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UK-5
VAN ALLEN BELT
RADIATION EXPOSURE

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UK-5 VAN ALLEN BELT RADIATION EXPOSURE

A special study to determine
the trapped particle intensities on
the UK-5 satellite with spatial mapping
of the ambient flux environment

by

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October 1972

Goddard Space Flight Center
Greenbelt, Maryland

Foreword

Vehicle encountered electron and proton fluxes were calculated for a set of nominal UK-5 trajectories with new computational methods and new electron environment models. Temporal variations in the electron data were considered and partially accounted for. Field strength calculations were performed with an extrapolated model on the basis of linear secular variation predictions. Tabular maps for selected electron and proton energies were constructed as functions of latitude and longitude for specified altitudes. Orbital flux integration results are presented in graphical and tabular form; they are analyzed, explained, and discussed.

This study was performed in order to assist in the finalization of the UK-5 orbit which will be based upon the weighing of radiation effects on the scientific experiments against aerodynamic considerations affecting the orbit lifetime.

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Appendices

Introduction

The planning for the UK-5 satellite provides for a circular equatorial flight path at about 550 kilometers altitude, in contrast to the UK-4, which was launched in a circular but nearly polar trajectory at the same altitude.

To thoroughly evaluate the radiation environment at or near the geographic equator, two inclinations and three altitudes were considered in this study (for more details see Appendix A).

The new orbital configuration minimizes the region of trapped radiation encountered by the vehicle. The actual range of B and L, as calculated with the selected field model for the specified epoch, is given by the respective extrema listed in Table 1 and plotted in Figure 1 as a function of altitude for each inclination.

The relatively narrow L band indicates that only the inner zone trapped particles are encountered. A new inner belt electron model AE5 (Teague and Vette, 1972) was used in the calculation. Although additional epochs will be available later, the only one presently available is October 1967. Since the model contains a Starfish residual component at some L values, it was necessary to insure that this component, which will not be present in December 1973, would not affect the calculations. The time at which the Starfish component has decayed to levels where it is masked by the natural electron fluxes has been determined by Teague and Stassinopoulos (1972) as a function of energy and L. Using these times and an exponential decay determined from experimental data (Stassinopoulos and Verzariu, 1972), this component was removed from the calculation.

In constructing the AE5 model, it was possible to infer a change of the quiet time inner zone flux levels as a function of the solar cycle. Since epoch October 1967 is more equivalent to the 1971-2 period than the December 1973 launch of UK-5, the actual fluxes may be somewhat lower than those calculated here. This will be indicated by increasing the uncertainty factor attached to these results in the same manner as done before with UK-4 (Stassinopoulos, 1972) where the uncertainty is proportional to the time spent at a given L value and to the average expected variation in the intensities.

All comments, remarks, or references made for the UK-4 in regards to proton fluxes, their models, spectra, calculations, and uncertainties, are still valid at this time and apply equally to the UK-5. Similarly, the classification of orbit integrated spectra is still relative, based on an overall evaluation of near earth space in terms of circular trajectories between equatorial and polar planes.

Appendix A contains pertinent information on units, field models, trajectory generation and conversion, etc.

Two new sections, Appendixes B and C, have been added to this report relating to the enclosed tables and plots, explaining their format and describing their data.

The present study includes tabular mappings of instantaneous proton and electron fluxes over a narrow region about the geographic equator. The mapping was performed for the three selected altitudes and for four proton and three electron energy levels.

A further addition to the output data and the reference material usually included in our reports is:

a) a projection of the satellite trajectory on a world map grid drawn in Miller cylindrical coordinates, where the start of each successive orbit (revolution) is sequentially numbered,

b) a trace of the flight path in magnetic B-L space after conversion from geocentric geographic (geodetic system) to geocentric geomagnetic (B-L system) coordinates,

c) computer produced exposure analysis table,

d) computer produced time account table.

Novel features in our old tables, besides improved headlines and labels, are:

a) New constant L-band intervals on the first output table, extending now to L=8.2,

b) L-band tables also generated for protons,

c) complete description of low energy protons included as a standard procedure in all studies,

d) spectral distribution given also in average orbit-integrated instantaneous fluxes.

At this point we should emphasize that our calculations are only approximations due to the large uncertainties in future flux levels; as always, we strongly recommend that all persons receiving parts of this report be advised about this uncertainty (see last paragraph of Appendix A).

Finally, an explanation regarding the attribute "standard", frequently used in the reformatted OFI (Orbital Flux Integration) Study Reports. The term is applied as a modifier to parameters, constants, or variables in order to indicate or refer to some specific value of these quantities, a value that had been used without change over extended periods of time. Although override possibilities do exist in the OFI system, a routinely submitted production run will, by default option, always use these "standard" values. The term is also used in reference to established forms, style, processes, or procedures, as for example, "standard tables", "standard plots", "standard production runs", etc. A list of some quantities, values, or expressions modified by "standard" is given in Table 2.

Results: Analysis and Discussion

The outcome of our calculations is summarized in Tables 3 to 62, which are all computer produced; they include some new additions as well as some expanded or improved versions of previously routinely issued standard tables. The tables are arranged in four sets, where every set pertains to one specific type of table. All sets except the last contain three similar sections consisting of six tables each: one section for low energy protons, one for high energy protons, and one for electrons, in that order.

The first set is composed of the L-band tables, the second of the Spectral Distribution and Exposure Index tables, and the third of the tables of Peaks. The output is completed by the fourth set. It contains six tables which consist of two parts: the "Exposure Analysis" summary and the "Time Account" breakdown. See Appendix B for a thorough explanation of the tables and a detailed description of their data. Figure 2 is a guide to the table arrangement as produced for a single trajectory by a standard production run of our Orbital Flux Integration (OFI) program UNIFLUX.

Some of the tabulated data is computer plotted in Figures 4 to 57. The plots are identical to those issued in past studies; their number only has been increased by including the low energy protons. As with the tables, the plots are arranged in four sets, where each set pertains to one specific type of plot. Again, all sets except the last contain three similar sections: one section for each type of particle considered.

The first set of plots is composed of Time and Flux Histograms, the second of Spectral Profiles, and the third of Peaks per Orbit, consisting of eighteen plots each (1 set = 3 types of particles x 6 trajectories). The fourth set pertains to flight path data and should contain two sections of six plots each: one section of World Map Grid Projections, and one of B-L Space Tracings. However, because of system changes, only two plots of each type were produced at the time of this writing. They are shown in Figures 58 to 61. Appendix C describes and explains the plots. Figure 2A is a guide to plot arrangement as produced for a single trajectory by a standard production run.

I. Trajectory Data:

See Figures 58, 59 for World Map Projections and Figures 60, 61 for B-L Space Tracings.

The relative orbit period determines the nodal precession of the trajectory. For circular flight paths the period is a simple function of altitude (actually geocentric distance). At the low altitudes proposed for the UK-5, the periods range from about 1.56 to about 1.63 hours with corresponding precessions from 23.4 to 24.4 degrees approximately.

Whereas precession has an important effect on inclined circular or elliptical trajectories, it does not affect near equatorial circular flight paths to any significant degree, because no "skipping" over some higher intensity regions of trapped particles can occur. Simulating UK-5 mission for a total flight duration of 48 hours is therefore more than adequate to insure good coverage and sampling.

For reasons explained elsewhere, only two of the six trajectories generated were projected and traced: the 0°/450 km and the 3°/650 km. The world map projections for the 0° inclination are, of course, all falling on the equatorial grid line. The orbit numbers appear at the starting point of each of the 10 revolutions plotted. At 3° inclination, the starting points are the same but appear covered up by the extended width of the projections.

On the B-L graph, the five equatorial orbits plotted fall again onto each other, forming the depicted pattern and crossing the magnetic equator at the two positions shown. The 3° inclination orbits have moved down in B and up in L because of the altitude increase, but also display the spreading or displacement of the orbits because of precession effects.

II. Spectral Profiles:

For tabulated data consult Tables 21-38.

For plotted data consult Figures 22-39.

The integral spectra presented in this report are orbit integrated, statistically averaged trapped particle spectra, characteristic of the specific trajectory that produced them.

For a constant altitude, the orbit integrated fluxes of an inclined trajectory are somewhat greater than those of an equatorial flight path in the regions of space considered in this study. This is true for all energies.

While for the investigated UK-5 orbits the inclination dependence of the fluxes is very small (the inclination only varies by 3°), their variation with altitude is substantial. Thus, for both inclinations, the intensities rise rapidly when altitude is increased, namely by about an order of magnitude for every 100 kilometers. All particles are equally affected.

The spectral distributions of orbits with constant altitude are very similar for both inclinations, that is, shape and form of their spectral curves are almost identical. However, the spectral dependence on altitude is distinctly noticeable, especially for the low energy protons and the electrons, where a gradual softening may be observed when altitude is increased. Apparently, the high energy protons are not very sensitive to moderate altitude variations at these heights.

It is advisable to ignore the extrapolation from 4 Mev down to 3 Mev for the high energy proton fluxes (AP6). These values appear excessive and should be replaced with corresponding fluxes from the low energy model (AP5).

Noteworthy are the electron spectra obtained from the new environment model AE5, especially with regards to the steep fall-off to zero flux for E > 4 Mev. The apparent cutoff at about 4.5 Mev is probably due to the complete removal of the Starfish artificials, assuming no naturals exist with energies E > 4.5 Mev.

III. Peaks per Orbit:

Tabulated data is contained in Tables 39-56.

Plotted data is shown in Figures 40-57.

The absolute peaks presented in this report have been obtained for standard OFI (Orbital Flux Integration) energies: E > .1 Mev for low energy protons, E > 5. Mev for high energy protons, and E > .5 Mev for electrons.

Peaks vary with inclination and altitude. Even as small a change in inclination as that of the proposed UK-5 orbits (from 0° to 3°) produces a substantial difference between the extremes P_{max} and P_{min} of a peak curve. Figure 3 shows the ratio of P_{max} to P_{min} for the three types of particles and for all trajectories and inclinations. The inclination dependence appears to be strongest at the lower altitudes, especially for the low energy protons, but the fluxes there are very small. As altitude is increased, the extremes approach each other and the ratio shrinks. Obviously, the extremes of the equatorial orbits are not very sensitive to height. Although the cyclic daily peak variation is greatly enhanced for the inclined orbits, the data indicates that for a given altitude the mean value of the peaks is about the same for both inclinations.

Besides the apparent dampening effect on the oscillations of the peak curves, an upward change in height produces a rapid rise in the encountered peak fluxes. This aspect of the altitude dependence may be important because the average rate of intensity increase observed in the data is close to one order of magnitude per 100 kilometers, regardless of inclination. Specifically, the intensities rise by the factors listed below:

0° & 3°	Low En. Pr.	Hi En. Pr.	Electr.
450 km to 550 km	~16	~6	~10
550 km to 650 km	~ 6	~6	~10

A peculiar feature of the peak curves is the sharp drop in the flux values at certain altitudes and inclinations. As far as can be determined, the data that produces these dips appears valid in all cases. If it were not for the equatorial inclination, the assumption could be made that those particular orbits miss some of the higher intensity regions populated by the particles in question. But that seems unlikely in this case.

Evidently the peak contours follow a periodic pattern based on an approximately daily cycle of about 14 to 15 revolutions (See: "I. Trajectory Data" for more detail). Since the investigated trajectories are circular, no major changes are expected, assuming stable orbits and no atmospheric drag effects.

IV. Tabular Flux Maps:

Electron and high energy proton maps were constructed by calculating the instantaneous environment fluxes at lattice points 2 degrees in longitude and 1 degree in latitude, for a narrow band of ±5 degrees about the equator all around the globe, and for the three specified altitude levels. The same models of field and environments were used as in the orbital flux integrations (see Appendix A) and for the same epoch. Maps were produced for the following electron and proton energies:

$> E_e$ (Mev)	$> E_p$ (Mev)
.1	3.
.2	5.
.5	50.
	100.

Missing map segments were discarded because they did not contain any fluxes. The uncertainty factors of the models apply to the obtained intensities; they are about a factor of 2 for both types of particles.

It should be noted that although decay was applied to the electrons, a comparison with undecayed fluxes showed no effect at all, which implies that the mapped positions lie well beyond the limits of cutoff time, even at the epoch of the AE5 model (October 1967), for all energies considered.

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APPENDIX A

General Background Information

For the selected UK-5 trajectories, orbit tapes were generated with the standard integration stepsize of one minute, and for a sufficiently long flighttime, so as to insure an adequate sampling of the ambient environment. Considering the period of the UK-5 orbits, which determines the rate of flightpath precession, a 48-hour flight duration is sufficient to provide the required coverage; it would insure an ascending and a descending pass every 10 to 15 degrees apart in longitudinal displacement. (For more detail, see: Results, I. Trajectory Data.) The following circular trajectories were thus produced:

	h =	450 km	550 km	650 km
i=	0°	x	x	x
	3°	x	x	x

The orbits were subsequently converted from geocentric polar into magnetic B-L coordinates with McIlwain's INVAR program of 1965 (Hassit and McIlwain, 1967) and with the field routine ALLMAG by Stassinopoulos and Mead (1972), utilizing the IGRF(1965) geomagnetic field model by Cain and Cain (1971), calculated for the epoch 1970.0.

Orbital flux integrations were performed with Vette's current models of the environment, the new AE4-AE5 for outer and inner zone electrons, the AP6-AP7 for high energy protons, and the AP5 for low energy protons. All are static models which do not consider temporal variations; this includes the new electron models, at least as far as the present calculations are concerned. See text for further details on this matter.

The documents that describe these models are listed below:

Model	Reference
AE4	Singley and Vette, 1972
AE5	Teague and Vette, 1972
AP5	King, 1967
AP6	Lavine and Vette, 1969
AP7	Lavine and Vette, 1970

The results, relating to the omnidirectional, vehicle encountered, integral, trapped particle fluxes, are presented in graphical and tabular form with the following unit conventions:

1. Daily averages : total trajectory integrated flux averaged into particles/cm^2 day,
2. Average instantaneous : time integrated average, characteristic of the orbit, in particles/cm^2 sec,
3. Totals per orbit : non-averaged, single-orbit integrated flux in particles/cm^2 orbit, and
4. Peaks per orbit : highest orbit-encountered instantaneous flux in particles/cm^2 sec,

where one orbit = one revolution.

Please note: we wish to emphasize the fact that the data presented in this report are only approximations. We do not believe the results to be any better than a factor of 2 for the protons and a factor of 3 for the electrons. It is advisable to inform all potential users about this uncertainty in the data.

APPENDIX B

Description of Tables

a) The L-band Table:

The table contains 36 L-bands L_i of equal size, covering the range from L = 1.0 to L = 8.2 earth radii in constant increments of .2 earth radii. For the L-intervals determined in this way, orbital spectral functions

$$N(>E,E_N;\mathcal{L}_i) = \left[\sum_k J_k(>E;B)\right]_{\mathcal{L}_i} \Big/ \left[\sum_k J_k(>E_N;B)\right]_{\mathcal{L}_i} \qquad \begin{matrix} i=1,36 \\ \mathcal{L}_i:\ L_i < L \le L_{i+1} \end{matrix} \tag{1}$$

are obtained at nine arbitrary energy levels such that the integral spectrum is equal to 1 for $E = E_N$, where E_N was taken to be .1, 5., and .5 Mev for low energy protons, the high energy protons, and the electrons, respectively. The notation $\mathcal{L}_i$ is used to indicate the L-band from L_i to L_{i+1}, while J(>E;B) is the integral, omnidirectional flux yielded by the environment model used in the calculation. The spectral functions N are evaluated for the total flight time simulated in the study, where the summing index k selects all trajectory points lying in each $\mathcal{L}_i$.

The corresponding orbital distribution functions, representing fluxes above energy E_N, are given by

$$F(E;\mathcal{L}_i) = \Delta t \left[\sum_k J_k(>E;B)\right]_{\mathcal{L}_i} \tag{2}$$

where Δt is the constant time increment of orbit integration, whose standard value is 60 seconds. The distribution functions are fluxes accumulated in their respective L_i bands over the total flight period considered.

The orbital distribution functions are listed on the table at the bottom of each L-interval and are labeled "NORMFLUX". The nine integral energy levels selected for the low and high energy protons and for electrons are given below in units of "Mev" for all particles:

Protons		Electrons
Low	High	
.1*	3.	0
.5	5.	.5*
.9	10.	1.0
1.1	15.	1.5
1.5	20.	2.0
2.0	25.	2.5
2.5	30.	3.0
3.0	50.	4.0
3.5	100.	5.0

where the normalization energy is indicated by a star (*).

b) The Spectral Distribution and Exposure Index Table:

This table has three parts:

I. The spectrum $\Psi_j(\Delta E)$ given in % for energy intervals that correspond to the energy levels of the previously discussed table (L-bands), with two special columns showing the total orbit integrated flux for these energy intervals averaged into instantaneous I_j^s and daily I_j^D intensities

$$\Psi_j(\Delta E) = 100 \frac{I_j^D(\Delta E)}{F(>E_1)} \qquad j=1,9 \qquad (3)$$

where

$$F(>E_1) = C \sum_{k=1}^{k_0} J_k(>E_1;B,L)\Delta t \qquad (4)$$

$$I_j^D(\Delta E) = C \sum_{k=1}^{k_0} \Delta t \left\{ J_k(>E_j;B,L) - J_k(>E_{j+1};B,L) \right\} \qquad (5)$$

$$I_j^S(\Delta E) = I_j^D(\Delta E)/86400 \qquad (6)$$

$$C = \frac{24}{T} \quad , \quad T = k_0\Delta t \qquad i=1,36$$

and where k_0 is the upper limit of k. It is equal to the total number of time increments considered in the study.

II. The composite orbit spectrum for integral energies, giving the total vehicle encountered fluxes averaged into daily $S^D(>E_j)$ and instantaneous $S^S(>E_j)$ intensities for 15 discrete energy levels:

$$S^D(>E_j) = c\Delta t \sum_{m=0}^{T} J_m(>E_j) \qquad j=1,15 \qquad (7)$$

$$S^S(>E_j) = S^D(>E_j)/86400 \qquad (8)$$

where the summation is performed for the entire simulated mission duration T and includes all fluxes with energies greater than E_j.

III. The exposure index, given (for the normalization energy used in the L-band table) at nine successive intensity ranges R_n one order of magnitude apart, in terms of exposure duration $\tau(R_n)$, converted to hours, and total number of particles $\phi(>E_N;R_n)$ accumulated while in that intensity range. The notation R_n is used to indicate the intensity range from r_n to r_{n+1}:

$$\phi(>E_N;R_n) = \tau(R_n)\ \theta(>E_N;R_n) \qquad \begin{matrix} n=1,9 \\ R_n:\ r_n < r \le r_{n+1} \end{matrix} \tag{9}$$

$$\theta(>E_N;R_n) = \left[\sum_{\ell} J_{\ell}(>E_N;r)\right]_{R_n} \Big/ \zeta_n \tag{10}$$

$$\tau(R_n) = \Delta t\ \zeta_n \tag{11}$$

where ζ_n is the upper limit of ℓ in each R_n.

c) <u>The Table of Peaks</u>:

In this table, the absolute instantaneous peak flux encountered during each successive orbit (revolution) is listed for the indicated energy range. There are nine columns on this table. Column 1 is an orbit counting device, based on the period of the orbit when the trajectory lies in the equatorial plane and is circular, on the physical perigee in all elliptical cases, and on the equatorial crossing for circular inclined trajectories. Column 2 gives the peak flux. Columns 3, 4, and 5 indicate the spacecraft position in geocentric coordinates at which the peak was encountered, while columns 6, 7, and 8 determine respectively the time and the magnetic B-L coordinates for this event. It should be noted that all simulated flight paths for the purpose of orbital radiation studies start at $t_0 = 0$ hours. Finally, the last column indicates the total flux encountered during that particular orbit. It is advisable to disregard the last line on this table because many times that orbit is incomplete and the fluxes or positions shown do not correspond to true peaks.

d) The Exposure Analysis Summary:

The summary is contained in the left half of this last table of each set as a semi-independent and separate table. It indicates what percent of its total lifetime T the satellite spends in "flux free" regions of space, what percent of T in "high intensity" regions, and while in the latter, what percent of its total daily flux it accumulates.

In the context of this study, the term "flux free" applies to all regions of space where trapped particle fluxes are less than one proton or electron per square centimeter per second, having energies $E > .1$, $E > 5.$, and $E > .5$ Mev for the low energy protons, the high energy protons, and the electrons, respectively; by definition, this includes all regions outside the radiation belts. The concept of "trapped particle fluxes" is meant to include stably trapped, pseudo-trapped, and transient fluxes, as long as they are part of or contained in the environment models used and, in the case of transients or pseudos, their sources are considered powerful enough to supply them in a substantial and ever present way.

Similarly, we define as "high intensity" those regions of space where the instantaneous, integral, omnidirectional, trapped-particle flux is greater than 10^3 protons with energies $E > .1$ or $E > 5.$ Mev, and greater than 10^5 electrons with energies $E > .5$ Mev.

The values given in this table are statistical averages, obtained over extended intervals of mission time. However, they may vary significantly from one orbit to the next, when individual orbits are considered.

e) <u>The Time Account Breakdown</u>:

The breakdown of orbit time is given in the right half of the last table of every set, in the same semi-independent form as the summary. The table shows the total lifetime spent by the vehicle in the inner zone T^i ($1.0 < L \leq 2.5$) and the outer zone T^o ($2.5 < L \leq 7.0$) of the trapped particle radiation belt, and also the percent duration spent outside that region ($L > 7.0$), which is denoted by T^e (T-external), such that for any mission

$$T = T^i + T^o + T^e = 100\%.$$

The confinement of the outer zone within the boundary of the $L = 7.0$ volume is arbitrary and has no physical meaning. It is intended only as a simplification to facilitate our calculations. The region considered "external" ($L > 7.0$) in this study is still partially a domain of the outer zone, at least as far out as $L = 11.0$ earth radii, according to the latest electron models (Singley and Vette, 1972).

A last item on this table: the inner zone time T^i may be subdivided into two parts: the percentage of time spent inside the region ($1.0 < L \leq 1.1$) and inside the region ($1.1 < L \leq 2.5$).

APPENDIX C

Description of Plots

a) The Time and Flux Histogram:

This plot shows two curves superimposed on the same graph, namely, one each for the variables "time" and "flux". Both are given as functions of the parameter L (earth radii) within the range $1 \leq L \leq 7$, on a semi-log scale. The plot depicts: (1) by a plain curve the characteristic trajectory intensities as obtained from the orbital integration process in terms of averaged, instantaneous, integral particle fluxes above a given energy, over constant L-bands of .1 earth radius width, and (2) by a contour marked with symbols the percent of total lifetime (%T) spent in each L-interval. The logarithmic ordinate relates to the time-flux variables. The printed numbers are powers of 10 and pertain to the fluxes; the scale values for the time curve are given in the upper part of the ordinate label; from 10^{-3} to 10^{2} percent of T. The type of particles, their integral energy, and the units, are all given in the lower part of the label. The label on top of the graph lists some useful information about the trajectory.

b) The Spectral Profile:

A graphical presentation of the final spectral distribution, obtained from the orbital integration process. The plot is a semi-log graph, where the abscissa is a linear energy scale for integral particle energies

E_0 in Mev, and the ordinate is a logarithmic scale for the orbit integrated fluxes, given in daily averages for energies greater than E_0; the printed scale values are powers of 10.

c) Peaks per Orbit:

Here the absolute peak intensities, encountered per period, are plotted for the duration of the total flight time considered (1 period = 1 revolution = 1 orbit). The logarithmic ordinate relates to instantaneous particle fluxes of the environment at the indicated energy threshold, while the abscissa is a linear orbit enumeration.

d) World Map Grid Projection of Orbits:

The trajectory is plotted for several revolutions on a global map produced by a Miller Cylindrical Projection. The contours of the continents have been omitted for clarity. The positions of either equatorial crossing, of physical perigee, or of period commencement are indicated by numbers identifying the orbits shown in this graph. For all trajectories, the distance between successive sequential numbers is a measure of the orbit precession.

e) B-L Trace of Orbits:

This plot shows a trace of the trajectory in B-L space on a semi-log scale. Several orbits are usually depicted, each identified by its sequential number. The magnetic equator is entered on all plots. The logarithmic ordinate relates to the field strength B in gauss; the printed values are exponents of 10. L is given in earth radii on the linear abscissa.

LIST OF TABLES

LIST OF FIGURES

TABLE 1

UK-5

Field Model # 5
Epoch 1970.0

Minimum and Maximum Values of Magnetic Coordinates B and L Attainable by the Indicated Circular Trajectories

Alt.	Incl.		
450 km	0°	$.22725 \lesssim$ B (gauss) $\lesssim .33723$	$1.02 \lesssim$ L (e.r.) $\lesssim 1.20$
	3°	$.22269 \lesssim$ B (gauss) $\lesssim .34433$	$1.00 \lesssim$ L (e.r.) $\lesssim 1.23$
550 km	0°	$.21722 \lesssim$ B (gauss) $\lesssim .32124$	$1.03 \lesssim$ L (e.r.) $\lesssim 1.22$
	3°	$.21287 \lesssim$ B (gauss) $\lesssim .32787$	$1.02 \lesssim$ L (e.r.) $\lesssim 1.25$
650 km	0°	$.20781 \lesssim$ B (gauss) $\lesssim .30619$	$1.05 \lesssim$ L (e.r.) $\lesssim 1.24$
	3°	$.20381 \lesssim$ B (gauss) $\lesssim .31281$	$1.03 \lesssim$ L (e.r.) $\lesssim 1.26$

TABLE 2

Partial Listing of
Parameters, Constants, Variables, or Expressions
designated as "standard" in the text

1. Standard Tables: set of tables as listed in Figure 2, in the regular format described in Appendix B.

2. Standard Plots: set of plots as listed in Figure 2A, in the regular format described in Appendix C.

3. Standard Production Run: a production run processed on default options.

4. Standard Integration Stepsize: constant time increment of orbit integration: 1'(60").

5. Standard Energies: low energy protons E > .1 Mev, high energy protons E > 5. Mev, and electrons E > .5 Mev.

6. Standard Procedure: established procedure normally followed vs. procedure followed in special cases.

Table 3

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*****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/450  ** INCLINATION=  0DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TO8161 ** PERIOD=  1.560 **
*****************************************************************************************************************************
                          ***************************      ELECTRONS      ******************************
                          ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C			S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)		L - B A N D S
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.0	1.34E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	9.01E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	8.42E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	7.47E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	6.18E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	5.01E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	1.34E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.14E 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C			S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)		L - B A N D S
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C			S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)		L - B A N D S
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 4

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************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: F.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:           **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  3:  CAINFLANGEL IAP-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/550  ** INCLINATION=  0DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TOR161 ** PERIOD=  1.594 **
************************************************************************************************************************
                         **************************        ELECTRONS        ***************************
                         ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H		R A D I I)	L - B A N D S
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.0	2.01E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	7.85E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	6.68E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	5.12E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	3.37E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	2.15E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	2.37E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.51E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H		R A D I I)	L - B A N D S
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H		R A D I I)	L - B A N D S
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 5

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*******************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:               **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5   0/650   ** INCLINATION=  0DEG ** PERIGEE=  650KM ** APOGEE=   650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD=  1.629 **
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                         *************************          ELECTRONS          ****************************
                         ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.0	2.93E 00	4.35E 01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	6.86E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	5.33E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	3.53E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	1.85E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	9.32E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	4.20E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.13E 06	1.20E 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table -

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/450 ** INCLINATION= 3DEG ** PERIGEE= 450KM ** APOGEE= 450KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.560 **

ELECTRONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.0	1.52E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	8.60E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	7.83E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	6.67E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	5.11E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	3.81E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	8.21E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.31E 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.5*	*6.5-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 7

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*************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/550  ** INCLINATION=  3DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.594 **
*************************************************************************************************************************
                         *************************          ELECTRONS         ****************************
                         ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.0	2.19E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	7.60E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	6.33E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	4.69E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	2.93E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	1.78E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	1.84E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.62E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 8

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. O WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/650 ** INCLINATION= 3DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.629 **
****

*************************** ELECTRONS ***************************

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

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ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.0	3.14E 00	4.49E 01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	6.67E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	5.09E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	3.27E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	1.63E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	7.84E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	3.37E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.01E 06	1.64E 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 9

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. O WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/450 ** INCLINATION= 0DEG ** PERIGEE= 450KM ** APOGEE= 450KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.560 **

HIGH ENERGY PROTONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.00 MEV **

ENERGY LEVELS >(MEV)	L - B A N D S *1.0-1.2*	*1.2-1.4*	(M A G N E T I C *1.4-1.6*	*1.6-1.8*	S H E L L *1.8-2.0*	*2.0-2.2*	P A R A M E T E R *2.2-2.4*	I N *2.4-2.6*	E A R T H *2.6-2.8*	R A D I I) *2.8-3.0*	*3.0-3.2*	L - B A N D S *3.2-3.4*
3.00	3.60E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	7.71E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	7.43E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	7.26E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	7.24E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	7.20E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	7.16E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	6.66E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.81E 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S *3.4-3.6*	*3.6-3.8*	(M A G N E T I C *3.8-4.0*	*4.0-4.2*	S H E L L *4.2-4.4*	*4.4-4.6*	P A R A M E T E R *4.6-4.8*	I N *4.8-5.0*	E A R T H *5.0-5.2*	R A D I I) *5.2-5.4*	*5.4-5.6*	L - B A N D S *5.6-5.8*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S *5.8-6.0*	*6.0-6.2*	(M A G N E T I C *6.2-6.4*	*6.4-6.6*	S H E L L *6.6-6.8*	*6.8-7.0*	P A R A M E T E R *7.0-7.2*	I N *7.2-7.4*	E A R T H *7.4-7.6*	R A D I I) *7.6-7.8*	*7.8-8.0*	L - B A N D S *8.0-8.2*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 10

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/550 ** INCLINATION= 0DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TD9161 ** PERIOD= 1.594 **

HIGH ENERGY PROTONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.00 MEV **

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
3.00	8.44E 00	8.18E 01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	8.82E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	8.05E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	7.55E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	7.51E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	7.41E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	7.32E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	6.24E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	2.31E 05	8.23E 03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 11

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/650  ** INCLINATION=  0DEG ** PERIGEE=  650KM ** APOGEE=   650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD=  1.629 **
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HIGH ENERGY PROTONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.00 MEV **

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
3.00	4.27E 00	5.03E 01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	8.41E-01	7.96E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	7.26E-01	7.11E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	6.54E-01	6.34E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	6.49E-01	6.08E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	6.37E-01	5.47E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	6.25E-01	4.55E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	5.06E-01	1.74E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.28E 06	1.94E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 12

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/450 ** INCLINATION= 3DEG ** PERIGEE= 450KM ** APOGEE= 450KM ** B/L ORBIT TAPE : TD5247 ** PERIOD= 1.560 **

HIGH ENERGY PROTONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.00 MEV **

ENERGY LEVELS >(MEV)	L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS *1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
3.00	4.17E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	7.79E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	7.41E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	7.16E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	7.14E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	7.08E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	7.02E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	6.37E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.54E 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS *3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS *5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 13

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**********************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:               **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/550  ** INCLINATION=  3DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TO5247 ** PERIOD=  1.594 **
**********************************************************************************************************************
                         ***************************   HIGH ENERGY PROTONS   ***************************
                         ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.00 MEV **
                         ******************************************************************************
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ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
3.00	9.11E 00	6.90E 01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	8.63E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	7.80E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	7.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	7.21E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	7.11E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	7.01E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	5.90E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	2.78E 05	4.77E 03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 14

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**********************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:            **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/650  ** INCLINATION=  3DEG ** PERIGEE=  650KM ** APOGEE=   650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.629 **
**********************************************************************************************************
                    **************************   HIGH ENERGY PROTONS   ****************************
                    ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.00 MEV **
                    ******************************************************************************
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L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS

ENERGY LEVELS >(MEV)	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
3.00	4.60E 00	4.99E 01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	8.33E-01	7.98E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	7.12E-01	7.06E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	6.37E-01	6.26E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	6.32E-01	6.01E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	6.20E-01	5.43E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	6.09E-01	4.94E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	4.89E-01	1.86E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.50E 06	1.92E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS

ENERGY LEVELS >(MEV)	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS

ENERGY LEVELS >(MEV)	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 15

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****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/450  ** INCLINATION=  0DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TO8161 ** PERIOD=  1.560 **
****************************************************************************************************************************
                     ***************************   LOW  ENERGY PROTONS   ***************************
                     ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **
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ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H		R A D I I)	L - B A N D S
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.100	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	9.36E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	8.42E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	7.65E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	6.39E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	5.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	4.40E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	3.79E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	3.33E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.28E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H		R A D I I)	L - B A N D S
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H		R A D I I)	L - B A N D S
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 16

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*****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAINELANGEL 147-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/550  ** INCLINATION=  0DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TDR161 ** PERIOD=  1.594 **
*****************************************************************************************************************************
                         **************************  LOW  ENERGY PROTONS   ****************************
                         ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **
                         ********************************************************************************
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ENERGY	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
LEVELS >(MEV)	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.100	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	8.80E-01	8.56E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	7.26E-01	6.50E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	6.16E-01	4.93E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	4.61E-01	2.85E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	3.43E-01	1.46E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	2.72E-01	7.62E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	2.26E-01	4.06E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	1.95E-01	2.23E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.34E 06	6.47E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
LEVELS >(MEV)	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
LEVELS >(MEV)	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 17

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/650 ** INCLINATION= 0DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.629 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS

ENERGY LEVELS >(MEV)	1.0-1.2	1.2-1.4	1.4-1.6	1.6-1.8	1.8-2.0	2.0-2.2	2.2-2.4	2.4-2.6	2.6-2.8	2.8-3.0	3.0-3.2	3.2-3.4
.100	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	8.76E-01	8.44E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	7.58E-01	6.65E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	6.96E-01	5.45E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	5.93E-01	3.67E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	4.92E-01	2.24E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	4.15E-01	1.37E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	3.55E-01	8.38E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	3.07E-01	5.14E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.77E 06	6.15E 06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS

ENERGY LEVELS >(MEV)	3.4-3.6	3.6-3.8	3.8-4.0	4.0-4.2	4.2-4.4	4.4-4.6	4.6 4.8	4.8-5.0	5.0-5.2	5.2-5.4	5.4-5.6	5.6-5.8
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS

ENERGY LEVELS >(MEV)	5.8-6.0	6.0-6.2	6.2-6.4	6.4-6.6	6.6-6.8	6.8-7.0	7.0-7.2	7.2-7.4	7.4-7.6	7.6-7.8	7.8-8.0	8.0-8.2
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 18

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************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:               **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/450  ** INCLINATION=  30DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.560 **
************************************************************************************************************
                    ***************************  LOW  ENERGY PROTONS  ***************************
                    ** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **
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L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.100	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	9.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	8.17E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	7.32E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	5.99E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	4.81E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	3.99E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	3.41E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	2.98E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.71E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 19

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/550 ** INCLINATION= 3DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.594 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

ENERGY LEVELS >(MEV)	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)		L - B A N D S
.100	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	8.75E-01	8.59E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	7.17E-01	6.57E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	6.05E-01	5.04E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	4.47E-01	2.98E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	3.27E-01	1.57E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	2.55E-01	8.46E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	2.08E-01	4.65E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	1.77E-01	2.63E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.80E 06	3.18E 05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)		L - B A N D S
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)		L - B A N D S
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 20

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/650 ** INCLINATION= 3DEG ** PERIGEE= 550KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.629 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION - NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

ENERGY LEVELS >(MEV)	L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS											
	1.0-1.2	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.100	1.00E 00	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	8.73E-01	8.41E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	7.50E-01	6.62E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	6.84E-01	5.42E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	5.75E-01	3.64E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	4.73E-01	2.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	3.97E-01	1.37E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	3.38E-01	8.45E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	2.91E-01	5.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	5.89E 06	5.89E 06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS											
	3.4-3.6	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS											
	5.8-6.0	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 21

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************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.J.STASSINOPOULOS67,VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/450  ** INCLINATION=  0DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD8161 ** PERIOD=  1.560 **
************************************************************************************************************************
                              ************        ELECTRONS        ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	6.103E-02	5.273E 03	25.134
.500-1.00	1.792E-02	1.549E 03	7.381
1.00-1.50	1.074E-02	9.280E 02	4.423
1.50-2.00	1.727E-02	1.492E 03	7.112
2.00-2.50	2.351E-02	2.032E 03	9.684
2.50-3.00	2.124E-02	1.835E 03	8.748
3.00-4.00	6.673E-02	5.765E 03	27.479
4.00-5.00	2.438E-02	2.106E 03	10.038
5.00-OVER	0.0	0.0	0.0
TOTAL	2.428E-01	2.098E 04	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.425E-01	2.098E 04
.250	2.026E-01	1.752E 04
.500	1.318E-01	1.571E 04
.750	1.700E-01	1.469E 04
1.00	1.639E-01	1.416E 04
1.25	1.587E-01	1.371E 04
1.50	1.531E-01	1.323E 04
1.75	1.457E-01	1.259E 04
2.00	1.359E-01	1.174E 04
2.50	1.123E-01	9.707E 03
3.00	9.110E-02	7.871E 03
3.50	6.387E-02	5.519E 03
4.00	2.436E-02	2.106E 03
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX-ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	44.700	0.0
1.E0-1.E1	3.300	3.141E 04
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	3.141E 04

Table 22

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*****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:             **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAINELANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/550   ** INCLINATION=  0DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TOB161 ** PERIOD=  1.594 **
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                                        ************       ELECTRONS       ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.044E 00	1.766E 05	50.142
.500-1.00	4.378E-01	3.782E 04	10.737
1.00-1.50	2.379E-01	2.055E 04	5.833
1.50-2.00	3.167E-01	2.737E 04	7.769
2.00-2.50	3.558E-01	3.074E 04	8.726
2.50-3.00	2.473E-01	2.136E 04	6.064
3.00-4.00	3.892E-01	3.362E 04	9.545
4.00-5.00	4.823E-02	4.167E 03	1.183
5.00-OVER	0.0	0.0	0.0
TOTAL	4.077E 00	3.523E 05	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	4.077E 00	3.523E 05
.250	2.652E 00	2.291E 05
.500	2.033E 00	1.756E 05
.750	1.734E 00	1.498E 05
1.00	1.595E 00	1.378E 05
1.25	1.477E 00	1.276E 05
1.50	1.357E 00	1.173E 05
1.75	1.216E 00	1.051E 05
2.00	1.040E 00	8.989E 04
2.50	6.847E-01	5.915E 04
3.00	4.374E-01	3.779E 04
3.50	1.994E-01	1.723E 04
4.00	4.823E-02	4.167E 03
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX-ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	43.000	0.0
1.E0-1.E1	1.933	3.409E 04
1.E1-1.E2	4.067	3.163E 05
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	-0.0
1.E7-OVER	0.0	0.0
TOTAL	49.000	3.513E 05

Table 23

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*************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/650   ** INCLINATION=  0DEG ** PERIGEE=  650KM ** APOGEE=   650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD=  1.629 **
*************************************************************************************************************************
                                   ************       ELECTRONS       ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.796E 01	3.280E 06	67.637
.500-1.00	5.751E 00	4.969E 05	10.247
1.00-1.50	2.764E 00	2.388E 05	4.924
1.50-2.00	3.254E 00	2.812E 05	5.798
2.00-2.50	3.041E 00	2.627E 05	5.418
2.50-3.00	1.667E 00	1.440E 05	2.970
3.00-4.00	1.611E 00	1.392E 05	2.871
4.00-5.00	7.593E-02	6.560E 03	0.135
5.00-OVER	0.0	0.0	0.0
TOTAL	5.612E 01	4.849E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	5.612E 01	4.849E 06
.250	2.821E 01	2.438E 06
.500	1.816E 01	1.569E 06
.750	1.413E 01	1.221E 06
1.00	1.241E 01	1.072E 06
1.25	1.101E 01	9.513E 05
1.50	9.648E 00	8.336E 05
1.75	8.143E 00	7.035E 05
2.00	6.394E 00	5.525E 05
2.50	3.354E 00	2.897E 05
3.00	1.687E 00	1.458E 05
3.50	4.793E-01	4.141E 04
4.00	7.593E-02	6.560E 03
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX-ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	39.000	0.0
1.E0-1.E1	2.133	3.134E 04
1.E1-1.E2	2.900	5.175E 05
1.E2-1.E3	3.967	2.590E 06
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	3.139E 06

Table 24

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***************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.J.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:            **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAINELANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/450  ** INCLINATION=  3DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.560 **
***************************************************************************************************************
                                   ************        ELECTRONS        ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	1.298E-01	1.122E 04	34.226
.500-1.00	3.485E-02	3.011E 03	9.188
1.00-1.50	1.922E-02	1.661E 03	5.068
1.50-2.00	2.896E-02	2.502E 03	7.634
2.00-2.50	3.896E-02	3.366E 03	10.272
2.50-3.00	3.246E-02	2.805E 03	8.559
3.00-4.00	7.455E-02	6.442E 03	19.656
4.00-5.00	2.047E-02	1.769E 03	5.398
5.00-OVER	0.0	0.0	0.0
TOTAL	3.793E-01	3.277E 04	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.793E-01	3.277E 04
.250	2.934E-01	2.535E 04
.500	2.495E-01	2.156E 04
.750	2.252E-01	1.946E 04
1.00	2.146E-01	1.854E 04
1.25	2.053E-01	1.773E 04
1.50	1.954E-01	1.688E 04
1.75	1.828E-01	1.580E 04
2.00	1.665E-01	1.438E 04
2.50	1.275E-01	1.102E 04
3.00	9.503E-02	8.211E 03
3.50	5.968E-02	5.156E 03
4.00	2.047E-02	1.769E 03
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX-ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	45.233	0.0
1.E0-1.E1	2.717	4.124E 04
1.E1-1.E2	0.050	1.870E 03
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	4.311E 04

Table 25

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/550 ** INCLINATION= 3DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TC5247 ** PERIOD= 1.594 **
****

************ ELECTRONS ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.182E 00	2.749E 05	54.337
.500-1.00	6.418E-01	5.545E 04	10.960
1.00-1.50	3.408E-01	2.944E 04	5.820
1.50-2.00	4.383E-01	3.787E 04	7.484
2.00-2.50	4.692E-01	4.054E 04	8.012
2.50-3.00	3.068E-01	2.651E 04	5.240
3.00-4.00	4.279E-01	3.697E 04	7.307
4.00-5.00	4.925E-02	4.255E 03	0.841
5.00-OVER	0.0	0.0	0.0
TOTAL	5.856E 00	5.059E 05	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	5.856E 00	5.059E 05
.250	3.610E 00	3.119E 05
.500	2.674E 00	2.310E 05
.750	2.233E 00	1.929E 05
1.00	2.032E 00	1.756E 05
1.25	1.863E 00	1.609E 05
1.50	1.591E 00	1.461E 05
1.75	1.495E 00	1.292E 05
2.00	1.253E 00	1.083E 05
2.50	7.839E-01	6.773E 04
3.00	4.771E-01	4.122E 04
3.50	2.027E-01	1.752E 04
4.00	4.925E-02	4.255E 03
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX-ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	42.050	0.0
1.E0-1.E1	2.417	4.309E 04
1.E1-1.E2	3.533	4.190E 05
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	4.621E 05

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*****************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/650   ** INCLINATION=  3DEG ** PERIGEE=  650KM ** APOGEE=  650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.629 **
*****************************************************************************************************************
                                   ************      ELECTRONS      ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	5.392E 01	4.659E 06	69.810
.500-1.00	7.824E 00	6.760E 05	10.129
1.00-1.50	3.678E 00	3.178E 05	4.762
1.50-2.00	4.227E 00	3.652E 05	5.472
2.00-2.50	3.799E 00	3.282E 05	4.918
2.50-3.00	1.970E 00	1.702E 05	2.551
3.00-4.00	1.743E 00	1.506E 05	2.257
4.00-5.00	7.830E-02	6.765E 03	0.101
5.00-OVER	0.0	0.0	0.0
TOTAL	7.724E 01	6.674E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	7.724E 01	6.674E 06
.250	3.736E 01	3.228E 06
.500	2.332E 01	2.015E 06
.750	1.781E 01	1.539E 06
1.00	1.550E 01	1.339E 06
1.25	1.362E 01	1.177E 06
1.50	1.182E 01	1.021E 06
1.75	9.847E 00	8.508E 05
2.00	7.591E 00	6.559E 05
2.50	3.792E 00	3.276E 05
3.00	1.822E 00	1.574E 05
3.50	4.865E-01	4.203E 04
4.00	7.830E-02	6.765E 03
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX-ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	39.367	0.0
1.E0-1.E1	1.717	2.746E 04
1.E1-1.E2	3.483	5.724E 05
1.E2-1.E3	3.433	3.430E 06
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	4.030E 06

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Table 27

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*****************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/450 ** INCLINATION= ODEG ** PERIGEE= 450KM ** APOGEE= 450KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.560 **
*****************************************************************************************************************
                              ************   HIGH ENERGY PROTONS   ************
                              ***********************************************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
3.00-5.00	5.738E-01	4.958E 04	72.248
5.00-10.0	5.053E-02	4.365E 03	6.361
10.0-15.0	6.013E-03	5.195E 02	0.757
15.0-20.0	3.957E-03	3.419E 02	0.498
20.0-25.0	3.424E-04	2.958E 01	0.043
25.0-30.0	8.506E-04	7.350E 01	0.107
30.0-50.0	8.434E-04	7.287E 01	0.106
50.0-100.	1.108E-02	9.577E 02	1.396
100.-OVER	1.468E-01	1.268E 04	18.483
TOTAL	7.943E-01	6.862E 04	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
3.00	7.943E-01	6.862E 04
4.00	2.794E-01	2.414E 04
5.00	2.204E-01	1.904E 04
7.00	1.739E-01	1.502E 04
10.0	1.699E-01	1.468E 04
12.0	1.657E-01	1.432E 04
15.0	1.639E-01	1.416E 04
18.0	1.612E-01	1.392E 04
20.0	1.599E-01	1.382E 04
25.0	1.596E-01	1.379E 04
30.0	1.387E-01	1.371E 04
50.0	1.579E-01	1.364E 04
60.0	1.546E-01	1.336E 04
70.0	1.306E-01	1.301E 04
100.	1.463E-01	1.268E 04

* EXPOSURE INDEX-ENERGY >5.00MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	42.283	0.0
1.E0-1.E1	5.717	3.809E 04
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	3.809E 04

Table 28

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/550 ** INCLINATION= 0DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.594 **

HIGH ENERGY PROTONS

****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
3.00-5.00	1.379E 01	1.191E 06	90.884
5.00-10.0	2.054E-01	1.775E 04	1.354
10.0-15.0	1.022E-01	8.827E 03	0.674
15.0-20.0	6.780E-02	5.858E 03	0.447
20.0-25.0	5.200E-03	4.493E 02	0.034
25.0-30.0	1.284E-02	1.110E 03	0.085
30.0-50.0	1.262E-02	1.091E 03	0.083
50.0-100.	1.433E-01	1.238E 04	0.945
100.-OVER	8.334E-01	7.201E 04	5.494
TOTAL	1.517E 01	1.311E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
3.00	1.517E 01	1.311E 06
4.00	1.911E 00	1.651E 05
5.00	1.383E 00	1.195E 05
7.00	1.252E 00	1.082E 05
10.0	1.177E 00	1.017E 05
12.0	1.108E 00	9.573E 04
15.0	1.075E 00	9.290E 04
18.0	1.028E 00	8.881E 04
20.0	1.007E 00	8.704E 04
25.0	1.002E 00	8.659E 04
30.0	9.894E-01	8.548E 04
50.0	9.767E-01	8.439E 04
60.0	9.283E-01	8.021E 04
70.0	8.784E-01	7.589E 04
100.	8.334E-01	7.201E 04

* EXPOSURE INDEX-ENERGY >5.00MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	38.233	0.0
1.E0-1.E1	7.117	9.518E 04
1.E1-1.E2	2.650	1.438E 05
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	2.389E 05

Table 29

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*****************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOSEP.VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  3:  CAINELANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/650  ** INCLINATION=  0DEG ** PERIGEE=  650KM ** APOGEE=   650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.629 **
*****************************************************************************************************************
                                   ************   HIGH ENERGY PROTONS   ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
3.00-5.00	7.963E 01	6.880E 06	90.309
5.00-10.0	1.411E 00	1.219E 05	1.600
10.0-15.0	9.477E-01	8.188E 04	1.075
15.0-20.0	6.231E-01	5.384E 04	0.707
20.0-25.0	6.564E-02	5.672E 03	0.074
25.0-30.0	1.561E-01	1.348E 04	0.177
30.0-50.0	1.457E-01	1.259E 04	0.165
50.0-100.	1.246E 00	1.076E 05	1.413
100.-OVER	3.950E 00	3.413E 05	4.480
TOTAL	8.817E 01	7.618E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
3.00	8.817E 01	7.618E 06
4.00	1.277E 01	1.104E 06
5.00	8.545E 00	7.383E 05
7.00	7.856E 00	6.788E 05
10.0	7.134E 00	6.164E 05
12.0	6.485E 00	5.603E 05
15.0	6.186E 00	5.345E 05
18.0	5.764E 00	4.980E 05
20.0	5.563E 00	4.806E 05
25.0	5.497E 00	4.750E 05
30.0	5.341E 00	4.615E 05
50.0	5.195E 00	4.489E 05
60.0	4.689E 00	4.051E 05
70.0	4.285E 00	3.702E 05
100.	3.950E 00	3.413E 05

* EXPOSURE INDEX-ENERGY >5.00MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	33.550	0.0
1.E0-1.E1	5.783	5.710E 04
1.E1-1.E2	8.050	1.167E 06
1.E2-1.E3	0.617	2.526E 05
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	1.477E 06

Table 30

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****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/450  ** INCLINATION=  3DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.560 **
****************************************************************************************************************************
                              ************   HIGH ENERGY PROTONS   ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
3.00-5.00	8.325E-01	7.192E 04	76.025
5.00-10.0	5.808E-02	5.018E 03	5.304
10.0-15.0	9.828E-03	8.491E 02	0.898
15.0-20.0	6.740E-03	5.824E 02	0.616
20.0-25.0	5.492E-04	4.745E 01	0.050
25.0-30.0	1.363E-03	1.178E 02	0.125
30.0-50.0	1.697E-03	1.466E 02	0.155
50.0-100.	1.698E-02	1.467E 03	1.551
100.-OVER	1.673E-01	1.445E 04	15.278
TOTAL	1.095E 00	9.461E 04	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
3.00	1.095E 00	9.461E 04
4.00	3.369E-01	2.910E 04
5.00	2.625E-01	2.268E 04
7.00	2.115E-01	1.827E 04
10.0	2.045E-01	1.766E 04
12.0	1.978E-01	1.709E 04
15.0	1.946E-01	1.682E 04
18.0	1.900E-01	1.641E 04
20.0	1.879E-01	1.623E 04
25.0	1.873E-01	1.619E 04
30.0	1.860E-01	1.607E 04
50.0	1.843E-01	1.592E 04
60.0	1.790E-01	1.547E 04
70.0	1.730E-01	1.494E 04
100.	1.673E-01	1.445E 04

* EXPOSURE INDEX-ENERGY >5.00MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	42.633	0.0
1.E0-1.E1	5.367	4.536E 04
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	4.536E 04

Table 31

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/550 ** INCLINATION= 3DEG ** PERIGEE= 350KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.594 **

HIGH ENERGY PROTONS

****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
3.00-5.00	1.492E 01	1.289E 06	90.123
5.00-10.0	2.478E-01	2.141E 04	1.497
10.0-15.0	1.340E-01	1.158E 04	0.809
15.0-20.0	8.782E-02	7.588E 03	0.530
20.0-25.0	6.580E-03	5.685E 02	0.040
25.0-30.0	1.624E-02	1.403E 03	0.098
30.0-50.0	1.594E-02	1.377E 03	0.096
50.0-100.	1.783E-01	1.541E 04	1.077
100.-OVER	9.487E-01	8.197E 04	5.730
TOTAL	1.656E 01	1.431E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
3.00	1.656E 01	1.431E 06
4.00	2.259E 00	1.952E 05
5.00	1.635E 00	1.413E 05
7.00	1.487E 00	1.284E 05
10.0	1.388E 00	1.199E 05
12.0	1.296E 00	1.120E 05
15.0	1.254E 00	1.083E 05
18.0	1.192E 00	1.030E 05
20.0	1.166E 00	1.007E 05
25.0	1.159E 00	1.002E 05
30.0	1.143E 00	9.875E 04
50.0	1.127E 00	9.737E 04
60.0	1.056E 00	9.211E 04
70.0	1.004E 00	8.676E 04
100.	9.487E-01	8.197E 04

* EXPOSURE INDEX-ENERGY >5.00MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	38.333	0.0
1.E0-1.E1	6.783	7.789E 04
1.E1-1.E2	2.883	2.047E 05
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	2.826E 05

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. O WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/650 ** INCLINATION= 3DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.629 **

************ HIGH ENERGY PROTONS ************

****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
3.00-5.00	8.546E 01	7.384E 06	89.741
5.00-10.0	1.675E 00	1.447E 05	1.758
10.0-15.0	1.144E 00	9.884E 04	1.201
15.0-20.0	7.370E-01	6.367E 04	0.774
20.0-25.0	7.055E-02	6.096E 03	0.074
25.0-30.0	1.674E-01	1.446E 04	0.176
30.0-50.0	1.562E-01	1.350E 04	0.164
50.0-100.	1.378E 00	1.191E 05	1.447
100.-OVER	4.441E 00	3.837E 05	4.664
TOTAL	9.523E 01	8.228E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
3.00	9.523E 01	8.228E 06
4.00	1.439E 01	1.244E 06
5.00	9.769E 00	8.441E 05
7.00	8.975E 00	7.755E 05
10.0	8.095E 00	6.994E 05
12.0	7.310E 00	6.316E 05
15.0	6.951E 00	6.006E 05
18.0	6.446E 00	5.570E 05
20.0	6.214E 00	5.369E 05
25.0	6.143E 00	5.308E 05
30.0	5.976E 00	5.163E 05
50.0	5.820E 00	5.028E 05
60.0	5.274E 00	4.557E 05
70.0	4.820E 00	4.164E 05
100.	4.441E 00	3.837E 05

* EXPOSURE INDEX-ENERGY >5.00MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	33.700	0.0
1.E0-1.E1	5.950	6.079E 04
1.E1-1.E2	7.217	1.030E 06
1.E2-1.E3	1.133	5.977E 05
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	1.688E 06

Table 33

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/450 ** INCLINATION= 0DEG ** PERIGEE= 450KM ** APOGEE= 450KM ** B/L ORBIT TAPE : TD8161 ** PERIOD= 1.560 **

************ LOW ENERGY PROTONS ************

****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	4.719E-02	4.077E 03	6.392
.500-.900	6.915E-02	5.975E 03	9.367
.900-1.10	5.708E-02	4.931E 03	7.731
1.10-1.50	9.289E-02	8.026E 03	12.582
1.50-2.00	8.570E-02	7.405E 03	11.608
2.00-2.50	6.176E-02	5.336E 03	8.365
2.50-3.00	4.515E-02	3.901E 03	6.116
3.00-3.50	3.356E-02	2.899E 03	4.545
3.50-OVER	2.458E-01	2.124E 04	33.294
TOTAL	7.383E-01	6.379E 04	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	7.383E-01	6.379E 04
.300	7.142E-01	6.171E 04
.500	6.911E-01	5.971E 04
.700	6.687E-01	5.777E 04
.900	6.220E-01	5.374E 04
1.10	5.649E-01	4.881E 04
1.30	5.152E-01	4.452E 04
1.50	4.720E-01	4.078E 04
1.75	4.256E-01	3.677E 04
2.00	3.863E-01	3.337E 04
2.25	3.529E-01	3.049E 04
2.50	3.245E-01	2.804E 04
2.75	3.002E-01	2.594E 04
3.00	2.794E-01	2.414E 04
3.50	2.456E-01	2.124E 04

* EXPOSURE INDEX-ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	42.317	0.0
1.E0-1.E1	4.367	5.491E 04
1.E1-1.E2	1.317	7.267E 04
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	1.276E 05

Table 34

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*********************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP5, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAINELANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/550 .** INCLINATION= 0DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.594 **
*********************************************************************************************************************************
                                   ************  LOW ENERGY PROTONS  ************
                                   **********************************************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	1.474E 00	1.273E 05	12.789
.500-.900	1.966E 00	1.699E 05	17.065
.900-1.10	1.443E 00	1.246E 05	12.520
1.10-1.50	1.983E 00	1.714E 05	17.212
1.50-2.00	1.439E 00	1.243E 05	12.489
2.00-2.50	8.164E-01	7.054E 04	7.085
2.50-3.00	4.906E-01	4.239E 04	4.258
3.00-3.50	3.137E-01	2.711E 04	2.723
3.50-OVER	1.597E 00	1.380E 05	13.860
TOTAL	1.152E 01	9.956E 05	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	1.152E 01	9.956E 05
.300	1.076E 01	9.296E 05
.500	1.005E 01	8.683E 05
.700	9.391E 00	8.114E 05
.900	8.083E 00	6.984E 05
1.10	6.640E 00	5.737E 05
1.30	5.525E 00	4.773E 05
1.50	4.657E 00	4.024E 05
1.75	3.832E 00	3.311E 05
2.00	3.218E 00	2.780E 05
2.25	2.755E 00	2.380E 05
2.50	2.402E 00	2.075E 05
2.75	2.127E 00	1.838E 05
3.00	1.911E 00	1.651E 05
3.50	1.597E 00	1.380E 05

* EXPOSURE INDEX-ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	38.150	0.0
1.E0-1.E1	3.217	6.846E 04
1.E1-1.E2	4.600	5.375E 05
1.E2-1.E3	2.033	1.385E 06
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	1.991E 06

Table 35

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/650 ** INCLINATION= 0DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.629 **

************ LOW ENERGY PROTONS ************

****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	9.000E 00	7.776E 05	14.239
.500-.900	9.606E 00	8.299E 05	15.197
.900-1.10	5.975E 00	5.162E 05	9.453
1.10-1.50	9.217E 00	7.963E 05	14.582
1.50-2.00	7.866E 00	6.796E 05	12.445
2.00-2.50	5.224E 00	4.514E 05	8.266
2.50-3.00	3.546E 00	3.063E 05	5.610
3.00-3.50	2.466E 00	2.131E 05	3.902
3.50-OVER	1.031E 01	8.906E 05	16.308
TOTAL	6.321E 01	5.461E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	6.321E 01	5.461E 06
.300	5.853E 01	5.057E 06
.500	5.421E 01	4.684E 06
.700	5.022E 01	4.339E 06
.900	4.460E 01	3.854E 06
1.10	3.863E 01	3.337E 06
1.30	3.362E 01	2.905E 06
1.50	2.941E 01	2.541E 06
1.75	2.507E 01	2.166E 06
2.00	2.154E 01	1.861E 06
2.25	1.867E 01	1.613E 06
2.50	1.632E 01	1.410E 06
2.75	1.438E 01	1.243E 06
3.00	1.277E 01	1.104E 06
3.50	1.031E 01	8.906E 05

* EXPOSURE INDEX-ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	33.533	0.0
1.E0-1.E1	2.250	3.803E 04
1.E1-1.E2	6.400	1.044E 06
1.E2-1.E3	5.183	7.271E 06
1.E3-1.E4	0.633	2.569E 06
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	1.092E 07

Table 36

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*****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:               **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/450  ** INCLINATION=  3DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** S/L ORBIT TAPE : TD5247 ** PERIOD=  1.560 **
*****************************************************************************************************************************
                                  ************   LOW  ENERGY PROTONS   ************
                                  **********************************************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******				*** COMPOSITE ORBIT SPECTRUM ***			* EXPOSURE INDEX-ENERGY >.100MEV *		
ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT	ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY	INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
.100-.500	7.572E-02	6.542E 03	7.664	.100	9.380E-01	8.537E 04	ZERO FLUX	42.633	0.0
.500-.900	1.056E-01	9.120E 03	10.683	.300	9.491E-01	8.200E 04	1.E0-1.E1	4.133	6.087E 04
.900-1.10	8.344E-02	7.209E 03	8.445	.500	9.123E-01	7.882E 04	1.E1-1.E2	1.233	1.099E 05
1.10-1.50	1.316E-01	1.137E 04	13.317	.700	8.770E-01	7.578E 04	1.E2-1.E3	0.0	0.0
1.50-2.00	1.164E-01	1.006E 04	11.784	.900	8.066E-01	6.970E 04	1.E3-1.E4	0.0	0.0
2.00-2.50	8.085E-02	6.986E 03	8.183	1.10	7.233E-01	6.250E 04	1.E4-1.E5	0.0	0.0
2.50-3.00	5.761E-02	4.978E 03	5.831	1.30	6.523E-01	5.636E 04	1.E5-1.E6	0.0	0.0
3.00-3.50	4.254E-02	3.676E 03	4.306	1.50	5.918E-01	5.113E 04	1.E6-1.E7	0.0	0.0
3.50-OVER	2.943E-01	2.543E 04	29.788	1.75	5.381E-01	4.563E 04	1.E7-OVER	0.0	0.0
				2.00	4.753E-01	4.107E 04			
TOTAL	9.880E-01	8.537E 04	100.000	2.25	4.314E-01	3.727E 04	TOTAL	48.000	1.707E 05
				2.50	3.945E-01	3.408E 04			
				2.75	3.633E-01	3.139E 04			
				3.00	3.369E-01	2.910E 04			
				3.50	2.943E-01	2.543E 04			

Table 37

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******************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/550  ** INCLINATION=  3DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.594 **
******************************************************************************************************************************
                                   ************   LOW  ENERGY PROTONS   ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	1.564E 00	1.351E 05	12.742
.500-.900	2.020E 00	1.745E 05	16.454
.900-1.10	1.448E 00	1.251E 05	11.794
1.10-1.50	2.027E 00	1.751E 05	16.510
1.50-2.00	1.514E 00	1.308E 05	12.335
2.00-2.50	8.902E-01	7.691E 04	7.252
2.50-3.00	5.537E-01	4.784E 04	4.511
3.00-3.50	3.660E-01	3.162E 04	2.982
3.50-OVER	1.893E 00	1.635E 05	15.421
TOTAL	1.227E 01	1.061E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	1.227E 01	1.061E 06
.300	1.146E 01	9.905E 05
.500	1.071E 01	9.254E 05
.700	1.001E 01	8.650E 05
.900	8.691E 00	7.509E 05
1.10	7.243E 00	6.258E 05
1.30	6.110E 00	5.279E 05
1.50	5.217E 00	4.507E 05
1.75	4.355E 00	3.763E 05
2.00	3.703E 00	3.199E 05
2.25	3.202E 00	2.767E 05
2.50	2.813E 00	2.430E 05
2.75	2.505E 00	2.164E 05
3.00	2.259E 00	1.952E 05
3.50	1.893E 00	1.635E 05

* EXPOSURE INDEX-ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	38.117	0.0
1.E0-1.E1	2.917	4.825E 04
1.E1-1.E2	5.000	6.326E 05
1.E2-1.E3	1.967	1.440E 06
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	2.121E 06

Table 38

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*****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/650  ** INCLINATION=  3DEG ** PERIGEE=  650KM ** APOGEE=   650KM ** B/L ORBIT TAPE: TO5247 ** PERIOD= 1.629 **
*****************************************************************************************************************************
                                   ************  LOW ENERGY PROTONS  ************
                                   **********************************************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	9.744E 00	8.419E 05	14.298
.500-.900	1.032E 01	8.918E 05	15.146
.900-1.10	6.334E 00	5.472E 05	9.294
1.10-1.50	9.731E 00	8.408E 05	14.279
1.50-2.00	8.293E 00	7.165E 05	12.169
2.00-2.50	5.535E 00	4.782E 05	8.122
2.50-3.00	3.795E 00	3.279E 05	5.569
3.00-3.50	2.678E 00	2.314E 05	3.930
3.50-OVER	1.172E 01	1.012E 06	17.192
TOTAL	6.815E 01	5.888E 06	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	6.815E 01	5.888E 06
.300	6.308E 01	5.450E 06
.500	5.840E 01	5.046E 06
.700	5.409E 01	4.673E 06
.900	4.808E 01	4.154E 06
1.10	4.175E 01	3.607E 06
1.30	3.646E 01	3.150E 06
1.50	3.202E 01	2.766E 06
1.75	2.744E 01	2.371E 06
2.00	2.372E 01	2.050E 06
2.25	2.069E 01	1.787E 06
2.50	1.819E 01	1.572E 06
2.75	1.612E 01	1.393E 06
3.00	1.439E 01	1.244E 06
3.50	1.172E 01	1.012E 06

* EXPOSURE INDEX-ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	33.600	0.0
1.E0-1.E1	2.500	4.203E 04
1.E1-1.E2	5.167	7.970E 05
1.E2-1.E3	6.033	7.708E 06
1.E3-1.E4	0.700	3.230E 06
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	48.000	1.178E 07

Table 39

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/450 ** INCLINATION= 0DEG ** PERIGEE= 450KM ** APOGEE= 450KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.560 **

ELECTRONS

** TABLE OF PEAK AND TOTAL FLUXES FEF PERIOD - ENERGY >.500 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITJDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	3.817E 00	-31.884	-0.00	443.13	0.31667	0.22836	1.12	1.128E 03
2	3.402E 00	-31.193	-0.00	430.91	1.98333	0.22866	1.11	1.022E 03
3	3.178E 00	-30.472	-0.00	434.95	3.65000	0.22895	1.11	9.556E 02
4	2.979E 00	-33.341	-0.00	432.30	5.30000	0.22987	1.12	8.273E 02
5	2.880E 00	-32.579	-0.00	430.76	6.96667	0.22982	1.12	8.172E 02
6	2.848E 00	-31.812	-0.00	430.97	8.63333	0.22961	1.11	8.066E 02
7	3.085E 00	-31.053	-0.00	432.95	10.30000	0.22925	1.11	8.546E 02
8	3.249E 00	-30.315	-0.00	435.36	11.96667	0.22879	1.11	9.861E 02
9	3.558E 00	-29.605	-0.00	440.50	13.63333	0.22828	1.11	1.108E 03
10	4.020E 00	-32.528	-0.00	444.02	15.28333	0.22843	1.12	1.202E 03
11	4.326E 00	-31.873	-0.00	447.43	16.95000	0.22791	1.12	1.354E 03
12	4.304E 00	-31.239	-0.00	440.57	18.61664	0.22756	1.12	1.419E 03
13	4.448E 00	-34.210	0.00	440.03	20.26666	0.22835	1.12	6.889E 02
14	4.468E 00	-30.614	0.00	440.91	20.28331	0.22743	1.12	6.826E 02
15	4.409E 00	-33.582	0.00	443.75	21.93330	0.22826	1.12	1.302E 03
16	4.103E 00	-32.939	0.00	443.93	23.59999	0.22835	1.12	1.220E 03
17	3.754E 00	-32.271	0.00	442.03	25.26666	0.22857	1.12	1.034E 03
18	3.384E 00	-31.572	0.00	437.31	26.93330	0.22885	1.12	1.000E 03
19	3.193E 00	-30.843	0.00	434.05	28.59999	0.22910	1.11	9.190E 02
20	2.970E 00	-30.090	-0.00	431.50	30.26666	0.22927	1.11	8.110E 02
21	2.771E 00	-32.943	-0.00	430.64	31.91664	0.22993	1.12	7.971E 02
22	2.978E 00	-32.177	-0.00	431.33	33.58331	0.22965	1.12	8.336E 02
23	3.074E 00	-31.422	-0.00	433.75	35.25000	0.22924	1.11	8.737E 02
24	3.267E 00	-30.691	-0.00	437.41	36.91664	0.22873	1.11	1.023E 03
25	3.606E 00	-33.595	-0.00	440.98	38.56667	0.22906	1.12	1.130E 03
26	3.901E 00	-29.318	-0.00	445.59	40.25000	0.22773	1.11	1.218E 03
27	4.251E 00	-32.271	-0.00	443.19	41.89999	0.22793	1.12	1.361E 03
28	4.539E 00	-31.640	-0.00	440.84	43.56667	0.22762	1.12	1.416E 03
29	4.465E 00	-31.015	0.00	440.68	45.23331	0.22751	1.12	8.791E 02
30	3.812E 00	-27.419	0.00	440.50	45.25000	0.22732	1.11	4.714E 02

Table 40

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: F.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                  **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/550  ** INCLINATION=  0DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TD9161 ** PERIOD=  1.594 **
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                    ********************         ELECTRONS         ********************
                    ** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.500 MEV **
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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	3.226E 01	-36.985	-0.00	544.06	0.30000	0.22021	1.15	1.281E 04
2	2.929E 01	-34.082	-0.00	539.46	2.01567	0.21937	1.14	1.155E 04
3	2.858E 01	-34.671	-0.00	535.62	3.71667	0.21996	1.14	1.090E 04
4	2.613E 01	-35.236	-0.00	532.64	5.41667	0.22049	1.14	1.017E 04
5	2.489E 01	-35.784	-0.00	531.07	7.11566	0.22099	1.14	9.850E 03
6	2.478E 01	-36.326	-0.00	531.17	8.81567	0.22113	1.14	1.001E 04
7	2.574E 01	-33.345	-0.00	533.15	10.53333	0.21971	1.14	1.051E 04
8	2.873E 01	-33.915	-0.00	536.63	12.23333	0.21958	1.14	1.154E 04
9	3.162E 01	-34.512	-0.00	540.50	13.93333	0.21942	1.14	1.258E 04
10	3.427E 01	-35.137	-0.00	544.53	15.63333	0.21929	1.14	1.380E 04
11	3.586E 01	-35.788	-0.00	547.73	17.33331	0.21926	1.14	1.454E 04
12	3.650E 01	-36.456	-0.00	549.63	19.03331	0.21940	1.15	1.357E 04
13	2.422E 01	-40.646	0.00	549.97	20.71666	0.22198	1.16	5.599E 03
14	3.684E 01	-37.133	0.00	549.90	20.73331	0.21972	1.15	1.074E 04
15	3.539E 01	-34.291	0.00	548.11	22.45000	0.21861	1.14	1.441E 04
16	3.401E 01	-34.945	0.00	545.07	24.14999	0.21916	1.14	1.323E 04
17	3.010E 01	-32.051	0.00	540.58	25.86664	0.21864	1.13	1.214E 04
18	2.839E 01	-32.647	0.00	536.62	27.56667	0.21918	1.13	1.110E 04
19	2.649E 01	-33.218	0.00	533.34	29.25555	0.21967	1.14	1.039E 04
20	2.491E 01	-33.770	-0.00	531.34	30.96666	0.22005	1.14	9.871E 03
21	2.460E 01	-34.313	-0.00	530.97	32.66564	0.22028	1.14	9.849E 03
22	2.573E 01	-34.859	-0.00	532.31	34.36564	0.22036	1.14	1.034E 04
23	2.797E 01	-35.421	-0.00	535.10	36.06567	0.22032	1.14	1.119E 04
24	2.953E 01	-36.005	-0.00	538.86	37.76665	0.22022	1.14	1.209E 04
25	3.249E 01	-33.098	-0.00	543.49	39.48331	0.21855	1.14	1.378E 04
26	3.580E 01	-33.742	-0.00	546.96	41.18330	0.21852	1.14	1.434E 04
27	3.653E 01	-34.407	-0.00	549.27	42.88332	0.21854	1.14	1.490E 04
28	3.592E 01	-35.083	0.00	550.00	44.58331	0.21874	1.14	1.202E 04
29	2.011E 01	-21.030	0.00	549.59	44.64997	0.21850	1.13	3.102E 03
30	3.616E 01	-35.758	0.00	549.02	46.28331	0.21913	1.14	1.444E 04

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Table 4

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/650 ** INCLINATION= 0DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.629 **
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******************** ELECTRONS ********************

** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.500 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	2.704E 02	-34.990	-0.00	643.80	0.31667	0.20991	1.16	1.167E 05
2	2.446E 02	-36.939	-0.00	639.99	2.05000	0.21115	1.16	1.072E 05
3	2.272E 02	-35.415	-0.00	635.75	3.80000	0.21082	1.16	9.814E 04
4	2.166E 02	-37.313	-0.00	632.92	5.53333	0.21199	1.16	9.284E 04
5	2.066E 02	-35.743	-0.00	631.27	7.28333	0.21138	1.16	9.053E 04
6	2.077E 02	-37.620	-0.00	631.52	9.01667	0.21228	1.16	9.350E 04
7	2.132E 02	-32.604	-0.00	634.12	10.78333	0.20597	1.15	9.824E 04
8	2.248E 02	-34.511	-0.00	637.40	12.51667	0.21030	1.16	1.043E 05
9	2.533E 02	-36.443	-0.00	641.22	14.25000	0.21079	1.16	1.154E 05
10	2.721E 02	-34.962	-0.00	645.45	16.00000	0.20975	1.16	1.251E 05
11	2.921E 02	-36.945	-0.00	648.27	17.73331	0.21040	1.16	1.326E 05
12	2.972E 02	-35.510	-0.00	649.91	19.48331	0.20957	1.16	1.063E 05
13	1.481E 02	-21.778	0.00	649.94	19.54999	0.20859	1.14	3.884E 04
14	3.103E 02	-37.513	0.00	649.66	21.21666	0.21057	1.17	1.218E 05
15	2.830E 02	-36.074	0.00	647.49	22.96666	0.21005	1.16	1.263E 05
16	2.716E 02	-38.051	0.00	644.35	24.70000	0.21134	1.17	1.155E 05
17	2.441E 02	-36.561	0.00	639.98	26.45000	0.21096	1.16	1.082E 05
18	2.234E 02	-35.037	0.00	635.73	28.20000	0.21067	1.16	9.825E 04
19	2.175E 02	-36.934	0.00	632.91	29.93330	0.21180	1.16	9.365E 04
20	2.046E 02	-35.364	-0.00	631.26	31.68330	0.21121	1.16	9.116E 04
21	2.088E 02	-37.242	-0.00	631.52	33.41664	0.21208	1.16	9.267E 04
22	2.107E 02	-35.676	-0.00	633.70	35.16664	0.21112	1.16	9.724E 04
23	2.322E 02	-34.133	-0.00	637.42	36.91664	0.21016	1.16	1.056E 05
24	2.522E 02	-36.065	-0.00	641.23	38.64999	0.21061	1.16	1.151E 05
25	2.747E 02	-38.022	-0.00	644.94	40.38332	0.21127	1.17	1.240E 05
26	2.916E 02	-36.568	-0.00	648.28	42.13332	0.21021	1.16	1.330E 05
27	3.023E 02	-38.566	-0.00	649.81	43.86664	0.21114	1.17	1.217E 05
28	2.664E 02	-40.569	0.00	649.80	45.59999	0.21240	1.17	6.273E 04
29	3.100E 02	-37.136	0.00	649.65	45.61664	0.21037	1.16	8.621E 04

Table 42

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:        **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/450  ** INCLINATION=  3DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.550 **
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******************** ELECTRONS ********************

** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.500 MEV **

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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	0.0	-100.260	0.0	450.00	0.0	0.26491	1.09	0.0
2	0.0	-121.219	0.16	449.99	1.56667	0.26383	1.07	0.0
3	1.068E 00	-23.212	2.17	431.99	3.68333	0.23362	1.10	1.255E 02
4	1.646E 00	-26.088	1.21	431.76	5.33333	0.23164	1.11	3.596E 02
5	2.791E 00	-28.972	0.07	430.74	6.98333	0.22941	1.11	7.643E 02
6	4.300E 00	-31.854	-1.09	431.04	8.63333	0.22726	1.12	1.494E 03
7	6.526E 00	-34.727	-2.07	432.64	10.28333	0.22557	1.12	2.488E 03
8	9.129E 00	-33.974	-2.82	435.85	11.95000	0.22352	1.12	3.545E 03
9	1.074E 01	-36.841	-2.59	439.27	13.60000	0.22349	1.12	4.061E 03
10	1.032E 01	-36.126	-2.63	443.43	15.26667	0.22366	1.12	3.827E 03
11	7.732E 00	-35.466	-1.72	445.99	16.93330	0.22511	1.12	2.728E 03
12	5.244E 00	-34.857	-0.45	449.29	18.59999	0.22758	1.12	1.588E 03
13	2.474E 00	-34.269	0.50	449.90	20.26666	0.23058	1.12	3.229E 02
14	2.907E 00	-30.676	1.09	449.33	20.28331	0.22985	1.12	4.237E 02
15	1.627E 00	-26.462	2.34	441.01	21.96666	0.23226	1.11	2.674E 02
16	0.0	-76.183	1.21	449.91	23.39999	0.26598	1.18	0.0
17	0.0	-97.140	1.35	449.75	24.96666	0.26956	1.11	0.0
18	1.139E 00	-24.358	2.23	439.63	26.96666	0.23341	1.10	6.832E 01
19	1.693E 00	-27.246	1.37	431.70	28.61664	0.23173	1.11	3.531E 02
20	2.611E 00	-30.137	0.24	431.65	30.26666	0.22978	1.11	7.632E 02
21	4.136E 00	-33.022	-0.92	430.80	31.91664	0.22786	1.12	1.359E 03
22	6.331E 00	-32.276	-2.09	431.50	33.58331	0.22520	1.12	2.315E 03
23	8.215E 00	-35.130	-2.75	431.43	35.23331	0.22413	1.12	3.269E 03
24	1.010E 01	-37.981	-3.00	435.33	36.88332	0.22418	1.13	3.896E 03
25	9.510E 00	-37.242	-2.70	440.35	38.54999	0.22416	1.13	3.602E 03
26	7.950E 00	-36.556	-1.85	444.33	40.21666	0.22545	1.13	2.695E 03
27	4.918E 00	-35.928	-0.62	447.64	41.88332	0.22779	1.13	1.604E 03
28	2.993E 00	-31.740	0.93	449.67	43.56667	0.22977	1.12	7.975E 02
29	1.311E 00	-31.133	2.10	449.55	45.23331	0.23239	1.12	1.784E 02
30	1.663E 00	-27.536	2.24	449.33	45.25000	0.23196	1.11	1.629E 02

Table 43

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/550  ** INCLINATION=  3DEG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.594 **
******************************************************************************************************************
                    *******************       ELECTRONS      *******************
                    ** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.500 MEV **
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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	1.111E 01	-29.964	2.90	542.93	0.33333	0.22433	1.13	3.632E 03
2	9.609E 00	-30.546	2.94	538.91	2.03333	0.22502	1.13	3.316E 03
3	1.098E 01	-27.580	2.29	534.65	3.75000	0.22327	1.13	4.011E 03
4	1.520E 01	-28.151	1.23	532.05	5.45000	0.22138	1.13	5.890E 03
5	2.317E 01	-32.259	0.13	531.03	7.13333	0.21990	1.13	9.815E 03
6	3.703E 01	-32.837	-1.17	531.42	3.83333	0.21726	1.13	1.660E 04
7	5.550E 01	-36.934	-2.11	533.03	10.51667	0.21634	1.14	2.617E 04
8	7.232E 01	-37.490	-2.82	536.15	12.21667	0.21471	1.14	3.530E 04
9	8.584E 01	-38.053	-2.99	540.03	13.91667	0.21422	1.14	3.959E 04
10	8.089E 01	-38.649	-2.56	543.97	15.61667	0.21502	1.15	3.538E 04
11	6.192E 01	-39.298	-1.64	547.28	17.31667	0.21714	1.15	2.555E 04
12	4.083E 01	-36.484	-0.21	549.56	19.03331	0.21892	1.14	1.432E 04
13	1.159E 01	-40.704	0.91	549.89	20.71666	0.22442	1.16	3.053E 03
14	2.278E 01	-33.685	1.27	549.72	20.75000	0.22117	1.14	6.251E 03
15	1.490E 01	-30.850	2.44	547.70	22.46666	0.22305	1.13	5.018E 03
16	1.065E 01	-27.955	2.98	543.98	24.18330	0.22390	1.13	3.714E 03
17	1.058E 01	-28.546	2.83	540.03	25.88332	0.22409	1.13	3.605E 03
18	1.234E 01	-29.126	2.13	536.16	27.58331	0.22304	1.13	4.492E 03
19	1.725E 01	-29.711	1.02	533.07	29.28331	0.22105	1.13	6.747E 03
20	2.707E 01	-33.825	-0.10	531.49	30.96666	0.21983	1.14	1.121E 04
21	4.052E 01	-34.402	-1.38	531.14	32.66664	0.21725	1.14	1.834E 04
22	5.567E 01	-34.958	-2.39	532.47	34.36664	0.21517	1.14	2.715E 04
23	7.495E 01	-35.500	-2.94	535.23	36.06667	0.21395	1.14	3.558E 04
24	8.025E 01	-39.585	-2.95	538.31	37.75000	0.21509	1.15	3.712E 04
25	7.222E 01	-40.173	-2.43	542.27	39.45000	0.21620	1.15	3.206E 04
26	5.502E 01	-37.301	-1.27	546.38	41.16664	0.21712	1.15	2.222E 04
27	3.484E 01	-34.487	0.22	549.11	42.88332	0.21909	1.14	1.302E 04
28	2.066E 01	-31.681	1.65	549.81	44.59999	0.22128	1.14	6.009E 03
29	1.008E 01	-21.144	2.11	549.47	44.64999	0.22181	1.12	1.332E 03
30	1.359E 01	-32.356	2.56	548.64	46.29999	0.22383	1.14	4.730E 03

Table 44

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/650 ** INCLINATION= 3DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.629 **

ELECTRONS

** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.500 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	9.742E 01	-31.572	2.88	643.29	0.33333	0.21510	1.15	3.710E 04
2	8.683E 01	-30.038	2.93	638.86	2.08333	0.21508	1.15	3.394E 04
3	9.497E 01	-31.935	2.40	635.31	3.81667	0.21488	1.15	4.041E 04
4	1.286E 02	-33.838	1.43	632.64	5.55000	0.21368	1.16	5.765E 04
5	1.971E 02	-35.749	0.20	631.33	7.28333	0.21182	1.16	9.388E 04
6	3.048E 02	-34.212	-1.25	631.77	9.03333	0.20810	1.15	1.556E 05
7	4.502E 02	-36.111	-2.27	633.77	10.76667	0.20644	1.16	2.381E 05
8	6.019E 02	-38.000	-2.88	636.92	12.50000	0.20560	1.16	3.142E 05
9	6.562E 02	-39.898	-2.96	640.67	14.23333	0.20589	1.17	3.330E 05
10	6.104E 02	-41.830	-2.50	644.39	15.96667	0.20758	1.17	2.931E 05
11	4.674E 02	-40.377	-1.43	647.87	17.71666	0.20896	1.17	2.057E 05
12	2.909E 02	-38.975	-0.01	649.73	19.46666	0.21137	1.17	1.028E 05
13	1.110E 02	-21.833	0.94	649.87	19.54999	0.20997	1.14	2.169E 04
14	1.733E 02	-34.149	1.58	649.42	21.23331	0.21261	1.16	6.546E 04
15	1.138E 02	-32.709	2.60	647.06	22.98331	0.21457	1.16	4.450E 04
16	9.603E 01	-31.213	3.00	643.26	24.73331	0.21524	1.15	3.638E 04
17	9.486E 01	-33.130	2.76	639.46	26.46666	0.21586	1.16	3.800E 04
18	1.143E 02	-31.595	1.87	635.34	28.21666	0.21355	1.15	4.930E 04
19	1.680E 02	-33.513	0.72	632.71	29.95000	0.21193	1.15	7.654E 04
20	2.416E 02	-35.430	-0.56	631.42	31.68330	0.20998	1.16	1.222E 05
21	3.775E 02	-37.334	-1.74	631.68	33.41664	0.20819	1.16	1.943E 05
22	5.176E 02	-35.766	-2.69	633.85	35.16664	0.20551	1.16	2.685E 05
23	6.089E 02	-41.096	-2.99	636.42	36.88332	0.20680	1.17	3.200E 05
24	6.166E 02	-39.545	-2.75	640.66	38.63332	0.20618	1.16	3.096E 05
25	5.125E 02	-41.490	-2.01	644.34	40.36664	0.20854	1.17	2.391E 05
26	3.559E 02	-36.624	-0.53	648.14	42.13332	0.20905	1.16	1.529E 05
27	2.238E 02	-35.227	0.93	649.76	43.88332	0.21158	1.16	8.328E 04
28	8.277E 01	-40.681	1.89	649.67	45.59999	0.21750	1.18	2.122E 04
29	1.460E 02	-33.814	2.17	649.36	45.63332	0.21385	1.16	4.094E 04

Table 45

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*******************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:             **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM FOGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/450  ** INCLINATION=  0DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD8161 ** PERIOD=  1.560 **
*******************************************************************************************************************
                    ********************    HIGH ENERGY PROTONS    ********************
                    ** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >5.00 MEV **
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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	3.326E 00	-35.487	-0.00	443.74	0.30000	0.22951	1.12	1.370E 03
2	3.068E 00	-34.802	-0.00	439.56	1.96667	0.22965	1.12	1.281E 03
3	2.967E 00	-34.085	-0.00	435.51	3.63333	0.22980	1.12	1.159E 03
4	2.691E 00	-33.341	-0.00	431.33	5.30000	0.22987	1.12	1.094E 03
5	2.714E 00	-32.579	-0.00	430.76	6.96667	0.22982	1.12	1.091E 03
6	2.651E 00	-31.812	-0.00	430.97	8.63333	0.22961	1.11	1.089E 03
7	2.692E 00	-34.669	-0.00	432.53	10.28333	0.23033	1.12	1.118E 03
8	2.923E 00	-33.926	-0.00	435.77	11.95000	0.22971	1.12	1.231E 03
9	3.230E 00	-33.212	-0.00	439.85	13.61667	0.22905	1.12	1.325E 03
10	3.322E 00	-32.528	-0.00	444.02	15.28333	0.22843	1.12	1.404E 03
11	3.563E 00	-35.472	-0.00	447.02	16.93330	0.22917	1.12	1.537E 03
12	3.779E 00	-34.836	-0.00	449.36	18.59999	0.22866	1.12	1.584E 03
13	3.726E 00	-34.210	0.00	449.98	20.26666	0.22835	1.12	8.987E 02
14	3.425E 00	-30.614	0.00	449.91	20.28331	0.22743	1.12	6.936E 02
15	3.673E 00	-33.582	0.00	443.75	21.93330	0.22826	1.12	1.425E 03
16	3.433E 00	-32.939	0.00	443.93	23.59999	0.22835	1.12	1.430E 03
17	3.140E 00	-32.271	0.00	442.03	25.26666	0.22857	1.12	1.337E 03
18	2.972E 00	-31.572	0.00	437.81	26.93330	0.22885	1.12	1.262E 03
19	2.847E 00	-34.457	0.00	434.57	28.58331	0.23004	1.12	1.191E 03
20	2.772E 00	-33.707	0.00	431.79	30.25000	0.23005	1.12	1.091E 03
21	2.652E 00	-32.943	-0.00	430.64	31.91664	0.22993	1.12	1.082E 03
22	2.634E 00	-32.177	-0.00	431.33	33.58331	0.22965	1.12	1.094E 03
23	2.765E 00	-31.422	-0.00	433.75	35.25000	0.22924	1.11	1.141E 03
24	2.983E 00	-34.301	-0.00	435.80	36.89999	0.22974	1.12	1.268E 03
25	3.302E 00	-33.595	-0.00	440.93	38.56667	0.22906	1.12	1.341E 03
26	3.458E 00	-32.919	-0.00	445.03	40.23331	0.22843	1.12	1.427E 03
27	3.592E 00	-32.271	-0.00	443.13	41.89999	0.22793	1.12	1.552E 03
28	3.803E 00	-35.236	-0.00	442.70	43.54999	0.22879	1.12	1.588E 03
29	3.791E 00	-34.612	0.00	449.33	45.21666	0.22852	1.12	1.051E 03
30	2.797E 00	-27.419	0.00	440.50	45.25000	0.22732	1.11	5.242E 02

Table 46

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*****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/550  ** INCLINATION=  00EG ** PERIGEE=  550KM ** APOGEE=   550KM ** B/L ORBIT TAPE: TOR161 ** PERIOD=  1.594 **
*****************************************************************************************************************************
                    *******************   HIGH ENERGY PROTONS   *********************
                    ** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >5.00 MEV **
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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	2.073E 01	-36.985	-0.00	544.06	0.30000	0.22021	1.15	9.686E 03
2	1.941E 01	-37.606	-0.00	540.09	2.00000	0.22093	1.15	8.116E 03
3	1.783E 01	-38.200	-0.00	536.17	3.70000	0.22165	1.15	7.615E 03
4	1.626E 01	-38.767	-0.00	537.02	5.40000	0.22230	1.15	7.177E 03
5	1.609E 01	-35.784	-0.00	531.07	7.11666	0.22068	1.14	7.086E 03
6	1.647E 01	-36.326	-0.00	531.17	8.81667	0.22113	1.14	7.160E 03
7	1.695E 01	-36.876	-0.00	532.95	10.51667	0.22123	1.14	7.430E 03
8	1.746E 01	-37.443	-0.00	536.07	12.21667	0.22123	1.15	7.870E 03
9	1.891E 01	-38.036	-0.00	539.97	13.91667	0.22118	1.15	8.450E 03
10	1.981E 01	-38.656	-0.00	543.35	15.61667	0.22116	1.15	9.090E 03
11	2.106E 01	-35.788	-0.00	547.73	17.33331	0.21926	1.14	9.430E 03
12	2.211E 01	-36.456	-0.00	549.63	19.03331	0.21940	1.15	8.508E 03
13	2.031E 01	-40.646	0.00	549.97	20.71565	0.22188	1.16	5.188E 03
14	2.309E 01	-37.133	0.00	549.90	20.73331	0.21972	1.15	6.025E 03
15	2.259E 01	-37.806	0.00	548.47	22.43330	0.22023	1.15	9.241E 03
16	1.997E 01	-38.463	0.00	545.61	24.13332	0.22089	1.15	8.886E 03
17	1.862E 01	-39.096	0.00	541.83	25.83331	0.22164	1.15	9.266E 03
18	1.781E 01	-36.175	0.00	537.20	27.54999	0.22047	1.14	7.684E 03
19	1.740E 01	-36.749	0.00	533.78	29.25000	0.22109	1.14	7.361E 03
20	1.656E 01	-37.303	-0.00	531.55	30.95000	0.22159	1.14	7.139E 03
21	1.629E 01	-37.846	-0.00	530.92	32.64999	0.22196	1.15	7.070E 03
22	1.590E 01	-38.392	-0.00	532.00	34.34999	0.22217	1.15	7.233E 03
23	1.688E 01	-38.950	-0.00	534.59	36.04999	0.22225	1.15	7.645E 03
24	1.939E 01	-36.005	-0.00	539.86	37.76666	0.22022	1.14	8.252E 03
25	1.951E 01	-36.618	-0.00	542.89	39.45566	0.22013	1.14	8.966E 03
26	2.146E 01	-37.259	-0.00	546.49	41.16664	0.22011	1.15	9.381E 03
27	2.293E 01	-37.921	-0.00	549.01	42.85664	0.22024	1.15	9.701E 03
28	2.238E 01	-38.596	0.00	549.99	44.56667	0.22054	1.15	7.778E 03
29	9.969E 00	-21.030	0.00	549.59	44.54999	0.21850	1.13	7.905E 03
30	2.151E 01	-39.272	0.00	549.29	46.26566	0.22103	1.15	8.784E 03

Table 47

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP5, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/650 ** INCLINATION= 0DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.629 **

HIGH ENERGY PROTONS

** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD – ENERGY >5.00 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	1.118E 02	-38.429	-0.00	644.37	0.30000	0.21156	1.17	5.523E 04
2	1.133E 02	-40.383	-0.00	640.60	2.03333	0.21312	1.17	5.210E 04
3	1.006E 02	-38.863	-0.00	636.28	3.78333	0.21255	1.17	4.830E 04
4	9.797E 01	-40.764	-0.00	633.28	5.51667	0.21405	1.17	4.542E 04
5	9.291E 01	-39.195	-0.00	631.37	7.26667	0.21321	1.17	4.437E 04
6	9.142E 01	-41.073	-0.00	631.37	9.00000	0.21444	1.17	4.447E 04
7	9.670E 01	-39.504	-0.00	633.29	10.75000	0.21322	1.17	4.687E 04
8	9.780E 01	-41.405	-0.00	636.29	12.48333	0.21421	1.18	4.927E 04
9	1.127E 02	-39.885	-0.00	640.61	14.23333	0.21279	1.17	5.351E 04
10	1.124E 02	-38.400	-0.00	644.92	15.98333	0.21149	1.17	5.681E 04
11	1.246E 02	-40.380	-0.00	647.91	17.71666	0.21244	1.17	5.948E 04
12	1.237E 02	-38.943	-0.00	649.80	19.46666	0.21136	1.17	4.981E 04
13	6.064E 01	-47.613	-0.00	649.97	21.16664	0.21812	1.20	2.945E 04
14	1.307E 02	-40.947	0.00	649.80	21.20000	0.21265	1.18	4.436E 04
15	1.239E 02	-39.510	0.00	647.89	22.95000	0.21187	1.17	5.864E 04
16	1.165E 02	-41.490	0.00	644.90	24.68330	0.21348	1.18	5.548E 04
17	1.091E 02	-40.004	0.00	640.58	26.43330	0.21287	1.17	5.183E 04
18	9.692E 01	-41.932	0.00	636.81	28.16664	0.21455	1.16	4.778E 04
19	9.733E 01	-40.385	0.00	633.27	29.91664	0.21379	1.17	4.568E 04
20	9.311E 01	-38.817	-0.00	631.37	31.66664	0.21298	1.17	4.478E 04
21	9.082E 01	-40.694	-0.00	631.38	33.39999	0.21418	1.17	4.457E 04
22	9.440E 01	-39.126	-0.00	633.30	35.14999	0.21290	1.17	4.642E 04
23	9.790E 01	-41.027	-0.00	636.30	36.88332	0.21395	1.17	4.908E 04
24	1.078E 02	-39.507	-0.00	640.63	38.63332	0.21255	1.17	5.315E 04
25	1.121E 02	-41.461	-0.00	644.39	40.36664	0.21350	1.18	5.690E 04
26	1.255E 02	-40.003	-0.00	647.92	42.11664	0.21219	1.17	6.015E 04
27	1.239E 02	-38.566	-0.00	649.81	43.86664	0.21114	1.17	5.459E 04
28	1.297E 02	-40.569	0.00	649.80	45.59999	0.21240	1.17	4.029E 04
29	1.125E 02	-37.136	0.00	649.65	45.61664	0.21037	1.16	3.126E 04

Table 48

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/450 ** INCLINATION= 3DEG ** PERIGEE= 450KM ** APOGEE= 450KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.560 **

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******************** HIGH ENERGY PROTONS ********************

** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >5.00 MEV **

****

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	1.036E 00	-35.513	2.80	443.80	0.30000	0.23697	1.13	3.676E 02
2	1.030E 00	-34.797	2.93	430.62	1.96667	0.23747	1.13	3.049E 02
3	1.213E 00	-26.826	2.30	434.40	3.66667	0.23364	1.11	3.250E 02
4	1.646E 00	-29.702	1.39	432.03	5.31667	0.23221	1.11	5.060E 02
5	2.476E 00	-32.584	0.27	430.83	6.96667	0.23044	1.12	1.048E 03
6	3.534E 00	-35.467	-0.89	430.39	8.61666	0.22867	1.12	1.564E 03
7	4.966E 00	-38.342	-1.92	432.27	10.26667	0.22729	1.13	2.342E 03
8	6.400E 00	-37.590	-2.74	435.30	11.93333	0.22472	1.13	3.127E 03
9	7.654E 00	-40.455	-3.00	431.63	13.58333	0.22506	1.13	3.507E 03
10	7.428E 00	-39.733	-2.72	442.92	15.25000	0.22495	1.13	3.333E 03
11	6.135E 00	-39.064	-1.89	445.51	16.91664	0.22630	1.13	2.642E 03
12	4.240E 00	-34.857	-0.45	440.29	18.59999	0.22759	1.12	1.811E 03
13	2.716E 00	-34.268	0.90	447.90	20.26666	0.23058	1.12	6.375E 02
14	2.593E 00	-30.676	1.09	440.83	20.29331	0.22985	1.12	3.967E 02
15	1.648E 00	-30.061	2.21	443.33	21.95000	0.23247	1.11	6.627E 02
16	1.161E 00	-25.793	2.93	444.34	23.63332	0.23385	1.11	4.407E 02
17	1.035E 00	-35.915	2.99	442.72	25.25000	0.23799	1.13	3.057E 02
18	1.234E 00	-27.970	2.41	437.20	26.95000	0.23369	1.11	3.029E 02
19	1.633E 00	-30.858	1.55	434.13	28.59999	0.23260	1.11	6.078E 02
20	2.397E 00	-30.137	0.24	431.55	30.26666	0.22978	1.11	7.727E 02
21	3.454E 00	-33.022	-0.92	430.80	31.91664	0.22786	1.12	1.591E 03
22	4.697E 00	-35.893	-1.94	431.23	33.56667	0.22634	1.12	2.232E 03
23	6.273E 00	-38.748	-2.67	433.01	35.21666	0.22560	1.13	2.909E 03
24	7.025E 00	-37.981	-3.00	435.30	36.88332	0.22418	1.13	3.356E 03
25	6.924E 00	-40.853	-2.79	439.71	38.53331	0.22568	1.13	3.242E 03
26	6.124E 00	-40.158	-2.01	443.80	40.20000	0.22695	1.13	2.631E 03
27	4.333E 00	-35.928	-0.62	447.54	41.88332	0.22779	1.13	1.778E 03
28	2.838E 00	-31.740	0.93	449.67	43.56667	0.22977	1.12	1.114E 03
29	1.737E 00	-31.133	2.10	449.55	45.23331	0.23233	1.12	5.354E 02
30	1.762E 00	-27.536	2.24	440.39	45.25000	0.23196	1.11	1.597E 02

Table 49

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/550 ** INCLINATION= 3DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.594 **

HIGH ENERGY PROTONS

** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >5.00 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	8.181E 00	-33.489	2.84	543.53	0.31667	0.22558	1.14	3.413E 03
2	7.828E 00	-30.546	2.94	538.91	2.03333	0.22502	1.13	3.106E 03
3	8.574E 00	-31.111	2.41	535.16	3.73333	0.22433	1.13	3.555E 03
4	1.032E 01	-31.680	1.41	532.36	5.43333	0.22245	1.13	4.721E 03
5	1.500E 01	-35.787	0.33	531.13	7.11666	0.22166	1.14	6.916E 03
6	2.029E 01	-36.366	-0.99	531.25	8.81667	0.21880	1.14	1.026E 04
7	2.884E 01	-40.465	-1.97	532.66	10.50000	0.21839	1.15	1.471E 04
8	3.542E 01	-41.022	-2.75	535.61	12.20000	0.21653	1.15	1.870E 04
9	4.005E 01	-45.112	-3.00	538.80	13.88333	0.21814	1.16	2.065E 04
10	4.092E 01	-42.172	-2.66	543.39	15.60000	0.21667	1.15	1.942E 04
11	3.442E 01	-42.813	-1.80	546.84	17.29999	0.21891	1.16	1.528E 04
12	2.356E 01	-39.993	-0.41	549.37	19.01666	0.22043	1.15	9.435E 03
13	1.322E 01	-40.704	0.91	549.89	20.71666	0.22442	1.16	3.552E 03
14	1.552E 01	-37.195	1.09	549.33	20.73331	0.22252	1.15	4.072E 03
15	1.088E 01	-34.367	2.32	549.08	22.45000	0.22423	1.14	4.218E 03
16	8.626E 00	-31.479	2.95	544.54	24.15664	0.22483	1.14	3.438E 03
17	7.927E 00	-32.074	2.89	540.65	25.86664	0.22532	1.14	3.333E 03
18	9.167E 00	-32.654	2.27	536.73	27.56667	0.22442	1.14	3.809E 03
19	1.170E 01	-33.238	1.20	533.47	29.26666	0.22242	1.14	5.196E 03
20	1.630E 01	-37.353	0.10	531.70	30.95000	0.22186	1.14	7.581E 03
21	2.148E 01	-37.932	-1.20	531.09	32.64999	0.21904	1.14	1.108E 04
22	2.966E 01	-42.024	-2.13	531.89	34.33331	0.21898	1.15	1.527E 04
23	3.669E 01	-42.569	-2.83	534.25	36.03331	0.21734	1.15	1.880E 04
24	3.960E 01	-43.116	-2.98	537.72	37.73331	0.21698	1.16	1.995E 04
25	3.774E 01	-43.697	-2.54	541.66	39.43330	0.21808	1.16	1.777E 04
26	3.128E 01	-40.816	-1.44	545.39	41.14999	0.21863	1.15	1.366E 04
27	2.207E 01	-37.996	0.02	548.85	42.86664	0.22035	1.15	9.121E 03
28	1.465E 01	-35.192	1.48	549.84	44.58331	0.22238	1.14	4.924E 03
29	5.993E 00	-21.144	2.11	549.47	44.64999	0.22181	1.12	1.422E 03
30	1.051E 01	-32.356	2.56	549.64	46.29999	0.22383	1.14	3.863E 03

Table 50

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP5, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/650 ** INCLINATION= 3DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.629 **
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******************* HIGH ENERGY PROTONS *******************

** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >5.00 MEV **

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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	5.346E 01	-35.015	2.82	643.86	0.31667	0.21660	1.16	2.526E 04
2	4.681E 01	-33.487	2.96	639.46	2.06667	0.21655	1.16	2.214E 04
3	5.149E 01	-35.385	2.51	635.82	3.80000	0.21679	1.16	2.412E 04
4	6.221E 01	-37.286	1.60	632.98	5.53333	0.21589	1.17	3.085E 04
5	8.564E 01	-39.197	0.39	631.43	7.26667	0.21418	1.17	4.402E 04
6	1.164E 02	-41.110	-0.89	631.44	9.00000	0.21220	1.17	6.386E 04
7	1.565E 02	-43.012	-2.00	633.01	10.73333	0.21052	1.17	8.843E 04
8	1.920E 02	-44.903	-2.75	635.85	12.46667	0.20956	1.18	1.090E 05
9	2.260E 02	-46.795	-3.00	639.47	14.20000	0.21001	1.18	1.176E 05
10	2.166E 02	-45.272	-2.61	643.84	15.95000	0.20955	1.18	1.080E 05
11	1.850E 02	-43.810	-1.59	647.48	17.70000	0.21078	1.18	8.547E 04
12	1.255E 02	-42.404	-0.20	649.59	19.45000	0.21318	1.18	5.374E 04
13	3.695E 01	-21.833	0.94	649.87	19.54999	0.20997	1.14	2.016E 04
14	8.960E 01	-37.590	1.41	649.59	21.21666	0.21406	1.17	2.969E 04
15	6.167E 01	-36.147	2.50	647.48	22.96665	0.21612	1.17	2.881E 04
16	5.186E 01	-34.653	2.98	643.83	24.71666	0.21682	1.16	2.411E 04
17	4.848E 01	-33.130	2.76	639.46	26.46665	0.21586	1.16	2.361E 04
18	5.792E 01	-35.042	2.02	635.85	28.20000	0.21537	1.16	2.779E 04
19	7.274E 01	-36.960	0.91	633.04	29.93330	0.21396	1.16	3.737E 04
20	9.734E 01	-38.878	-0.37	631.52	31.66664	0.21210	1.17	5.349E 04
21	1.343E 02	-40.785	-1.58	631.54	33.39999	0.21030	1.17	7.543E 04
22	1.702E 02	-46.125	-2.39	632.75	35.11664	0.21171	1.18	9.728E 04
23	1.998E 02	-44.549	-2.96	635.89	36.86664	0.20890	1.18	1.127E 05
24	2.125E 02	-46.439	-2.88	639.47	38.59999	0.21005	1.18	1.102E 05
25	1.998E 02	-44.929	-2.15	643.79	40.34999	0.21047	1.18	9.413E 04
26	1.506E 02	-43.486	-0.90	647.40	42.09999	0.21233	1.18	7.053E 04
27	1.353E 02	-38.655	0.75	649.65	43.86664	0.21305	1.17	4.562E 04
28	6.040E 01	-40.681	1.89	649.67	45.59999	0.21750	1.18	2.109E 04
29	7.119E 01	-37.248	2.03	649.53	45.61664	0.21544	1.17	1.855E 04

Table 51

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/450  ** INCLINATION=  0DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD8161 ** PERIOD=  1.560 **
***************************************************************************************************************
                    ********************   LOW  ENERGY PROTONS   ********************
                    ** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.100 MEV **
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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	2.016E 01	-46.294	-0.00	443.49	0.25000	0.23717	1.16	4.917E 03
2	1.924E 01	-45.622	-0.00	441.51	1.91667	0.23696	1.16	4.463E 03
3	1.547E 01	-44.919	-0.00	437.29	3.58333	0.23677	1.15	3.924E 03
4	1.499E 01	-47.801	-0.00	434.15	5.23333	0.23984	1.16	3.602E 03
5	1.377E 01	-47.049	-0.00	431.55	6.90000	0.23938	1.16	3.223E 03
6	1.293E 01	-46.283	-0.00	430.62	8.56667	0.23875	1.16	3.176E 03
7	1.315E 01	-45.518	-0.00	431.56	10.23333	0.23793	1.15	3.209E 03
8	1.449E 01	-44.766	-0.00	434.15	11.90000	0.23696	1.15	3.580E 03
9	1.538E 01	-47.647	-0.00	437.30	13.55000	0.23935	1.16	4.053E 03
10	1.799E 01	-46.945	-0.00	441.51	15.21667	0.23822	1.16	4.513E 03
11	2.060E 01	-46.273	-0.00	443.49	16.88332	0.23715	1.16	5.236E 03
12	2.239E 01	-45.627	-0.00	443.43	19.54999	0.23623	1.16	5.751E 03
13	2.413E 01	-48.594	-0.00	440.82	20.20000	0.23895	1.17	5.050E 03
14	4.182E 00	-30.614	0.00	449.91	20.25331	0.22743	1.12	1.209E 03
15	2.279E 01	-47.969	0.00	449.71	21.86664	0.23834	1.17	5.121E 03
16	2.307E 01	-47.337	0.00	447.92	23.53331	0.23793	1.16	5.363E 03
17	1.989E 01	-46.695	0.00	444.50	25.20000	0.23765	1.16	4.592E 03
18	1.733E 01	-46.005	0.00	440.31	26.86664	0.23744	1.16	4.165E 03
19	1.542E 01	-45.295	0.00	435.25	28.53331	0.23722	1.15	3.753E 03
20	1.402E 01	-44.555	0.00	432.83	30.20000	0.23691	1.15	3.343E 03
21	1.295E 01	-43.796	-0.00	430.94	31.86664	0.23644	1.15	3.224E 03
22	1.302E 01	-46.647	-0.00	430.60	33.51666	0.23909	1.16	3.195E 03
23	1.325E 01	-45.864	-0.00	432.09	35.18330	0.23821	1.16	3.266E 03
24	1.445E 01	-45.137	-0.00	435.06	36.84999	0.23720	1.15	3.745E 03
25	1.642E 01	-48.025	-0.00	433.39	38.50000	0.23961	1.17	4.346E 03
26	1.943E 01	-47.331	-0.00	442.61	40.16664	0.23847	1.16	4.760E 03
27	2.225E 01	-46.667	-0.00	443.40	41.83331	0.23743	1.16	5.168E 03
28	2.448E 01	-46.027	-0.00	449.03	43.50000	0.23654	1.16	6.022E 03
29	2.330E 01	-48.996	0.00	449.37	45.14999	0.23934	1.17	5.322E 03
30	3.221E 00	-27.419	0.00	449.50	45.25000	0.22732	1.11	9.947E 02

Table 52

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH A.LMAS. MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  0/550  ** INCLINATION= 0DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TOB161 ** PERIOD= 1.594 **
*********************************************************************************************************************
                    ********************  LOW ENERGY PROTONS  ********************
                    ** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.100 MEV **
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PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	2.938E 02	-51.058	-0.00	546.24	0.23333	0.23133	1.20	7.682E 04
2	2.732E 02	-51.696	-0.00	542.58	1.93333	0.23233	1.20	7.027E 04
3	2.585E 02	-52.307	-0.00	538.54	3.63333	0.23335	1.20	6.494E 04
4	2.413E 02	-52.890	-0.00	534.84	5.33333	0.23431	1.20	6.024E 04
5	2.180E 02	-53.450	-0.00	532.14	7.03333	0.23515	1.20	5.812E 04
6	2.022E 02	-50.462	-0.00	530.90	8.75000	0.23231	1.19	5.667E 04
7	2.195E 02	-51.006	-0.00	531.57	10.45000	0.23277	1.19	5.646E 04
8	2.257E 02	-51.561	-0.00	534.01	12.15000	0.23308	1.20	5.876E 04
9	2.589E 02	-52.137	-0.00	537.50	13.85000	0.23329	1.20	6.531E 04
10	2.659E 02	-52.740	-0.00	541.52	15.55000	0.23347	1.20	7.075E 04
11	2.628E 02	-53.371	-0.00	545.35	17.25000	0.23370	1.20	7.589E 04
12	3.053E 02	-50.512	-0.00	548.64	18.96666	0.23055	1.19	7.899E 04
13	3.169E 02	-51.185	-0.00	549.94	20.66664	0.23108	1.20	7.588E 04
14	5.027E 01	-37.133	0.00	549.90	20.73331	0.21972	1.15	1.864E 04
15	3.289E 02	-51.862	0.00	549.54	22.36564	0.23178	1.20	7.245E 04
16	2.993E 02	-52.530	0.00	547.52	24.06567	0.23265	1.20	7.793E 04
17	2.512E 02	-53.178	0.00	544.24	25.76565	0.23363	1.20	7.246E 04
18	2.469E 02	-50.277	0.00	539.65	27.48331	0.23124	1.19	6.748E 04
19	2.323E 02	-50.868	0.00	535.78	29.19330	0.23221	1.19	6.114E 04
20	2.222E 02	-51.433	0.00	532.75	30.89332	0.23308	1.20	5.748E 04
21	2.284E 02	-51.982	-0.00	531.10	32.58331	0.23390	1.20	5.610E 04
22	2.223E 02	-52.524	-0.00	531.13	34.29331	0.23433	1.20	5.619E 04
23	2.327E 02	-53.073	-0.00	532.93	35.98331	0.23470	1.20	5.919E 04
24	2.208E 02	-53.640	-0.00	535.90	37.68330	0.23494	1.20	6.357E 04
25	2.486E 02	-50.707	-0.00	540.41	39.39999	0.23158	1.19	6.866E 04
26	2.804E 02	-51.331	-0.00	544.36	41.09999	0.23179	1.20	7.380E 04
27	3.144E 02	-51.980	-0.00	547.51	42.79999	0.23210	1.20	8.005E 04
28	2.980E 02	-52.649	-0.00	549.58	44.50000	0.23255	1.20	7.880E 04
29	2.832E 02	-49.812	0.00	549.92	46.21666	0.22976	1.19	6.378E 04
30	1.894E 02	-46.299	0.00	549.68	46.23331	0.22648	1.18	2.111E 04

Table 13

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 0/650 ** INCLINATION= 0DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD8161 ** PERIOD= 1.629 **

******************** LOW ENERGY PROTONS ********************
** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.100 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	1.226E 03	-48.743	-0.00	645.95	0.25000	0.21934	1.20	4.177E 05
2	1.159E 03	-47.267	-0.00	641.81	2.00000	0.21841	1.20	3.993E 05
3	1.109E 03	-49.203	-0.00	637.96	3.73333	0.22052	1.20	3.727E 05
4	1.048E 03	-47.664	-0.00	634.11	5.48333	0.21949	1.20	3.537E 05
5	1.011E 03	-49.552	-0.00	631.91	7.21667	0.22142	1.20	3.383E 05
6	1.071E 03	-47.978	-0.00	631.20	8.96667	0.22005	1.20	3.403E 05
7	1.002E 03	-49.858	-0.00	632.28	10.70000	0.22167	1.21	3.431E 05
8	1.173E 03	-48.301	-0.00	635.25	12.45000	0.21996	1.20	3.649E 05
9	1.027E 03	-50.217	-0.00	638.80	14.18333	0.22137	1.21	3.787E 05
10	1.204E 03	-48.718	-0.00	643.24	15.93333	0.21957	1.20	4.029E 05
11	1.289E 03	-47.252	-0.00	647.09	17.68330	0.21790	1.20	4.250E 05
12	1.204E 03	-49.244	-0.00	649.27	19.41664	0.21948	1.21	4.164E 05
13	1.366E 03	-47.813	-0.00	649.97	21.16664	0.21812	1.20	3.694E 05
14	8.490E 02	-44.380	0.00	649.90	21.18330	0.21521	1.19	1.344E 05
15	1.185E 03	-46.379	0.00	648.59	22.91664	0.21700	1.20	4.013E 05
16	1.261E 03	-48.365	0.00	645.94	24.64999	0.21900	1.20	4.203E 05
17	1.094E 03	-46.889	0.00	641.79	26.39999	0.21808	1.20	3.956E 05
18	1.143E 03	-48.824	0.00	637.95	28.13332	0.22018	1.20	3.740E 05
19	9.895E 02	-47.265	0.00	634.09	29.88332	0.21916	1.20	3.523E 05
20	1.044E 03	-49.174	-0.00	631.91	31.61664	0.22107	1.20	3.435E 05
21	1.011E 03	-47.599	-0.00	631.20	33.36664	0.21971	1.20	3.401E 05
22	1.034E 03	-49.479	-0.00	632.29	35.09999	0.22131	1.20	3.417E 05
23	1.145E 03	-47.923	-0.00	635.26	36.84999	0.21961	1.20	3.634E 05
24	1.057E 03	-49.839	-0.00	638.82	38.58331	0.22102	1.21	3.752E 05
25	1.243E 03	-48.340	-0.00	643.26	40.33331	0.21923	1.20	4.071E 05
26	1.217E 03	-46.874	-0.00	647.10	42.08331	0.21757	1.20	4.261E 05
27	1.239E 03	-48.866	-0.00	649.27	43.81667	0.21914	1.20	4.258E 05
28	1.364E 03	-47.435	0.00	649.97	45.56667	0.21779	1.20	4.119E 05
29	3.462E 02	-63.170	0.00	649.74	47.23331	0.23194	1.23	1.401E 05

Table 54

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*************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE3, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  3:  CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5  3/450  ** INCLINATION=  3DEG ** PERIGEE=  450KM ** APOGEE=   450KM ** B/L ORBIT TAPE: TD5247 ** PERIOD=  1.550 **
*************************************************************************************************************************
                    *******************   LOW  ENERGY PROTONS   ********************
                    ** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.100 MEV **
                    ******************************************************************
```

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	3.814E 00	-35.513	2.80	441.80	0.30000	0.23697	1.13	8.645E 02
2	3.057E 00	-34.797	2.98	430.52	1.96667	0.23747	1.13	5.817E 02
3	2.865E 00	-34.056	2.54	435.59	3.63333	0.23626	1.12	6.164E 02
4	4.619E 00	-36.929	1.74	432.84	5.28333	0.23605	1.13	1.170E 03
5	8.960E 00	-43.422	0.87	431.35	6.91667	0.23877	1.15	2.310E 03
6	1.563E 01	-46.306	-0.23	430.69	8.56667	0.23781	1.16	4.119E 03
7	2.501E 01	-49.186	-1.41	431.37	10.21667	0.23684	1.16	7.113E 03
8	3.464E 01	-52.055	-2.32	433.29	11.86667	0.23636	1.17	1.080E 04
9	4.048E 01	-54.916	-2.87	435.13	13.51667	0.23687	1.17	1.333E 04
10	4.661E 01	-54.173	-2.55	440.27	15.18333	0.23547	1.17	1.422E 04
11	4.846E 01	-53.470	-2.43	444.35	16.84999	0.23613	1.17	1.346E 04
12	3.688E 01	-52.825	-1.41	447.66	18.51666	0.23861	1.18	9.880E 03
13	2.160E 01	-48.633	0.11	440.74	20.20000	0.23937	1.17	4.849E 03
14	3.502E 00	-30.676	1.09	449.33	20.29331	0.22985	1.12	4.188E 02
15	9.395E 00	-40.851	1.75	449.26	21.89999	0.23735	1.15	2.305E 03
16	4.499E 00	-36.608	2.74	445.44	23.58331	0.23724	1.13	1.074E 03
17	3.705E 00	-35.915	2.99	442.72	25.25000	0.23789	1.13	6.520E 02
18	3.400E 00	-35.194	2.63	433.54	26.91664	0.23683	1.13	7.194E 02
19	5.228E 00	-38.081	1.88	433.23	28.56667	0.23699	1.13	1.219E 03
20	8.028E 00	-40.971	0.84	432.63	30.21666	0.23644	1.14	2.205E 03
21	1.424E 01	-47.473	-0.12	431.29	31.84999	0.23943	1.16	4.135E 03
22	2.265E 01	-50.354	-1.25	430.81	33.50000	0.23951	1.17	6.766E 03
23	3.067E 01	-53.220	-2.20	431.65	35.14999	0.23800	1.17	9.899E 03
24	3.909E 01	-52.453	-2.83	434.15	36.81667	0.23482	1.17	1.245E 04
25	4.341E 01	-55.307	-2.93	437.22	38.46666	0.23674	1.17	1.381E 04
26	4.189E 01	-50.972	-2.41	441.96	40.14999	0.23415	1.16	1.297E 04
27	3.720E 01	-50.311	-1.39	445.77	41.81667	0.23649	1.17	9.668E 03
28	2.294E 01	-46.108	0.14	443.86	43.50000	0.23710	1.16	5.605E 03
29	1.051E 01	-41.918	1.62	440.83	45.18330	0.23780	1.15	2.257E 03
30	2.220E 00	-27.536	2.24	440.33	45.25000	0.23196	1.11	1.682E 02

Table 55

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/550 ** INCLINATION= 3DEG ** PERIGEE= 550KM ** APOGEE= 550KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.594 **

******************** LOW ENERGY PROTONS ********************
** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.100 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	1.639E 02	-47.577	2.50	545.77	0.25000	0.23618	1.20	3.603E 04
2	1.153E 02	-44.661	2.99	541.41	1.96667	0.23519	1.19	2.639E 04
3	1.101E 02	-45.234	2.79	537.40	3.66667	0.23555	1.19	2.533E 04
4	1.194E 02	-45.799	2.05	533.94	5.36666	0.23406	1.18	2.972E 04
5	1.836E 02	-49.902	1.09	531.92	7.05000	0.23531	1.20	4.222E 04
6	2.031E 02	-50.482	-0.22	530.97	8.75000	0.23162	1.19	6.160E 04
7	2.745E 02	-54.588	-1.31	531.52	10.43333	0.23188	1.20	8.797E 04
8	3.075E 02	-55.151	-2.34	533.65	12.13333	0.22878	1.19	1.133E 05
9	3.323E 02	-55.706	-2.92	537.00	13.83333	0.22709	1.19	1.238E 05
10	3.561E 02	-56.274	-2.93	540.95	15.53333	0.22717	1.19	1.300E 05
11	3.750E 02	-56.882	-2.36	544.81	17.23331	0.22913	1.20	1.331E 05
12	3.721E 02	-54.032	-1.16	548.25	18.95000	0.23014	1.20	1.157E 05
13	3.109E 02	-51.230	0.33	549.86	20.66664	0.23223	1.20	7.597E 04
14	4.665E 01	-37.195	1.09	549.83	20.73331	0.22252	1.15	8.795E 03
15	2.230E 02	-48.423	1.74	549.27	22.38332	0.23415	1.20	4.817E 04
16	1.446E 02	-45.567	2.71	546.62	24.09999	0.23467	1.19	3.355E 04
17	1.326E 02	-46.181	3.00	543.11	25.79999	0.23664	1.19	2.749E 04
18	1.284E 02	-46.768	2.70	539.12	27.50000	0.23669	1.19	2.736E 04
19	1.474E 02	-47.349	1.88	535.37	29.20000	0.23493	1.19	3.366E 04
20	1.837E 02	-51.463	0.88	532.90	30.88332	0.23608	1.20	4.716E 04
21	2.319E 02	-52.049	-0.44	531.26	32.58331	0.23236	1.19	6.592E 04
22	2.682E 02	-56.152	-1.51	531.19	34.26666	0.23269	1.20	9.093E 04
23	2.970E 02	-56.705	-2.48	532.63	35.96666	0.22982	1.19	1.120E 05
24	3.198E 02	-57.247	-2.96	535.48	37.66664	0.22844	1.19	1.202E 05
25	3.363E 02	-57.804	-2.87	539.21	39.36664	0.22885	1.19	1.240E 05
26	3.817E 02	-54.884	-2.08	543.73	41.08331	0.22839	1.19	1.281E 05
27	3.361E 02	-52.036	-0.76	547.47	42.79999	0.22966	1.19	1.050E 05
28	2.510E 02	-49.231	0.75	549.58	44.51666	0.23166	1.19	6.925E 04
29	1.601E 02	-49.929	1.92	549.68	46.21666	0.23632	1.21	3.038E 04
30	1.809E 02	-46.416	2.07	549.55	46.23331	0.23314	1.19	1.714E 04

Table 56

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS : VETTES AE4, AE5, AP1, AP5, AP6, AP7 **** PROCEDURE : UNIFLUX OF 1972 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1972. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 3: CAIN&LANGEL 143-TERM POGO 10/68 * TIME= 1970.0 **
** VEHICLE : UK-5 3/650 ** INCLINATION= 3DEG ** PERIGEE= 650KM ** APOGEE= 650KM ** B/L ORBIT TAPE: TD5247 ** PERIOD= 1.629 **

******************** LOW ENERGY PROTONS ********************
** TABLE OF PEAK AND TOTAL FLUXES PER PERIOD - ENERGY >.100 MEV **

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	8.057E 02	-45.341	2.57	645.49	0.26667	0.22405	1.21	2.589E 05
2	7.986E 02	-43.832	2.99	641.27	2.01667	0.22431	1.20	2.174E 05
3	6.577E 02	-45.735	2.78	637.46	3.75000	0.22588	1.21	2.034E 05
4	6.957E 02	-44.184	1.91	633.75	5.50000	0.22208	1.19	2.267E 05
5	8.667E 02	-46.092	0.77	631.76	7.23333	0.22060	1.20	2.861E 05
6	1.015E 03	-48.006	-0.51	631.27	8.96667	0.21856	1.20	3.776E 05
7	1.243E 03	-49.912	-1.70	632.37	10.70000	0.21663	1.20	5.026E 05
8	1.507E 03	-51.805	-2.57	634.85	12.43333	0.21545	1.20	6.155E 05
9	1.723E 03	-53.695	-2.98	638.29	14.16667	0.21551	1.20	6.782E 05
10	1.729E 03	-52.158	-2.77	642.69	15.91667	0.21444	1.20	6.815E 05
11	1.680E 03	-50.679	-1.90	646.61	17.66664	0.21535	1.20	6.324E 05
12	1.405E 03	-49.261	-0.58	649.20	19.41664	0.21776	1.20	5.225E 05
13	1.064E 03	-47.869	0.88	649.90	21.16664	0.22083	1.21	3.354E 05
14	9.466E 02	-44.440	1.06	649.84	21.18330	0.21827	1.19	9.889E 04
15	8.584E 02	-46.455	2.13	648.55	22.91664	0.22348	1.21	2.811E 05
16	7.723E 02	-44.988	2.87	645.45	24.66664	0.22466	1.21	2.400E 05
17	7.382E 02	-43.472	2.93	641.26	26.41664	0.22378	1.20	2.133E 05
18	7.946E 02	-45.385	2.40	637.48	28.14999	0.22437	1.20	2.198E 05
19	8.410E 02	-47.390	1.44	634.22	29.88332	0.22353	1.21	2.573E 05
20	9.812E 02	-49.220	0.21	632.05	31.61664	0.22175	1.20	3.307E 05
21	1.186E 03	-51.133	-1.06	631.33	33.34999	0.21968	1.20	4.389E 05
22	1.365E 03	-53.029	-2.13	632.19	35.08331	0.21801	1.20	5.570E 05
23	1.463E 03	-54.908	-2.82	634.45	36.81667	0.21734	1.20	6.407E 05
24	1.693E 03	-53.338	-2.96	638.31	38.56667	0.21526	1.20	6.657E 05
25	1.700E 03	-51.811	-2.40	642.66	40.31667	0.21523	1.20	6.482E 05
26	1.518E 03	-50.351	-1.26	646.54	42.06667	0.21695	1.20	5.717E 05
27	1.182E 03	-48.943	0.18	649.12	43.81667	0.21976	1.21	4.569E 05
28	9.252E 02	-47.544	1.57	649.83	45.56667	0.22267	1.21	3.227E 05
29	2.716E 02	-37.248	2.03	649.53	45.61664	0.21544	1.17	6.772E 04

TABLE _

UK-5 0/450

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 450 KM

APOGEE: 450 KM

DECAY DATE: 1972. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	88.16 %	88.09 %	93.12 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	0.0 %	0.0 %	0.0 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	0.0 %	0.0 %	0.0 %

****

* <1 PARTICLE/CM**2/SEC

\+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC

TABLE 57

UK-5 0/450

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 450 KM

APOGEE: 450 KM

DECAY DATE: 1972. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *
* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE (1.0 < L < 2.5)	-TI-* :	100.00 %
OUTER ZONE (2.5 < L < 7.0)	-TO- :	0.0 %
EXTERNAL (L > 7.0)	-TE- :	0.0 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1) :	70.10 %
INSIDE TRAPPING REGION (1.1 < L < 2.5) :	29.90 %

TABLE

UK-5 0/550

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 550 KM

APOGEE: 550 KM

DECAY DATE: 1972. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	79.49 %	79.65 %	87.50 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	0.0 %	0.0 %	0.0 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	0.0 %	0.0 %	0.0 %

****

* <1 PARTICLE/CM**2/SEC

\+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC

TABLE 8

UK-5 0/550

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 550 KM

APOGEE: 550 KM

DECAY DATE: 1972. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *

* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE -TI-* : 100.00 %

(1.0 < L < 2.5)

OUTER ZONE -TO- : 0.0 %

(2.5 < L < 7.0)

EXTERNAL -TE- : 0.0 %

(L > 7.0)

TOTAL : 100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION : 62.74 %

(1.0 < L < 1.1)

INSIDE TRAPPING REGION : 37.26 %

(1.1 < L < 2.5)

TABLE 59

UK-5 0/650

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 650 KM

APOGEE: 650 KM

DECAY DATE: 1972. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	69.86 %	69.90 %	81.25 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	1.32 %	0.0 %	0.0 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	23.52 %	0.0 %	0.0 %

****

* <1 PARTICLE/CM**2/SEC

+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC

UK-5 0/650

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 650 KM

APOGEE: 650 KM

DECAY DATE: 1972. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *
* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE -TI-* (1.0 < L < 2.5)	:	100.00 %
OUTER ZONE -TO- (2.5 < L < 7.0)	:	0.0 %
EXTERNAL -TE- (L > 7.0)	:	0.0 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION : 53.54 %
(1.0 < L < 1.1)

INSIDE TRAPPING REGION : 46.46 %
(1.1 < L < 2.5)

TABLE _

UK-5 3/450

CIRCULAR

INCLINATION: 3 DEG

PERIGEE: 450 KM

APOGEE: 450 KM

DECAY DATE: 1972. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	88.82 %	88.82 %	94.24 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	0.0 %	0.0 %	0.0 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	0.0 %	0.0 %	0.0 %

****

* <1 PARTICLE/CM**2/SEC

+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC

TABLE 60

UK-5 3/450

CIRCULAR

INCLINATION: 3 DEG

PERIGEE: 450 KM

APOGEE: 450 KM

DECAY DATE: 1972. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *
* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE (1.0 < L < 2.5)	-TI-* :	100.00 %
OUTER ZONE (2.5 < L < 7.0)	-TO- :	0.0 %
EXTERNAL (L > 7.0)	-TE- :	0.0 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION : 71.01 %
(1.0 < L < 1.1)

INSIDE TRAPPING REGION : 28.99 %
(1.1 < L < 2.5)

TABLE _

UK-5 3/550

CIRCULAR

INCLINATION: 3 DEG

PERIGEE: 550 KM

APOGEE: 550 KM

DECAY DATE: 1972. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFETIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	79.41 %	79.86 %	87.60 %
PERCENT OF TOTAL LIFETIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	0.0 %	0.0 %	0.0 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	0.0 %	0.0 %	0.0 %

****

* <1 PARTICLE/CM**2/SEC

+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC

TABLE 61

UK-5 3/550

CIRCULAR

INCLINATION: 3 DEG

PERIGEE: 550 KM

APOGEE: 550 KM

DECAY DATE: 1972. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *

* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE -TI-* : 100.00 %
(1.0 < L < 2.5)

OUTER ZONE -TO- : 0.0 %
(2.5 < L < 7.0)

EXTERNAL -TE- : 0.0 %
(L > 7.0)

TOTAL : 100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION : 62.26 %
(1.0 < L < 1.1)

INSIDE TRAPPING REGION : 37.74 %
(1.1 < L < 2.5)

TABLE _ TABLE 62

UK-5 3/650

CIRCULAR

INCLINATION: 3 DEG

PERIGEE: 650 KM

APOGEE: 650 KM

DECAY DATE: 1972. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	70.00 %	70.21 %	82.01 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	1.46 %	0.0 %	0.0 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	27.42 %	0.0 %	0.0 %

****

* <1 PARTICLE/CM**2/SEC

\+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC

UK-5 3/650

CIRCULAR

INCLINATION: 3 DEG

PERIGEE: 650 KM

APOGEE: 650 KM

DECAY DATE: 1972. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *
* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE -TI-* (1.0 < L < 2.5)	:	100.00 %
OUTER ZONE -TO- (2.5 < L < 7.0)	:	0.0. %
EXTERNAL -TE- (L > 7.0)	:	0.0 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	53.40 %
INSIDE TRAPPING REGION (1.1 < L < 2.5)	:	46.60 %

Table 63
Protons

ALTITUDE= 400.0 ENERGY≥ 50.0

	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0	-32.0	-30.0	-28.0	-26.0
5.0	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1
-1.0	1	1	1	1	1	1	1	1	1	1
-2.0	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1
-5.0	1	1	2	2	2	3	2	2	1	1

ALTITUDE= 400.0 ENERGY≥ 5.0

	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0
-4.0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0
-5.0	0	1	1	1	2	2	2	2	2	2	2	2	1	1	1	0

ALTITUDE= 400.0 ENERGY≥ 3.0

	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0	-32.0	-30.0	-28.0	-26.0	-24.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1
-1.0	1	1	1	1	1	1	1	1	1	1	1	1
-2.0	1	1	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1	1	1
-5.0	1	1	2	2	2	2	2	2	2	2	1	1

Table 64
Protons

ALTITUDE= 500.0 ENERGY= 5.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-45.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
2.0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	1
1.0	0	0	1	1	1	1	1	0	0	0	0	0	0	1	1	1	2
0.0	0	1	1	1	1	1	0	0	0	0	0	0	1	1	2	3	3
-1.0	0	0	0	0	0	0	0	0	0	0	1	1	3	4	5	6	7
-2.0	0	0	0	0	0	0	0	0	1	1	3	4	7	9	11	12	12
-3.0	0	0	0	0	0	0	0	1	2	4	7	10	14	17	19	19	20
-4.0	0	0	0	0	0	1	2	4	7	11	16	21	24	27	29	30	31
-5.0	0	0	0	1	2	4	6	11	17	23	28	34	38	45	49	51	51

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
2.0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
1.0	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0
0.0	4	4	4	3	3	2	2	1	1	1	0	0	0	0	0	0	0
-1.0	7	7	6	6	5	4	3	2	1	1	1	0	0	0	0	0	0
-2.0	12	12	11	9	8	6	5	3	2	1	1	1	0	0	0	0	0
-3.0	19	18	16	14	13	10	8	5	3	2	1	1	0	0	0	0	0
-4.0	30	27	25	22	18	15	12	8	5	3	2	1	0	0	0	0	0
-5.0	49	45	39	32	27	22	17	12	8	4	2	1	0	0	0	0	0

ALTITUDE= 500.0 ENERGY= 3.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-45.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	4
-1.0	1	1	1	1	1	1	1	1	1	1	1	2	3	4	6	7	8
-2.0	1	1	1	1	1	1	1	1	1	1	3	5	8	10	12	13	14
-3.0	1	1	1	1	1	1	1	1	3	5	8	12	16	19	21	22	22
-4.0	1	1	1	1	1	1	2	5	8	12	18	23	27	31	33	34	35
-5.0	1	1	1	1	2	4	7	12	19	26	32	39	44	51	56	58	58

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-5.0	-4.0	-2.0	0.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
0.0	4	4	4	4	3	2	2	1	1	1	1	1	1	1	1	1	1
-1.0	8	8	7	6	5	4	3	2	2	1	1	1	1	1	1	1	1
-2.0	14	13	12	10	9	7	5	4	3	2	1	1	1	1	1	1	1
-3.0	22	20	18	16	14	11	9	6	4	2	1	1	1	1	1	1	1
-4.0	34	31	28	25	21	17	13	9	6	4	2	1	1	1	1	1	1
-5.0	55	51	44	36	31	24	19	14	9	5	3	1	1	1	1	1	1

Table 65
Protons

ALTITUDE= 500.0 ENERGY≥100.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
-3.0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2
-4.0	0	0	0	0	0	0	0	0	0	0	1	2	2	3	4	4	4
-5.0	0	0	0	0	0	0	0	0	1	2	3	4	4	5	6	6	7

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0
-4.0	4	4	3	3	2	1	1	0	0	0	0	0	0	0	0	0	0
-5.0	6	6	5	4	3	2	1	1	0	0	0	0	0	0	0	0	0

ALTITUDE= 500.0 ENERGY≥ 50.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3
-1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	5	6
-2.0	1	1	1	1	1	1	1	1	1	1	1	2	4	6	8	9	11
-3.0	1	1	1	1	1	1	1	1	1	2	4	6	9	12	15	17	19
-4.0	1	1	1	1	1	1	1	2	4	6	9	14	18	22	24	26	27
-5.0	1	1	1	1	1	2	3	6	9	14	19	24	29	32	35	36	36

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
0.0	3	4	4	4	3	2	2	1	1	1	1	1	1	1	1	1	1
-1.0	6	6	6	6	5	4	3	2	1	1	1	1	1	1	1	1	1
-2.0	12	12	11	9	7	6	4	3	2	1	1	1	1	1	1	1	1
-3.0	19	19	17	15	12	8	6	4	3	1	1	1	1	1	1	1	1
-4.0	27	26	24	21	17	13	9	6	4	2	1	1	1	1	1	1	1
-5.0	36	34	31	27	23	18	12	8	5	2	1	1	1	1	1	1	1

Table 66
Protons

ALTITUDE= 600.0 ENERGY= 3.0

	-100.0	-98.0	-96.0	-94.0	-92.0	-90.0	-88.0	-86.0	-84.0	-82.0	-80.0	-78.0	-76.0	-74.0	-72.0	-70.0	-68.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5
-1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
-2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	5

ALTITUDE= 600.0 ENERGY= 3.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-55.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	1	1	1	1	1	3	5	8	10	12	12	8	1	1	1	1	3
4.0	1	1	1	2	4	7	10	13	15	15	11	2	1	1	3	5	7
3.0	1	2	4	6	9	12	15	18	19	16	7	1	2	5	8	12	16
2.0	3	5	7	10	14	18	21	22	19	12	1	4	8	13	19	25	28
1.0	5	8	11	15	19	23	24	23	16	3	7	13	20	28	35	41	46
0.0	7	10	14	18	22	25	25	19	6	11	19	29	39	49	68	71	79
-1.0	7	10	15	19	23	23	20	9	17	28	41	53	56	86	103	114	120
-2.0	1	6	10	14	16	14	15	25	39	53	70	95	120	139	156	169	174
-3.0	1	1	3	7	13	22	36	51	70	97	128	157	185	207	233	248	256
-4.0	3	6	11	19	32	48	66	92	129	165	203	236	278	309	330	343	346
-5.0	10	17	29	43	60	83	123	164	207	252	308	354	393	418	444	456	459

ALTITUDE= 600.0 ENERGY= 3.0

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	4	5	6	7	6	6	5	4	3	2	2	1	1	1	1	1	1
4.0	9	11	12	12	12	10	9	7	6	4	3	2	1	1	1	1	1
3.0	19	20	21	20	18	16	14	12	9	7	5	3	2	1	1	1	1
2.0	31	32	32	30	28	25	21	17	14	11	8	5	4	2	1	1	1
1.0	50	52	52	49	44	38	31	26	21	16	12	9	6	3	2	1	1
0.0	84	84	82	77	69	60	50	39	30	23	18	13	8	5	3	2	1
-1.0	124	123	118	110	98	86	73	58	44	33	24	18	12	7	4	2	1
-2.0	178	175	166	151	137	120	100	83	63	45	33	24	17	10	6	3	2
-3.0	255	248	234	215	189	160	136	110	86	63	44	31	22	14	8	4	2
-4.0	341	330	311	295	253	216	177	143	113	84	56	40	28	18	10	5	2
-5.0	449	429	399	364	326	281	229	184	143	107	73	51	35	22	12	6	3

Table 67
Rotons

ALTITUDE= 600.0 ENERGY= 5.0

	-100.0	-98.0	-96.0	-94.0	-92.0	-90.0	-88.0	-86.0	-84.0	-82.0	-80.0	-78.0	-76.0	-74.0	-72.0	-70.0	-68.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
-5.0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	5

ALTITUDE= 600.0 ENERGY= 5.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	1	3	5	7	10	11	10	7	0	0	1	1	2
4.0	0	0	1	2	4	6	9	12	14	14	10	2	0	1	2	4	6
3.0	1	2	4	5	8	11	14	16	17	14	6	1	2	4	7	10	14
2.0	3	5	7	9	13	16	19	19	17	10	1	3	7	11	17	21	25
1.0	5	7	10	14	17	20	22	20	14	3	6	11	18	25	31	36	40
0.0	6	9	13	16	20	22	22	17	5	9	15	25	34	43	50	61	69
-1.0	6	9	13	16	20	20	17	8	14	24	35	46	57	74	98	98	103
-2.0	1	5	9	12	14	12	12	22	33	45	60	82	102	119	134	145	150
-3.0	0	1	3	6	11	19	30	43	60	82	109	133	158	177	199	212	219
-4.0	3	5	9	16	27	40	56	78	109	139	171	200	236	262	290	291	295
-5.0	9	15	25	37	51	70	104	138	174	212	259	298	331	353	375	386	389

ALTITUDE= 600.0 ENERGY= 5.0

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	4	4	5	6	6	5	5	4	3	2	2	1	1	1	0	0	0
4.0	8	10	11	11	10	9	8	7	5	4	3	2	1	1	1	0	0
3.0	16	18	19	18	16	15	13	10	8	6	4	3	2	1	1	1	0
2.0	27	29	28	27	25	22	19	15	13	10	7	5	3	2	1	1	1
1.0	44	46	46	43	39	34	28	23	19	14	11	8	5	3	2	1	1
0.0	73	74	71	67	61	53	44	36	26	21	16	11	8	5	3	1	1
-1.0	107	107	103	95	85	75	64	51	39	29	21	16	11	7	4	2	1
-2.0	153	151	143	131	119	104	87	72	55	39	29	21	15	9	5	3	1
-3.0	219	213	201	185	163	138	117	95	75	54	38	27	19	12	7	4	2
-4.0	291	291	266	244	217	185	152	123	98	72	49	35	24	16	9	5	2
-5.0	380	363	338	309	277	239	195	157	122	92	63	44	30	19	11	6	3

Table 68

Protons

ALTITUDE= 600.0 ENERGY= 50.0

	-100.0	-98.0	-96.0	-94.0	-92.0	-90.0	-88.0	-86.0	-84.0	-82.0	-80.0	-78.0	-76.0	-74.0	-72.0	-70.0	-68.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3

ALTITUDE= 600.0 ENERGY= 50.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	6	8
2.0	1	1	1	1	1	1	1	1	1	1	1	2	3	5	9	12	17
1.0	1	1	1	1	1	1	1	2	2	1	3	5	9	13	19	24	28
0.0	1	1	1	1	1	2	3	3	2	5	8	13	19	26	31	37	40
-1.0	1	1	1	1	2	3	4	4	7	12	18	25	33	41	48	54	57
-2.0	1	1	1	2	3	4	6	10	16	24	33	42	52	62	70	74	76
-3.0	1	1	1	3	5	9	14	22	31	42	53	68	81	90	93	91	91
-4.0	1	3	5	8	13	20	29	39	51	70	88	103	110	113	112	108	105
-5.0	4	7	12	18	26	36	49	68	89	111	125	134	141	140	135	129	124

ALTITUDE= 600.0 ENERGY= 50.0

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	2	2	4	4	4	4	4	4	3	3	2	1	1	1	1	1	1
4.0	5	6	7	8	8	8	7	6	5	4	3	2	1	1	1	1	1
3.0	10	13	15	15	15	14	13	10	8	6	5	3	2	1	1	1	1
2.0	20	22	24	24	23	22	19	16	13	9	7	5	3	2	1	1	1
1.0	31	33	33	33	32	29	26	23	19	14	9	7	4	3	1	1	1
0.0	44	45	45	44	41	37	34	29	24	19	14	9	6	4	2	1	1
-1.0	60	60	59	57	53	48	42	36	30	24	18	12	7	4	2	1	1
-2.0	77	76	74	71	66	59	52	44	36	29	22	15	9	5	3	1	1
-3.0	92	91	88	84	79	72	63	54	43	35	26	19	11	7	4	2	1
-4.0	105	103	101	96	91	84	77	65	53	40	31	22	14	8	5	2	1
-5.0	119	117	114	112	109	103	94	81	64	47	35	25	17	10	5	3	1

Table 69
Protons

ALTITUDE= 600.0 ENERGY=100.0

	-100.0	-98.0	-96.0	-94.0	-92.0	-90.0	-88.0	-86.0	-84.0	-82.0	-80.0	-78.0	-76.0	-74.0	-72.0	-70.0	-68.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ALTITUDE= 600.0 ENERGY=100.0

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
1.0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3	4
0.0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	8
-1.0	0	0	0	0	0	0	0	0	1	2	3	4	6	8	10	12	14
-2.0	0	0	0	0	0	0	1	1	2	4	6	8	11	15	19	21	23
-3.0	0	0	0	0	0	1	2	4	6	8	12	17	24	29	33	34	36
-4.0	0	0	0	1	2	3	5	8	11	18	26	35	42	47	50	50	50
-5.0	0	1	2	3	4	7	10	17	26	38	49	58	66	70	70	69	67

ALTITUDE= 600.0 ENERGY=100.0

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
3.0	1	1	2	2	2	2	1	1	1	0	0	0	0	0	0	0	0
2.0	3	3	3	3	3	3	3	2	1	1	0	0	0	0	0	0	0
1.0	5	5	6	6	5	5	4	3	2	2	1	0	0	0	0	0	0
0.0	9	9	9	9	9	7	6	5	3	2	2	1	0	0	0	0	0
-1.0	15	15	15	14	12	10	8	6	5	3	2	1	1	0	0	0	0
-2.0	24	24	23	20	18	15	12	9	6	4	3	2	1	0	0	0	0
-3.0	37	36	34	31	26	21	17	12	9	6	4	3	1	1	0	0	0
-4.0	50	49	46	41	36	29	23	17	12	8	5	3	2	1	0	0	0
-5.0	64	62	58	54	48	41	32	24	16	10	6	4	2	1	0	0	0

Table 70

Electrons

ALTITUDE= 400.0 ENERGY≥ 0.2

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3
-3.0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	4	4	4
-4.0	0	0	0	0	0	0	0	0	0	0	2	4	6	7	7	6	6
-5.0	0	0	0	0	0	0	0	0	1	4	7	9	9	10	9	9	8

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
-2.0	3	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0
-3.0	4	3	3	3	3	2	2	1	0	0	0	0	0	0	0	0	0
-4.0	5	5	4	4	4	3	3	1	0	0	0	0	0	0	0	0	0
-5.0	7	7	7	6	6	5	4	2	0	0	0	0	0	0	0	0	0

ALTITUDE= 400.0 ENERGY≥ 0.1

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	3
-3.0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	5	5	4
-4.0	0	0	0	0	0	0	0	0	0	0	3	5	7	8	8	7	6
-5.0	0	0	0	0	0	0	0	0	2	5	8	10	11	11	10	10	9

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
-2.0	3	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0
-3.0	4	3	3	3	3	2	2	1	0	0	0	0	0	0	0	0	0
-4.0	6	5	5	5	4	4	3	1	0	0	0	0	0	0	0	0	0
-5.0	8	8	8	7	7	5	4	2	0	0	0	0	0	0	0	0	0

Table 71

Electrons

ALTITUDE= 500.0 ENERGY≥ 0.1

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	6
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	11	12
0.0	0	0	0	0	0	0	0	0	0	0	0	1	5	12	16	19	18
-1.0	0	0	0	0	0	0	0	0	0	0	2	10	19	26	28	27	25
-2.0	0	0	0	0	0	0	0	0	0	5	15	28	35	41	40	38	34
-3.0	0	0	0	0	0	0	0	3	11	24	40	54	57	59	56	52	48
-4.0	0	0	0	0	0	1	8	19	39	57	75	81	82	83	74	70	60
-5.0	0	0	0	1	6	16	34	55	83	104	112	118	117	110	108	87	82

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
4.0	0	2	3	3	3	2	2	1	1	1	1	0	0	0	0	0	0
3.0	4	4	5	4	4	3	2	2	2	1	1	1	0	0	0	0	0
2.0	8	8	7	6	5	4	3	3	2	2	2	1	0	0	0	0	0
1.0	12	11	10	8	7	6	5	4	4	3	2	2	1	0	0	0	0
0.0	17	14	13	11	9	8	7	7	6	5	4	2	1	0	0	0	0
-1.0	22	20	16	15	13	12	12	10	8	7	5	4	2	0	0	0	0
-2.0	31	26	22	21	20	19	17	15	13	10	8	5	2	0	0	0	0
-3.0	41	35	33	30	30	29	26	23	18	15	10	6	2	0	0	0	0
-4.0	52	50	48	48	48	45	39	32	28	20	14	7	3	0	0	0	0
-5.0	74	72	72	74	69	67	60	51	38	27	18	8	2	0	0	0	0

ALTITUDE= 400.0 ENERGY≥ 0.5

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2
-3.0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	4	3
-4.0	0	0	0	0	0	0	0	0	0	0	1	3	5	5	5	5	5
-5.0	0	0	0	0	0	0	0	0	1	2	4	6	7	8	8	7	7

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
-2.0	2	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0
-3.0	3	3	3	3	2	2	1	0	0	0	0	0	0	0	0	0	0
-4.0	5	4	4	4	3	3	2	1	0	0	0	0	0	0	0	0	0
-5.0	6	6	6	5	5	4	3	1	0	0	0	0	0	0	0	0	0

Table 72
Electrons

ALTITUDE= 500.0 ENERGY= 0.5

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	7
0.0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	9	11	11
-1.0	0	0	0	0	0	0	0	0	0	0	1	4	9	13	15	16	16
-2.0	0	0	0	0	0	0	0	0	0	2	6	12	17	22	23	23	22
-3.0	0	0	0	0	0	0	0	1	4	9	17	25	29	32	32	32	31
-4.0	0	0	0	0	0	0	2	7	15	23	34	39	43	46	43	43	38
-5.0	0	0	0	0	2	5	12	21	34	45	52	59	62	62	63	53	51

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
4.0	0	1	2	2	2	2	2	1	1	1	1	0	0	0	0	0	0
3.0	2	3	3	3	3	2	2	2	1	1	1	1	0	0	0	0	0
2.0	5	5	5	5	4	3	3	3	2	2	1	1	0	0	0	0	0
1.0	8	8	7	6	5	5	4	4	3	3	2	1	1	0	0	0	0
0.0	11	10	9	8	7	6	6	5	4	4	3	2	1	0	0	0	0
-1.0	15	14	12	11	10	9	9	7	6	5	4	2	1	0	0	0	0
-2.0	21	18	16	15	14	13	12	10	8	7	5	3	1	0	0	0	0
-3.0	27	24	23	21	20	19	17	14	11	9	6	3	1	0	0	0	0
-4.0	34	32	31	31	30	28	23	19	16	11	7	4	1	0	0	0	0
-5.0	46	45	45	45	41	38	33	27	19	13	8	3	1	0	0	0	0

ALTITUDE= 500.0 ENERGY= 0.2

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	9	10
0.0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	13	16	16
-1.0	0	0	0	0	0	0	0	0	0	0	2	7	15	21	23	23	22
-2.0	0	0	0	0	0	0	0	0	0	4	11	21	28	33	33	32	30
-3.0	0	0	0	0	0	0	0	2	8	17	30	42	45	48	47	44	42
-4.0	0	0	0	0	0	1	5	14	28	42	58	64	66	69	62	60	52
-5.0	0	0	0	1	4	11	24	40	62	79	87	94	95	92	91	74	70

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
4.0	0	1	2	2	2	2	2	1	1	1	1	0	0	0	0	0	0
3.0	3	4	4	4	3	3	2	2	1	1	1	1	0	0	0	0	0
2.0	7	7	6	6	5	4	3	3	2	2	1	1	0	0	0	0	0
1.0	10	10	9	8	6	5	5	4	4	3	2	2	1	0	0	0	0
0.0	15	13	11	10	9	7	7	6	5	4	3	2	1	0	0	0	0
-1.0	20	18	15	14	12	11	11	9	7	6	5	3	2	0	0	0	0
-2.0	27	23	20	19	18	17	15	13	11	9	7	4	2	0	0	0	0
-3.0	36	31	29	27	26	25	22	19	15	13	8	5	2	0	0	0	0
-4.0	45	43	42	42	41	38	33	27	23	17	11	6	2	0	0	0	0
-5.0	63	62	62	63	58	56	49	41	31	21	13	6	1	0	0	0	0

Table 73
Electrons

ALTITUDE= 600.0 ENERGY= 0.1

	-100.0	-98.0	-96.0	-94.0	-92.0	-90.0	-88.0	-86.0	-84.0	-82.0	-80.0	-78.0	-76.0	-74.0	-72.0	-70.0	-68.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-5.0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	6	9	17

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	14
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	22	35
3.0	0	0	0	0	0	0	0	0	0	0	0	0	2	13	36	57	67
2.0	0	0	0	0	0	0	0	0	0	0	0	5	22	54	82	97	103
1.0	0	0	0	0	0	0	0	0	0	0	9	39	81	118	150	149	139
0.0	0	0	0	0	0	0	0	0	2	19	61	119	176	202	215	219	193
-1.0	0	0	0	0	0	0	2	8	37	89	173	251	300	313	320	287	263
-2.0	0	0	0	0	1	6	20	61	142	239	356	426	462	440	428	392	336
-3.0	0	0	1	4	18	51	116	222	342	472	553	615	614	596	548	511	440
-4.0	3	8	22	48	100	194	317	471	636	774	858	882	841	826	728	636	547
-5.0	30	55	101	165	288	430	630	831	1005	1102	1148	1136	1102	1030	920	797	705

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	23	28	30	26	24	20	17	14	11	9	7	5	4	3	2	2	1
4.0	44	45	43	37	31	27	22	17	15	11	9	7	6	5	4	3	2
3.0	69	62	59	50	44	34	28	24	20	16	14	11	9	7	5	4	3
2.0	94	85	74	66	54	44	35	31	27	23	19	17	13	10	8	6	4
1.0	129	115	104	80	66	56	49	45	38	34	30	25	19	15	12	9	6
0.0	175	152	125	104	89	78	71	64	59	52	43	35	28	21	16	11	8
-1.0	235	195	164	141	124	113	106	105	90	77	64	54	41	31	23	15	10
-2.0	284	241	208	196	178	168	164	158	139	113	98	80	62	43	31	20	11
-3.0	375	327	291	283	266	275	267	243	205	180	142	110	82	60	39	22	11
-4.0	480	430	421	422	437	428	407	360	321	260	219	164	112	78	44	23	11
-5.0	679	627	631	653	698	655	607	558	469	396	303	219	152	93	48	22	8

	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0
5.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-5.0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 74
Electrons

ALTITUDE= 600.0 ENERGY= 0.2

	-100.0	-98.0	-96.0	-94.0	-92.0	-90.0	-88.0	-86.0	-84.0	-82.0	-80.0	-78.0	-76.0	-74.0	-72.0	-70.0	-68.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-5.0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	6	11

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15	26
3.0	0	0	0	0	0	0	0	0	0	0	0	0	1	9	25	42	51
2.0	0	0	0	0	0	0	0	0	0	0	0	3	14	37	59	73	80
1.0	0	0	0	0	0	0	0	0	0	0	5	25	55	84	111	114	110
0.0	0	0	0	0	0	0	0	0	1	11	39	80	123	147	162	169	154
-1.0	0	0	0	0	0	0	1	5	23	57	115	173	214	231	244	225	210
-2.0	0	0	0	0	0	3	12	38	90	157	242	300	336	330	330	309	270
-3.0	0	0	0	2	11	31	72	142	225	319	387	442	455	452	425	405	353
-4.0	2	5	14	30	63	123	204	310	429	536	610	644	630	631	569	504	438
-5.0	19	36	65	106	186	281	417	562	694	779	830	841	833	794	720	629	560

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	17	22	25	22	21	17	15	13	10	8	6	5	4	3	2	2	1
4.0	34	36	35	31	27	23	20	15	13	10	9	7	6	4	4	3	2
3.0	54	51	49	43	38	30	25	21	18	14	12	10	8	7	5	4	3
2.0	75	70	62	56	47	39	31	28	24	20	17	15	12	9	7	5	4
1.0	104	95	88	68	57	49	43	40	33	30	27	22	17	13	10	7	5
0.0	142	126	105	88	76	67	61	55	51	45	37	30	24	18	13	10	7
-1.0	192	162	137	118	105	95	90	88	76	65	54	45	34	25	19	13	8
-2.0	232	198	172	163	149	140	136	131	114	92	79	64	49	34	24	16	9
-3.0	304	267	238	232	218	225	216	195	163	142	111	85	63	46	30	17	8
-4.0	387	348	341	341	351	341	321	281	247	198	164	122	82	56	32	17	8
-5.0	541	500	503	518	549	508	465	421	349	290	219	156	107	65	33	15	5

	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0
5.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-5.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 75

Electrons

ALTITUDE= 600.0 ENERGY≥ 0.5

	-100.0	-98.0	-96.0	-94.0	-92.0	-90.0	-88.0	-86.0	-84.0	-82.0	-80.0	-78.0	-76.0	-74.0	-72.0	-70.0	-68.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-5.0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	5

	-66.0	-64.0	-62.0	-60.0	-58.0	-56.0	-54.0	-52.0	-50.0	-48.0	-46.0	-44.0	-42.0	-40.0	-38.0	-36.0	-34.0
5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	15
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13	22	29
2.0	0	0	0	0	0	0	0	0	0	0	0	1	6	18	31	41	48
1.0	0	0	0	0	0	0	0	0	0	0	2	11	26	42	60	66	68
0.0	0	0	0	0	0	0	0	0	0	4	16	36	60	77	91	100	96
-1.0	0	0	0	0	0	0	0	1	8	23	51	82	109	126	140	136	133
-2.0	0	0	0	0	0	0	4	14	37	69	112	149	177	184	193	188	172
-3.0	0	0	0	1	4	12	28	58	97	146	188	227	246	257	252	249	223
-4.0	1	2	5	11	25	49	85	135	195	255	306	339	347	362	340	309	274
-5.0	8	15	27	45	78	120	183	256	328	385	428	453	466	461	429	382	346

	-32.0	-30.0	-28.0	-26.0	-24.0	-22.0	-20.0	-18.0	-16.0	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0.0
5.0	10	14	16	15	15	13	12	10	8	7	5	4	4	3	2	2	1
4.0	21	23	24	22	20	18	16	12	11	9	7	6	5	4	3	2	2
3.0	34	33	33	30	28	23	19	17	14	12	10	8	7	6	4	3	2
2.0	48	47	43	40	34	29	24	21	19	16	14	12	9	7	6	4	3
1.0	67	64	61	49	42	36	32	30	25	22	20	16	13	10	8	6	4
0.0	93	85	73	63	55	49	45	40	37	33	27	22	17	13	10	7	5
-1.0	126	109	94	82	73	67	63	62	53	45	37	30	23	17	13	8	5
-2.0	151	132	116	111	101	95	92	87	75	61	51	41	31	21	15	10	5
-3.0	196	174	157	153	144	147	139	123	102	87	67	51	37	26	17	9	5
-4.0	246	223	218	217	222	213	196	169	145	114	92	68	45	30	17	9	4
-5.0	335	312	312	310	332	300	268	236	191	155	114	79	53	31	16	7	2

	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0
5.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1.0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2.0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B and L Extrema of UK-5 Trajectories.

Figure 1

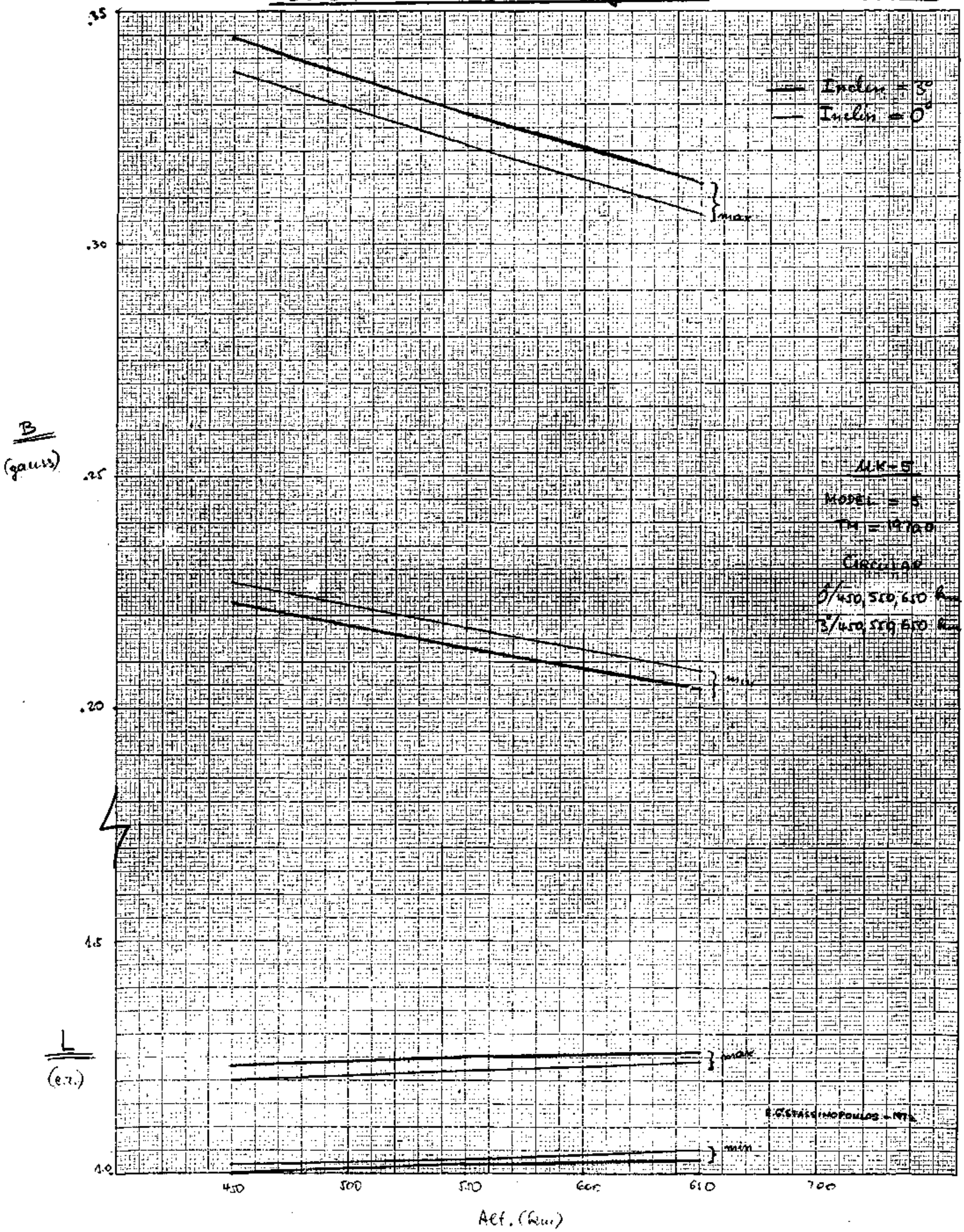


TABLE ARRANGEMENT

Computer Produced Output Tables for Orbital Flux Integrations.

Standard Production Runs with UNIFLUX Program.

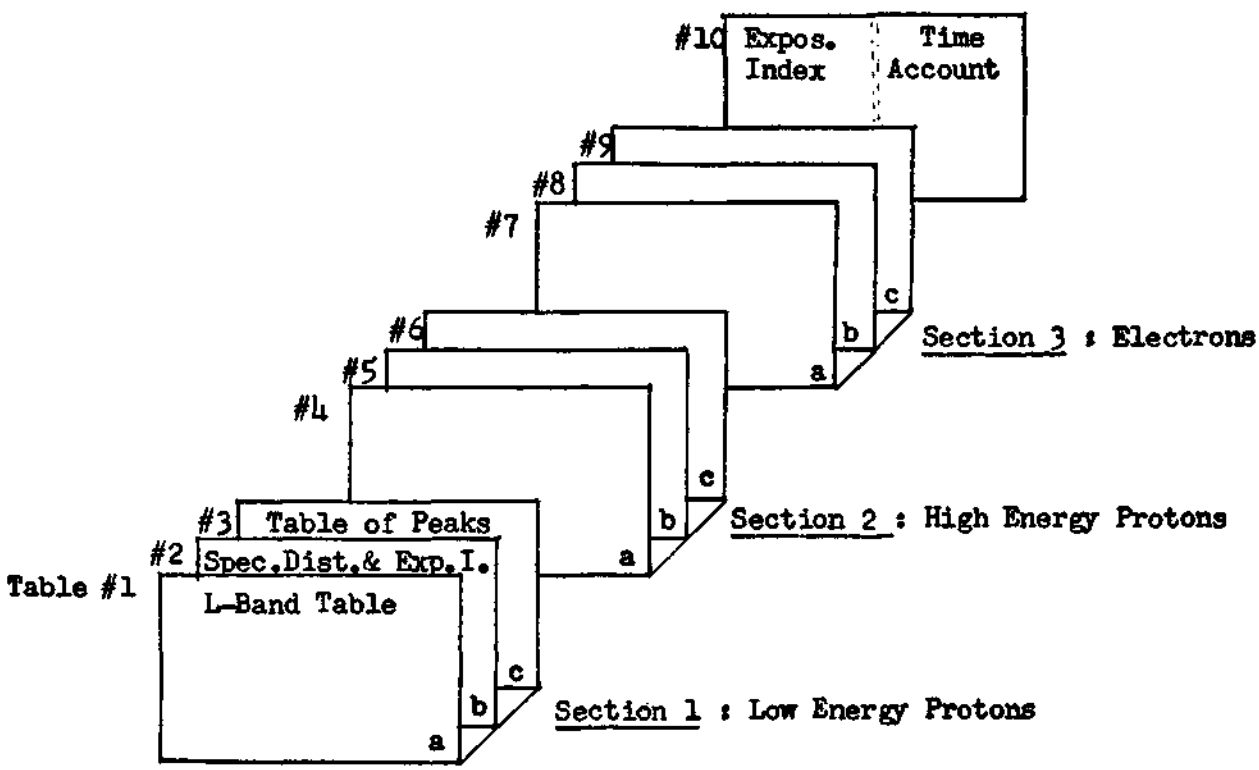


Figure 2 : Set of tables produced for every trajectory considered in a trapped particle radiation study.

PLOT ARRANGEMENT

Computer Produced Plots for Orbital Flux Integrations.

Standard Production Runs with UNIFLUX Program.

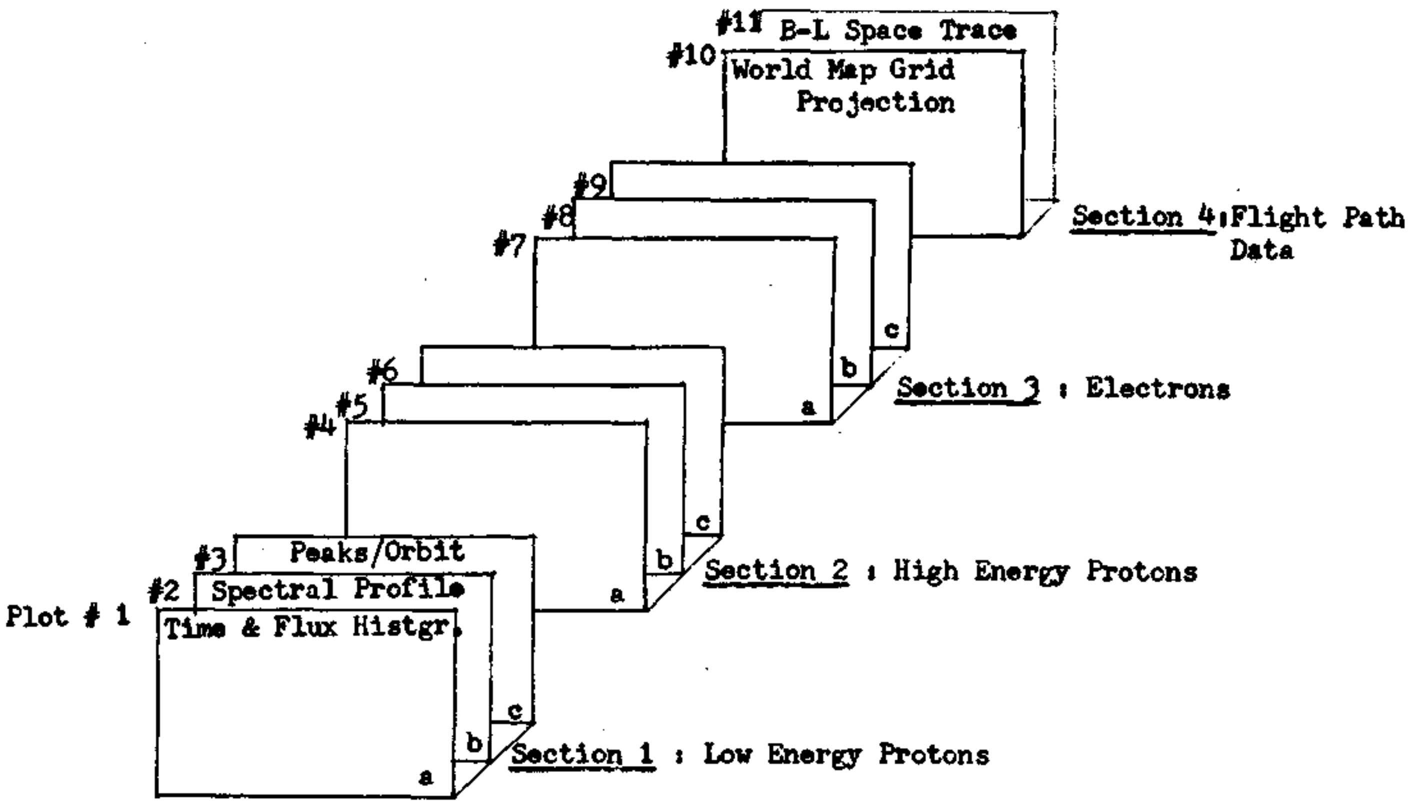
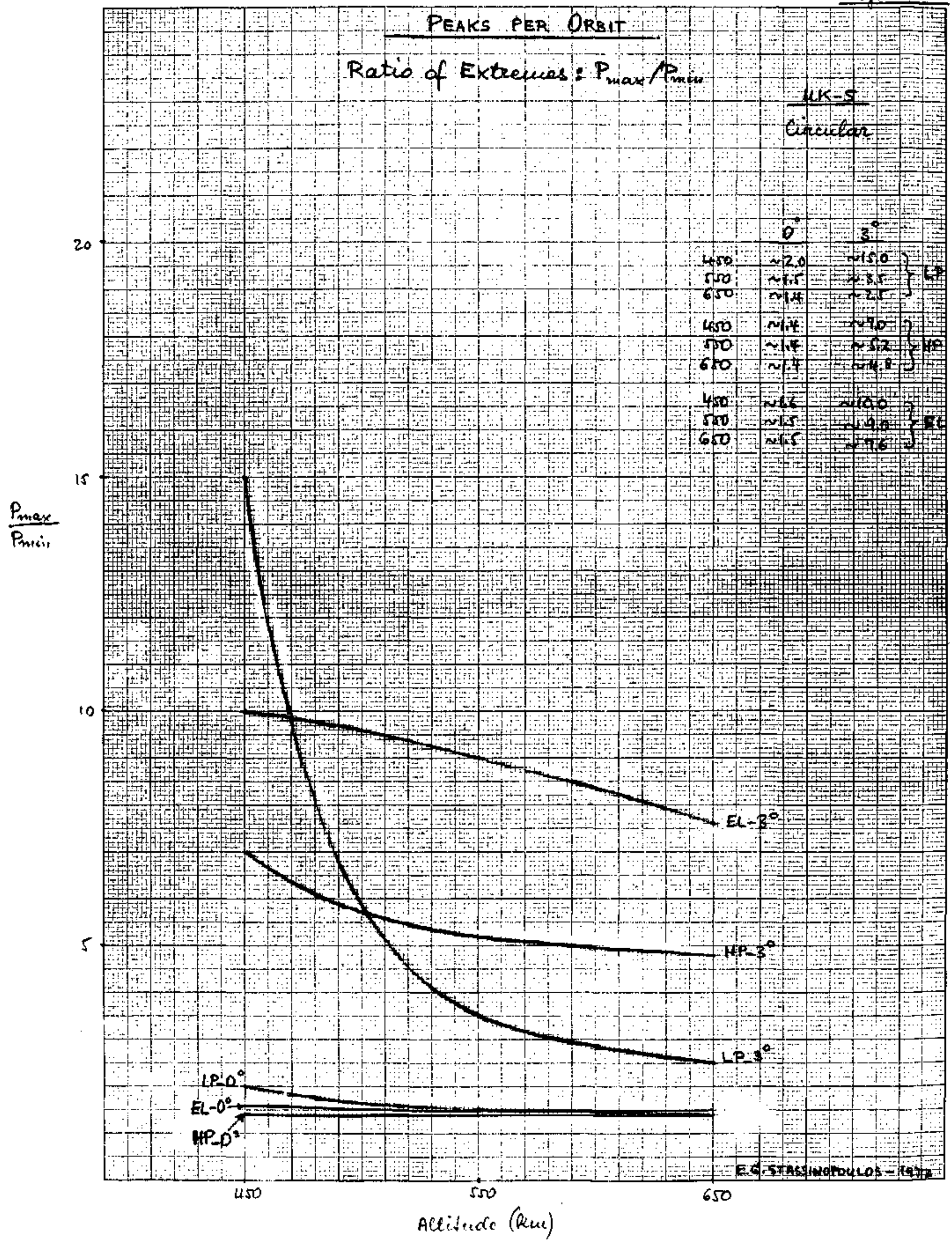


Figure 2A : Set of plots produced for every trajectory considered in a trapped particle radiation study.

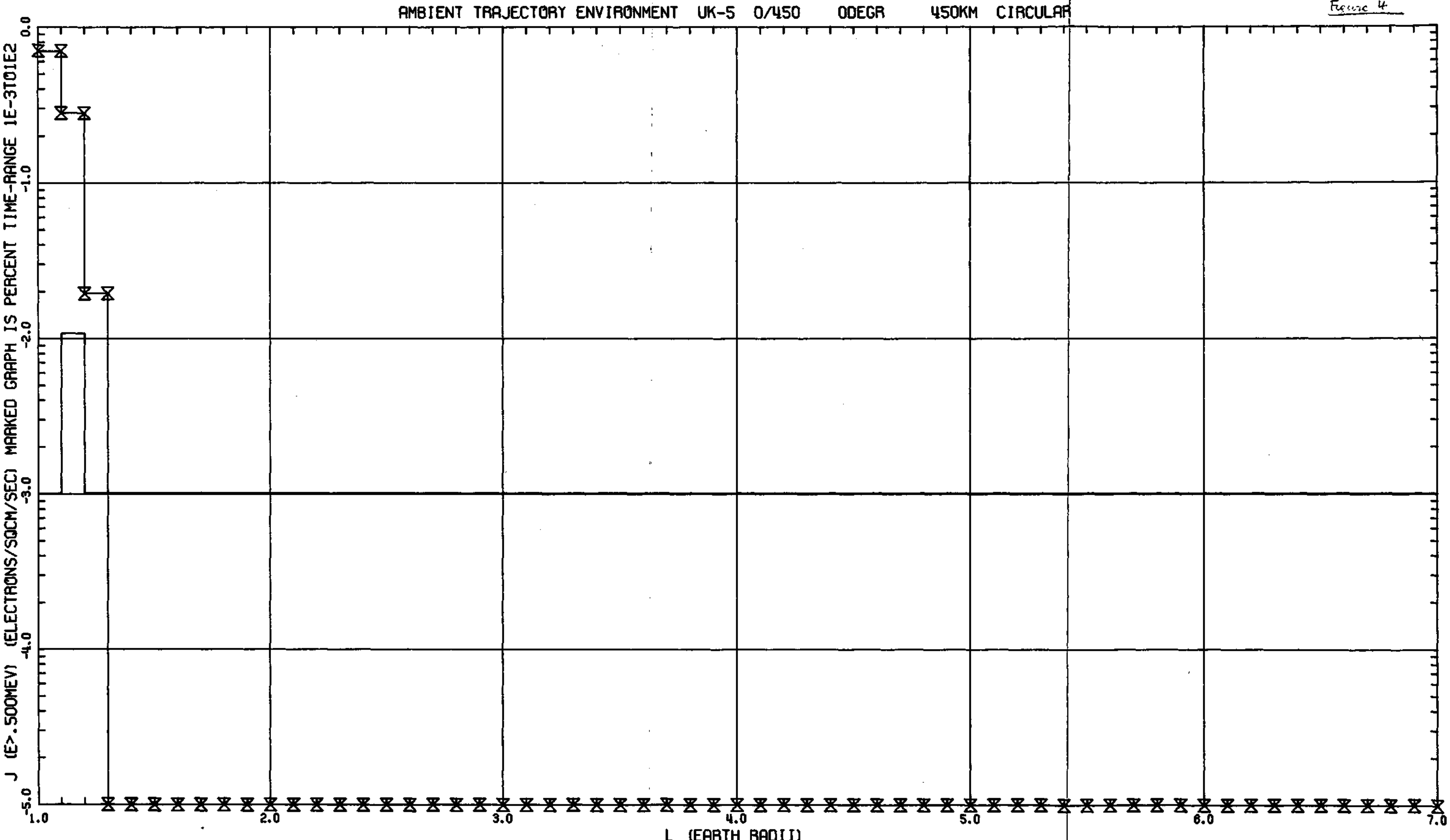
Figure 3


PEAKS PER ORBIT
Ratio of Extremes: P_{max}/P_{min}
UK-5
Circular
0° 3°
450 ~2.0 ~15.0 LP
550 ~1.5 ~3.5
650 ~1.4 ~2.5
450 ~1.4 ~9.0 HP
550 ~1.4 ~5.2
650 ~1.4 ~4.8
450 ~1.6 ~10.0 EL
550 ~1.5 ~9.0
650 ~1.5 ~7.6
20
15
10
5
$\frac{P_{max}}{P_{min}}$
EL-3°
HP-3°
LP-3°
LP-0°
EL-0°
HP-0°
450
550
650
Altitude (km)
E.G. STASSINOPOULOS - 1972

FOLDOUT FRAME 1

FOLDOUT FRAME 2

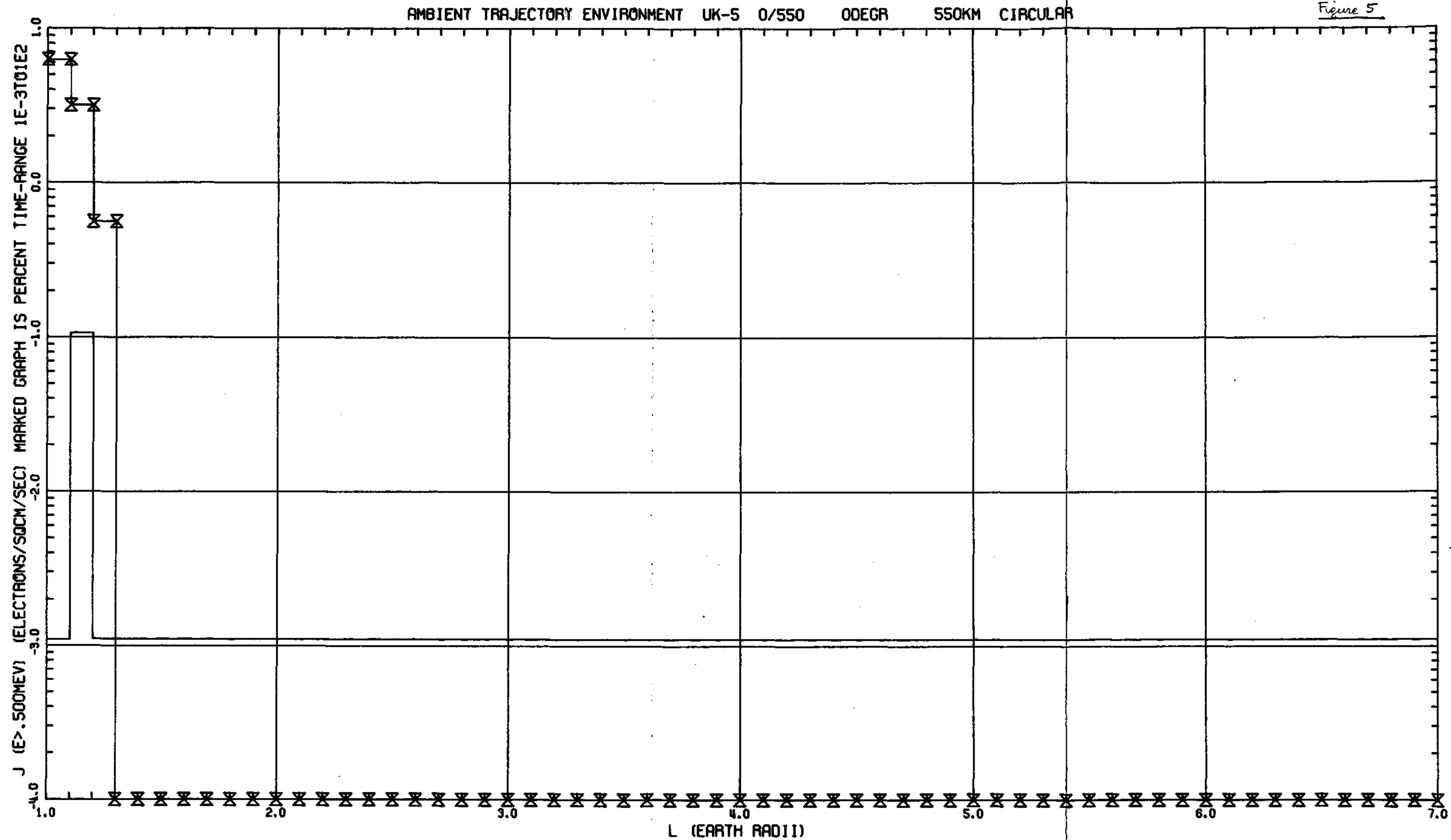
Figure 4



FOLDOUT FRAME 1

FOLDOUT FRAME 2

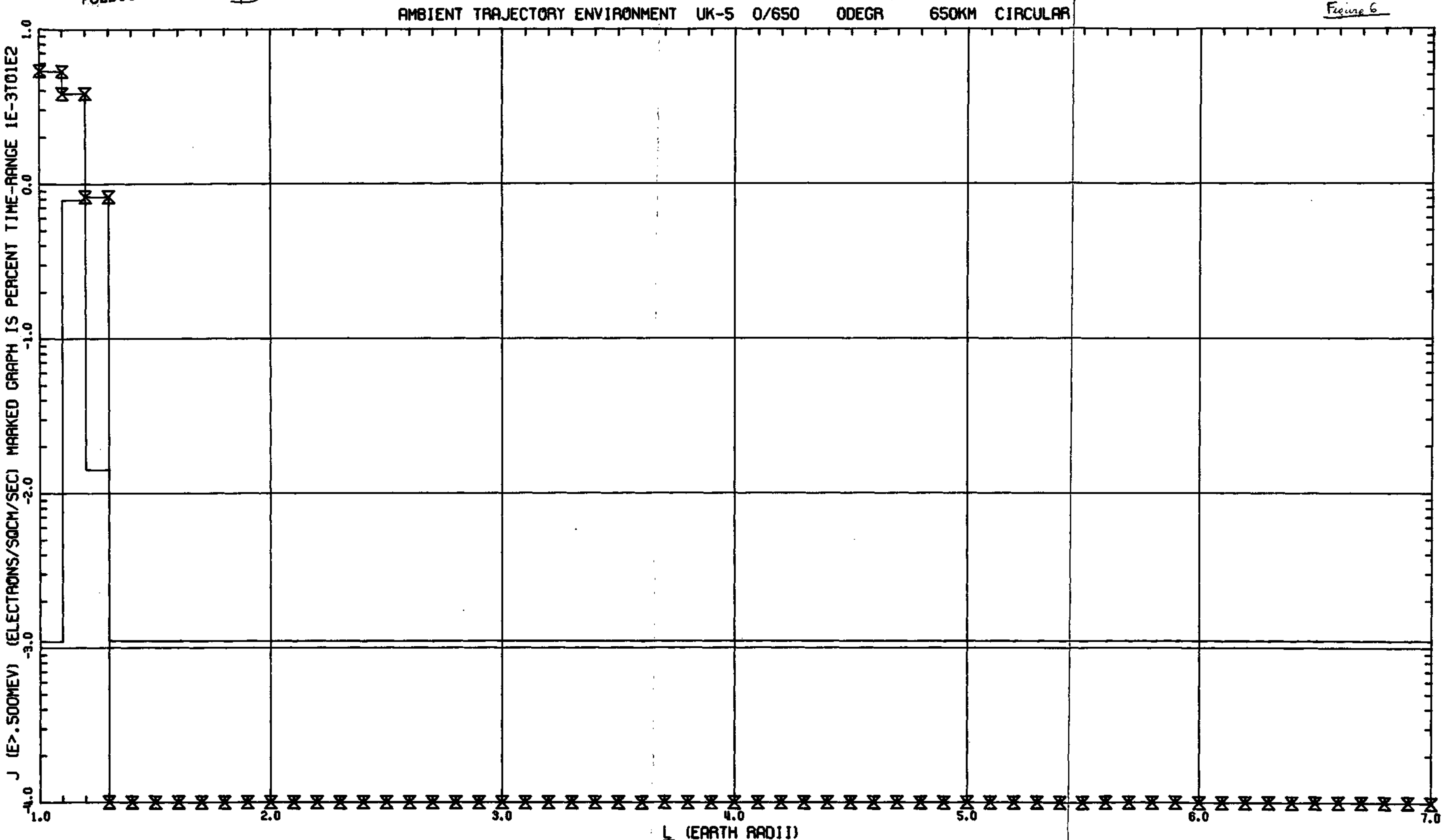
Figure 5



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 6

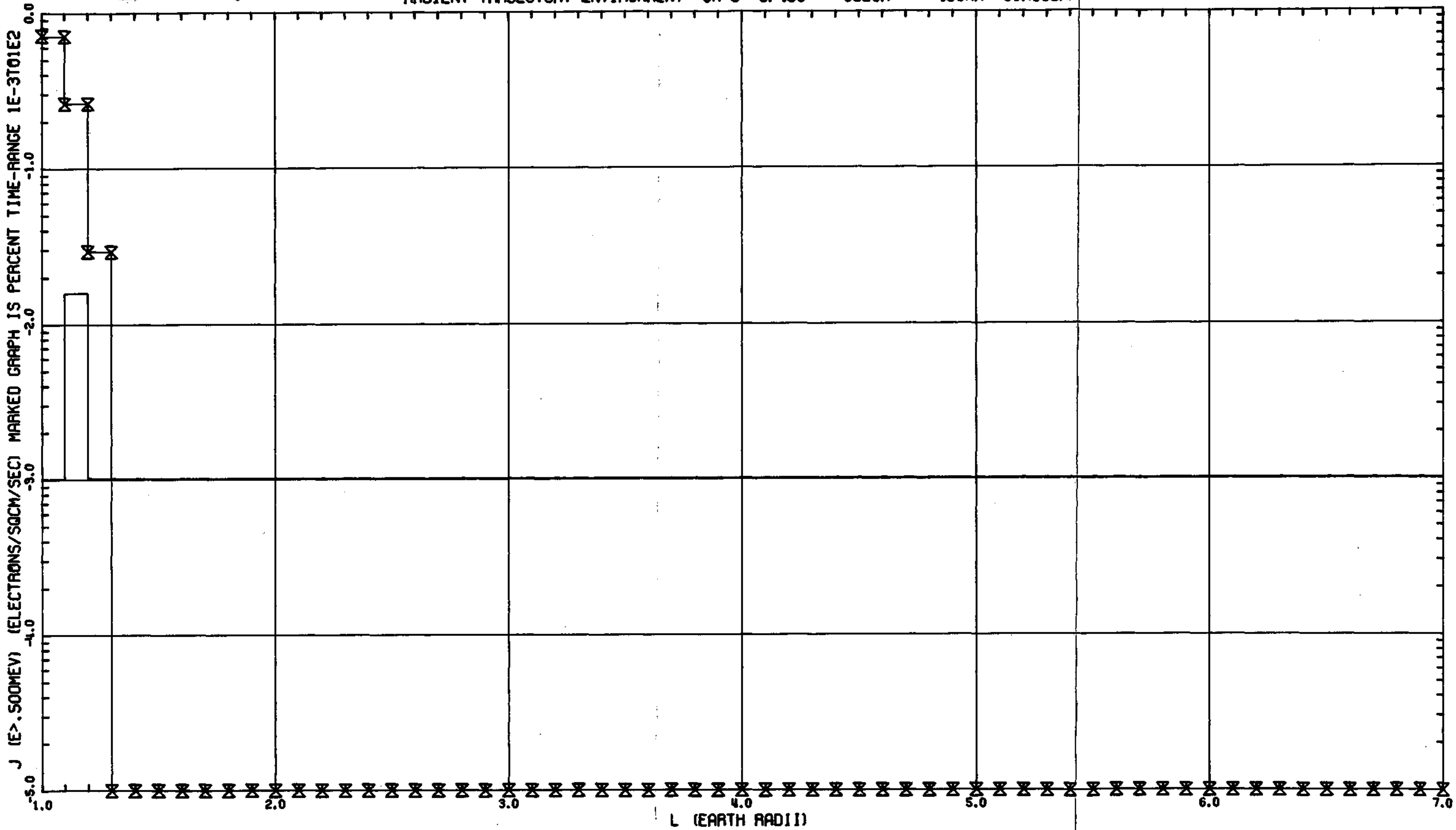


EOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 7

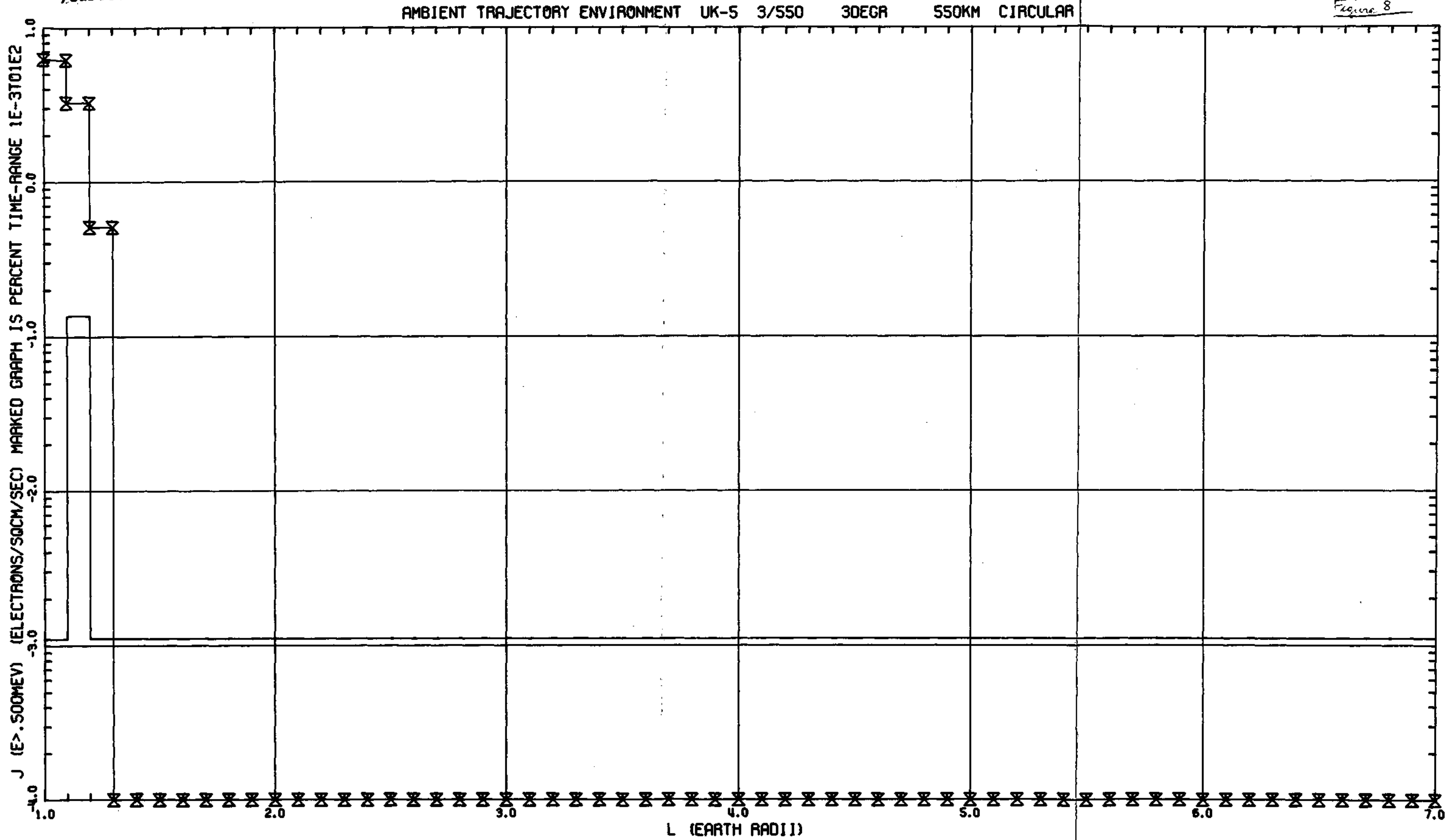
AMBIENT TRAJECTORY ENVIRONMENT UK-5 3/450 30EGR 450KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

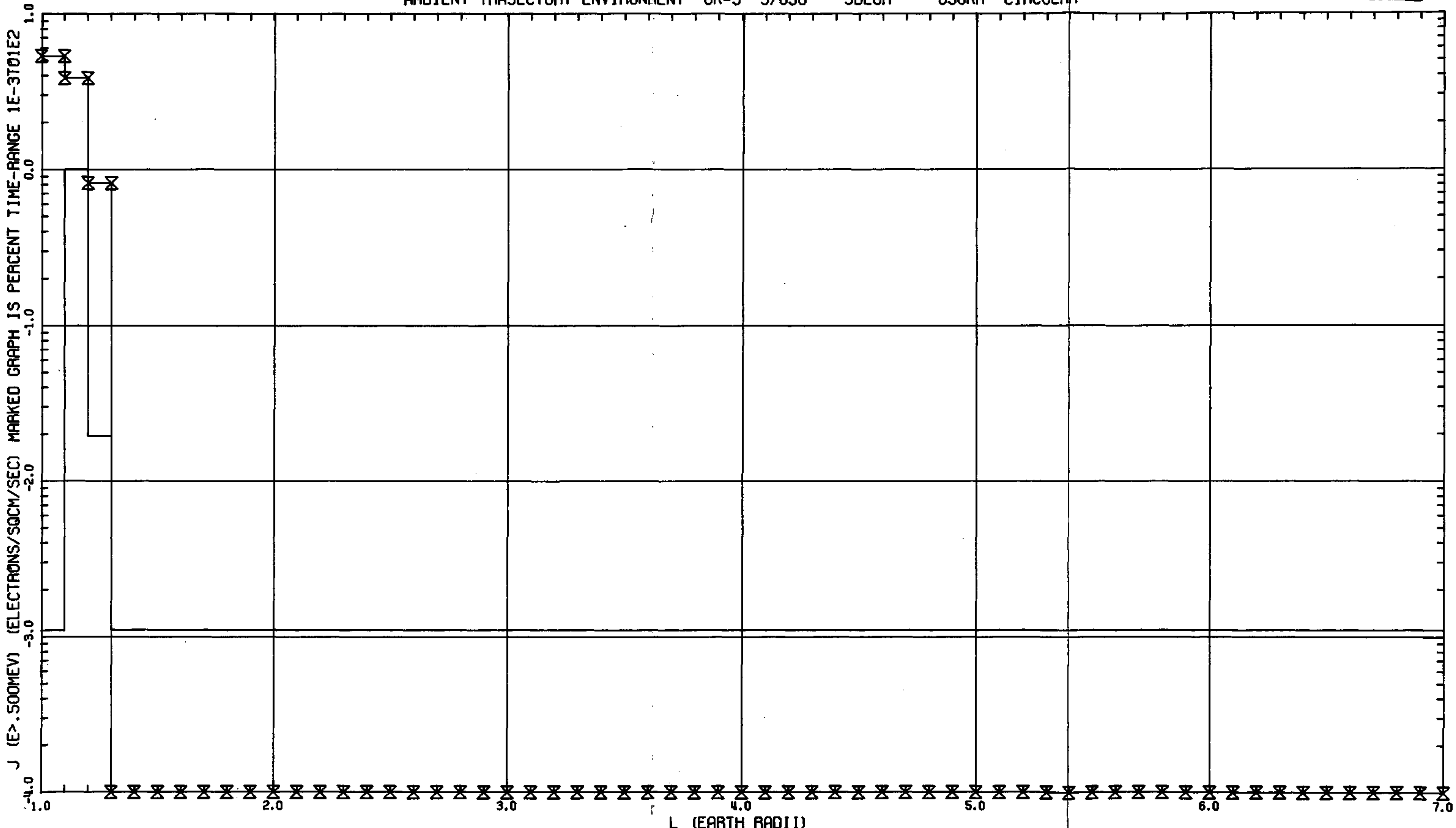
Figure 8



FOLDOUT FRAME 1

FOLDOUT FRAME 2

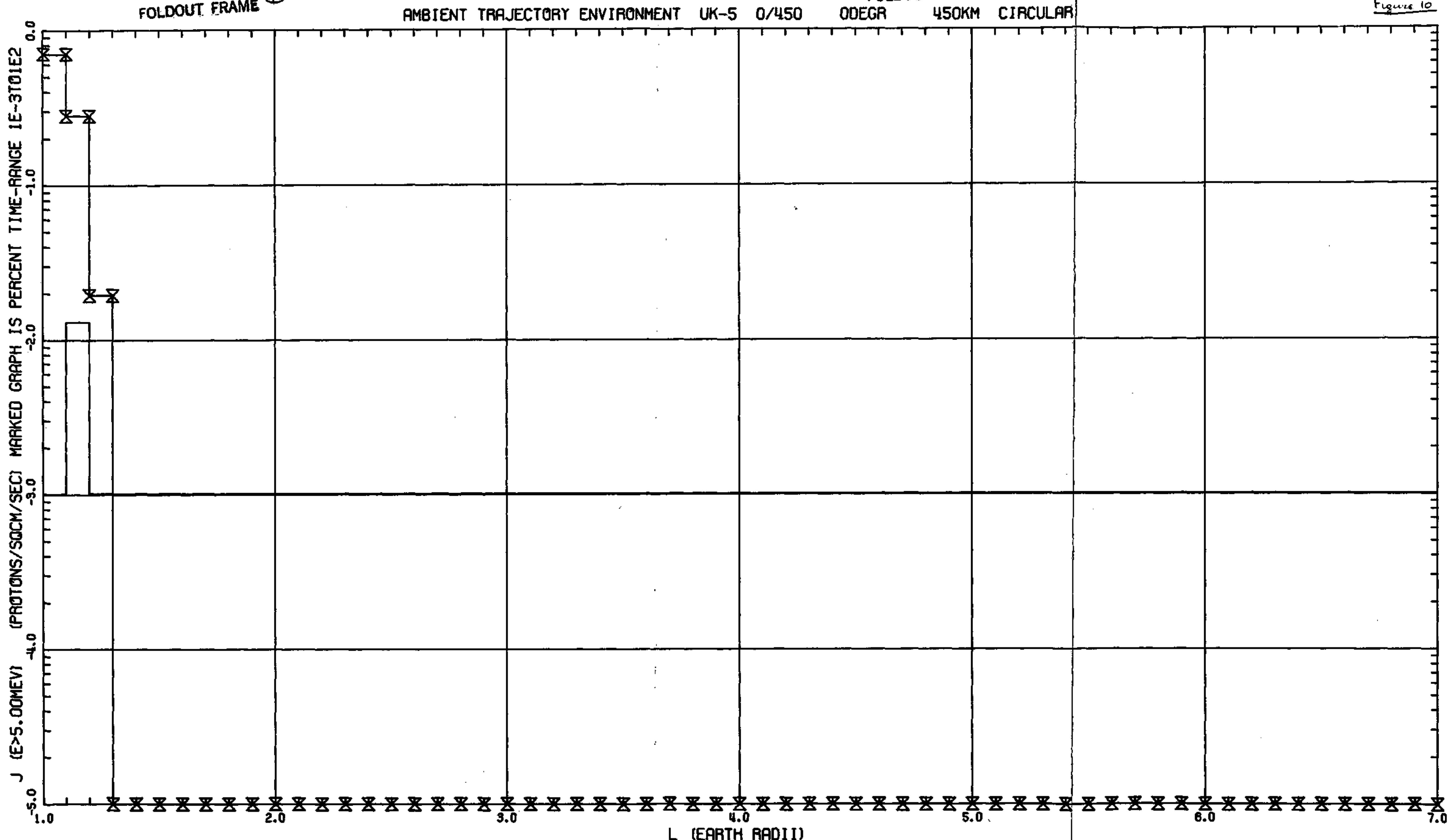
Figure 9



FOLDOUT FRAME 1

FOLDOUT FRAME 2

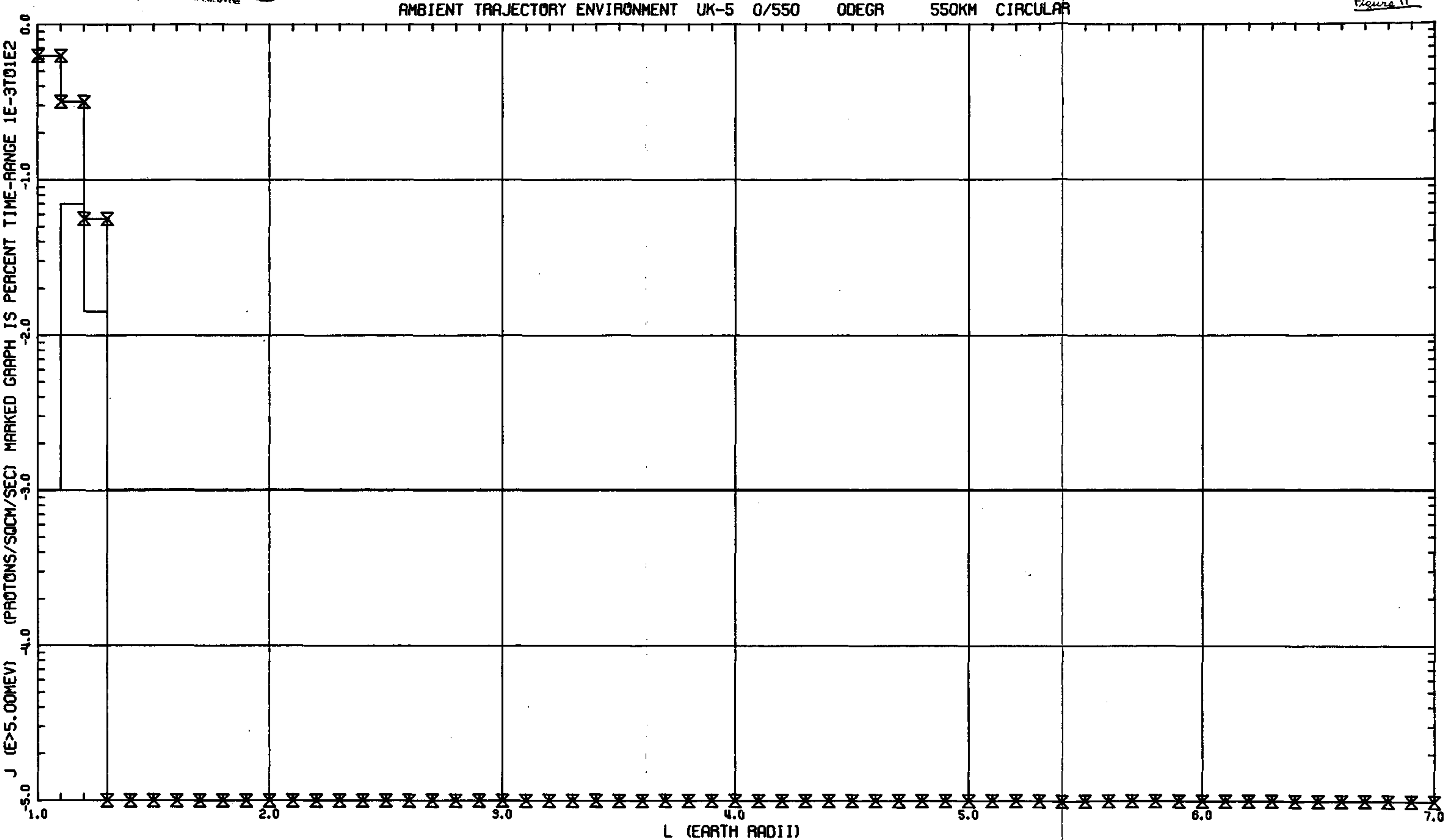
Figure 10



FOLDOUT FRAME 1

FOLDOUT FRAME 2

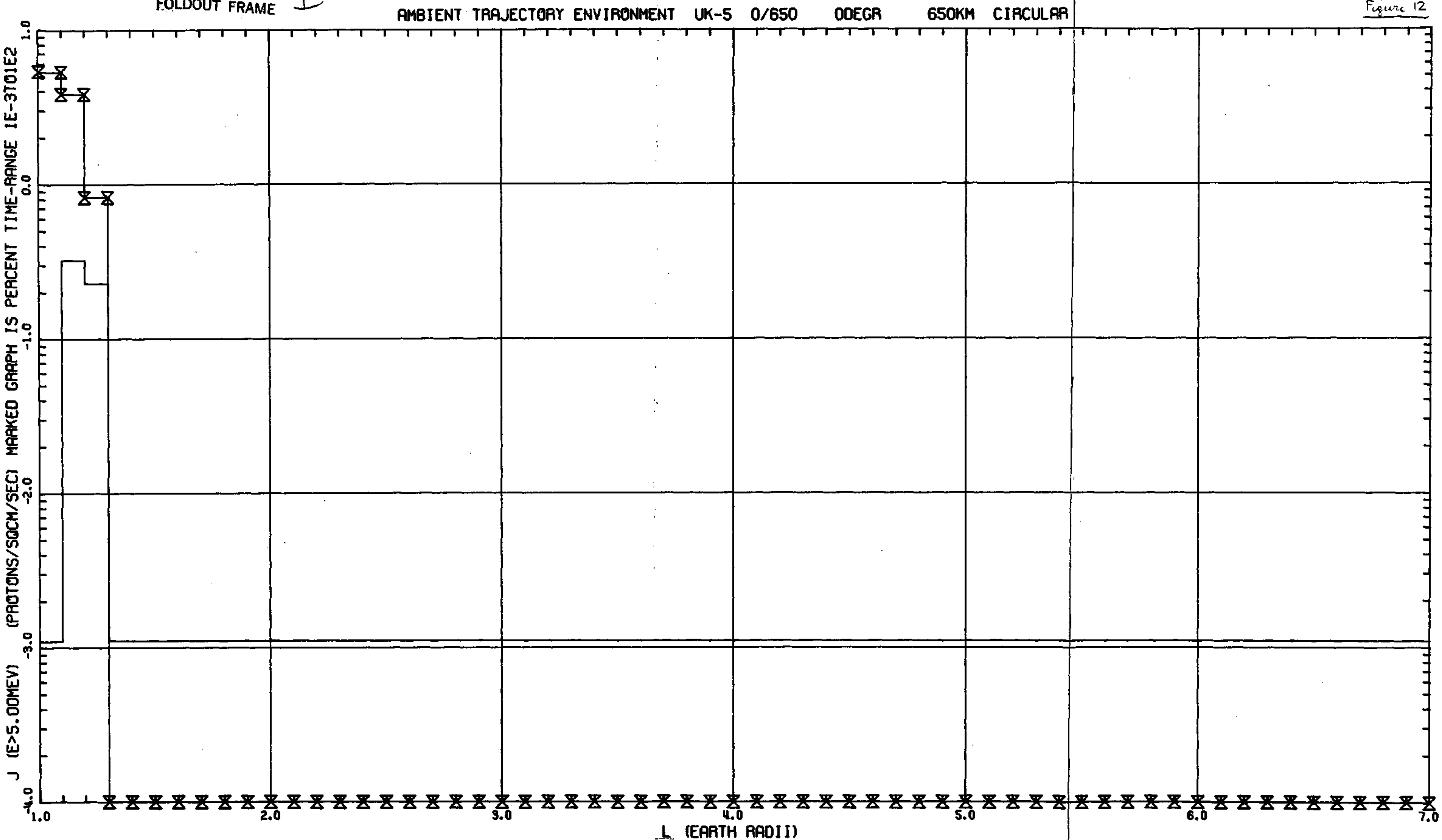
Figure 11



FOLDOUT FRAME 1

FOLDOUT FRAME 2

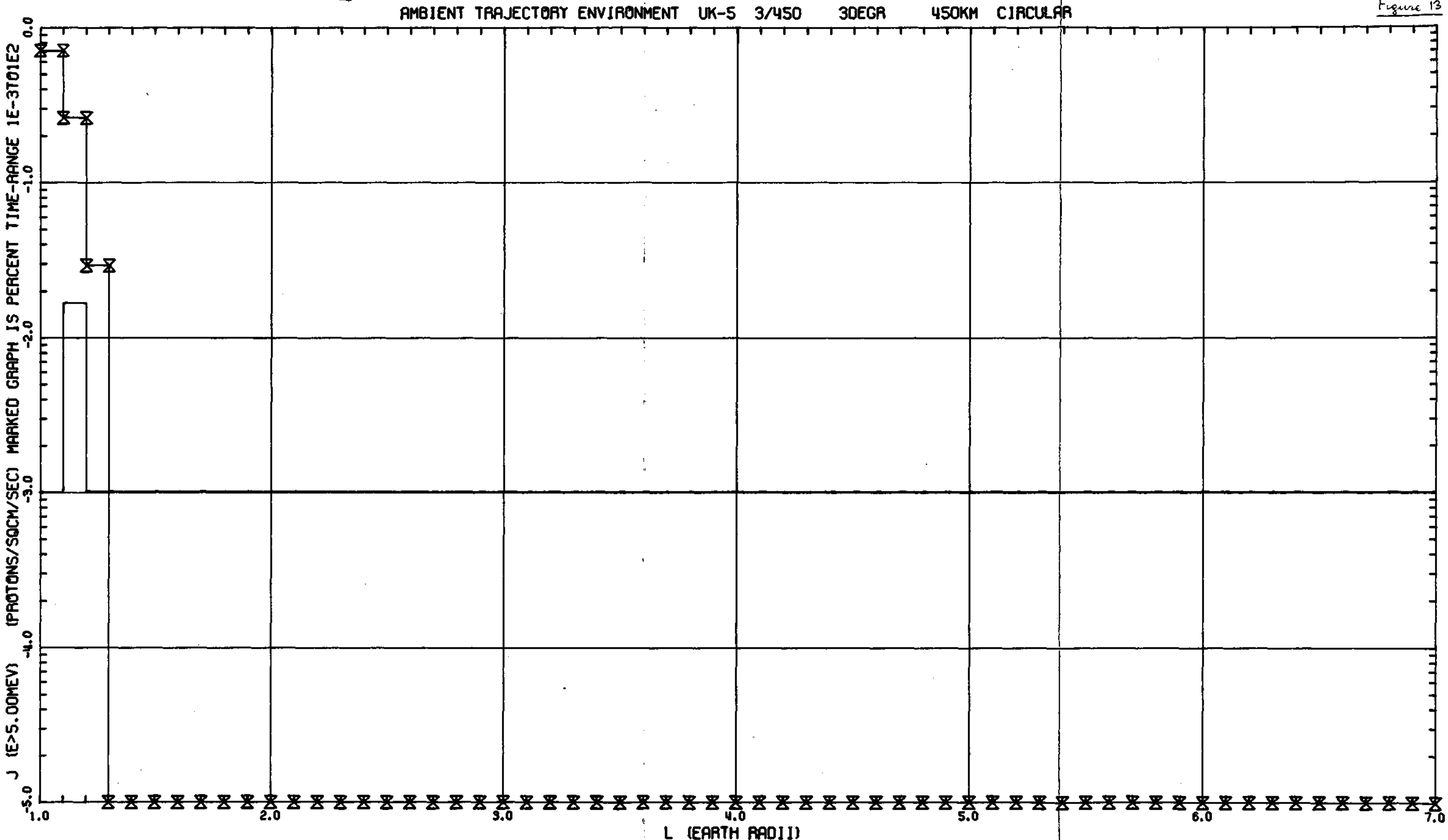
Figure 12



FOLDOUT FRAME 1

FOLDOUT FRAME 2

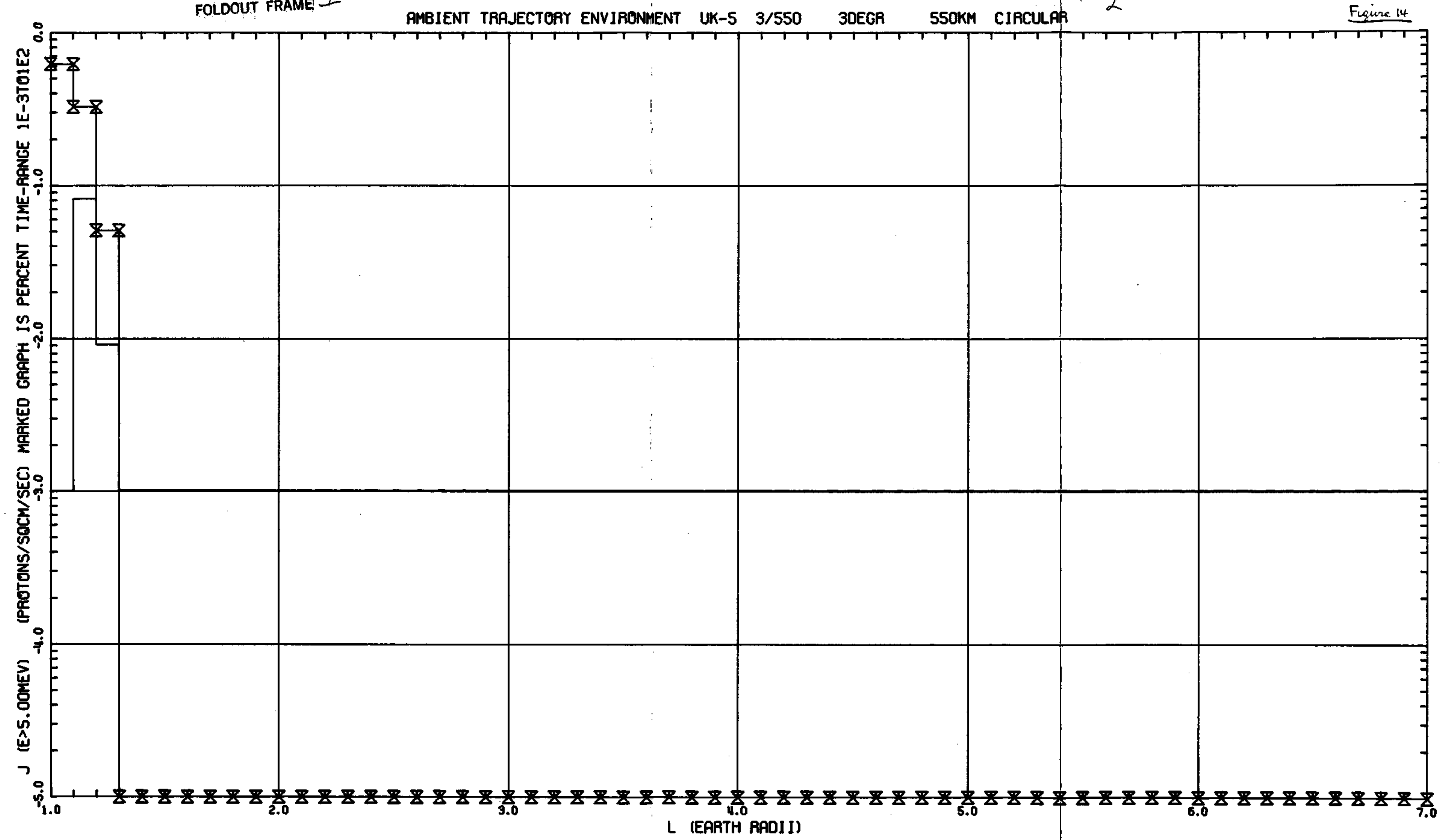
Figure 13



FOLDOUT FRAME 1

FOLDOUT FRAME 2

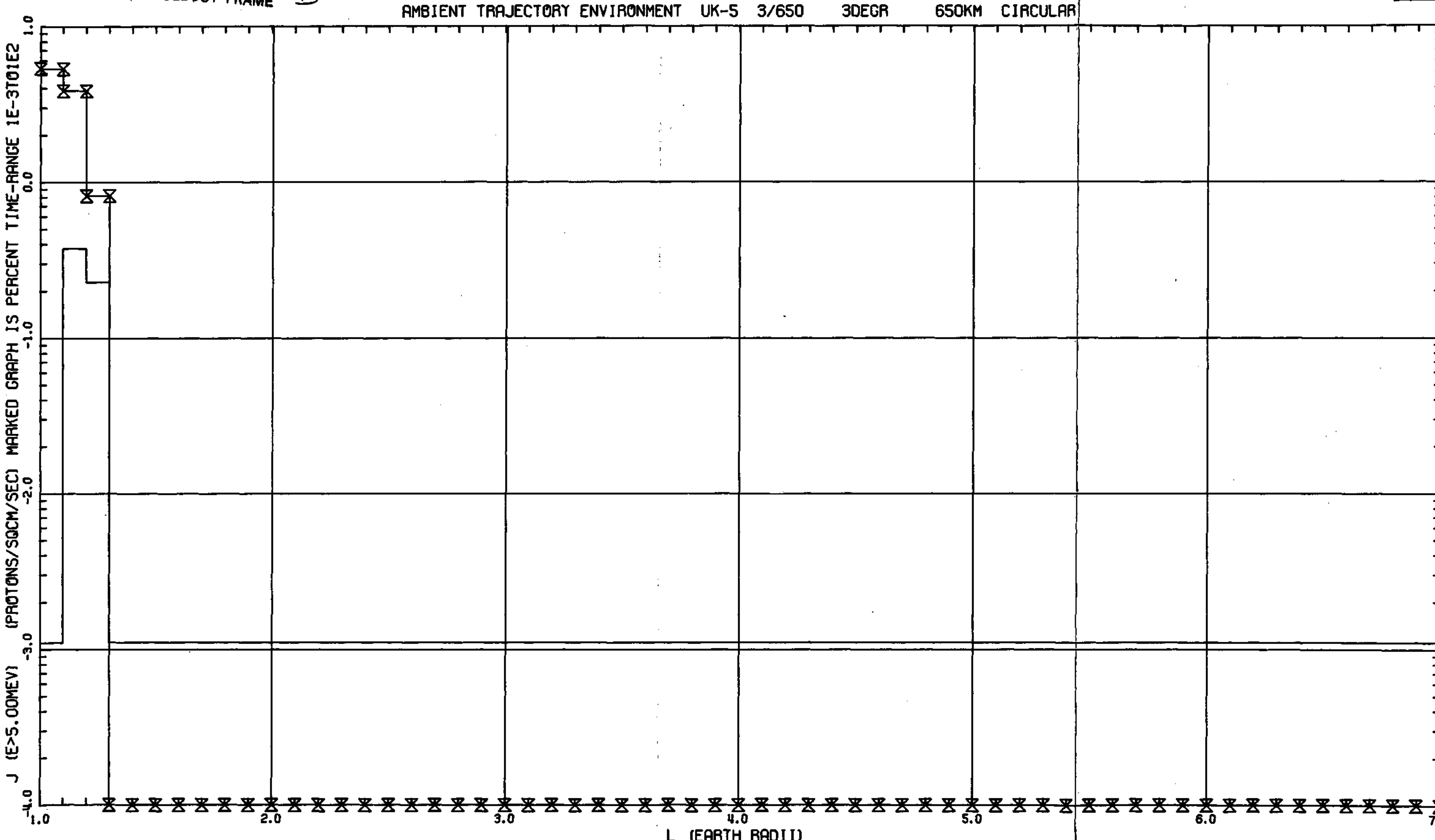
Figure 14



FOLDOUT FRAME 1

FOLDOUT FRAME 2

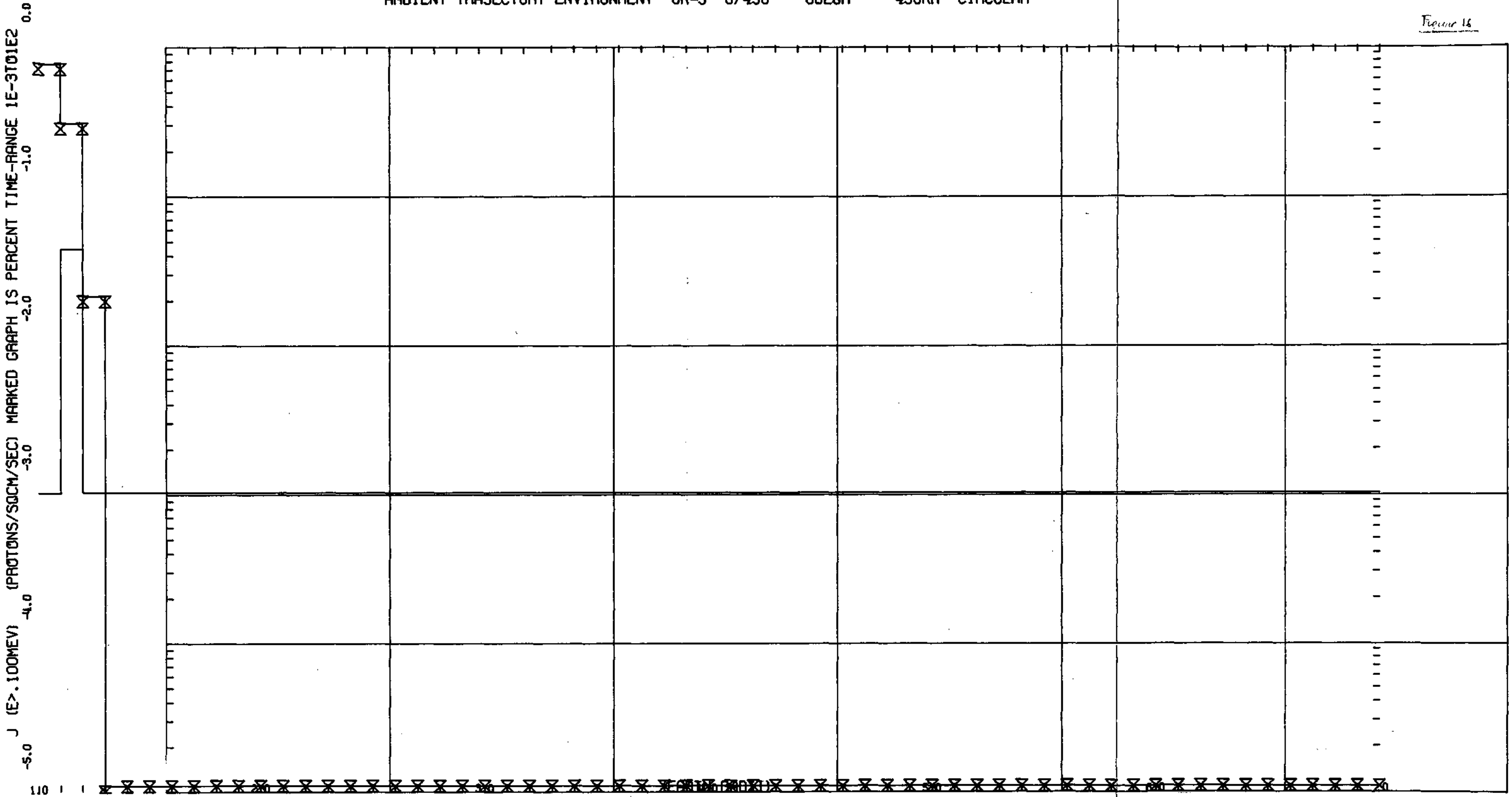
Figure 15



FOLDOUT FRAME 1

FOLDOUT FRAME 2

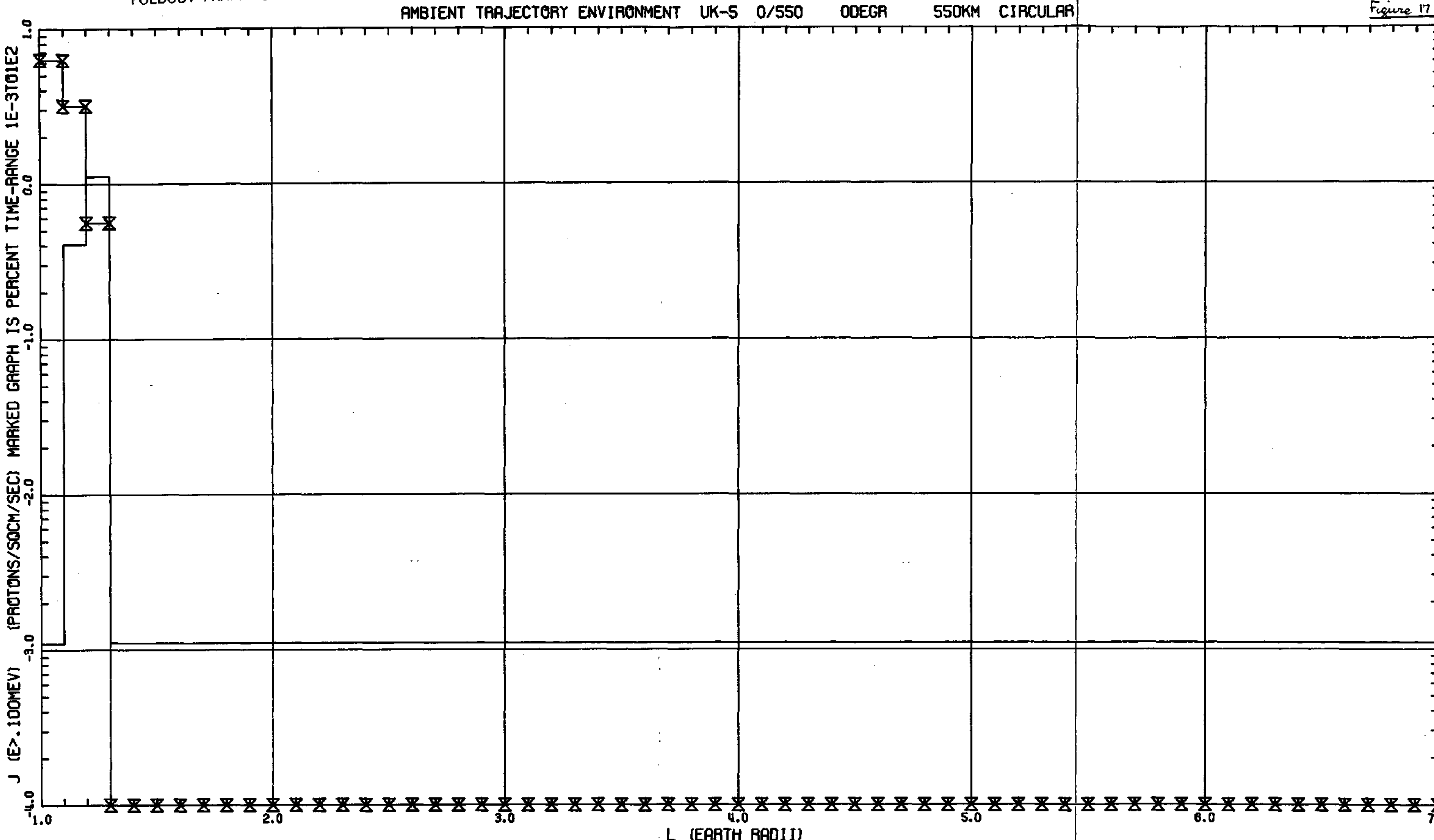
AMBIENT TRAJECTORY ENVIRONMENT UK-5 0/450 0DEGR 450KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

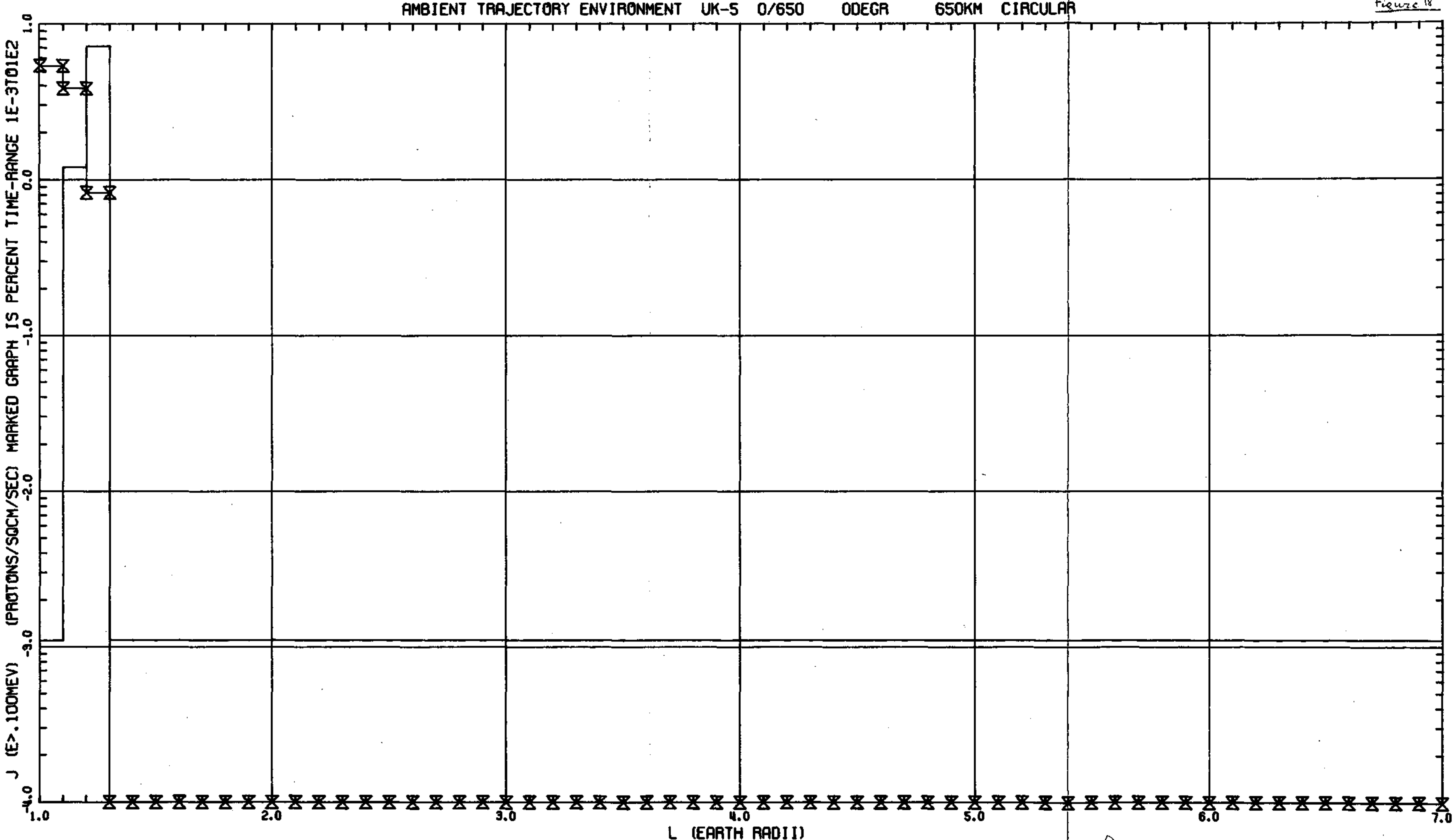
Figure 17



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 18



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 10

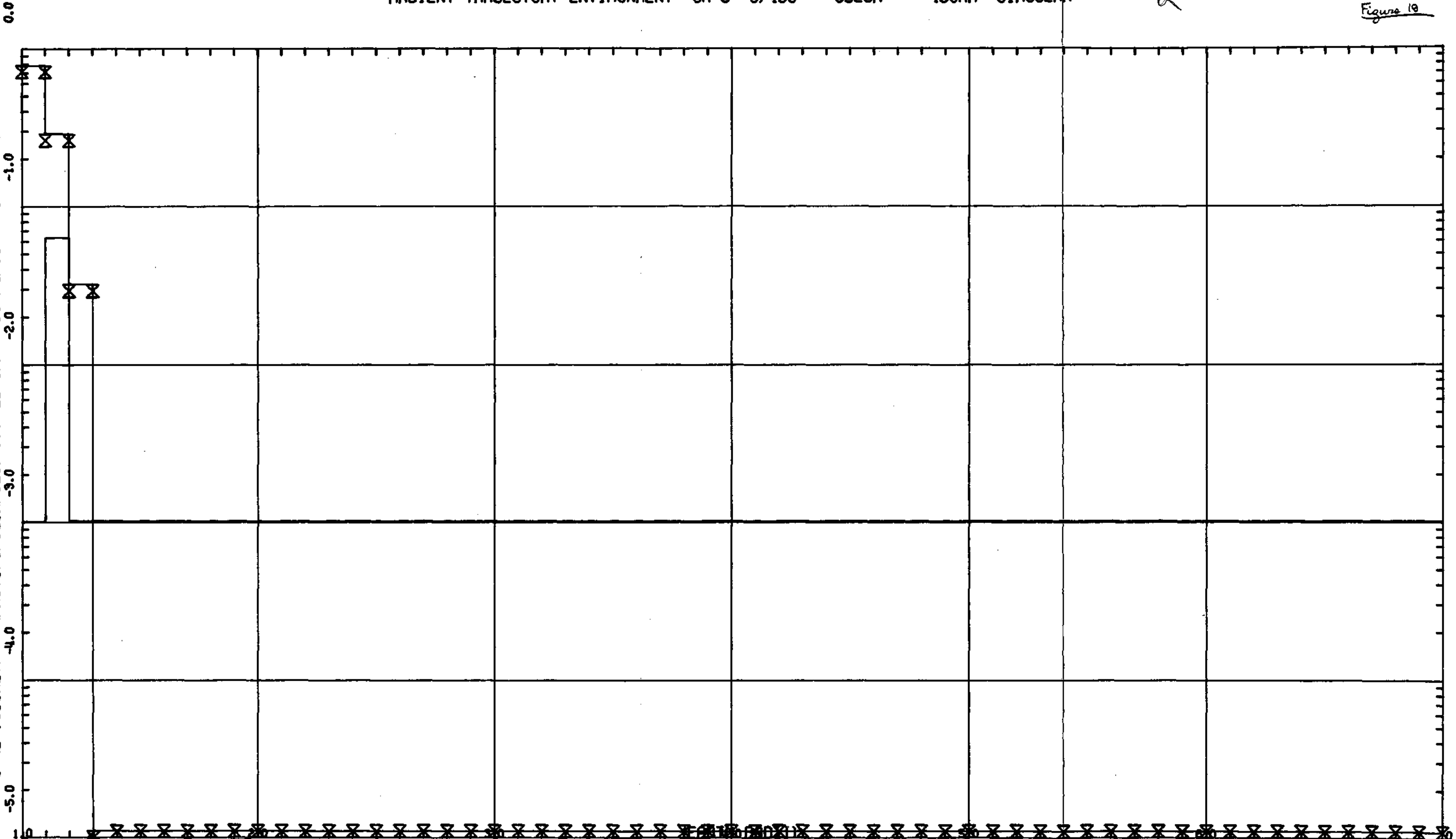


Figure 20

AMBIENT TRAJECTORY ENVIRONMENT UK-5 3/550 3DEGR 550KM CIRCULAR

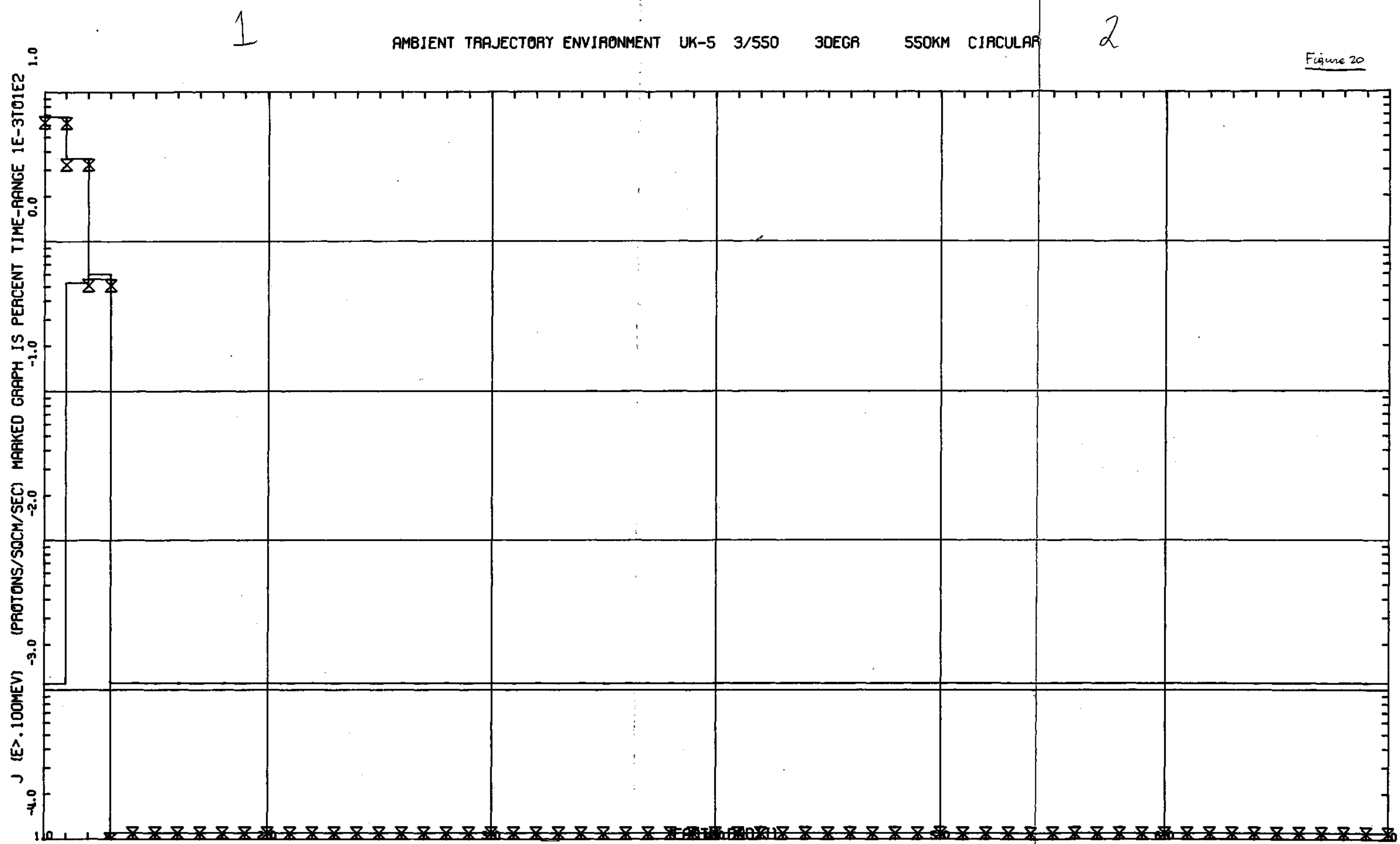
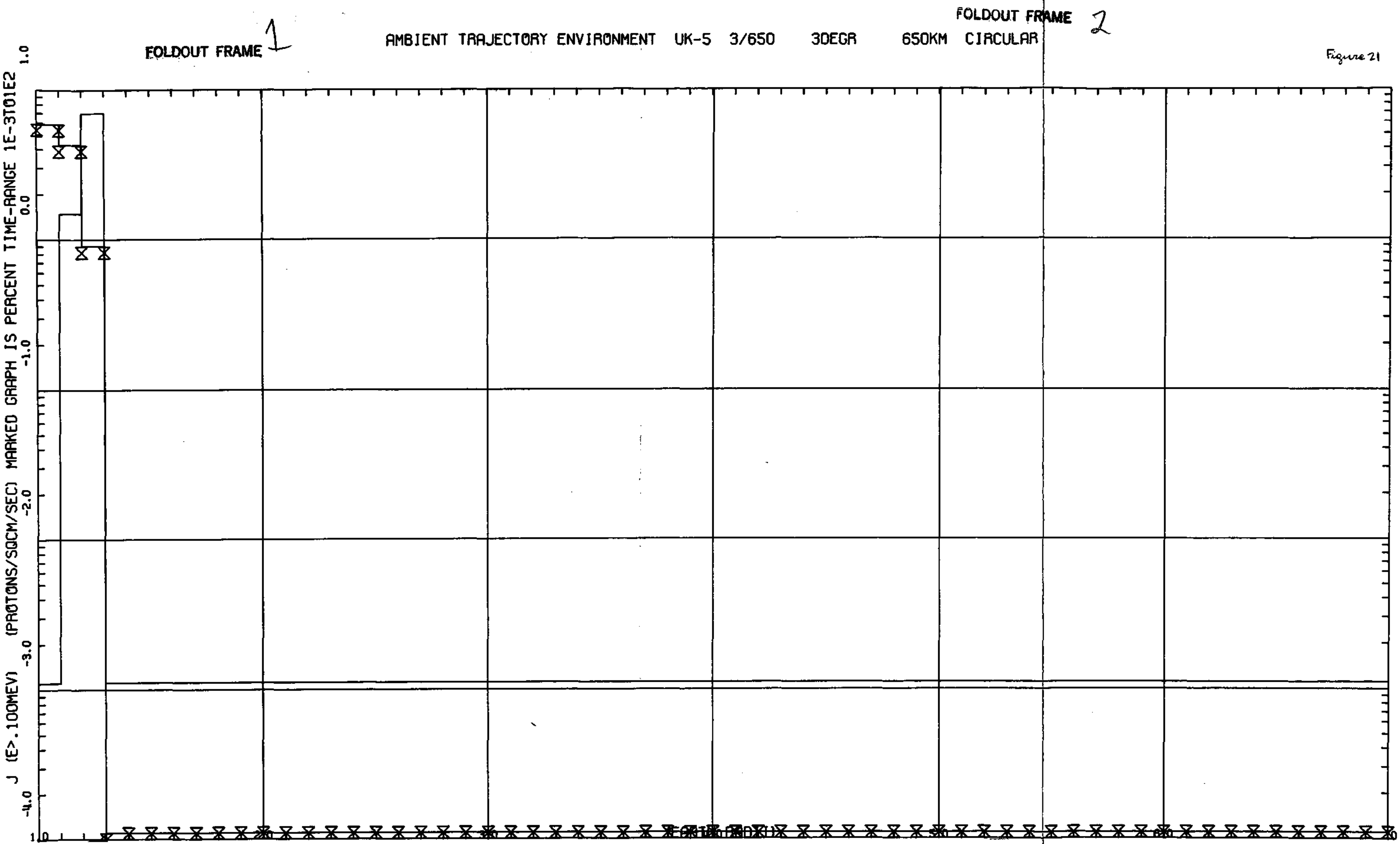


Figure 21

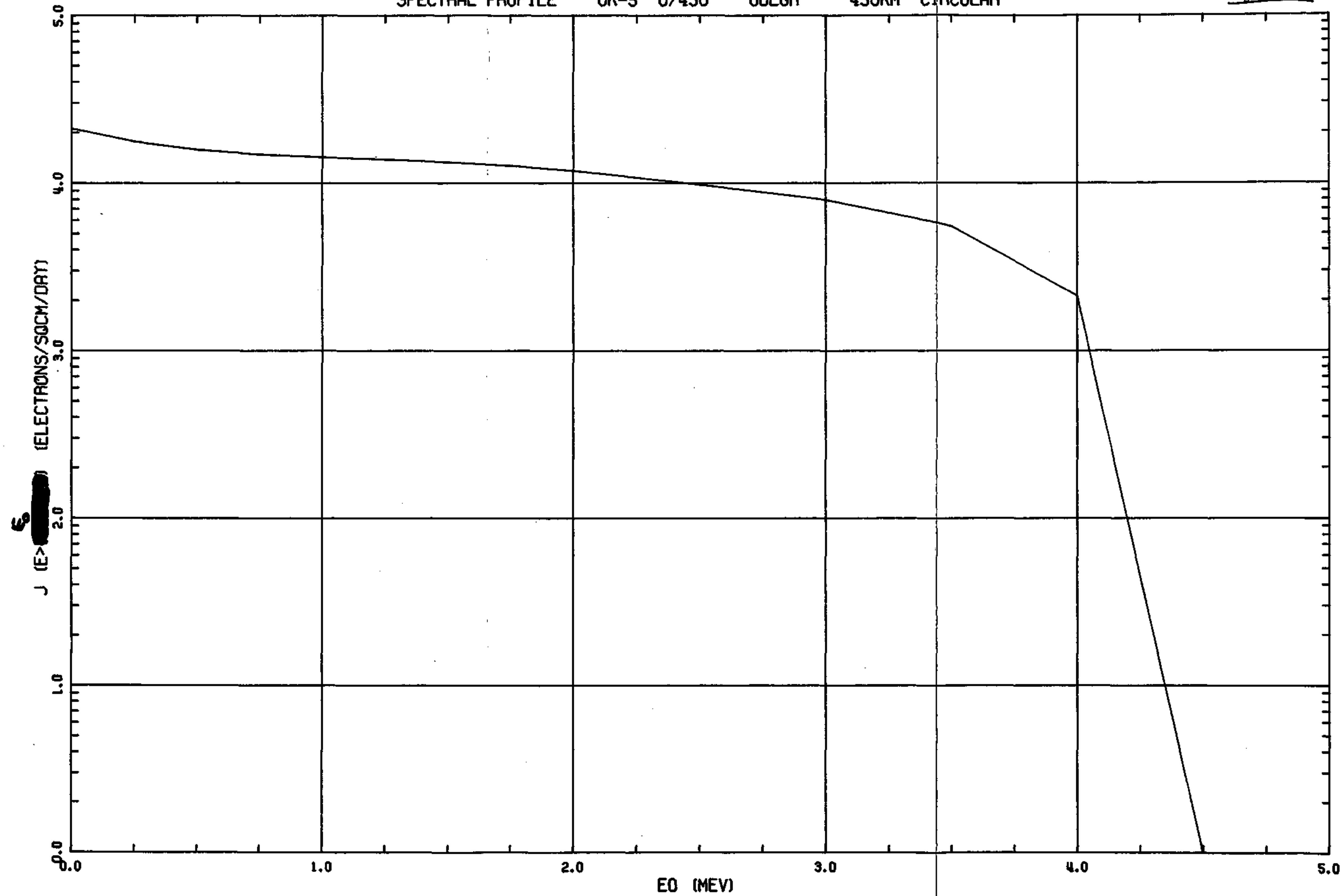

FOLDOUT FRAME 1
AMBIENT TRAJECTORY ENVIRONMENT UK-5 3/650 30EGR 650KM CIRCULAR
FOLDOUT FRAME 2
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
1.0
0.0
-1.0
-2.0
-3.0
-4.0

FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 22

SPECTRAL PROFILE UK-5 0/450 0DEGR 450KM CIRCULAR

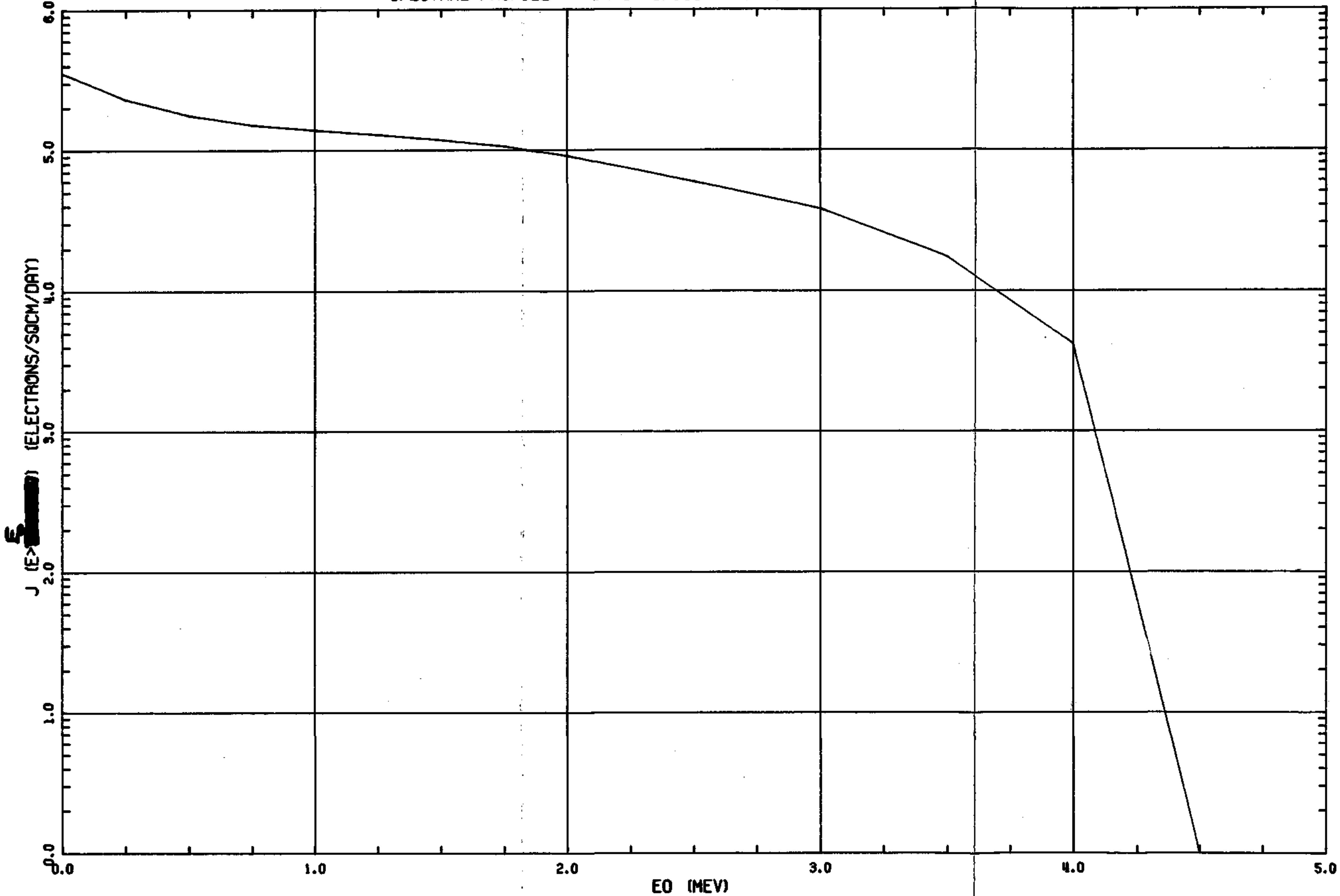


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 23

SPECTRAL PROFILE UK-5 0/550 0DEGR 550KM CIRCULAR

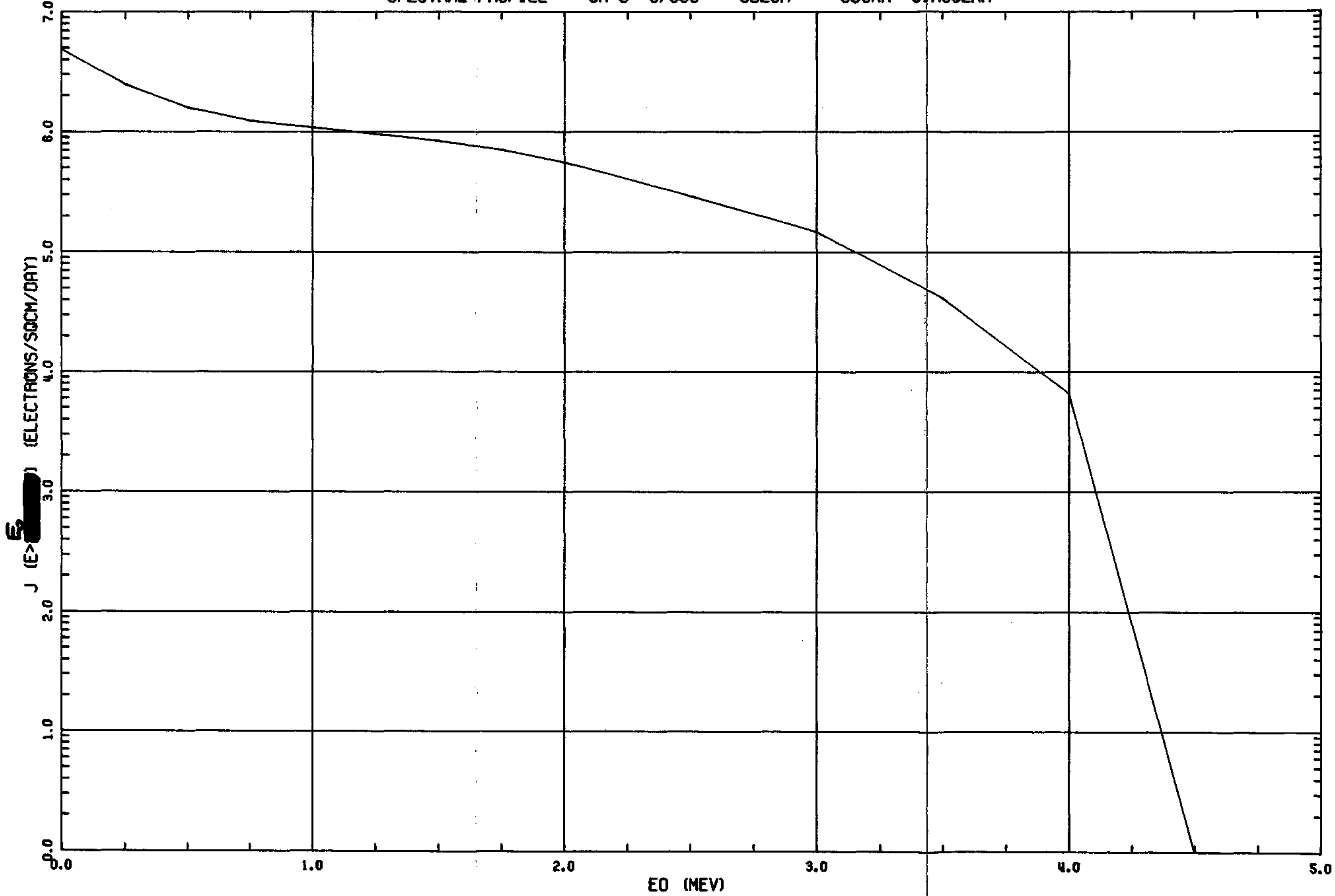


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 24

SPECTRAL PROFILE UK-5 0/650 0DEGR 650KM CIRCULAR

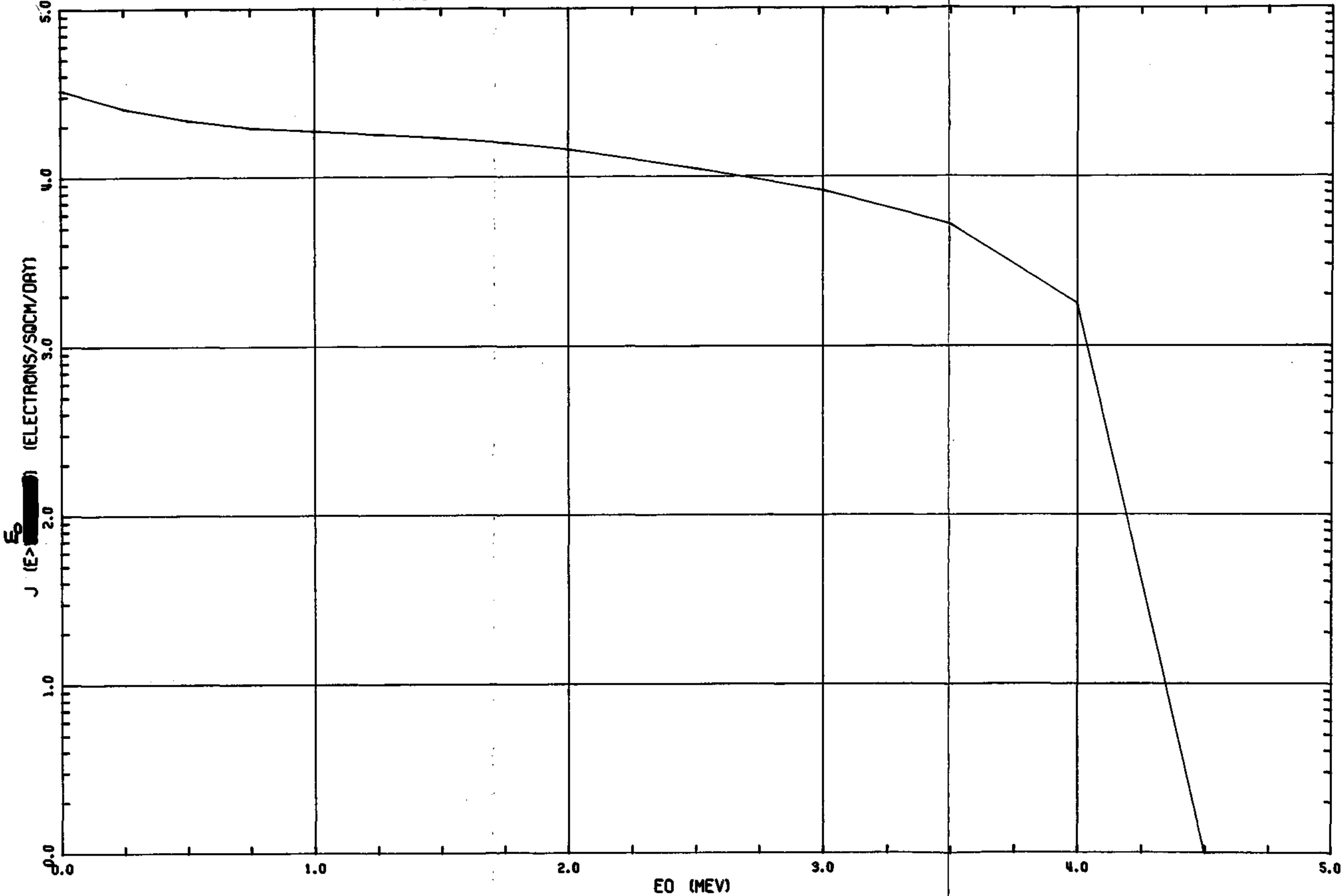


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 25

SPECTRAL PROFILE UK-5 3/450 30DEGR 450KM CIRCULAR

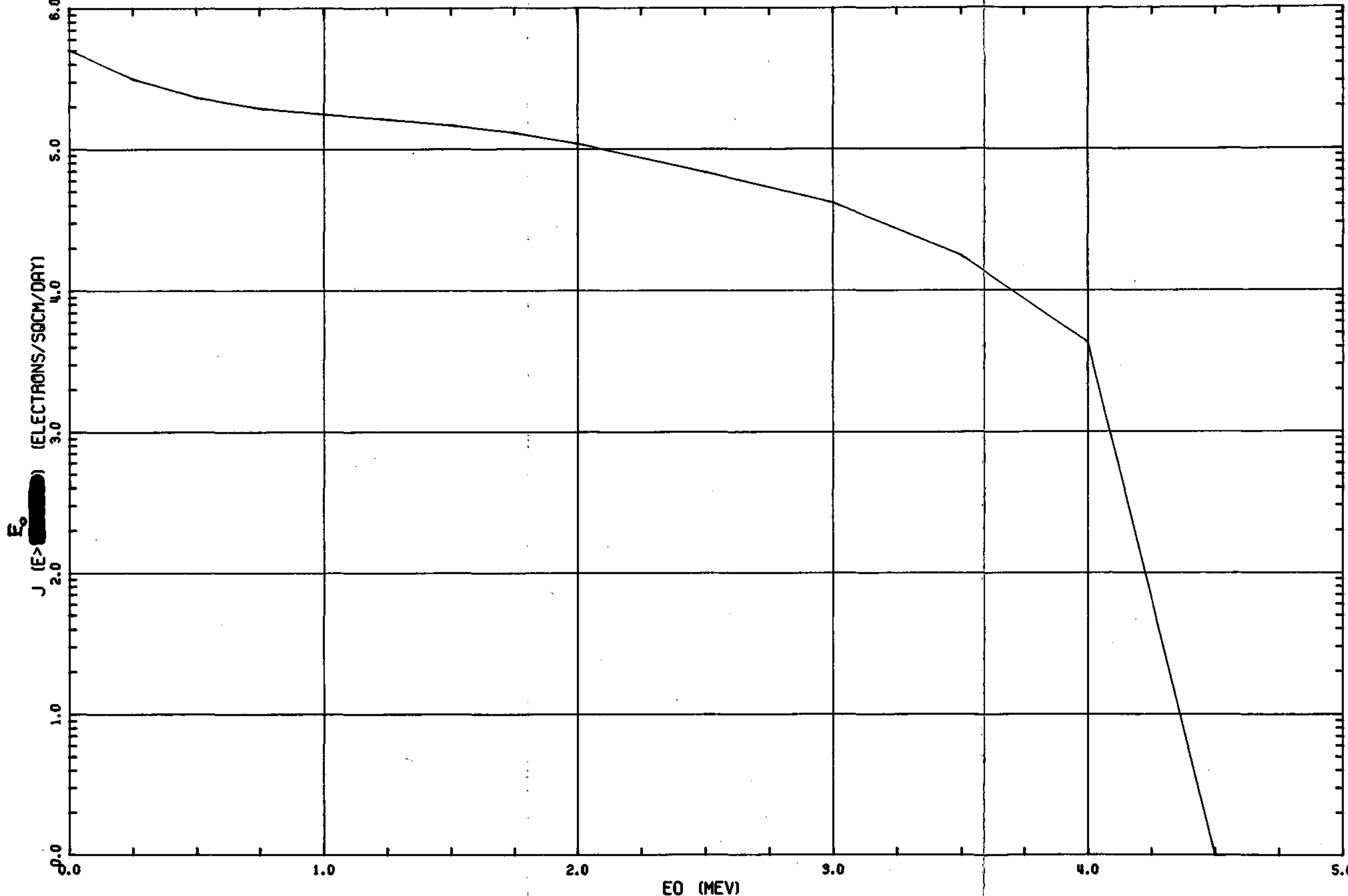


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 26

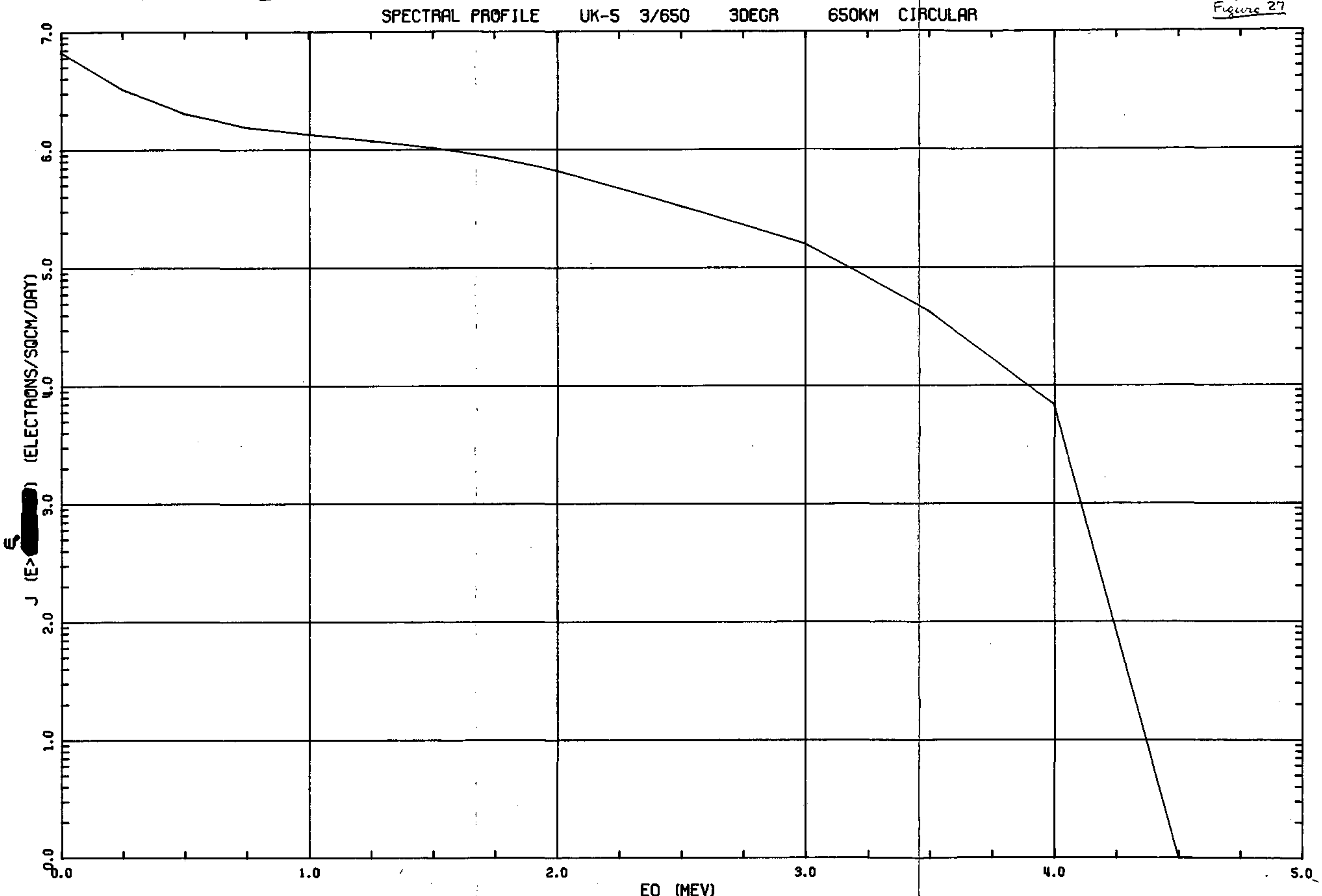
SPECTRAL PROFILE UK-5 3/550 30EGR 550KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 27

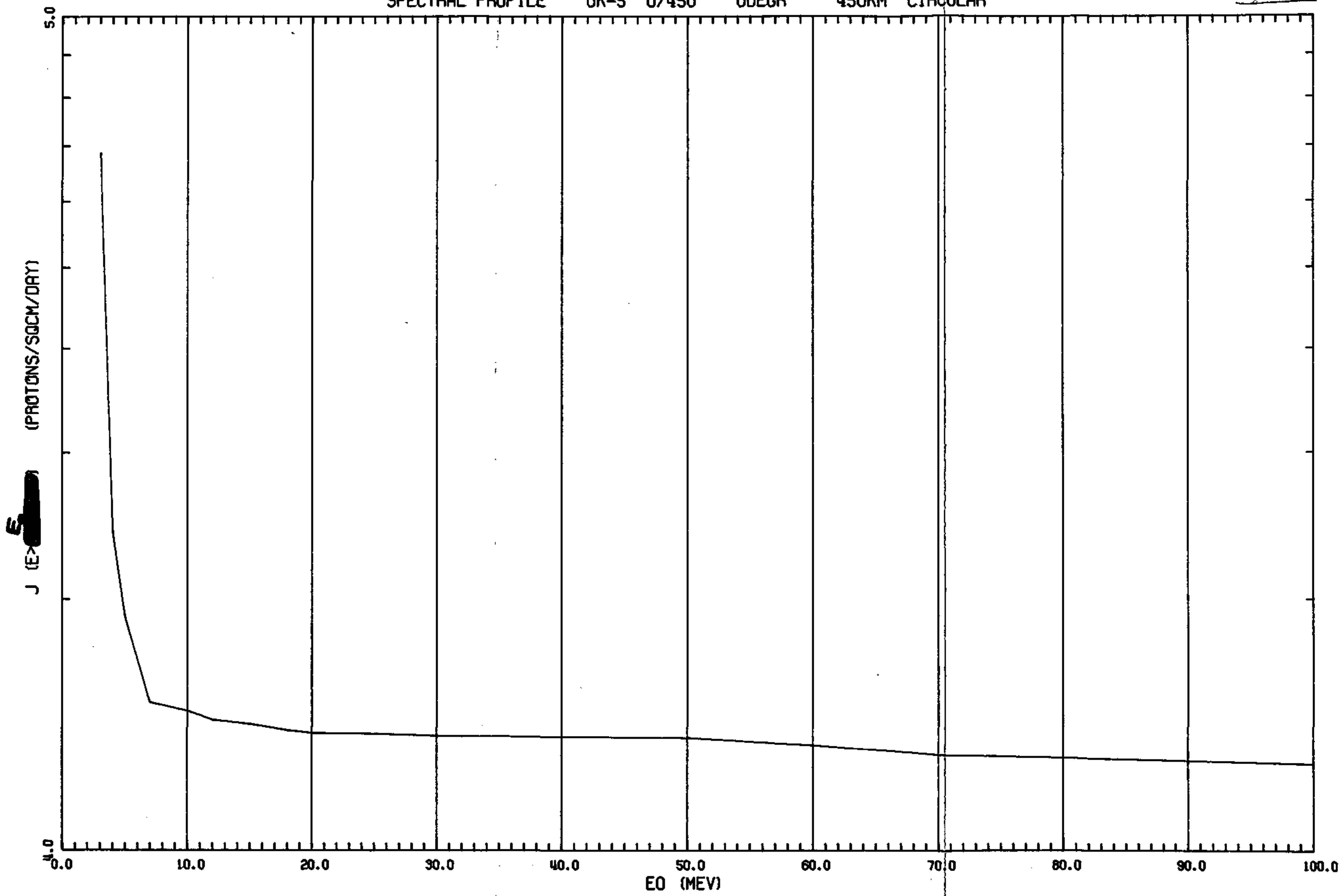


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 28

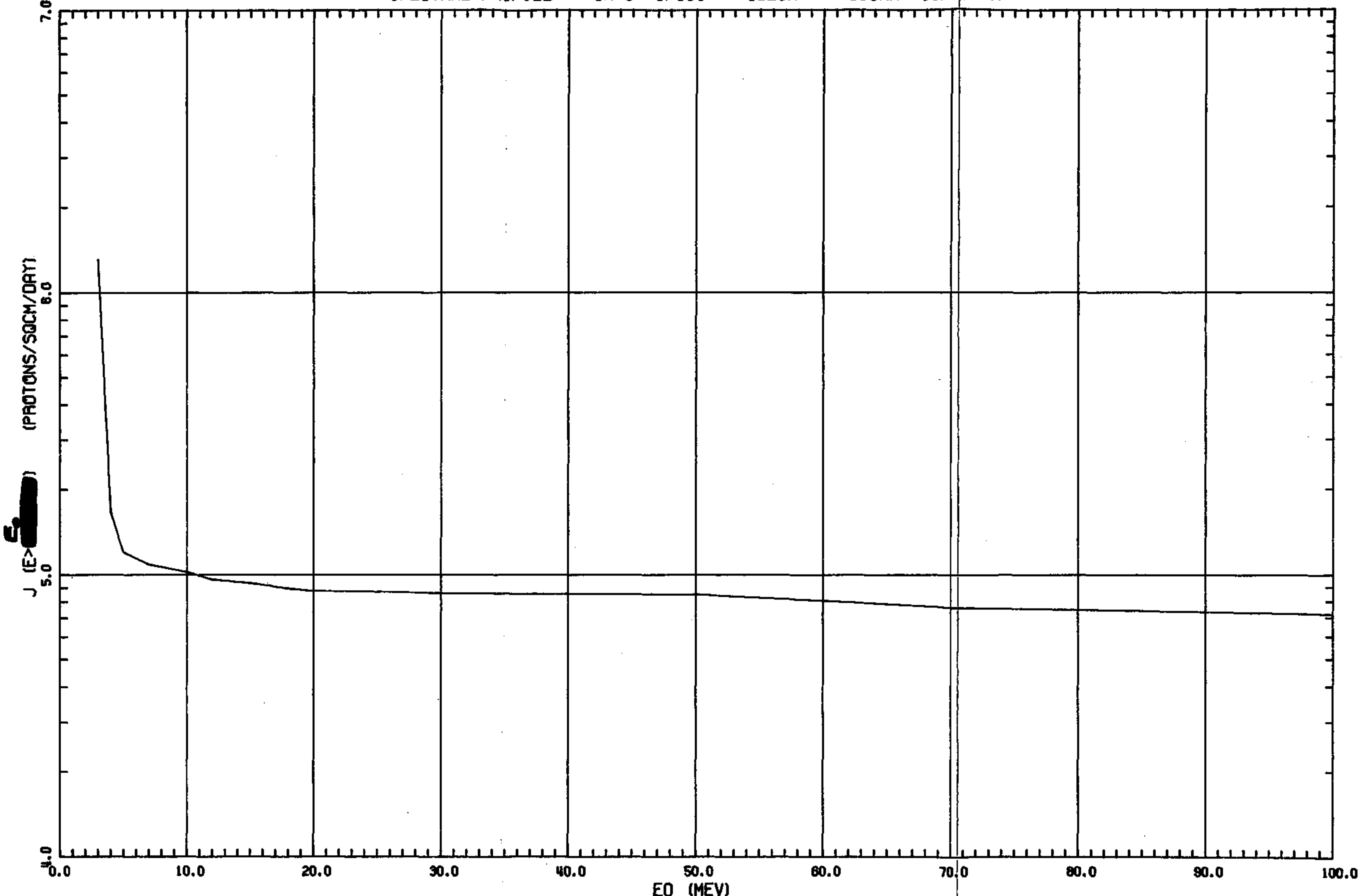
SPECTRAL PROFILE UK-5 0/450 0DEGR 450KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 29

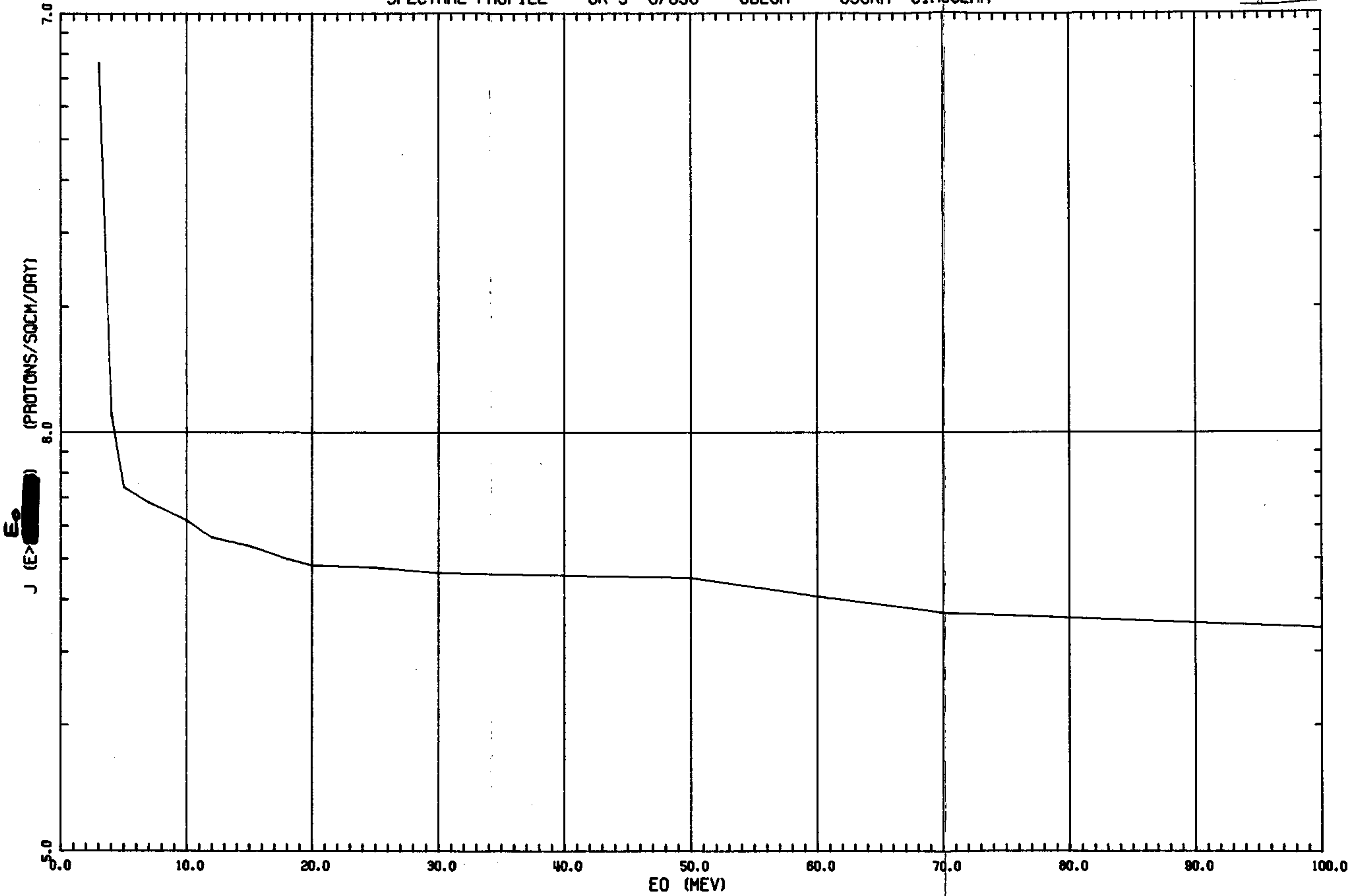


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 30

SPECTRAL PROFILE UK-5 0/650 0DEGR 650KM CIRCULAR

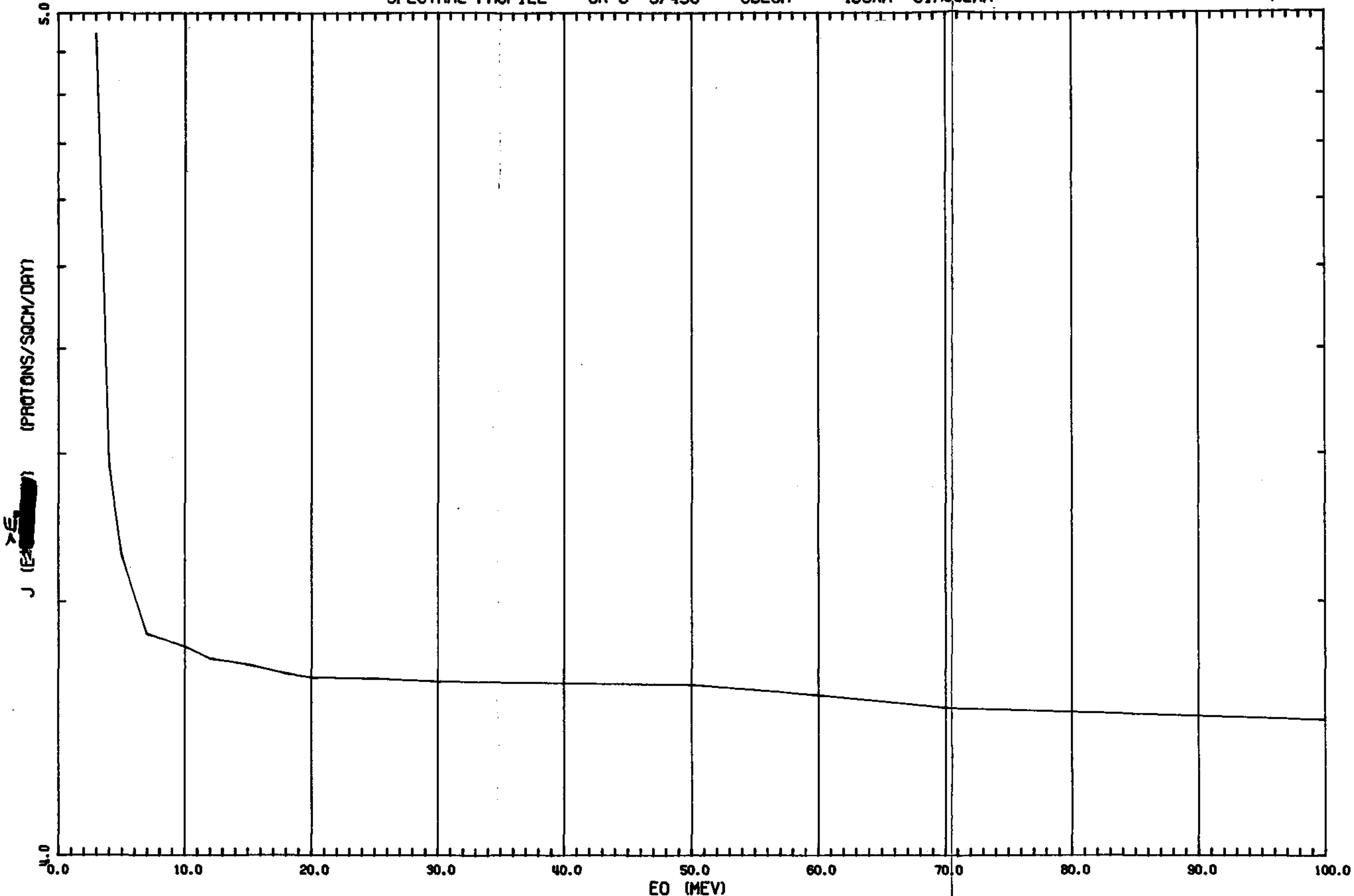


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 31

SPECTRAL PROFILE UK-5 3/450 3DEGR 450KM CIRCULAR

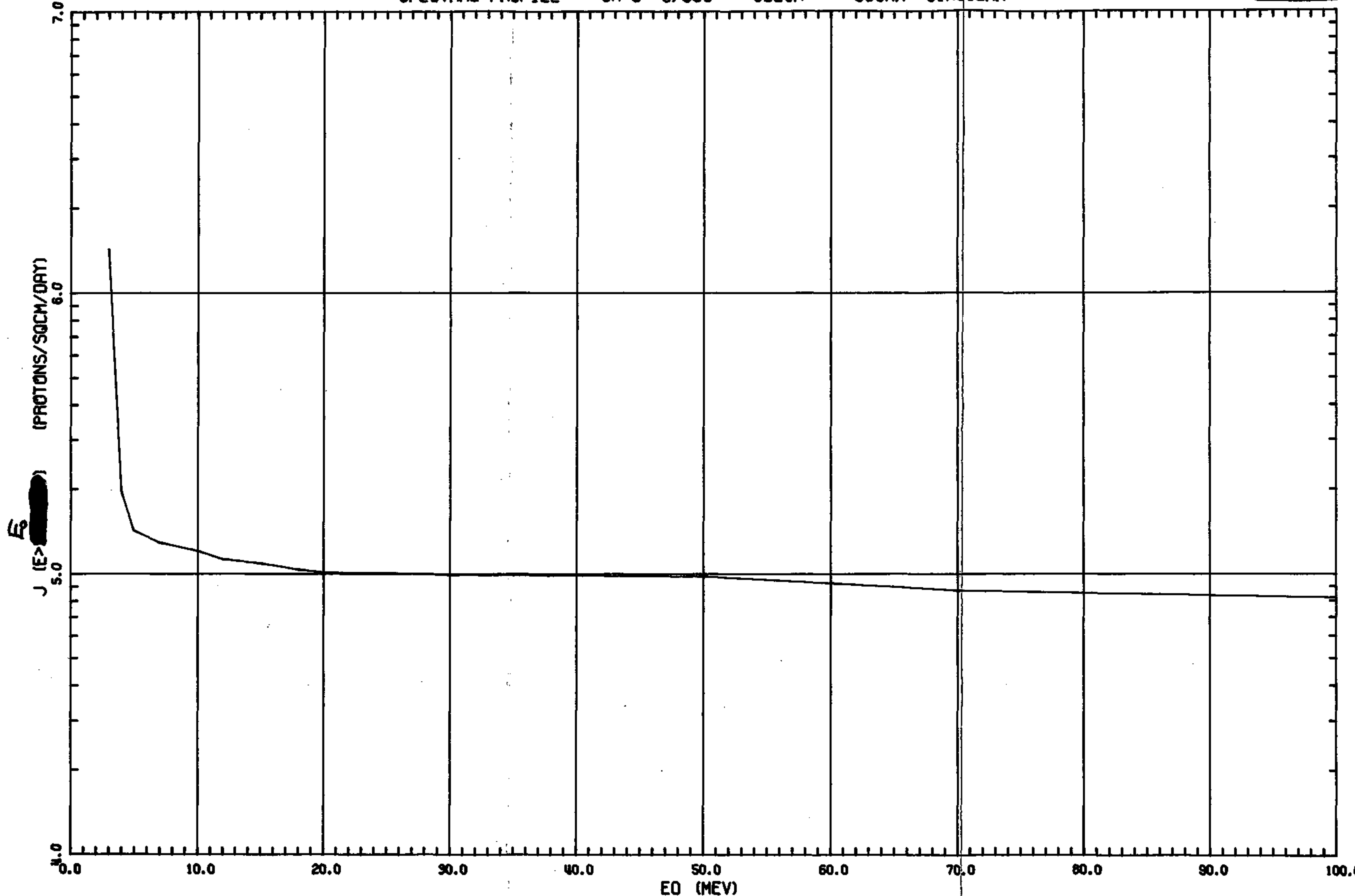


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 32

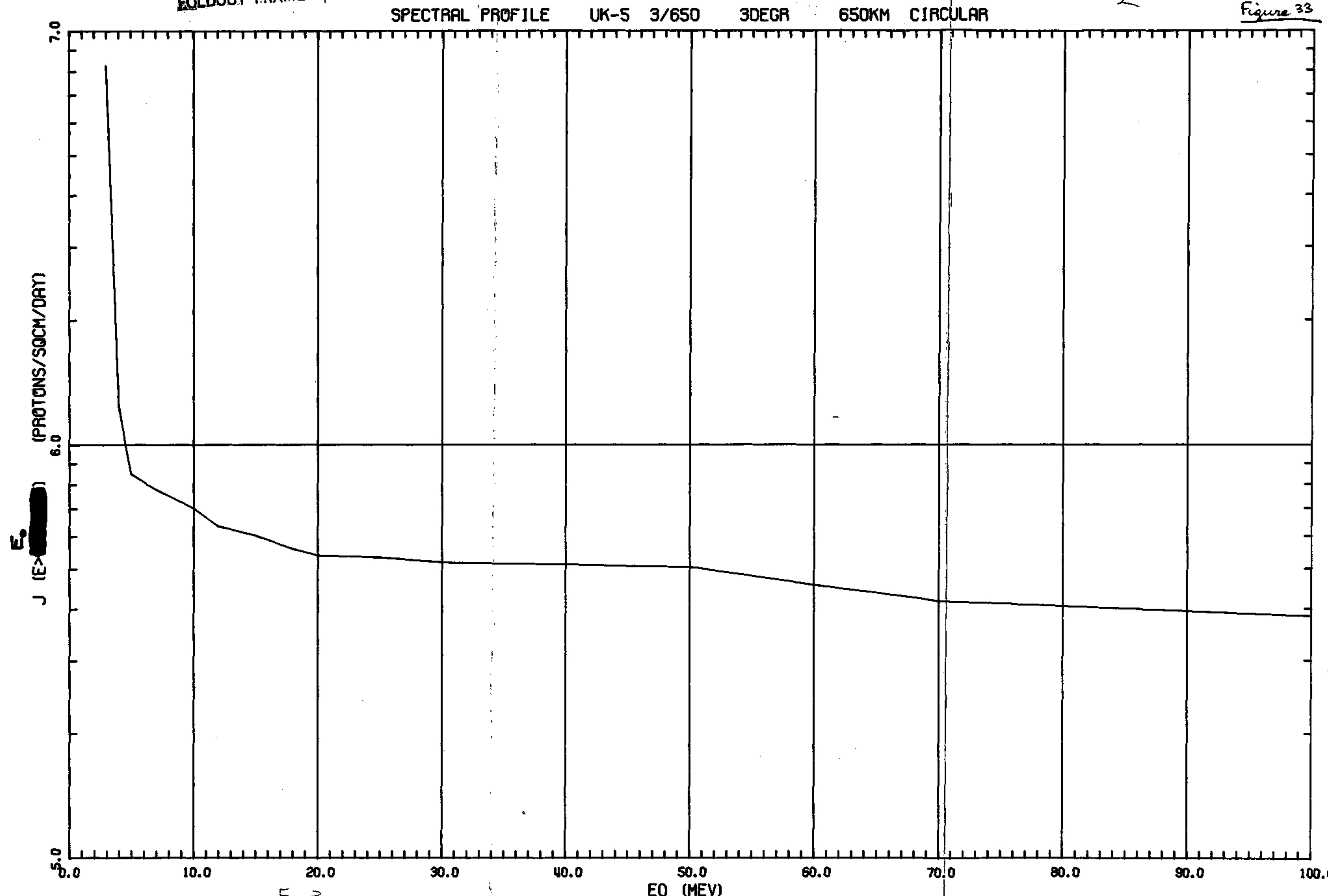
SPECTRAL PROFILE UK-5 3/550 30EGR 550KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 33

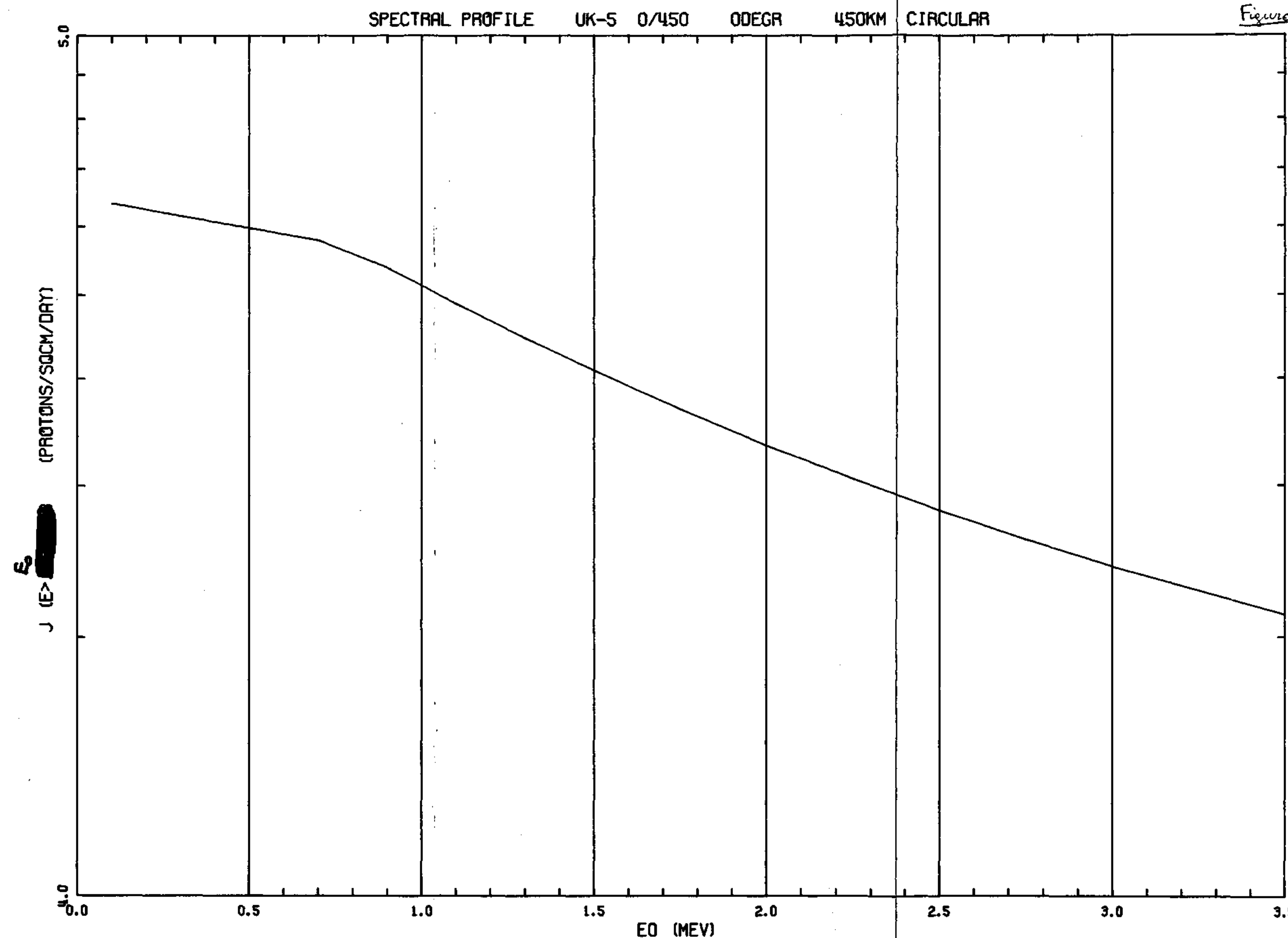


F-2

FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 34

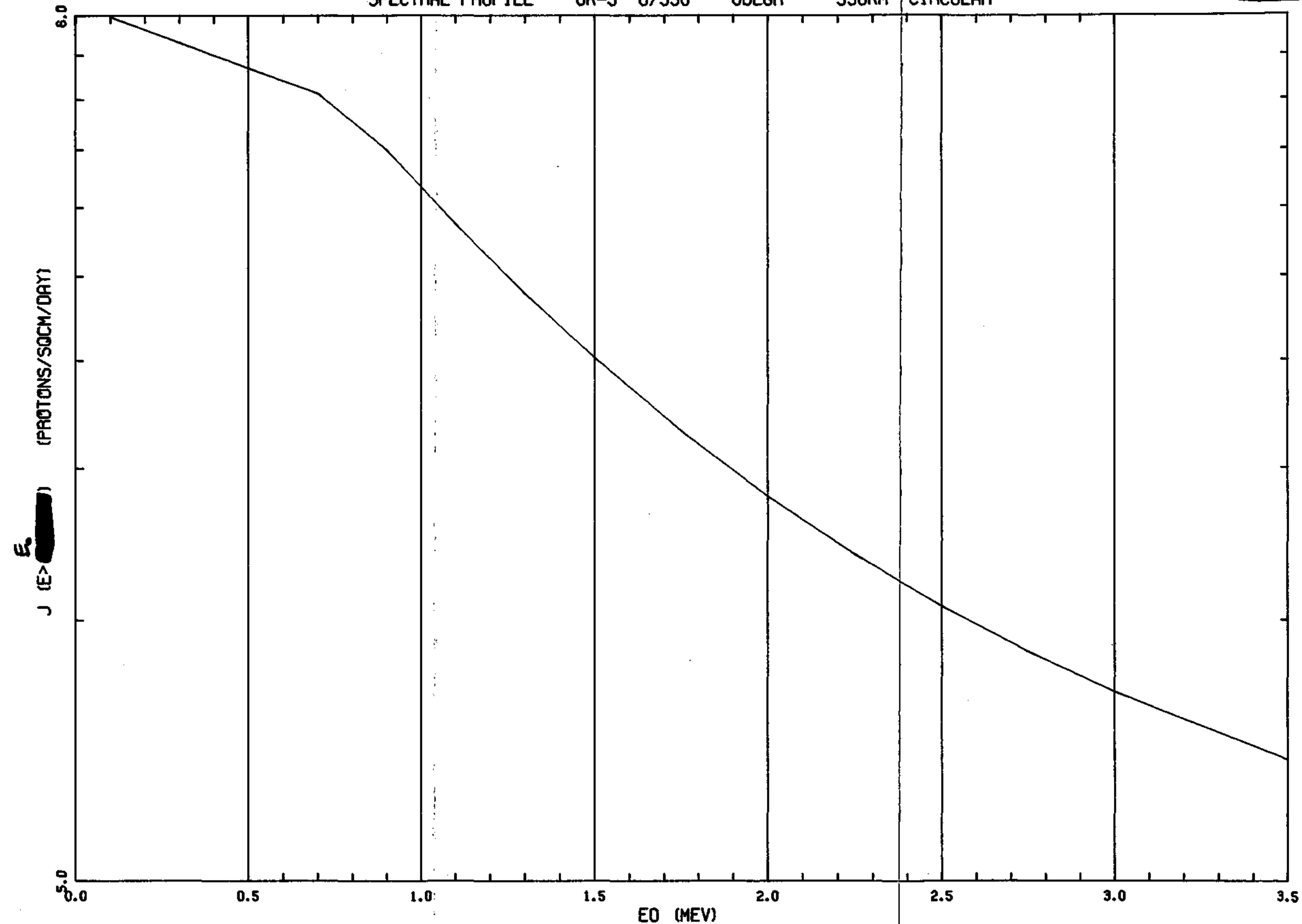


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 35

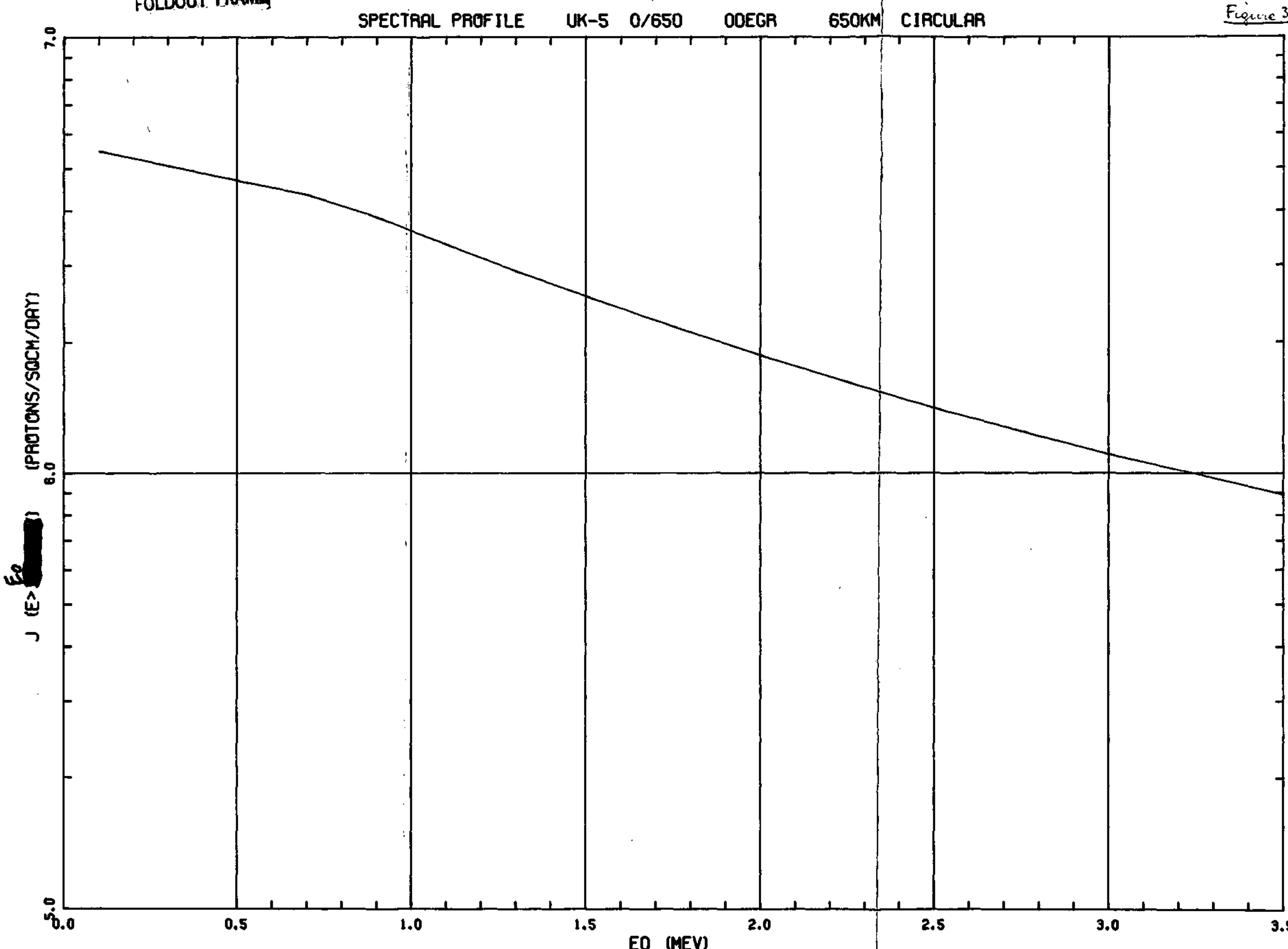
SPECTRAL PROFILE UK-5 0/550 0DEGR 550KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

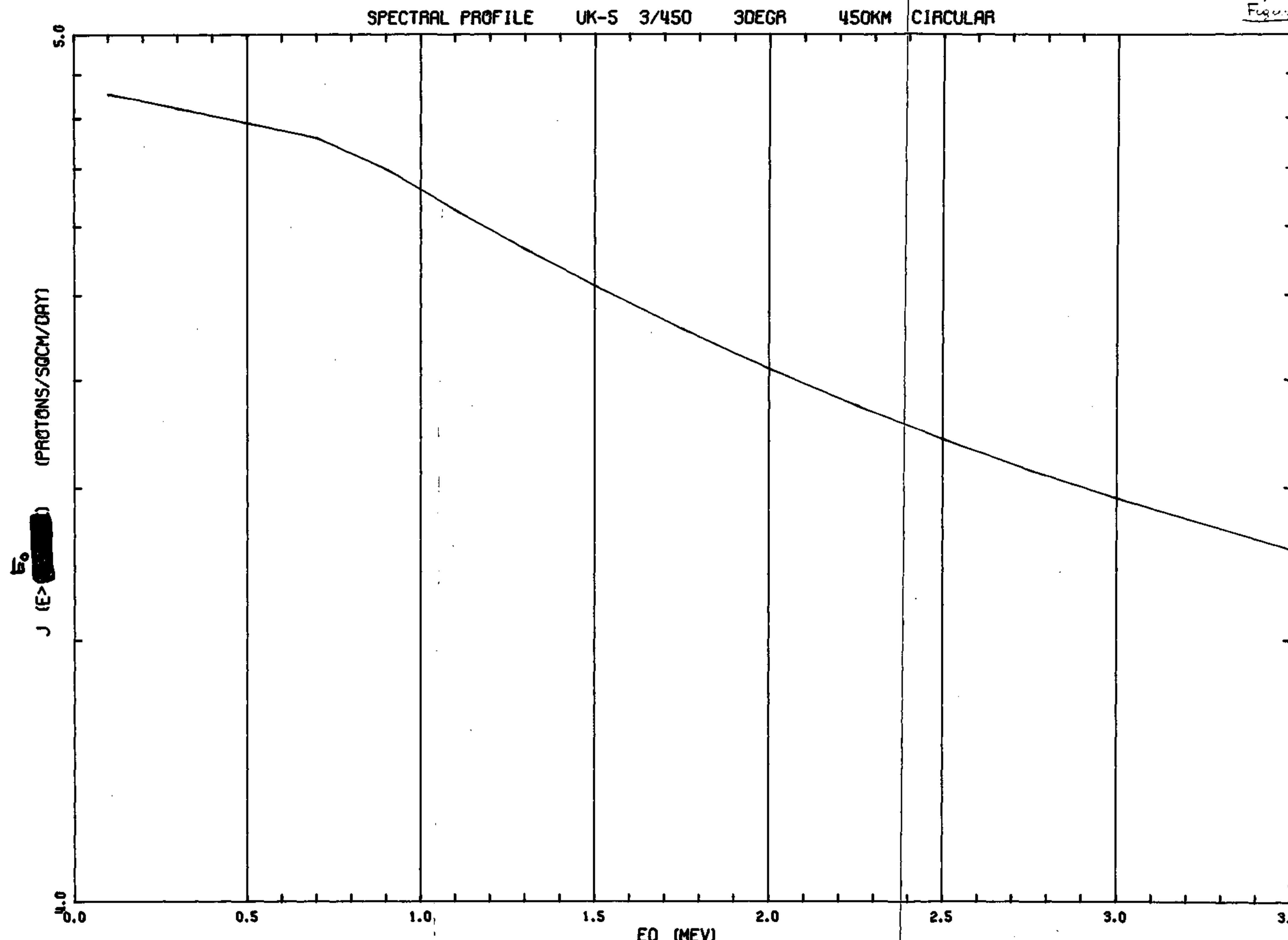
Figure 36



FOLDOUT FRAME 1

FOLDOUT FRAME 2

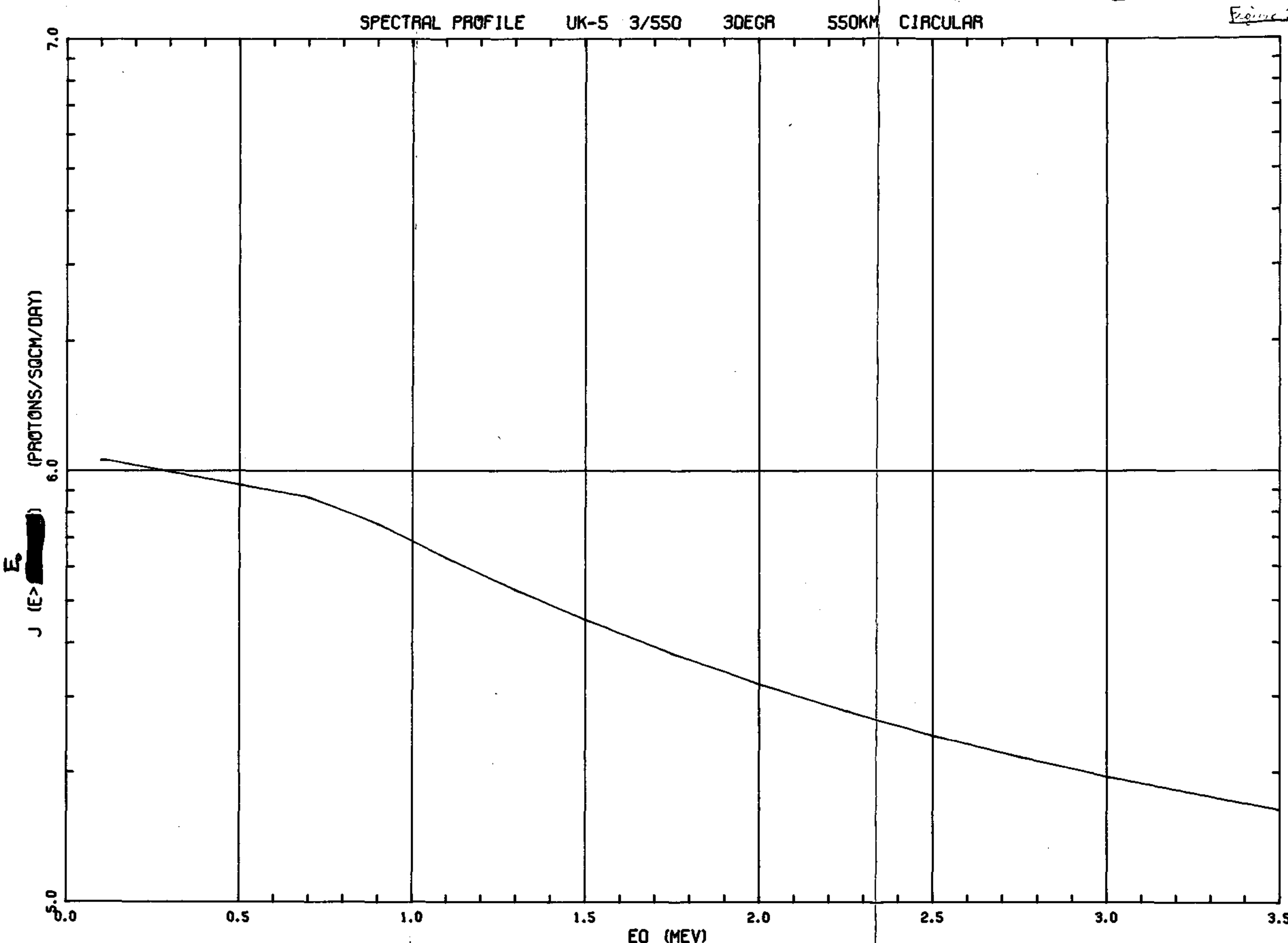
Figure 37



FOLDOUT FRAME 1

FOLDOUT FRAME 2

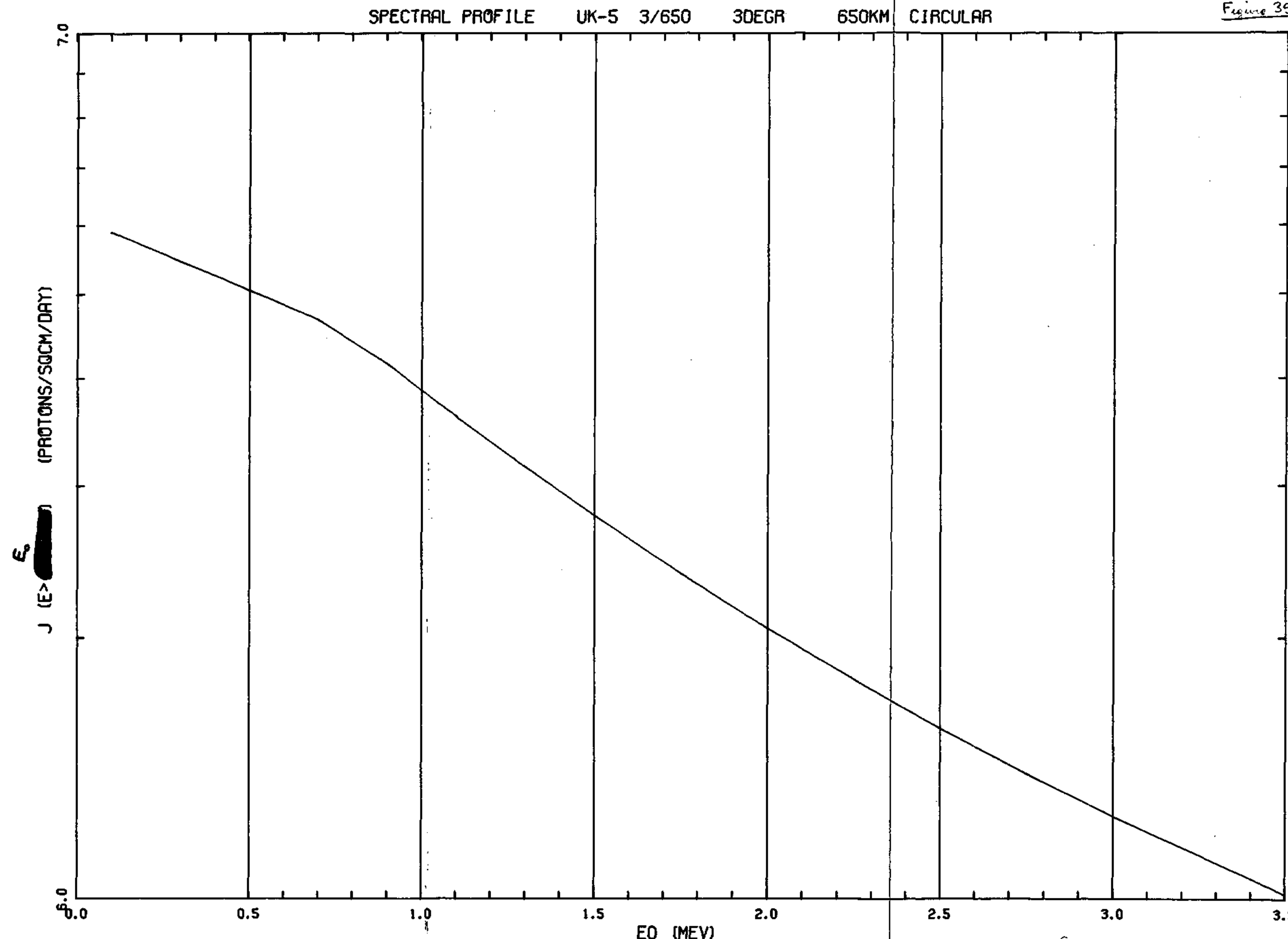
Figure 38



FOLDOUT FRAME 1

FOLDOUT FRAME 2

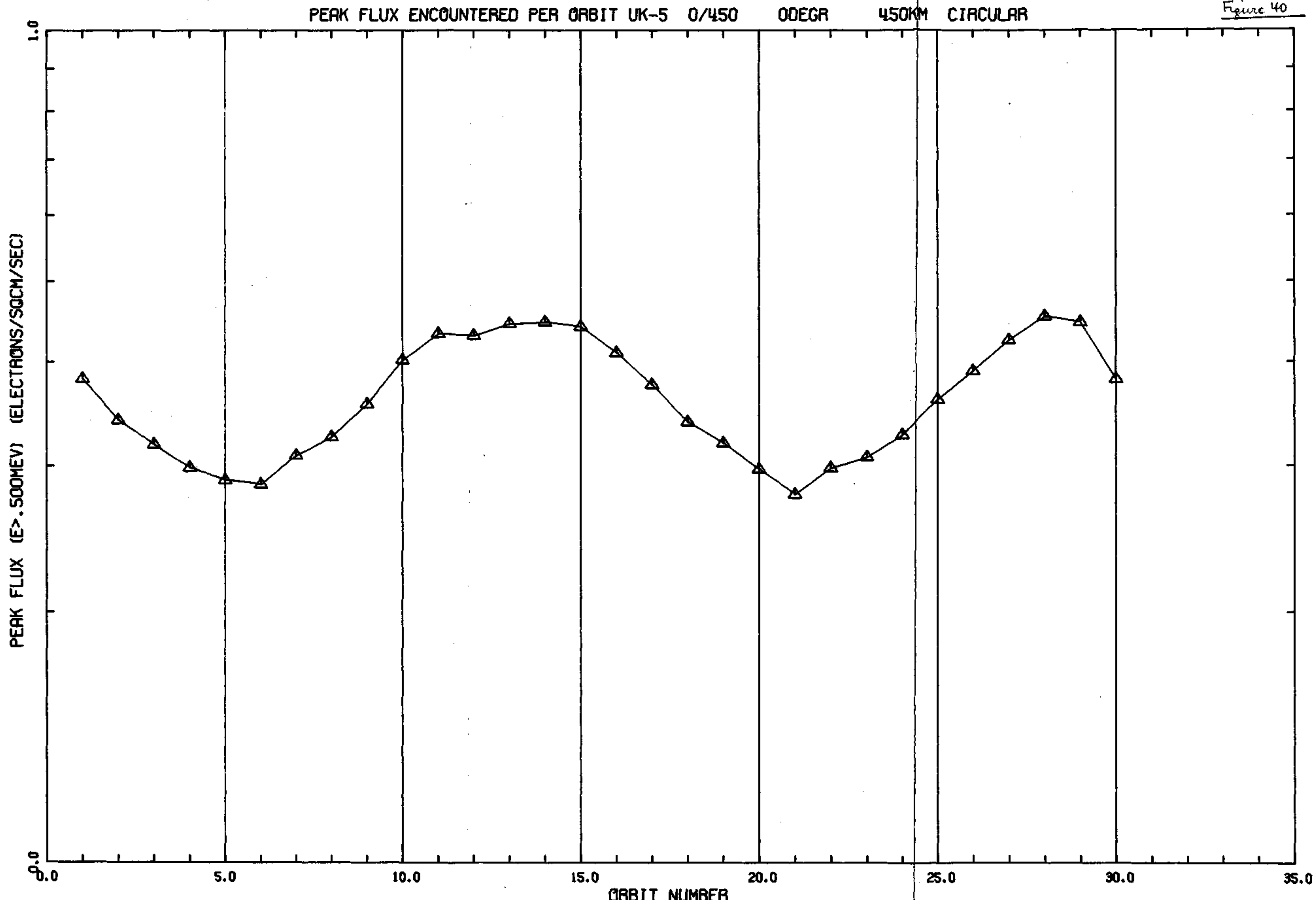
Figure 39



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 40

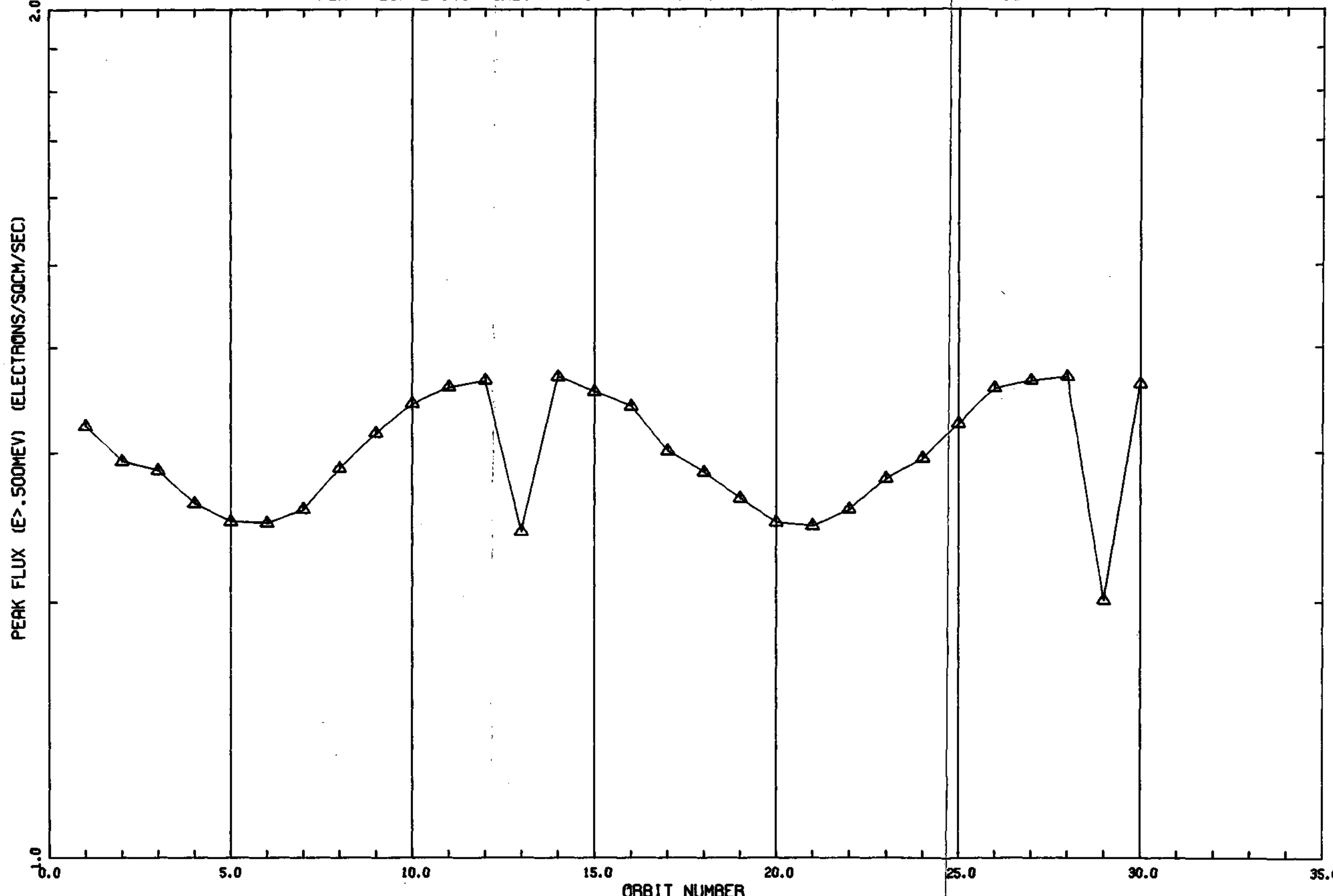


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 41

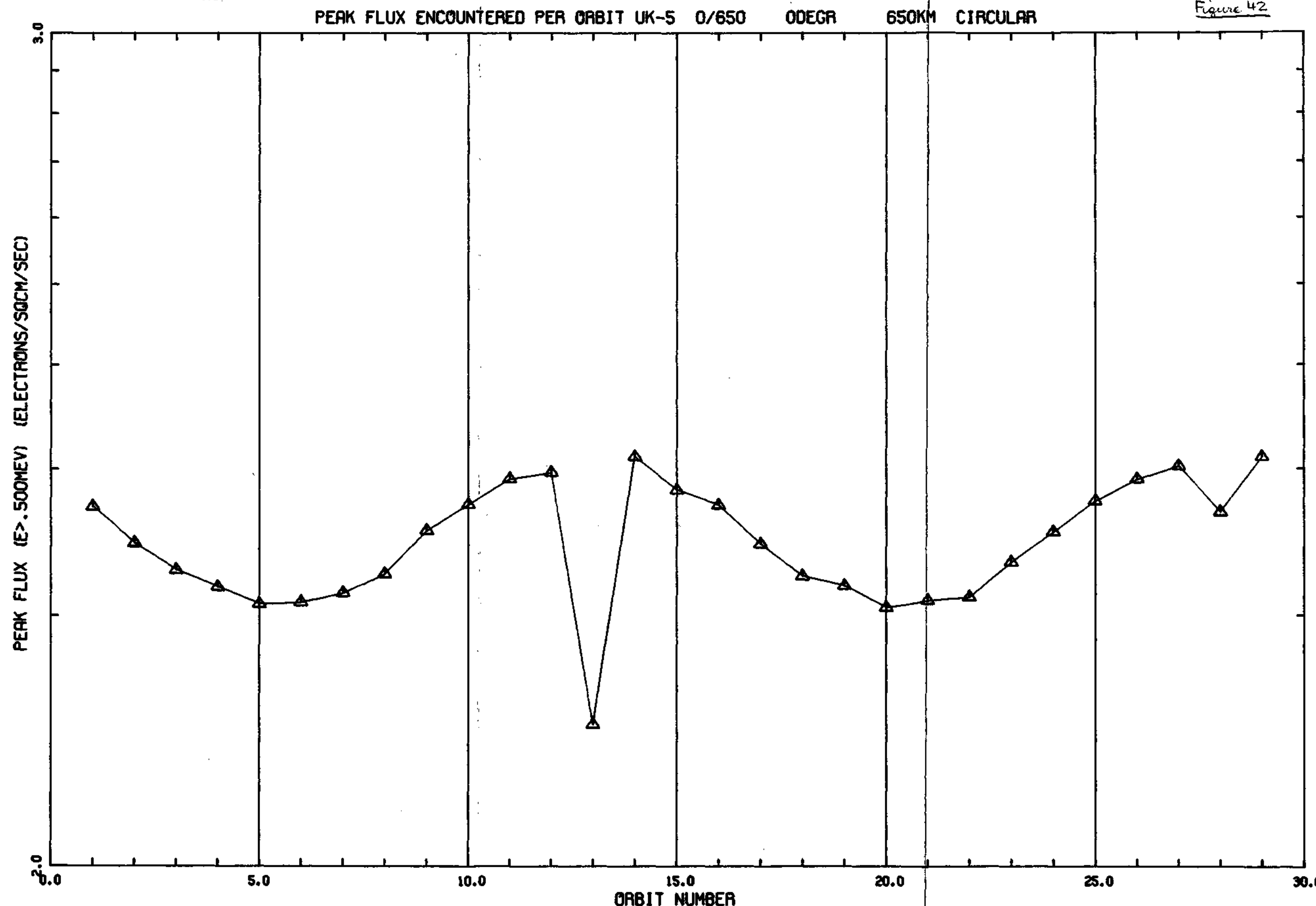
PEAK FLUX ENCOUNTERED PER ORBIT UK-5 0/550 0DEGR. 550KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

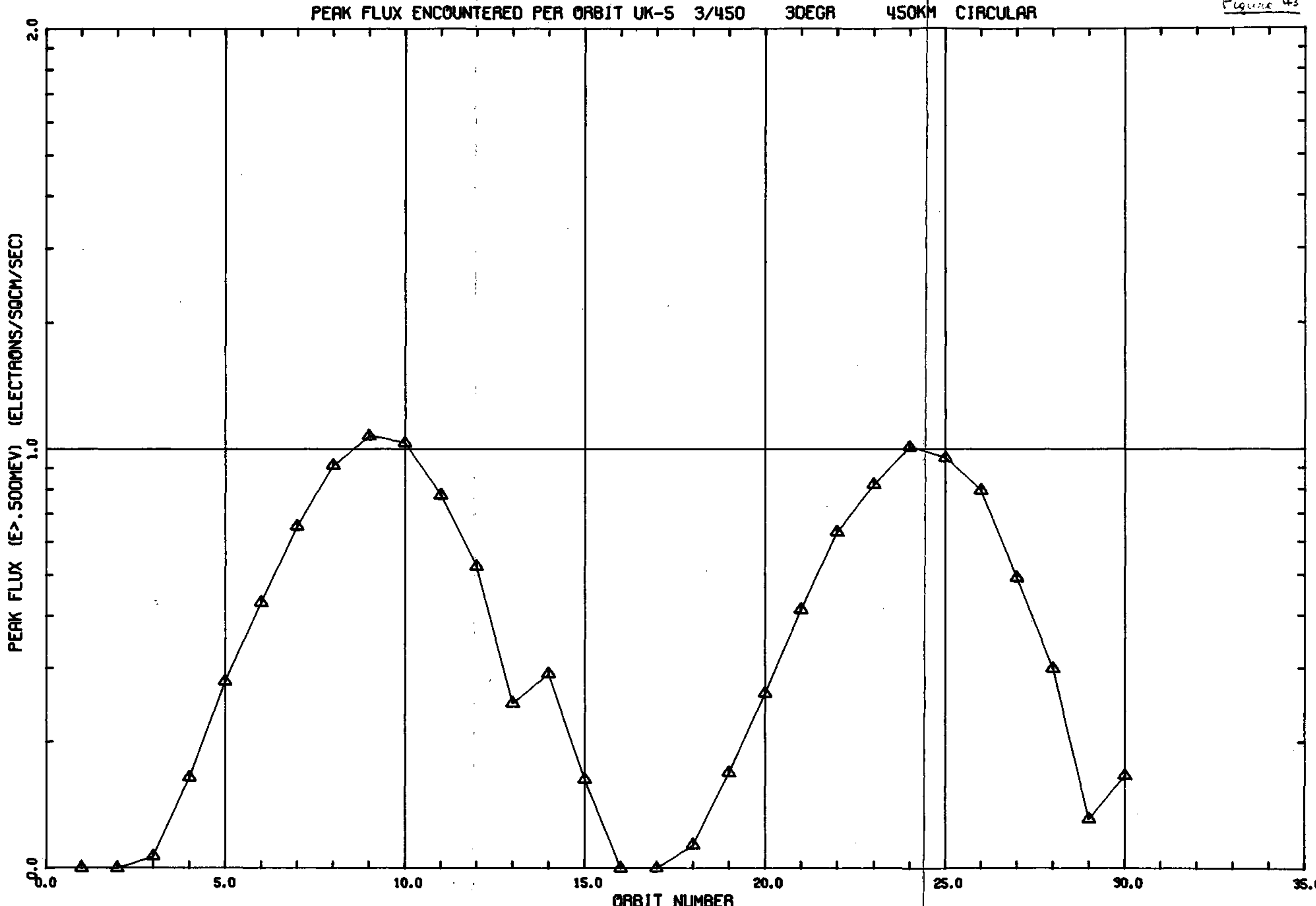
Figure 42



FOLDOUT FRAME 1

FOLDOUT FRAME 2

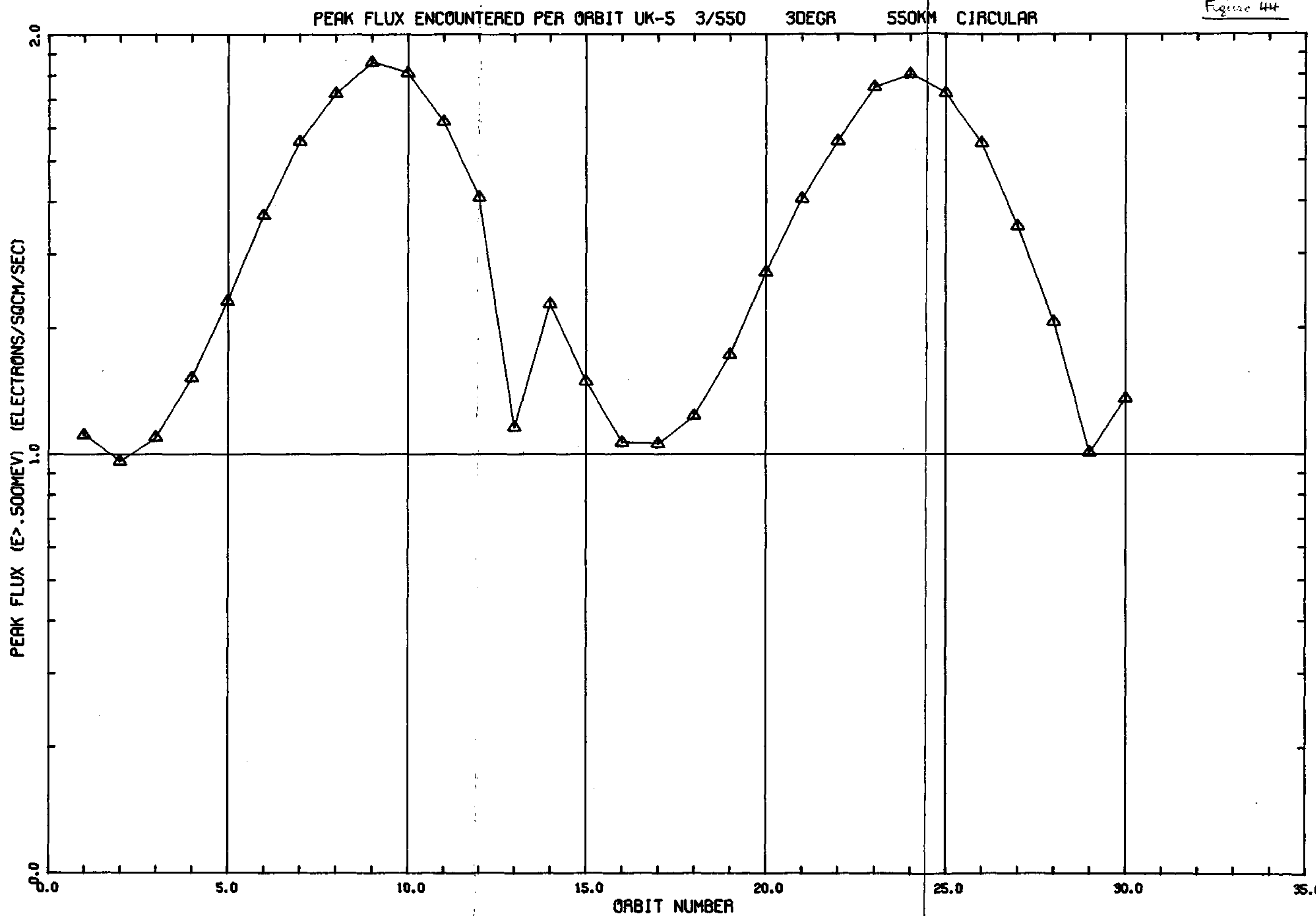
Figure 43



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 44



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 45

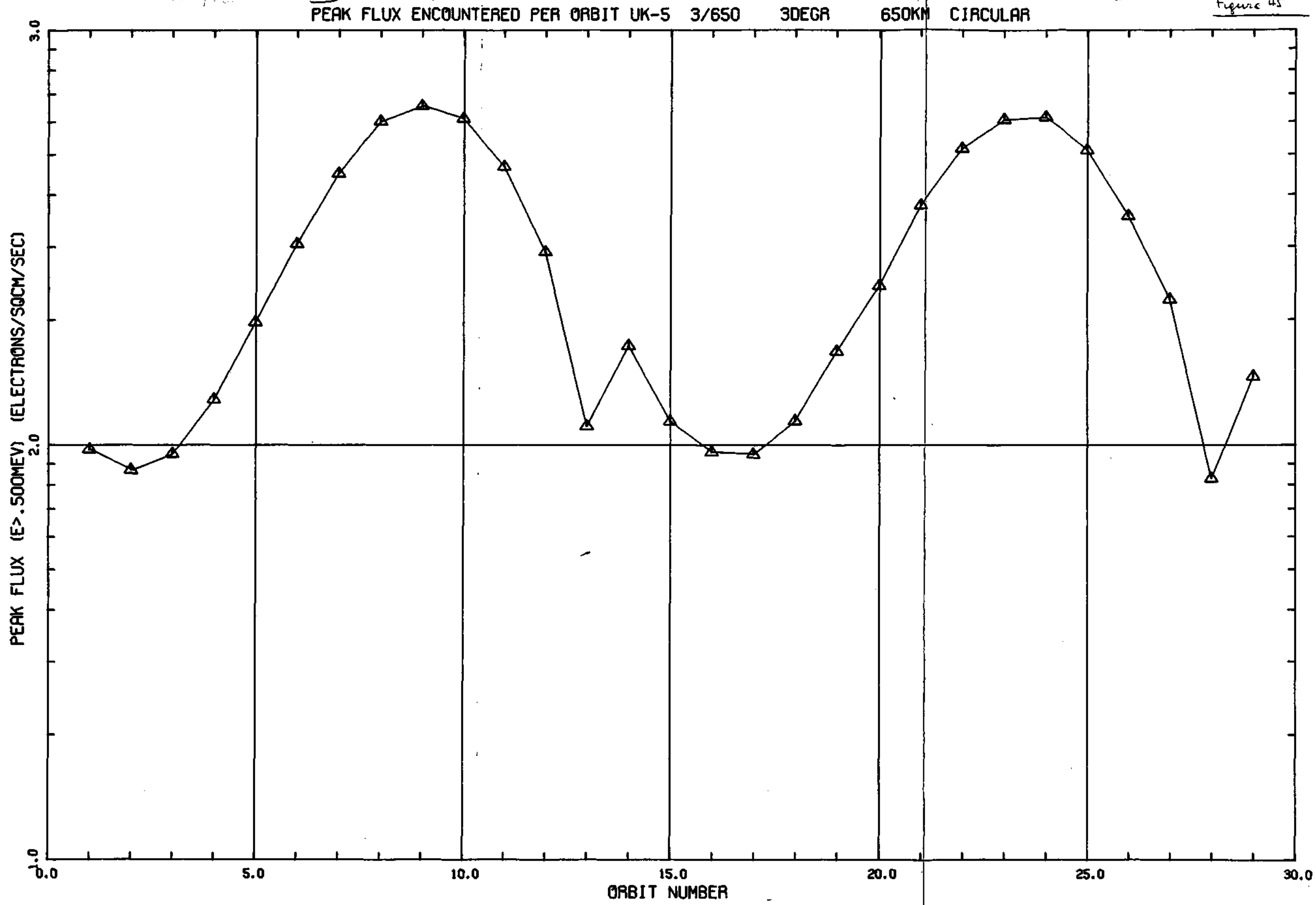
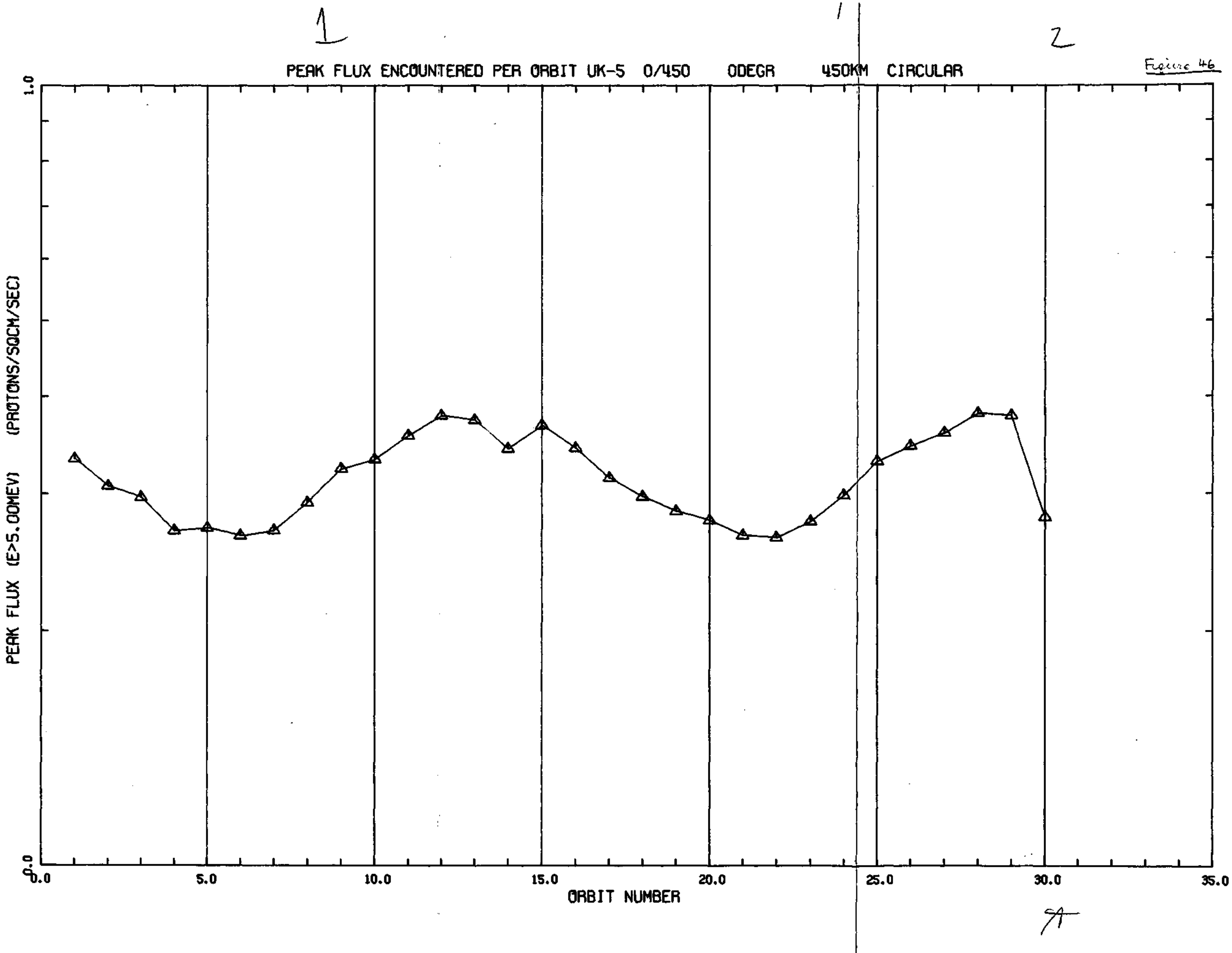


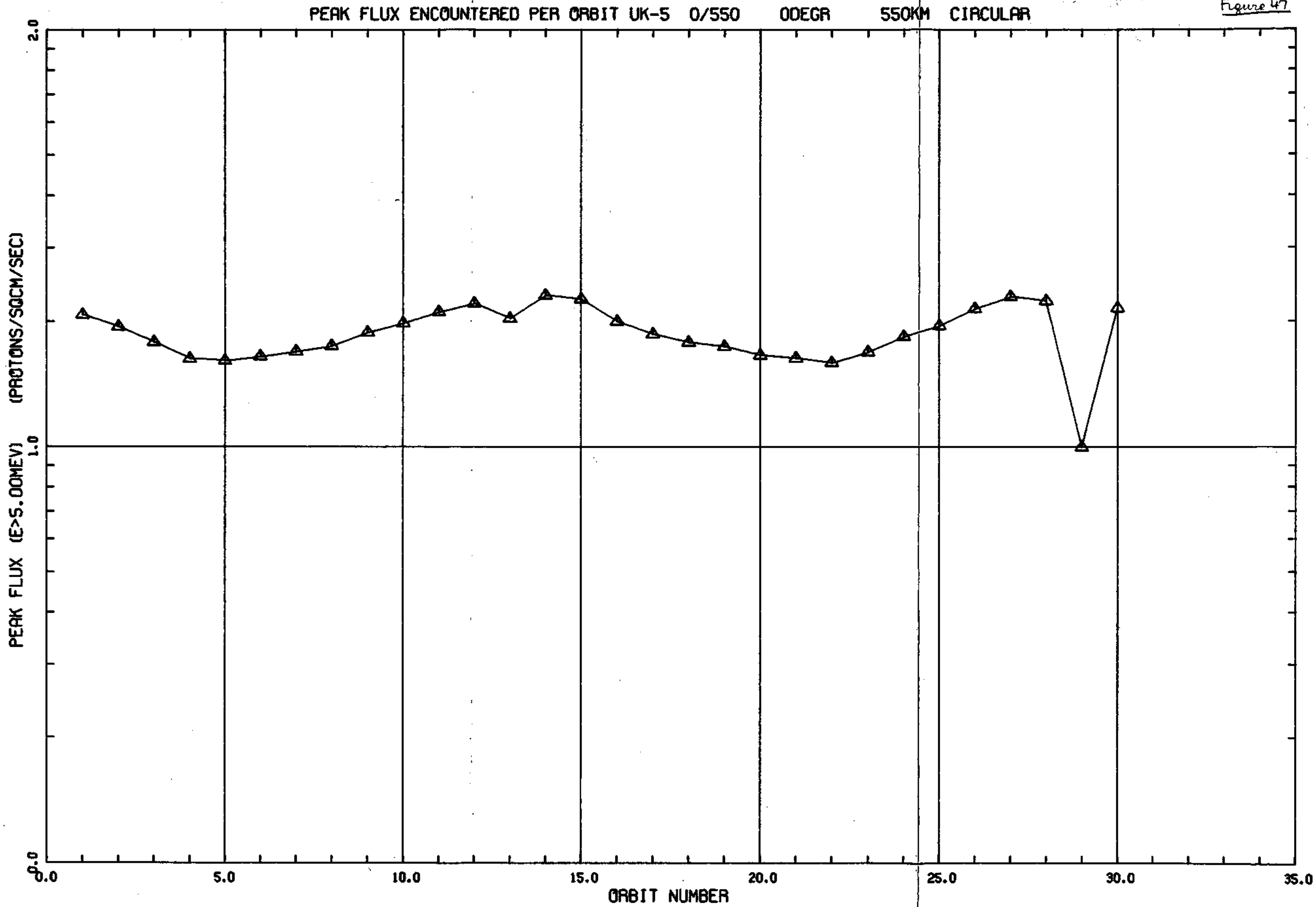
Figure 46


PEAK FLUX ENCOUNTERED PER ORBIT UK-5 0/450 0DEGR 450KM CIRCULAR
PEAK FLUX (E>5.00MEV) (PROTONS/SQCM/SEC)
ORBIT NUMBER
0.0
1.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0

FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 47

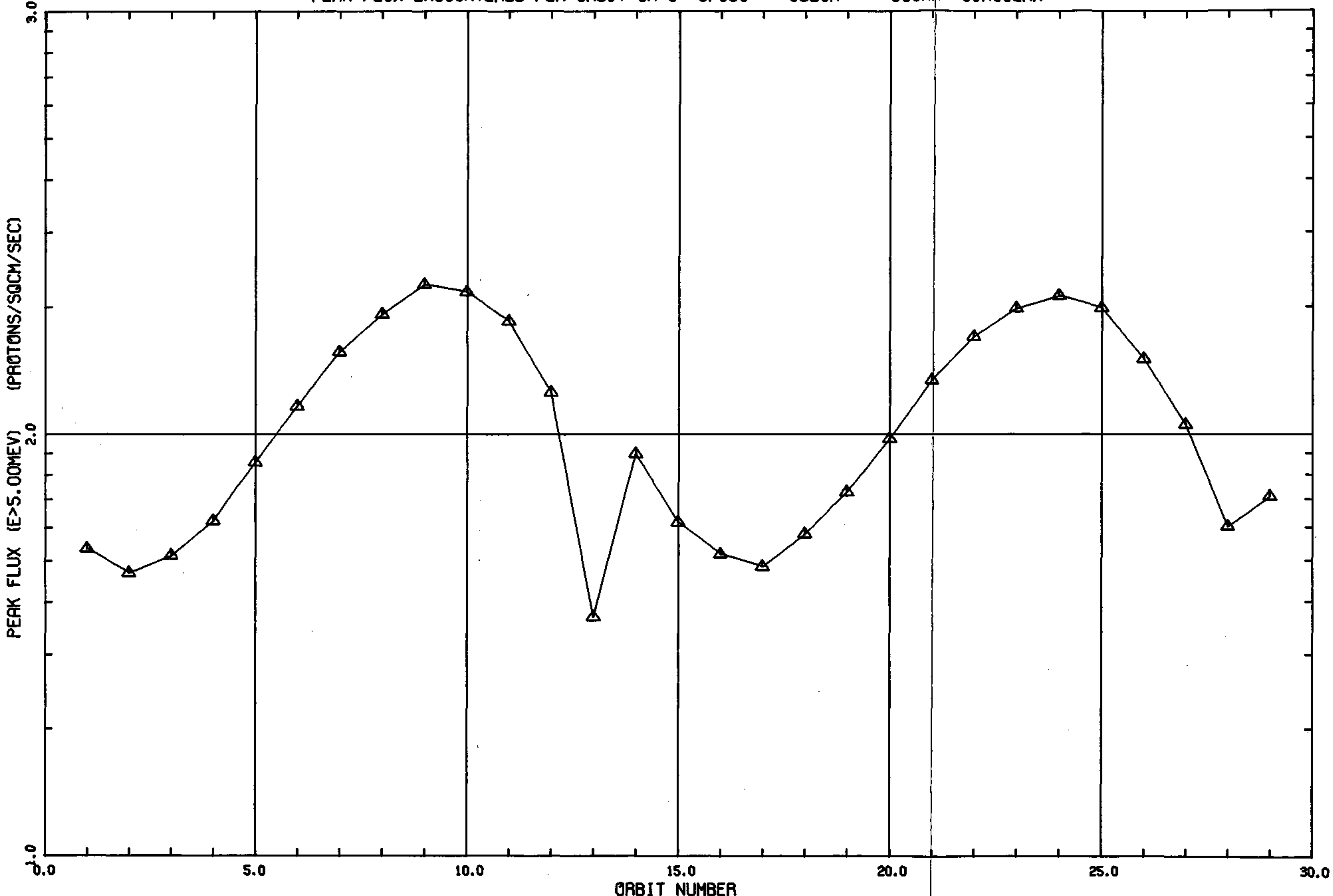


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 48

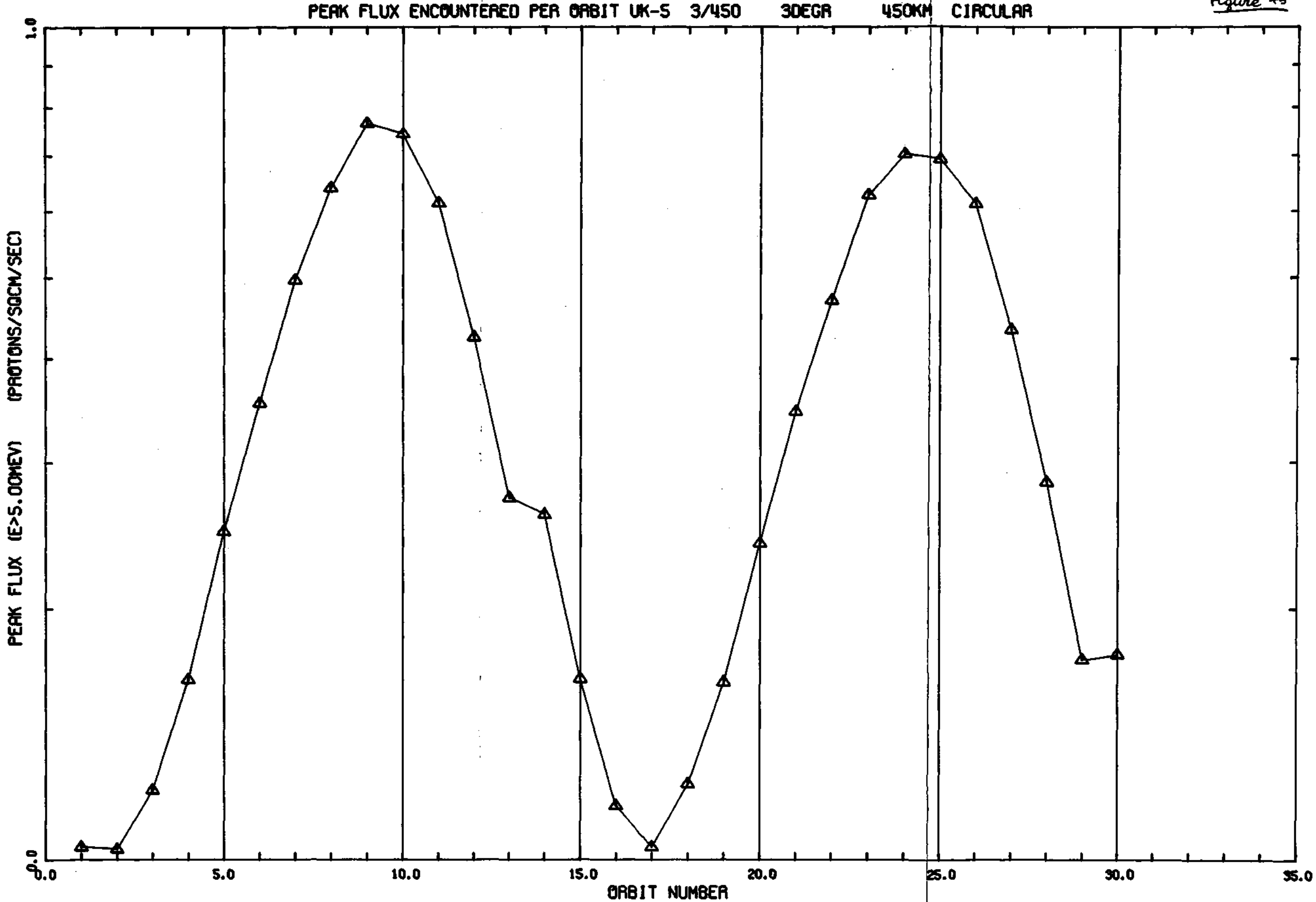
PEAK FLUX ENCOUNTERED PER ORBIT UK-5 3/650 3DEGR 650KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

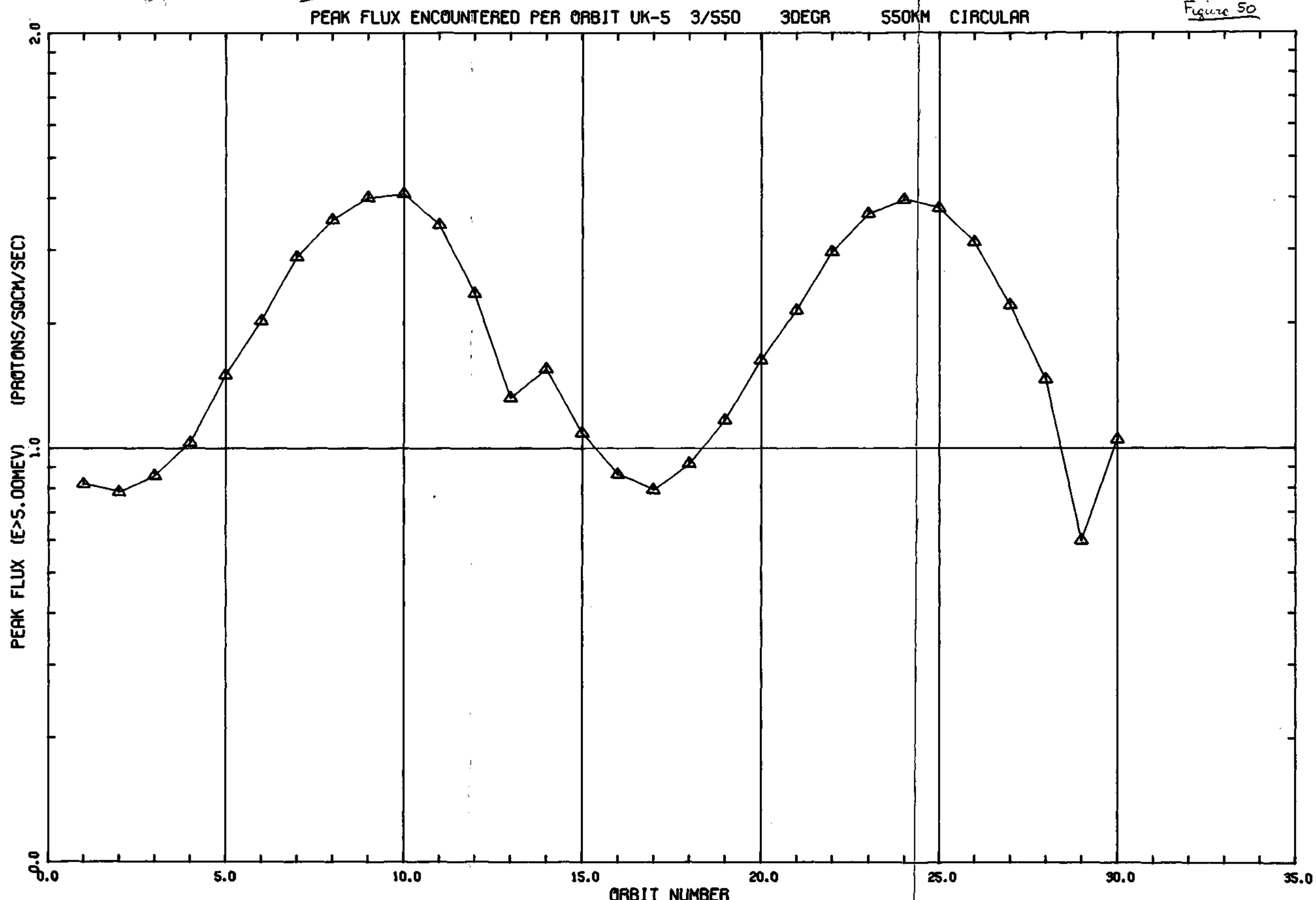
Figure 49



FOLDOUT FRAME 1

FOLDOUT FRAME 2

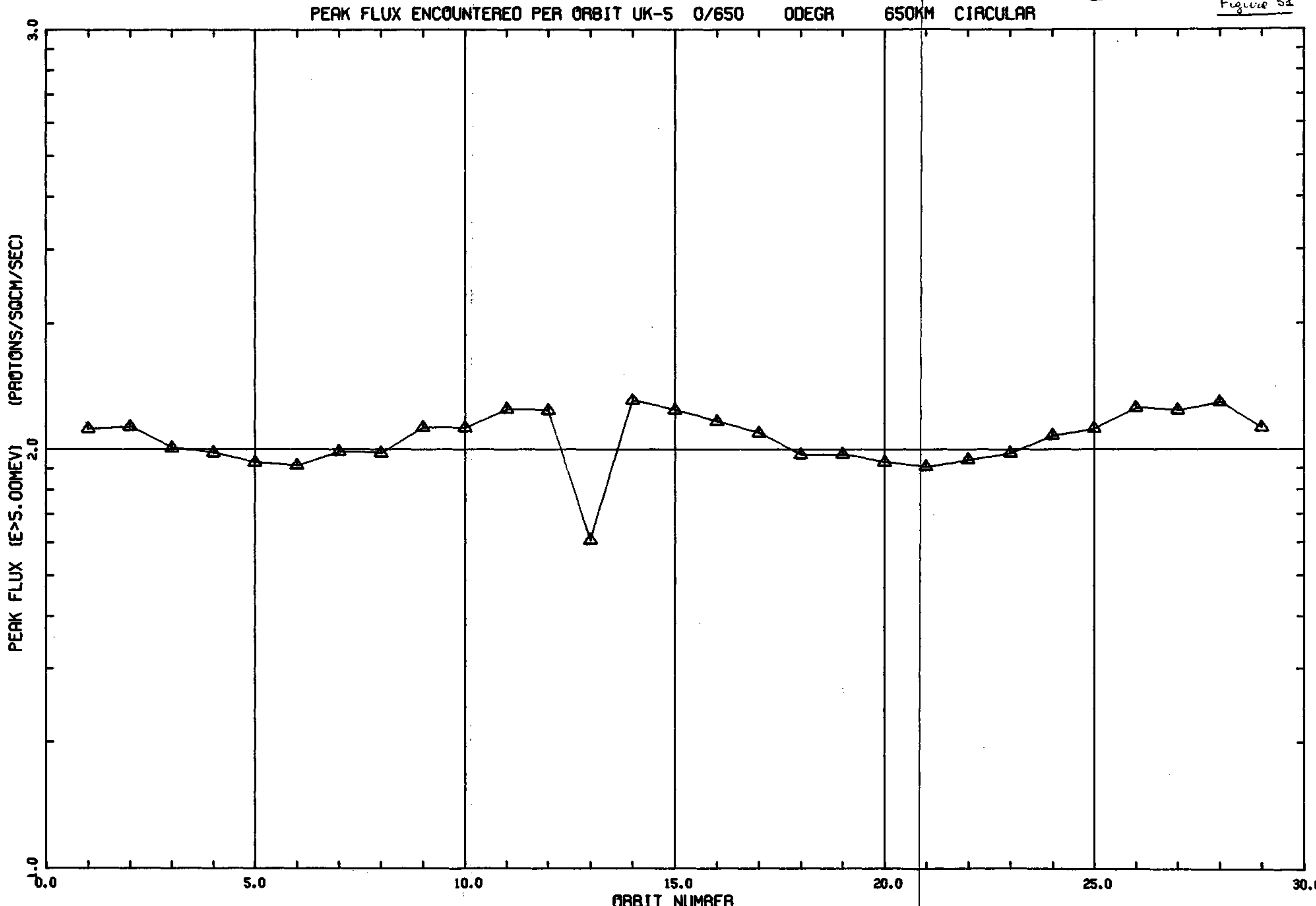
Figure 50



FOLDOUT FRAME 1

FOLDOUT FRAME 2

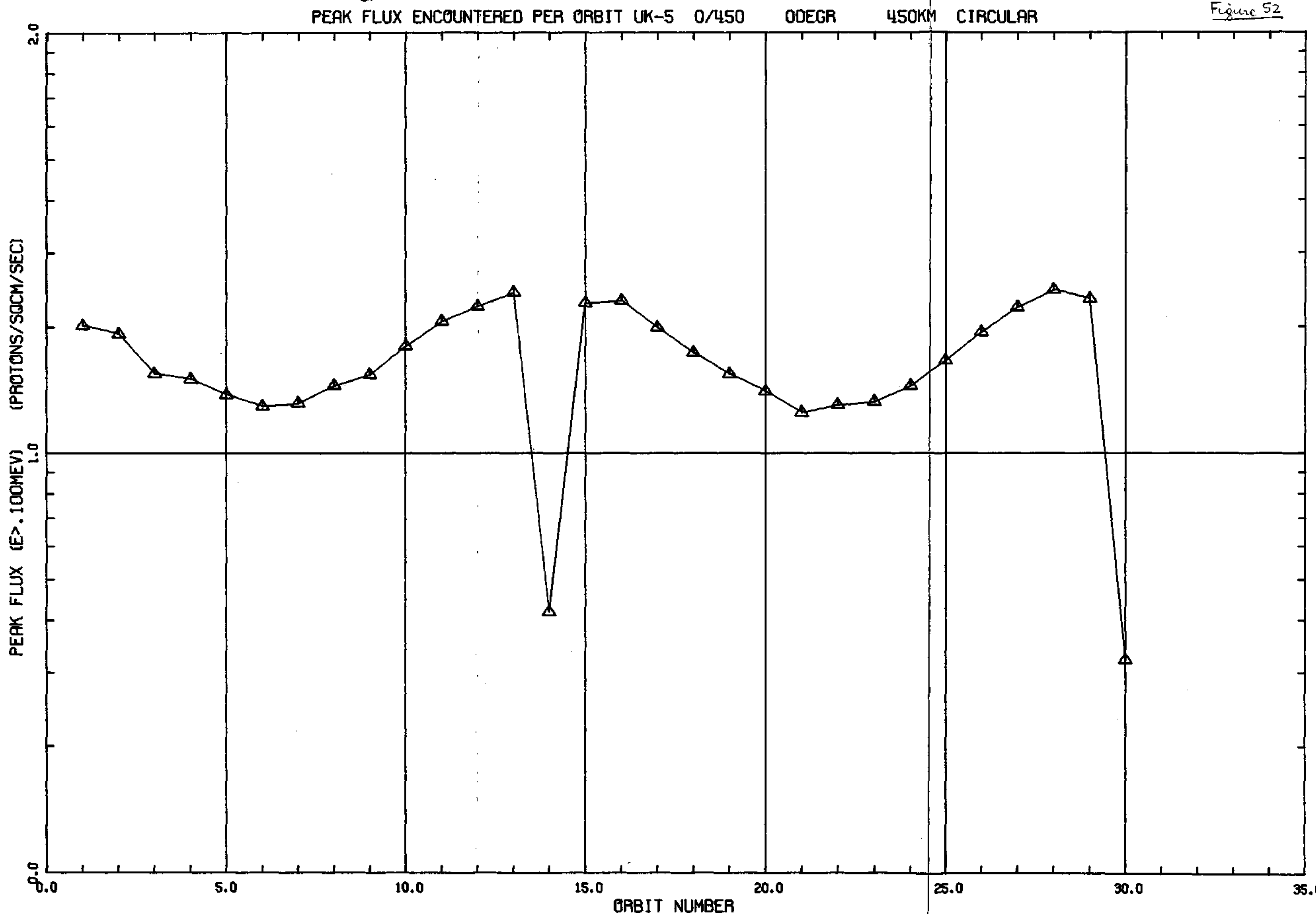
Figure 51



FOLDOUT FRAME 1

FOLDOUT FRAME 2

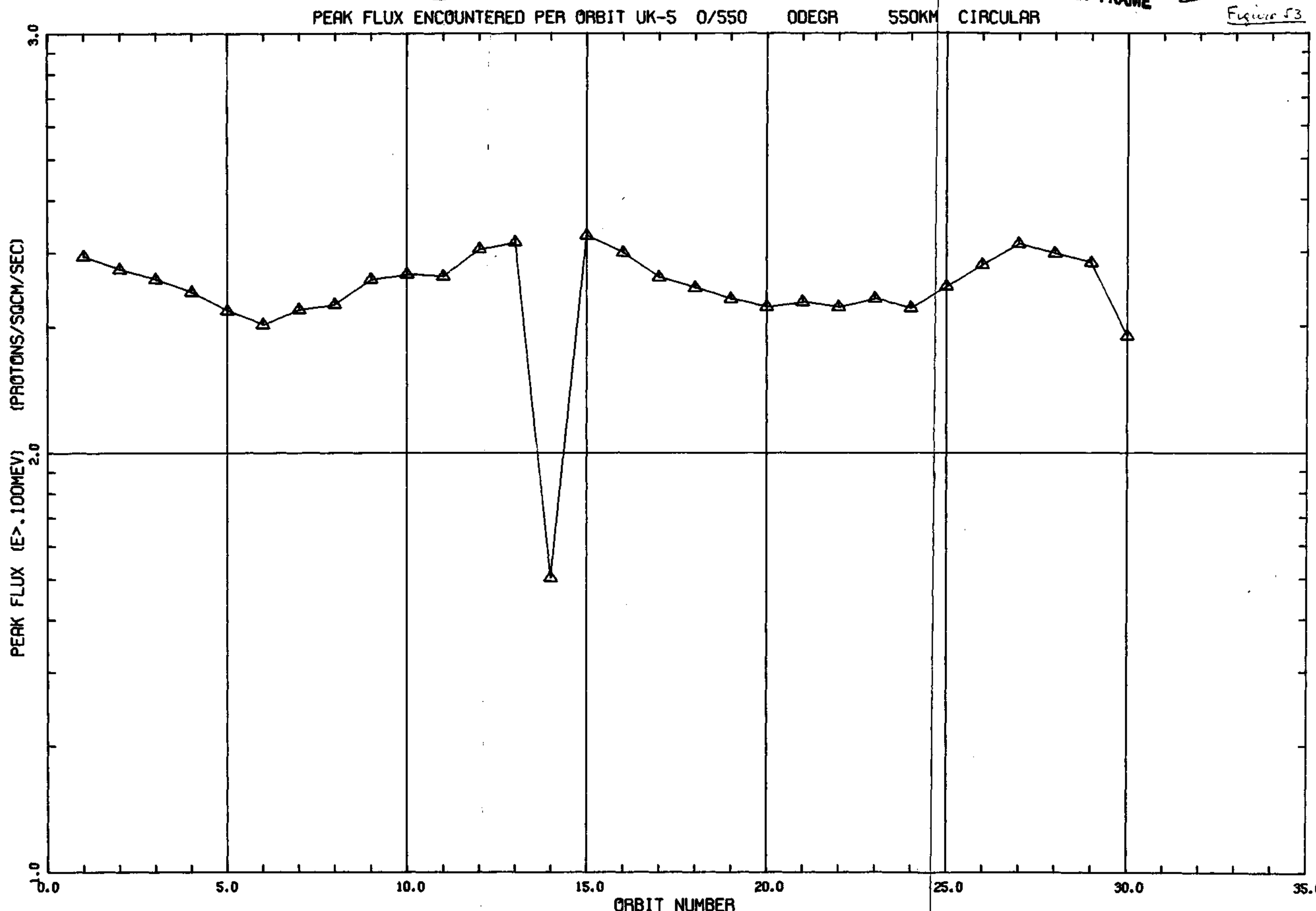
Figure 52



FOLDOUT FRAME 1

FOLDOUT FRAME 2

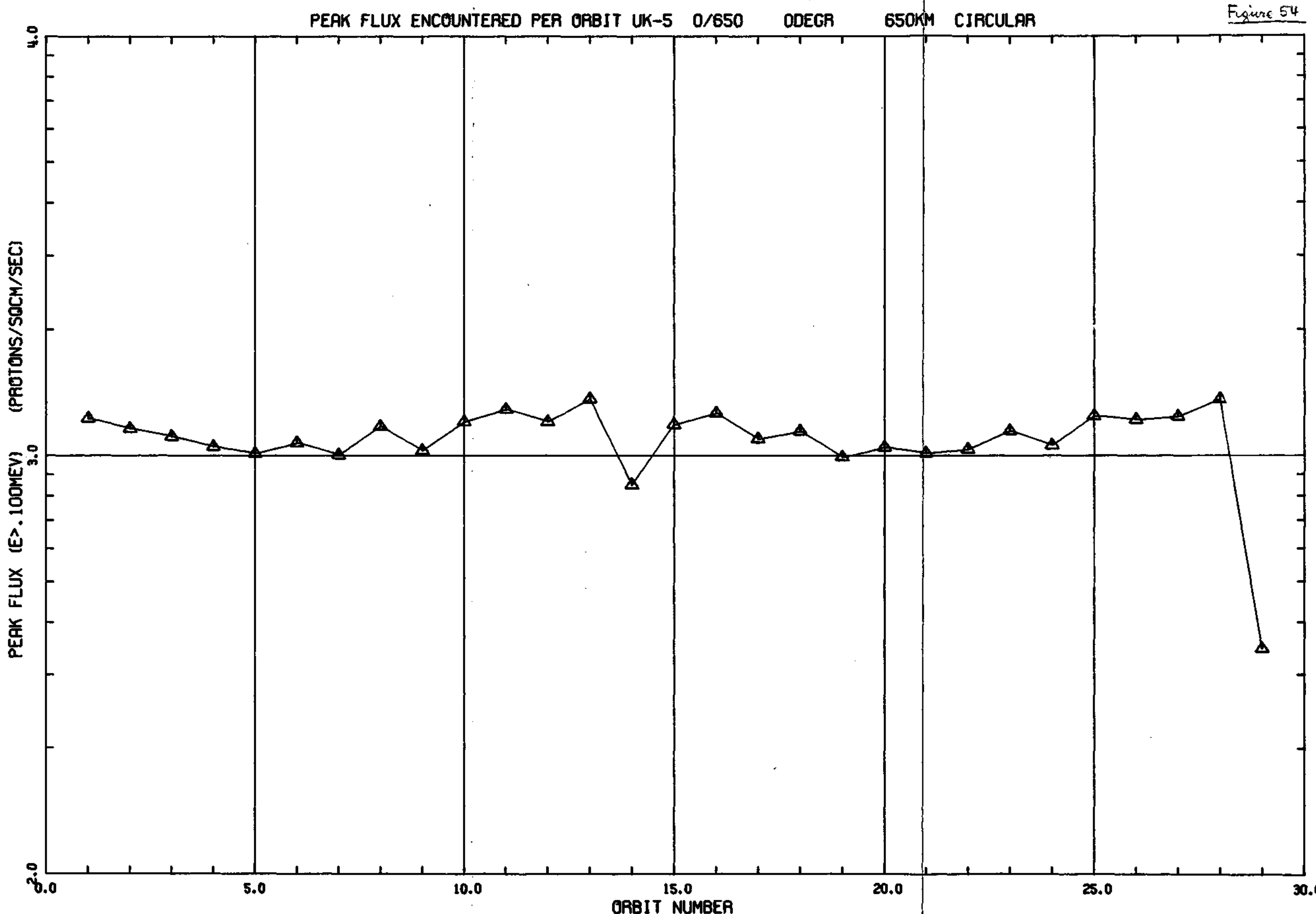
Figure 53



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 54

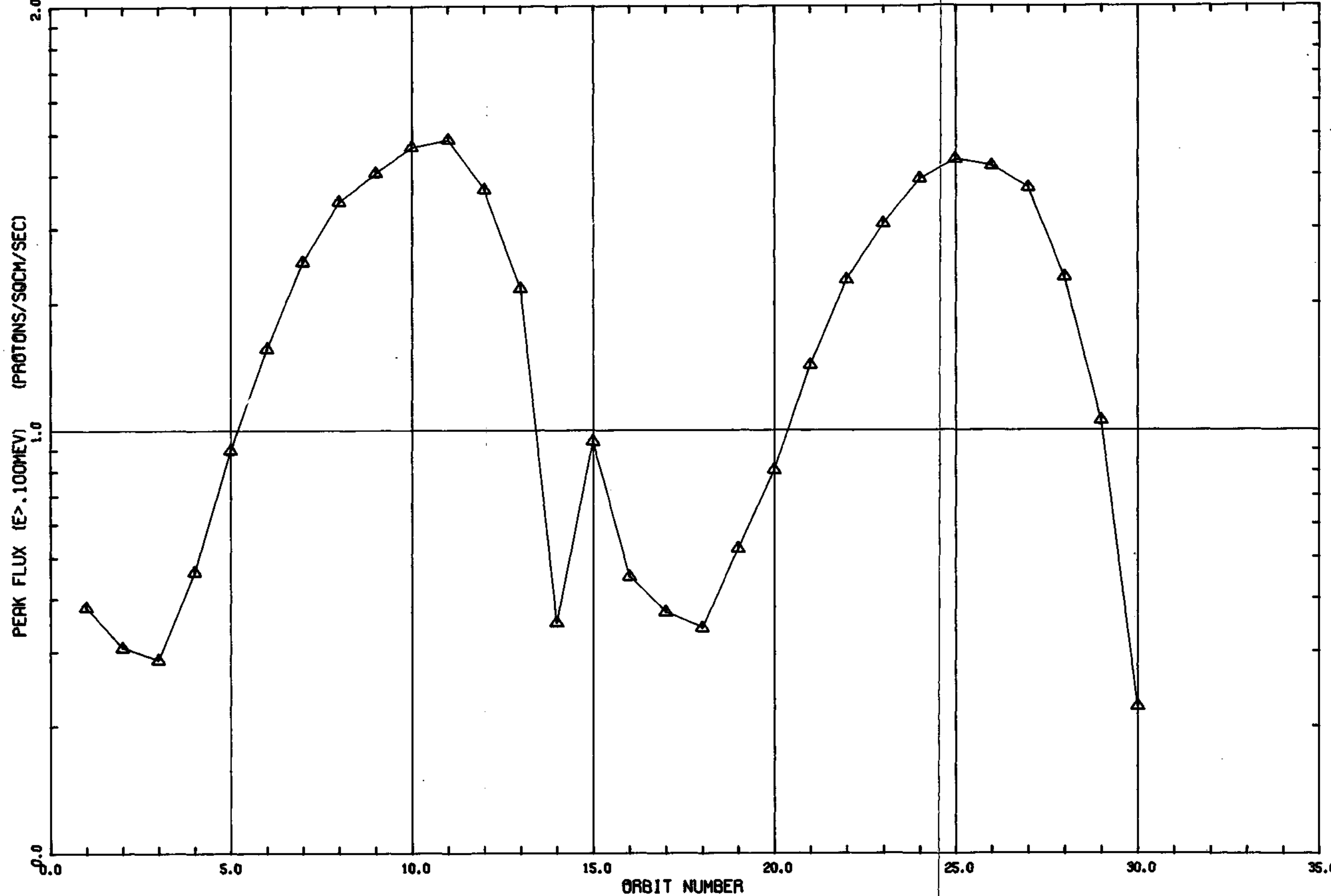


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 55

PEAK FLUX ENCOUNTERED PER ORBIT UK-5 3/450 3DEGR 450KM CIRCULAR

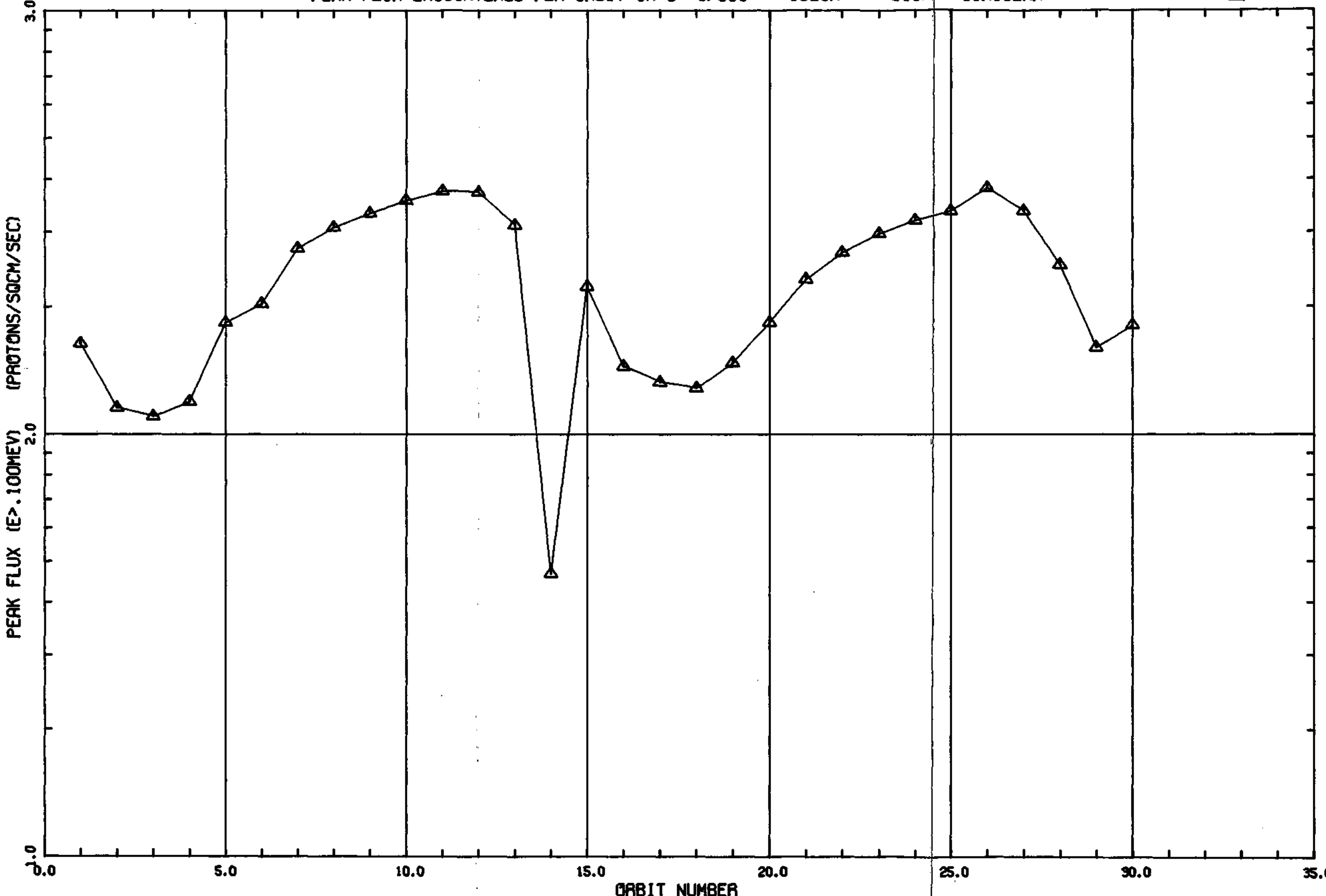


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 56

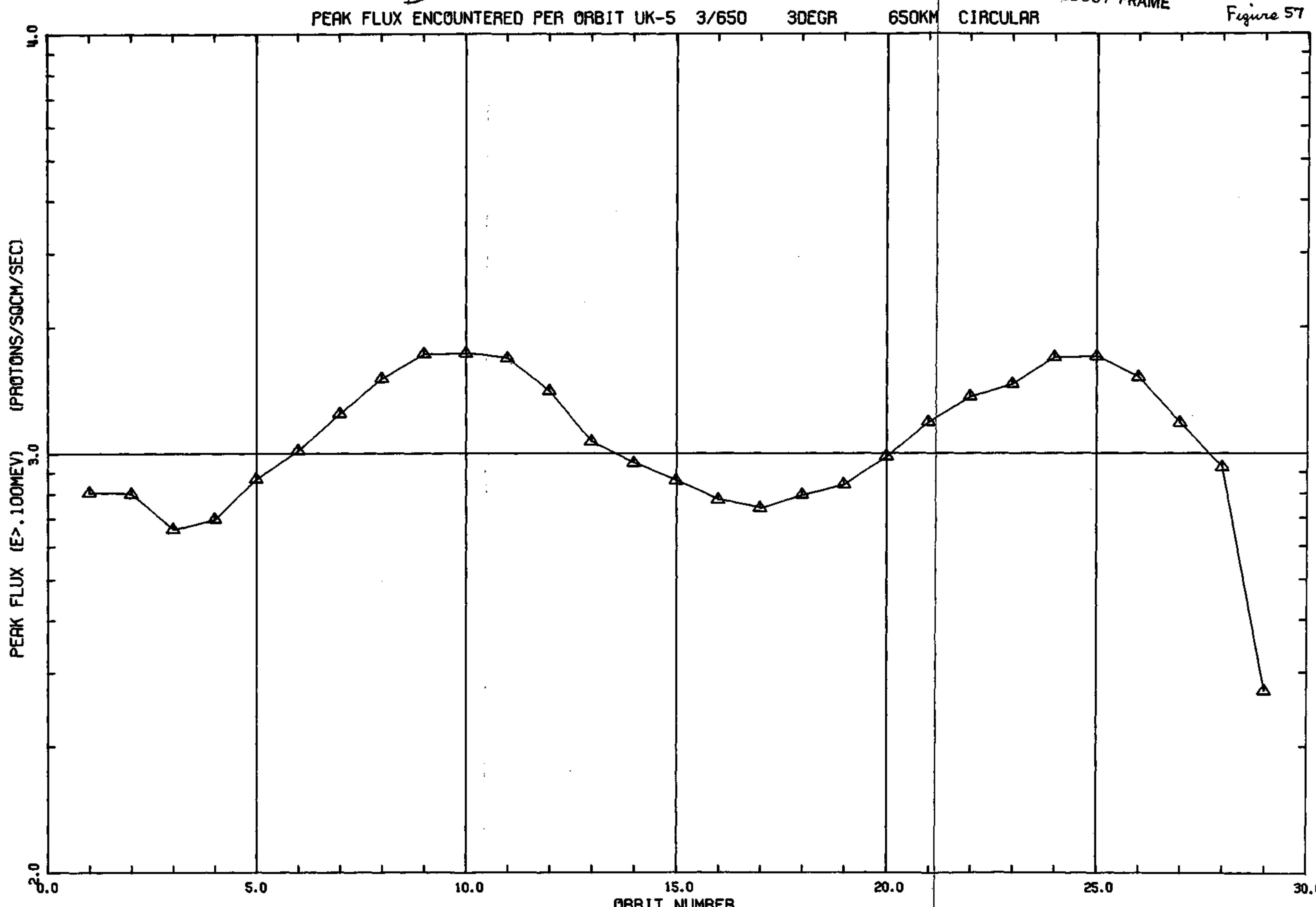
PEAK FLUX ENCOUNTERED PER ORBIT UK-5 3/550 30EGR 550KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 57

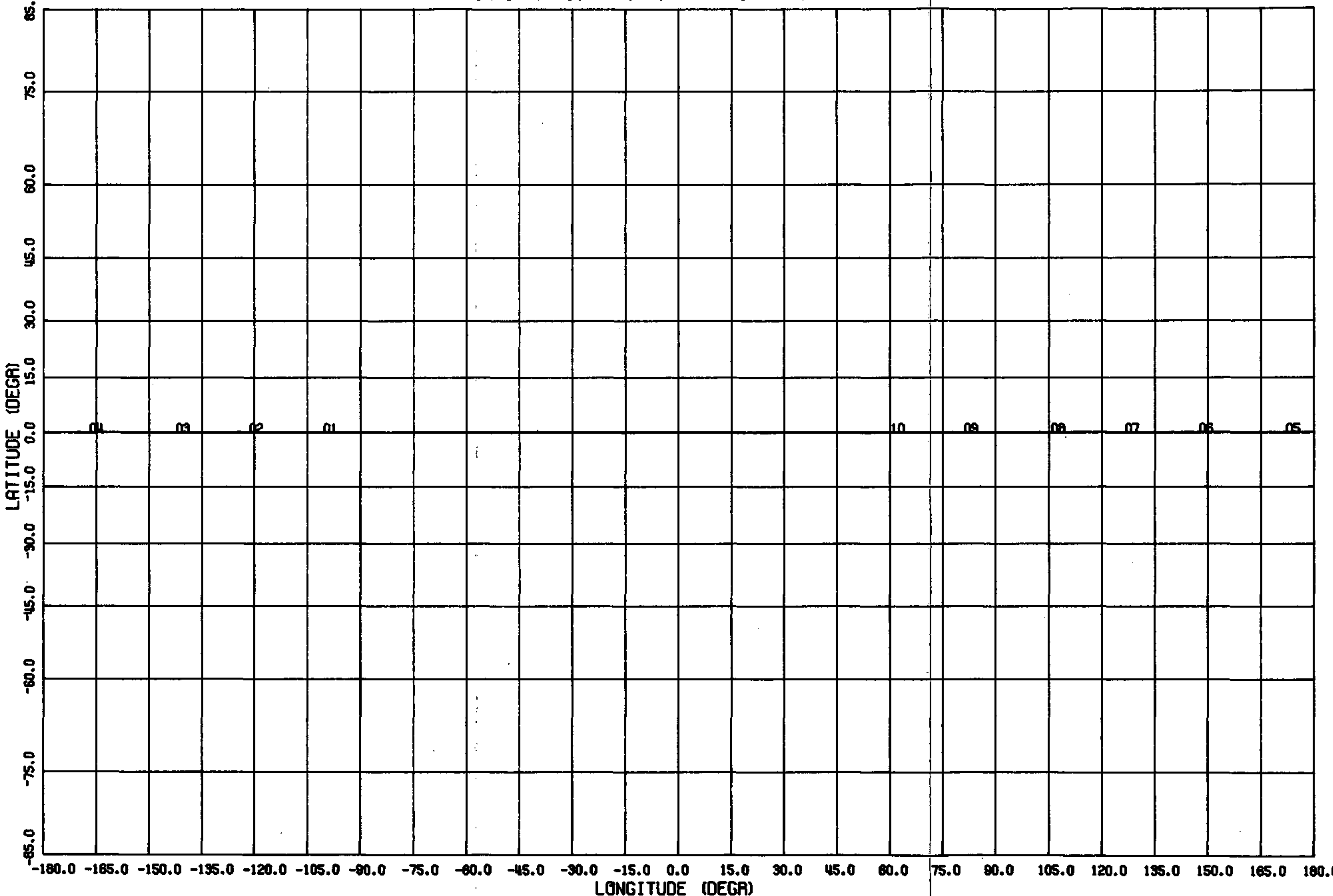


FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 58

UK-5 0/450 0DEGR 450KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 59

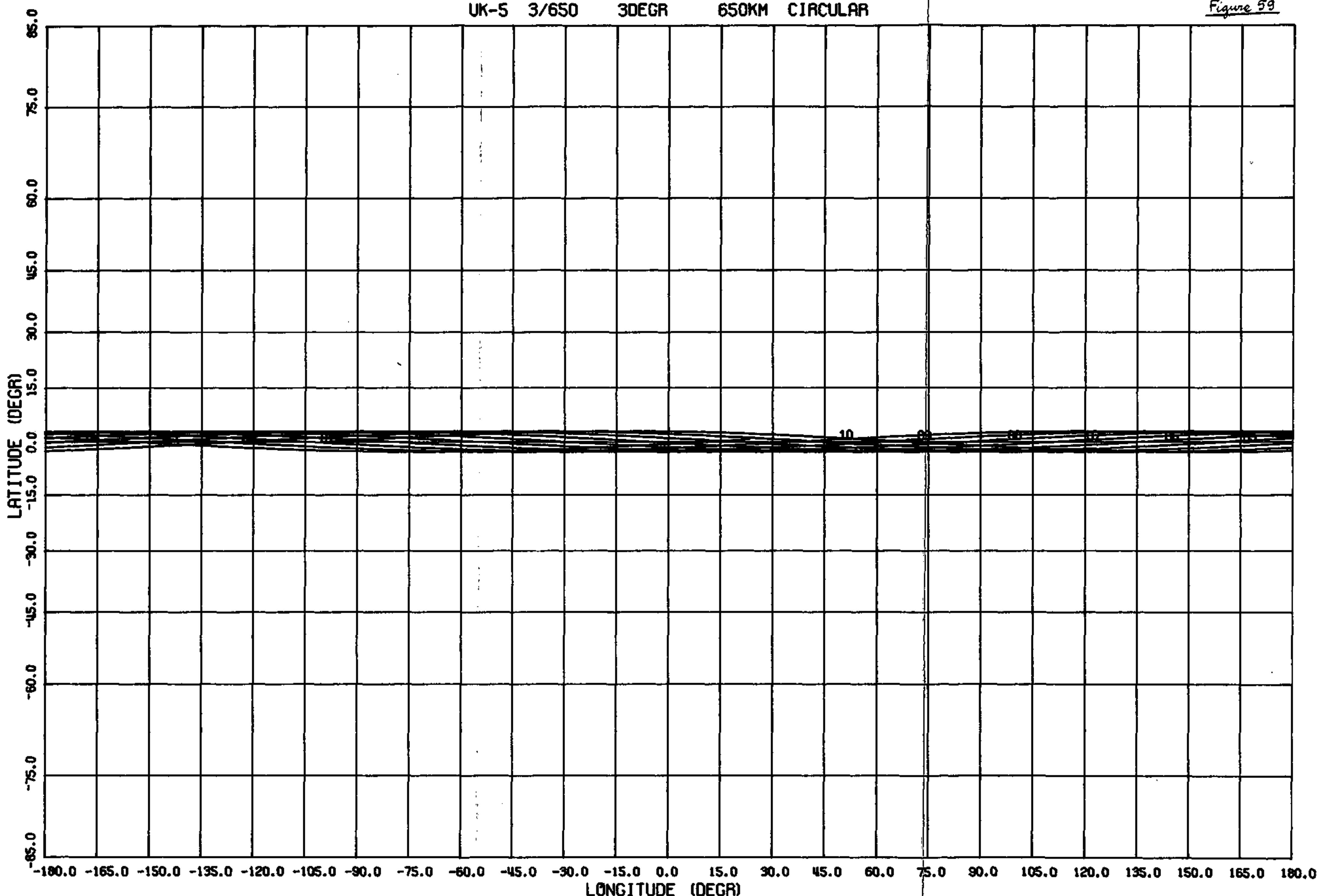
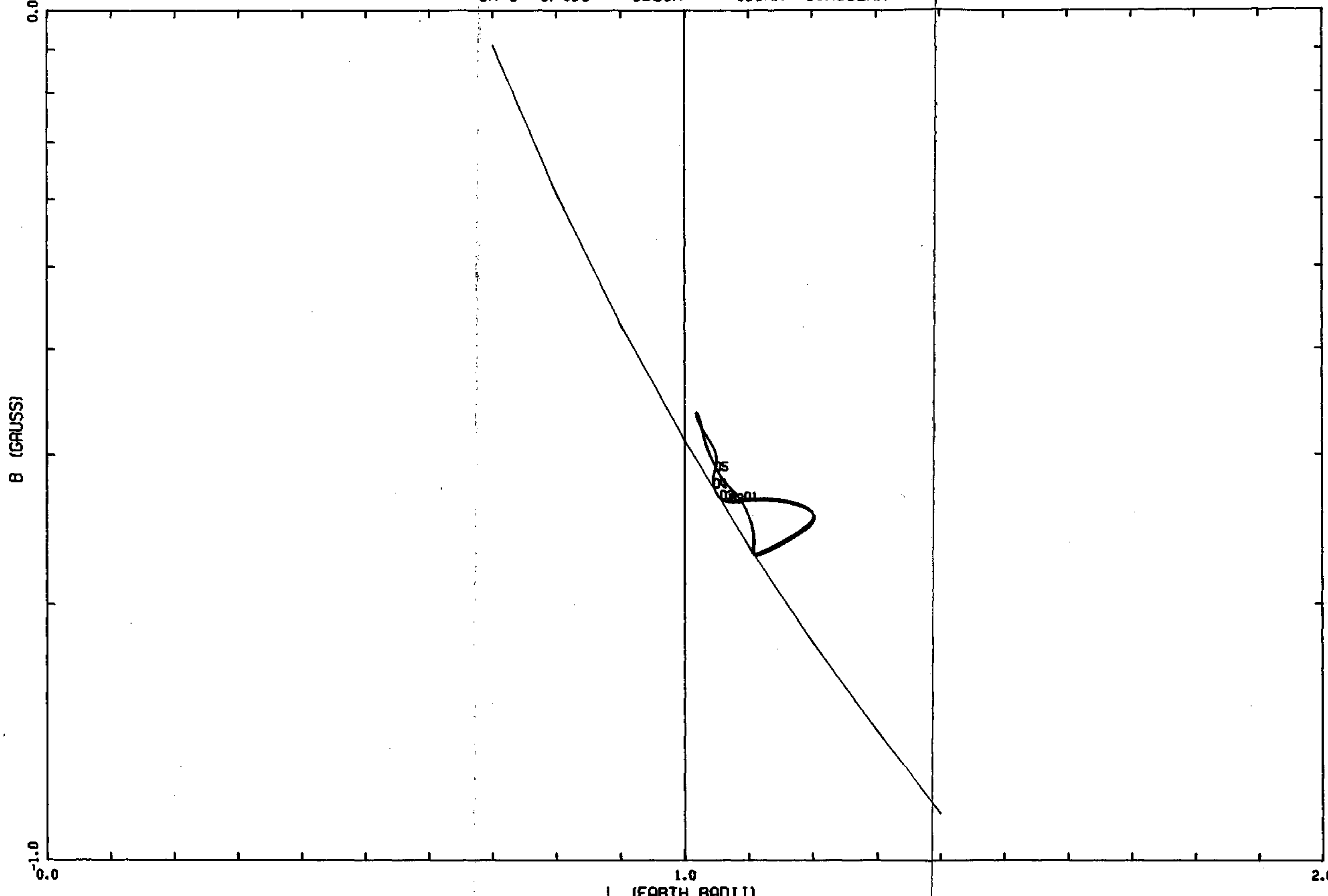


Figure 60

FOLDOUT FRAME 1

FOLDOUT FRAME 2

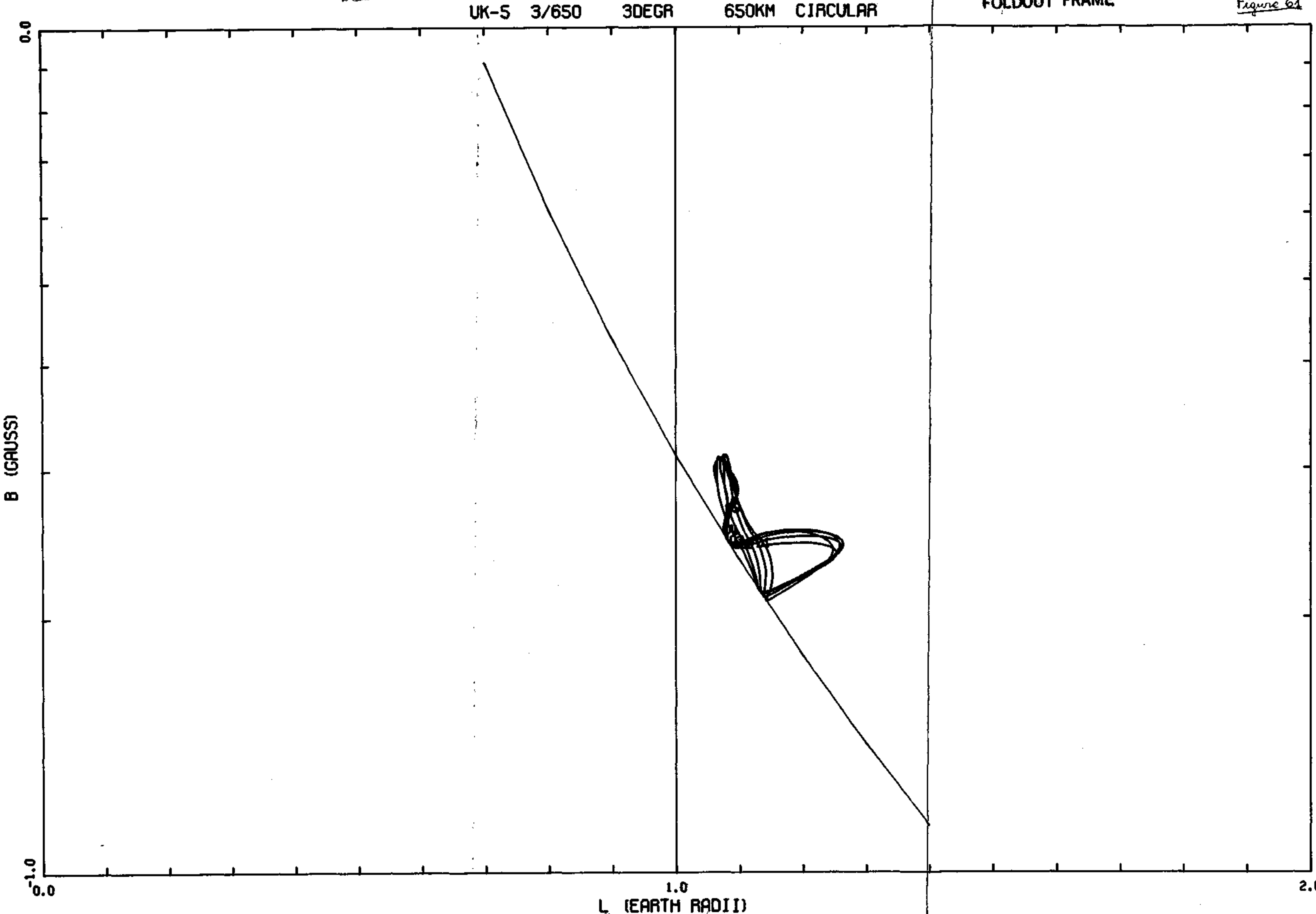
UK-5 0/450 ODEGR 450KM CIRCULAR



FOLDOUT FRAME 1

FOLDOUT FRAME 2

Figure 61



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