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# THE NIMBUS 5 DATA CATALOG

## VOLUME 12

(Final)

1 OCTOBER 1974 THROUGH 30 NOVEMBER 1974  
DATA ORBITS 8843 THROUGH 9660

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GREENBELT, MARYLAND

**THE NIMBUS 5 DATA CATALOG**

**Volume 12  
(Final)**

**1 October 1974 through 30 November 1974  
Data Orbits 8843 - 9660**

**Prepared by**

**Management and Technical Services Company  
Beltsville, Maryland**

**For the**

**LANDSAT/Nimbus Project**

**August 1975**

**GODDARD SPACE FLIGHT CENTER  
Greenbelt, Maryland**

## FOREWORD

This is the twelfth and final volume of a series of catalogs published to document data acquired from the Nimbus 5 meteorological satellite. This volume covers the period from 1 October 1974 through 30 November 1974. On 11 December 1974 Nimbus 5 will have been in orbit for two years. At the end of November useful data were still being received from the THIR, NEMS, ESMR, SCR, and ITPR. Availability of data from these experiments for periods after 30 November 1974 can be determined by writing to the National Space Science Data Center, Goddard Space Flight Center, Greenbelt, Maryland, 20771.

Background information concerning the Nimbus 5 meteorological satellite system and a description of the experiments and data formats have been published separately in The Nimbus 5 User's Guide. Post-launch User's Guide information changes and corrections are included in the data catalogs. The Nimbus 5 catalogs present the type of data available, anomalies in the data, if any, and geographic location and time of data.

The assembly and editing of this catalog was accomplished by the Management and Technical Services Company (MATSCO), Beltsville, Maryland, under contract number NAS 5-20694 with the Goddard Space Flight Center, NASA, Greenbelt, Maryland.

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Project Manager  
LANDSAT/Nimbus Project  
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## SECTION 1

### SUMMARY OF OPERATIONS

#### 1.1 Introduction

Nimbus 5 was successfully launched from the Western Test Range, Vandenberg Air Force Base, California at 07 hr. 56 min. 00 sec. on 11 December 1972. After achieving a near circular orbit (1089 km  $\times$  1102 km), all experiments and subsystems were successfully turned on. Data reception, accountability, and processing were intermittent prior to orbit 103 (18 December 1972) because of engineering evaluation of all spacecraft systems. Table 1-1 is a summary of the documentation for each Nimbus 5 Data Catalog volume 1 through volume 12.

Table 1-1

Nimbus 5 Catalog Documentation Summary

Volume	Dates	Orbits
1	19 Dec. 72 - 31 Jan. 73	104 - 693
2	1 Feb. 73 - 31 Mar. 73	694 - 1485
3	1 Apr. 73 - 31 May 73	1486 - 2304
4	1 June 73 - 31 July 73	2305 - 3123
5	1 Aug. 73 - 30 Sept. 73	3124 - 3942
6	1 Oct. 73 - 30 Nov. 73	3943 - 4761
7	1 Dec. 73 - 31 Jan. 74	4762 - 5593
8	1 Feb. 74 - 31 Mar. 74	5594 - 6385
9	1 Apr. 74 - 31 May 74	6386 - 7204
10	1 June 74 - 31 July 74	7205 - 8023
11	1 Aug. 74 - 30 Sept. 74	8024 - 8842
12	1 Oct. 74 - 30 Nov. 74	8843 - 9660

The total operating time for each experiment from launch through orbit 9660 was:

ESMR	14,583 hours	
ITPR	14,587 hours	
NEMS	14,588 hours	
SCR	14,588 hours	
THIR	14,590 hours	
SCMR: Direct	29 hours	(No usable SCMR data
Recorded	6 hours	was recorded after orbit 320)

During this catalog period, the spacecraft was biased in pitch at +2.9 degrees. A positive pitch bias of 2.9 degrees moves the principal point 55.6 km behind the satellite subpoint.

The nadir location coordinates on ESMR, ITPR, SCR, and NEMS tapes, and the grid points on THIR and ESMR images are routinely adjusted for pitch bias. Any image grid still in error by more than 60 n. m. is identified in Table 2-2 under the column headed "Grid Correction". THIR and ESMR grid print maps, available through NSSDC, are also adjusted to match data points and their coordinates.

Roll and yaw attitude control have been within nominal limits during this period.

Data quality from both HDRSS recorders continues to be good. However, since June 1973 the amplitude of the flutter on HDRSS A has been twice that of HDRSS B. Thus, HDRSS A use is generally restricted to one orbit per day during the blind period when two tape recorders are required for global coverage.

The power, command/clock, Versatile Information Processor (VIP), and thermal subsystem performances continued to be satisfactory during this period.

Subsections 1.2 through 1.7 of this catalog summarize the operational highlights of the individual experiments and call attention to known data anomalies. Section 2 lists the times data was recorded and is available for study for each experiment. Sections 3 and 4 show ESMR and THIR imagery, while Section 5 presents corrections to The Nimbus 5 User's Guide.

The user is referred to The Nimbus 5 User's Guide for a complete description of each experiment and to Section 1.7 of that Guide for the requesting procedure and sources for all data. Sections 2, 3, and 4 of this Data Catalog should help the user to select data to meet his needs.

## 1.2 The Temperature Humidity Infrared Radiometer (THIR) Subsystem

The quality of THIR data from both channels has been good. Root mean square (rms) THIR temperature variations, due to HDRSS tape recorder and system noise,



are near 2.4°K for HDRSS B and 3.6°K for HDRSS A. The higher HDRSS A value is attributed to higher flutter in its recorder system.

### 1.3 The Surface Composition Mapping Radiometer (SCMR) Experiment

The SCMR experiment collected and returned approximately 35 hours of instrument data during the first 320 orbits. Intermittent loss of a scan mirror synchronization pulse caused a loss of useful data output whenever this occurred. This synchronization problem progressed to the point where no useful data could be obtained after orbit 320 (4 January 1973).

Users who desire SCMR data or information should write to Dr. Warren G. Hovis, Code 940, Goddard Space Flight Center, Greenbelt, Maryland 20771.

### 1.4 The Electrically Scanning Microwave Radiometer (ESMR) Experiment

The ESMR instrument performance during this period has been satisfactory, although there were times, as shown in Table 3-2 in Section 3, when the instrument operated in a reduced data output mode.

In the reduced data output level mode the instrument brightness temperature response range is between 110°K and 220°K. Its normal response range is between 110°K and about 300°K. Thus, the effect of the malfunction is to narrow the range to which the instrument can respond. There is no way to recover temperature data above 220°K. However, by applying offset corrections, temperature values below 220°K are considered to be accurate to within 10°K. Because many polar and atmospheric phenomena have brightness temperature lower than 220°K, investigations of these phenomena will be only slightly affected by the loss of high brightness temperatures.

On the ESMR image displays (Section 3) the effect of the temperature offset is to completely eliminate data information in swath 3, since its entire display temperature range, 254°K to 290°K, is above the new upper limit. Swath 2 temperature values range from 194°K to 266°K; thus, those values above 220°K are not shown at their true temperature. The offset does not affect values of swath 1, as its temperature limits are 110°K and 200°K.

A semi-quantitative calibration algorithm has been developed for these offset data. These calibrated data, as well as the normal data, are available through NSSDC as described in The Nimbus 5 User's Guide.

## 1.5 The Infrared Temperature Profile Radiometer (ITPR) Experiment

The ITPR instrument operated in the nadir mode except for brief periods during orbits 8972, 8986, 9054, and 9068 when it was in the scan mode. Scan performance was erratic each time. Sensor outputs from all seven channels have been normal.

## 1.6 The Selective Chopper Radiometer (SCR) Experiment

The SCR instrument has remained in the normal operating mode since shortly after launch. Useful data continues to be received from all A, B, and C channels. The D channels, when in high gain, have been affected by noise since orbit 3124 (1 August 1973). Since 21 September 1973 the data has been unusable. The problem is attributed to faulty relay contacts.

The SCR data is transmitted daily from Goddard Space Flight Center to the experimenter at Oxford, England. After processing and calibration, the data is output in several forms for analysis. Previous volumes of this catalog series show several output forms and provide discussion of some of the results from analysis of the SCR data.

## 1.7 The Nimbus E Microwave Spectrometer (NEMS) Experiment

The NEMS instrument continued to perform well during this catalog period. The experimenter at MIT, Cambridge, Massachusetts, continues to receive all NEMS data and is using it for research. Examples and analysis of some of the output products are in volumes 1 through 3 of this catalog series.

## 1.8 Bibliography of Nimbus 5 Experiments

### 1.8.1 ESMR

Campbell, W. J., Gloersen, P., Nordberg, W., and Wilheit, T. T.: Dynamics and Morphology of Beaufort Sea Ice Determination From Satellites, Aircraft, and Drifting Stations. NASA, X-650-73-194, 1973, and also pub. in the Proc. of the Sym. held on "Approaches to Earth Survey Problems Through Use of Space Techniques," pp. 311-327 Akademie-Verlag-Berlin, 1974

Chang, T. C., Gloersen, P., Schmugge, T., Wilheit, T. T., and Zwally, H. J.: Microwave Emission From Snow and Glacier Ice. NASA, X-910-75-36, 1975

Gloersen, P., Campbell, W. J., Ramseier, R. O., Webster, W. J., and Wilheit, T. T.: Beaufort Sea Ice Zones by Means of Microwave Imager. NASA, X-910-75-80, 1975

- Gloersen, P., Chang, T. C., Wilheit, T. T., and Campbell, W. J.: Polar Sea Ice Observations by Means of Microwave Radiometry. NASA, X-652-73-341, 1973
- Gloersen, P., and Salomonson, V. V.: Satellites - New Global Observing Techniques for Ice and Snow. NASA, X-910-74-309, 1974
- Gloersen, P., Schmugge, T. J., and Chang, T. C.: Microwave Signatures of Snow, Ice and Soil at Several Wavelengths, Proc. of the URSI Spec. Mtg. on Microwave Scattering and Emission From the Earth, Berne, Switzerland, 1974
- Gloersen, P., Wilheit, T. T., Chang, T. C., Nordberg, W., and Campbell, W. J.: Microwave Maps of the Polar Ice of the Earth. NASA, X-652-73-269, 1973; and also pub. in the Twenty-Fourth Alaska Science Conference held in Fairbanks, Alaska, pp. 407-413, Geophysical Inst., Univ. of Alaska, 1973; and pub. in the Bul. Am. Met. Soc., Vol 55, No. 12, pp. 1442-1448, 1974
- Sabatini, R. R. and Merritt, E. S.: The Nimbus 5 ESMR and its Application to Storm Detection. Final Report EPRF 51-0873-004, Earth Satellite Corporation, Washington, D. C., 1973
- Schmugge, T. J., Rango, A., Allison, L. J., and Wilheit, T. T.: Hydrologic Applications of Nimbus 5 ESMR Data. NASA, X-910-74-51, 1974
- Wilheit, T. T., Rao, M. S. V., Chang, T. C., Rodgers, E. B., and Theon, J. S.: A Satellite Technique for Quantitatively Mapping Rainfall Rates over the Oceans. NASA, X-911-75-72, 1975
- Wilheit, T. T., Theon, J. S., Shenk, W., Allison, L.: Meteorological Interpretations of the Images from Nimbus 5 Electrically Scanned Microwave Radiometer. NASA, TM-X-70424 and X-651-73-189, 1973

#### 1.8.2 ITPR

- Smith, W. L., Hilleary, D. T., Fischer, J. C., Howell, H. B., and Woolf, H. M.: The Nimbus 5 ITPR Experiment. Applied Optics, Vol. 13, January, 1974, pp. 499-506
- Smith, W. L., Woolf, H. M., and Hayden, C. M.: Extraction of Meteorological Data from the Nimbus 5 ITPR Experiment. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

### 1.8.3 SCR

Barnett, J. J. : Analysis of Stratospheric Measurements by the Nimbus IV and V Selective Chopper Radiometers. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

Barnett, J. J., Houghton, J. T., Morgan, C. G., Pick, D. R., Rodgers, C. D., Williamson, E. J., Cross, M. J., Flower, D., Peckham, G., and Smith, S. D. : Stratospheric Observations from Nimbus 5. Nature, Vol. 245, 1973, pp. 141-143

Ellis, P., Holah, G., Houghton, J. T., Jones, T. S., Peckham, G., Peskett, G. D., Pick, D. R., Rodgers, C. D., Roscoe, H., Sandwell, R., Smith, S. D., and Williamson, E. J. : Remote Sounding of Atmospheric Temperature from Satellites IV. The Selective Chopper Radiometer from Nimbus 5. Proc. R. Soc. Lond., Vol. 334, 1973, pp. 149-170

Jones, T. S. and Williamson, E. J. : The Analysis of Data from Meteorological Satellites. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

Pick, D. R. : The Scientific Assessment of the Selective Chopper Radiometer Flown on the Nimbus 5 Satellite. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

### 1.8.4 NEMS

Poon, R. K. L. and Staelin, D. H. : Anomalous Oxygen Absorption Inferred From Nimbus 5 Microwave Experiment, Quarterly Progress Report No. 111, Research Laboratory of Electronics, M. I. T., Cambridge, Mass., October 15, 1973, pp. 9-44

Staelin, D. H., Barath, F. T., Barrett, A. H., Gaut, N. E., Kunzi, K. F., Lenoir, W. B., Nordberg, W., Pettyjohn, R. L., Poon, R. K. L., Waters, J. W., Wilcox, R. W. : Preliminary Results from the Nimbus 5 Microwave Spectrometer Experiment. Quarterly Progress Report No. 109, Research Laboratory of Electronics, M. I. T., Cambridge, Mass., April 15, 1973, pp 6-10

Staelin, D. H., Barrett, A. H., Kunzi, K. F., Lenoir, W. B., Pettyjohn, R. L., Poon, R. K. L., Waters, J. W., Barath, F. T., Blinn, J. C., Johnston, E. J., Rosenkranz, P. W., Gaut, N. E., and Nordberg, W. : Meteorological Measurements From Space with Passive Microwave Techniques. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973, pp. 201-206

Staelin, D. H., Kunzi, K. F., Pettyjohn, R. L., Poon, R. K. L., Smith, W. L., Waters, J. W., Wilcox, R. W.: Further Results from the Nimbus 5 Microwave Spectrometer Experiment. Quarterly Progress Report No. 110, Research Laboratory of Electronics, M. I. T., Cambridge, Mass., July 15, 1973, pp. 7-10

Staelin, D. H., Barrett, A. H., Waters, J. W., Barath, F. T., Johnston, E. J., Rosenkranz, P. W., Gaut, N. E., and Lenoir, W. B.: Microwave Spectrometer on the Nimbus 5 Satellite: Meteorological and Geophysical Data. Science, Vol. 182, pp. 1339-1341

#### 1.8.5 NEMS, ITPR, and SCR

Smith, W. L., Staelin, D. H., and Houghton, J. T.: Vertical Temperature Profiles from Satellites - Results from Second Generation Instruments Aboard Nimbus 5. Proceedings, COSPAR Symposium on Approaches to Earth Survey Problems Through the Use of Space Techniques, IUGG, LAMAP, Konstanz, Federal Republic of Germany, May 23 - June 6, 1973

Smith, W. L., Staelin, D. H., and Houghton, J. T.: Intercomparison and Amalgamation of Nimbus 5 Infrared and Microwave Temperature Profile Data. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973, pp. 139-145

#### 1.8.6 ESMR and THIR

Allison, L. J., Rodgers, E. B., Wilheit, T. T., and Wexler, R.: A Multi-Sensor Analysis of Nimbus 5 Data on 22 January 1973. NASA, X-910-74-20, 1974; also NASA TN D-7911, March 1975

Allison, L. J., Rodgers, E. B., Wilheit, T. T., and Fett, R. W.: Tropical Cyclone Rainfall as Measured by the Nimbus 5 Electrically Scanning Microwave Radiometer. Bul. of Am. Met. Soc., Vol. 55, No. 9, September 1974, pp. 1074-1089

#### 1.8.7 THIR, ESMR, and SCMR

Theon, J. S.: A Multispectral View of the Gulf of Mexico from Nimbus 5. Bul. of Am. Met. Soc., Vol. 54, September, 1973, pp. 934-937

#### 1.8.8 THIR

Wilkniss, P. E., Larson, R. E., Bressan, D. J., and Steranka, J.: Atmospheric Radon and Continental Dust near the Antarctic and their Correlation with Air Mass Trajectories Computed from Nimbus 5 Satellite Photographs. J. Appl. Meteorol., Vol. 13, No. 4, 1974, pp. 513-515

## SECTION 2

### THE ORBITAL ELEMENTS AND DATA AVAILABILITY ON-OFF TIMES

The Nimbus 5 Brouwer Mean orbital elements for selected epochs during October and November 1974 are listed in Table 2-1.

**Table 2-1**

**Nimbus 5 Brouwer Mean Orbital Elements  
for October and November 1974**

Epoch	Universal Time	8 OCT 74 00 00 00	22 OCT 74 00 00 00	7 NOV 74 00 00 00	22 NOV 74 00 00 00
Semi-Major Axis	Km	7473.465	7473.462	7473.460	7473.455
Eccentricity		.000920	.000888	.000825	.000814
Inclination	Degrees	99.915	99.915	99.916	99.917
Argument of Perigee	Degrees	61.630	28.946	350.615	311.763
Right Ascension of Ascending Node	Degrees	188.158	201.922	217.553	232.401
Height of Perigee	Km	1088.42	1088.66	1089.13	1089.21
Height of Apogee	Km	1102.17	1101.93	1101.46	1101.37
Anomalistic Period	Minutes	107.1619	107.1619	107.1618	107.1617
Motion of Perigee	Deg. per Day	-2.4365	-2.4365	-2.4365	-2.4364

The data availability on-off times (Table 2-2) list the times when the data from each instrument was recorded on a HDRSS.

THIR orbital coverage in Table 2-2 is divided between daytime and nighttime data. The THIR data is normally recorded simultaneously from both 6.7  $\mu$ m and 11.5  $\mu$ m channels. Therefore, the listed on-off times apply to both channels.

A THIR data orbit is defined as beginning and ending at the night-day terminator. Thus, the daytime data orbit extends from the night-day terminator to the day-night terminator. Each daytime THIR data orbit is assigned the orbit number of the ascending node which occurs during that portion of the orbit. The same orbit number is assigned also to the succeeding nighttime data orbit.

The "INT ORBIT & STDN" identify the orbit in which the satellite is interrogated and the ground station to which the satellite data is transmitted. The letter "R" denotes Rosman, North Carolina; the letter "A" denotes Fairbanks, Alaska.

The "HDRSS" identifies the satellite tape recorder, either A or B.

The "THIR GRID CORR" columns are used to indicate an image grid error in latitude and longitude whenever either is in error by more than one degree of great circle arc (60 n. m.). Latitude errors are suffixed by an N or S; longitude errors, by an E or W. An N or S indicates the grid should be moved up or down by the amount shown to obtain a good fit of the grid to the geography. An E or W indicates the grid should be moved right or left, at the equator, by the amount shown.

Ascending node times and longitudes are the times and longitudes at which the satellite crosses the equator in the northbound direction. These crossings always occur during the daytime portion of the orbit. The descending nodes and times refer to the southbound crossings, which occur during the nighttime portion of the orbit.

ESMR, NEMS, SCR, and ITPR are normally on all the time. Their sensory information is recorded on a HDRSS between interrogations, and their on-and-off times define the total record times between interrogations. An interrogation orbit is the orbit during which previously recorded data is transmitted to a ground station. This data will be from segments of two or more data orbits as defined above for THIR. To determine the orbital coverage of the data from any interrogation, the on-and-off times should be matched with the appropriate ascending or descending node listed with the THIR information on the same page of Table 2-2. Coverage can then be determined as described below.

The "DATA ORBIT" indicator in the ESMR table is given only for reference purposes. It is the number which appears on the data display image, samples of which are reproduced in Section 3, and identifies the last data orbit on each display. It should not be confused with the THIR data orbit number.

Table 2-2 together with the World Map (Figure 2-1) and the vellum Subsatellite Tracks Overlay attached to the back of this catalog, can be used to determine approximate geographic coverages.

A Subsatellite Tracks Overlay is correctly oriented with the World Map when the ascending or descending node line on the overlay coincides with the 0-degree latitude (equator) line of the World Map. Orbital coverage is determined by placing an orbit track on the world map at the appropriate ascending node (for daytime) or descending node (for nighttime) longitude for the orbit of interest.

The Subsatellite Tracks Overlay contains 14 correctly spaced tracks, which end at the approximate earth day-night transitions. The tracks contain time ticks spaced 5

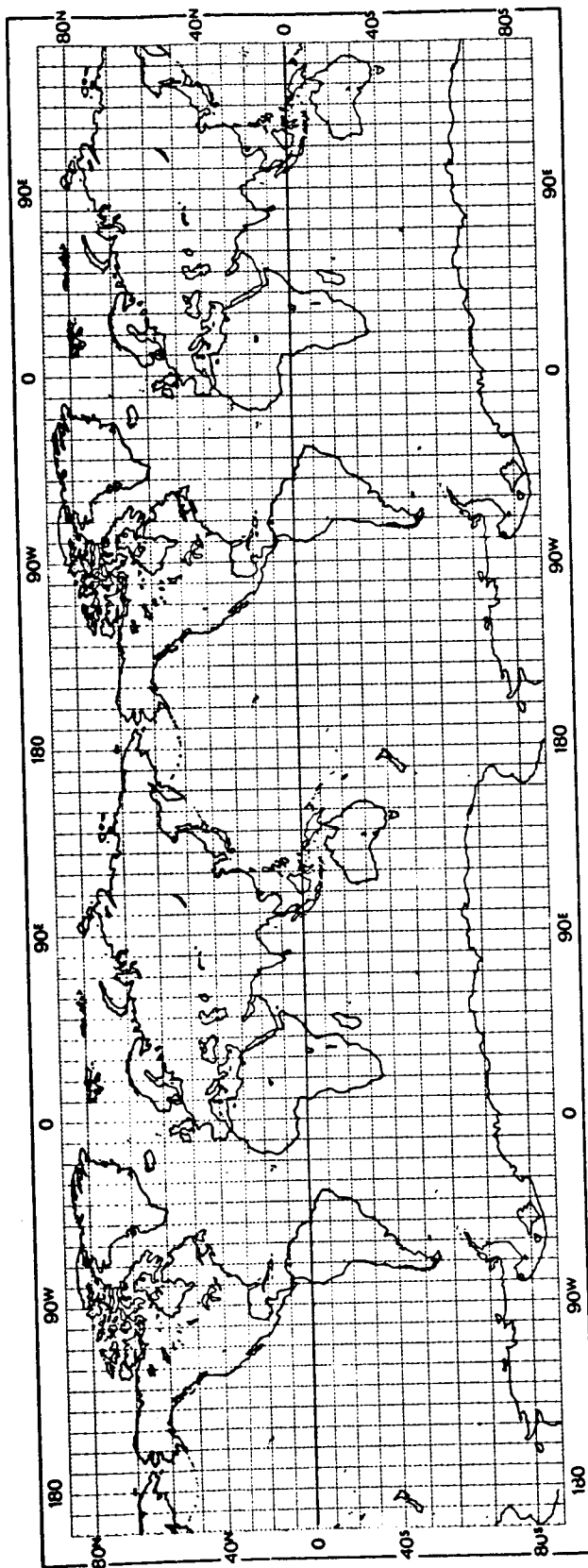


Figure 2-1 World Map



minutes apart, appropriately annotated at the edge of the overlay, referenced from the equator. Times in minutes from equator crossings for all or part of a particular orbit are calculated by adding to or subtracting from the ascending or descending node time listed for that orbit in the Data Availability On-Off Times Table.

The nature and format of the data to be available from each experiment are explained in detail in the respective sections of The Nimbus 5 User's Guide. The appropriate sources for requesting the various data types are listed in Section 1.7 of the same manual.

**TABLE 2-2**  
**DATA AVAILABILITY ON-OFF TIMES**  
**1 OCTOBER 1974**

THIR										ESMR				
		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H	
DATA	ON	OFF	ORBIT	ORBIT	D	GRID	DESC.	NODE		DATA	ON	OFF	ORBIT	D
ORBIT	HRMN	HRMN	STDN	R	CORR	LALJ	HRMNSS	DEG		ORBIT	HRMN	HRMN	STDN	R
DAYTIME THIR														
										ASC. NODE				
8843	0115	0206	8845R	A			014348	E146.0		8843	0010	0209	8845R	A
8844	0305	0354	8844R	B			033105	E119.2		8844	0209	0408	8844R	B
8845	0452	0541	8845R	B			051821	E092.3		8845	0416	0555	8845R	B
8846	0640	0728	8846A	B			070538	E065.5		8846	0601	0737	8846A	B
8847	0827	0915	8847A	B			085254	E038.7		8847	0742	0923	8847A	B
8848	1014	1103	8848A	B			104011	E011.9		8848	0928	1108	8848A	B
8849	1201	1250	8849A	B			122727	W015.0		8849	1114	1255	8849A	B
8850	1349	1437	8850A	B			141443	W041.8		8850	1302	1442	8850A	B
8851	1536	1621	8851A	B			160200	W068.6		8851	1447	1623	8851A	B
8852	1723	1806	8852A	B			174916	W095.4		8852	1628	1808	8852A	B
8853	1910	1952	8853A	B			193633	W122.2		8853	1814	1954	8853A	B
8854	2058	2139	8854A	B			212349	W149.0		8854	1958	2142	8854A	B
8855	2245	2327	8855A	B			231106	W175.9		8855	2147	2329	8855A	B
NIGHTTIME THIR														
										DESC. NODE				
8843	0209	0305	8844R	B			023719	W047.4		NEMS - SCR - ITPR				
8844	0354	0407	8844R	B			042435	W074.2		0011	0209	8845R	A	
8844	0416	0452	8845R	B						0209	0408	8844R	B	
8845	0541	0554	8845R	B			061152	W101.1		0416	0555	8845R	B	
8845	0601	0640	8846A	B						0601	0738	8846A	B	
8846	0728	0736	8846A	B			075909	W127.9		0743	0923	8847A	B	
8846	0743	0827	8847A	B						0928	1109	8848A	B	
8847	0915	0921	8847A	B			094625	W154.7		1114	1256	8849A	B	
8847	0928	1014	8848A	B						1302	1442	8850A	B	
8848	1114	1201	8849A	B			113341	E178.5		1447	1623	8851A	B	
8849	1302	1349	8850A	B			132058	E151.7		1628	1808	8852A	B	
8850	1446	1536	8851A	B			150814	E124.9		1814	1954	8853A	B	
8851	1628	1723	8852A	B			165530	E098.0		1959	2141	8854A	B	
8852	1814	1910	8853A	B			184247	E071.2		2146	2328	8855A	B	
8853	1959	2058	8854A	B			203003	E044.4						
8854	2146	2245	8855A	B			221720	E017.6						
8855							000436	W009.2						

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
2 OCTOBER 1974

THIR										ESMR							
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H				
ORBIT	HRMN	HRMN	HRMN	ORBIT	D	GRID	DESC.	NODE	TIME	LUNG		ORBIT	D				
				+	R	CORR	TIME	LONG	HRMNSS	DEC		+	R				
				STDN	S	LALD						STDN	S				
DAYTIME THIR										ASC. NODE							
8856	0110	0121		8858R	A		005822	E157.3			8857	0110	0308	8858R	A		
8857	0219	0307		8858R	A		024538	E130.5			8858	0308	0507	8858R	B		
8858	0407	0455		8858R	B		043255	E103.7			8859	0514	0657	8859R	B		
8859	0554	0643		8859R	B		062011	E076.9			8860	0702	0838	8860A	B		
8860	0741	0830		8860A	B		080728	E050.1			8861	0843	1023	8861A	B		
8861	0929	1017		8861A	B		095444	E023.2			8862	1027	1207	8862A	B		
8862	1116	1204		8862A	B		114201	W003.6			8863	1212	1355	8863A	B		
8863	1303	1352		8863A	B		132917	W030.4			8864	1401	1542	8864A	B		
8864	1450	1539		8864A	B		151633	W057.2			8865	1547	1725	8865A	B		
8865	1638	1723		8865A	B		170350	W084.0			8866	1731	1909	8866A	B		
8866	1825	1907		8866A	B		185106	W110.9			8867	1914	2058	8867A	B		
8867	2012	2057		8867A	B		203823	W137.7			8868	2103	2242	8868A	B		
8868	2159	2241		8868A	B		222539	W164.5									
NIGHTTIME THIR										DESC. NODE				NEMS - SCR - ITPR			
8856	0121	0219		8858R	A		015153	W036.1			0110	0308	8858R	A			
8857	0308	0407		8858R	B		033909	W062.9			0308	0507	8858R	B			
8858	0455	0505		8858R	B		052625	W089.7			0514	0658	8859R	B			
8859	0514	0554		8859R	B						0702	0838	8860A	B			
8859	0643	0655		8859R	B		071342	W116.5			0843	1023	8861A	B			
8859	0702	0741		8860A	B						1027	1208	8862A	B			
8860	0830	0836		8860A	B		090058	W143.3			1213	1355	8863A	B			
8860	0843	0929		8861A	B						1400	1542	8864A	B			
8861	1027	1116		8862A	B		104815	W170.1			1548	1726	8865A	B			
8862	1213	1303		8863A	B		123531	E163.0			1731	1909	8866A	B			
8863	1401	1450		8864A	B		142248	E136.2			1914	2059	8867A	B			
8864	1548	1638		8865A	B		161004	E109.4			2103	2242	8868A	B			
8865	1731	1825		8866A	B		175720	E082.6									
8866	1914	2012		8867A	B		194437	E055.8									
8867	2104	2159		8868A	B		213153	E029.0									
8868							231910	E002.1									

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
3 OCTOBER 1974

THIR					ESMR								
DATA	ON	OFF	INT	H	ASC. AND	DESC. NUDE	TIME	LONG	DATA	ON	OFF	INT	H
ORBIT	HRMN	HRMN	ORBIT	D	GRID	TIME	LONG	HRMNS	ORBIT	HRMN	HRMN	ORBIT	D
			+	R	CORR	UEG						+	R
			STDN	S	LALJ							STDN	S

DAYTIME THIR					ASC. NODE					ESMR				
8869	0027	0035	8871R	A	001255	E168.7	8870	0027	0223	8871R	A			
8870	0134	0222	8871R	A	020012	E141.9	8871	0226	0422	8871R	B			
8871	0321	0410	8871R	B	034728	E115.1	8872	0433	0613	8872R	B			
8872	0508	0557	8872R	B	053445	E088.2	8873	0617	0752	8873A	B			
8873	0656	0744	8873A	B	072201	E061.4	8874	0757	0938	8874A	B			
8874	0843	0930	8874A	B	090918	E034.6	8875	0942	1128	8875A	B			
*8875	1030	1119	8875A	B	105634	E007.8	8876	1133	1311	8876A	B			
8876	1217	1306	8876A	B	124350	W019.0	8877	1317	1452	8877A	B			
8877	1405	1452	8877A	B	143107	W045.9	8878	1502	1639	8878A	B			
8878	1552	1638	8878A	B	161823	W072.7	8879	1644	1822	8879A	B			
8879	1739	1821	8879A	B	180540	W099.5	8880	1828	2007	8880A	B			
8880	1927	2005	8880A	B	195256	W126.3	8881	2012	2152	8881A	B			
8881	2114	2155	8881A	B	214013	W153.1	8882	2202	2343	8882A	B			
8882	2301	2342	8882A	B	232729	180.0								
8882	2344	2350	8885R	A										

\*NO 11.5 DATA

NIGHTIME THIR					DESC. NUDE					NEMS - SCR - ITPR				
8869	0035	0134	8871R	A	010626	W024.7	0027	0223	8871R	A				
8870	0225	0321	8871R	B	025343	W051.5	0225	0422	8871R	B				
8871	0410	0420	8871R	B	044059	W078.3	0432	0612	8872R	B				
8871	0433	0508	8872R	B			0617	0753	8873A	B				
8872	0557	0611	8872R	B	062815	W105.1	0758	0939	8874A	B				
8872	0618	0656	8873A	B			0942	1128	8875A	B				
8873	0744	0750	8873A	B	081532	W132.0	1133	1312	8876A	B				
8873	0757	0843	8874A	B			1317	1458	8877A	B				
*8874	0943	1030	8875A	B	100248	W158.8	1503	1639	8878A	B				
*8875	1119	1124	8875A	B	115005	E174.4	1644	1823	8879A	B				
8875	1133	1217	8876A	B			1829	2007	8880A	B				
8876	1318	1405	8877A	B	133721	E147.6	1949	2157	8881A	B				
8877	1503	1552	8878A	B	152438	E120.8	2202	2344	8882A	B				
8878	1644	1739	8879A	B	171154	E094.0								
8879	1829	1927	8880A	B	185910	E067.1								
8880	2015	2114	8881A	B	204627	E040.3								
8881	2202	2301	8882A	B	223343	E013.5								
8882	2350	0048	8885R	A	002100	W013.3								

\*NO 11.5 DATA

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
4 OCTOBER 1974

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE TIME LUNG		DATA ORBIT	ON OFF		INT ORBIT + STDN	H R S		
	HRMN	HRMN				HRMN	HRMN		HRMN	HRMN				
DAYTIME THIR										ASC. NODE				
8883	0048	0137	8852R	A		011445	E153.2	8883	2343	0125	8885R	A		
8884	0236	0324	8884R	B		030202	E126.4	8884	0142	0342	8884R	B		
8885	0423	0511	8885R	B		044918	E099.6	8885	0349	0518	8885R	B		
8886	0610	0659	8886R	B		063635	E072.8	8886	0532	0714	8886R	B		
8887	0757	0846	8887A	B		082351	E046.0	8887	0720	0853	8887A	B		
8888	0945	1033	8888A	B		101107	E019.1	8888	0858	1041	8888A	B		
8889	1132	1220	8889A	B		115824	W007.7	8889	1046	1225	8889A	B		
8890	1319	1408	8890A	B		134540	W034.5	8890	1230	1413	8890A	B		
8891	1506	1554	8891A	B		153257	W061.3	8891	1417	1552	8891A	B		
8892	1654	1738	8892A	B		172013	W088.2	8892	1602	1740	8892A	B		
8893	1841	1921	8893A	B		190730	W115.0	8893	1745	1923	8893A	B		
8894	2028	2112	8894A	B		205446	W141.8	8894	1928	2113	8894A	B		
8895	2216	2257	8895A	B		224202	W168.6	8895	2118	2258	8895A	B		
NIGHTTIME THIR										DESC. NODE				
8883	0142	0236	8884R	B		020816	W040.1	NEMS - SCR - ITPR						
8884	0324	0338	8884R	B		035533	W067.0	2344	0125	8885R	A			
8884	0349	0423	8885R	B				0142	0341	8884R	B			
8885	0511	0525	8885R	B		054249	W093.8	0350	0518	8885R	B			
8885	0532	0610	8886R	B				0532	0715	8886R	B			
8886	0659	0713	8886R	B		073805	W120.6	0720	0854	8887A	B			
8886	0720	0757	8887A	B				0858	1041	8888A	B			
8887	0846	0851	8887A	B		091722	W147.4	1046	1225	8889A	B			
8887	0858	0945	8888A	B				1230	1412	8890A	B			
8888	1033	1039	8888A	B		110438	W174.3	1417	1556	8891A	B			
8888	1046	1132	8889A	B				1602	1740	8892A	B			
8889	1229	1319	8890A	B		125155	E158.9	1745	1923	8893A	B			
8890	1417	1506	8891A	B		143911	E132.1	1928	2114	8894A	B			
8891	1602	1654	8892A	B		162628	E105.3	2119	2259	8895A	B			
8892	1745	1841	8893A	B		181344	E078.5							
8893	1930	2028	8894A	B		200100	E051.7							
8894	2119	2216	8895A	B		214817	E024.8							
8895						233533	W002.0							

**TABLE 2-2**  
**DATA AVAILABILITY ON-OFF TIMES**  
**5 OCTOBER 1974**

THIR										ESMR				
-----										-----				
DATA	11.5 + 6.7		INT	H	THIR	ASC. AND				DATA	UN	OFF	INT	H
ORBIT	ON	OFF	ORBIT	D	GRID	DESC.	NUDE	TIME	LUNG	ORBIT	HRMN	HRMN	ORBIT	O
	HRMN	HRMN	STDN	R	CORR	HRMNS	DEC			STDN			STDN	R
			S	LALJ									S	S
DAYTIME THIR														
*8896	0043	0051	8898R	A		002919	E164.6			8897	0042	0241	8898R	A
8897	0150	0239	8898R	A		021635	E137.8			8898	0242	0433	8898R	B
8898	0337	0426	8898R	B		040352	E111.0			8899	0447	0649	8900A	B
8899	0525	0613	8900A	B		055108	E084.1			8901	0807	0957	8901A	B
8900						073825	E057.3			8902	1001	1146	8902A	B
8901	0859	0948	8901A	B		092541	E030.5			8903	1151	1330	8903A	B
8902	1046	1135	8902A	B		111257	E003.7			8904	1335	1512	8904A	B
8903	1234	1322	8903A	B		130014	W023.1			8905	1517	1657	8905A	B
8904	1421	1509	8904A	B		144730	W050.0			8906	1702	1838	8906A	B
8905	1608	1655	8905A	B		163447	W076.8			8907	1842	2028	8907A	B
8906	1755	1836	8906A	B		182203	W103.6			8908	2033	2212	8908A	B
8907	1943	2027	8907A	B		200920	W130.4			8909	2217	0002	8909A	B
8908	2130	2208	8908A	B		215636	W157.2							
8909	2317	2358	8909A	B		234352	E176.0							
*8909	2358	0006	8912R	A										
*NO 6.7 DATA														
NIGHTIME THIR														
*8896	0051	0150	8898R	A		012250	W028.8			NEMS - SCR - ITPR				
8897	0241	0337	8898R	B		031006	W055.6			0043	0241	8898R	A	
8898	0426	0439	8898R	B		045723	W082.4			0241	0434	8898R	B	
8898	0448	0525	8900A	B						0448	0650	8900A	B	
8899	0613	0648	8900A	B		064439	W109.3			0816	0956	8901A	B	
8900	0816	0859	8901A	B		083155	W136.1			1000	1146	8902A	B	
8901	0948	0954	8901A	B		101912	W162.9			1150	1330	8903A	B	
8901	1001	1046	8902A	B						1335	1513	8904A	B	
8902	1135	1143	8902A	B		120628	E170.3			1518	1657	8905A	B	
8902	1150	1234	8903A	B						1702	1838	8906A	B	
8903	1322	1327	8903A	B		135345	E143.5			1843	2029	8907A	B	
8903	1335	1421	8904A	B						2034	2212	8908A	B	
8904	1518	1608	8905A	B		154101	E116.7			2218	0002	8909A	B	
8904	1518	1608	8905A	B		172817	E089.8							
8905	1702	1755	8906A	B		191534	E063.0							
8906	1844	1943	8907A	B		210250	E036.2							
8907	2034	2130	8908A	B		225007	E009.4							
8908	2219	2317	8909A	B		003723	W017.4							
*8909	0006	0105	8912R	A										
*6.7 DATA CHANGES														
8896	0129	0150	8898R	A										
8909 NO DATA														

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
6 OCTOBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D	THIR GRID CORR LALJ	ASC. AND DESC. TIME HRMNSS		NODE LUNG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	
	ON	OFF				HRMN	HRMN							
DAYTIME THIR					ASC. NODE									
*8910	0105	0153	8912R	A		013107	E149.1		8910	2358	0155	8912R	A	
*8911	0252	0340	8911R	B		031823	E122.3		8911	0157	0356	8911R	B	
*8912	0439	0528	8912R	B		050540	E095.5		8912	0405	0541	8912R	B	
8913	0626	0715	8913A	B		065256	E068.7		8913	0547	0724	8913A	B	
8914	0814	0902	8914A	B		084013	E041.9		8914	0729	0911	8914A	B	
8915	1001	1049	8915A	B		102729	E015.0		8915	0916	1101	8915A	B	
8916	1148	1237	8916A	B		121445	W011.8		8916	1106	1245	8916A	B	
8917	1335	1424	8917A	B		140202	W038.6		8917	1250	1428	8917A	B	
8918	1523	1611	8918A	B		154918	W065.4		8918	1434	1615	8918A	B	
8919	1710	1755	8919A	B		173635	W092.2		8919	1619	1756	8919A	B	
8920	1857	1938	8920A	B		192351	W119.1		8920	1801	1940	8920A	B	
8921	2044	2129	8921A	B		211107	W145.8		8921	1945	2130	8921A	B	
8922	2232	2312	8922A	B		225824	W172.7		8922	2135	2315	8922A	B	
*NO 6.7 DATA														
NIGHTTIME THIR					DESC. NODE					NEMS - SCR - ITPR				
*8910	0157	0252	8911R	B		022438	W044.3		2359	0156		8912R	A	
*8911	0340	0354	8911R	B		041154	W071.1		0157	0356		8911R	B	
*8912	0405	0439	8912R	B					0405	0542		8912R	B	
*8912	0528	0540	8912R	B		055911	W097.9		0547	0724		8913A	B	
8913	0715	0724	8913A	B					0728	0911		8914A	B	
8913	0729	0814	8914A	B		074627	W124.7		0916	1101		8915A	B	
8914	0902	0909	8914A	B					1107	1244		8916A	B	
8914	0916	1001	8915A	B		093343	W151.5		1250	1429		8917A	B	
8915	1049	1059	8915A	B					1434	1614		8918A	B	
8915	1107	1148	8916A	B		112100	W178.3		1619	1757		8919A	B	
8916	1237	1243	8916A	B					1802	1940		8920A	B	
8916	1250	1335	8917A	B		130816	E154.8		1945	2131		8921A	B	
8917	1434	1523	8918A	B					2135	2316		8922A	B	
8918	1619	1710	8919A	B		145533	E128.0							
8919	1802	1857	8920A	B		164249	E101.2							
8920	1946	2044	8921A	B		183005	E074.4							
8921	2136	2232	8922A	B		201722	E047.6							
8922						220438	E020.8							
*NO 6.7 DATA														

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
7 OCTOBER 1974

THIR						ESMR											
DATA	11.5	ON	6.7	INT	H	THIR	ASC.	AND	DESC.	NUDE	DATA	ON	OFF	INT	H		
ORBIT	HRMN	HRMN	HRMN	ORBIT	D	GRID	TIME	LUNG	TIME	DEG	ORBIT	HRMN	HRMN	ORBIT	D		
				+	R	CORR								+	R		
				STDN	S	LALJ	HRMNSS	DEG						STDN	S		
DAYTIME THIR						ASC. NUDE											
*8923	0058	0108		8925R	A		004540	E160.5			8924	0058	0256	8925R	A		
8924	0206	0255		8925R	A		023257	E133.7			8925	0313	0454	8925R	B		
8925	0354	0442		8925R	B		042013	E106.9			8926	0503	0648	8927A	B		
8926	0541	0629		8927A	B		060729	E080.0			8927	0648	0829	8927A	A		
8927	0728	0817		8927A	A		075446	E053.2			8928	0828	1013	8928A	B		
8928	0915	1004		8928A	B		094202	E026.4			8929	1018	1158	8929A	B		
8929	1103	1151		8929A	B		112919	W000.4			8930	1202	1344	8930A	B		
8930	1250	1338		8930A	B		131635	W027.2			8931	1350	1529	8931A	B		
8931	1437	1526		8931A	B		150352	W054.1			8932	1533	1714	8932A	B		
8932	1624	1712		8932A	B		165108	W080.9			8933	1719	1853	8933A	B		
8933	1812	1849		8933A	B		183824	W107.7			8934	1858	2042	8934A	B		
8934	1959	2041		8934A	B		202541	W134.5			8935	2047	2229	8935A	B		
8935	2146	2227		8935A	B		221257	W161.3									
*NO 6.7 DATA																	
NIGHTTIME THIR						DESC. NUDE						NEMS - SCR - ITPR					
*8923	0108	0206		8925R	A		013911	W032.9			0058	0256	8925R	A			
8924	0308	0354		8925R	B		032628	W059.7			0313	0455	8925R	B			
8925	0442	0453		8925R	B		051344	W086.5			0503	0649	8927A	B			
8925	0503	0541		8927A	B						0649	0828	8927A	A			
8926	0629	0647		8927A	B		070100	W113.3			0828	1013	8928A	B			
8926	0649	0728		8927A	A						1018	1158	8929A	B			
8927	0817	0826		8927A	A		084817	W140.2			1202	1344	8930A	B			
8927	0829	0915		8928A	B						1350	1528	8931A	B			
*8928	1004	1011		8928A	B		103533	W167.0			1533	1714	8932A	B			
8928	1018	1103		8929A	B						1719	1853	8933A	B			
8929	1202	1250		8930A	B		122250	E166.2			1858	2043	8934A	B			
8930	1350	1437		8931A	B		141006	E139.4			2047	2229	8935A	B			
8931	1533	1624		8932A	B		155722	E112.6									
8932	1719	1812		8933A	B		174439	E085.8									
8933	1900	1959		8934A	B		193155	E058.9									
8934	2047	2146		8935A	B		211912	E032.1									
8935	2253	2333		8938R	A		230628	E005.3									
*6.7 DATA CHANGES																	
8923	0144	0206		8925R	A												
8928 NO DATA																	



**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
8 OCTOBER 1974**

THIR						ESMR							
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. TIME HRMNSS	AND NUDE LONG DEG	DATA ORBIT	ON OFF		INT ORBIT + STDN	H D R S	
	HRMN	HRMN							HRMN	HRMN			
DAYTIME THIR						ASC. NUDE							
8936	2333	0022	8938R	A		000014	E1/1.9	8936	2227	0047	8938R	A	
8937						014730	E145.0	8938	0214	0409	8938R	B	
8938	0308	0356	8938R	B		033446	E118.2	8939	0419	0605	8940A	B	
8939	0455	0544	8940A	B		052203	E091.4	8940	0604	0744	8941A	A	
8940	0642	0731	8941A	A		070919	E064.6	8941	0745	0925	8941A	B	
8941	0830	0918	8941A	B		085636	E037.8	8942	0930	1111	8942A	B	
8942	1017	1106	8942A	B		104352	EU10.9	8943	1117	1301	8943A	B	
8943	1204	1253	8943A	B		123108	W015.9	8944	1306	1445	8944A	B	
8944	1352	1440	8944A	B		141825	W042.7	8945	1450	1630	8945A	B	
8945	1539	1627	8945A	B		160541	W069.5	8946	1635	1812	8946A	B	
8946	1726	1808	8945A	B		175258	W096.3	8947	1819	1957	8947A	B	
8947	1913	1955	8947A	B		194014	W123.2	8948	2002	2146	8948A	B	
8948	2101	2145	8948A	B		212731	W150.0	8949	2151	2331	8949A	B	
8949	2248	2328	8949A	B		231447	W176.8						
8949	2330	2336	8952R	A									
NIGHTTIME THIR						DESC. NUDE							
8936	0022	0050	8938R	A		005345	W021.5	NEMS - SCR - ITPR					
8937	0214	0308	8938R	B		024101	W048.3	2227	0047		8938R	A	
8938	0356	0412	8938R	B		042817	W075.2	0214	0409		8938R	B	
8939	0419	0455	8940A	B				0419	0604		8940A	B	
8939	0544	0601	8940A	B		061534	W102.0	0604	0744		8941A	A	
8939	0604	0642	8941A	A				0745	0924		8941A	B	
8940	0731	0743	8941A	A		080250	W128.8	0930	1112		8942A	B	
8940	0748	0830	8941A	B				1117	1301		8943A	B	
8941	0930	1017	8942A	B		095007	W155.6	1306	1445		8944A	B	
8942	1117	1204	8943A	B		113723	E177.6	1450	1629		8945A	B	
8943	1253	1259	8943A	B		132439	E150.7	1635	1813		8946A	B	
8943	1306	1352	8944A	B				1819	1957		8947A	B	
8944	1450	1539	8945A	B		151156	E123.9	2002	2147		8948A	B	
8945	1634	1726	8946A	B		165912	E097.1	2152	2332		8949A	B	
8946	1819	1913	8947A	B		184629	E070.3						
8947	2002	2101	8948A	B		203345	E043.5						
8948	2152	2248	8949A	B		222102	E016.6						
8949	2336	0035	8952R	A		000818	W010.8						

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
9 OCTOBER 1974**

THIR										ESMR					
DATA ORBIT		11.5 + 6.7 ON OFF HRMN HRMN		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NUDE TIME LONG HRMNSS DEG		DATA ORBIT	UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S		
DAYTIME THIR					ASC. NUDE										
8950	0035	0124	8952R	A	010203	E156.4	8950	2330	0127	8952H	A				
8951	0222	0311	8951R	B	024920	E129.6	8951	0128	0326	8951H	B				
8952	0410	0458	8952R	B	043636	E102.8	8952	0336	0515	8952H	B				
8953	0557	0645	8954A	B	062353	E075.9	8953	0520	0705	8954A	B				
8954	0744	0833	8954A	A	081109	E049.1	8954	0705	0845	8954A	A				
8955	0931	1020	8955A	B	095825	E022.3	8955	0845	1031	8955A	B				
8956	1119	1207	8956A	B	114542	W004.5	8956	1037	1213	8956A	B				
8957	1306	1355	8957A	B	133258	W031.3	8957	1219	1401	8957A	B				
8958	1453	1542	8958A	B	152015	W058.1	8958	1407	1545	8958A	B				
8959	1641	1726	8959A	B	170731	W085.0	8959	1550	1728	8959A	B				
8960	1828	1907	8960A	B	185447	W111.8	8960	1733	1909	8960A	B				
8961	2015	2057	8961A	B	204204	W138.6	8961	1914	2059	8961A	B				
8962	2202	2244	8962A	B	222920	W165.4	8962	2104	2246	8962A	B				
NIGHTTIME THIR					DESC. NUDE					NEMS - SCR - ITPR					
8950	0129	0222	8951R	B	015534	W037.0	2330	0128	8952H	A					
8951	0311	0325	8951R	B	034251	W063.8	0128	0327	8951H	B					
8951	0336	0410	8952R	B			0336	0515	8952R	B					
8952	0458	0513	8952R	B	053007	W090.6	0520	0704	8954A	B					
8952	0520	0557	8954A	B			0704	0845	8954A	A					
8953	0645	0702	8954A	B	071724	W117.5	0845	1032	8955A	B					
8953	0705	0744	8954A	A			1038	1214	8956A	B					
8954	0833	0843	8954A	A	090440	W144.3	1219	1402	8957A	B					
8954	0845	0931	8955A	B			1407	1544	8958A	B					
8955	1020	1026	8955A	B	105156	W171.1	1550	1728	8959A	B					
8955	1037	1119	8956A	B			1733	1909	8960A	B					
8956	1219	1306	8957A	B	123913	E162.1	1914	2059	8961A	B					
8957	1407	1453	8958A	B	142629	E135.3	2104	2246	8962A	B					
8958	1550	1641	8959A	B	161346	E108.5									
8959	1733	1828	8960A	B	180102	E081.7									
8960	1916	2015	8961A	B	194819	E054.9									
8961	2104	2202	8962A	B	213535	E028.0									
8962					232251	E001.2									

**TABLE 2-2**  
**DATA AVAILABILITY ON-OFF TIMES**  
**10 OCTOBER 1974**

THIR										ESMR					
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALD	ASC. AND DESC. TIME		ASC. NODE LONG DEG	DATA ORBIT	ON OFF		INT ORBIT + STDN	H D R S		
	HRMN	HRMN				HRMN	HRMN								
DAYTIME THIR															
8963	0030	0038	8965R	A		001637	E167.8		8964	0030	0228	8965R	A		
8964	0137	0225	8965R	A		020353	E140.9		8965	0228	0427	8965R	B		
8965	0324	0413	8965R	B		035110	E114.1		8966	0436	0620	8967A	B		
8966	0511	0600	8967A	B		053826	E087.3		8967	0620	0801	8968A	A		
8967	0659	0747	8968A	A		072542	E060.8		8968	0800	0941	8968A	B		
8968	0846	0934	8968A	B		091259	E033.7		8969	0946	1127	8969A	B		
8969	1033	1122	8969A	B		110015	E006.8		8970	1131	1315	8970A	B		
8970	1220	1309	8970A	B		124732	W020.0		8971	1320	1500	8971A	B		
8971	1408	1456	8971A	B		143448	W046.8		8972	1505	1645	8972A	B		
8972	1555	1643	8972A	B		162204	W073.6		8973	1650	1826	8973A	B		
8973	1742	1824	8973A	B		180921	W100.4		8974	1831	2010	8974A	B		
8974	1930	2008	8974A	B		195637	W127.2		8975	2015	2200	8975A	B		
8975	2117	2158	8975A	B		214354	W154.1		8976	2205	2348	8976A	B		
8976	2304	2346	8976A	B		233110	E179.1								
8976	2348	2353	8981A	A											
NIGHTIME THIR															
8963	0038	0137	8965R	A		011008	W025.6		NEMS - SCR - ITPR						
8964	0228	0324	8965R	B		025724	W052.4		0030	0228		8965R	A		
8965	0413	0424	8965R	B		044441	W079.2		0228	0427		8965R	B		
8965	0436	0511	8967A	B					0436	0620		8967A	B		
8966	0600	0618	8967A	B		063157	W106.1		0620	0802		8968A	A		
8966	0618	0659	8968A	A					0800	0941		8968A	B		
8967	0747	0759	8968A	A		081914	W132.9		0946	1127		8969A	B		
8967	0800	0846	8968A	B					1132	1315		8970A	B		
8968	0946	1033	8969A	B		100630	W159.7		1320	1500		8971A	B		
8969	1132	1220	8970A	B		115346	E173.5		1505	1646		8972A	B		
8970	1320	1408	8971A	B		134103	E146.7		1651	1826		8973A	B		
8971	1505	1555	8972A	B		152819	E119.8		1831	2010		8974A	B		
8972	1651	1742	8973A	B		171536	E093.0		2015	2200		8975A	B		
8973	1831	1930	8974A	B		190252	E066.2		2205	2348		8976A	B		
8974	2018	2117	8975A	B		205008	E039.4								
8975	2205	2304	8976A	B		223725	E012.6								
8976	2353	0051	8981A	A		002441	W014.3								

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**TABLE 2.2**  
**DATA AVAILABILITY ON-OFF TIMES**  
**11 OCTOBER 1974**

THIR										ESMR						
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		DATA ORBIT	UN HRMN	OFF HRMN	INT + STDN	H D R S				
	ON HRMN	OFF HRMN				TIME HRMNSS	LONG DEG									
DAYTIME THIR													ASC. NODE			
8977	0051	0140	8981A	A		011826	E152.3	8977	2348	0146	8981A	A				
8978	0239	0327	8978R	B		030543	E125.5	8978	0147	0346	8978R	B				
8979	0426	0514	8980A	B		045259	E098.7	8979	0353	0555	8980A	B				
8980						064016	E071.8	8981	0717	0856	8981A	B				
8981	0800	0849	8981A	B		082732	E045.0	8982	0901	1043	8982A	B				
8982	0948	1036	8982A	B		101448	E018.2	8983	1048	1233	8983A	B				
8983	1135	1223	8983A	B		120205	W008.6	8984	1238	1415	8984A	B				
8984	1322	1411	8984A	B		134921	W035.4	8985	1419	1600	8985A	B				
8985	1509	1558	8985A	B		153638	W062.3	8986	1605	1745	8986A	B				
8986	1657	1744	8986A	B		172354	W089.1	8987	1750	1925	8987A	B				
8987	1844	1923	8987A	B		191111	W115.9	8988	1930	2114	8988A	B				
8988	2031	2112	8988A	B		205827	W142.7	8989	2119	2301	8989A	B				
8989	2218	2300	8989A	B		224543	W169.5									
NIGHTTIME THIR													DESC. NODE		NEMS - SCR - ITPR	
8977	0147	0239	8978R	B		021158	W041.1	2348	0147		8981A	A				
8978	0327	0345	8978R	B		035914	W069.9	0147	0346		8978R	B				
8979	0353	0426	8980A	B				0353	0555		8980A	B				
8979	0514	0553	8980A	B		054631	W094.7	0717	0856		8981A	B				
8980	0717	0800	8981A	B		073347	W121.5	0901	1043		8982A	B				
8981	0849	0854	8981A	B		092103	W148.3	1048	1233		8983A	B				
8981	0900	0948	8982A	B				1238	1414		8984A	B				
8982	1036	1042	8982A	B		110820	W175.2	1419	1559		8985A	B				
8982	1048	1135	8983A	B				1604	1746		8986A	B				
8983	1223	1251	8983A	B		125536	E158.0	1750	1925		8987A	B				
8983	1238	1322	8984A	B				1930	2114		8988A	B				
8984	1419	1509	8985A	B		144253	E131.2	2119	2302		8989A	B				
8985	1611	1657	8986A	B		163009	E104.4									
8986	1750	1844	8987A	B		181725	E077.6									
8987	1932	2031	8988A	B		200442	E050.7									
8988	2120	2218	8989A	B		215158	E023.9									
8989						233915	W002.9									

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
12 OCTOBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		TIME	LONG UEG	DATA ORBIT	ON OFF		INT ORBIT + STDN	H D R S
	HRMN	HRMN				HRMN	HRMN							
DAYTIME THIR														
8990	0045	0054	8992R	A		003300	E163.7			8991	0045	0244	8992R	A
8991	0153	0242	8992R	A		022016	E136.8			8992	0244	0443	8992R	B
8992	0340	0429	8992R	B		040733	E110.0			8993	0450	0635	8994A	B
8993	0528	0616	8994A	B		055449	E083.2			8994	0636	0816	8994A	A
*8994	0715	0803	8994A	A		074205	E056.4			8995	0817	1001	8995A	B
8995	0902	0951	8995A	B		092922	E029.6			8996	1006	1141	8996A	B
8996	1049	1138	8996A	B		111638	E002.7			8997	1147	1331	8997A	B
8997	1237	1325	8997A	B		130355	W024.1			8998	1337	1515	8998A	B
8998	1424	1512	8998A	B		145111	W050.9			8999	1522	1659	8999A	B
8999	1611	1657	8999A	B		163827	W077.7			9000	1705	1842	9000A	B
9000	1758	1840	9000A	B		182544	W104.5			9001	1847	2029	9001A	B
9001	1946	2027	9001A	B		201300	W131.4			9002	2034	2218	9002A	B
9002	2133	2217	9002A	B		220017	W158.2							
9003	0002	0009	9005R	A		234733	E175.0							
*NO 6.7 DATA														
NIGHTTIME THIR														
8990	0054	0153	8992R	A		012631	W029.7			NEMS - SCR - JTPR				
8991	0244	0340	8992R	B		031348	W056.5			0046	0244		8992R	A
8992	0429	0441	8992R	B		050104	W083.4			0244	0443		8992R	B
8992	0450	0528	8994A	B						0450	0636		8994A	B
8993	0616	0634	8994A	B		064820	W110.2			0636	0816		8994A	A
*8993	0636	0715	8994A	A						0817	1002		8995A	B
*8994	0803	0814	8994A	A		083537	W137.0			1006	1142		8996A	B
8994	0817	0902	8995A	B						1147	1332		8997A	B
8995	0951	1000	8995A	B		102253	W163.8			1337	1517		8998A	B
8995	1006	1049	8996A	B						1522	1659		8999A	B
8996	1147	1237	8997A	B		121010	E169.4			1705	1842		9000A	B
8997	1337	1424	8998A	B		135726	E142.6			1847	2029		9001A	B
8998	1521	1611	8999A	B		154442	E115.7			2034	2219		9002A	B
8999	1704	1758	9000A	B		173159	E088.9							
9000	1847	1946	9001A	B		191915	E062.1							
9001	2034	2133	9002A	B		210632	E035.3							
9002						225348	E008.5							
9003	0009	0107	9005R	A		004105	W018.4							
*NO 6.7 DATA														

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
13 OCTOBER 1974**

THIR										ESMR							
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R CORR S LALD	THIR GRID CORR LALD	ASC. AND DESC. NODE		DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S					
	ON	OFF				HRMN	HRMN						TIME	LONG			
DAYTIME THIR										ASC. NODE							
9004	0107	0156	9005R	A		013449	E148.2	9004	0002	0200	9005R	A					
9005	0255	0343	9005R	B		032205	E121.4	9005	0200	0359	9005R	B					
9006	0442	0531	9007A	B		050922	E094.6	9006	0407	0551	9007A	B					
9007	0629	0718	9008A	A		065638	E067.7	9007	0552	0734	9008A	A					
9008	0817	0905	9008A	B		084354	E040.9	9008	0733	0912	9008A	B					
9009	1004	1052	9009A	B		103111	E014.1	9009	0918	1105	9009A	B					
9010	1151	1240	9010A	B		121827	W012.7	9010	1110	1247	9010A	B					
9011	1338	1427	9011A	B		140544	W039.5	9011	1252	1432	9011A	B					
9012	1526	1612	9012A	B		155300	W066.4	9012	1437	1614	9012A	B					
9013	1713	1757	9013A	B		174016	W093.2	9013	1620	1801	9013A	B					
9014	1900	1937	9014A	B		192733	W120.0	9014	1805	1945	9014A	B					
9015	2047	2127	9015A	B		211449	W146.8	9015	1949	2129	9015A	B					
9016	2235	2318	9016A	B		230206	W173.6	9016	2134	2319	9016A	B					
*DIFFERENT 6./ TIME																	
9016	2235	2315	9016A	B													
NIGHTTIME THIR										DESC. NODE			NEMS - SCR - ITPR				
9004	0200	0255	9005R	B		022820	W045.2	0002	0200	9005R	A						
9005	0343	0356	9005R	B		041537	W072.0	0200	0359	9005R	B						
9006	0408	0442	9007A	B				0408	0552	9007A	B						
9006	0531	0549	9007A	B		060253	W098.8	0552	0734	9008A	A						
9006	0552	0629	9008A	A				0733	0913	9008A	B						
9007	0718	0730	9008A	A		075009	W125.6	0918	1104	9009A	B						
9007	0733	0817	9008A	B				1110	1248	9010A	B						
9008	0905	0911	9008A	B		093726	W152.4	1252	1432	9011A	B						
9008	0918	1004	9009A	B				1437	1615	9012A	B						
9009	1052	1103	9009A	B		112442	W179.3	1620	1801	9013A	B						
9009	1110	1151	9010A	B				1806	1945	9014A	B						
9010	1240	1246	9010A	B		131159	E153.9	1949	2129	9015A	B						
9010	1253	1338	9011A	B				2134	2319	9016A	B						
9011	1437	1526	9012A	B		145915	E127.1										
9012	1620	1713	9013A	B		164632	E100.3										
9013	1805	1900	9014A	B		183348	E073.5										
9014	1949	2047	9015A	B		202104	E046.6										
9015	2136	2235	9016A	B		220821	E019.8										
9016						235537	W007.0										

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
14 OCTOBER 1974**

THIR										ESMR				
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			INT		H		
ORBIT	ON	OFF	ORBIT	+	R	GRID	DESC.	NUDE		ORBIT	+	D		
HRMN	HRMN	STDN	S	LALO	HRMNS	DEG				HRMN	HRMN	STDN	S	
DAYTIME THIR					ASC. NUDE									
9017							004922	E159.6		9019	0247	0446	9020R	A
9018	0248	0258	9020R	A			023638	E152.8		9020	0446	0645	9020R	B
9019	0356	0443	9020R	A			042355	E105.9		9021	0653	0828	9021A	B
9020	0544	0632	9020R	B			061111	E079.1		9022	0833	1007	9022A	B
9021	0731	0819	9021A	B			075828	E052.3		9023	1018	1200	9023A	B
9022	0918	1007	9022A	B			094544	E025.5		9024	1205	1349	9024A	B
9023	1106	1154	9023A	B			113301	W001.4		9025	1355	1532	9025A	B
9024	1253	1341	9024A	B			132017	W028.2		9026	1537	1717	9026A	B
9025	1440	1529	9025A	B			150733	W055.0		9027	1724	1903	9027A	B
9026	1627	1716	9026A	B			165450	W081.8		9028	1910	2044	9028A	B
9027	1815	1901	9027A	B			184206	W108.6		9029	2052	2235	9029A	B
9028	2002	2045	9028A	B			202923	W135.5						
9029	2149	2233	9029A	B			221639	W162.3						
NIGHTIME THIR					DESC. NUDE					NEMS - SCR - ITPR				
9017							014254	W033.8		0247	0446		9020R	A
9018	0258	0356	9020R	A			033010	W060.6		0446	0645		9020R	B
9019	0446	0544	9020R	B			051726	W087.5		0653	0829		9021A	B
9020	0632	0642	9020R	B			070443	W114.3		0833	1006		9022A	B
9020	0653	0731	9021A	B						1019	1201		9023A	B
9021	0819	0825	9021A	B			085159	W141.1		1206	1350		9024A	B
9021	0833	0918	9022A	B						1355	1532		9025A	B
9022	1007	1012	9022A	B			103916	W167.9		1537	1719		9026A	B
9022	1019	1106	9023A	B						1724	1903		9027A	B
9023	1206	1253	9024A	B			122632	E165.3		1910	2044		9028A	B
9024	1341	1348	9024A	B			141348	E138.5		2051	2235		9029A	B
9024	1355	1440	9025A	B										
9025	1537	1627	9026A	B			160105	E111.6						
9026	1724	1815	9027A	B			174821	E084.8						
9027	1910	2002	9028A	B			193538	E058.0						
9028	2052	2149	9029A	B			212254	E031.2						
9029							231011	E004.4						
*DIFFERENT 6.7 TIMES														
9026	1741	1815	9027A	B										

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
15 OCTOBER 1974**

THIR										ESMR									
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND						INT	H					
ORBIT	HRMN	HRMN	STDN	ORBIT	D	CRID	DESC.	NUDE	TIME	LONG		ORBIT	D	R					
				+	R	CORR						+	R	S					
					S	LALJ	HRMNSS	DEG											
DAYTIME THIR										ASC. NODE									
9030							000355	E170.9			9032	0202	0402	9033R	A				
9031							015112	E144.1			9033	0401	0600	9033R	B				
9032	0311	0359	9033R	A			033828	E117.3			9034	0608	0744	9034A	B				
9033	0458	0547	9033R	B			052545	E090.5			9035	0749	0930	9035A	B				
9034	0645	0734	9034A	B			071301	E063.6			9036	0935	1116	9036A	B				
9035	0833	0921	9035A	B			090017	E036.8			9037	1121	1305	9037A	B				
9036	1020	1108	9036A	B			104734	E010.0			9038	1311	1447	9038A	B				
9037	1207	1256	9037A	B			123450	W016.8			9039	1452	1633	9039A	B				
9038	1355	1443	9038A	B			142207	W043.6			9040	1638	1815	9040A	B				
9039	1542	1630	9039A	B			160923	W070.5			9041	1820	2001	9041A	B				
9040	1729	1813	9040A	B			175639	W097.3			9042	2006	2147	9042A	B				
9041	1916	1958	9041A	B			194356	W124.1			9043	2152	2334	9043A	B				
9042	2104	2143	9042A	B			213112	W150.9											
9043	2251	2333	9043A	B			231829	W177.7											

\*NO 6.7 DATA

NIGHTTIME THIR										DESC. NODE					NEMS - SCR - IIPR				
ORBIT	HRMN	HRMN	STDN	D	CRID	CORR	DESC.	NUDE	TIME	LONG									
9030							005727	W022.5			0203	0401	9033R	A					
9031							024443	W049.3			0401	0600	9033R	B					
9032	0401	0458	9033R	B			043200	W076.1			0608	0745	9034A	B					
9033	0547	0559	9033R	B			061916	W102.9			0749	0930	9035A	B					
9033	0608	0645	9034A	B							0935	1115	9036A	B					
9034	0734	0743	9034A	B			080633	W129.7			1120	1306	9037A	B					
9034	0749	0833	9035A	B							1311	1448	9038A	B					
9035	0921	0928	9035A	B			095349	W156.6			1452	1634	9039A	B					
9035	0935	1020	9036A	B							1639	1815	9040A	B					
9036	1108	1113	9036A	B			114105	E176.6			1820	2001	9041A	B					
9036	1121	1207	9037A	B							2006	2148	9042A	B					
9037	1256	1303	9037A	B			132822	E149.8			2152	2335	9043A	B					
9037	1311	1355	9038A	B															
9038	1452	1542	9039A	B			151538	E123.0											
9039	1639	1729	9040A	B			170255	E096.2											
9040	1820	1916	9041A	B			185011	E069.4											
9041	2006	2104	9042A	B			203727	E042.5											
9042	2152	2251	9043A	B			222444	E015.7											
9043	2339	0038	9048A	A			001200	W011.1											



**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
16 OCTOBER 1974**

THIR										ESMR									
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			DATA		INT		H					
ORBIT	ON	OFF	ORBIT	+	R	GRID	DESC.	NODE		ORBIT	ON	OFF	ORBIT	D					
HRMN	HRMN	STDN	S	LALJ	HRMNS	DEC	HRMN	HRMN	STDN	S	HRMN	HRMN	STDN	S					
DAYTIME THIR										ASC. NODE									
9044	0038	0127	9048A	A			010545	E155.5		9044	2335	0029	9048A	A					
9045	0225	0314	9045R	B			025301	E128.6		9045	0135	0333	9045R	B					
9046							044018	E101.8		9047	0504	0705	9047R	B					
9047	0600	0648	9047R	B			062734	E075.0		9048	0711	0843	9048A	B					
9048	0747	0836	9048A	B			081451	E048.2		9049	0848	1033	9049A	B					
9049	0934	1023	9049A	B			100207	E021.4		9050	1038	1214	9050A	B					
9050	1122	1210	9050A	B			114923	W005.5		9051	1221	1404	9051A	B					
9051	1309	1357	9051A	B			133640	W032.3		9052	1408	1548	9052A	B					
9052	1456	1544	9052A	B			152356	W059.1		9053	1552	1732	9053A	B					
9053	1643	1729	9053A	B			171113	W085.9		9054	1737	1916	9054A	B					
9054	1831	1913	9054A	B			185829	W112.7		9055	1920	2101	9055A	B					
9055	2018	2059	9055A	B			204545	W139.6											
9056							223302	W166.4											
NIGHTTIME THIR										DESC. NODE					NEMS - SCR - ITPR				
9044	0127	0132	9048A	A			015917	W037.9		2335	0133	9048A	A						
9044	0134	0225	9045R	B			034633	W064.7		0134	0333	9045R	B						
9045	0314	0330	9045R	B			053350	W091.6		0504	0705	9047R	B						
9046	0504	0600	9047R	B			072106	W118.4		0711	0844	9048A	B						
9047	0648	0702	9047R	B						0848	1034	9049A	B						
9047	0711	0747	9048A	B						1039	1213	9050A	B						
9048	0836	0841	9048A	B			090822	W145.2		1221	1404	9051A	B						
9048	0848	0934	9049A	B						1408	1548	9052A	B						
9049	1023	1032	9049A	B			105539	W172.0		1552	1732	9053A	B						
9049	1039	1122	9050A	B						1737	1916	9054A	B						
9050	1221	1309	9051A	B			124255	E161.2		1921	2100	9055A	B						
9051	1408	1456	9052A	B			143012	E134.3											
9052	1552	1643	9053A	B			161728	E107.5											
9053	1737	1831	9054A	B			180444	E080.7											
9054	1921	2018	9055A	B			195201	E053.9											
9055							213917	E027.1											
9056	2319	2353	9059R	A			232634	E000.3											

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
17 OCTOBER 1974**

THIR										ESMR				
-----										-----				
DATA	11.5 + 6.7		INT	H	THIR	ASC. AND				DATA	ON	OFF	INT	H
ORBIT	ON	OFF	ORBIT	D	GRID	DESC.	NODE	TIME	LONG	ORBIT	HRMN	HRMN	ORBIT	D
	HRMN	HRMN	STDN	S	LALJ	HRMNSS	DEG						STDN	S
DAYTIME THIR										ASC. NODE				
9057	2353	0041	9059R	A		002018	E166.8			9057	2318	0117	9059R	A
9058						020735	E140.0			9059	0233	0432	9059R	B
9059	0327	0416	9059R	B		035451	E113.2			9060	0437	0620	9060R	B
9060	0514	0603	9060R	B		054207	E086.4			9062	0804	0944	9062A	B
9061						072924	E059.6			9063	0951	1135	9063A	B
9062	0849	0937	9062A	B		091640	E032.7			9064	1142	1317	9064A	B
9063	1036	1125	9063A	B		110357	E005.9			9065	1322	1502	9065A	B
9064	1223	1312	9064A	B		125113	W020.9			9066	1507	1648	9066A	B
9065	1411	1458	9065A	B		143829	W047.7			9067	1653	1829	9067A	B
9066	1558	1646	9066A	B		162546	W074.6			9068	1833	2014	9068A	B
9067	1745	1827	9067A	B		181302	W101.4			9069	2020	2204	9069A	B
9068	1932	2013	9068A	B		200019	W128.2			9070	2208	2352	9070A	B
9069	2120	2202	9069A	B		214735	W155.0							
9070	2307	2350	9070A	B		233451	E178.2							
9070	2350	2356	9073R	A										
NIGHTTIME THIR										DESC. NODE				
9057	0041	0115	9059R	A		011350	W026.6			2319	0117		9059R	A
9058	0233	0327	9059R	B		030106	W053.4			0233	0432		9059R	B
9059	0416	0430	9059R	B		044823	W080.2			0438	0621		9060R	B
9059	0438	0514	9060R	B						0804	0944		9062A	B
9060	0603	0619	9060R	B		063539	W107.0			0951	1136		9063A	B
9060	0626	0657	9061A	B						1142	1318		9064A	B
9061	0804	0849	9062A	B		082256	W133.8			1323	1502		9065A	B
9062	0937	0944	9062A	B		101012	W160.7			1507	1649		9066A	B
9062	0951	1036	9063A	B						1654	1829		9067A	B
9063	1125	1134	9063A	B		115729	E172.5			1834	2015		9068A	B
9063	1142	1223	9064A	B						2020	2204		9069A	B
9064	1323	1411	9065A	B		134445	E145.7			2209	2352		9070A	B
9065	1507	1558	9066A	B		153201	E118.9							
9066	1654	1745	9067A	B		171918	E092.1							
9067	1834	1932	9068A	B		190634	E065.2							
9068	2021	2120	9069A	B		205351	E038.4							
9069	2209	2307	9070A	B		224107	E011.6							
9070	2356	0054	9073R	A		002823	W015.2							
										NEMS - SCR - ITPR				

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
18 OCTOBER 1974**

THIR										ESMR				
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			INT		H		
ORBIT	ON	OFF	ORBIT	D	GRID	DESC.	NUDE		DATA	ON	OFF	ORBIT	D	
HRMN	HRMN	STDN	R	CORR	TIME	LUNG		ORBIT	HRMN	HRMN	STDN	R	S	
			S	LALD	HRNSS	UEG						S		
<b>DAYTIME THIR</b>					<b>ASC. NODE</b>									
9071	0054	0143	9073R	A	012208	E151.4		9071	2351	0149	9073R	A		
9072	0242	0330	9072R	B	030924	E124.5		9072	0149	0343	9072R	B		
9073	0429	0517	9073R	B	045641	E097.7		9073	0356	0532	9073R	B		
*9074	0616	0705	9074A	B	064357	E070.9		9074	0538	0716	9074A	B		
9075	0803	0852	9075A	B	083113	E044.1		9075	0722	0901	9075A	B		
9076	0951	1039	9076A	B	101830	E017.3		9076	0906	1043	9076A	B		
9077	1138	1226	9077A	B	120546	W009.6		9077	1052	1232	9077A	B		
9078	1325	1414	9078A	B	135303	W036.4		9078	1257	1417	9078A	B		
9079	1512	1600	9079A	B	154019	W063.2		9079	1422	1602	9079A	B		
9080	1700	1743	9080A	B	172735	W090.0		9080	1607	1745	9080A	B		
9081	1847	1926	9081A	B	191452	W116.8		9081	1750	1928	9081A	B		
9082	2034	2114	9082A	B	210208	W143.7		9082	1933	2116	9082A	B		
9083	2221	2302	9083A	B	224925	W170.5		9083	2121	2307	9083A	B		
*NO 6.7 DATA														
<b>NIGHTTIME THIR</b>					<b>DESC. NODE</b>					<b>NEWS - SCR - ITPR</b>				
9071	0149	0242	9072R	B	021540	W042.0		2351	0149	9073R	A			
9072	0330	0346	9072R	B	040256	W068.8		0149	0343	9072R	B			
9072	0356	0429	9073R	B				0355	0533	9073R	B			
9073	0517	0531	9073R	B	055013	W095.7		0538	0716	9074A	B			
*9073	0538	0616	9074A	B				0720	0900	9075A	B			
*9074	0705	0713	9074A	B	073729	W122.5		0905	1044	9076A	B			
9074	0720	0803	9075A	B				1052	1232	9077A	B			
9075	0852	0858	9075A	B	092445	W149.3		1257	1417	9078A	B			
9075	0906	0951	9076A	B				1422	1602	9079A	B			
9076	1039	1045	9076A	B	111202	W176.1		1607	1745	9080A	B			
9076	1052	1138	9077A	B				1750	1928	9081A	B			
9077	1237	1325	9078A	B	125918	E157.1		1933	2116	9082A	B			
9078	1421	1512	9079A	B	144635	E130.2		2120	2307	9083A	B			
9079	1607	1700	9080A	B	163351	E103.4								
9080	1750	1847	9081A	B	182108	E076.6								
*9081	1935	2034	9082A	B	200824	E049.8								
9082	2123	2221	9083A	B	215540	E023.0								
9083					234257	W003.9								
*CHANGES FOR 6.7 DATA														
9073 NO 6.7 DATA														
9074 NO 6.7 DATA														
9081	2020	2034	9082A	B										

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
19 OCTOBER 1974**

THIR							ESMR						
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. TIME HRMNSS	NUDE LONG DEG	DATA ORBIT	UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	
	ON HRMN	OFF HRMN											
DAYTIME THIR							ASC. NUDE						
9084	0049	0057	9086R	A		003641	E162.7	9085	0048	0247	9086R	A	
9085	0156	0244	9086R	A		022357	E135.9	9086	0314	0445	9086R	B	
9086	0343	0432	9086R	B		041114	E109.1	9087	0454	0637	9087R	B	
9087	0531	0619	9087A	B		055830	E082.3	9088	0642	0816	9088A	B	
9088	0718	0806	9088A	B		074547	E055.5	9089	0821	1002	9089A	B	
9089	0905	0954	9089A	B		093303	E028.6	9090	1007	1152	9090A	B	
9090	1052	1141	9090A	B		112019	E001.8	9091	1157	1326	9091A	B	
9091	1240	1328	9091A	B		130736	W025.0	9092	1341	1520	9092A	B	
9092	1427	1515	9092A	B		145452	W051.8	9093	1525	1705	9093A	B	
9093	1614	1703	9093A	B		164209	W078.7	9094	1710	1845	9094A	B	
9094	1801	1842	9094A	B		182925	W105.5	9095	1849	2034	9095A	B	
9095	1949	2033	9095A	B		201641	W132.3	9096	2039	2219	9096A	B	
9096	2136	2217	9096A	B		220358	W159.1						
9097	0006	0012	9100R	A		235114	E174.1						
NIGHTTIME THIR							DESC. NUDE						
9084	0057	0156	9086R	A		013013	W030.7	0048	0247	9086R	1		
9085	0247	0343	9086R	B		031730	W057.5	0247	0445	9086R	B		
9086	0432	0444	9086R	B		050446	W084.3	0454	0637	9087R	B		
9086	0454	0531	9087A	B				0642	0816	9088A	B		
9087	0619	0635	9087A	B		065202	W111.1	0821	1003	9089A	B		
9087	0642	0718	9088A	B				1007	1152	9090A	B		
9088	0806	0814	9088A	B		083919	W138.0	1158	1327	9091A	B		
9088	0821	0905	9089A	B				1341	1521	9092A	B		
9089	0954	1001	9089A	B		102635	W164.8	1526	1705	9093A	B		
9089	1007	1052	9090A	B				1710	1844	9094A	B		
9090	1141	1151	9090A	B		121352	E168.4	1849	2034	9095A	B		
9090	1158	1240	9091A	B				2039	2220	9096A	B		
9091	1328	1335	9091A	B		140108	E141.6						
9091	1341	1427	9092A	B									
9092	1525	1614	9093A	B		154824	E114.8						
9093	1709	1801	9094A	B		173541	E088.0						
9094	1850	1949	9095A	B		192257	E061.2						
9095	2039	2136	9096A	B		211014	E034.3						
9096						225730	E007.5						
9097	0012	0110	9100R	A		004447	W019.3						

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
20 OCTOBER 1974

THIR										ESMR											
DATA ORBIT		11.5 + 6.7 ON HRMN OFF HRMN		INT ORBIT + STDN	H D	THIR GRID CORR LALD	ASC. AND DESC. NODE TIME LONG		HRMNSS DEG		DATA ORBIT	UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S						
DAYTIME THIR										ASC. NODE											
9098	0110	0158	9100R	A			013830	E147.3			9098	0006	0203	9100R	A						
9099	0258	0346	9099R	B			032547	E120.5			9099	0204	0403	9099R	B						
9100	0445	0533	9100R	B			051303	E093.7			9100	0412	0550	9100R	B						
9101	0632	0721	9101A	B			070020	E066.8			9101	0555	0730	9101A	B						
9102	0820	0908	9102A	B			084736	E040.0			9102	0735	0917	9102A	B						
9103	1007	1055	9103A	B			103452	E013.2			9103	0922	1104	9103A	B						
9104	1154	1243	9104A	B			122209	W013.7			9104	1109	1250	9104A	B						
9105	1341	1430	9105A	B			140925	W040.5			9105	1255	1436	9105A	B						
9106	1529	1617	9106A	B			155642	W067.3			9106	1441	1620	9106A	B						
9107	1716	1801	9107A	B			174358	W094.1			9107	1624	1803	9107A	B						
9108	1903	1943	9108A	B			193114	W120.9			9108	1807	1945	9108A	B						
9109	2050	2131	9109A	B			211831	W147.7			9109	1950	2132	9109A	B						
9110	2238	2321	9110A	B			230547	W174.6			9110	2138	2322	9110A	B						
NIGHTTIME THIR										DESC. NODE						NEMS - SCR - ITPR					
9098	0204	0258	9099R	B			023203	W046.1			0006	0203	9100R	A							
9099	0346	0402	9099R	B			041919	W073.0			0204	0403	9099R	B							
9099	0412	0445	9100R	B							0412	0550	9100R	B							
9100	0533	0544	9100R	B			060635	W099.8			0555	0730	9101A	B							
9100	0555	0632	9101A	B							0735	0917	9102A	B							
9101	0721	0728	9101A	B			075352	W126.6			0922	1104	9103A	B							
9101	0735	0820	9102A	B							1109	1250	9104A	B							
9102	0908	0915	9102A	B			094108	W153.4			1255	1436	9105A	B							
9102	0922	1007	9103A	B							1441	1620	9106A	B							
9103	1055	1102	9103A	B			112825	E179.8			1624	1803	9107A	B							
9103	1109	1154	9104A	B							1807	1946	9108A	B							
9104	1255	1341	9105A	B			131541	E153.0			1950	2132	9109A	B							
9105	1441	1529	9106A	B			150257	E126.1			2138	2323	9110A	B							
9106	1624	1716	9107A	B			165014	E099.3													
9107	1808	1903	9108A	B			183730	E072.5													
9108	1952	2050	9109A	B			202447	E045.7													
9109	2139	2238	9110A	B			221203	E018.9													
9110							235920	W008.0													

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
21 OCTOBER 1974**

THIR							ESMR						
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND				INT	H	
ORBIT	ON	OFF	ORBIT	D	GRID	DESC. NODE	TIME	LONG	DATA	ON	OFF	ORBIT	D
HRMN	HRMN	STDN	R	CORR	TIME	LONG	HRMNSS	DEG	ORBIT	HRMN	HRMN	STDN	S
DAYTIME THIR							ASC. NODE						
9111	0105	0113	9115A	A		005304	E158.6		9112	0105	0300	9115A	A
9112	0212	0301	9115A	A		024020	E151.8		9113	0304	0459	9113R	B
9113	0359	0448	9113R	B		042736	E105.0		9114	0515	0653	9114R	B
9114	0547	0635	9114R	B		061453	E078.2		9115	0658	0832	9115A	B
9115	0734	0822	9115A	B		080209	E051.4		9116	0837	1015	9116A	B
9116	0921	1010	9115A	B		094926	E024.5		9117	1024	1206	9117A	B
9117	1108	1157	9117A	B		113642	W002.3		9118	1214	1351	9118A	B
9118	1256	1344	9118A	B		132358	W029.1		9119	1355	1535	9119A	B
9119	1443	1532	9119A	B		151115	W055.9		9120	1539	1717	9120A	B
9120	1630	1715	9120A	B		165831	W082.7		9121	1723	1904	9121A	B
9121	1818	1902	9121A	B		184548	W109.6		9122	1908	2046	9122A	B
9122	2005	2045	9122A	B		203304	W136.4		9123	2051	2237	9123A	B
9123	2152	2235	9123A	B		222020	W163.2						
NIGHTTIME THIR							DESC. NODE						
9111	0113	0212	9115A	A		014636	W034.8		0104	0300	9115R	A	
9112	0303	0359	9113R	B		033352	W061.6		0303	0459	9113R	B	
9113	0448	0500	9113R	B		052109	W088.4		0515	0653	9114R	B	
9113	0515	0547	9114R	B					0658	0832	9115A	B	
9114	0635	0651	9114R	B		070825	W115.2		0837	1015	9116A	B	
9114	0658	0734	9115A	B					1024	1206	9117A	B	
9115	0822	0830	9115A	B		085542	W142.1		1214	1351	9118A	B	
9115	0837	0921	9116A	B					1355	1534	9119A	B	
9116	1010	1017	9116A	B		104258	W168.9		1539	1718	9120A	B	
9116	1024	1108	9117A	B					1722	1903	9121A	B	
9117	1157	1205	9117A	B		123014	E164.3		1908	2047	9122A	B	
9117	1213	1256	9118A	B					2051	2227	9123A	B	
9118	1356	1443	9119A	B		141731	E137.5						
9119	1539	1630	9120A	B		160447	E110.7						
9120	1722	1818	9121A	B		175204	E083.9						
9121	1908	2005	9122A	B		193920	E057.1						
9122	2053	2152	9123A	B		212636	E030.3						
9123	2308	2339	9126R	A		231353	E003.4						

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
22 OCTOBER 1974**

THIR										ESMR					
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE TIME LUNG DEG		DATA ORBIT	UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S			
	ON HRMN	OFF HRMN				ASC. TIME HRMNSS	DESC. TIME LUNG DEG								
DAYTIME THIR															
9124	2339	0028	9126R	A		000737	E170.0	9124	2308	0106	9126R	A			
9125	0127	0215	9126R	B		015453	E143.2	9126	0222	0420	9126R	B			
9126	0314	0402	9126R	B		034210	E116.4	9127	0428	0608	9127R	B			
9127	0501	0550	9127R	B		052926	E089.5	9128	0614	0750	9128A	B			
9128	0648	0737	9128A	B		071642	E062.7	9129	0755	0936	9129A	B			
9129	0836	0924	9129A	B		090359	E035.9	9130	0941	1120	9130A	B			
9130	1023	1111	9130A	B		105115	E009.1	9131	1125	1306	9131A	B			
9131	1210	1259	9131A	B		123832	W017.8	9132	1311	1451	9132A	B			
9132	1357	1446	9132A	B		142548	W044.6	9133	1456	1634	9133A	B			
9133	1545	1631	9133A	B		161304	W071.4	9134	1639	1815	9134A	B			
9134	1732	1814	9134A	B		180021	W098.2	9135	1821	2000	9135A	B			
9135	1919	1959	9135A	B		194737	W125.0	9136	2005	2151	9136A	B			
9136	2107	2150	9136A	B		213453	W151.9	9137	2155	2337	9137A	B			
9137	2254	2336	9137A	B		232210	W178.7								
NIGHTTIME THIR															
9124	0028	0104	9126R	A		010109	W023.4	NEMS - SCR - ITPR							
9124	0034	0127	9126R	B		024826	W050.2	2308	0106	9126R	A				
9125	0222	0314	9126R	B		043542	W077.1	0221	0420	9126R	B				
9126	0402	0418	9126R	B		062258	W103.9	0427	0608	9127R	B				
9126	0427	0501	9127R	B		081015	W130.7	0613	0750	9128A	B				
9127	0550	0607	9127R	B		095731	W157.5	0754	0936	9129A	B				
9127	0613	0648	9128A	B		114448	E175.7	0941	1121	9130A	B				
9128	0737	0747	9128A	B		133204	E148.9	1126	1306	9131A	B				
9128	0754	0836	9129A	B		151920	E122.1	1311	1451	9132A	B				
9129	0924	0934	9129A	B		170637	E095.3	1456	1634	9133A	B				
9129	0941	1023	9130A	B		185353	E068.4	1638	1816	9134A	B				
9130	1111	1118	9130A	B		204110	E041.6	1820	2001	9135A	B				
9130	1126	1210	9131A	B		222826	E014.8	2005	2151	9136A	B				
9131	1259	1304	9131A	B		001543	W012.0	2156	2338	9137A	B				
9131	1311	1357	9132A	B											
9132	1456	1545	9133A	B											
9133	1638	1732	9134A	B											
9134	1821	1919	9135A	B											
9135	2008	2107	9136A	B											
9136	2157	2254	9137A	B											
9137	2342	0041	9140R	A											

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
23 OCTOBER 1974

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S		
	ON HRMN	OFF HRMN				TIME HRMNSS	LONG DEG							
DAYTIME THIR						ASC. NODE								
9138	0041	0130	9140R	A		010926	E154.5	9138	2338	0137	9140R	A		
9139	0228	0317	9139R	B		025643	E127.7	9139	0137	0335	9139R	B		
9140	0416	0504	9140R	B		044359	E100.9	9140	0347	0520	9140R	B		
9141	0603	0651	9142A	B		063115	E074.1	9141	0525	0711	9142A	B		
9142	0750	0839	9143A	A		081832	E047.3	9142	0711	0855	9143A	A		
9143	0937	1026	9143A	B		100548	E020.5	9143	0855	1031	9143A	B		
9144	1125	1213	9144A	B		115305	W006.4	9144	1038	1224	9144A	B		
9145	1312	1400	9145A	B		134021	W033.2	9145	1231	1403	9145A	B		
9146	1459	1548	9145A	B		152737	W060.0	9146	1405	1540	9146A	B		
9147	1646	1732	9147A	B		171454	W086.9	9147	1555	1735	9147A	B		
9148	1834	1916	9148A	B		190210	W113.7	9148	1740	1917	9148A	B		
9149	2021	2104	9149A	B		204927	W140.5	9149	1923	2107	9149A	B		
9150	2208	2251	9150A	B		223643	W167.3	9150	2114	2253	9150A	B		
NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR						
9138	0130	0135	9140R	A		020259	W038.9	2338	0137		9140R	A		
9138	0137	0228	9139R	B				0137	0336		9139R	B		
9139	0317	0334	9139R	B		035015	W065.7	0346	0521		9140R	B		
9139	0346	0416	9140R	B				0526	0712		9142A	B		
9140	0504	0520	9140R	B		053732	W092.5	0711	0856		9143A	A		
9140	0526	0603	9142A	B				0855	1032		9143A	B		
9141	0651	0710	9142A	B		072448	W119.3	1038	1224		9144A	B		
9141	0710	0750	9143A	A				1231	1404		9145A	B		
9142	0839	0853	9143A	A		091205	W146.1	1410	1549		9146A	B		
9142	0855	0937	9143A	B				1554	1735		9147A	B		
9143	1038	1125	9144A	B		105921	W173.0	1740	1918		9148A	B		
9144	1213	1222	9144A	B		124637	E160.2	1916	2107		9149A	B		
9144	1229	1312	9145A	B				2113	2253		9150A	B		
9145	1410	1459	9145A	B		143354	E133.4							
9146	1555	1646	9147A	B		162110	E106.6							
9147	1740	1834	9148A	B		180827	E079.8							
9148	1922	2021	9149A	B		195543	E053.0							
9149	2113	2208	9150A	B		214259	E026.2							
9150						235016	W000.7							



**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
24 OCTOBER 1974**

THIR										ESMR					
DATA ORBIT	11.5 + 6.7		INT ORBIT	H	THIR	ASC. AND		DATA ORBIT	ON	OFF	INT ORBIT	H			
	ON	OFF	+	D	GRID	DESC.	NODE						+	D	
HRMN	HRMN	STPN	S	R	CORR	TIME	LONG	HRMNS	HRMN	HRMN	STDN	R	S		
DAYTIME THIR					ASC. NODE										
9151	0036	0044	9153R	A		002359	E165.9	9152	0037	0235	9153R	A			
9152	0143	0231	9153R	A		021116	E139.1	9153	0235	0434	9153R	B			
9153	0330	0419	9153R	B		035832	E112.3	9154	0442	0625	9154R	B			
9154	0517	0606	9154R	B		054549	E085.5	9155	0631	0802	9155A	B			
9155	0705	0753	9155A	B		073305	E058.6	9156	0808	0950	9156A	B			
9156	0852	0940	9156A	B		092021	E031.8	9157	0955	1134	9157A	B			
9157	1039	1128	9157A	B		110738	E005.0	9158	1139	1323	9158A	B			
9158	1226	1315	9158A	B		125454	W021.8	9159	1328	1507	9159A	B			
9159	1414	1502	9159A	B		144211	W048.7	9160	1511	1650	9160A	B			
9160	1601	1649	9160A	B		162927	W075.5	9161	1626	1830	9161A	B			
9161	1748	1829	9161A	B		181643	W102.3	9162	1836	2019	9162A	B			
9162	1935	2017	9162A	B		200400	W129.1	9163	2025	2208	9163A	B			
9163	2123	2206	9163A	B		215116	W155.9	9164	2213	2355	9164A	B			
9164	2310	2354	9164A	B		233833	E177.3								
NIGHTTIME THIR					DESC. NODE					NEMS - SCR - ITPR					
9151	0044	0143	9153R	A		011732	W027.5		0036	0235	9153R	A			
9152	0235	0330	9153R	B		030449	W054.3		0235	0434	9153R	B			
9153	0419	0432	9153R	B		045205	W081.2		0442	0625	9154R	B			
9153	0442	0517	9154R	B					0631	0802	9155A	B			
9154	0606	0623	9154R	B		063921	W108.0		0808	0950	9156A	B			
9154	0631	0705	9155A	B					0954	1134	9157A	B			
9155	0753	0800	9155A	B		082638	W134.8		1139	1323	9158A	B			
9155	0808	0852	9156A	B					1328	1507	9159A	B			
9156	0940	0948	9156A	B		101354	W161.6		1511	1651	9160A	B			
9156	0954	1039	9157A	B					1656	1830	9161A	B			
9157	1139	1226	9158A	B		120111	W171.6		1836	2020	9162A	B			
9158	1315	1321	9158A	B		134827	E144.8		2025	2208	9163A	B			
9158	1328	1414	9159A	B					2213	2356	9164A	B			
9159	1511	1601	9160A	B		153543	E118.0								
9160	1656	1748	9161A	B		172300	E091.2								
9161	1837	1935	9162A	B		191016	E064.3								
9162	2025	2123	9163A	B		205733	E037.5								
9163	2213	2310	9164A	B		224449	E010.7								
9164	2358	0057	9167R	A		003205	W016.2								

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
25 OCTOBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		DATA ORBIT	ON OFF		INT ORBIT + STDN	H D R S		
	HRMN	HRMN				HRMN	HRMN		HRMNS	DEC			HRMN	HRMN
DAYTIME THIR						ASC. NODE								
9165	0057	0146	9167R	A		012549	E150.4	9165	2355	0152	9167R	A		
9166	0245	0333	9166R	B		031305	E123.6	9166	0153	0352	9166R	B		
9167	0432	0520	9167R	B		050022	E096.8	9167	0400	0538	9167R	B		
9168	0619	0708	9168A	B		064738	E070.0	9168	0545	0723	9168A	B		
9169	0806	0855	9169A	B		083455	E043.2	9169	0727	0906	9169A	B		
9170	0954	1042	9170A	B		102211	E016.3	9170	0911	1056	9170A	B		
9171	1141	1229	9171A	B		120927	W010.5	9171	1101	1238	9171A	B		
9172	1328	1417	9172A	B		135644	W037.3	9172	1243	1423	9172A	B		
9173	1515	1604	9173A	B		154400	W064.1	9173	1427	1606	9173A	B		
9174	1703	1750	9174A	B		173116	W091.0	9174	1611	1752	9174A	B		
9175	1850	1931	9175A	B		191833	W117.8	9175	1757	1932	9175A	B		
9176	2037	2118	9176A	B		210549	W144.6	9176	1957	2120	9176A	B		
9177	2224	2308	9177A	B		225306	W171.4	9177	2125	2308	9177A	B		
NIGHTTIME THIR						DESC. NODE								
9165	0146	0151	9167R	A		021922	W043.0	NEMS - SCR - ITPR						
9165	0153	0245	9166R	B				2355	0152	9167R	A			
9166	0333	0350	9166R	B		040638	W069.8	0153	0352	9166R	B			
9166	0400	0432	9167R	B				0400	0539	9167R	B			
9167	0520	0536	9167R	B		055355	W096.6	0544	0723	9168A	B			
9167	0552	0619	9168A	B				0727	0906	9169A	B			
9168	0708	0721	9168A	B		074111	W123.4	0911	1056	9170A	B			
9168	0727	0806	9169A	B				1100	1239	9171A	B			
9169	0855	0904	9169A	B		092827	W150.2	1243	1423	9172A	B			
9169	0911	0954	9170A	B				1428	1606	9173A	B			
9170	1042	1053	9170A	B		111544	W177.0	1611	1752	9174A	B			
9170	1100	1141	9171A	B				1756	1933	9175A	B			
9171	1229	1237	9171A	B		130300	E156.1	1957	2120	9176A	B			
9171	1243	1328	9172A	B				2125	2309	9177A	B			
9172	1428	1515	9173A	B		145017	E129.3							
9173	1611	1703	9174A	B		153733	E102.5							
9174	1756	1850	9175A	B		182450	E075.7							
9175	1938	2037	9176A	B		201206	E048.9							
9176	2126	2224	9177A	B		215922	E022.1							
9177						234639	W004.8							
*DIFFERENT 6.7 TIMES														
9167	0544	0619	9168A	B										

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
26 OCTOBER 1974

THIR										ESMR																																																																																														
DATA ORBIT		11.5 + 6.7 ON HRMN OFF HRMN		INT ORBIT + STDN	H D R S	THIR GRID CORR LALD	ASC. AND DESC. NODE TIME LONG HRMNSS DEG		DATA ORBIT		UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S																																																																																										
DAYTIME THIR																																																																																																								
										ASC. NODE																																																																																														
9178	0053	0100	9180R	A		004022	E161.8	9179	0052	0248	9180R	A																																																																																												
9179	0159	0247	9180R	A		022738	E135.0	9180	0252	0447	9180R	B																																																																																												
9180	0346	0435	9180R	B		041455	E108.2	9181	0457	0640	9181R	B																																																																																												
9181	0534	0622	9181R	B		060211	E081.4	9182	0647	0818	9182A	B																																																																																												
9182	0721	0809	9182A	B		074928	E054.5	9183	0822	1007	9183A	B																																																																																												
9183	0908	0957	9183A	B		093644	E027.7	9184	1012	1151	9184A	B																																																																																												
9184	1055	1144	9184A	B		112400	E000.9	9185	1156	1337	9185A	B																																																																																												
9185	1243	1331	9185A	B		131117	W026.0	9186			9186A	B																																																																																												
9186	1430	1518	9186A	B		145833	W052.8	9187	1531	1707	9187A	B																																																																																												
9187	1617	1704	9187A	B		164550	W079.6	9188	1712	1850	9188A	B																																																																																												
9188	1804	1848	9188A	B		183306	W106.4	9189	1854	2035	9189A	B																																																																																												
9189	1952	2033	9189A	B		202022	W133.2	9190	2040	2225	9190A	B																																																																																												
9190	2139	2223	9190A	B		220739	W160.1	9191	2254	0053	9193R	A																																																																																												
9191	2326	0015	9193R	A		235455	E173.2																																																																																																	
NIGHTTIME THIR																																																																																																								
										DESC. NODE																																																																																														
9178	0100	0159	9180R	A		013355	W031.6	<table border="1"> <thead> <tr> <th colspan="6">NEMS - SCR - ITPR</th> </tr> <tr> <th colspan="2">DATA ORBIT</th> <th>UN HRMN</th> <th>OFF HRMN</th> <th>INT ORBIT + STDN</th> <th>H D R S</th> </tr> </thead> <tbody> <tr> <td>0052</td><td>0249</td><td>9180R</td><td>A</td><td></td><td></td> </tr> <tr> <td>0251</td><td>0448</td><td>9180R</td><td>B</td><td></td><td></td> </tr> <tr> <td>0458</td><td>0641</td><td>9181R</td><td>B</td><td></td><td></td> </tr> <tr> <td>0646</td><td>0818</td><td>9182A</td><td>B</td><td></td><td></td> </tr> <tr> <td>0822</td><td>1007</td><td>9183A</td><td>B</td><td></td><td></td> </tr> <tr> <td>1012</td><td>1150</td><td>9184A</td><td>B</td><td></td><td></td> </tr> <tr> <td>1155</td><td>1338</td><td>9185A</td><td>B</td><td></td><td></td> </tr> <tr> <td>1342</td><td>1525</td><td>9186A</td><td>B</td><td></td><td></td> </tr> <tr> <td>1530</td><td>1707</td><td>9187A</td><td>B</td><td></td><td></td> </tr> <tr> <td>1711</td><td>1850</td><td>9188A</td><td>B</td><td></td><td></td> </tr> <tr> <td>1854</td><td>2035</td><td>9189A</td><td>B</td><td></td><td></td> </tr> <tr> <td>2040</td><td>2225</td><td>9190A</td><td>B</td><td></td><td></td> </tr> <tr> <td>2250</td><td>0053</td><td>9193R</td><td>A</td><td></td><td></td> </tr> </tbody> </table>							NEMS - SCR - ITPR						DATA ORBIT		UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	0052	0249	9180R	A			0251	0448	9180R	B			0458	0641	9181R	B			0646	0818	9182A	B			0822	1007	9183A	B			1012	1150	9184A	B			1155	1338	9185A	B			1342	1525	9186A	B			1530	1707	9187A	B			1711	1850	9188A	B			1854	2035	9189A	B			2040	2225	9190A	B			2250	0053	9193R	A		
NEMS - SCR - ITPR																																																																																																								
DATA ORBIT		UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S																																																																																																			
0052	0249	9180R	A																																																																																																					
0251	0448	9180R	B																																																																																																					
0458	0641	9181R	B																																																																																																					
0646	0818	9182A	B																																																																																																					
0822	1007	9183A	B																																																																																																					
1012	1150	9184A	B																																																																																																					
1155	1338	9185A	B																																																																																																					
1342	1525	9186A	B																																																																																																					
1530	1707	9187A	B																																																																																																					
1711	1850	9188A	B																																																																																																					
1854	2035	9189A	B																																																																																																					
2040	2225	9190A	B																																																																																																					
2250	0053	9193R	A																																																																																																					
9179	0251	0346	9180R	B		032112	W058.4																																																																																																	
9180	0435	0449	9180R	B		050828	W085.2																																																																																																	
9181	0458	0534	9181R	B																																																																																																				
9181	0622	0639	9181R	B		065544	W112.0																																																																																																	
9181	0646	0721	9182A	B																																																																																																				
9182	0822	0908	9183A	B		084301	W138.9																																																																																																	
9183	0957	1003	9183A	B		103017	W165.7																																																																																																	
9183	1013	1055	9184A	B																																																																																																				
9184	1155	1243	9185A	B		121734	E167.5																																																																																																	
9185	1342	1430	9186A	B		140450	E140.7																																																																																																	
9186	1530	1617	9187A	B		155206	E113.9																																																																																																	
9187	1711	1804	9188A	B		173923	E087.0																																																																																																	
9188	1854	1952	9189A	B		192639	E060.2																																																																																																	
9189	2040	2139	9190A	B		211356	E033.4																																																																																																	
9190	2254	2326	9193R	A		230112	E006.6																																																																																																	
9191	0015	0051	9193R	A		004828	W020.3																																																																																																	

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
27 OCTOBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	ON	OFF				ASC.	AND							
DAYTIME THIR														
9192						014214	E146.3			9193	0208	0329	9193R	B
9193	0301	0349	9193R	B		032930	E119.5			9194	0415	0556	9195A	B
9194	0448	0536	9195A	B		051646	E092.7			9195	0556	0735	9196A	A
9195	0635	0724	9196A	A		070403	E065.9			9196	0739	0920	9196A	B
9196	0823	0911	9196A	B		085119	E039.0			9197	0925	1112	9197A	B
9197	1010	1058	9197A	B		103836	E012.2			9198	1117	1253	9198A	B
9198	1157	1246	9198A	B		122552	W014.6			9199	1258	1437	9199A	B
9199	1344	1433	9199A	B		141308	W041.4			9200	1442	1622	9200A	B
9200	1532	1619	9200A	B		160025	W068.2			9201	1626	1807	9201A	B
9201	1719	1804	9201A	B		174741	W095.0			9202	1811	1948	9202A	B
9202	1906	1946	9202A	B		193458	W121.9			9203	1954	2137	9203A	B
9203	2053	2136	9203A	B		212214	W148.7			9204	2147	2313	9204A	B
9204	2241	2324	9204A	B		230930	W175.5							
NIGHTTIME THIR														
						DESC. NODE		NEMS - SCR - ITPR						
9192	0209	0301	9193R	B		023547	W047.1			0208	0330		9193R	B
9193	0349	0406	9193R	B		042303	W073.9			0415	0555		9195A	B
9193	0415	0448	9195A	B						0556	0735		9196A	A
9194	0536	0554	9195A	B		061020	W100.7			0739	0920		9196A	B
9194	0556	0635	9196A	A						0925	1112		9197A	B
9195	0724	0738	9196A	A		075736	W127.5			1115	1254		9198A	B
9195	0740	0823	9196A	B						1258	1437		9199A	B
9196	0911	0916	9196A	B		094452	W154.3			1442	1621		9200A	B
9196	0925	1010	9197A	B						1626	1806		9201A	B
9197	1058	1110	9197A	B		113209	E178.8			1811	1949		9202A	B
9197	1116	1157	9198A	B						1954	2138		9203A	B
9198	1246	1251	9198A	B		131925	E152.0			2143	2314		9204A	B
9198	1258	1344	9199A	B										
9199	1442	1532	9200A	B		150642	E125.2							
9200	1626	1719	9201A	B		165358	E098.4							
9201	1811	1906	9202A	B		184115	E071.6							
9202	1955	2053	9203A	B		202831	E044.7							
9203	2143	2241	9204A	B		221547	E017.9							
9204						000304	W008.9							

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
28 OCTOBER 1974

THIR										ESMR					
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H		
ORBIT	ON	OFF	ORBIT	+	D	GR:J	DESC.	NODE		DATA	UN	OFF	ORBIT	D	
HRMN	HRMN	STON	S	LALJ	HRMNS	DEG				ORBIT	HRMN	HRMN	+	R	
										STON			STON	S	
DAYTIME THIR					ASC. NODE										
9205	0108	0116	9207R	A	005647	E157.7	9206	0108	0307	9207R	A				
9206	0215	0304	9207R	A	024403	E130.9	9207	0307	0506	9207R	B				
9207	0402	0451	9207R	B	043120	E104.0	9208	0513	0658	9209A	B				
9208	0550	0638	9209A	B	061836	E077.2	9209	0659	0843	9210A	A				
9209	0737	0825	9210A	A	080552	E050.4	9210	0848	1022	9210A	B				
9210	0924	1013	9210A	B	095309	E023.6	9211	1027	1207	9211A	R				
9211	1112	1200	9211A	B	114025	W003.2	9212	1212	1353	9212A	B				
9212	1259	1347	9212A	B	132742	W030.1	9213	1358	1538	9213A	B				
9213	1446	1535	9213A	B	151458	W056.9	9214	1543	1722	9214A	B				
9214	1633	1720	9214A	B	170214	W083.7	9215	1727	1903	9215A	B				
9215	1821	1902	9215A	B	184931	W110.5	9216	1908	2056	9216A	B				
9216	2008	2054	9216A	B	203647	W137.3	9217	2102	2240	9217A	B				
9217	2155	2237	9217A	B	222404	W164.1									
NIGHTTIME THIR					DESC. NODE					NEMS - SCR - ITPR					
9205	0116	0215	9207R	A	015020	W035.7		0108	0307	9207R	A				
9206	0307	0402	9207R	B	033737	W062.5		0307	0506	9207R	B				
9207	0451	0504	9207R	B	052453	W089.4		0514	0659	9209A	B				
9207	0513	0550	9209A	B				0659	0844	9210A	B				
9208	0638	0656	9209A	B	071209	W116.2		0843	1022	9210A	A				
9208	0659	0737	9210A	A				1027	1207	9211A	B				
9209	0825	0836	9210A	A	085926	W143.0		1212	1353	9212A	B				
9209	0843	0924	9210A	B				1358	1538	9213A	B				
9210	1013	1020	9210A	B	104642	W169.8		1542	1722	9214A	B				
9210	1027	1113	9211A	B				1727	1904	9215A	B				
9211	1212	1259	9212A	B	123359	E163.4		1908	2056	9216A	B				
9212	1358	1446	9213A	B	142115	E136.5		2102	2240	9217A	B				
9213	1542	1633	9214A	B	160831	E109.7									
9214	1727	1821	9215A	B	175548	E082.9									
9215	1909	2008	9216A	B	194304	E056.1									
9216	2112	2155	9217A	B	213021	E029.3									
9217	2311	2342	9220R	A	231737	E002.5									

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
29 OCTOBER 1974**

THIR										ESMR				
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			DATA		INT	H	
ORBIT	ON	OFF	ORBIT	+	D	GRID	DESC.	NUDE		ORBIT	ON	OFF	ORBIT	D
HRMN	HRMN	STDN	S	LALJ	HRMNSS	DEG	HRMN	SS	DEG	HRMN	HRMN	STDN	S	S
DAYTIME THIR										ASC. NUDE				
9218	2342	0031	9220R	A	001120	E169.0	9218	2310	0108	9220R	A			
9219					015836	E142.2	9220	0224	0419	9220R	B			
9220	0317	0405	9220R	B	034753	E115.4	9221	0429	0609	9222A	B			
9221	0504	0553	9221R	B	053309	E088.6	9222	0617	0754	9223A	A			
9222	0652	0740	9222A	B	072026	E061.8	9223	0758	0938	9223A	B			
9223	0839	0927	9223A	B	090742	E034.9	9224	0943	1125	9224A	B			
9224	1026	1114	9224A	B	105458	E008.1	9225	1130	1312	9225A	B			
9225	1213	1302	9225A	B	124215	W018.7	9226	1316	1454	9226A	B			
9226	1401	1449	9226A	B	142931	W045.5	9227	1458	1637	9227A	B			
9227	1548	1633	9227A	B	161648	W072.3	9228	1642	1825	9228A	B			
9228	1735	1822	9228A	B	180404	W099.2	9229	1830	2005	9229A	B			
9229	1922	2003	9229A	B	195120	W126.0	9230	2009	2154	9230A	B			
9230	2110	2153	9230A	B	213837	W152.8	9231	2159	2342	9231A	B			
9231	2257	2338	9231A	B	232553	W179.6								
NIGHTTIME THIR										DESC. NUDE				
9218	0031	0108	9220R	A	010453	W024.4	9218	2311	0109	9220R	A			
9219	0224	0317	9220R	B	025210	W051.2	9220	0224	0420	9220R	B			
9220	0405	0421	9220R	B	043926	W078.0	9221	0429	0610	9221R	B			
9221	0553	0604	9221R	B			9222	0618	0754	9222A	B			
9222	0618	0651	9222A	B	062643	W104.8	9223	0758	0939	9223A	B			
9223	0740	0752	9222A	B			9224	0944	1125	9224A	B			
9224	0758	0839	9223A	B	081359	W131.6	9225	1129	1311	9225A	B			
9225	0927	0937	9223A	B			9226	1316	1454	9226A	B			
9226	0944	1026	9224A	B	100116	W158.5	9227	1459	1637	9227A	B			
9227	1114	1123	9224A	B			9228	1642	1824	9228A	B			
9228	1130	1213	9225A	B	114832	E174.7	9229	1830	2005	9229A	B			
9229	1302	1309	9225A	B			9230	2009	2154	9230A	B			
9230	1316	1401	9226A	B	133548	E147.9	9231	2159	2342	9231A	B			
9231	1458	1548	9227A	B										
9222	1642	1735	9228A	B	152305	E121.1								
9223	1830	1922	9229A	B	171021	E094.3								
9224	2011	2110	9230A	B	185738	E067.5								
9225	2159	2257	9231A	B	204454	E040.6								
9226	2345	0044	9234R	A	223210	E013.8								
					001927	W013.0								

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
30 OCTOBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALD	ASC. AND DESC. NODE		DATA ORBIT	UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S		
	ON	OFF				TIME	LONG						HRMNS	DEG
DAYTIME THIR													ASC. NODE	
9232	0044	0133	9234R	A		011310	E153.6	9232	2342	0142	9234R	A		
9233	0231	0320	9233R	B		030026	E126.8	9233	0142	0342	9233R	B		
9234	0419	0507	9234R	B		044742	E099.9	9234	0347	0524	9234R	B		
9235	0606	0654	9235R	B		063459	E073.1	9235	0529	0712	9235R	B		
9236	0753	0842	9236A	B		062215	E046.3	9236	0717	0852	9236A	B		
9237	0940	1029	9237A	B		100932	E019.5	9237	0857	1038	9237A	B		
9238	1128	1216	9238A	B		115648	W007.3	9238	1043	1224	9238A	B		
9239	1315	1403	9239A	B		134404	W034.2	9239	1227	1411	9239A	B		
9240	1502	1551	9240A	B		153121	W061.0	9240	1417	1555	9240A	B		
9241	1650	1737	9241A	B		171837	W087.8	9241	1559	1738	9241A	B		
9242	1837	1924	9243A	B		190554	W114.6	9242	1743	1925	9243A	B		
9243	2024	2110	9243A	A		205310	W141.4	9243	1926	2108	9243A	A		
9244	2211	2255	9244A	B		224026	W168.3	9244	2112	2255	9244A	B		
NIGHTTIME THIR													DESC. NODE	
9232	0141	0231	9233R	B		020643	W039.8	NEMS - SCR - ITPR						
9233	0320	0340	9233R	B		035400	W066.6	2342	0141	9234R	A			
9233	0347	0419	9234R	B				0141	0341	9233R	B			
9234	0507	0523	9234R	B		054116	W093.5	0347	0524	9234R	B			
9234	0530	0606	9235R	B				0530	0712	9235R	B			
9235	0654	0706	9235R	B		072832	W120.3	0717	0852	9236A	B			
9235	0717	0753	9236A	B				0856	1038	9237A	B			
9236	0842	0850	9236A	B		091549	W147.1	1043	1223	9238A	B			
9236	0856	0940	9237A	B				1228	1411	9239A	B			
9237	1029	1035	9237A	B		110305	W173.9	1416	1555	9240A	B			
9237	1043	1128	9238A	B				1559	1739	9241A	B			
9238	1216	1221	9238A	B		125022	E159.3	1743	1926	9243A	B			
9238	1227	1315	9239A	B				1926	2110	9243A	A			
9239	1403	1409	9239A	B		143738	E132.5	2112	2255	9244A	B			
9239	1416	1502	9240A	B										
9240	1559	1650	9241A	B		162455	E105.7							
9241	1743	1837	9243A	B		181211	E078.8							
9242	1926	2024	9243A	A		195927	E052.0							
9243	2113	2211	9244A	B		214644	E025.2							
9244						233400	W001.7							

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
31 OCTOBER 1974

THIR										ESMR									
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			INT	H			INT	H				
ORBIT	HRMN	HRMN	STDN	ORBIT	D	GRID	DESC.	NODE	TIME	LUNG	ORBIT	D	STDN	ORBIT	D				
ORBIT	HRMN	HRMN	STDN	+	R	CORR	HRMNS	DEG			+	R		+	R				
ORBIT	HRMN	HRMN	STDN	S	LALJ		HRMNS	DEG			STDN	S							
DAYTIME THIR										ASC. NODE									
9245							002743	E164.9			9248	0407	0605	9250A	A				
9246							021459	E138.1			9249	0605	0804	9249A	B				
9247	0407	0422	9250A	A			040216	E111.3			9250	0813	0952	9250A	B				
9248	0520	0604	9250A	A			054932	E084.5			9251	0956	1143	9251A	B				
9249	0708	0756	9249A	B			073648	E057.7			9252	1148	1226	9252A	B				
9250	0855	0943	9250A	B			092405	E030.8			9253	1335	1509	9253A	B				
9251	1042	1131	9251A	B			111121	E004.0			9254	1514	1657	9254A	B				
9252	1229	1318	9252A	B			125838	W022.8			9255	1702	1837	9255A	B				
9253	1417	1505	9253A	B			144554	W049.6			9256	1841	2023	9256A	B				
9254	1604	1652	9254A	B			163310	W076.4			9257	2028	2212	9257A	B				
9255	1751	1834	9255A	B			182027	W103.3			9258	2217	0000	9258A	B				
9256	1939	2022	9256A	B			200743	W130.1											
9257	2126	2210	9257A	B			215500	W156.9											
9258	2313	2357	9258A	B			234216	E176.3											
9258	2357	0002	9261R	A															
NIGHTTIME THIR										DESC. NODE					NEMS - SCR - ITPR				
9245							012117	W028.5			0406	0606	9250A	A					
9246							030833	W055.3			0605	0804	9249A	B					
9247	0422	0520	9250A	A			045549	W082.1			0813	0951	9250A	B					
9248	0609	0708	9249A	B			064306	W108.9			0956	1144	9251A	B					
9249	0756	0802	9249A	B			083022	W135.7			1148	1327	9252A	B					
9249	0813	0855	9250A	B							1331	1510	9253A	B					
9250	0943	0950	9250A	B			101739	W162.6			1514	1657	9254A	B					
9250	0956	1042	9251A	B							1702	1836	9255A	B					
9251	1131	1142	9251A	B			120455	E170.6			1841	2024	9256A	B					
9251	1149	1229	9252A	B							2028	2212	9257A	B					
9252	1331	1417	9253A	B			135211	E143.8			2217	0000	9258A	B					
9253	1514	1604	9254A	B			153928	E117.0											
9254	1701	1751	9255A	B			172644	E090.2											
9255	1843	1939	9256A	B			191401	E063.4											
9256	2028	2126	9257A	B			210117	E036.5											
9257	2217	2313	9258A	B			224833	E009.7											
9258	0002	0100	9261R	A			003550	W017.1											



**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
1 NOVEMBER 1974**

THIR										ESMR				
		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H	
DATA	ON	OFF	ORRIT	D	GRID	DESC.	TIME	LONG	DATA	ON	OFF	ORRIT	D	
ORBIT	HRMN	HRMN	STDN	S	LALJ	HRMNSS	DEC		ORBIT	HRMN	HRMN	STDN	S	
DAYTIME THIR														
										DESC. NODE				
9259	0100	0149	9261R	A		012932	E149.5		9259	2357	0155	9261R	A	
9260	0248	0336	9260R	B		031649	E122.7		9260	0155	0355	9260R	B	
9261	0435	0523	9261R	B		050405	E095.8		9261	0403	0540	9261R	B	
9262	0622	0711	9263A	B		065122	E069.0		9262	0547	0724	9263A	B	
9263	0809	0858	9263A	A		083538	E042.2		9263	0724	0911	9263A	A	
9264	0957	1045	9264A	B		102554	E015.4		9264	0912	1058	9264A	B	
9265	1144	1232	9265A	B		121311	W011.4		9265	1103	1241	9265A	B	
9266	1331	1420	9266A	B		140027	W038.3		9266	1247	1425	9266A	B	
9267	1518	1607	9267A	B		154743	W065.1		9267	1430	1610	9267A	B	
9268	1706	1748	9268A	B		173500	W091.9		9268	1615	1752	9268A	B	
9269	1853	1935	9269A	B		192216	W118.7		9269	1759	1936	9269A	B	
9270	2040	2128	9270A	B		210933	W145.5		9270	1941	2129	9270A	B	
9271	2228	2312	9271A	B		225649	W172.4		9271	2135	2314	9271A	B	
NIGHTTIME THIR														
										NEMS - SCR - ITPR				
9259	0156	0248	9260R	B		022306	W043.9		2356	0155	9261R	A		
9260	0336	0347	9260R	B		041023	W070.8		0155	0354	9260R	B		
9261	0402	0435	9261R	B					0402	0541	9261R	B		
9261	0523	0539	9261R	B		055739	W097.6		0546	0724	9263A	B		
9261	0546	0622	9263A	B					0724	0911	9263A	A		
9262	0711	0723	9263A	B		074456	W124.4		0912	1058	9264A	B		
9262	0725	0809	9263A	A					1103	1242	9265A	B		
9263	0858	0909	9263A	A		093212	W151.2		1247	1425	9266A	B		
9263	0912	0957	9264A	B					1429	1610	9267A	B		
9264	1045	1056	9264A	B		111928	W178.0		1614	1754	9268A	B		
9264	1103	1144	9265A	B					1759	1936	9269A	B		
9265	1232	1240	9265A	B		130645	E155.2		1941	2129	9270A	B		
9265	1247	1351	9266A	B					2134	2314	9271A	B		
9266	1429	1518	9267A	B		145401	E128.4							
9267	1615	1706	9268A	B		164118	E101.6							
9268	1759	1853	9269A	B		182834	E074.7							
9269	1941	2040	9270A	B		201550	E047.9							
9270	2134	2228	9271A	B		220307	E021.1							
9271						235023	W005.8							

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**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
2 NOVEMBER 1974**

THIR										ESMR							
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			INT		H					
ORBIT	ON	OFF	ORBIT	+	D	GRID	DESC.	NODE		ORBIT	+	D					
HRMN	HRMN	HRMN	SJDN	R	R	CONJ	TIME	LUNG		HRMN	HRMN	STDN	R				
			S	LALJ	HRMNSS	DEG						S					
DAYTIME THIR										ASC. NODE							
9272	0056	0103	9274R	A	004405	E160.8	9273	0056	0250	9274R	A						
9273	0202	0251	9274R	A	023122	E134.0	9274	0255	0453	9274R	B						
9274	0349	0438	9274R	B	041838	E107.2	9275	0502	0646	9275R	B						
9275	0537	0625	9275R	B	060555	E080.4	9276	0651	0823	9276A	B						
9276	0724	0812	9276A	B	075311	E053.6	9277	0828	1010	9277A	B						
9277	0911	1000	9277A	B	094027	E026.7	9278	1015	1155	9278A	B						
*9278	1058	1147	9278A	B	112744	W000.1	9279	1201	1342	9279A	B						
9279	1246	1334	9279A	B	131500	W026.9	9280	1347	1527	9280A	B						
9280	1433	1521	9280A	B	150217	W053.7	9281	1532	1709	9281A	B						
9281	1620	1708	9281A	B	164933	W080.5	9282	1712	1856	9282A	B						
9282	1807	1850	9282A	B	183649	W107.4	9283	1857	2039	9283A	B						
9283	1955	2037	9283A	B	202406	W134.2	9284	2043	2227	9284A	B						
9284	2142	2223	9284A	B	221122	W161.0											
9285					235839	E172.2											
*NO 6.7 DATA																	
NIGHTTIME THIR										DESC. NODE					NEMS - SCR - ITPR		
9272	0103	0202	9274R	A	013740	W032.6	0056	0251	9274R	A							
9273	0255	0349	9274R	B	032456	W059.4	0254	0453	9274R	B							
9274	0438	0452	9274R	B	051212	W086.2	0502	0646	9275R	B							
9275	0502	0537	9275R	B			0651	0823	9276A	B							
9276	0625	0644	9275R	B	065929	W113.0	0828	1010	9277A	B							
9277	0651	0724	9276A	B			1014	1156	9278A	B							
9278	0812	0822	9276A	B	084645	W139.8	1201	1342	9279A	B							
9279	0828	0911	9277A	B			1347	1527	9280A	B							
9280	1000	1008	9277A	B	103402	W166.7	1532	1710	9281A	B							
*9281	1014	1058	9278A	B			1714	1852	9282A	B							
*9282	1147	1154	9278A	B	122118	E166.6	1857	2039	9283A	B							
9283	1201	1246	9279A	B			2043	2228	9284A	B							
9284	1334	1340	9279A	B	140834	E139.7											
9285	1347	1433	9280A	B													
9286	1532	1620	9281A	B	155551	E112.9											
9287	1714	1807	9282A	B	174307	E086.1											
9288	1857	1955	9283A	B	193024	E059.3											
9289	2043	2142	9284A	B	211740	E032.4											
9290					230456	E005.6											
9291					005213	W021.2											
*NO 6.7 DATA																	

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
3 NOVEMBER 1974**

THIR										ESMR					
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR L'ALJ	ASC. AND DESC. NODE		DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S			
	ON HRMN	OFF HRMN				TIME	LONG DEG								
DAYTIME THIR						ASC. NODE									
9286						014554	E145.4	9287	0237	0436	9290A	A			
9287	0304	0352	9290A	A		033310	E118.6	9289	0537	0736	9289A	S			
9288						052027	E091.7	9290	0744	0924	9290A	B			
9289	0638	0727	9289A	B		070743	E064.9	9291	0928	1110	9291A	B			
9290	0826	0914	9290A	B		085459	E038.1	9292	1114	1257	9292A	B			
9291	1013	1101	9291A	B		104216	E011.3	9293	1302	1443	9293A	B			
9292	1200	1249	9292A	B		122932	W015.5	9294	1448	1625	9294A	B			
9293	1347	1436	9293A	B		141649	W042.3	9295	1630	1812	9295A	B			
9294	1535	1623	9294A	B		160405	W069.2	9296	1815	1944	9296A	B			
9295	1722	1810	9295A	B		175121	W096.0	9297	1959	2145	9297A	B			
9296	1909	1952	9296A	B		193838	W122.8	9298	2150	2330	9298A	B			
9297	2056	2141	9297A	B		212554	W149.6								
9298	2244	2329	9298A	B		231311	W176.4								
NIGHTTIME THIR						DESC. NODE									
9286	0237	0304	9290A	A		023928	W048.0	NEMS - SCR - IIPR							
9287	0352	0433	9290A	A		042644	W074.8	0236	0435		9290A	A			
9288	0540	0638	9289A	B		061401	W101.7	0537	0736		9289A	B			
9289	0727	0734	9289A	B		080117	W128.5	0744	0924		9290A	B			
9289	0744	0826	9290A	B				0928	1110		9291A	B			
9290	0914	0922	9290A	B		094834	W155.3	1114	1257		9292A	B			
9290	0928	1013	9291A	B				1302	1443		9293A	B			
9291	1101	1108	9291A	B		113550	E177.9	1448	1625		9294A	B			
9291	1114	1200	9292A	B				1630	1812		9295A	B			
9292	1249	1255	9292A	B		132306	E151.1	1815	1954		9296A	B			
9292	1302	1347	9293A	B				1959	2144		9297A	B			
9293	1436	1441	9293A	B		151023	E124.3	2150	2331		9298A	B			
9293	1448	1535	9294A	B											
9294	1630	1722	9295A	B		165739	E097.5								
9295	1817	1909	9296A	B		184456	E070.6								
9296	1959	2056	9297A	B		203212	E043.8								
9297	2150	2244	9298A	B		221928	E017.0								
9298	0001	0031	9301R	A		000645	W009.8								

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**TABLE 2-2**  
**DATA AVAILABILITY ON-OFF TIMES**  
**4 NOVEMBER 1974**

THIR										ESMR					
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		TIME	LUNG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	
	ON HRMN	OFF HRMN				ASC.	DESC.								
DAYTIME THIR															
9299	0031	0119	9301R	A		010027	E156.7			9299	0002	0200	9301R	A	
9300						024743	E129.9			9301	0312	0510	9301R	B	
9301	0406	0454	9301R	B		043500	E103.1			9302	0518	0700	9302R	B	
9302	0553	0641	9302R	B		062216	E076.3			9303	0705	0841	9303A	B	
9303	0740	0829	9303A	B		080932	E049.5			9304	0846	1027	9304A	B	
9304	0927	1016	9304A	B		095649	E022.6			9305	1032	1218	9305A	B	
9305	1115	1203	9305A	B		114405	W004.2			9306	1224	1357	9306A	B	
9306	1302	1350	9306A	B		133122	W031.0			9307	1402	1543	9307A	B	
9307	1449	1538	9307A	B		151838	W057.8			9308	1547	1728	9309A	B	
9308	1636	1725	9309A	B		170554	W084.6			9309	1728	1914	9309A	A	
9309	1824	1912	9309A	A		185311	W111.4			9310	1915	2054	9310A	B	
9310	2011	2052	9310A	B		204027	W138.3			9311	2059	2244	9311A	B	
9311	2158	2245	9311A	B		222744	W165.1								
NIGHTTIME THIR															
9299	0119	0158	9301R	A		015401	W036.7			NEMS - SCR - ITPR					
9300	0311	0406	9301R	B		034118	W063.5			0002	0200		9301R	A	
9301	0454	0508	9301R	B		052834	W090.3			0311	0510		9301R	B	
9301	0521	0553	9302R	B						0518	0700		9302R	B	
9302	0641	0658	9302R	B		071550	W117.1			0705	0841		9303A	B	
9302	0705	0740	9303A	B						0846	1027		9304A	B	
9303	0829	0839	9303A	B		090307	W143.9			1031	1219		9305A	B	
9303	0846	0927	9304A	B						1224	1357		9306A	B	
9304	1016	1024	9304A	B		105023	W170.7			1401	1543		9307A	B	
9304	1031	1115	9305A	B						1548	1728		9309A	B	
9305	1203	1216	9305A	B		123740	E162.4			1728	1914		9309A	A	
9305	1224	1302	9306A	B						1914	2054		9310A	B	
9306	1401	1449	9307A	B		142456	E135.6			2059	2244		9311A	B	
9307	1547	1636	9309A	B		161212	E108.8								
9308	1729	1824	9309A	A		175929	E082.0								
9309	1914	2011	9310A	B		194645	E055.2								
9310	2059	2158	9311A	B		213402	E028.3								
9311						232118	E001.5								

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
5 NOVEMBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALD	ASC. AND DESC. NODE		TIME HRMNSS	LONG DEG	DATA ORBIT	ON OFF		INT ORBIT + STDN	H D R S
	HRMN	HRMN				HRMN	HRMN				HRMN	HRMN		
DAYTIME THIR														
9312						001500	E168.1			9315	0553	0550	9317A	A
9313						020216	E141.3			9316	0552	0751	9316A	B
9314	0354	0408	9317A	A		034933	E114.5			9317	0800	0940	9317A	B
9315	0507	0550	9317A	A		053649	E087.6			9318	0945	1128	9318A	B
9316	0655	0743	9316A	B		072406	E060.8			9319	1133	1313	9319A	B
9317	0842	0930	9317A	B		091122	E034.0			9320	1319	1509	9320A	B
9318	1029	1118	9318A	B		105838	E007.2			9321	1505	1640	9321A	B
9319	1216	1305	9319A	B		124555	W019.6			9322	1645	1826	9322A	B
9320	1404	1452	9320A	B		145311	W046.4			9323	1830	2015	9324A	B
9321	1551	1638	9321A	B		162027	W073.3			9324	2015	2155	9324A	A
9322	1738	1824	9322A	B		180744	W100.1			9325	2216	2346	9325A	B
9323	1925	2013	9324A	B		195500	W126.9							
9324	2113	2154	9324A	A		214217	W153.7							
9325	2300	2337	9325A	B		232933	E179.5							
NIGHTTIME THIR														
9312						010834	W025.3			NEMS - SCR - ITPR				
9313						025551	W052.1			0554	0549		9317A	A
9314	0408	0507	9317A	A		044307	W078.9			0552	0752		9316A	B
9315	0556	0655	9316A	B		063024	W105.8			0800	0940		9317A	B
9316	0743	0750	9316A	B		081740	W132.6			0945	1128		9318A	B
9316	0800	0842	9317A	B						1133	1314		9319A	B
9317	0930	0938	9317A	B		100456	W159.4			1319	1459		9320A	B
9317	0945	1029	9318A	B						1504	1640		9321A	B
9318	1118	1127	9318A	B		115213	E173.8			1645	1826		9322A	B
9318	1133	1216	9319A	B						1831	2015		9324A	B
9319	1305	1312	9319A	B		133929	E147.0			2015	2156		9324A	A
9319	1319	1404	9320A	B						2216	2346		9325A	B
9320	1452	1457	9320A	B		152646	E120.2							
9320	1504	1551	9321A	B										
9321	1645	1738	9322A	B		171402	E093.4							
9322	1831	1925	9324A	B		190118	E066.5							
*9323	2015	2113	9324A	A		204835	E039.7							
9324	2217	2300	9325A	B		223551	E012.9							
9325	0017	0047	9328A	A		002308	W014.0							
*DIFFERENT 6.7 TIMES														
9323	2024	2113	9324A	A										

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**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
6 NOVEMBER 1974**

THIR										ESMR				
		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H	
DATA	ON	OFF	ORBIT	+	R	CORR	TIME	LONG		DATA	ON	OFF	ORBIT	H
ORBIT	HRMN	HRMN	STDN	S	LALJ	HRMNSS	DEG			ORBIT	HRMN	HRMN	STDN	S
DAYTIME THIR														
						ASC. NUDE								
9326	0047	0136	9328R	A		011649	E152.6			9326	0016	0215	9328R	A
9327						030406	E125.8			9328	0528	0513	9328R	H
9328	0422	0510	9328R	B		045122	E099.0			9329	0534	0715	9329R	H
9329	0609	0657	9329R	B		063859	E072.2			9330	0721	0856	9330A	B
9330	0756	0845	9330A	B		082555	E045.4			9331	0901	1041	9331A	B
9331	0944	1032	9331A	B		101511	E018.5			9332	1047	1228	9332A	B
9332	1131	1219	9332A	B		120028	W008.3			9333	1232	1411	9333A	B
9333	1318	1407	9333A	B		134744	W035.1			9334	1417	1557	9334A	B
9334	1505	1554	9334A	B		153500	W061.9			9335	1602	1741	9335A	B
9335	1653	1740	9335A	B		172217	W088.7			9336	1747	1930	9337A	B
9336	1840	1928	9337A	B		190933	W115.5			9337	1930	2117	9337A	A
9337	2027	2115	9337A	A		204650	W142.4			9338	2118	2300	9338A	B
9338	2214	2258	9338A	B		224406	W169.2							
NIGHTTIME THIR														
						DESC. NUDE				NEWS - SCR - ITPR				
9326	0136	0213	9328R	A		021024	W040.8			0016	0215		9328R	A
9327	0326	0422	9328R	B		035740	W067.6			0528	0512		9328R	B
9328	0510	0519	9328R	B		054457	W094.4			0534	0716		9329R	B
9328	0534	0609	9329R	B						0721	0857		9330A	B
9329	0657	0714	9329R	B		073213	W121.2			0901	1042		9331A	B
9329	0721	0756	9330A	B						1047	1228		9332A	B
9330	0845	0855	9330A	B		091930	W148.0			1232	1412		9333A	B
9330	0901	0944	9331A	B						1417	1558		9334A	B
9331	1032	1040	9331A	B		110646	W174.9			1602	1742		9335A	B
9331	1047	1131	9332A	B						1747	1930		9337A	B
9332	1219	1226	9332A	B		125402	E158.4			1930	2117		9337A	A
9332	1232	1318	9333A	B						2118	2300		9338A	B
9333	1417	1505	9334A	B		144119	E131.5							
9334	1602	1653	9335A	B		162835	E104.7							
9335	1747	1840	9337A	B		181552	E077.9							
9336	1930	2027	9337A	A		200308	E051.1							
9337	2118	2214	9338A	B		215024	E024.3							
9338						233741	W002.6							

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
7 NOVEMBER 1974**

THIR										ESMR				
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			INT		H		
ORBIT	ON	OFF	ORBIT	+	R	D	DESC.	NUDE		ORBIT	+	D		
HRMN	HRMN	STDN	S	LALD	HRMNS	DEG				HRMN	HRMN	STDN	S	
DAYTIME THIR					ASC. NUDE									
9339							005122	E164.0		9342	0410	0608	9343A	A
9340							021839	E137.2		9343	0609	0808	9343A	B
9341	0410	0425	9343A	A			040555	E110.4		9344	0815	0958	9344A	B
9342	0523	0606	9343A	A			055312	E083.5		9345	1003	1141	9345A	B
9343	0711	0759	9343A	B			074028	E056.7		9346	1145	1328	9346A	B
9344	0858	0946	9344A	B			092744	E029.9		9347	1332	1514	9347A	B
9345	1045	1134	9345A	B			111501	E003.1		9348	1519	1656	9348A	B
9346	1233	1321	9345A	B			130217	W023.7		9349	1701	1841	9349A	B
9347	1420	1508	9347A	B			144933	W050.5		9350	1848	2030	9351A	B
9348	1607	1655	9348A	B			163650	W077.4		9351	2030	2214	9351A	A
9349	1754	1842	9349A	B			182406	W104.2		9352	2243	0041	9354R	A
9350	1942	2029	9351A	B			201121	W131.0						
9351	2129	2210	9351A	A			215839	W157.8						
9352	2316	0005	9354R	A			234555	E175.4						
NIGHTTIME THIR					DESC. NUDE					NEMS - SCR - ITPR				
9339							012457	W029.4		0410	0608	9343A	A	
9340							031214	W056.2		0608	0808	9343A	B	
9341	0425	0523	9343A	A			045930	W083.0		0815	0959	9344A	B	
9342	0612	0711	9343A	B			064646	W109.9		1003	1141	9345A	B	
9343	0759	0806	9343A	B			083403	W136.7		1146	1328	9346A	B	
9343	0815	0858	9344A	B						1332	1515	9347A	B	
9344	0946	0957	9344A	B			102119	W163.5		1519	1657	9348A	B	
9344	1003	1045	9345A	B						1701	1842	9349A	B	
9345	1134	1139	9345A	B			120836	E169.7		1848	2031	9351A	B	
9345	1146	1233	9345A	B						2031	2212	9351A	A	
9346	1321	1326	9346A	B			135552	E142.9		2243	0041	9354R	A	
9346	1333	1420	9347A	B										
9347	1519	1607	9348A	B			154308	E116.1						
9348	1701	1754	9349A	B			173025	E089.2						
9349	1848	1942	9351A	B			191741	E062.4						
9350	2031	2129	9351A	A			210458	E035.6						
9351	2242	2316	9354R	A			225214	E008.8						
9352	0005	0039	9354R	A			003930	W018.0						

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TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
8 NOVEMBER 1974

THIR										ESMR									
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H						
ORBIT	HRMN	HRMN	STDN	ORBIT	R	GRID	DESC.	NODE	TIME	LONG	ORBIT	R	ORBIT	D					
ORBIT	HRMN	HRMN	STDN	ORBIT	S	CORR	TIME	LONG	HRMNSS	DEG	ORBIT	HRMN	HRMN	STDN	S				
DAYTIME THIR										ASC. NODE									
9353							013312	E148.5			9354	0200	0357	9354R	B				
9354	0251	0359	9354R	B			032028	E121.7			9355	0405	0550	9357A	B				
9355	0438	0526	9357A	B			050745	E094.9			9356	0550	0727	9356A	A				
9356	0625	0714	9356A	A			065501	E068.1			9357	0733	0915	9357A	A				
9357	0812	0901	9357A	A			084217	E041.3			9358	0916	1102	9358A	B				
9358	1000	1048	9358A	B			102934	E014.5			9359	1107	1246	9359A	B				
9359	1147	1235	9359A	B			121650	W012.4			9360	1250	1429	9360A	B				
9360	1334	1423	9360A	B			140406	W039.2			9361	1434	1613	9361A	B				
9361	1522	1610	9361A	B			155123	W066.0			9362	1618	1759	9362A	B				
9362	1709	1757	9362A	B			173839	W092.8			9363	1804	1939	9363A	B				
9363	1856	1931	9363A	B			192556	W119.6			9364	1944	2126	9364A	B				
9364	2043	2125	9364A	B			211312	W146.5			9365	2132	2317	9365A	B				
9365	2231	2316	9365A	B			230028	W173.3											
NIGHTTIME THIR										DESC. NODE					NEMS - SCR - ITPR				
9353	0200	0251	9354R	B			022647	W044.9			0200	0357	9354R	B					
9354	0339	0358	9354R	B			041403	W071.7			0405	0549	9357A	B					
9354	0405	0438	9357A	B							0550	0728	9356A	A					
9355	0526	0548	9357A	B			060120	W098.5			0732	0915	9357A	A					
9355	0550	0625	9356A	A							0916	1102	9358A	B					
9356	0714	0726	9356A	A			074836	W125.3			1107	1246	9359A	B					
9356	0733	0812	9357A	A							1251	1429	9360A	B					
9357	0901	0913	9357A	A			093552	W152.1			1434	1613	9361A	B					
9357	0916	1000	9358A	B							1618	1759	9362A	B					
9358	1048	1058	9358A	B			112309	W179.0			1804	1939	9363A	B					
9358	1107	1147	9359A	B							1944	2127	9364A	B					
9359	1235	1244	9359A	B			131025	E154.2			2132	2317	9365A	B					
9359	1251	1334	9360A	B															
9360	1434	1522	9361A	B			145741	E127.4											
9361	1618	1709	9362A	B			164458	E100.6											
9362	1804	1856	9363A	B			183214	E073.8											
9363	1945	2043	9364A	B			201931	E047.0											
9364	2132	2231	9365A	B			220647	E020.2											
9365							235403	W006.7											
*DIFFERENT 6.7 TIMES																			
9356	0714	0722	9356A	A															



**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
9 NOVEMBER 1974**

THIR										ESMR				
		11.5 + 6.7		INT	H	THIR	ASC. AND						INT	H
DATA	ON	OFF	ORBIT	D	GRID	DESC.	TIME	LONG	NODE	DATA	ON	OFF	ORBIT	D
ORBIT	HRMN	HRMN	STDN	R	CORR	HRMNSS	DEG			ORBIT	HRMN	HRMN	STDN	R
				S	LALJ									S
DAYTIME THIR														
										ASC. NODE				
9366						004745	E159.9			9368	0252	0444	9369R	A
9367						023501	E133.1			9369	0444	0643	9369R	B
9368	0352	0441	9369R	A		042218	E106.3			9370	0653	0830	9370A	B
9369	0540	0628	9369R	B		060934	E079.4			9371	0834	1012	9371A	B
9370	0727	0815	9370A	B		075650	E052.6			9372	1017	1156	9372A	B
9371	0914	1003	9371A	B		094407	E025.8			9373	1202	1346	9373A	B
9372	1101	1150	9372A	B		113123	W001.0			9374	1351	1531	9374A	B
9373	1249	1337	9373A	B		131839	W027.8			9375	1536	1713	9375A	B
9374	1436	1524	9374A	B		150556	W054.6			9376	1718	1900	9377A	B
9375	1623	1710	9375A	B		165312	W081.5			9377	1900	2047	9377A	A
9376	1811	1858	9377A	B		184029	W108.3			9378	2047	2230	9378A	B
9377	1958	2046	9377A	A		202745	W135.1							
9378	2145	2228	9378A	B		221501	W161.9							
NIGHTTIME THIR														
										DESC. NODE				
9366						014120	W033.5			NEMS - SCR - ITPR				
9367	0254	0352	9369R	A		032836	W060.3			0252	0444	9369R	A	
9368	0444	0540	9369R	B		051553	W087.2			0444	0643	9369R	B	
9369	0628	0639	9369R	B		070309	W114.0			0653	0829	9370A	B	
9369	0653	0727	9370A	B						0834	1012	9371A	B	
9370	0815	0828	9370A	B		085025	W140.8			1017	1157	9372A	B	
9370	0834	0914	9371A	B						1202	1346	9373A	B	
9371	1003	1010	9371A	B		103742	W167.6			1351	1531	9374A	B	
9371	1017	1101	9372A	B						1536	1714	9375A	B	
9372	1150	1155	9372A	B		122458	E165.6			1719	1900	9377A	B	
9372	1202	1249	9373A	B						1900	2047	9377A	A	
9373	1337	1344	9373A	B		141215	E138.8			2048	2334	9378A	B	
9373	1351	1436	9374A	B										
9374	1524	1529	9374A	B		155931	E112.0							
9374	1536	1623	9375A	B										
9375	1719	1811	9377A	B		174647	E085.2							
9376	1900	1958	9377A	A		193404	E058.3							
9377	2048	2145	9378A	B		212120	E031.5							
9378						230837	E004.7							

**TABLE 2-2**  
**DATA AVAILABILITY ON-OFF TIMES**  
**10 NOVEMBER 1974**

THIR						ESMR						
DATA	ON	OFF	INT	H	THIR	ASC. AND	DESC. NODE	DATA	ON	OFF	INT	H
ORBIT	HRMN	HRMN	ORBIT	D	GRID	TIME	LONG	ORBIT	HRMN	HRMN	ORBIT	D
			+	R	COMR	HRMNS	DEG				+	R
			STDN	S	LALO						STDN	S
DAYTIME THIR						ASC. NODE						
9379						000216	E171.3	9380	0017	0215	9381R	A
9380	0120	0208	9381R	A		014932	E144.5	9381	0215	0414	9381R	B
9381	0307	0355	9381R	B		033648	E117.7	9382	0420	0604	9382R	B
9382	0454	0543	9382R	B		052405	E090.8	9383	0609	0742	9383A	B
9383	0641	0730	9383A	B		071121	E064.0	9384	0747	0926	9384A	B
9384	0829	0917	9384A	B		085837	E037.2	9385	0932	1118	9385A	B
9385	1016	1104	9385A	B		104554	E010.4	9386	1124	1302	9386A	B
9386	1203	1252	9386A	B		123310	W016.4	9387	1307	1446	9387A	B
9387	1350	1439	9387A	B		142027	W043.3	9388	1451	1629	9388A	B
9388	1538	1626	9388A	B		160743	W070.1	9389	1634	1815	9389A	B
9389	1725	1813	9389A	B		175459	W096.9	9390	1820	2002	9391A	B
9390	1912	2000	9391A	B		194216	W123.7	9391	2002	2146	9391A	A
9391	2100	2145	9391A	A		212932	W150.5	9392	2148	2335	9392A	B
9392	2247	2333	9392A	B		231648	W177.4					
NIGHTTIME THIR						DESC. NODE						
9379	0021	0120	9381R	A		005551	W022.1	NEMS - SCR - ITPR				
9380	0208	0213	9381R	A		024307	W048.9	0016	0215	9381R	A	
9380	0215	0307	9381R	B				0215	0414	9381R	B	
9381	0355	0413	9381R	B		043024	W075.8	0420	0604	9382R	B	
9381	0420	0454	9382R	B				0609	0742	9383A	B	
9382	0543	0602	9382R	B		061740	W102.6	0747	0927	9384A	B	
9382	0609	0641	9383A	B				0932	1119	9385A	B	
9383	0730	0741	9383A	B		080456	W129.4	1124	1302	9386A	B	
9383	0747	0829	9384A	B				1307	1446	9387A	B	
9384	0917	0925	9384A	B		095213	W156.2	1451	1629	9388A	B	
9384	0932	1016	9385A	B				1634	1815	9389A	B	
9385	1104	1116	9385A	B		113929	E177.0	1820	2002	9391A	B	
9385	1124	1203	9386A	B				2002	2147	9391A	A	
9386	1252	1300	9386A	B		132645	E150.1	2148	2334	9392A	B	
9386	1307	1350	9387A	B								
9387	1451	1538	9388A	B		151402	E123.3					
9388	1634	1725	9389A	B		170118	E096.5					
9389	1820	1912	9391A	B		184835	E069.7					
9390	2002	2100	9391A	A		203551	E042.9					
9391	2148	2247	9392A	B		222307	E016.1					
9392						001024	W010.8					

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
11 NOVEMBER 1974

THIR										ESMR					
-----										-----					
		11.5 + 6.7		INT	H	THIR	ASC. AND						INT	H	
DATA	ON	OFF	+	ORBIT	D	GRID	DESC.	NODE	TIME	LONG			ORBIT	D	
ORBIT	HRMN	HRMN	STDN	S	CURR	LALJ	HRMNSS	DEG			ORBIT	HRMN	HRMN	STDN	S
DAYTIME THIR										ASC. NODE					
9393							010405	E155.6			9395	0533	0532	9397A	A
9394							025121	E129.0			9397	0641	0840	9397A	B
9395	0409	0457		9397A	A		043838	E102.2			9398	0848	1030	9398A	B
9396							062554	E075.4			9399	1035	1214	9399A	B
9397	0743	0832		9397A	B		081310	E048.6			9400	1218	1403	9400A	B
9398	0930	1019		9398A	B		100027	E021.7			9401	1407	1547	9401A	B
9399	1118	1206		9399A	B		114743	W005.1			9402	1550	1732	9403A	B
9400	1305	1353		9400A	B		133459	W031.9			9403	1733	1917	9403A	A
9401	1452	1541		9401A	B		152216	W058.7			9404	1918	2103	9404A	B
9402	1639	1728		9403A	B		170932	W085.6			9405	2108	2247	9405A	B
9403	1827	1915		9403A	A		185648	W112.4							
9404	2014	2101		9404A	B		204405	W139.2							
9405	2201	2245		9405A	B		223121	W166.0							
NIGHTTIME THIR										DESC. NODE					
9393							015740	W037.6			NEMS - SCR - ITPR				
9394	0324	0409		9397A	A		034456	W064.4			0534	0532	9397A	A	
9395	0457	0530		9397A	A		053213	W091.2			0641	0840	9397A	B	
9396	0644	0743		9397A	B		071929	W118.0			0848	1030	9398A	B	
9397	0832	0838		9397A	B		090646	W144.9			1035	1212	9399A	B	
9397	0849	0930		9398A	B						1218	1402	9400A	B	
9398	1019	1028		9398A	B		105402	W171.7			1407	1546	9401A	B	
9398	1035	1118		9399A	B						1551	1732	9403A	B	
9399	1206	1211		9399A	B		124118	E161.5			1732	1917	9403A	A	
9399	1218	1305		9400A	B						1918	2103	9404A	B	
9400	1353	1400		9400A	B		142835	E134.7			2108	2247	9405A	B	
9400	1407	1452		9401A	B										
9401	1550	1639		9403A	B		161551	E107.9							
9402	1733	1827		9403A	A		180308	E081.0							
9403	1917	2014		9404A	B		195024	E054.2							
9404	2108	2201		9405A	B		213740	E027.4							
9405							232457	E000.6							

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
12 NOVEMBER 1974

THIR										ESMR					
-----										-----					
		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H		
DATA	ON	OFF	+	ORBIT	D	GRID	DESC.	NUDE		DATA	ON	OFF	ORBIT	D	
ORBIT	HRMN	HRMN	STDN	S	LALJ	HRMNSS	DEG			ORBIT	HRMN	HRMN	STDN	S	
DAYTIME THIR										ASC. NODE					
9406							001838	E167.2		9409	0358	0556	9411A	A	
9407							020554	E140.4		9410	0557	0756	9410A	B	
9408	0357	0411		9411A	A		035310	E113.6		9411	0805	0943	9411A	B	
9409	0510	0555		9411A	A		054027	E086.7		9412	0948	1130	9412A	B	
9410	0658	0746		9410A	B		072743	E059.9		9413	1136	1317	9413A	B	
9411	0845	0933		9411A	B		091459	E033.1		9414	1322	1501	9414A	B	
9412	1032	1121		9412A	B		110216	E006.3		9415	1508	1645	9415A	B	
9413	1219	1308		9413A	B		124932	W020.6		9416	1652	1829	9416A	B	
9414	1407	1455		9414A	B		143648	W047.4		9417	1834	2015	9418A	B	
9415	1554	1642		9415A	B		162405	W074.2		9418	2019	2200	9418A	A	
9416	1741	1827		9416A	B		181121	W101.0		9419	2210	2350	9419A	B	
9417	1928	2013		9417A	B		195838	W127.8							
9418	2116	2158		9418A	B		214554	W154.6							
9419	2303	2349		9419A	B		235310	E178.6							
NIGHTTIME THIR										DESC. NODE					
9406							011213	W026.2		NEMS - SCR - ITPR					
9407							025929	W053.0		0358	0556		9411A	A	
9408	0411	0510		9411A	A		044646	W079.9		0556	0756		9410A	B	
9409	0559	0658		9410A	B		063402	W106.7		0805	0943		9411A	B	
9410	0746	0754		9410A	B		082119	W133.5		0948	1131		9412A	B	
9411	0805	0845		9411A	B					1136	1317		9413A	B	
9411	0933	0941		9411A	B		100835	W160.3		1322	1501		9414A	B	
9411	0948	1032		9412A	B					1506	1647		9415A	B	
9412	1121	1129		9412A	B		115551	E172.9		1652	1829		9416A	B	
9412	1136	1219		9413A	B					1834	2015		9417A	B	
9413	1308	1316		9413A	B		134308	E146.0		2019	2200		9418A	B	
9413	1322	1407		9414A	B					2204	2350		9419A	B	
9414	1506	1554		9415A	B		153024	E119.2							
9415	1652	1741		9416A	B		171740	E092.4							
9416	1834	1928		9417A	B		190457	E065.6							
9417	2019	2116		9418A	B		205213	E038.8							
9418	2204	2303		9419A	B		223930	E012.0							
9419	0000	0050		9422R	A		002646	W014.9							

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
13 NOVEMBER 1974**

THIR										ESMR						
DATA		11.5 + 6.7		INT	H	THIR	ASC.	AND			DATA		INT	H		
ORBIT	HRMN	HRMN	STDN	ORBIT	D	GRID	DESC.	NODE			ORBIT	ON	OFF	ORBIT	D	
				+	R	CORR	TIME	LONG			+	HRMN	HRMN	STDN	R	
				STDN	S	LALJ	HRMNSS	DEG			STDN				S	
DAYTIME THIR																
										ASC. NODE						
9420	0050	0139	9422R	A			012027	E151.7			9420	2354	0148	9422R	A	
9421	0237	0326	9421R	B			030743	E124.9			9421	0148	0346	9421R	B	
9422	0425	0513	9422R	B			045459	EU98.1			9422	0355	0533	9422R	B	
9423	0612	0700	9423A	B			064216	E071.3			9423	0543	0715	9423A	B	
9424	0759	0848	9424A	B			082932	E044.5			9424	0720	0859	9424A	B	
9425	0947	1035	9425A	B			101648	E017.7			9425	0903	1045	9425A	B	
9426	1134	1222	9426A	B			120405	W009.2			9426	1050	1230	9426A	B	
9427	1321	1410	9427A	B			135121	W036.0			9427	1234	1418	9427A	B	
9428	1508	1557	9428A	B			153838	W062.8			9428	1421	1601	9428A	B	
9429	1656	1744	9430A	B			172554	W089.7			9429	1606	1746	9430A	B	
9430	1843	1926	9430A	A			191310	W116.5			9430	1748	1928	9430A	A	
9431	2030	2118	9431A	B			210027	W143.3			9431	1938	2120	9431A	B	
9432	2217	2302	9432A	B			224743	W170.1			9432	2124	2305	9432A	B	
NIGHTTIME THIR																
										DESC. NODE						
9420	0139	0147	9422R	A			021402	W041.7			NEMS - SCR - ITPR					
9420	0148	0237	9421R	B							2350	0148	9422R	A		
9421	0326	0345	9421R	B			040119	W068.5			0148	0346	9421R	B		
9421	0355	0425	9422R	B							0355	0532	9422R	B		
9422	0513	0530	9422R	B			054835	W095.3			0543	0715	9423A	B		
9422	0537	0612	9423A	B							0720	0859	9424A	B		
9423	0700	0713	9423A	B			073551	W122.1			0904	1045	9425A	B		
9423	0719	0759	9424A	B							1050	1230	9426A	B		
9424	0848	0857	9424A	B			092308	W149.0			1234	1417	9427A	B		
9424	0904	0947	9425A	B							1422	1602	9428A	B		
9425	1050	1134	9426A	B							1606	1747	9430A	B		
9426	1222	1227	9426A	B			125741	E157.4			1938	2120	9431A	B		
9425	1035	1043	9425A	B			111024	W175.8			2124	2304	9432A	B		
9425	1050	1134	9426A	B							1748	1928	9430A	A		
9426	1222	1227	9426A	B			125741	E 57.4			1938	2120	9431A	B		
9426	1234	1321	9427A	B							2124	2304	9432A	B		
9427	1422	1508	9428A	B			144457	E130.6								
9428	1606	1656	9430A	B			163213	E103.8								
9429	1748	1843	9430A	A			181930	E077.0								
9430	1938	2030	9431A	B			200646	E050.1								
9431	2124	2217	9432A	B			215402	E023.3								
9432							234119	W003.5								

\*NO 6.7 DATA

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
14 NOVEMBER 1974**

THIR										ESMR				
DATA	ON	OFF	INT	H	THIR	ASC.	AND	DESC.	NUDE	DATA	ON	OFF	INT	H
ORBIT	HRMN	HRMN	ORBIT	D	GRID	TIME	LONG	TIME	LONG	ORBIT	HRMN	HRMN	ORBIT	D
			+	R	CORR	HRMNS	DEC			+			+	R
			STDN	S	LALD					STDN			STDN	S
DAYTIME THIR														
										ASC. NODE				
9433						003459	E163.1			9436	0414	0612	9437A	A
9434						022216	E136.3			9437	0612	0812	9437A	B
9435	0414	0428	9437A	A		040932	E109.5			9438	0818	1000	9438A	B
9436	0526	0611	9437A	A		055648	E082.7			9439	1005	1150	9439A	B
9437	0714	0802	9437A	B		074405	E055.8			9440	1156	1334	9440A	B
9438	0901	0949	9438A	B		093121	E029.0			9441	1339	1518	9441A	B
9439	1048	1137	9439A	B		111838	E002.2			9442	1522	1703	9443A	B
9440	1236	1324	9440A	B		130554	W024.7			9443	1703	1843	9443A	A
9441	1423	1511	9441A	B		145310	W051.5			9444	1851	2033	9444A	B
9442	1610	1659	9443A	B		164027	W078.3			9445	2038	2217	9445A	B
9443	1757	1840	9443A	A		162743	W105.1							
9444	1945	2031	9444A	B		201459	W131.9							
9445	2132	2215	9445A	B		220216	W158.8							
9446						234932	E174.5							
NIGHTTIME THIR														
										DESC. NODE				
9433						012835	W030.3			NEMS - SCR - ITPR				
9434						031552	W057.1			0414	0612		9437A	A
9435	0428	0526	9437A	A		050308	W084.0			0612	0812		9437A	B
9436	0615	0714	9437A	B		065024	W110.8			0819	1000		9438A	B
9437	0802	0809	9437A	B		083741	W137.6			1005	1150		9439A	B
9437	0819	0901	9438A	B						1155	1335		9440A	B
9438	0949	0958	9438A	B		102457	W164.4			1339	1517		9441A	B
9438	1005	1048	9439A	B						1522	1704		9443A	B
9439	1137	1149	9439A	B		121213	E168.8			1704	1842		9443A	A
9439	1155	1236	9440A	B						1851	2033		9444A	B
9440	1324	1333	9440A	B		135930	E142.0			2038	2217		9445A	B
9440	1339	1423	9441A	B										
9441	1522	1610	9443A	B		154646	E115.1							
9442	1703	1757	9443A	A		173402	E088.3							
9443	1851	1945	9444A	B		192119	E061.5							
9444	2038	2132	9445A	B		210835	E034.7							
9445						225552	E007.9							
9446						004308	W019.0							

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
15 NOVEMBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT	H	THIR	ASC. AND		INT	H	D				
	ON	OFF	ORBIT	D	GRID	DESC.	NODE				ORBIT	D		
	HRMN	HRMN	STDN	S	LALD	TIME	LONG	+	R	S				
	HRMN	HRMN	STDN	S	LALD	HRMNSS	DEG	STDN						
DAYTIME THIR										ASC. NODE				
9447	0141	0155	9451A	A		013648	E147.7	9448	0142	0340	9451A	A		
9448	0254	0339	9451A	A		032405	E120.8	9450	0528	0727	9450A	B		
9449						051121	E094.0	9451	0735	0915	9451A	B		
9450	0628	0717	9450A	B		065838	E067.2	9452	0920	1101	9452A	B		
9451	0815	0904	9451A	B		084554	E040.4	9453	1106	1248	9453A	B		
9452	1003	1051	9452A	B		103310	E013.6	9454	1252	1434	9454A	B		
9453	1150	1239	9453A	B		122027	W013.3	9455	1440	1618	9455A	B		
9454	1337	1426	9454A	B		140743	W040.1	9456	1625	1804	9457A	B		
9455	1525	1613	9455A	B		155459	W066.9	9457	1803	1943	9457A	A		
9456	1712	1800	9457A	B		174216	W093.8	9458	1952	2135	9458A	B		
9457	1859	1938	9457A	A		192932	W120.6	9459	2140	2322	9459A	B		
*9458	2046	2132	9458A	B		211648	W147.4							
*9459	2234	2301	9459A	B		230405	W174.2							
*9459	2308	2319	9459A	B										
*DIFFERENT 6.7 TIMES														
9458	2052	2130	9458A	B										
9459	2234	2319	9459A	B										
NIGHTTIME THIR										DESC. NODE				
9447	0155	0254	9451A	A		023024	W045.8	NEMS - SCR - ITPR						
9448						041741	W072.6	0142	0340	9451A	A			
9449	0524	0628	9450A	B		060457	W099.4	0528	0727	9450A	B			
9450	0717	0726	9450A	B		075213	W126.2	0735	0915	9451A	B			
9450	0734	0815	9451A	B				0920	1101	9452A	B			
9451	0904	0914	9451A	B		093930	W153.0	1106	1248	9453A	B			
9451	0920	1003	9452A	B				1253	1434	9454A	B			
9452	1051	1059	9452A	B		112646	W179.9	1439	1619	9455A	B			
9452	1106	1150	9453A	B				1624	1803	9457A	B			
9453	1253	1337	9454A	B		131403	E153.3	1803	1944	9457A	A			
9454	1439	1525	9455A	B		150119	E126.5	1952	2135	9458A	B			
9455	1624	1712	9457A	B		164835	E099.7	2140	2321	9459A	B			
9456	1803	1859	9457A	A		183552	E072.9							
*9457	1953	2046	9458A	B		202308	E046.0							
9458	2140	2234	9459A	B		221024	E019.2							
9459						235741	W007.6							
*NO 6.7 DATA														

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**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
16 NOVEMBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT	H	THIR	ASC. AND	DESC. NUDE		DATA ORBIT	UN	OFF	INT	H	
	ON	OFF	ORBIT	D	GRID	TIME	LUNG	HRMN		HRMN	HRMN	ORBIT	D	
	HRMN	HRMN	STDN	S	LALJ	HRMNSS	DEG		ORBIT	HRMN	HRMN	STDN	S	
	DAYTIME THIR					ASC. NUDE								
9460						005121	E159.0		9461	0103	0115	9462R	A	
9461	0208	0257	9462R	A		023837	E132.2		9461	0140	0301	9462R	A	
9462	0355	0444	9462R	B		042554	E105.4		9462	0301	0408	9462R	B	
9463	0543	0631	9463R	B		061310	EU78.6		9462	0421	0500	9462R	B	
9464	0730	0818	9464A	B		080027	EU51.7		9463	0508	0652	9463R	B	
9465	0917	1006	9465A	B		094743	EU24.9		9464	0657	0828	9464A	B	
*9466	1105	1153	9466A	B		113459	W001.9		9465	0833	1017	9465A	B	
9467	1252	1340	9467A	B		132216	W028.8		9466	1021	1206	9466A	B	
9468	1439	1528	9468A	B		150932	W055.6		9467	1212	1349	9467A	B	
9469	1626	1715	9470A	B		165648	W082.4		9468	1354	1535	9468A	B	
9470	1814	1901	9470A	A		184405	W109.2		9469	1538	1720	9470A	B	
9471	2001	2047	9471A	B		203121	W136.0		9470	1720	1903	9470A	A	
9472	2148	2232	9472A	B		221837	W162.8		9471	1904	2049	9471A	B	
									9472	2054	2234	9472A	B	

\*DIFFERENT 6.7 TIMES  
9466 1112 1153 9466A B

NIGHTTIME THIR										DESC. NUDE					NEMS - SCR - ITPR				
DATA ORBIT	11.5 + 6.7		INT	H	THIR	ASC. AND	DESC. NUDE		DATA ORBIT	UN	OFF	INT	H						
	ON	OFF	ORBIT	D	GRID	TIME	LUNG	HRMN		HRMN	HRMN	ORBIT	D						
	HRMN	HRMN	STDN	S	LALJ	HRMNSS	DEG		ORBIT	HRMN	HRMN	STDN	S						
9460	0139	0208	9462R	A		014457	W034.4		0103	0301	9462R	A							
9461	0300	0355	9462R	B		033214	W061.2		0301	0500	9462R	B							
9462	0444	0458	9462R	B		051930	W088.0		0508	0651	9463R	B							
9462	0508	0543	9463R	B					0656	0829	9464A	B							
9463	0631	0648	9463R	B		070646	W114.9		0833	1017	9465A	B							
9463	0656	0730	9464A	B					1022	1206	9466A	2							
9464	0818	0827	9464A	B		085403	W141.7		1212	1349	9467A	B							
9464	0833	0917	9465A	B					1354	1534	9468A	B							
9465	1006	1015	9465A	B		104119	W168.5		1539	1720	9470A	B							
*9465	1021	1105	9466A	B					1720	1903	9470A	A							
9466	1153	1203	9466A	B		122835	E164.7		1904	2049	9471A	B							
9466	1212	1252	9467A	B					2054	2234	9472A	B							
9467	1340	1348	9467A	B		141552	E137.9												
9467	1354	1459	9468A	B															
9468	1539	1626	9470A	B		160308	E111.0												
9469	1720	1814	9470A	A		175024	E084.2												
9470	1904	2001	9471A	B		193741	E057.4												
9471	2054	2148	9472A	B		212457	E030.6												
9472						231214	E003.8												

\*DIFFERENT 6.7 TIMES  
9465 1021 1053 9466A B



TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
17 NOVEMBER 1974

THIR										ESMR				
DATA ORBIT		11.5 + 6.7 ON OFF HRMN HXMN		INT ORBIT + STDN	H D R S	THIR GRID CORR LALD	ASC. AND DESC. NODE TIME LONG HRMNSS DEG		DATA ORBIT	UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	
DAYTIME THIR					ASC. NODE									
9473							000603	E170.3	9474	0019	0218	9475R	A	
9474	0123	0211		9475R	A		015319	E143.5	9475	0218	0418	9475R	B	
9475	0310	0358		9475R	B		034036	E116.7	9476	0425	0607	9476R	B	
9476	0457	0546		9476R	B		052752	E089.9	9477	0611	0747	9477A	B	
9477	0644	0733		9477A	B		071509	E063.0	9478	0751	0932	9478A	B	
9478	0832	0920		9478A	B		090225	E036.2	9479	0936	1115	9479A	B	
9479	1019	1107		9479A	B		104941	E009.4	9480	1120	1310	9480A	B	
9480	1206	1255		9480A	B		123658	W017.4	9481	1315	1448	9481A	B	
9481	1354	1442		9481A	B		142414	W044.2	9482	1453	1635	9482A	B	
9482	1541	1629		9482A	B		161131	W071.1	9483	1639	1821	9483A	B	
9483	1728	1817		9483A	B		175847	W097.9	9484	1825	2003	9484A	B	
9484	1915	2001		9484A	B		194603	W124.7	9485	2007	2151	9485A	B	
9485	2103	2149		9485A	B		213320	W151.5	9486	2156	2337	9486A	B	
9486	2250	2336		9486A	B		232036	W178.3						
NIGHTTIME THIR					DESC. NODE					NEMS - SCR - ITPR				
9473	0024	0123		9475R	A		005939	W023.1	0020	0218		9475R	A	
9474	0218	0310		9475R	B		024656	W049.9	0218	0418		9475R	B	
9475	0358	0415		9475R	B		043412	W076.7	0424	0606		9476R	B	
9476	0425	0457		9476R	B				0611	0747		9477A	B	
9476	0546	0604		9476R	B		062128	W103.5	0752	0932		9478A	B	
9476	0611	0644		9477A	B				0937	1116		9479A	B	
9477	0733	0745		9477A	B		080845	W130.4	1120	1310		9480A	B	
9477	0752	0832		9478A	B				1315	1449		9481A	B	
9478	0920	0930		9478A	B		095601	W157.2	1453	1634		9482A	B	
9478	0954	1019		9479A	B				1639	1821		9483A	B	
9479	1107	1114		9479A	B		114318	E176.0	1826	2003		9484A	B	
9479	1120	1206		9480A	B				2007	2152		9485A	B	
9480	1255	1309		9480A	B		133034	E149.2	2156	2337		9486A	B	
9480	1315	1354		9481A	B									
9481	1453	1541		9482A	B		151750	E122.4						
9482	1639	1728		9483A	B		170507	E095.6						
9483	1825	1915		9484A	B		185223	E068.7						
9484	2007	2103		9485A	B		203940	E041.9						
9485	2157	2250		9486A	B		222656	E015.1						
9486	0007	0037		9486R	A		001412	W011.7						
*DIFFERENT 6.7 TIMES														
9478	0937	1019		9479A	B									

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
18 NOVEMBER 1974**

THIR										ESMR									
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H						
ORBIT	ON	OFF		ORBIT	D	GRID	DESC.	NODE		DATA	ON	OFF	ORBIT	D					
	HRMN	HRMN	STDN	+	R	CORR	TIME	LUNG		ORBIT	HRMN	HRMN	+	R					
				S	LALJ	HRMNS	DEG			STDN			S						
DAYTIME THIR										ASC. NODE									
9487	0037	0126		9489R	A		010753	E154.8		9487	0008	0206	9489R	A					
9488							025509	E128.0		9489	0318	0517	9489R	B					
9489	0412	0500		9489R	B		044225	E101.2		9490	0524	0714	9491A	B					
9490	0559	0647		9491A	B		062942	E074.4		9492	0855	1034	9492A	B					
9491	0746	0835		9491A	A		081658	E047.6		9493	1039	1225	9493A	B					
9492	0933	1022		9492A	B		100415	E020.8		9494	1229	1405	9494A	B					
9493	1121	1209		9493A	B		115131	W006.1		9495	1409	1549	9495A	B					
9494	1308	1356		9494A	B		133847	W032.9		9496	1553	1733	9496A	B					
9495	1455	1544		9495A	B		152604	W059.7		9497	1738	1915	9497A	B					
9496	1643	1731		9496A	B		171320	W086.5		9498	1920	2101	9498A	B					
9497	1830	1914		9497A	B		190037	W113.3		9499	2107	2252	9499A	B					
9498	2017	2059		9498A	B		204753	W140.2											
9499	2204	2249		9499A	B		223509	W167.0											
NIGHTTIME THIR										DESC. NODE					NEMS - SCR - ITPR				
9487	0126	0203		9489R	A		020129	W038.5		0008	0206		9489R	A					
9488	0318	0412		9489R	B		034845	W065.4		0318	0518		9489R	B					
9489	0500	0516		9489R	B		053602	W092.2		0524	0714		9491A	B					
9489	0524	0559		9491A	B					0855	1034		9492A	B					
9490	0647	0712		9491A	B		072318	W119.0		1039	1224		9493A	B					
9490	0714	0746		9491A	A					1230	1404		9494A	B					
9491	0835	0844		9491A	A		091035	W145.8		1409	1549		9495A	B					
9491	0855	0933		9492A	B					1554	1733		9496A	B					
9492	1022	1032		9492A	B		105751	W172.6		1738	1916		9497A	B					
9492	1039	1121		9493A	B					1920	2102		9498A	B					
9493	1209	1223		9493A	B		124507	E160.6		2107	2251		9499A	B					
9493	1229	1308		9494A	B														
9494	1356	1402		9494A	B		143224	E133.7											
9494	1409	1455		9495A	B														
9495	1557	1643		9496A	B		161940	E106.9											
9496	1738	1830		9497A	B		180656	E080.1											
9497	1920	2017		9498A	B		195413	E053.3											
9498	2107	2204		9499A	B		214129	E026.5											
9499							232846	W000.4											

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
19 NOVEMBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		TIME	LONG DEG	DATA ORBIT	ON OFF		INT ORBIT + STDN	H D R S
	HRMN	HRMN				HRMN	HRMN							
DAYTIME THIR														
9500						002226	E166.2			9503	0402	0600	9504A	A
9501						020942	E139.4			9504	0600	0800	9504A	B
9502						030659	E112.6			9505	0806	0954	9505A	B
9503	0513	0559	9504A	A		054415	E085.7			9506	0958	1138	9506A	B
9504	0701	0749	9504A	B		073131	E058.9			9507	1144	1322	9507A	B
9505	0848	0936	9505A	B		091848	E032.1			9508	1327	1505	9508A	B
9506	1035	1124	9506A	B		110604	E005.3			9509	1510	1650	9509A	B
9507	1222	1311	9507A	B		125320	W021.5			9510	1655	1831	9510A	B
9508	1410	1458	9508A	B		144037	W048.3			9511	1837	2020	9511A	B
9509	1557	1646	9509A	B		162753	W075.2			9512	2025	2205	9512A	B
9510	1744	1831	9510A	B		181510	W102.0							
9511	1932	2018	9511A	B		200226	W128.8							
9512	2119	2203	9512A	B		214943	W155.6							
9513						233659	E177.6							
NIGHTTIME THIR														
9500						011602	W027.2			NEMS - SCR - ITPR				
9501						030319	W054.0			0402	0600		9504A	A
9502	0415	0513	9504A	A		045035	W080.8			0600	0759		9504A	B
9503	0602	0701	9504A	B		063751	W107.6			0806	0954		9505A	B
9504	0749	0759	9504A	B		082508	W134.5			0958	1139		9506A	B
9504	0806	0848	9505A	B						1144	1322		9507A	B
9505	0936	0950	9505A	B		101224	W161.3			1327	1506		9508A	B
9505	0957	1035	9506A	B						1511	1650		9509A	B
9506	1124	1137	9506A	B		115941	E171.9			1655	1831		9510A	B
9506	1144	1222	9507A	B						1837	2020		9511A	B
9507	1311	1320	9507A	B		134657	E145.1			2025	2204		9512A	B
9507	1327	1410	9508A	B										
9508	1511	1557	9509A	B		153413	E118.3							
9509	1655	1744	9510A	B		172130	E091.5							
9510	1837	1932	9511A	B		190846	E064.6							
9511	2025	2119	9512A	B		205603	E037.8							
9512						224319	E011.0							
9513	0049	0054	9516R	A		003035	W015.8							
*DIFFERENT 6.7 TIMES														
9504	0749	0756	9504A	B										

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
20 NOVEMBER 1974**

THIR										ESMR											
DATA ORBIT		11.5 + 6.7		INT ORBIT	H	THIR	ASC. AND			DATA ORBIT		ON	OFF	INT ORBIT	H						
HRMN	HRMN	STDN	+	R	S	CRID	TIME	NODE		HRMN	HRMN	HRMN	HRMN	STDN	S						
DAYTIME THIR										ASC. NODE											
NIGHTTIME THIR										DESC. NODE						NEMS - SCR - ITPR					
9514	0054	0142		9515R	A		012415	E150.7		9514	0049	0247		9516R	A						
9515							031132	E123.9		9516	0335	0534		9516R	B						
9516	0428	0517		9516R	B		045848	E097.1		9517	0542	0710		9518A	B						
9517	0615	0704		9518A	B		064605	E070.3		9518	0710	0905		9518A	A						
9518	0803	0851		9518A	A		083321	E043.5		9519	0906	1046		9519A	B						
9519	0950	1038		9519A	B		102037	E016.7		9520	1051	1238		9520A	B						
9520	1137	1226		9520A	B		120754	W010.2		9521	1243	1420		9521A	B						
9521	1324	1413		9521A	B		135510	W037.0		9522	1425	1605		9522A	B						
9522	1512	1600		9522A	B		154227	W063.8		9523	1610	1749		9523A	B						
9523	1659	1747		9523A	B		172943	W090.6		9524	1755	1936		9525A	B						
9524							191659	W117.4		9525	1937	2122		9525A	A						
9525	2033	2120		9525A	A		210416	W144.3		9526	2123	2306		9526A	B						
9526	2221	2304		9526A	B		225132	W171.1													
9514	0142	0241		9516R	A		021752	W042.6		0048	0247			9516R	A						
9515	0335	0428		9516R	B		040508	W069.5		0335	0534			9516R	B						
9516	0517	0533		9516R	B		055225	W096.3		0542	0711			9518A	B						
9516	0542	0615		9518A	B					0710	0906			9518A	A						
9517	0710	0803		9518A	A		073941	W123.1		0906	1046			9519A	B						
9518	0851	0904		9518A	A		092657	W149.9		1052	1238			9520A	B						
9518	0906	0950		9519A	B					1243	1420			9521A	B						
9519	1038	1044		9519A	B		111414	W176.7		1425	1605			9522A	B						
9519	1051	1137		9520A	B					1610	1749			9523A	B						
9520	1226	1236		9520A	B		130130	E156.4		1755	1936			9525A	B						
9520	1243	1324		9521A	B					2123	2307			9526A	B						
9521	1425	1512		9522A	B		144847	E129.6													
9522	1610	1659		9523A	B		163603	E102.8													
9523							182320	E076.0													
9524	1937	2033		9525A	A		201036	E049.2													
9525	2123	2221		9526A	B		215752	E022.4													
9526							234509	W004.5													

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
21 NOVEMBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALD	ASC. AND DESC. NODE		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	ON	OFF				ASC.	DESC.							
DAYTIME THIR														
9527						003849	E162.1			9530	0418	0616	9531A	A
9528						022605	E135.5			9531	0615	0815	9531A	B
9529	0417	0431	9531A	A		041321	E108.5			9532	0824	1004	9532A	B
9530	0530	0615	9531A	A		060038	E081.6			9533	1009	1150	9533A	B
9531	0717	0806	9531A	B		074754	E054.8			9534	1155	1340	9534A	B
9532	0904	0953	9532A	B		093511	E028.0			9535	1345	1521	9535A	B
9533	1052	1140	9533A	B		112227	E001.2			9536	1525	1705	9536A	B
9534	1239	1327	9534A	B		130943	W025.6			9537	1710	1852	9537A	B
9535	1426	1515	9535A	B		145700	W052.4			9538	1856	2040	9538A	B
9536	1613	1702	9536A	B		164416	W079.3			9539	2045	2221	9539A	B
9537	1801	1849	9537A	B		183133	W106.1							
9538	1948	2036	9538A	B		201549	W132.9							
9539	2135	2219	9539A	B		220605	W159.7							
9540						235322	E173.5							
NIGHTTIME THIR														
9527						013225	W031.3			NEMS - SCR - ITPR				
9528						031942	W058.1			0418	0616		9531A	A
9529	0431	0530	9531A	A		050658	W084.9			0616	0815		9531A	B
9530	0618	0717	9531A	B		065414	W111.7			0824	1004		9532A	B
9531	0806	0814	9531A	B		084131	W138.6			1009	1150		9533A	B
9531	0814	0904	9532A	B						1155	1340		9534A	B
9532	0953	1001	9532A	B		102847	W165.4			1345	1521		9535A	B
9532	1009	1052	9533A	B						1526	1706		9536A	B
9533	1140	1148	9533A	B		121604	E167.8			1711	1852		9537A	B
9533	1155	1239	9534A	B						1956	2040		9538A	B
9534	1345	1426	9535A	B		140320	E141.0			2045	2221		9539A	B
9535	1526	1613	9536A	B		155036	E114.2							
9536	1711	1801	9537A	B		173753	E087.3							
9537	1857	1948	9538A	B		192509	E060.5							
9538	2046	2135	9539A	B		211226	E033.7							
9539						225942	E006.9							
9540						004658	W019.9							

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
22 NOVEMBER 1974**

THIR										ESMR				
		11.5 + 6.7		INT	H	THIR	ASC. AND					INT	H	
DATA	ON	OFF	ORBIT	D	GRID	DESC. NODE	TIME	LONG	DATA	ON	OFF	ORBIT	D	
ORBIT	HRMN	HRMN	STDN	R	CORR	HRMNSS	DEG		ORBIT	HRMN	HRMN	STDN	S	
DAYTIME THIR														
										ASC. NODE				
9541						014038	E146.7		9543	0408	0607	9545A	A	
9542						032755	E119.8		9545	0717	0917	9545A	B	
9543	0444	0533	9545A	A		051511	E093.0		9546	0925	1110	9546A	B	
9544						070227	E066.2		9547	1115	1251	9547A	B	
9545	0819	0907	9545A	B		084944	E039.4		9548	1256	1438	9548A	B	
*9546	1006	1055	9546A	B		103700	E012.6		9549	1443	1620	9549A	B	
9547	1153	1242	9547A	B		122416	W014.3		9550	1625	1807	9550A	B	
9548	1341	1429	9548A	B		141133	W041.1		9551	1812	1948	9551A	B	
9549	1528	1616	9549A	B		155849	W067.9		9552	1952	2139	9552A	B	
9550	1715	1804	9550A	B		174606	W094.7		9553	2146	2325	9553A	B	
9551	1902	1946	9551A	B		193322	W121.5							
9552	2050	2136	9552A	B		212038	W148.4							
9553	2237	2323	9553A	B		230754	W175.2							
*DIFFERENT 6.7 TIMES														
9546	1014	1055	9546A	B										
NIGHTTIME THIR														
										DESC. NODE				
										NEMS - SCR - ITPR				
9541						023415	W046.7		0408	0607		9545A	A	
9542	0408	0444	9545A	A		042131	W073.6		0717	0916		9545A	B	
9543	0533	0605	9545A	A		060848	W100.4		0925	1110		9546A	B	
9544	0720	0819	9545A	B		075604	W127.2		1115	1251		9547A	B	
9545	0907	0915	9545A	B		094320	W154.0		1256	1438		9548A	B	
*9545	0925	1006	9546A	B					1443	1620		9549A	B	
9546	1055	1106	9546A	B		113037	E179.2		1626	1808		9550A	B	
9546	1115	1153	9547A	B					1812	1948		9551A	B	
9547	1242	1249	9547A	B		131753	E152.3		1952	2139		9552A	B	
9547	1256	1341	9548A	B					2144	2325		9553A	B	
9548	1429	1436	9548A	B		150510	E125.5							
9548	1444	1528	9549A	B										
9549	1626	1715	9550A	B		165226	E098.7							
9550	1812	1902	9551A	B		183942	E071.9							
9551	1953	2050	9552A	B		202659	E045.1							
9552	2145	2237	9553A	B		221415	E018.2							
9553						000132	W008.6							
*NO 6.7 DATA														

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
23 NOVEMBER 1974**

THIR					ESMR									
DATA ORBIT	11.5 ON HRMN	+ 6.7 OFF HRMN	INT ORRIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. TIME HRMNSS	AND NODE LUNG DEG	DATA ORBIT	UN HRMN	OFF HRMN	INT ORRIT + STDN	H D R S		
DAYTIME THIR					ASC. NODE									
9554	0107	0113	9556R	A		005511	E158.0	9555	0107	0305	9556R	A		
9555	0212	0258	9556R	A		024226	E131.2	9556	0305	0503	9556R	B		
9556	0359	0447	9556R	B		042944	E104.4	9557	0513	0655	9557R	B		
9557	0546	0635	9557R	B		061700	E077.5	9558	0701	0835	9558A	B		
9558	0733	0822	9558A	B		080417	E050.7	9559	0840	1022	9559A	B		
9559	0921	1009	9559A	B		095133	E023.9	9560	1027	1205	9560A	B		
9560	1108	1156	9560A	B		113850	W002.9	9561	1210	1354	9561A	B		
9561	1255	1344	9561A	B		132606	W029.7	9562	1359	1535	9562A	B		
9562	1442	1531	9562A	B		151322	W056.5	9563	1540	1726	9564A	B		
9563	1630	1718	9564A	B		170039	W083.4	9564	1727	1909	9564A	A		
9564	1817	1905	9564A	A		184755	W110.2	9565	1909	2052	9565A	B		
9565	2004	2050	9565A	B		203512	W137.0	9566	2056	2239	9566A	B		
9566	2151	2237	9566A	B		222228	W163.8							
NIGHTTIME THIR					DESC. NODE					NEMS - SCR - ITPR				
9554	0113	0212	9556R	A		014848	W035.4	0107	0305	9556R	1			
9555	0305	0359	9556R	B		033604	W062.2	0305	0503	9556R	B			
9556	0447	0503	9556R	B		052321	W089.0	0513	0656	9557R	B			
9556	0513	0546	9557R	B				0701	0835	9558A	B			
9557	0635	0655	9557R	B		071037	W115.8	0840	1022	9559A	B			
9557	0701	0733	9558A	B				1027	1206	9560A	B			
9558	0822	0829	9558A	B		085754	W142.7	1210	1354	9561A	B			
9558	0840	0921	9559A	B				1359	1536	9562A	B			
9559	1009	1020	9559A	B		104510	W169.5	1540	1726	9564A	B			
9559	1027	1108	9560A	B				1727	1909	9564A	A			
9560	1156	1204	9560A	B		123227	E163.7	1909	2052	9565A	B			
9560	1211	1255	9561A	B				2056	2238	9566A	B			
9561	1344	1352	9561A	B		141943	E136.9							
9561	1359	1442	9562A	B										
9562	1540	1630	9564A	B		160659	E110.1							
9563	1718	1724	9564A	B		175416	E083.2							
9563	1727	1817	9564A	A										
9564	1909	2004	9565A	B		194132	E056.4							
9565	2057	2151	9566A	B		212849	E029.7							
9566						231605	E002.8							

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
24 NOVEMBER 1974**

THIR										ESMR				
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			INT		H		
ORBIT	HRMN	HRMN	HRMN	ORBIT	D	GRID	DESC.	NODE	TIME	LONG	ORBIT	D		
				+	R	CORR					+	R		
				STDN	S	LALJ	HRMNSS	DEG			STDN	S		
									DATA	ON	OFF			
									ORBIT	HRMN	HRMN			
DAYTIME THIR														
9567							000946	E169.4	9571	0614	0752	9572A	B	
9568							015703	E142.6	9572	0752	0940	9572A	A	
9569							034419	E115.7	9573	0940	1126	9573A	B	
9570							053136	E088.9	9574	1131	1310	9574A	B	
9571	0648	0736		9572A	B		071852	E062.1	9575	1315	1451	9575A	B	
9572	0835	0924		9572A	A		090608	E035.3	9576	1458	1637	9576A	B	
9573	1022	1111		9573A	B		105325	E088.5	9577	1643	1820	9577A	B	
*9574	1213	1258		9574A	B		124041	W018.3	9578	1824	2010	9578A	B	
9575	1357	1445		9575A	B		142758	W045.2	9579	2015	2152	9579A	B	
9576	1544	1628		9576A	B		161514	W072.0	9580	2157	2340	9580A	B	
9577	1731	1817		9577A	B		180230	W098.8						
9578	1919	2007		9578A	B		194947	W125.6						
9579	2106	2151		9579A	B		213703	W152.4						
9580	2253	2338		9580A	B		232420	W179.3						
*DIFFERENT 6./ TIMES														
9574	1210	1258		9574A	B									
NIGHTTIME THIR														
9567							010323	W024.0	NEMS - SCR - ITPR					
9568							025040	W050.8	0614	0752		9572A	B	
9569							043756	W077.7	0752	0940		9572A	A	
9570	0614	0648		9572A	B		062512	W104.5	0940	1127		9573A	B	
9571	0736	0751		9572A	B		081229	W131.3	1132	1310		9574A	B	
9571	0753	0835		9572A	A				1315	1451		9575A	B	
9572	0924	0938		9572A	A		095945	W158.1	1458	1638		9576A	B	
9572	0940	1022		9573A	B				1643	1819		9577A	B	
9573	1111	1125		9573A	B		114702	E175.1	1824	2011		9578A	B	
*9573	1132	1154		9574A	B				2015	2152		9579A	B	
9574	1315	1357		9575A	B		133418	E148.2	2157	2340		9580A	B	
9575	1445	1451		9575A	B		152135	E121.4						
9575	1458	1544		9576A	B									
9576	1643	1731		9577A	B		170851	E094.9						
9577	1824	1919		9578A	B		185607	E067.8						
9578	2015	2106		9579A	B		204324	E041.0						
9579	2158	2253		9580A	B		225040	E014.2						
*9580	2342	0041		9583R	A		001757	W012.7						
*DIFFERENT 6./ TIMES														
9573	1132	1210		9574A	B									
9580	2346	0041		9583R	A									



**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
25 NOVEMBER 1974**

THIR										ESMR				
DATA ORBIT	11.5 + 6.7		INT ORBIT + STDN	H D R S	THIR GRID CORR LALJ	ASC. AND DESC. NODE		DATA ORBIT	UN HRMN	OFF HRMN	INT ORBIT + STDN	H D R S		
	ON HRMN	OFF HRMN				TIME HRMNSS	LONG DEG							
DAYTIME THIR					ASC. NODE									
9581	0041	0129	9583R	A	011136	E153.9	9581	2340	0141	9583R	A			
9582					025952	E127.1	9584	0529	0710	9585A	A			
9583					044609	E100.3	9585	0703	0849	9585A	B			
9584	0602	0651	9585A	A	063325	E073.5	9586	0857	1041	9586A	B			
9585	0750	0838	9585A	B	082042	E046.6	9587	1047	1222	9587A	B			
9586	0937	1025	9586A	B	100758	E019.8	9588	1227	1410	9588A	B			
9587	1124	1213	9587A	B	115515	W007.0	9589	1415	1551	9589A	B			
9588	1311	1400	9588A	B	134231	W033.8	9590	1556	1738	9590A	B			
9589	1459	1547	9589A	B	152947	W060.6	9591	1743	1920	9591A	B			
9590	1646	1734	9590A	B	171704	W087.4	9592	1925	2108	9592A	B			
9591	1833	1918	9591A	B	190420	W114.3	9593	2113	2255	9593A	B			
9592	2020	2106	9592A	B	205137	W141.1								
9593	2208	2254	9593A	B	223853	W167.9								
NIGHTIME THIR					DESC. NODE			NEMS - SCR - IIPR						
9581	0129	0140	9583R	A	020513	W039.5	2340	0141	9583R	A				
9582					035229	W066.3	0529	0710	9585A	A				
9583	0529	0602	9585A	A	053946	W093.1	0649	0848	9585A	B				
9584	0651	0708	9585A	A	072702	W120.0	0857	1042	9586A	B				
9584	0651	0750	9585A	B			1047	1227	9587A	B				
9585	0838	0847	9585A	B	091419	W146.8	1227	1410	9588A	B				
9585	0857	0937	9586A	B			1415	1551	9589A	B				
9586	1025	1040	9586A	B	110135	W173.6	1556	1738	9590A	B				
9586	1047	1124	9587A	B			1743	1920	9591A	B				
9587	1213	1219	9587A	B	124851	E159.6	1925	2108	9592A	B				
9587	1227	1311	9588A	B			2113	2255	9593A	B				
9588	1415	1459	9589A	B	143608	E132.7								
9589	1556	1646	9590A	B	162324	E106.0								
9590	1743	1833	9591A	B	181041	E079.2								
9591	1925	2020	9592A	B	195757	E052.3								
9592	2113	2208	9593A	B	214514	E025.5								
9593					233230	W001.3								

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**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
26 NOVEMBER 1974**

THIR						ESMR											
DATA		11.5 + 6.7		INT	H	THIR		ASC. AND		DATA		INT		H			
ORBIT	ON	OFF	HRMN	HRMN	STDN	D	GRID	DESC.	NODE	ON	OFF	HRMN	HRMN	STDN	D		
						R	CORR	TIME	LONG						R		
						S	LALJ	HRMNS	DEG						S		
DAYTIME THIR						ASC. NODE											
9594								002609	E165.3	9595	0040	0238	9596R	A			
9595	0142	0231			9596R	A		021326	E138.5	9596	0238	0437	9596R	B			
9596	0330	0418			9596R	B		040042	E111.6	9597	0444	0627	9597R	B			
9597	0517	0605			9597R	B		054759	E084.8	9598	0632	0810	9598A	B			
9598	0704	0753			9598A	B		073515	E058.0	9599	0815	0953	9599A	B			
9599	0851	0940			9599A	B		092231	E031.2	9600	0958	1138	9600A	B			
9600	1039	1127			9600A	B		110948	E004.4	9601	1143	1322	9601A	B			
9601	1226	1314			9601A	B		125704	W022.5	9602	1330	1504	9602A	B			
9602	1413	1502			9602A	B		144421	W049.3	9603	1514	1655	9603A	B			
9603	1600	1649			9603A	B		163137	W076.1	9604	1700	1838	9604A	B			
9604	1748	1836			9604A	B		181853	W102.9	9605	1843	2021	9605A	B			
9605	1935	2019			9605A	B		200610	W129.7	9606	2027	2211	9606A	B			
9606	2122	2210			9606A	B		215326	W156.5	9607	2216	2358	9607A	B			
9607	2310	2356			9607A	B		234043	E176.6								
NIGHTTIME THIR						DESC. NODE						NEMS - SCR - ITPR					
9594	0044	0142			9596R	A		011946	W028.1	0040	0239		9596R	A			
9595	0231	0237			9596R	A		030703	W054.9	0238	0437		9596R	B			
9596	0418	0435			9596R	B		045419	W081.8	0444	0627		9597R	B			
9597	0605	0626			9597R	B		064136	W108.6	0632	0810		9598A	B			
9598	0815	0851			9598A	B		082852	W135.4	0815	0954		9599A	B			
9599	0940	0951			9599A	B		101608	W162.2	0958	1138		9600A	B			
9600	1127	1137			9600A	B		120325	E171.0	1143	1323		9601A	B			
9601	1314	1323			9601A	B		135041	E144.1	1330	1509		9602A	B			
9602	1502	1507			9602A	B		153758	E117.3	1514	1655		9603A	B			
9603	1700	1748			9604A	B		172514	E040.5	1700	1838		9604A	B			
9604	1917	1935			9605A	B		191231	E063.7	1843	2021		9605A	B			
9605	2027	2122			9606A	B		205947	E036.9	2027	2211		9606A	B			
9606	2216	2310			9607A	B		224703	E010.1	2216	2358		9607A	B			
9607	2358	0057			9610R	A		003420	W016.8								

**TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
27 NOVEMBER 1974**

THIR										ESMR					
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND			DATA		UN	OFF	INT	H
ORBIT	HRMN	HRMN	STDN	ORBIT	D	GRID	DESC.	NUDE		ORBIT	HRMN	HRMN	STDN	ORBIT	D
				+	R	CORR	TIME	LUNG		+				+	R
				STDN	S	LALJ	HRMNSS	DEG		STDN				STDN	S
DAYTIME THIR										ASC. NUDE					
9608	0057	0145	9610R	A			012759	E149.8		9609	0154	0353	9609R	B	
9609	0244	0333	9609R	B			031515	E123.0		9610	0401	0540	9610R	B	
9610	0431	0520	9610R	B			050232	E096.2		9611	0546	0721	9611A	B	
9611	0619	0707	9611A	B			064948	E069.4		9612	0725	0907	9612A	B	
9612	0806	0854	9612A	B			083705	E042.5		9613	0911	1052	9613A	B	
9613	0953	1042	9613A	B			102421	E015.7		9614	1057	1237	9614A	B	
9614	1140	1229	9614A	B			121138	W011.1		9615	1242	1425	9615A	B	
9615	1328	1416	9615A	B			135854	W037.9		9616	1431	1609	9616A	B	
9616	1515	1603	9616A	B			154610	W064.7		9617	1615	1752	9617A	B	
9617	1702	1751	9617A	B			173327	W091.6		9618	1757	1938	9618A	B	
9618	1849	1937	9618A	B			192043	W118.4		9619	1943	2126	9619A	B	
9619	2037	2125	9619A	B			210800	W145.2		9620	2131	2312	9620A	B	
9620	2224	2310	9620A	B			225516	W172.0							
NIGHTTIME THIR										DESC. NUDE					
9608	0145	0153	9610R	A			022136	W043.6		2356	0154	9610R	A		
9608	0155	0244	9609R	B						0154	0353	9609R	B		
9609	0333	0352	9609R	B			040853	W070.4		0401	0540	9610R	B		
9609	0401	0431	9610R	B						0546	0721	9611A	B		
9610	0520	0537	9610R	B			055609	W097.2		0725	0907	9612A	B		
9610	0545	0619	9611A	B						0912	1052	9613A	B		
9611	0707	0718	9611A	B			074325	W124.0		1057	1238	9614A	B		
9611	0726	0806	9612A	B						1243	1425	9615A	B		
9612	0854	0905	9612A	B			093042	W150.9		1431	1610	9616A	B		
9612	0912	0953	9613A	B						1615	1753	9617A	B		
9613	1042	1051	9613A	B			111758	W177.7		1758	1939	9618A	B		
9613	1057	1140	9614A	B						1944	2127	9619A	B		
9614	1229	1236	9614A	B			130515	E155.5		2131	2312	9620A	B		
9614	1243	1328	9615A	B											
9615	1416	1424	9615A	B			145231	E128.7							
9615	1431	1515	9616A	B											
9616	1615	1702	9617A	B			163947	E101.9							
9617	1758	1849	9618A	B			182704	E075.0							
9618	1944	2037	9619A	B			201420	E048.2							
9619	2132	2224	9620A	B			220137	E021.4							
9620							234853	W005.4							

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TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
28 NOVEMBER 1974

THIR							ESMR						
DATA	11.5 + 6.7		INT	H	THIR	ASC. AND	DATA	ON	OFF	INT	H		
ORBIT	ON	OFF	ORBIT	D	GRID	DESC. NODE	ORBIT	HRMN	HRMN	ORBIT	D		
	HRMN	HRMN	STDN	R	CORR	TIME LUNG				STDN	R		
				S	LALD	HRMNSS DEG					S		
DAYTIME THIR							ASC. NODE						
9621	0055	0100	9623R	A		004232 E161.2	9622	0055	0253	9623R	A		
9622	0159	0247	9623R	A		022949 E154.3	9623	0253	0452	9623R	B		
9623	0346	0434	9623R	B		041705 E107.5	9624	0500	0642	9624R	B		
9624	0533	0622	9624R	B		060422 E080.7	9625	0647	0822	9625A	B		
9625	0720	0809	9625A	B		075138 E053.9	9626	0825	1011	9626A	B		
9626	0908	0956	9626A	B		093854 E027.1	9627	1017	1157	9627A	B		
9627	1055	1143	9627A	B		112611 E000.3	9628	1203	1342	9628A	B		
9628	1242	1331	9628A	B		131327 W026.6	9629	1347	1525	9629A	B		
9629	1429	1518	9629A	B		150044 W053.4	9630	1529	1707	9630A	B		
9630	1617	1705	9630A	B		164800 W080.2	9631	1711	1850	9631A	B		
9631	1804	1848	9631A	B		183516 W107.0	9632	1854	2038	9632A	B		
9632	1951	2036	9632A	B		202233 W153.8	9633	2042	2226	9633A	B		
9633	2139	2224	9633A	B		220949 W160.7	9634	2253	0053	9636R	A		
9634	2326	0014	9636R	A		235706 E172.5							
NIGHTIME THIR							DESC. NODE						
9621	0100	0159	9623R	A		013610 W052.2	NEMS - SCR - ITPR						
9622	0254	0346	9623R	B		032326 W059.0	0055	0253	9623R	A			
9623	0434	0451	9623R	B		051042 W085.9	0253	0452	9623R	B			
9623	0500	0533	9624R	B			0500	0642	9624R	B			
*9624	0622	0631	9624R	B		065759 W112.7	0647	0823	9625A	B			
9624	0647	0720	9625A	B			0827	1007	9626A	B			
9625	0809	0821	9625A	B		084515 W159.5	1012	1159	9627A	B			
9625	0827	0908	9626A	B			1203	1343	9628A	B			
9626	0956	1005	9626A	B		103232 W166.3	1347	1524	9629A	B			
9626	1012	1055	9627A	B			1529	1707	9630A	B			
9627	1143	1157	9627A	B		121948 E166.9	1711	1850	9631A	B			
9627	1204	1242	9628A	B			1855	2038	9632A	B			
9628	1331	1341	9628A	B		140704 E140.0	2043	2227	9633A	B			
9628	1347	1429	9629A	B			2254	0052	9636R	A			
9629	1529	1617	9630A	B		155421 E113.2							
9630	1712	1804	9631A	B		174137 E086.4							
9631	1855	1951	9632A	B		192854 E059.6							
9632	2043	2139	9633A	B		211610 E052.8							
9633	2254	2326	9636R	A		230327 E005.9							
9634	0014	0051	9636R	A		005043 W020.9							

\*NO 6.7 DATA

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
29 NOVEMBER 1974

THIR					ESMR						
DATA	11.5	+ 6.7	INT	H	THIR	ASC. AND				INT	H
ORBIT	ON	OFF	ORBIT	D	GRID	DESC. NODE	TIME	LONG		ORBIT	D
	HRMN	HRMN	STDN	R	CORR	HRMNSS	DEG			STDN	S
				S	LALD						
DAYTIME THIR					ASC. NODE						
9635						014422	E145.7			9636	0210 0409 9636R B
9636	0300	0349	9636R	B		033138	E118.9			9637	0416 0557 9637R B
9637	0448	0536	9637R	B		051855	E092.1			9638	0601 0736 9638A B
9638	0635	0723	9638A	B		070611	E065.2			9639	0741 0922 9639A B
9639	0822	0911	9639A	B		085329	E038.4			9640	0927 1106 9640A B
9640	1009	1058	9640A	B		104044	E011.6			9641	1111 1254 9641A B
*9641	1157	1245	9641A	B		122801	W015.2			9642	1259 1440 9642A B
9642	1344	1432	9642A	B		141517	W042.0			9643	1445 1626 9643A B
9643	1531	1620	9643A	B		160233	W068.8			9644	1631 1801 9644A B
9644	1719	1807	9644A	B		174950	W095.7			9645	1815 1952 9645A B
9645	1906	1944	9645A	B		193706	W122.5			9646	1957 2142 9646A B
9646	2053	2135	9646A	B		212423	W149.3			9647	2147 2328 9647A B
9647						231139	W176.1				
*NO 11.5 DATA											
NIGHTTIME THIR					DESC. NODE					NEMS - SCR - ITPR	
9535	0211	0300	9636R	B		023759	W047.7			0210	0409 9636R B
9636	0349	0408	9636R	B		042516	W074.5			0416	0557 9637R B
9636	0416	0448	9637R	B						0602	0736 9638A B
9637	0536	0555	9637R	B		061232	W101.3			0741	0922 9639A B
9637	0602	0635	9638A	B						0927	1107 9640A B
9638	0723	0753	9638A	B		075949	W128.1			1111	1254 9641A B
9638	0741	0822	9639A	B						1259	1440 9642A B
9639	0911	0921	9639A	B		094705	W155.0			1445	1626 9643A B
9639	0927	1009	9640A	B						1631	1809 9644A B
9640	1059	1104	9640A	B		113421	E178.2			1815	1926 9645A B
*9640	1111	1157	9641A	B						1958	2143 9646A B
*9641	1245	1251	9641A	B		132138	E151.4			2148	2328 9647A B
9641	1259	1344	9642A	B							
9642	1432	1439	9642A	B		150854	E124.6				
9642	1445	1531	9643A	B							
9643	1631	1719	9644A	B		165611	E097.8				
9644	1815	1906	9645A	B		184327	E070.9				
9645	1958	2053	9646A	B		203043	E044.1				
9646						221800	E017.3				
9647						000516	W009.5				
*NO 11.5 DATA											

TABLE 2-2  
DATA AVAILABILITY ON-OFF TIMES  
30 NOVEMBER 1974

THIR										ESMR											
DATA		11.5 + 6.7		INT	H	THIR	ASC. AND														
ORBIT	HRMN	HRMN	STDN	ORBIT	R	GRID	DESC.	NUDE	TIME	LONG	DATA	ON	OFF	INT	H	ORBIT	D	ASC.	NUDE	TIME	
ORBIT	HRMN	HRMN	STDN	ORBIT	R	CORR	TIME	LONG	HRMNSS	UEG	ORBIT	HRMN	HRMN	ORBIT	R	STDN	S				
DAYTIME THIR										ASC. NUDE											
9648	0111	0116	9650R	A			005855	E157.1			9649	0110	0303	9650R	A						
9649	0215	0303	9650R	A			024612	E130.2			9650	0309	0508	9650R	B						
9650	0402	0451	9650R	B			043328	E103.4			9651	0516	0657	9651R	B						
9651	0549	0638	9651R	B			062045	E076.6			9652	0702	0837	9652A	B						
9652	0737	0825	9652A	B			080801	E049.8			9653	0842	1028	9653A	B						
9653	0924	1012	9653A	B			095517	E023.0			9654	1033	1211	9654A	B						
9654	1111	1200	9654A	B			114234	W003.9			9655	1215	1356	9655A	B						
9655	1258	1347	9655A	B			132950	W030.7			9656	1401	1539	9656A	B						
9656	1446	1534	9656A	B			151707	W057.5			9657	1543	1725	9657A	B						
9657	1633	1721	9657A	B			170423	W084.3			9658	1730	1908	9658A	B						
9658	1820	1906	9658A	B		1W	185139	W111.1			9659	1913	2054	9659A	B						
9659	2008	2053	9659A	B			203856	W137.9			9660	2059	2243	9660A	B						
9660	2155	2240	9660A	B			222612	W164.8													
NIGHTIME THIR										DESC. NUDE					NEMS - SCR - ITPR						
9648	0116	0215	8965A	R			015233	W036.3			0111	0309	9650R	A							
9649	0310	0402	9650R	B			033949	W063.2			0309	0508	9650R	B							
9650	0451	0501	9650R	B			052706	W090.0			0516	0658	9651R	B							
9650	0516	0549	9651R	B							0702	0838	9652A	B							
9651	0638	0656	9651R	B			071422	W116.8			0842	1028	9653A	B							
9651	0702	0737	9652A	B							1033	1211	9654A	B							
9652	0825	0835	9652A	B			090138	W143.6			1215	1356	9655A	B							
9652	0842	0924	9653A	B							1401	1539	9656A	B							
9653	1012	1027	9653A	B			104855	W170.4			1544	1726	9657A	B							
9653	1033	1111	9654A	B							1730	1908	9658A	B							
9654	1200	1209	9654A	B			123611	E162.8			1913	2054	9659A	B							
9654	1215	1258	9655A	B							2059	2243	9660A	B							
9655	1347	1354	9655A	B			142328	E135.9													
9655	1401	1446	9655A	B																	
9656	1544	1633	9657A	B			161044	E109.1													
9657	1730	1820	9658A	B		1E	175800	E082.3													
9658	1913	2008	9659A	B			194517	E055.5													
9659	2059	2155	9660A	B			213233	E028.7													
*9660	2312	2342	9663R	A			231950	E001.8													

\*NO 11.5 DATA

## SECTION 3

### ELECTRICALLY SCANNING MICROWAVE RADIOMETER DISPLAYS

One ESMR display per day has been selected for presentation in this section. All ESMR coverage times are listed in the Data Availability On-Off Times (Table 2-2). Each display contains the following items:

#### Nimbus 5 ESMR

This identifies the satellite (Nimbus 5) and the experiment (ESMR).

#### Date

This identifies the Greenwich day, month, and year the data is recorded.

#### Data Orbit

This data orbit number identifies only the last data orbit on each display. Usually parts of two data orbits are on the same display, since all data acquired during each satellite interrogation is presented on one 4 × 5-inch negative. In general, nighttime data is on the left and daytime data is on the right.

#### Program

No Program number is identified on these displays. Its intended use was to identify the appropriate table which would list the temperature interval for each gray level in the gray scale. The temperature programs used since launch are listed in Table 3-1.

#### Gray Scale

A single 11-step gray scale serves to define ESMR brightness temperatures in all three swaths, by the assignment of a different brightness temperature range to each step for each swath. Table 3-1 defines the gray scale table used on all images since launch.

#### Image Swaths (1, 2, 3)

A set of three swaths, labeled 1, 2, and 3, separates the same recorded data into three temperature intervals (defined in Table 3-1). The right set of three swaths is a continuation of the left set and is offset because of the limitations of the 4 × 5-inch film format. The three swath presentation is used because it shortens the temperature ranges spanned by

Table 3-1

ESMR Gray Scale Steps Versus Brightness Temperature  
for Each of the Three ESMR Swaths in  
the ESMR Pictorial Displays  
(Temperatures in °K)

Swath		Table 1 Orbit 104 through 502			Table 2 Orbit 503 through 9660		
		1	2	3	1	2	3
Gray Scale Number	(black) 1	>200	>262	>280	>210	>266	>290
	2	190-200	256-262	277-280	202-210	258-266	286-290
	3	180-190	250-256	274-277	194-202	250-258	282-286
	4	170-180	240-250	271-274	186-194	242-250	278-282
	5	160-170	230-240	268-271	178-186	234-242	274-278
	6	150-160	220-230	265-268	170-178	226-234	270-274
	7	140-150	210-220	262-265	162-170	218-226	266-270
	8	130-140	200-210	259-262	154-162	210-218	262-266
	9	120-130	190-200	256-259	146-154	202-210	258-262
	10	110-120	180-190	253-256	138-146	194-202	254-258
(white) 11	<110	<180	<253	<138	<194	<254	

each step of the gray scale, and, therefore, permits discrimination of various meteorological and terrestrial phenomena.

Significant in swath 1 are the areas of atmospheric moisture and rainfall over oceans. Swath 2 brightness temperature range discriminates between new and multi-year ice and, over oceans, shows only rainfall areas. The high brightness temperatures of swath 3 outline some land areas of high soil moisture content or snow cover, but oceans lose almost all their temperature contrasts. The swath 3 information was lost because of an instrument malfunction between orbit 1062 (28 February 1973) and orbit 2250 (27 May 1973), and for short intervals after orbit 3015 (23 July 1973).

Time Code Index

The Time Code Index, in hours and minutes (GMT), is adjacent to the gray scale. The top number in each set is for the left group of three

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swaths; the bottom number in each set is for the right group of three swaths. Time bars are spaced at five-minute intervals. The same time bars are used for the left and right swaths. The top or bottom time code index determines the time for each time bar.

## Grids

Two grids, labeled GRID L and GRID R, identify the geographic coordinates for the imagery of the left (L) and the right (R) sets of swaths, respectively. Latitude lines are spaced at 10-degree intervals. Longitude lines are spaced at 10-degree intervals to 60 degrees north and south of the equator, and at 20-degree intervals from 60 to 80 degrees north and south. The equator (EQ), North Pole (NP), and South Pole (SP) are labeled, as well as longitude values at the equator and at 30 and 60 degrees north and south of the equator.

## Swath Display Program

The antenna gain function is different at each beam position. Thus, to present a uniform surface temperature as the same shade of gray across a scan track requires that the output voltage at each antenna position be adjusted for its beam position and output voltage value. If the corrections are not precise, vertical bands will be evident in the ESMR pictorial displays.

Three different sets of calibration constants (Display Format Programs) were used during the first two months of operation to eliminate these vertical bands. Two additional programs have been used since the instrument malfunction of 28 February 1973. Volume 1 of this catalog series illustrates the vertical banding produced by the first three programs, while the images in this section illustrate the banding produced by the last two. After 27 May 1973, Program 5 was used for image displays whenever the instrument was operating normally. Table 3-2 shows the Display Format Programs used during this catalog period.

The brightness temperature accuracy varied with each Display Format Program. With display Program 1, which uses prelaunch calibration constants, the digital brightness temperature values have about  $\pm 20^\circ\text{K}$  accuracy. With a change to postlaunch calibration constants, Programs 2 and 4 produce about  $\pm 2^\circ$  to  $5^\circ\text{K}$  temperature value accuracies. Of course, with Programs 2 and 4, the displayed temperature values are accurate only within the limits of the temperature range of each step of the gray scales as defined in Table 3-1. Display Programs 5 and 6, used after the instrument malfunction of 28 February 1973, are considered to produce  $\pm 10^\circ\text{K}$  temperature accuracies on the image displays.

A description of the ESMR experiment may be found in The Nimbus 5 User's Guide, Section 4, and instructions for ordering the data, both pictorial and digital, are in Section 1.7 of that Guide.

Table 3-2

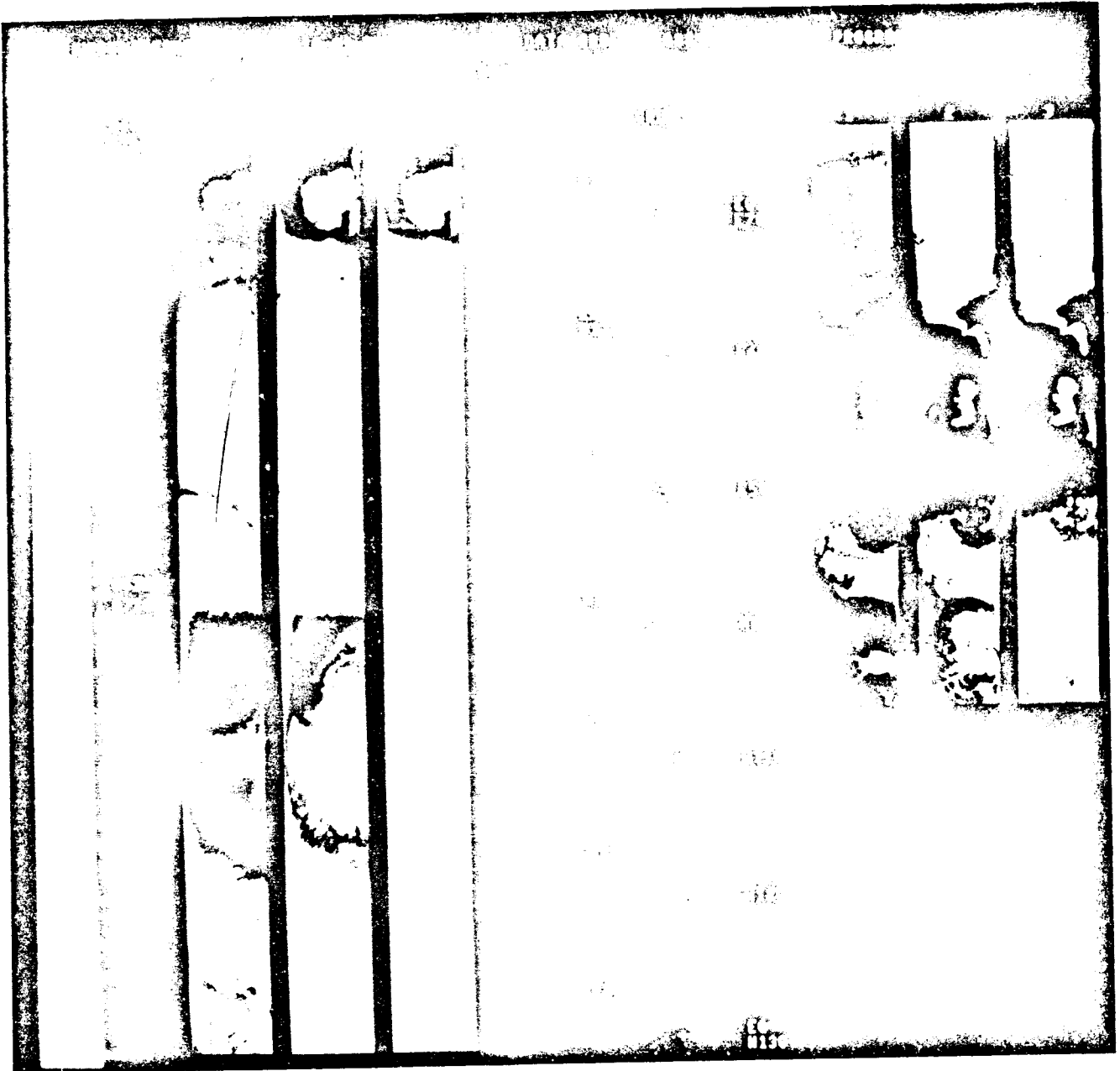
ESMR Display Format Programs for  
October and November 1974

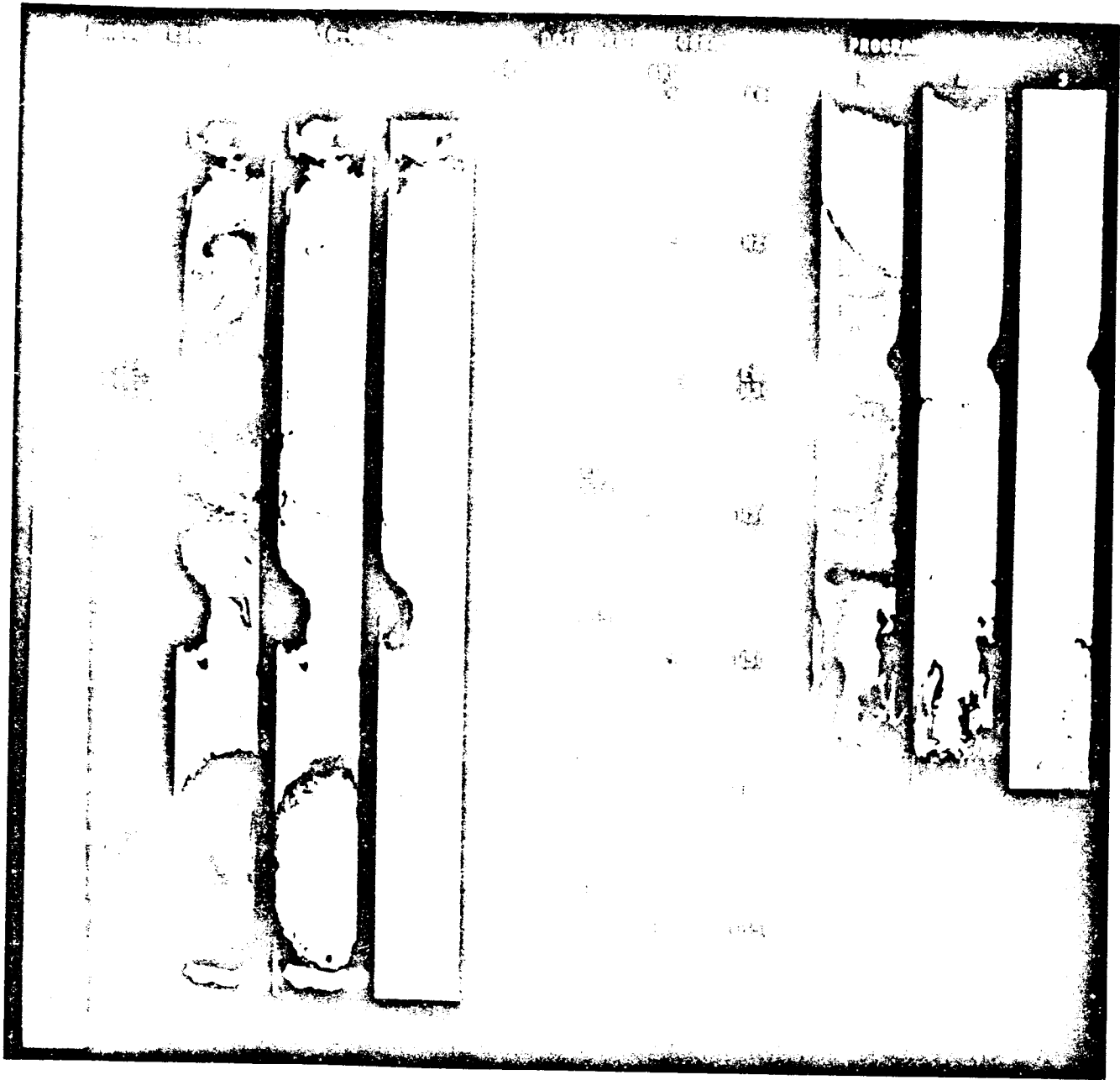
Orbits Processed with Display Format Program 5*		Orbits Processed with Display Format Program 6**	
Date	Orbits	Date	Orbits
01-12 Oct	8843-8993	12 Oct	8993-8995
12-13 Oct	8995-9006	13 Oct	9006-9009
13-14 Oct	9009-9029	14 Oct	9029
15 Oct	9032-9044	16 Oct	9045
16 Oct	9047-9055	16-17 Oct	9057-9059
17-18 Oct	9060-9074	18 Oct	9074-9075
18-21 Oct	9075-9117	18-24 Oct	9117-9157
24 Oct	9158-9160	24-28 Oct	9160-9210
28-31 Oct	9210-9256	31 Oct-02 Nov	9257-9275
02 Nov	9275-9284	02-03 Nov	9285-9287
03-07 Nov	9289-9351	07-08 Nov	9352-9358
08-30 Nov	9359-9661		

\*Program 5 is used whenever the instrument is operating normally (data in all three swaths).

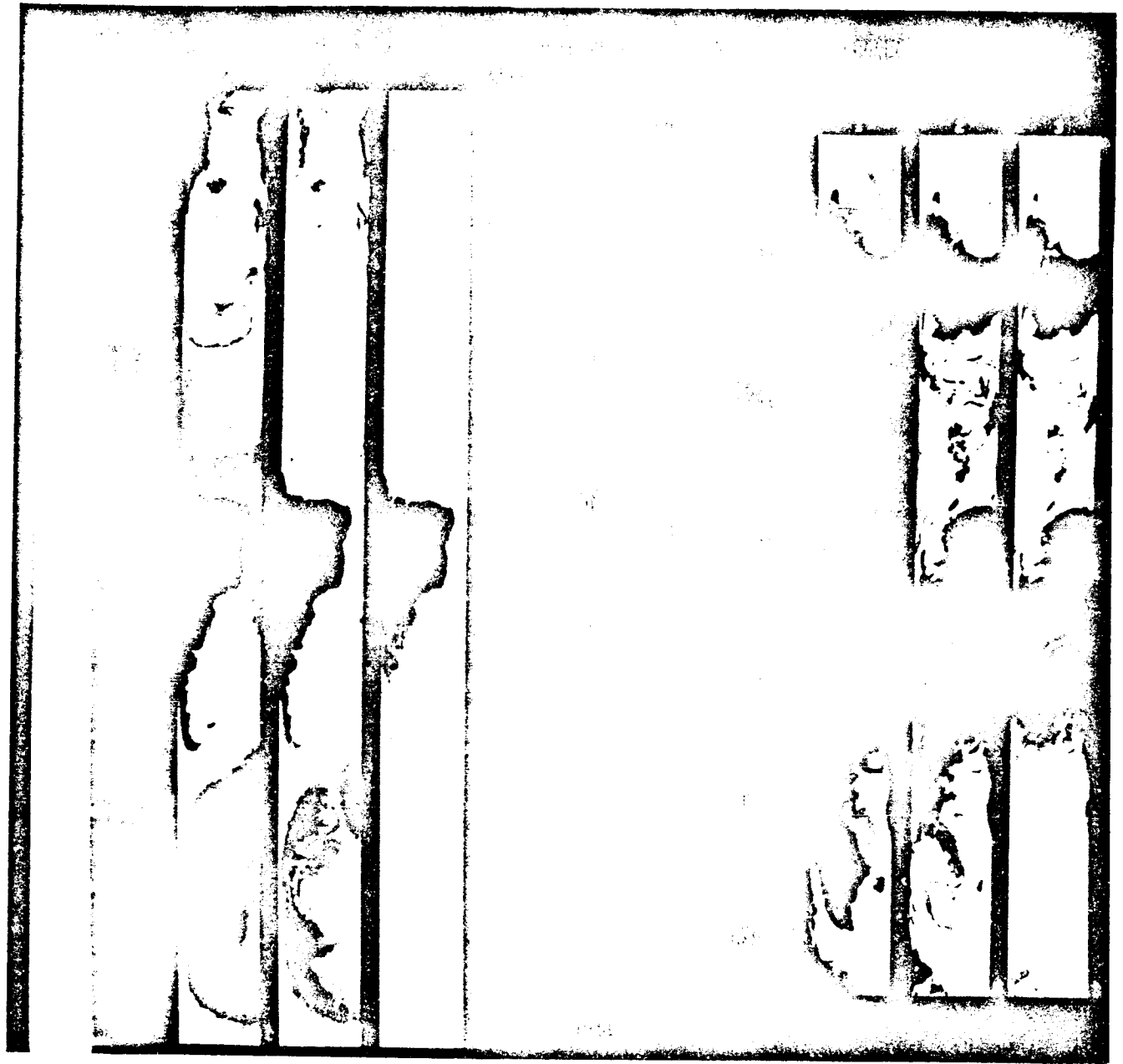
\*\*Program 6 is used whenever the instrument is operating in the reduced response mode (data only in swaths one and two). All orbits were processed with gray Scale Brightness Temperature Table 2 values (See Table 3-1). An orbit listed under both processing programs means the ESMR operated in both modes during that orbit.

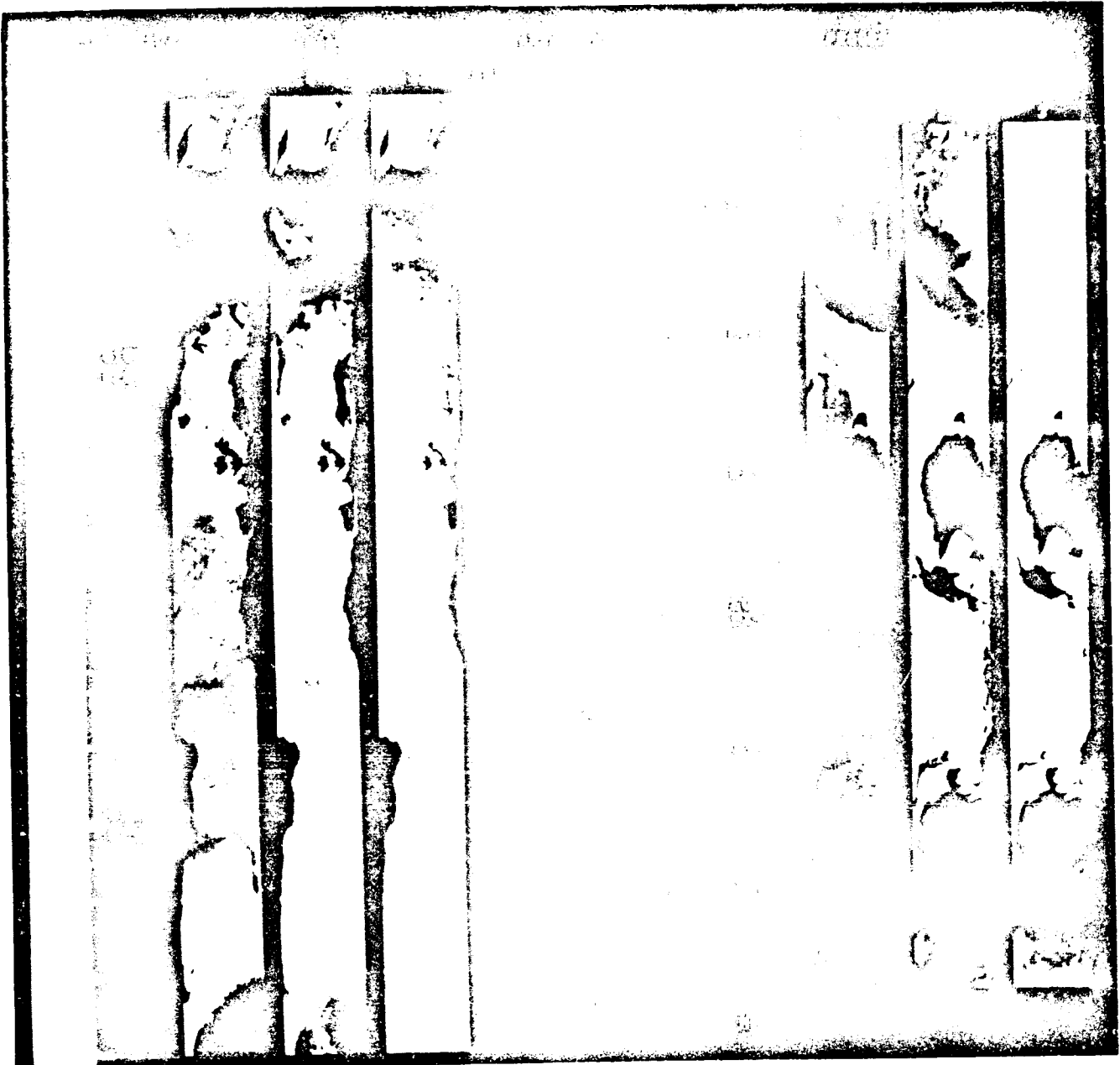
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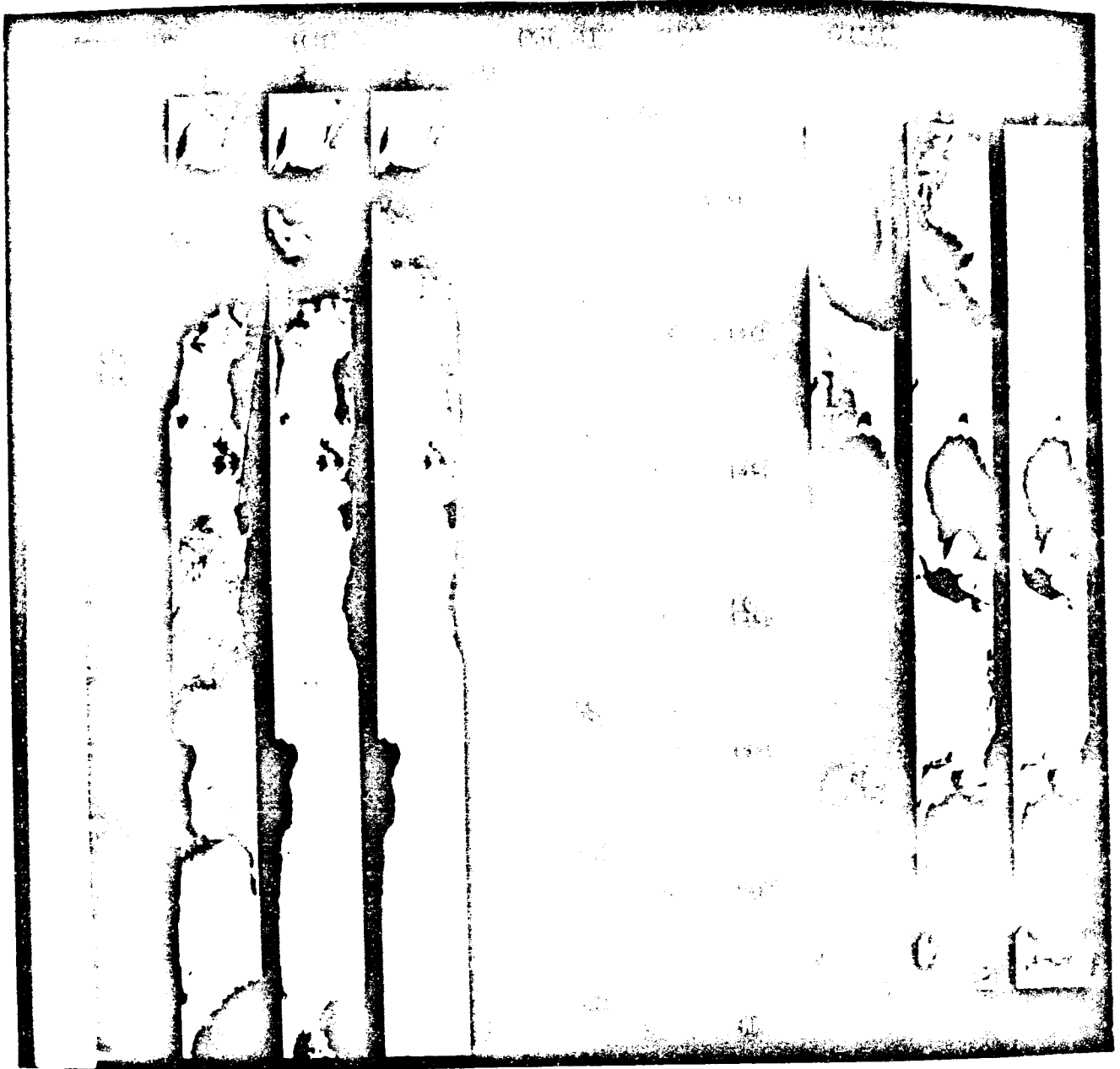




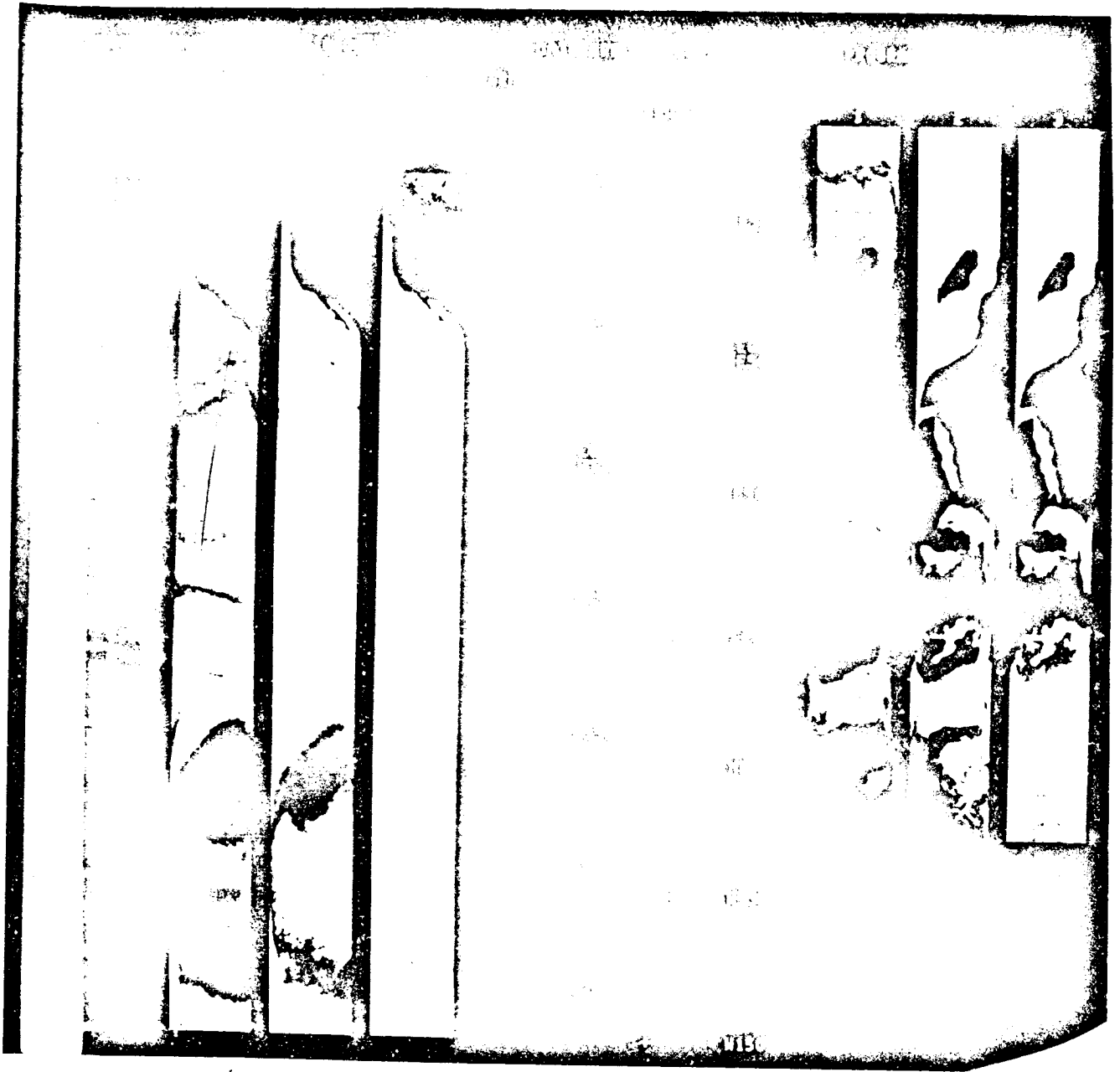


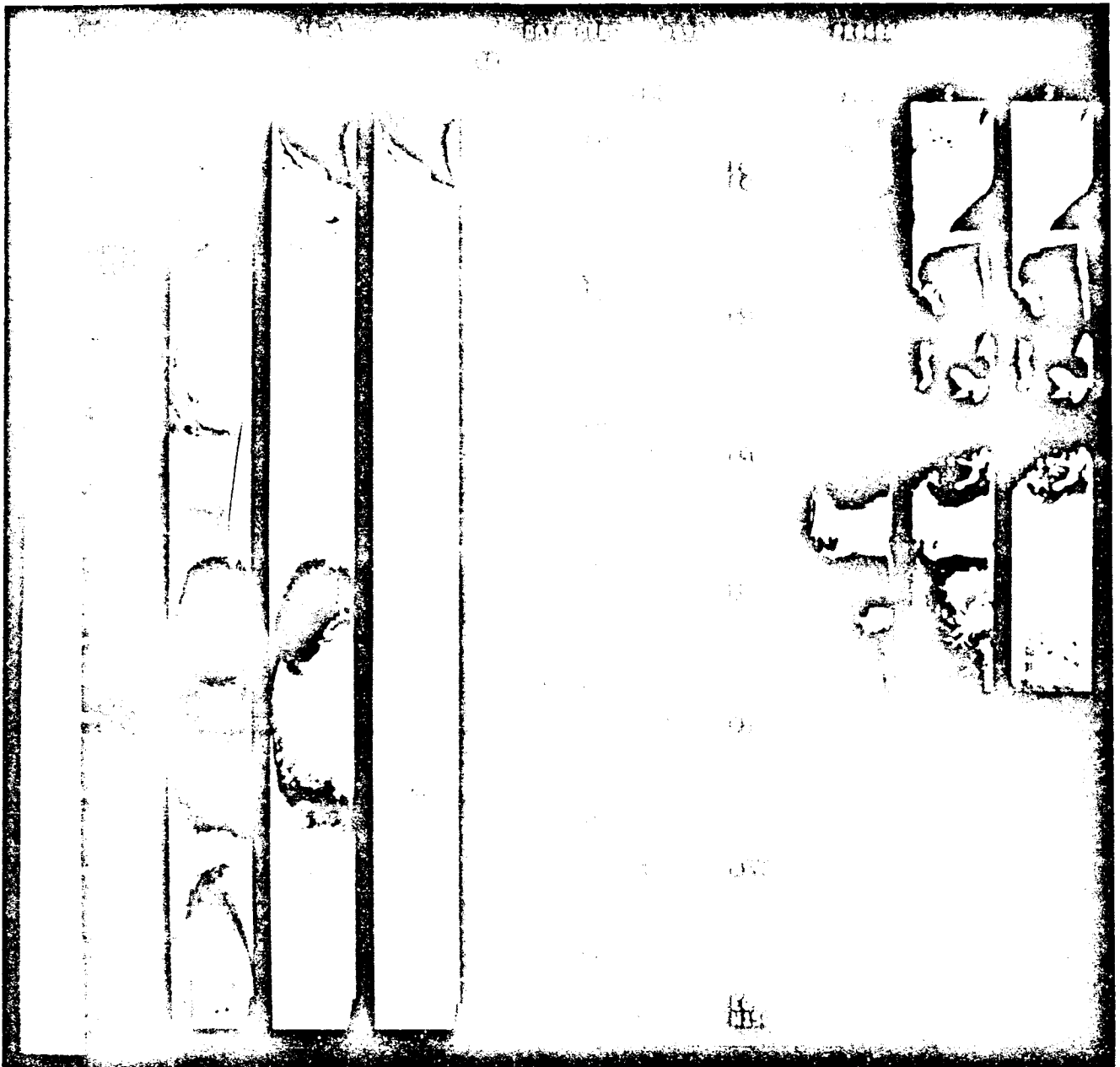


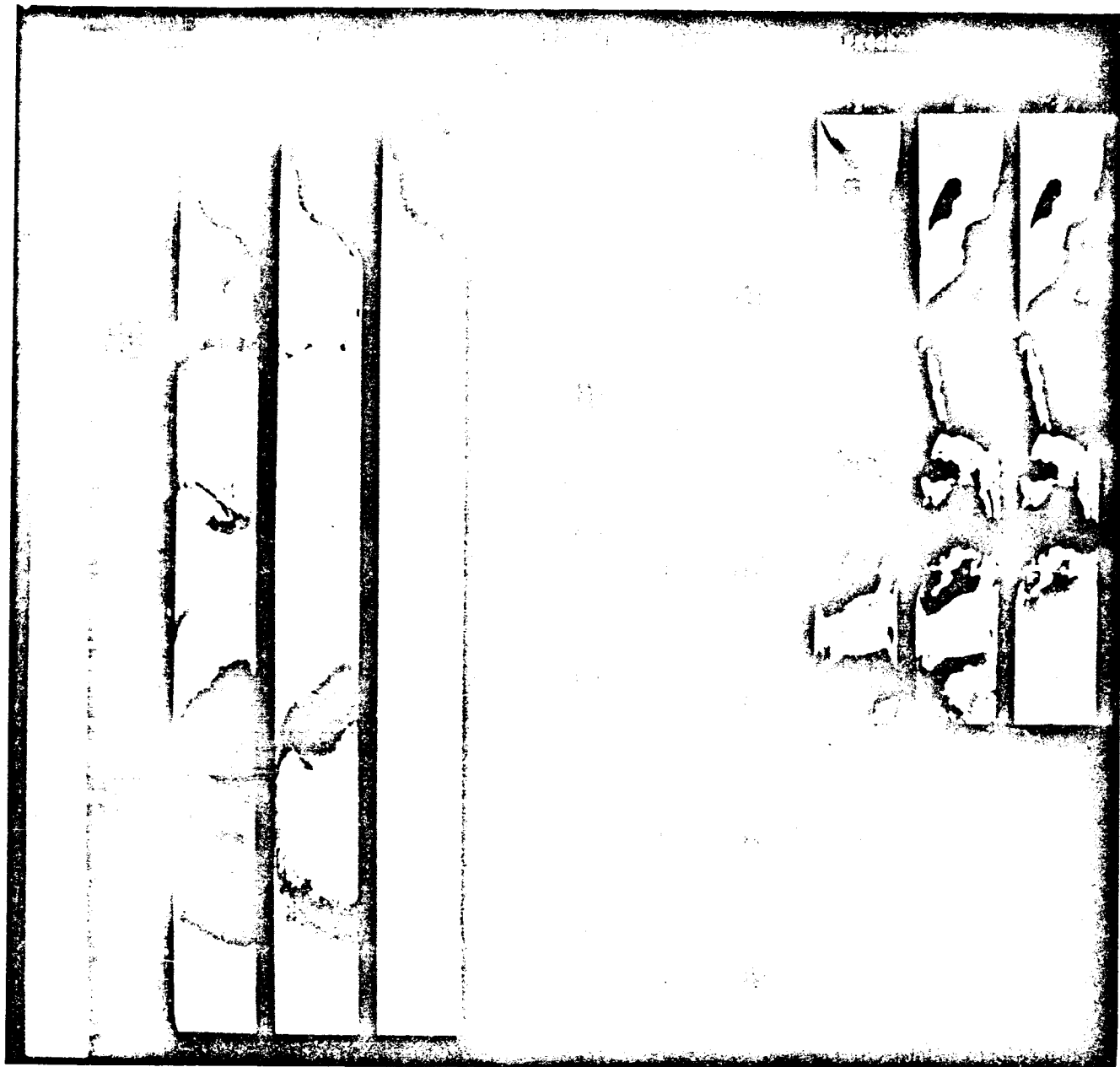


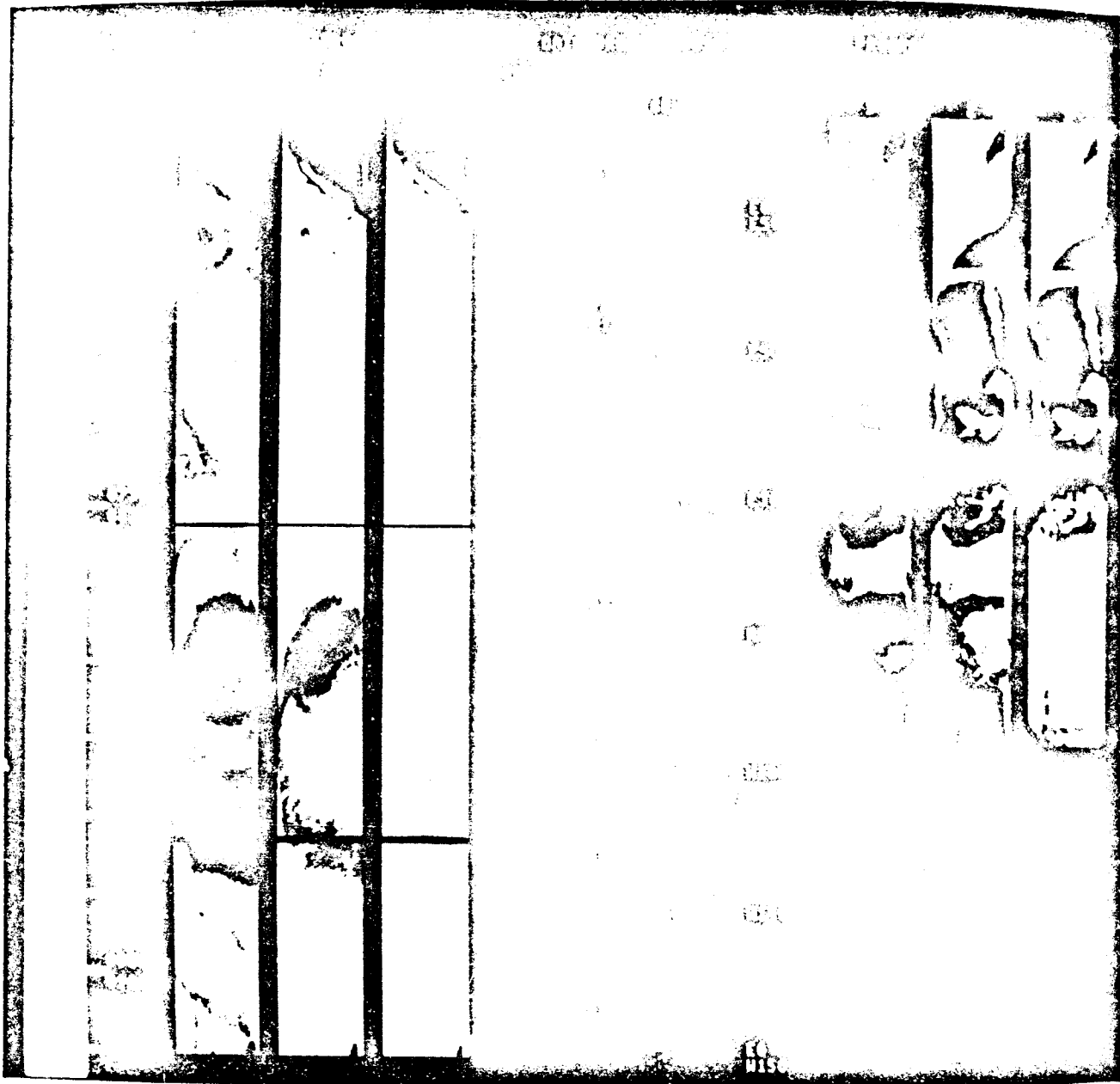


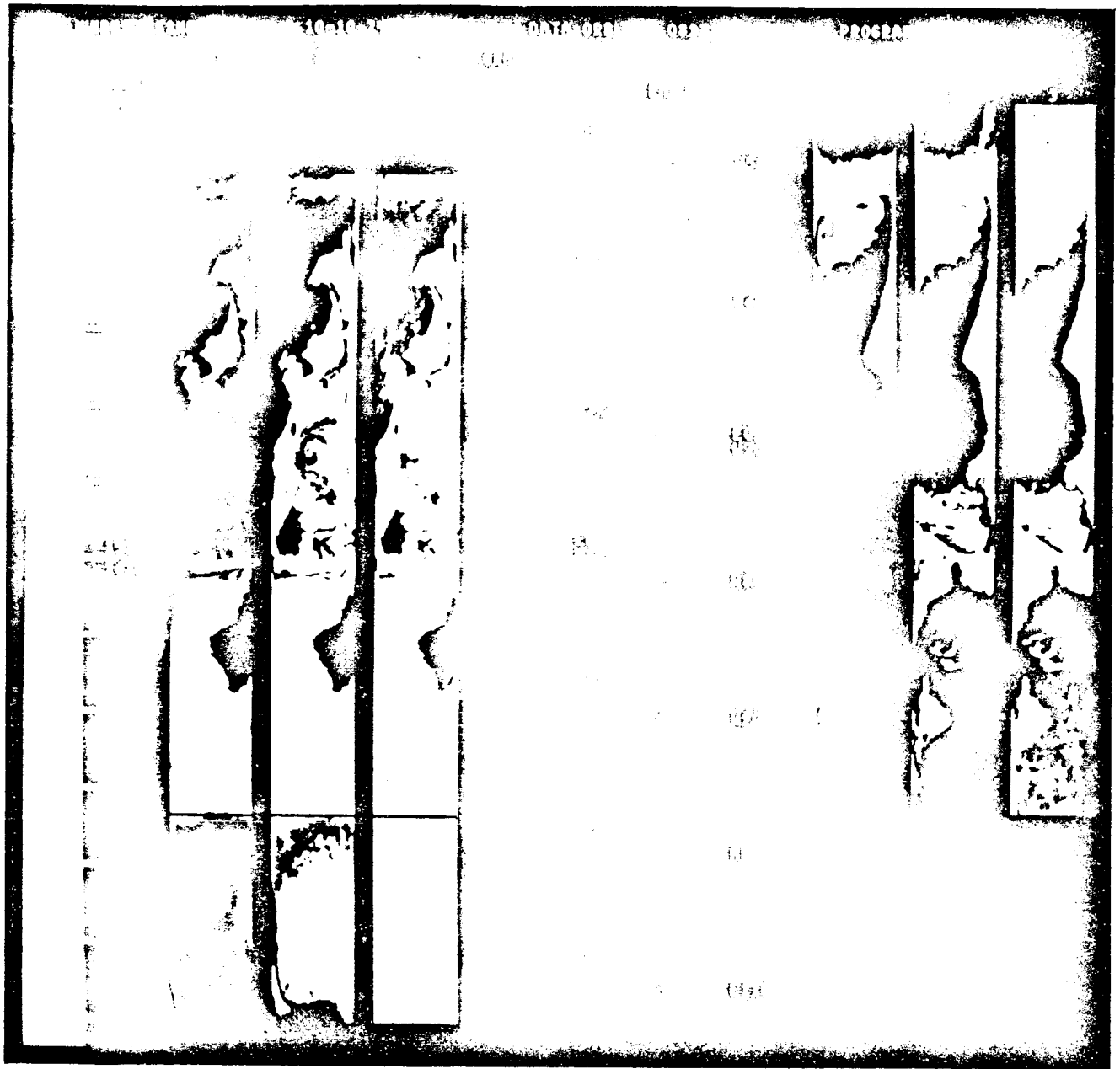


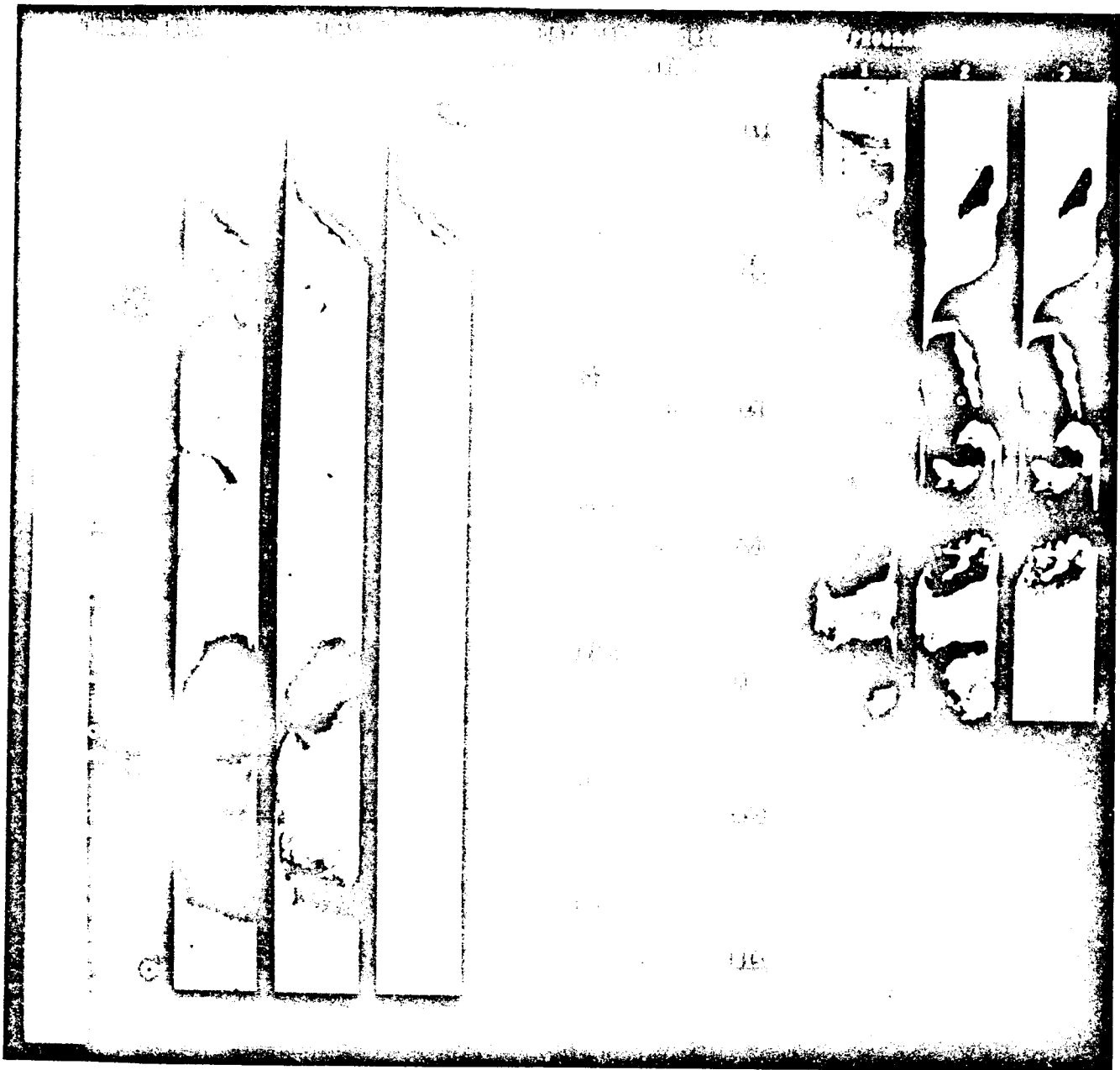


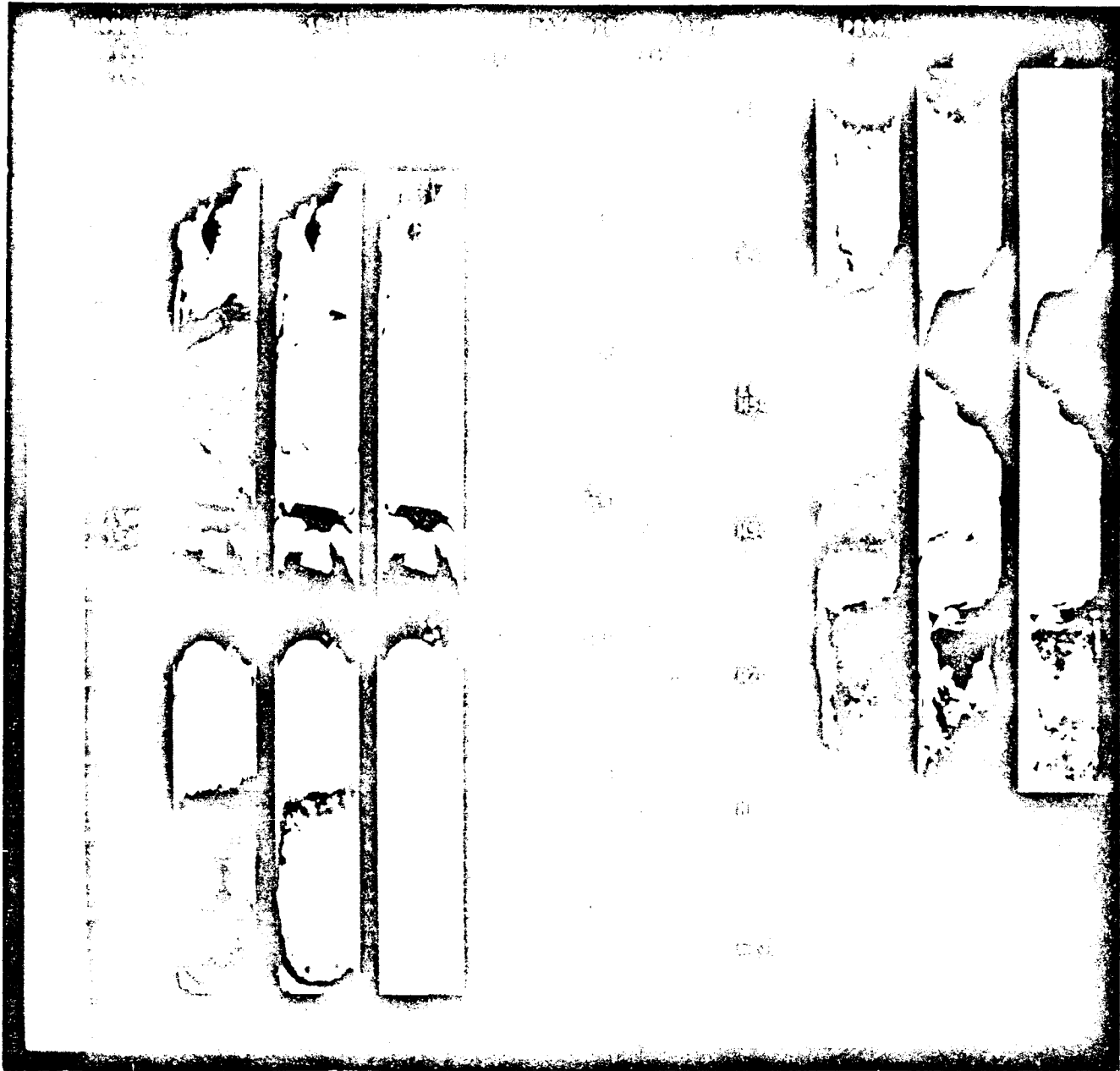


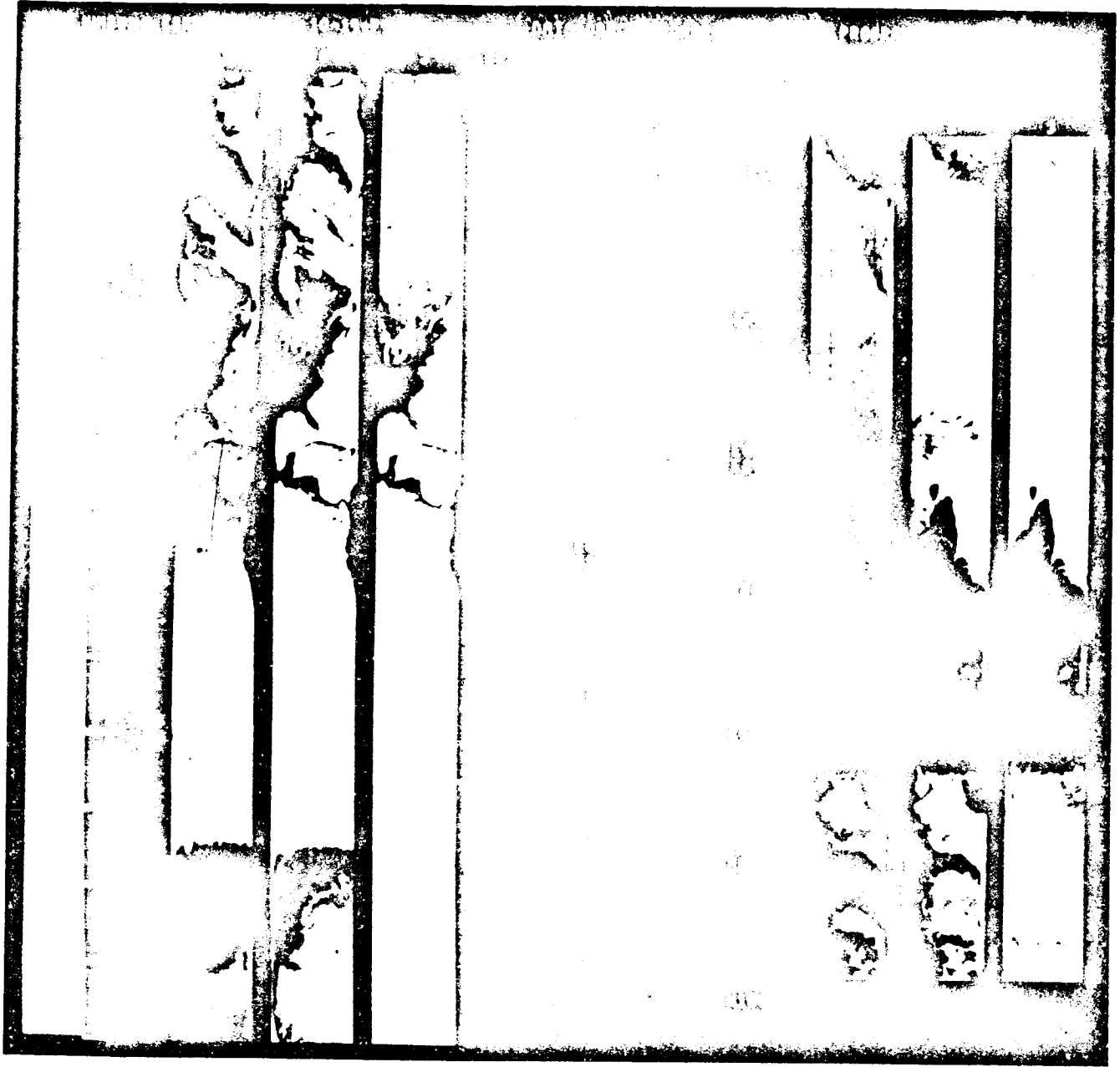




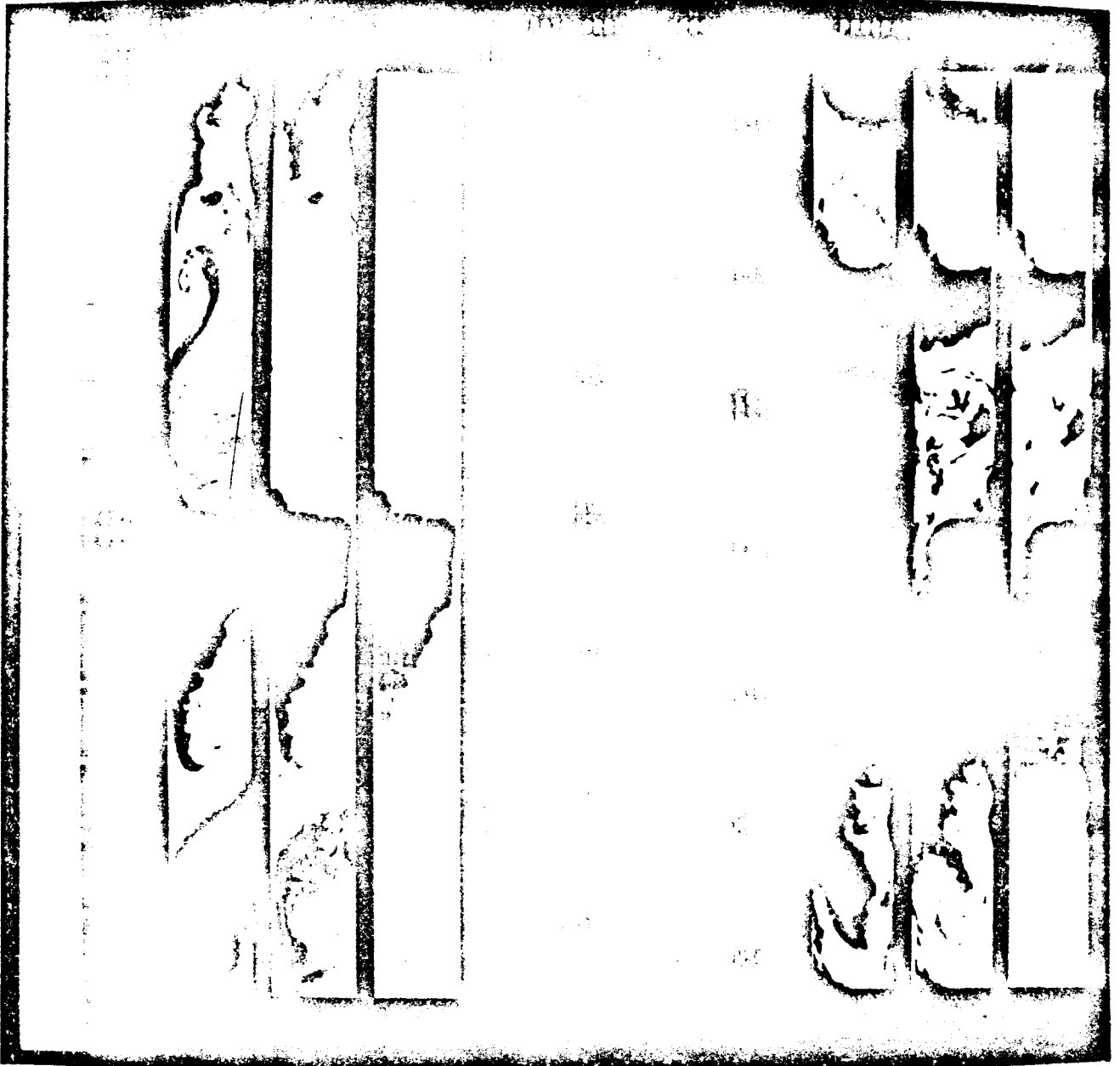


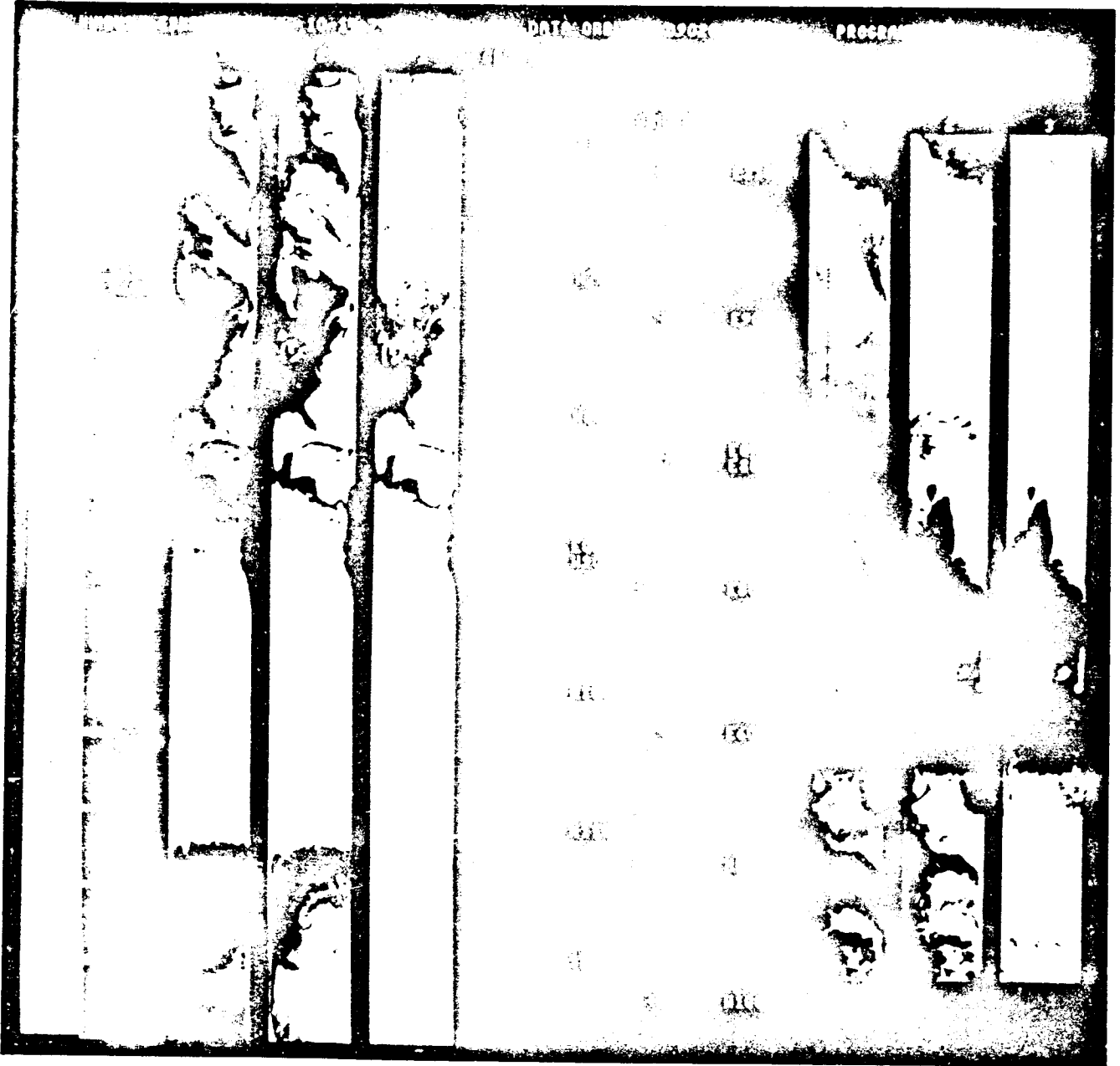


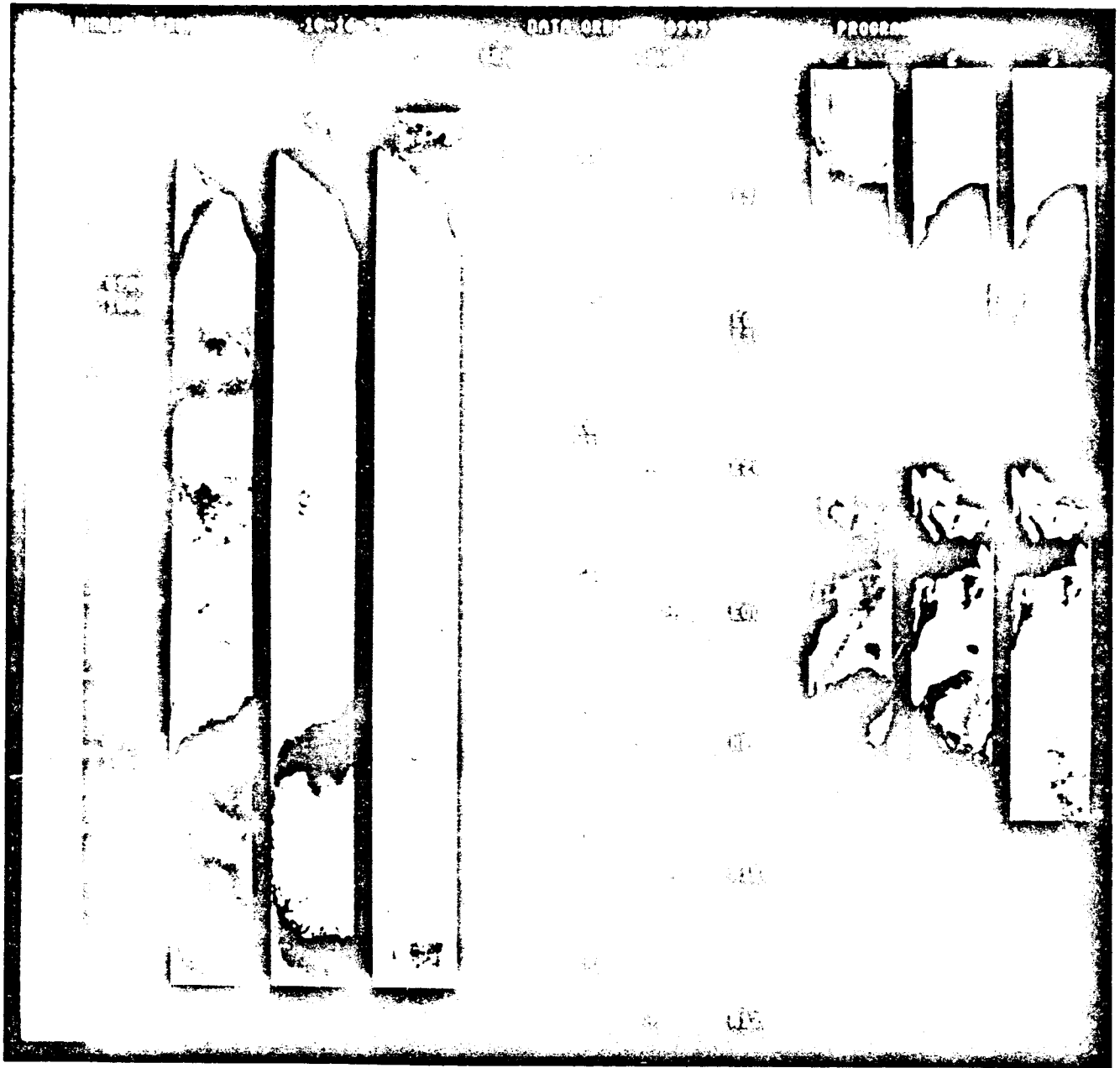


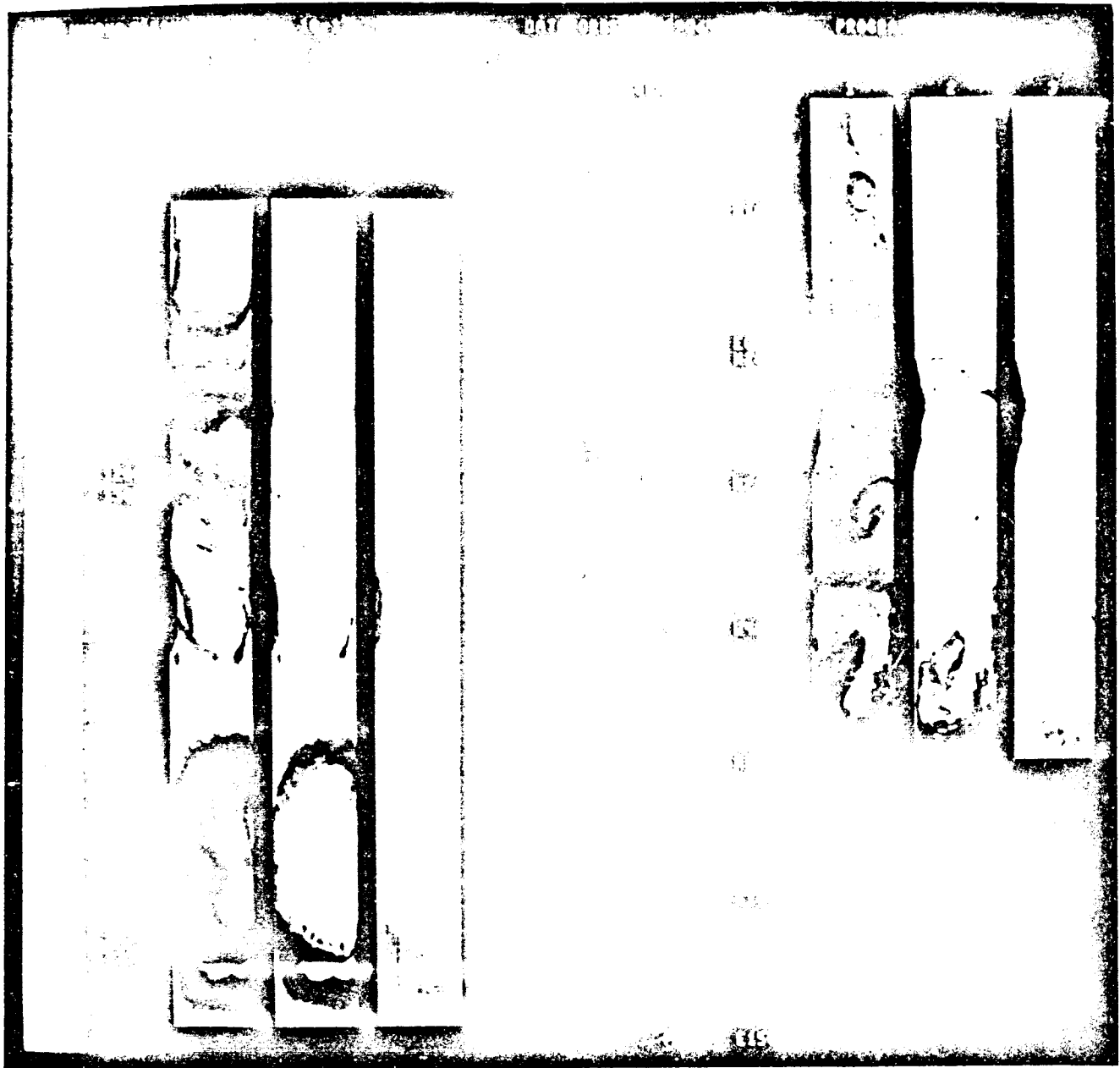


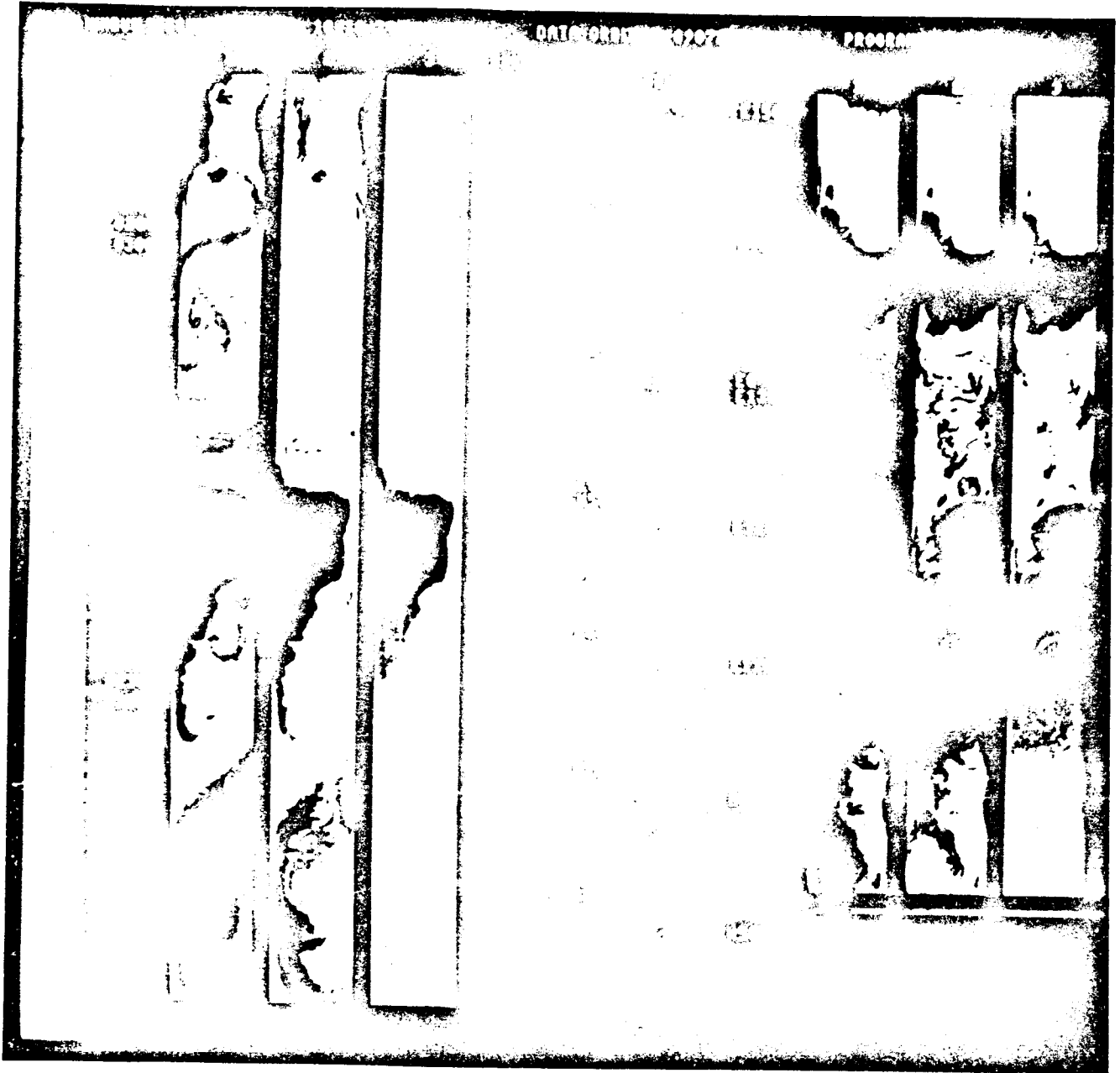


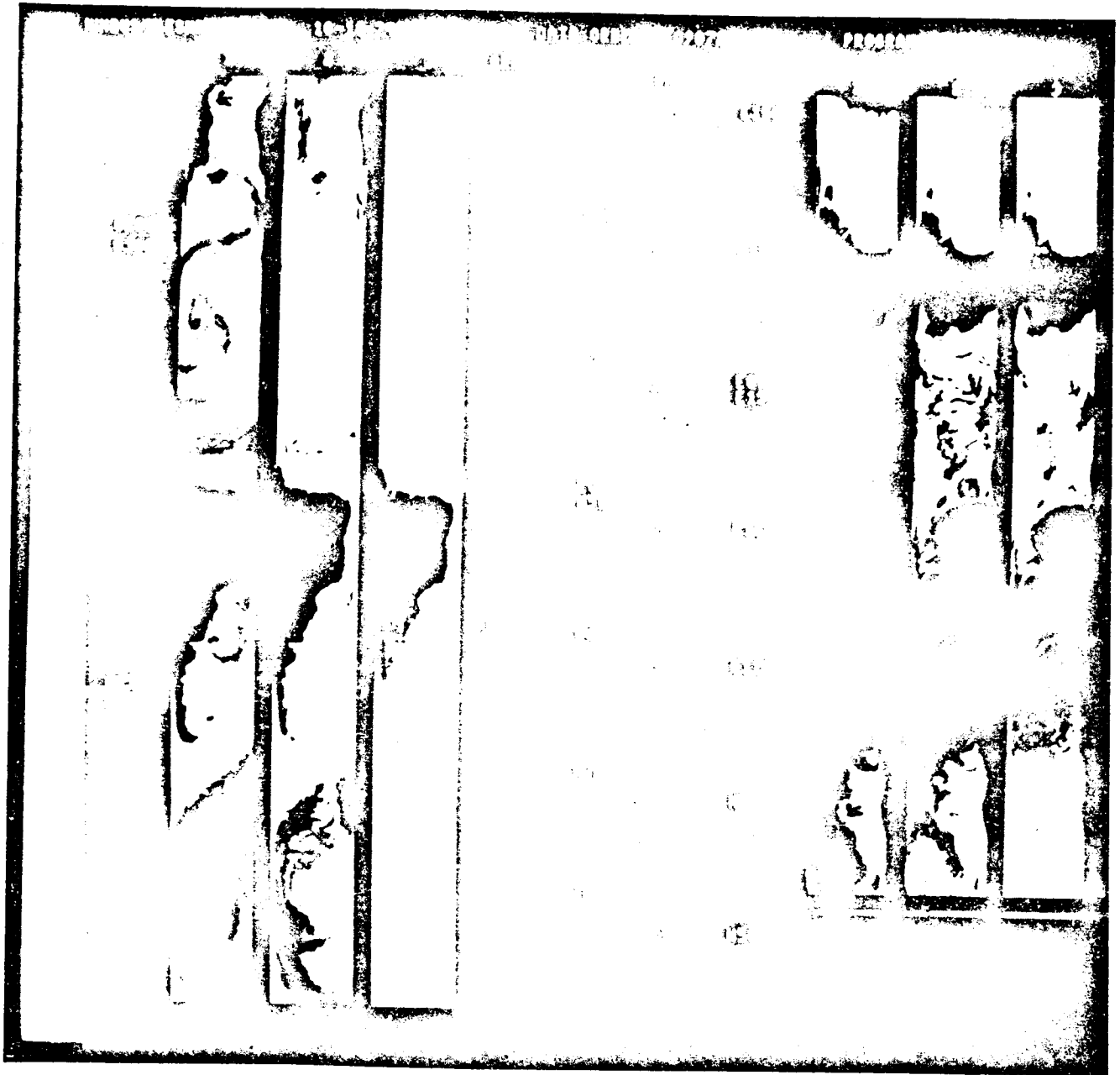


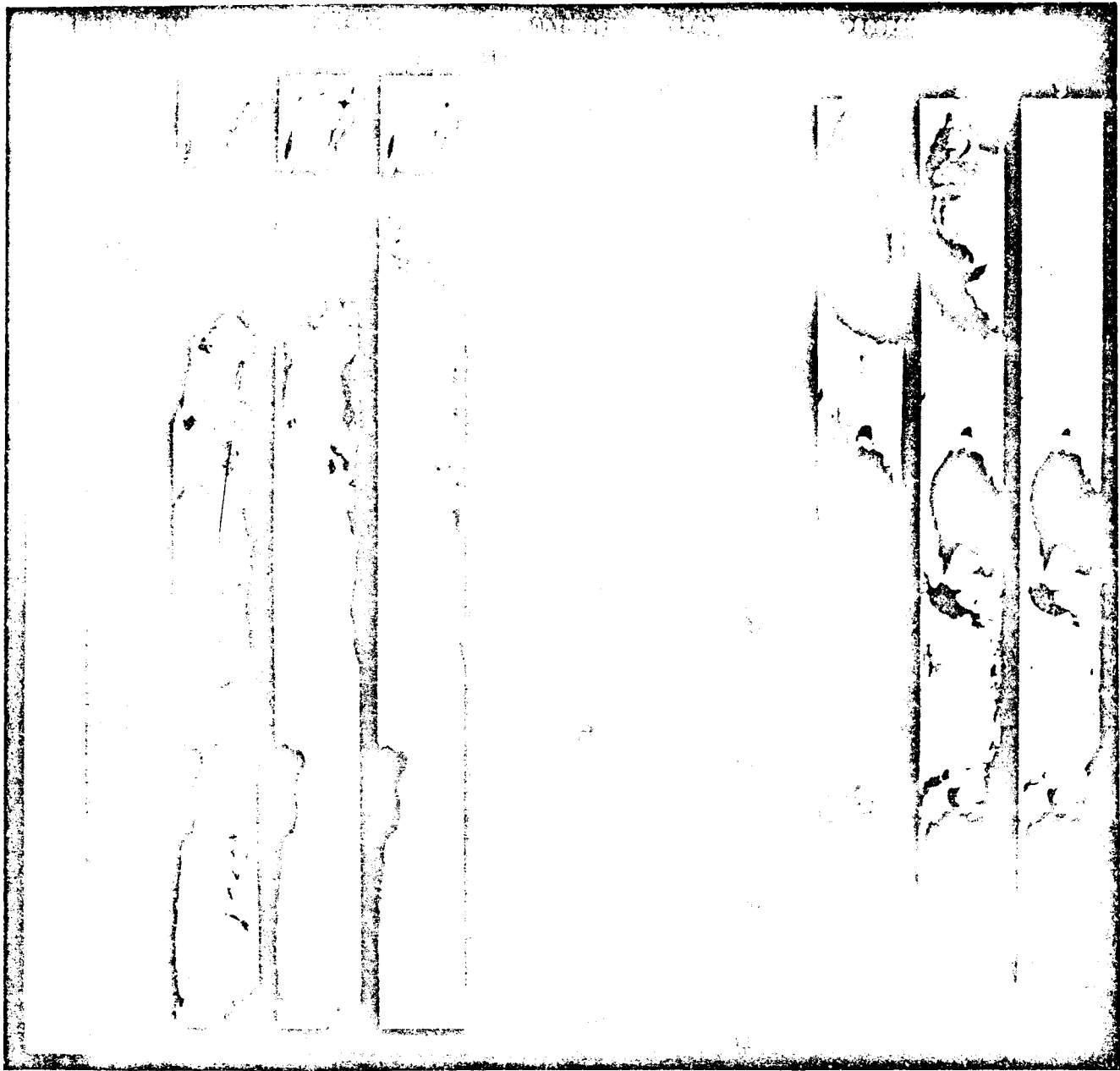


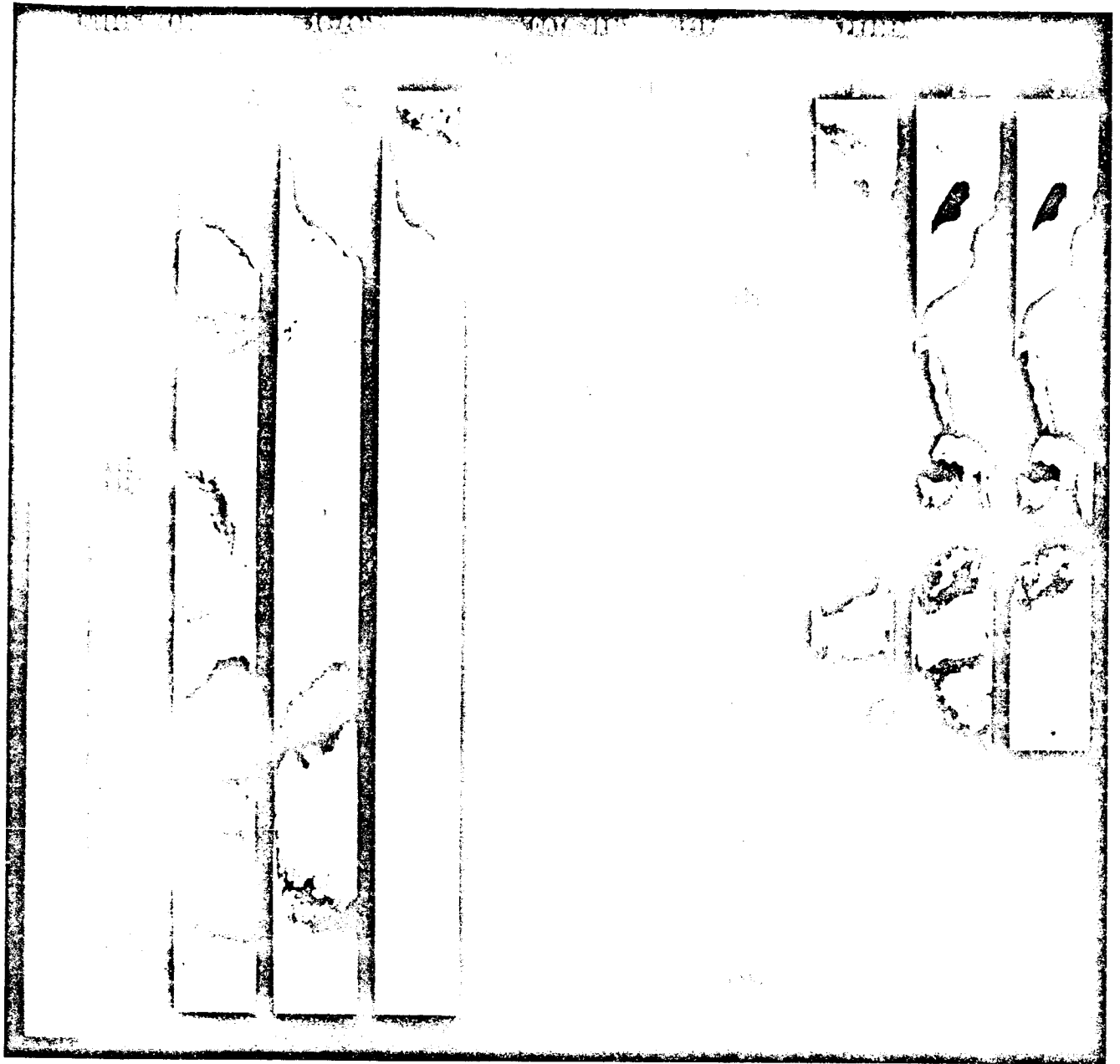




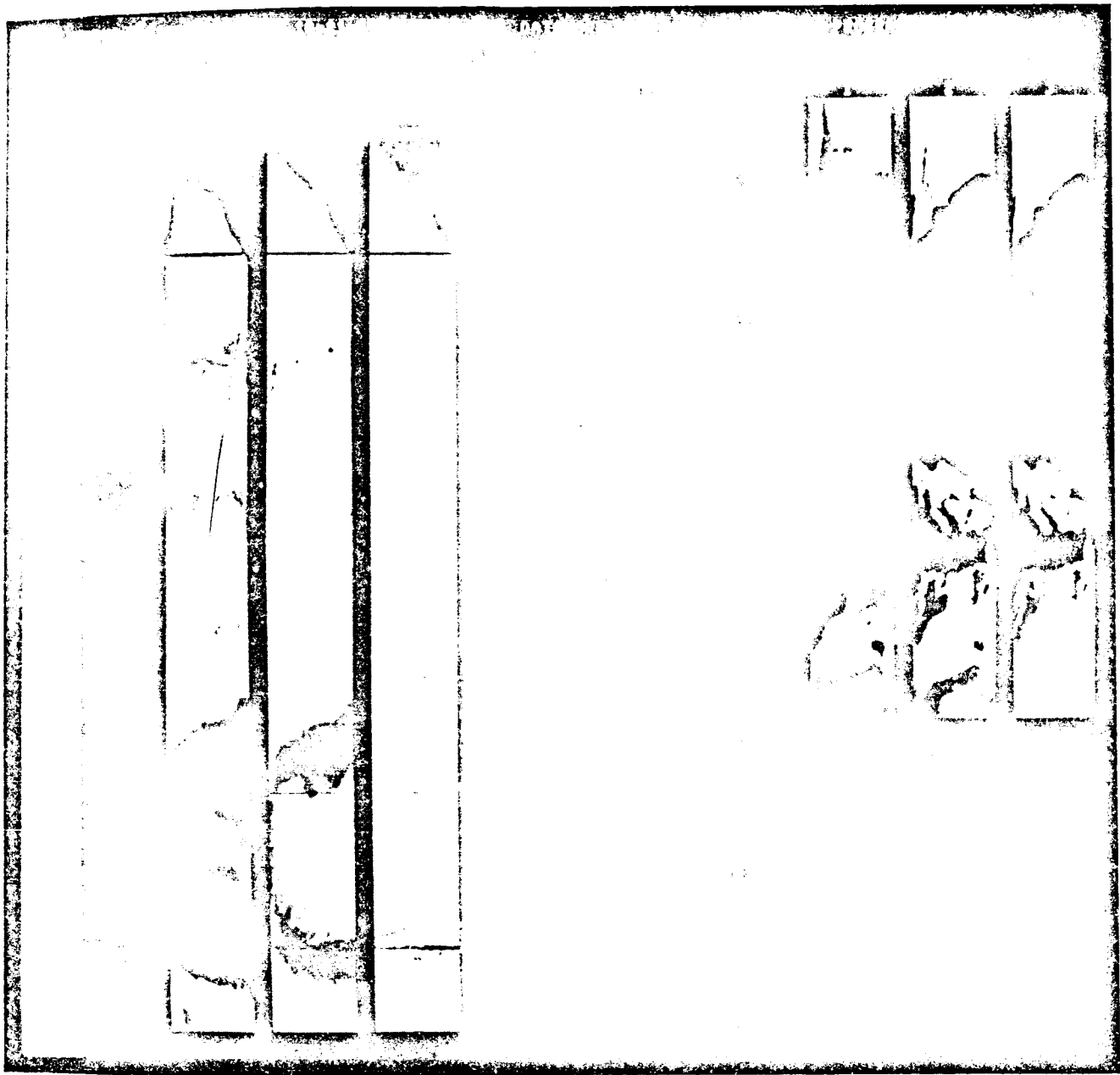


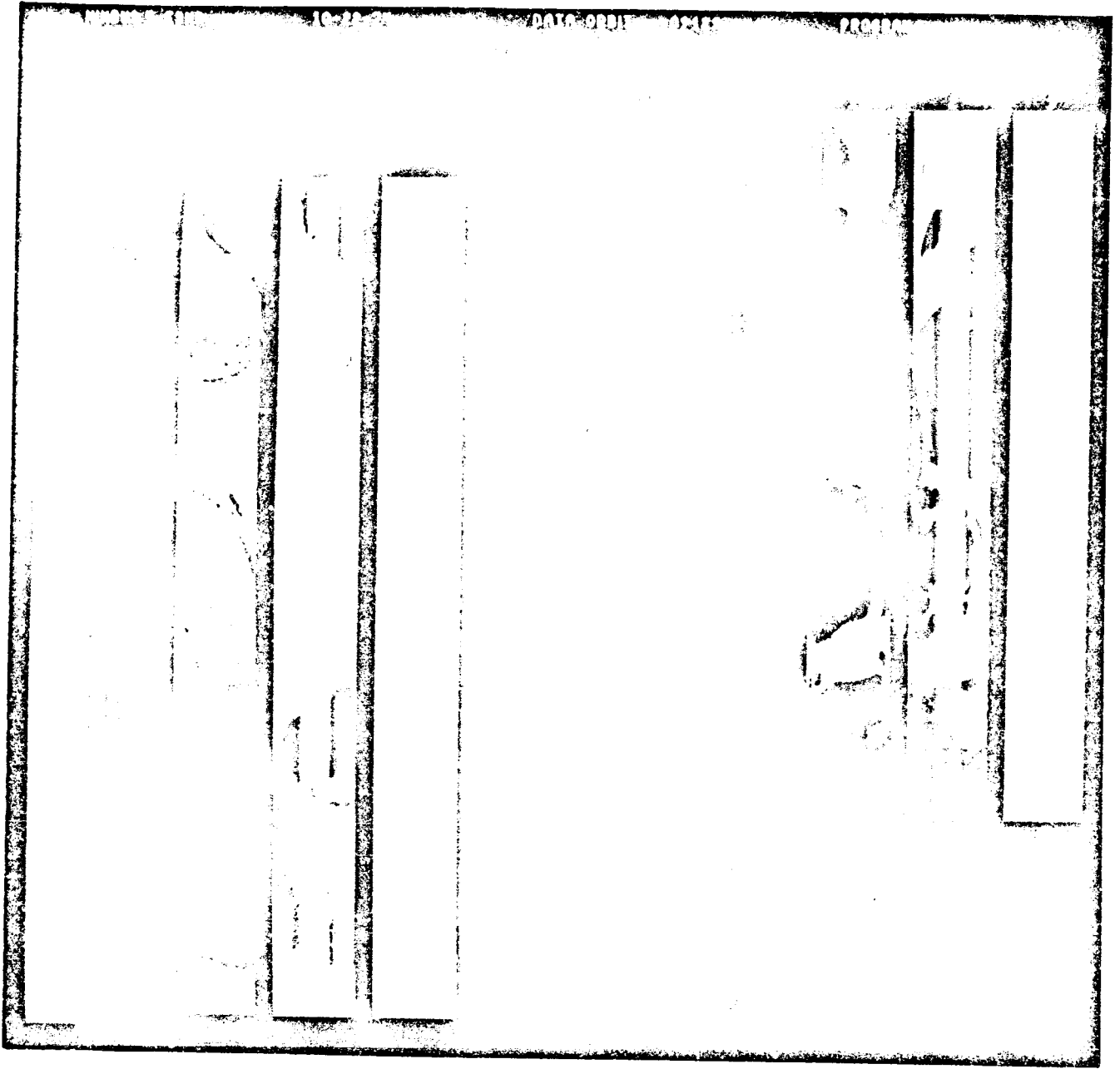


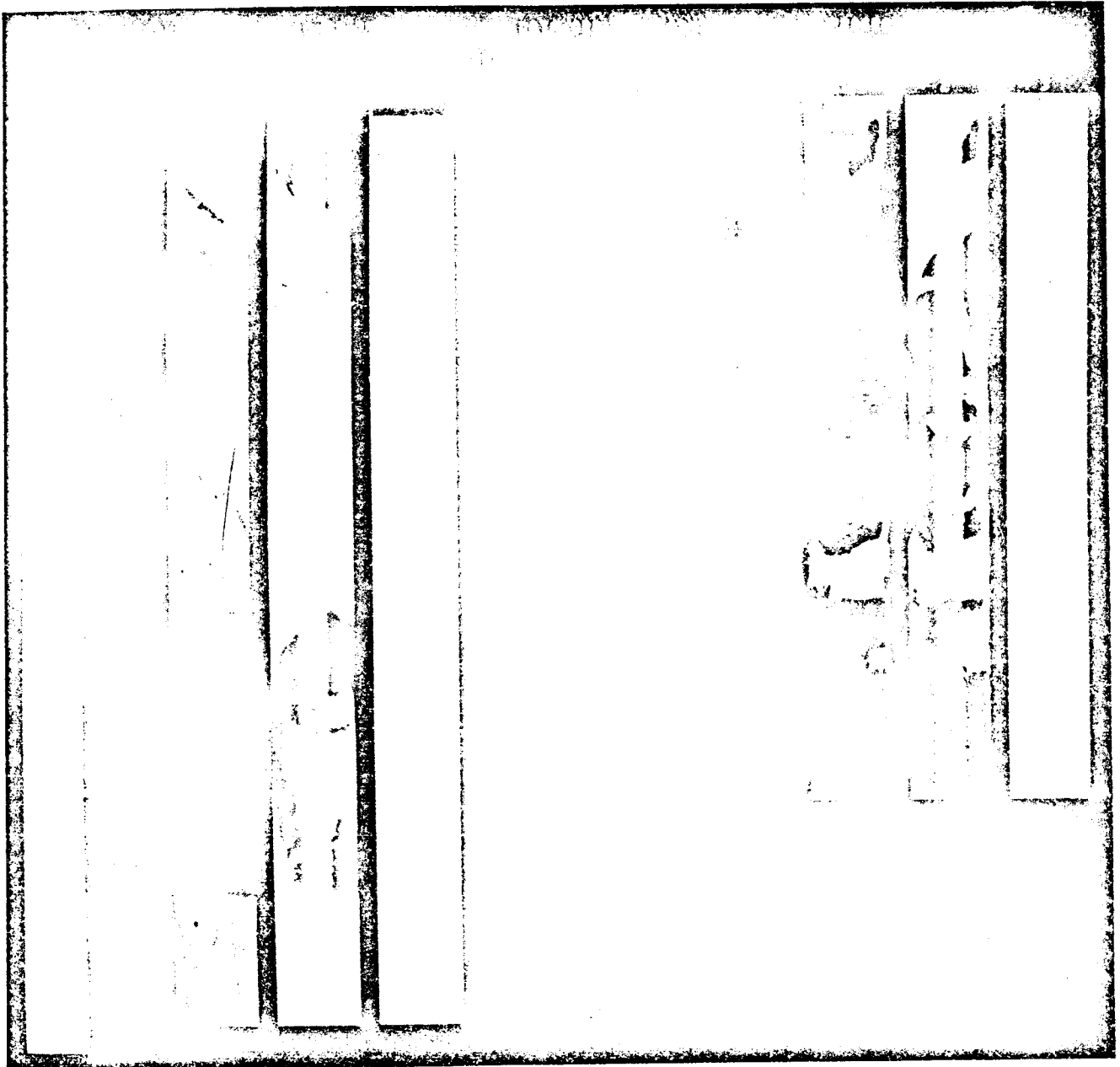


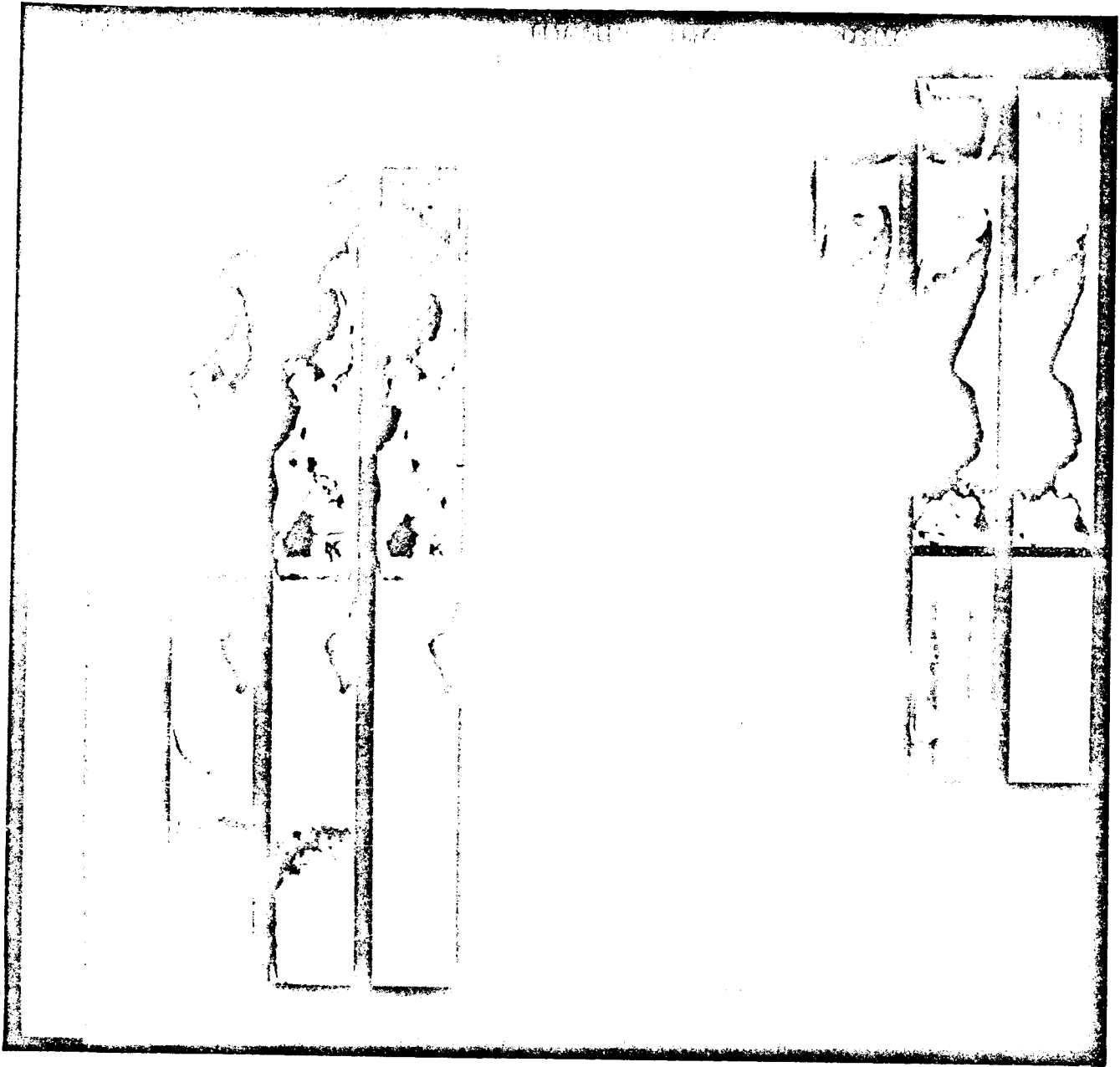


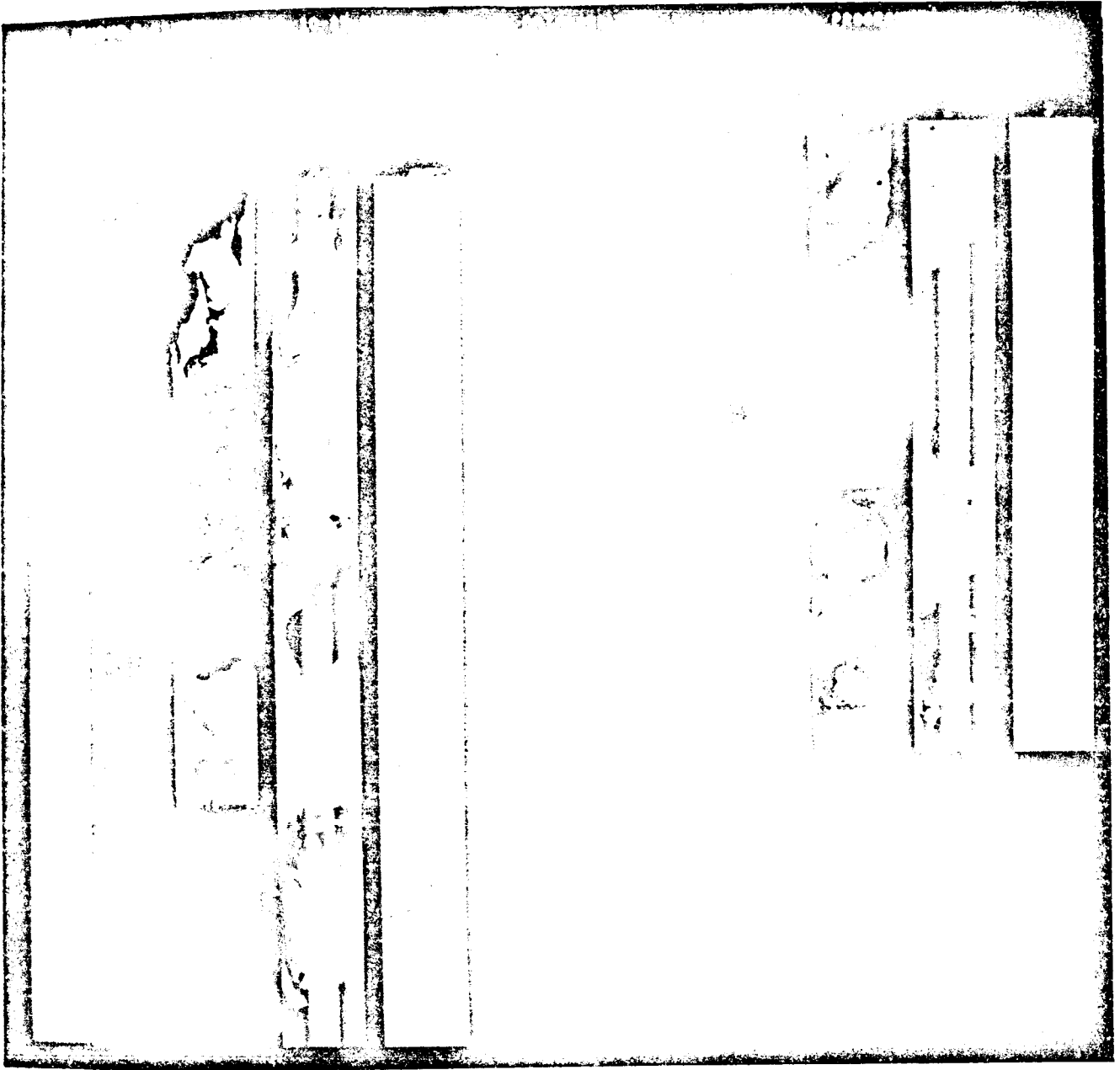


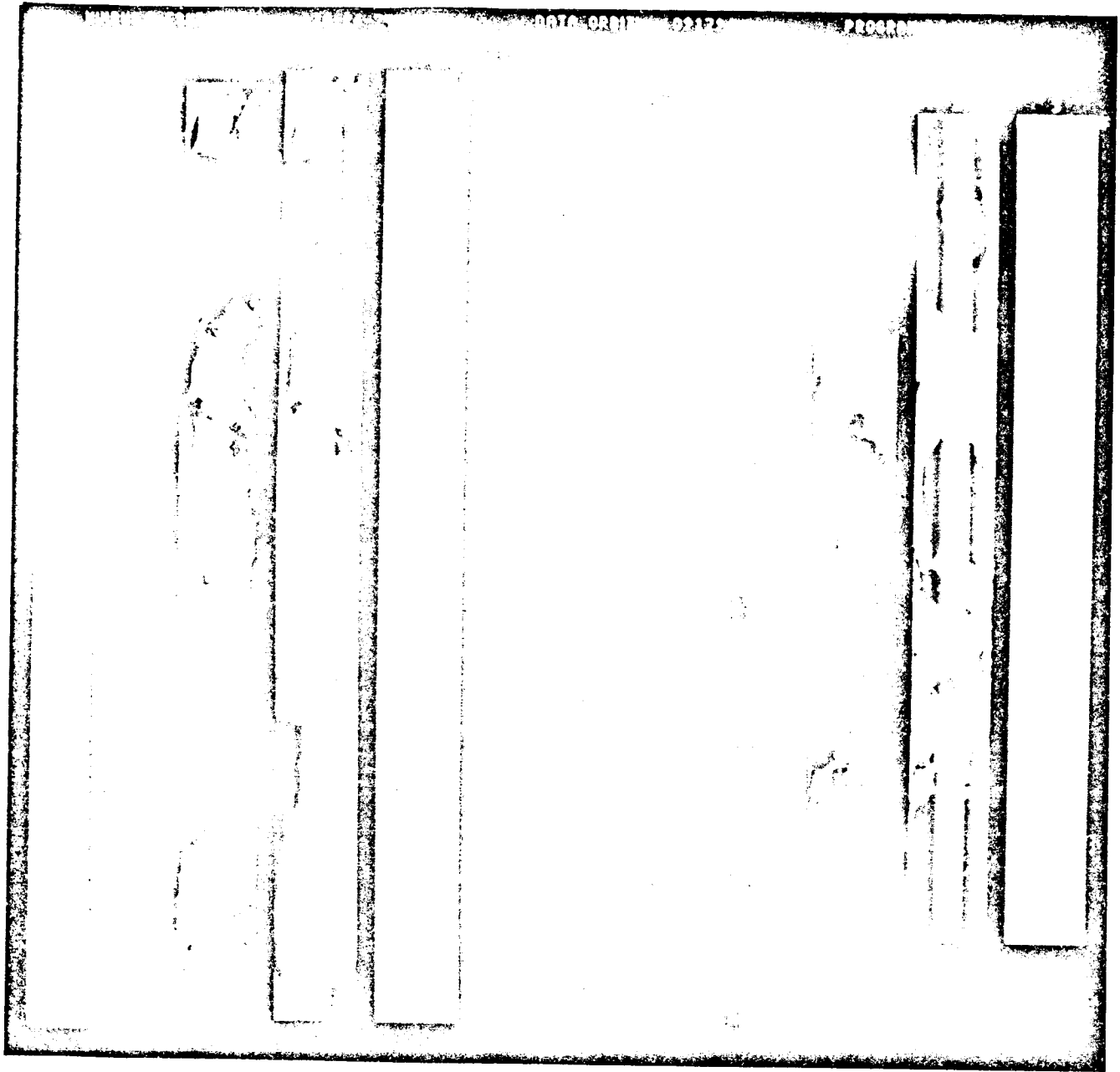


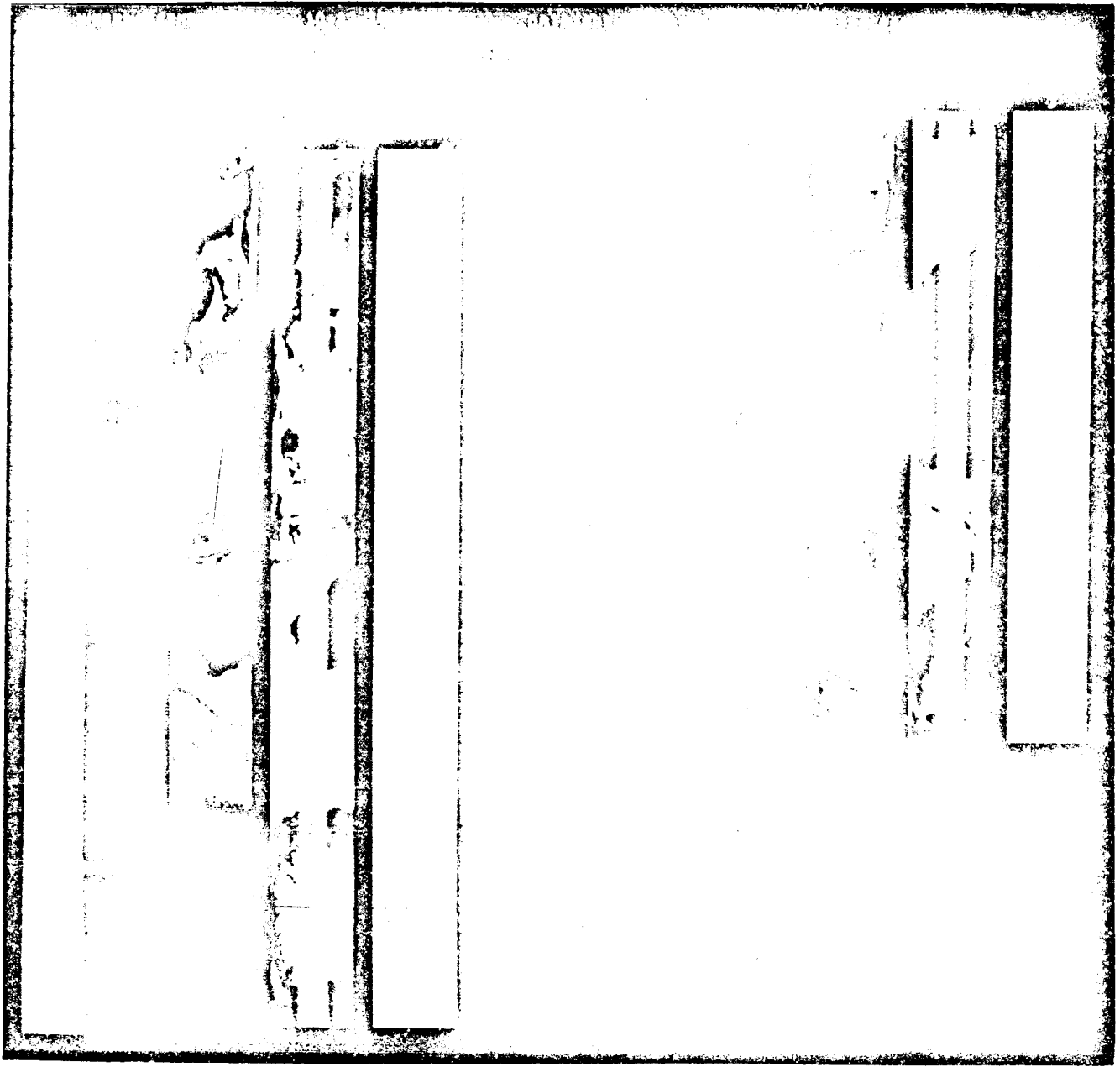


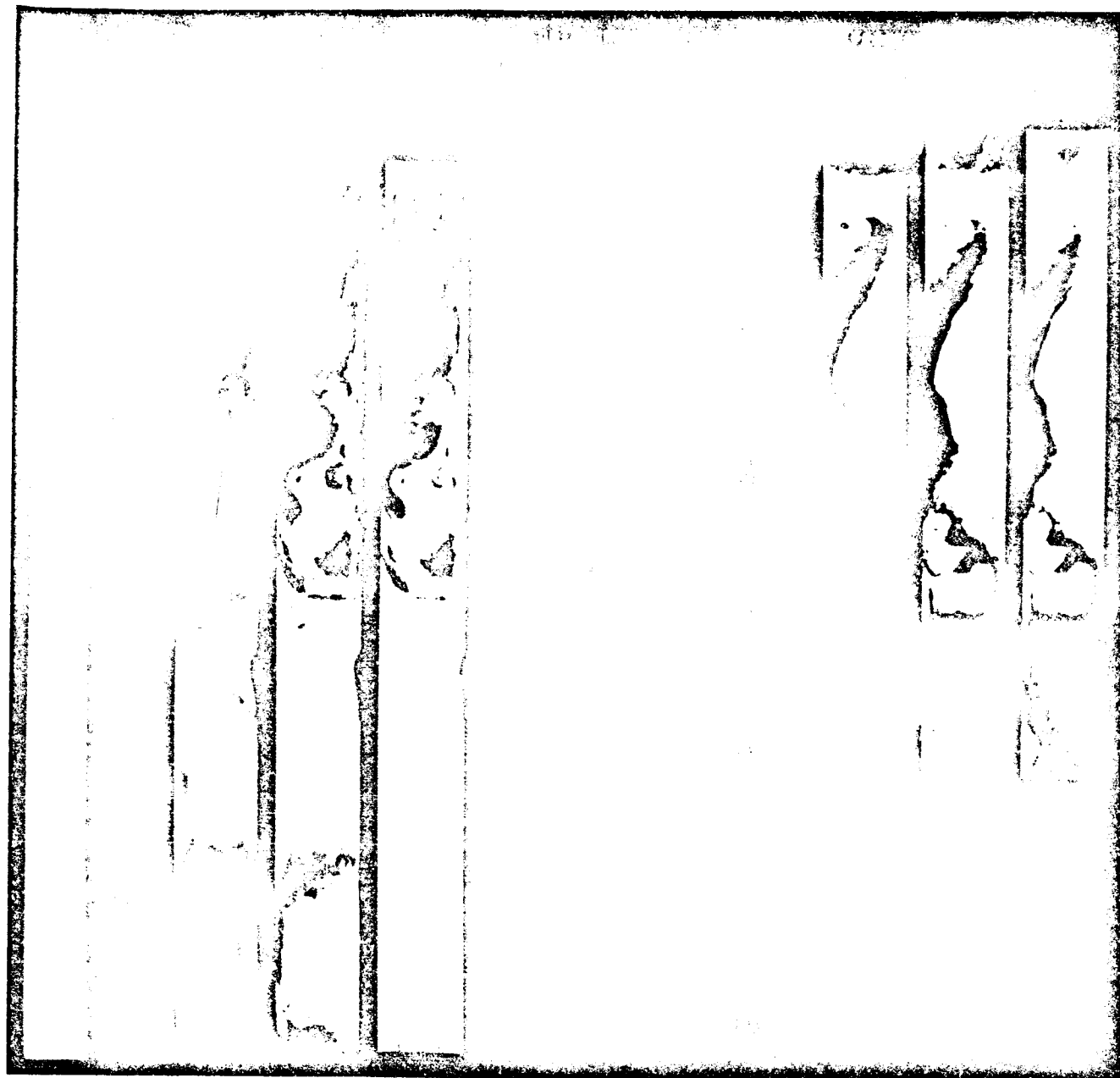




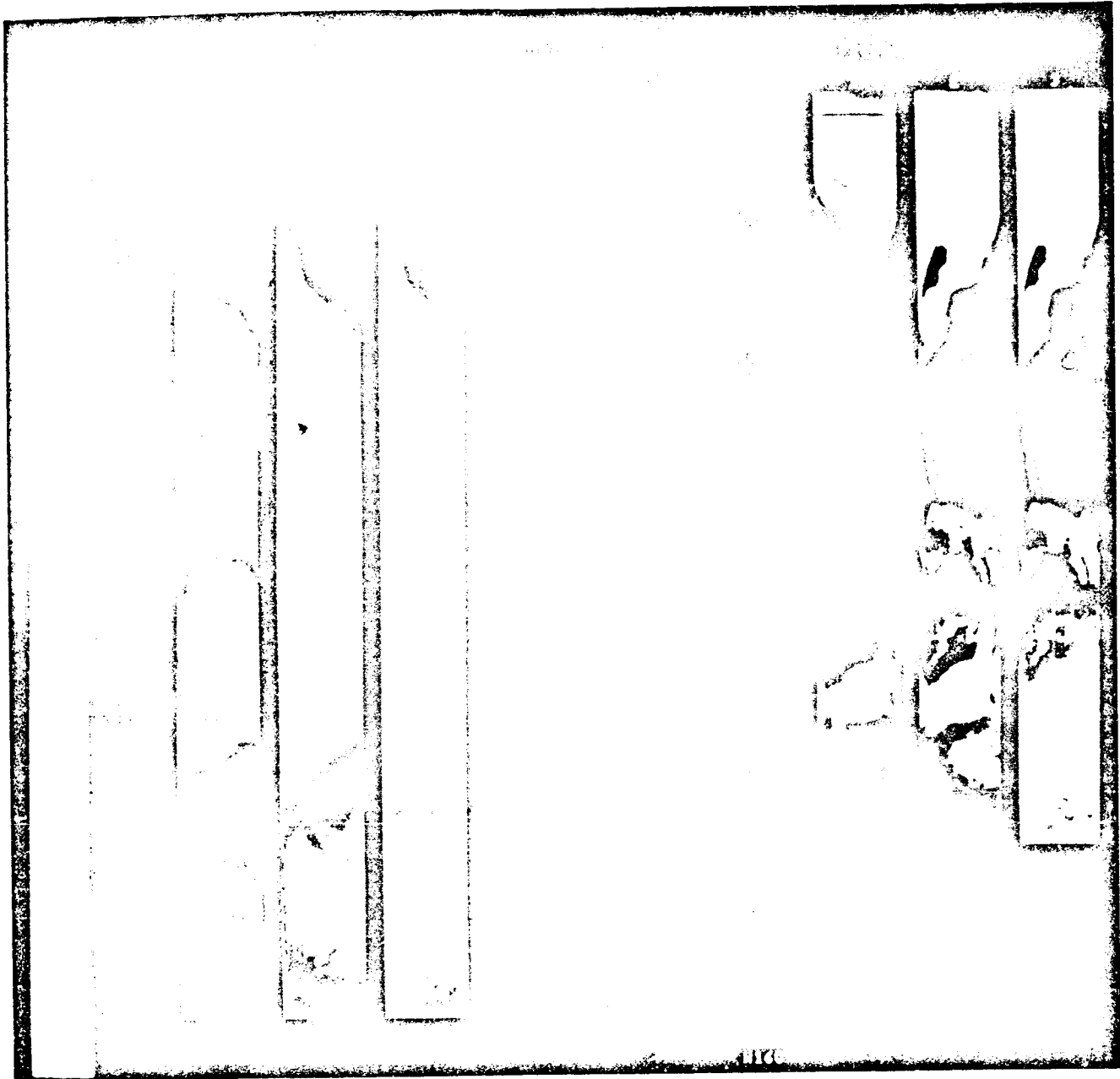


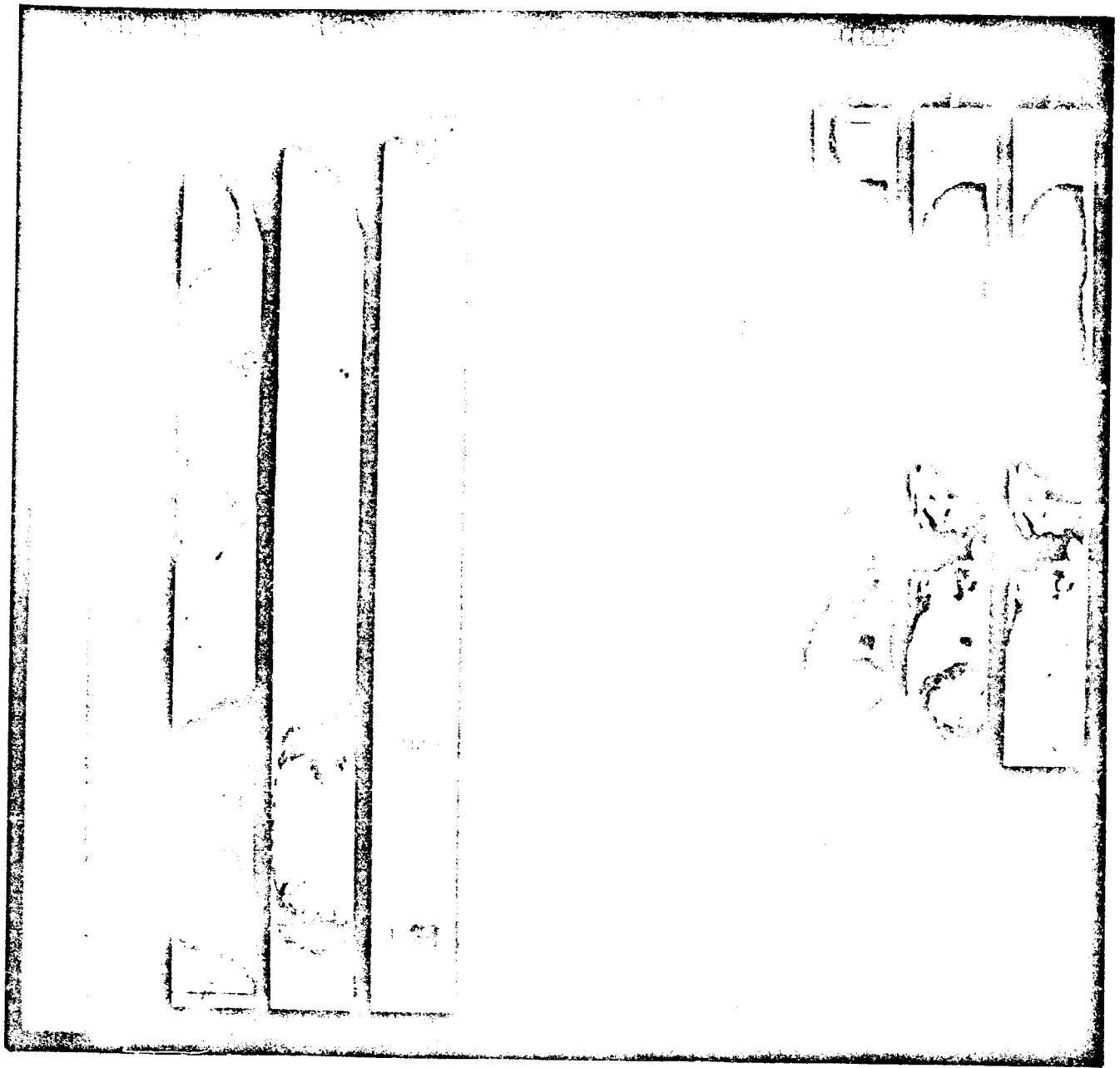


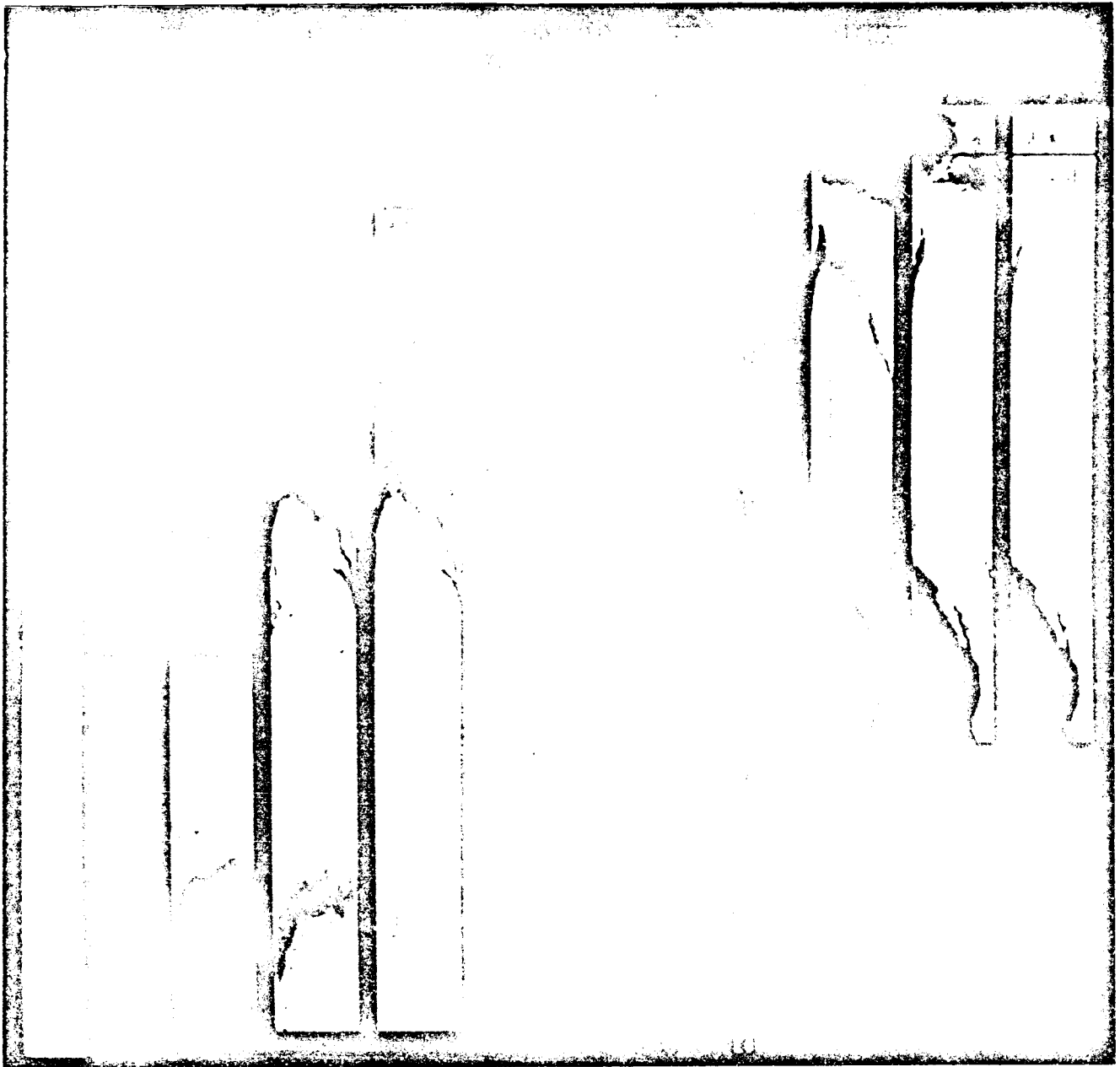


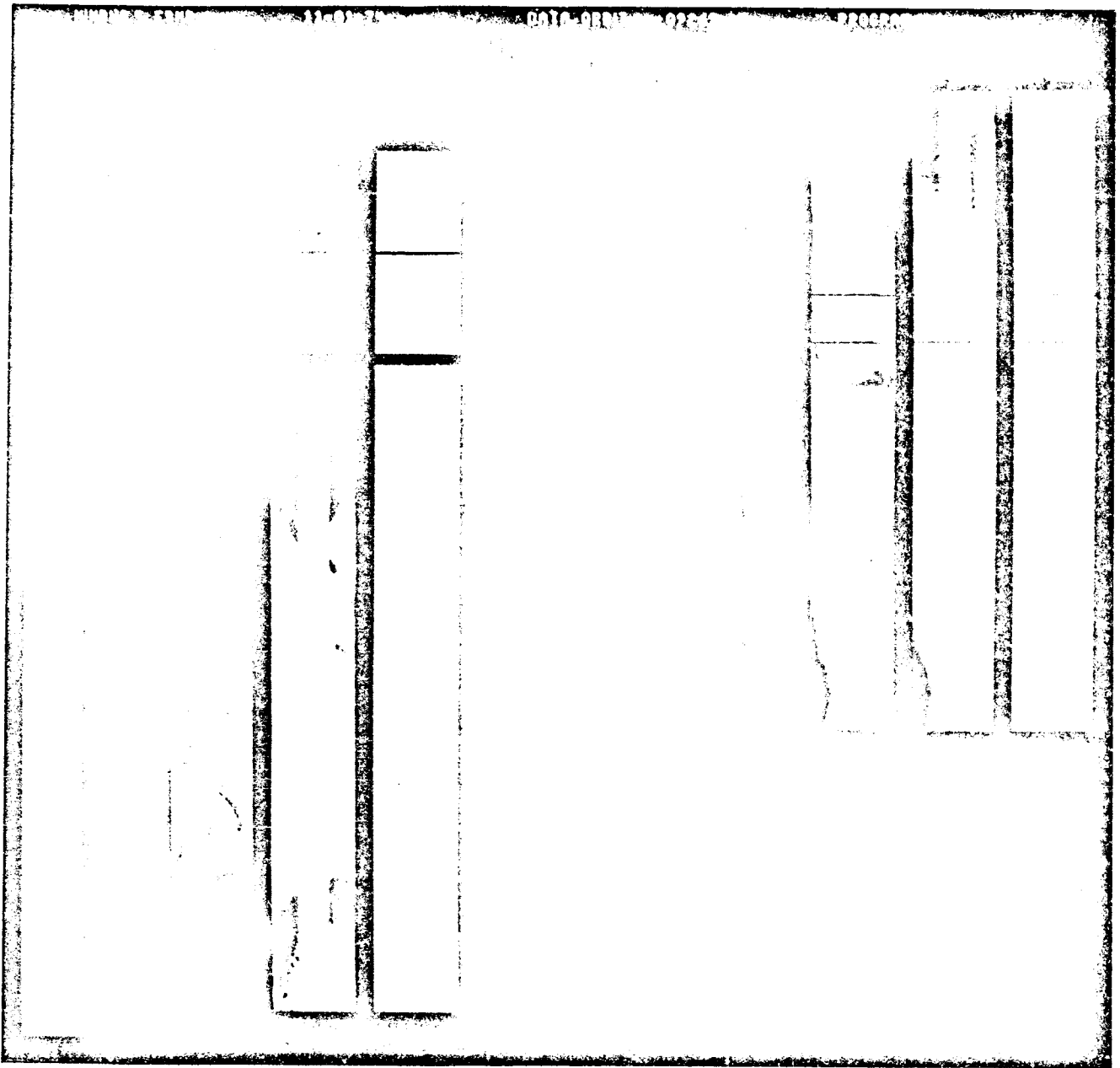


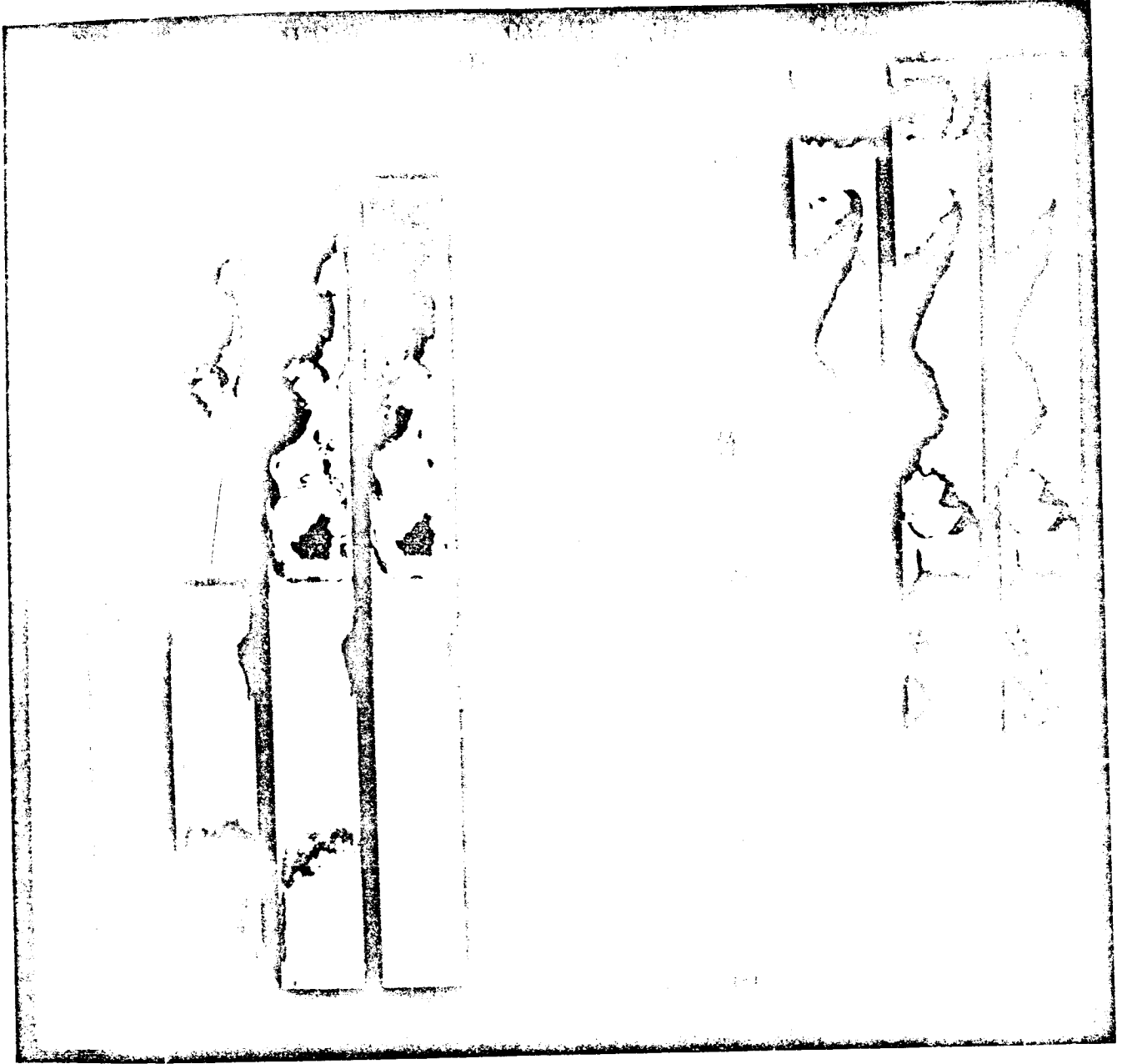


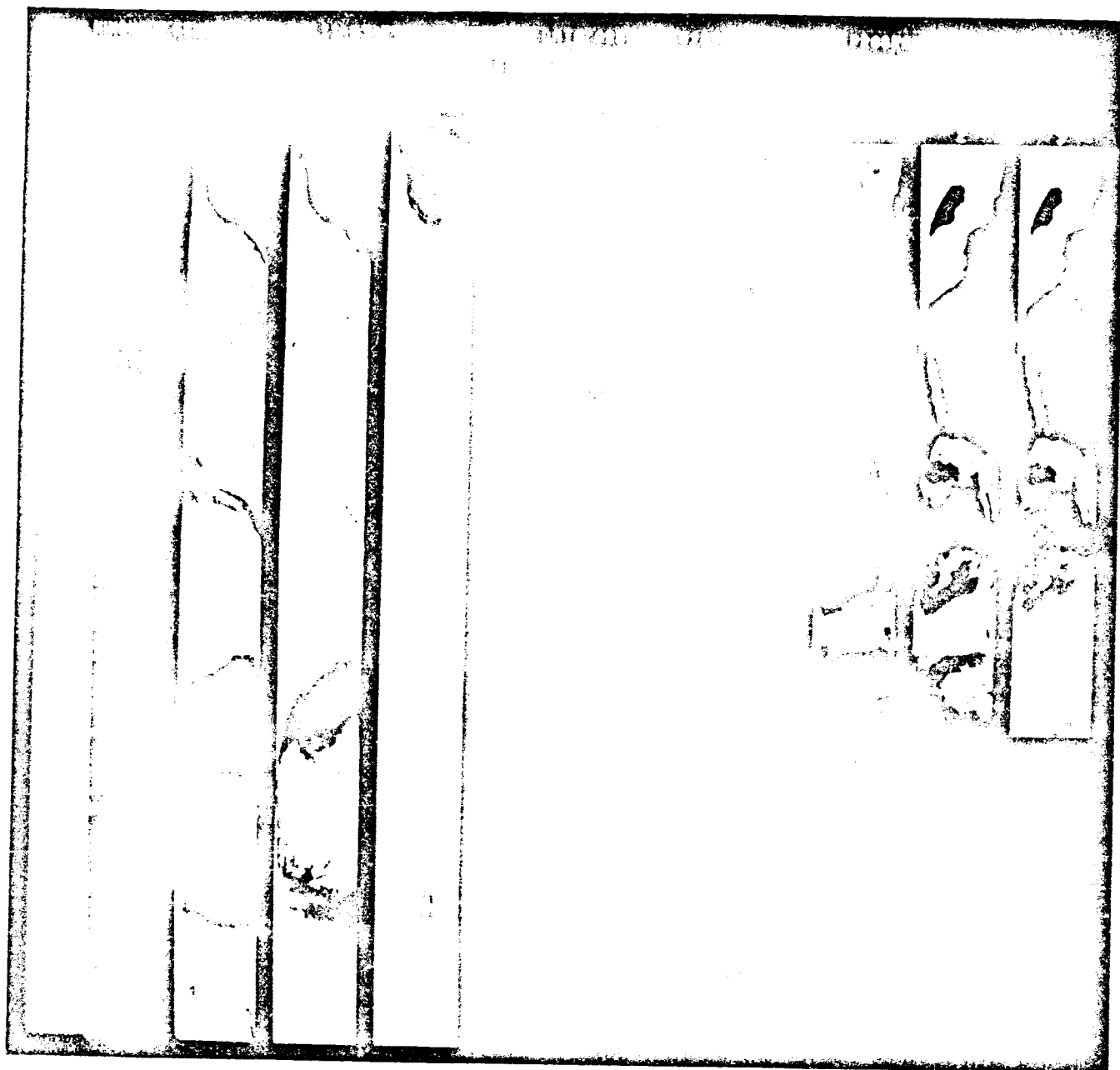


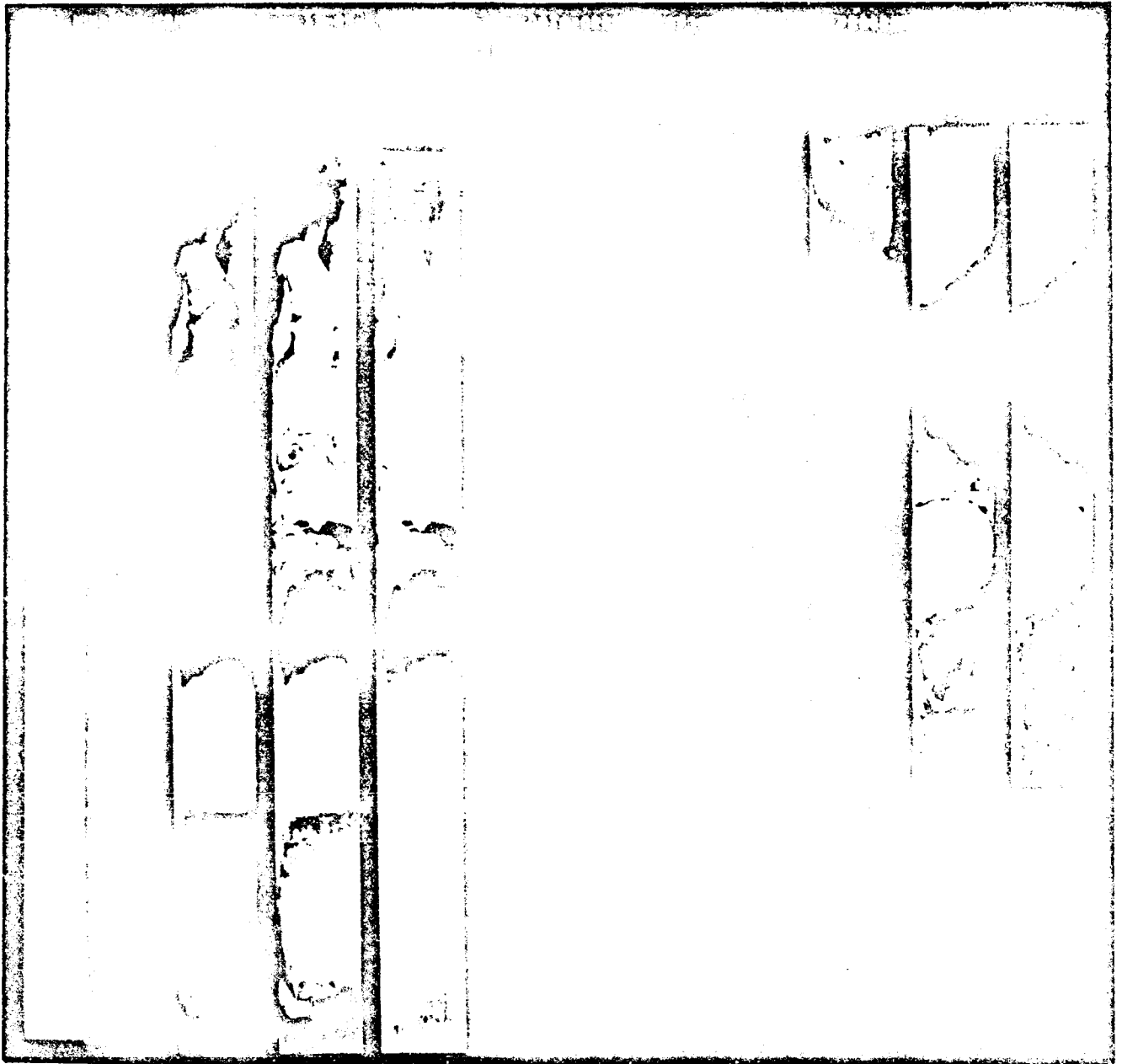


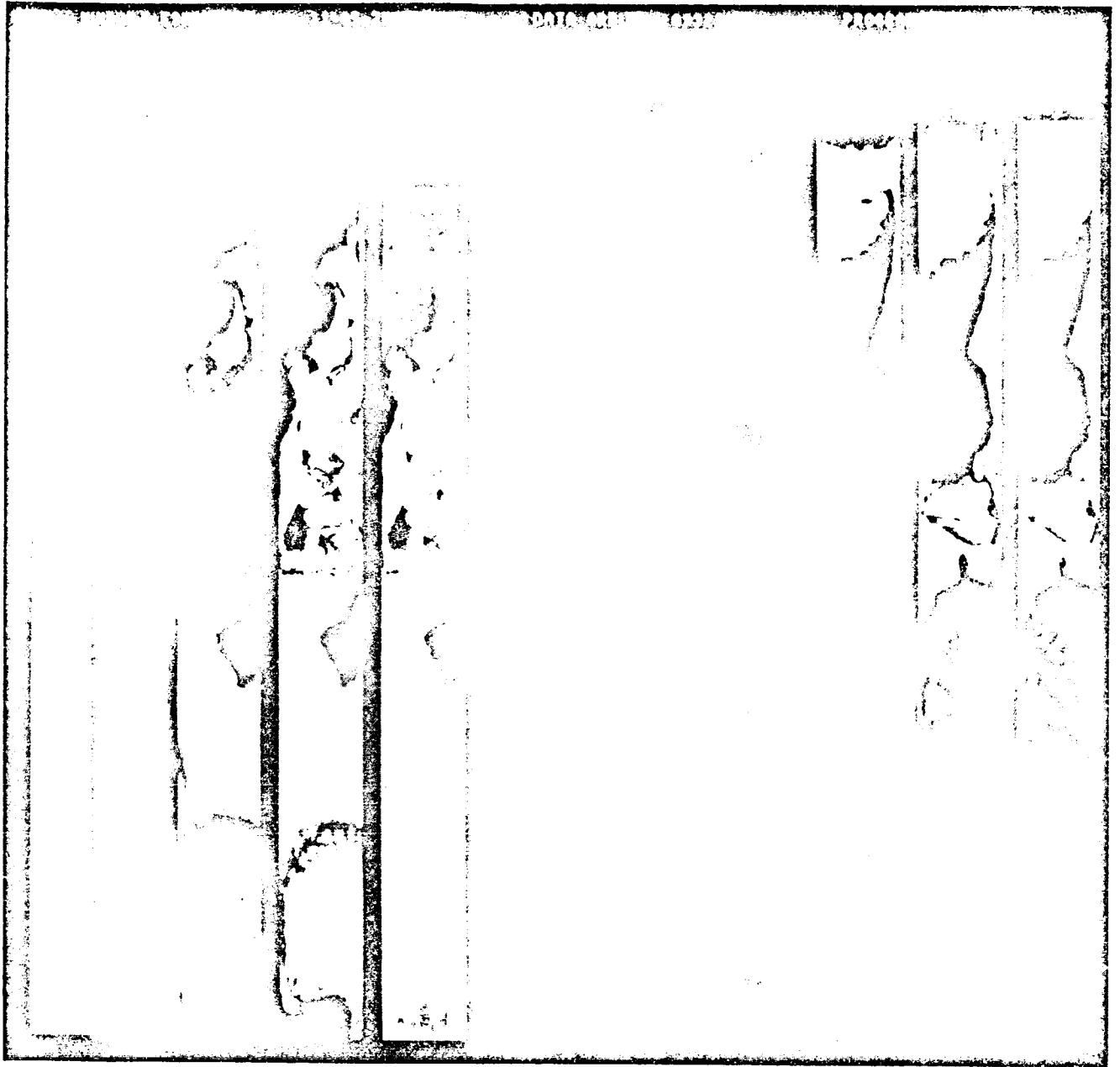






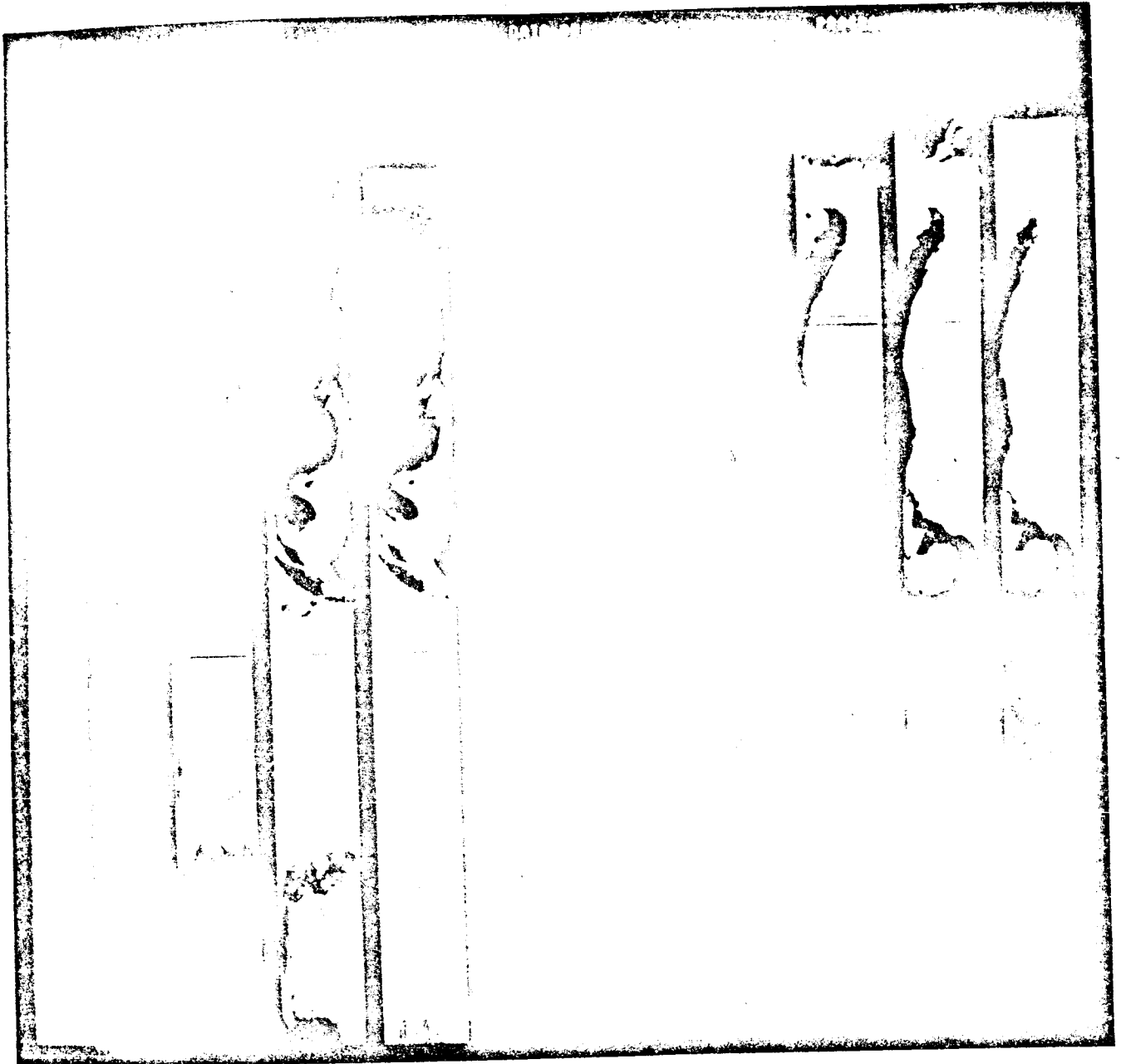


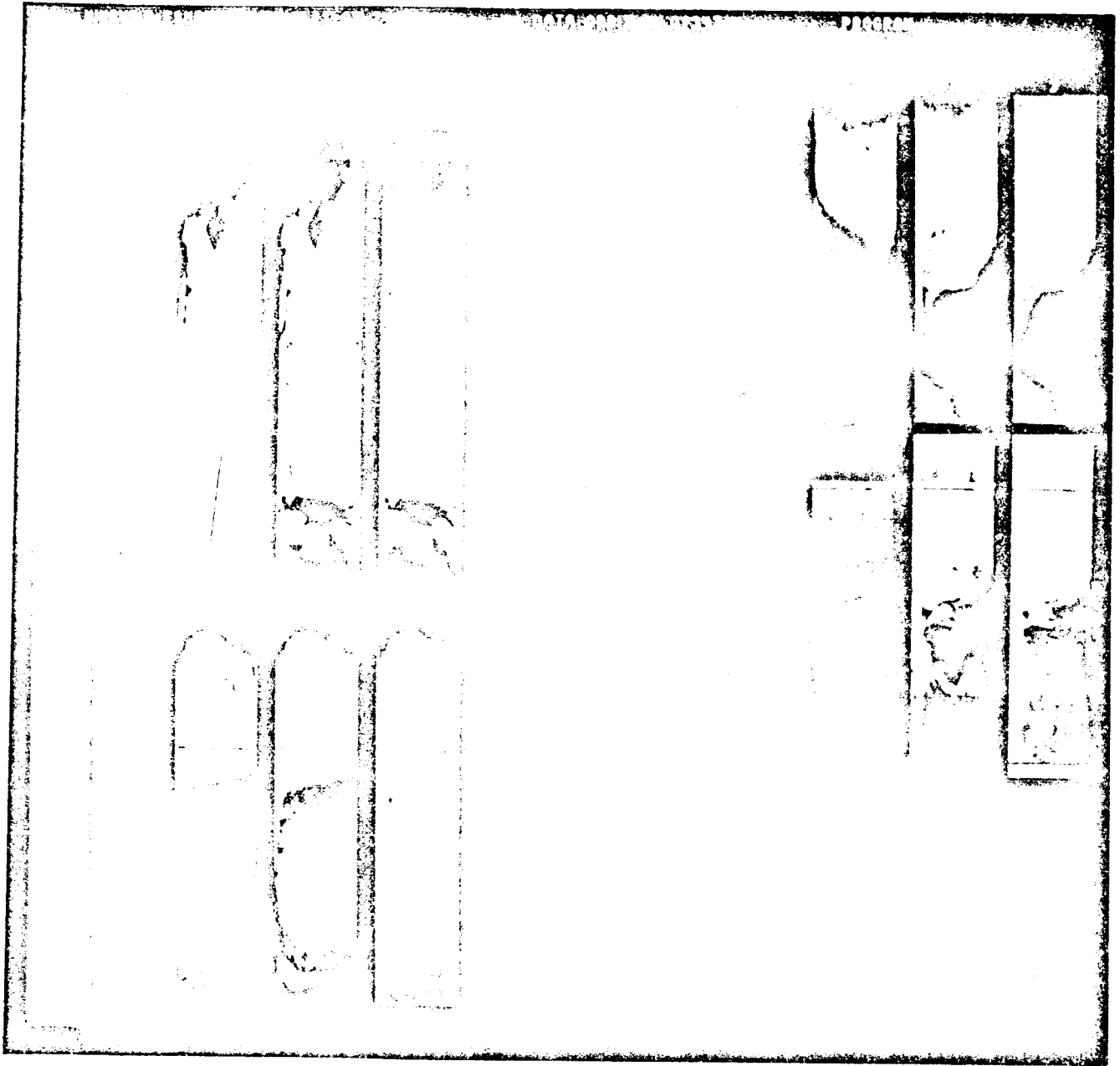


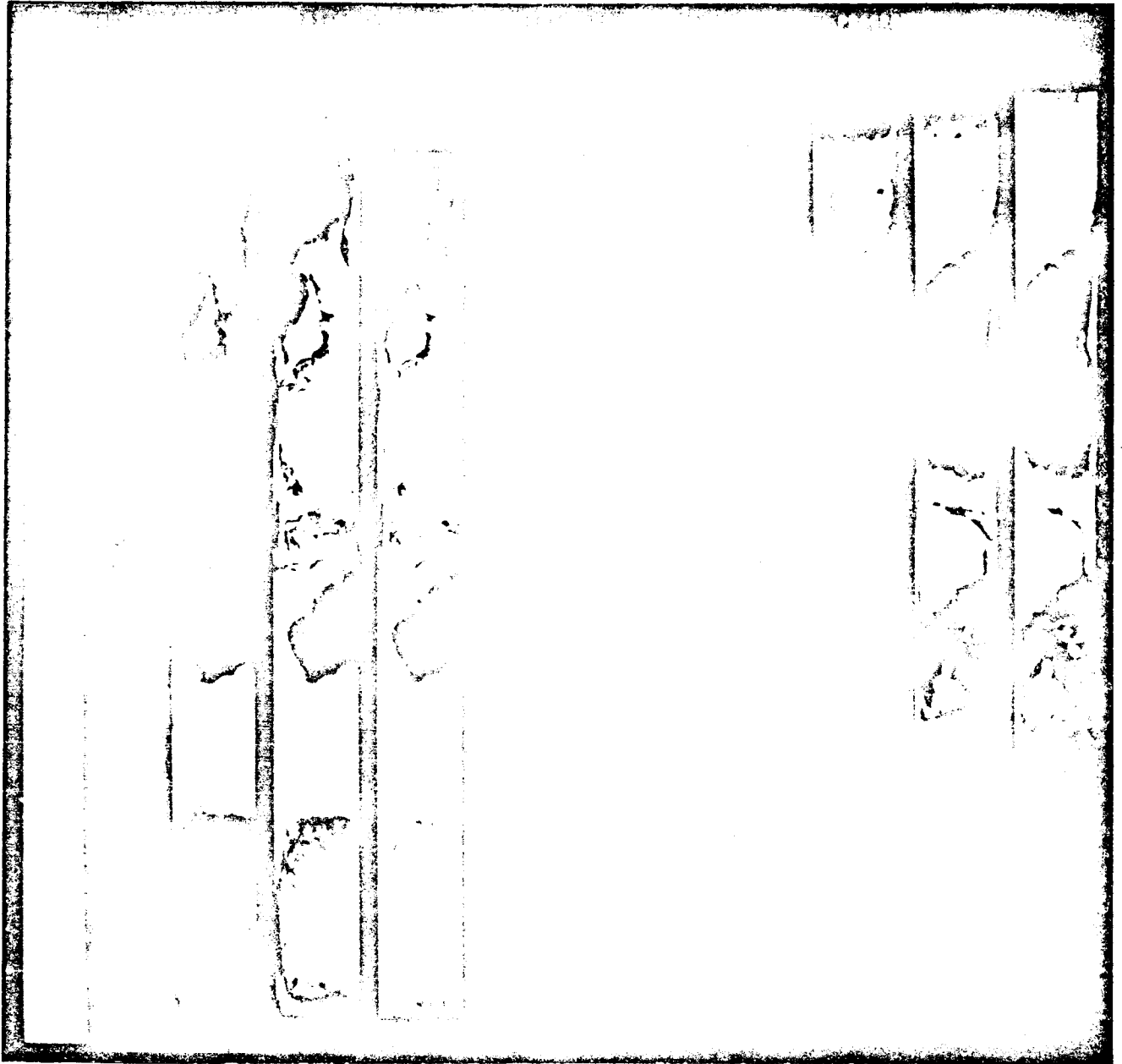


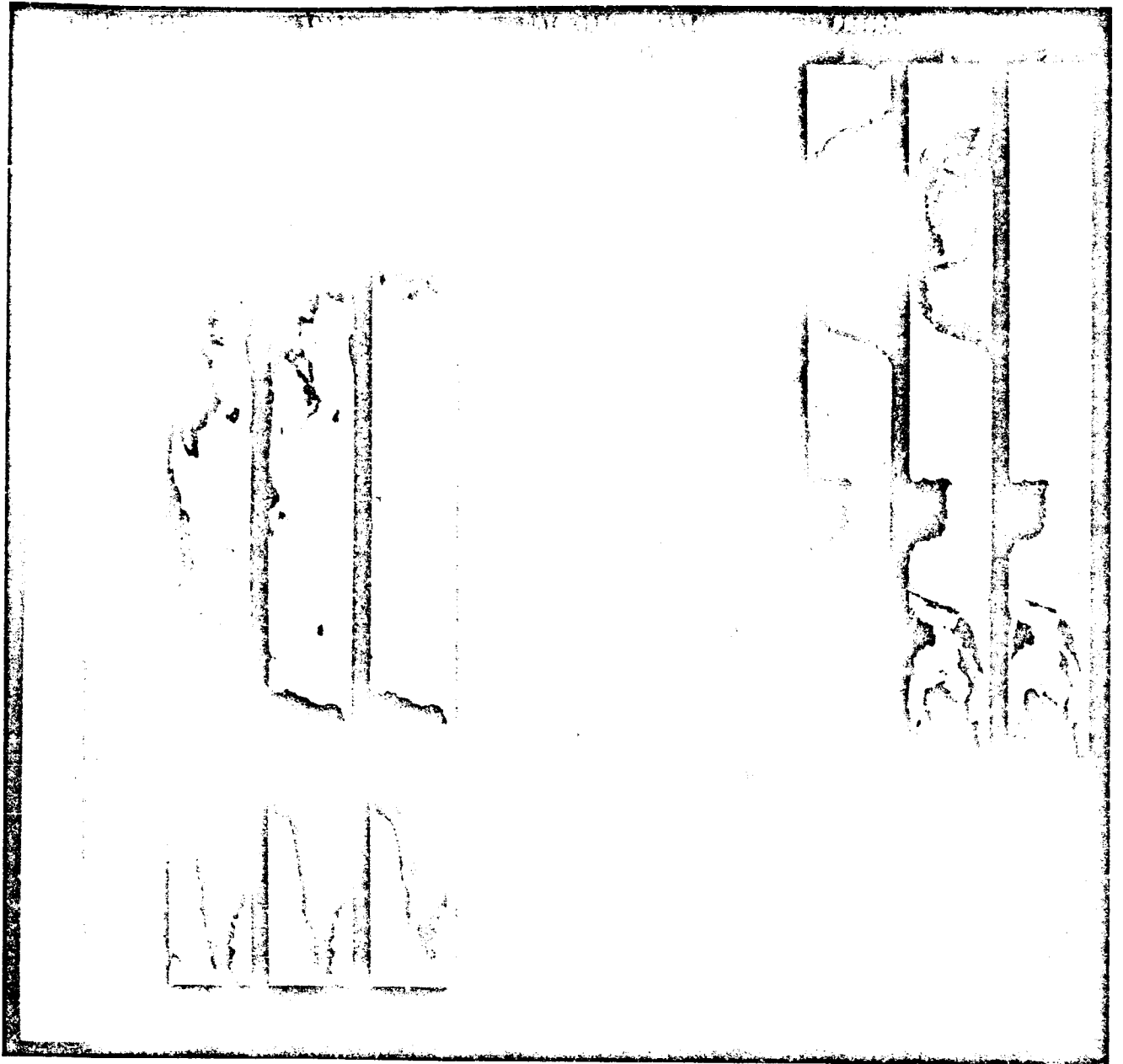
112

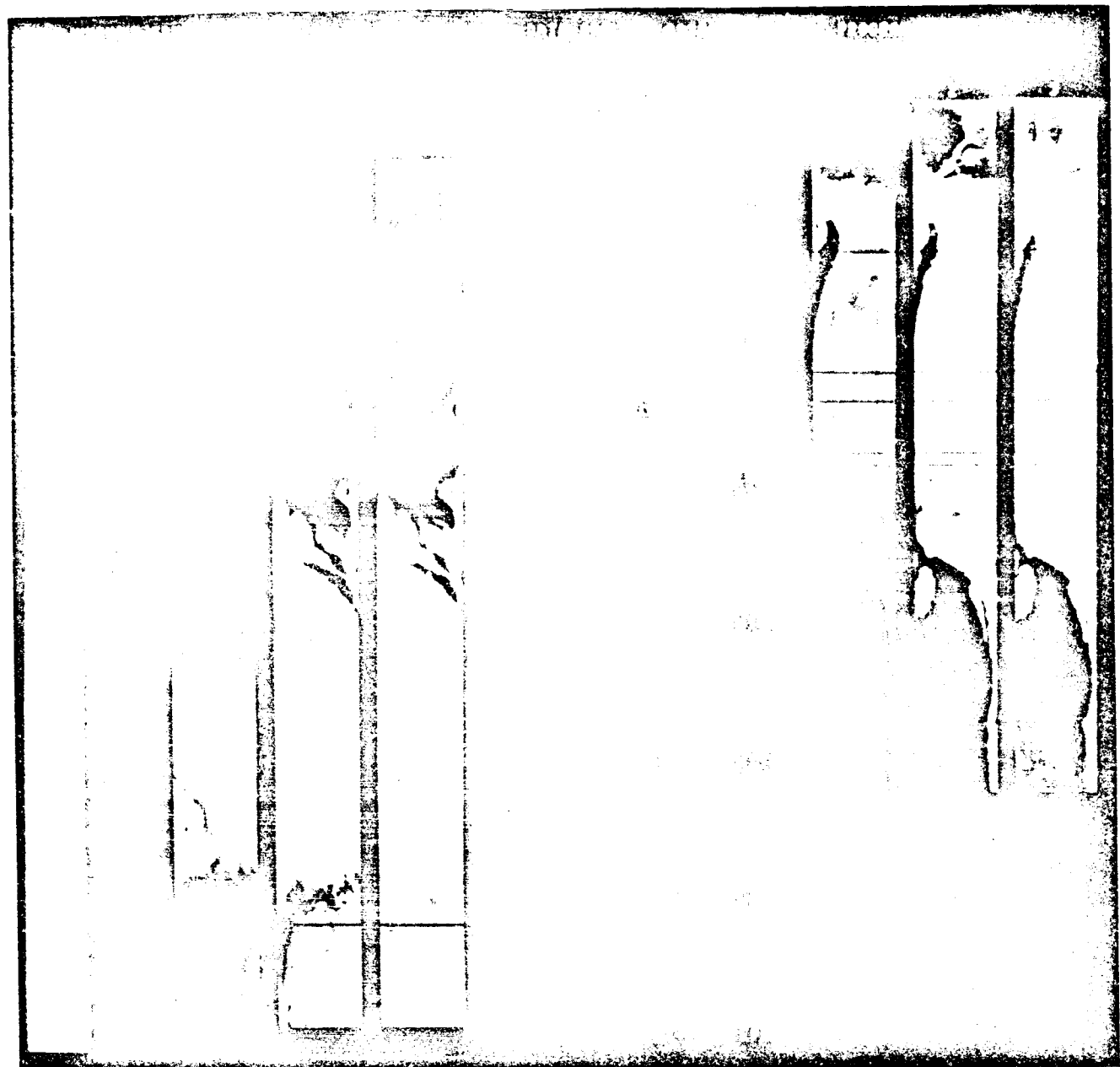


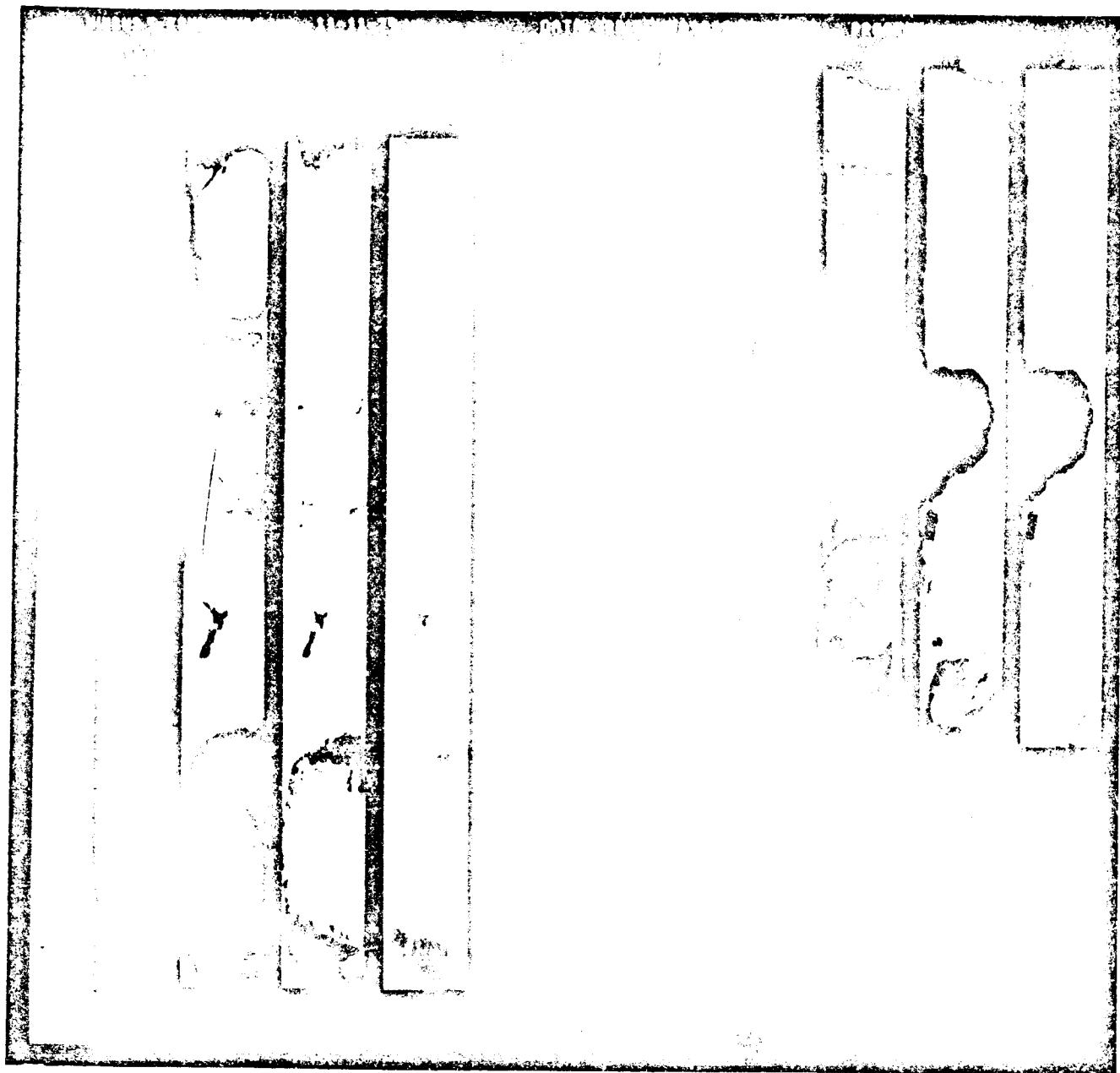


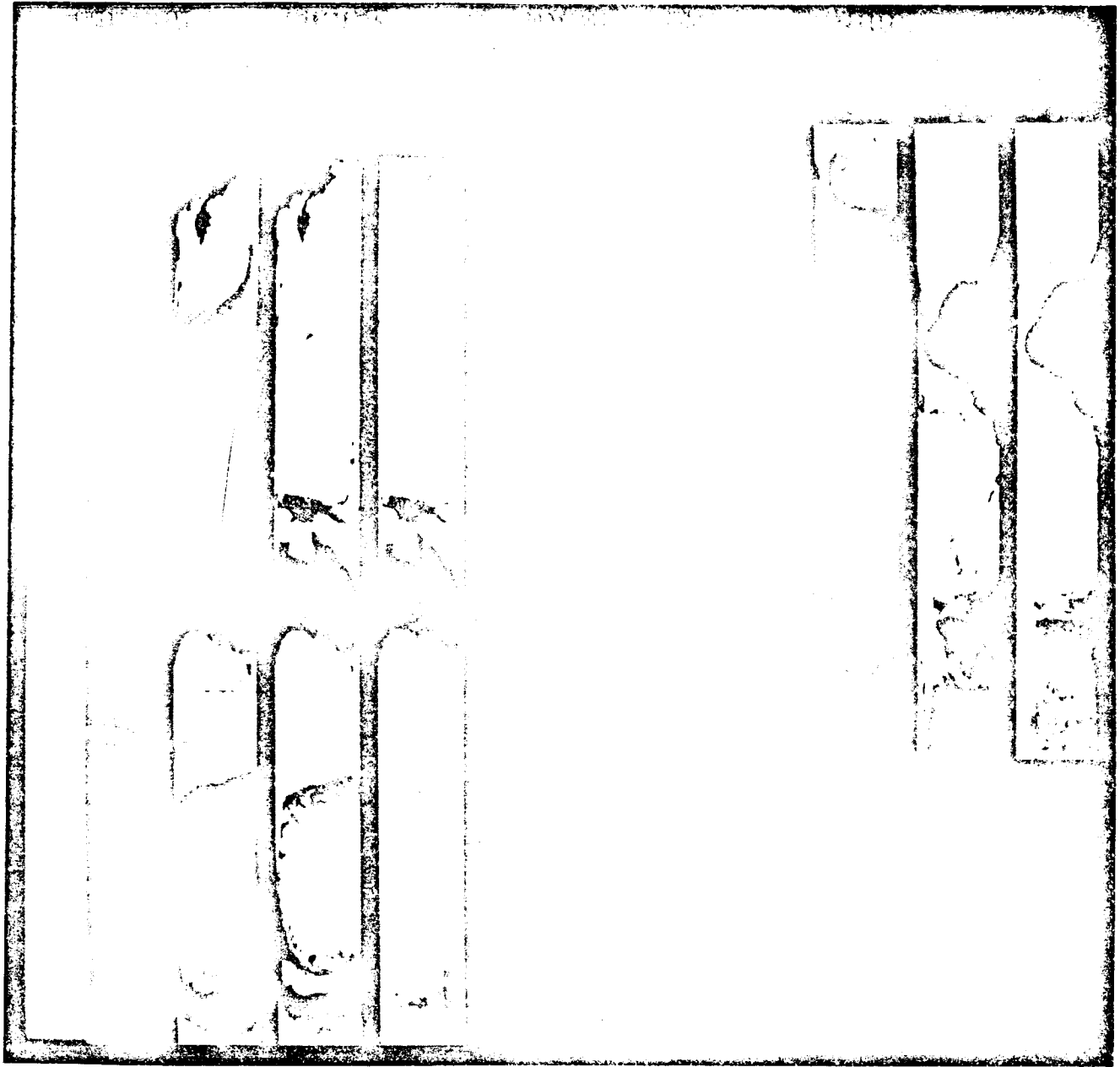


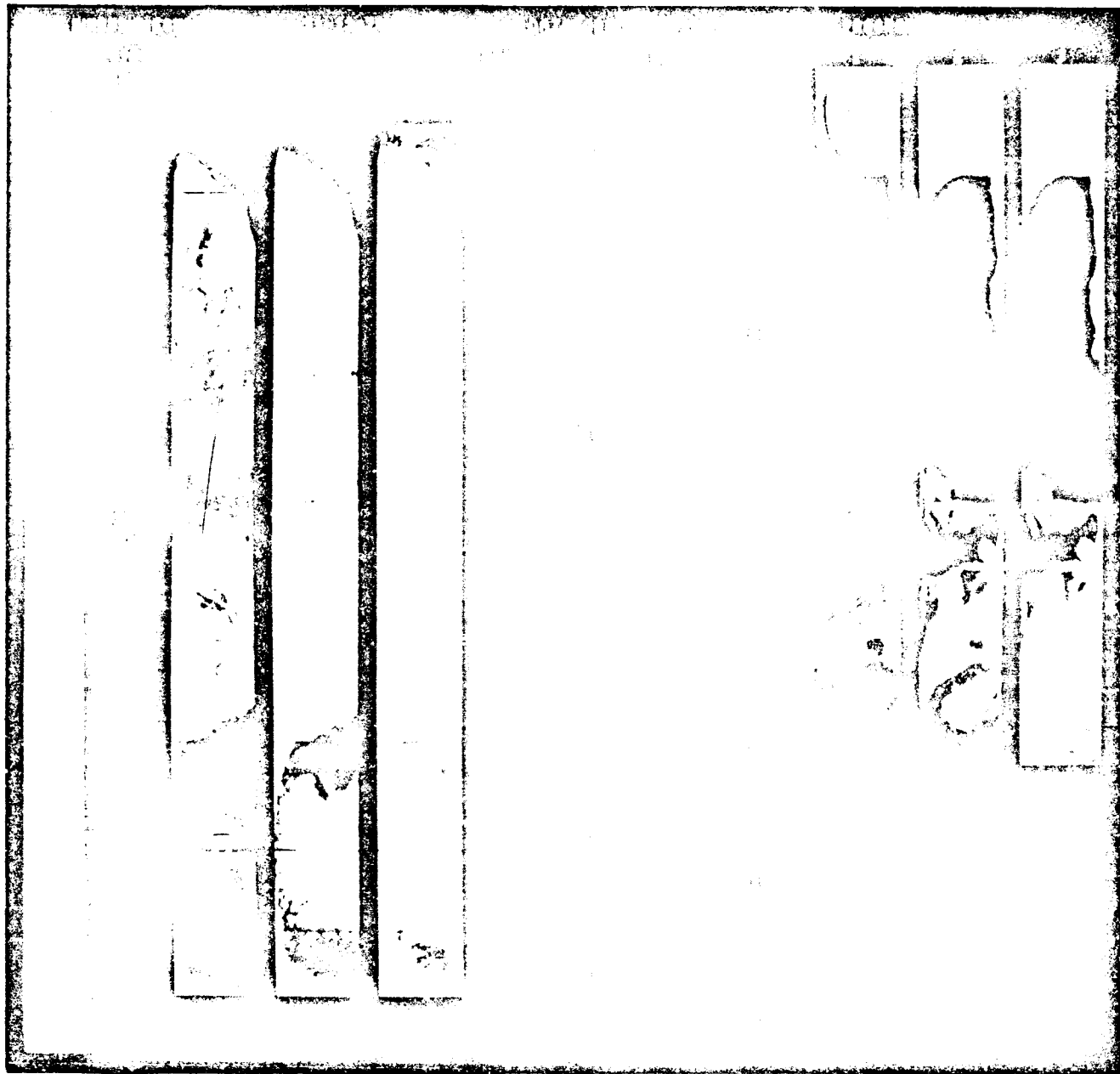




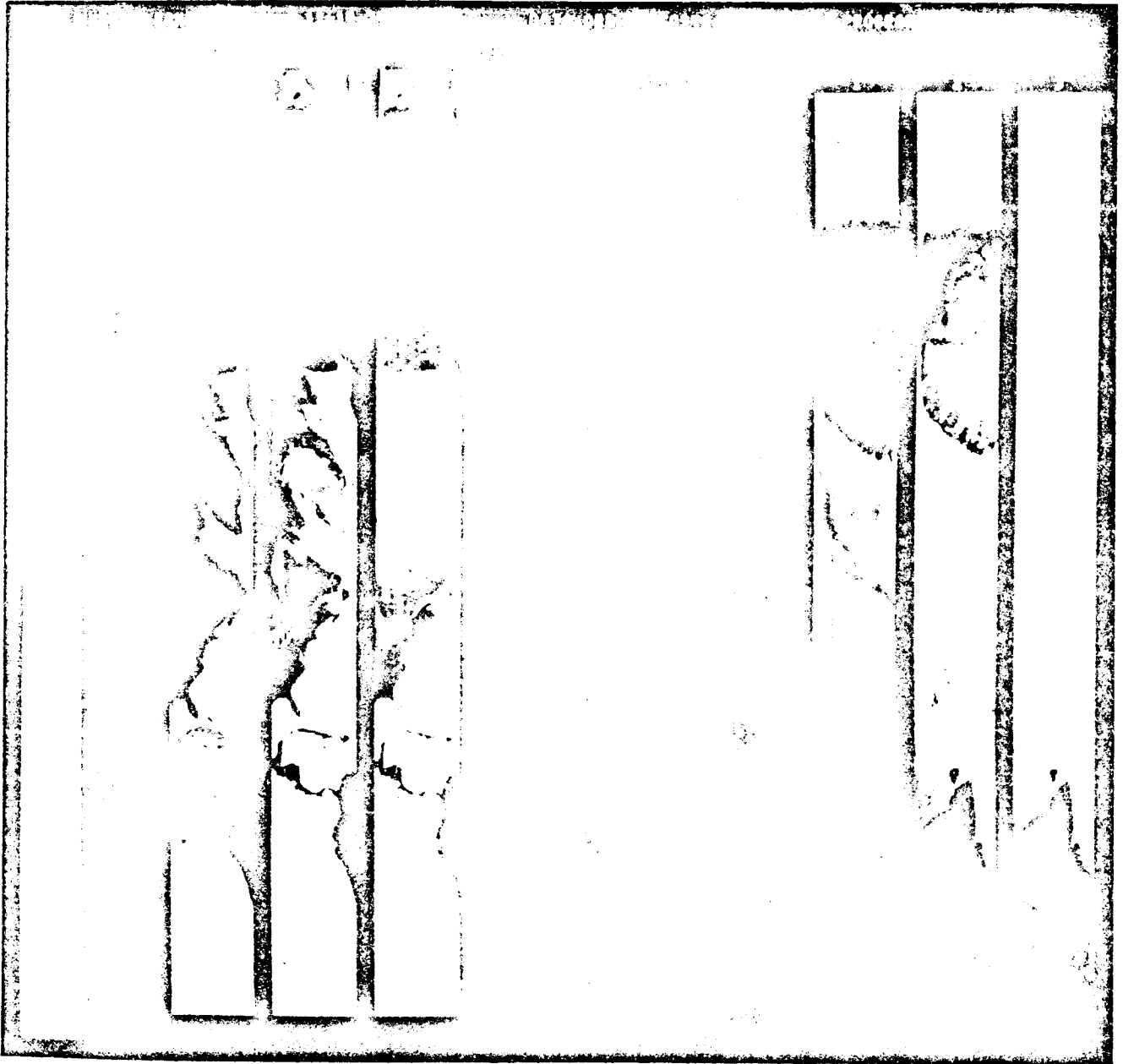


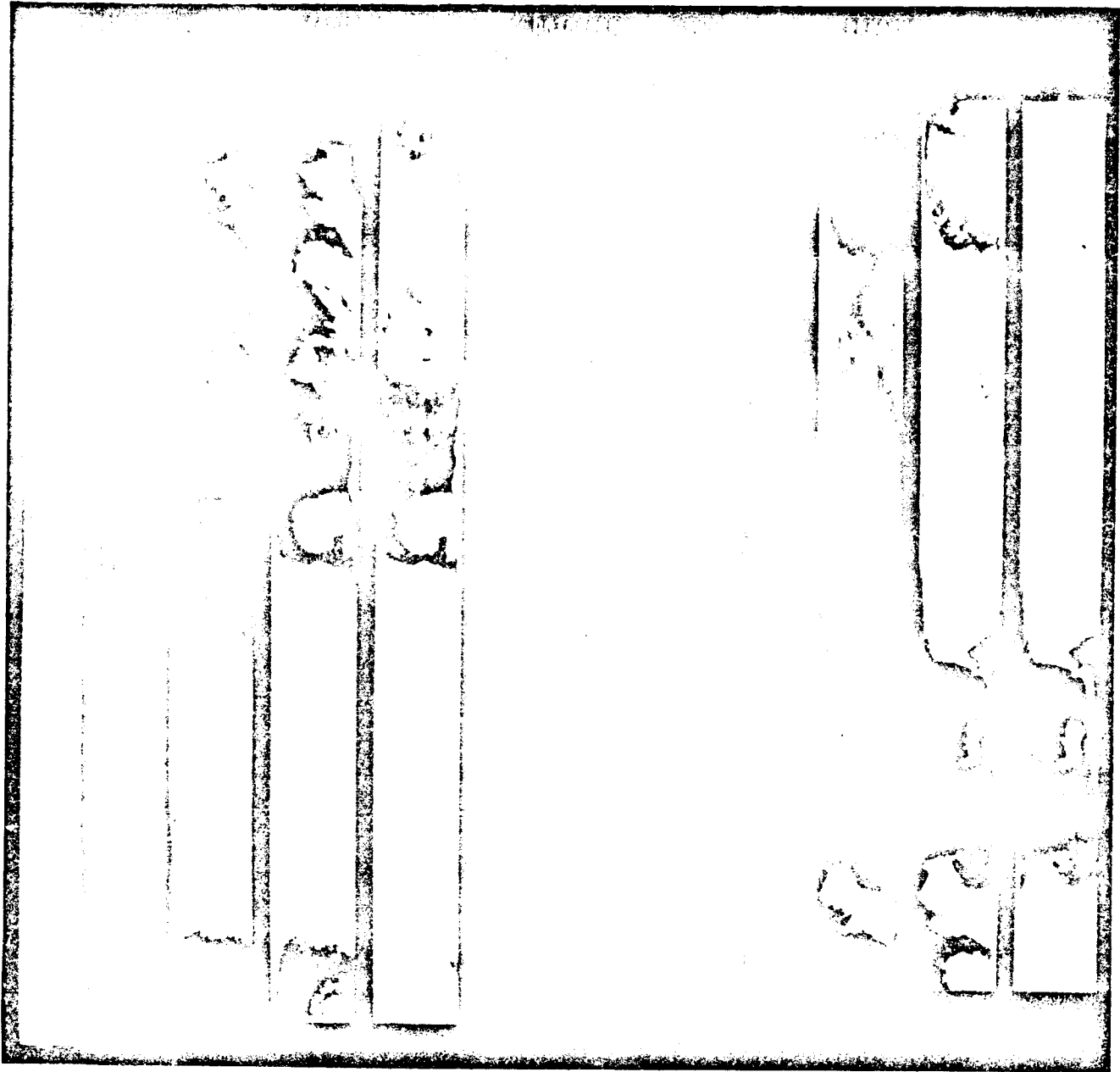


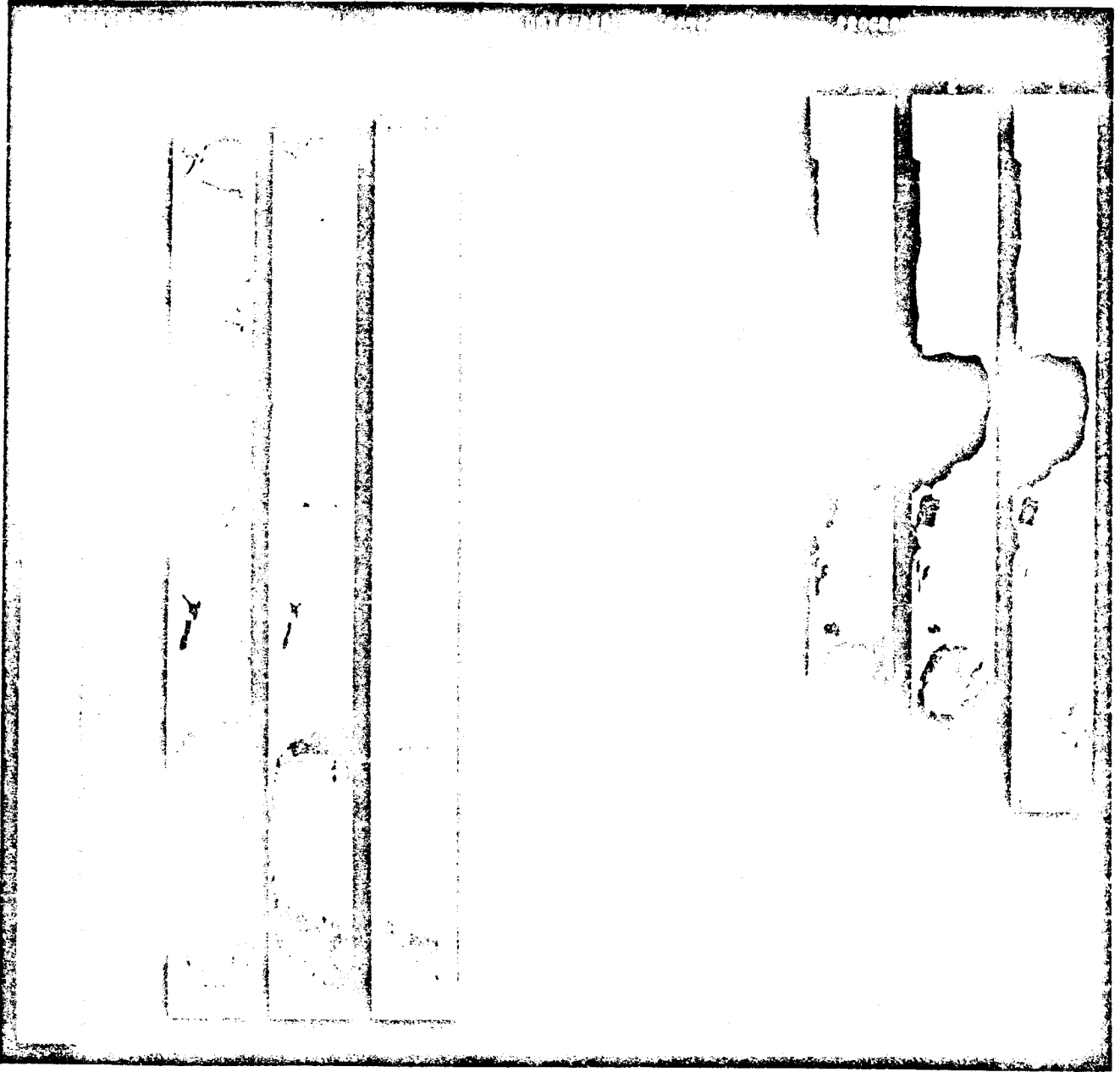


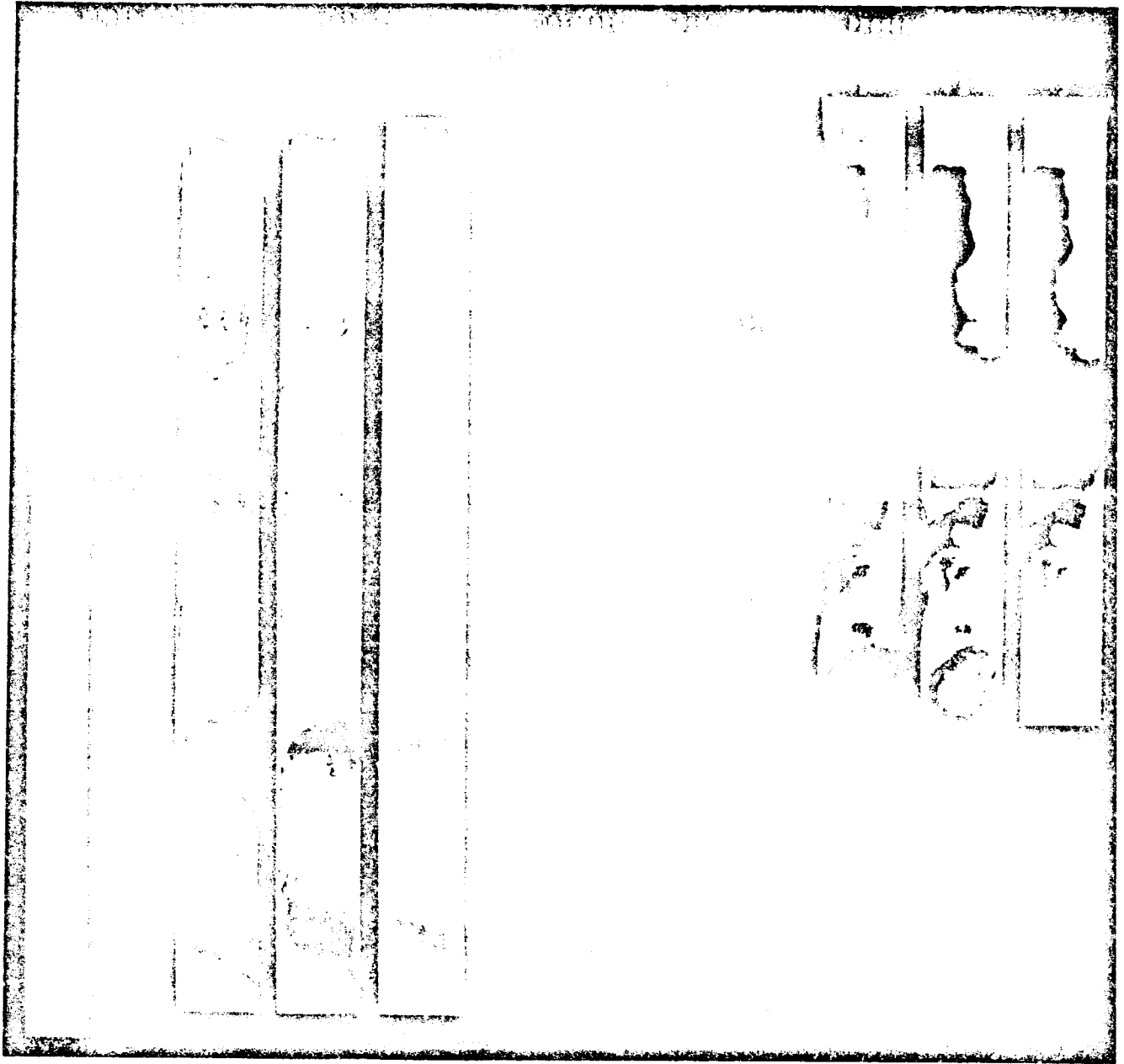


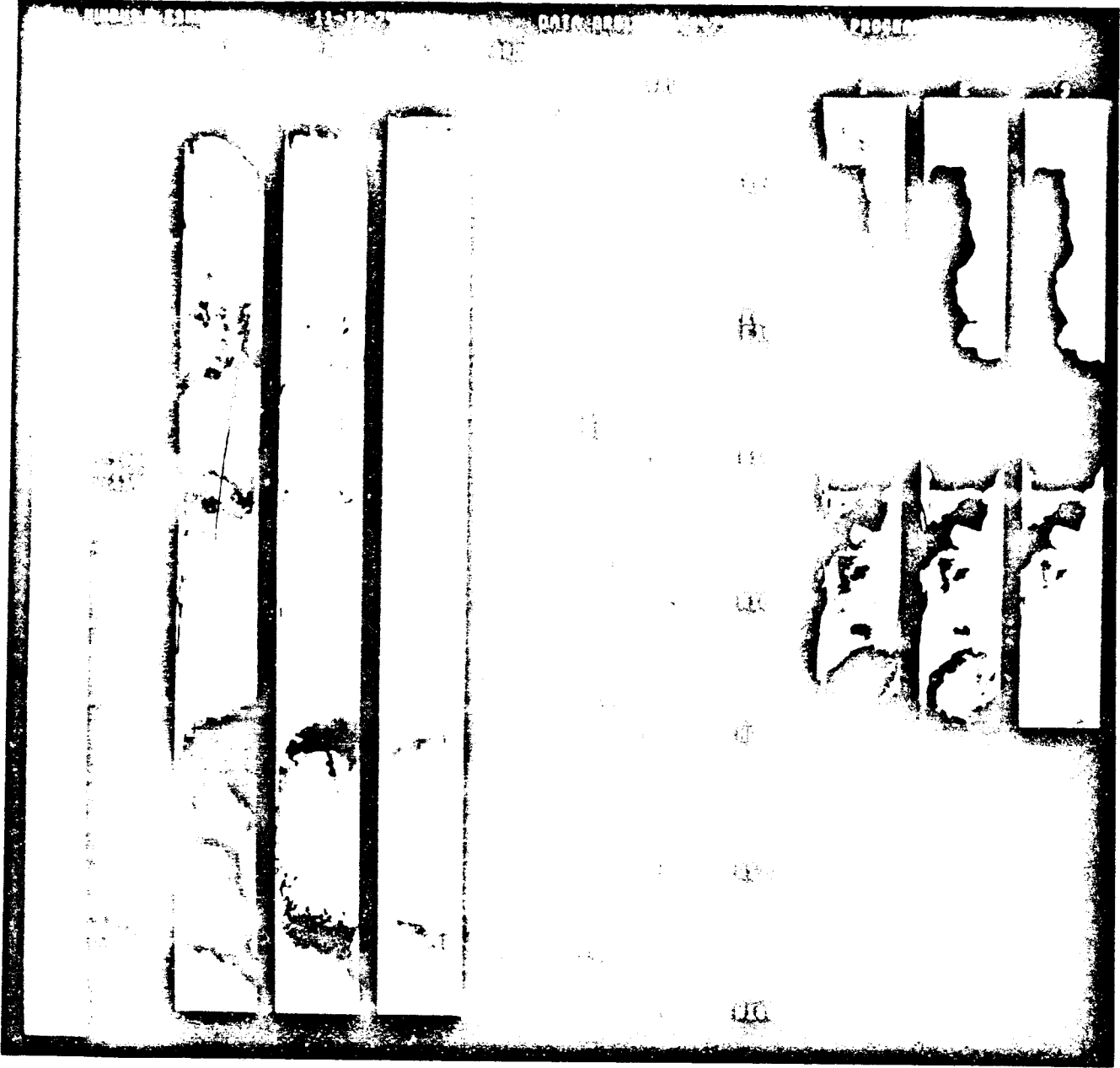


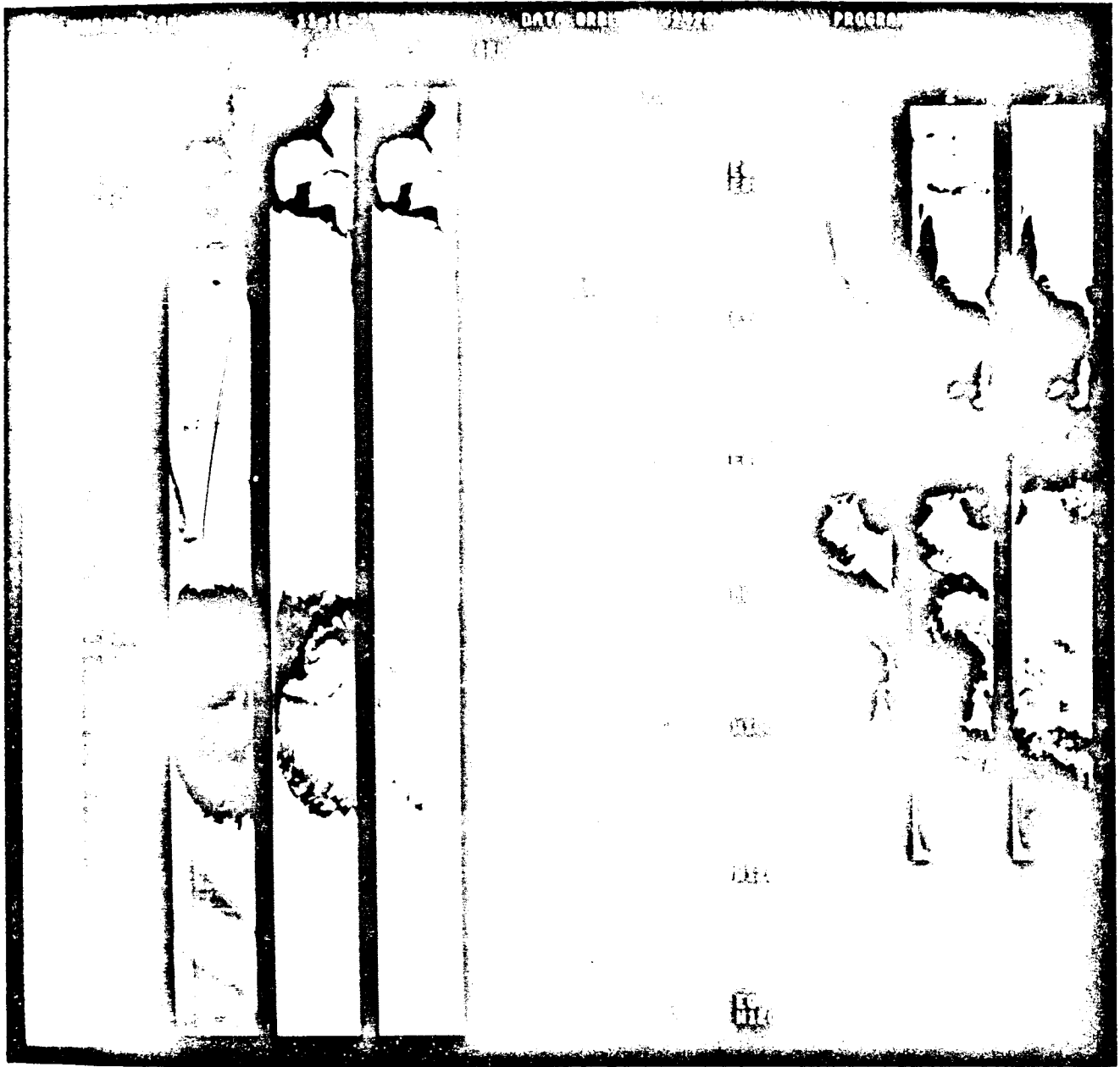




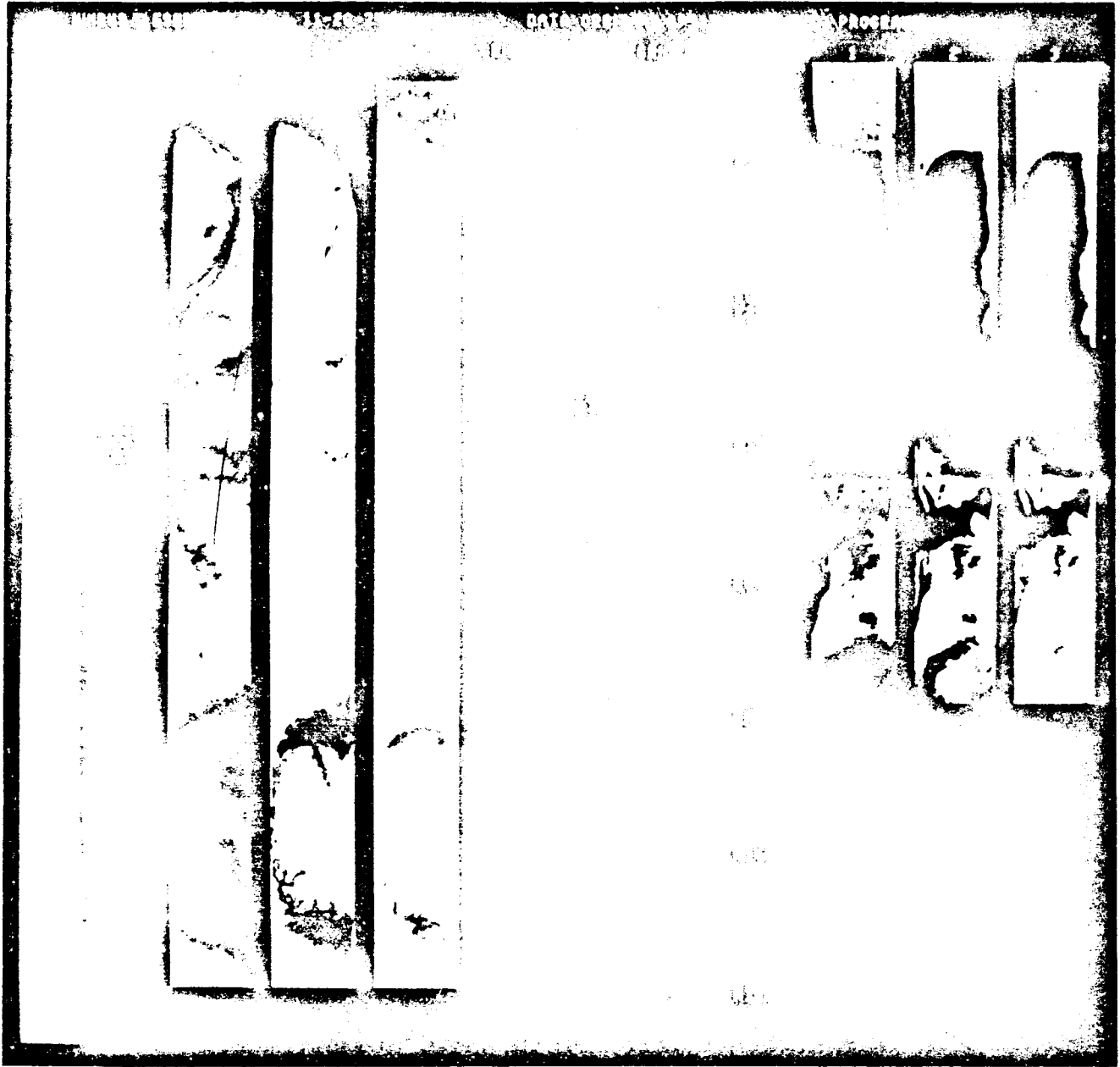




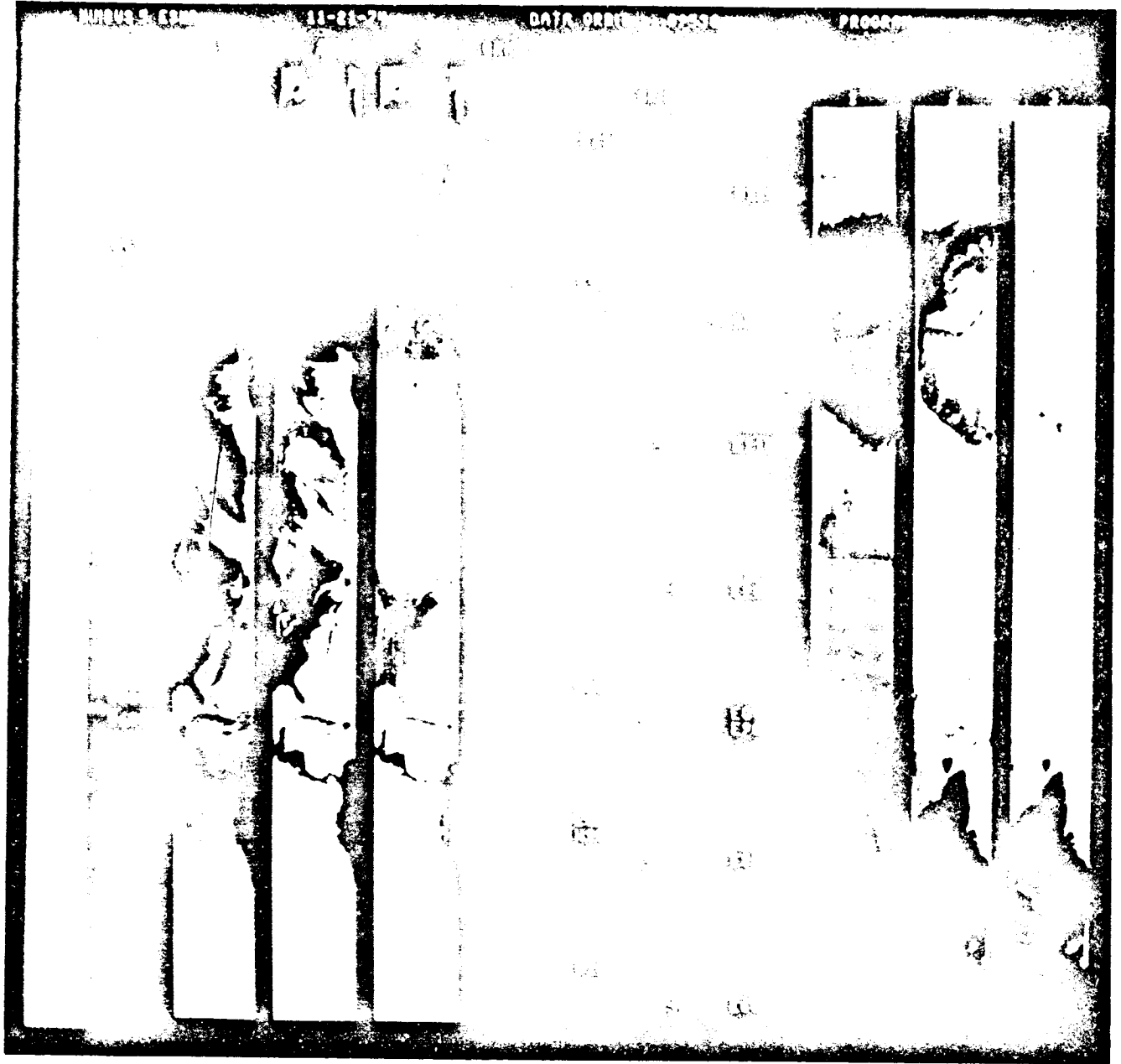




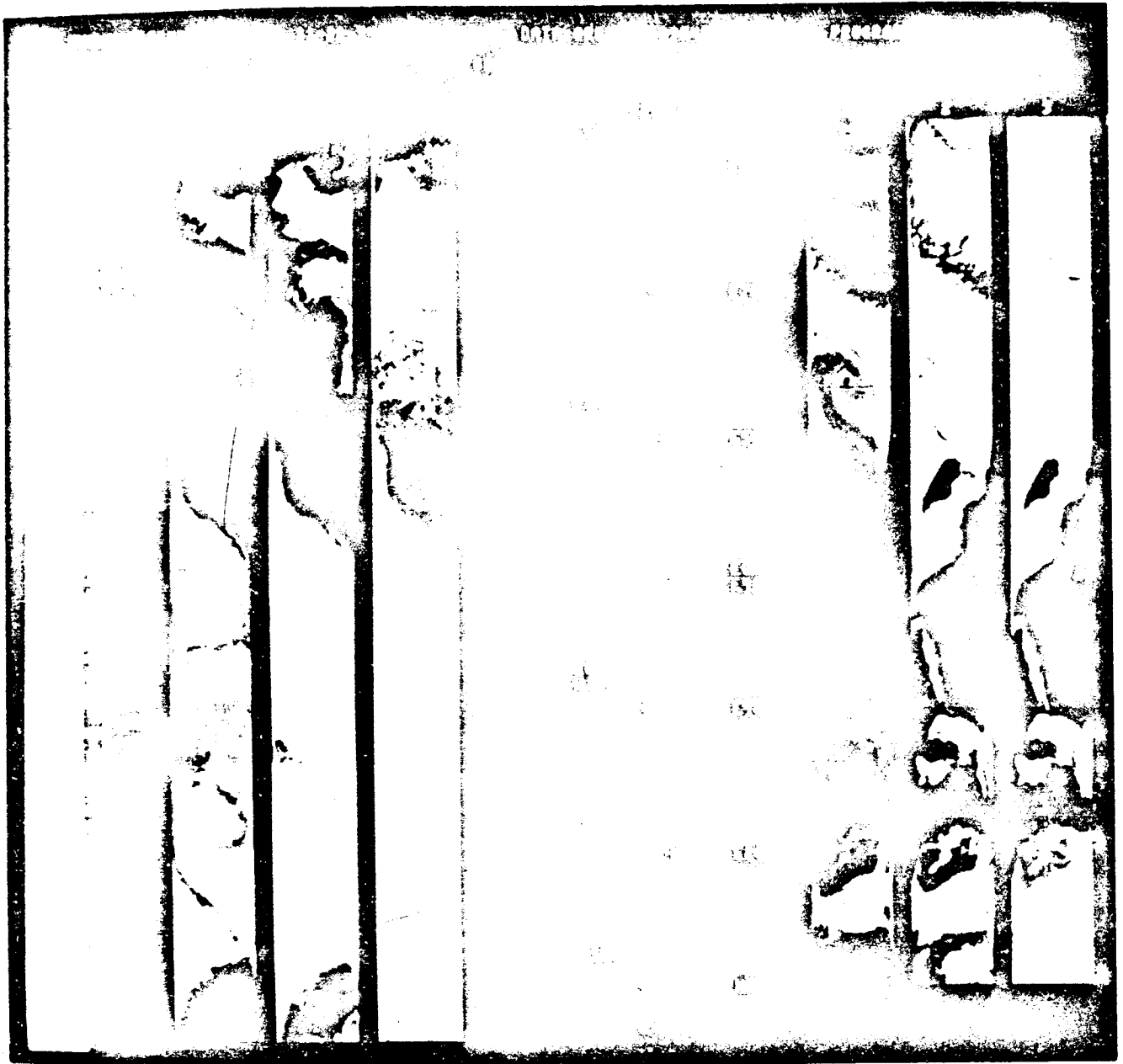


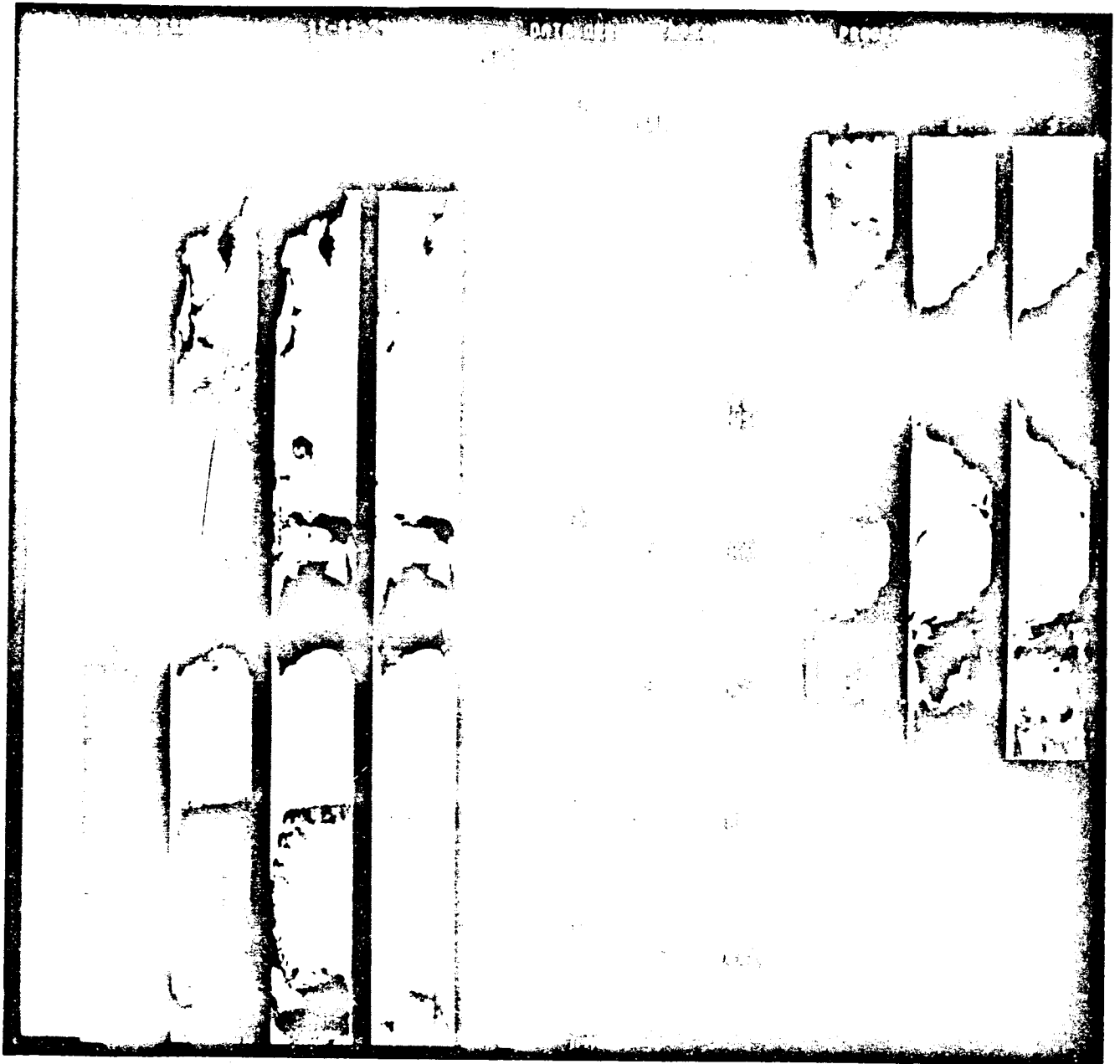


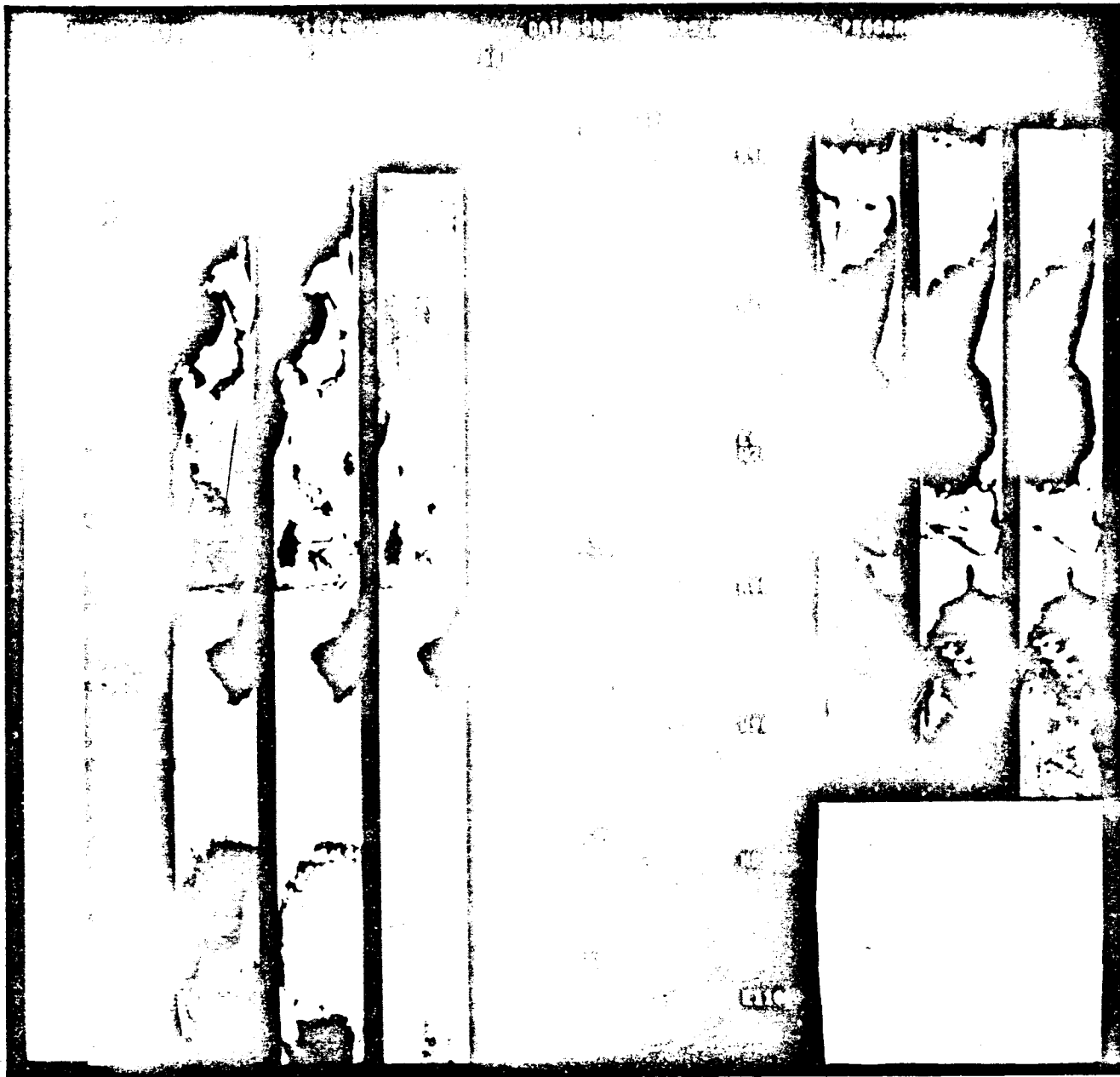


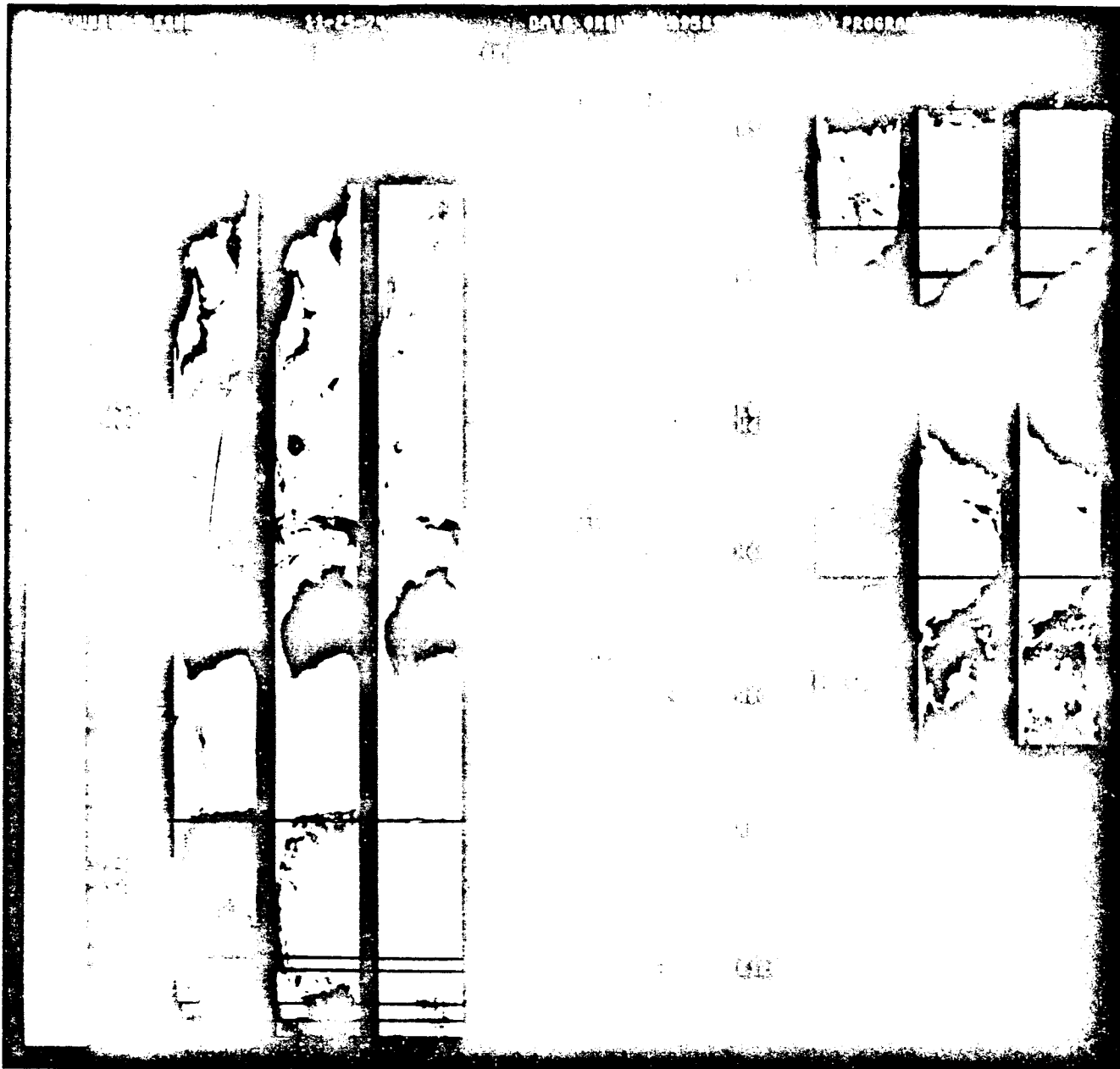


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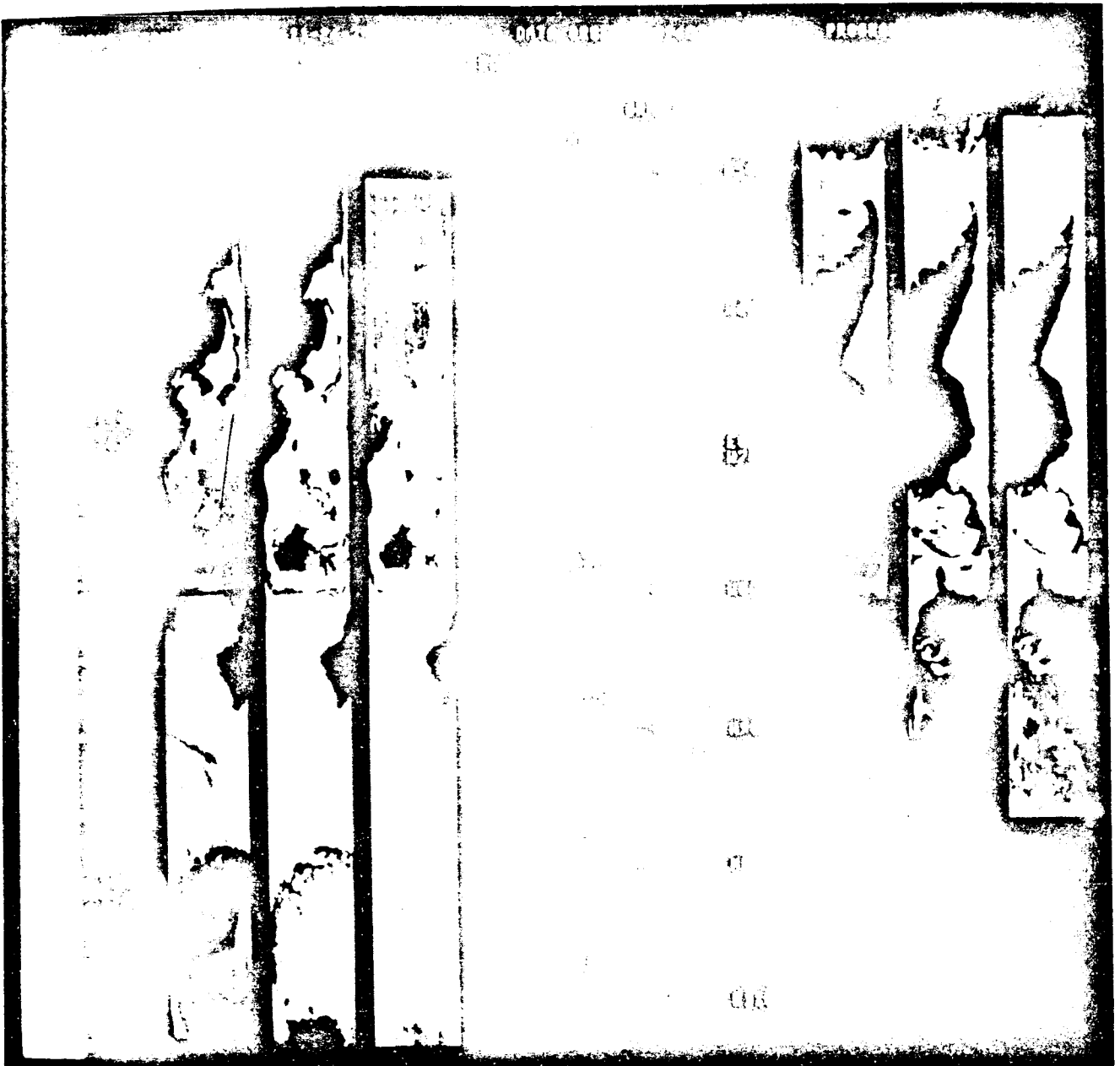


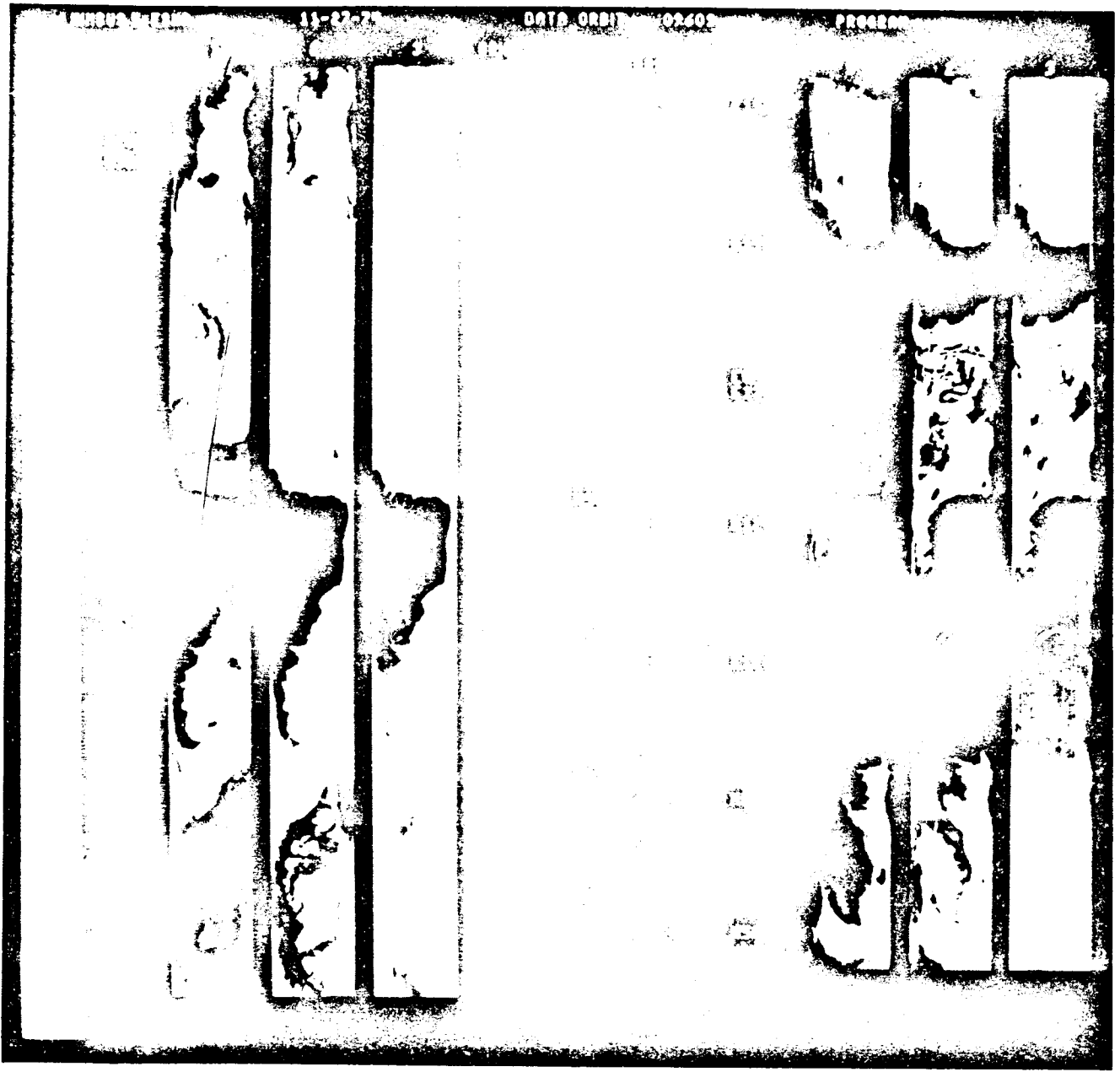




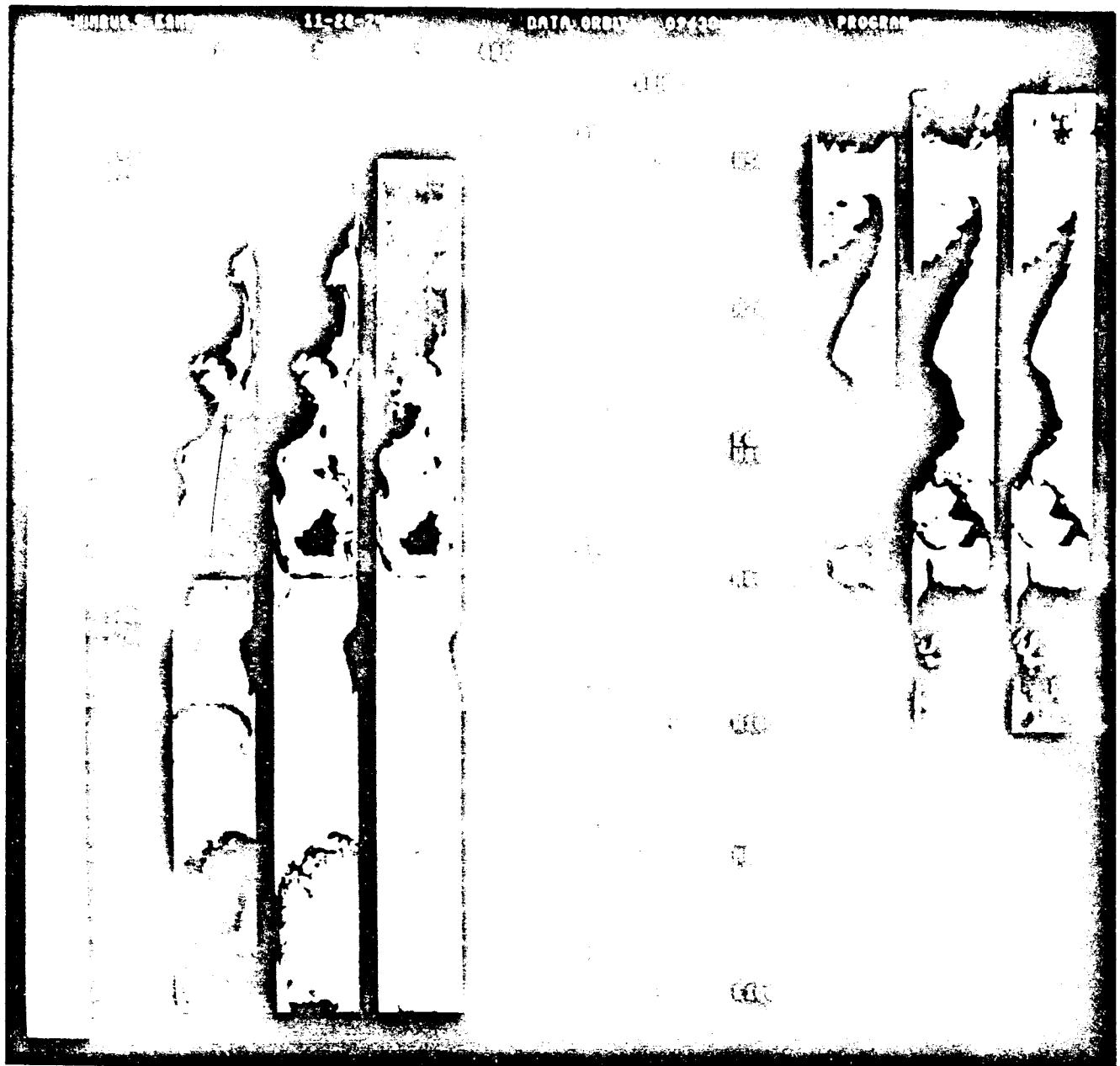


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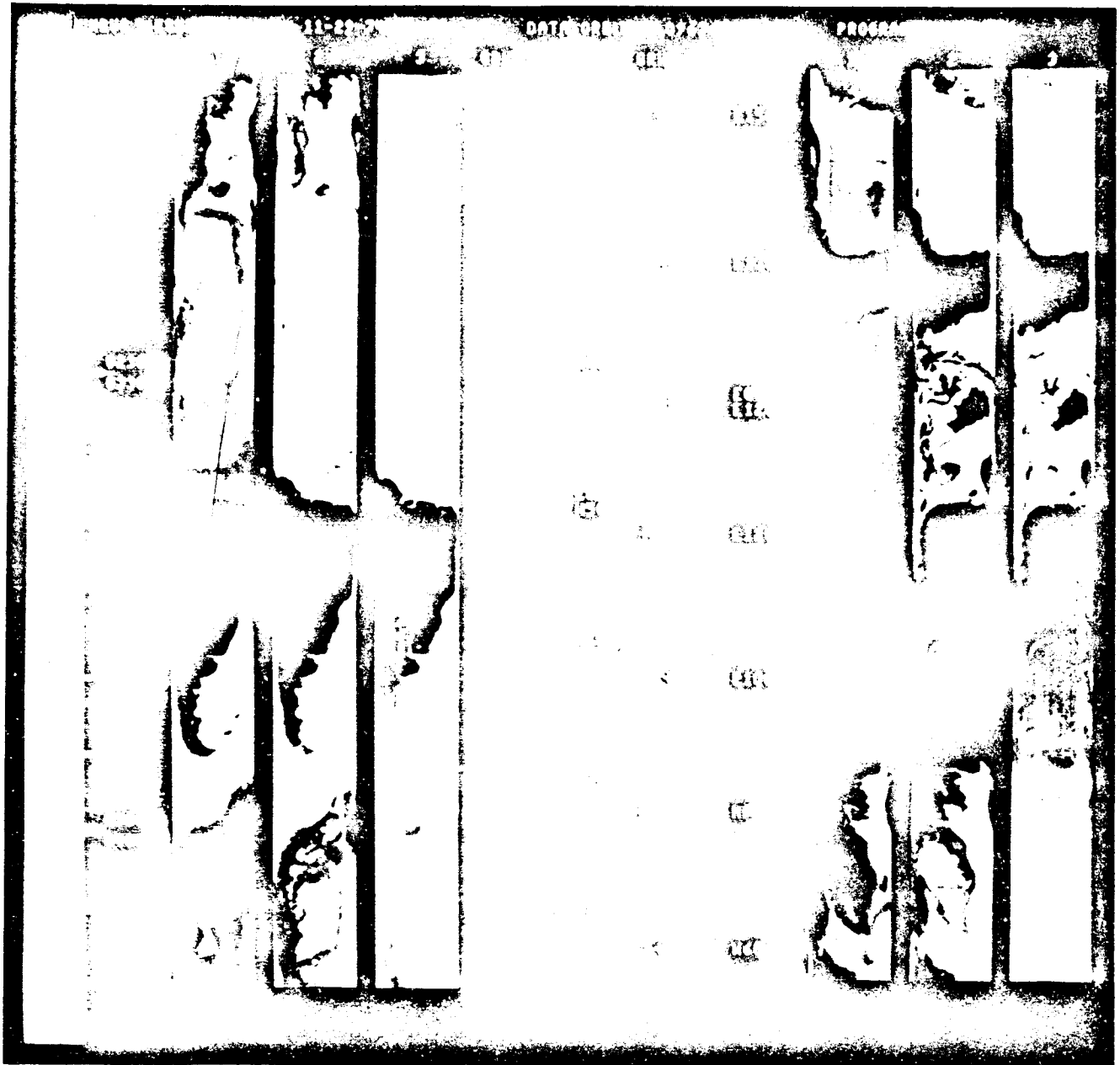




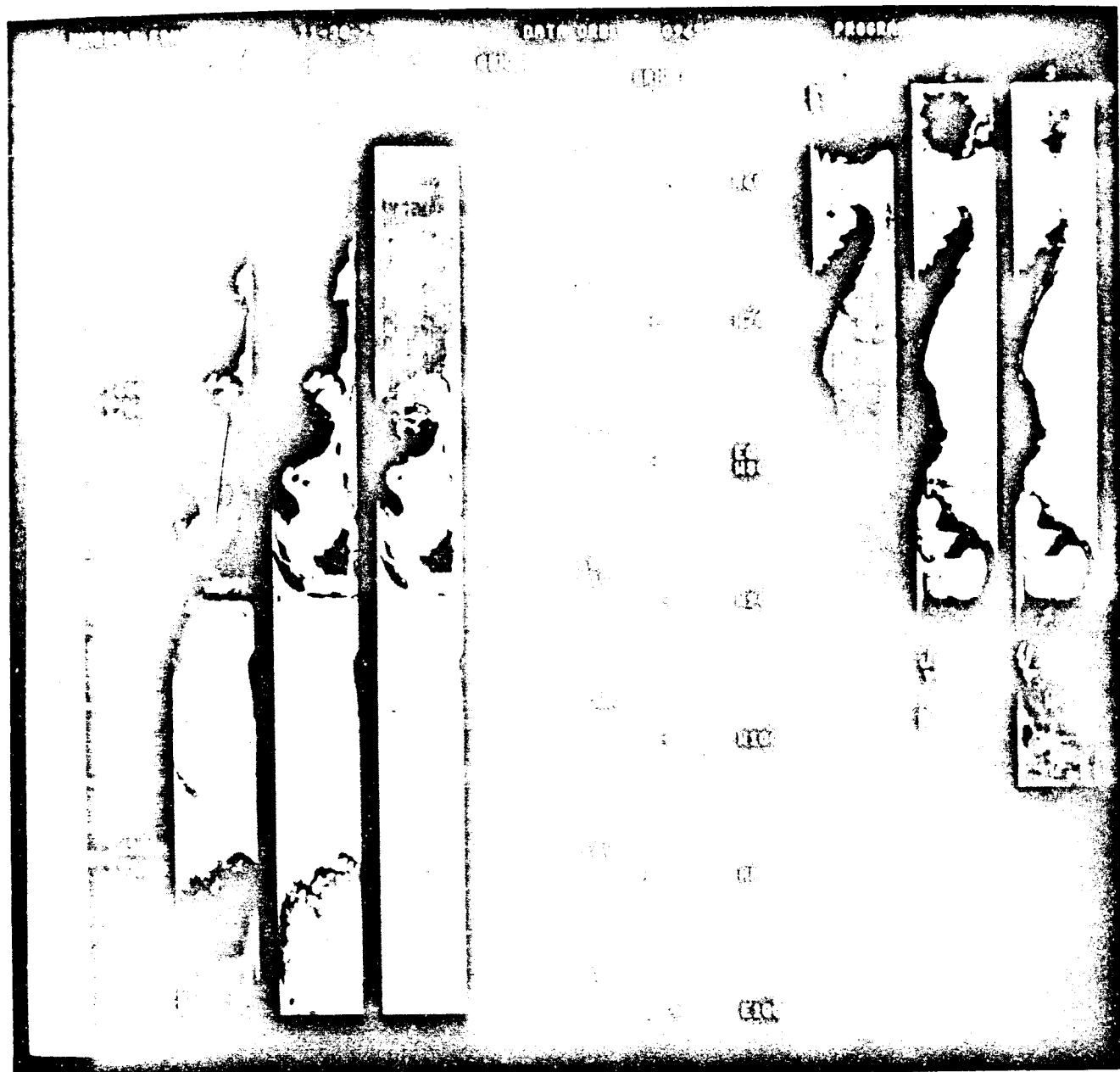
34







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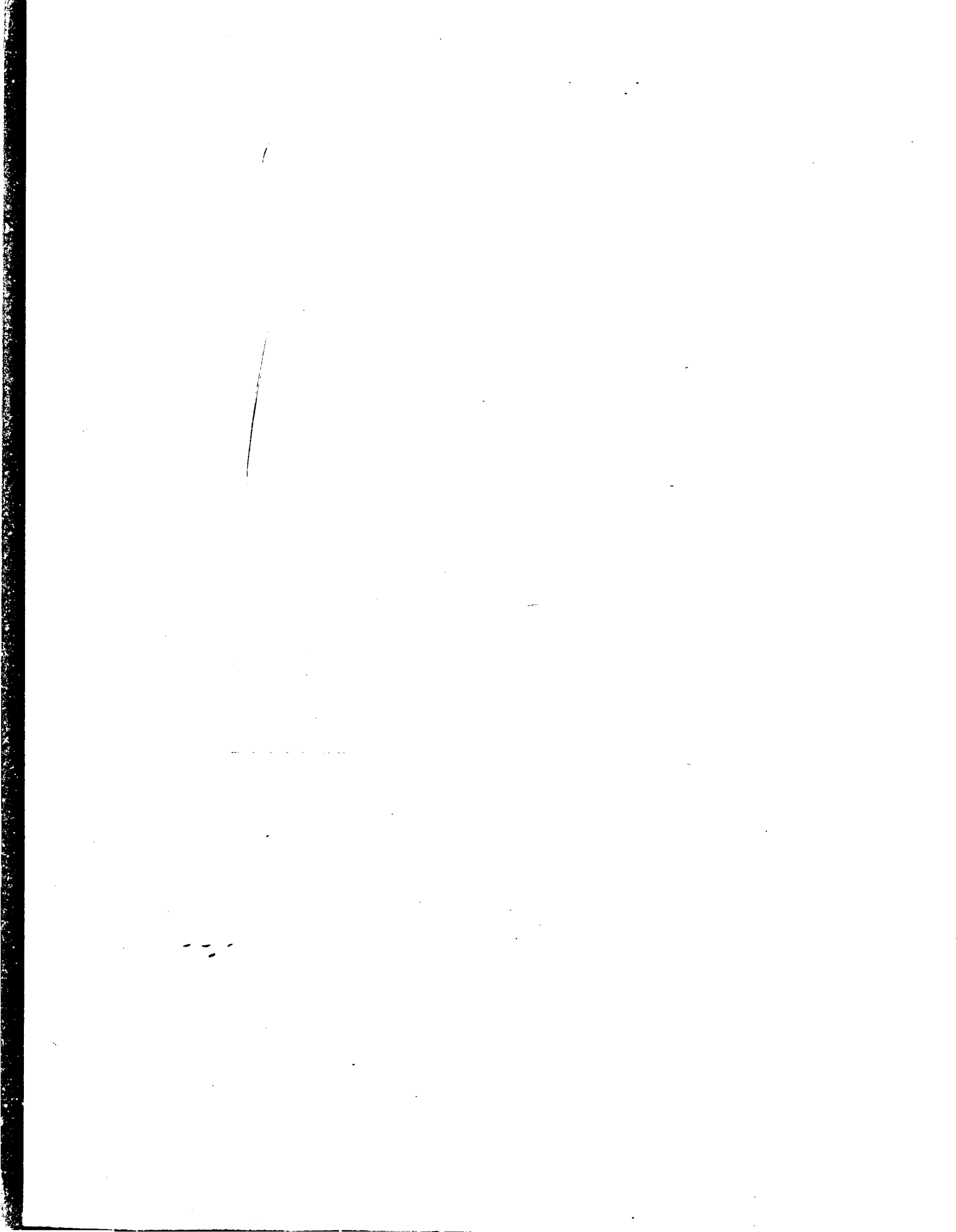


Table 4-1

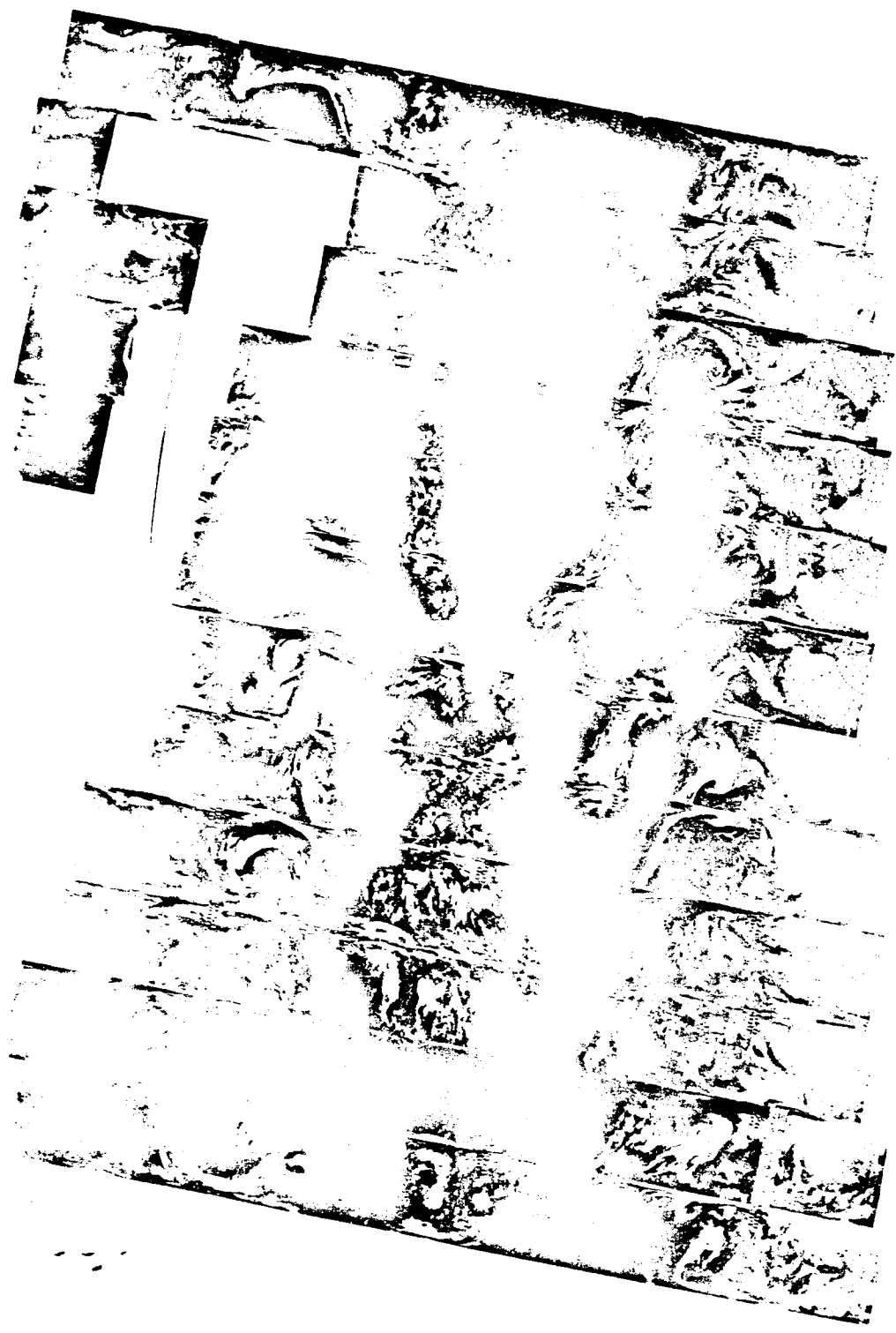
Latitude Versus Minutes From  
Ascending or Descending Node

Latitude from AN or DN	Minutes and Seconds from AN or DN
0	0:00
5	1:31
10	3:02
15	4:33
20	6:03
25	7:34
30	9:05
35	10:36
40	12:08
45	13:40
50	15:12
55	16:44
60	18:18
65	19:52
70	21:33
75	23:26
78	24:44
80.1	26:49
78	29:00
75	30:09
70	31:51
65	33:35

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**SECTION 4.1**  
**TEMPERATURE HUMIDITY INFRARED RADIOMETER**  
**NIGHTTIME MONTAGES**

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8855 8854 8853 8852 8851 8850 8849 8848 8847 8846 8845 8844 8843

1 OCTOBER 1974

11.5  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8855 8854 8853 8852 8851 8850 8849 8848 8847 8846 8845 8844 8843

1 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8868 8867 8866 8865 8864 8863 8862 8861 8860 8859 8858 8857 8856

2 OCTOBER 1974

11.5  $\mu$ m

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30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8868 8867 8866 8865 8864 8863 8862 8861 8860 8859 8858 8857 8856  
2 OCTOBER 1974  
6.7  $\mu$ m



8882 8881 8880 8879 8878 8877 8876 8875 8874 8873 8872 8871 8870 8869

3 OCTOBER 1974

11.5  $\mu$ m

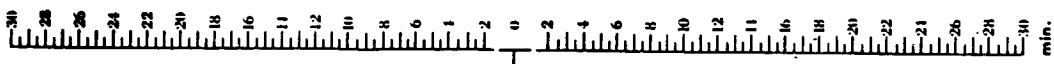
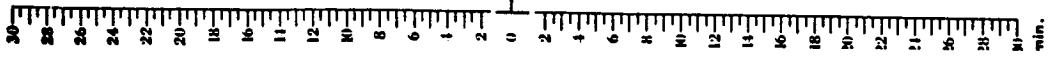


8882 8881 8880 8879 8878 8877 8876 8875 8874 8873 8872 8871 8870 8869

3 OCTOBER 1974

6.7  $\mu\text{m}$

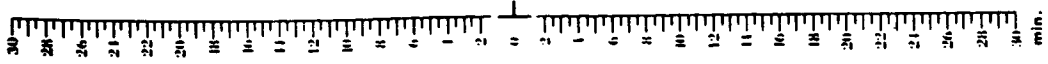
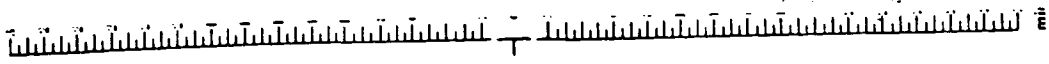
147



8895 8894 8893 8892 8891 8890 8889 8888 8887 8886 8885 8884 8883

4 OCTOBER 1974

11.5 μm



8895 8894 8893 8892 8891 8890 8889 8888 8887 8886 8885 8884 8883

4 OCTOBER 1974

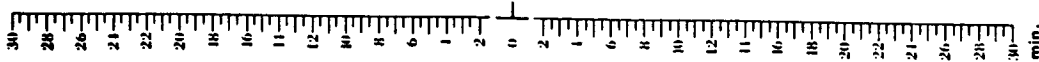
6.7 μm



8909 8908 8907 8906 8905 8904 8903 8902 8901 8900 8899 8898 8897 8896

5 OCTOBER 1974

11.5  $\mu\text{m}$



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8909 8908 8907 8906 8905 8904 8903 8902 8901 8900 8899 8898 8897 8896

5 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8922 8921 8920 8919 8918 8917 8916 8915 8914 8913 8912 8911 8910

6 OCTOBER 1974

11.5  $\mu$ m

157



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8922 8921 8920 8919 8918 8917 8916 8915 8914 8913 8912 8911 8910

6 OCTOBER 1974

6.7  $\mu$ m



8935 8934 8933 8932 8931 8930 8929 8928 8927 8926 8925 8924 8923

7 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

8923

8924

8925

8926

8927

8928

8929

8930

8931

8932

8933

8934

8935

7 OCTOBER 1974

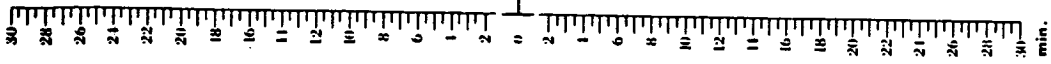
6.7  $\mu$ m

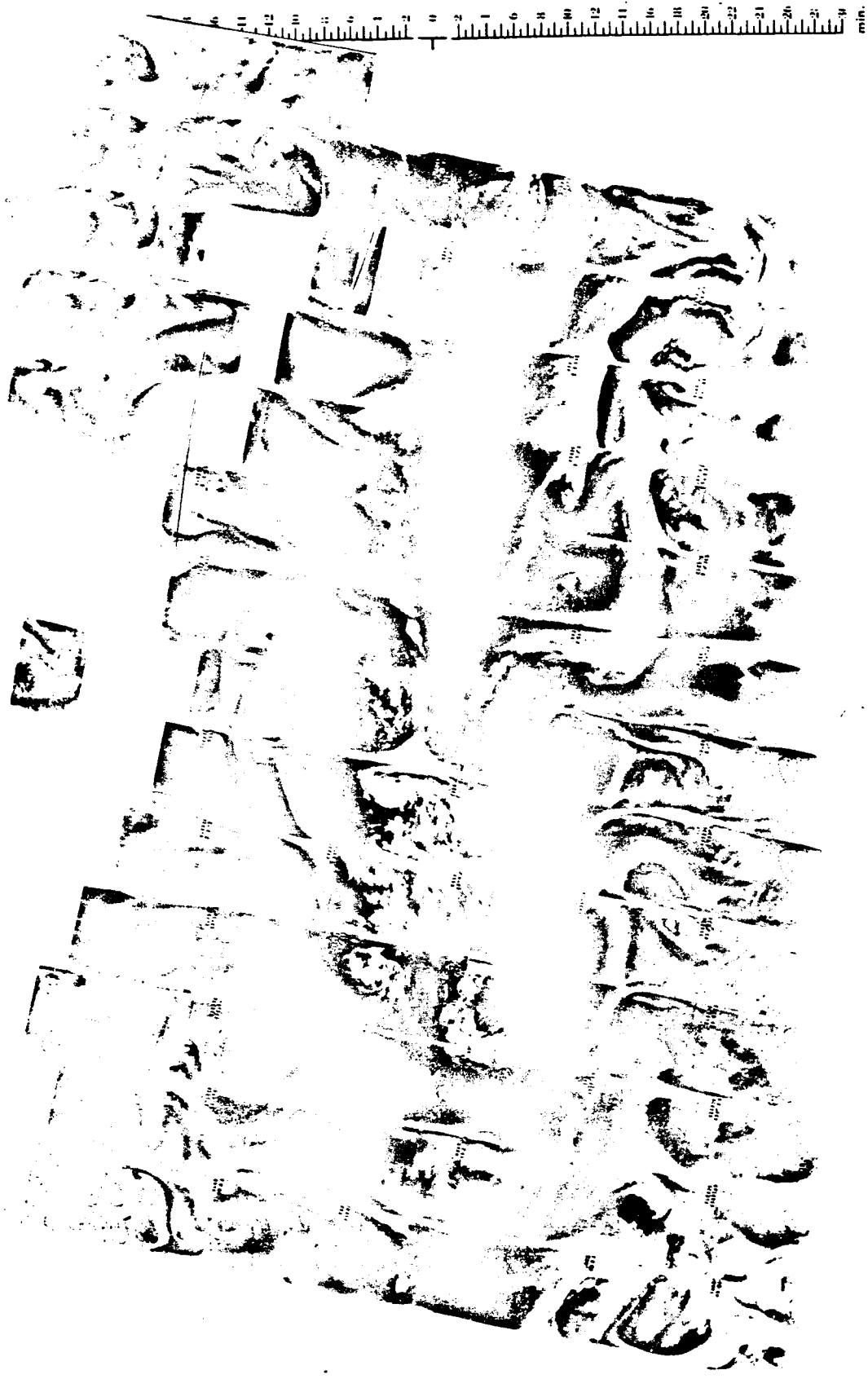


8949 · 8948 8947 8946 8945 8944 8943 8942 8941 8940 8939 8938 8937 8936

8 OCTOBER 1974

11.5  $\mu$ m





8949 8948 8947 8946 8945 8944 8943 8942 8941 8940 8939 8938 8937 8936

8 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8962 8961 8960 8959 8958 8957 8956 8955 8954 8953 8952 8951 8950

9 OCTOBER 1974

11.5  $\mu$ m

157

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

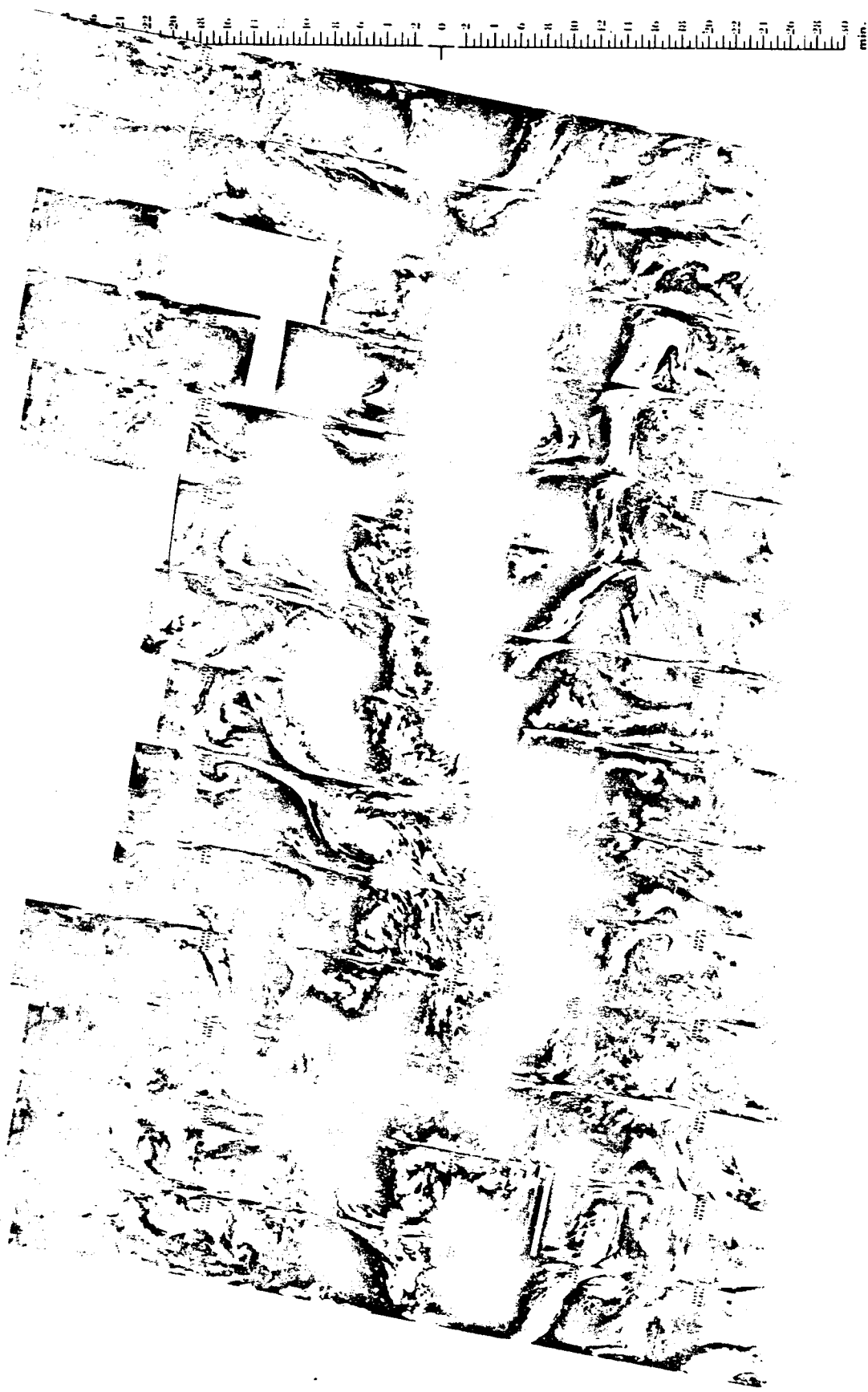


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8962 8961 8960 8959 8958 8957 8956 8955 8954 8953 8952 8951 8950

9 OCTOBER 1974

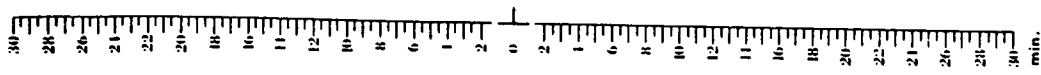
6.7  $\mu$ m



8976 8975 8974 8973 8972 8971 8970 8969 8968 8967 8966 8965 8964 8963

10 OCTOBER 1974

11.5  $\mu$ m



159





30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8976 8975 8974 8973 8972 8971 8970 8969 8968 8967 8966 8965 8964 8963

10 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8989 8988 8987 8986 8985 8984 8983 8982 8981 8980 8979 8978 8977

11 OCTOBER 1974

11.5  $\mu$ m

761

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8989 8988 8987 8986 8985 8984 8983 8982 8981 8980 8979 8978 8977

11 OCTOBER 1974

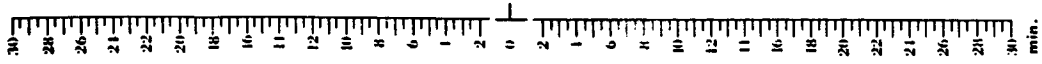
6.7 μm



9003 9002 9001 9000 8999 8998 8997 8996 8995 8994 8993 8992 8991 8990

12 OCTOBER 1974

11.5  $\mu$ m



3



9003 9002 9001 9000 8999 8998 8997 8996 8995 8994 8993 8992 8991 8990

12 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9016 9015 9014 9013 9012 9011 9010 9009 9008 9007 9006 9005 9004

13 OCTOBER 1974

11.5  $\mu$ m

765

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9016 9015 9014 9013 9012 9011 9010 9009 9008 9007 9006 9005 9004  
13 OCTOBER 1974  
6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9029 9028 9027 9026 9025 9024 9023 9022 9021 9020 9019 9018 9017

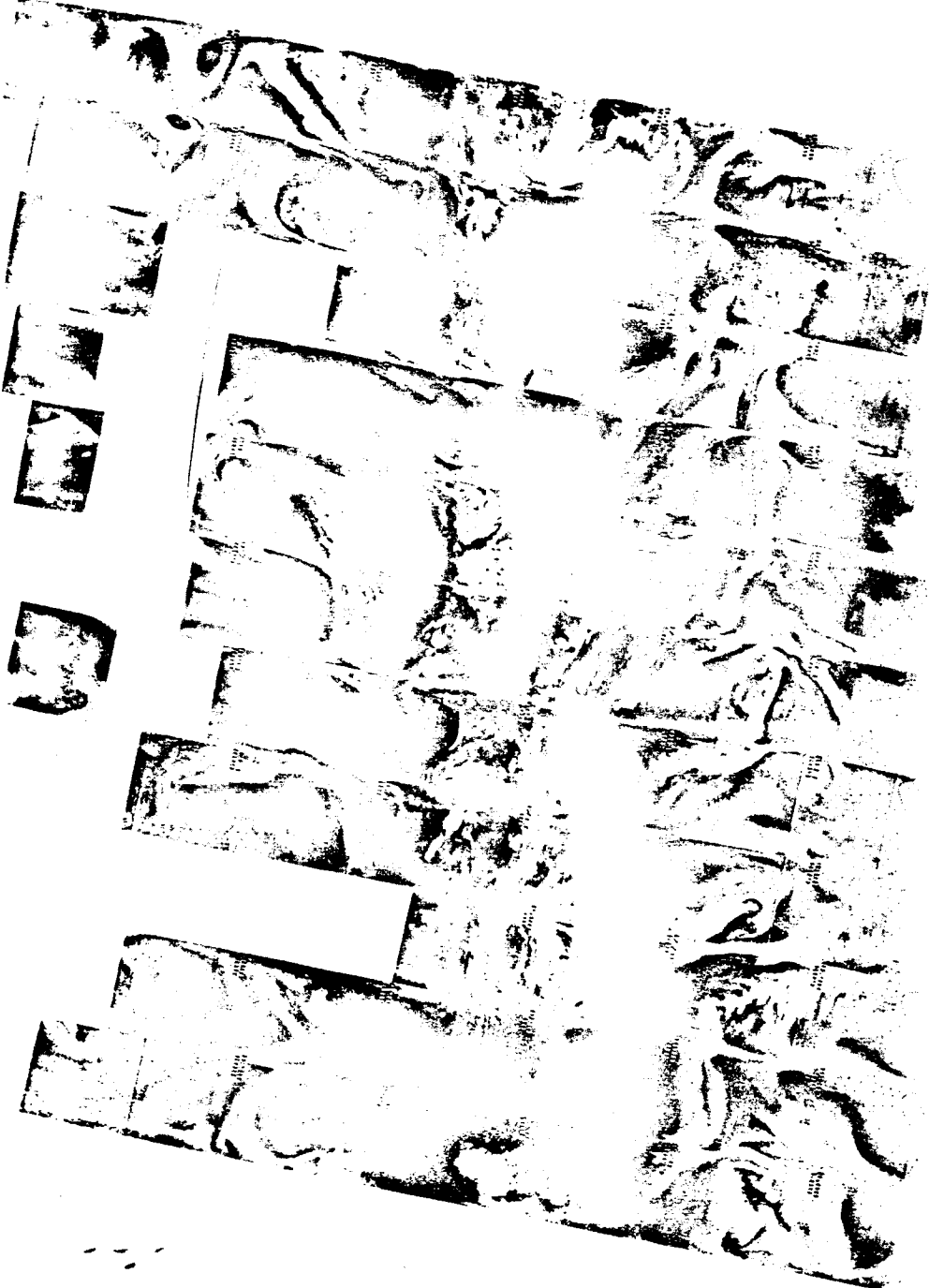
14 OCTOBER 1974

11.5  $\mu\text{m}$

167



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9029 9028 9027 9026 9025 9024 9023 9022 9021 9020 9019 9018 9017

14 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

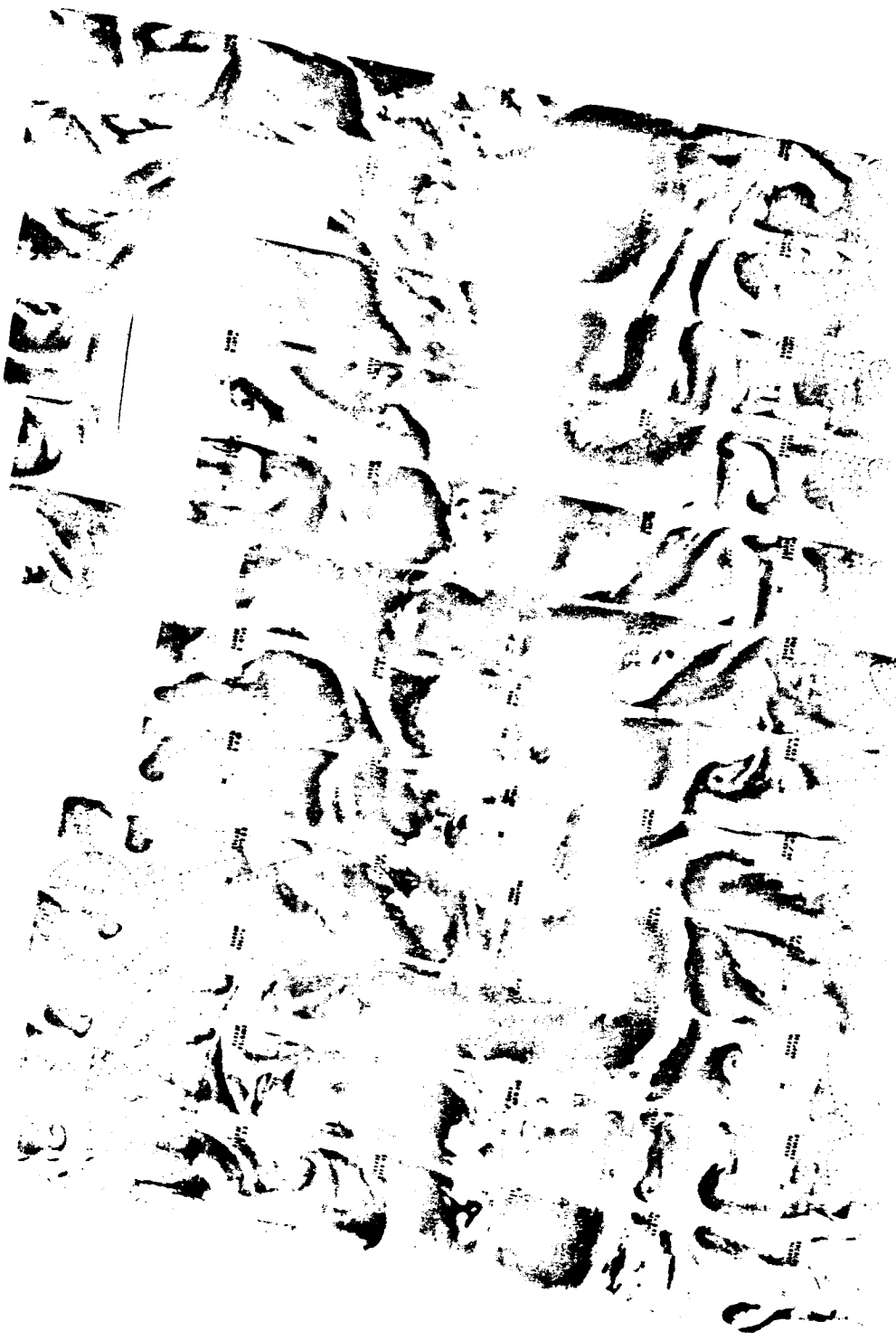


9043 9042 9041 9040 9039 9038 9037 9036 9035 9034 9033 9032 9031 9030

15 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

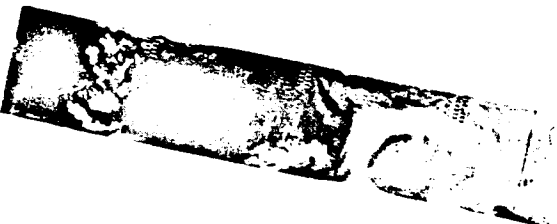
9043 9042 9041 9040 9039 9038 9037 9036 9035 9034 9033 9032 9031 9030

15 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

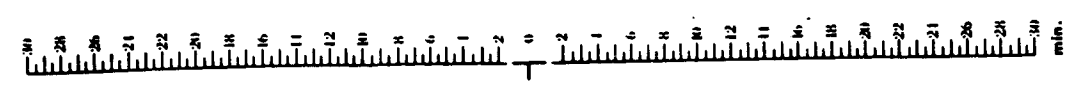


9044 9045 9046 9047 9048 9049 9050 9051 9052 9053 9054 9055 9056

16 OCTOBER 1974

11.5  $\mu$ m

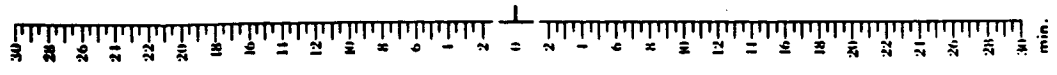
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



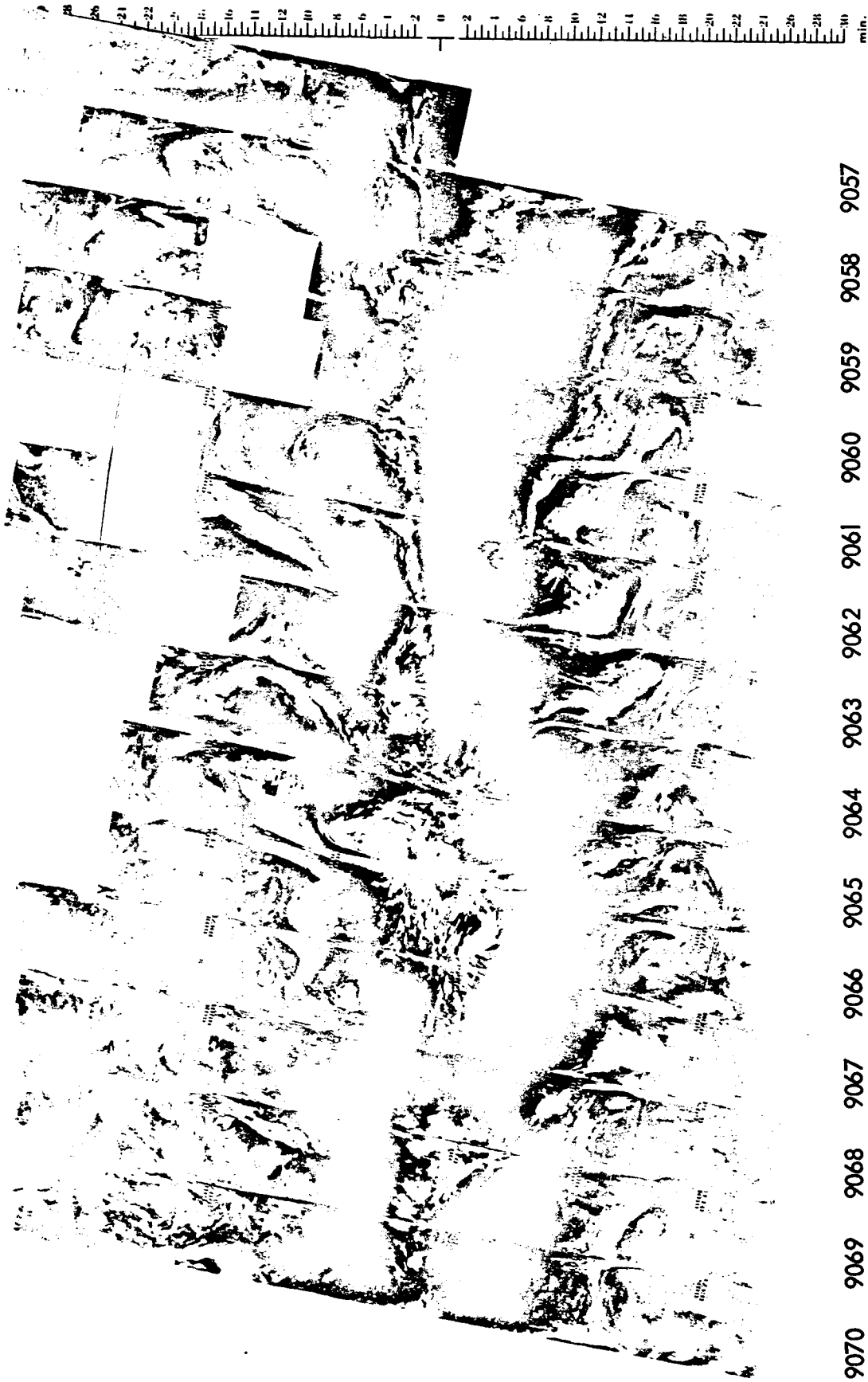
9056 9055 9054 9053 9052 9051 9050 9049 9048 9047 9046 9045 9044

16 OCTOBER 1974

6.7  $\mu$ m



142



9070 9069 9068 9067 9066 9065 9064 9063 9062 9061 9060 9059 9058 9057

17 OCTOBER 1974

11.5  $\mu$ m

173

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9083 9082 9081 9080 9079 9078 9077 9076 9075 9074 9073 9072 9071  
18 OCTOBER 1974  
11.5  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

135



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

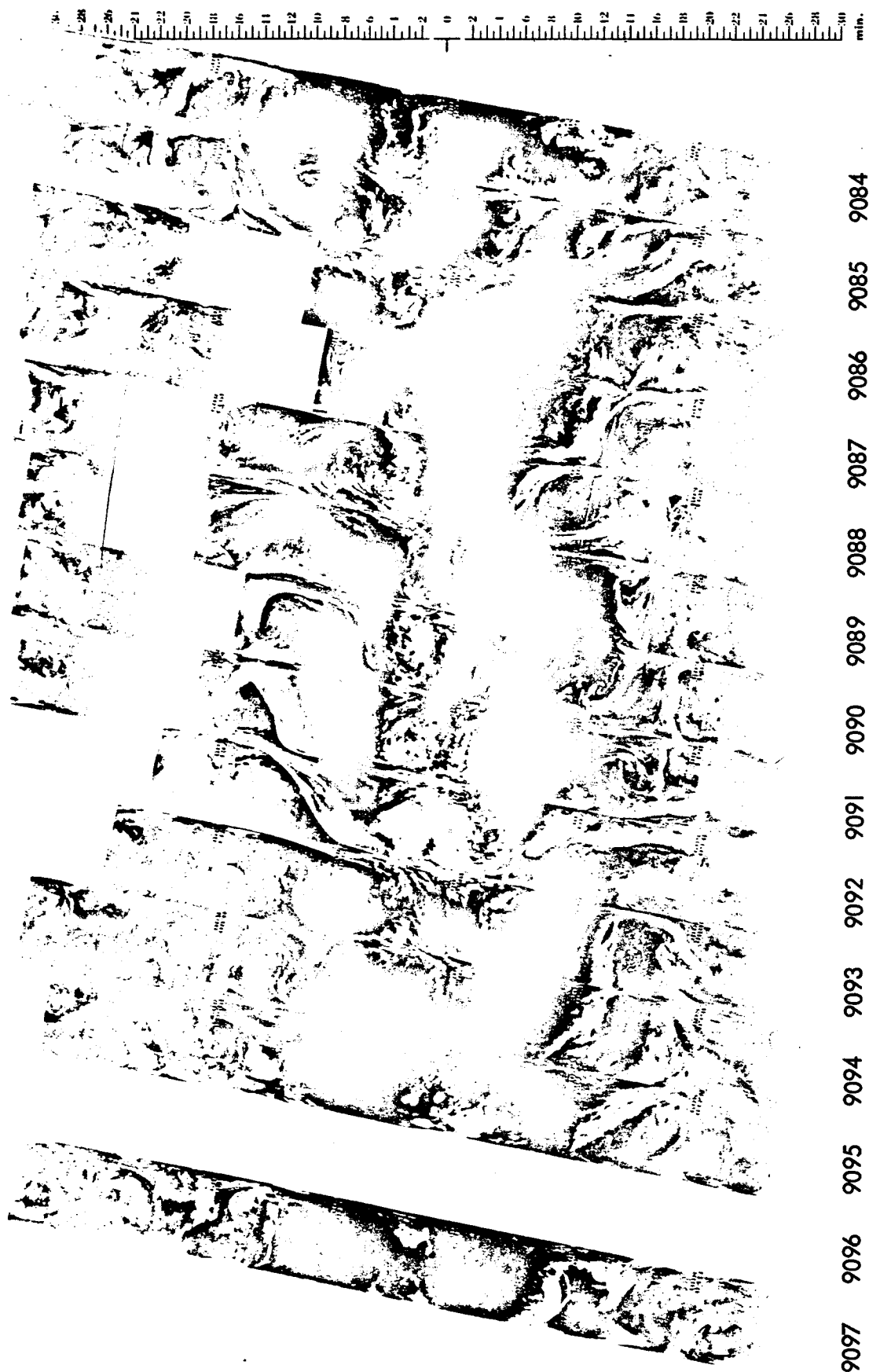
9083 9082 9081 9080 9079 9078 9077 9076 9075 9074 9073 9072 9071

18 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

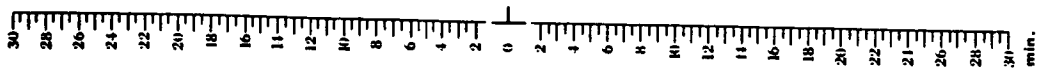


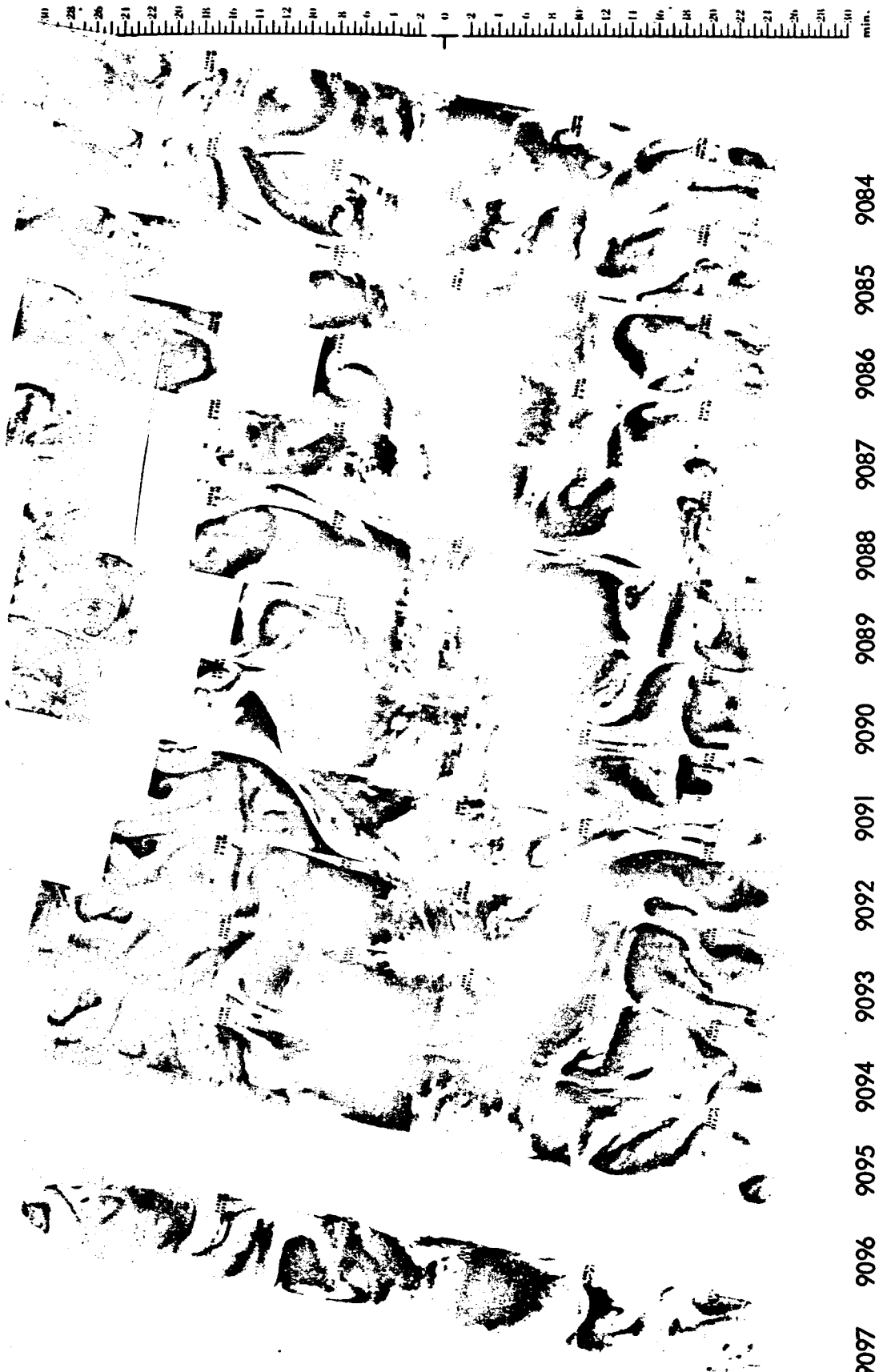


9097 9096 9095 9094 9093 9092 9091 9090 9089 9088 9087 9086 9085 9084

19 OCTOBER 1974

11.5 μm





9097 9096 9095 9094 9093 9092 9091 9090 9089 9088 9087 9086 9085 9084

19 OCTOBER 1974

6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9110 9109 9108 9107 9106 9105 9104 9103 9102 9101 9100 9099 9098

20 OCTOBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

179



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.

9110 9109 9108 9107 9106 9105 9104 9103 9102 9101 9100 9099 9098  
20 OCTOBER 1974  
6.7  $\mu$ m

181



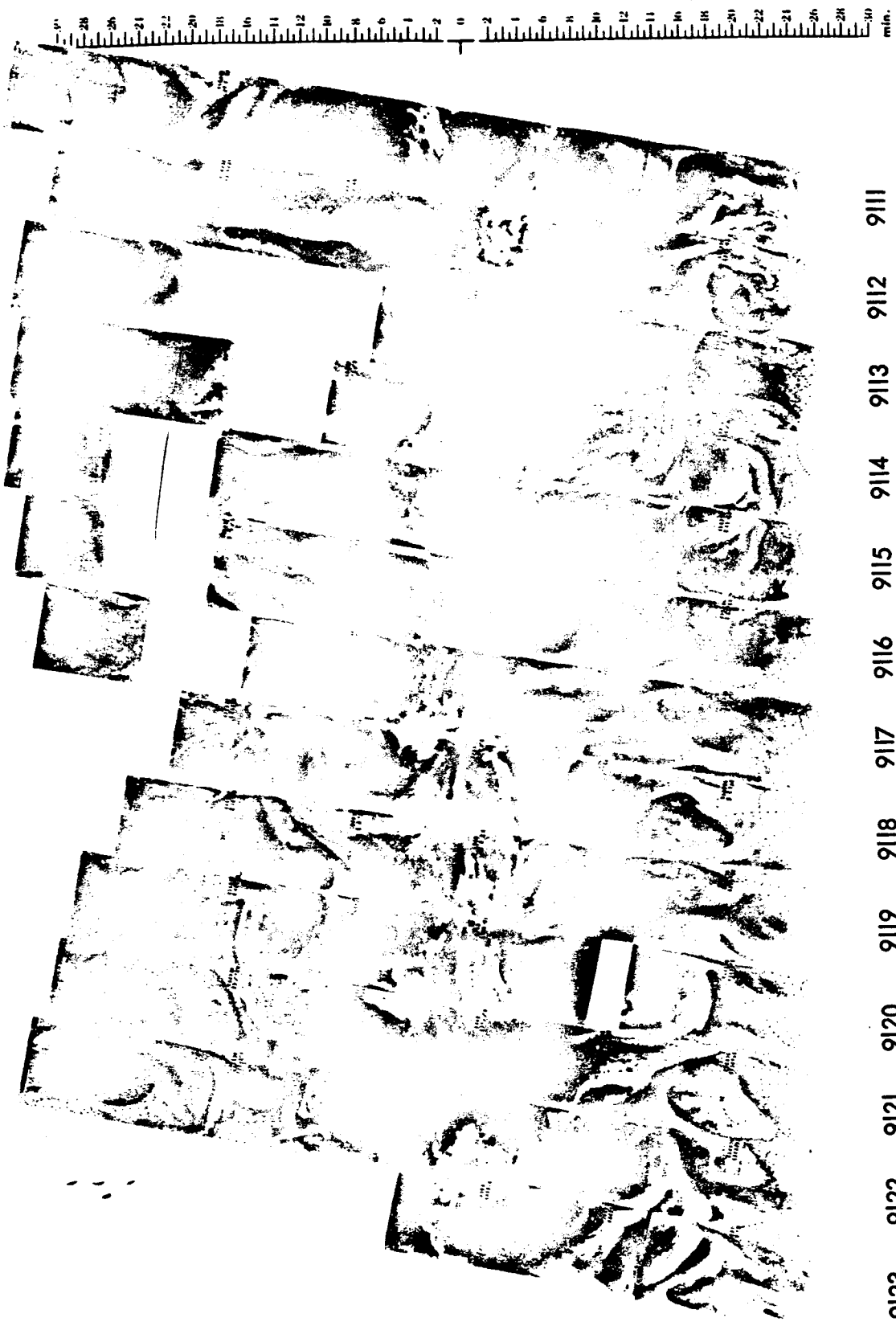
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9123 9122 9121 9120 9119 9118 9117 9116 9115 9114 9113 9112 9111

21 OCTOBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.

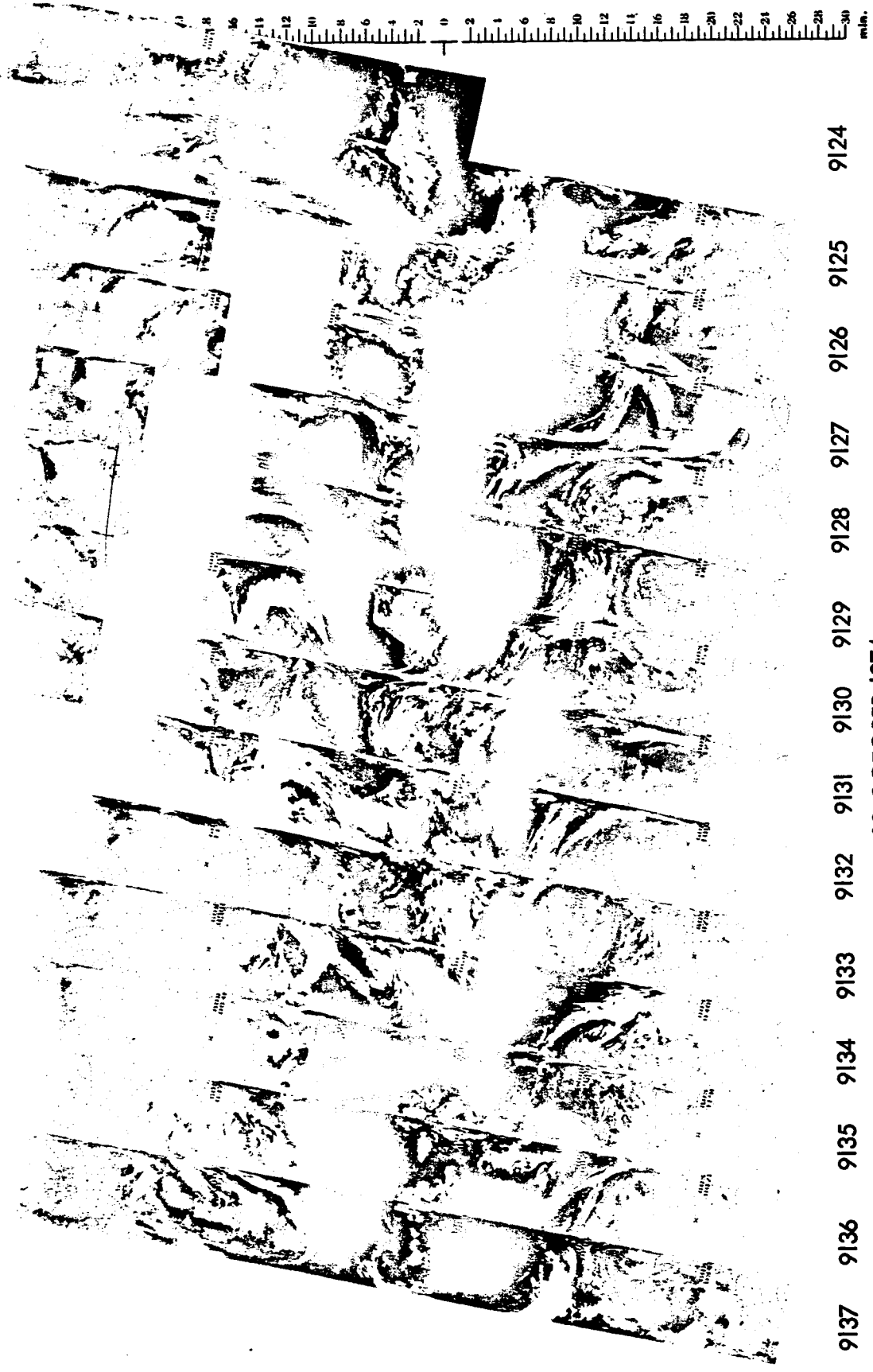
9123 9122 9121 9120 9119 9118 9117 9116 9115 9114 9113 9112 9111  
21 OCTOBER 1974

6.7  $\mu$ m

4-45

182

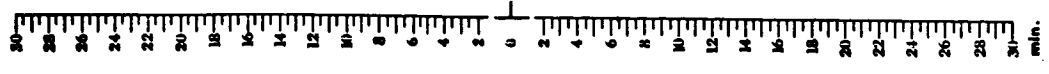
163



9137 9136 9135 9134 9133 9132 9131 9130 9129 9128 9127 9126 9125 9124

22 OCTOBER 1974

11.5  $\mu$ m





30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9137 9136 9135 9134 9133 9132 9131 9130 9129 9128 9127 9126 9125 9124

22 OCTOBER 1974

6.7  $\mu\text{m}$



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9150 9149 9148 9147 9146 9145 9144 9143 9142 9141 9140 9139 9138

23 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

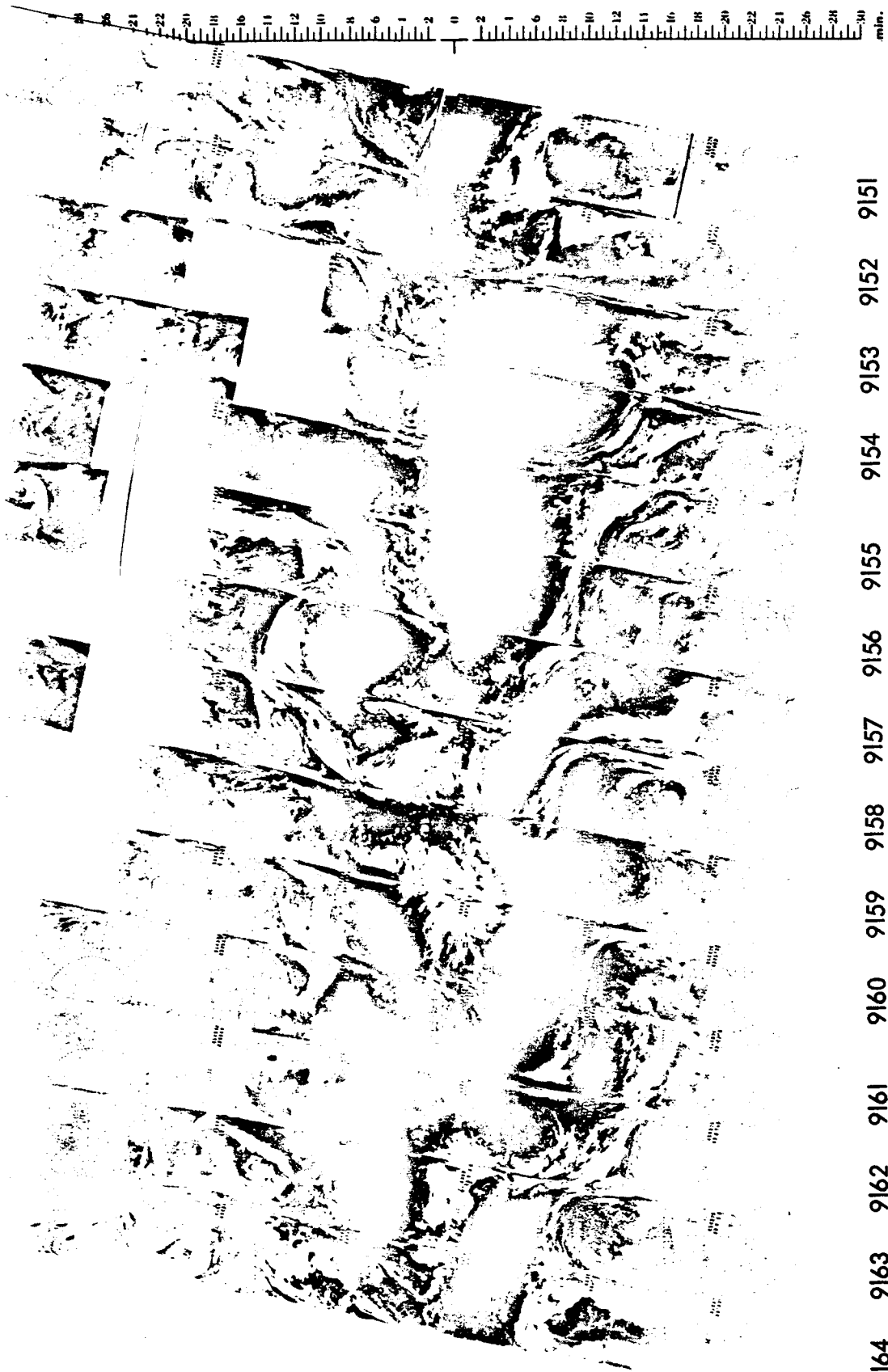
9150 9149 9148 9147 9146 9145 9144 9143 9142 9141 9140 9139 9138

23 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

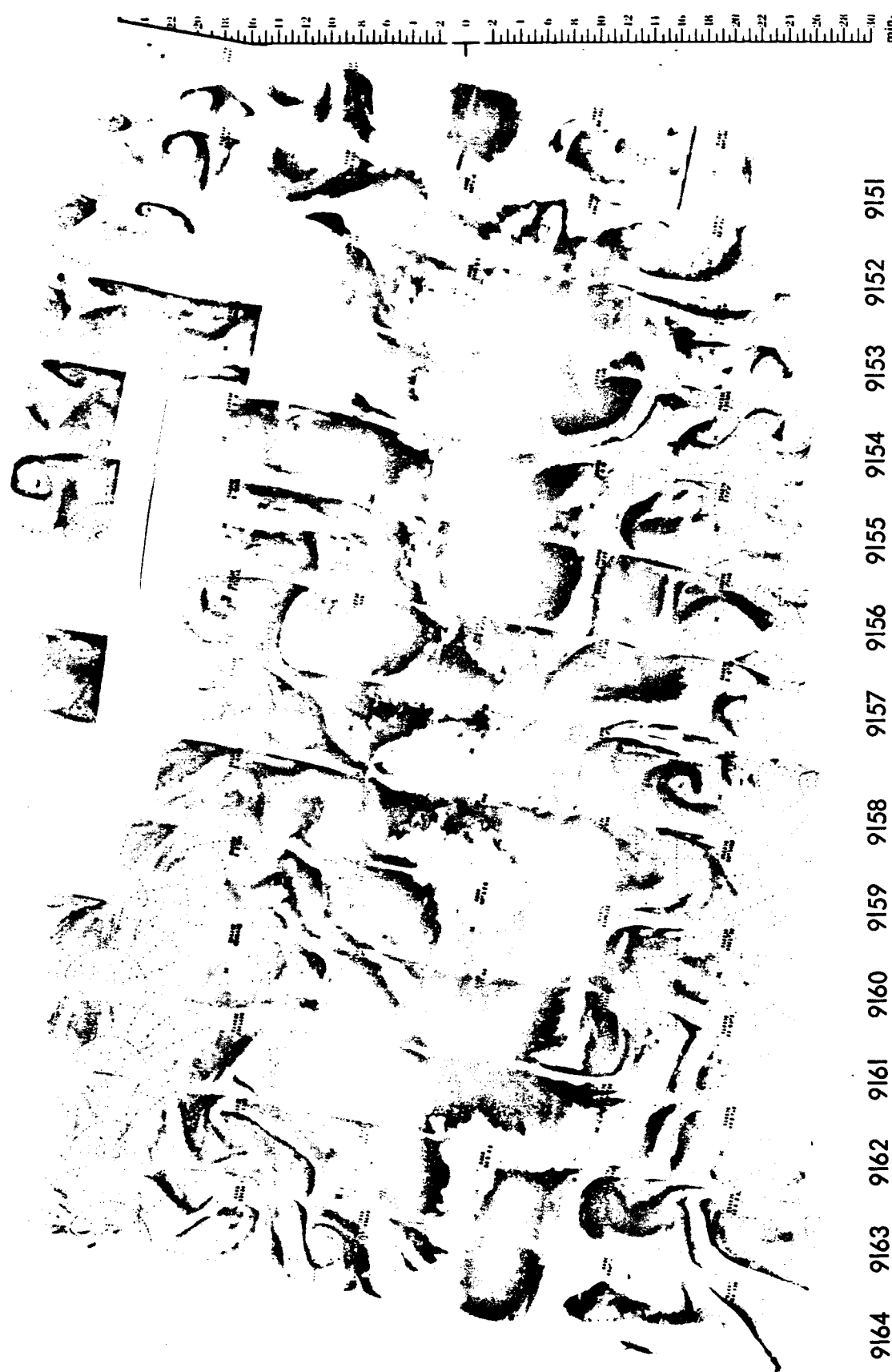
87



9164 9163 9162 9161 9160 9159 9158 9157 9156 9155 9154 9153 9152 9151

24 OCTOBER 1974

11.5  $\mu$ m

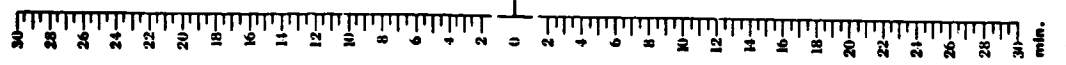
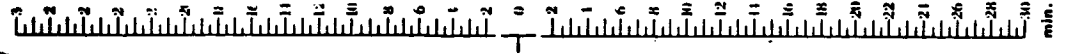


9164 9163 9162 9161 9160 9159 9158 9157 9156 9155 9154 9153 9152 9151

24 OCTOBER 1974

6.7 μm

189



9177 9176 9175 9174 9173 9172 9171 9170 9169 9168 9167 9166 9165

25 OCTOBER 1974

11.5  $\mu$ m

491



9191 9190 9189 9188 9187 9186 9185 9184 9183 9182 9181 9180 9179 9178

26 OCTOBER 1974

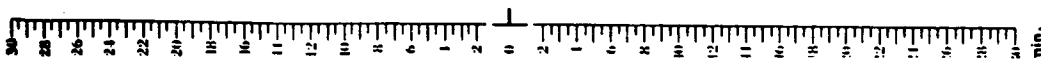
11.5  $\mu$ m



9191 9190 9189 9188 9187 9186 9185 9184 9183 9182 9181 9180 9179 9178

26 OCTOBER 1974

6.7  $\mu\text{m}$



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



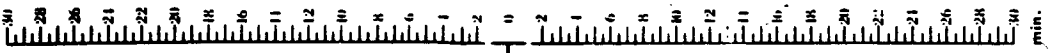
9204 9203 9202 9201 9200 9199 9198 9197 9196 9195 9194 9193 9192

27 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

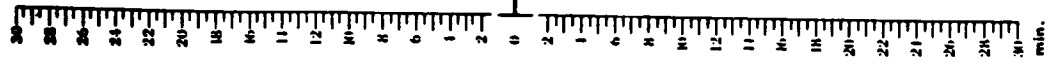




9204 9203 9202 9201 9200 9199 9198 9197 9196 9195 9194 9193 9192

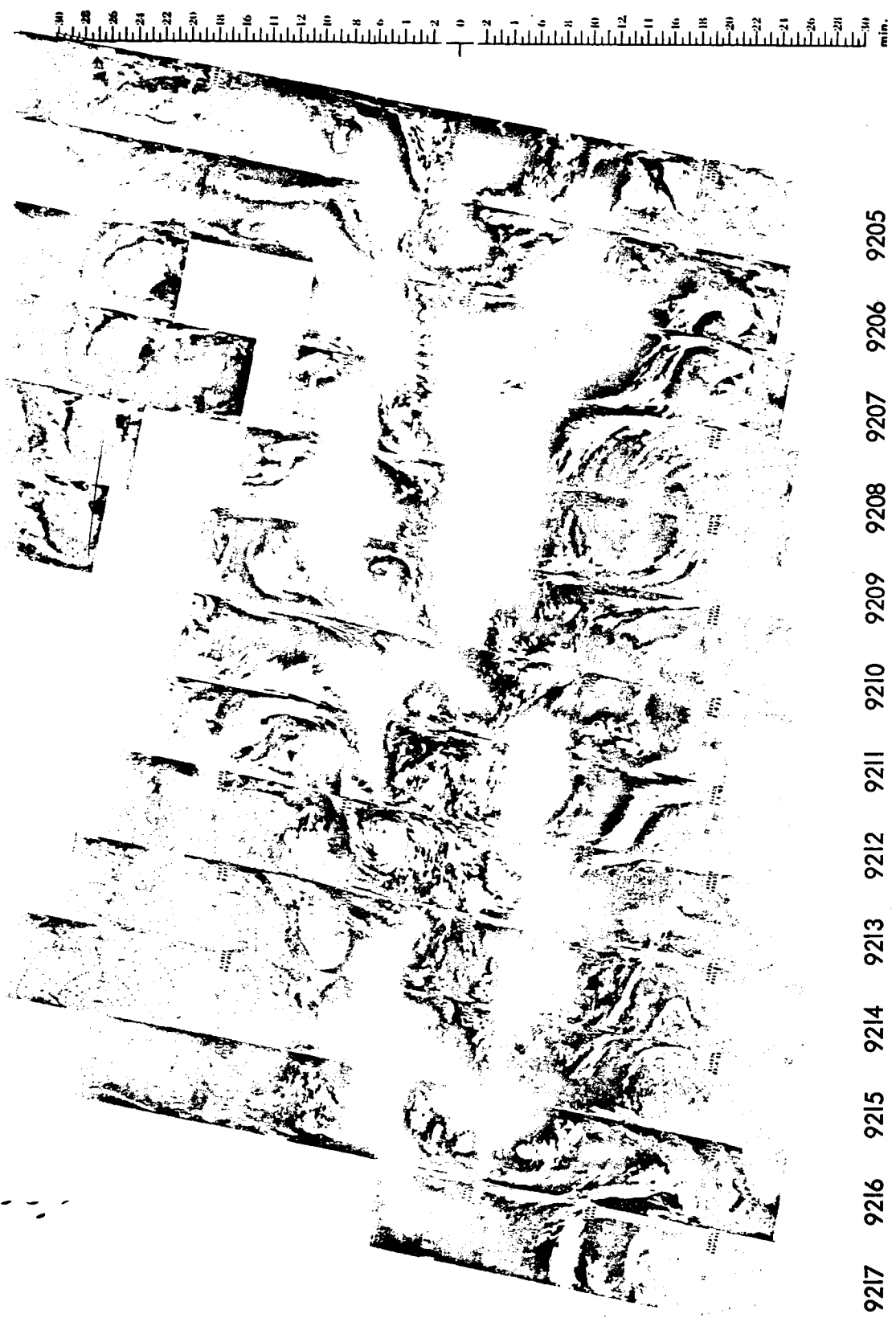
27 OCTOBER 1974

6.7  $\mu$ m



190

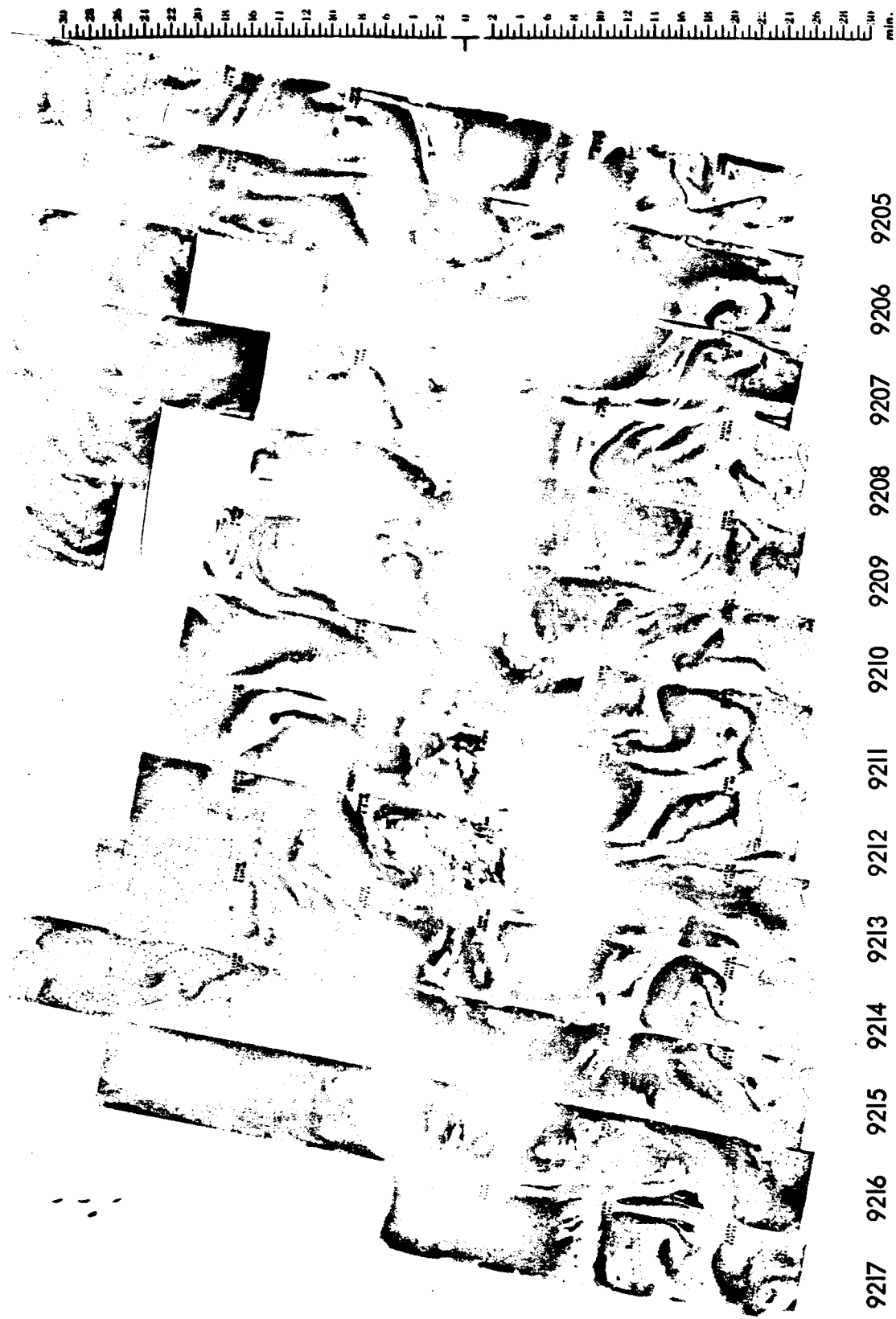
795



9217 9216 9215 9214 9213 9212 9211 9210 9209 9208 9207 9206 9205

28 OCTOBER 1974

11.5  $\mu$ m



9217 9216 9215 9214 9213 9212 9211 9210 9209 9208 9207 9206 9205

28 OCTOBER 1974

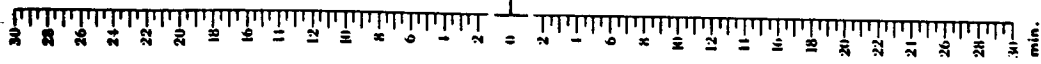
6.7  $\mu\text{m}$



9231 9230 9229 9228 9227 9226 9225 9224 9223 9222 9221 9220 9219 9218

29 OCTOBER 1974

11.5 μm



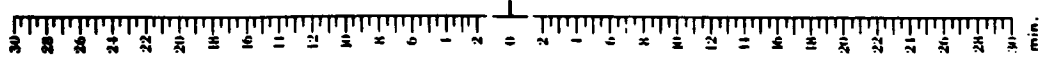
197



9231 9230 9229 9228 9227 9226 9225 9224 9223 9222 9221 9220 9219 9218

29 OCTOBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

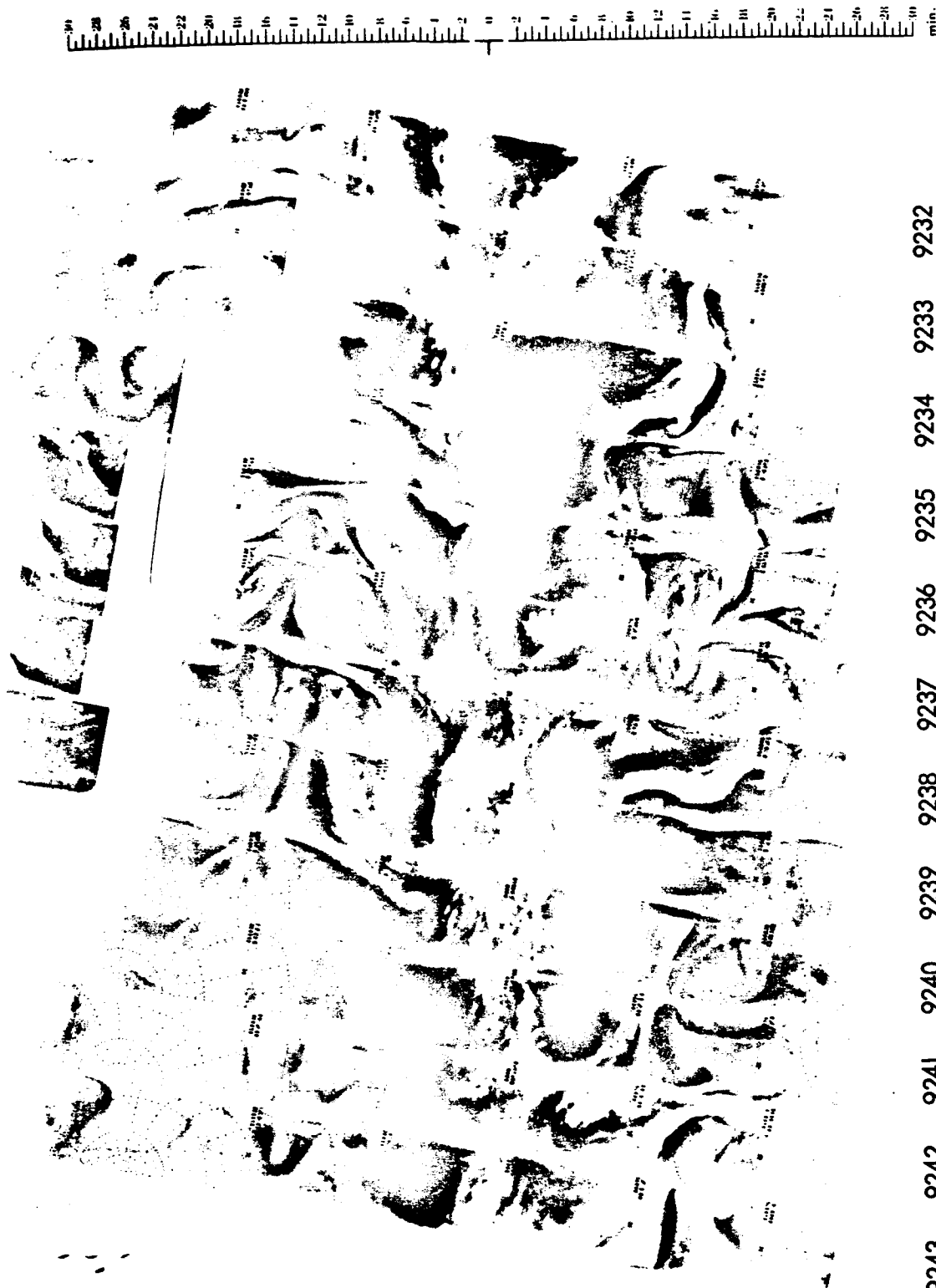


9244 9243 9242 9241 9240 9239 9238 9237 9236 9235 9234 9233 9232

30 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9244 9243 9242 9241 9240 9239 9238 9237 9236 9235 9234 9233 9232

30 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9258 9257 9256 9255 9254 9253 9252 9251 9250 9249 9248 9247 9246 9245

31 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

201





30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

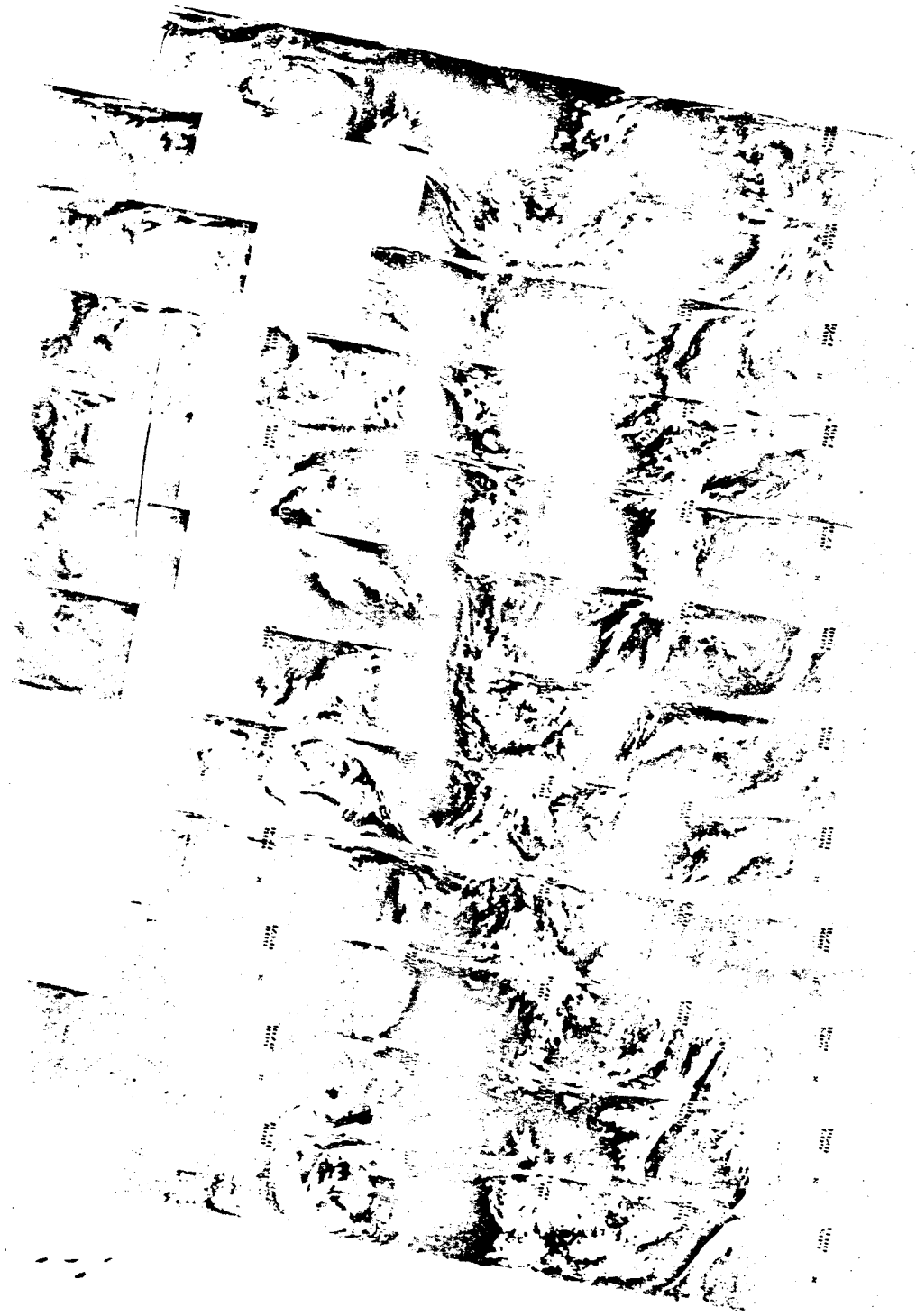
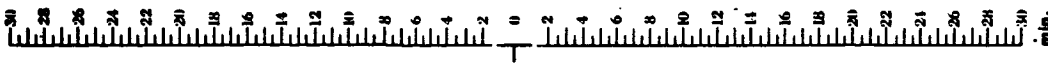
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9258 9257 9256 9255 9254 9253 9252 9251 9250 9249 9248 9247 9246 9245

31 OCTOBER 1974

6.7 μm

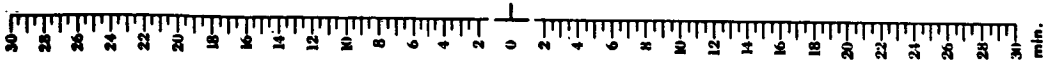
252



9271 9270 9269 9268 9267 9266 9265 9264 9263 9262 9261 9260 9259

1 NOVEMBER 1974

11.5  $\mu$ m



3903



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

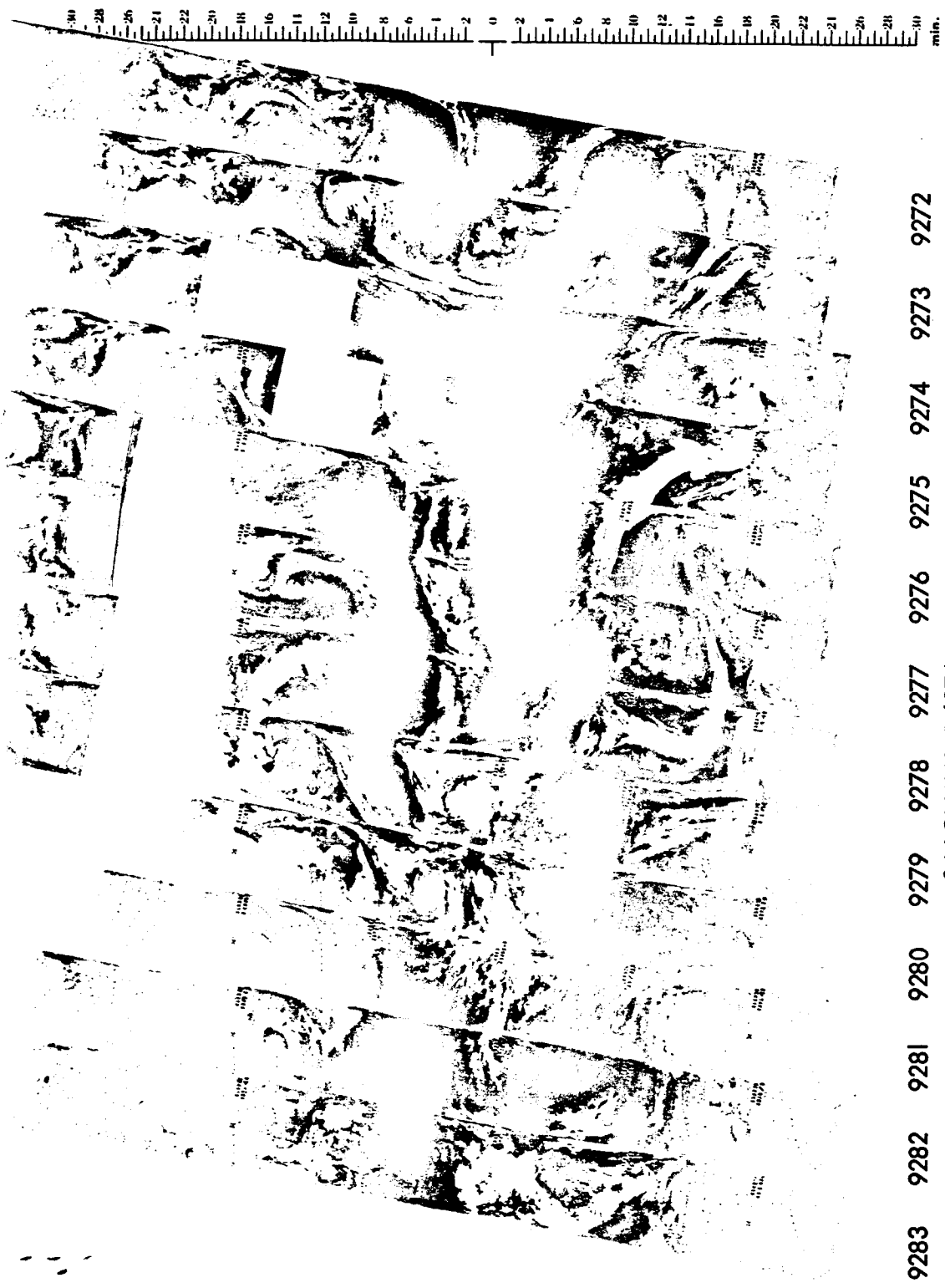
9271 9270 9269 9268 9267 9266 9265 9264 9263 9262 9261 9260 9259

1 NOVEMBER 1974

6.7 μm

204

3705



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9285 9284 9283 9282 9281 9280 9279 9278 9277 9276 9275 9274 9273 9272

2 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9272

9273

9274

9275

9276

9277

9278

9279

9280

9281

9282

9283

9284

9285

2 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

926



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

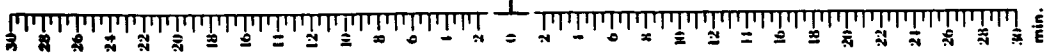
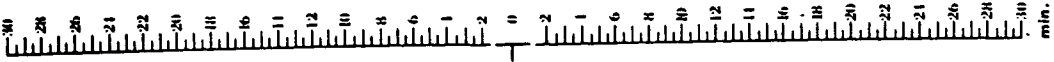
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9298 9297 9296 9295 9294 9293 9292 9291 9290 9289 9288 9287 9286

3 NOVEMBER 1974

11.5 μm

907

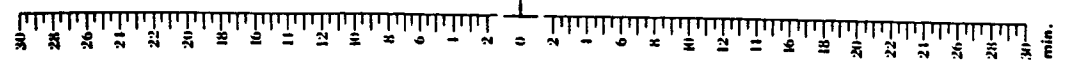
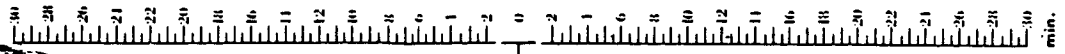


9298 9297 9296 9295 9294 9293 9292 9291 9290 9289 9288 9287 9286

3 NOVEMBER 1974

6.7  $\mu\text{m}$

209

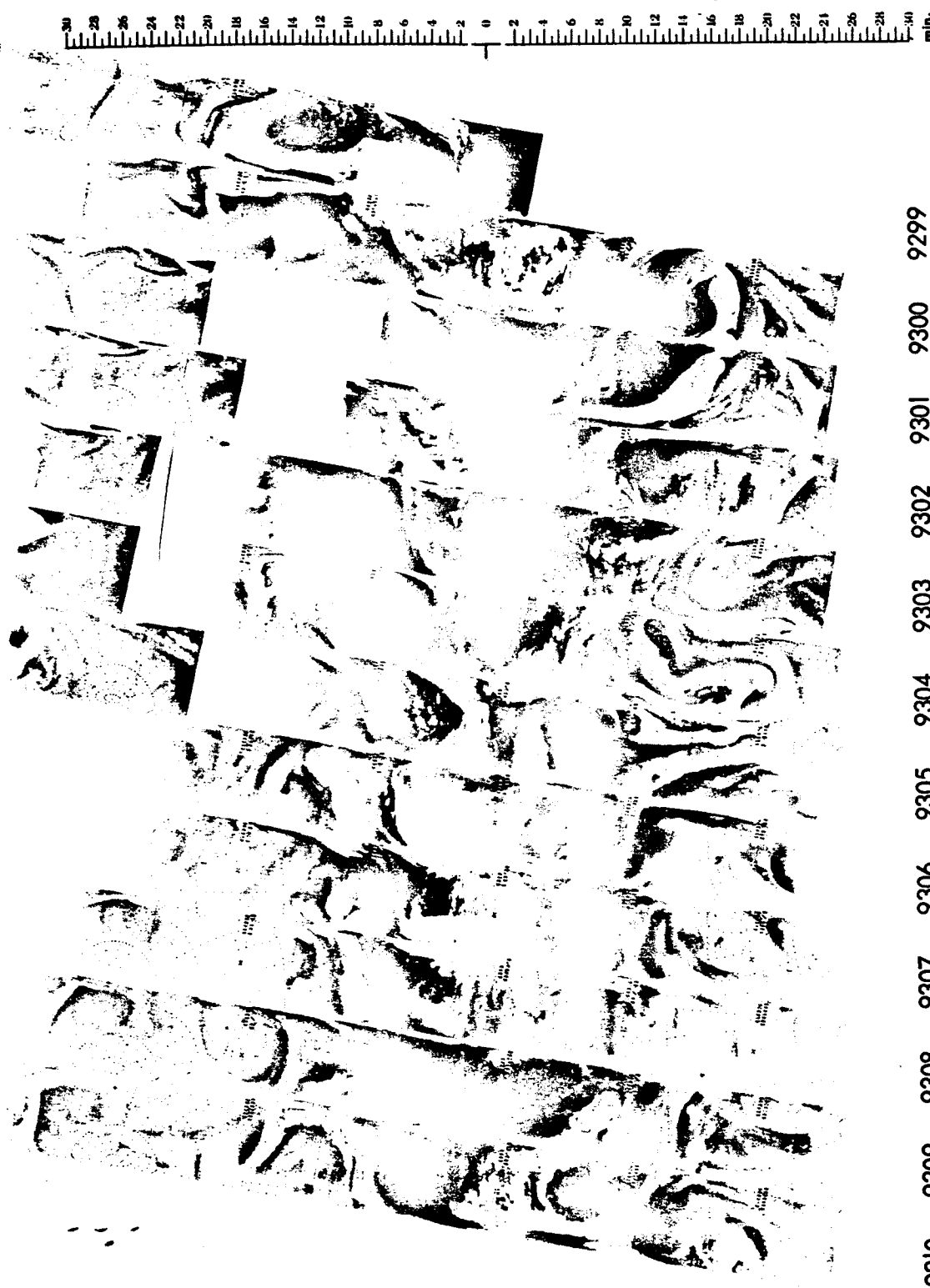


9311 9310 9309 9308 9307 9306 9305 9304 9303 9302 9301 9300 9299

4 NOVEMBER 1974

11.5  $\mu$ m





9311 9310 9309 9308 9307 9306 9305 9304 9303 9302 9301 9300 9299

4 NOVEMBER 1974

6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9325 9324 9323 9322 9321 9320 9319 9318 9317 9316 9315 9314 9313 9312

5 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

211

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



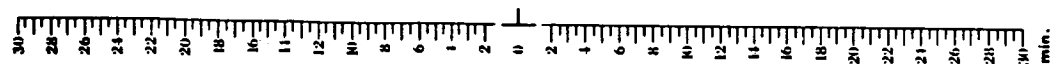
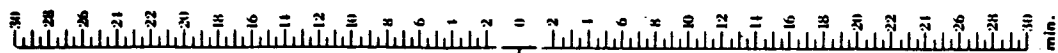
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9325 9324 9323 9322 9321 9320 9319 9318 9317 9316 9315 9314 9313 9312

5 NOVEMBER 1974

6.7  $\mu$ m

213



9338 9337 9336 9335 9334 9333 9332 9331 9330 9329 9328 9327 9326

6 NOVEMBER 1974

11.5 μm



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9338 9337 9336 9335 9334 9333 9332 9331 9330 9329 9328 9327 9326

6 NOVEMBER 1974

6.7  $\mu$ m

2014

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9352 9351 9350 9349 9348 9347 9346 9345 9344 9343 9342 9341 9340 9339

7 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

215



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

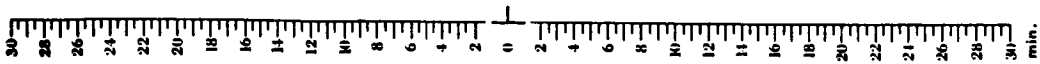
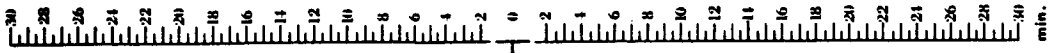
9352 9351 9350 9349 9348 9347 9346 9345 9344 9343 9342 9341 9340 9339

7 NOVEMBER 1974

6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

217



4-80

9365 9364 9363 9362 9361 9360 9359 9358 9357 9356 9355 9354 9353

8 NOVEMBER 1974

11.5 μm



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9365 9364 9363 9362 9361 9360 9359 9358 9357 9356 9355 9354 9353

8 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9378 9377 9376 9375 9374 9373 9372 9371 9370 9369 9368 9367 9366

9 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9378 9377 9376 9375 9374 9373 9372 9371 9370 9369 9368 9367 9366

9 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

321



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

4-84

9392 9391 9390 9389 9388 9387 9386 9385 9384 9383 9382 9381 9380 9379

10 NOVEMBER 1974

11.5 μm

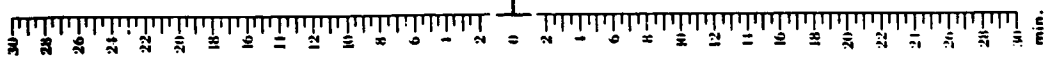
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



9392 9391 9390 9389 9388 9387 9386 9385 9384 9383 9382 9381 9380 9379

10 NOVEMBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.



9405 9404 9403 9402 9401 9400 9399 9398 9397 9396 9395 9394 9393

11 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.

233



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9405 9404 9403 9402 9401 9400 9399 9398 9397 9396 9395 9394 9393

11 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9419 9418 9417 9416 9415 9414 9413 9412 9411 9410 9409 9408 9407 9406

12 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

25



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9419 9418 9417 9416 9415 9414 9413 9412 9411 9410 9409 9408 9407 9406

12 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



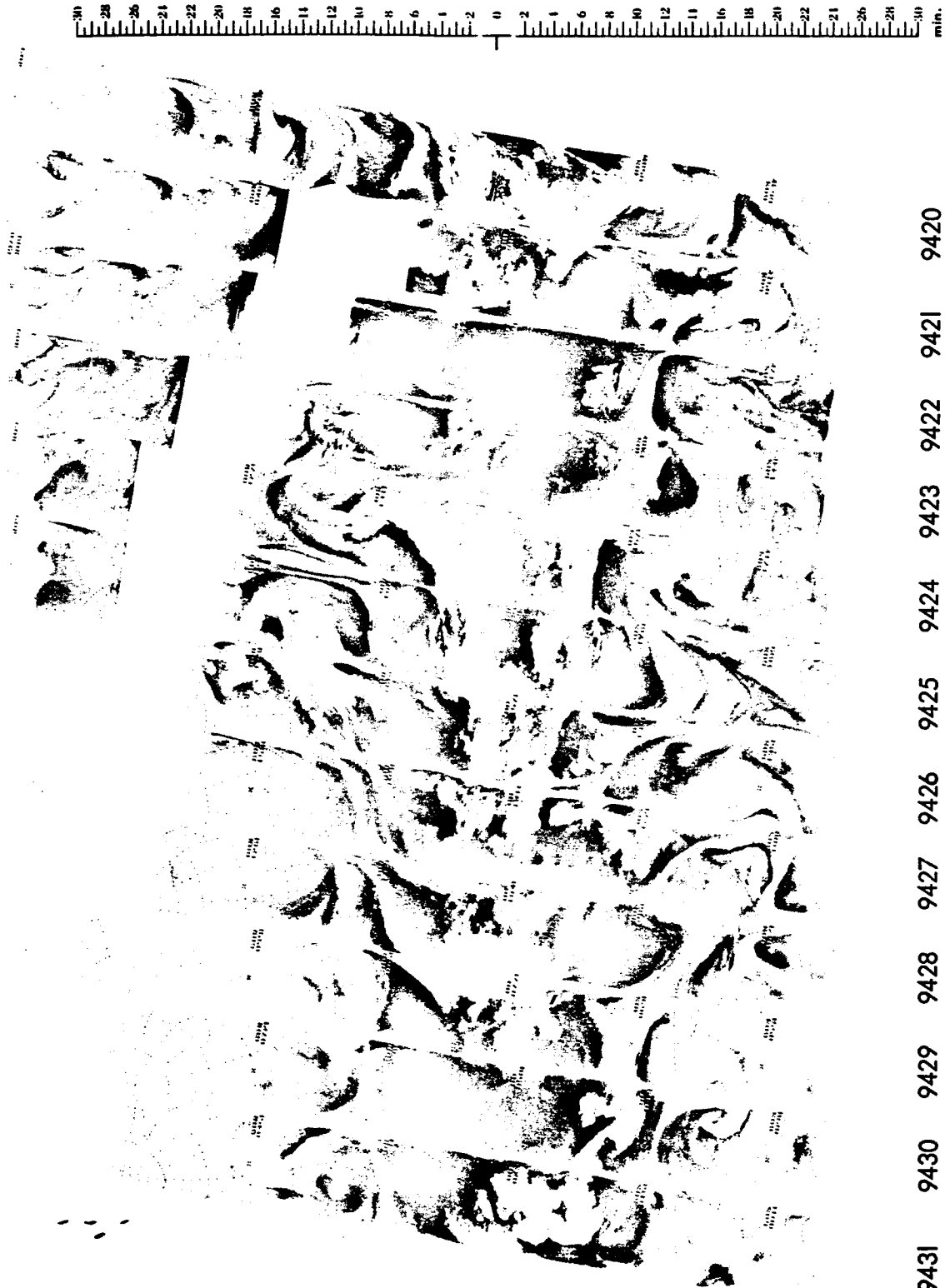
9432 9431 9430 9429 9428 9427 9426 9425 9424 9423 9422 9421 9420

13 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

207



9432 9431 9430 9429 9428 9427 9426 9425 9424 9423 9422 9421 9420

13 NOVEMBER 1974

6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9446 9445 9444 9443 9442 9441 9440 9439 9438 9437 9436 9435 9434 9433

14 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

229

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9446 9445 9444 9443 9442 9441 9440 9439 9438 9437 9436 9435 9434 9433

14 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



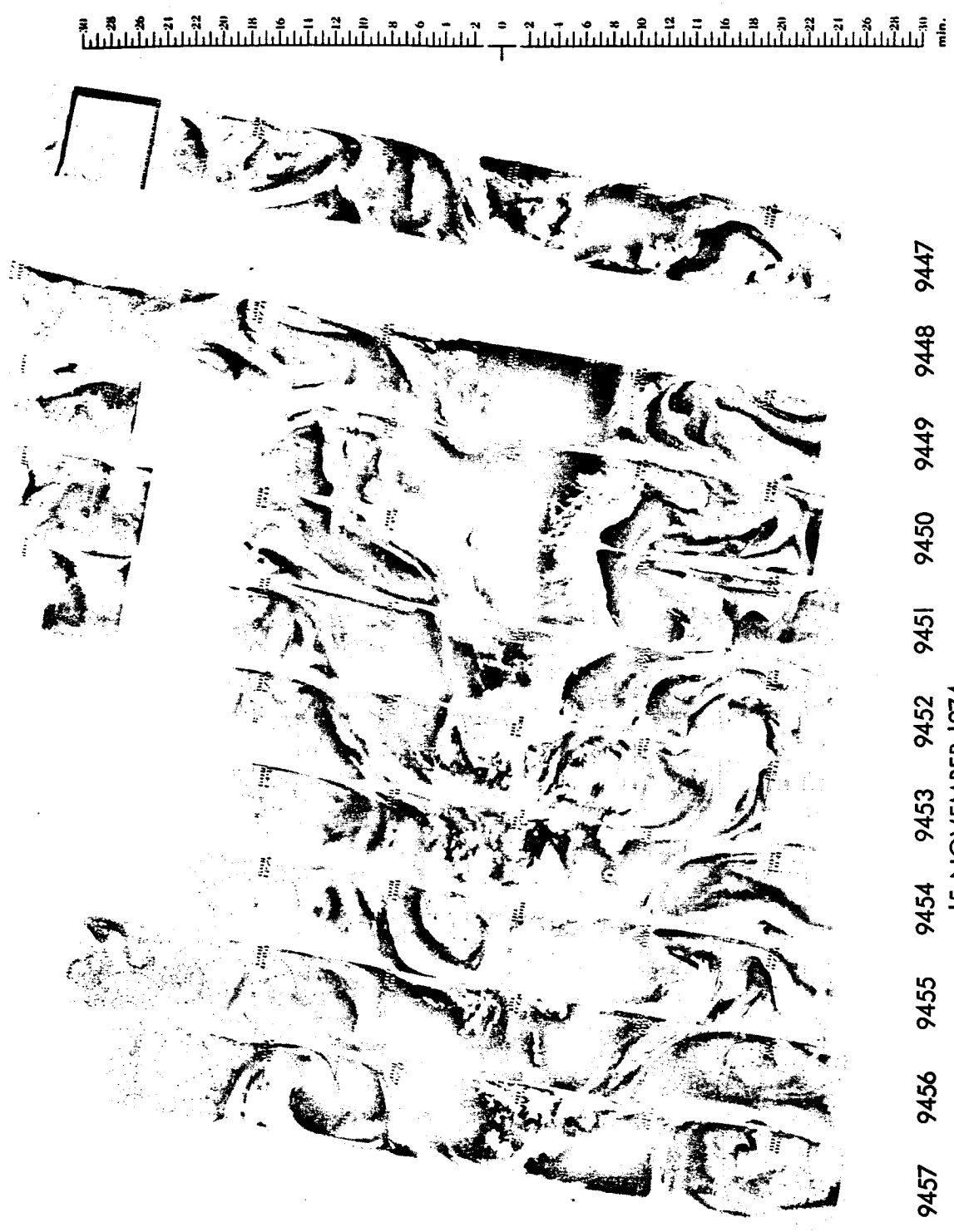
9459 9458 9457 9456 9455 9454 9453 9452 9451 9450 9449 9448 9447

15 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

231



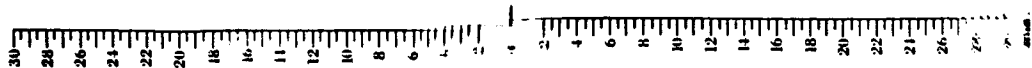
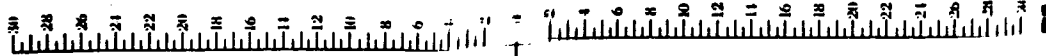
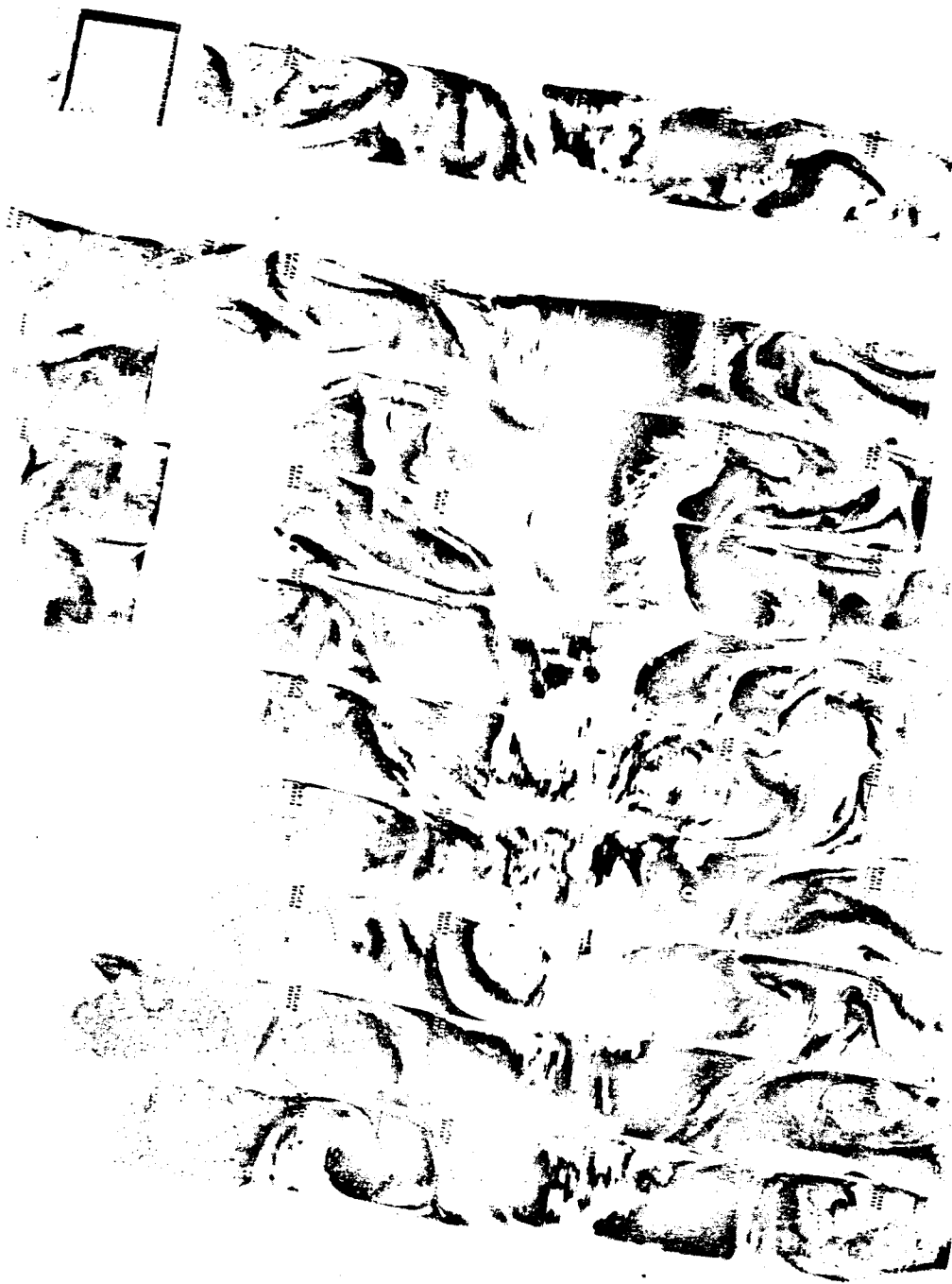
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9459 9458 9457 9456 9455 9454 9453 9452 9451 9450 9449 9448 9447

15 NOVEMBER 1974

6.7  $\mu$ m



9459 9458 9457 9456 9455 9454 9453 9452 9451 9450 9449 9448 9447

15 NOVEMBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



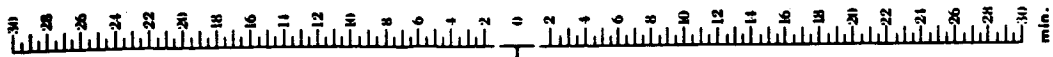
9472 9471 9470 9469 9468 9467 9466 9465 9464 9463 9462 9461 9460

16 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

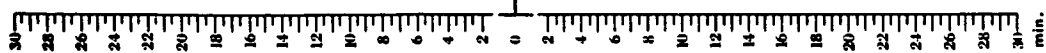
233

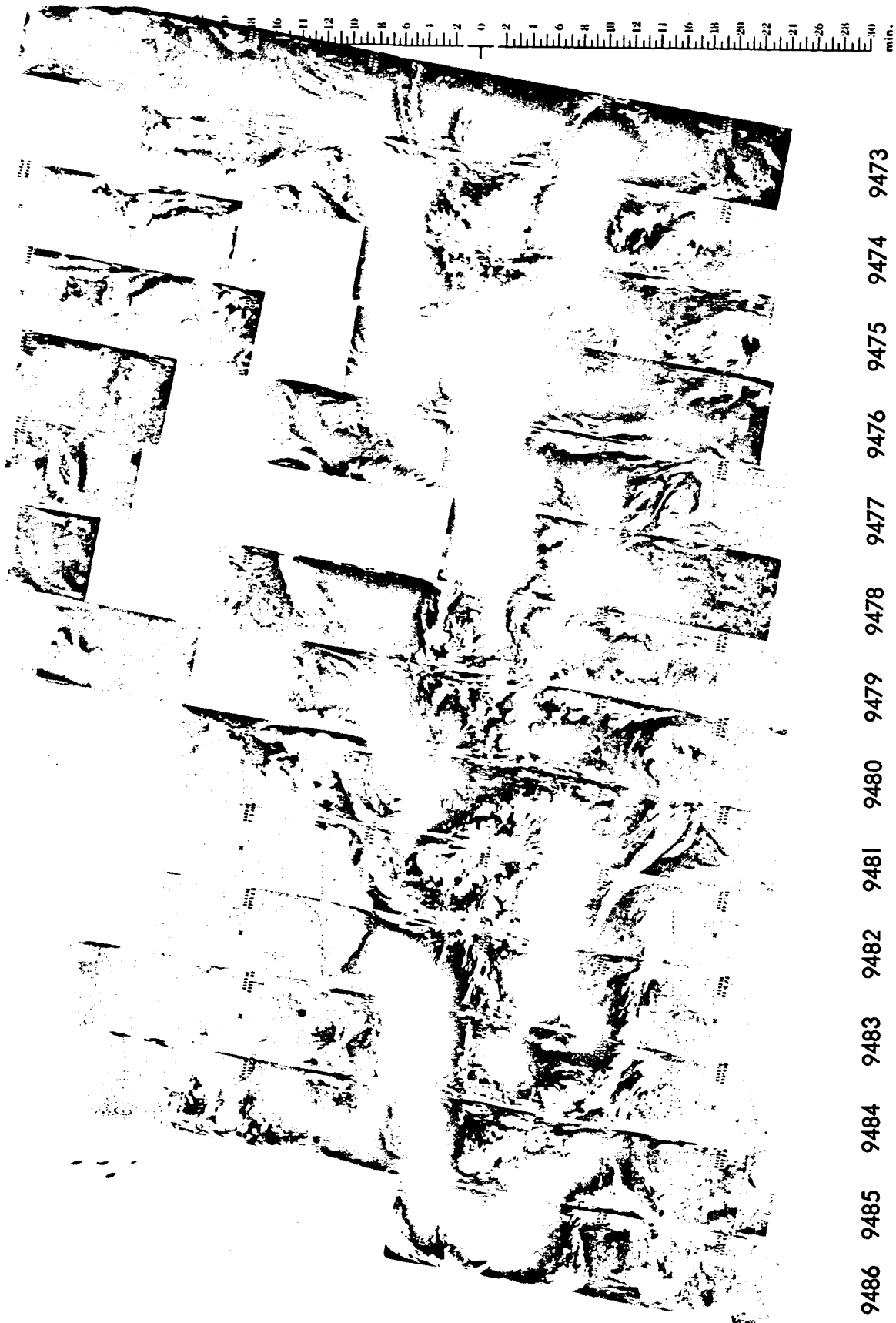


9472 9471 9470 9469 9468 9467 9466 9465 9464 9463 9462 9461 9460

16 NOVEMBER 1974

6.7 μm

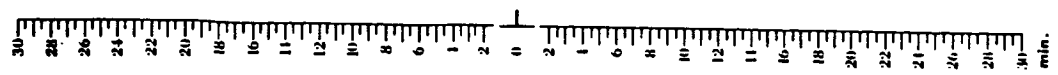




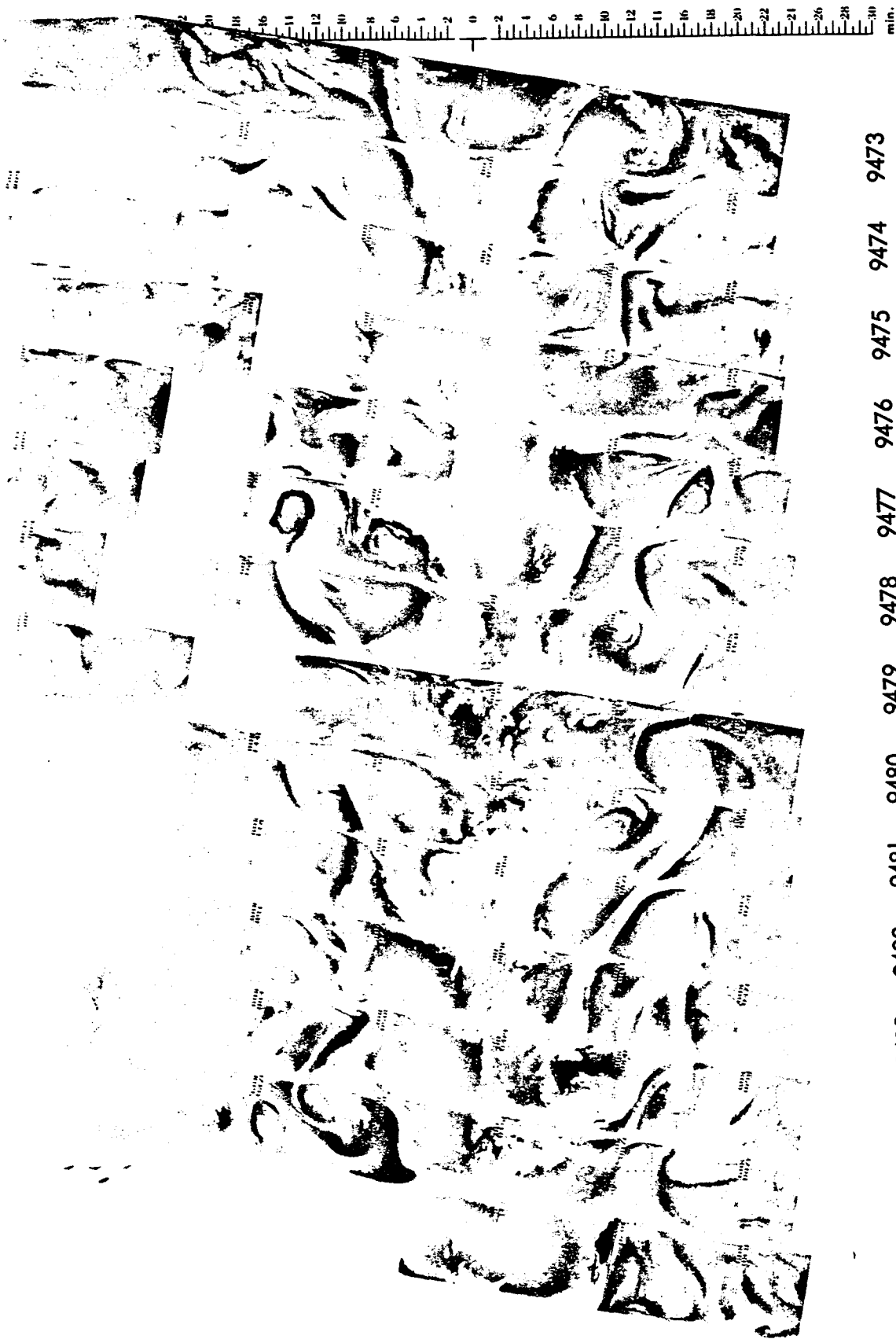
9486 9485 9484 9483 9482 9481 9480 9479 9478 9477 9476 9475 9474 9473

17 NOVEMBER 1974

11.5  $\mu$ m



235

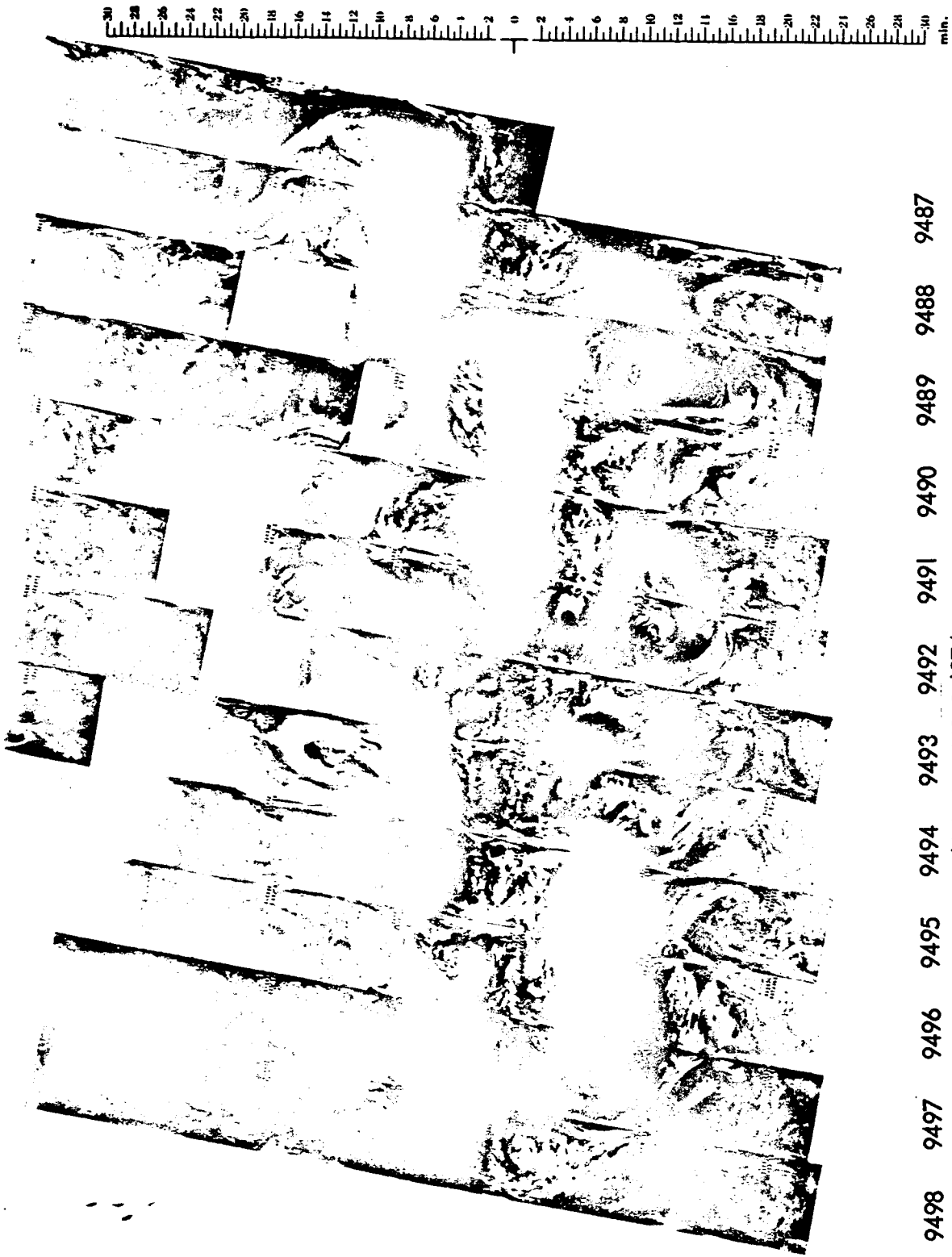


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

4-99

9486 9485 9484 9483 9482 9481 9480 9479 9478 9477 9476 9475 9474 9473  
17 NOVEMBER 1974  
6.7  $\mu$ m

221



9499 9498 9497 9496 9495 9494 9493 9492 9491 9490 9489 9488 9487

18 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9499 9498 9497 9496 9495 9494 9493 9492 9491 9490 9489 9488 9487

18 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9513 9512 9511 9510 9509 9508 9507 9506 9505 9504 9503 9502 9501 9500

19 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

239

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9513 9512 9511 9510 9509 9508 9507 9506 9505 9504 9503 9502 9501 9500

19 NOVEMBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9526 9525 9524 9523 9522 9521 9520 9519 9518 9517 9516 9515 9514

20 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

241



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9526 9525 9524 9523 9522 9521 9520 9519 9518 9517 9516 9515 9514

20 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9540 9539 9538 9537 9536 9535 9534 9533 9532 9531 9530 9529 9528 9527

21 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

243



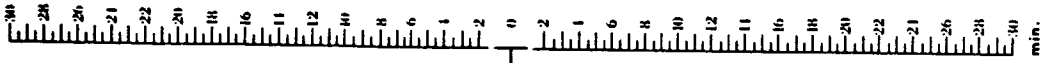
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

9540 9539 9538 9537 9536 9535 9534 9533 9532 9531 9530 9529 9528 9527

21 NOVEMBER 1974

6.7  $\mu$ m

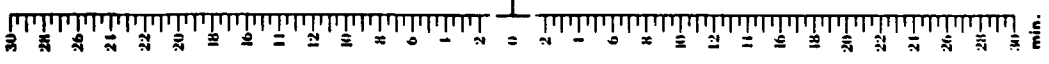
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



9553 9552 9551 9550 9549 9548 9547 9546 9545 9544 9543 9542 9541

22 NOVEMBER 1974

11.5  $\mu$ m



245



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9553 9552 9551 9550 9549 9548 9547 9546 9545 9544 9543 9542 9541

22 NOVEMBER 1974

11.5  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



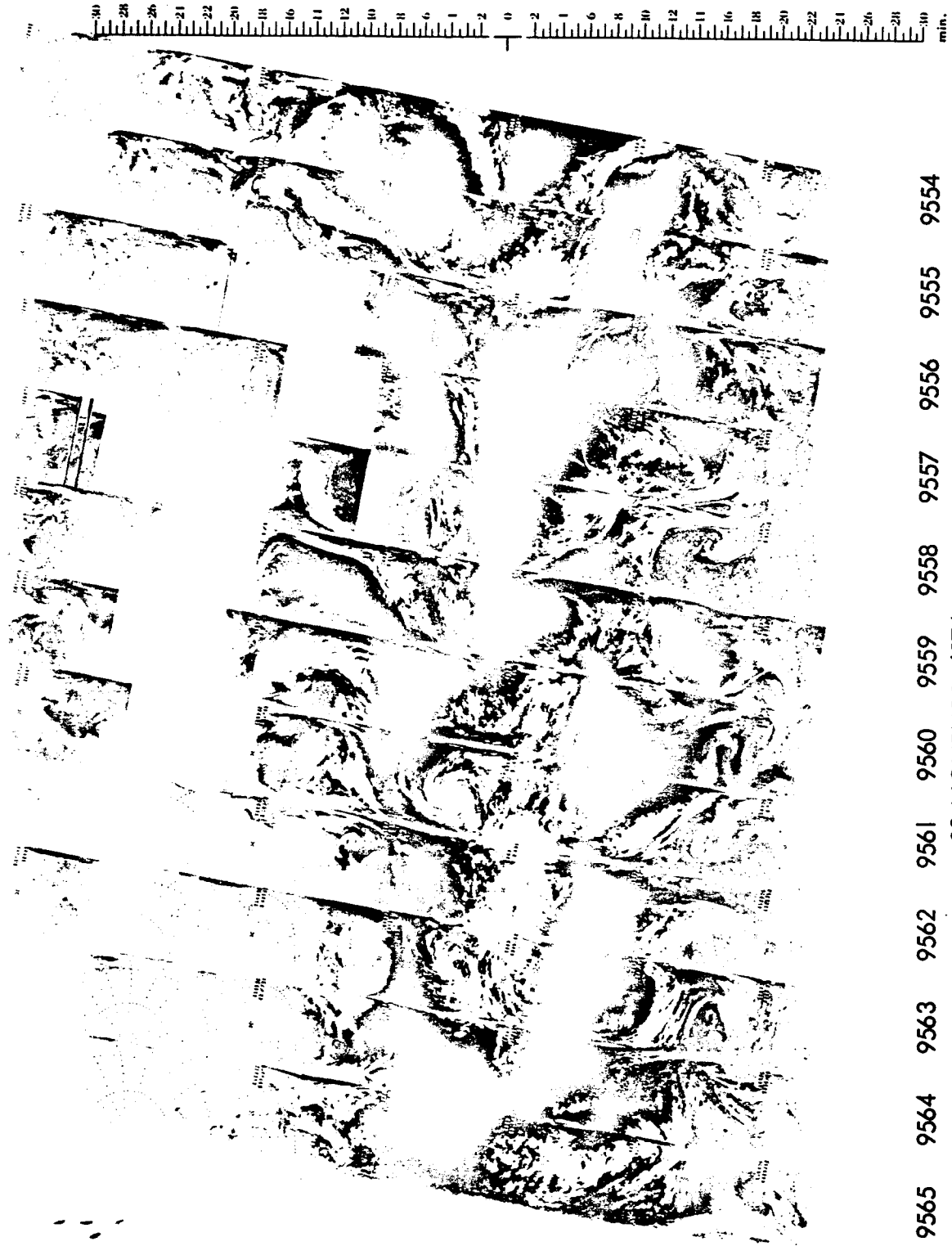
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9553 9552 9551 9550 9549 9548 9547 9546 9545 9544 9543 9542 9541

22 NOVEMBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



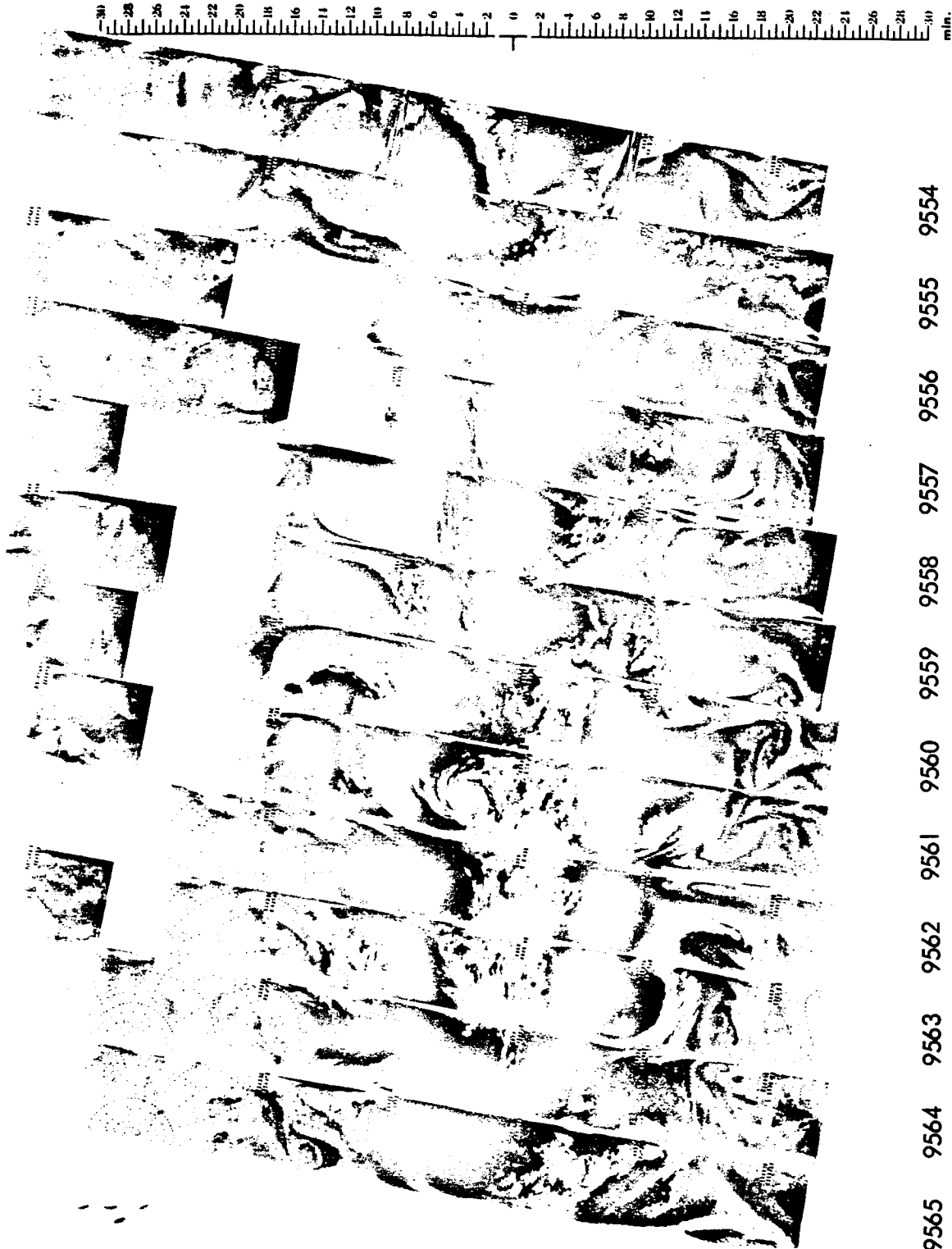
9566 9565 9564 9563 9562 9561 9560 9559 9558 9557 9556 9555 9554

23 NOVEMBER 1974

11.5 μm

247





9566 9565 9564 9563 9562 9561 9560 9559 9558 9557 9556 9555 9554

23 NOVEMBER 1974

6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9580 9579 9578 9577 9576 9575 9574 9573 9572 9571 9570 9569 9568 9567

24 NOVEMBER 1974

11.5 μm

249



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

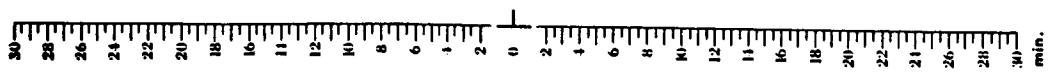
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9580 9579 9578 9577 9576 9575 9574 9573 9572 9571 9570 9569 9568 9567

24 NOVEMBER 1974

6.7 μm

151

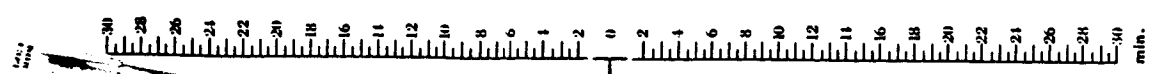


4-114

• 9593 9592 9591 9590 9589 9588 9587 9586 9585 9584 9583 9582 9581

25 NOVEMBER 1974

11.5 μm





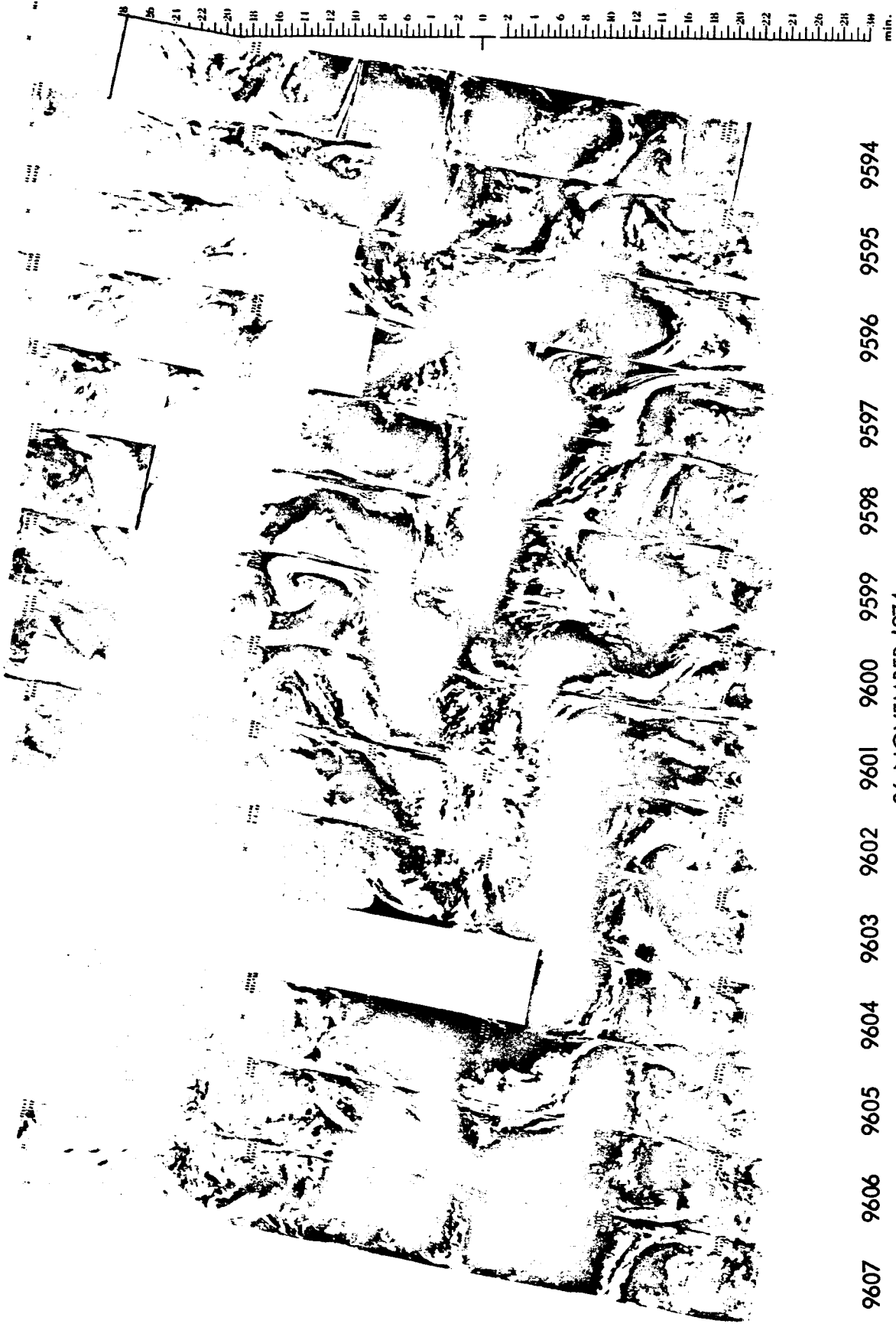
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9593 9592 9591 9590 9589 9588 9587 9586 9585 9584 9583 9582 9581

25 NOVEMBER 1974

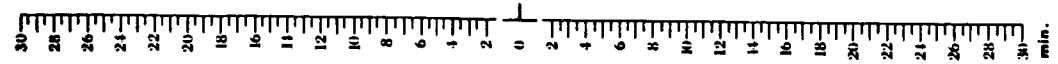
6.7  $\mu$ m



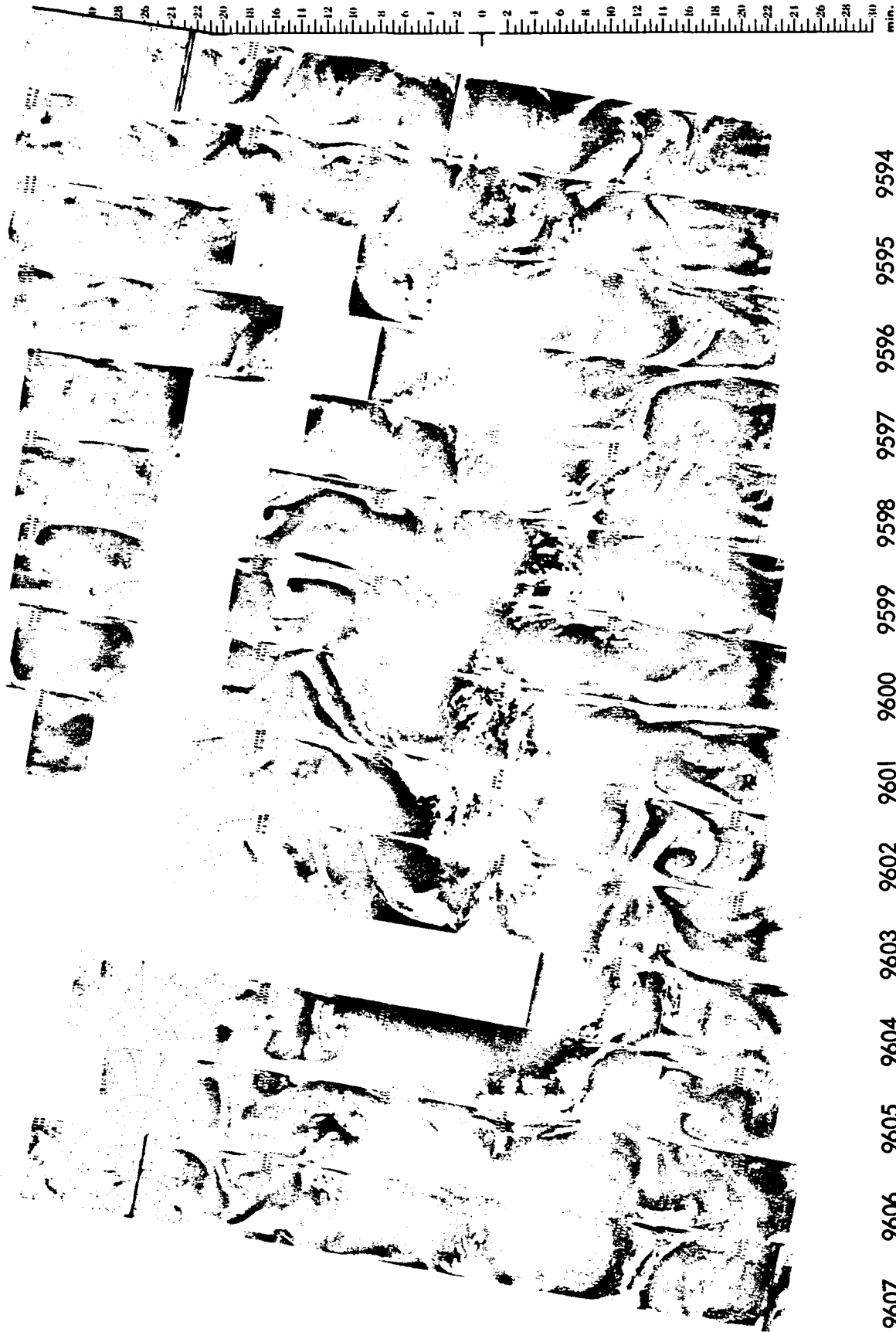
9607 9606 9605 9604 9603 9602 9601 9600 9599 9598 9597 9596 9595 9594

26 NOVEMBER 1974

11.5  $\mu$ m



253



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.

4-117

9607 9606 9605 9604 9603 9602 9601 9600 9599 9598 9597 9596 9595 9594

26 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9620 9619 9618 9617 9616 9615 9614 9613 9612 9611 9610 9609 9608

27 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

253





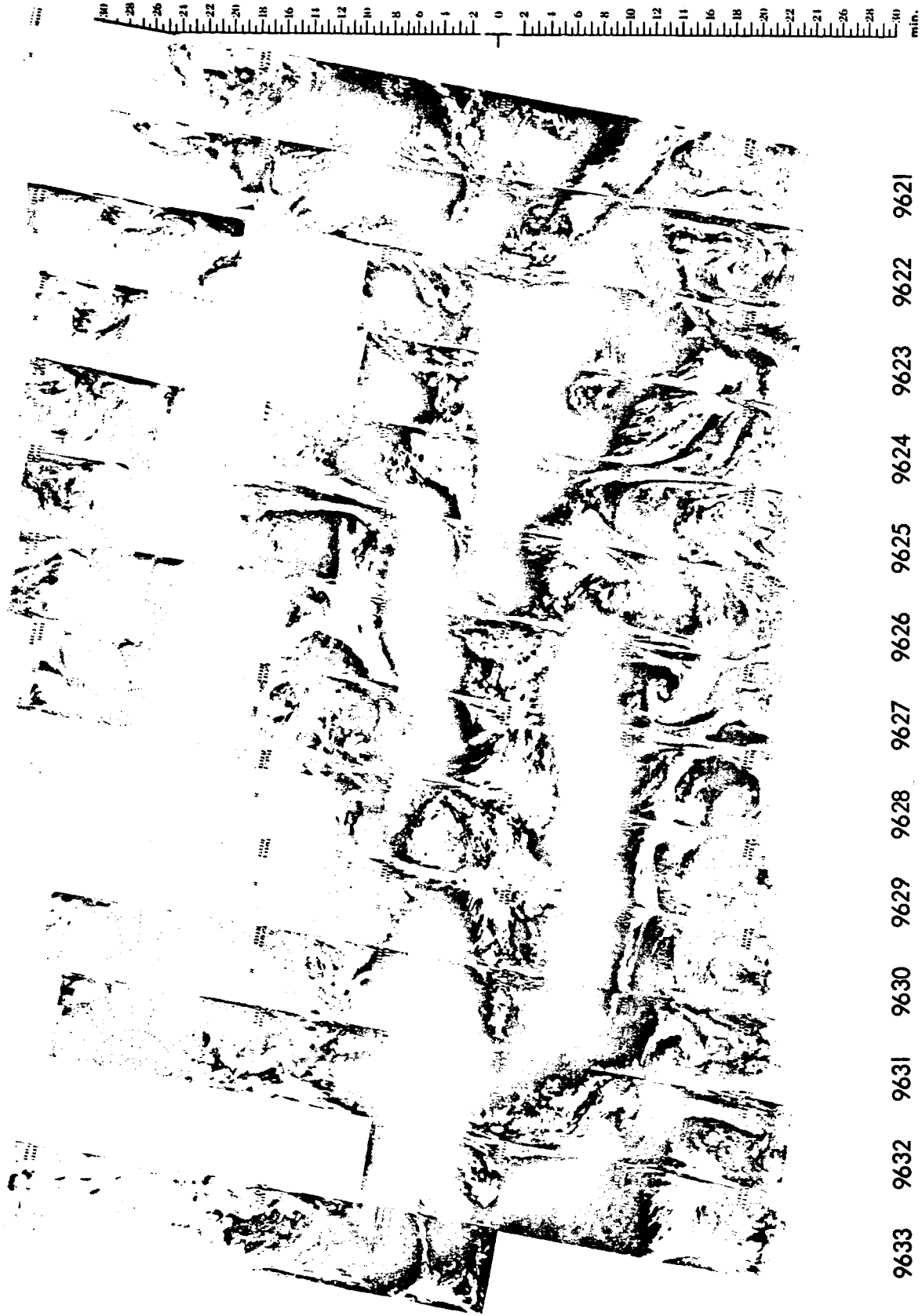
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9620 9619 9618 9617 9616 9615 9614 9613 9612 9611 9610 9609 9608

27 NOVEMBER 1974

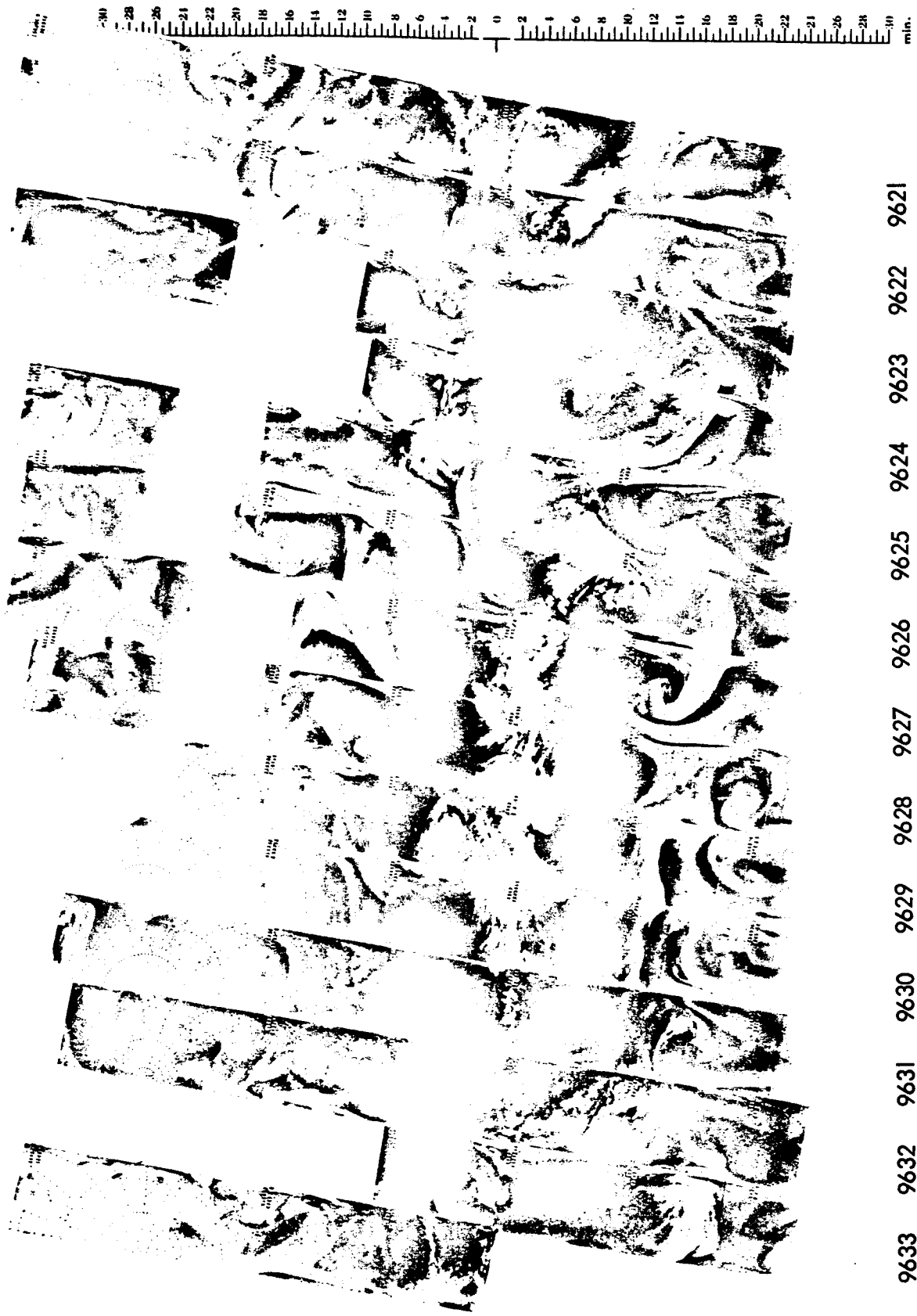
6.7 μm



9634 9633 9632 9631 9630 9629 9628 9627 9626 9625 9624 9623 9622 9621

28 NOVEMBER 1974

11.5  $\mu$ m

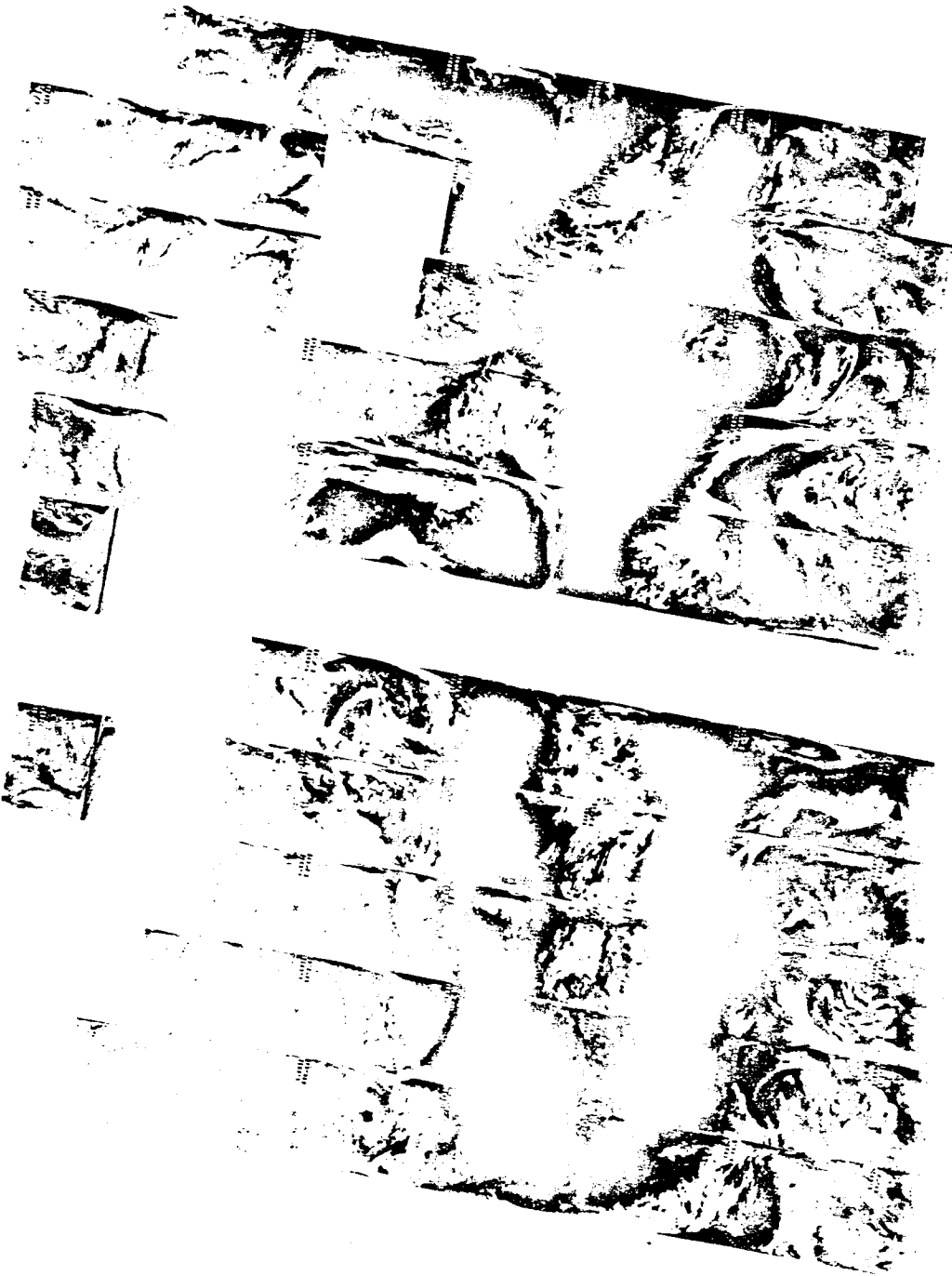


9634 9633 9632 9631 9630 9629 9628 9627 9626 9625 9624 9623 9622 9621

28 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9647 9646 9645 9644 9643 9642 9641 9640 9639 9638 9637 9636 9635

29 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

259

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

9647 9646 9645 9644 9643 9642 9641 9640 9639 9638 9637 9636 9635

29 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9660 9659 9658 9657 9656 9655 9654 9653 9652 9651 9650 9649 9648

30 NOVEMBER 1974

11.5  $\mu$ m

261



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

9660 9659 9658 9657 9656 9655 9554 9653 9652 9651 9650 9649 9648

30 NOVEMBER 1974

6.7  $\mu$ m





SECTION 4.2  
TEMPERATURE HUMIDITY INFRARED RADIOMETER  
DAYTIME MONTAGES

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8855 8854 8853 8852 8851 8850 8849 8848 8847 8846 8845 8844 8843

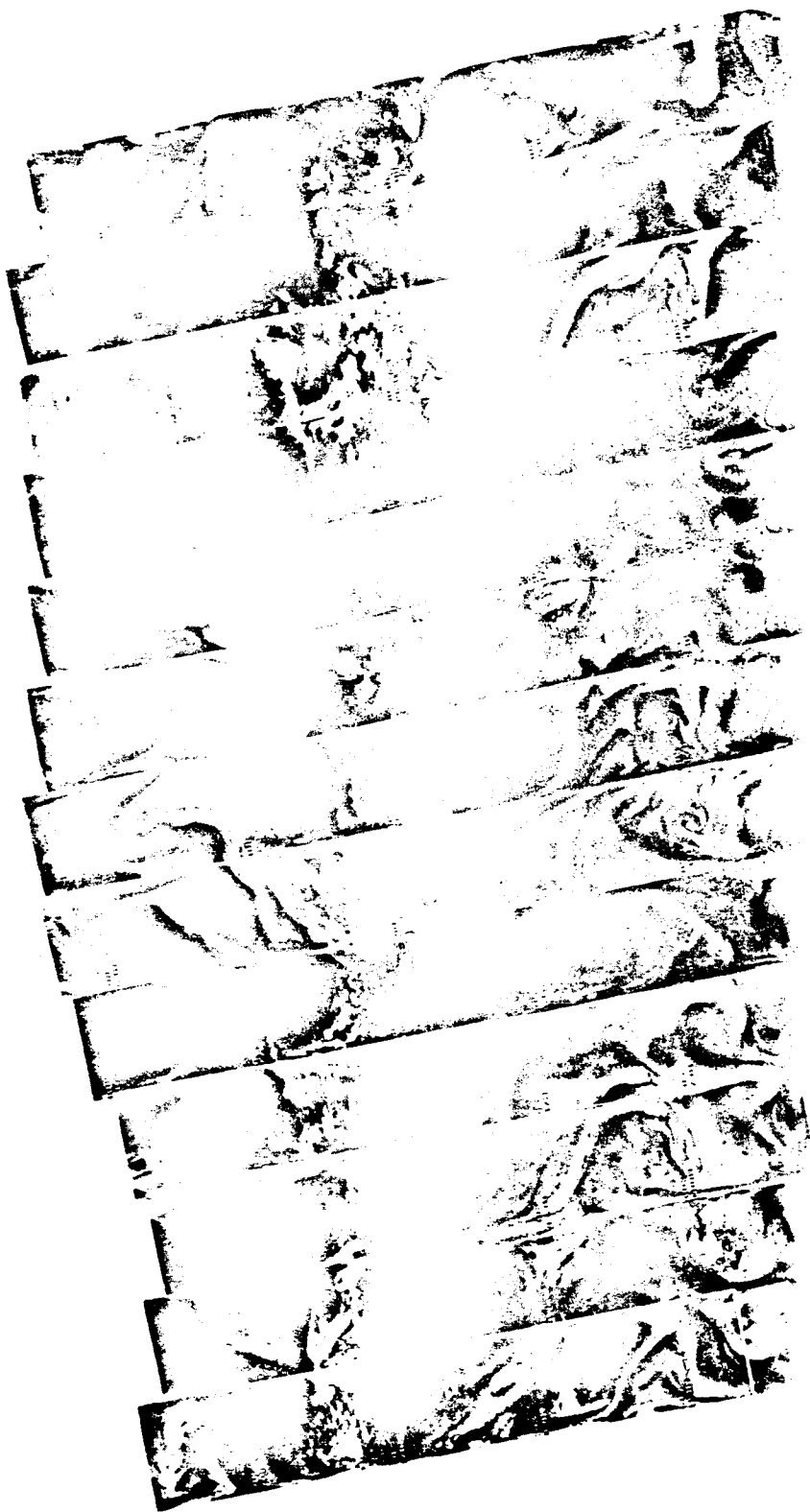
1 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

264

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8855 8854 8853 8852 8851 8850 8849 8848 8847 8846 8845 8844 8843

1 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

2665

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



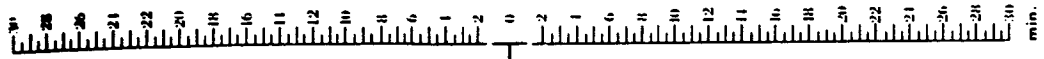
8868 8867 8866 8865 8864 8863 8862 8861 8860 8859 8858 8857 8856

2 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

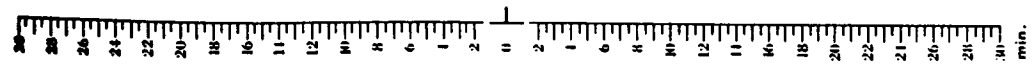
266



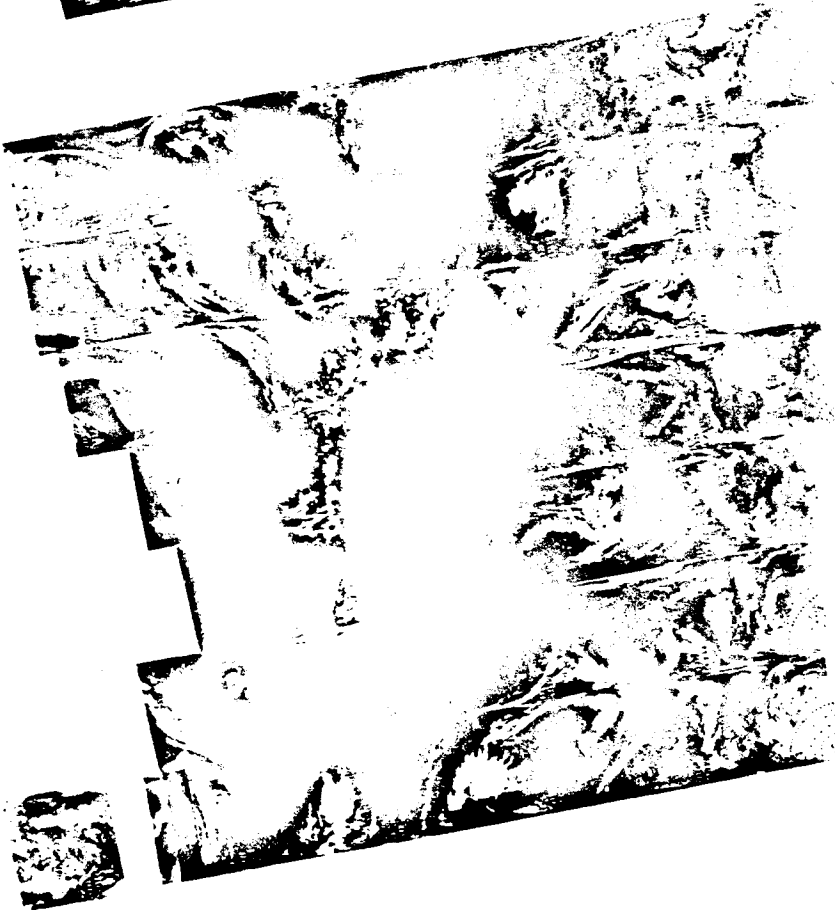
8868 8867 8866 8865 8864 8863 8862 8861 8860 8859 8858 8857 8856

2 OCTOBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min



8882 8881 8880 8879 8878 8877 8876 8875 8874 8873 8872 8871 8870 8869

3 OCTOBER 1974

11.5'

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min

268

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8882 8881 8880 8879 8878 8877 8876 8875 8874 8873 8872 8871 8870 8869

3 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



8895 8894 8893 8892 8891 8890 8889 8888 8887 8886 8885 8884 8883

4 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8895 8894 8893 8892 8891 8890 8889 8888 8887 8886 8885 8884 8883

4 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

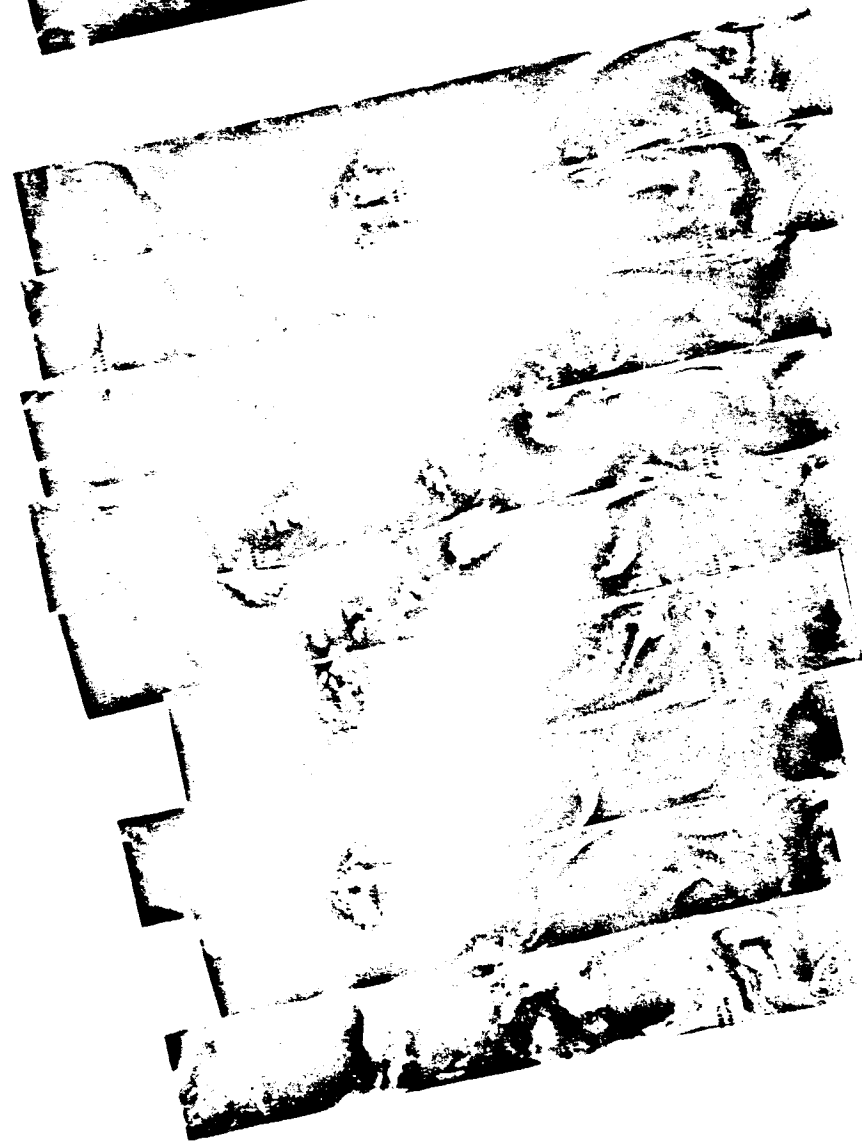
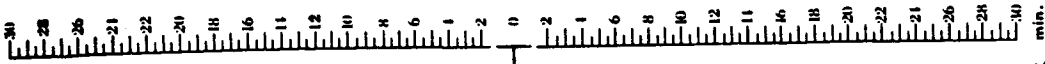


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8896 8897 8898 8899 8900 8901 8902 8903 8904 8905 8906 8907 8908 8909

5 OCTOBER 1974

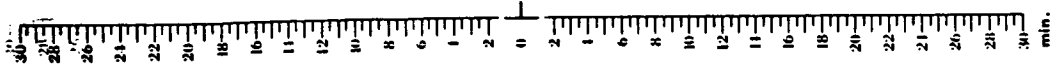
11.5 μm



8909 8908 8907 8906 8905 8904 8903 8902 8901 8900 8899 8898 8897 8896

5 OCTOBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min



8922 8921 8920 8919 8918 8917 8916 8915 8914 8913 8912 8911 8910

6 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min

274

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8922 8921 8920 8919 8918 8917 8916 8915 8914 8913 8912 8911 8910

6 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min



8935 8934 8933 8932 8931 8930 8929 8928 8927 8926 8925 8924 8923

7 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

276

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8935 8934 8933 8932 8931 8930 8929 8928 8927 8926 8925 8924 8923

7 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

8949 8948 8947 8946 8945 8944 8943 8942 8941 8940 8939 8938 8937 8936

8 OCTOBER 1974

11.5  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8949 8948 8947 8946 8945 8944 8943 8942 8941 8940 8939 8938 8937 8936

8 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8962 8961 8960 8959 8958 8957 8956 8955 8954 8953 8952 8951 8950

9 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

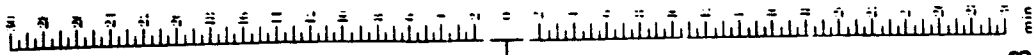


8976 8975 8974 8973 8972 8971 8970 8969 8968 8967 8966 8965 8964 8963

10 OCTOBER 1974

11.5  $\mu$ m

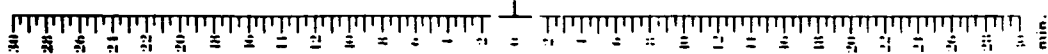
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



8976 8975 8974 8973 8972 8971 8970 8969 8968 8967 8966 8965 8964 8963

10 OCTOBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8977

8978

8979

8980

8981

8982

8983

8984

8985

8986

8987

8988

8989

11 OCTOBER 1974

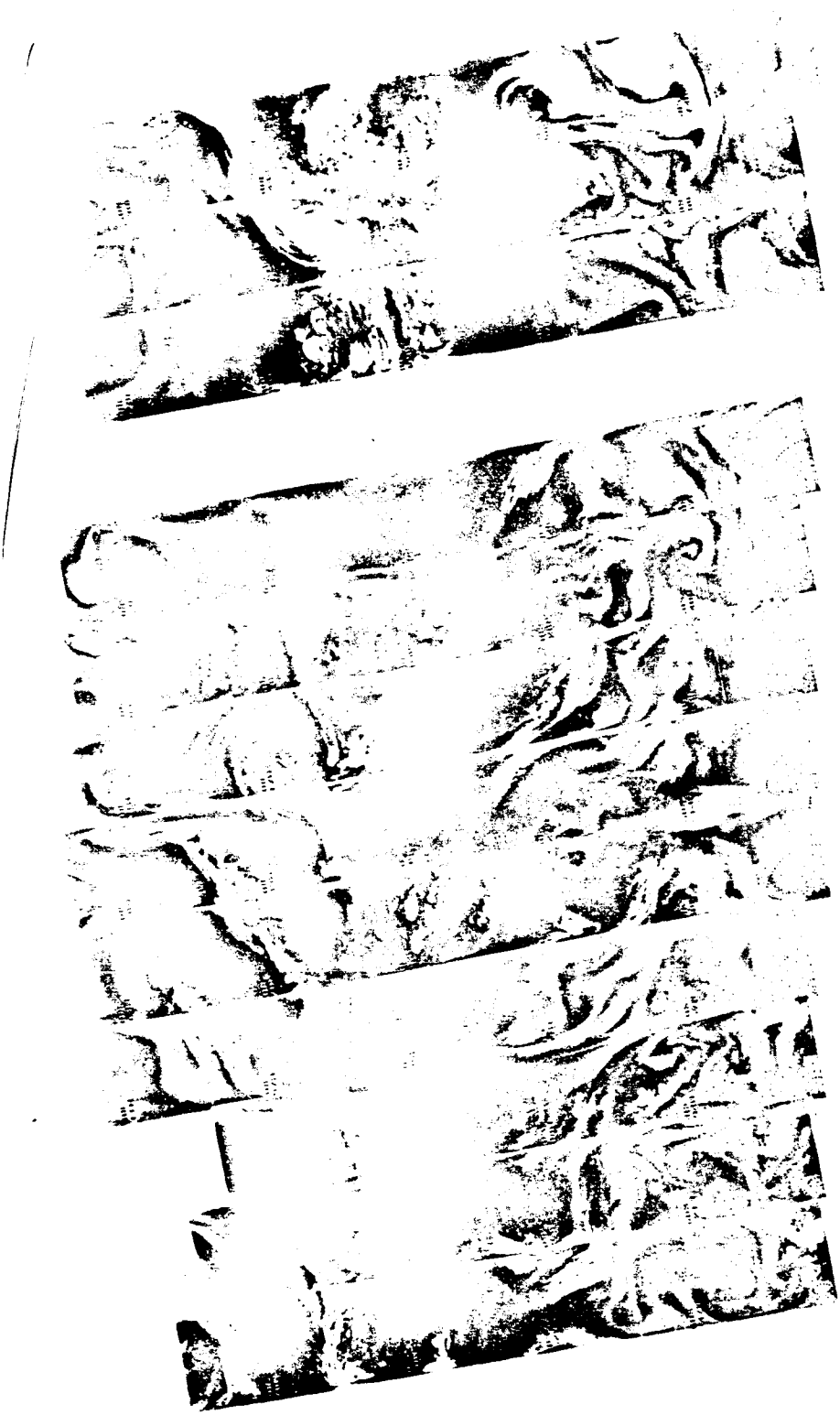
11.5 μm



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

384

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



8989 8988 8987 8986 8985 8984 8983 8982 8981 8980 8979 8978 8977

11 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9003 9002 9001 9000 8999 8998 8997 8996 8995 8994 8993 8992 8991 8990

12 OCTOBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9003 9002 9001 9000 8999 8998 8997 8996 8995 8994 8993 8992 8991 8990

12 OCTOBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9016 9015 9014 9013 9012 9011 9010 9009 9008 9007 9006 9005 9004

13 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

288

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min



9016 9015 9014 9013 9012 9011 9010 9009 9008 9007 9006 9005 9004

13 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9029 9028 9027 9026 9025 9024 9023 9022 9021 9020 9019 9018 9017

14 OCTOBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9029 9028 9027 9026 9025 9024 9023 9022 9021 9020 9019 9018 9017

14 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



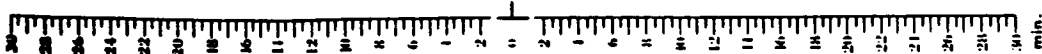
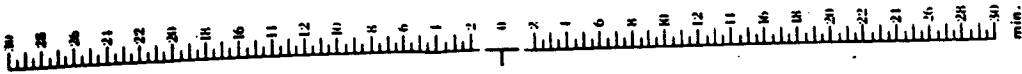
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

9043 9042 9041 9040 9039 9038 9037 9036 9035 9034 9033 9032 9031 9030

15 OCTOBER 1974

11.5  $\mu$ m

292



9043 9042 9041 9040 9039 9038 9037 9036 9035 9034 9033 9032 9031 9030

15 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9056 9055 9054 9053 9052 9051 9050 9049 9048 9047 9046 9045 9044

16 OCTOBER 1974

11.5 μm

294

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm

9056 9055 9054 9053 9052 9051 9050 9049 9048 9047 9046 9045 9044  
16 OCTOBER 1974  
6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9070 9069 9068 9067 9066 9065 9064 9063 9062 9061 9060 9059 9058 9057

17 OCTOBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9070 9069 9068 9067 9066 9065 9064 9063 9062 9061 9060 9059 9058 9057

17 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9083 9082 9081 9080 9079 9078 9077 9076 9075 9074 9073 9072 9071

18 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9083 9082 9081 9080 9079 9078 9077 9076 9075 9074 9073 9072 9071

18 OCTOBER 1974

6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9097 9096 9095 9094 9093 9092 9091 9090 9089 9088 9087 9086 9085 9084

19 OCTOBER 1974

11.5 μm

4-164

380

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9097 9096 9095 9094 9093 9092 9091 9090 9089 9088 9087 9086 9085 9084

19 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9110 9109 9108 9107 9106 9105 9104 9103 9102 9101 9100 9099 9098

20 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9110 9109 9108 9107 9106 9105 9104 9103 9102 9101 9100 9099 9098

20 OCTOBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9123 9122 9121 9120 9119 9118 9117 9116 9115 9114 9113 9112 9111

21 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 min.



9123 9122 9121 9120 9119 9118 9117 9116 9115 9114 9113 9112 9111

21 OCTOBER 1974

6.7  $\mu$ m

30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



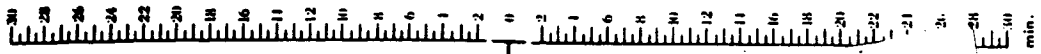
9137 9136 9135 9134 9133 9132 9131 9130 9129 9128 9127 9126 9125 9124

22 OCTOBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

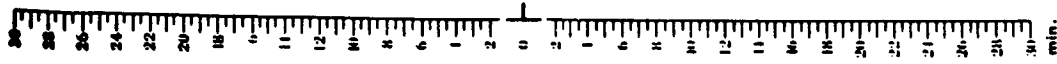
306



9124 9125 9126 9127 9128 9129 9130 9131 9132 9133 9134 9135 9136 9137

22 OCTOBER 1974

6.7  $\mu\text{m}$



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9150 9149 9148 9147 9146 9145 9144 9143 9142 9141 9140 9139 9138

23 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9150 9149 9148 9147 9146 9145 9144 9143 9142 9141 9140 9139 9138  
23 OCTOBER 1974  
6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9164 9163 9162 9161 9160 9159 9158 9157 9156 9155 9154 9153 9152 9151

24 OCTOBER 1974

11.5  $\mu$ m

310

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



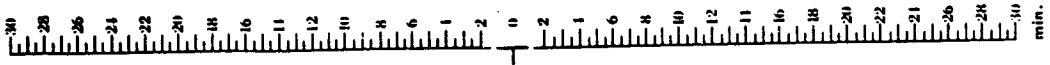
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9164 9163 9162 9161 9160 9159 9158 9157 9156 9155 9154 9153 9152 9151

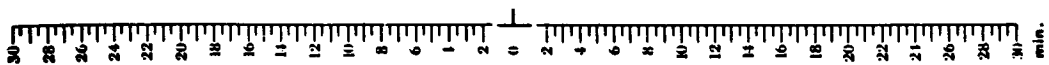
24 OCTOBER 1974

6.7  $\mu\text{m}$





9177 9176 9175 9174 9173 9172 9171 9170 9168 9167 9166 9165  
 25 OCTOBER 1974  
 11.5  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9177 9176 9175 9174 9173 9172 9171 9170 9169 9168 9167 9166 9165  
25 OCTOBER 1974  
6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



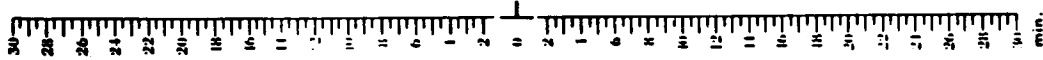
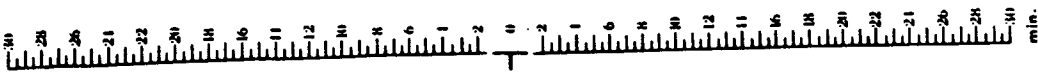
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9191 9190 9189 9188 9187 9186 9185 9184 9183 9182 9181 9180 9179 9178

26 OCTOBER 1974

11.5 μm

314



9191 9190 9189 9188 9187 9186 9185 9184 9183 9182 9181 9180 9179 9178

26 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

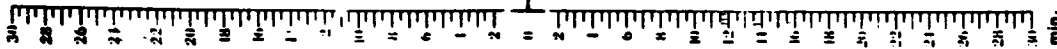
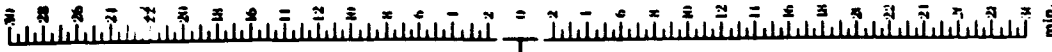


9204 9203 9202 9201 9200 9199 9198 9197 9196 9195 9194 9193 9192

27 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9204 9203 9202 9201 9200 9199 9198 9197 9196 9195 9194 9193 9192

27 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9217 9216 9215 9214 9213 9212 9211 9210 9209 9208 9207 9206 9205

28 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

318

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9217 9216 9215 9214 9213 9212 9211 9210 9209 9208 9207 9206 9205

28 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9218 9219 9220 9221 9222 9223 9224 9225 9226 9227 9228 9229 9230 9231

29 OCTOBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



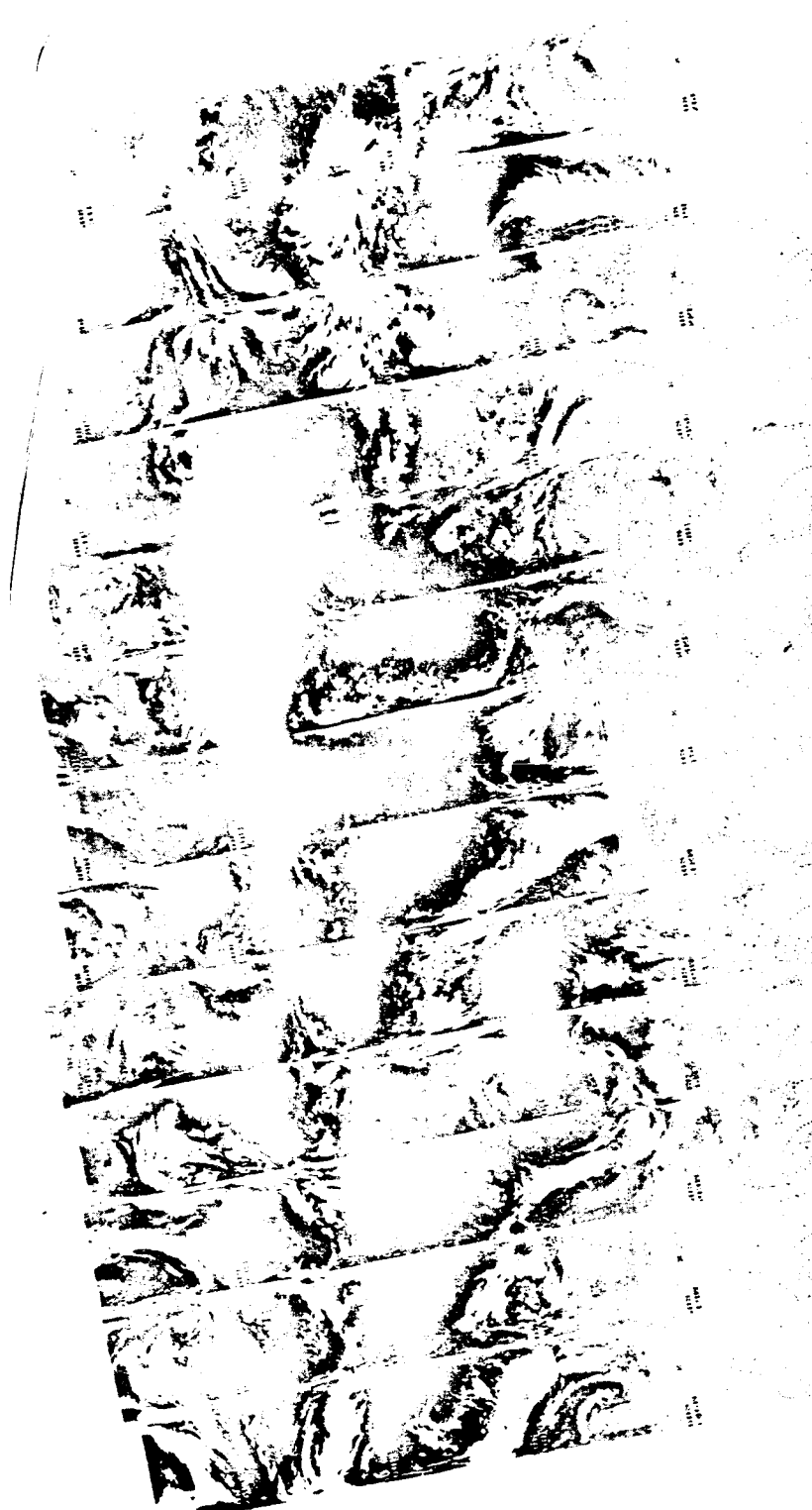
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9231 9230 9229 9228 9227 9226 9225 9224 9223 9222 9221 9220 9219 9218

29 OCTOBER 1974

6.7  $\mu$ m

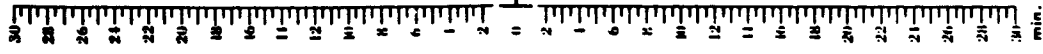
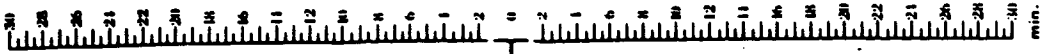
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9244 9243 9242 9241 9240 9239 9238 9237 9236 9235 9234 9233 9232

30 OCTOBER 1974  
11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9244 9243 9242 9241 9240 9239 9238 9237 9236 9235 9234 9233 9232

30 OCTOBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9258 9257 9256 9255 9254 9253 9252 9251 9250 9249 9248 9247 9246 9245

31 OCTOBER 1974  
11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

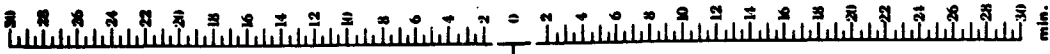


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9258 9257 9256 9255 9254 9253 9252 9251 9250 9249 9248 9247 9246 9245

31 OCTOBER 1974

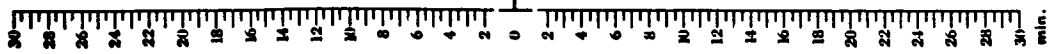
6.7  $\mu\text{m}$



9271 9270 9269 9268 9267 9266 9265 9264 9263 9262 9261 9260 9259

1 NOVEMBER 1974

11.5 μm



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9271 9270 9269 9268 9267 9266 9265 9264 9263 9262 9261 9260 9259

1 NOVEMBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9285 9284 9283 9282 9281 9280 9279 9278 9277 9276 9275 9274 9273 9272

2 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

328

20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9285 9284 9283 9282 9281 9280 9279 9278 9277 9276 9275 9274 9273 9272

2 NOVEMBER 1974

6.7 μm

20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9298 9297 9296 9295 9294 9293 9292 9291 9290 9289 9288 9287 9286

3 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9298 9297 9296 9295 9294 9293 9292 9291 9290 9289 9288 9287 9286

3 NOVEMBER 1974

6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9311 9310 9309 9308 9307 9306 9305 9304 9303 9302 9301 9300 9299

4 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

332

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9311 9310 9309 9308 9307 9306 9305 9304 9303 9302 9301 9300 9299

4 NOVEMBER 1974  
6.7  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9325 9324 9323 9322 9321 9320 9319 9318 9317 9316 9315 9314 9313 9312

5 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

334

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9325 9324 9323 9322 9321 9320 9319 9318 9317 9316 9315 9314 9313 9312

5 NOVEMBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9338 9337 9336 9335 9334 9333 9332 9331 9330 9329 9328 9327 9326

6 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

336

24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9338 9337 9336 9335 9334 9333 9332 9331 9330 9329 9328 9327 9326

6 NOVEMBER 1974

6.7  $\mu$ m

24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9352 9351 9350 9349 9348 9347 9346 9345 9344 9343 9342 9341 9340 9339

7 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9352 9351 9350 9349 9348 9347 9346 9345 9344 9343 9342 9341 9340 9339

7 NOVEMBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9353 9354 9355 9356 9357 9358 9359 9360 9361 9362 9363 9364 9365

8 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9365 9364 9363 9362 9361 9360 9359 9358 9357 9356 9355 9354 9353

8 NOVEMBER 1974  
6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9378 9377 9376 9375 9374 9373 9372 9371 9370 9369 9368 9367 9366

9 NOVEMBER 1974

11.5 μm

4-206

342

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



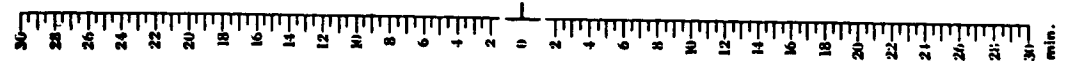
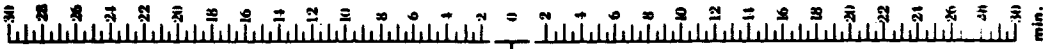
9378 9377 9376 9375 9374 9373 9372 9371 9370 9369 9368 9367 9366

9 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.





9392 9391 9390 9389 9388 9387 9386 9385 9384 9383 9382 9381 9380 9379

10 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9392 9391 9390 9389 9388 9387 9386 9385 9384 9383 9382 9381 9380 9379

10 NOVEMBER 1974

6.7  $\mu$ m

315

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9405 9404 9403 9402 9401 9400 9399 9398 9397 9396 9395 9394 9393

11 NOVEMBER 1974

11.5 μm

346

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9405 9404 9403 9402 9401 9400 9399 9398 9397 9396 9395 9394 9393

11 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



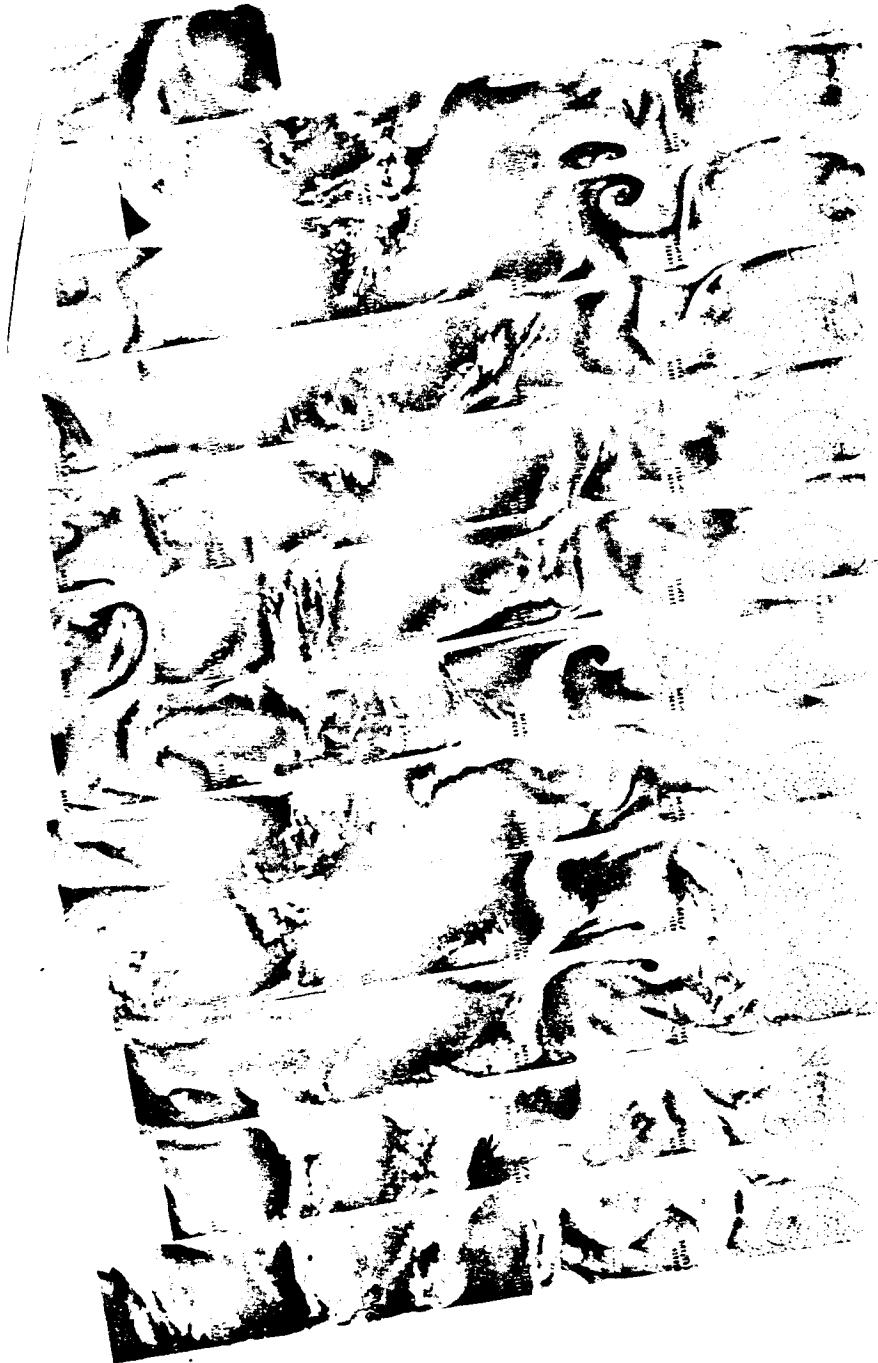
9419 9418 9417 9416 9415 9414 9413 9412 9411 9410 9409 9408 9407 9406

12 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9419 9418 9417 9416 9415 9414 9413 9412 9411 9410 9409 9408 9407 9406

12 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9432 9431 9430 9429 9428 9427 9426 9425 9424 9423 9422 9421 9420

13 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

350

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9432 9431 9430 9429 9428 9427 9426 9425 9424 9423 9422 9421 9420

13 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9446 9445 9444 9443 9442 9441 9440 9439 9438 9437 9436 9435 9434 9433

14 NOVEMBER 1974

11.5  $\mu$ m

352

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9446 9445 9444 9443 9442 9441 9440 9439 9438 9437 9436 9435 9434 9433

14 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9459 9458 9457 9456 9455 9454 9453 9452 9451 9450 9449 9448 9447

15 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9459 9458 9457 9456 9455 9454 9453 9452 9451 9450 9449 9448 9447

15 NOVEMBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9472 9471 9470 9469 9468 9467 9466 9465 9464 9463 9462 9461 9460

16 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9472 9471 9470 9469 9468 9467 9466 9465 9464 9463 9462 9461 9460

16 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9486 9485 9484 9483 9482 9481 9480 9479 9478 9477 9476 9475 9474 9473

17 NOVEMBER 1974  
11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

358

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9486 9485 9484 9483 9382 9481 9480 9479 9478 9477 9476 9475 9474 9473

17 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9499 9498 9497 9496 9495 9494 9493 9492 9491 9490 9489 9488 9487

18 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9499 9498 9497 9496 9495 9494 9493 9492 9491 9490 9489 9488 9487

18 NOVEMBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9513 9512 9511 9510 9509 9508 9507 9506 9505 9504 9503 9502 9501 9500

19 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

362

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9513 9512 9511 9510 9509 9508 9507 9506 9505 9504 9503 9502 9501 9500

19 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9526 9525 9524 9523 9522 9521 9520 9519 9518 9517 9516 9515 9514

20 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

364

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.



9526 9525 9524 9523 9522 9521 9520 9519 9518 9517 9516 9515 9514

20 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mm.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9540 9539 9538 9537 9536 9535 9534 9533 9532 9531 9530 9529 9528 9527

21 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

9540 9539 9538 9537 9536 9535 9534 9533 9532 9531 9530 9529 9528 9527

21 NOVEMBER 1974

6.7  $\mu$ m



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9553 9552 9551 9550 9549 9548 9547 9546 9545 9544 9543 9542 9541  
22 NOVEMBER 1974  
11.5  $\mu\text{m}$

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9553 9552 9551 9550 9549 9548 9547 9546 9545 9544 9543 9542 9541

22 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.



9566 9565 9564 9563 9562 9561 9560 9559 9558 9557 9556 9555 9554

23 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9566 9565 9564 9563 9562 9561 9560 9559 9558 9557 9556 9555 9554

23 NOVEMBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9580 9579 9578 9577 9576 9575 9574 9573 9572 9571 9570 9569 9568 9567

24 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9580 9579 9578 9577 9576 9575 9574 9573 9572 9571 9570 9569 9568 9567  
24 NOVEMBER 1974  
6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9593 9592 9591 9590 9589 9588 9587 9586 9585 9584 9583 9582 9581

25 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9593 9592 9591 9590 9589 9588 9587 9586 9585 9584 9583 9582 9581

25 NOVEMBER 1974

6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9607 9606 9605 9604 9603 9602 9601 9600 9599 9598 9597 9596 9595 9594

26 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mil.



9607 9606 9605 9604 9603 9602 9601 9600 9599 9598 9597 9596 9595 9594

26 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30  
mil.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9620 9619 9618 9617 9616 9615 9614 9613 9612 9611 9610 9609 9608

27 NOVEMBER 1974

11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

4-242

378

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9620 9619 9618 9617 9616 9615 9614 9613 9612 9611 9610 9609 9608

27 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

4-243

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

9634 9633 9632 9631 9630 9629 9628 9627 9626 9625 9624 9623 9622 9621

28 NOVEMBER 1974

11.5 μm

4-244

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9634 9633 9632 9631 9630 9629 9628 9627 9626 9625 9624 9623 9622 9621

28 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9647 9646 9645 9644 9643 9642 9641 9640 9639 9638 9637 9636 9635

29 NOVEMBER 1974

11.5  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9647 9646 9645 9644 9643 9642 9641 9640 9639 9638 9637 9636 9635

29 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

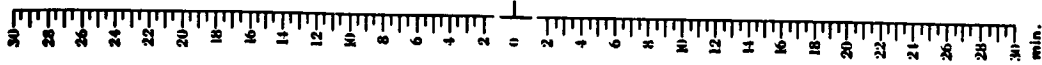
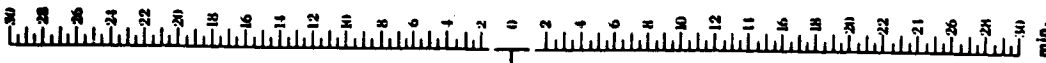


9647 9646 9645 9644 9643 9642 9641 9640 9639 9638 9637 9636 9635

29 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9660 9659 9658 9657 9656 9655 9654 9653 9652 9651 9650 9649 9648

30 NOVEMBER 1974

11.5  $\mu$ m

4-248

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



9660 9659 9658 9657 9656 9655 9654 9653 9652 9651 9650 9649 9648

30 NOVEMBER 1974

6.7  $\mu$ m

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

SECTION 5

CORRECTIONS TO THE NIMBUS 5 USER'S GUIDE

This section presents all corrections or additions to The Nimbus 5 User's Guide which now are known to be necessary. If additional corrections are required, they will appear in a subsequent catalog. All previous corrections will be carried forward cumulatively into each new catalog.

5.1 THIR Corrections to the User's Guide

Table 5-1  
(First presented in Volume 1)

This table replaces Table 2-3 (page 31) in The Nimbus 5 User's Guide.

Table 2-3

THIR Output Voltages versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 11.5  $\mu$ m Channel

		Bolometer Temperature ( $^{\circ}$ C)				
		0	10	20	30	40
Blackbody Temperature ( $^{\circ}$ K)	0*	-0.405	-0.407	-0.413	-0.421	-0.425
	180	-0.618	-0.617	-0.617	-0.617	-0.606
	190	-0.711	-0.709	-0.706	-0.702	-0.685
	200	-0.829	-0.825	-0.820	-0.811	-0.785
	210	-0.976	-0.970	-0.961	-0.946	-0.911
	220	-1.153	-1.144	-1.130	-1.109	-1.062
	230	-1.363	-1.351	-1.332	-1.302	-1.240
	240	-1.606	-1.591	-1.565	-1.526	-1.448
	250	-1.886	-1.867	-1.834	-1.783	-1.686
	260	-2.202	-2.178	-2.137	-2.074	-1.955
	270	-2.555	-2.526	-2.476	-2.399	-2.256
	280	-2.946	-2.911	-2.851	-2.759	-2.589
	290	-3.375	-3.334	-3.262	-3.153	-2.954
	300	-3.841	-3.793	-3.709	-3.582	-3.352
	310	-4.345	-4.289	-4.192	-4.045	-3.781
320	-4.886	-4.822	-4.711	-4.543	-4.241	
330	-5.463	-5.391	-5.264	-5.074	-4.733	

\*Space level

Table 5-2  
(First presented in Volume 1)

This table replaces Table 2-4 (page 32) in The Nimbus 5 User's Guide.

Table 2-4

THIR Output Voltages versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 6.7  $\mu$ m Channel

		Bolometer Temperature ( $^{\circ}$ C)				
		0	10	20	30	40
Blackbody Temperature ( $^{\circ}$ K)	0*	-0.507	-0.518	-0.532	-0.556	-0.576
	180	-0.607	-0.618	-0.632	-0.655	-0.674
	185	-0.644	-0.654	-0.669	-0.692	-0.710
	190	-0.692	-0.702	-0.716	-0.739	-0.756
	195	-0.752	-0.762	-0.776	-0.798	-0.814
	200	-0.827	-0.838	-0.851	-0.873	-0.888
	205	-0.921	-0.931	-0.944	-0.966	-0.978
	210	-1.035	-1.045	-1.058	-1.078	-1.089
	215	-1.172	-1.182	-1.195	-1.215	-1.223
	220	-1.337	-1.347	-1.359	-1.379	-1.383
	225	-1.533	-1.543	-1.554	-1.573	-1.573
	230	-1.764	-1.774	-1.784	-1.801	-1.797
	235	-2.033	-2.043	-2.052	-2.068	-2.059
	240	-2.350	-2.355	-2.363	-2.378	-2.362
	245	-2.704	-2.714	-2.721	-2.734	-2.711
	250	-3.115	-3.125	-3.131	-3.142	-3.111
	255	-3.582	-3.592	-3.597	-3.605	-3.565
260	-4.110	-4.119	-4.122	-4.127	-4.077	
265	-4.704	-4.714	-4.715	-4.717	-4.656	
270	-5.367	-5.378	-5.376	-5.375	-5.300	

\*Space level

The following information supplements that in paragraph 2.4.1.2 (page 34) in The Nimbus 5 User's Guide. (First presented in volume 5.)

Beginning with orbit 3581 (4 September 1973), the ten-step gray scale will no longer be attached to each orbit of 70mm archival film. However, one gray scale will be attached at the beginning and end of each reel of archival film. A user who requests THIR imagery recorded after orbit 3581 will be furnished a gray scale wedge only if he specifically requests it.

## 5.2 SCMR Corrections to the User's Guide

There are no SCMR corrections to the User's Guide.

## 5.3 ESMR Corrections to the User's Guide (First presented in Volume 3)

The following information replaces the next to the last paragraph on page 103 (Section 4.4.5) of The Nimbus 5 User's Guide.

ESMR grid print maps of calibrated brightness temperatures are available from NSSDC in three different map projections. These are: (1) Polar stereographic, (2) Mercator, and (3) Horizontal stereographic (Bull's-eye). Program options permit contouring of the grid print maps, printing of map titles, and using fewer than the full 78 beam positions.

For each map requested, the following information is needed:

- Satellite and sensor  
Nimbus 5 ESMR
  
- Map type
  1. Polar stereographic
  2. Mercator
  3. Horizontal stereographic (Bull's-eye)
  
- Map scale  
Scale of map in millions
  
- Geographic area
  1. For a Polar stereographic map specify - latitude of map perimeter, and orientation of 0° meridian line. The standard position for the 0° meridian on a northern hemisphere map is 10° clockwise below a left-right horizontal line through the map's pole.  
  
On a southern hemisphere map, 0° meridian is 10° counterclockwise below a left-right horizontal line through the map's pole. For other orientations of the 0° meridian, the user must specify, preferably with a sketch, the orientation desired.
  2. For a Mercator map specify - latitude of upper and lower edges of map; and longitudes of left and right edges of map. Longitudes are measured west from Greenwich (0°).  
Rev.
  3. For a Horizontal stereographic (Bull's-eye) map specify - latitude and longitude (west from Greenwich) of map center, pseudo co-latitude

of map perimeter (number of degrees of latitude from map center), and azimuth of 0° longitude line. If not specified, the azimuth will be located as it is for the Polar stereographic map.

- Calendar date of data requested
- Data orbit number(s)
- Beginning and end time (GMT) of the date for each map requested. These times are derived from information in Table 2-2 of each Nimbus 5 Data Catalog.

Optional specifications for each map are the following:

- **ESMR beam parameters**  
The user can specify, or limit, the range of beam positions used to produce each map. If no specifications are made, beam positions 1 through 78 are used.
- **Map title**  
For each map, the user may specify a title containing up to 70 characters.
- **Contouring**  
Normally, maps are printed without contours. To obtain contoured maps, the user must specify a contour base (or lower temperature limit e. g. , 130°K) and a contouring interval (e. g. , contour every 10°K). The contour program fills in the first contour interval above the contour base with the letter "A", the next interval is blank, the next is filled in with the letter "B", etc.

(The following was first presented in Volume 2.)

Table 4-4 of The Nimbus 5 User's Guide will not be supplied. Table 5-3 is to be used in its place.

As stated in The Nimbus 5 Data Catalog, vol. 1, the antenna properties changed after final calibration and rendered those numbers useless. The cause of the gross variations in antenna properties which were observed soon after launch has been determined to be a cross-polarized grating lobe. This finding has been confirmed through measurements on the engineering model and on the proto/flight model of the ESMR, and through theoretical calculations. The problem does not exist for the near-nadir beam positions, so those positions are unaffected. A quantitative discussion of this problem is included in the report of the Nimbus 5 ESMR Anomaly Review Committee.

An empirical calibration has been developed which removes the effect of the lobe structure and antenna loss, which vary with position, and roughly corrects for angular variations in viewing geometry. In this calibration scheme the antenna loss ratio is assumed to be 1.56 for all temperatures and beam positions, and a linear correction is applied to the data. The correction is given by:

$$T'_i = A_i T_i + B_i$$

where  $T'_i$  is the corrected brightness temperature for the  $i$ -th beam position and  $T_i$  is the brightness temperature calculated with the assumption of a constant antenna loss.  $A_i$  and  $B_i$  are empirically derived constants given in Table 5-3.

Table 5-3

Constants for Linear Correction of Brightness Temperatures  
Corresponding to ESMR Beam Positions

Beam Position	A	B(°K)	Beam Position	A	B(°K)
1	1.058	4	27	0.941	11
2	1.027	10	28	0.947	10
3	0.990	16	29	0.937	11
4	0.980	14	30	0.942	10
5	0.963	17	31	0.963	6
6	0.987	15	32	1.003	-3
7	0.970	17	33	1.002	-3
8	0.961	19	34	0.976	1
9	0.969	18	35	0.988	-1
10	0.980	16	36	1.004	0
11	0.980	17	37-42	1.000	0
12	1.018	10	43	1.002	-3
13	0.999	12	44	0.962	4
14	0.989	13	45	0.960	4
15	0.975	15	46	0.980	2
16	0.974	15	47	0.966	4
17	0.994	10	48	0.966	6
18	1.026	8	49	0.948	10
19	1.038	5	50	0.949	10
20	1.018	13	51	0.934	12
21	1.034	13	52	0.945	13
22	1.099	4	53	0.988	11
23	1.082	9	54	1.019	11
24	1.048	8	55	1.041	11
25	0.986	12	56	1.049	14
26	0.960	10	57	1.042	15



Table 5-3 (Continued)

Beam Position	A	B(°K)	Beam Position	A	B(°K)
58	1.019	16	69	0.955	24
59	1.015	15	70	0.974	22
60	1.012	12	71	0.941	26
61	0.993	13	72	0.969	22
62	0.976	15	73	0.949	30
63	0.998	12	74	0.967	22
64	0.983	14	75	0.956	27
65	0.998	14	76	0.959	28
66	0.970	19	77	0.969	26
67	0.982	18	78	1.030	13
68	0.980	19			

5.4 ITPR Corrections to the User's Guide

The following tables replace Table 5-3 of The Nimbus 5 User's Guide.

Table 5-4  
(First presented in volume 1)

ITPR Calibration Constants for the Period 12/12/72 - 2/6/73

$R_s = a_0 + a_1 V$		
$R_s =$ radiance of the scene ( $\text{mw}/\text{m}^2 \text{ ster cm}^{-1}$ )		
$V =$ digital counts		
Channel	$a_0^*$	$a_1$
1	1.0495	-0.001773
2	141.78	-0.1813
3	166.93	-0.2046
4	173.02	-0.2065
5	174.02	-0.1940
6	174.99	-0.1977
7	170.18	-0.1995

\*The calibration constant  $a_0$  now includes the radiance of the chopper reference blackbody.

Table 5-5  
(First presented in volume 2)

ITPR Calibration Constants for the Period 2/7/73 - 3/31/73

$R_s = a_0 + a_1 V$

$R_s$  = radiance of the scene (mw/m<sup>2</sup> ster cm<sup>-1</sup>)

V = digital counts

Channel	$a_0^*$	$a_1$
1	1.061	-0.001782
2	141.775	-0.1801
3	166.840	-0.2037
4	172.974	-0.2054
5	174.034	-0.1931
6	175.040	-0.1963
7	170.288	-0.1988

\*The calibration constant  $a_0$  now includes the radiance of the chopper reference blackbody.

Table 5-6  
(First presented in volume 3)

ITPR Calibration Constants for the Period 4/1/73 - 5/31/73

$R_s = a_0 + a_1 V$

$R_s$  = radiance of the scene (mw/m<sup>2</sup> ster cm<sup>-1</sup>)

V = digital counts

Channel	$a_0^*$	$a_1$
1	1.056	-0.001783
2	141.6	-0.1815
3	168.8	-0.2057
4	173.0	-0.2068
5	174.0	-0.1946
6	174.9	-0.1976
7	170.1	-0.1987

\*The calibration constant  $a_0$  now includes the radiance of the chopper reference blackbody.

Table 5-7  
(First presented in volume 4)

ITPR Calibration Constants for the Period 6/1/73 - 7/31/73

$R_s = a_0 + a_1 V$

$R_s$  = radiance of the scene (mw/m<sup>2</sup> ster cm<sup>-1</sup>)

V = digital counts

Channel	$a_0$ *	$a_1$
1	1.049	-0.001758
2	141.8	-0.1820
3	166.8	-0.2061
4	173.1	-0.2072
5	174.1	-0.1954
6	175.2	-0.1982
7	170.3	-0.1985

\*The calibration constant  $a_0$  now includes the radiance of the chopper reference blackbody.

The following are changes to the ITPR material in Section 5 of The Nimbus 5 User's Guide: (First presented in Volume 2)

- The table, Nimbus 5 Compacted Data Format, at the bottom of page 125 should read:

<u>Word</u>	<u>Format</u>	<u>Description</u>
1	I	GMT (seconds)
2	Spec 1	Julian Day and Year
3 - 162	Spec 2 (F1, F3)	Calibrated IR Data
163 - 182	F1	Latitude
183 - 202	F1	Longitude
203 - 222	F1	Zenith
223	I	Grid Type (0 = Nadir)
224 - 225	-	(1, 2, or 3 = Scan)
		Zero Fill

- On page 126 in the paragraph describing Spec 2, the last two lines of that paragraph should read:

". . . 4-word pattern will be repeated thru word 162, resulting in 40 sets of IR measurements."

- The next paragraph (on page 126, after description of Spec 2) should read:

"Each data record will contain 5 major frames of data (225 24-bit words for each major frame) with a total of 1125 24-bit words, or 450 60-bit words. Because major frames will contain either 34, 36, or 40 earth views for each channel, there will be zero fill in the IR data words when 34 or 36 views are present, and the corresponding latitudes and longitudes will be fictitious. This applies also to data samples which occur during re-trace. Zero fill will be used to produce the constant-length record when the the number of major frames in a day is not a multiple of 5."

- In the next paragraph the following changes should be made:

Line 1: ". . .with a density of 556 6-bit bytes . . ."  
should read: ". . .with a density of 800 6-bit bytes . . ."

Line 3: ". . .per day at 320 major frames. . . about 640 records"  
should read: ". . .per day at 400 major frames. . . about 960 records"

Line 4: ". . .will contain about 5 days . . ."  
should read: ". . .will contain about 4 days . . ."

## 5.5 SCR Corrections to the User's Guide

The following information supplements the SCR information in the User's Guide and has been derived from post-launch information. (First presented in volume 3.)

The filters of the A and B channels have minor leaks at short wavelengths. Corrections for these leaks are made using the radiance measured by channel C4 (11.5  $\mu$ m window channel) in the equation,

$$R'_i = R_i (1 + \gamma_i) - a_i \gamma_i C_4,$$

where  $R_i$  is the measured channel  $i$  Radiance and  $R'_i$  is the corrected radiance. Table 5-7 gives values of  $\gamma$  and  $a\gamma$  for the A channels and channel B4. Corrections are of order 1-2 radiance units ( $\text{mw}/\text{m}^2 \text{ster cm}^{-1}$ ) for the A channels. This is small compared with typical measured radiances of 80 units, but still 5-10 times larger than the rms noise. The correction to B4 is normally about 5 radiance units.

The B difference channels are not affected by leaks since the differencing operation causes the leaks to cancel exactly. The equation

$$R_{ij} = R_i + (R_i - R_j)\beta_{ij},$$

where  $R_{ij}$  is the calculated channel  $B_{ij}$  radiance and  $R_i$  is the measured channel  $B_i$  radiance, is used to derive the B difference channel radiances (B12, B23, and B34) from the measured B channel radiances (B1, B2, B3, and B4). Table 5-8 gives the coefficients  $\beta_{ij}$ .

Table 5-8

Correction Coefficients  $\gamma$  and  $a\gamma$  for the SCR Temperature Sounding Channels

<u>Channel</u>	<u><math>\gamma</math></u>	<u><math>a\gamma</math></u>
A1	0.0305	0.015
A2	0.0235	0.0105
A3	0.0146	0.0057
A4	0.0595	0.025
B4	0.153	0.0165

Table 5-9

SCR B Difference Channel Coefficients  $\beta$

<u>Channel</u>	<u><math>\beta</math></u>
B12	9.50
B23	10.05
B34	4.83

Figure 5-1 gives the experimenter's current best estimates of the weighting functions of the A channels and B4, when corrected as above, and of the B difference channels. These channels measure emission from carbon dioxide in the  $\nu_2$  band near  $15 \mu\text{m}$ . The weighting functions were derived for a climatological mean temperature profile and, to a good approximation, are independent of temperature profile for the range of temperature which occurs in the atmosphere. These weighting functions are a compromise between theoretical computations, using spectral line parameters together with measured filter transmission profiles, and pre-launch test results for the flight instrument. This method is similar to the one used for the Nimbus 5 SCR and was described in more detail by Barnett et al (1972).

#### 5.6 NEMS Corrections to the User's Guide.

There are no NEMS corrections to the User's Guide.

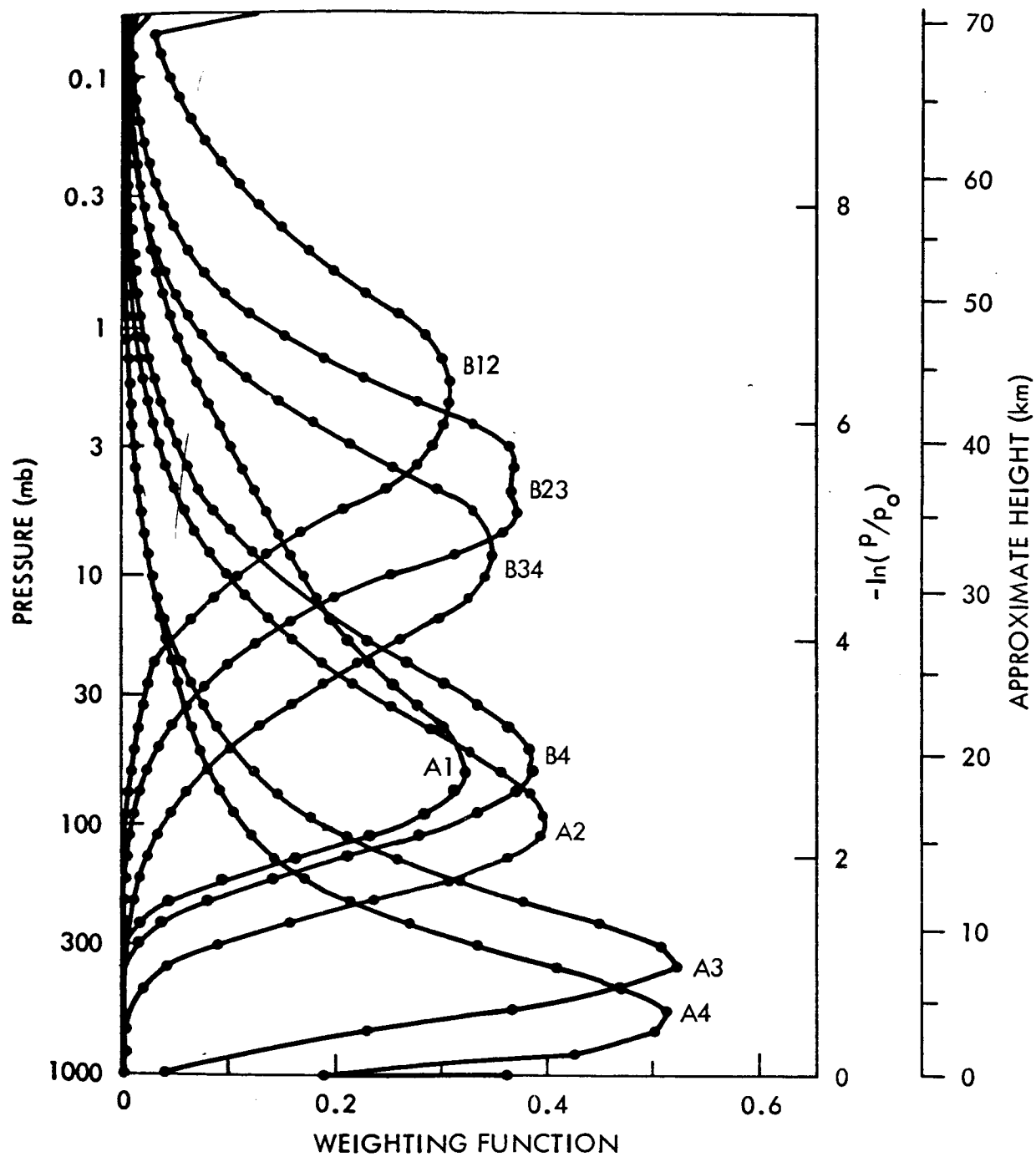
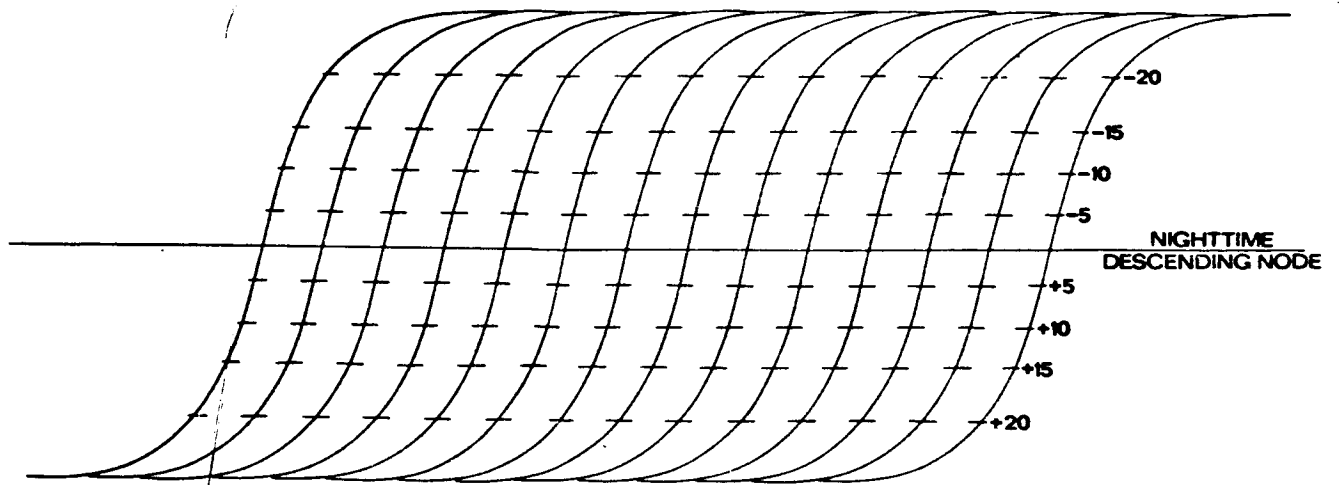
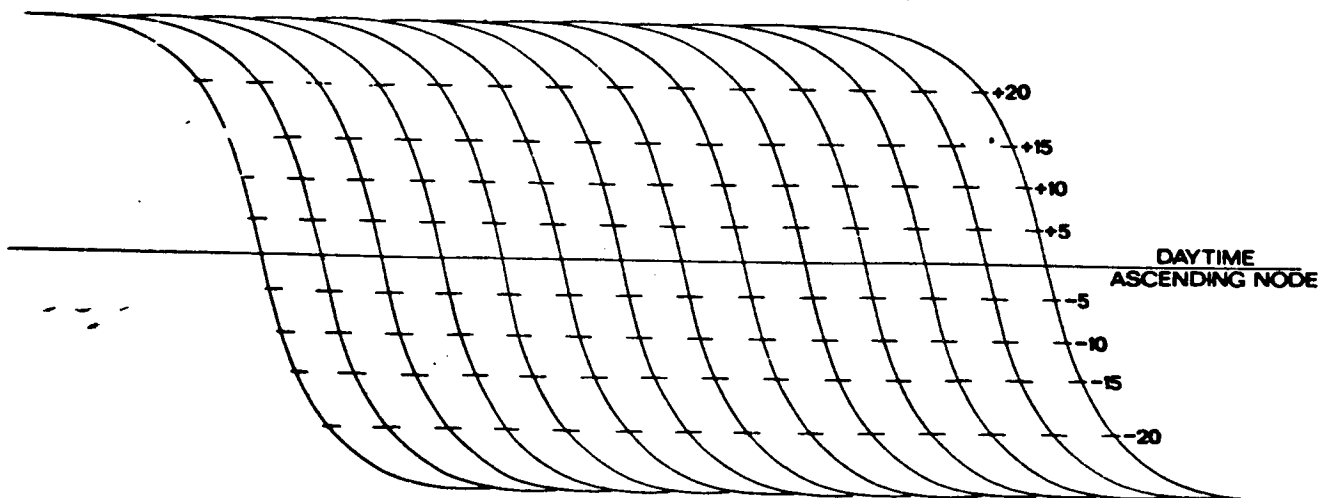


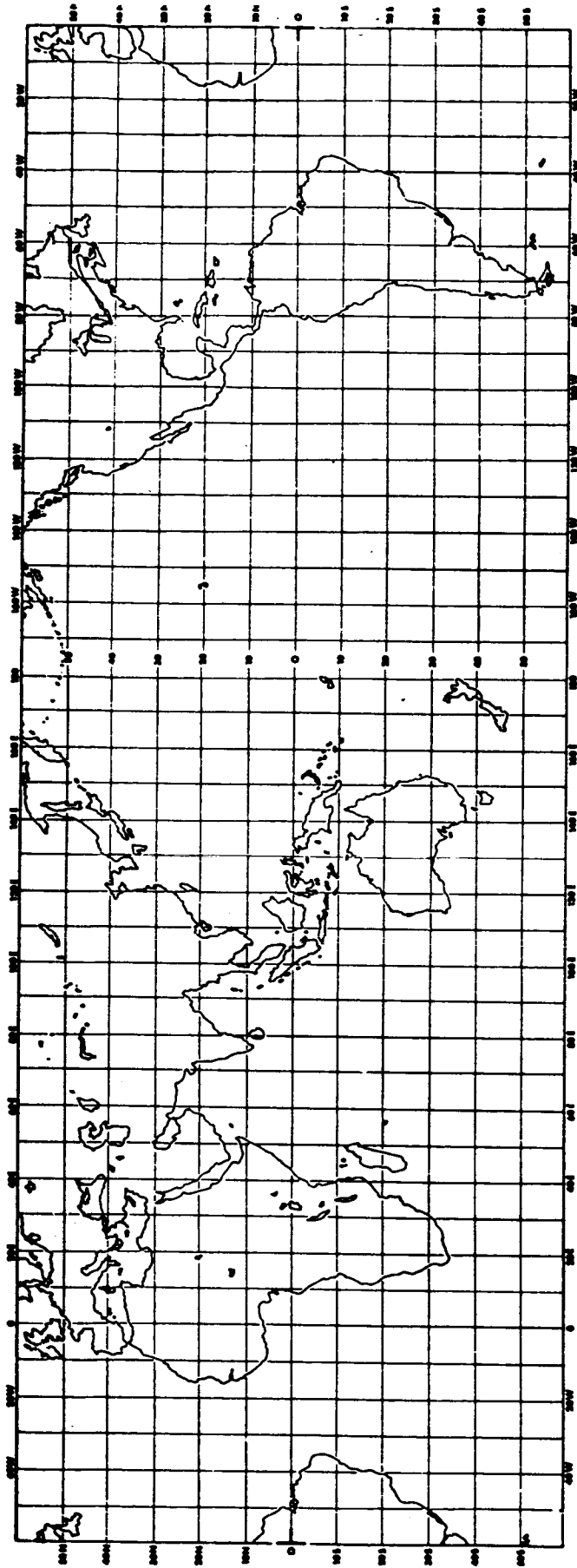
Figure 5-1. Weighting Functions of the Temperature Sounding Channels of the Nimbus 5 SCR. The height scale is approximate. The abscissa is a weighting function on an arbitrary scale.



**NIMBUS SUBSATELLITE TRACKS OVERLAY**

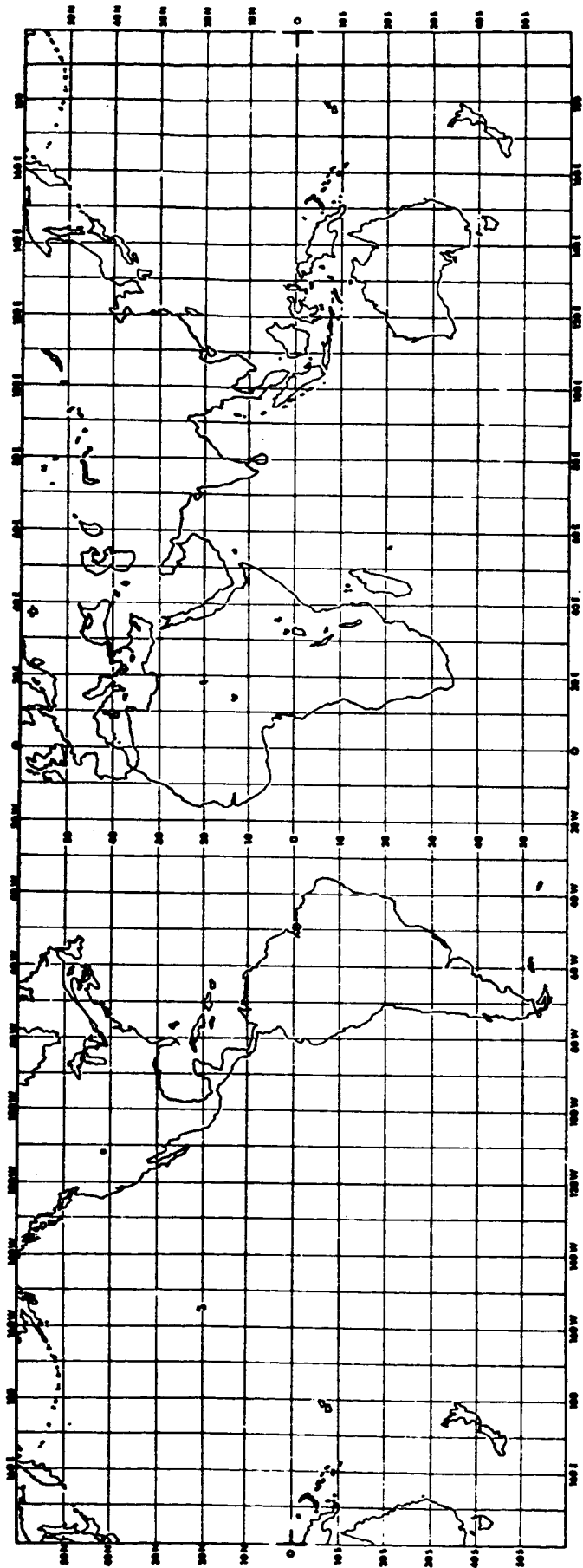


**NIMBUS SUBSATELLITE TRACKS OVERLAY**

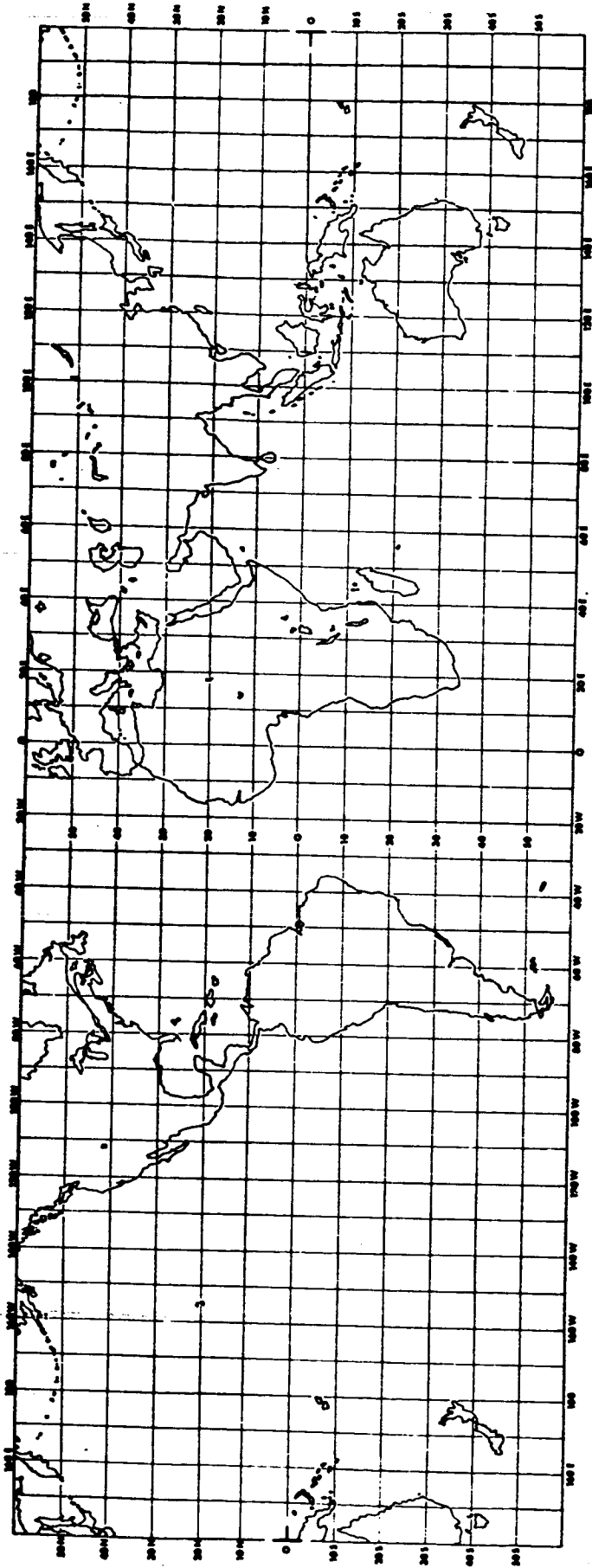


Location Guide  
Average Scale for Nimbus  
THIR Nighttime Montages

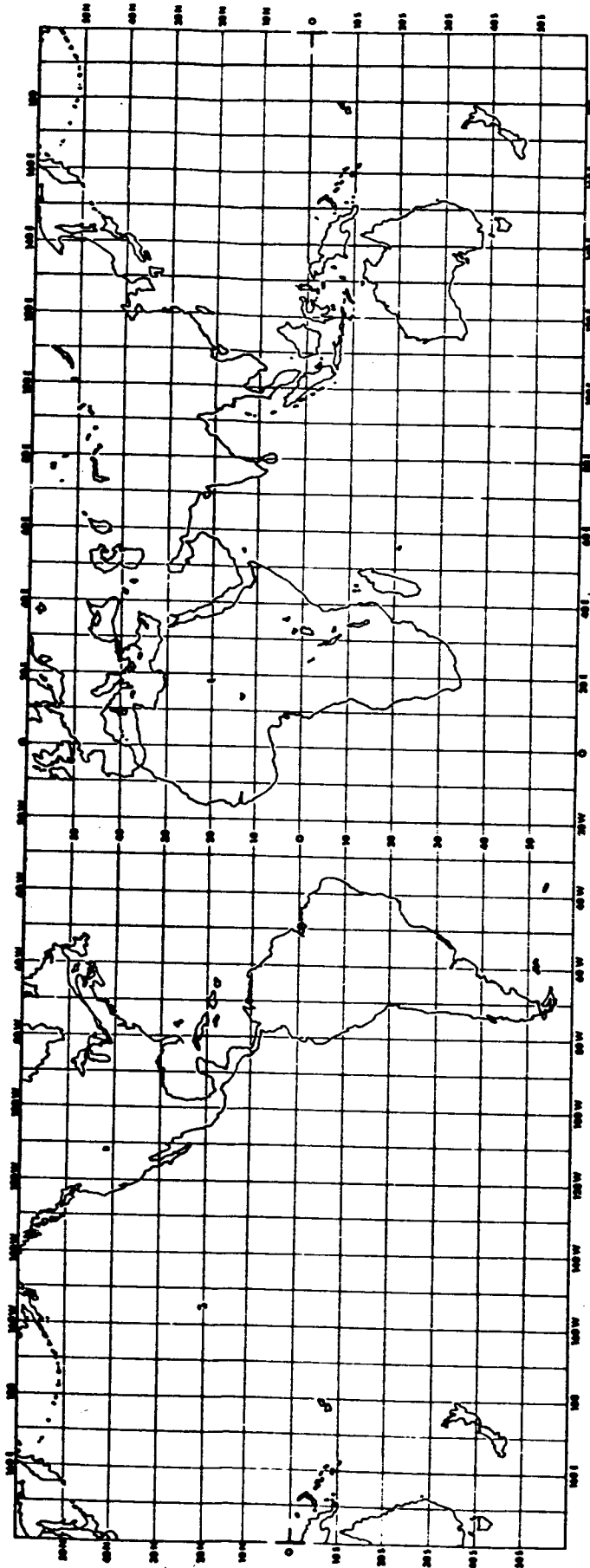




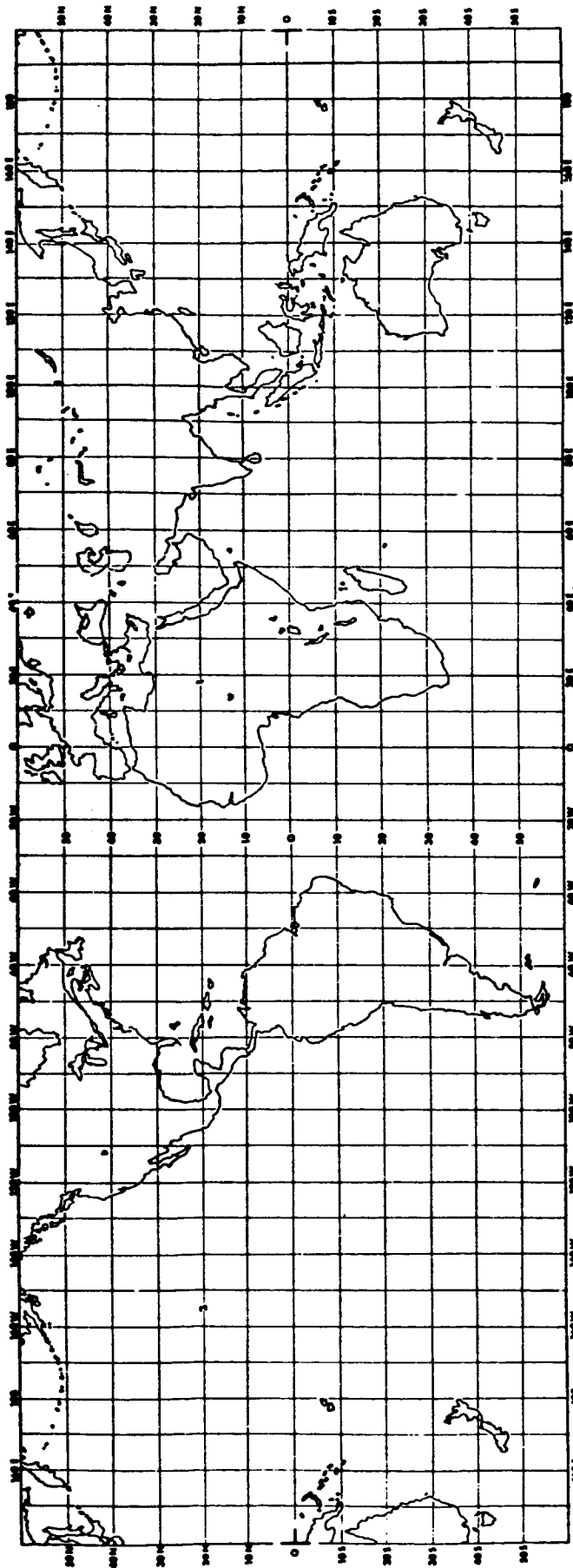
Location Guide  
Average Scale for Nimbus  
THIR Daytime Montages



Location Guide  
Average Scale for Nimbus  
THIR Daytime Montages



Location Guide  
Average Scale for Nimbus  
THIR Daytime Montages



Location Guide  
Average Scale for Nimbus  
THIR Daytime Montages