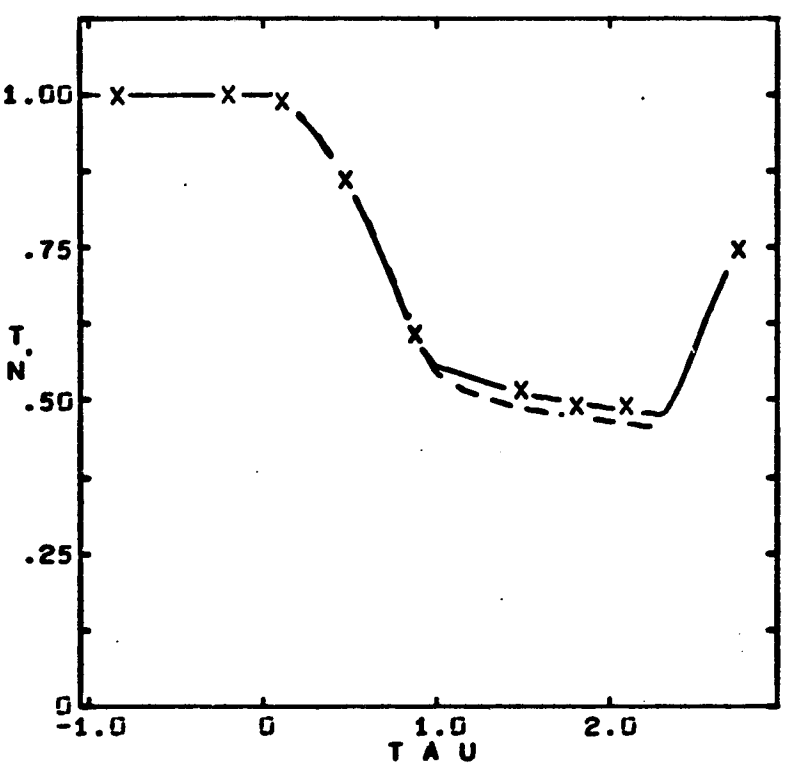
DIFFERENTIAL ENERGY DATA

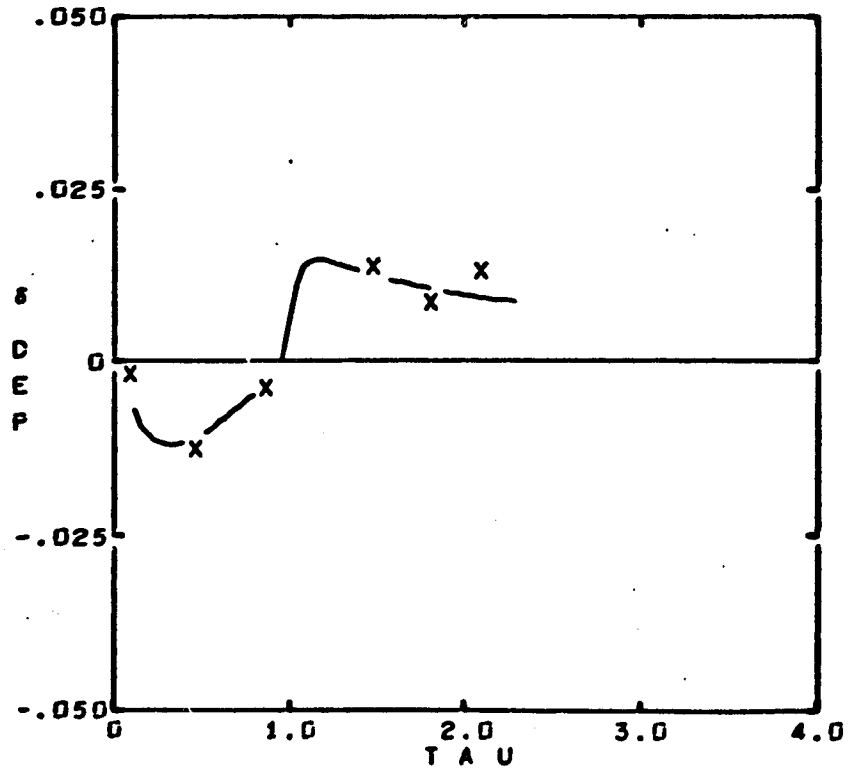
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0114	.0227	-.0113
.50	.0393	.0498	-.0105
.75	.0733	.0790	-.0057
.93	.0968	.0986	-.0018
1.0	.0961	.0894	.0067
1.5	.0688	.0564	.0124
2.0	.0565	.0468	.0097
2.5	.0487	.0407	.0080

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.836	367.44		367.44	1.001	.0047
9H	-0.212	366.90		366.90	1.000	-.0012
10H	0.099	363.40		363.40	0.990	.0051
11H	0.466	315.49		315.49	0.860	.0333
12H	0.868	223.17	0.207 -.045	223.60	0.609	.0875
13H	1.480	173.23	1.416 -.632	189.26	0.516	.0707
14H	1.805	163.27	0.914 +.329	180.40	0.492	.0584
15H	2.093	178.84	0.359 -.111	180.53	0.492	.0585
16H	2.738	273.79	1.344 +.111	274.45	0.748	-.0797







PHOTOGRAPH NOT AVAILABLE

344 (3K7) PTOLEMAEUS A

LAMBDA= 0.80 W BETA= 8.51 S XI=-.0138 ETA=-.1479 L+PL CODE = 30114 ALBEDO =.0975

13H FLAT MOON DATA
FM=.00737 FM'=.02943

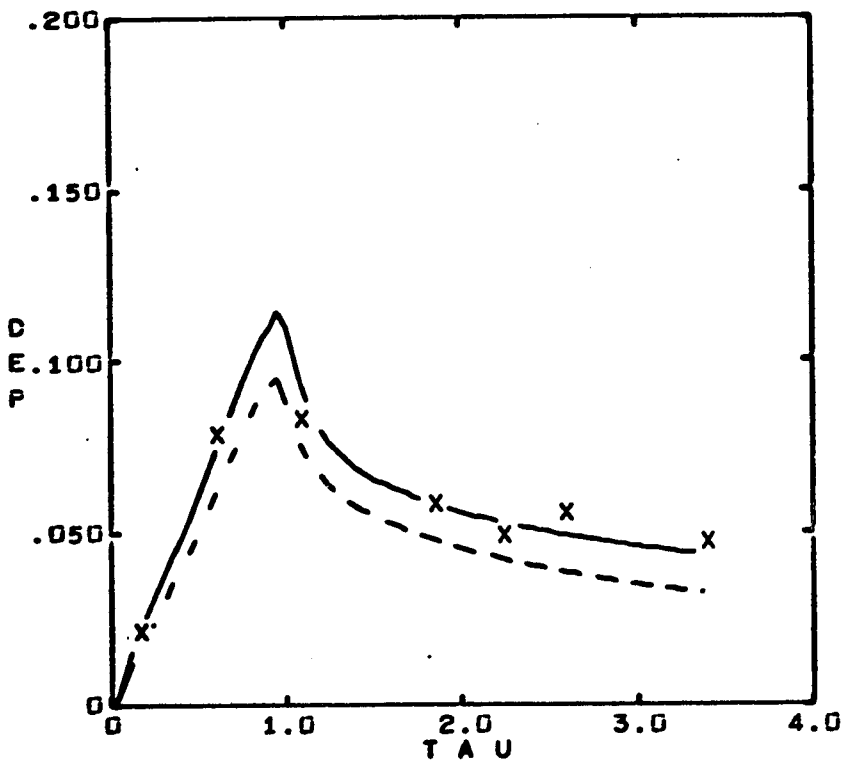
INITIAL TEMPERATURE 392.77
TAU-END OF TOTALITY 3.371

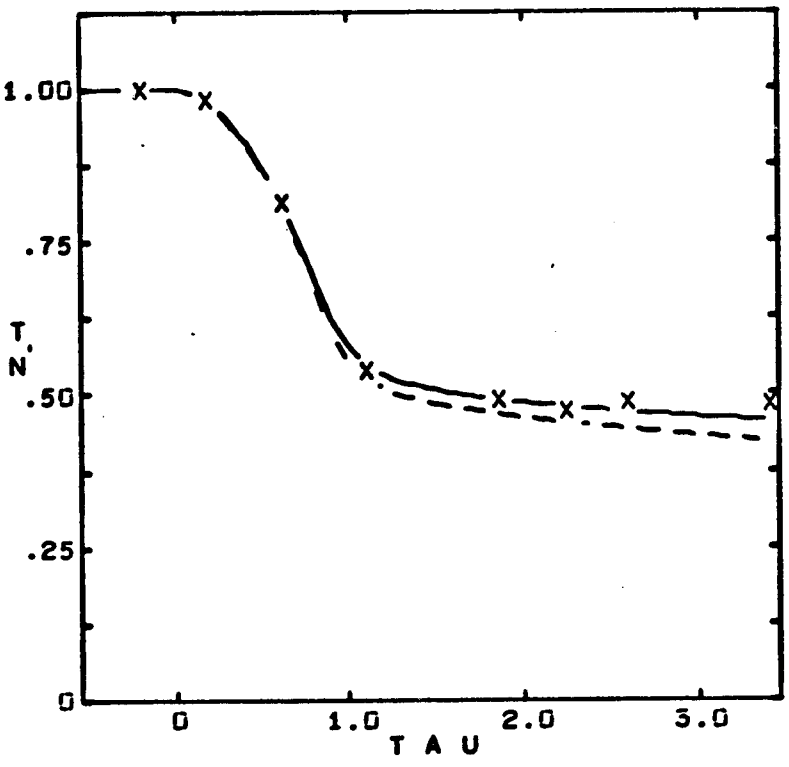
DIFFERENTIAL ENERGY DATA

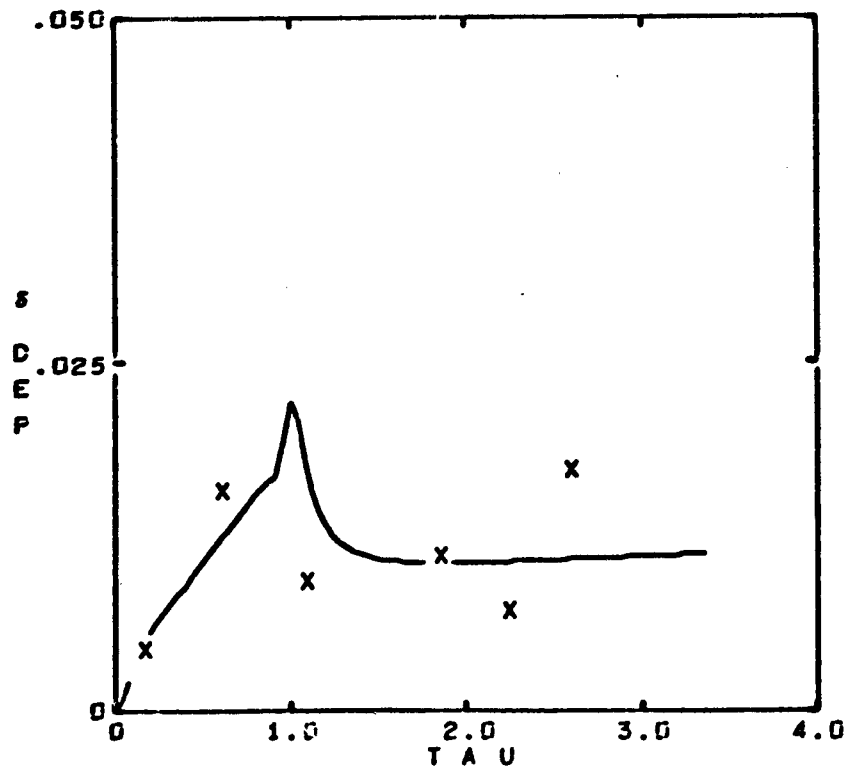
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0310	.0245	.0065
.50	.0610	.0504	.0106
.75	.0931	.0785	.0146
.93	.1145	.0972	.0173
1.0	.1103	.0881	.0222
1.5	.0659	.0551	.0108
2.0	.0560	.0455	.0105
2.5	.0502	.0395	.0107
3.0	.0461	.0350	.0111

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.972	394.53		394.53	1.004	.0181
9H	-0.208	392.39		392.39	0.999	-.0038
10H	0.169	385.92		385.92	0.983	.0211
11H	0.615	318.99	0.000 -.870	318.99	0.812	.0790
12H	1.103	209.20	0.286 -.286	210.95	0.537	.0832
13H	1.849	184.74	0.882 -.156	193.42	0.492	.0588
14H	2.240	182.22	0.617 -.800	185.18	0.471	.0494
15H	2.593	190.64	0.045 -.269	190.93	0.486	.0558
16H	3.405	183.97	0.396 +.537	189.97	0.484	.0475







PHOTOGRAPH NOT AVAILABLE

345 (2M3) PYTHEAS

LAMBDA=20.57 W BETA=20.55 N XI=-.3290 ETA=+.3510 L+FL CODE = 23325 ALBEDO =.0775

13H FLAT MOON DATA
FM=.03402 FM'=.05284

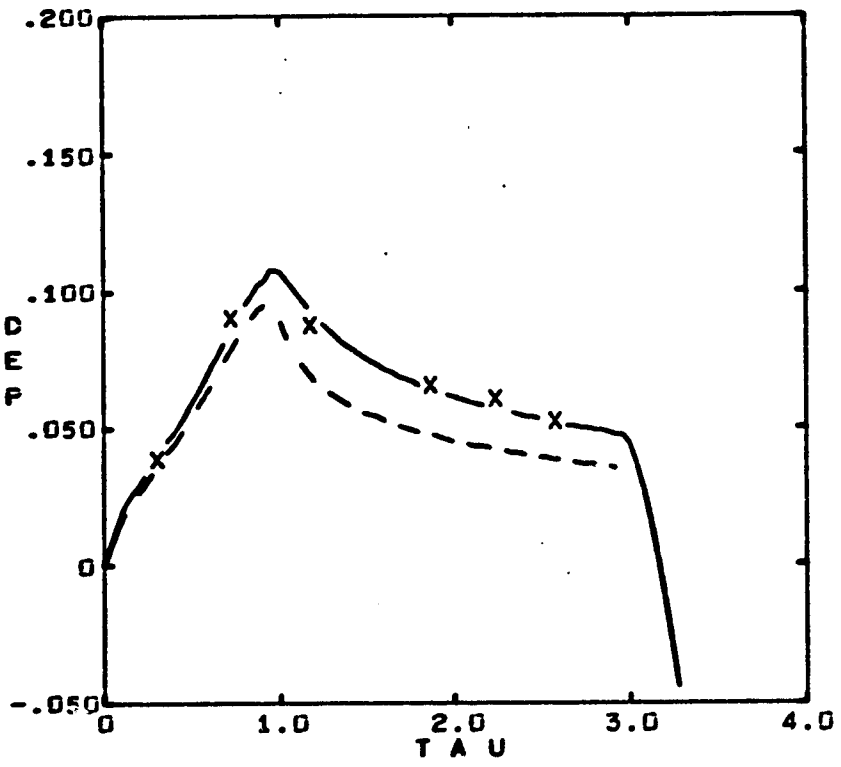
INITIAL TEMPERATURE 386.76
TAU-END OF TOTALITY 2.956

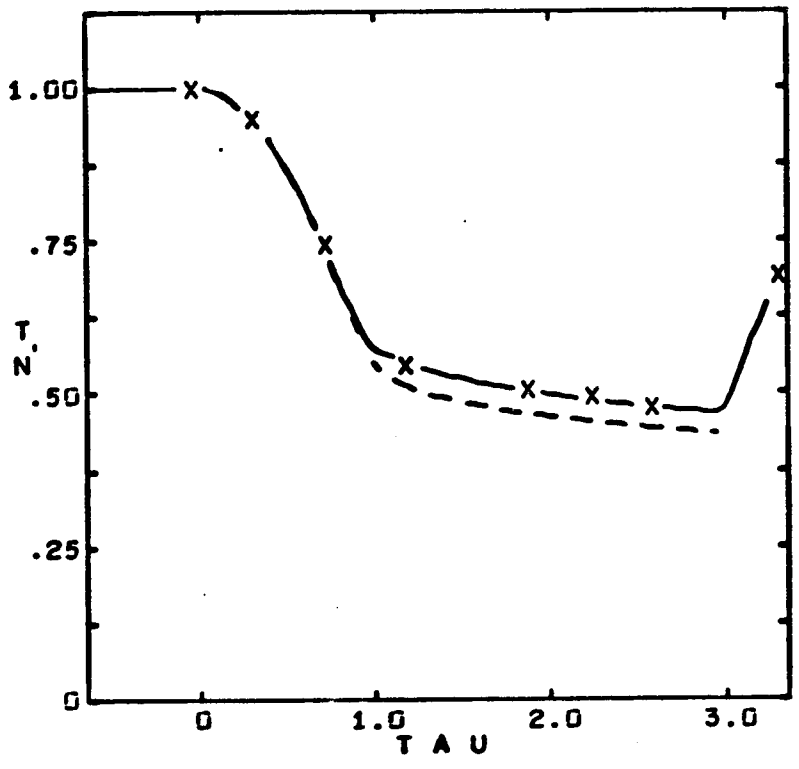
DIFFERENTIAL ENERGY DATA

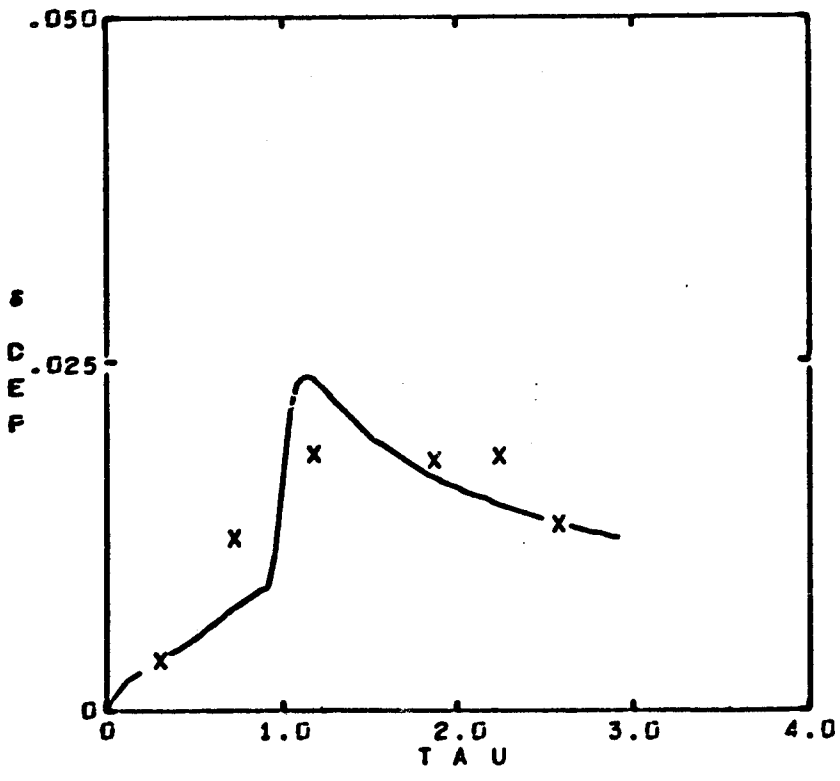
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0338	.0307	.0031
.50	.0603	.0550	.0053
.75	.0891	.0816	.0075
.93	.1082	.0991	.0091
1.0	.1067	.0895	.0172
1.5	.0750	.0553	.0197
2.0	.0613	.0454	.0159
2.5	.0531	.0394	.0137
3.0	.0471	.0350	.0121

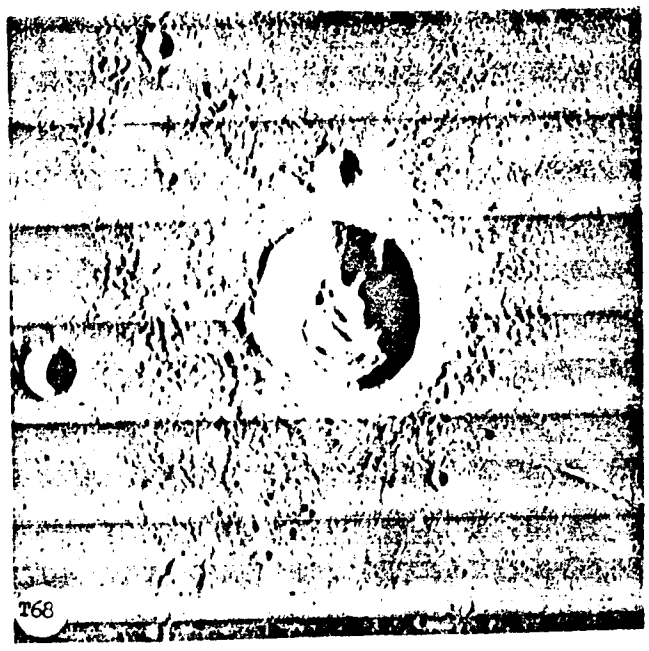
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.770	387.72		387.72	1.002	.0100
9H	-0.058	386.69		386.69	1.000	-.0007
10H	0.296	366.73		366.73	0.948	.0385
11H	0.713	287.98	0.000 -.780	287.98	0.745	.0900
12H	1.170	208.58	0.220 +.083	210.53	0.544	.0878
13H	1.868	187.28	0.521 -.196	195.57	0.506	.0654
14H	2.235	185.27	0.385 -.997	191.86	0.496	.0606
15H	2.565	184.35	0.139 -.364	184.79	0.478	.0521
16H	3.297	268.19	0.000 +.182	268.19	0.693	-.0521









346 (4F8) RABBI LEVI L

LAMBDA=23.05 E BETA=34.69 S XI=+.3219 ETA=-.5692 L+PL CODE = 43526 ALBEDO =.1293

13H FLAT MOON DATA
FM=.05826 FM'=.06103

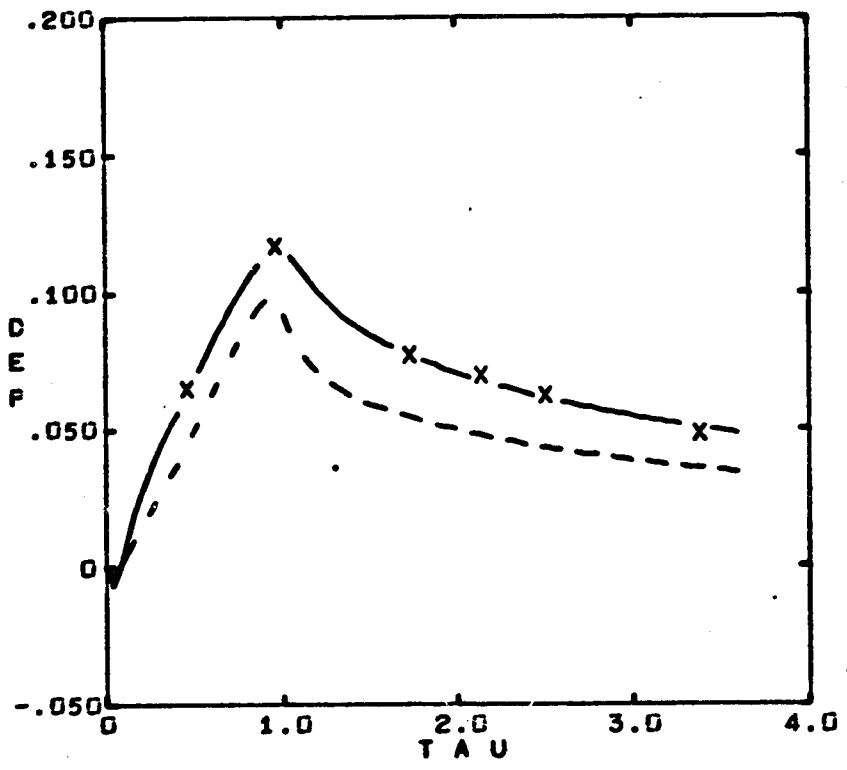
INITIAL TEMPERATURE 374.61
TAU-END OF TOTALITY 3.614

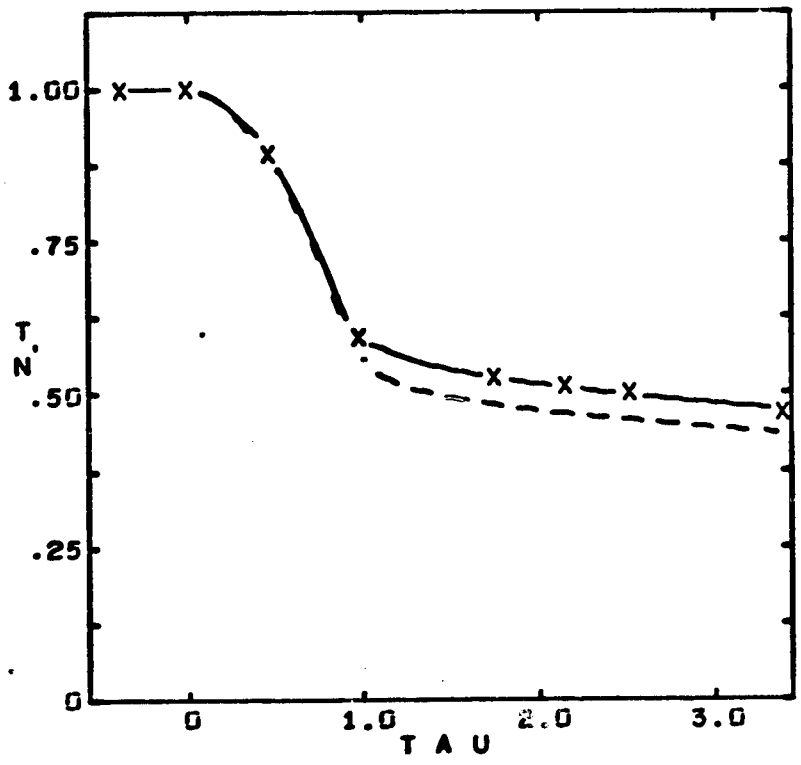
DIFFERENTIAL ENERGY DATA

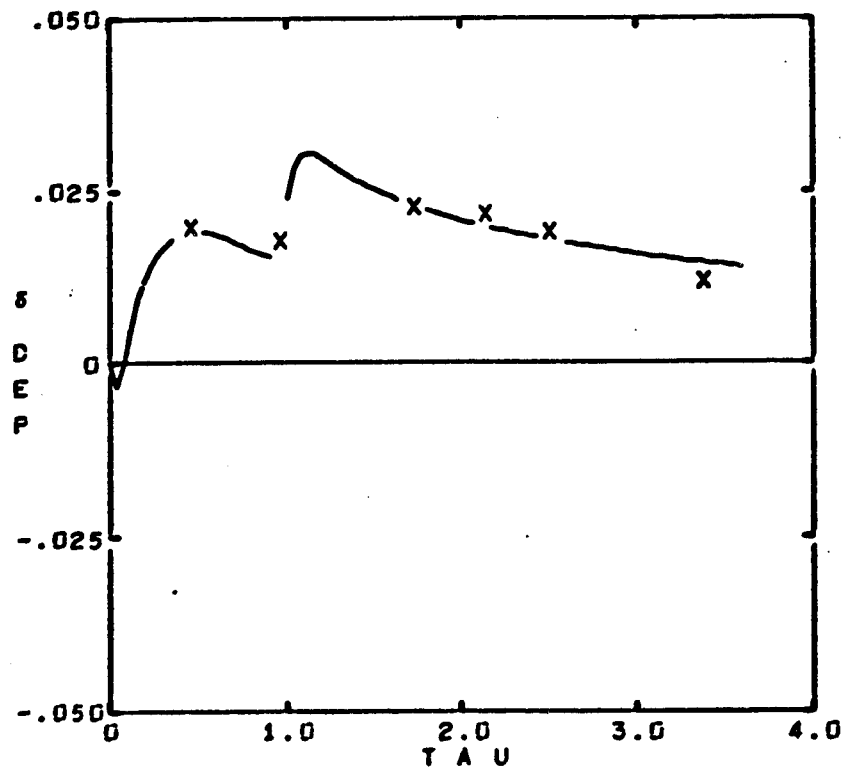
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0355	.0206	.0149
.50	.0689	.0498	.0191
.75	.0980	.0809	.0171
.93	.1165	.1017	.0148
1.0	.1161	.0925	.0236
1.5	.0849	.0596	.0253
2.0	.0706	.0499	.0207
2.5	.0616	.0437	.0179
3.0	.0549	.0390	.0159

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.185	376.43		376.43	1.005	.0196
9H	-0.393	375.06		375.06	1.001	.0049
10H	-0.003	374.60		374.60	1.000	-.0001
11H	0.459	335.15		335.15	0.895	.0646
12H	0.966	220.58	0.209 +.730	222.47	0.594	.1167
13H	1.739	196.24	0.081 -.124	197.27	0.527	.0769
14H	2.143	185.59	0.493 +.059	192.43	0.514	.0696
15H	2.510	183.00	0.376 -.828	187.26	0.500	.0624
16H	3.379	172.53	0.266 +.062	175.41	0.468	.0481







PHOTOGRAPH NOT AVAILABLE

347 (2M4) REINER A

LAMBDA=51.38 W BETA= 5.13 N XI=-.7782 ETA=+.0895 L+PL CODE = 27078 ALBEDO =.0614

13H FLAT MOON DATA
FM=.10245 FM'=.10042

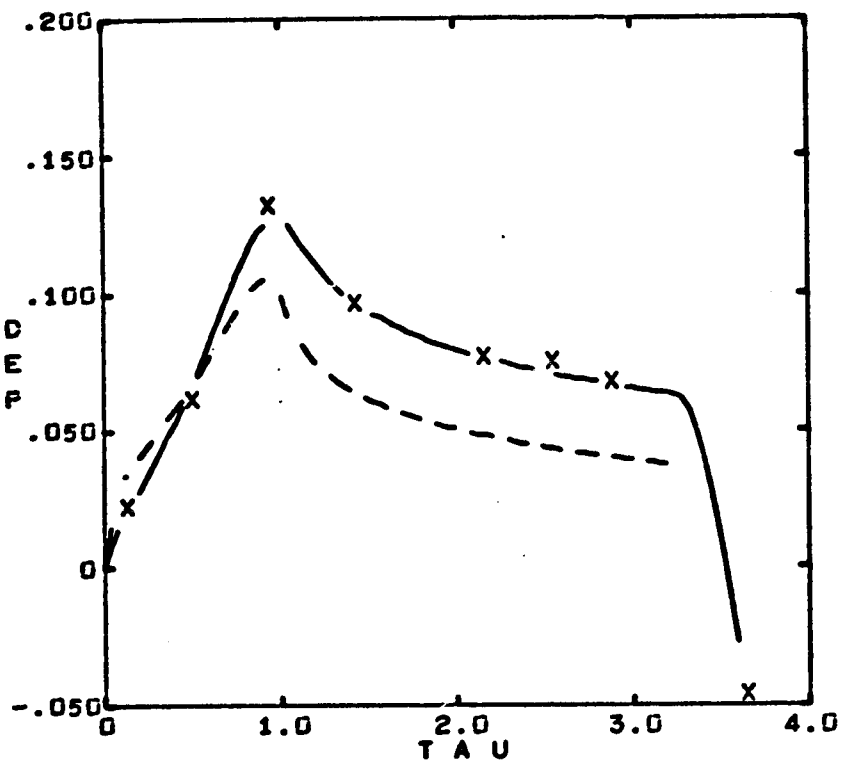
INITIAL TEMPERATURE 369.01
TAU-END OF TOTALITY 3.260

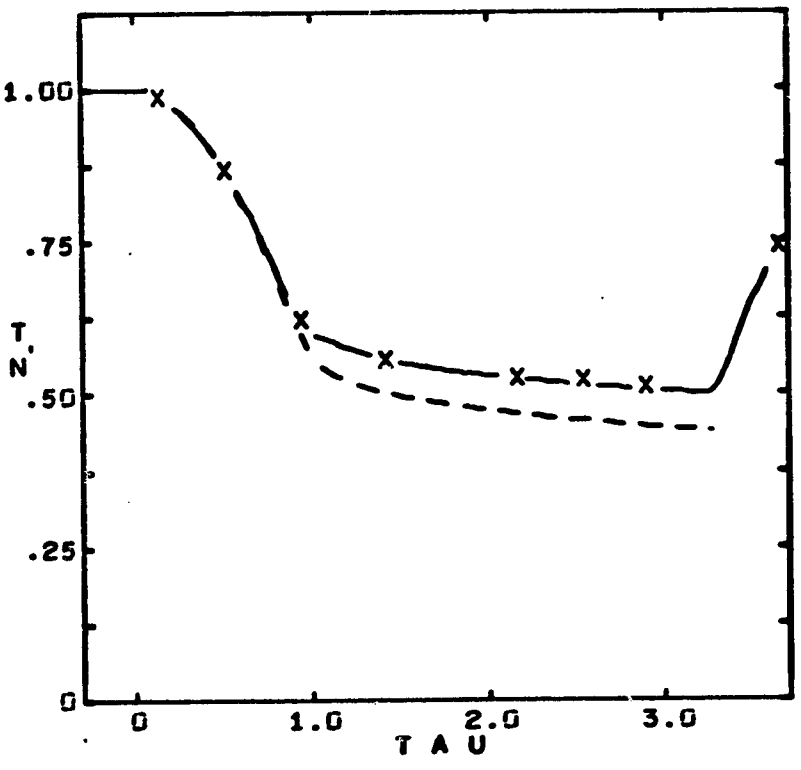
DIFFERENTIAL ENERGY DATA

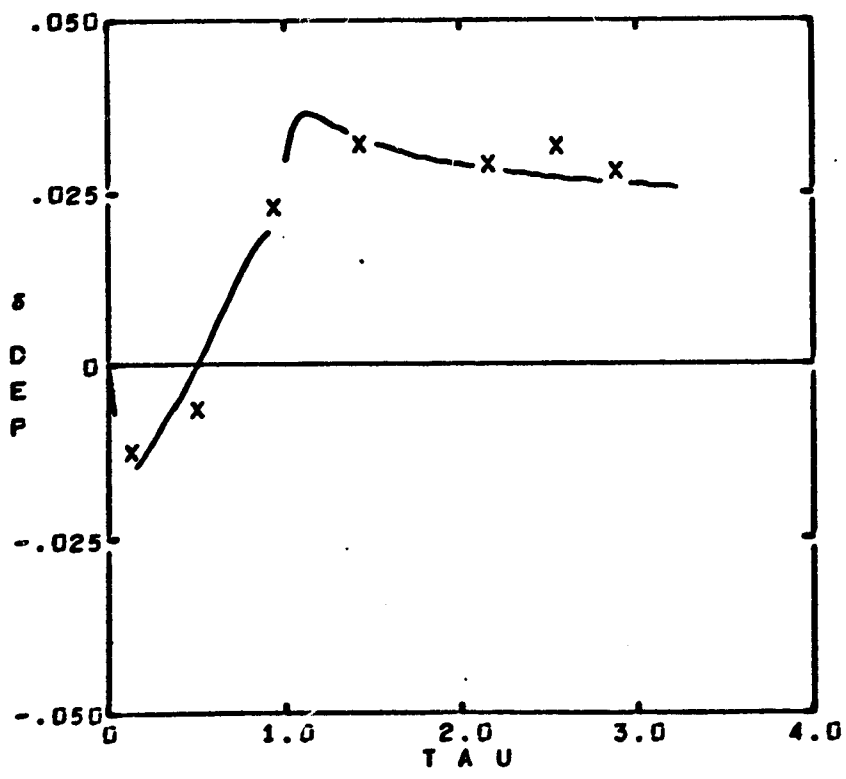
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0331	.0445	-.0114
.50	.0678	.0677	.0001
.75	.1060	.0931	.0129
.93	.1310	.1097	.0213
1.0	.1289	.0994	.0295
1.5	.0935	.0614	.0321
2.0	.0795	.0505	.0290
2.5	.0712	.0440	.0272
3.0	.0654	.0393	.0261

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.619	369.01			369.01	1.000	.0000
9H	0.132	365.50			365.50	0.991	.0227
10H	0.502	320.44	0.000	-.799	320.44	0.868	.0614
11H	0.941	222.29	0.529	-.937	229.58	0.622	.1324
12H	1.421	204.48	0.041	-.981	205.45	0.557	.0961
13H	2.155	193.59	0.105	+.738	194.53	0.527	.0772
14H	2.539	184.51	0.387	+.443	193.40	0.524	.0755
15H	2.887	186.34	0.175	-.569	188.71	0.511	.0684
16H	3.646	274.89	0.000	+.181	274.89	0.745	-.0460







PHOTOGRAPH NOT AVAILABLE

348 (2M5) REINER 6

LAMBDA=47.33 W BETA= 5.65 N XI=-.7317 ETA=+.0984 L+FL CODE = 27039 ALBEDO =.0598

13H FLAT MOON DATA
FM=.06038 FM'=.06424

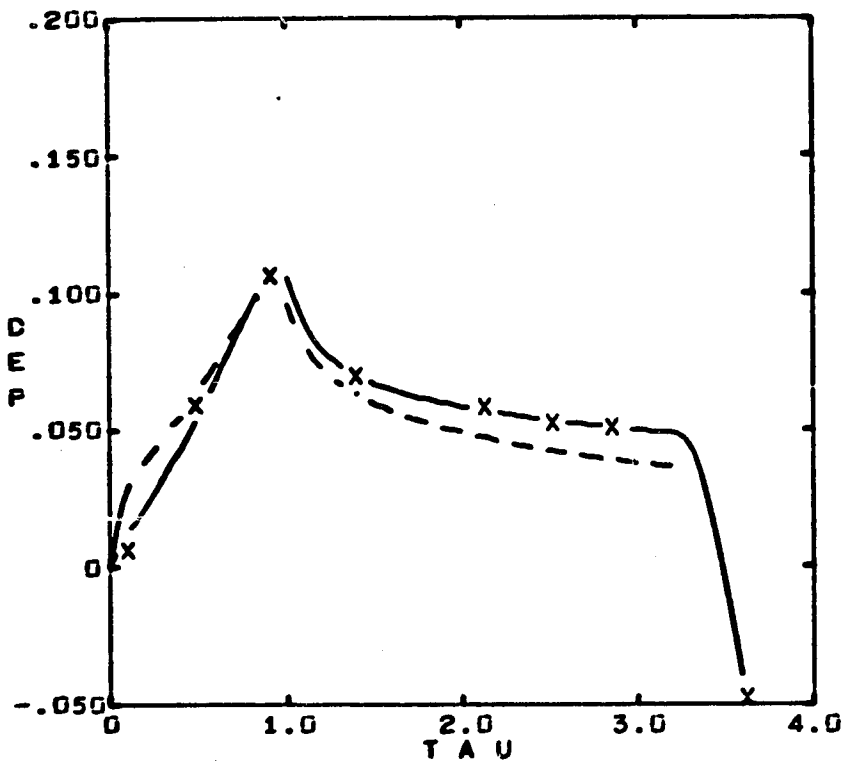
INITIAL TEMPERATURE 373.49
TAU-END OF TOTALITY 3.248

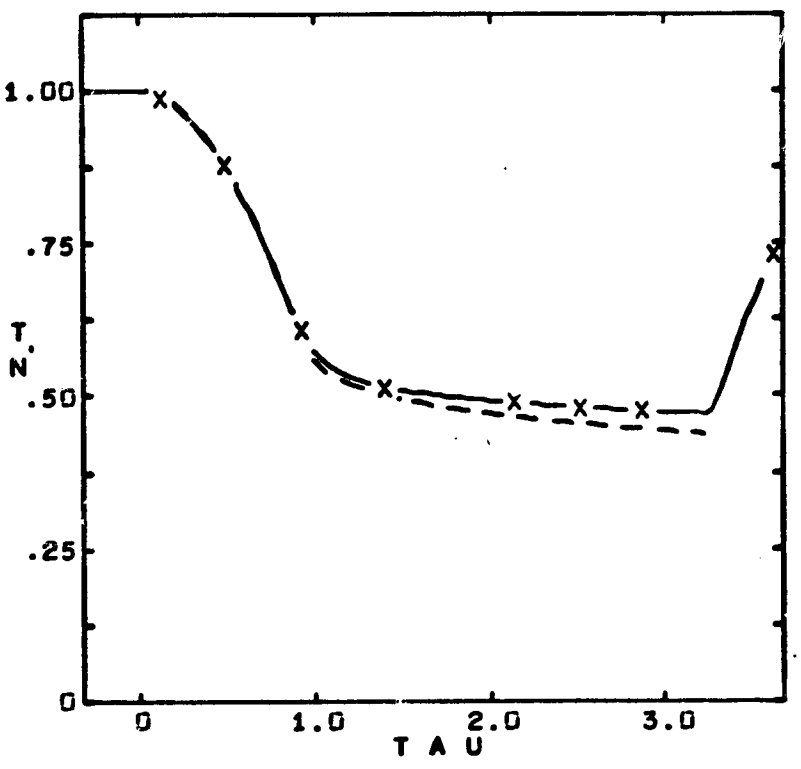
DIFFERENTIAL ENERGY DATA

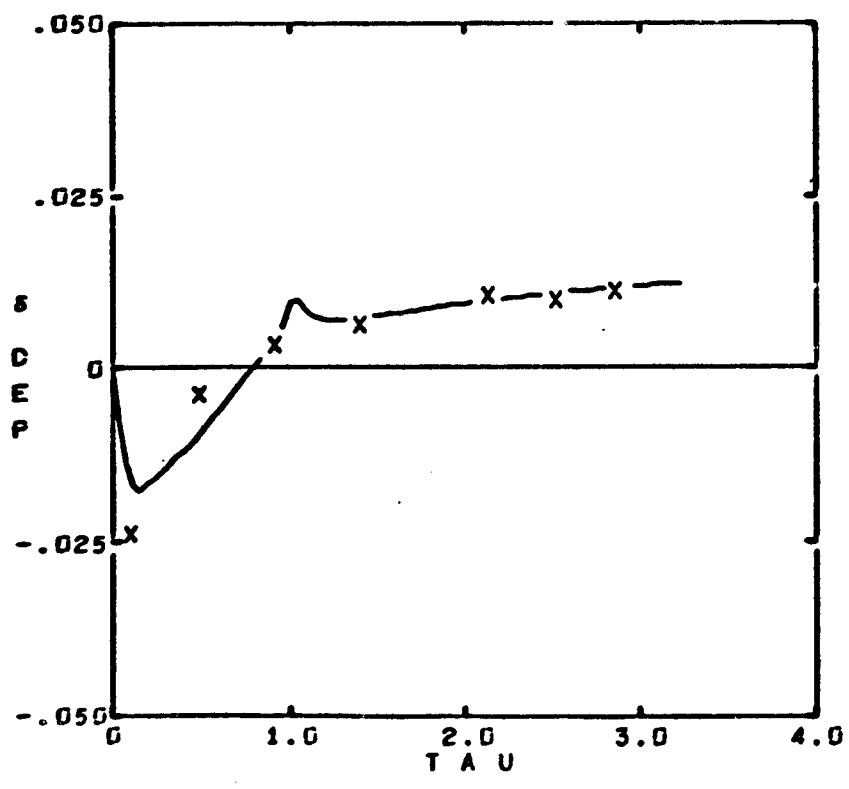
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0258	.0416	-.0158
.50	.0557	.0647	-.0090
.75	.0888	.0900	-.0012
.93	.1105	.1066	.0039
1.0	.1061	.0965	.0096
1.5	.0672	.0596	.0076
2.0	.0584	.0490	.0094
2.5	.0535	.0427	.0108
3.0	.0500	.0381	.0119

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.638	373.49		373.49	1.000	.0000
9H	0.111	369.70		369.70	0.990	.0057
10H	0.482	327.79		327.79	0.878	.0593
11H	0.919	226.45	0.000 -.094	226.45	0.606	.1060
12H	1.398	191.62	0.000 -.234	191.62	0.513	.0693
13H	2.131	181.62	0.189 -.430	183.16	0.490	.0578
14H	2.514	178.87	0.000 -.287	178.87	0.479	.0526
15H	2.861	176.08	0.126 +.285	177.14	0.474	.0506
16H	3.621	273.78	0.000 +.815	273.78	0.733	-.0473







PHOTOGRAPH NOT AVAILABLE

349 (2M6) REINER C

LAMBDA=51.40 W BETA= 3.50 N XI=-.7801 ETA=+.0610 L+PL CODE = 27086 ALBEDO =.0608

13H FLAT MOON DATA
FM=.05129 FM'=.05893

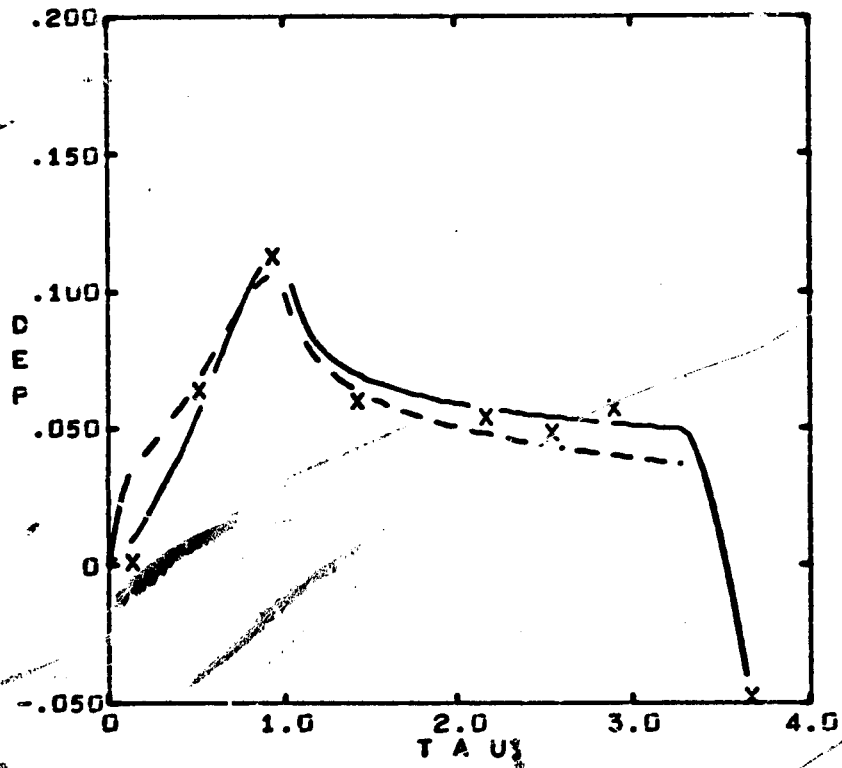
INITIAL TEMPERATURE 369.68
TAU-END OF TOTALITY 3.284

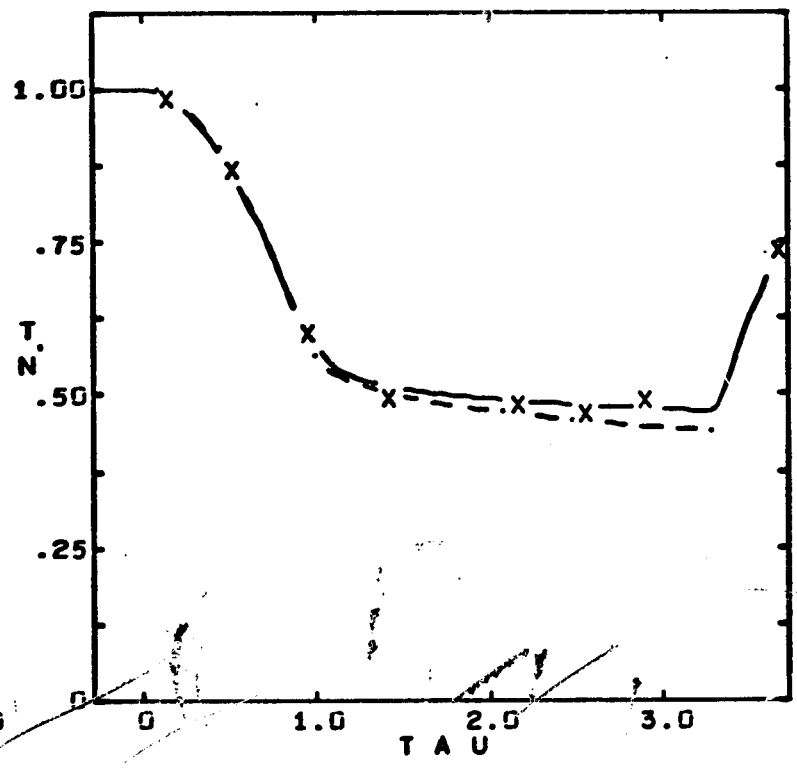
DIFFERENTIAL ENERGY DATA

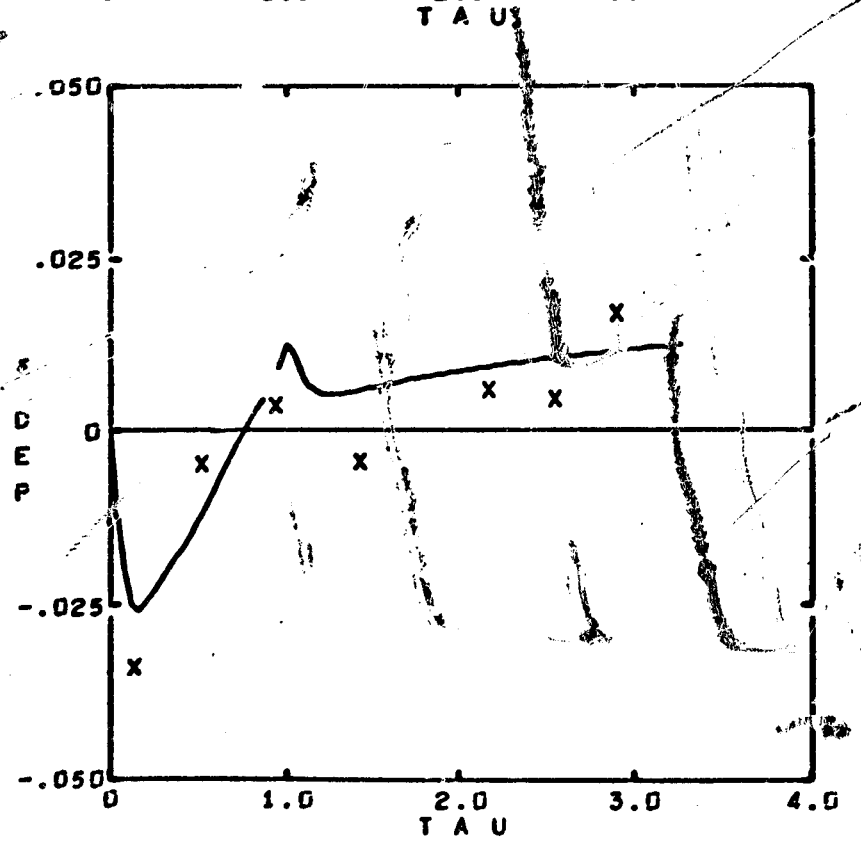
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0216	.0446	-.0230
.50	.0553	.0677	-.0124
.75	.0925	.0931	-.0006
.93	.1169	.1097	.0072
1.0	.1121	.0994	.0127
1.5	.0677	.0614	.0063
2.0	.0592	.0505	.0087
2.5	.0545	.0440	.0105
3.0	.0512	.0393	.0119

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.622	369.68		369.68	1.000	.0000
9H	0.133	364.02		364.02	0.985	.0011
10H	0.505	320.91	0.000 -.764	320.91	0.868	.0636
11H	0.544	221.41	0.056 +.569	221.54	0.599	.1130
12H	1.426	182.59	0.000 -.173	182.59	0.494	.0595
13H	2.164	174.87	0.388 +.833	178.14	0.482	.0539
14H	2.549	171.02	0.377 -.009	173.09	0.468	.0481
15H	2.898	175.51	0.468 - 849	180.72	0.489	.0571
16H	3.661	272.14	0.000 +.821	272.14	0.736	-.0480







PHOTOGRAPH NOT AVAILABLE

350 (2M7) REINHOLC N

LAMBDA=25.38 W BETA= 1.58 N XI=-.4285 ETA=+.0275 L+PL CODE = 24022 ALBEDO =.0728

13H FLAT MOON DATA
FM=.01452 FM'=.01731

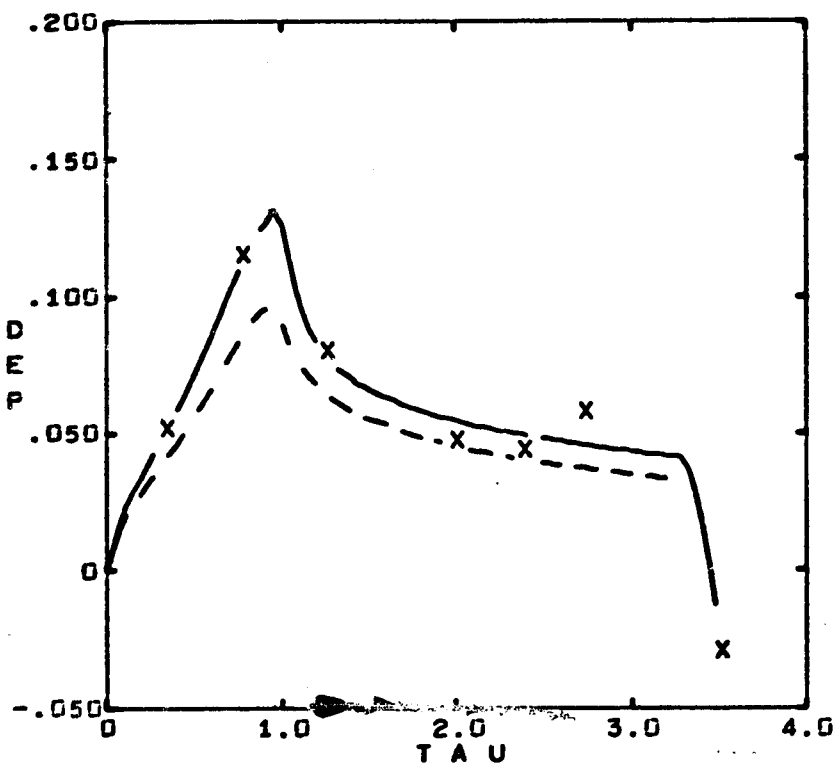
INITIAL TEMPERATURE 388.21
TAU-END OF TOTALITY 3.274

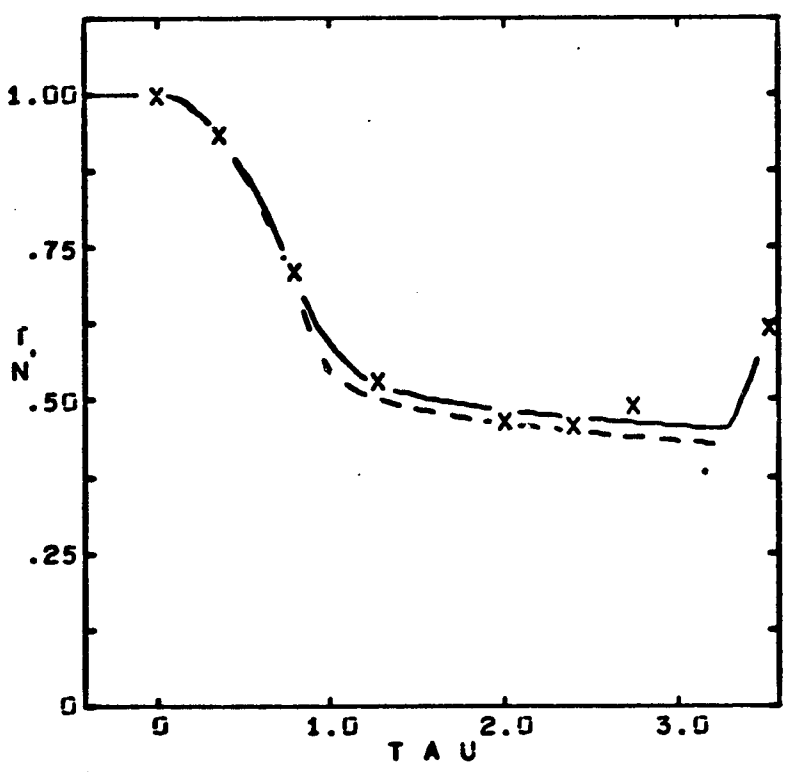
DIFFERENTIAL ENERGY DATA

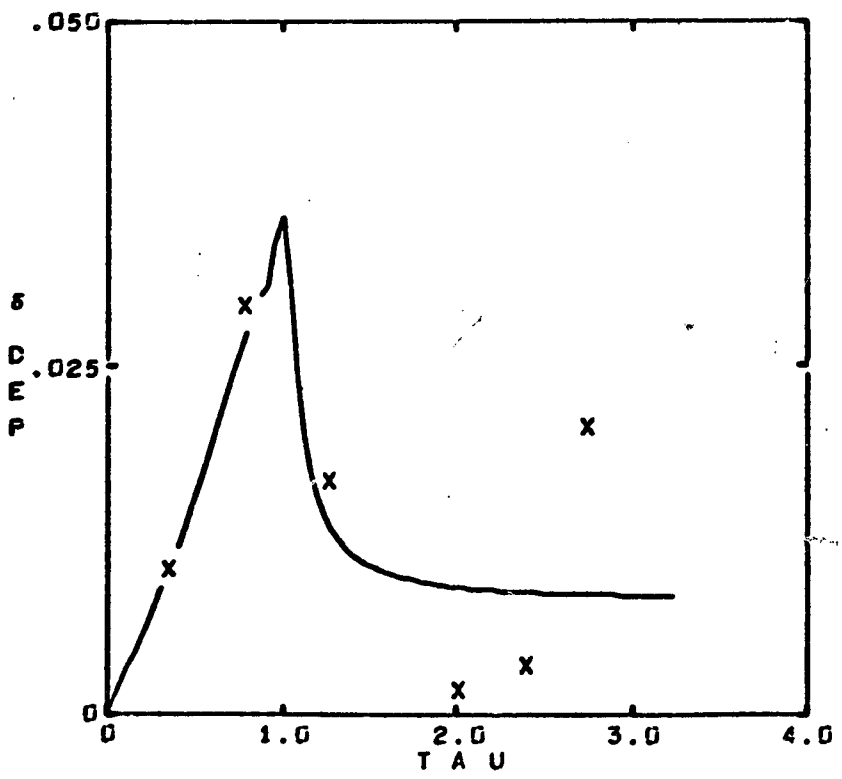
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0387	.0319	.0068
.50	.0716	.0560	.0156
.75	.1079	.0822	.0257
.93	.1318	.0995	.0323
1.0	.1257	.0898	.0359
1.5	.0661	.0555	.0106
2.0	.0547	.0456	.0091
2.5	.0482	.0396	.0086
3.0	.0457	.0352	.0085

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.774	389.45		389.45	1.003	.0128
9H	-0.020	388.18		388.18	1.000	-.0003
10H	0.351	362.70		362.70	0.934	.0515
11H	0.789	270.15	0.794 +.902	275.90	0.711	.1155
12H	1.271	202.52	0.381 +.677	206.80	0.533	.0805
13H	2.006	179.31	0.432 +.824	180.98	0.466	.0472
14H	2.392	178.08	0.000 +.994	178.08	0.459	.0443
15H	2.739	182.90	0.557 +.862	190.45	0.491	.0579
16H	3.517	240.14	0.000 +.498	240.14	0.619	-.0286







PHOTOGRAPH
NOT
AVAILABLE

351 (1M5) RHAETICUS B

LAMBDA= 6.83 E BETA= 1.61 N XI=+.1189 ETA=+.0281 L+PL CODE = 11012 ALBEDO =.1487

13H FLAT MOON DATA
FM=.03308 FM'=.03938

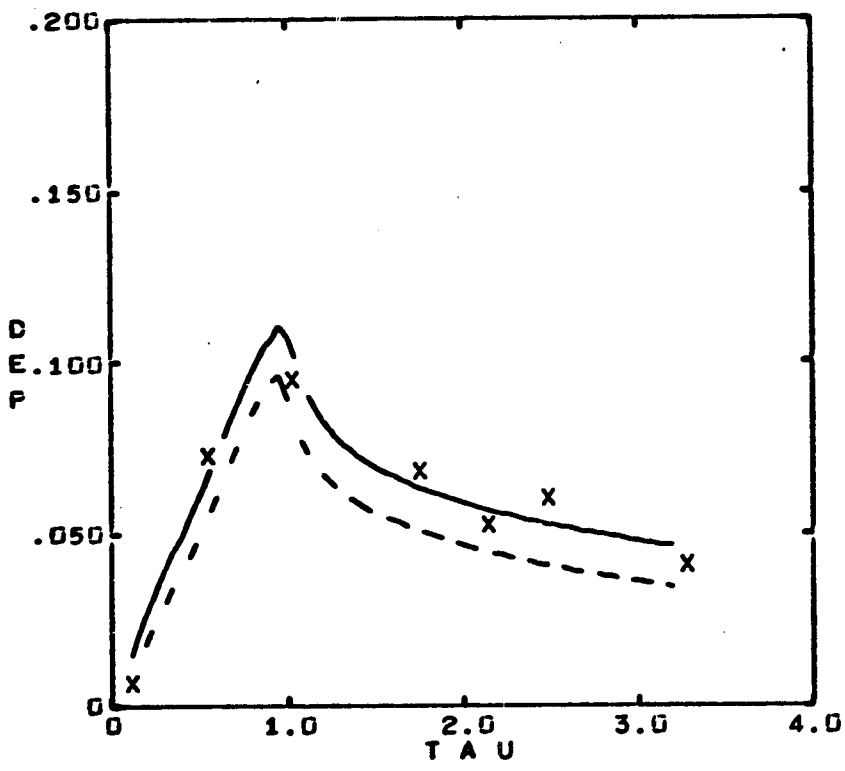
INITIAL TEMPERATURE 390.34
TAU-END OF TOTALITY 3.213

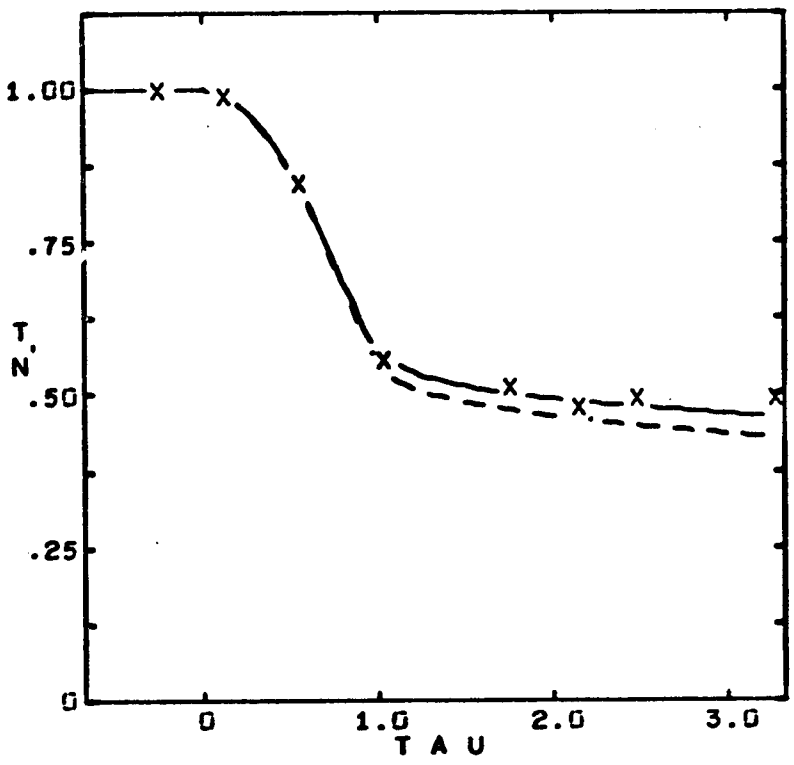
DIFFERENTIAL ENERGY DATA

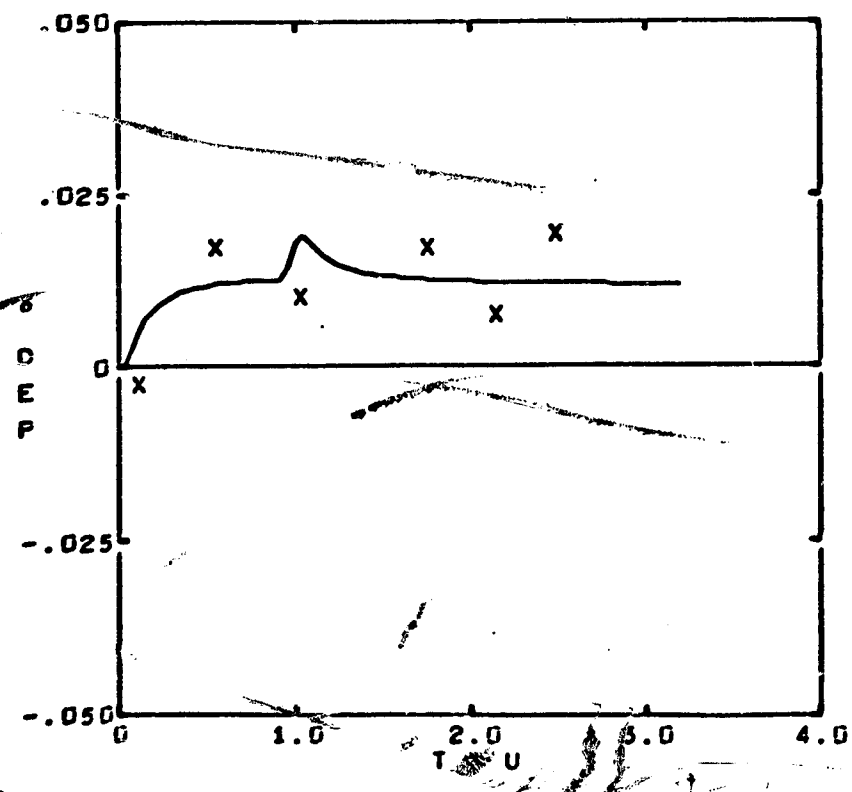
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0319	.0228	.0091
.50	.0615	.0497	.0118
.75	.0913	.0789	.0124
.93	.1109	.0984	.0125
1.0	.1074	.0893	.0181
1.5	.0696	.0563	.0133
2.0	.0591	.0467	.0124
2.5	.0527	.0406	.0121
3.0	.0481	.0361	.0120

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.998	391.49		391.49	1.003	.0118
9H	-0.254	390.05		390.05	0.999	-.0030
10H	0.114	386.23		386.23	0.989	.0061
11H	0.550	330.28	0.000 -.858	330.28	0.846	.0728
12H	1.026	215.23	0.767 -.163	216.75	0.555	.0951
13H	1.754	196.42	0.303 -.410	199.50	0.511	.0682
14H	2.136	186.40	0.148 +.413	186.87	0.479	.0525
15H	2.480	191.45	0.167 +.006	193.38	0.495	.0602
16H	3.272	190.31	0.389 +.575	192.27	0.493	.0413







PHOTOGRAPH NOT AVAILABLE

352 (4F9) RICCIUS E

LAMBDA=26.44 E BETA=39.91 S XI=+.3415 ETA=-.6416 L+PL CODE = 43644 ALBEDO =.1527

13H FLAT MOON DATA
FM=.02939 FM'=.03427

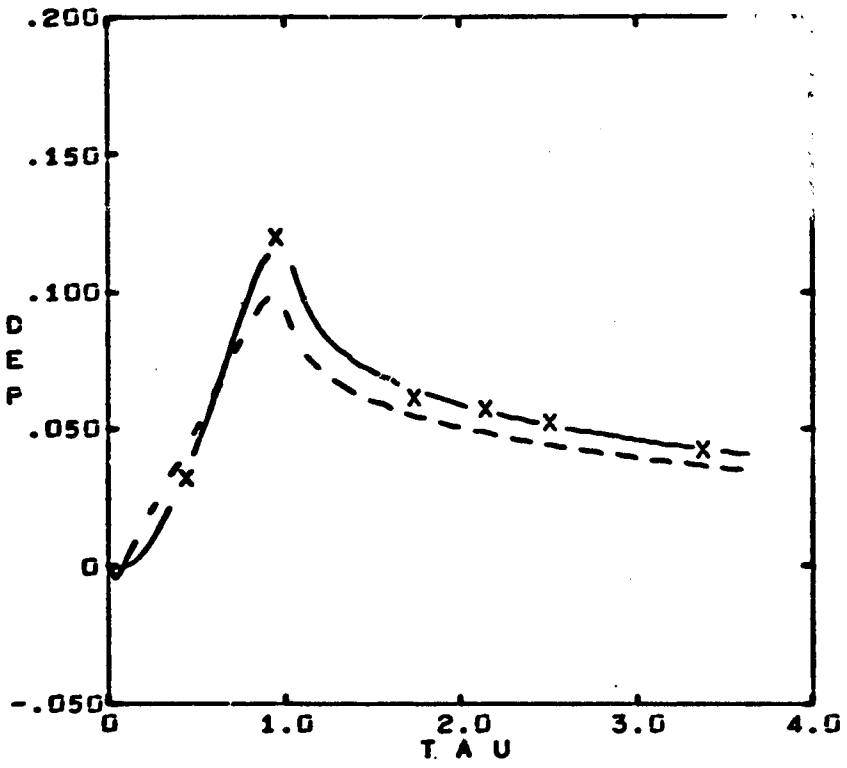
INITIAL TEMPERATURE 370.02
TAU-END OF TOTALITY 3.650

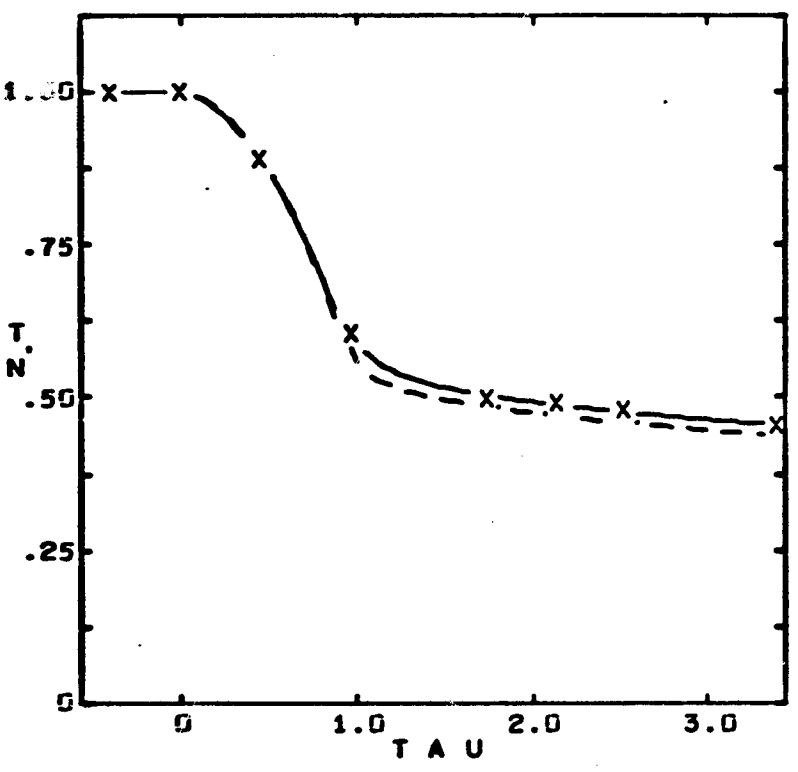
DIFFERENTIAL ENERGY DATA

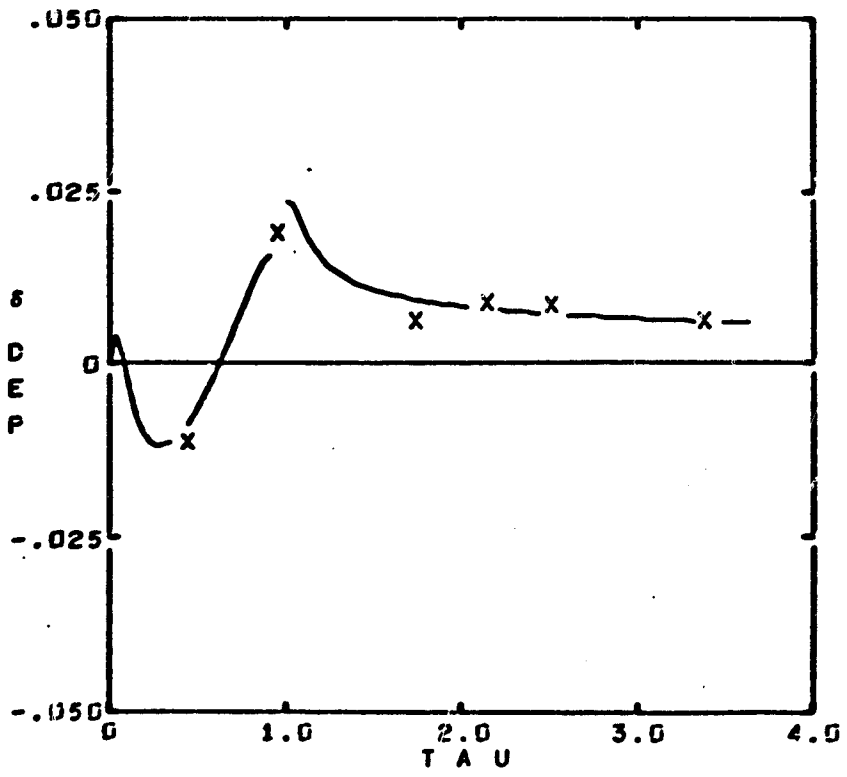
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0086	.0200	-.0114
.50	.0433	.0498	-.0065
.75	.0887	.0812	.0075
.93	.1206	.1022	.0184
1.0	.1168	.0931	.0237
1.5	.0710	.0602	.0108
2.0	.0589	.0505	.0084
2.5	.0516	.0443	.0073
3.0	.0462	.0397	.0065

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.206	369.02		369.02	0.997	-.0109
9H	-0.409	369.46		369.46	0.998	-.0061
10H	-0.018	370.06		370.06	1.000	.0004
11H	0.446	329.26		329.26	0.890	.0318
12H	0.955	221.83	0.187 -.153	223.17	0.603	.1202
13H	1.733	182.13	0.290 +.934	184.06	0.497	.0612
14H	2.139	177.04	0.405 +.582	181.21	0.490	.0575
15H	2.507	174.92	0.279 -.382	177.32	0.479	.0527
16H	3.364	166.41	0.185 -.899	168.51	0.455	.0430







PHOTOGRAPH NOT AVAILABLE

353 (1M6) RITTER B

LAMBDA=18.95 E BETA= 3.26 N XI=+.3242 ETA=+.0569 L+PL CODE = 13025 ALBEDO =.0735

13H FLAT MOON DATA
FM=.01641 FM'=.01641

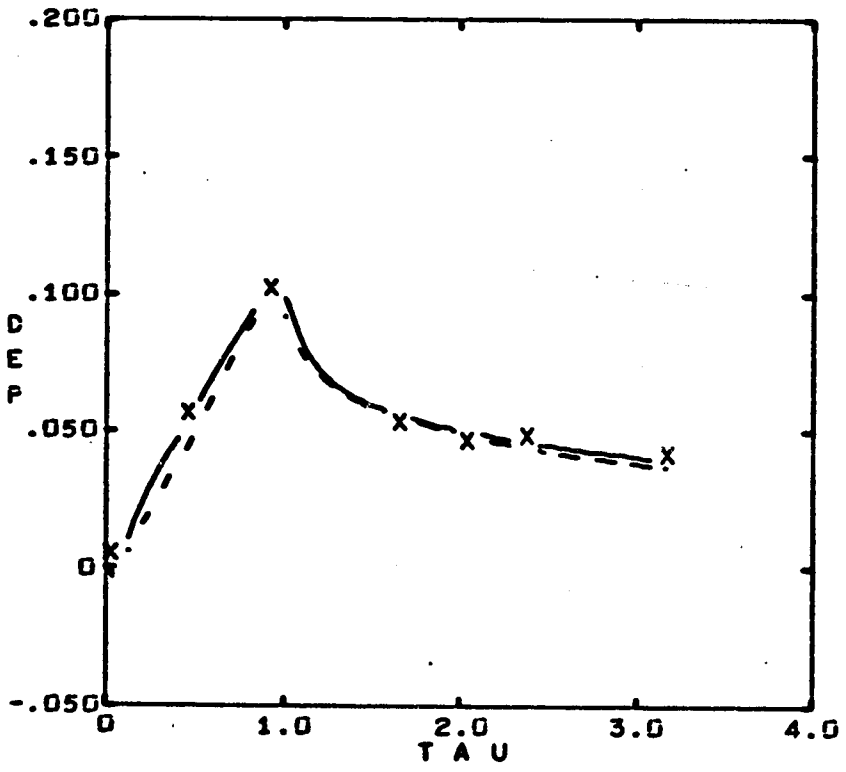
INITIAL TEMPERATURE 394.89
TAU-END OF TOTALITY 3.163

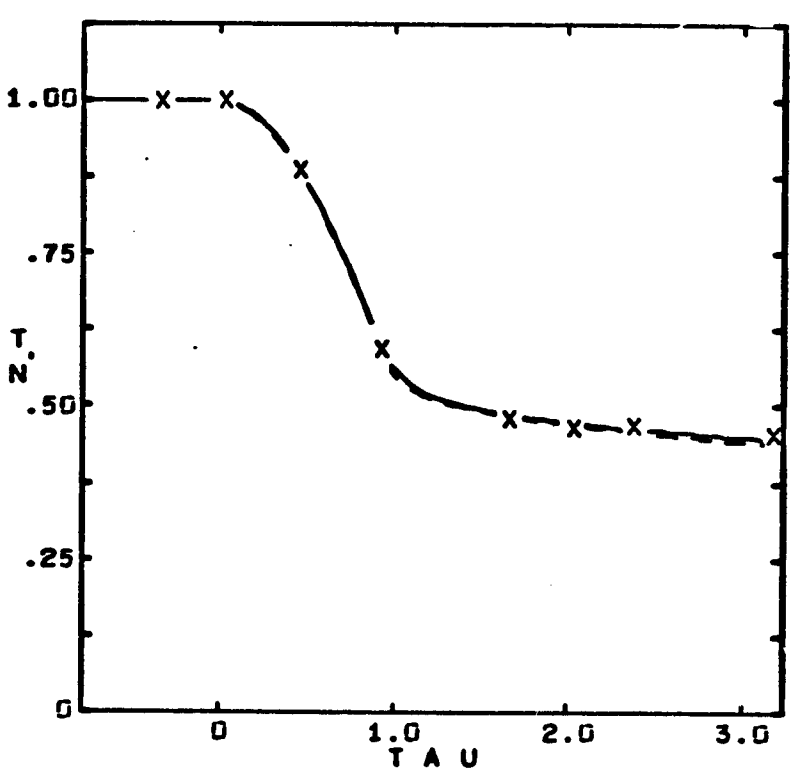
DIFFERENTIAL ENERGY DATA

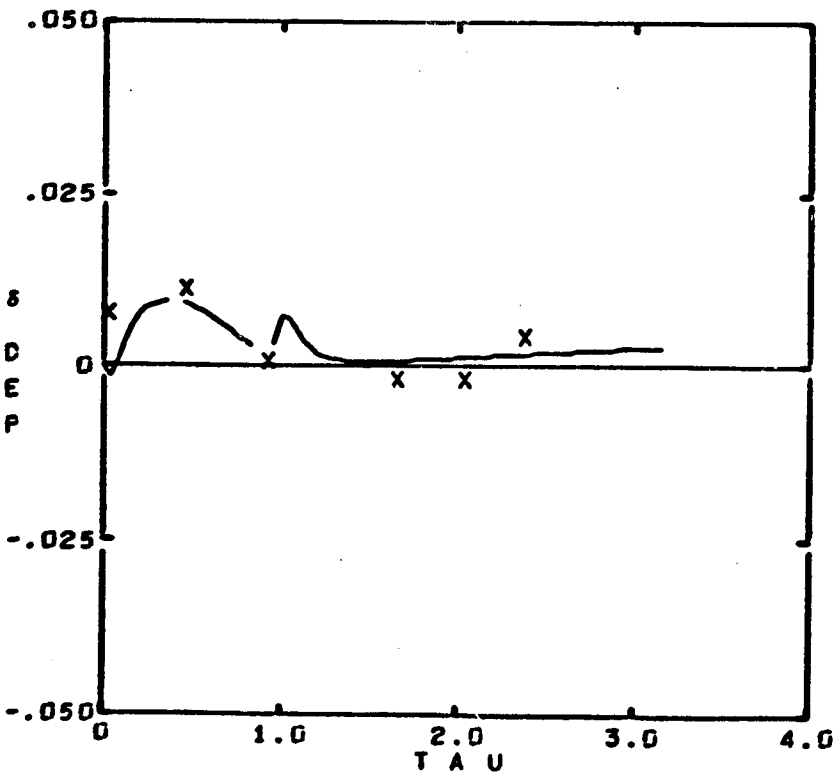
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0299	.0212	.0087
.50	.0586	.0499	.0087
.75	.0852	.0805	.0047
.93	.1024	.1011	.0013
1.0	.0991	.0919	.0072
1.5	.0595	.0588	.0007
2.0	.0504	.0491	.0013
2.5	.0449	.0429	.0020
3.0	.0409	.0382	.0027

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.074	396.17		396.17	1.003	.0131
9H	-0.338	394.48		394.48	0.999	-.0041
10H	0.028	394.91		394.91	1.000	.0050
11H	0.459	350.29		350.29	0.887	.0563
12H	0.933	233.76	0.000 +.196	233.76	0.592	.1018
13H	1.654	189.66	0.000 +.211	189.66	0.480	.0532
14H	2.033	183.58	0.000 +.216	183.58	0.465	.0467
15H	2.375	184.76	0.234 +.110	185.46	0.470	.0487
16H	3.168	179.10	0.000 +.194	179.10	0.454	.0420







PHOTOGRAPH NOT AVAILABLE

354 (1M7) ROSS

LAMBDA=21.73 E BETA=11.68 N XI=+.3626 ETA=+.2025 L+PL CODE = 13260 ALBEDO =.0662

13H FLAT MOON DATA
FM=.08273 FM'=.09210

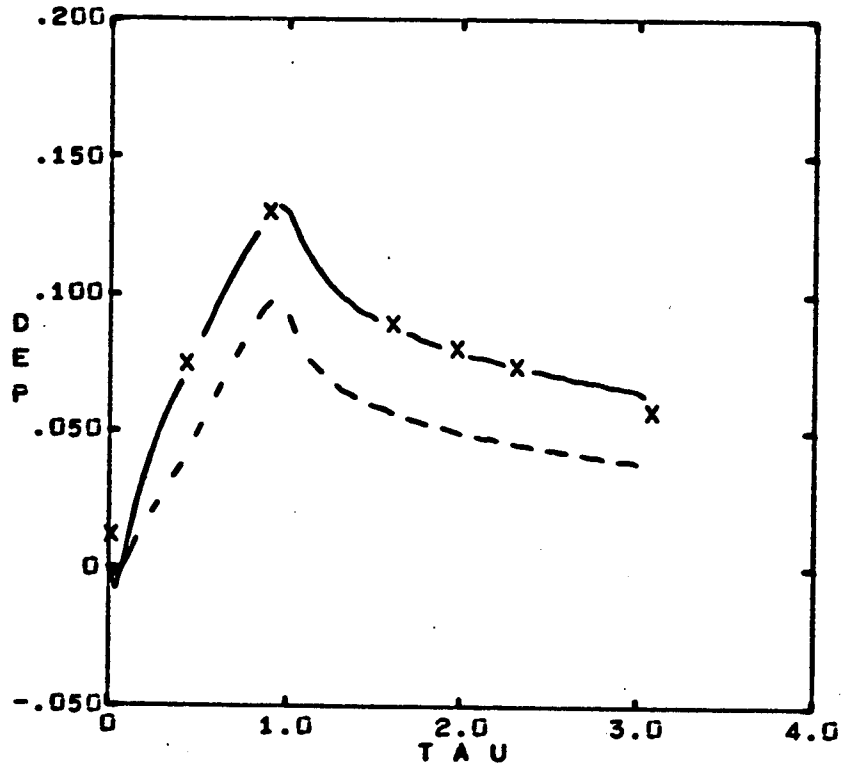
INITIAL TEMPERATURE 394.86
TAU-END OF TOTALITY 3.017

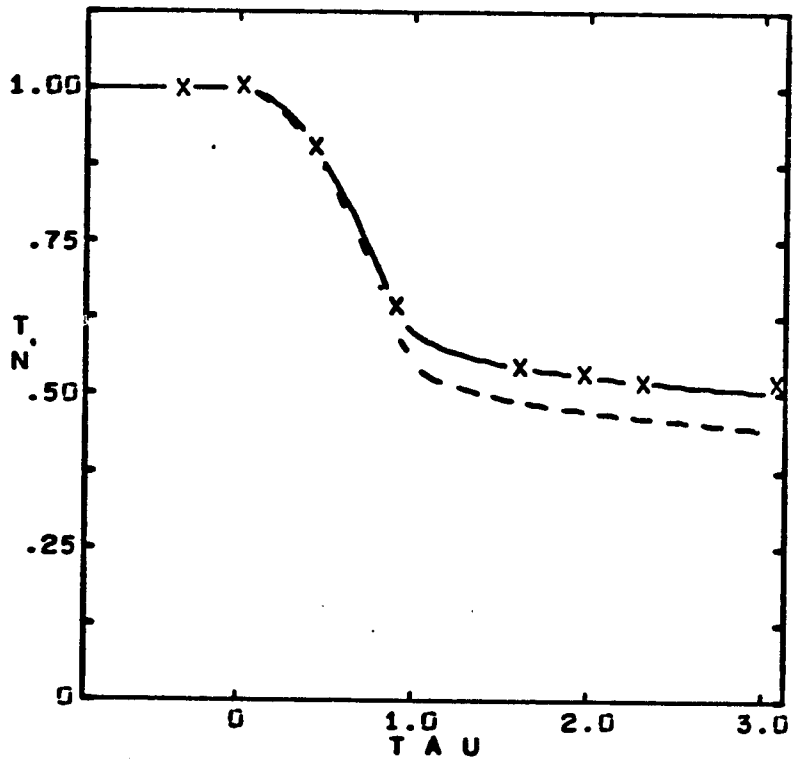
DIFFERENTIAL ENERGY DATA

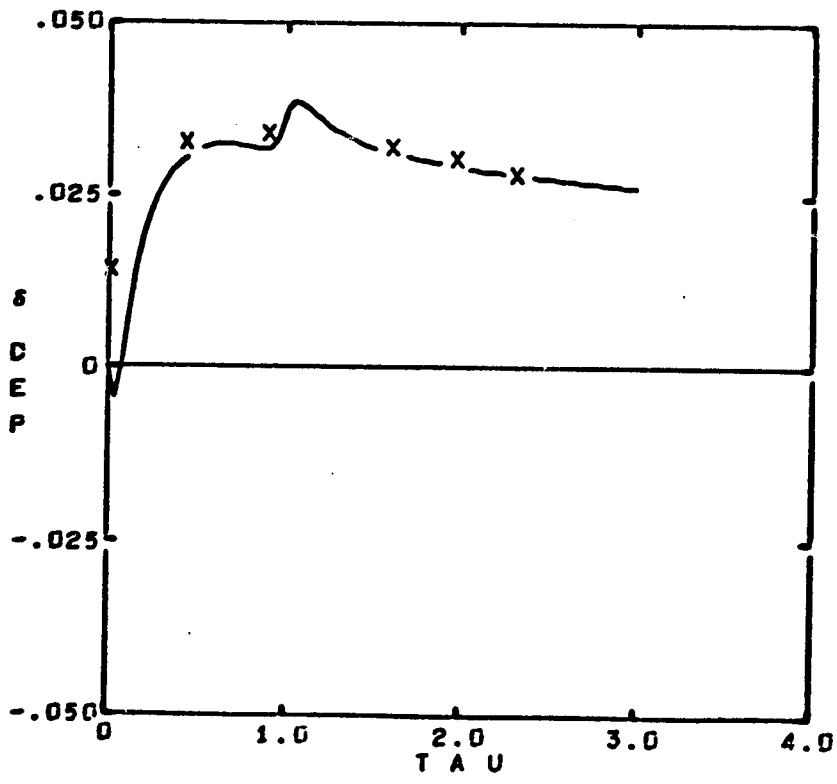
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0438	.0208	.0230
.50	.0814	.0499	.0315
.75	.1129	.0808	.0321
.93	.1326	.1015	.0311
1.0	.1295	.0923	.0372
1.5	.0913	.0593	.0320
2.0	.0787	.0496	.0291
2.5	.0708	.0434	.0274
3.0	.0649	.0388	.0261

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.063	395.26		395.26	1.001	.0041
9H	-0.344	394.73		394.73	1.000	-.0013
10H	0.012	395.92		395.92	1.003	.0120
11H	0.434	356.82		356.82	0.904	.0749
12H	0.896	253.24	0.214 +.394	254.37	0.644	.1301
13H	1.600	214.64	0.254 +.013	215.59	0.546	.0889
14H	1.972	207.18	0.178 -.911	210.40	0.533	.0806
15H	2.304	203.80	0.129 +.330	205.87	0.521	.0739
16H	3.076	200.62	0.571 -.90	205.68	0.521	.0575







PHOTOGRAPH NOT AVAILABLE

355 (1M8) ROSS B

LAMBDA=20.17 E BETA=11.38 N XI=+.3380 ETA=+.1973 +PL CODE = 13139 ALBEDO =.0590

13H FLAT MOON DATA
FM=.01947 FM'=.01947

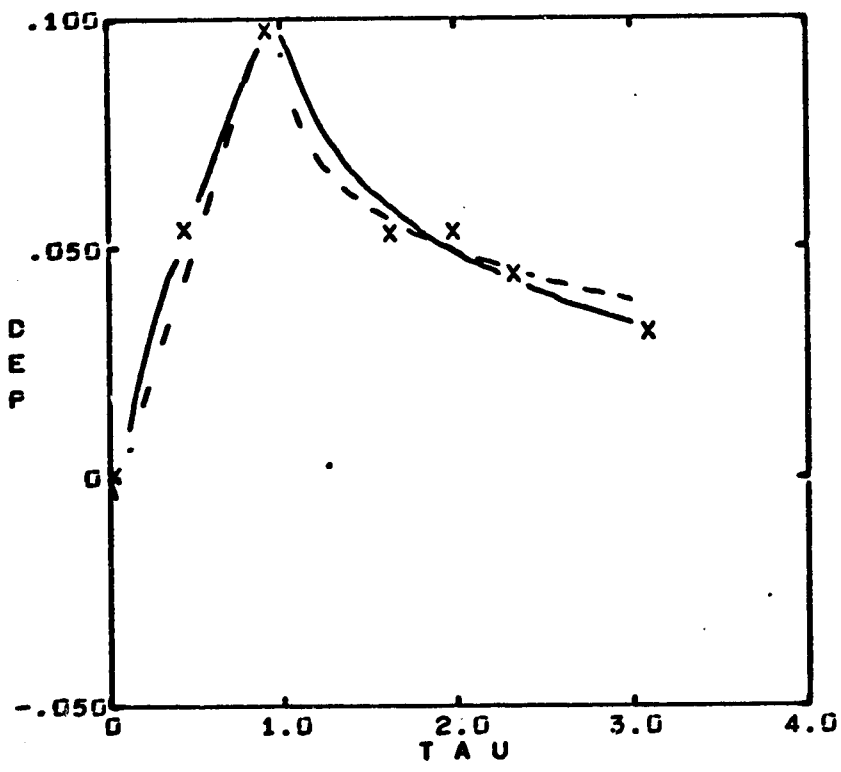
INITIAL TEMPERATURE 396.11
TAU-END OF TOTALITY 3.026

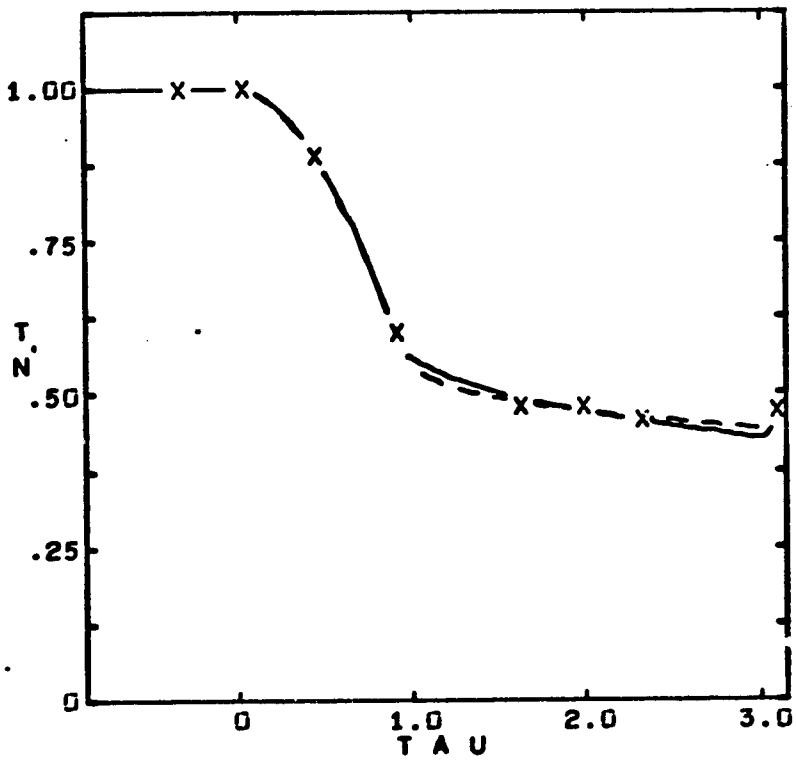
DIFFERENTIAL ENERGY DATA

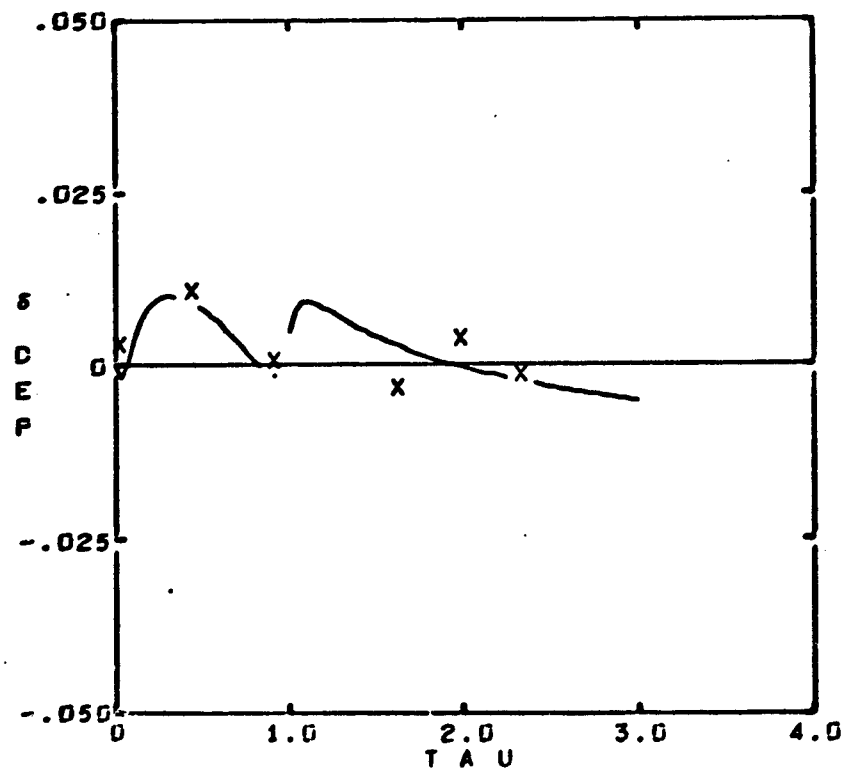
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0306	.0210	.0096
.50	.0583	.0499	.0084
.75	.0828	.0807	.0021
.93	.0984	.1013	-.0029
1.0	.0967	.0921	.0046
1.5	.0632	.0590	.0042
2.0	.0490	.0493	-.0003
2.5	.0400	.0431	-.0031
3.0	.0333	.0385	-.0052

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.054	397.81		397.81	1.004	.0173
9H	-0.335	395.57		395.57	0.999	-.0054
10H	0.023	395.80		395.80	0.999	.0003
11H	0.445	353.23		353.23	0.892	.0541
12H	0.908	238.62	0.000 -.780	238.62	0.602	.0973
13H	1.612	190.11	0.000 -.796	190.11	0.480	.0531
14H	1.984	190.70	0.000 -.820	190.70	0.481	.0537
15H	2.318	181.46	0.000 -.784	181.46	0.458	.0440
16H	3.090	187.52	0.000 +.356	187.52	0.473	.0315







PHOTOGRAPH NOT AVAILABLE

356 (1M9) ROSS C

LAMBDA=18.94 E BETA=11.61 N XI=+.3179 ETA=+.2013 L+PL CODE = 13210 ALBEDO =.0612

13H FLAT MOON DATA
FM=.03907 FM'=.04310

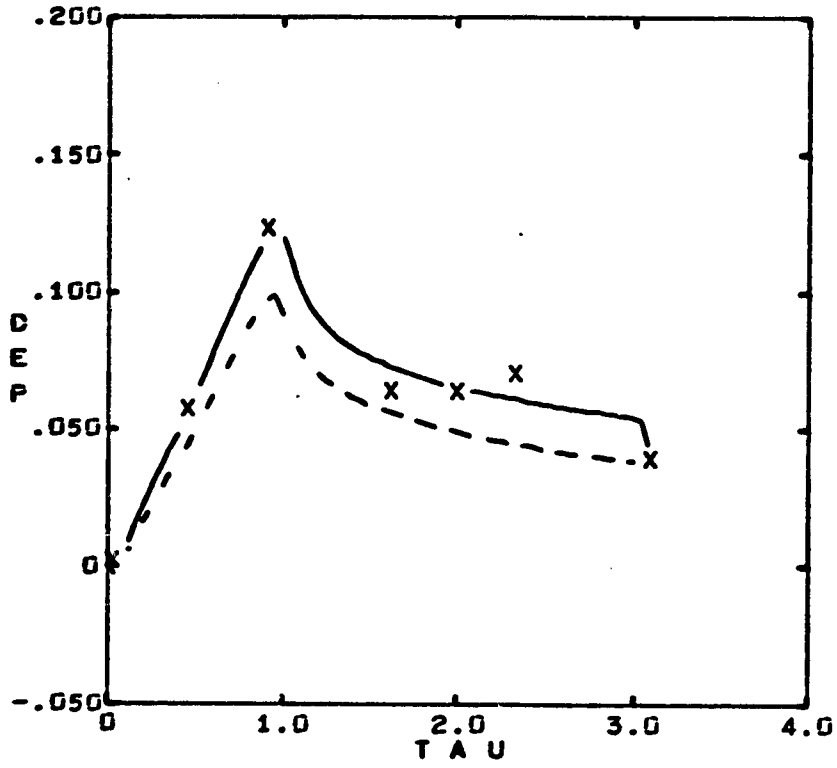
INITIAL TEMPERATURE 396.05
TAU-END OF TOTALITY 3.025

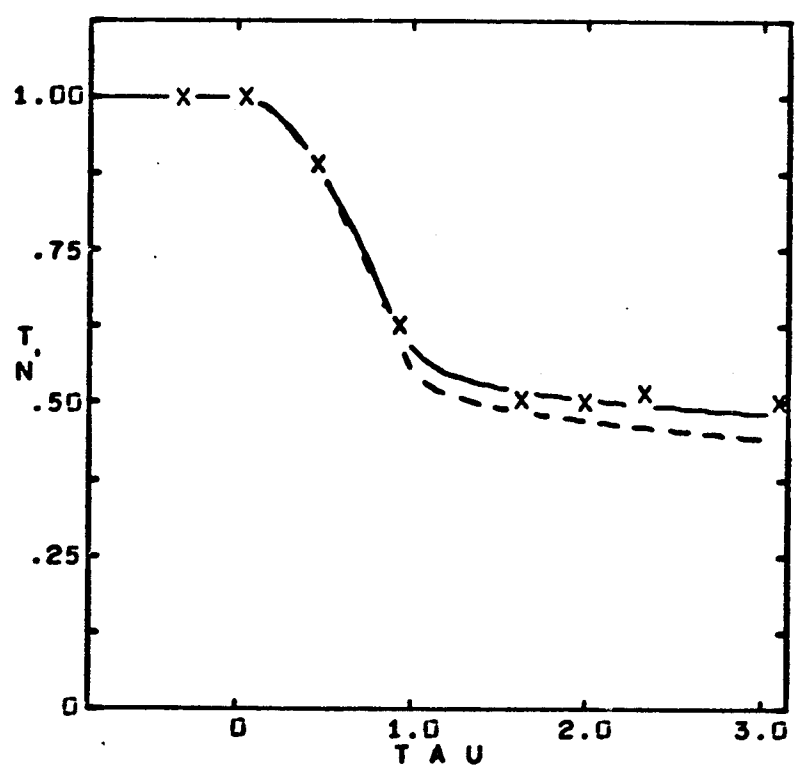
DIFFERENTIAL ENERGY DATA

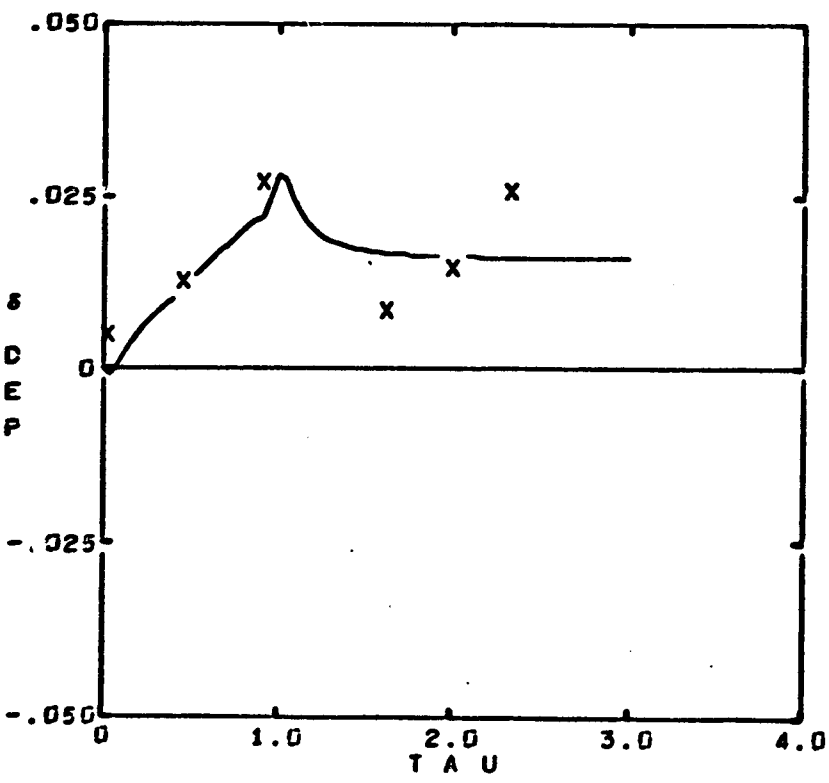
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0277	.0212	.0065
.50	.0628	.0499	.0129
.75	.0994	.0805	.0189
.93	.1239	.1011	.0228
1.0	.1201	.0919	.0282
1.5	.0760	.0588	.0172
2.0	.0654	.0491	.0163
2.5	.0591	.0429	.0162
3.0	.0544	.0382	.0162

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.046	396.81		396.81	1.002	.0076
9H	-0.326	395.82		395.82	0.999	-.0024
10H	0.031	395.74		395.74	0.999	.0024
11H	0.452	352.11		352.11	0.889	.0571
12H	0.916	247.36	0.036 -.784	247.95	0.626	.1238
13H	1.621	197.88	0.185 -.778	199.45	0.504	.0643
14H	1.992	190.39	0.503 -.977	199.31	0.503	.0641
15H	2.325	201.02	0.266 -.608	204.27	0.516	.0708
16H	3.097	192.51	0.570 +.774	198.09	0.500	.0396







PHOTOGRAPH NOT AVAILABLE

357 (1N1) ROSS F

LAMBDA=24.23 E BETA=10.91 N XI=+.4030 ETA=+.1893 L+FL CODE = 14108 ALBEDO =.0574

13H FLAT MOON DATA
FM=.01955 FM'=.01955

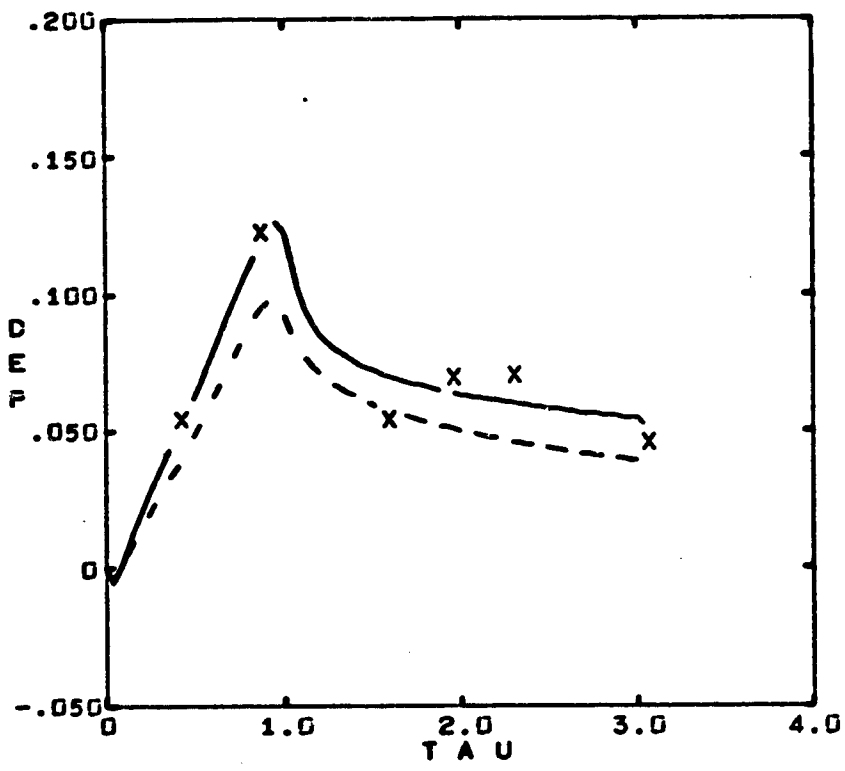
INITIAL TEMPERATURE 393.55
TAU-END OF TOTALITY 3.026

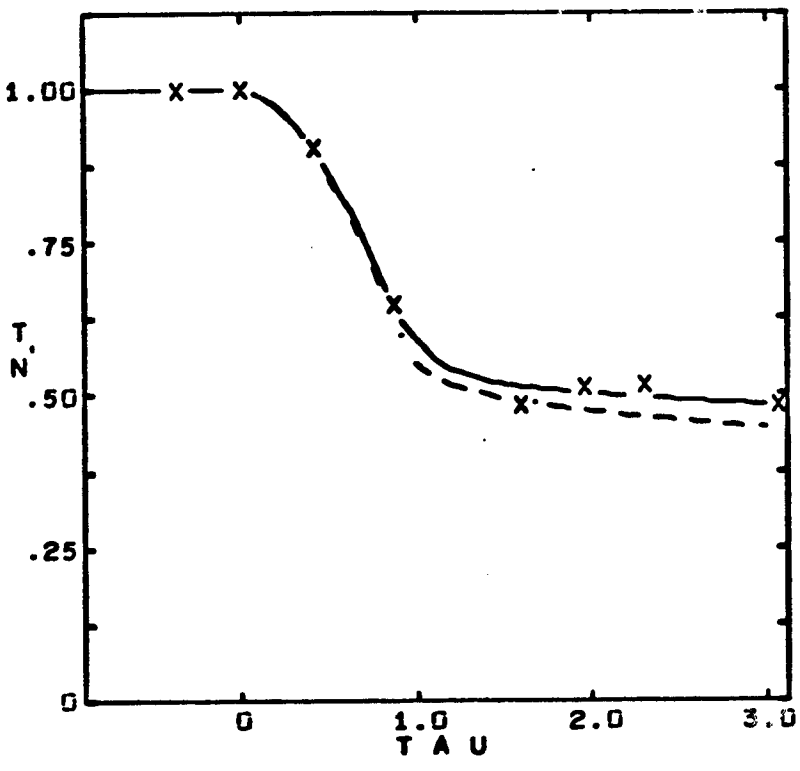
DIFFERENTIAL ENERGY DATA

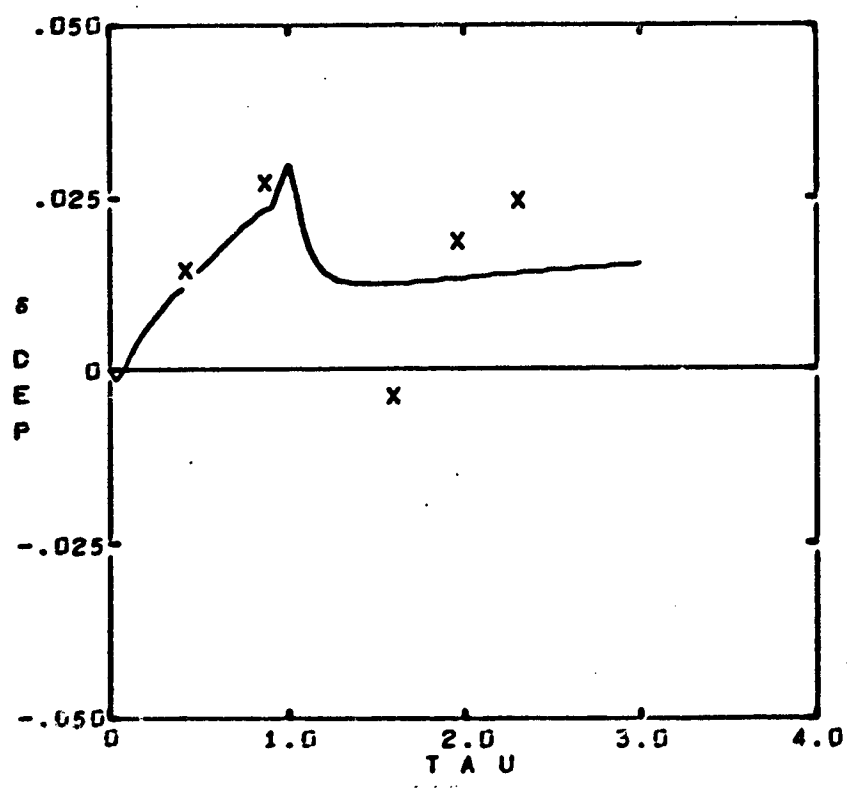
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0279	.0204	.0075
.50	.0644	.0498	.0146
.75	.1016	.0810	.0206
.93	.1263	.1019	.0244
1.0	.1224	.0927	.0297
1.5	.0722	.0598	.0124
2.0	.0634	.0501	.0133
2.5	.0583	.0439	.0144
3.0	.0545	.0392	.0153

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.082	394.88		394.88	1.003	.0136
9H	-0.361	393.68		393.68	1.000	.0013
10H	-0.004	393.54		393.54	1.000	-.0001
11H	0.417	356.01		356.01	0.905	.0543
12H	0.881	249.03	0.945 -.478	254.61	0.647	.1223
13H	1.586	189.68	0.000 -.187	189.68	0.482	.0540
14H	1.957	186.32	0.919 -.702	202.01	0.513	.0694
15H	2.291	190.67	1.336 -.518	202.94	0.516	.0707
16H	3.065	185.67	0.867 -.740	189.89	0.483	.0459







PHOTOGRAPH
NOT
AVAILABLE

358 (1N2) ROSS G

LAMBDA=24.85 E BETA=10.67 N XI=+.4129 ETA=+.1852 L+PL CODE = 14118 ALBEDO =.0614

13H FLAT MOON DATA
FM=.02809 FM'=.02809

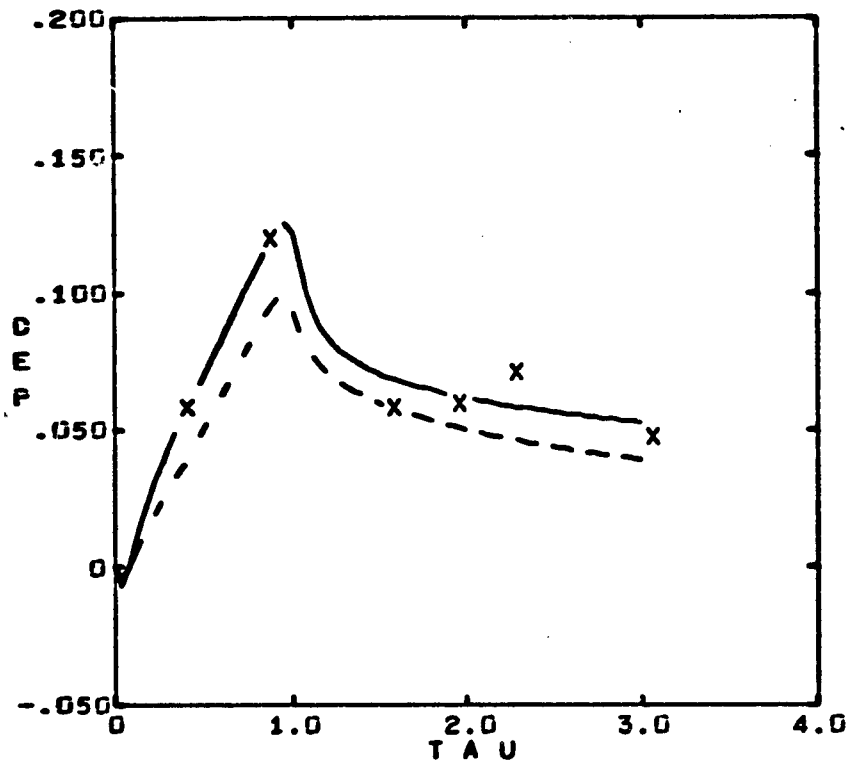
INITIAL TEMPERATURE 393.12
TAU-END OF TOTALITY 3.028

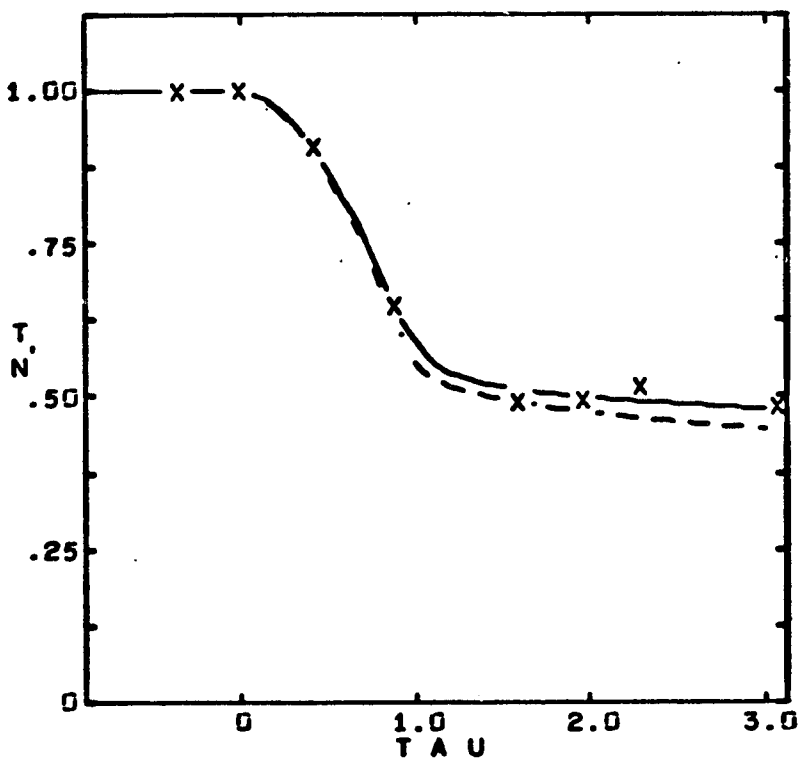
DIFFERENTIAL ENERGY DATA

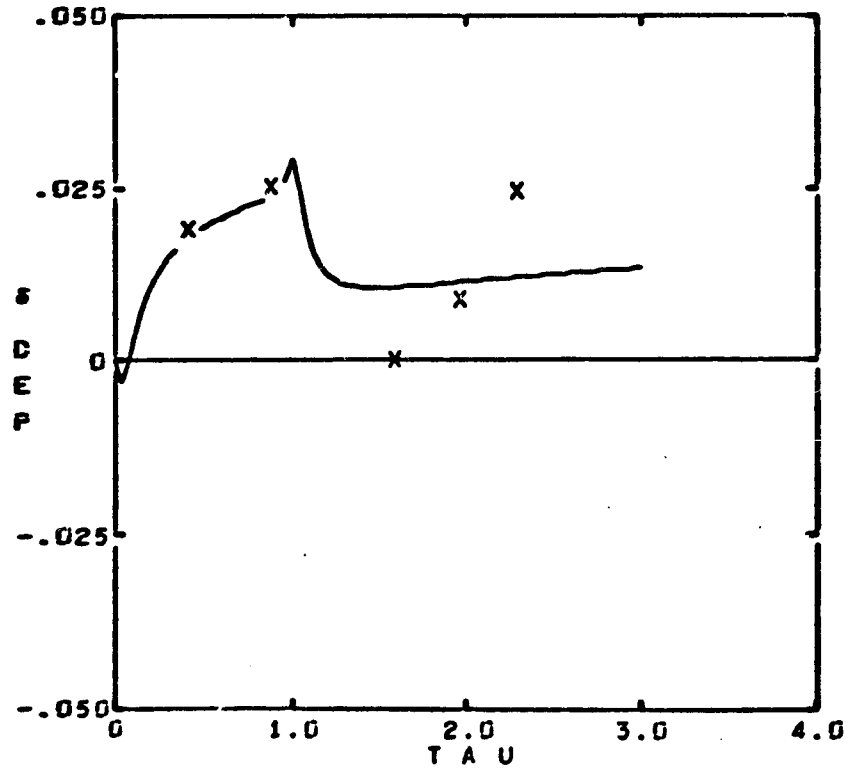
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0326	.0203	.0123
.50	.0691	.0498	.0193
.75	.1034	.0810	.0224
.93	.1258	.1020	.0238
1.0	.1218	.0928	.0290
1.5	.0705	.0599	.0106
2.0	.0617	.0502	.0115
2.5	.0566	.0440	.0126
3.0	.0528	.0394	.0134

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.086	394.24		394.24	1.003	.0114
9H	-0.365	392.88		392.88	0.999	-.0025
10H	-0.008	393.12		393.12	1.000	-.0000
11H	0.415	356.71		356.71	0.907	.0586
12H	0.877	253.28	0.207 +.194	254.61	0.648	.1202
13H	1.582	192.94	0.000 -.761	192.94	0.491	.0580
14H	1.955	194.36	0.000 -.780	194.36	0.494	.0597
15H	2.288	199.88	0.285 -.464	202.94	0.516	.0710
16H	3.063	188.37	0.273 +.590	189.89	0.483	.0476







PHOTOGRAPH
NOT
AVAILABLE

359 (1N3) ROSS H

LAMBDA=21.80 E BETA=10.24 N XI=+.3655 ETA=+.1718 L+PL CODE = 13167 ALBEDO =.0586

13H FLAT MOON DATA
FM=.03494 FM'=.03494

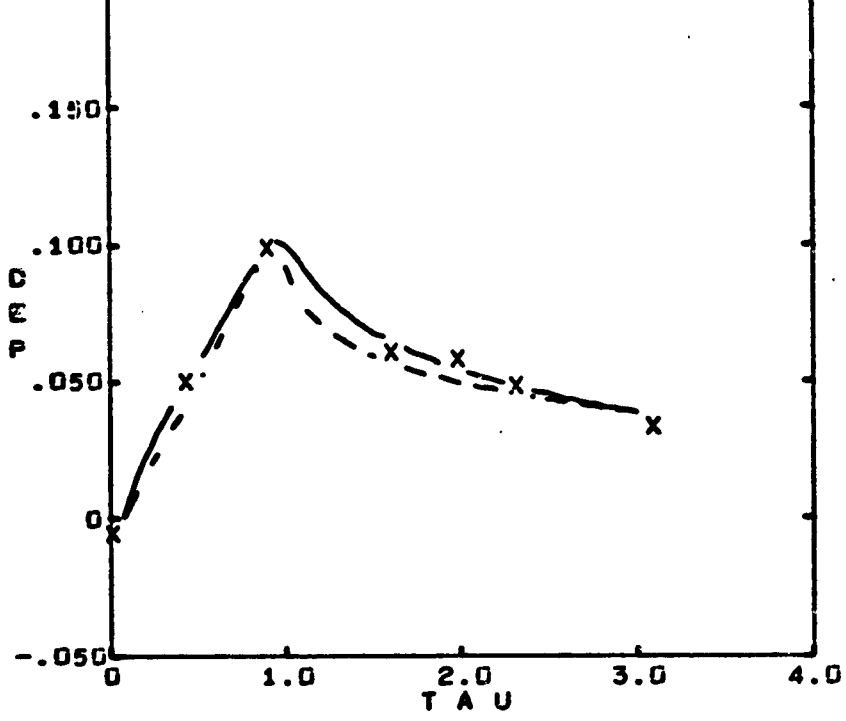
INITIAL TEMPERATURE 395.50
TAU-END OF TOTALITY 3.042

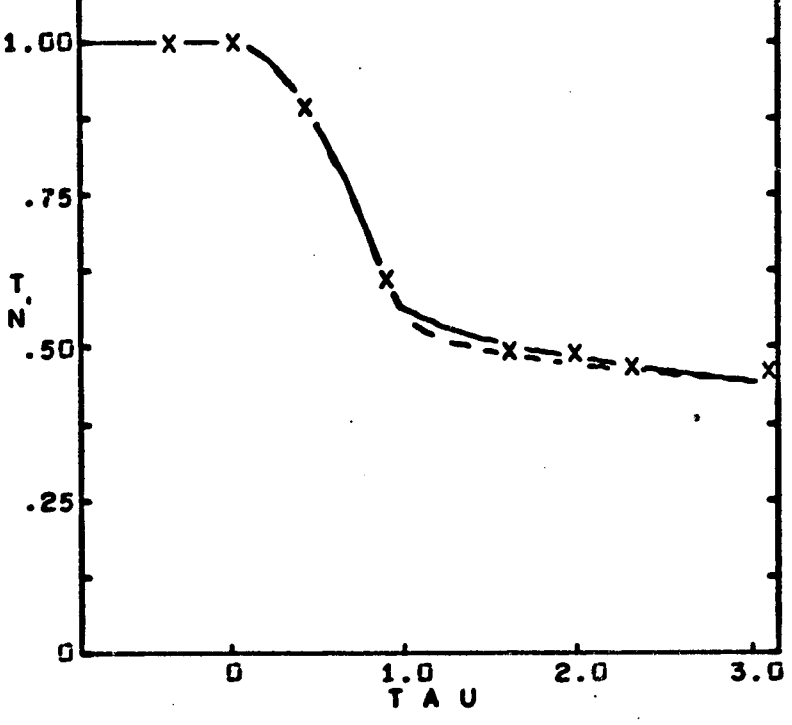
DIFFERENTIAL ENERGY DATA

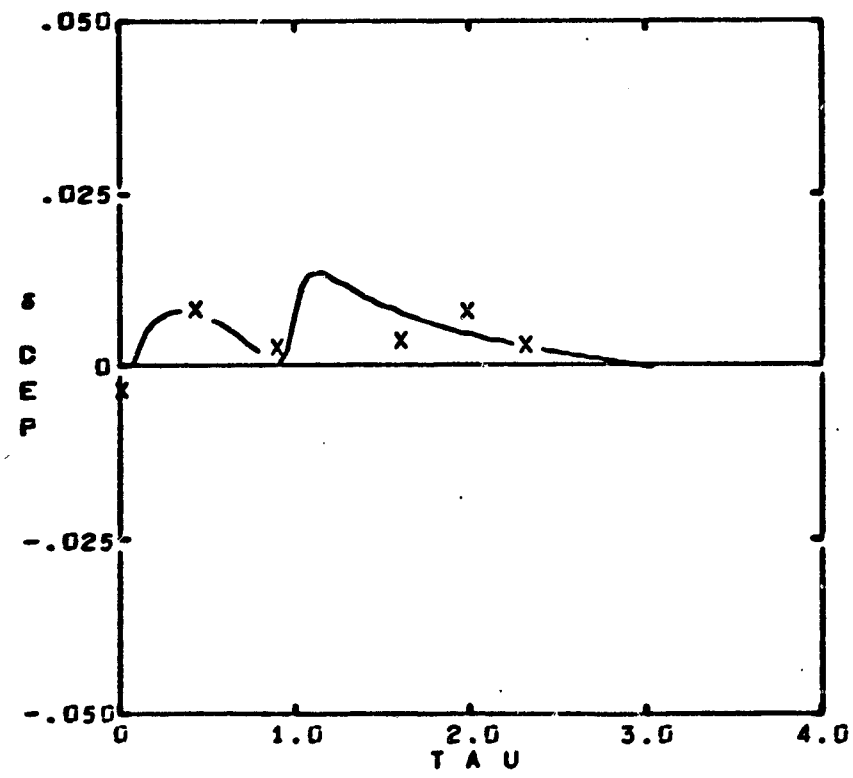
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0280	.0208	.0072
.50	.0569	.0499	.0070
.75	.0838	.0808	.0030
.93	.1012	.1015	-.0003
1.0	.1001	.0924	.0077
1.5	.0681	.0593	.0088
2.0	.0542	.0496	.0046
2.5	.0453	.0434	.0019
3.0	.0387	.0388	-.0001

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.069	396.51		396.51	1.003	.0103
9H	-0.347	395.17		395.17	0.999	-.0033
10H	0.011	394.88		394.88	0.998	-.0052
11H	0.435	354.08		354.08	0.895	.0504
12H	0.898	241.76	0.000 +.797	241.76	0.611	.0989
13H	1.605	196.11	0.000 +.846	196.11	0.496	.0605
14H	1.979	190.91	0.309 -.928	194.07	0.491	.0580
15H	2.312	185.78	0.000 +.801	185.78	0.470	.0487
16H	3.088	181.83	0.000 +.760	181.83	0.460	.0336







PHOTOGRAPH NOT AVAILABLE

360 (461) ROSSE

LAMBDA=34.96 E BETA=17.90 S XI=+.5453 ETA=-.3073 L+PL CODE = 45340 ALBEDO =.0858

13H FLAT MOON DATA
FM=.01531 FM'=.03964

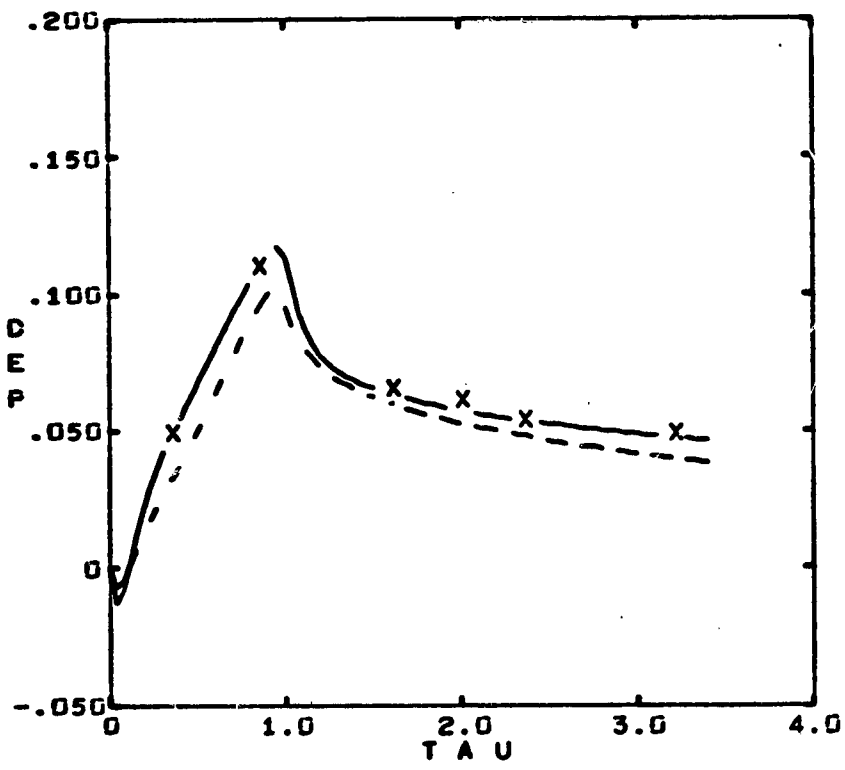
INITIAL TEMPERATURE 381.03
TAU-END OF TOTALITY 3.435

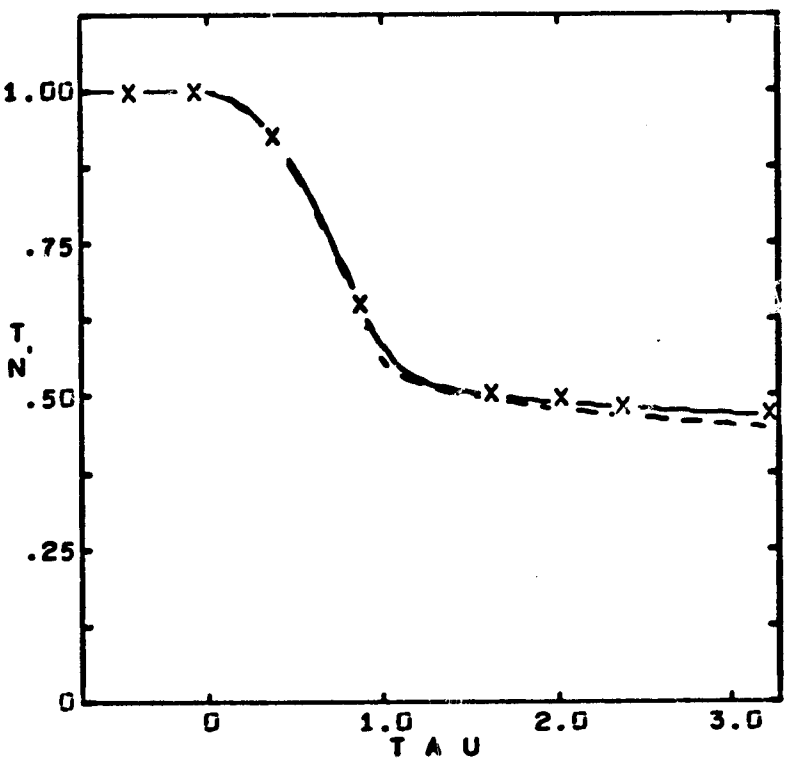
DIFFERENTIAL ENERGY DATA

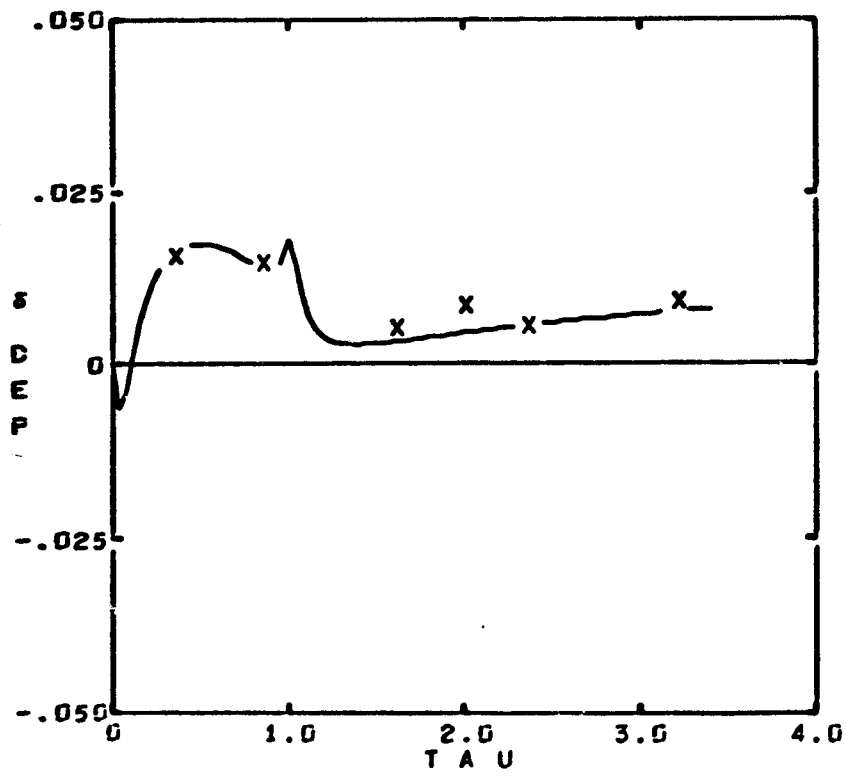
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0311	.0187	.0124
.50	.0676	.0501	.0175
.75	.0981	.0827	.0154
.93	.1172	.1046	.0126
1.0	.1138	.0956	.0182
1.5	.0656	.0625	.0031
2.0	.0574	.0528	.0046
2.5	.0526	.0466	.0060
3.0	.0491	.0418	.0073

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.232	383.31		383.31	1.006	.0242
9H	-0.461	380.81		380.81	0.999	-.0023
10H	-0.080	380.92		380.92	1.000	-.0012
11H	0.369	353.36		353.36	0.927	.0493
12H	0.863	247.47	0.313 +.929	248.90	0.653	.1107
13H	1.616	183.33	0.809 -.075	192.53	0.505	.0652
14H	2.011	187.84	0.215 -.811	189.48	0.497	.0612
15H	2.367	181.48	0.328 +.006	183.54	0.482	.0538
16H	3.215	174.20	0.556 +.710	179.50	0.471	.0493







PHOTOGRAPH NOT AVAILABLE

361 (4G2) ROTHMANN A

LAMBDA=27.68 E BETA=29.45 S XI=+.4G45 ETA=-.4916 L+PL CODE = 44409 ALBEDO =.1248

13H FLAT MOON DATA
FM=.01251 FM'=.01251

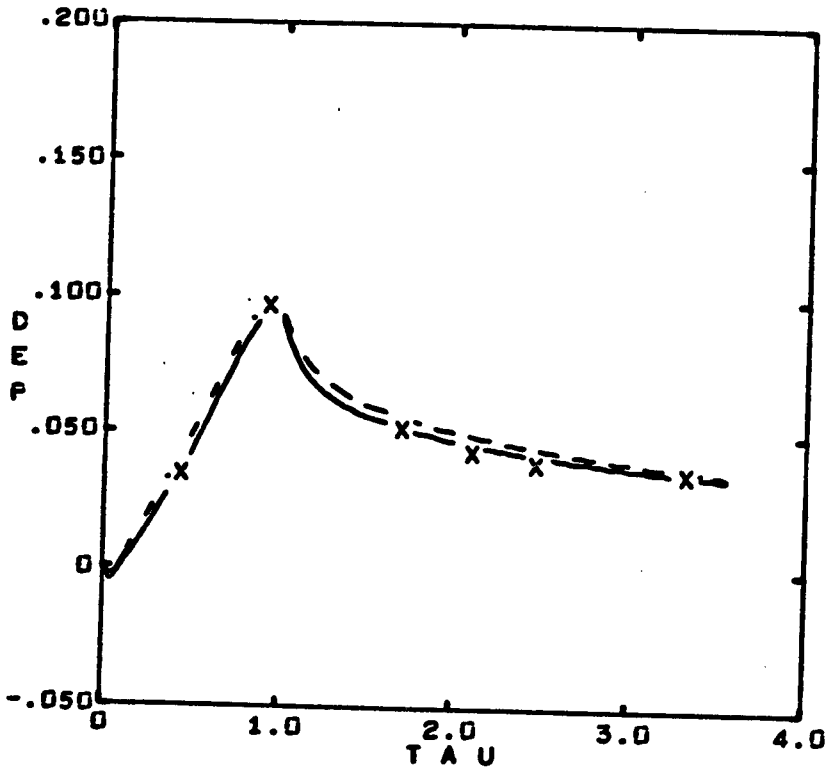
INITIAL TEMPERATURE 377.90
TAU-END OF TOTALITY 3.565

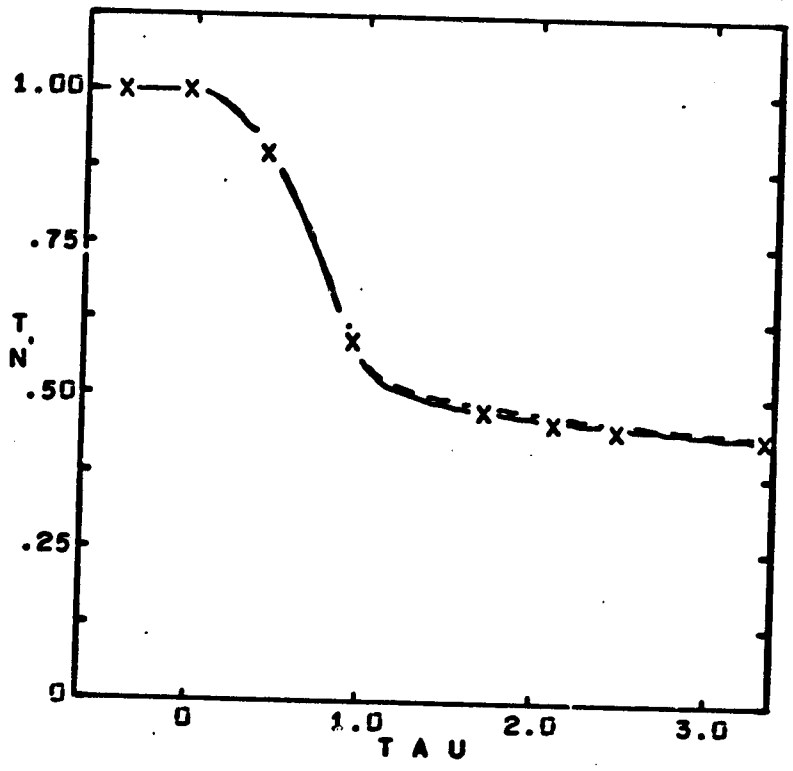
DIFFERENTIAL ENERGY DATA

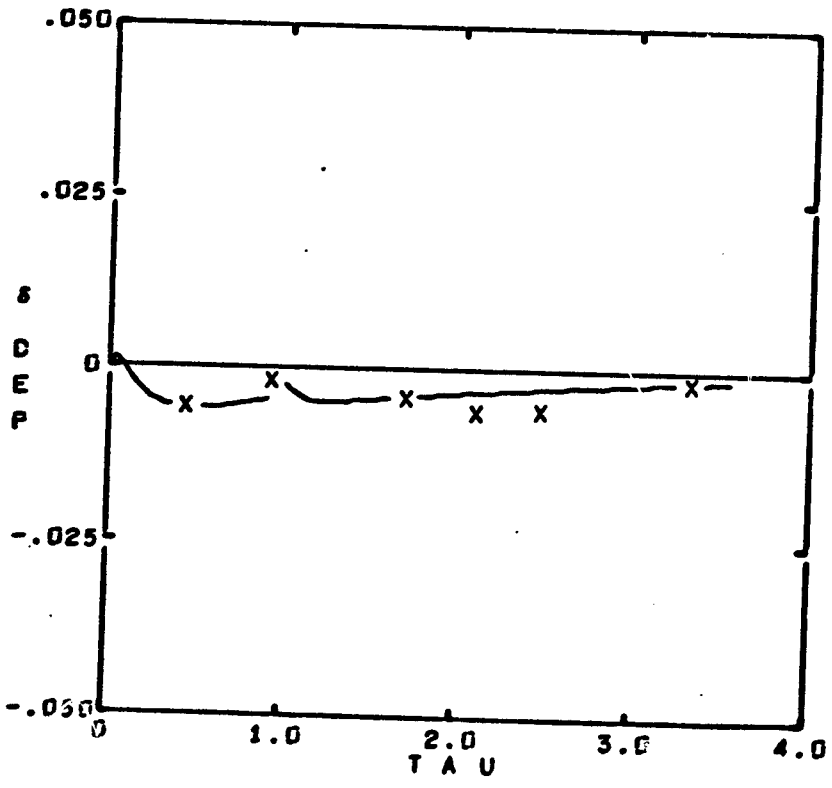
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0154	.0198	-.0044
.50	.0439	.0498	-.0059
.75	.0762	.0813	-.0051
.93	.0982	.1025	-.0043
1.0	.0914	.0934	-.0020
1.5	.0561	.0605	-.0044
2.0	.0475	.0508	-.0033
2.5	.0421	.0446	-.0025
3.0	.0381	.0399	-.0018

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.206	378.46			378.46	1.001	.0060
9H	-0.420	378.13			378.13	1.001	.0024
10H	-0.033	377.87			377.87	1.000	-.0004
11H	0.426	339.84			339.84	0.899	.0349
12H	0.929	223.11	0.000	-.120	223.11	0.590	.0967
13H	1.697	180.32	0.000	-.139	180.32	0.477	.0518
14H	2.098	172.49	0.000	-.118	172.49	0.456	.0434
15H	2.462	168.20	0.000	-.187	168.20	0.445	.0392
16H	3.326	164.50	0.000	-.125	164.50	0.435	.0359







PHOTOGRAPH NOT AVAILABLE

C.8

362 (463) ROTHMANN C

LAMBDA=25.06 E BETA=28.63 S XI=+.3718 ETA=-.4791 L+PL CODE = 43477 ALBEDO =.1411

13H FLAT MOON DATA
FM=.01872 FM'=.04173

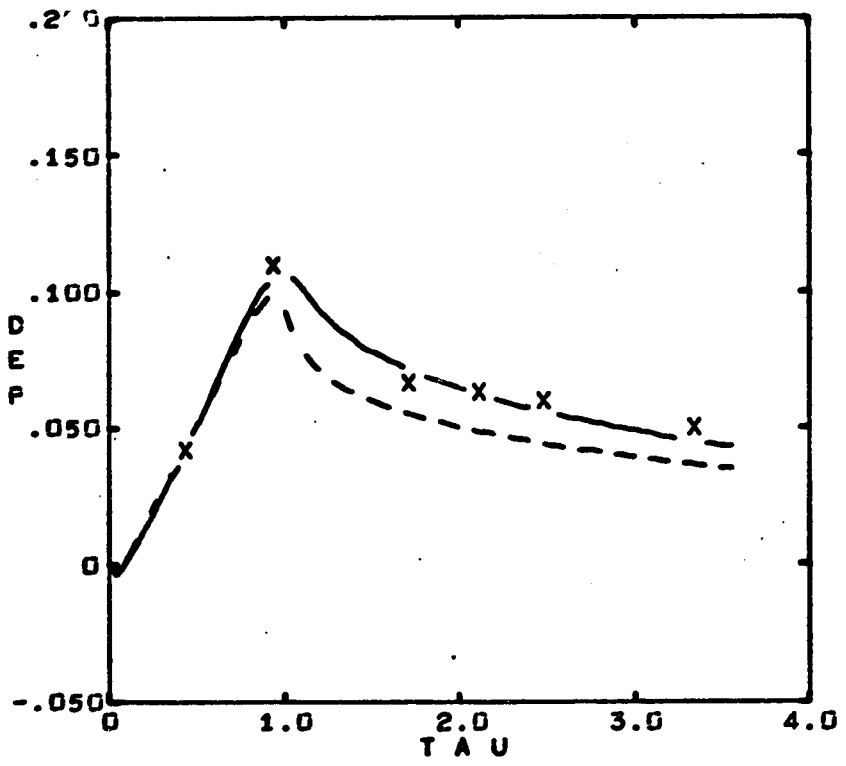
INITIAL TEMPERATURE 378.48
TAU-END OF TOTALITY 3.560

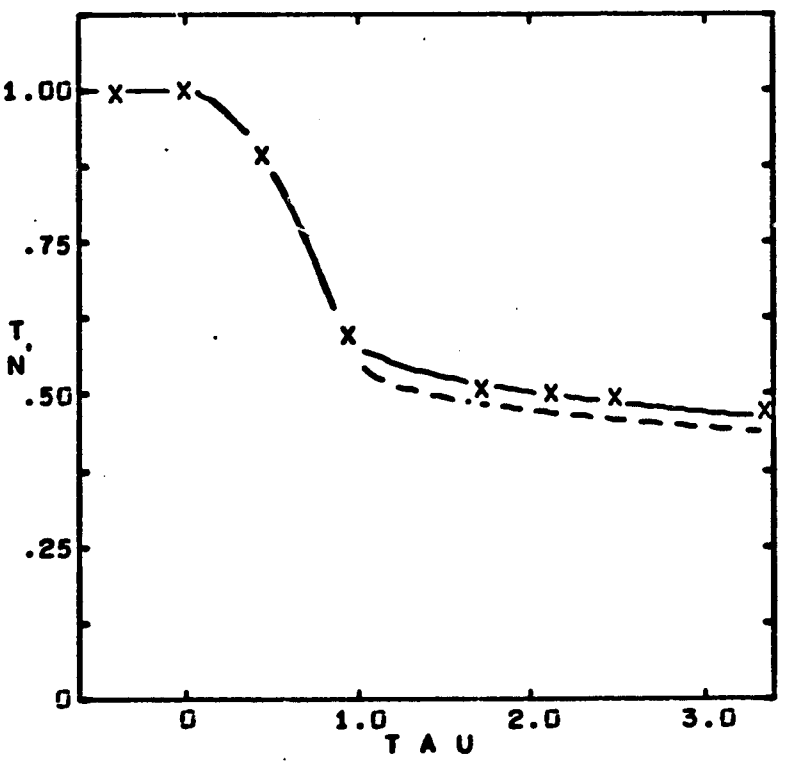
DIFFERENTIAL ENERGY DATA

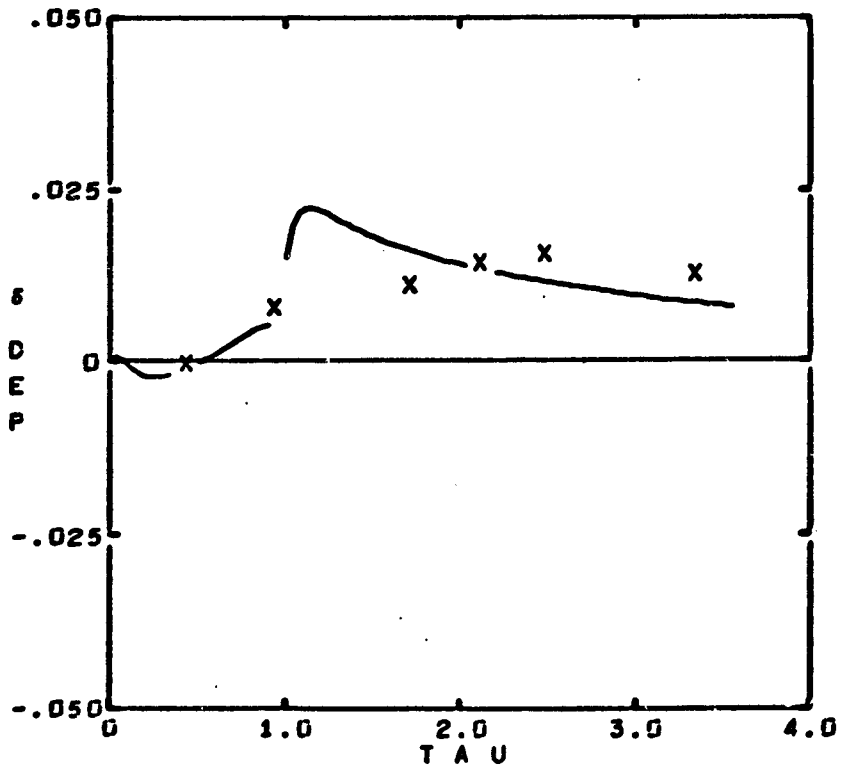
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0180	.0203	-.0023
.50	.0493	.0498	-.0005
.75	.0843	.0810	.0033
.93	.1082	.1020	.0062
1.0	.1078	.0929	.0149
1.5	.0781	.0599	.0182
2.0	.0643	.0503	.0140
2.5	.0556	.0441	.0115
3.0	.0490	.0394	.0096

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.190	378.33			378.33	1.000	-.0015
9H	-0.404	377.80			377.80	0.998	-.0071
10H	-0.017	378.51			378.51	1.000	.0003
11H	0.440	338.81			338.81	0.895	.0423
12H	0.943	225.21	0.226	-.228	226.03	0.597	.1099
13H	1.710	183.46	0.815	-.452	192.04	0.507	.0663
14H	2.113	179.18	0.838	-.293	189.78	0.501	.0632
15H	2.476	169.77	1.015	-.309	187.40	0.495	.0601
16H	3.337	166.84	1.174	-.119	178.74	0.472	.0497







PHOTOGRAPH
NOT
AVAILABLE

363 (464) SACROBOSCO C

LAMBDA=16.14 E BETA=24.05 S XI=+.2539 ETA=-.4076 L+PL CODE = 42450 ALBEDO =.1293

13H FLAT MOON DATA
FM=.01164 FM'=.01164

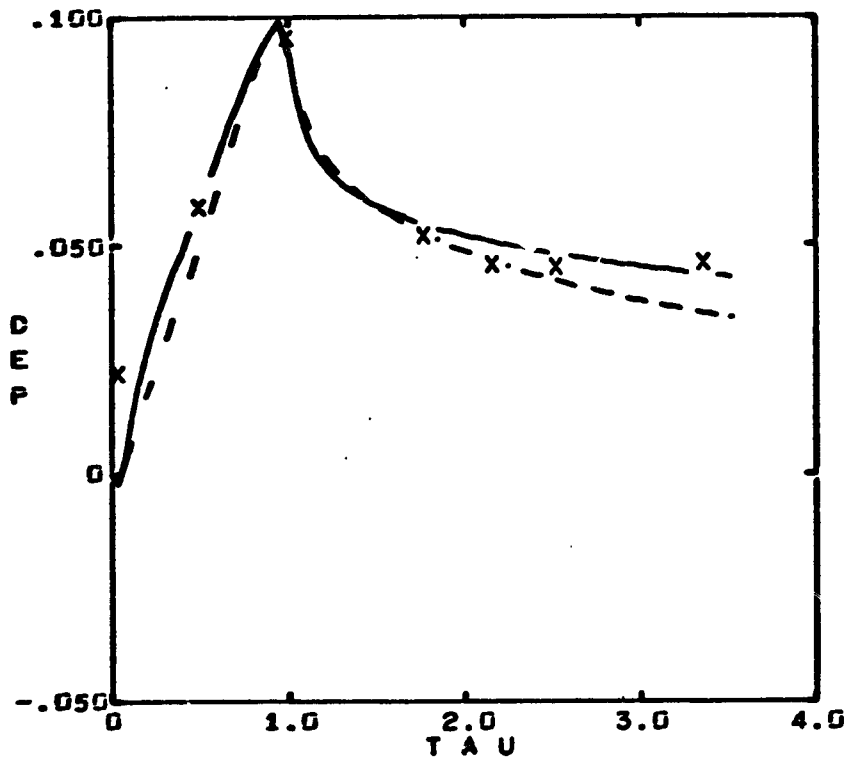
INITIAL TEMPERATURE 383.91
TAU-END OF TOTALITY 3.526

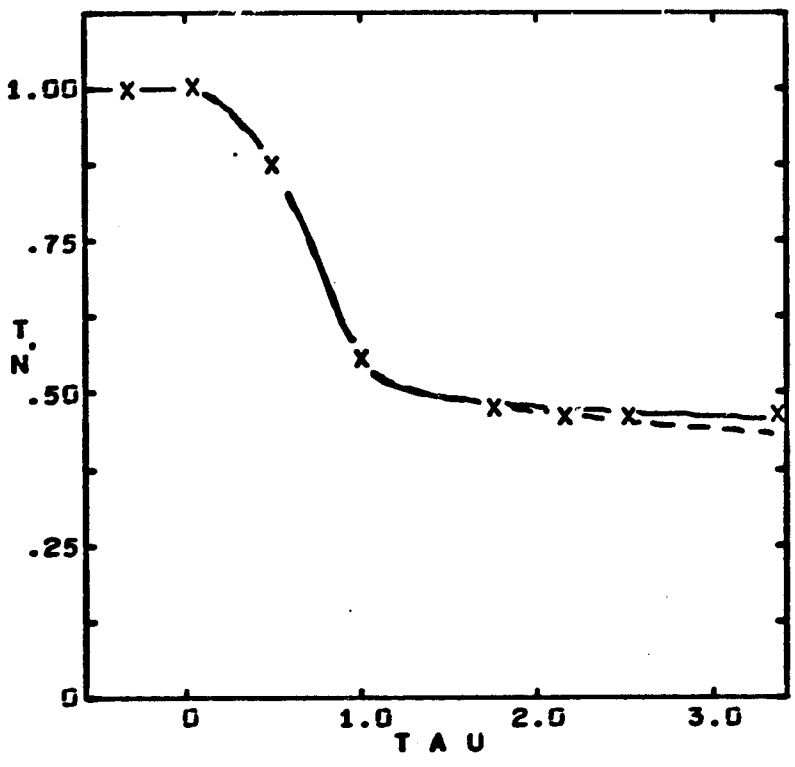
DIFFERENTIAL ENERGY DATA

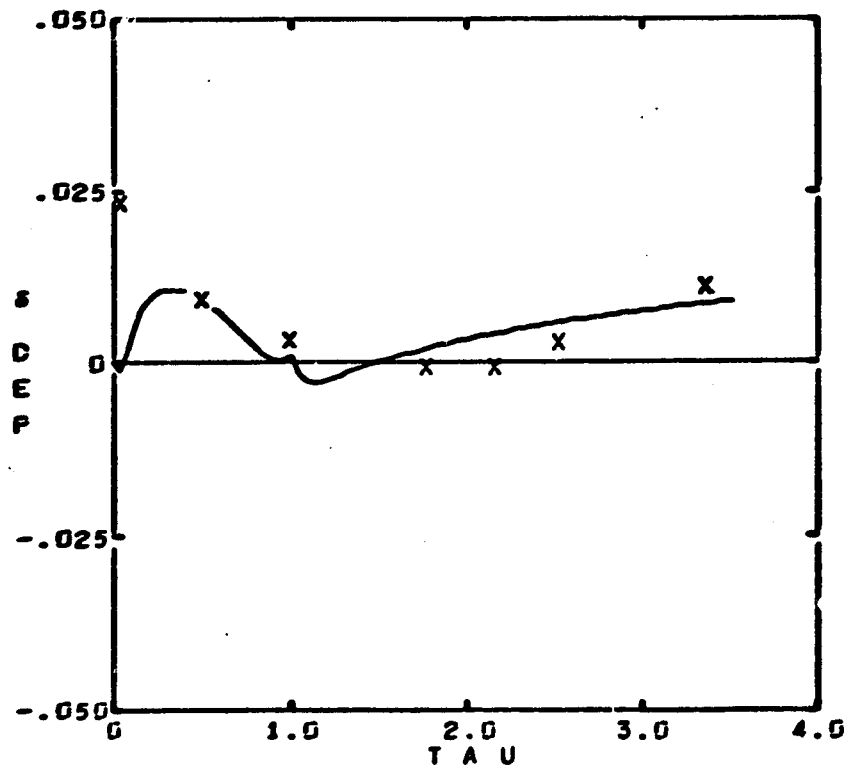
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0317	.0216	.0101
.50	.0592	.0499	.0093
.75	.0840	.0803	.0037
.93	.0998	.1006	-.0008
1.0	.0924	.0914	.0010
1.5	.0585	.0583	.0002
2.0	.0521	.0485	.0036
2.5	.0482	.0424	.0058
3.0	.0453	.0378	.0075

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.127	384.36		384.36	1.001	.0047
9H	-0.346	383.77		383.77	1.000	-.0015
10H	0.040	385.20		385.20	1.003	.0216
11H	0.495	335.44		335.44	0.874	.0585
12H	0.996	213.60	0.000 +.855	213.60	0.556	.0956
13H	1.759	183.39	0.000 +.872	183.39	0.478	.0521
14H	2.158	177.58	0.000 +.905	177.58	0.463	.0458
15H	2.520	177.11	0.000 +.885	177.11	0.461	.0453
16H	3.370	175.93	0.109 -.113	177.98	0.464	.0462







PHOTOGRAPH NOT AVAILABLE

364 (4G5) SAUNDER A

LAMBDA=12.29 E BETA= 4.00 S XI=+.2124 ETA=-.0698 L+PL CODE = 42016 ALBEDO =.1255

13H FLAT MOON DATA
FM=.01625 FM'=.02361

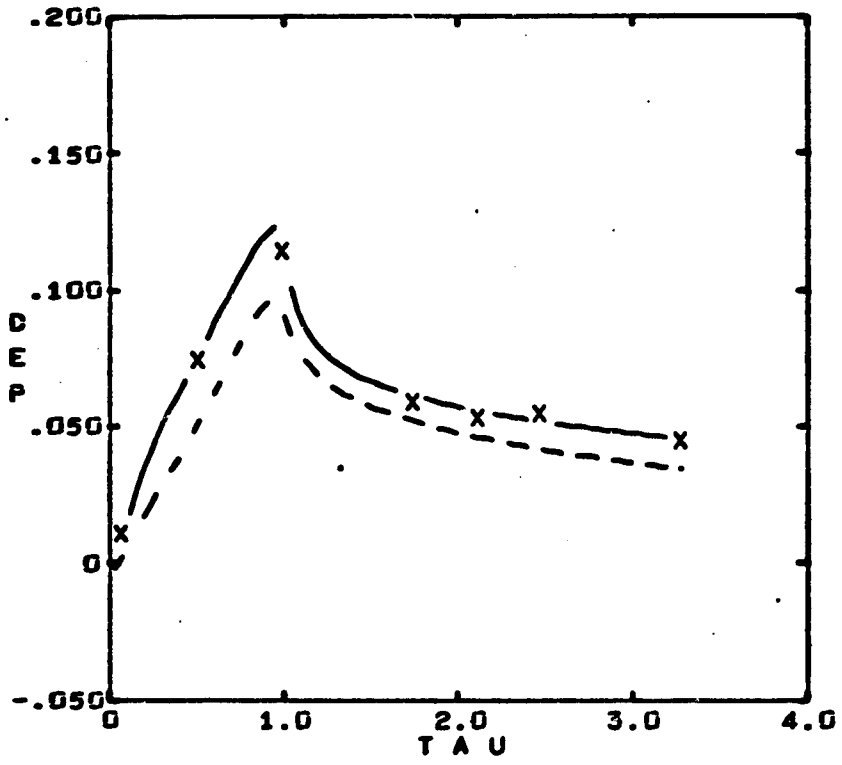
INITIAL TEMPERATURE 391.15
TAU-END OF TOTALITY 3.286

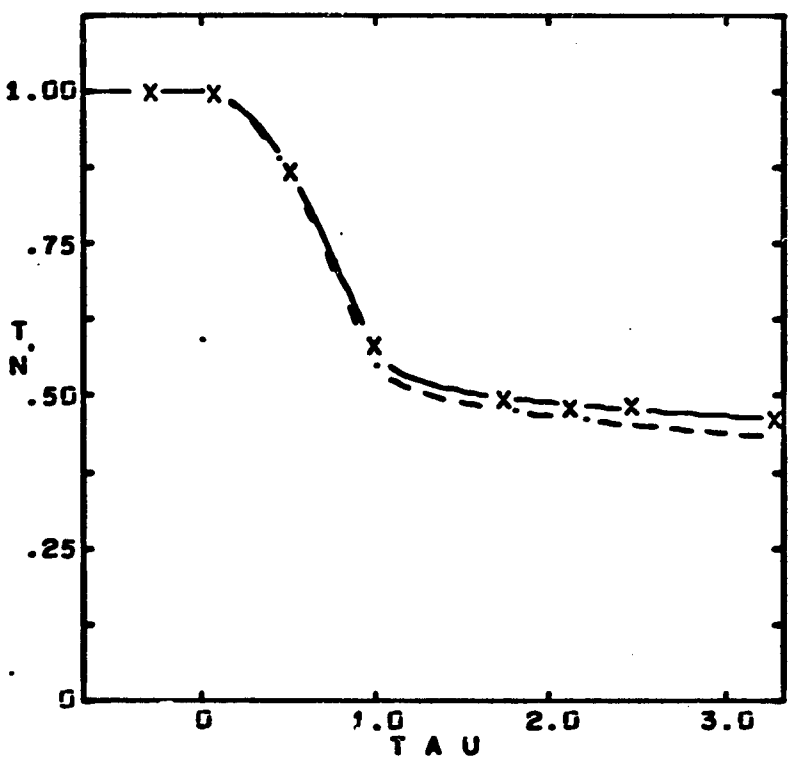
DIFFERENTIAL ENERGY DATA

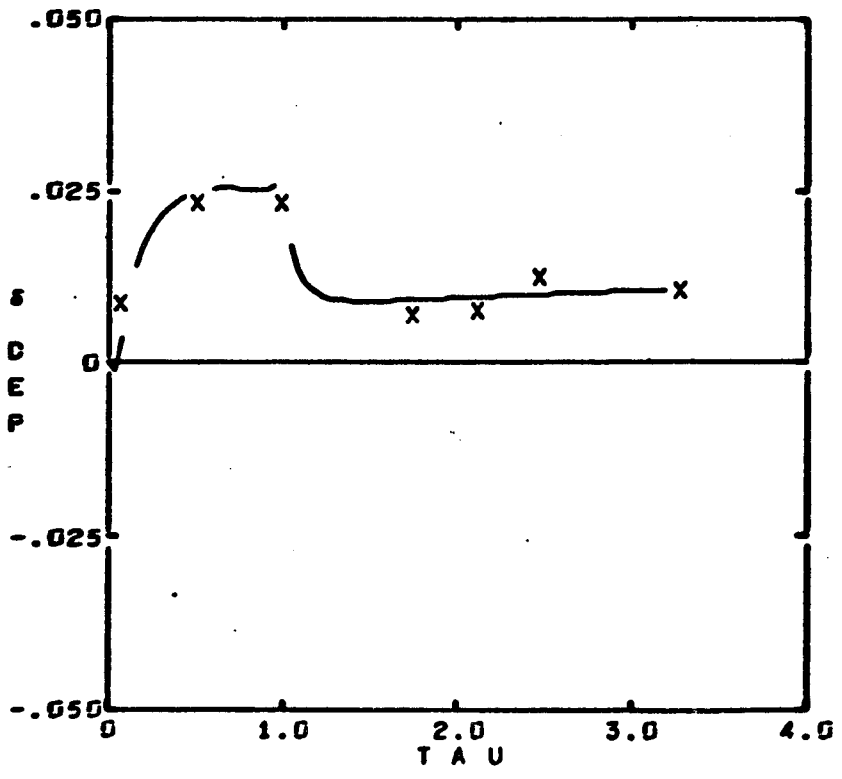
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0413	.0221	.0192
.50	.0747	.0499	.0248
.75	.1051	.0797	.0254
.93	.1246	.0998	.0248
1.0	.1140	.0906	.0234
1.5	.0665	.0575	.0090
2.0	.0573	.0478	.0095
2.5	.0517	.0416	.0101
3.0	.0476	.0370	.0106

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.052	392.43		392.43	1.003	.0132
9H	-0.299	390.78		390.78	0.999	-.0037
10H	0.073	389.99		389.99	0.997	.0107
11H	0.512	338.29	1.392 -.677	339.65	0.868	.0747
12H	0.995	223.75	0.403 +.441	227.78	0.582	.1148
13H	1.731	189.76	0.744 +.148	192.94	0.493	.0592
14H	2.118	184.80	0.581 +.602	188.27	0.461	.0537
15H	2.466	184.71	0.499 +.467	189.04	0.483	.0546
16H	3.274	175.57	1.748 +.705	180.69	0.462	.0455







PHOTOGRAPH
NOT
AVAILABLE

365 (1N4) SECCHI A

LAMBDA=41.47 E BETA= 3.29 N XI=+.6611 ETA=+.0574 L+PL CODE = 16065 ALBEDO =.0705

13H FLAT MOON DATA
FM=.02872 FM'=.04657

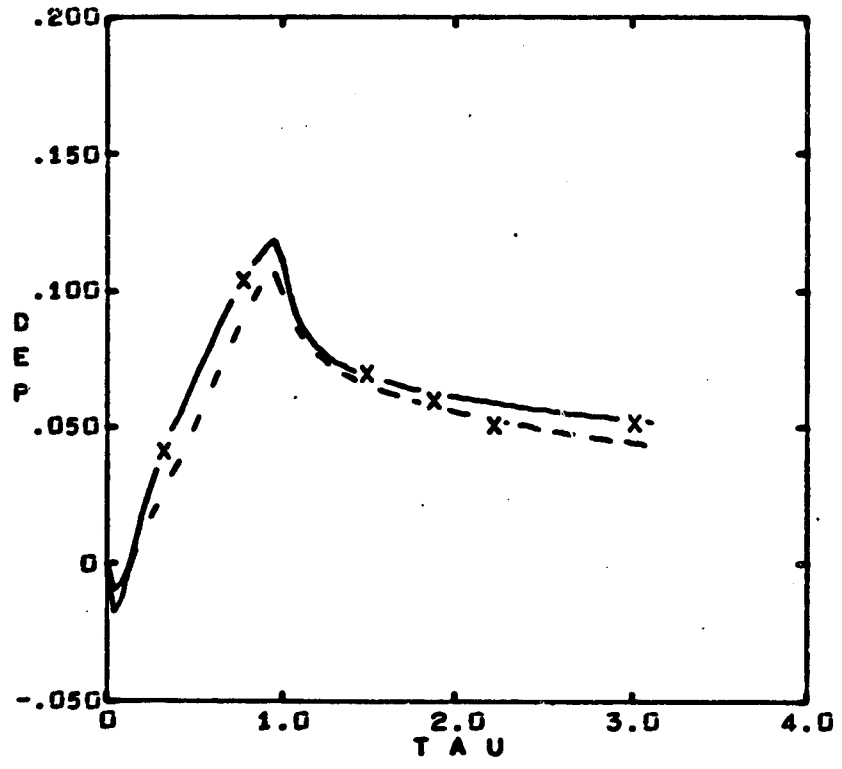
INITIAL TEMPERATURE 381.46
TAU-END OF TOTALITY 3.122

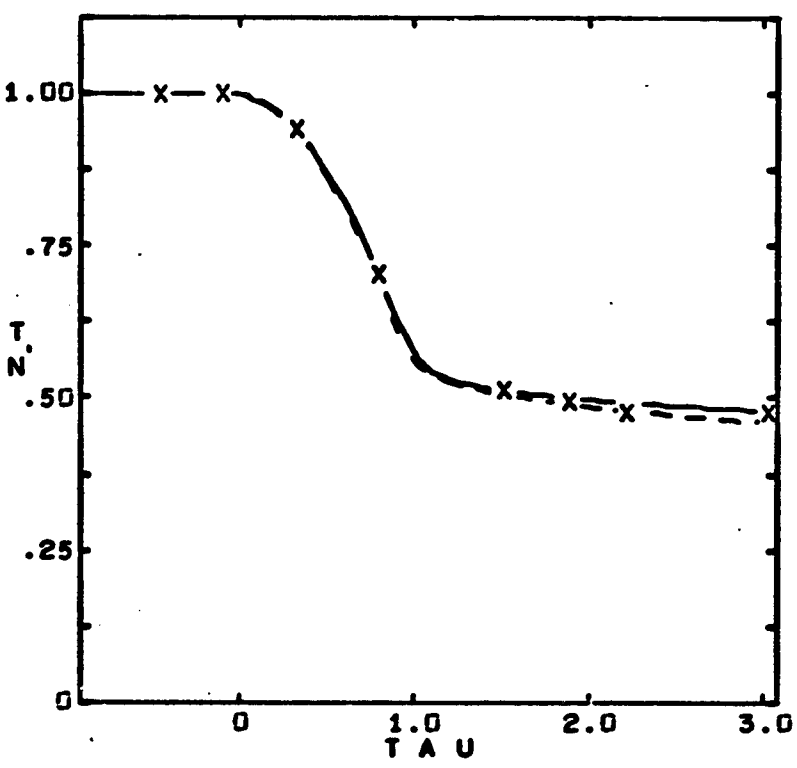
DIFFERENTIAL ENERGY DATA

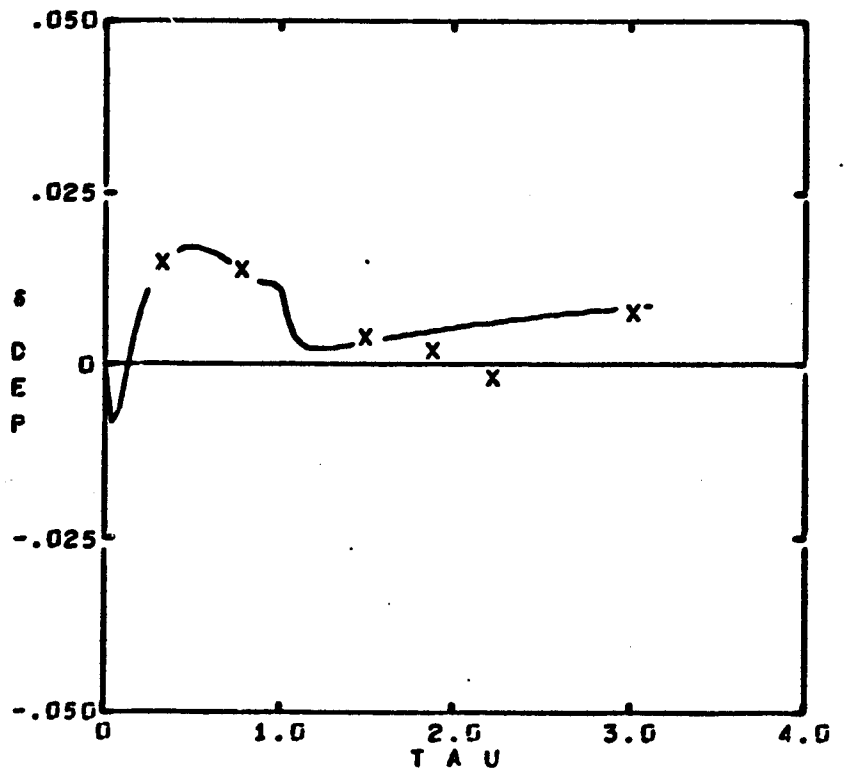
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0292	.0177	.0115
.50	.0682	.0511	.0171
.75	.0996	.0854	.0142
.93	.1191	.1083	.0108
1.0	.1103	.0992	.0111
1.5	.0689	.0657	.0032
2.0	.0612	.0558	.0054
2.5	.0564	.0493	.0071
3.0	.0528	.0444	.0084

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.206	383.28		383.28	1.005	.0192
9H	-0.476	381.01		381.01	0.999	-.0047
10H	-0.112	381.40		381.40	1.000	-.0007
11H	0.316	359.75		359.75	0.943	.0413
12H	0.787	264.82	0.662 +.770	267.76	0.702	.1039
13H	1.502	189.08	0.438 +.360	196.00	0.514	.0697
14H	1.880	186.30	0.331 +.611	188.73	0.495	.0599
15H	2.218	181.07	0.000 +.586	181.07	0.475	.0508
16H	3.019	175.30	0.725 +.953	182.17	0.478	.0520







PHOTOGRAPH
NOT
AVAILABLE

366 (1N5) SILBERSCHLAG

LAMBDA=12.20 E BETA= 6.22 N XI=+.2201 ETA=+.1083 L+PL CODE = 12110 ALBEDO =.1340

13H FLAT MOON DATA
FM=.00721 FM'=.05360

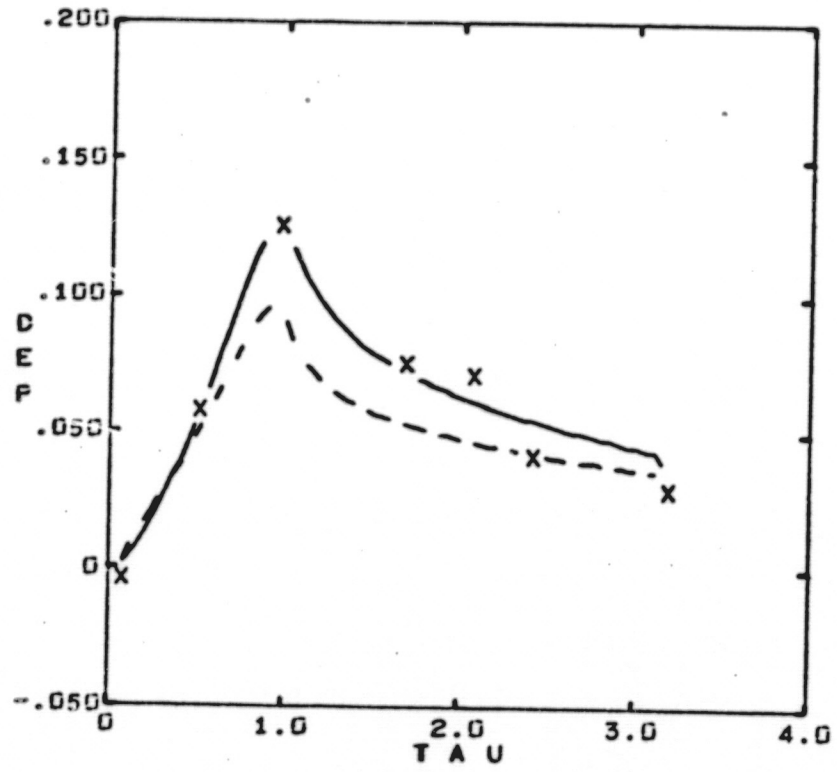
INITIAL TEMPERATURE 392.13
TAU-END OF TOTALITY 3.129

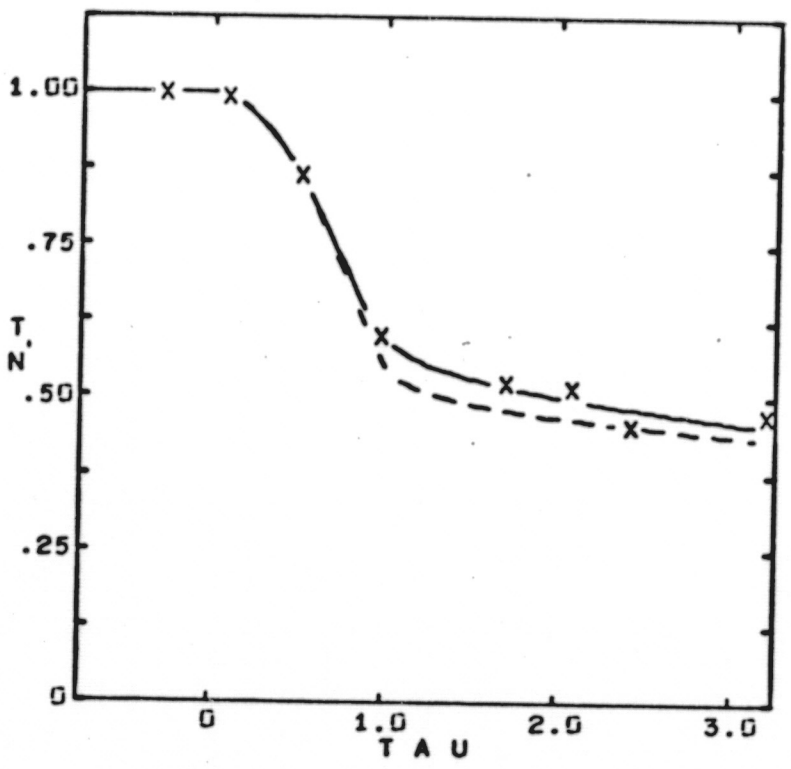
DIFFERENTIAL ENERGY DATA

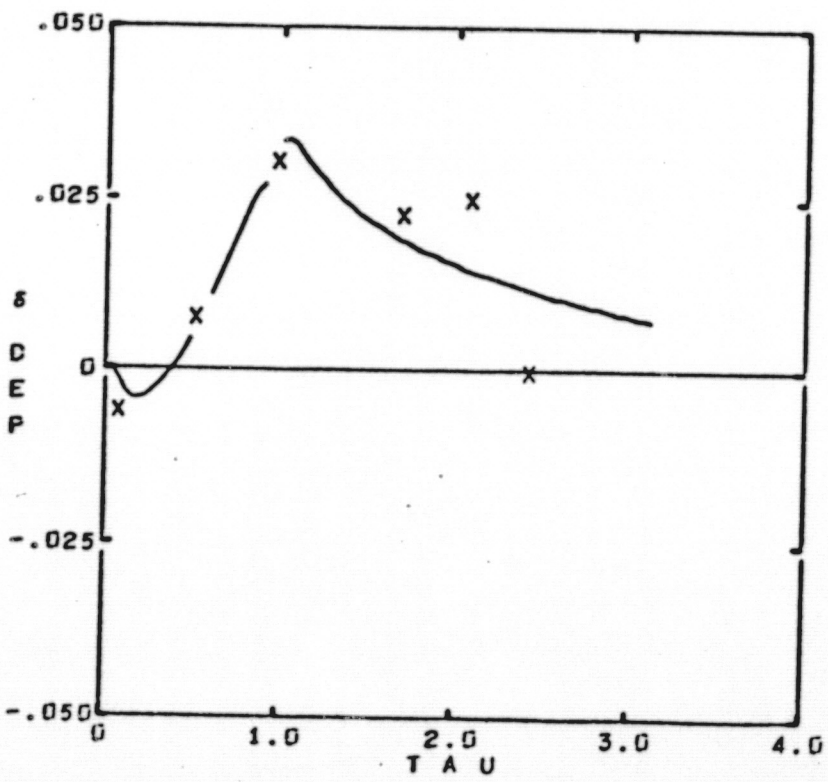
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0185	.0221	-.0036
.50	.0555	.0499	.0056
.75	.0993	.0797	.0196
.93	.1294	.0998	.0296
1.0	.1240	.0906	.0334
1.5	.0794	.0575	.0219
2.0	.0631	.0478	.0153
2.5	.0527	.0416	.0111
3.0	.0450	.0370	.0080

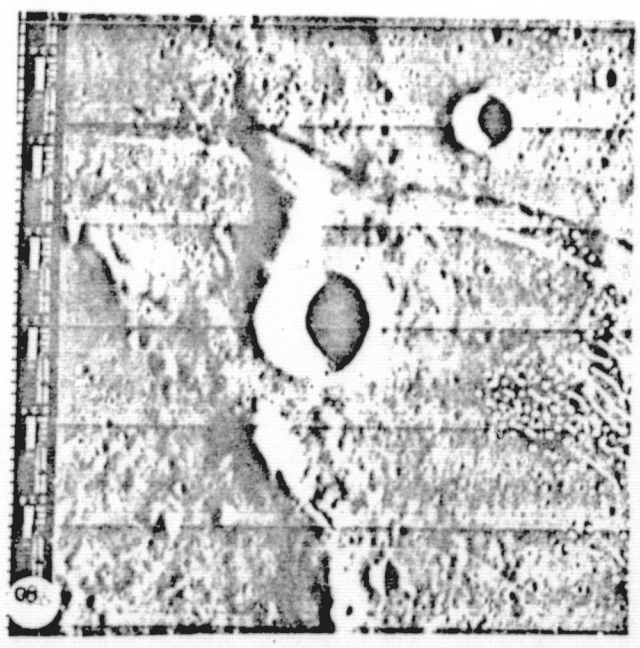
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.020	392.94		392.94	1.002	.0083
9H	-0.286	391.90		391.90	0.999	-.0023
10H	0.076	389.32		389.32	0.993	-.0036
11H	0.505	338.71	0.000 -.913	338.71	0.864	.0582
12H	0.976	221.29	0.832 -.648	235.16	0.600	.1256
13H	1.693	186.15	0.850 -.547	205.68	0.525	.0757
14H	2.071	187.47	0.920 -.826	202.80	0.517	.0715
15H	2.410	177.85	0.000 -.830	177.85	0.454	.0423
16H	3.193	184.65	0.000 -.976	184.65	0.471	.0296









566 (1N5) SILBERSCHLAG

LAMBDA=12.20 E BETA= 6.22 N XI=+.2201 ETA=+.1083 L+FL CODE = 12110 ALBEDO =.1340

13H FLAT MOON DATA
FM=.00721 FM'=.05360

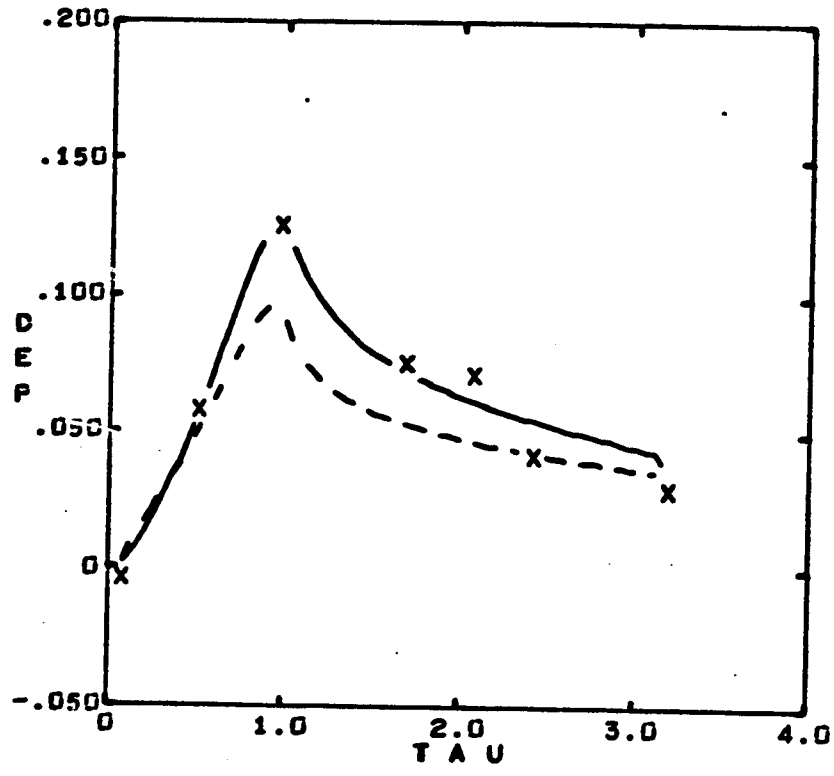
INITIAL TEMPERATURE 392.13
TAU-END OF TOTALITY 3.129

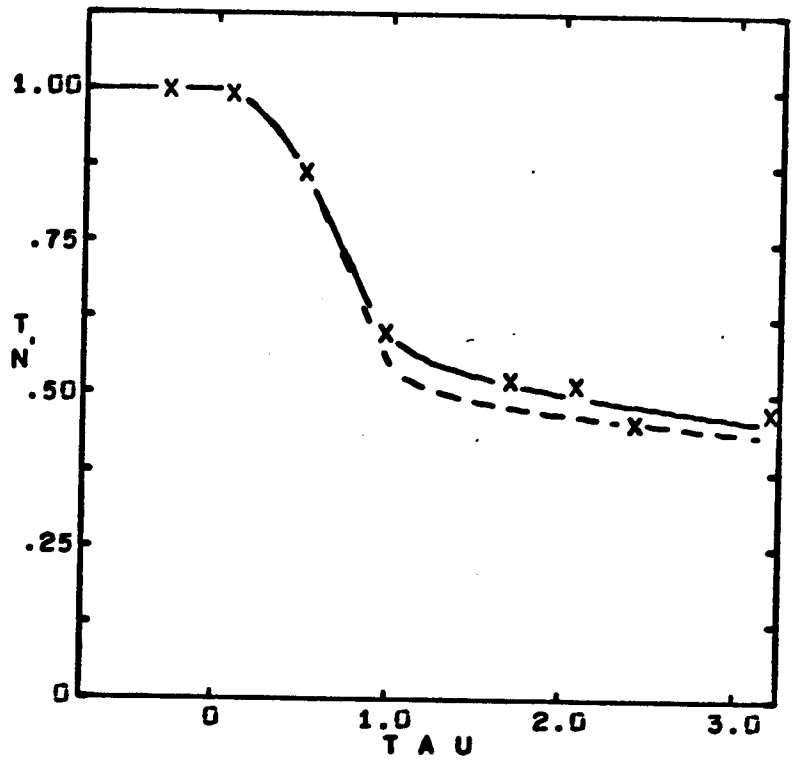
DIFFERENTIAL ENERGY DATA

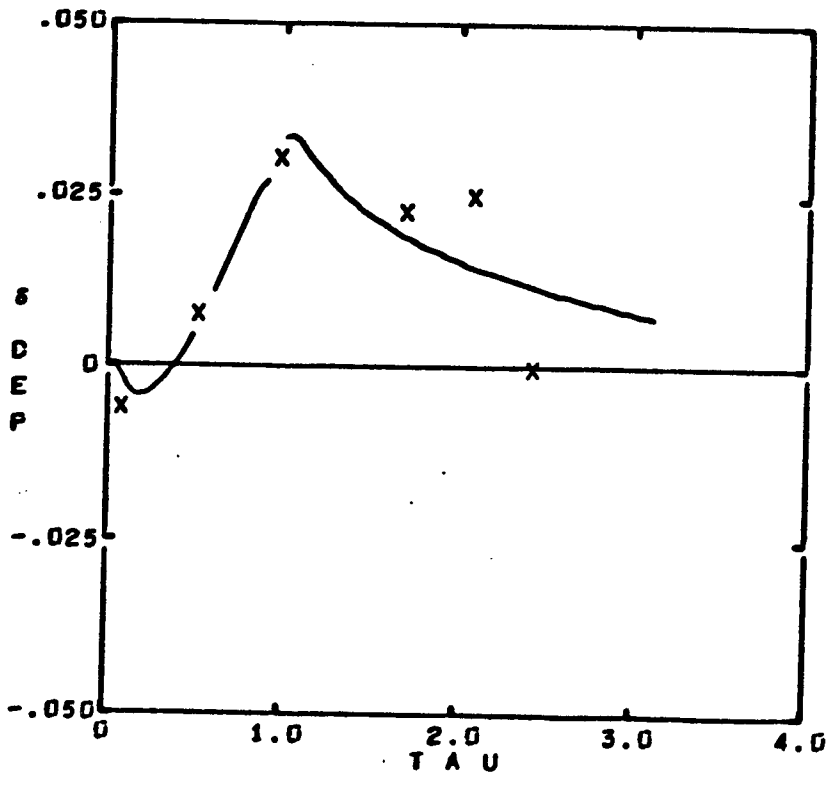
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0185	.0221	-.0036
.50	.0555	.0499	.0056
.75	.0993	.0797	.0196
.93	.1294	.0998	.0296
1.0	.1240	.0906	.0334
1.5	.0794	.0575	.0219
2.0	.0631	.0478	.0153
2.5	.0527	.0416	.0111
3.0	.0450	.0370	.0080

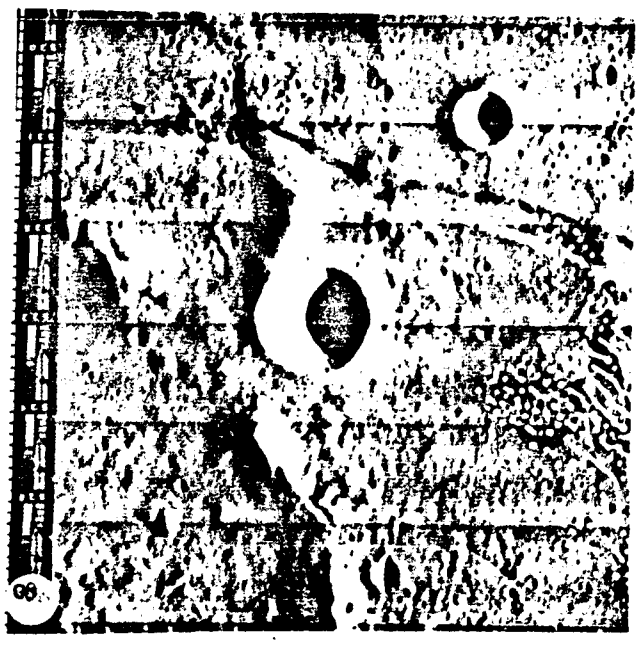
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.020	392.94		392.94	1.002	.0083
9H	-0.286	391.90		391.90	0.999	-.0023
10H	0.076	389.32		389.32	0.993	-.0036
11H	0.505	338.71	0.000 -.913	338.71	0.864	.0582
12H	0.976	221.29	0.832 -.648	235.16	0.600	.1256
13H	1.693	186.15	0.850 -.547	205.68	0.525	.0757
14H	2.071	187.47	0.920 -.826	202.80	0.517	.0715
15H	2.410	177.85	0.000 -.830	177.85	0.454	.0423
16H	3.193	184.65	0.000 -.976	184.65	0.471	.0296









367 (1N6) SILBERSCHLAG A

LAMBDA=13.23 E BETA= 6.94 N XI=+.2272 ETA=+.1208 L+PL CODE = 12122 ALBEDO =.1059

13H FLAT MOON DATA
FM=.04402 FM'=.04402

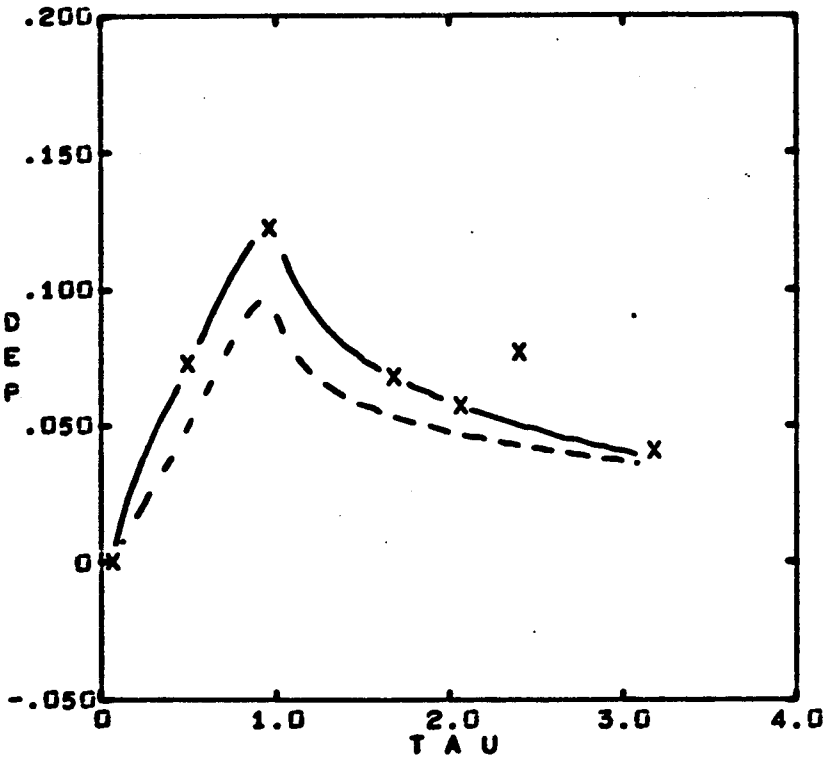
INITIAL TEMPERATURE 393.38
TAU-END OF TOTALITY 3.115

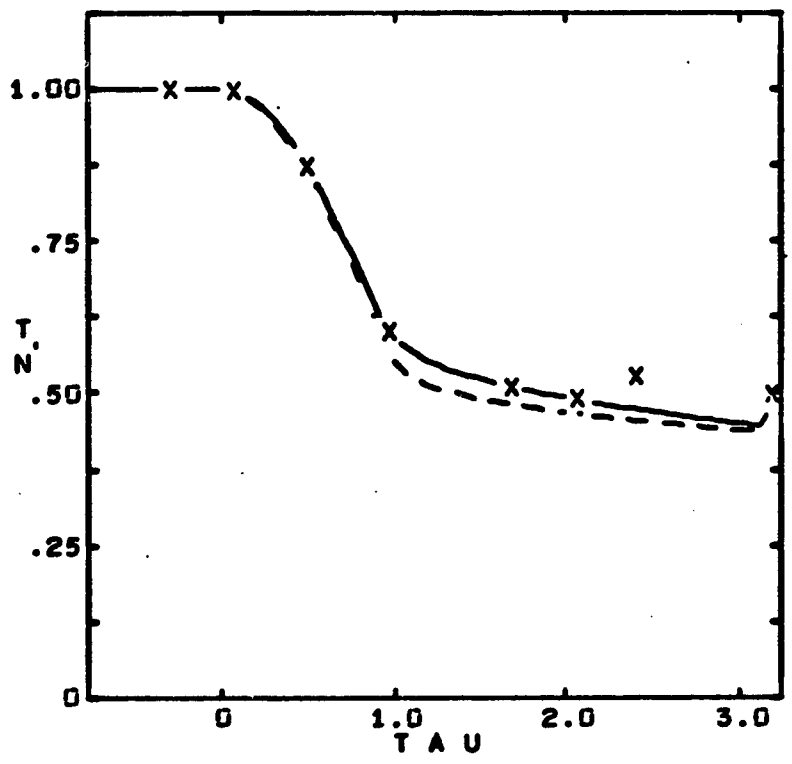
DIFFERENTIAL ENERGY DATA

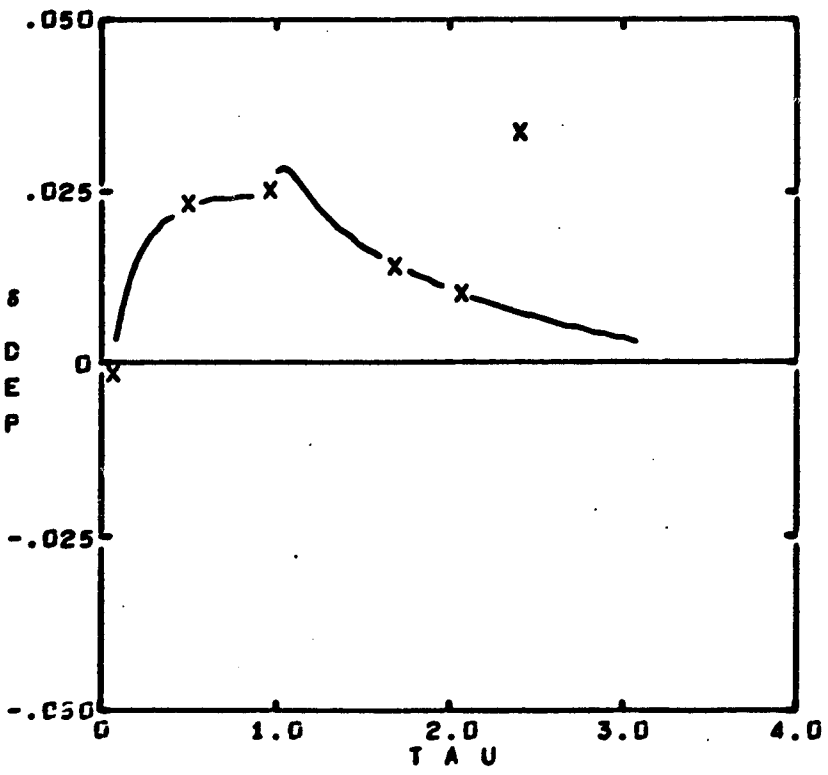
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0391	.0220	.0171
.50	.0727	.0499	.0228
.75	.1039	.0799	.0240
.93	.1241	.1000	.0241
1.0	.1188	.0908	.0280
1.5	.0749	.0577	.0172
2.0	.0586	.0480	.0108
2.5	.0485	.0418	.0067
3.0	.0409	.0372	.0037

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.025	394.46		394.46	1.003	.0110
9H	-0.294	393.08		393.08	0.999	-.0031
10H	0.069	391.31		391.31	0.995	.0002
11H	0.497	343.59		343.59	0.873	.0729
12H	0.967	231.80	0.285 -.751	235.66	0.599	.1224
13H	1.683	200.65	0.000 +.006	200.65	0.510	.0677
14H	2.059	192.47	0.000 +.062	192.47	0.489	.0573
15H	2.398	202.43	0.251 -.445	207.00	0.526	.0767
16H	3.179	192.37	0.720 -.104	195.18	0.496	.0411







PHOTOGRAPH NOT AVAILABLE

368 (1N7) SINAS

LAMBDA=31.62 E BETA= 8.86 N XI=+.5180 ETA=+.1541 L+PL CODE = 15115 ALBEDO =.0651

13H FLAT MOON DATA
FM=.04345 FM'=.06157

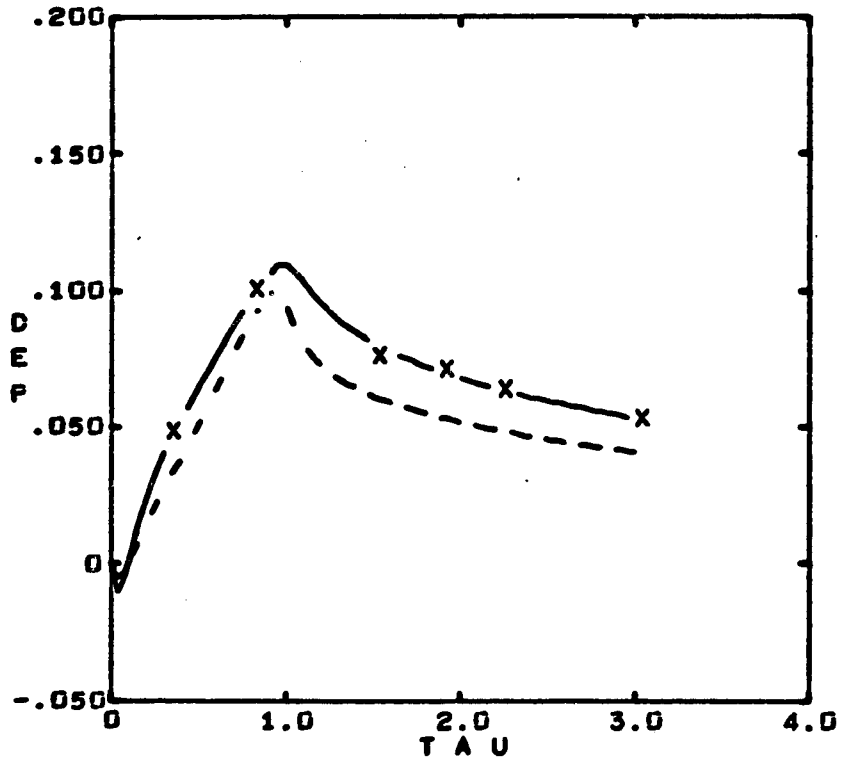
INITIAL TEMPERATURE 389.72
TAU-END OF TOTALITY 3.046

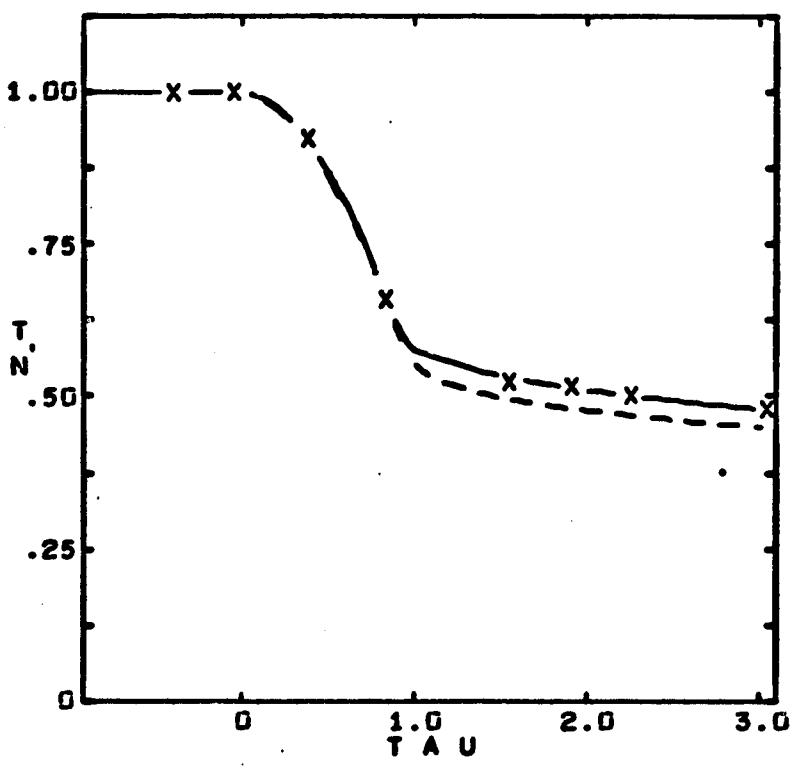
DIFFERENTIAL ENERGY DATA

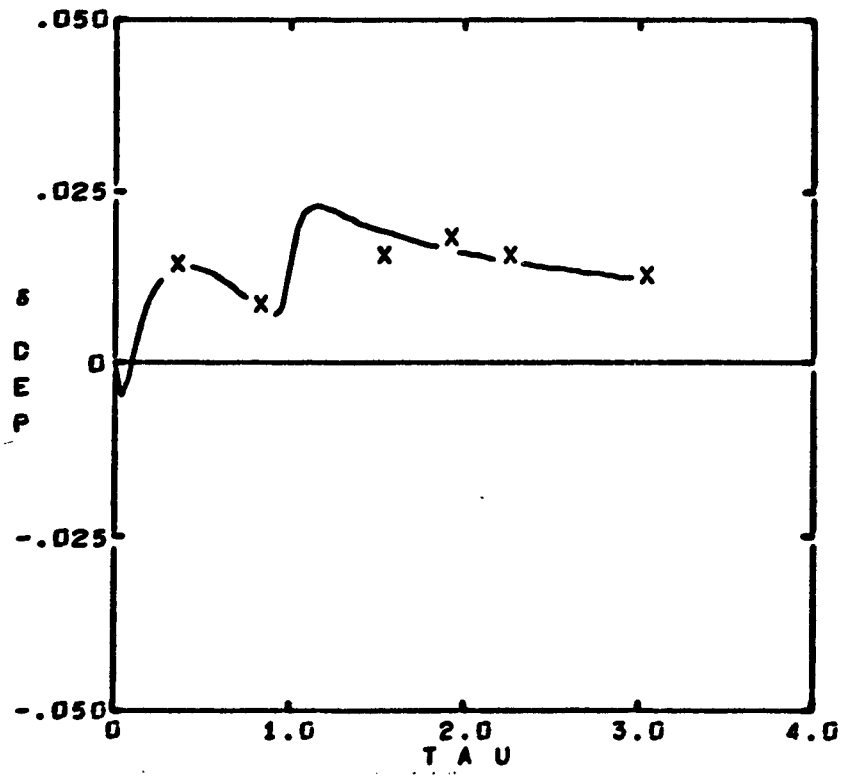
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0304	.0192	.0112
.50	.0636	.0499	.0137
.75	.0916	.0820	.0096
.93	.1092	.1035	.0057
1.0	.1091	.0944	.0147
1.5	.0810	.0615	.0195
2.0	.0678	.0518	.0160
2.5	.0595	.0456	.0139
3.0	.0532	.0408	.0124

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.133	391.36		391.36	1.004	.0169
9H	-0.410	390.14		390.14	1.001	.0043
10H	-0.052	389.59		389.59	1.000	-.0013
11H	0.372	359.61		359.61	0.923	.0485
12H	0.836	257.52	0.000 +.610	257.52	0.661	.1008
13H	1.543	197.65	0.398 +.531	204.70	0.525	.0761
14H	1.917	188.98	0.532 +.639	201.52	0.517	.0715
15H	2.251	190.46	0.340 -.305	196.10	0.503	.0641
16H	3.033	186.42	0.132 -.028	187.45	0.481	.0535







PHOTOGRAPH NOT AVAILABLE

369 (1N8) SINAS E

LAMBDA=31.00 E BETA= 9.65 N XI=+.5078 ETA=+.1676 L+PL CODE = 15106 ALBEDO =.0606

13H FLAT MOON DATA
FM=.01606 FM'=.06157

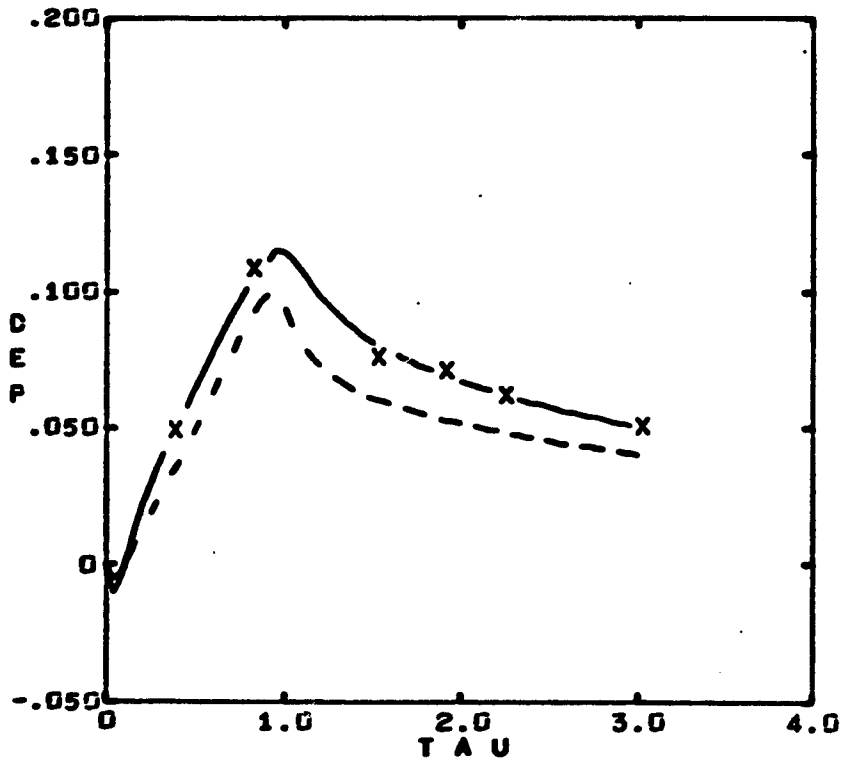
INITIAL TEMPERATURE 390.12
TAU-END OF TOTALITY 3.034

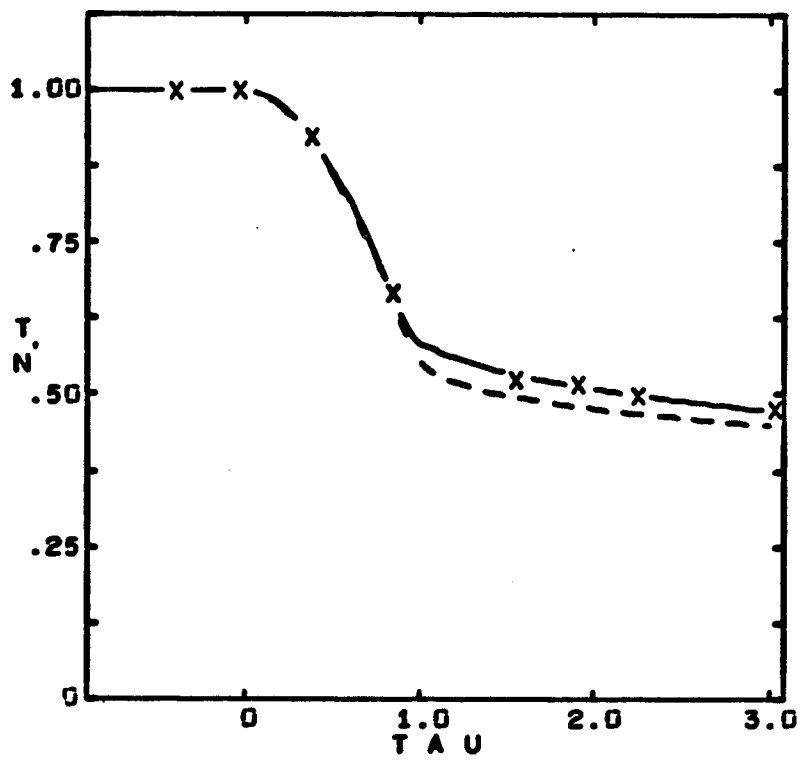
DIFFERENTIAL ENERGY DATA

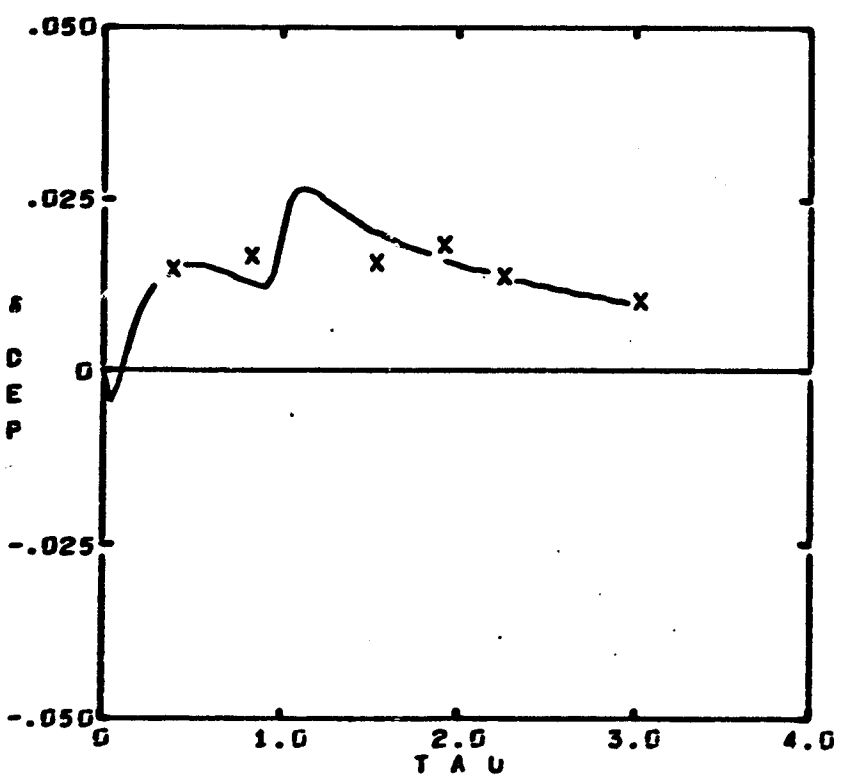
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0307	.0193	.0114
.50	.0654	.0499	.0155
.75	.0956	.0818	.0138
.93	.1148	.1033	.0115
1.0	.1143	.0942	.0201
1.5	.0920	.0613	.0207
2.0	.0672	.0516	.0156
2.5	.0576	.0454	.0122
3.0	.0505	.0406	.0099

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.126	391.87		391.87	1.004	.0180
9H	-0.405	390.54		390.54	1.001	.0043
10H	-0.047	390.00		390.00	1.000	-.0013
11H	0.375	359.60		359.60	0.922	.0492
12H	0.839	259.22	0.108 +.225	259.55	0.665	.1089
13H	1.545	187.14	1.312 -.336	204.70	0.525	.0758
14H	1.917	181.07	1.170 -.368	201.52	0.517	.0712
15H	2.251	193.68	0.127 -.978	194.82	0.499	.0622
16H	3.030	185.08	0.000 -.473	185.08	0.474	.0507







PHOTOGRAPH NOT AVAILABLE

370 (1N9) SINAS H

LAMBDA=33.61 E BETA=10.05 N XI=+.5450 ETA=+.1745 L+FL CODE = 15147 ALBEDO =.0594

13H FLAT MOON DATA
FM=.05130 FM'=.05630

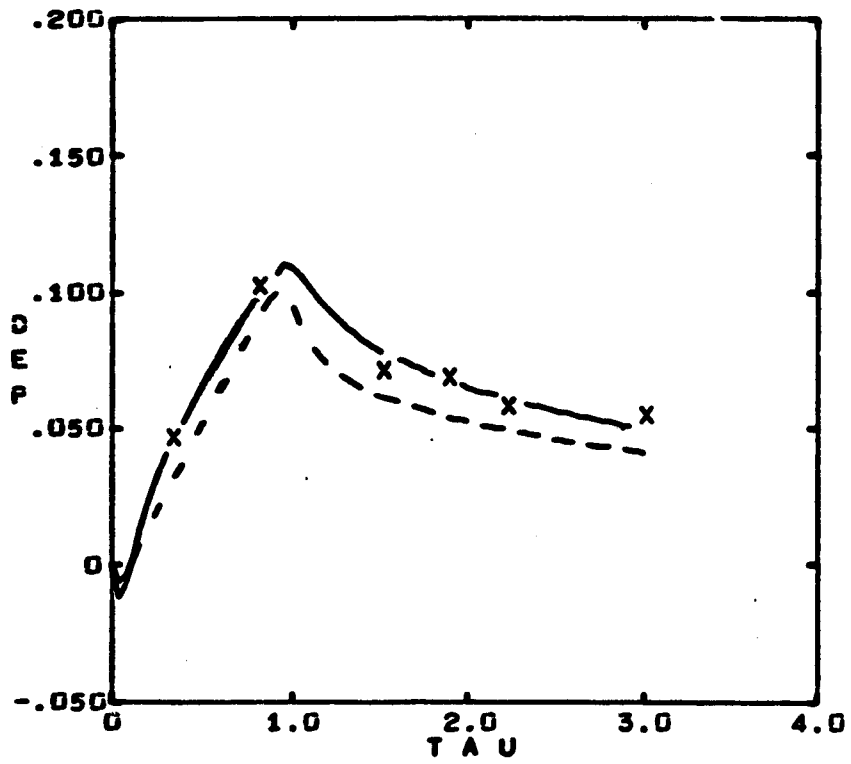
INITIAL TEMPERATURE 388.68
TAU-END OF TOTALITY 3.022

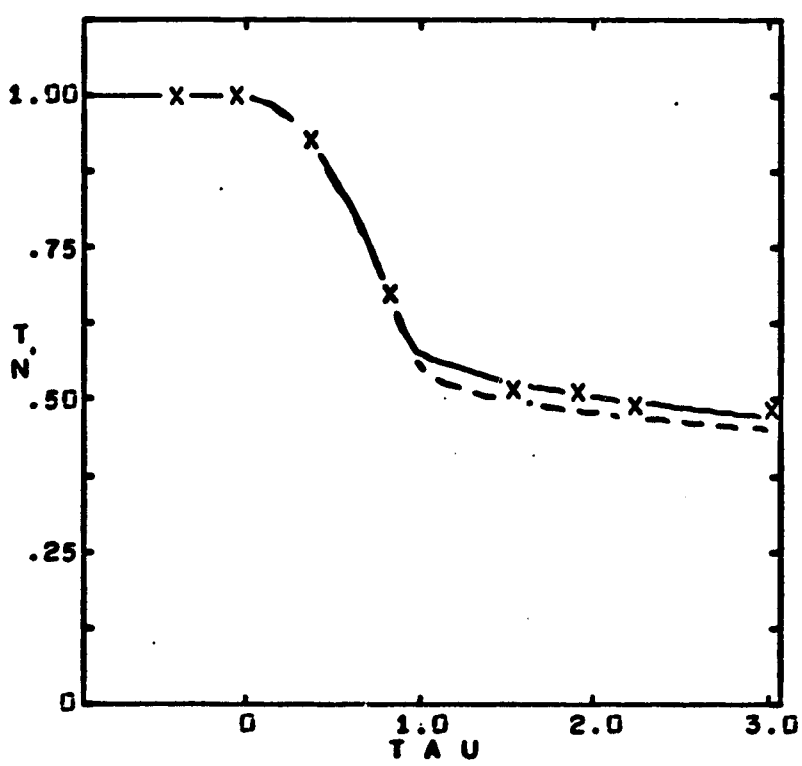
DIFFERENTIAL ENERGY DATA

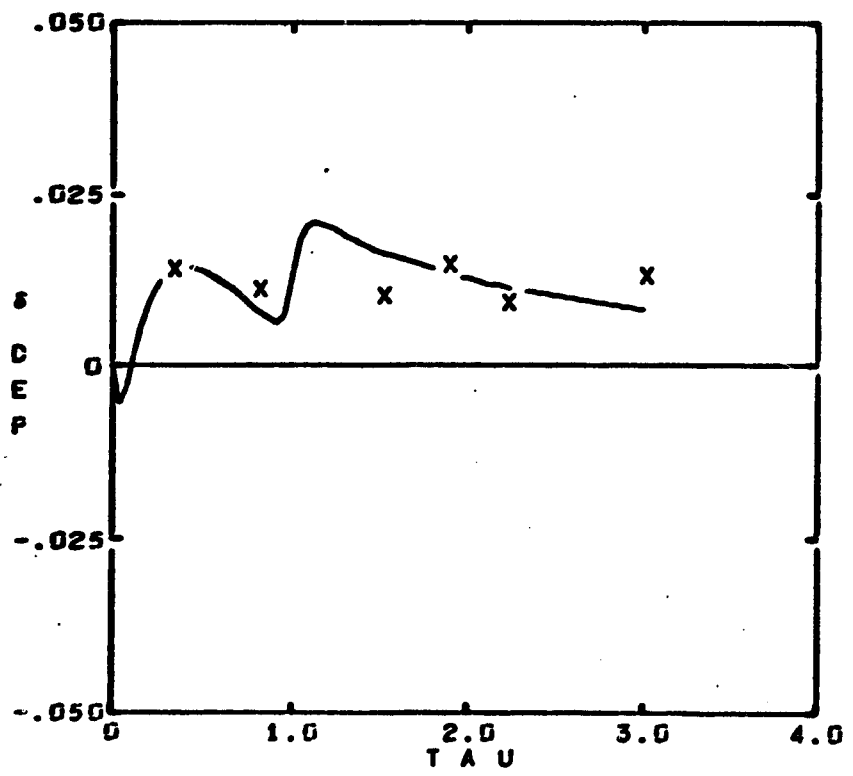
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0302	.0189	.0113
.50	.0640	.0500	.0140
.75	.0920	.0824	.0096
.93	.1094	.1041	.0053
1.0	.1090	.0951	.0139
1.5	.0788	.0621	.0167
2.0	.0651	.0524	.0127
2.5	.0563	.0461	.0102
3.0	.0497	.0414	.0083

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.138	389.77		389.77	1.003	.0113
9H	-0.420	388.54		388.54	1.000	-.0014
10H	-0.062	388.65		388.65	1.000	-.0004
11H	0.359	360.33		360.33	0.927	.0464
12H	0.821	259.79	0.566 -.994	261.54	0.673	.1024
13H	1.526	200.01	0.214 -.942	201.10	0.517	.0717
14H	1.898	191.05	0.543 +.705	199.06	0.512	.0688
15H	2.231	189.83	0.250 [illegible]66	191.12	0.492	.0585
16H	3.010	186.68	0.357 +.988	187.85	0.483	.0546







PHOTOGRAPH
NOT
AVAILABLE

371 (1P1) SINAS J

LAMBDA=33.76 E BETA=10.35 N XI=+.5466 ETA=+.1797 L+PL CODE = 15147 ALBEDO =.0592

13H FLAT MOON DATA
FM=.04399 FM'=.05280

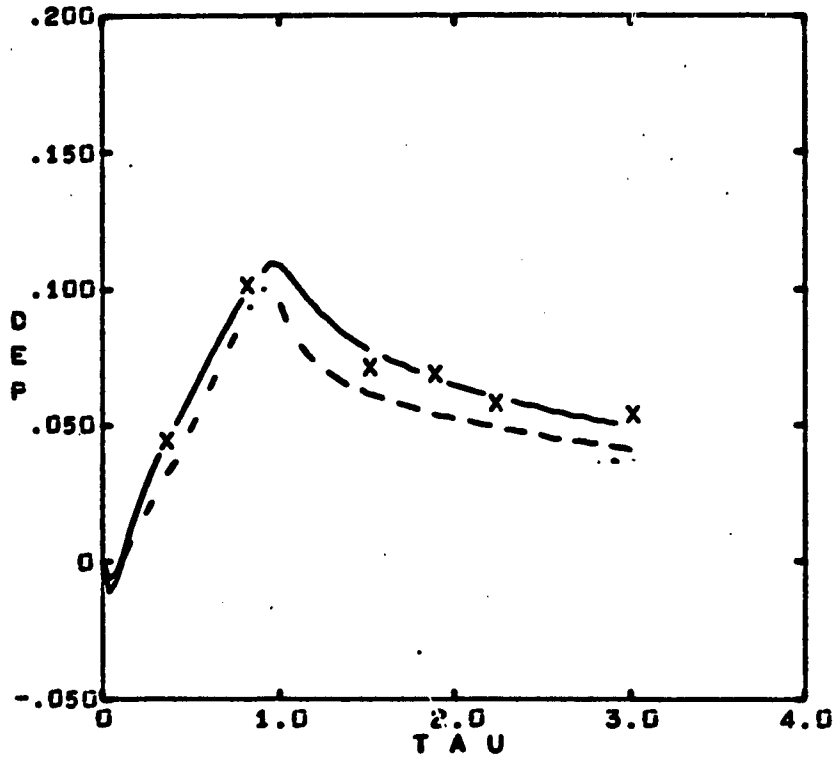
INITIAL TEMPERATURE 388.76
TAU-END OF TOTALITY 3.017

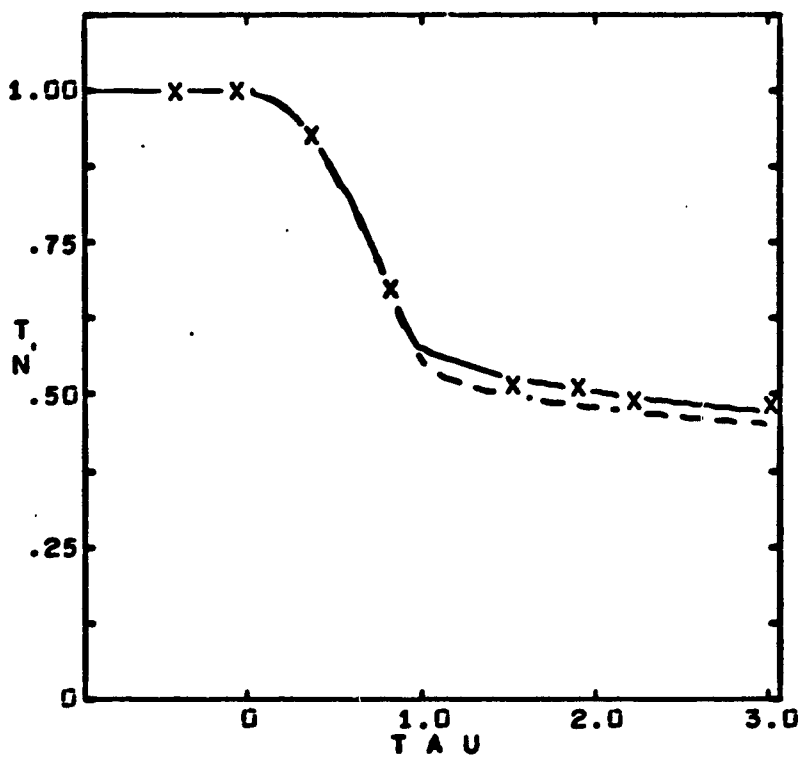
DIFFERENTIAL ENERGY DATA

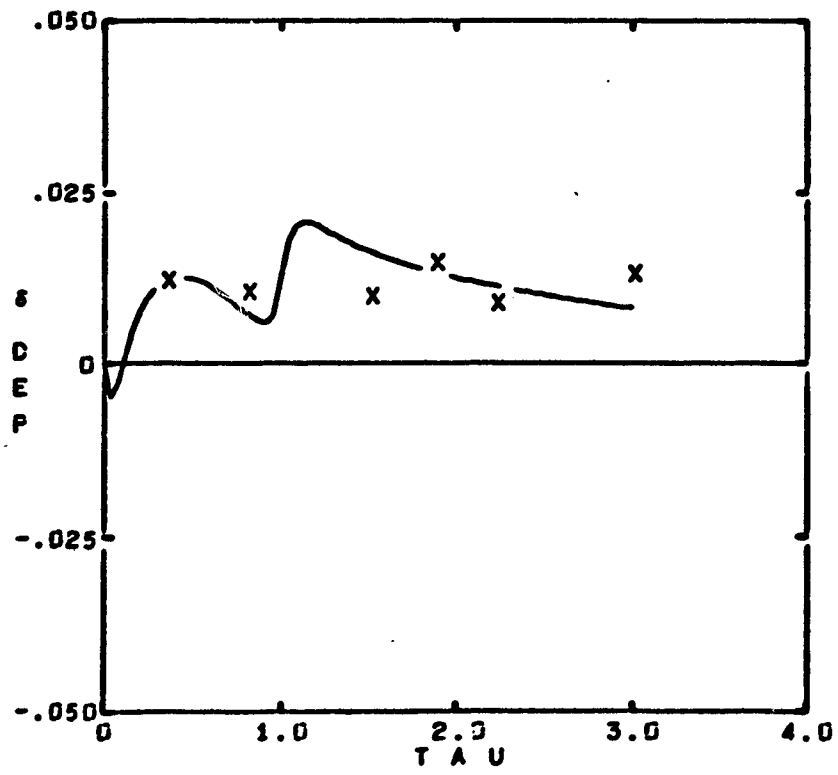
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0287	.0189	.0098
.50	.0624	.0500	.0124
.75	.0910	.0824	.0086
.93	.1092	.1042	.0050
1.0	.1087	.0951	.0136
1.5	.0786	.0622	.0164
2.0	.0650	.0524	.0126
2.5	.0562	.0462	.0100
3.0	.0496	.0414	.0082

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.138	389.86		389.86	1.003	.0114
9H	-0.419	389.08		389.08	1.001	.0032
10H	-0.063	388.65		388.65	1.000	-.0011
11H	0.358	360.41		360.41	0.927	.0445
12H	0.821	261.32	0.129 -.580	261.54	0.673	.1016
13H	1.523	197.13	0.340 -.150	201.10	0.517	.0716
14H	1.895	194.68	0.364 +.316	199.06	0.512	.0687
15H	2.229	189.57	0.285 -.034	191.12	0.492	.0584
16H	3.007	185.03	0.328 -.430	187.85	0.483	.0545







PHOTOGRAPH NOT AVAILABLE

372 (1P2) SOSIGENES

LAMBDA=17.61 E BETA= 8.71 N XI=+.2990 ETA=+.1514 L+PL CODE = 12195 ALBEDO =.0670

13H FLAT MOON DATA
FM=.04457 FM'=.04457

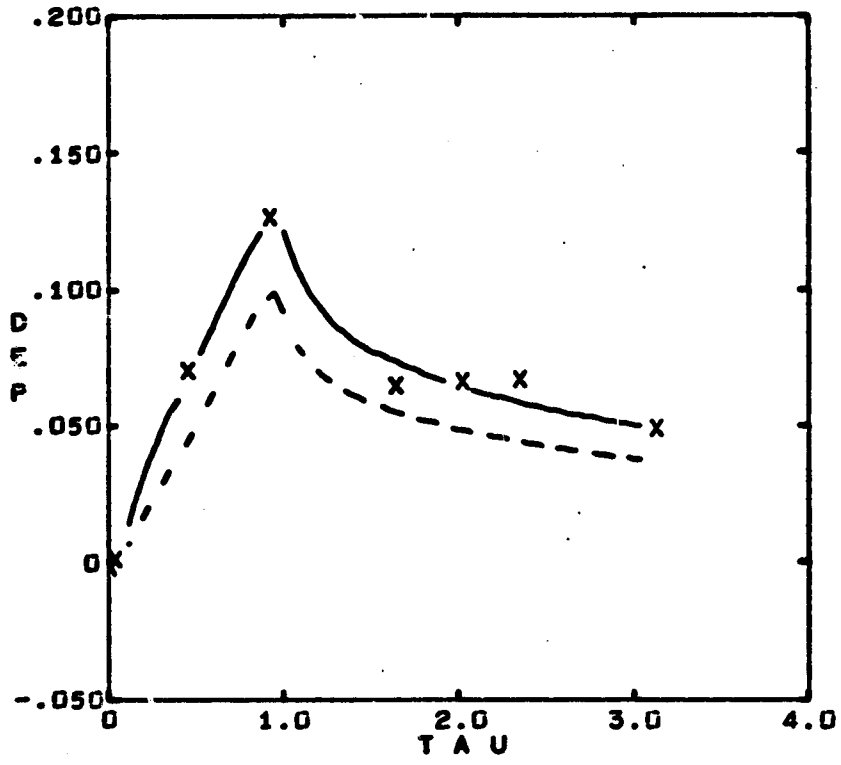
INITIAL TEMPERATURE 396.88
TAU-END OF TOTALITY 3.077

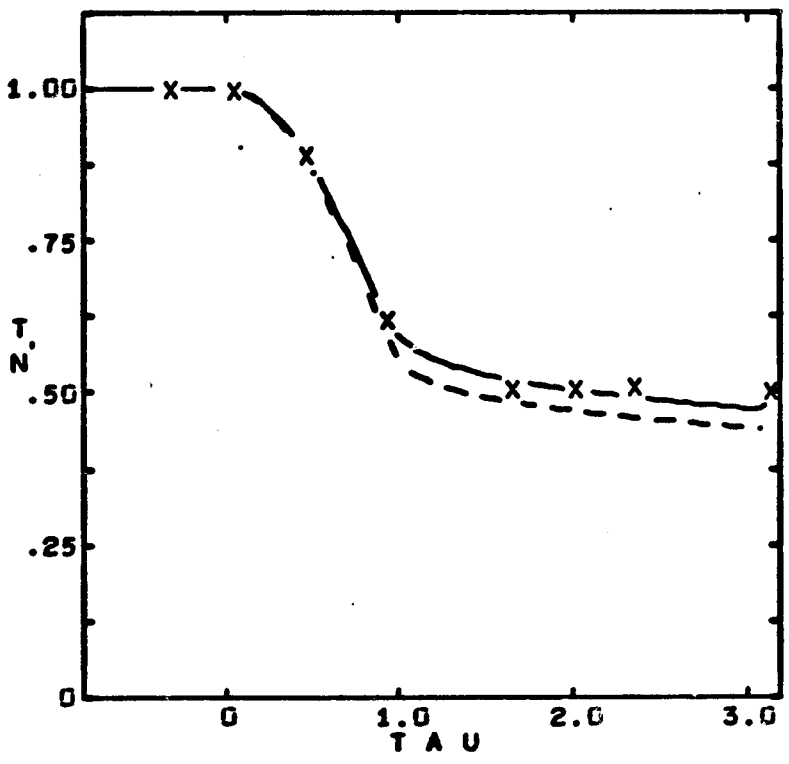
DIFFERENTIAL ENERGY DATA

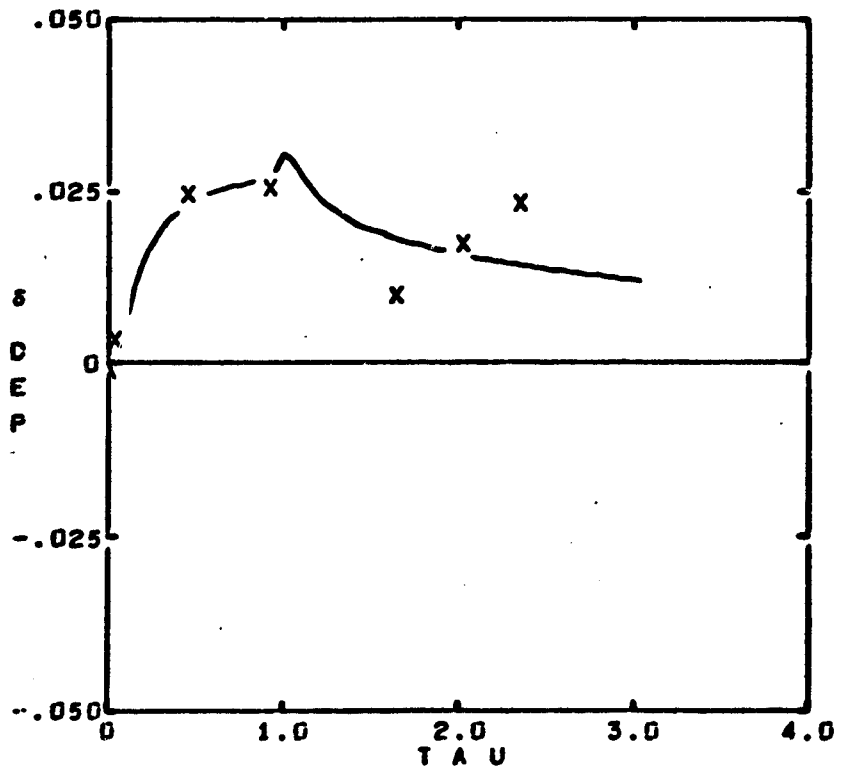
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0383	.0214	.0169
.50	.0737	.0499	.0238
.75	.1064	.0804	.0260
.93	.1275	.1009	.0266
1.0	.1220	.0917	.0303
1.5	.0780	.0585	.0195
2.0	.0647	.0488	.0159
2.5	.0563	.0426	.0137
3.0	.0501	.0380	.0121

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.048	398.14		398.14	1.003	.0128
9H	-0.321	396.49		396.49	0.999	-.0039
10H	0.039	396.19		396.19	0.998	.0014
11H	0.464	352.62		352.62	0.888	.0702
12H	0.932	242.62	0.314 -.729	246.13	0.620	.1266
13H	1.643	200.49	0.000 -.380	200.49	0.505	.0651
14H	2.017	195.26	0.606 +.940	201.16	0.507	.0660
15H	2.353	195.59	0.357 -.549	202.24	0.510	.0674
16H	3.131	193.62	0.618 +.897	199.65	0.503	.0493







PHOTOGRAPH NOT AVAILABLE

373 (1P3) SOSIGENES A

LAMBDA=18.49 E BETA= 7.76 N XI=+.3142 ETA=+.1351 L+PL CODE = 13113 ALBEDO =.0611

13H FLAT MOON DATA
FM=.06485 FM'=.06446

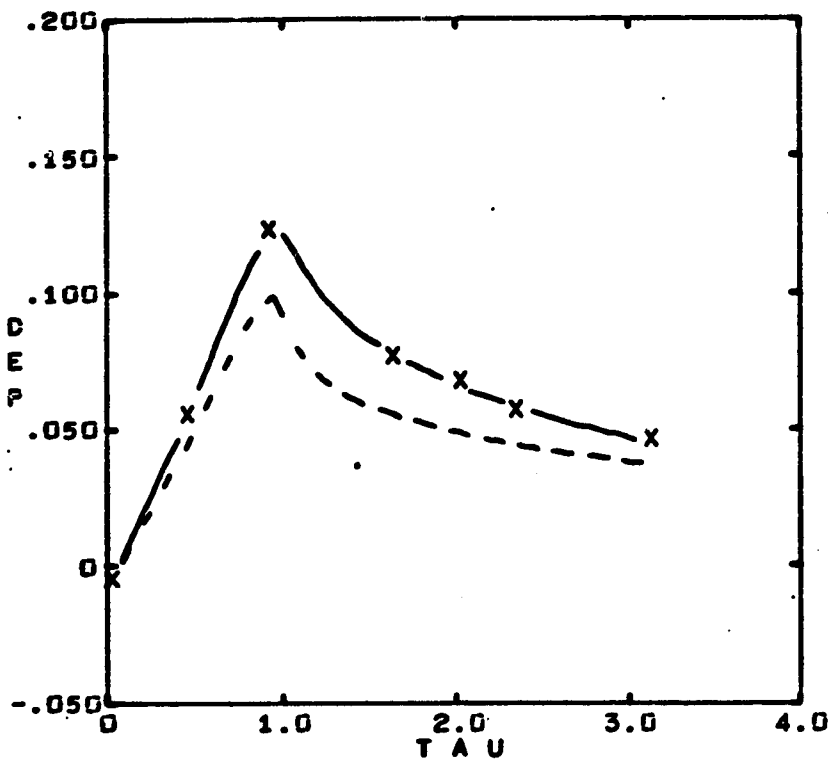
INITIAL TEMPERATURE 397.25
TAU-END OF TOTALITY 3.090

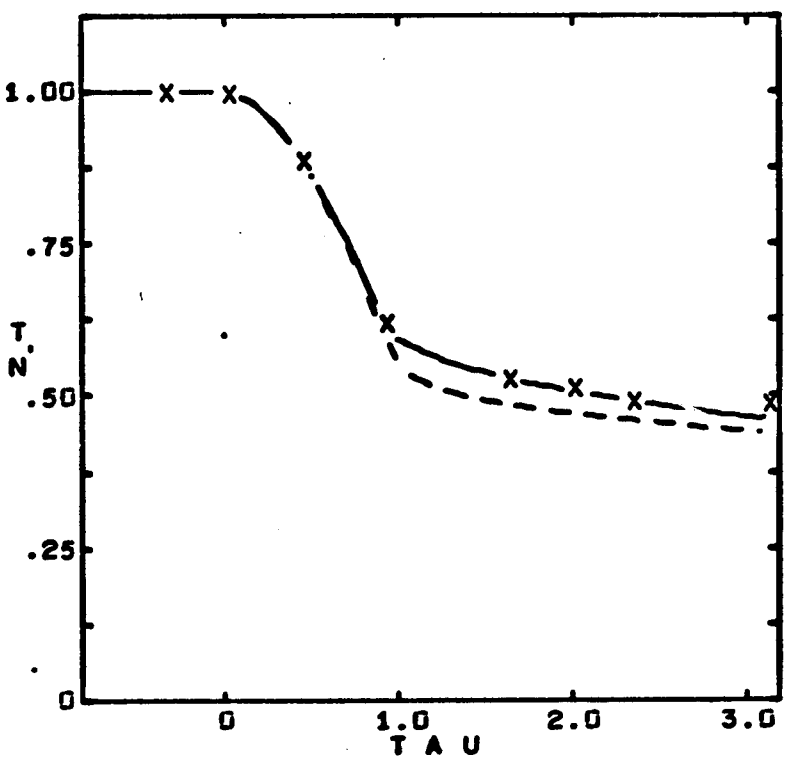
DIFFERENTIAL ENERGY DATA

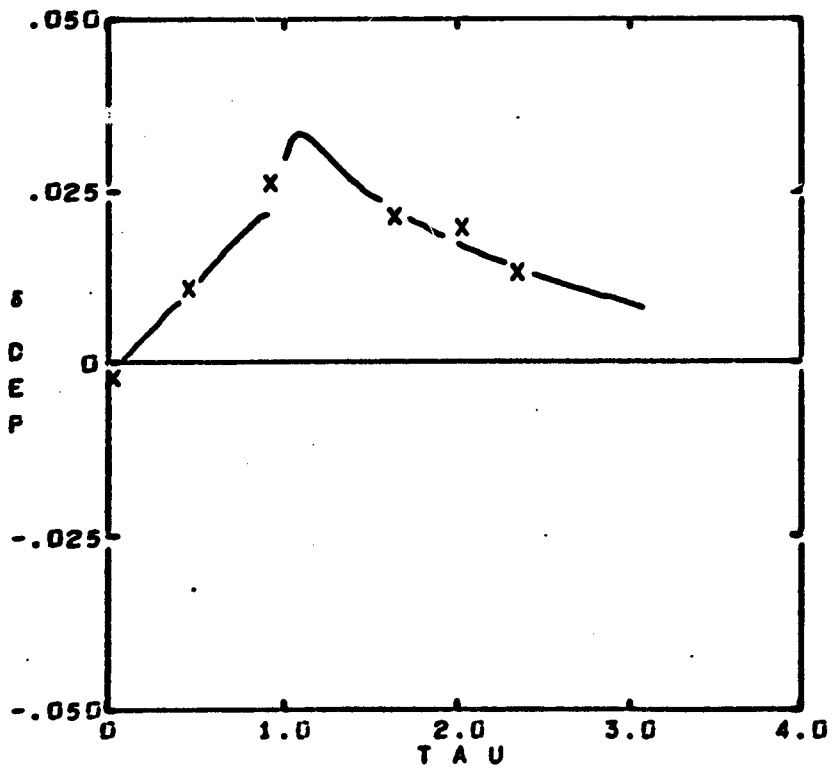
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0263	.0213	.0050
.50	.0614	.0499	.0115
.75	.0987	.0805	.0182
.93	.1237	.1010	.0227
1.0	.1214	.0918	.0296
1.5	.0834	.0587	.0247
2.0	.0663	.0490	.0173
2.5	.0552	.0428	.0124
3.0	.0468	.0382	.0086

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.057	397.67		397.67	1.001	.0042
9H	-0.328	397.12		397.12	1.000	-.0013
10H	0.033	396.20		396.20	0.997	-.0044
11H	0.459	352.11		352.11	0.886	.0559
12H	0.927	244.86	0.149 +.612	245.99	0.619	.1231
13H	1.640	208.48	0.071 +.857	209.07	0.526	.0767
14H	2.016	194.22	0.557 +.930	203.08	0.511	.0683
15H	2.352	194.52	0.000 +.617	194.52	0.490	.0575
16H	3.133	189.54	0.580 +.834	193.94	0.488	.0471







PHOTOGRAPH NOT AVAILABLE

374 (2M8) SUESS

LAMBDA=47.65 W BETA= 4.35 N XI=-.7369 ETA=+.0758 L+PL CODE = 27037 ALBEDO =.0639

13H FLAT MOON DATA
FM=.10795 FM'=.11473

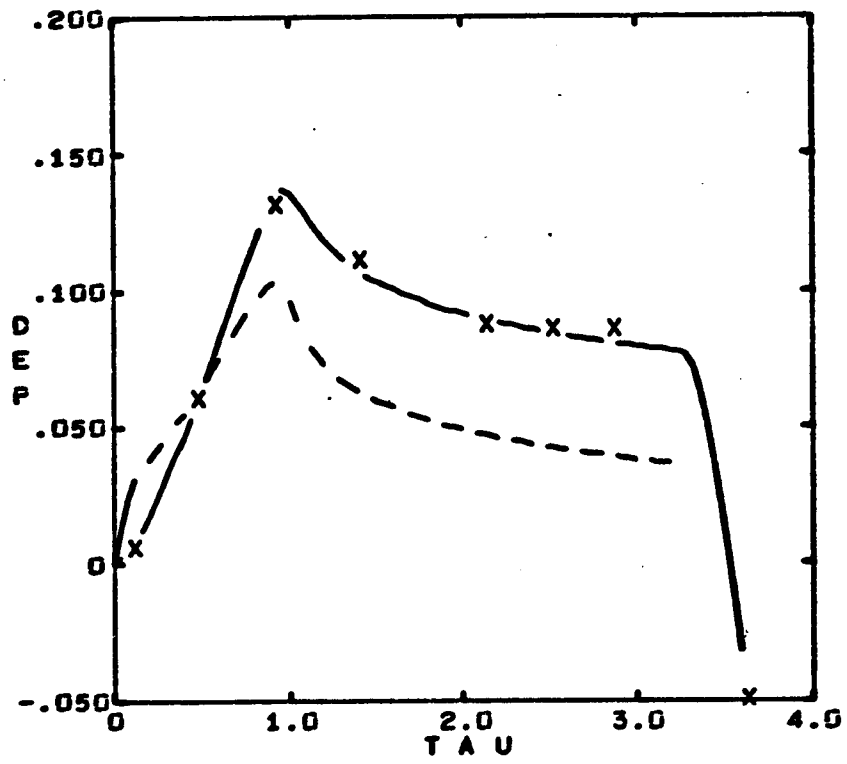
INITIAL TEMPERATURE 372.22
TAU-END OF TOTALITY 3.267

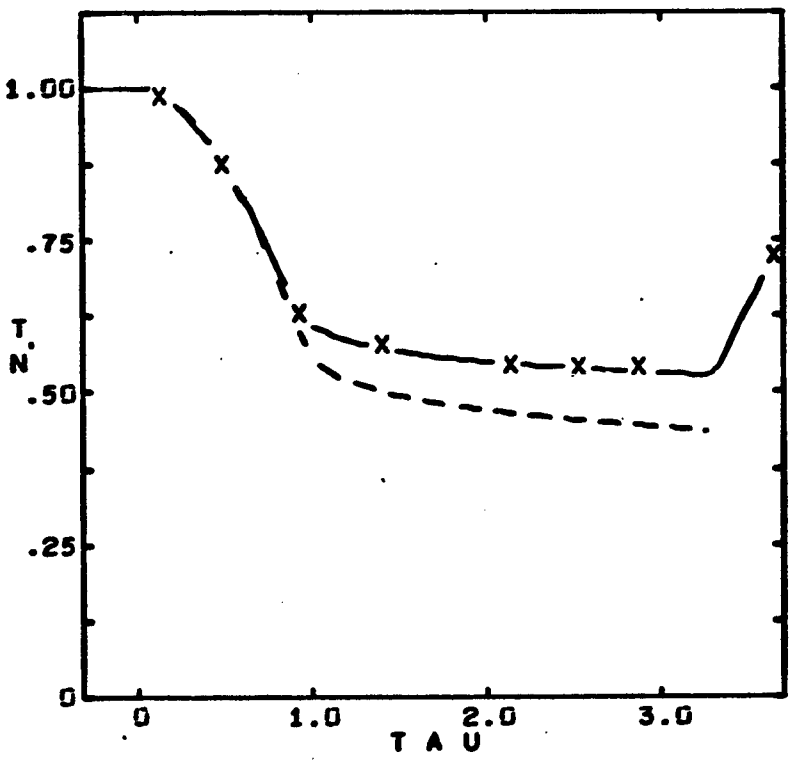
DIFFERENTIAL ENERGY DATA

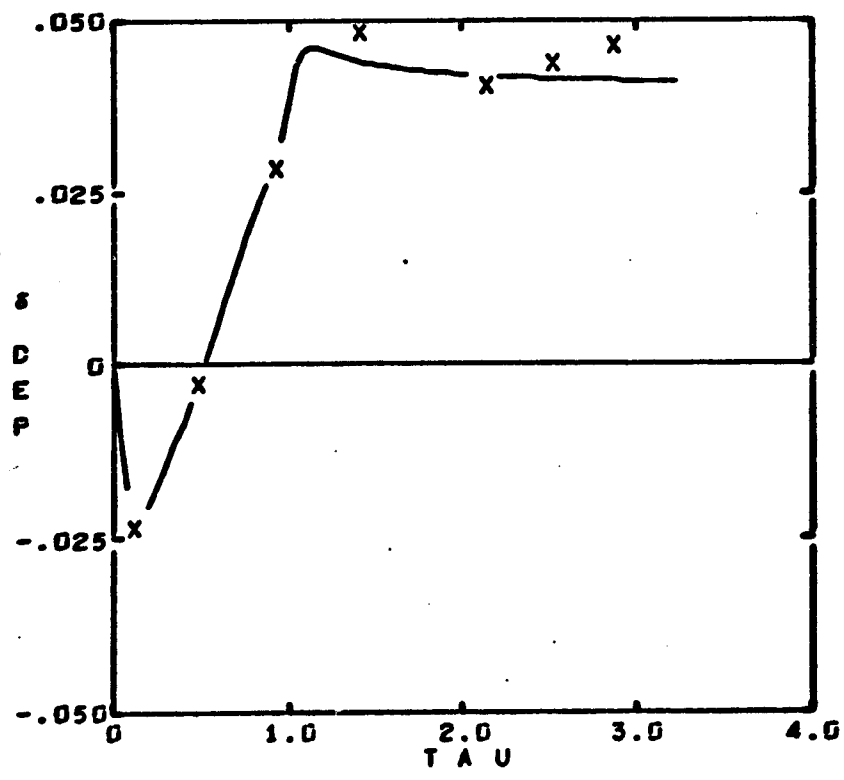
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0240	.0419	-.0179
.50	.0639	.0650	-.0011
.75	.1081	.0903	.0178
.93	.1371	.1068	.0303
1.0	.1354	.0967	.0387
1.5	.1034	.0597	.0437
2.0	.0913	.0491	.0422
2.5	.0844	.0428	.0416
3.0	.0795	.0382	.0413

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.636	372.22		372.22	1.000	.0000
9H	0.114	368.37		368.37	0.990	.0064
10H	0.484	326.56		326.56	0.877	.0608
11H	0.923	232.93	0.315 +.961	234.91	0.631	.1314
12H	1.404	214.00	0.054 +.107	214.95	0.577	.1112
13H	2.139	198.99	0.212 -.506	202.61	0.544	.0878
14H	2.523	199.48	0.152 +.411	201.72	0.542	.0863
15H	2.872	199.85	0.075 +.317	201.33	0.541	.0856
16H	3.634	270.36	0.000 +.837	270.36	0.726	-.0494







PHOTOGRAPH NOT AVAILABLE

375 (2M9) SUESS F

LAMBDA=44.62 W BETA= 1.16 N XI=-.7023 ETA=+.0203 L+PL CODE = 27002 ALBEDO =.0593

13H FLAT MOON DATA
FM=.06201 FM'=.06537

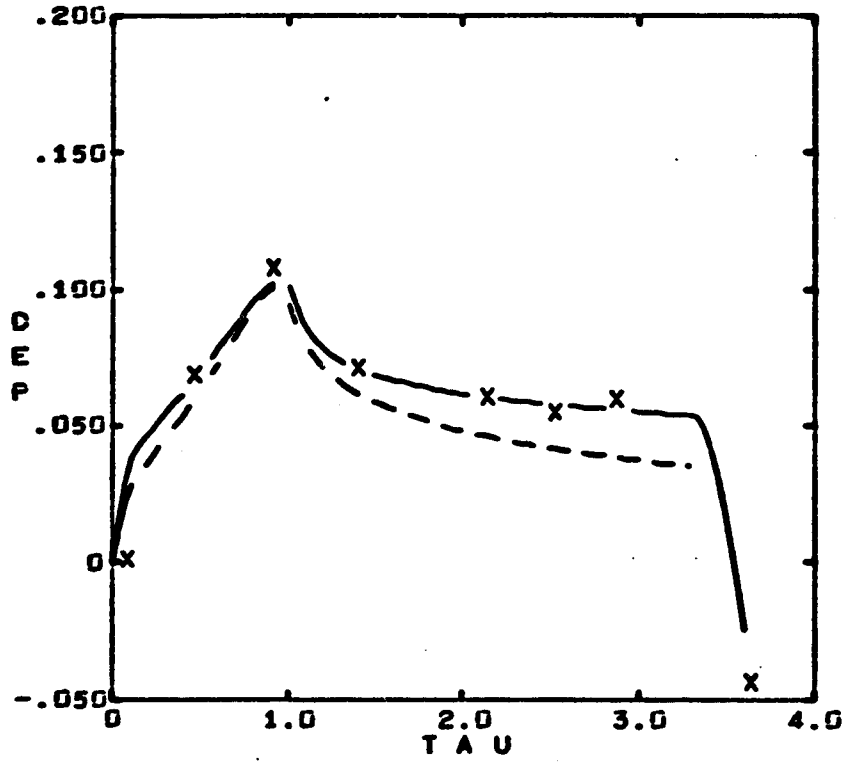
INITIAL TEMPERATURE 376.42
TAU-END OF TOTALITY 3.309

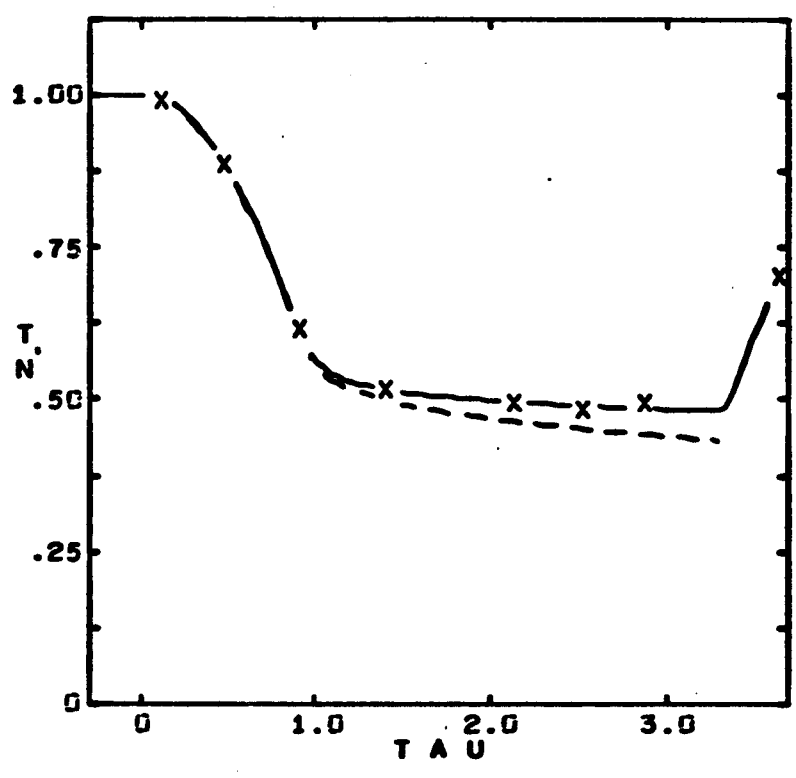
DIFFERENTIAL ENERGY DATA

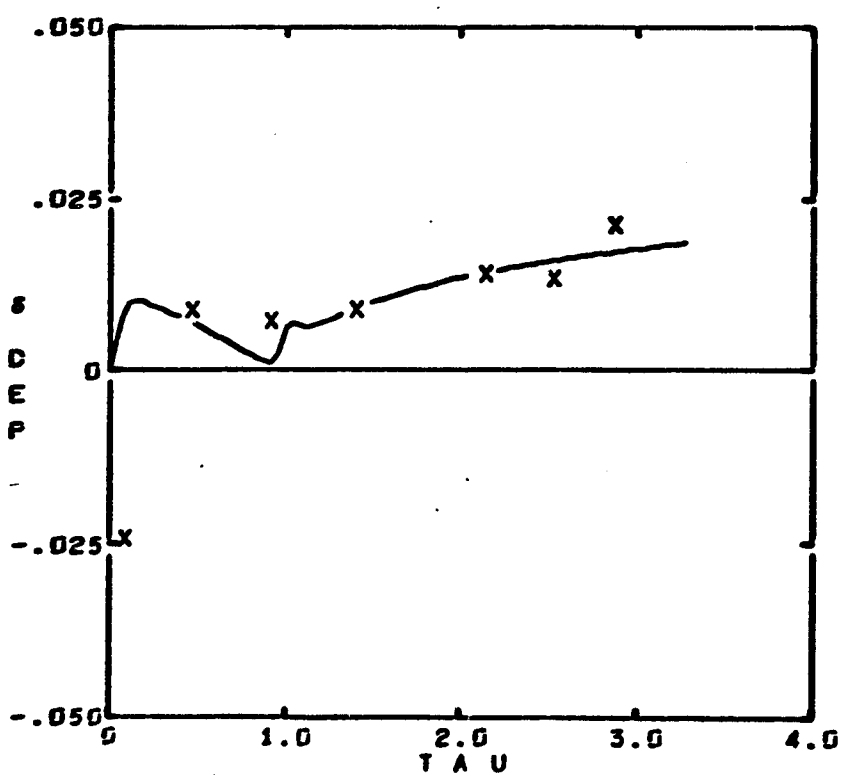
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0495	.0399	.0096
.50	.0696	.0630	.0066
.75	.0912	.0883	.0029
.93	.1054	.1048	.0006
1.0	.1012	.0949	.0063
1.5	.0686	.0586	.0100
2.0	.0617	.0482	.0135
2.5	.0579	.0419	.0160
3.0	.0552	.0374	.0178

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.660	376.42		376.42	1.000	.0000
9H	0.098	373.05		373.05	0.991	.0013
10H	0.471	334.09		334.09	0.868	.0692
11H	0.912	229.94	0.359 +.287	231.06	0.614	.1081
12H	1.397	193.19	0.151 -.919	194.29	0.516	.0710
13H	2.136	184.50	0.160 +.655	186.66	0.496	.0605
14H	2.523	176.84	0.454 +.649	182.31	0.484	.0550
15H	2.874	183.88	0.163 -.789	186.06	0.494	.0597
16H	3.644	264.62	0.000 +.525	264.62	0.703	-.0437







PHOTOGRAPH NOT AVAILABLE

376 (1P4) TACQUET

LAMBDA=19.18 E BETA=16.61 N XI=+.3149 ETA=+.2859 L+PL CODE = 13218 ALBEDO =.0709

13H FLAT MOON DATA
FM=.01498 FM'=.03321

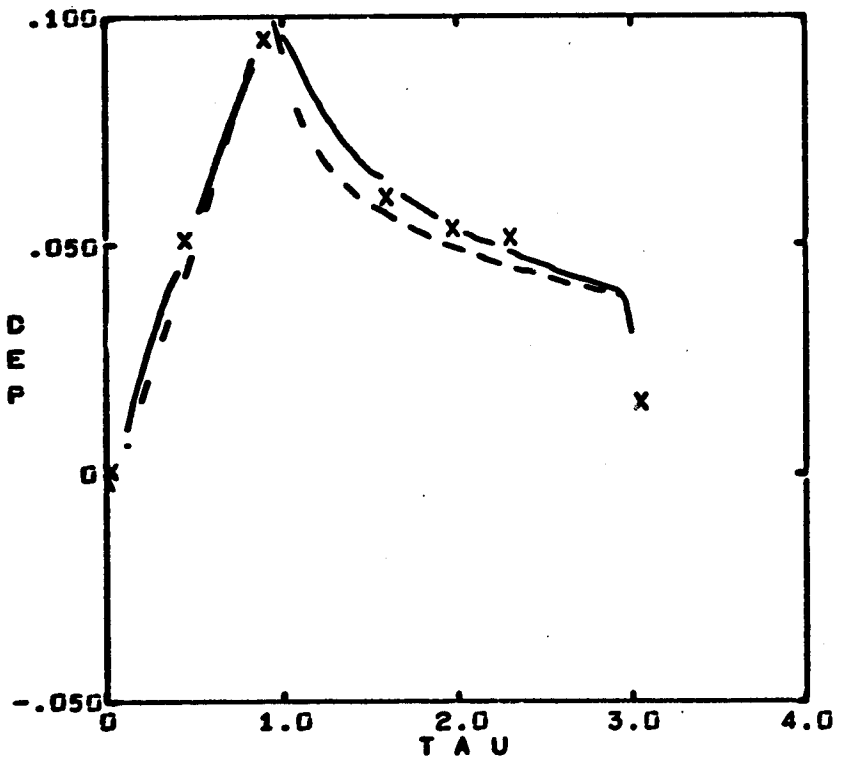
INITIAL TEMPERATURE 392.74
TAU-END OF TOTALITY 2.937

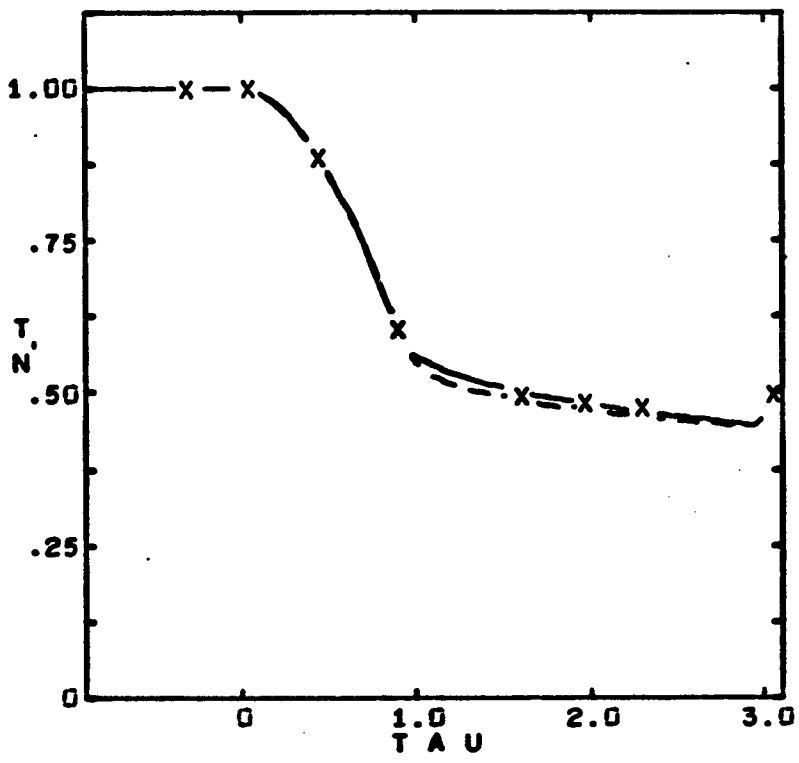
DIFFERENTIAL ENERGY DATA

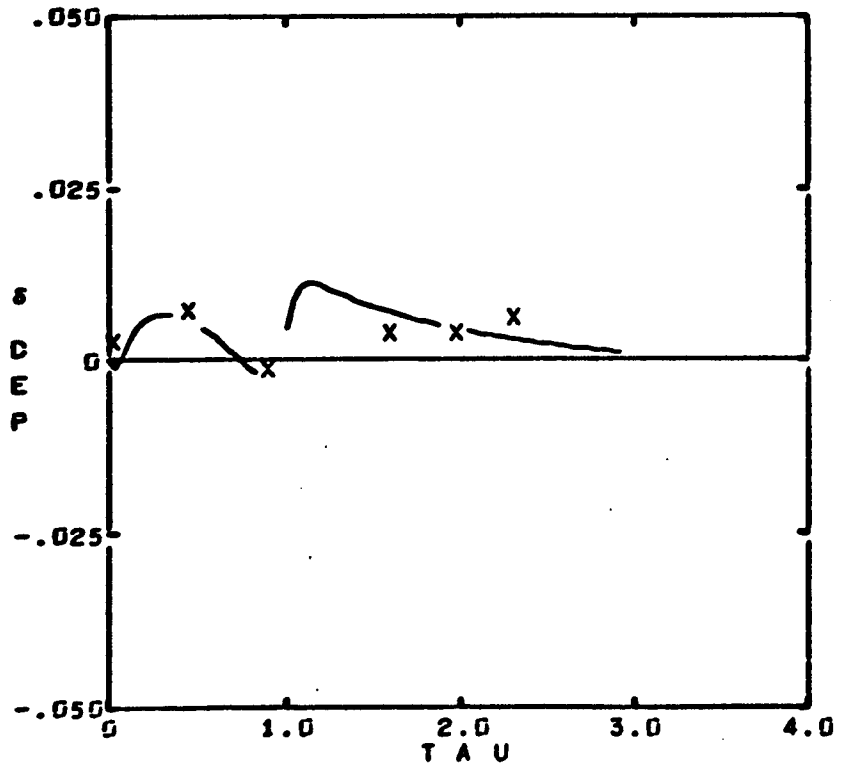
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0277	.0212	.0065
.50	.0550	.0499	.0051
.75	.0806	.0806	.0000
.93	.0972	.1011	-.0039
1.0	.0962	.0920	.0042
1.5	.0666	.0588	.0078
2.0	.0536	.0491	.0045
2.5	.0453	.0429	.0024
3.0	.0391	.0383	.0008

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.029	394.45		394.45	1.004	.0175
9H	-0.321	392.21		392.21	0.999	-.0054
10H	0.032	392.15		392.15	0.999	.0001
11H	0.447	348.78		348.78	0.888	.0510
12H	0.903	236.65	0.000 -.798	236.65	0.603	.0949
13H	1.598	187.65	0.639 +.551	194.75	0.496	.0605
14H	1.964	184.87	0.434 +.760	189.10	0.481	.0538
15H	2.292	186.29	0.174 -.417	187.18	0.477	.0516
16H	3.048	195.94	0.000 +.843	195.94	0.499	.0156







PHOTOGRAPH
NOT
AVAILABLE

377 (1P5) TACQUET C

LAMBDA=21.08 E BETA=13.46 N XI=+.3498 ETA=+.2328 L+PL CODE = 13243 ALBEDO =.0598

13H FLAT MOON DATA
FM=.03599 FM'=.05089

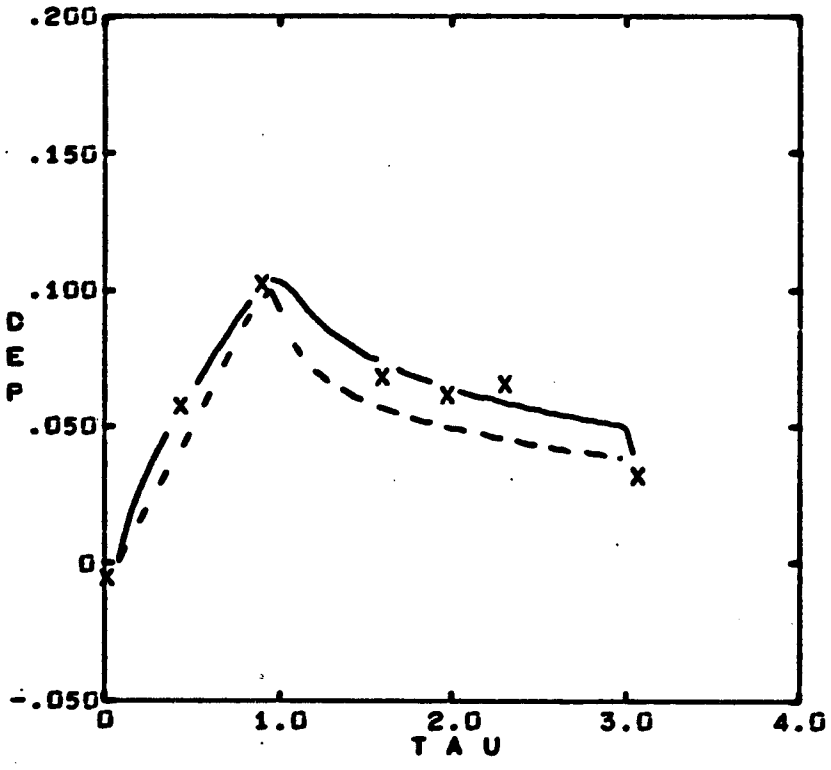
INITIAL TEMPERATURE 395.16
TAU-END OF TOTALITY 2.988

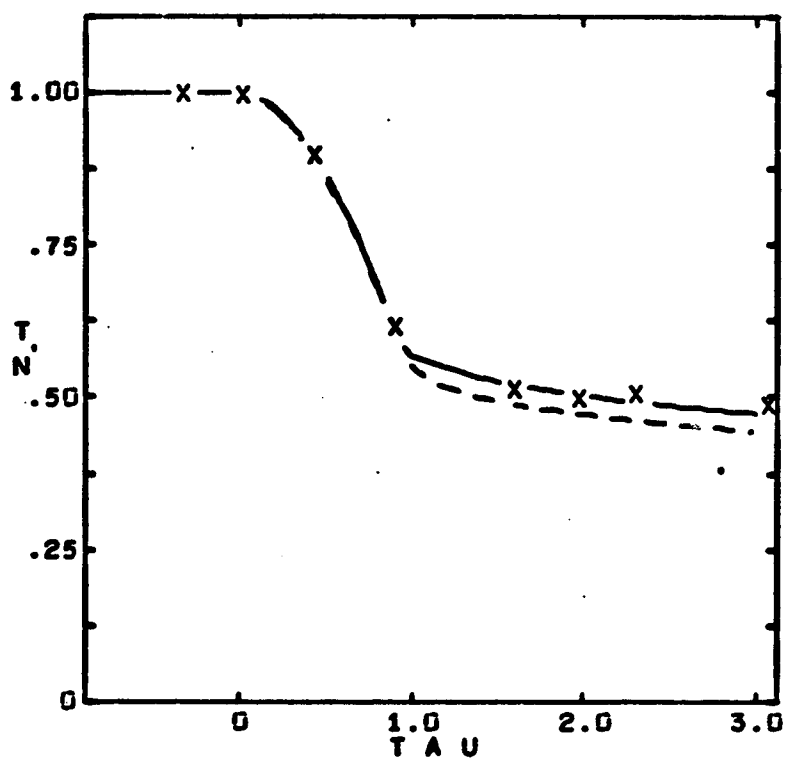
DIFFERENTIAL ENERGY DATA

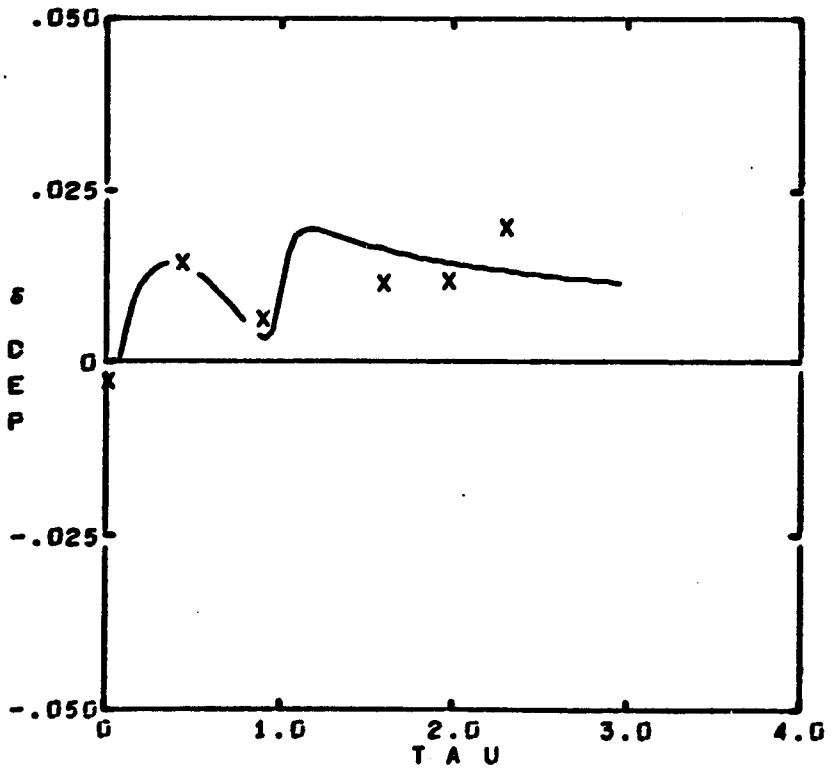
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0339	.0209	.0130
.50	.0631	.0499	.0132
.75	.0880	.0807	.0073
.93	.1036	.1014	.0022
1.0	.1032	.0923	.0109
1.5	.0762	.0592	.0170
2.0	.0638	.0495	.0143
2.5	.0560	.0433	.0127
3.0	.0502	.0386	.0116

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.052	396.10		396.10	1.002	.0096
9H	-0.337	394.85		394.85	0.999	-.0031
10H	0.018	394.40		394.40	0.998	-.0052
11H	0.437	353.97		353.97	0.896	.0570
12H	0.897	243.28	0.000 -.929	243.28	0.616	.1023
13H	1.597	196.19	0.386 +.507	202.02	0.511	.0683
14H	1.968	193.43	0.308 +.845	196.96	0.498	.0617
15H	2.298	196.14	0.312 -.123	199.79	0.506	.0653
16H	3.064	190.40	0.452 +.585	193.06	0.489	.0319







PHOTOGRAPH NOT AVAILABLE

378 (1P6) TARUNTIUS E

LAMBDA=40.23 E BETA= 5.52 N XI=+.6428 ETA=+.0962 L+PL CODE = 16049 ALBEDO =.0660

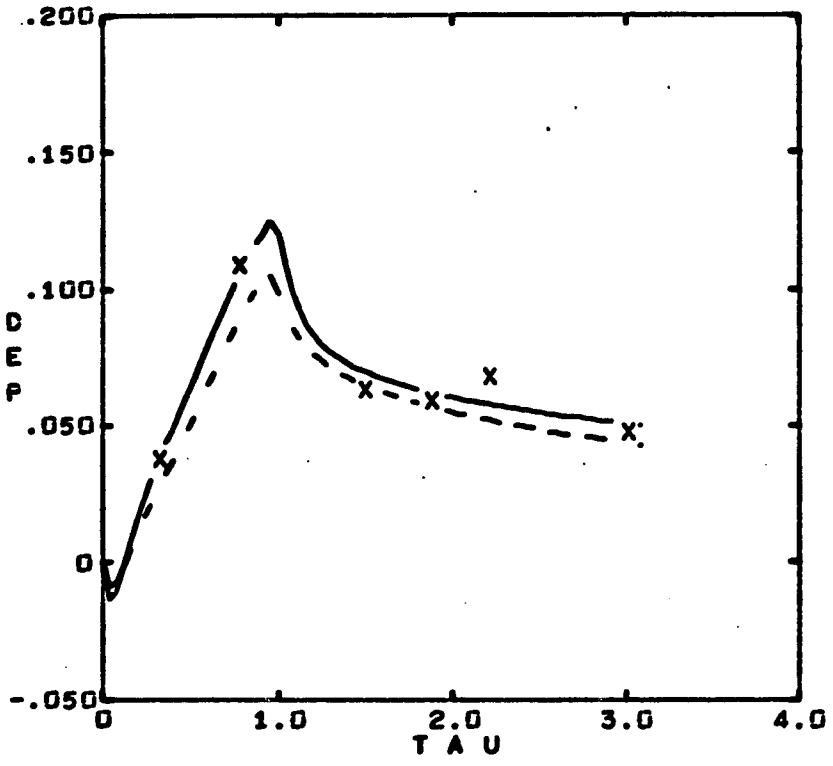
13H FLAT MOON DATA
FM=.01735 FM'=.03557

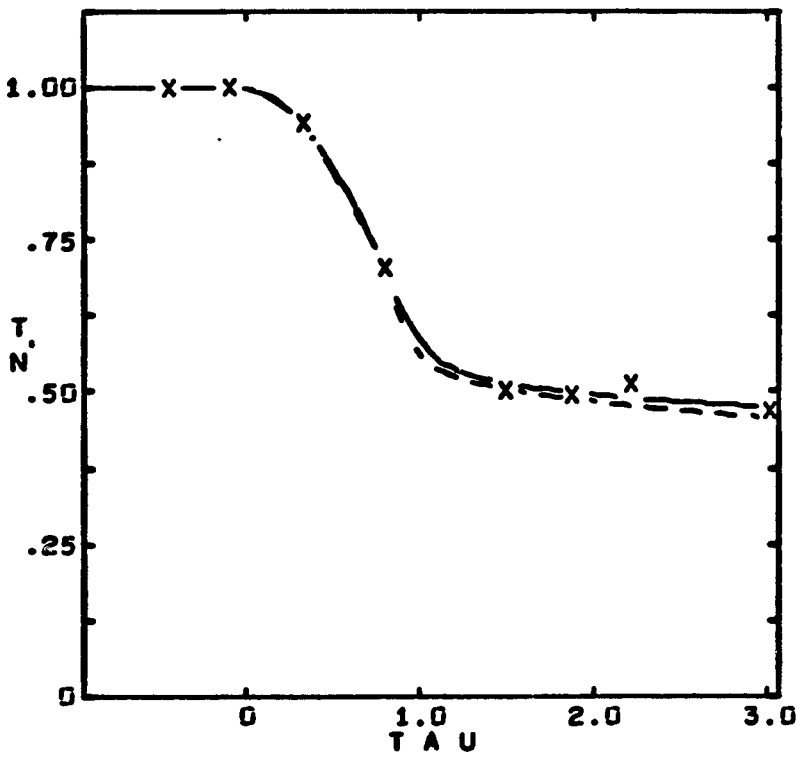
INITIAL TEMPERATURE 383.68
TAU-END OF TOTALITY 3.087

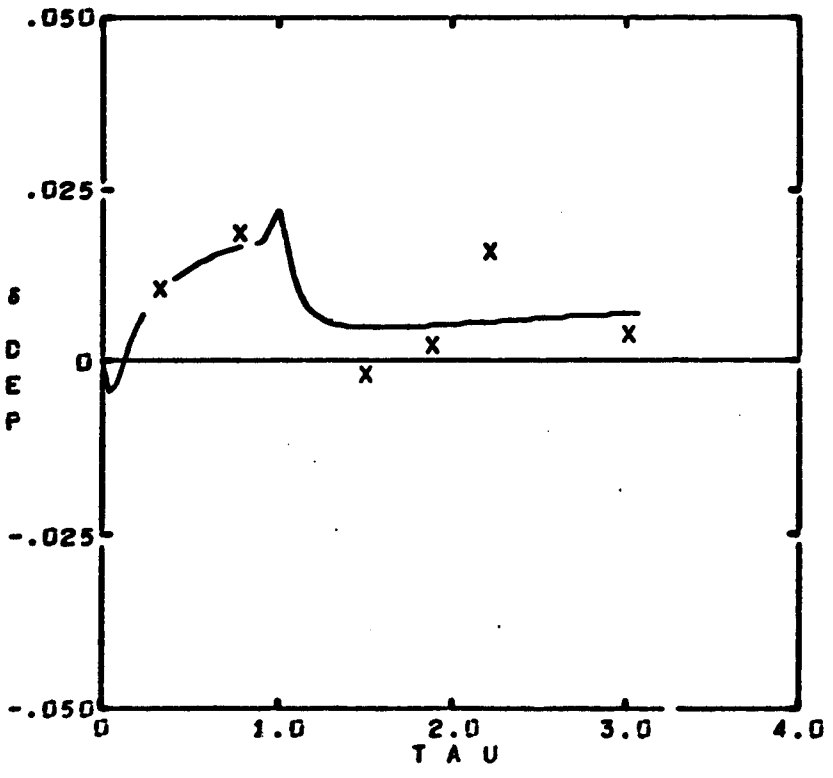
DIFFERENTIAL ENERGY DATA

ECLIPSE TEMPERATURE DATA

TAU	DEP	DEP-SMOOTH	δDEP	SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
.25	.0252	.0178	.0074	8H	-1.192	384.57		384.57	1.002	.0093
.50	.0644	.0508	.0136	9H	-0.465	383.22		383.22	0.999	-.0048
.75	.1009	.0846	.0163	10H	-0.104	383.71		383.71	1.000	.0003
.93	.1247	.1073	.0174	11H	0.322	360.56		360.56	0.940	.0377
1.0	.1201	.0982	.0219	12H	0.790	268.85	0.174 +.342	269.59	0.703	.1066
1.5	.0698	.0648	.0050	13H	1.502	185.23	0.639 +.675	192.24	0.501	.0630
2.0	.0604	.0550	.0054	14H	1.878	182.50	0.596 +.784	189.43	0.494	.0594
2.5	.0549	.0486	.0063	15H	2.214	195.28	0.062 +.830	196.09	0.511	.0682
3.0	.0507	.0438	.0069	16H	3.008	174.99	0.684 -.958	179.34	0.467	.0477







PHOTOGRAPH NOT AVAILABLE

379 (1P7) TARUNTIUS F

LAMBDA=40.54 E BETA= 3.94 N XI=+.6485 ETA=+.0687 L+PL CODE = 16046 ALBEDO =.0710

13H FLAT MOON DATA
FM=.01205 FM'=.04657

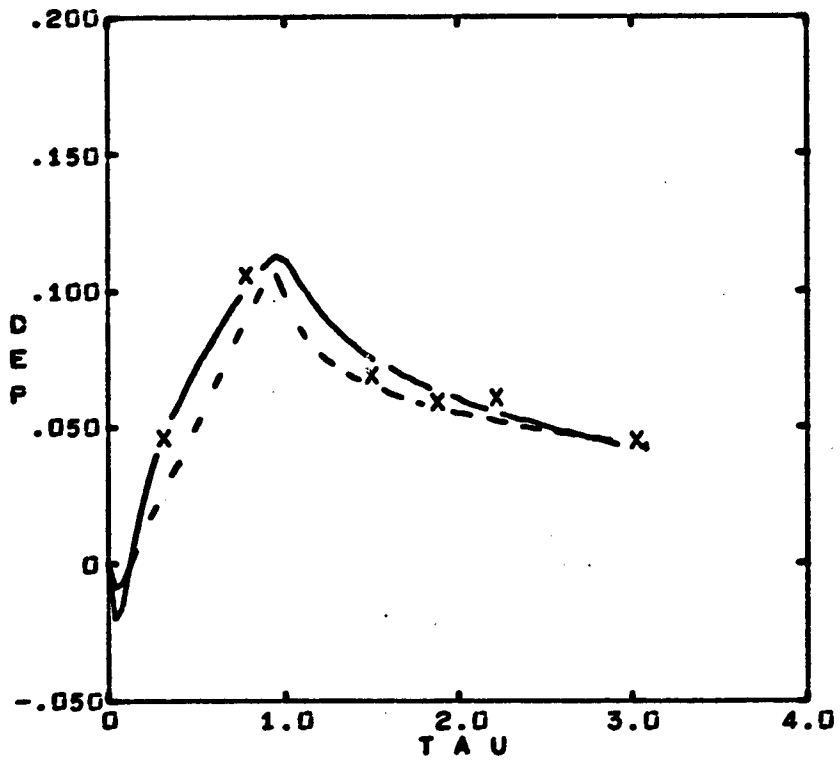
INITIAL TEMPERATURE 382.55
TAU-END OF TOTALITY 3.113

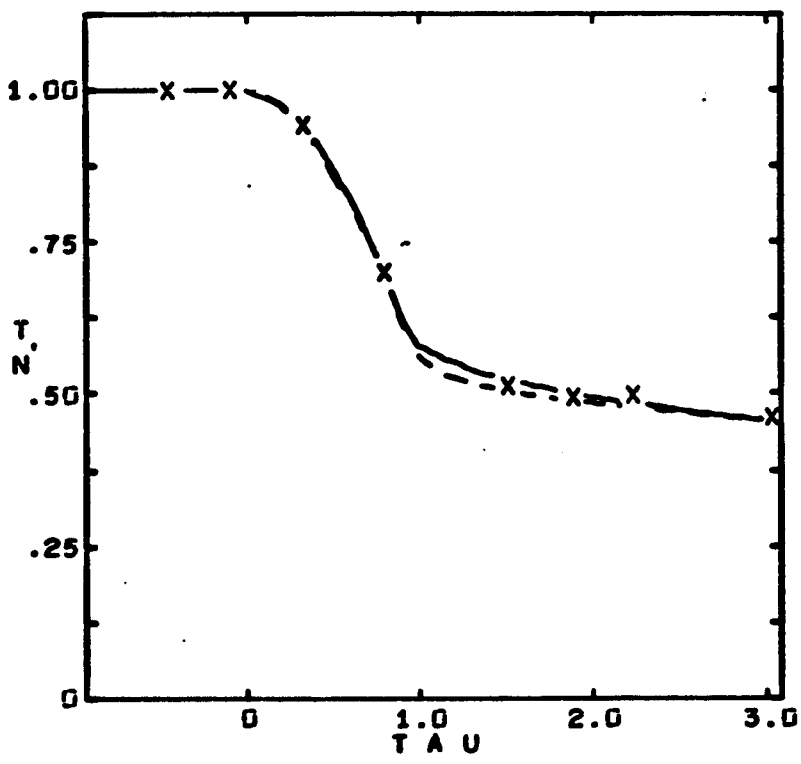
DIFFERENTIAL ENERGY DATA

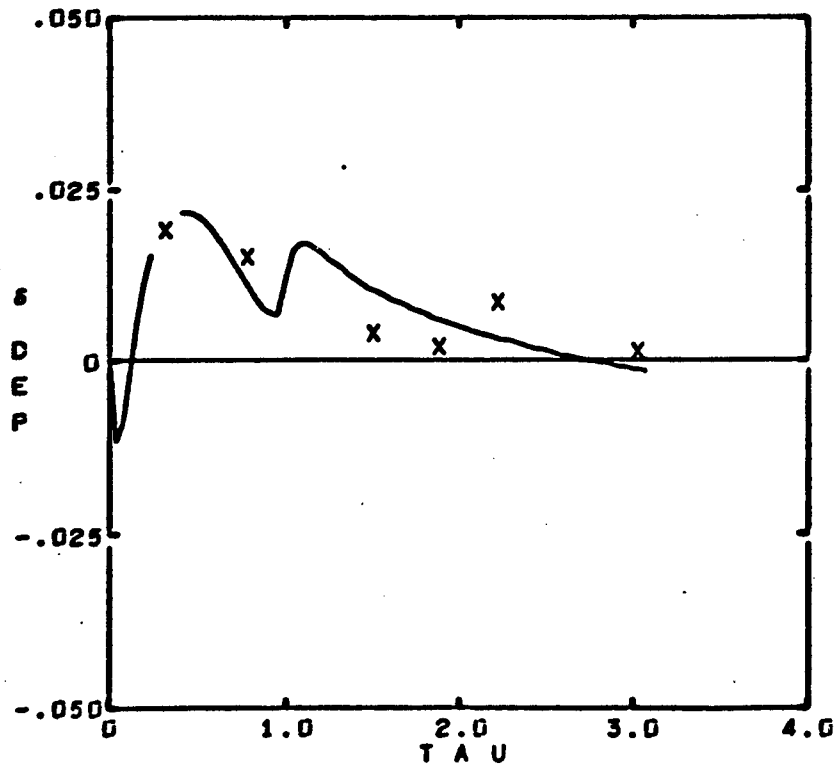
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0340	.0178	.0162
.50	.0718	.0509	.0209
.75	.0975	.0848	.0127
.93	.1123	.1076	.0047
1.0	.1110	.0985	.0125
1.5	.0755	.0650	.0105
2.0	.0602	.0552	.0050
2.5	.0503	.0488	.0015
3.0	.0428	.0439	-.0011

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.200	384.27		384.27	1.004	.0181
9H	-0.469	382.27		382.27	0.999	-.0029
10H	-0.107	382.46		382.46	1.000	-.0009
11H	0.320	360.69		360.69	0.943	.0462
12H	0.791	266.15	1.192 -.522	267.76	0.700	.1052
13H	1.506	183.10	1.360 -.359	196.00	0.512	.0689
14H	1.882	181.54	1.352 -.432	188.73	0.493	.0592
15H	2.221	188.97	0.131 +.903	189.96	0.497	.0608
16H	3.020	176.24	0.000 -.664	176.24	0.461	.0450







PHOTOGRAPH NOT AVAILABLE

380 (1P8) TARUNTIUS G

LAMBDA=49.45 E BETA= 1.87 N XI=+.7594 ETA=+.0326 L+PL CODE = 17053 ALBEDO =.0662

13H FLAT MOON DATA
FM=.02461 FM'=.05156

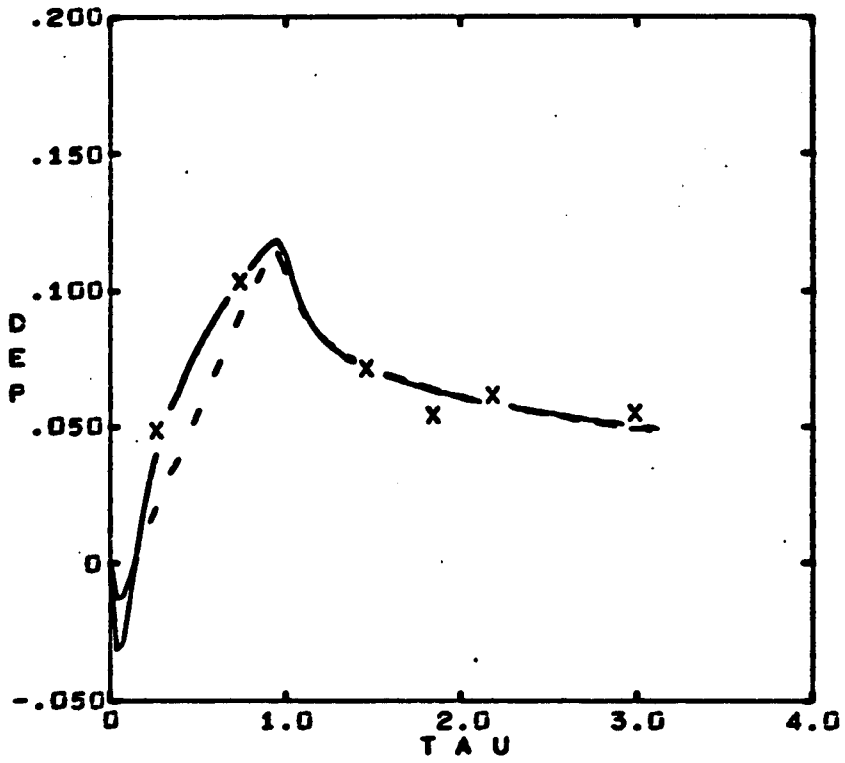
INITIAL TEMPERATURE 376.09
TAU-END OF TOTALITY 3.134

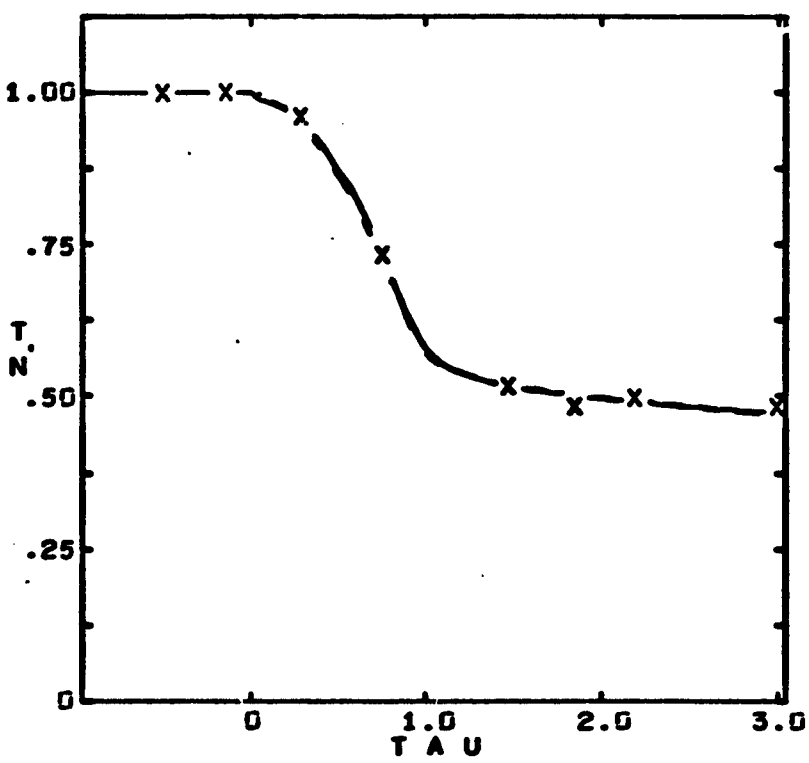
DIFFERENTIAL ENERGY DATA

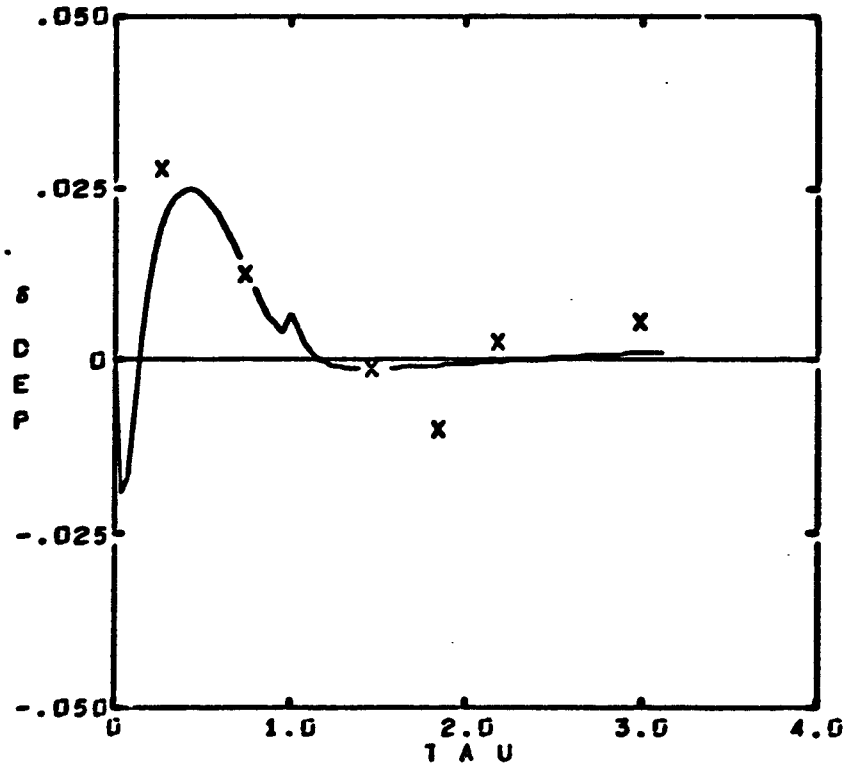
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0331	.0164	.0167
.50	.0776	.0535	.0241
.75	.1040	.0907	.0133
.93	.1182	.1156	.0026
1.0	.1130	.1065	.0065
1.5	.0704	.0715	-.0011
2.0	.0608	.0612	-.0004
2.5	.0548	.0544	.0004

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.250	378.19		378.19	1.006	.0225
9H	-0.518	376.17		376.17	1.000	.0008
10H	-0.154	375.81		375.81	0.999	-.0030
11H	0.275	360.80		360.80	0.959	.0480
12H	0.747	274.18	0.158 +.929	275.00	0.731	.1028
13H	1.463	184.03	0.644 +.251	194.37	0.517	.0713
14H	1.842	176.37	0.544 +.270	181.22	0.482	.0539
15H	2.182	187.19	0.000 -.200	187.19	0.498	.0614
16H	2.988	172.26	0.673 -.359	182.12	0.484	.0550







PHOTOGRAPH NOT AVAILABLE

381 (179) TARUNTIUS H

LAMBDA=49.80 E BETA= 0.37 N XI=+.7638 ETA=+.0064 L+PL CODE = 17060 ALBEDO =.0676

13H FLAT MOON DATA
FM=.05510 FM'=.08923

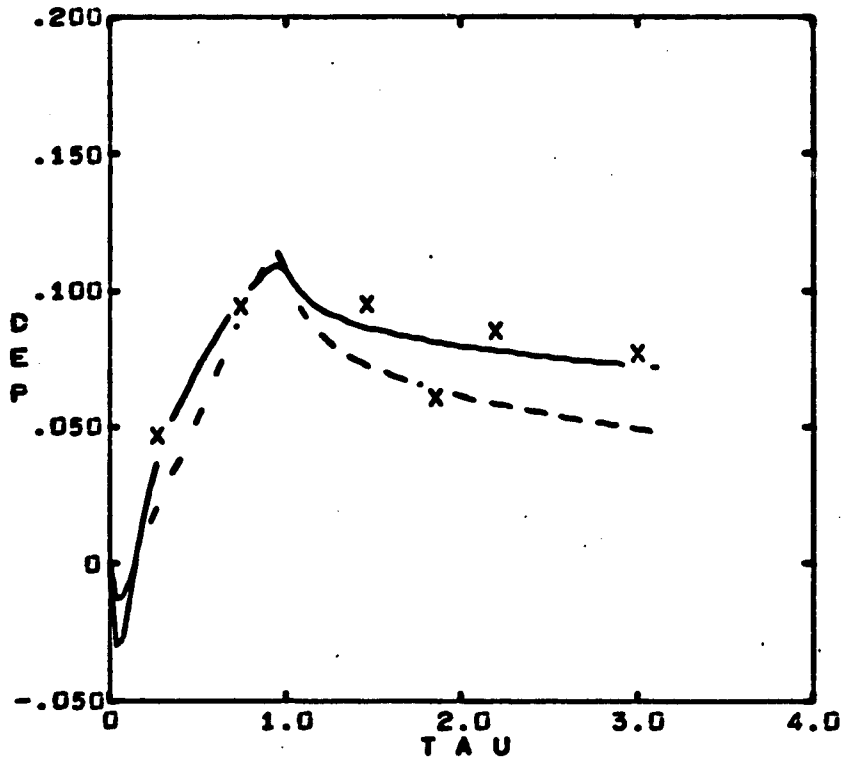
INITIAL TEMPERATURE 374.64
TAU-END OF TOTALITY 3.158

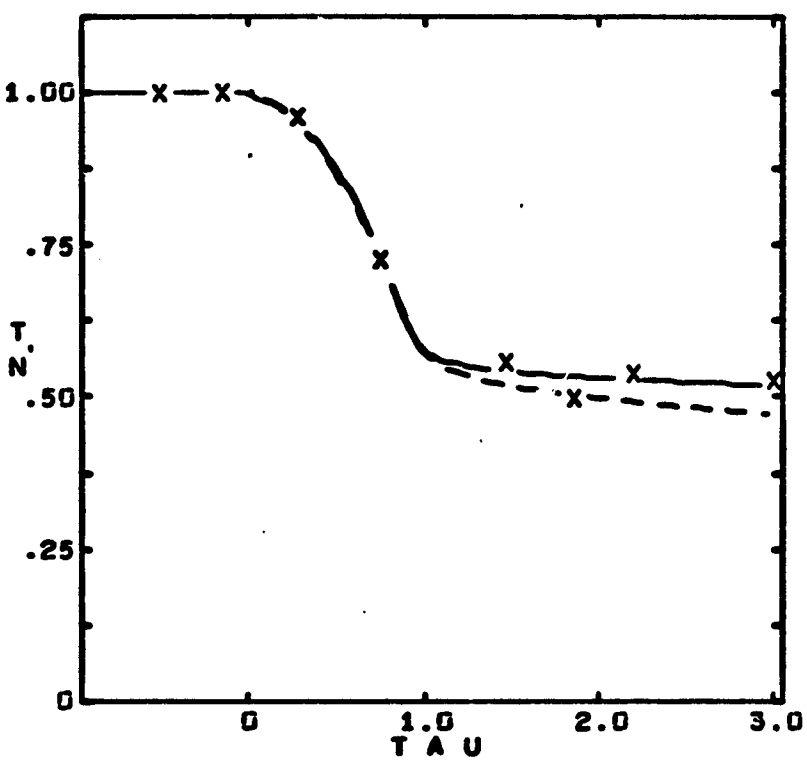
DIFFERENTIAL ENERGY DATA

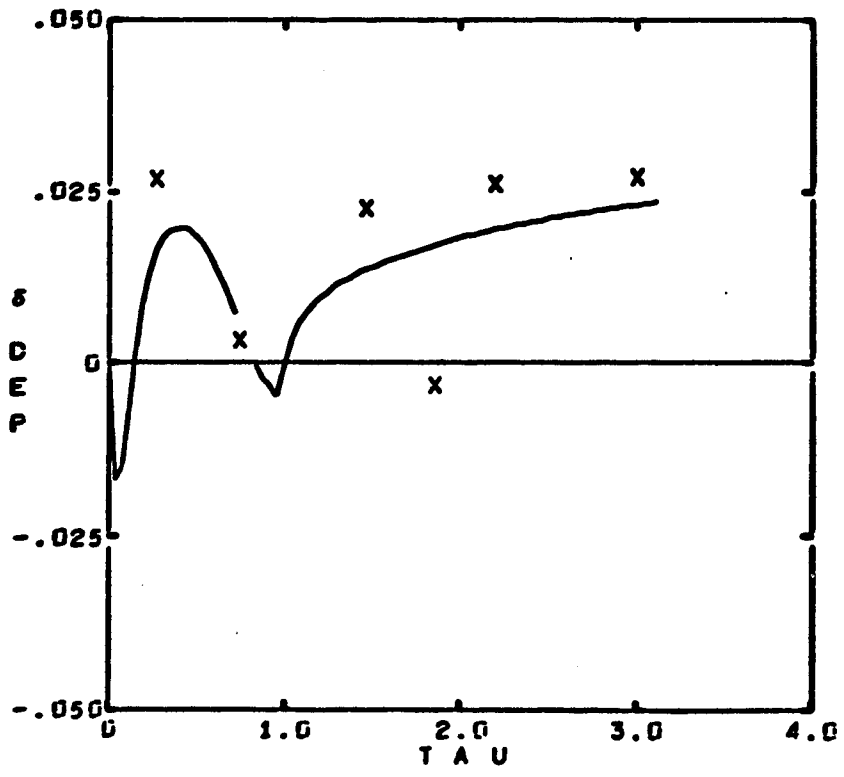
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0304	.0163	.0141
.50	.0719	.0536	.0183
.75	.0965	.0910	.0055
.93	.1097	.1160	-.0063
1.0	.1071	.1068	.0003
1.5	.0859	.0718	.0141
2.0	.0798	.0615	.0183
2.5	.0757	.0547	.0210

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.257	376.19		376.19	1.004	.0166
9H	-0.522	374.87		374.87	1.001	.0025
10H	-0.157	374.38		374.38	0.999	-.0028
11H	0.274	359.45		359.45	0.959	.0468
12H	0.747	271.74	0.000 -.845	271.74	0.725	.0939
13H	1.467	195.16	0.563 +.233	208.15	0.556	.0953
14H	1.847	186.19	0.000 -.866	186.19	0.497	.0610
15H	2.188	196.58	0.242 -.984	202.15	0.540	.0848
16H	2.999	196.65	0.067 +.072	197.15	0.526	.0767







PHOTOGRAPH NOT AVAILABLE

382 (1R1) TARUNTIUS K

LAMBDA=51.53 E BETA= 0.65 N XI=+.7829 ETA=+.0114 L+PL CODE = 17081 ALBEDO =.0661

13H FLAT MOON DATA
FM=.04118 FM'=.04118

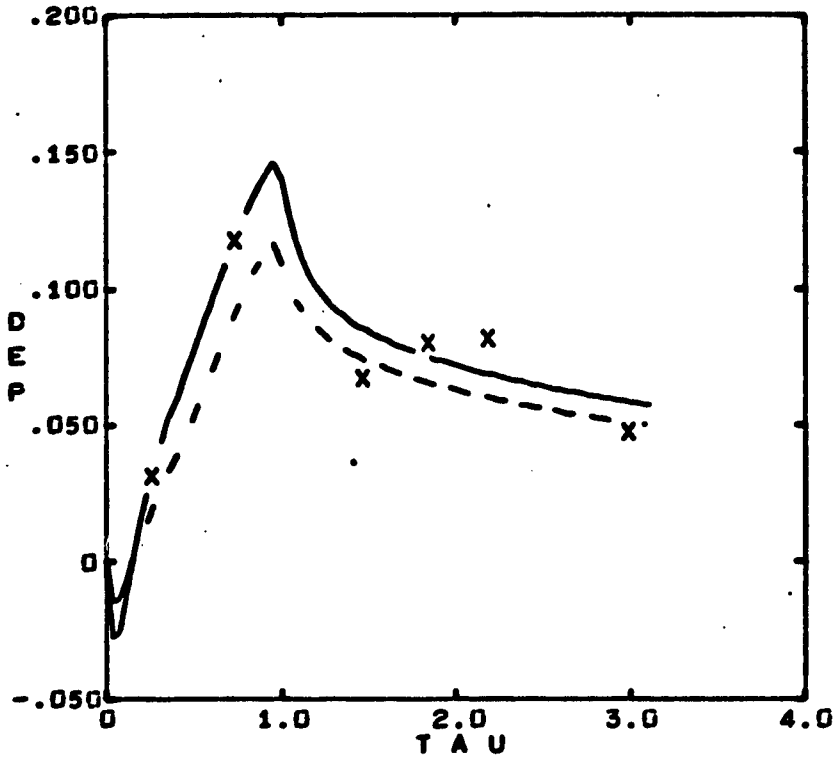
INITIAL TEMPERATURE 371.92
TAU-END OF TOTALITY 3.151

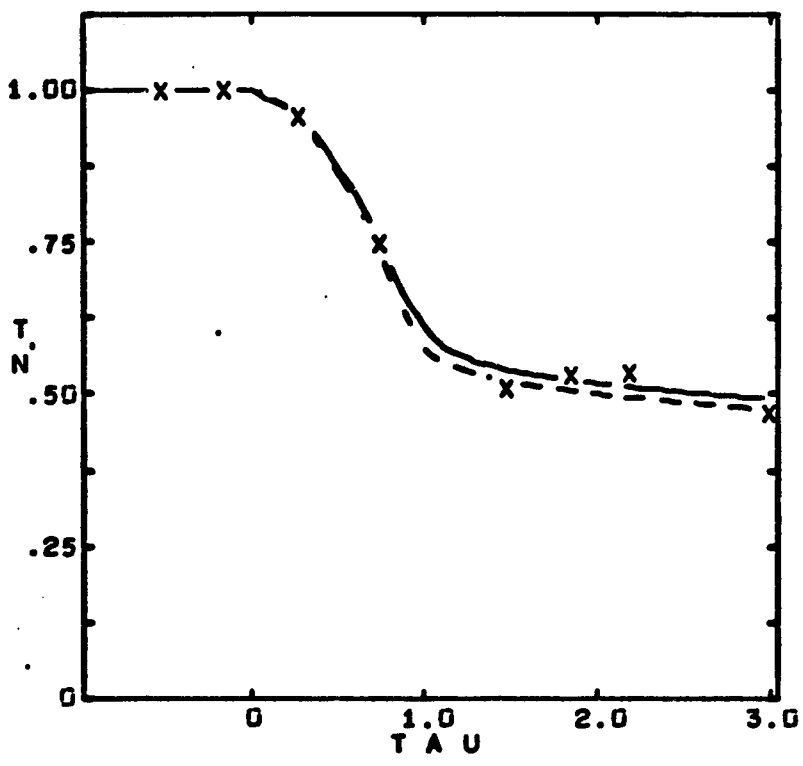
DIFFERENTIAL ENERGY DATA

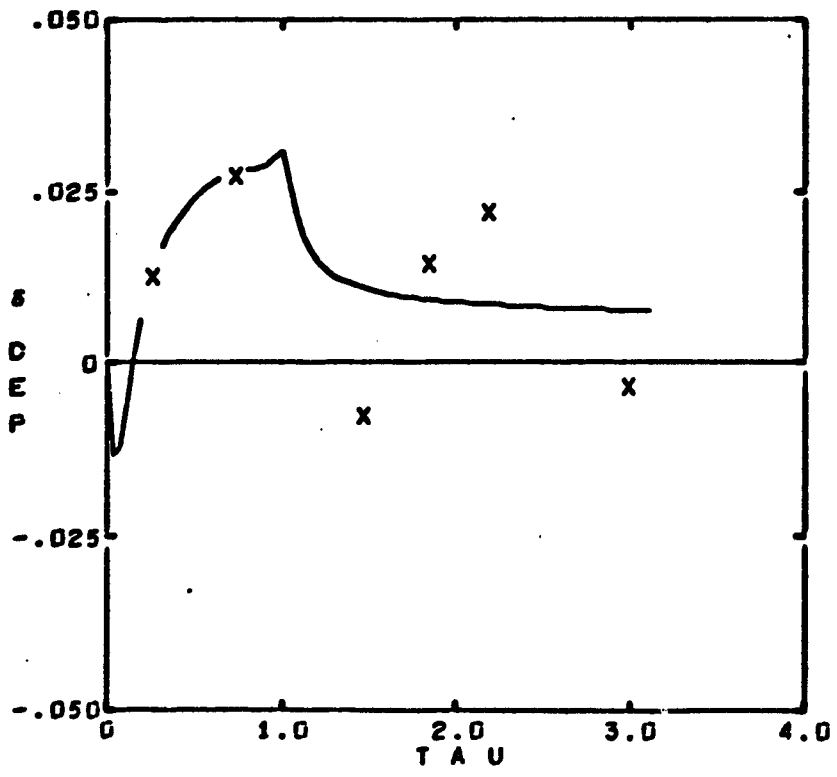
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0275	.0160	.0115
.50	.0785	.0542	.0243
.75	.1202	.0924	.0278
.93	.1463	.1180	.0283
1.0	.1395	.1088	.0307
1.5	.0840	.0734	.0106
2.0	.0718	.0629	.0089
2.5	.0642	.0560	.0082

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.264	373.36		373.36	1.004	.0156
9H	-0.529	372.16		372.16	1.001	.0027
10H	-0.165	371.65		371.65	0.999	-.0028
11H	0.265	356.18		356.18	0.958	.0310
12H	0.738	276.26	0.275 +.286	277.71	0.747	.1178
13H	1.458	189.11	0.000 +.197	189.11	0.508	.0669
14H	1.838	186.48	0.706 +.699	197.85	0.532	.0801
15H	2.177	199.05	0.000 +.189	199.05	0.535	.0821
16H	2.988	173.69	0.000 +.699	173.69	0.467	.0476







PHOTOGRAPH
NOT
AVAILABLE

383 (1R2) TARUNTIUS P

LAMBDA=51.54 E BETA= 0.09 N XI=+.7830 ETA=+.0016 L+PL CODE = 17080 ALBEDO =.0659

13H FLAT MOON DATA
FM=.03099 FM'=.06162

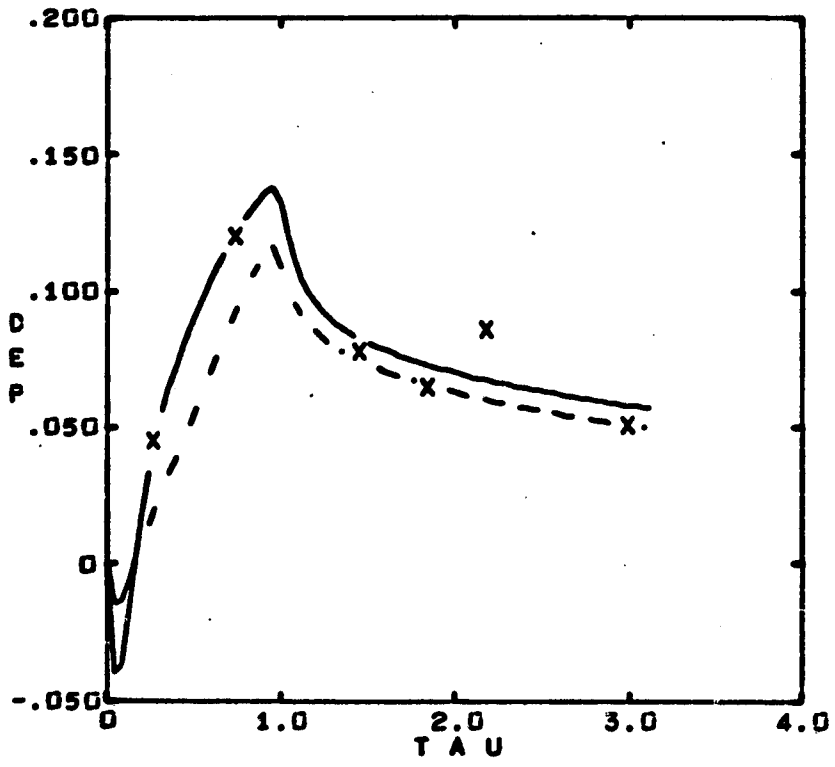
INITIAL TEMPERATURE 371.31
TAU-END OF TOTALITY 3.160

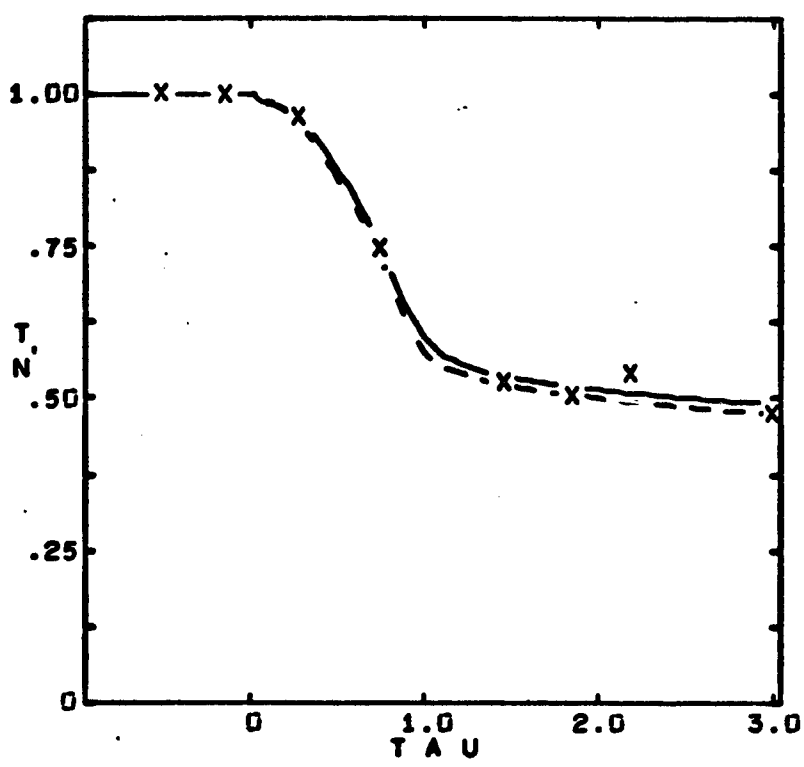
DIFFERENTIAL ENERGY DATA

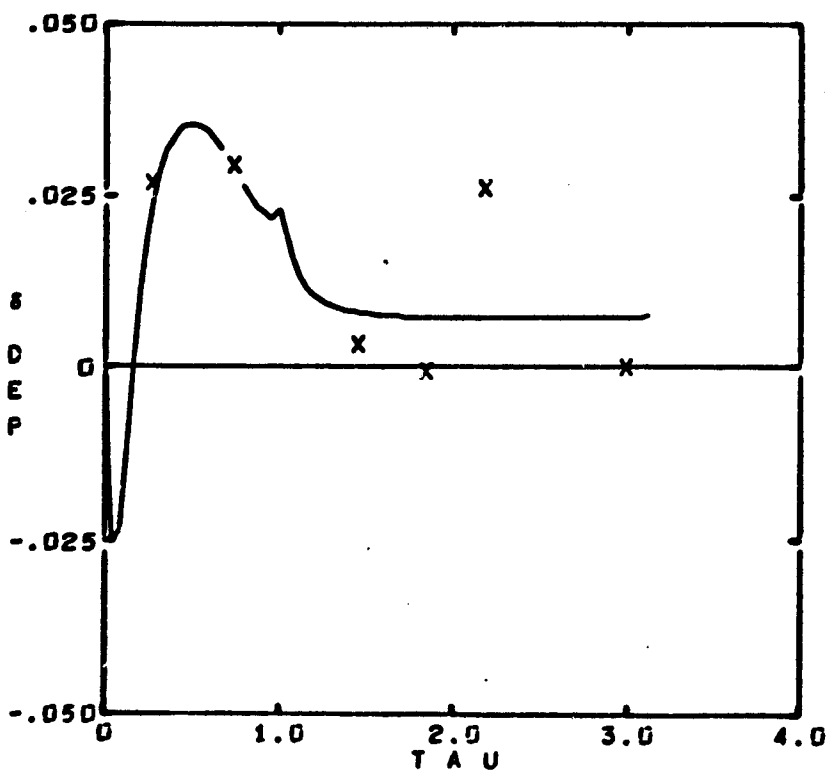
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0367	.0161	.0207
.50	.0898	.0542	.0356
.75	.1212	.0924	.0268
.93	.1381	.1180	.0201
1.0	.1319	.1088	.0231
1.5	.0813	.0734	.0079
2.0	.0702	.0629	.0073
2.5	.0634	.0560	.0074

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.266	373.25		373.25	1.005	.0211
9H	-0.530	372.26		372.26	1.003	.0103
10H	-0.165	370.76		370.76	0.999	-.0059
11H	0.265	357.12		357.12	0.962	.0453
12H	0.739	273.19	0.980 +.750	277.71	0.748	.1204
13H	1.460	185.28	0.728 +.619	196.27	0.529	.0781
14H	1.840	187.49	0.000 +.776	187.49	0.505	.0650
15H	2.180	191.50	0.756 +.848	201.24	0.542	.0863
16H	2.992	176.48	0.000 +.762	176.48	0.475	.0510







PHOTOGRAPH NOT AVAILABLE

384 (1R3) THEAETETUS

LAMBDA= 5.99 E BETA=36.98 N XI=+.0834 ETA=+.6016 L+PL CODE = 10680 ALBEDO =.1096

13H FLAT MOON DATA
FM=.03854 FM'=.03880

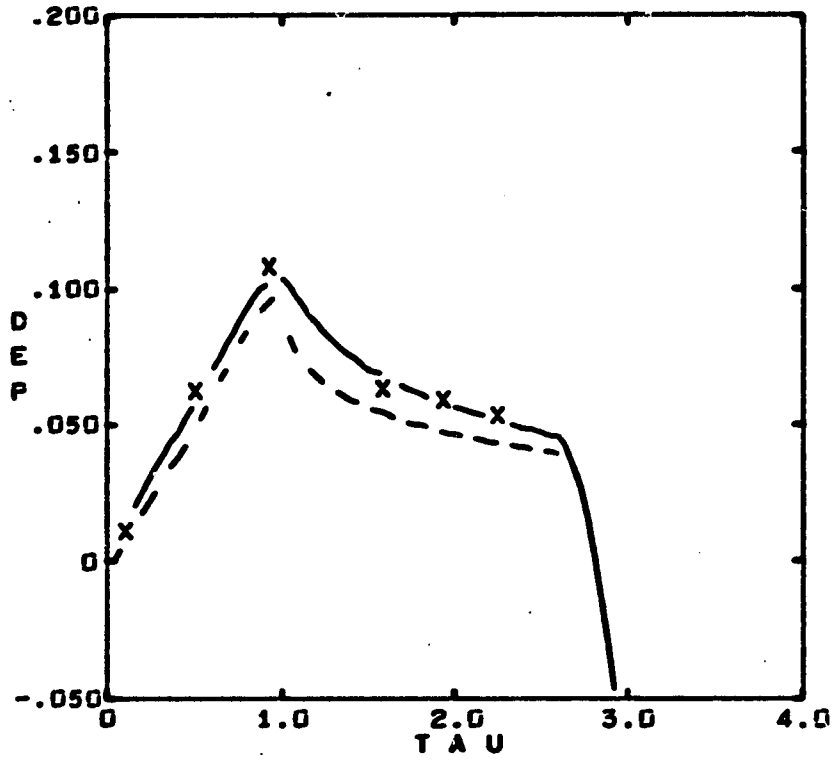
INITIAL TEMPERATURE 382.49
TAU-END OF TOTALITY 2.601

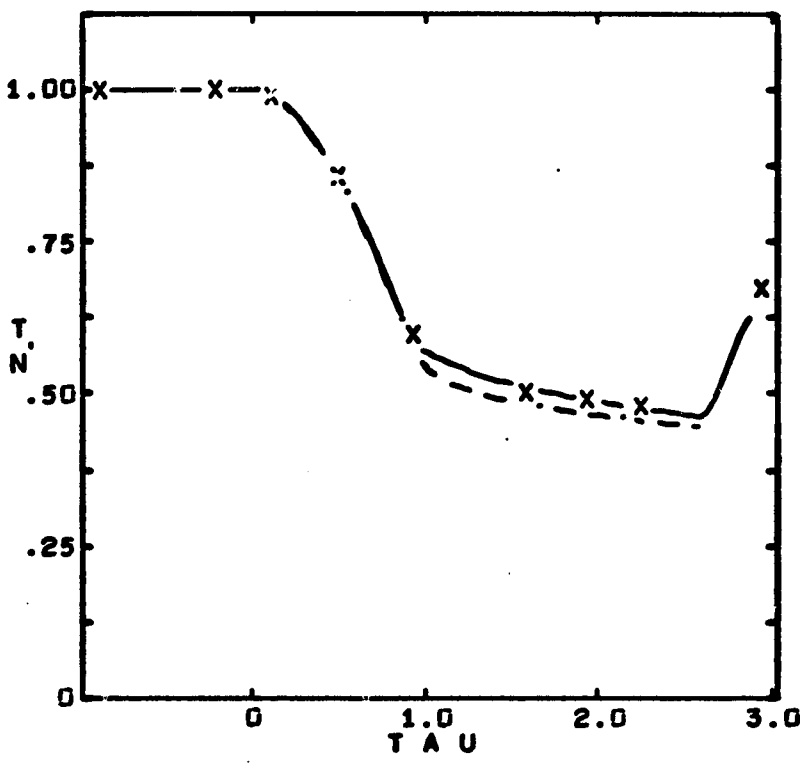
DIFFERENTIAL ENERGY DATA

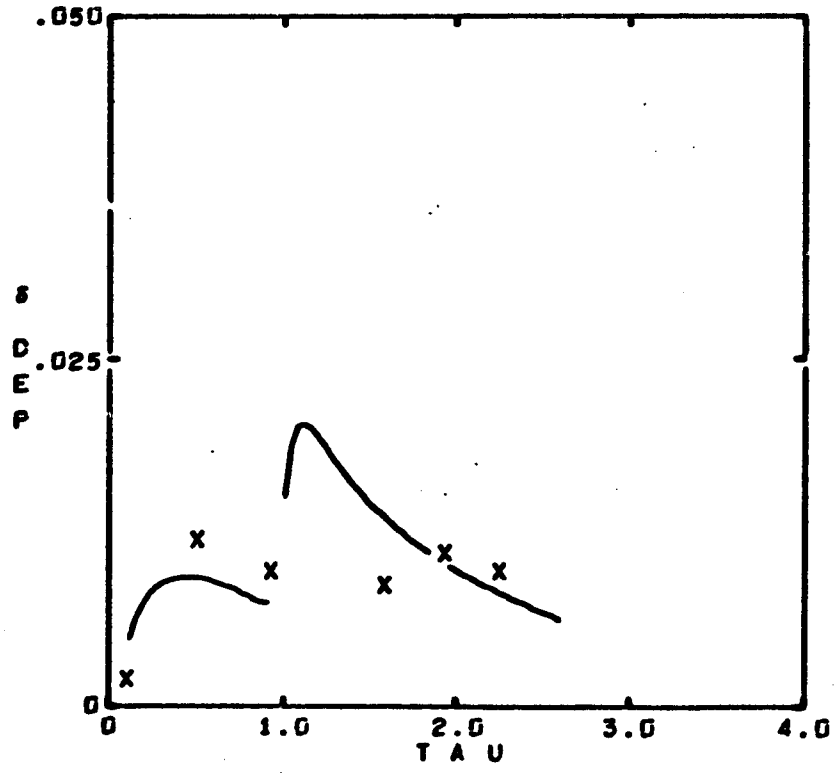
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0311	.0229	.0082
.50	.0590	.0497	.0093
.75	.0870	.0788	.0082
.93	.1054	.0982	.0072
1.0	.1040	.0891	.0149
1.5	.0708	.0562	.0146
2.0	.0563	.0465	.0098
2.5	.0472	.0405	.0067

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.885	382.05			382.05	0.999	-.0046
9H	-0.219	382.60			382.60	1.000	.0011
10H	0.113	378.60			378.60	0.990	.0107
11H	0.503	326.54	0.671	+.028	327.94	0.857	.0621
12H	0.932	227.74	0.082	-.159	228.14	0.596	.1080
13H	1.585	190.50	0.102	+.445	191.49	0.501	.0628
14H	1.930	186.19	0.269	+.584	188.26	0.492	.0587
15H	2.238	182.18	0.192	-.714	183.60	0.480	.0531
16H	2.933	257.28	0.000	+.770	257.28	0.673	-.0530







PHOTOGRAPH
NOT
AVAILABLE

385 (3K8) THEBIT A

LAMBDA= 4.88 W BETA=21.57 S XI=-.0791 ETA=-.3677 L+PL CODE = 30376 ALBEDO =.1406

13H FLAT MOON DATA
FM=.05429 FM'=.05693

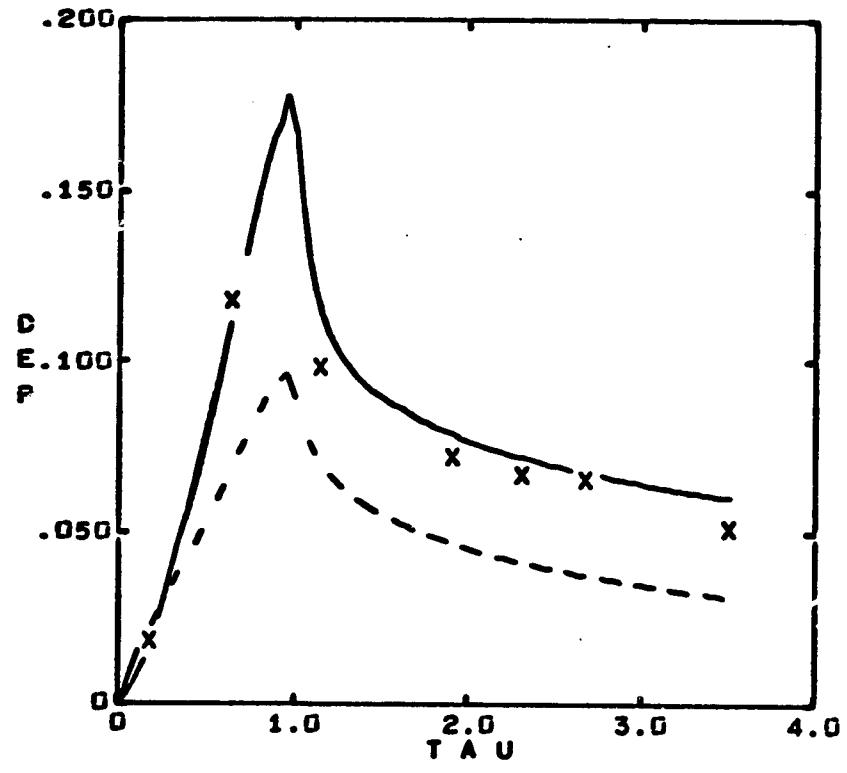
INITIAL TEMPERATURE 386.28
TAU-END OF TOTALITY 3.528

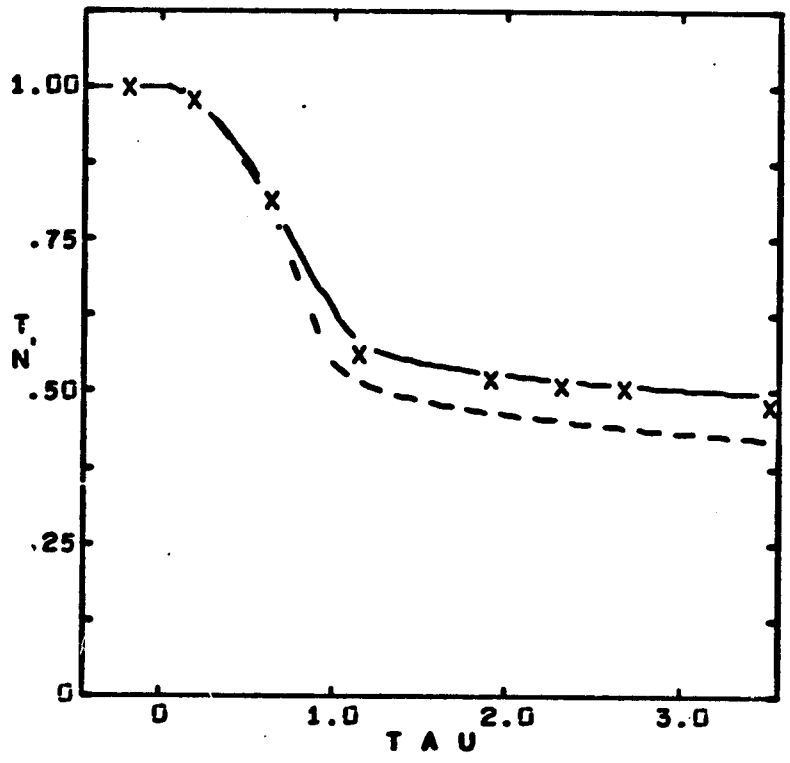
DIFFERENTIAL ENERGY DATA

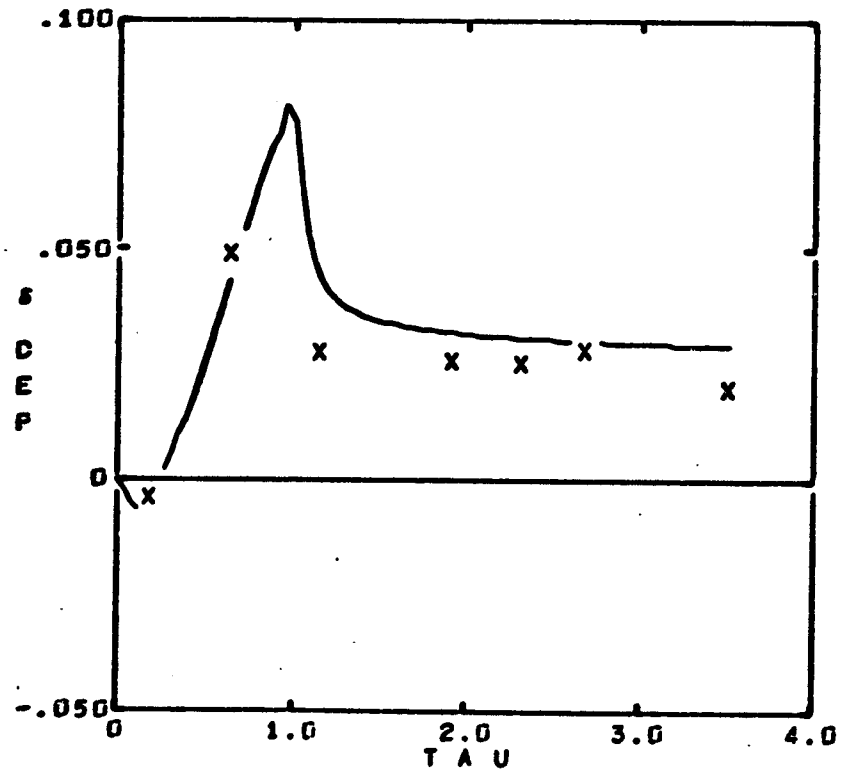
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0266	.0274	-.0008
.50	.0780	.0527	.0253
.75	.1381	.0803	.0578
.93	.1788	.0986	.0802
1.0	.1669	.0891	.0778
1.5	.0897	.0552	.0345
2.0	.0770	.0454	.0316
2.5	.0697	.0393	.0304
3.0	.0644	.0349	.0295

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.980	386.71		386.71	1.001	.0045
9H	-0.197	386.20		386.20	1.000	-.0009
10H	0.190	377.42		377.42	0.977	.0179
11H	0.645	313.36	0.188 +.700	314.28	0.814	.1181
12H	1.146	213.22	0.332 -.002	216.37	0.560	.0984
13H	1.909	199.41	0.131 +.761	200.47	0.519	.0725
14H	2.309	193.83	0.284 +.468	196.37	0.508	.0668
15H	2.670	192.68	0.231 -.033	195.53	0.506	.0656
16H	3.506	181.93	0.172 +.717	183.83	0.476	.0513







PHOTOGRAPH NOT AVAILABLE

386 (2N1) TIMAEUS

LAMBDA= 0.55 W BETA=62.82 N XI=-.0044 ETA=+.8896 L+PL CODE = 20608 ALBEDO =.1106

13H FLAT MOON DATA
FM=-.00509 FM'=-.00509

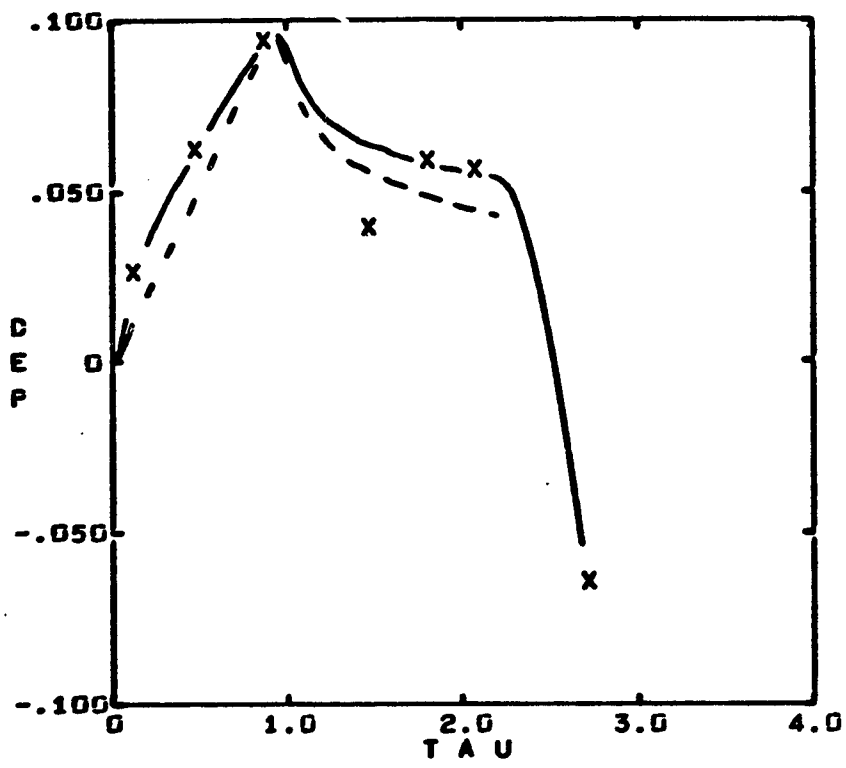
INITIAL TEMPERATURE 353.68
TAU-END OF TOTALITY 2.211

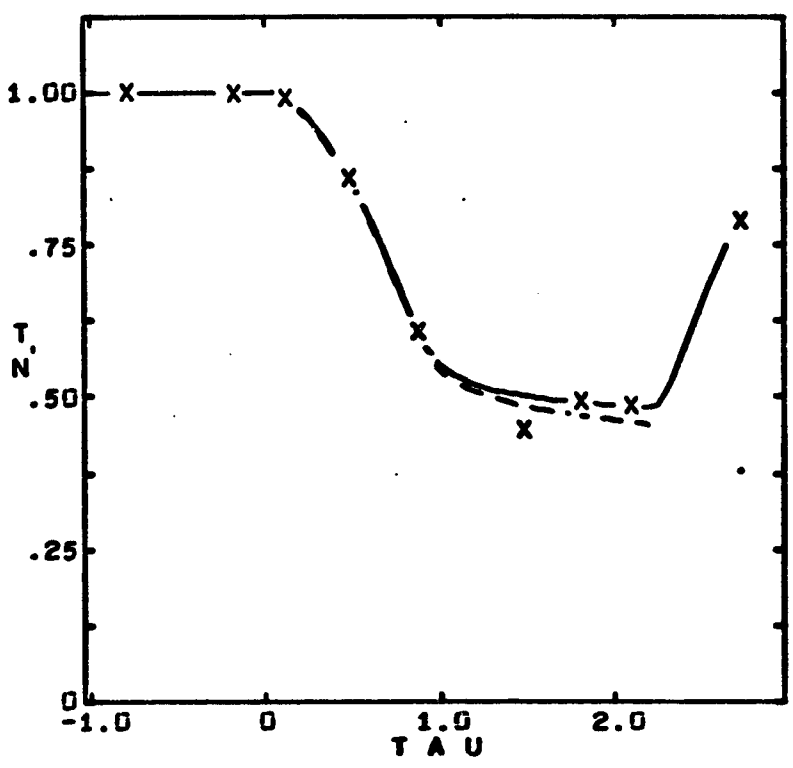
DIFFERENTIAL ENERGY DATA

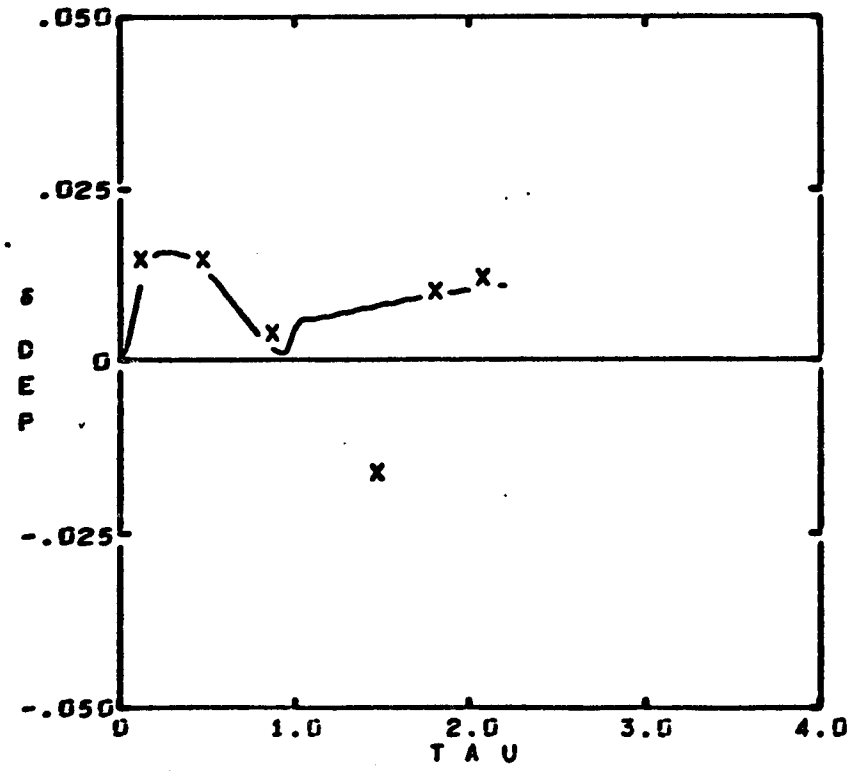
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0397	.0239	.0158
.50	.0628	.0498	.0130
.75	.0834	.0779	.0055
.93	.0964	.0967	-.0003
1.0	.0924	.0876	.0048
1.5	.0630	.0549	.0081
2.0	.0557	.0454	.0103
2.5	.0512	.0394	.0118

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.797	355.61			355.61	1.005	.0220
9H	-0.184	353.24			353.24	0.999	-.0050
10H	0.121	350.54			350.54	0.991	.0261
11H	0.481	304.41			304.41	0.861	.0625
12H	0.877	210.86	0.546	-.605	215.37	0.609	.0944
13H	1.478	157.41	0.000	+.033	157.41	0.445	.0392
14H	1.796	170.64	0.309	-.162	174.23	0.493	.0589
15H	2.081	162.13	0.795	-.613	172.41	0.487	.0565
16H	2.709	277.92	0.589	-.880	279.86	0.791	-.0643







PHOTOGRAPH NOT AVAILABLE

387 (2N2) TIMOCHARIS F

LAMBDA=13.06 W BETA=26.69 N XI=-.2019 ETA=+.4492 L+PL CODE = 22404 ALBEDO =.0869

13H FLAT MOON DATA
FM=.01404 FM'=.02069

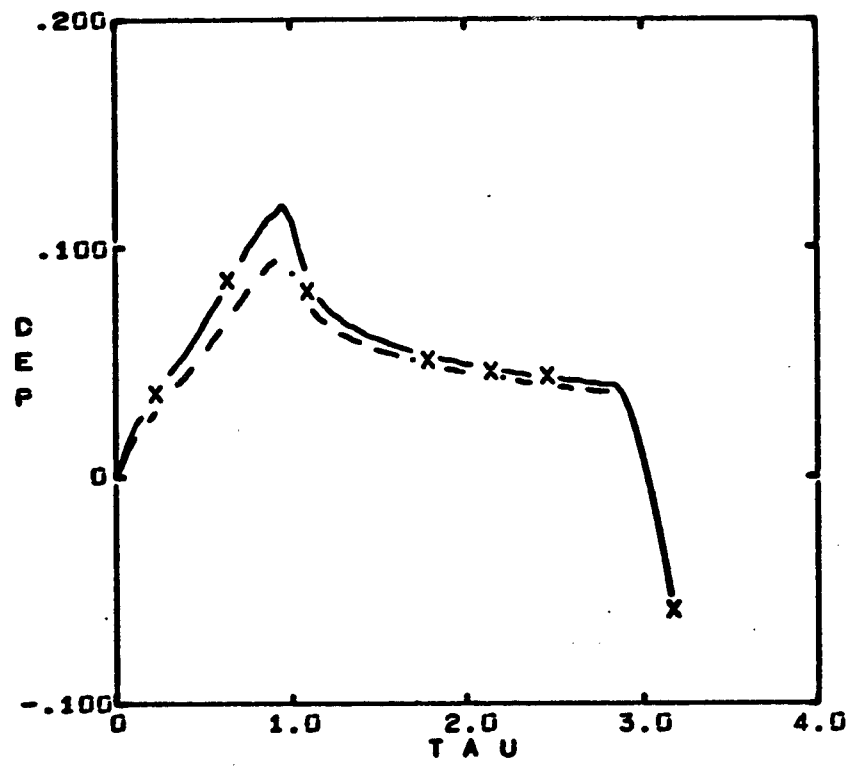
INITIAL TEMPERATURE 388.53
TAU-END OF TOTALITY 2.830

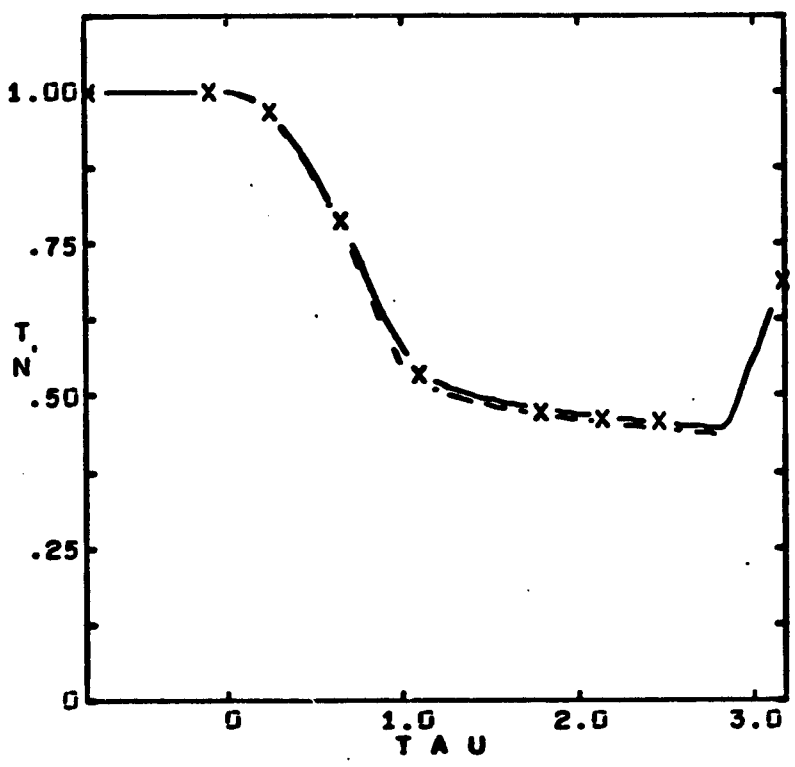
DIFFERENTIAL ENERGY DATA

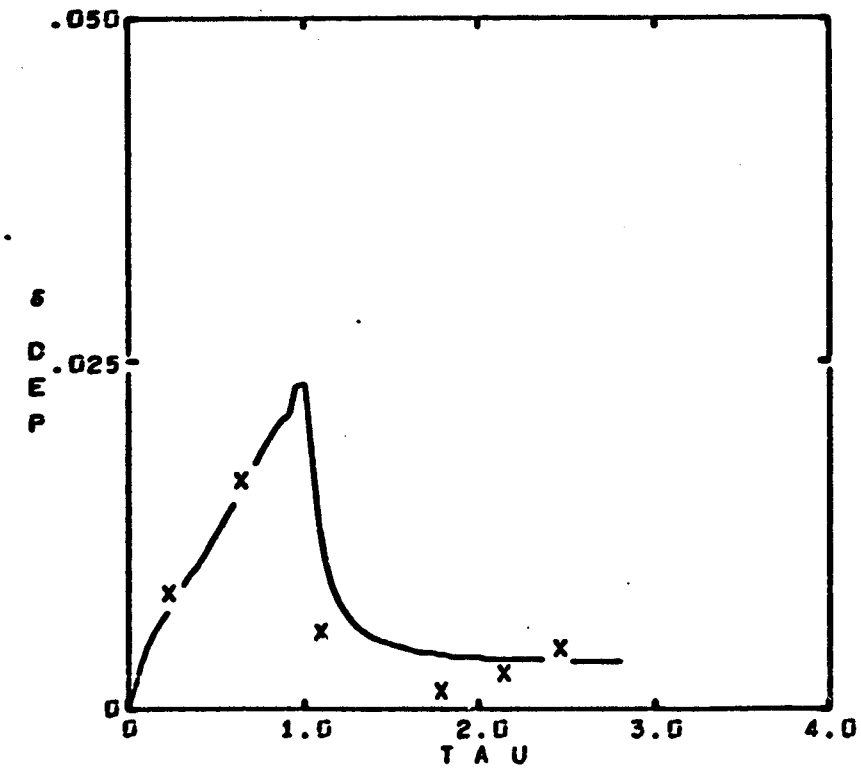
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0360	.0288	.0072
.50	.0660	.0534	.0126
.75	.0985	.0802	.0183
.93	.1200	.0980	.0220
1.0	.1120	.0885	.0235
1.5	.0593	.0548	.0045
2.0	.0486	.0450	.0036
2.5	.0425	.0390	.0035
3.0	.0381	.0346	.0035

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.805	388.01		388.01	0.999	-.0054
9H	-0.109	388.60		388.60	1.000	.0007
10H	0.236	375.48		375.48	0.966	.0358
11H	0.644	304.53	0.503 -.986	305.85	0.787	.0853
12H	1.092	208.92	0.262 +.489	207.07	0.533	.0807
13H	1.774	180.95	0.473 +.461	183.68	0.473	.0500
14H	2.133	175.01	0.668 +.800	179.63	0.462	.0457
15H	2.456	177.41	0.057 +.151	177.80	0.458	.0439
16H	3.174	267.23	0.000 +.194	267.23	0.688	-.0594







PHOTOGRAPH NOT AVAILABLE

388 (2N3) T. MAYER

LAMBDA=29.16 W BETA=15.54 N XI=-.4694 ETA=+.2679 L+PL CODE = 24266 ALBEDO =.1022

13H FLAT MOON DATA
FM=.00386 FM'=.01417

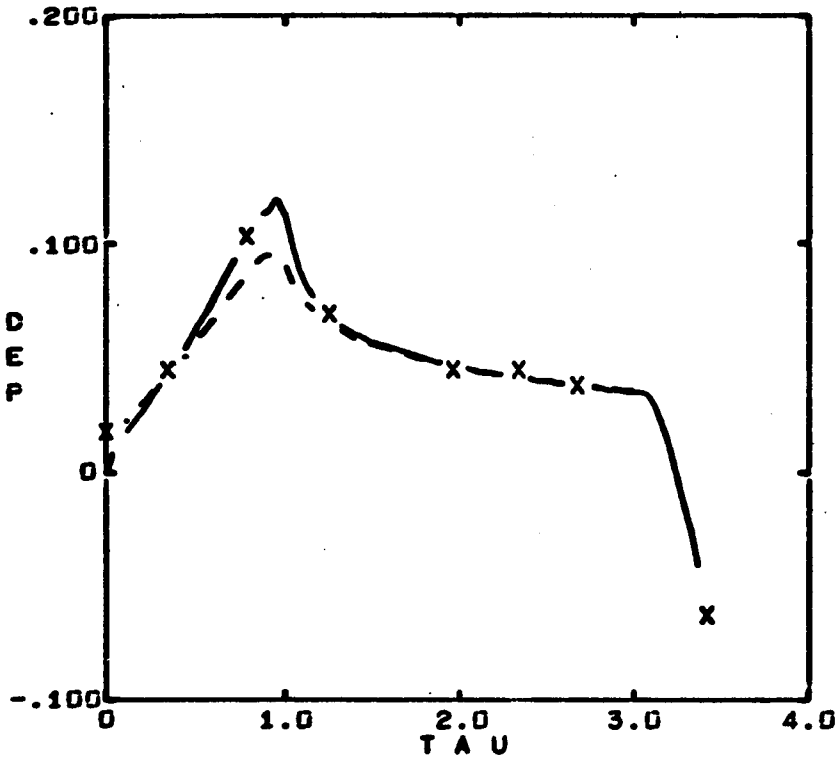
INITIAL TEMPERATURE 382.79
TAU-END OF TOTALITY 3.060

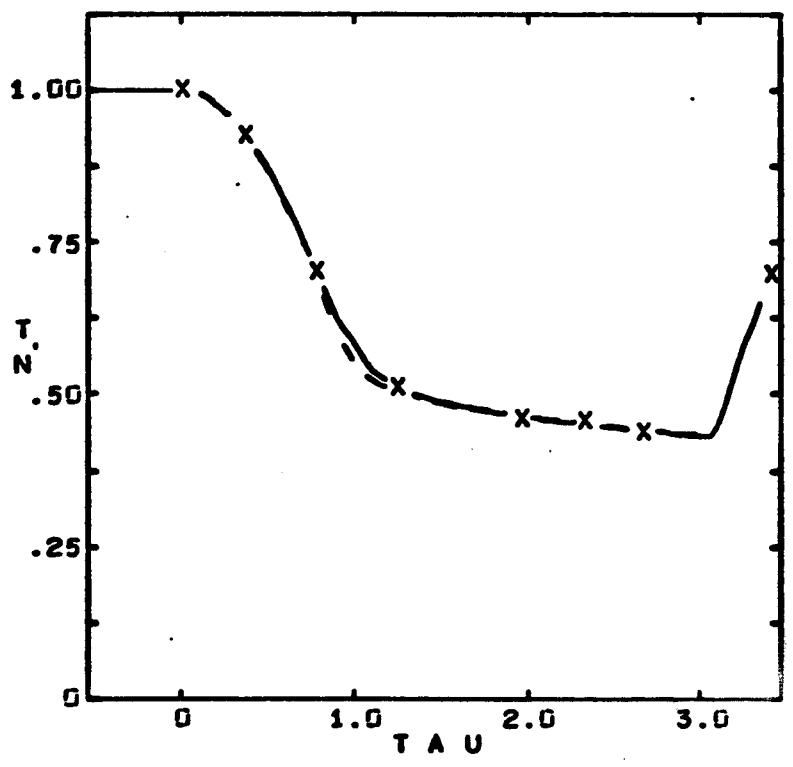
DIFFERENTIAL ENERGY DATA

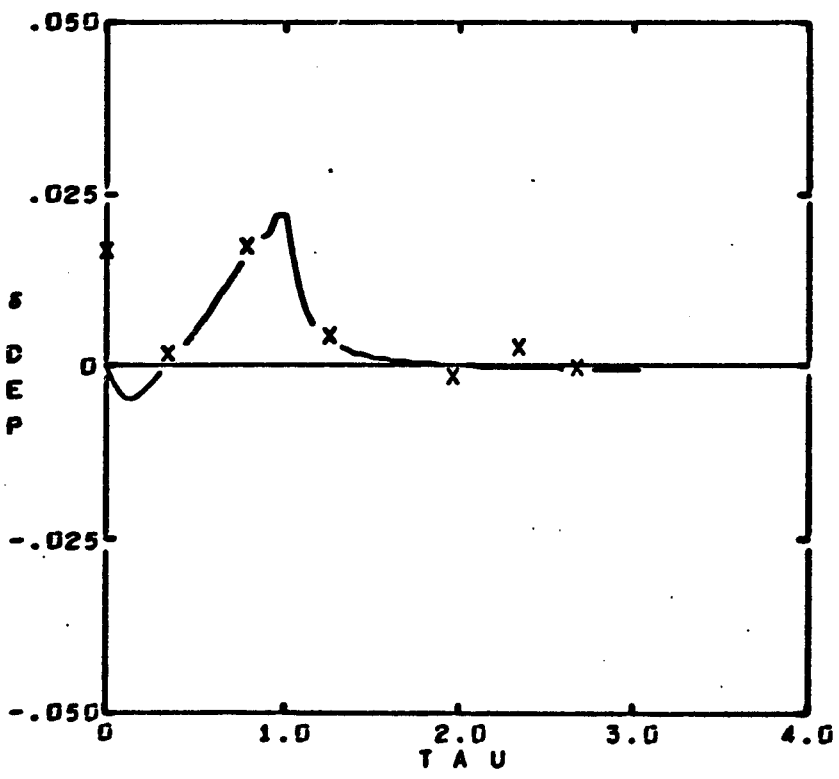
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0302	.0330	-.0028
.50	.0619	.0567	.0052
.75	.0972	.0826	.0146
.93	.1206	.0997	.0209
1.0	.1119	.0900	.0219
1.5	.0569	.0556	.0013
2.0	.0457	.0456	.0001
2.5	.0393	.0396	-.0003
3.0	.0348	.0353	-.0005

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.725	382.79		382.79	1.000	.0000
9H	0.001	384.41		384.41	1.004	.0170
10H	0.359	354.82		354.82	0.927	.0448
11H	0.785	263.72	1.628 -.616	268.81	0.702	.1033
12H	1.249	189.29	1.406 -.518	196.42	0.513	.0693
13H	.960	172.12	0.910 +.053	175.96	0.460	.0446
14H	2.333	172.03	1.576 -.575	175.44	0.458	.0441
15H	2.668	168.72	0.000 -.516	168.72	0.441	.0377
16H	3.411	267.32	0.000 +.077	267.32	0.698	-.0626







PHOTOGRAPH NOT AVAILABLE

389 (2N4) T. MAYER C

LAMBDA=25.97 W BETA=12.22 N XI=-.4280 ETA=+.2116 L+PL CODE = 24221 ALBEDO =.1151

13H FLAT MOON DATA
FM=.01481 FM'=.01481

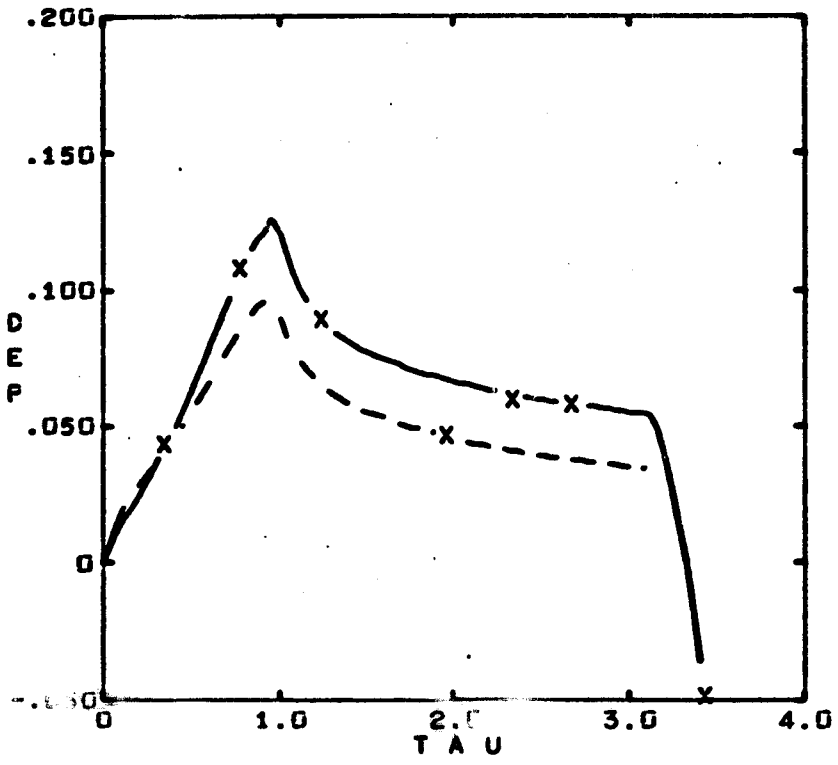
INITIAL TEMPERATURE 383.64
TAU-END OF TOTALITY 3.109

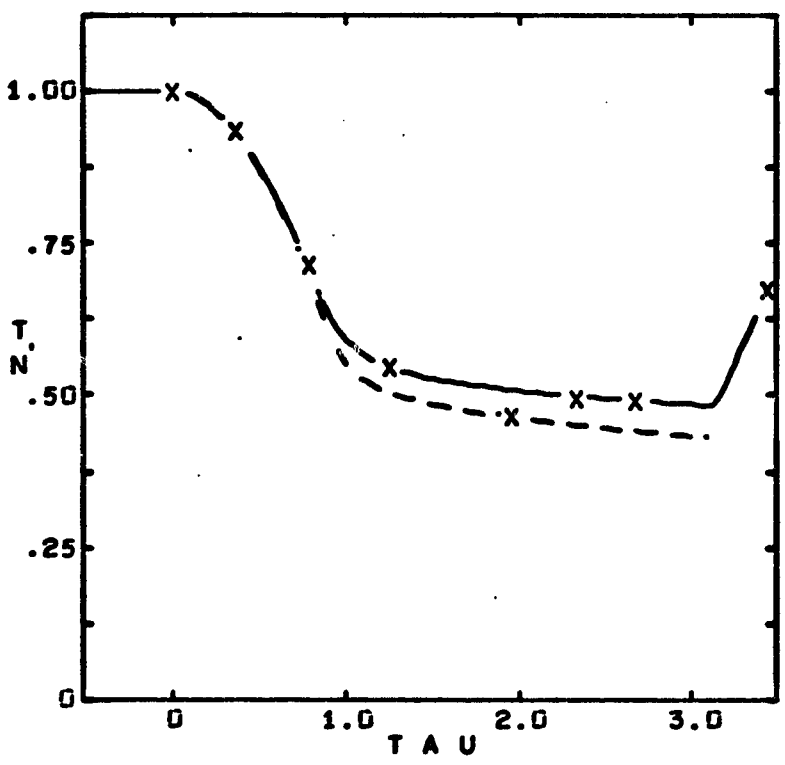
DIFFERENTIAL ENERGY DATA

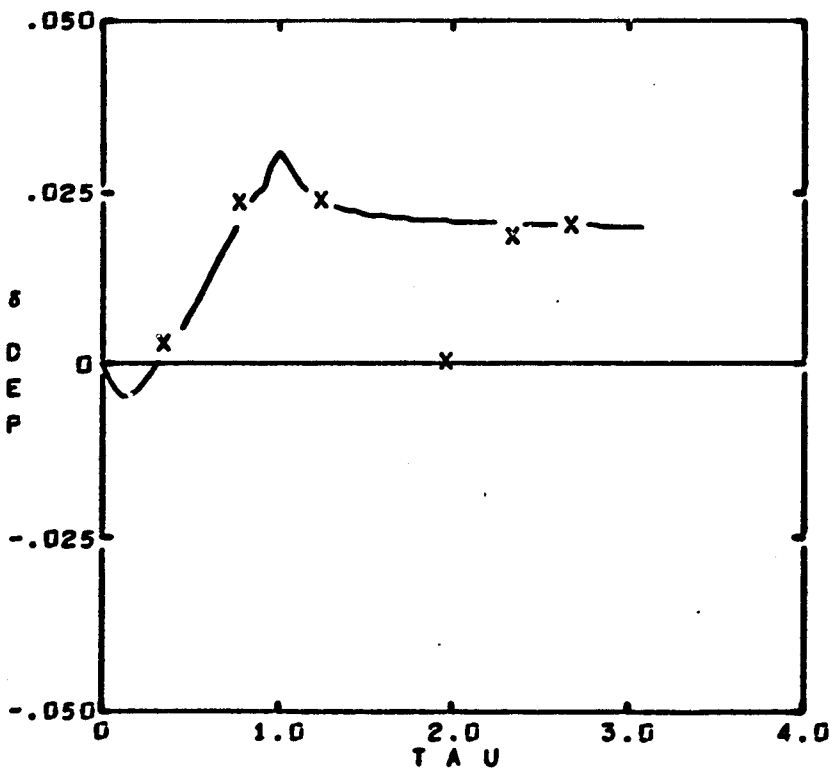
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0300	.0321	-.0021
.50	.0639	.0561	.0078
.75	.1019	.0822	.0197
.98	.1271	.0995	.0276
1.0	.1206	.0899	.0307
1.5	.0774	.0555	.0219
2.0	.0664	.0456	.0208
2.5	.0599	.0396	.0203
3.0	.0553	.0352	.0201

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-0.749	384.54			384.54	1.002	.0094
9H	-0.017	383.62			383.62	1.000	-.0002
10H	0.344	357.94			357.94	0.933	.0438
11H	0.773	273.28	0.439	-.893	274.31	0.715	.1081
12H	1.242	208.28	0.134	-.214	209.71	0.547	.0893
13H	1.957	178.45	0.000	-.064	178.45	0.465	.0468
14H	2.334	186.30	0.247	-.908	190.01	0.495	.0602
15H	2.672	185.23	0.229	+.332	188.42	0.491	.0582
16H	3.424	258.94	0.000	+.179	258.94	0.675	-.0485







PHOTOGRAPH NOT AVAILABLE

390 (2N5) T. MAYER G

LAMBDA=27.12 W BETA=17.33 N XI=-.4352 ETA=+.2978 L+PL CODE = 24239 ALBEDO =.0708

13H FLAT MOON DATA
FM=.01096 FM'=.01096

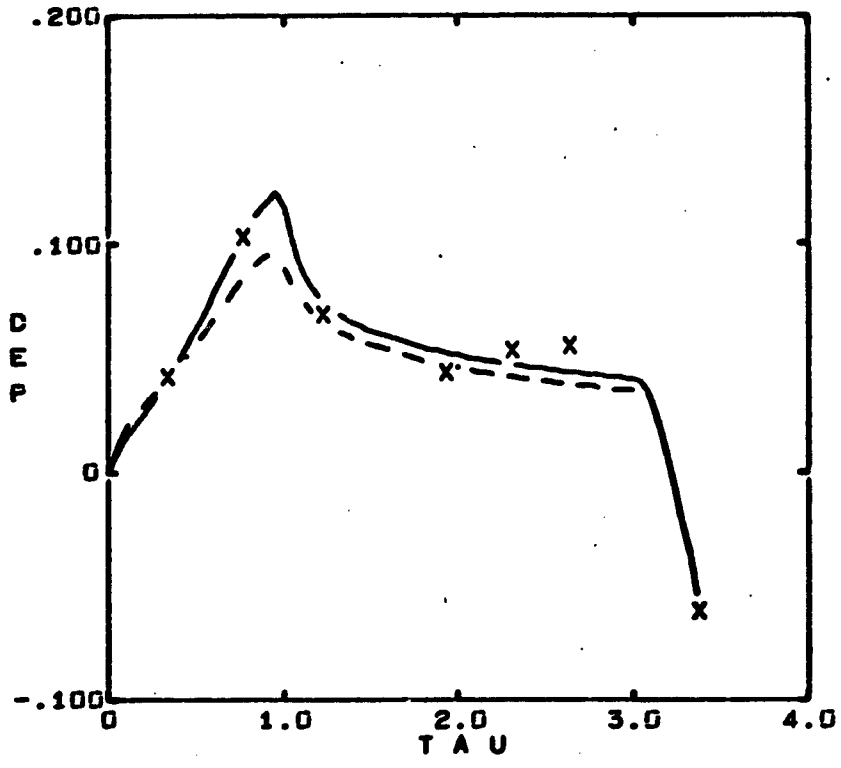
INITIAL TEMPERATURE 385.74
TAU-END OF TOTALITY 3.025

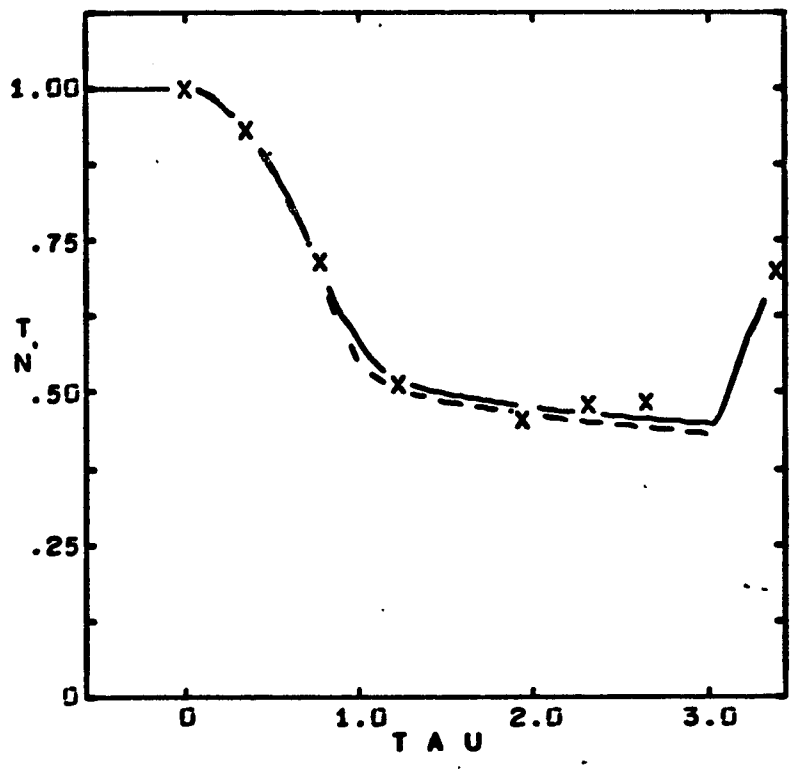
DIFFERENTIAL ENERGY DATA

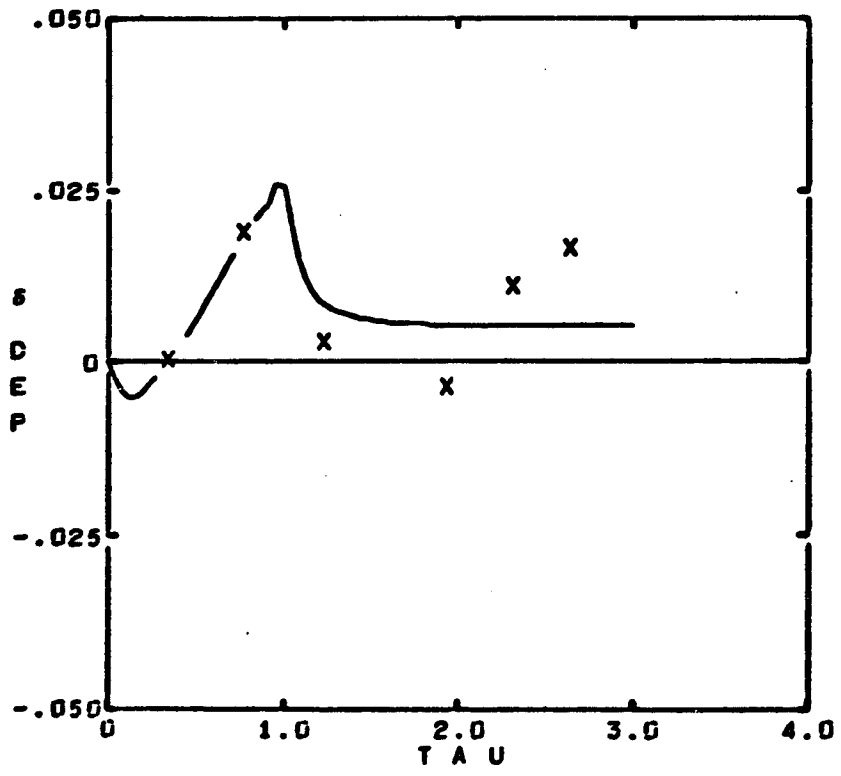
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0295	.0324	-.0029
.50	.0626	.0563	.0063
.75	.0996	.0823	.0173
.93	.1241	.0995	.0246
1.0	.1156	.0899	.0257
1.5	.0616	.0555	.0061
2.0	.0510	.0456	.0054
2.5	.0448	.0396	.0052
3.0	.0405	.0352	.0053

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.735	386.92		386.92	1.003	.0123
9H	-0.014	385.71		385.71	1.000	-.0002
10H	0.344	359.40		359.40	0.932	.0415
11H	0.766	274.64	0.316 +.833	276.07	0.716	.1031
12H	1.228	194.20	0.429 +.423	197.85	0.513	.0692
13H	1.934	175.72	0.000 -.910	175.72	0.456	.0431
14H	2.305	182.97	0.260 -.898	185.09	0.480	.0530
15H	2.639	183.75	0.261 -.586	186.92	0.485	.0551
16H	3.377	269.62	0.000 +.838	269.62	0.699	-.0613







PHOTOGRAPH NOT AVAILABLE

391 (466) TORRICELLI B

LAMBDA=29.16 E BETA= 2.59 S XI=+.4868 ETA=-.0452 L+PL CODE = 44084 ALBEDO =.0656

13H FLAT MOON DATA
FM=.03177 FM'=.08282

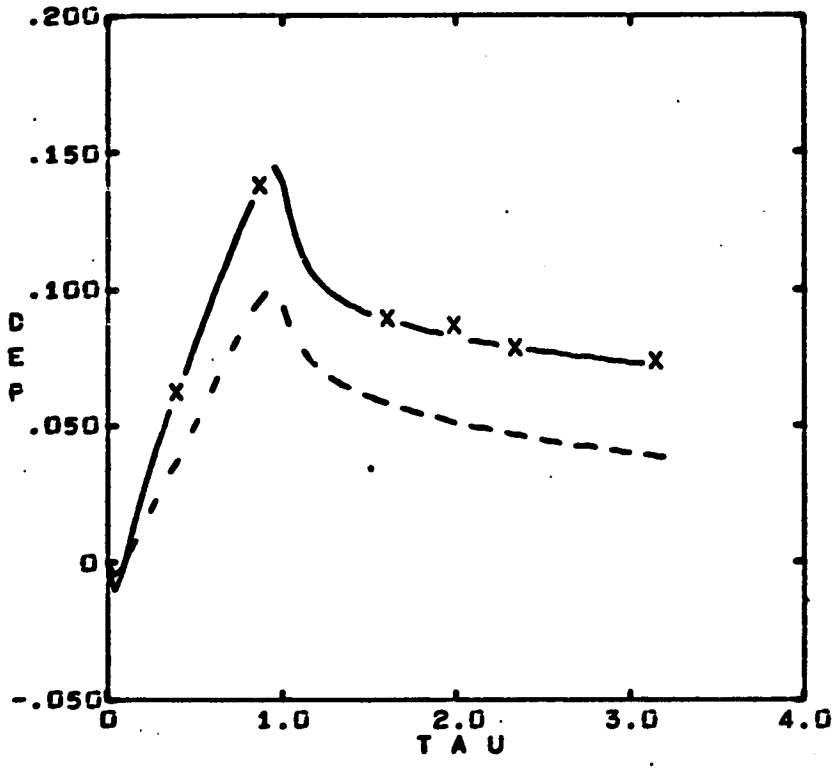
INITIAL TEMPERATURE 390.71
TAU-END OF TOTALITY 3.235

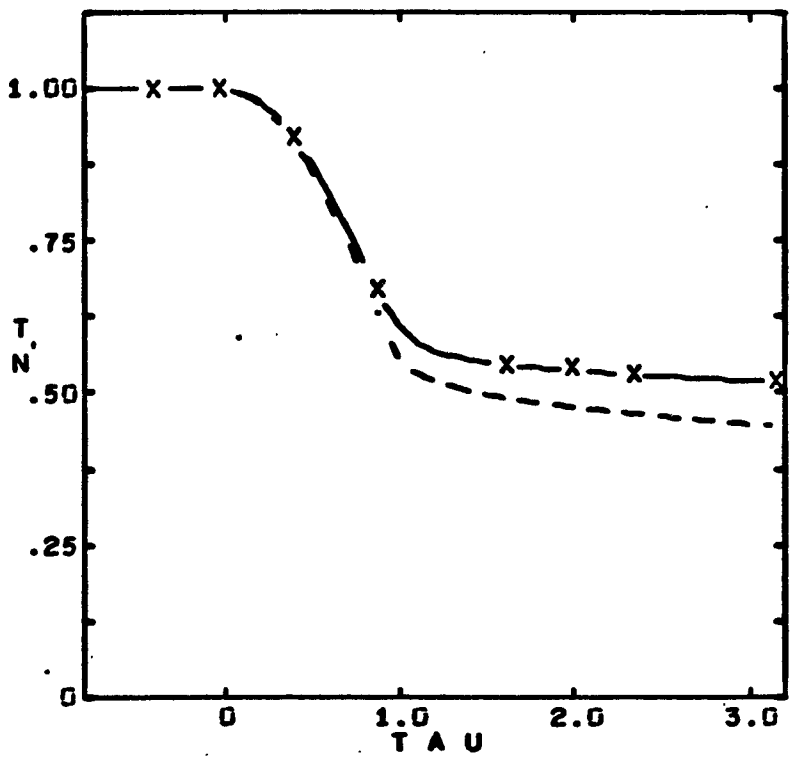
DIFFERENTIAL ENERGY DATA

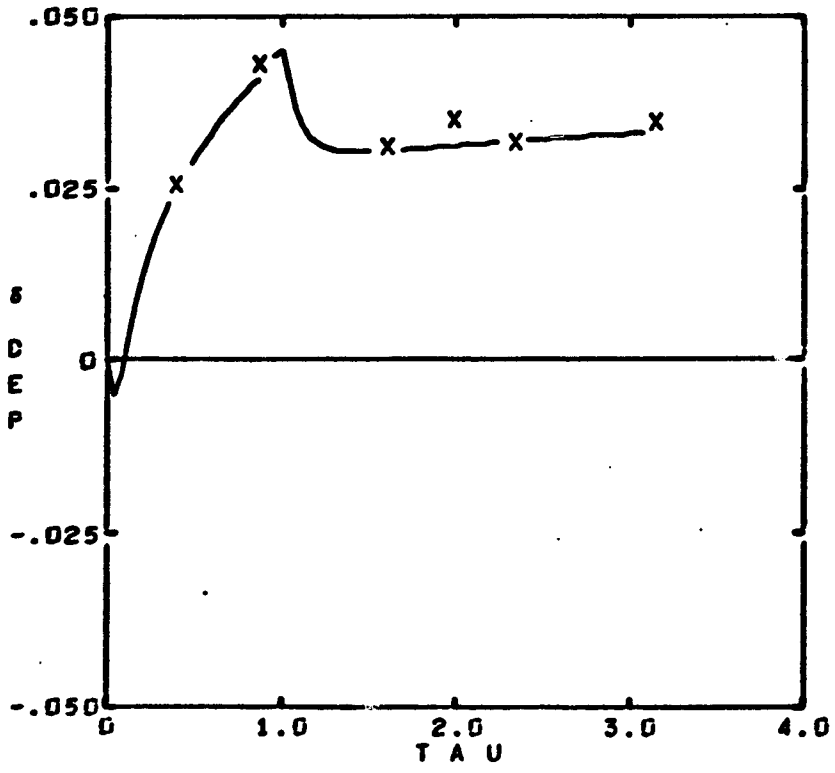
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0359	.0196	.0163
.50	.0790	.0498	.0292
.75	.1191	.0815	.0376
.93	.1452	.1028	.0424
1.0	.1389	.0937	.0452
1.5	.0912	.0608	.0304
2.0	.0823	.0511	.0312
2.5	.0771	.0449	.0322
3.0	.0731	.0402	.0329

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.158	392.15		392.15	1.004	.0148
9H	-0.412	390.34		390.34	0.999	-.0038
10H	-0.043	390.70		390.70	1.000	-.0001
11H	0.394	359.35		359.35	0.920	.0622
12H	0.872	257.56	0.346 +.224	261.37	0.669	.1382
13H	1.602	193.78	0.743 -.221	213.56	0.547	.0893
14H	1.986	211.52	0.068 +.522	211.63	0.542	.0864
15H	2.331	204.63	0.132 +.889	206.78	0.529	.0785
16H	3.143	187.91	0.518 +.548	203.60	0.521	.0737







PHOTOGRAPH NOT AVAILABLE

392 (4G7) TORRICELLI C

LAMBDA=25.99 E BETA= 2.69 S XI=+.4376 ETA=-.0470 L+PL CODE = 44034 ALBEDO =.0760

13H FLAT MOON DATA
FM=.04405 FM'=.05340

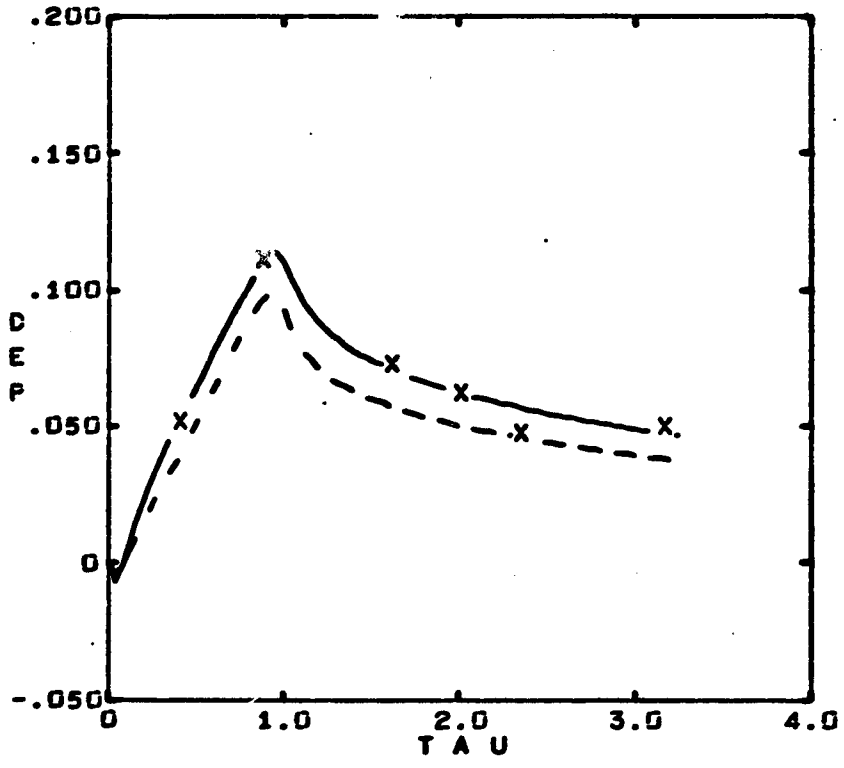
INITIAL TEMPERATURE 390.98
TAU-END OF TOTALITY 3.242

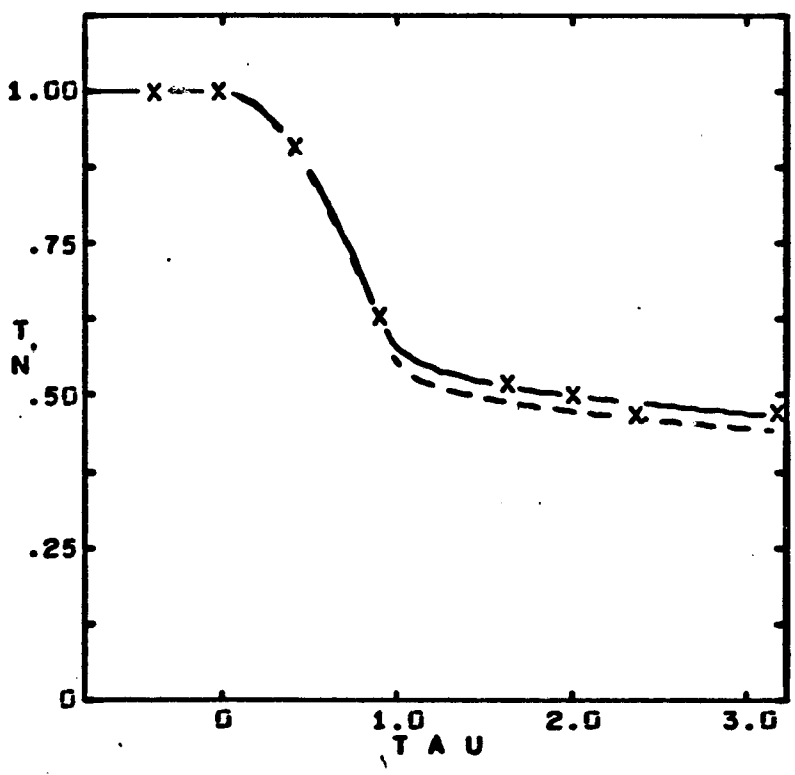
DIFFERENTIAL ENERGY DATA

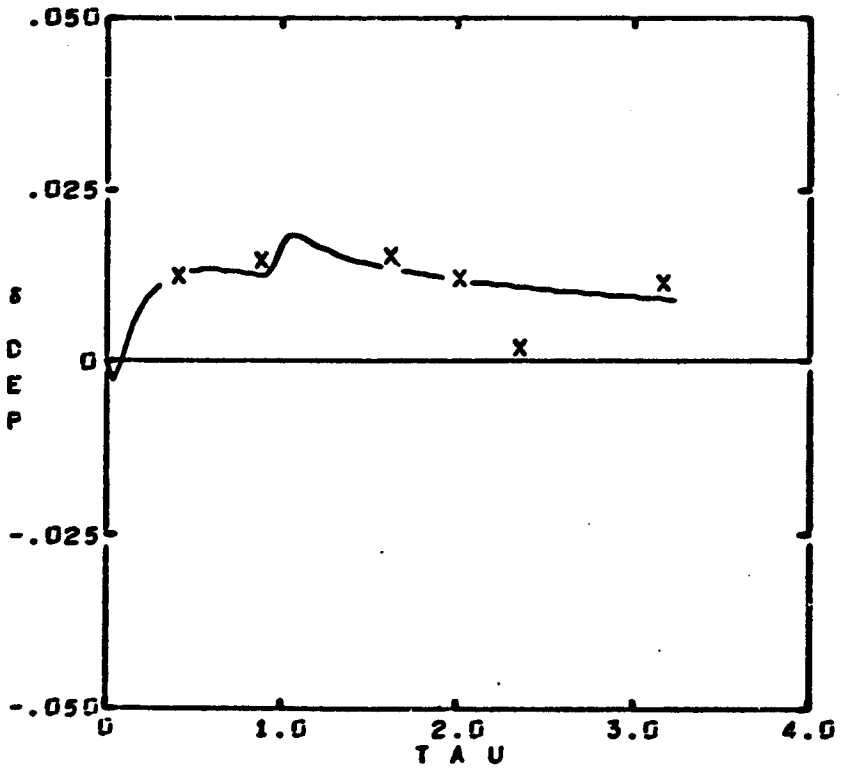
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0296	.0201	.0095
.50	.0630	.0498	.0132
.75	.0942	.0811	.0131
.93	.1145	.1022	.0123
1.0	.1102	.0930	.0172
1.5	.0744	.0601	.0143
2.0	.0624	.0504	.0120
2.5	.0548	.0443	.0105
3.0	.0490	.0396	.0094

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.139	393.60			393.60	1.007	.0270
9H	-0.393	390.71			390.71	0.999	-.0028
10H	-0.022	390.95			390.95	1.000	-.0004
11H	0.414	354.80			354.80	0.907	.0518
12H	0.894	244.86	0.212	-.918	246.01	0.629	.1113
13H	1.624	199.27	0.290	-.275	202.90	0.519	.0725
14H	2.009	190.40	0.454	-.968	195.49	0.500	.0625
15H	2.354	180.24	0.535	-.915	182.91	0.468	.0479
16H	3.165	178.62	0.427	+.455	184.77	0.473	.0499







PHOTOGRAPH NOT AVAILABLE

393 (1R4) TRALLES A

LAMBDA=47.05 E BETA=27.43 N XI=+.6497 ETA=+.4606 L+FL CODE = 16446 ALBEDO =.1555

13H FLAT MOON DATA
FM=.07708 FM'=.09285

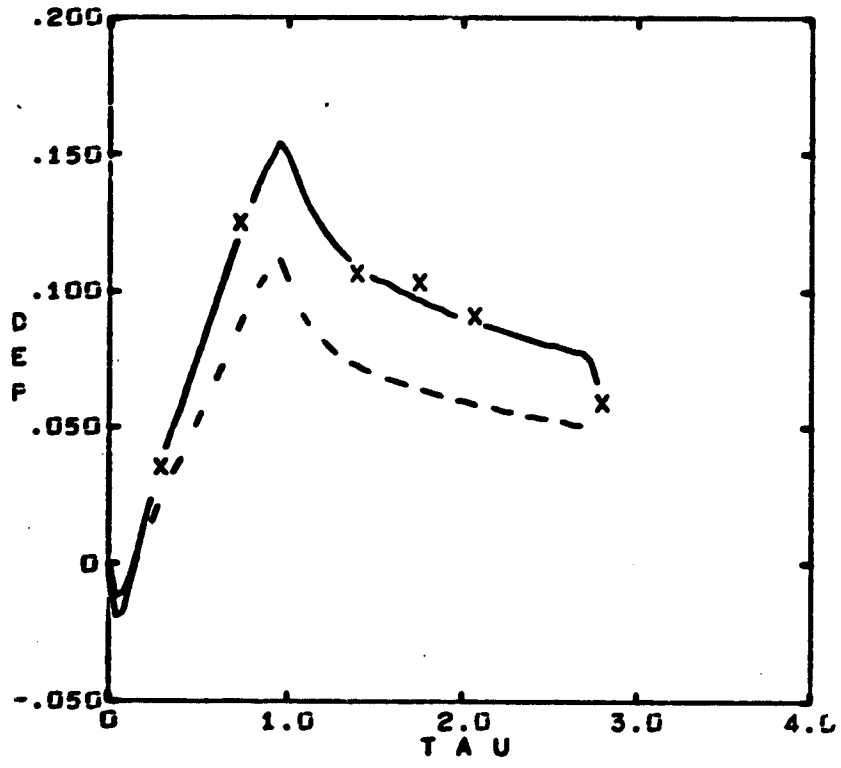
INITIAL TEMPERATURE 363.95
TAU-END OF TOTALITY 2.687

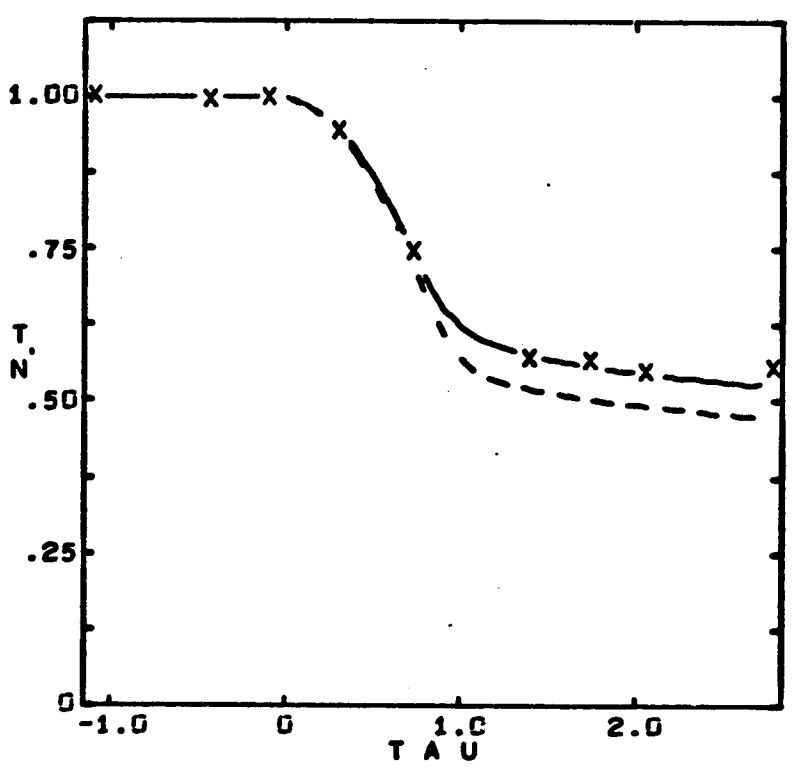
DIFFERENTIAL ENERGY DATA

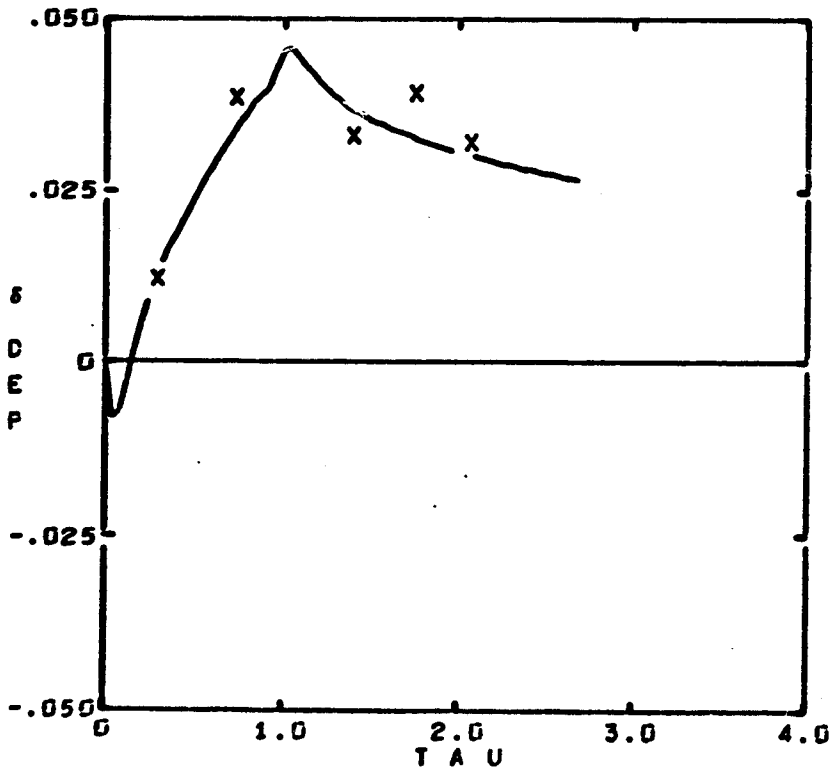
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0266	.0168	.0098
.50	.0768	.0527	.0241
.75	.1236	.0890	.0346
.93	.1542	.1133	.0409
1.0	.1494	.1041	.0453
1.5	.1049	.0696	.0353
2.0	.0900	.0594	.0306
2.5	.0802	.0528	.0274

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.116	365.01		365.01	1.003	.0117
9H	-0.440	362.96		362.96	0.997	-.0108
10H	-0.103	364.09		364.09	1.000	.0015
11H	0.294	344.25		344.25	0.946	.0356
12H	0.730	270.09	0.262 +.039	272.27	0.748	.1248
13H	1.393	201.91	0.250 +.975	207.66	0.571	.1060
14H	1.744	186.14	0.691 +.374	206.27	0.567	.1032
15H	2.058	197.67	0.113 -.858	199.71	0.549	.0907
16H	2.788	179.89	1.246 -.570	202.60	0.557	.0592







PHOTOGRAPH NOT AVAILABLE

394 (1R5) TRIESNECKER

LAMBDA= 3.63 E BETA= 4.18 N XI=+.0631 ETA=+.0729 L+PL CODE = 10067 ALBEDO =.1273

13H FLAT MOON DATA
FM=.04039 FM'=.05792

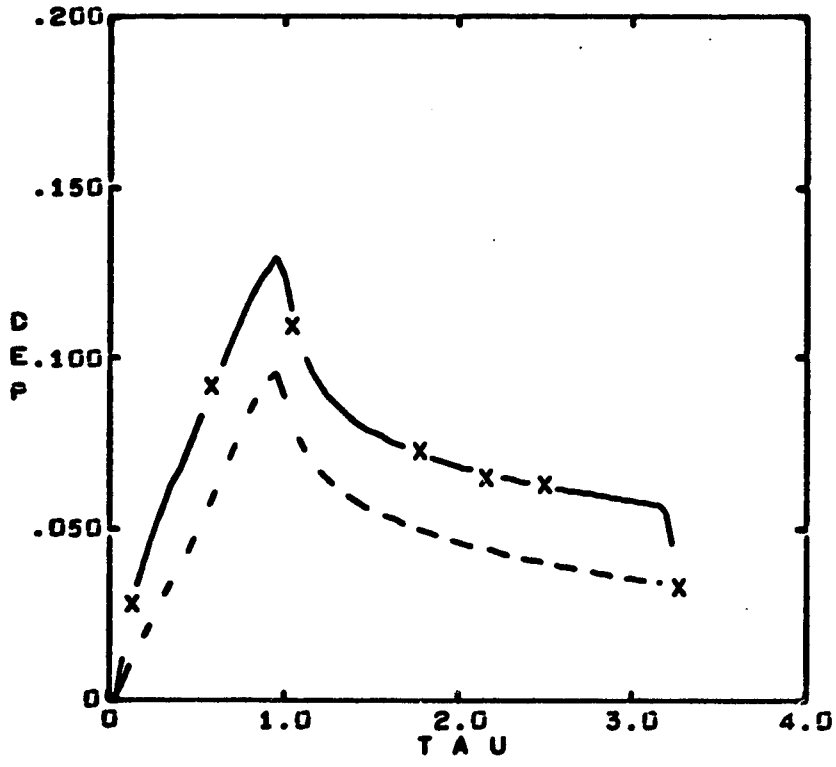
INITIAL TEMPERATURE 392.77
TAU-END OF TOTALITY 3.179

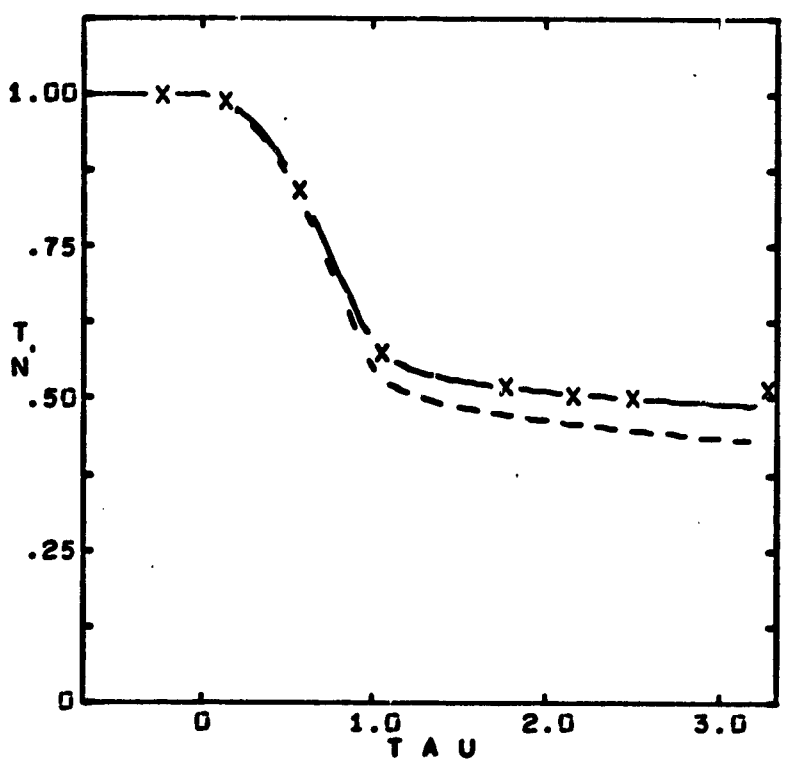
DIFFERENTIAL ENERGY DATA

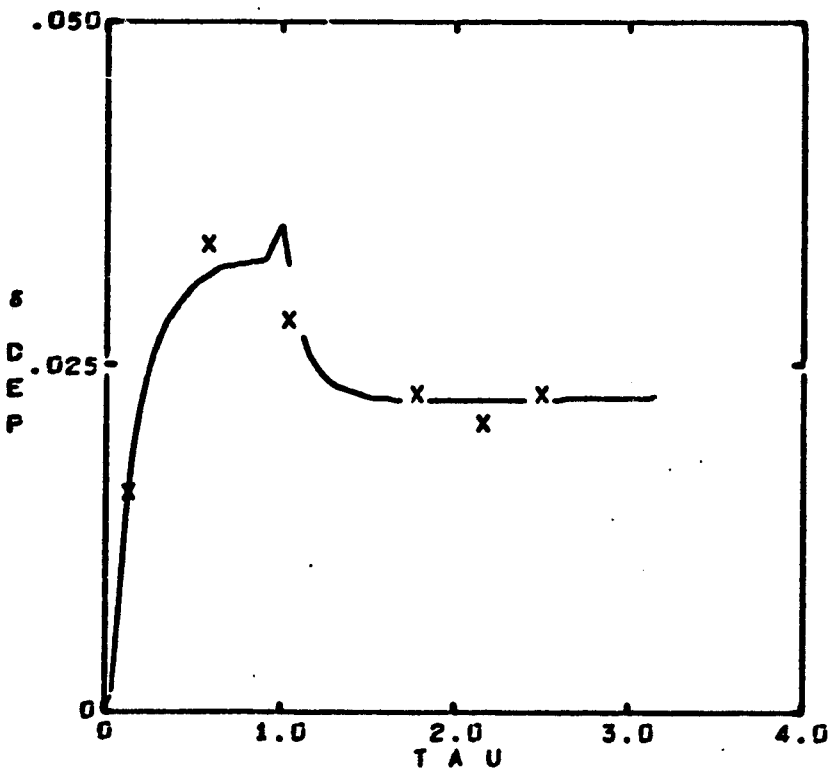
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0477	.0231	.0246
.50	.0805	.0497	.0308
.75	.1107	.0784	.0323
.93	.1300	.0976	.0324
1.0	.1236	.0885	.0351
1.5	.0784	.0557	.0227
2.0	.0685	.0461	.0224
2.5	.0626	.0401	.0225
3.0	.0582	.0356	.0226

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.967	393.31		393.31	1.001	.0055
9H	-0.228	392.64		392.64	1.000	-.0013
10H	0.139	388.98		388.98	0.990	.0281
11H	0.571	330.38	0.083 -.053	330.46	0.841	.0916
12H	1.046	225.20	0.130 -.587	225.82	0.575	.1093
13H	1.769	198.95	0.629 -.247	203.98	0.519	.0728
14H	2.149	197.29	0.254 -.819	198.29	0.505	.0650
15H	2.491	195.00	0.184 -.251	196.88	0.501	.0631
16H	3.276	200.90	0.534 +.916	203.11	0.517	.0330







PHOTOGRAPH NOT AVAILABLE

395 (3K9) TURNER

LAMBDA=13.21 W BETA= 1.38 S XI=-.2284 ETA=-.0241 L+PL CODE = 32022 ALBEDO =.0766

13H FLAT MOON DATA
FM=.04094 FM'=.06403

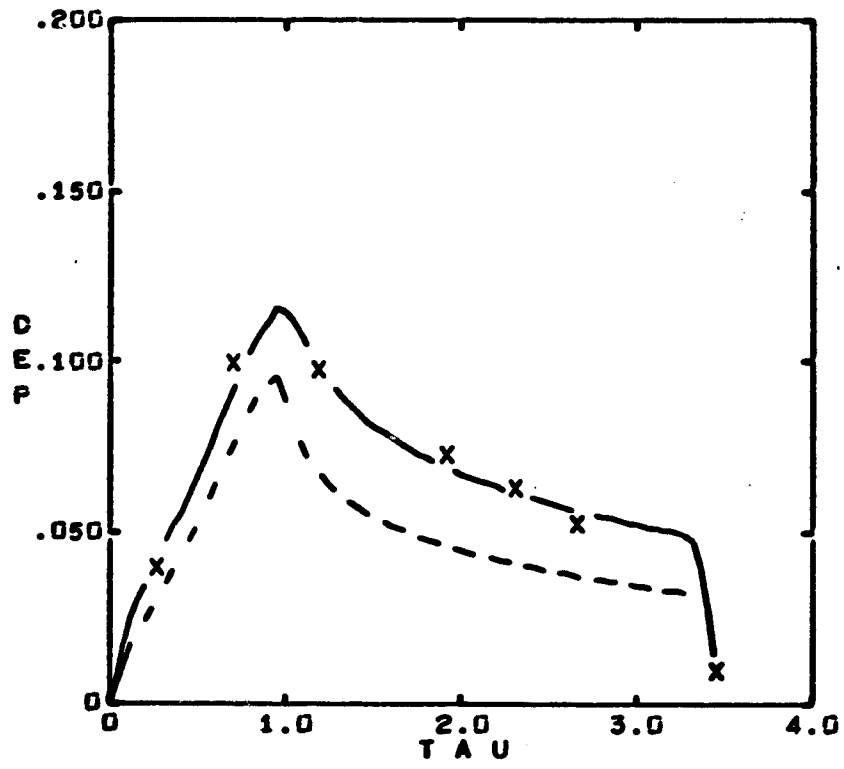
INITIAL TEMPERATURE 393.55
TAU-END OF TOTALITY 3.295

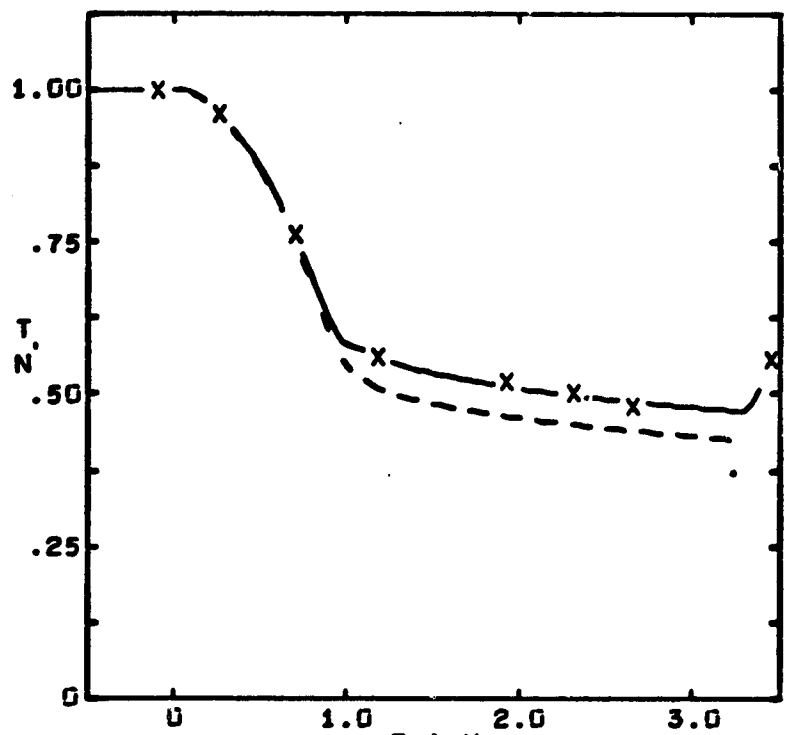
DIFFERENTIAL ENERGY DATA

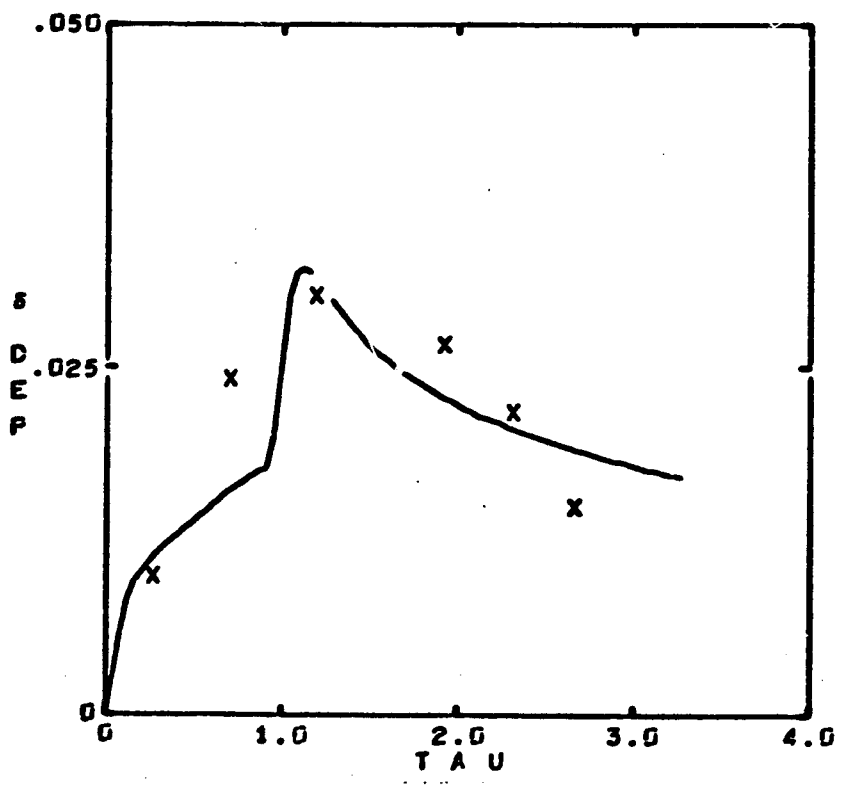
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0399	.0288	.0111
.50	.0675	.0534	.0141
.75	.0968	.0802	.0166
.93	.1160	.0980	.0180
1.0	.1146	.0886	.0260
1.5	.0814	.0548	.0266
2.0	.0673	.0450	.0223
2.5	.0587	.0390	.0197
3.0	.0525	.0346	.0179

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-0.864	395.90		395.90	1.006	.0241
9H	-0.108	393.26		393.26	0.999	-.0030
10H	0.264	378.41		378.41	0.962	.0400
11H	0.704	297.92	0.800 +.930	300.11	0.763	.0996
12H	1.187	218.42	0.151 -.618	220.10	0.559	.0978
13H	1.924	195.28	0.433 -.182	204.43	0.519	.0728
14H	2.312	188.29	0.442 -.571	197.03	0.501	.0628
15H	2.661	183.81	0.504 +.881	188.33	0.479	.0524
16H	3.451	212.48	0.676 +.653	218.86	0.556	.0097







PHOTOGRAPH NOT AVAILABLE

396 (3L1) TYCHO

LAMBDA=11.16 W BETA=43.24 S XI=-.1410 ETA=-.6850 L+PL CODE = 31648 ALBEDO =.1757

13H FLAT MOON DATA
FM=.13695 FM'=.17994

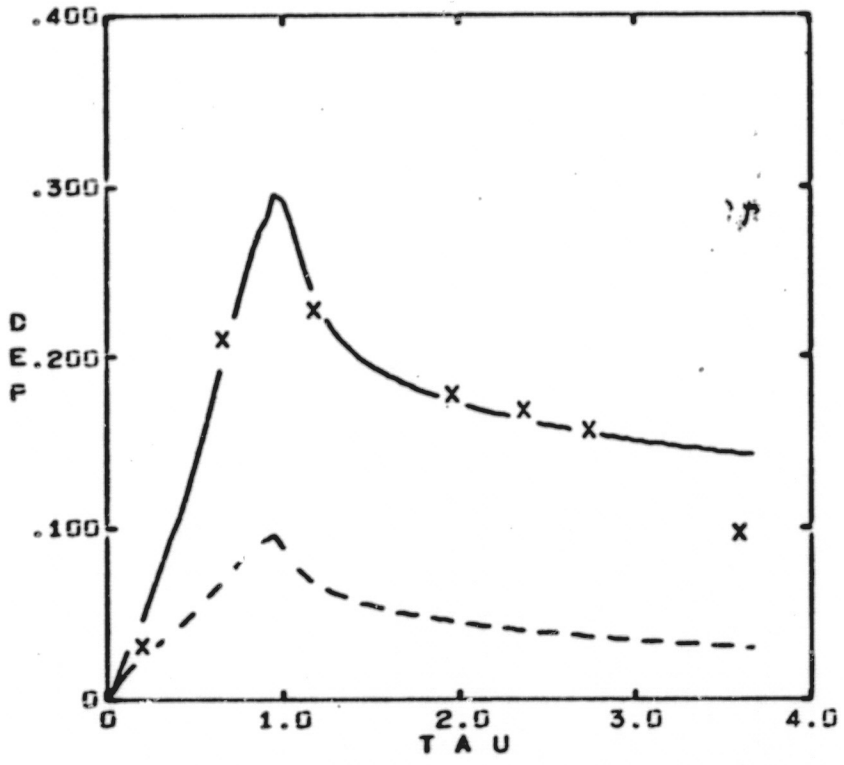
INITIAL TEMPERATURE 363.45
TAU-END OF TOTALITY 3.698

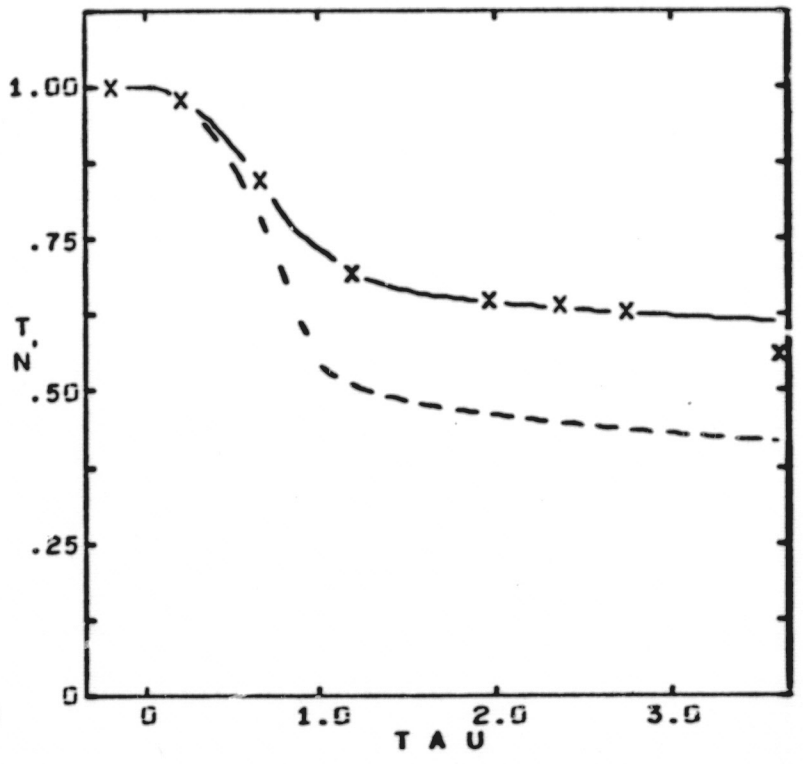
DIFFERENTIAL ENERGY DATA

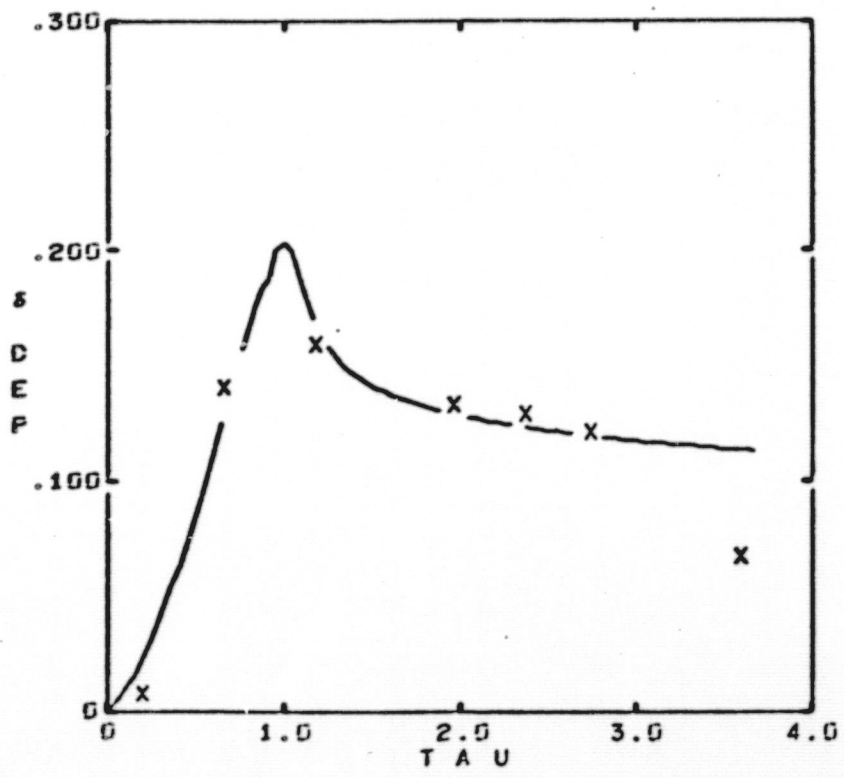
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0596	.0283	.0313
.50	.1411	.0530	.0881
.75	.2337	.0799	.1538
.93	.2959	.0978	.1981
1.0	.2917	.0884	.2033
1.5	.1952	.0546	.1406
2.0	.1727	.0449	.1278
2.5	.1603	.0389	.1214
3.0	.1515	.0345	.1170

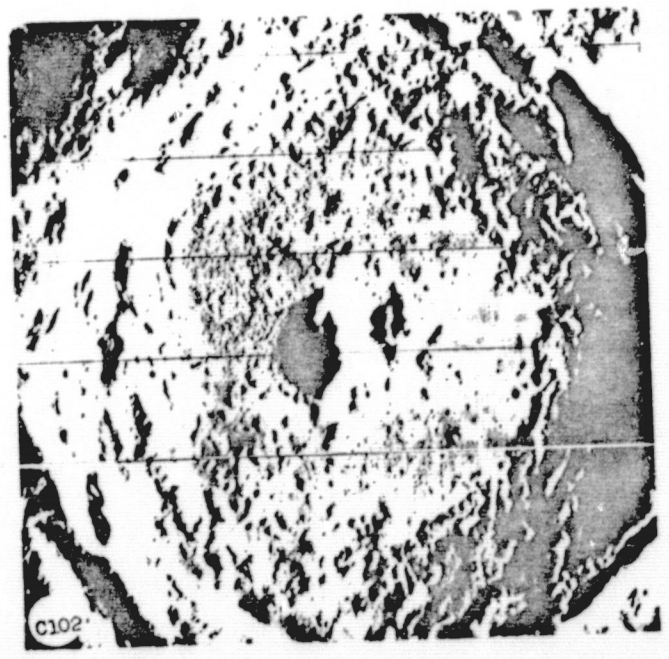
ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.004	361.86		361.86	0.996	-.0173
9H	-0.200	363.76		363.76	1.001	.0035
10H	0.194	356.15		356.15	0.980	.0308
11H	0.660	302.34	1.431 -.535	308.00	0.847	.2113
12H	1.173	247.59	0.279 +.237	251.02	0.691	.2275
13H	1.957	219.59	0.775 -.573	236.21	0.650	.1784
14H	2.364	230.98	0.227 +.209	233.25	0.642	.1696
15H	2.736	223.17	1.538 -.630	229.11	0.630	.1579
16H	3.600	203.40	0.000 -.563	203.40	0.560	.0981









397 (1R6) VITRUVIUS

LAMBDA=31.27 E BETA=17.65 N XI=+.4947 ETA=+.3032 L+PL CODE = 14390 ALBEDO =.0843

13H FLAT MOON DATA
FM=.02665 FM'=.02665

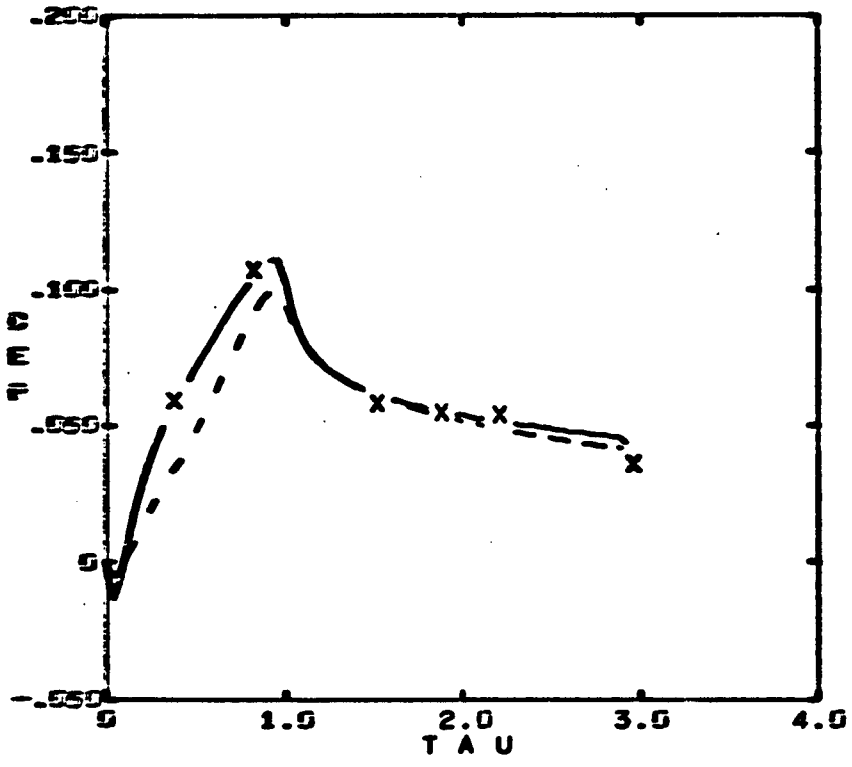
INITIAL TEMPERATURE 387.38
TAU-END OF TOTALITY 2.893

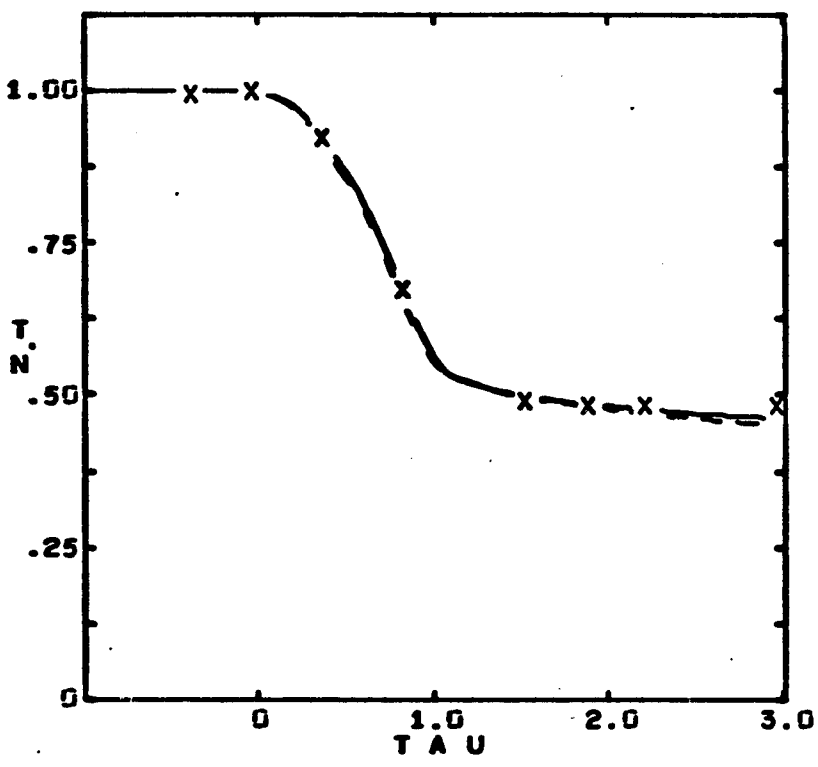
DIFFERENTIAL ENERGY DATA

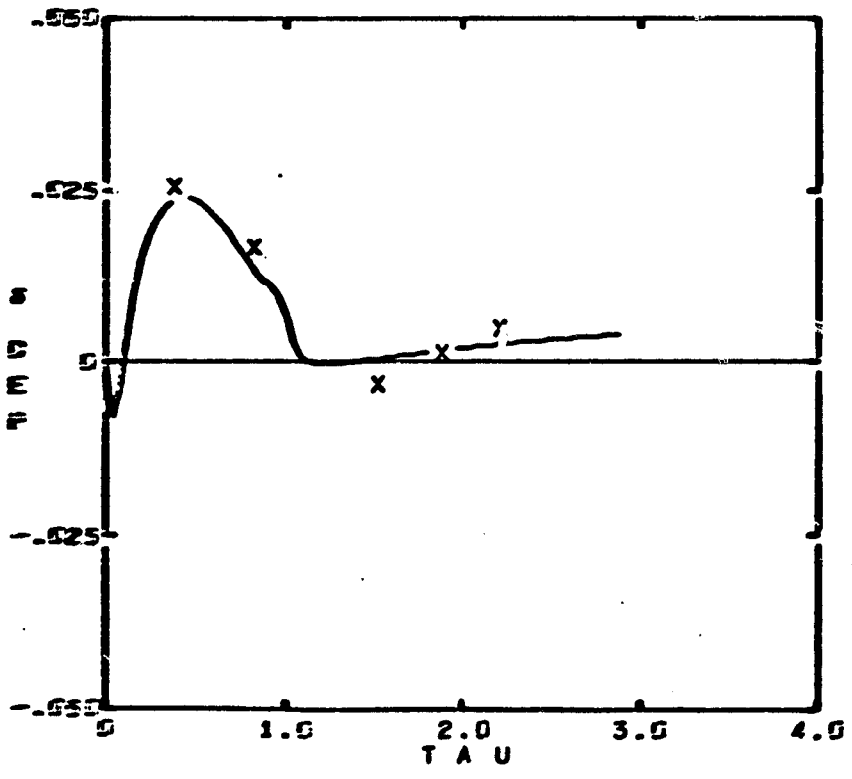
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0384	.0193	.0191
.50	.0731	.0499	.0232
.75	.0980	.0819	.0161
.93	.1127	.1034	.0093
1.0	.1010	.0943	.0067
1.5	.0619	.0614	.0005
2.0	.0538	.0517	.0021
2.5	.0488	.0454	.0034

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET		TEMP'	TN'	DEP'
8H	-1.093	388.39			388.39	1.003	.0105
9H	-0.391	386.61			386.61	0.998	-.0079
10H	-0.041	387.42			387.42	1.000	.0004
11H	0.371	358.32			358.32	0.925	.0594
12H	0.823	256.34	0.634	-.877	260.89	0.673	.1074
13H	1.513	190.07	0.000	-.213	190.07	0.491	.0580
14H	1.877	187.71	0.000	-.247	187.71	0.485	.0551
15H	2.202	183.85	0.373	-.635	186.64	0.482	.0539
16H	2.959	182.56	1.368	+.999	187.67	0.484	.0360







PHOTOGRAPH
NOT
AVAILABLE

398 (1R7) VITRUVIUS A

LAMBDA=33.84 E BETA=17.75 N XI=+.5304 ETA=+.3049 L+PL CODE = 15330 ALBEDO =.0713

13H FLAT MOON DATA
FM=.06271 FM'=.07034

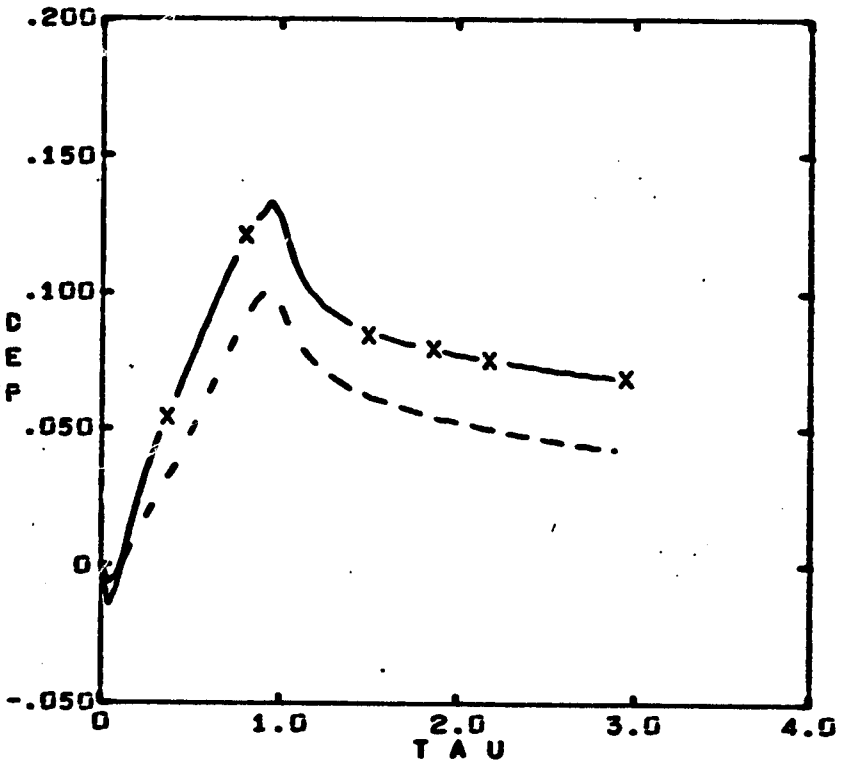
INITIAL TEMPERATURE 384.22
TAU-END OF TOTALITY 2.886

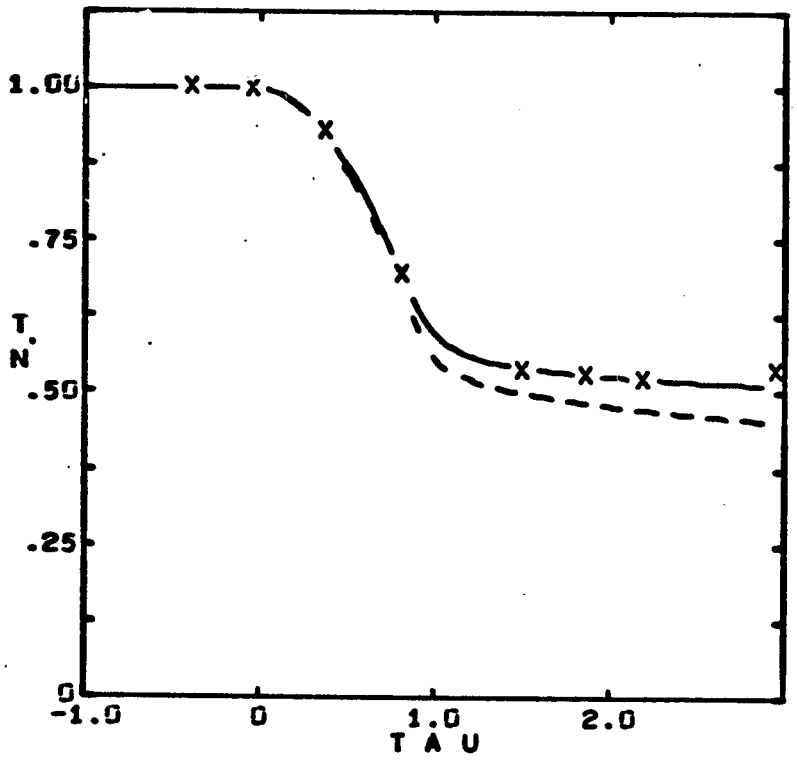
DIFFERENTIAL ENERGY DATA

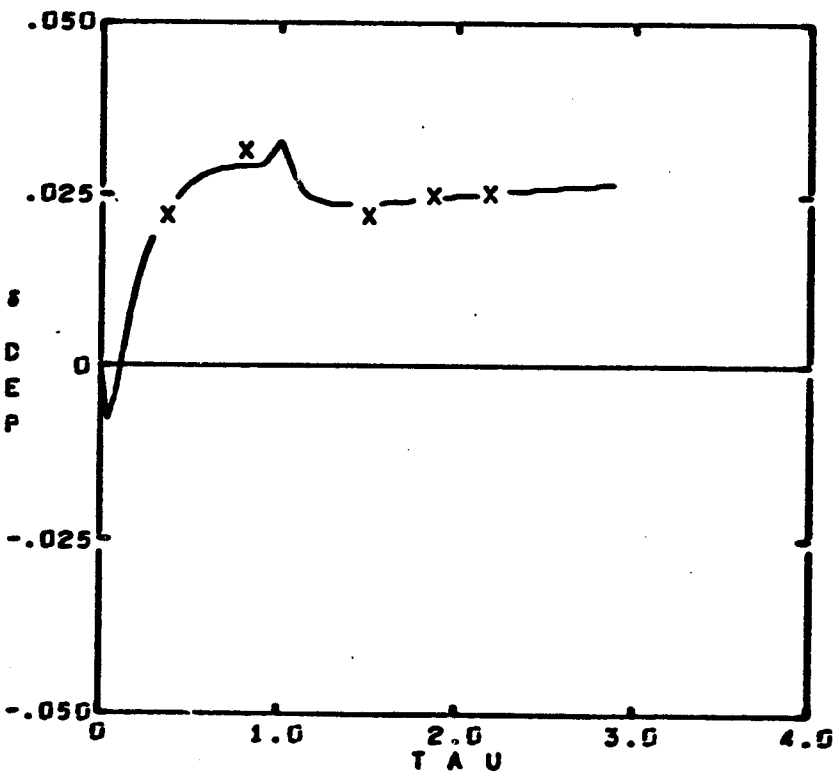
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0357	.0188	.0169
.50	.0768	.0500	.0268
.75	.1115	.0825	.0290
.93	.1333	.1042	.0291
1.0	.1278	.0952	.0326
1.5	.0858	.0622	.0236
2.0	.0773	.0525	.0248
2.5	.0721	.0462	.0259

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.108	386.76		386.76	1.007	.0268
9H	-0.405	385.05		385.05	1.002	.0088
10H	-0.056	383.97		383.97	0.999	-.0026
11H	0.357	357.02		357.02	0.929	.0539
12H	0.808	263.75	0.403 -.414	267.05	0.695	.1210
13H	1.496	203.22	0.585 +.776	207.04	0.539	.0843
14H	1.859	197.45	0.398 -.023	204.13	0.531	.0797
15H	2.184	201.01	0.160 +.843	201.19	0.524	.0752
16H	2.942	205.78	0.078 -.032	206.70	0.538	.0691







PHOTOGRAPH
NOT
AVAILABLE

399 (1R8) VITRUVIUS E

LAMBDA=29.26 E BETA=18.65 N XI=+.4631 ETA=+.3198 L+PL CODE = 14361 ALBEDO =.0789

13H FLAT MOON DATA
FM=.04356 FM'=.06967

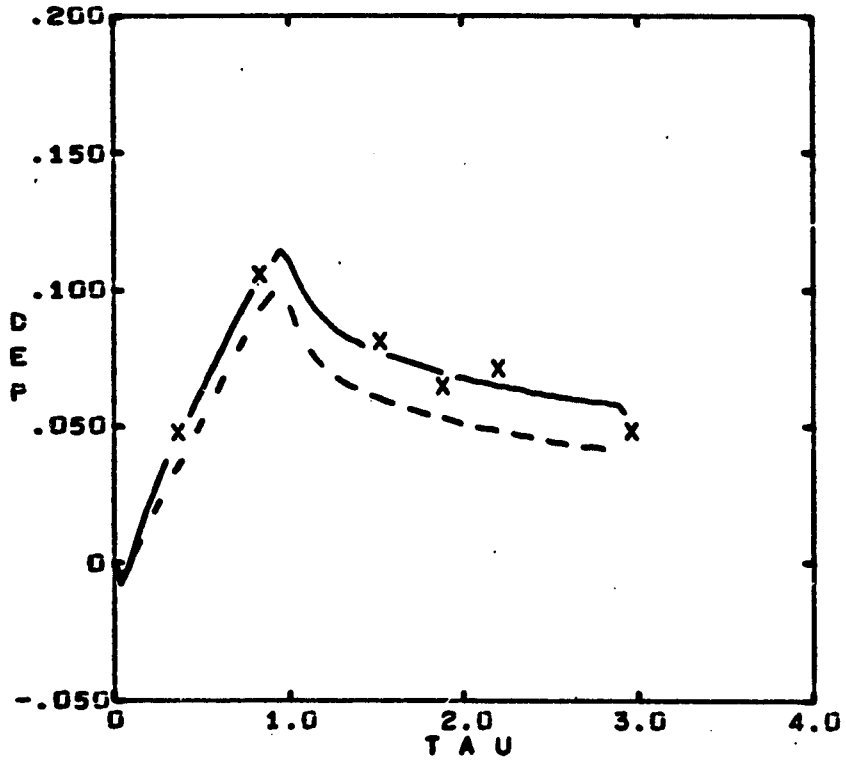
INITIAL TEMPERATURE 387.24
TAU-END OF TOTALITY 2.879

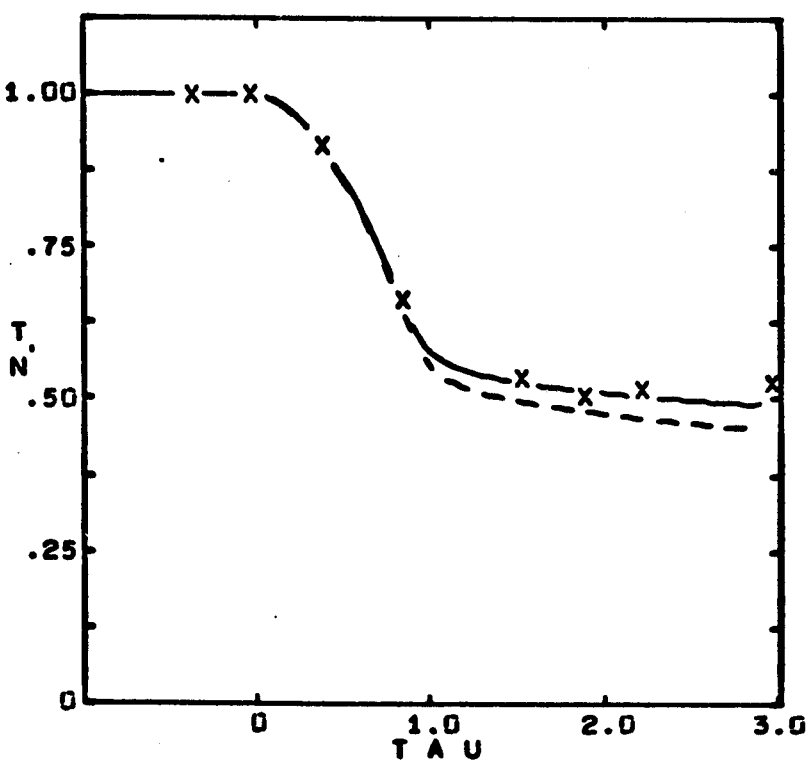
DIFFERENTIAL ENERGY DATA

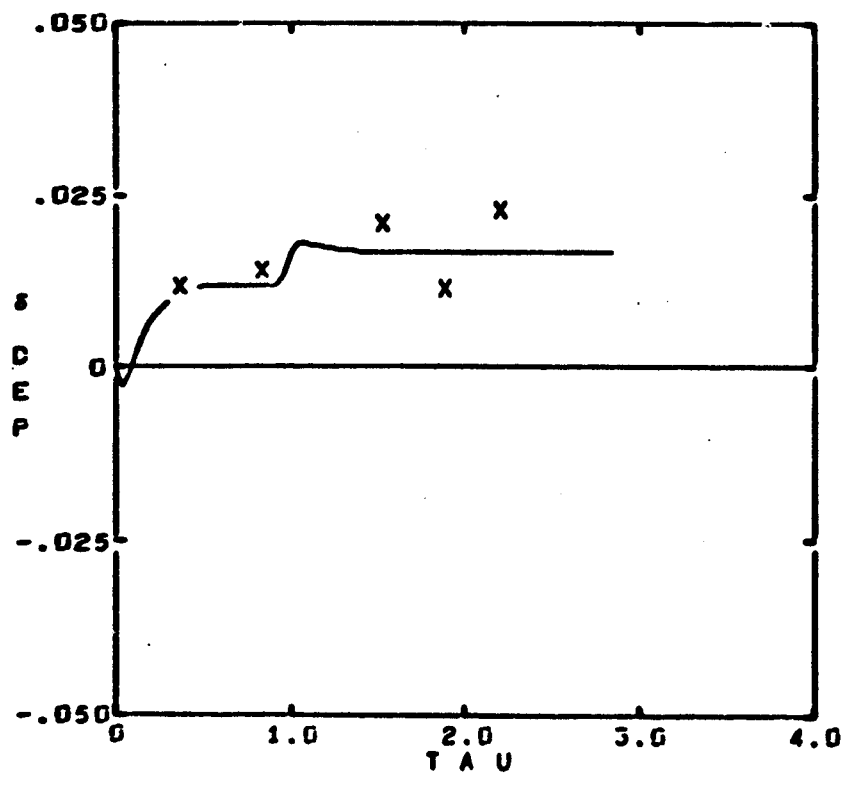
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0275	.0196	.0079
.50	.0614	.0498	.0116
.75	.0934	.0815	.0119
.93	.1143	.1028	.0115
1.0	.1104	.0937	.0167
1.5	.0776	.0608	.0168
2.0	.0678	.0511	.0167
2.5	.0615	.0449	.0166

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.078	388.28		388.28	1.003	.0107
9H	-0.378	387.20		387.20	1.000	-.0005
10H	-0.028	387.22		387.22	1.000	-.0002
11H	0.383	354.72		354.72	0.916	.0474
12H	0.834	254.96	0.622 -.940	257.08	0.664	.1056
13H	1.522	196.84	0.513 +.887	206.81	0.534	.0813
14H	1.885	188.59	0.534 +.706	195.06	0.504	.0644
15H	2.209	193.75	0.384 +.812	200.02	0.517	.0712
16H	2.963	198.23	0.373 -.472	203.71	0.526	.0481







PHOTOGRAPH NOT AVAILABLE

400 (1R9) VITRUVIUS G

LAMBDA=34.63 E BETA=13.92 N XI=+.5516 ETA=+.2406 L+PL CODE = 15254 ALBEDO =.0630

13H FLAT MOON DATA
FM=.05651 FM'=.06054

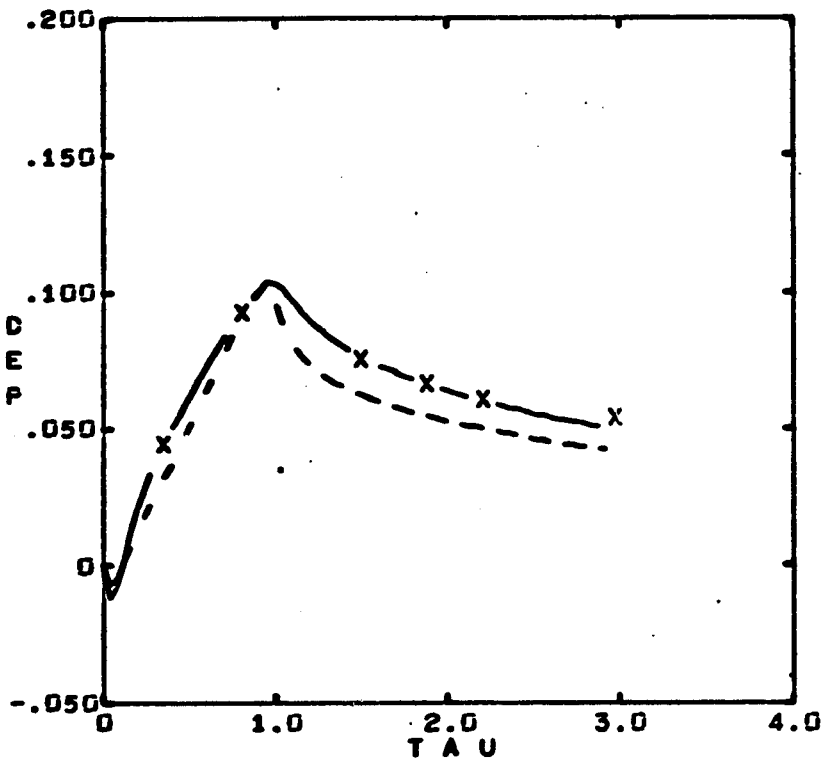
INITIAL TEMPERATURE 386.91
TAU-END OF TOTALITY 2.953

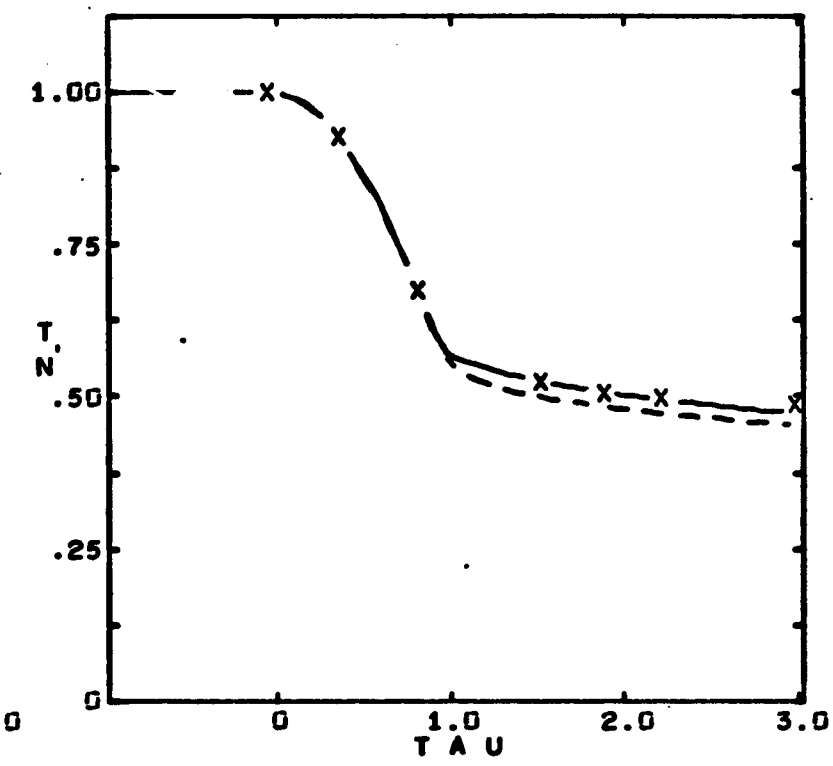
DIFFERENTIAL ENERGY DATA

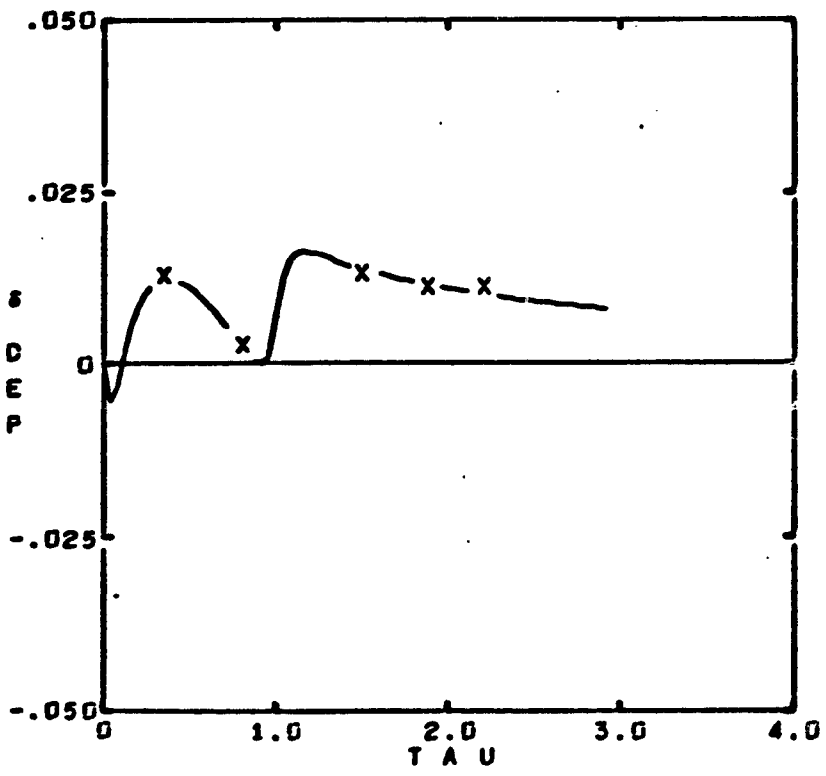
TAU	DEP	DEP-SMOOTH	δDEP
.25	.0291	.0187	.0104
.50	.0613	.0501	.0112
.75	.0871	.0826	.0045
.93	.1030	.1045	-.0015
1.0	.1029	.0954	.0075
1.5	.0762	.0624	.0138
2.0	.0636	.0527	.0109
2.5	.0556	.0465	.0091

ECLIPSE TEMPERATURE DATA

SCAN	TAU	TEMP	OFFSET	TEMP'	TN'	DEP'
8H	-1.128	388.44		388.44	1.004	.0159
9H	-0.418	386.88		386.88	1.000	-.0004
10H	-0.064	386.83		386.83	1.000	-.0008
11H	0.352	359.31		359.31	0.929	.0443
12H	0.810	260.25	0.000 -.781	260.25	0.673	.0928
13H	1.505	201.24	0.198 +.872	202.76	0.524	.0754
14H	1.873	188.79	0.434 +.536	196.18	0.507	.0661
15H	2.202	192.33	0.000 -.814	192.33	0.497	.0611
16H	2.971	185.63	0.279 -.280	188.91	0.488	.0544







PHOTOGRAPH
NOT
AVAILABLE

XI. ACKNOWLEDGEMENTS

The authors wish to thank Larry Hughes for assistance with the data extraction and presentation routines and Elizabeth Williamson for her careful plotting of the sites on the LEM chart.

A special note of thanks is given to Dr. D. F. Winter for computing the eclipse cooling for the particulate model for a series of east and west longitudes and for many useful discussions.