~~TOP SECRET~~ C [redacted]

[redacted]

11 December 1967

TO: [redacted]
C. Murphy
A. Johnson

THRU: [redacted]

FROM: [redacted]

SUBJECT: MISSION 1039-1 and 1039-2 FINAL REPORT (J-39)

Enclosed is the Final Performance Evaluation Report for Mission 1039-1 and 1039-2.

[redacted]
Manager
Advanced Projects

Copy No. [redacted]

CORONA J

PERFORMANCE EVALUATION REPORT

MISSION 1039-1 and 1039-2

FTV 1635, J-39

1 NOVEMBER 1967

Approved [redacted]
Mgr.
Advanced Projects

Approved [redacted]
Mgr.
Program

[redacted]

FOREWORD

This report details the performance of the payload system during the operational phase of the Program [redacted] Flight Test Vehicle 1635.

Lockheed Missiles and Space Company has the responsibility for evaluating payload performance under the level-of-effort and "J" System contracts.

This document is the final payload test and performance evaluation report for Corona Payload J-39, Mission 1039-1 and 1039-2 which was launched on 28 Febraury 1967.

TABLE OF CONTENTS

[redacted]

LIST OF TABLES

[redacted]

[redacted]

LIST OF ILLUSTRATIONS

[redacted]

INTRODUCTION

This report presents the final performance evaluation of Missions 1039-1 and 1039-2 of the Corona Program. The purpose of this report is to define the performance characteristics of the J-39 payload system and to identify the source of in-flight anomalies.

The performance evaluation was jointly conducted by representatives of Lockheed Missiles and Space Company (LMSC) and [redacted] at the facilities of NPIC and AFSPPF. The off-line evaluation using Corona engineering photography acquired over the United States was performed at the individual contractors plants. Telemetry data analysis of system performance was performed by LMSC at AP facility.

The quantitative data used for this report is obtained from government organizations. The diffuse density data, and MTF/AIM resolution are produced by AFSPPF. The vehicle attitude error values, frame correlation times are made at NPIC who also supply the Processing Summary reports published by [redacted]

Computer programs developed by A/P are utilized to calculate and plot the frequency distribution of the various contributors to image smear to permit analysis and correlation of the conditions of photography to the information content and quality of the acquired pictures. Computer analysis of the exposure, processing and illumination data provides the necessary data to analyze the expose criteria selected for the mission.

SECTION 1

SYSTEM PERFORMANCE

A. MISSION OBJECTIVES

The payload section of Mission 1039, placed into orbit by Flight Test Vehicle 1635 and SLV-2A booster #493, consisted of two panoramic cameras two Stellar-Index cameras, two Mark 5A recovery capsules and a space structure to enclose the cameras and provide mounting surfaces for all equipments. Figure 1-1 presents an inboard profile of the J-39 payload system. This Corona "J" system is designed to acquire search and reconnaissance photography of selected areas of the earth from orbital altitudes. The planned mission was a 5/6 day -1 mission followed by a 6/5 day -2 mission.

B. MISSION DESCRIPTION

The payload was launched from Vandenberg Air Force Base (VAFB) at 2202 Z (1402 PST) on 22 February 1967. Ascent and injection were normal and the achieved orbit was within nominal tolerances. Tracking and command support was effected by the Air Force Satellite Control Facility consisting of tracking and command stations at [redacted] under central control of the Satellite Test Center at Sunnyvale, California. Mission 1039-1 consisted of a 5 day operation and was completed by air recovery on 27 February 1967. Mission 1039-2 was completed with an air recovery on 5 March 1967 following a 6 day photographic operation.

The comparison of the planned and actual orbit parameters is tabulated as follows:

ORBITAL PARAMETERS

Parameter	Predicted	Orbit 42 Actuals	Orbit 122 Actuals
Period (Min.)	90.11	90.069	89.857
Perigee (N.M.)	99.5	97.027	98.285
Apogee (N.M.)	204.9	207.33	201.66
Inclination (Deg.)	80.0	80.021	80.020
Perigee Latitude (Deg. N.)	20.0	30.231	47.979
Eccentricity	30.0147	0.01535	0.01441

C. PANORAMIC CAMERAS

Both cameras operated normally and produced good photographic quality.

The starboard horizon cameras exhibited "veiling" on the -1 mission only.

D. STELLAR-INDEX CAMERAS

Both S/I units performed satisfactorily. The star imagery was adequate for vehicle attitude determinations and the terrain photography was good.

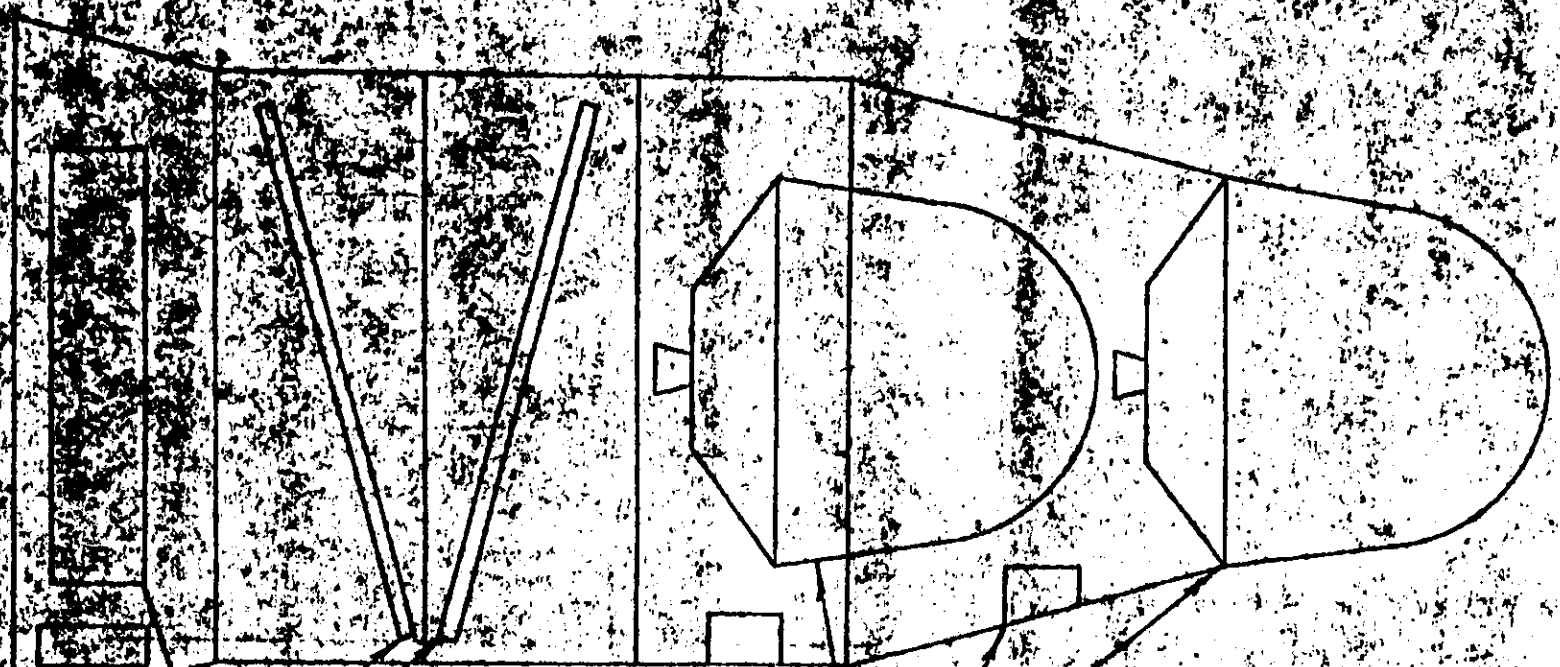
E. OTHER SUB-SYSTEMS

The clock, instrumentation, command, recovery and pressure make-up systems performed satisfactorily. The thermal environment was of a higher temperature than normal.

[redacted]

SCHEMATIC INBOARD PROFILE - CORONA J SYSTEM

MISSION 1039



Master Camera No: 206

Slave Camera No: 207

Supply Cassette No: SC-51

Clock No: 602

Yaw Programmer No: 460

"A" Recovery Subsystem No: 129

"A" Stellar-Index Camera No: M03/131/132

"B" Recovery Subsystem No: 130

"B" Stellar-Index Camera No: M00/125/125

Pressure Make-up Unit No: 1022-A

FIGURE 1-2

[redacted]

SECTION 2

PRE-FLIGHT SYSTEMS TEST

A. ENVIRONMENTAL TESTING

1. Test Objective

As a standard procedure, the J payload systems are subjected to thermal/altitude environmental testing which simulates orbital environment. One of the purposes of this test is to demonstrate the system susceptability to corona discharge. Such discharge fogs the film thus degrading the operational photography.

2. Test Summary

The J-39 payload system was subjected to an environmental HIVOS test from 13 June through 21 June 1966. Performance of the payload from an instrumentation standpoint was generally satisfactory.

The -1 Stellar/Index metering monitor was noisy and the index shutter monitor appeared to "Break Up" intermittently throughout the test.

The -2 Stellar/Index metering monitor was also noisy and the shutter monitor failed near the end of the test.

Clock accuracy was satisfactory.

The pressure make-up system operated normally. Average gas consumption was 8.9 PSI/min. Internal system pressure increased to 40-45 microns during PMU operates.

The Command system operated normally. The V/H delay stepper failed to home on one rev. However, data indicated the command was released prior to the stepper switch homing.

Transfer from -1 to -2 was commanded by KZ-38. All transfer functions occurred normally.

Both recovery sequences and the vehicle de-activate sequence were normal.

The O.S.P.G. operation appeared normal. One complete cycle was run in each mission. Spikes were noted on the output throughout the test however, these were correlated to the AC-1 Seaborn ON/OFF times.

3. Panoramic Camera Performance

The master camera #206 performed 5890 cycles and the slave camera #207 5880 cycles. The lowest pressure recorded was 1 micron.

Corona marking was confined to start-ups on the master instrument. In all cases the density level was low and occurred at less than 4 microns pressure. The slave camera had only 1 instance of start-up corona and its density was low.

4. Stellar/Index Performance

The "A" stellar film had an 0.125 inch plus density streak extending through 65% of the 429 frames. This unit was replaced by S/I # D103.

The "B" stellar camera operated satisfactorily. The index camera experienced a shutter open failure after 363 frames. The shutter was replaced.

5. Temperature Profile

Average Panoramic Instrument Temperatures (°F)

-1 Mission Day	Master High	Master Low	Slave High	Slave Low	Beta Angle
1	89	74	82	66	-53
2	85	75	74	68	-53
3	85	69	73	N/A	-53

-2 Mission Day	Master High	Master Low	Slave High	Slave Low	Beta Angle
1	69	56		N/A	0
2	64	53		N/A	0
3	69	60		N/A	0
4	123*	60		N/A	0

N/A - Thermocouple failed.
* - Occurred after "B" dump; 69° was high during OPS.

B. RESOLUTION TEST

Resolution and theodolite tests were performed on 23 June 1966. Results of the thru-focus resolution tests of pan instruments 206 and 207 show the following characteristics:

Master Pan Instrument No. 206

Maximum high contrast resolution 178 lines/mm at 0.000 focal position.

Maximum low contrast resolution 119 lines/mm at -0.001 focal position.

Slave Instrument No. 207

Maximum high contrast resolution 183 lines/mm at 0.000 focal position.

Maximum low contrast resolution 125 lines/mm at -0.001 focal position.

The test data for both instruments is shown in Figures 2-1 and 2-3 Both instruments met the system requirements specification.

C. LIGHT LEAK TEST

The J-39 system was tested for light leaks on 4 August 1966. Three apparent leaks were identified: 1) Slave output H.O. boot, 2) Master drum boot, and 3) "A" SRV forebody/fairing interface area. All of these affected film from both pan cameras.

Subsequent investigation located four leaks: 1) Slave H.O. boot, 2) Master drum boot, 3) a fairing fitting near the SRV, and 4) in the forebody. The first three had RTV applied, and the forebody was repainted (the second set of three coats at A/P). At the above locations, these remedies resulted in photomultiplier readings below that required to fog the film.

D. FLIGHT READINESS AND LOADING EVALUATION

The final Flight Readiness test payload was evaluated 13 February. This material demonstrated acceptability of pan instrument functions and data recording.

S/I CAMERA READINESS. Film from the live bench test on the S/I units was evaluated 9 February. This material demonstrated acceptability of units D103 and D100, which were installed respectively in the "A" and "B" positions. Unit D103 was substituted for the originally-assigned D99 because of the shutter failure in the latter.

The material appeared very clean. The correlation and fiducial lamps operated properly, with all stellar fiducial intersections clearly visible. The stellar grid number (132) on unit D103 was partially illegible. The first frames are double-exposed, as usual.

PAN SUPPLY LOADING: The pan supply cassette was loaded on 14 February in a routine operation. Normal samples were taken; no marks or scratches were noted on either of the undeveloped samples. The sensitometric samples indicated adequate performance when processed to the intermediate level.

The splices were inspected, power applied, and run-in achieved without incident. A check was made of the H.O. boot paint. All were adequate except the slave port side, which had several shiny areas; repainting was recommended.

FLIGHT CERTIFICATION: The confidence check was run in the "L" room on 15 February to demonstrate proper system setup and operation. Each instrument ran a total of 54 cycles. Slave material appeared good. The master material exhibited a base scratch which was not considered to be a source of image degradation or unreliable camera operation in flight. The J-39 System was certified for flight.

VAFB RECEIVING INSPECTION: The receiving inspection operations were conducted on 17 February in the base trailer at the "L" Building. The master was operated for 30 cycles, and the slave for 20. The appearance of the system and film was essentially unchanged from the preceeding run at A/P. No degradation-or improvement-in the base marking was noted.

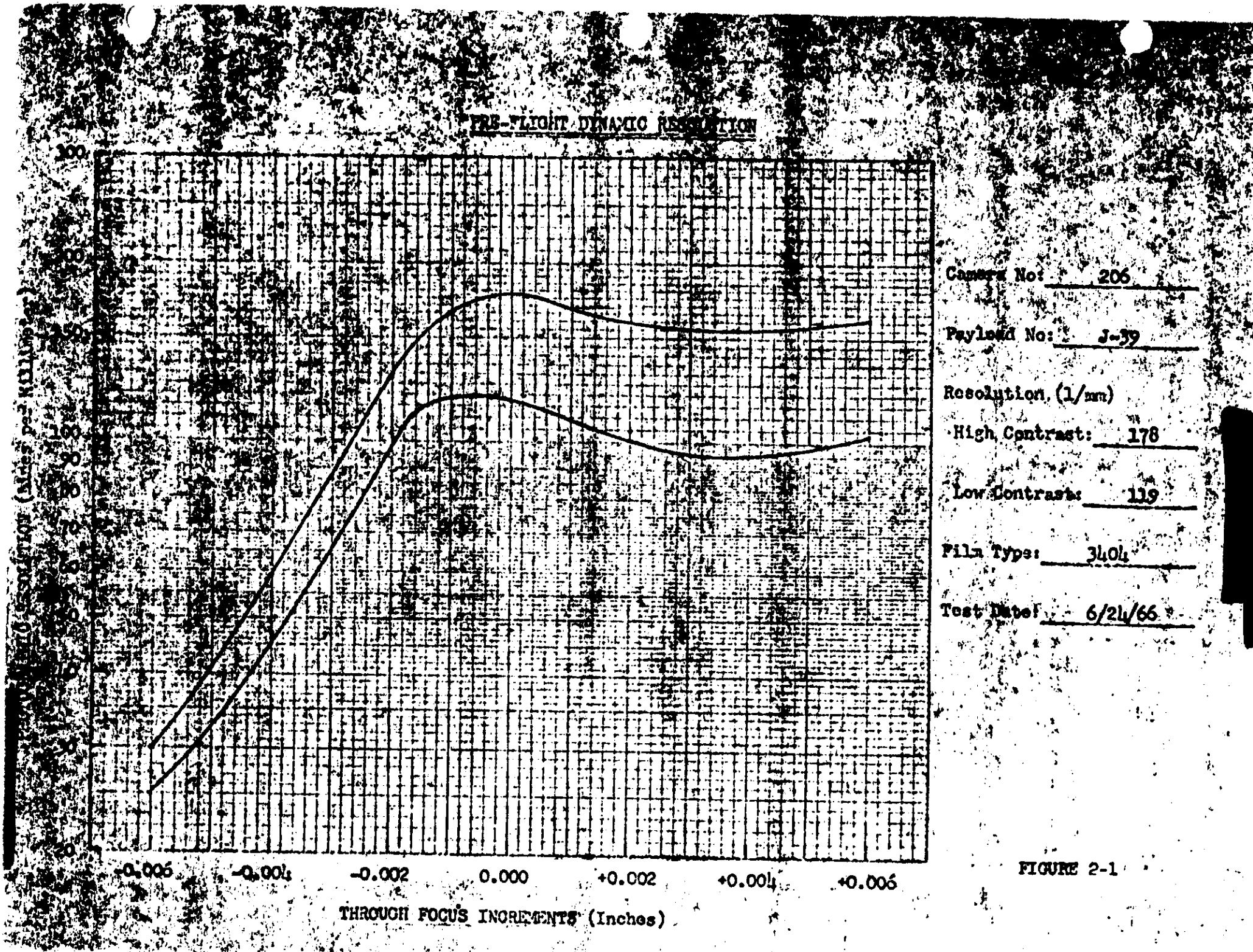
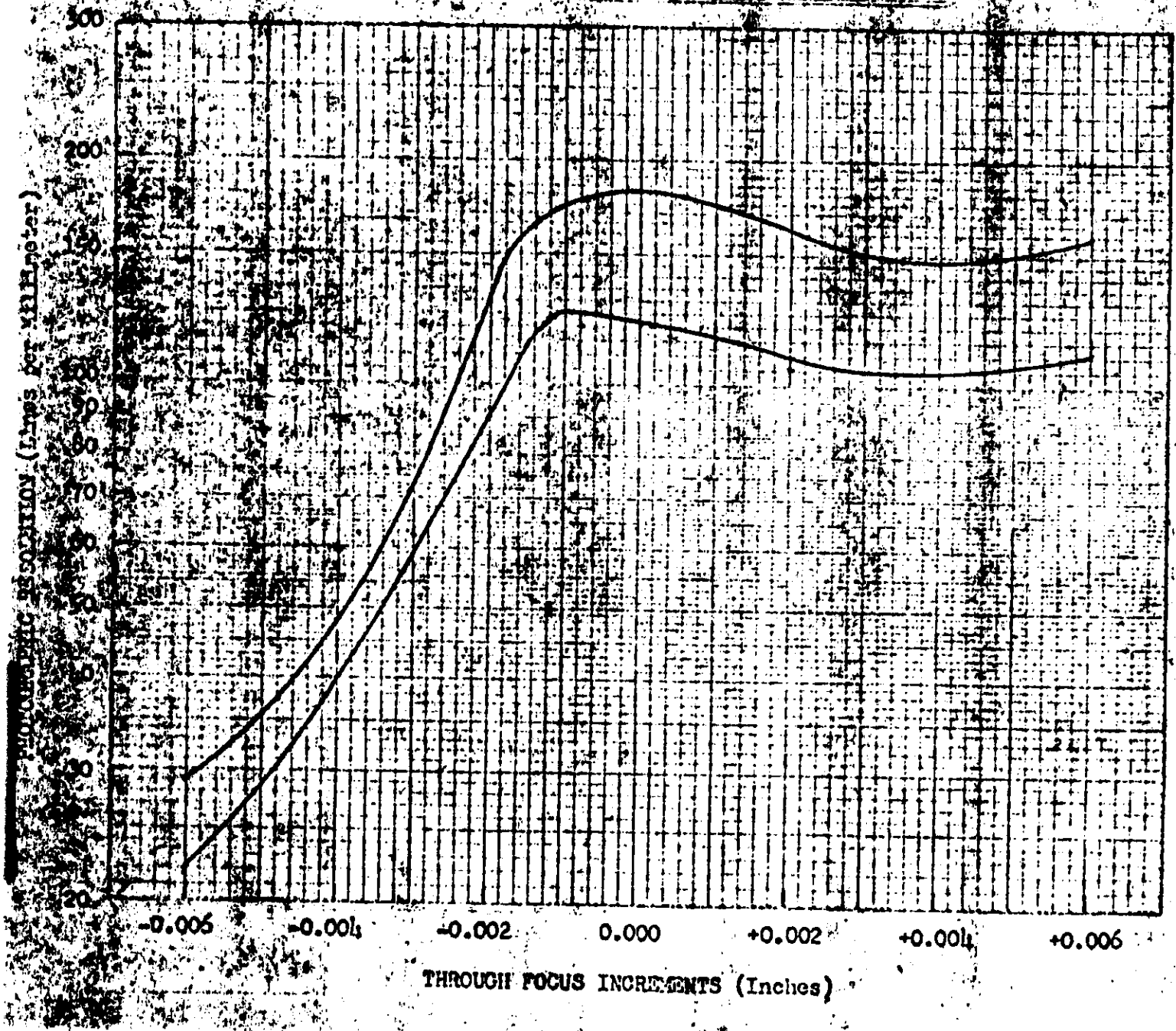

PRE-FLIGHT DYNAMIC RESOLUTION
Resolution (Lines per MM)
300
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
-0.006
-0.004
-0.002
0.000
+0.002
+0.004
+0.006
THROUGH FOCUS INCREMENTS (Inches)
Camera No: 206
Payload No: J-39
Resolution (l/mm)
High Contrast: 178
Low Contrast: 119
Film Type: 3404
Test Date: 6/24/66

FIGURE 2-1

PRE-FLIGHT DYNAMIC RESOLUTION



Camera No: 207

Payload No: J-39

Resolution (1/mm)

High Contrast: 183

Low Contrast: 125

Film Type: 3404

Test Date: 6/24/66

FIGURE 2-2

SECTION 3

FLIGHT OPERATIONS

A. SUMMARY

All launch, ascent, and injection events occurred as programmed. The orbit achieved was within the 3 sigma dispersions.

Both panoramic cameras operated satisfactorily throughout the flight. Average cycle rates for both cameras deviated from the pre-flight calibrated values by less than 2.5 per cent.

Both the -1 and the -2 Stellar/Index cameras, the clock system, and the instrumentation and command systems operated satisfactorily throughout the flight.

The pressure make-up system operated satisfactorily throughout the flight with 627 PSIA supply remaining.

The on-orbit internal temperatures were approximately 10° - 15° F higher than the predicted temperatures.

Both recovery systems operated normally throughout the flight.

KIK-ZORRO 38 (early A to B Switchover) was not utilized on this mission.

The orbit sine function generator performed normally for the duration of the mission.

B. PANORAMIC CAMERA PERFORMANCE

Both panoramic cameras operated normally throughout the mission. Camera system dynamic operation, 99/101 clutch operation, start-up, shutdown, and transport functions were normal for all passes monitored. The cut and wrap operation and transfer to the -2 system occurred as programmed. The Kik-Zorro 38 (early A to B transfer) command was not utilized on this mission.

The panoramic film was exhausted on Pass 173 frame No. 53 and frame No. 90 for the Master and Slave cameras respectively.

Panoramic Film Consumption - Cycles

	Actuals	
	Master	Slave
Sample Off-Spooling	21	20
Pre-Launch	120	110
-1 Mission	2908	2835
-2 Mission	[illegible]	[illegible]
Total	[illegible]	[illegible]

FMC Match

The V/H ramp to-orbit match was acceptable throughout the flight. The following settings of RTC 6, 8, and 10 were utilized to obtain the optimum FMC match during the flight:

	RTC Commands			Remarks
	6	8	10	
RTC	6	5	6	Launch through Rev 11
Positions	6	4	7	Rev 11 through Rev 108
	6	4	8	Rev 108 through the end of the mission

The camera system appeared to respond approximately 2.0 to 2.5 per cent slow to the input V/H voltage both above and below the limiter threshold voltage.

C. STELLAR/INDEX CAMERA PERFORMANCE

Both the -1 and -2 Stellar/Index cameras operated satisfactorily on all monitored engineering passes.

D. INSTRUMENTATION AND COMMAND SYSTEM PERFORMANCE

The instrumentation and command systems operated properly throughout the flight.

E. CLOCK SYSTEM PERFORMANCE

Clock system operation was normal for the duration of the flight. Satisfactory time correlation between the flight clock and [redacted] Tracking Station time was obtained.

F. PRESSURE MAKE-UP SYSTEM PERFORMANCE

Pressure make-up system performance was normal throughout the flight. Average gas consumption was approximately 8.9 PSI/min. for the 233 minutes of total operate time. The system had a surplus of 627 PSIA at the end of the mission.

[redacted]

THERMAL ENVIRONMENT

The average instrument temperatures ranged from a high of 102°F on the Master and 95°F on the Slave to a low of 75°F on the Master and 71°F on the Slave.

The average J-39 payload system temperatures were approximately 5°F higher than the J-34 payload system, even though the orbits were approximately the same. The J-39 payload system was launched at 1402 PST on 22 February 1967 and the J-34 payload system was launched on 14 January 1967. This is the second payload system in succession in which the internal payload system temperatures have exceeded the predicted temperatures.

The J-39 payload temperatures were approximately 10°-15°F higher than the predicted temperatures. An explanation for the high payload system temperatures is not available at present. A detailed analysis of the payload [redacted] being conducted to ascertain a cause of this anomaly. An exhaustive study of the last ten J payload systems flown is being conducted to determine any payload system differences which may have contributed to this problem.

[redacted]

SECTION 4

MISSION 1039-1 RECOVERY SYSTEM

SRV #729 was received at A/P on 14 March 1966. The receiving weight was 152.11 pounds. After modifications and incorporation of outstanding E.O.'s the SRV was delivered to Systems Test for incorporation into the J-39 system.

The capsule was shipped to VAFB on 16 February 1967.

The -1 recovery capsule was successfully recovered by air-catch on Rev 81 at 1551 PST on 27 February 1967. All re-entry events appeared normal and occurred within tolerance. The capsule impact point was approximately the predicted impact point.

	Latitude	Longitude
Predicted	17° 30.6' N	154° 17.5' W
Actual	17° 37.8' N	154° 21.3' W

The re-entry sequence of events is contained in Table 4-1.

MISSION 1039-1

RECOVERY SEQUENCE OF EVENTS

Event	Delta Time (Seconds) Actual	Nominal
*Arm	76.85	77.0 ± 1.0
*Transfer	1.99	2.0 ± 0.25
Electrical Disconnect	0.77	0.900 $^{+0.430}_{-0.400}$
Separation	- -	- - - -
**Spin	3.36	3.4 ± 0.30
Retro	7.22	7.55 ± 0.45
Despin	10.71	10.75 ± 0.59
T/C Separation	1.50	1.5 ± 0.15
***"G" Switch Open	489.61	492.1
Parachute Cover Off	33.50	34.0 ± 1.5
Drogue Chute Deployed	0.70	0.63 ± 0.08
Main Chute Bag Separate	10.62	10.0 $^{+3.0}_{-2.2}$
Main Chute Deployed	0.48	0.52 ± 0.13
Main Chute Disreef	4.82	4.5 ± 0.80

* From Separation
** From Electrical Disconnect
*** From Retro

TABLE 4-1

SECTION 5

MISSION 1039-2 RECOVERY SYSTEM

SRV #730 was received at A/P on 14 March 1966. The receiving weight was 154.04 pounds. After modifications and incorporation of outstanding E.O.'s the unit was delivered to Systems Test for mating to the J-39 system.

The capsule was shipped to VAFB on 16 February 1967.

The -2 recovery capsule was successfully recovered by air-catch on Rev 177 at 1615 PST on 5 March 1967. All re-entry events appeared normal and occurred within tolerance except for the parachute cover off event. The capsule impact point was south and east of the predicted impact point.

	Latitude	Longitude
Predicted	23° 10.8'N	165° 49.0' W
Actual	22° 58.3'N	165° 46.2' W

The re-entry sequence of events is contained in Table 5-1.

MISSION 1039-2

RECOVERY SEQUENCE OF EVENTS

Event	Delta Time (Seconds) Actual	Nominal
*Arm	N/A	77.0 ± 1.0
*Transfer	1.96	2.0 ± 0.25
Electrical Disconnect	0.83	0.900 $^{+0.430}_{-0.400}$
Separation	---	-----
Despin	3.37	3.4 ± 0.30
Retro	7.18	7.55 ± 0.45
Despin	10.54	10.75 ± 0.59
T/C Separation	1.51	1.5 ± 0.15
***"G" Switch Open	507.88	509.4
Parachute Cover Off	32.15	34.0 ± 1.5
Drogue Chute Deployed	0.62	0.63 ± 0.08
Main Chute Bag Separate	10.19	10.0 $^{+3.0}_{-2.2}$
Main Chute Deployed	0.47	0.52 ± 0.13
Main Chute Disreef	4.59	4.50 ± 0.80

* From Separation
** From Electrical Disconnect
*** From Retro

TABLE 5-1

SECTION 6

MISSION 1039 PANORAMIC CAMERAS

A. COMPONENT ASSIGNMENT

Component	Master (Fwd) Serial Number	Slave (Aft) Serial Number
Main Camera	206	207
Main Camera Lens	1992435	2202435
Supply Horizon Camera	309-G6H	307-G6H
Supply Horizon Camera Lens	E19106	E12896
Take-up Horizon Camera	309-G5H	308-G5H
Take-up Horizon Camera Lens	E12890	E12885
Supply Cassette	SC-51	SC-51

B. CAMERA DATA AND FLIGHT SETTINGS

Main Camera:		
Lens	24" f/3.5	24" f/3.5
Slit Width	0.225"	0.175
Filter Type	Wratten 23A	Wratten 21
Film Type (Eastman)	3404	3404

Supply Horizon Cameras:	Port	Starboard
Lens	55 mm f/6.3	55 mm f/6.3
Aperture Setting	f/6.3	f/8.0
Exposure	1/100 second	1/100 second
Filter Type	Wratten 25	Wratten 25

Take-up Horizon Camera:	Starboard Master(Fwd)	Port Slave (Aft)
Lens	55 mm f/6.3	55 mm f/6.3
Aperture Setting	f/8.0	f/6.3
Exposure Time	1/100 second	1/100 second
Filter Type	Wratten 25	Wratten 25

C. POST FLIGHT PERFORMANCE EVALUATION

The overall image quality of this mission is superior to that of the last two missions. The aft looking photography is slightly superior to the forward looking photography. Analysis of atmospheric conditions showed a low percentage of clear terrain areas.

This system experienced a high thermal environment and relatively heavy cloud cover and haze, similar to those experienced on mission 1038. Those factors are usually considered to produce degraded image quality, however, the photographic quality produced was good.

The starboard looking horizon cameras on both instruments produced veiled imagery beginning on pass D-5. The magnitude of this condition was much less on the forward looking camera. The veiling condition gradually became detectable on pass D-5 and continued to the end of the -1 mission. It cleared abruptly following the first mission recovery. Missions 1034 and 1038 were also affected by similar veiling, while the intervening three missions were unaffected. The horizon boots on all six systems had been painted.

Rail scratches, dendritic static, scan head scratches and fog patterns were less than normally experienced. The aft looking instrument produced a ragged format edge for the entire mission which was greater than normal.

SECTION 7

MISSION 1039 STELLAR-INDEX CAMERAS

A. COMPONENT ASSIGNMENT

Component	-1 Mission Serial No.	-2 Mission Serial No.
Camera	D-103	D-100
Index Reseau	131	125
Stellar Reseau	132	125

B. CAMERA DATA AND FLIGHT SETTINGS

Stellar Camera:		
Lens	85 mm f/1.8	85 mm f/1.8
Exposure Time	2 seconds	1 second
Filter Type	None	None
Film Type (Eastman)	3401	3401
Index Camera:		
Lens	38 mm f/4.5	38 mm f/4.5
Exposure Time	1/500 second	1/500 second
Filter Type	Wratten 21	Wratten 21
Film Type (Eastman)	3400	3400

C. POST FLIGHT EVALUATION

The -1 stellar camera operated throughout the mission. Small static induced fog patterns 1-5 inches apart are present in the center of the first 29 frames. The fog patterns are minor and do not affect the imagery. Approximately 50 percent of each frame is affected by flare, however images can be detected in the flare area. There are 15-20 stellar images per frame and they appear as point type images. The last 10 frames are degraded by the usual scratches, emulsion cracks and pinholes associated with film depletion.

The index camera operated satisfactorily. The imagery is good and comparable to that obtained from recent missions.

The -2 stellar camera operated normally. Although 20 percent of each format was affected by flare the images are detectable. Each format contained 20-25 paint type images. The last 10 frames had the usual physical damage from film depletion.

The index camera operated throughout the mission. The image quality is good.

SECTION 8

PANORAMIC CAMERA EXPOSURE

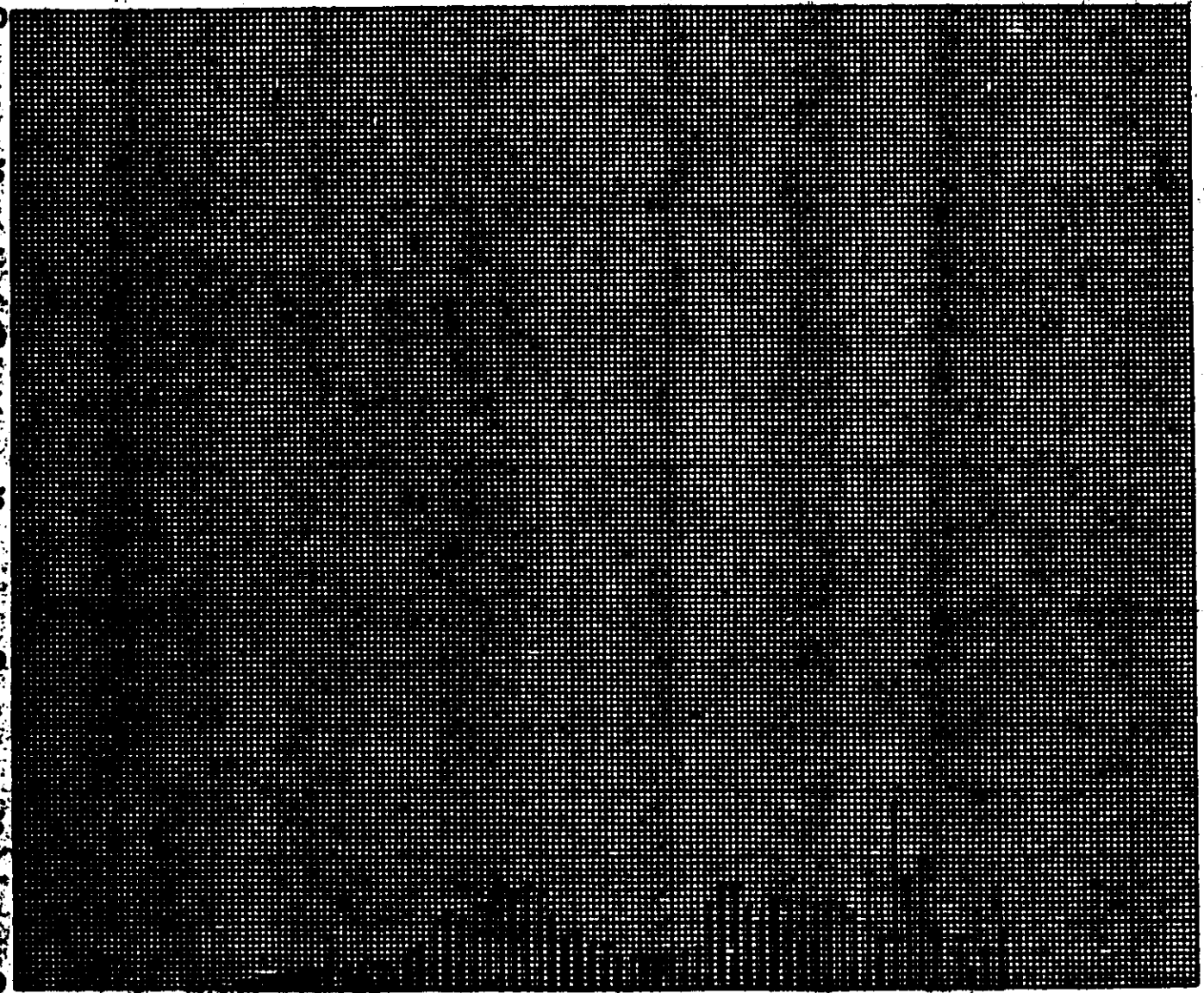
The Master camera contained a 0.225 inch slit and a Wratten 23A filter. The Slave camera had a 0.175 inch slit and a Wratten 21 filter. These conditions placed the nominal exposure on the full processing curve.

The frequency distributions of the solar elevations and solar azimuths encountered during the photographic operations are shown in Figures 8-1 to 8-4.

The nominal exposure times of the Master and Slave cameras are shown as a function of latitude for passes D-17, D-65, D-113 and D-161 in Figures 8-5 to 8-12. The predicted level of processing for the original negative is based on the in-flight performance estimate and is tabulated below with the processing levels reported by [redacted] The transition phase is a result of process machine development level changes.

Mission	Camera		Primary	Intermediate	Full	Transition
1039-1	FWD	Predicted	0	62	38	
		Reported	7	12	60	21
1039-1	AFT	Predicted	0	60	40	
		Reported	5	21	55	19
1039-2	FWD	Predicted	3.3	61.7	35	
		Reported	18	22	33	27
1039-2	AFT	Predicted	1.4	51.5	47.1	
		Reported	19	33	22	26

SOLAR ELEVATION FREQUENCY DISTRIBUTION



Mission No: 1039-1

Payload No: J-99

Camera No: 206

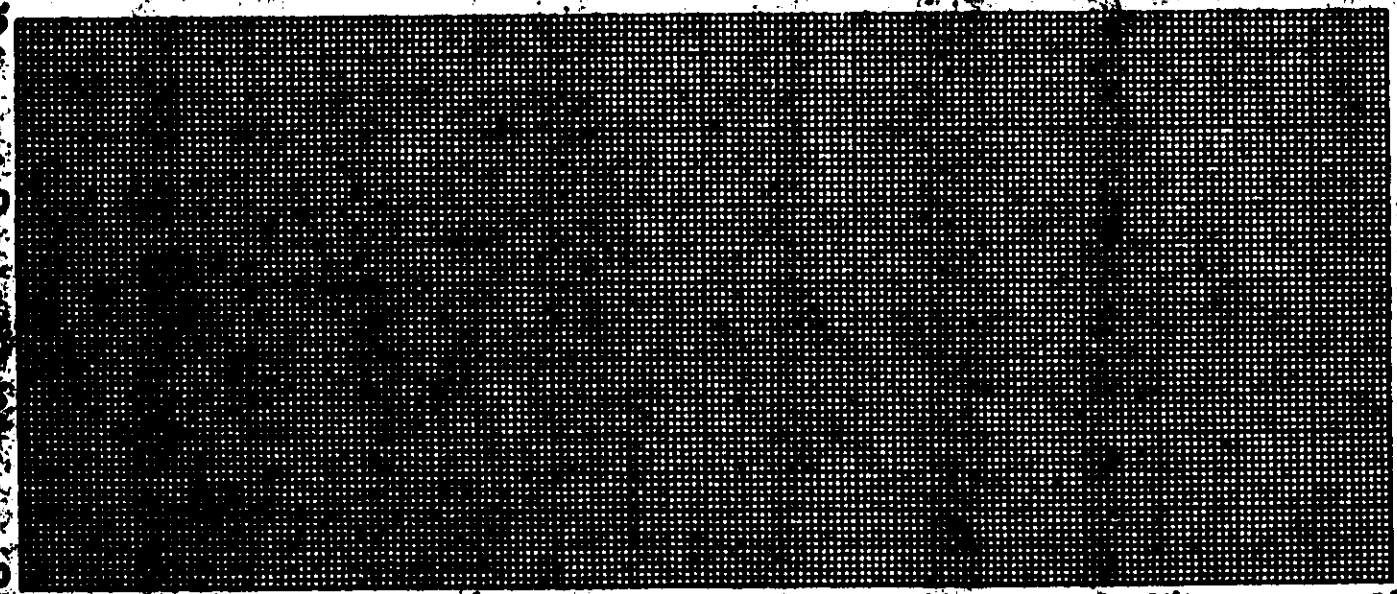
Launch Date: 2/22/67

Launch Time: 2204Z

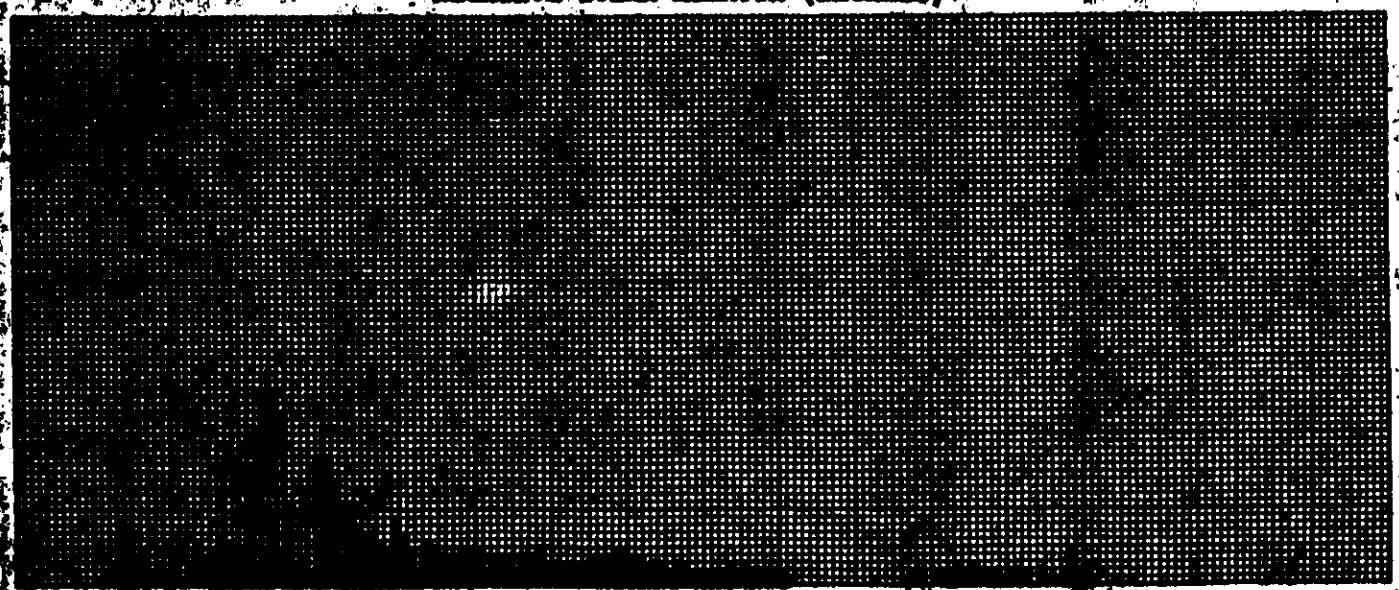
Inclination: 80°

FIGURE 8-1

SOLAR AZIMUTH FREQUENCY DISTRIBUTION



NEGATIVE SOLAR AZIMUTH (DEGREES)



POSITIVE SOLAR AZIMUTH (DEGREES)

Mission No: 1039-1

Payload No: 5-39

Camera No: 206

Launch Date: 2/22/67

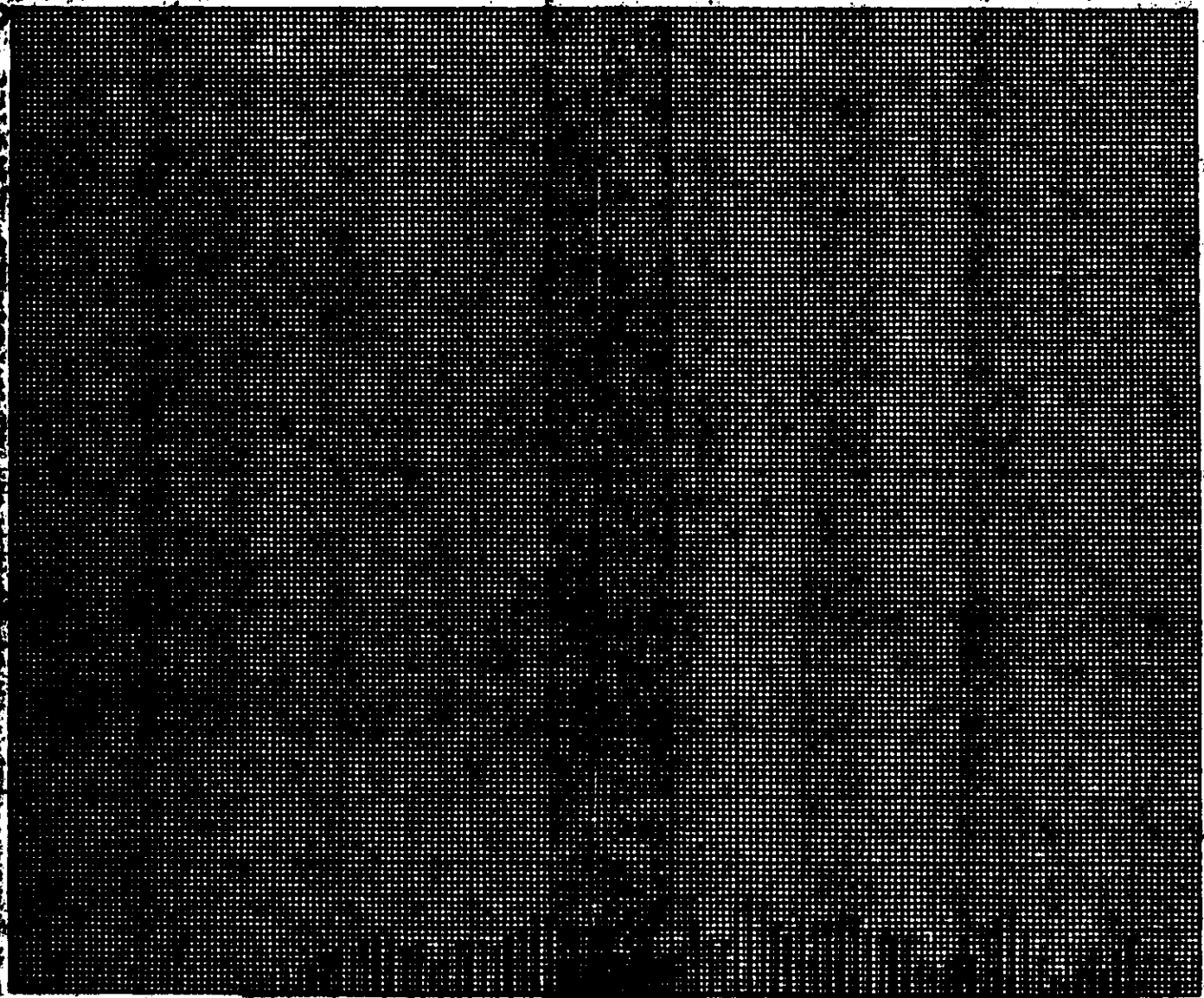
Launch Time: 2204Z

Inclination: 80°

SIGN NOTATION

FIGURE 8-2

SOLAR ELEVATION FREQUENCY DISTRIBUTION



Mission No: 1039-2

Payload No: J-39

Camera No: 206

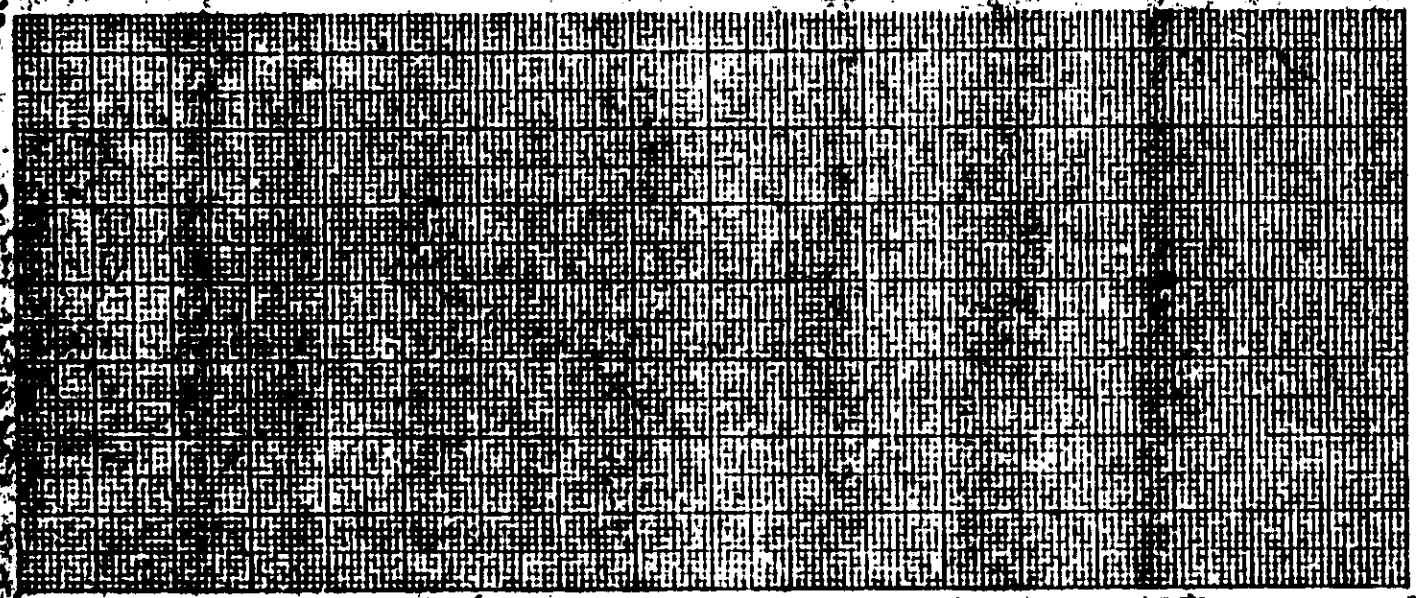
Launch Date: 2/22/67

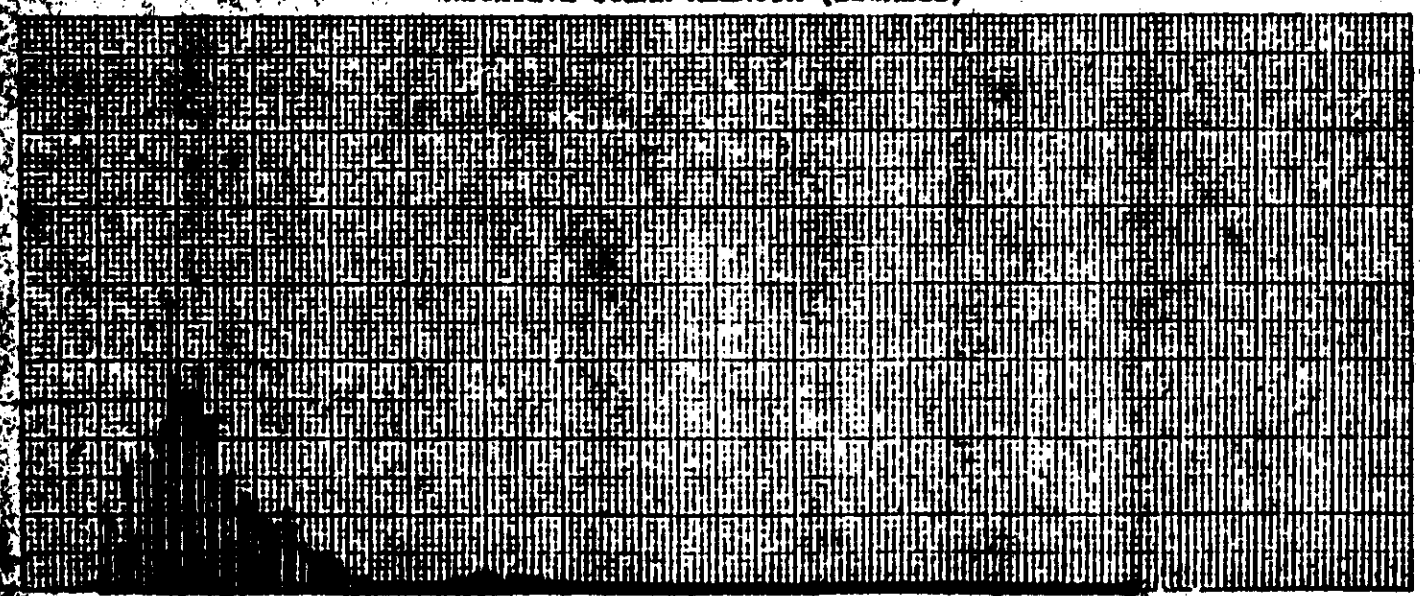
Launch Time: 2204Z

Inclination: 80°

FIGURE 8-3

SOLAR AZIMUTH FREQUENCY DISTRIBUTION





Mission No: 1039-2

Payload No: J-39

Camera No: 206

Launch Date: 2/22/67

Launch Time: 2204

Inclination: 80°

SIGN NOTATION

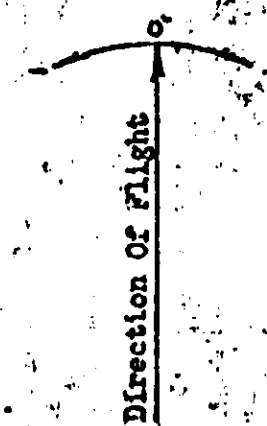
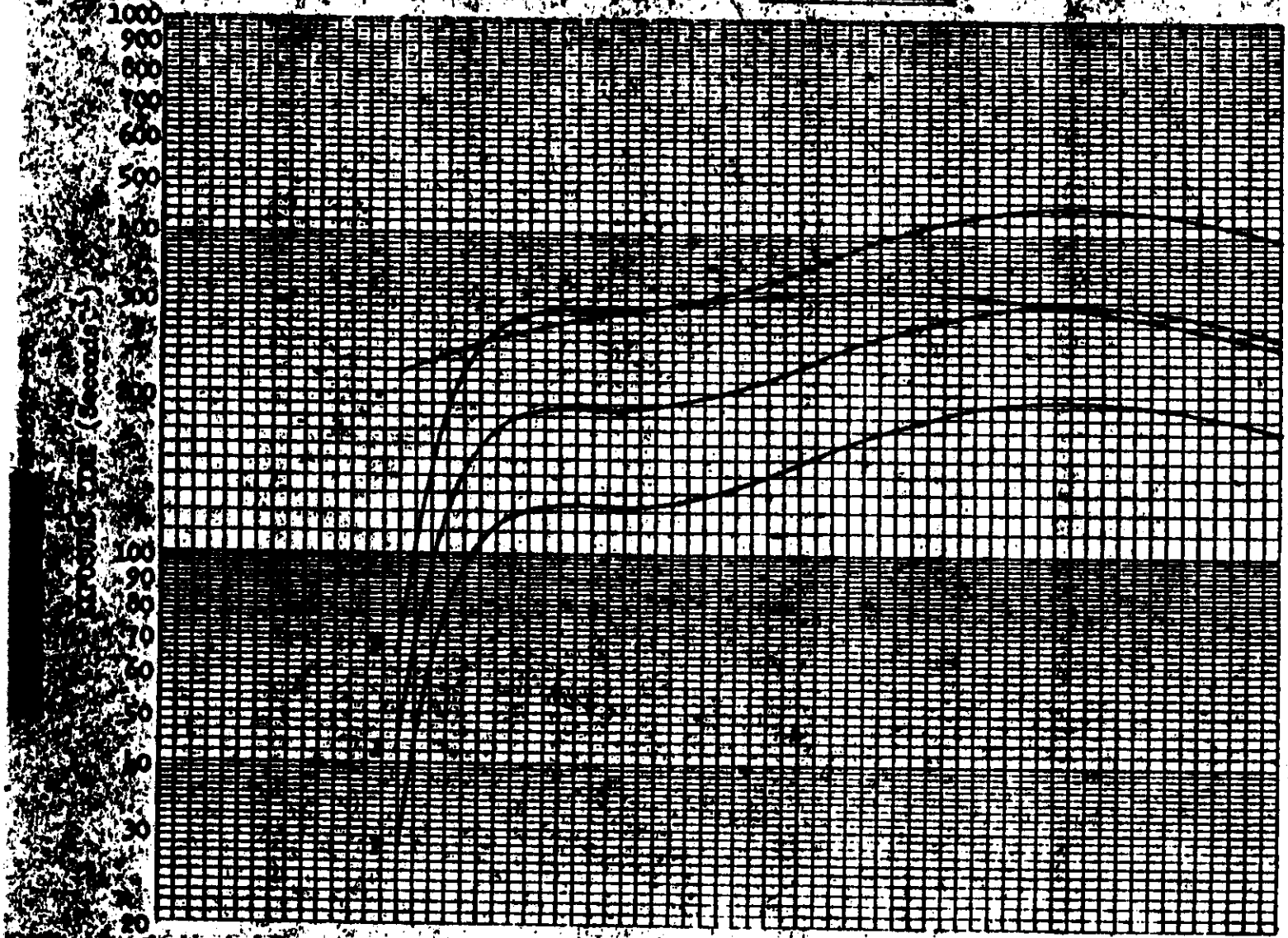


FIGURE 8-4

EXPOSURE POINTS



Mission No: 1039

Payload No: J-39

Camera No: 206

Pass No: 17

Launch Date: 2/22/67

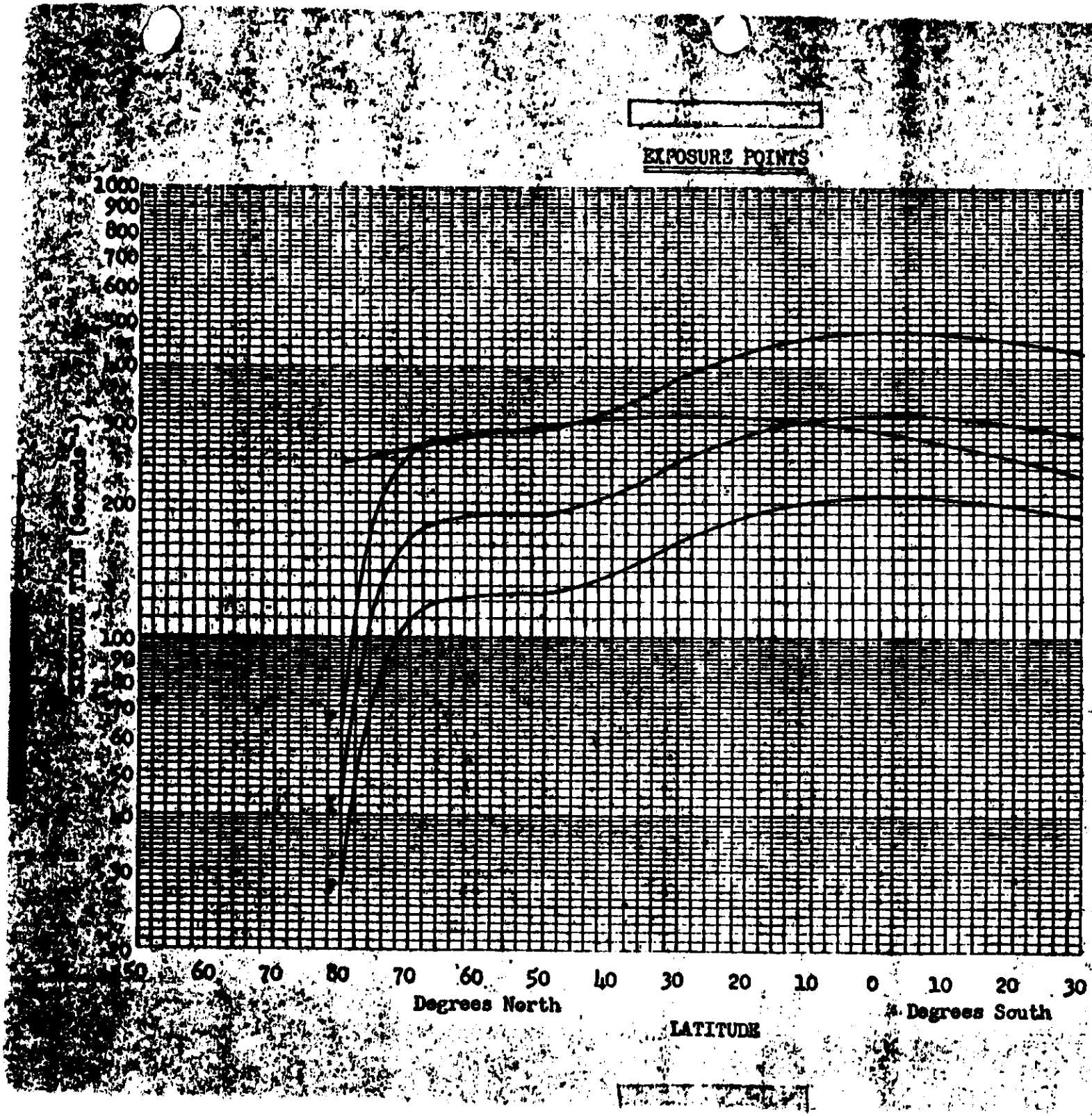
Launch Time: 2204 Z

Slit Width: .225

Filter Type: Wratten 23

Film Type: 3404

FIGURE 8-5



Mission No: 1039

Payload No: J-39

Camera No: 206

Pass No: 65

Launch Date: 2/22/67

Launch Time: 2204 Z

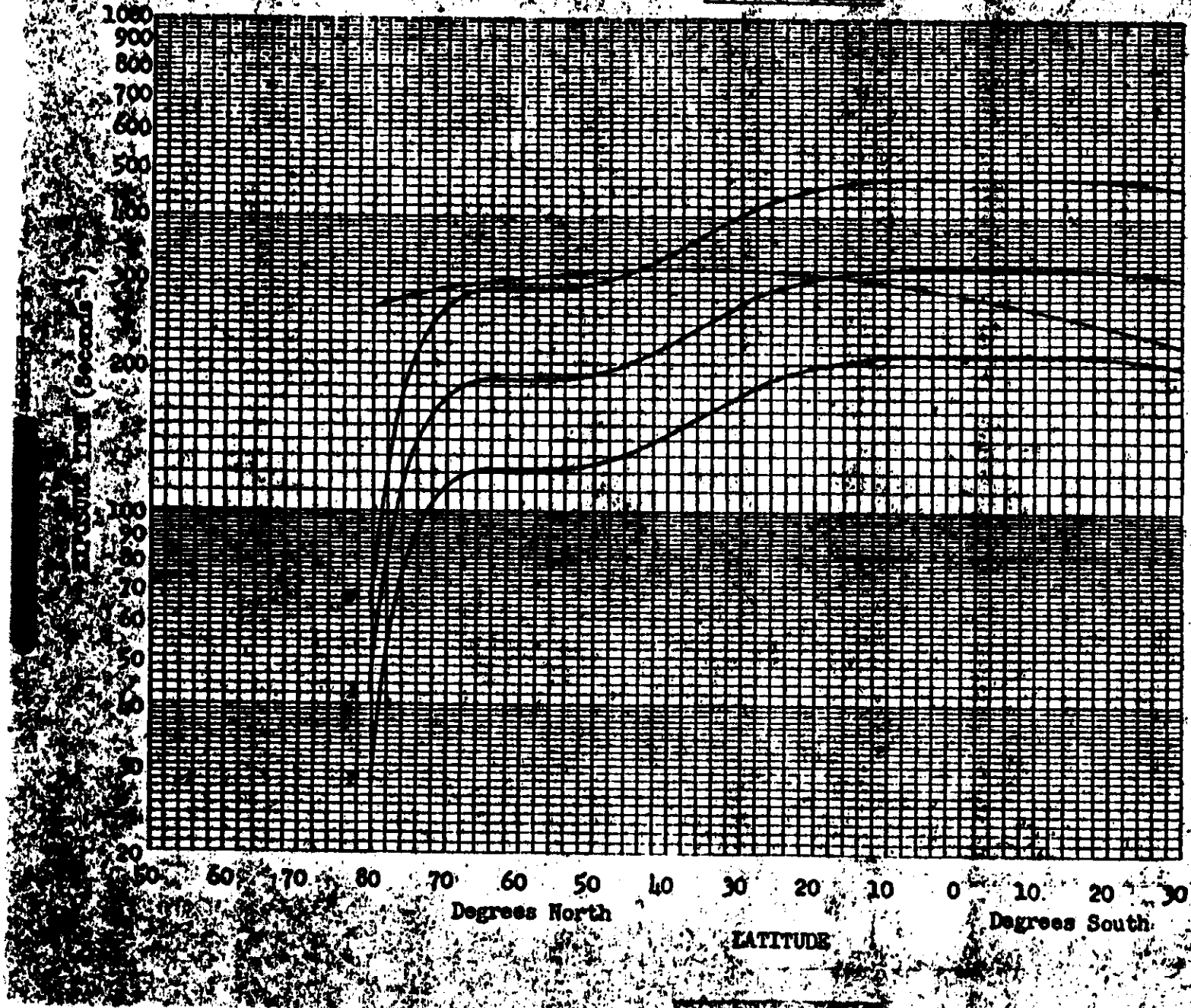
Slit Width: .225

Filter Type: Wratten 23

Film Type: 3404

FIGURE 8-6

EXPOSURE POINTS



Mission No: 1039

Payload No: J-39

Camera No: 206

Pass No: 113

Launch Date: 2/22/67

Launch Time: 2204 Z

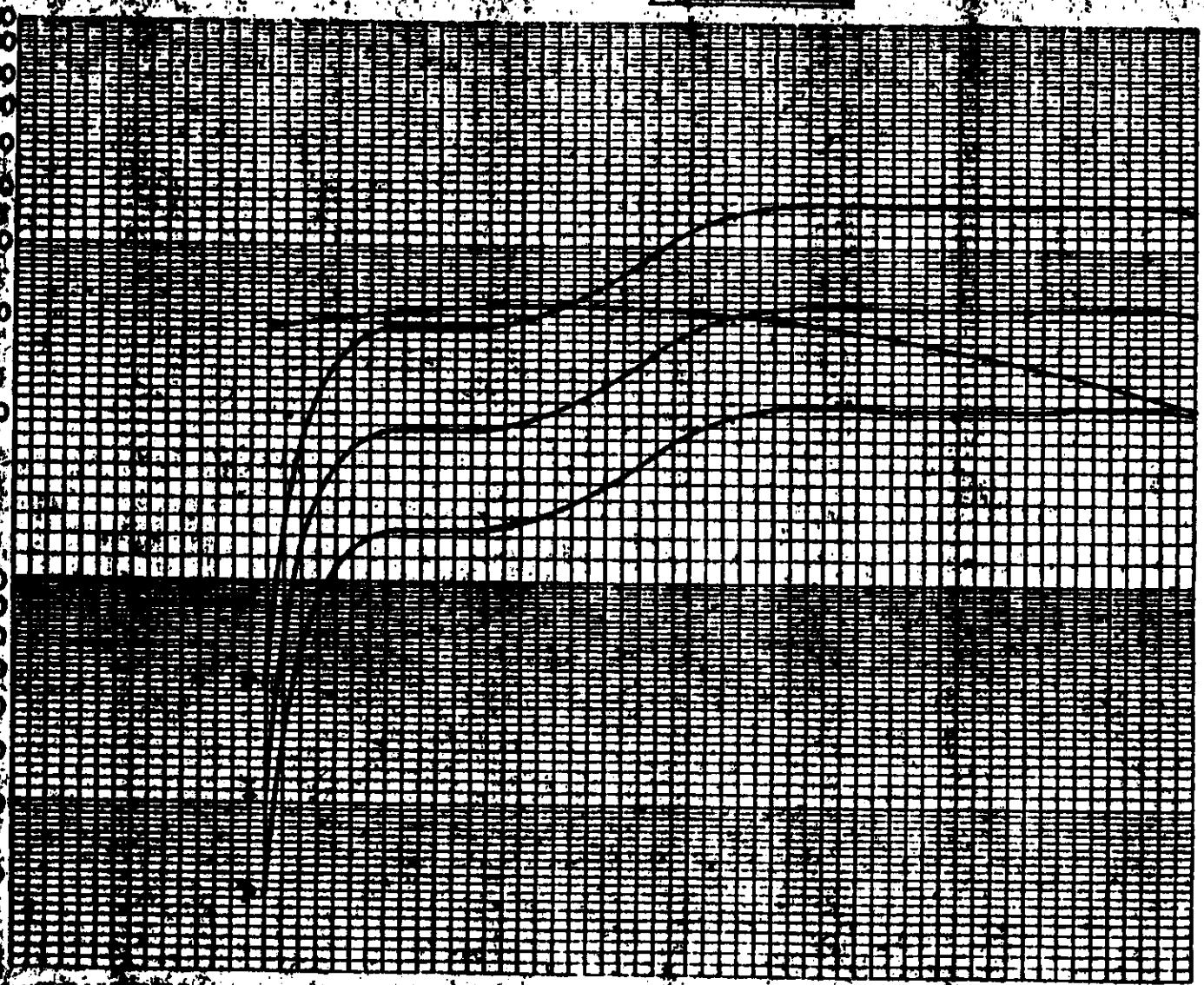
Slit Width: .225

Filter Type: Wratten 23

Film Type: 3404

FIGURE 8

EXPOSURE POINTS



Mission No: 1059

Payload No: J-39

Camera No: 206

Pass No: 161

Launch Date: 2/22/61

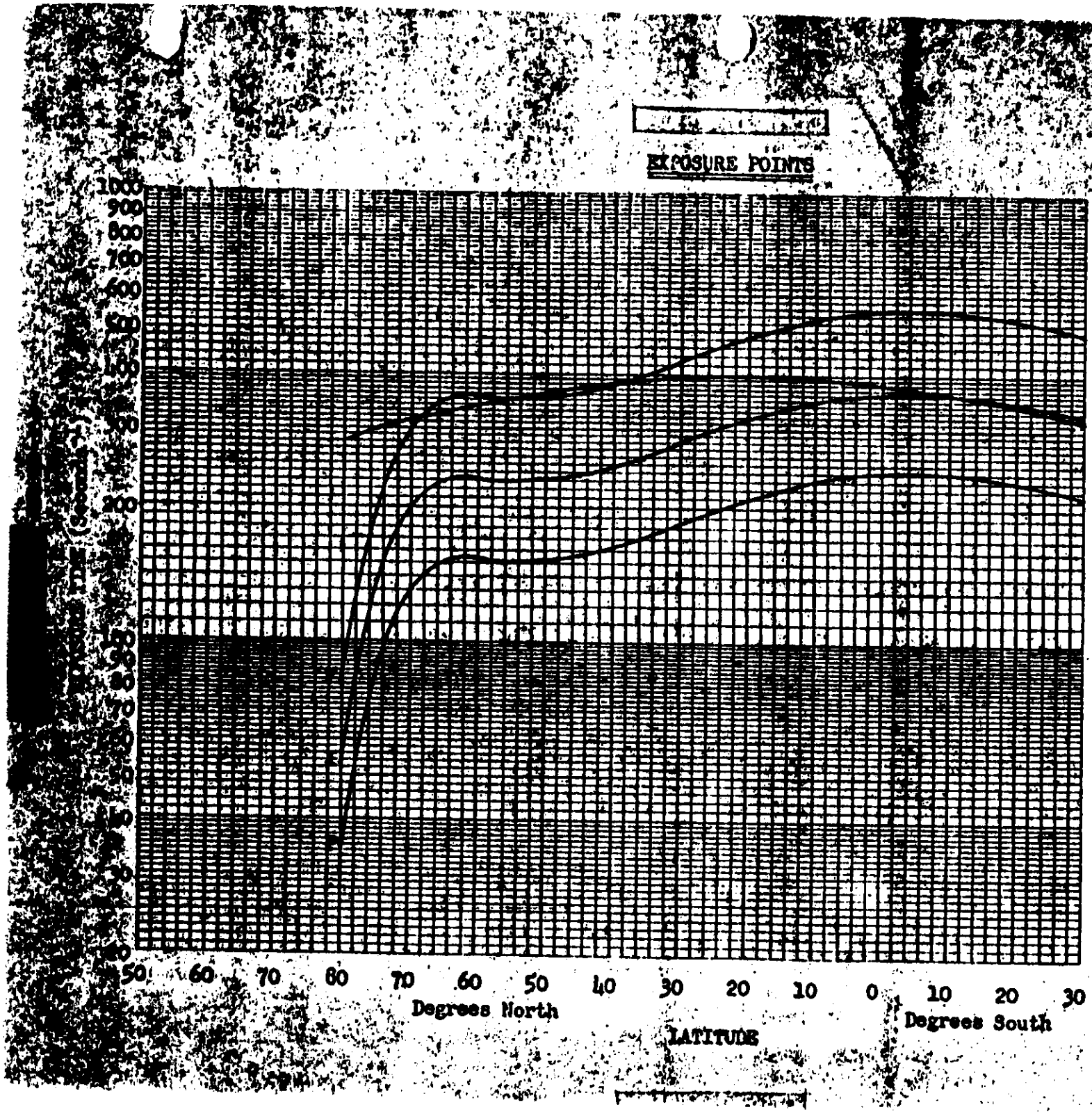
Launch Time: 2204 Z

Slit Width: .225

Filter Type: Wratten 23

Film Type: 3404

FIGURE 6-6



Mission No: 1039

Payload No: J-39

Camera No: 207

Pass No: 17

Launch Date: 2/22/67

Launch Time: 2204 Z

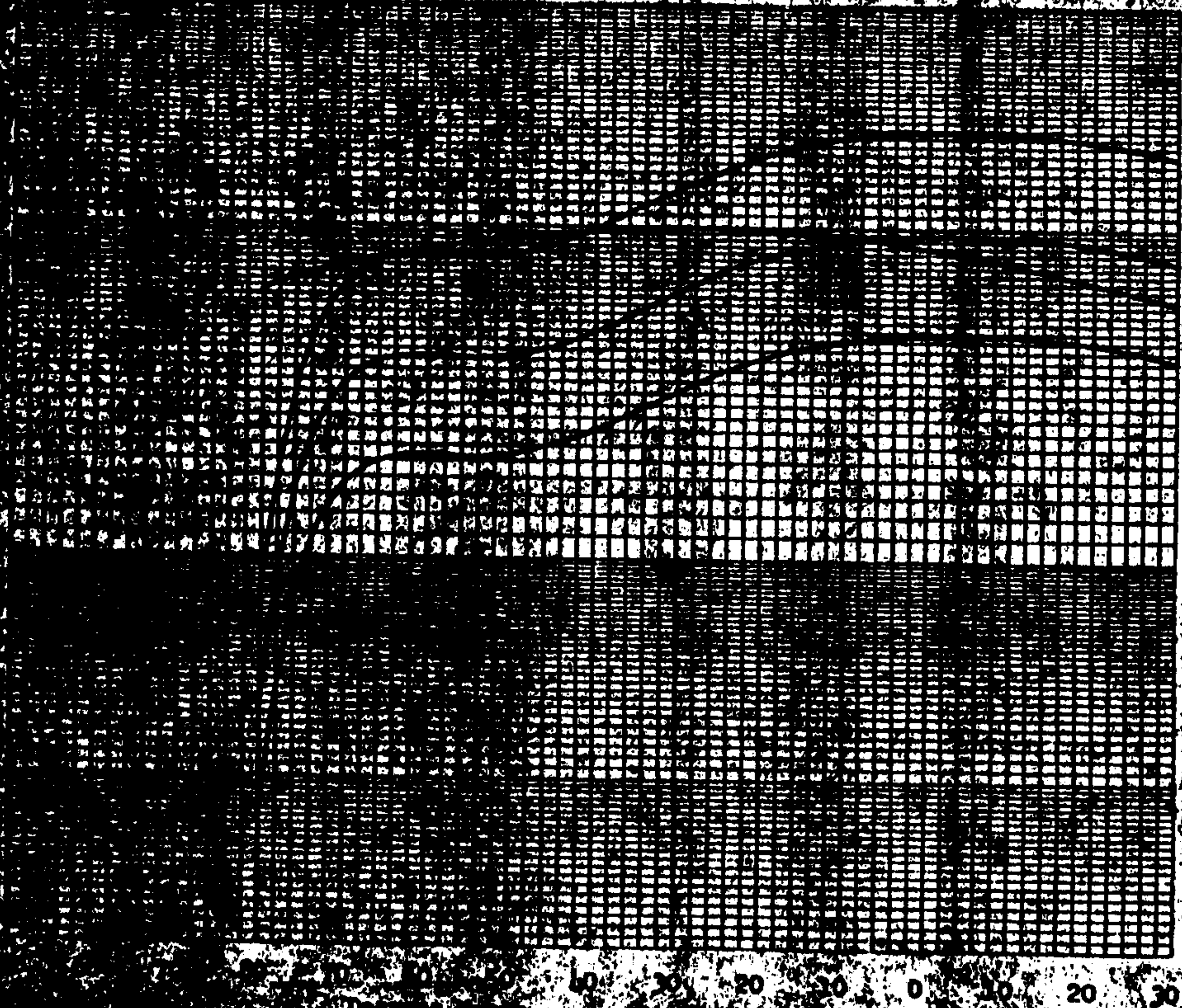
Slit Width: .175

Filter Type: Wratten 21

Film Type: 3404

FIGURE 8-9

[illegible]



Mission No: [illegible]

Payload No: [illegible]

Camera No: [illegible]

Pass No: [illegible]

Launch Date: [illegible]

Launch Time: [illegible]

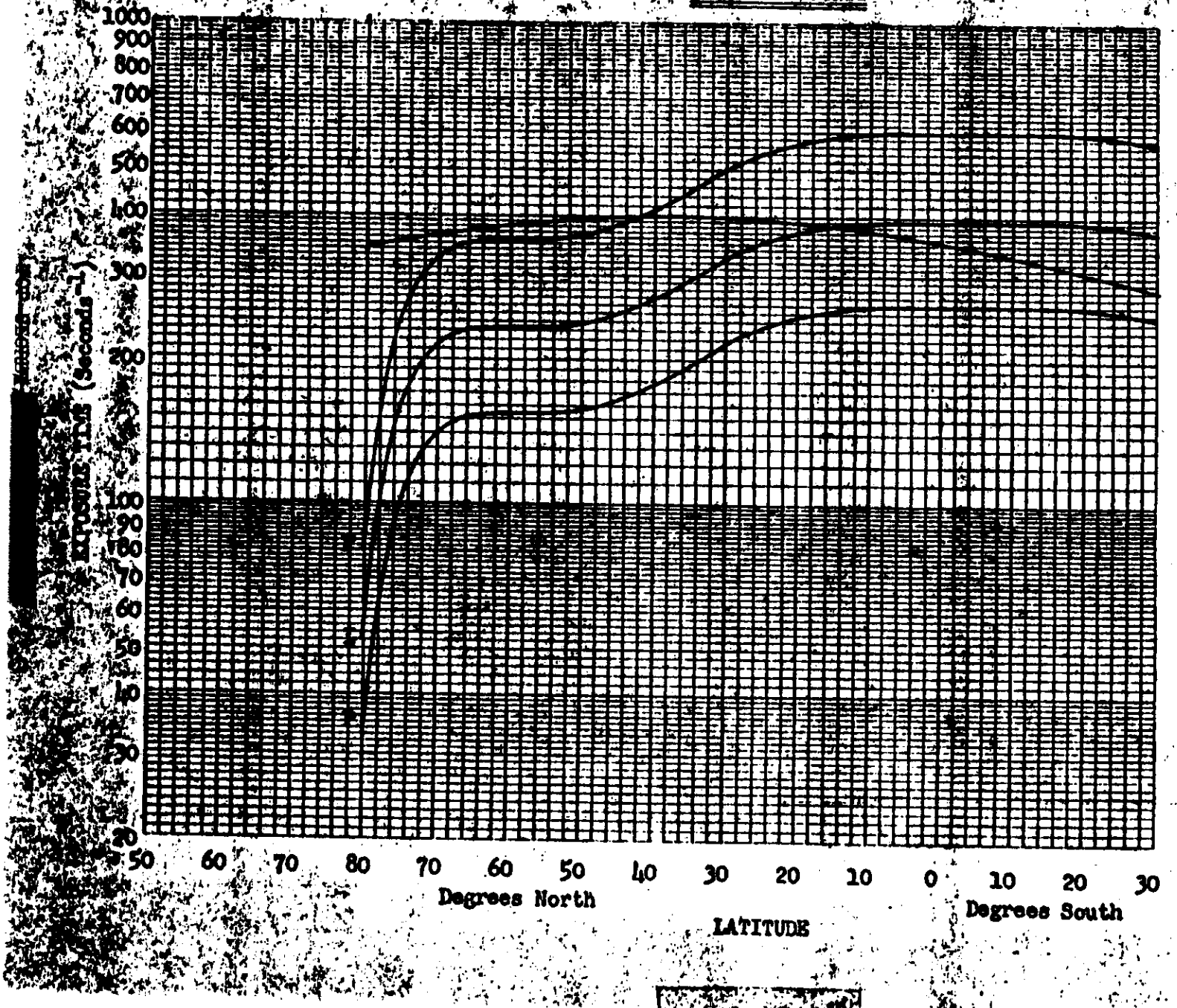
Slit Width: [illegible]

Filter Type: [illegible]

Film Type: [illegible]

[redacted]

EXPOSURE POINTS



Mission No: 1039

Payload No: J-39

Camera No: 207

Pass No: 113

Launch Date: 2/22/67

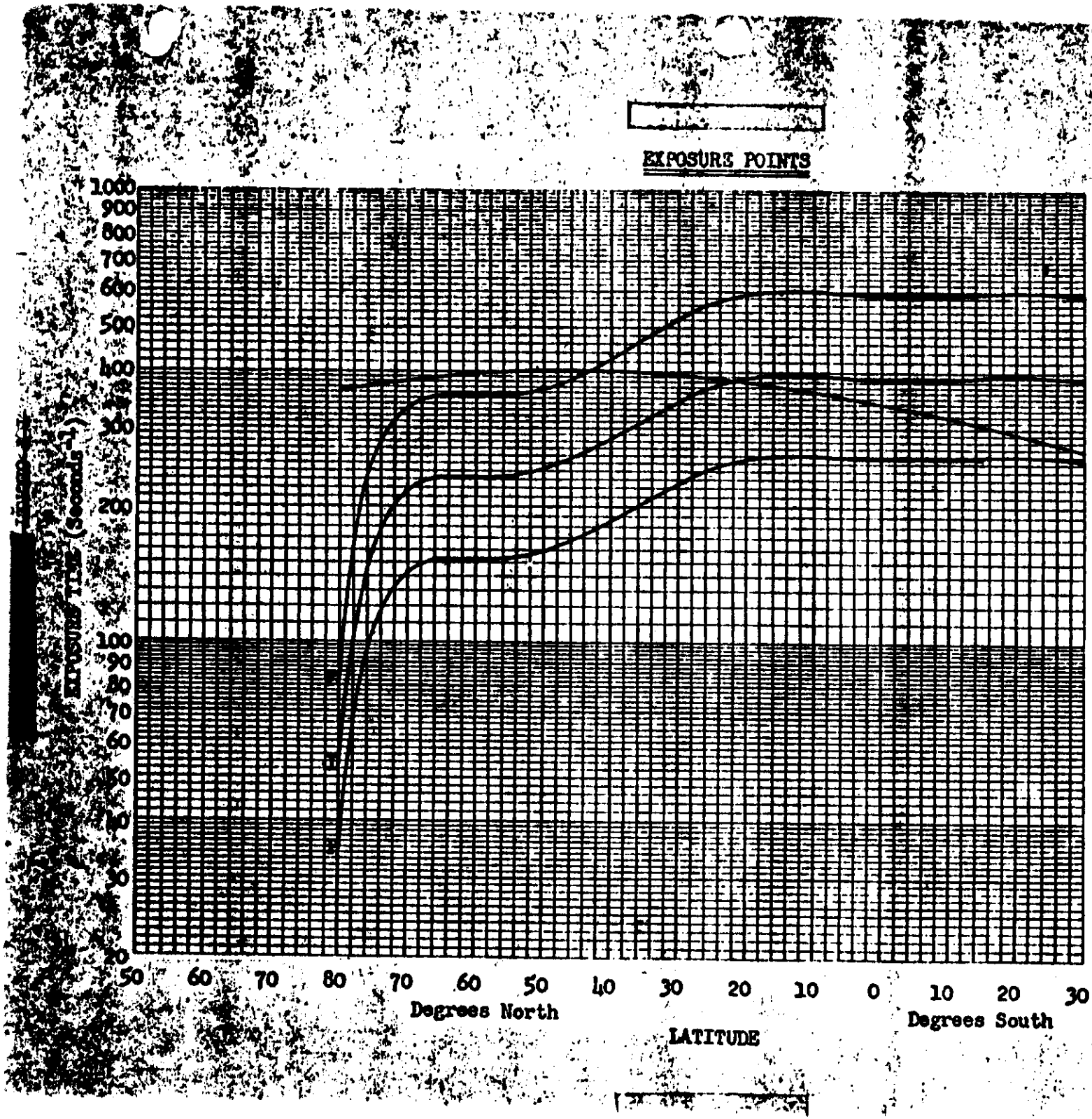
Launch Time: 2204 Z

Slit Width: .175

Filter Type: Wratten 21

Film Type: 3404

FIGURE 8-11



Mission No: 1039

Payload No: J-39

Camera No: 207

Pass No: 161

Launch Date: 2/22/67

Launch Time: 2204 Z

Slit Width: .175

Filter Type: Wratten 21

Film Type: 3404

FIGURE 8-12

SECTION 9

DIFFUSE DENSITY MEASUREMENTS

The diffuse density measurements made by AFSPPF were computer sorted at A/P to permit analysis of the density ranges encountered at the three processing levels. A study of sorting techniques showed that no absolute method was available to separate the density values as the accuracy of the Processing History published by [redacted] appears rather low and processing transition phases are not accounted for. The sorting technique selected uses the base plus fog density values where measurements up to 0.09 density are considered as having received Primary processing 0.10 to 0.17 as Intermediate and above 0.17 density as Full. The percentage of original negative that was processed at each level, based on the computer sort, is tabulated below with the predicted and reported processing percentages.

Mission	Camera		Primary	Intermediate	Full	Transition
1039-1	FWD	Predicted	0	62	38	
		Reported	7	12	60	21
		Computed	0.4	23.6	76	
1039-1	AFT	Predicted	0	60	40	
		Reported	5	21	55	19
		Computed	0	31	69	
1039-2	FWD	Predicted	3.3	61.7	35	
		Reported	18	22	33	27
		Computed	3	41	56	
1039-2	AFT	Predicted	1.4	47.1	51.5	
		Reported	19	33	22	26
		Computed	7	57	36	

The tabulations of density frequency distributions for Missions 1039-1 and 1039-2 are included in Appendix A, Table A-1 thru A-4. The graphical presentation of the density distribution are computer plotted in Appendix A, Figures A-1 thru A-39.

A summary of the processing and exposure analysis is shown in Table 9-1. The terrain D-Min criteria, (range) for proper exposure and processing is 0.40 to 0.90 density units. The area measured for D-Min is selected subjectively and is not necessarily the absolute D-Min in the photography.

A density range chart Figure 9-1 is included in this report. This type of chart for Missions 1004 to 1031 is included in the A/P final report for Mission 1031.

These charts are produced from the same density measurements previously mentioned in this section. The computer produced the mean, median and range figures for the various processing levels used. The chart includes the number of frames (samples) in which the density measurements were made. These measurements are made on approximately every tenth frame throughout the mission.

~~TOP SECRET~~ [redacted]

MISSION 1039-1 INSTR - FWD 05/18/67 PROCESSING AND EXPOSURE ANALYSIS

PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	1	0 PC	0 PC	100 PC	0 PC	0 PC
INTERMEDIATE	54	0 PC	17 PC	63 PC	19 PC	2 PC
FULL	174	5 PC	0 PC	83 PC	12 PC	0 PC
ALL LEVELS	229	3 PC	4 PC	79 PC	14 PC	0 PC

MISSION 1039-1 INSTR - AFT 05/18/ PROCESSING AND EXPOSURE ANALYSIS

PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	0	0 PC	0 PC	0 PC	36 PC	36 PC
INTERMEDIATE	71	0 PC	10 PC	62 PC	25 PC	3 PC
FULL	162	6 PC	0 PC	83 PC	11 PC	0 PC
ALL LEVELS	233	4 PC	3 PC	77 PC	15 PC	1 PC

MISSION 1039-2 INSTR - FWD 05/18/ PROCESSING AND EXPOSURE ANALYSIS

PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	7	0 PC	14 PC	86 PC	0 PC	0 PC
INTERMEDIATE	87	0 PC	11 PC	79 PC	8 PC	1 PC
FULL	121	3 PC	0 PC	82 PC	15 PC	0 PC
ALL LEVELS	215	2 PC	5 PC	81 PC	12 PC	0 PC

MISSION 1039-2 INSTR - AFT 05/18/ PROCESSING AND EXPOSURE ANALYSIS

PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	16	0 PC	0 PC	75 PC	0 PC	25 PC
INTERMEDIATE	143	0 PC	8 PC	81 PC	10 PC	1 PC
FULL	91	3 PC	0 PC	81 PC	15 PC	0 PC
ALL LEVELS	250	1 PC	4 PC	81 PC	12 PC	2 PC

PROCESS LEVEL	BASE & FOG	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	0.01-0.09	0.01-0.13	0.14-0.39	0.40-0.90	----------	0.91 AND UP
INTERMED	0.10-0.17	0.01-0.20	0.21-0.39	0.40-0.90	0.91-1.34	1.35 AND UP
FULL	0.18 AND UP	0.01-0.39	----------	0.40-0.90	0.91-1.69	1.70 AND UP

~~TOP SECRET~~ [redacted]

TABLE 9-1

J MISSION DENSITY RANGES

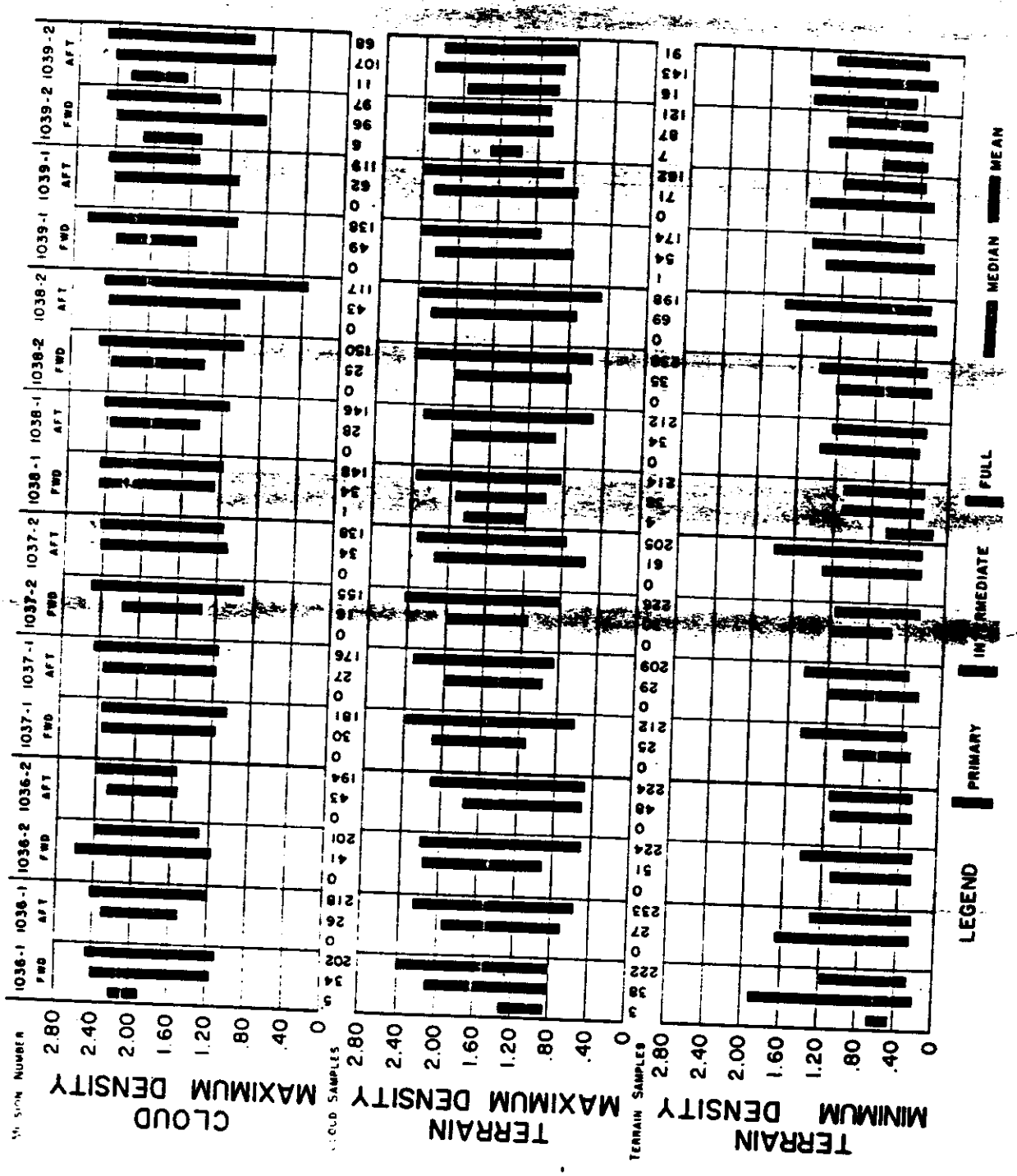


FIGURE 9 - 1

[redacted]

SECTION 10

PERFORMANCE MEASUREMENTS

The photography acquired by both panoramic cameras during Missions 1039-1 and 1039-2 received a MIP rating of 85. A summary is tabulated below of the MTF/AIM resolution values measured by AFSPPF. The microdensitometer slit was 1 micron by 80 microns for the edge scan analysis.

Mission	Camera	Cycles/mm	Average	Ground Resolution
1039-1	FWD	59	65	18.1'
1039-2	FWD	71		
1039-1	AFT	71	68	18.2'
1039-2	AFT	65		

The details of the measurement and computing techniques, targets measured and target locations are fully reported in the evaluation report published by AFSPPF and are not included in this report.

SECTION 11

VEHICLE ATTITUDE

The vehicle attitude errors for both Mission 1039-1 and 1039-2 were derived from the reduction of the Stellar camera photography. This attitude date is supplied to A/P by NPIC.

The attitude errors for each frame and the attitude control rates are calculated at the A/P computer facility. The computer also plots the frequency distribution of the rates and errors. Figures 11-1 through 11-6 show these distributions for Mission 1039-1 and Figures 11-7 through 11-12 for Mission 1039-2.

The summary table below lists the maximum attitude errors and rates that were experienced during 90% of the FWD camera photographic operations, excluding the first six frames of each operation, and the total range of the errors and rates.

Value	Mission 1039-1 90%	Mission 1039-1 Range	Mission 1039-2 90%	Mission 1039-2 Range
Pitch Error (°)	0.21	-0.50 to + 0.16	0.30	-0.22 to + 0.48
Roll Error (°)	0.43	-0.60 to + 0.22	0.54	-0.64 to + 0.18
Yaw Error (°)	3.03	-3.4 to + 1.4	2.50	-3 to + 1
Pitch Rate (°/hr.)	19.04	-24 to + 80	33.10	-42 to + 78
Roll Rate (°/hr.)	27.79	-60 to + 75	39.23	-90 to + 50
Yaw Rate (°/hr.)	39.15	-68 to + 36	24.96	-54 to + 30

The performance of the attitude control system is comparable to the control systems used on recent missions.

MISSION1039A1 [redacted] FRAMES 1-6 OF EACH UP UNGYED 90 PERCENT [redacted] 0.2

Y PITCH ANGLE ERROR - DEGREES (X) VERSUS FREQUENCY - PERCENT (Y)

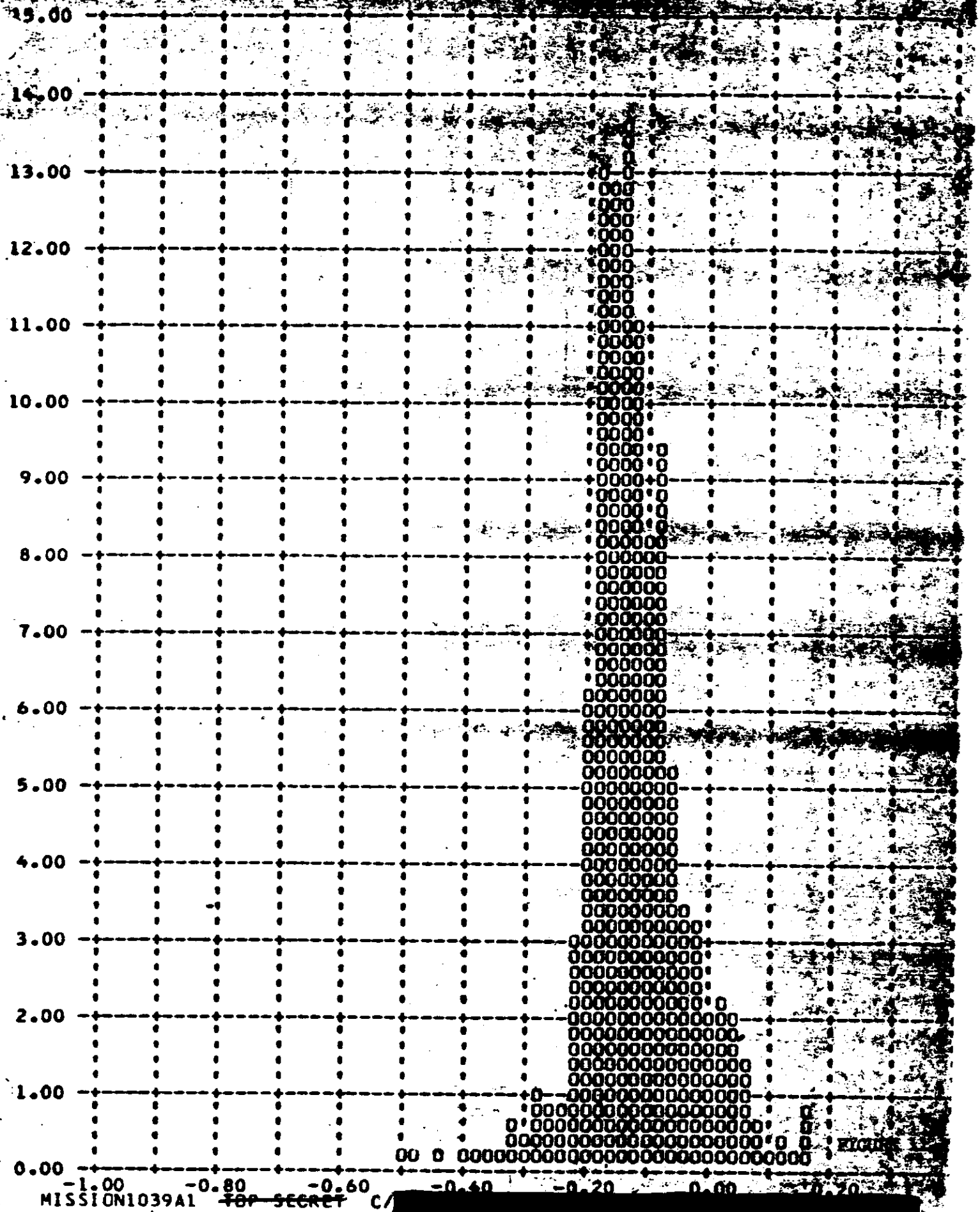
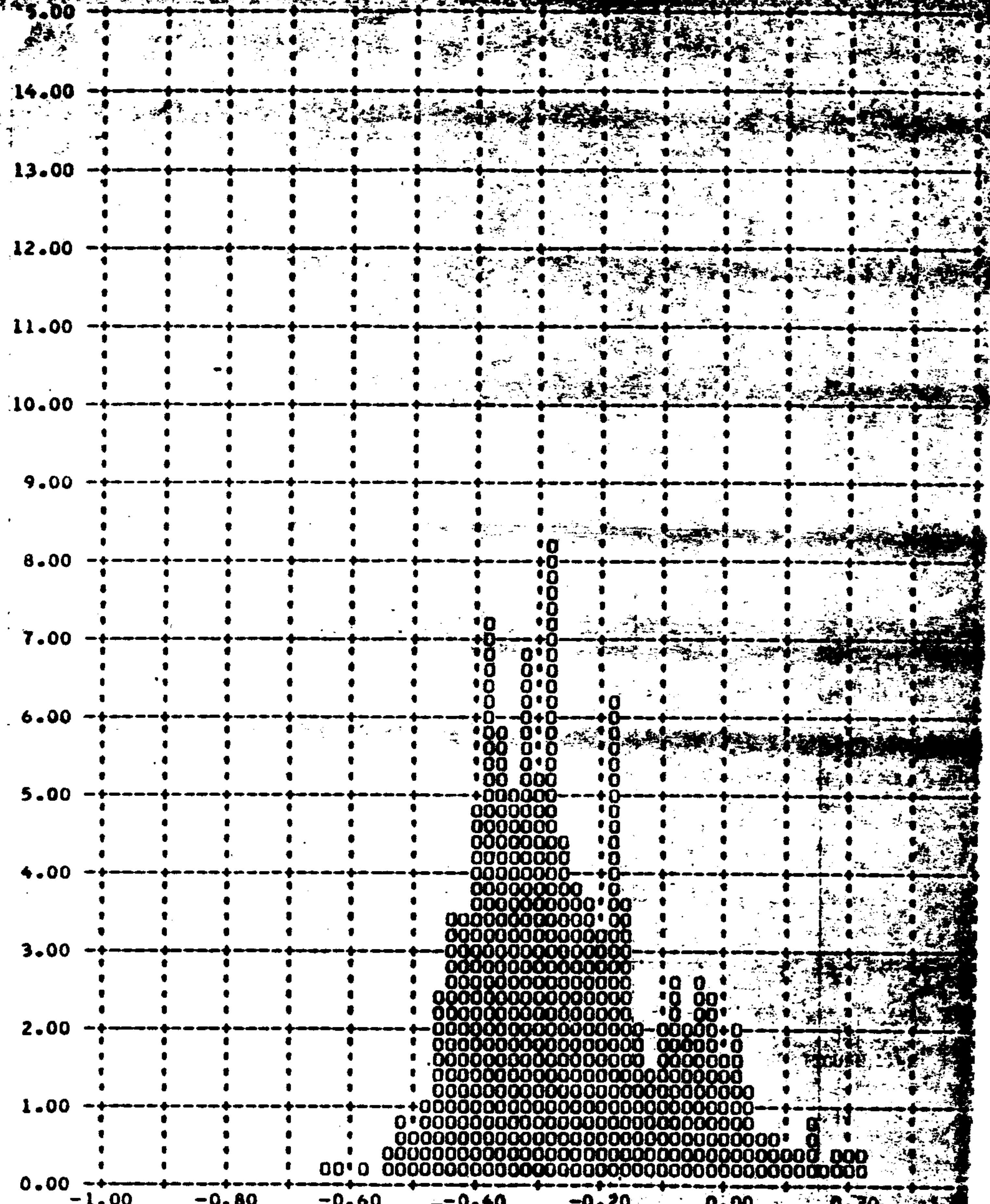


FIGURE 11-1

MISSION1039A1 [redacted]

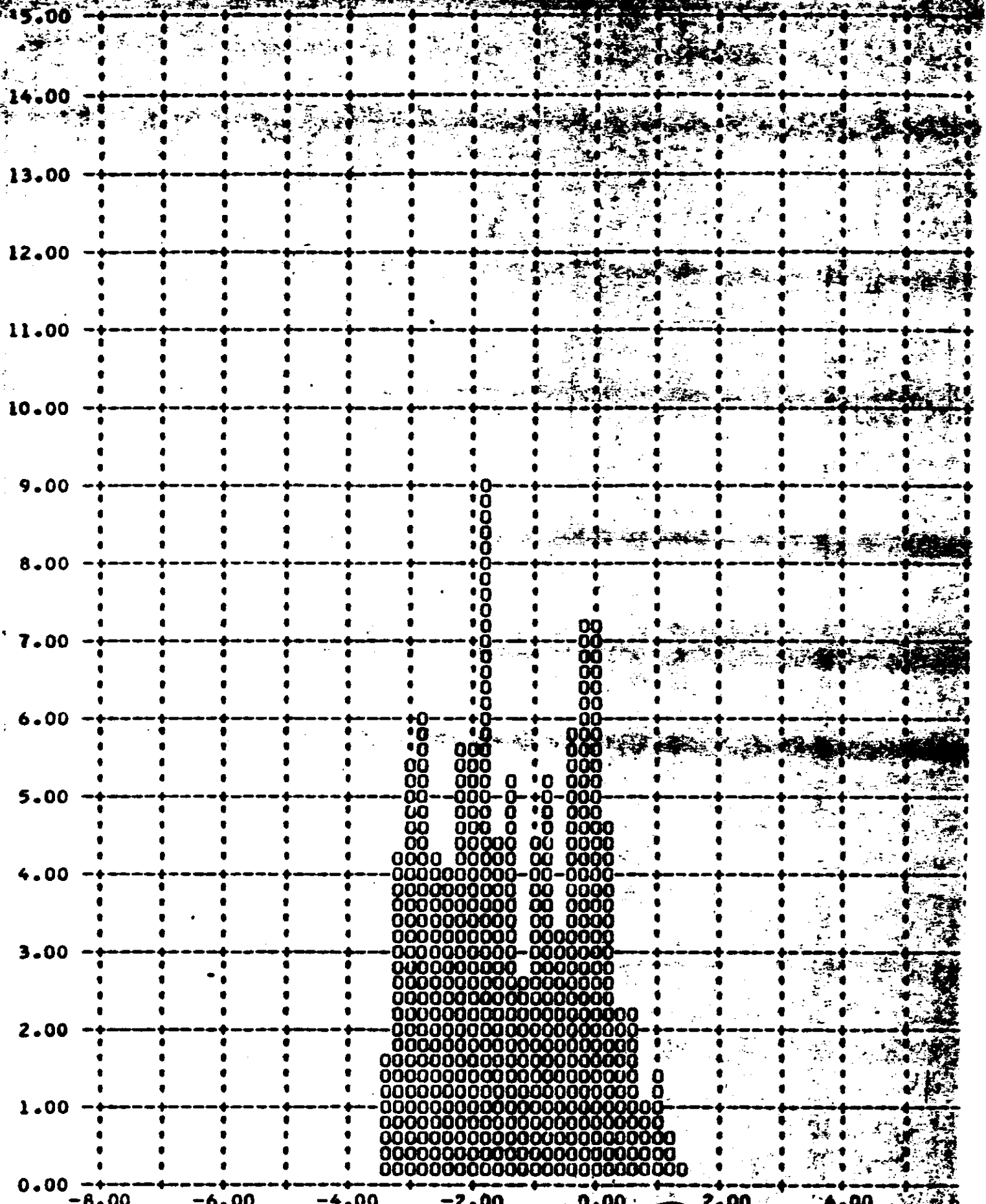
Y - ROLL ANGLE ERROR - DEGREES (X) VERSUS FREQUENCY - PERCENT (Y)



MISSION1039A1 ~~TOP SECRET~~ C/[redacted]

FIGURE 11 2

Y = YAW ANGLE ERROR = DEGREES (X) VERSUS FREQUENCY = PERCENT (Y)



FRAMES 1-6 TOP EACH [illegible] OMITTED = 90 PERCENT [illegible]

Y PITCH RATE ERROR - DEG/HOUR (X) VERSUS FREQUENCY - PERCENT (Y)

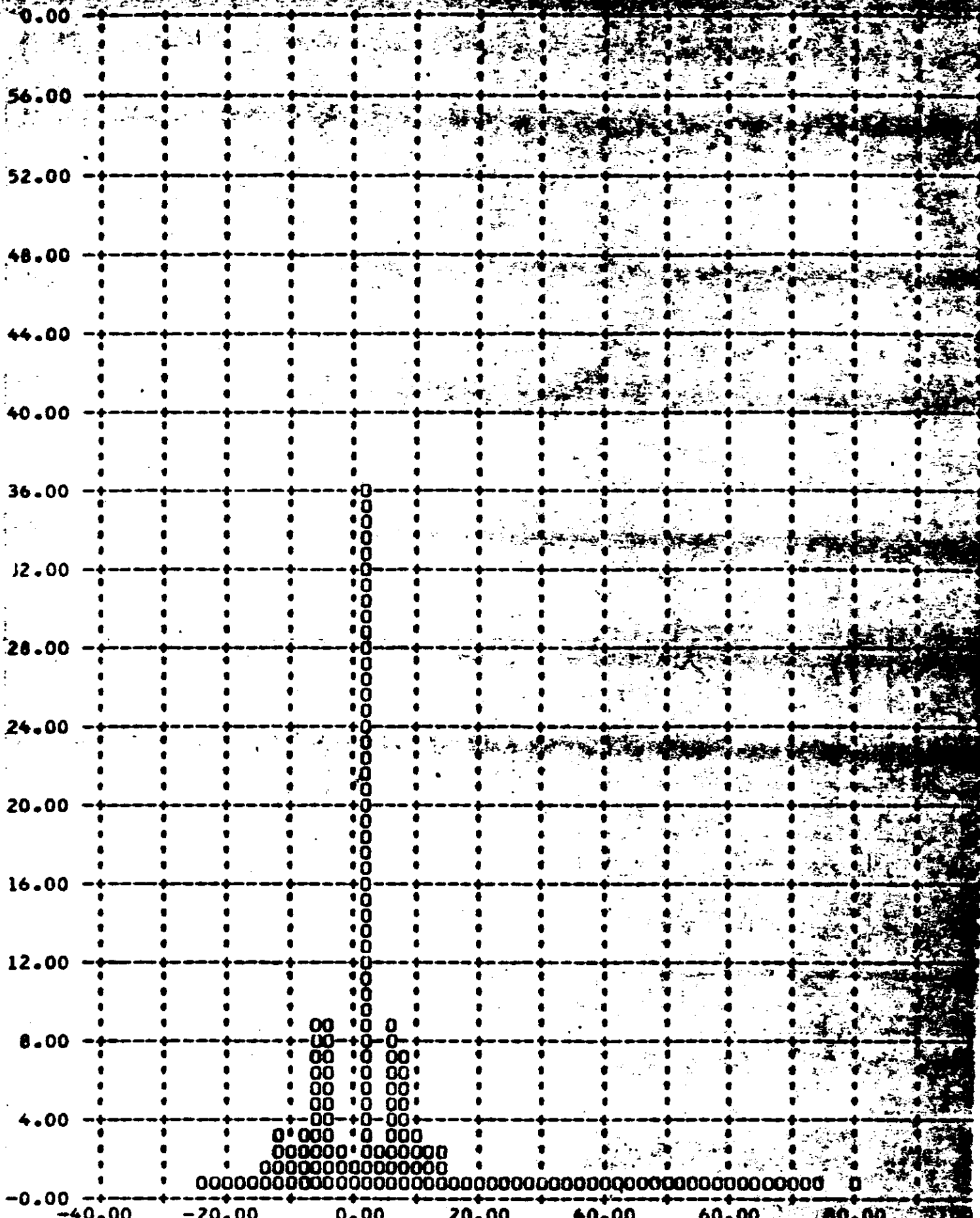


FIGURE 11-4

FRAMES 1-6 OF EACH 10 UNITED = 90 PERCENT = 27.7

Y ROLL RATE ERROR - DEG/HOUR (X) VERSUS FREQUENCY - PERCENT (Y)

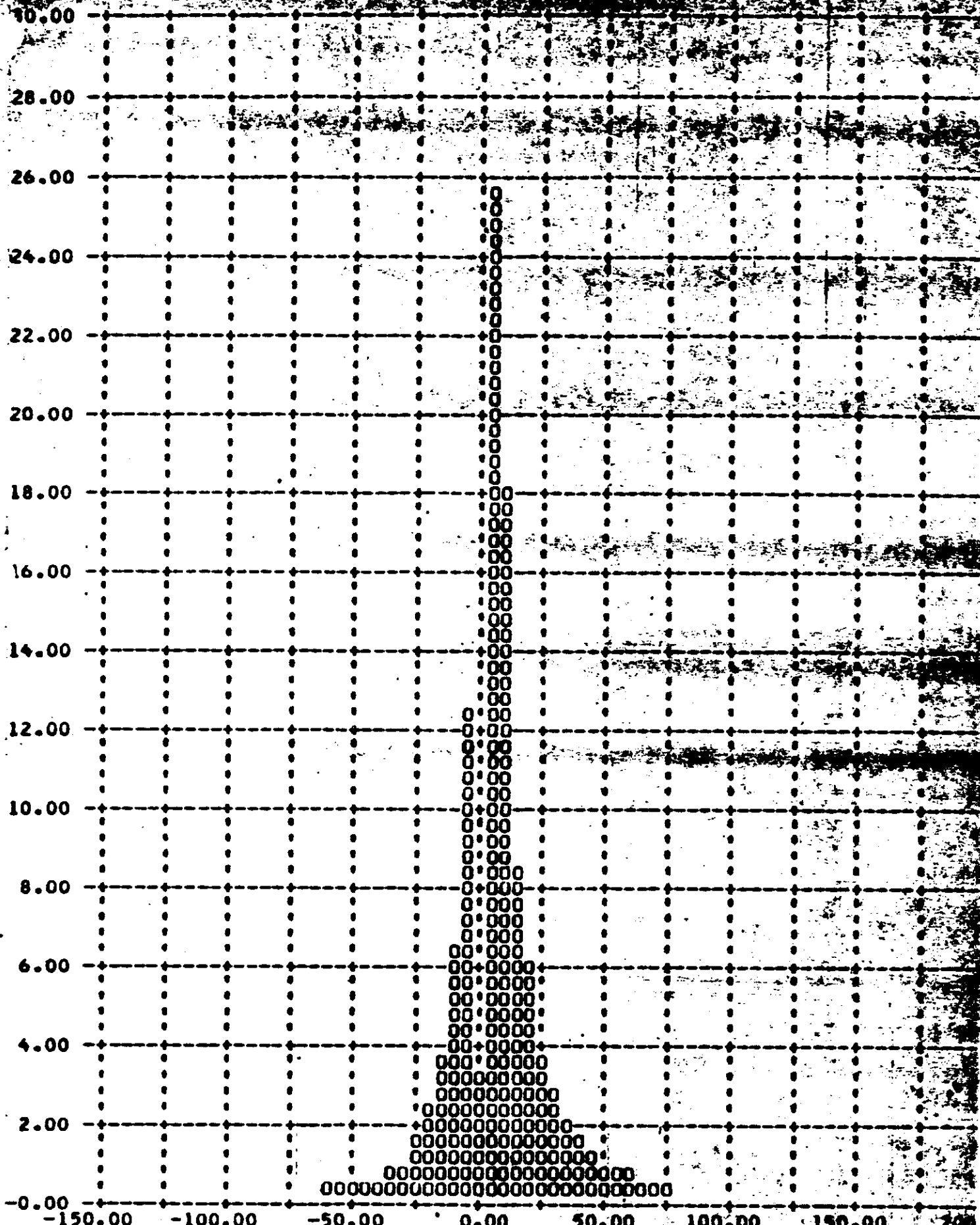
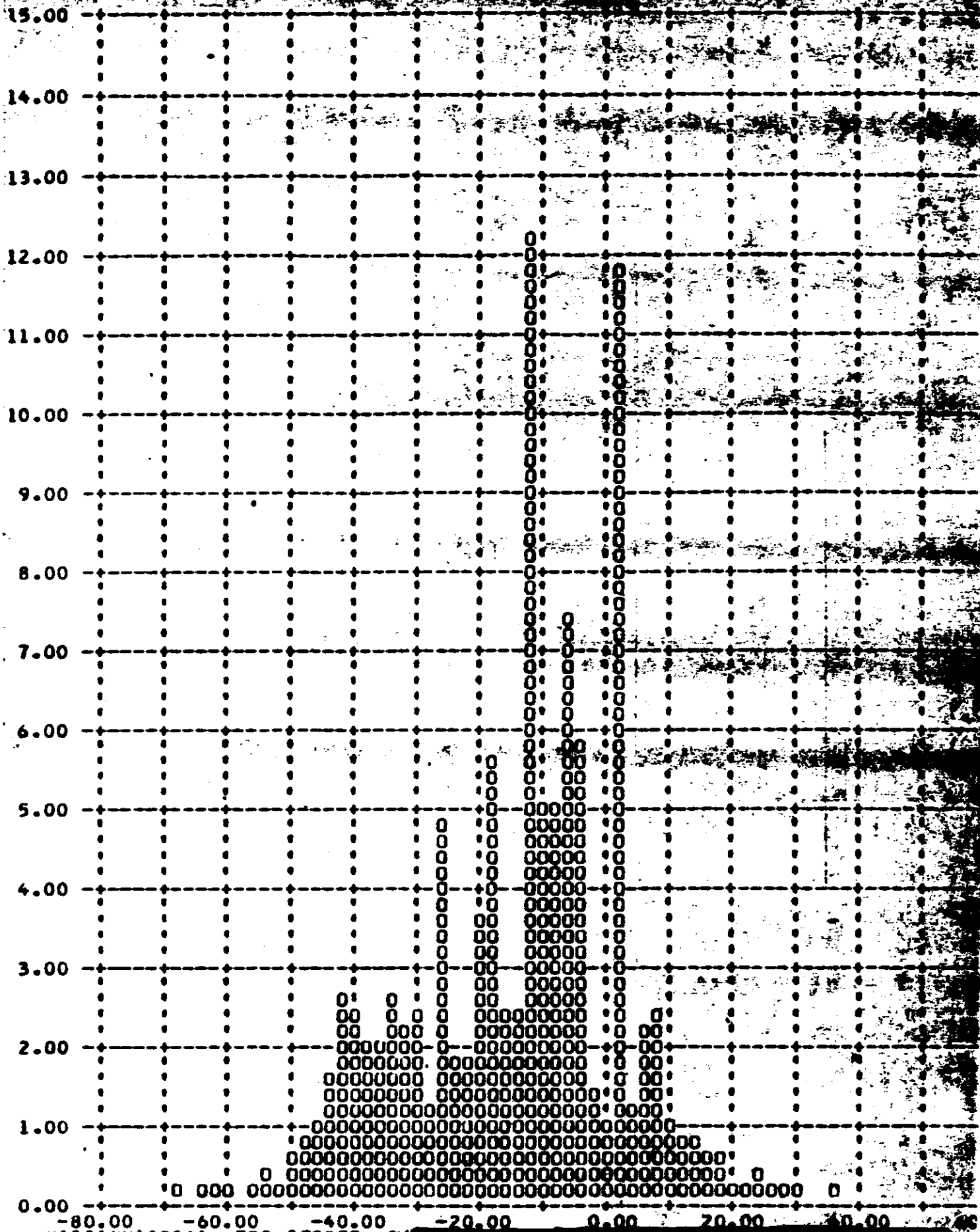


FIGURE 11-5

MISSION1039A1 ~~TOP SECRET~~ [redacted]

FRAMES 1-6 OF EACH [redacted] OMITTED [redacted] PERCENT = 19.1

Y YAW RATE ERROR - DEG/HOUR (X) VERSUS FREQUENCY - PERCENT (Y)



MISSION1039A1 ~~TOP SECRET~~ C/[redacted]

FIGURE 11-6

FRAMES 1-6 OR EACH OF UNITED 90 PERCENT 0.30

Y PITCH ANGLE ERROR - DEGREES (X) VERSUS FREQUENCY - PERCENT (Y)

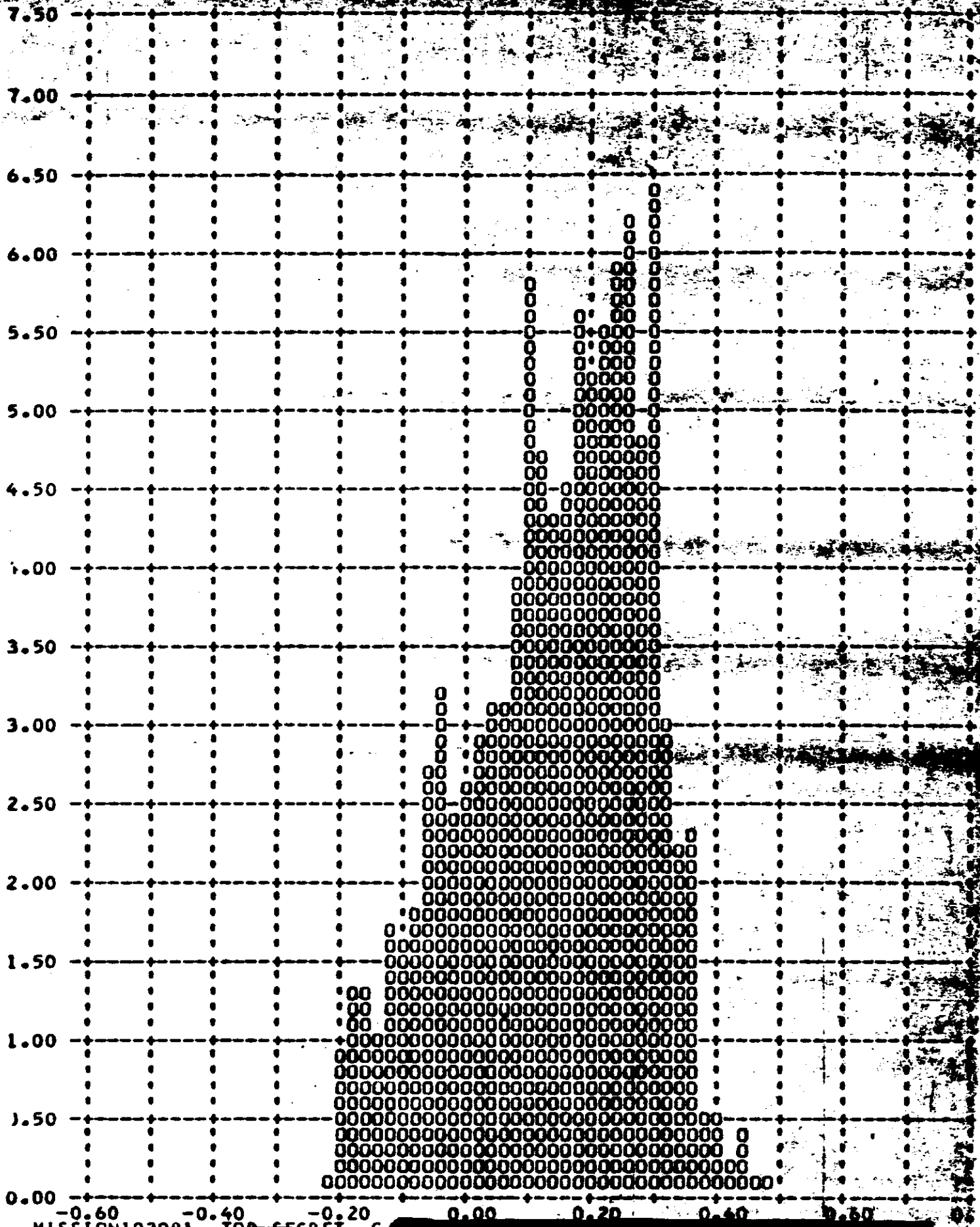


FIGURE 11-7

FRAMES 1-6 OF EACH OMITTED - 90 PERCENT

Y - ROLL ANGLE ERROR - DEGREES (X) VERSUS FREQUENCY - PERCENT (Y)

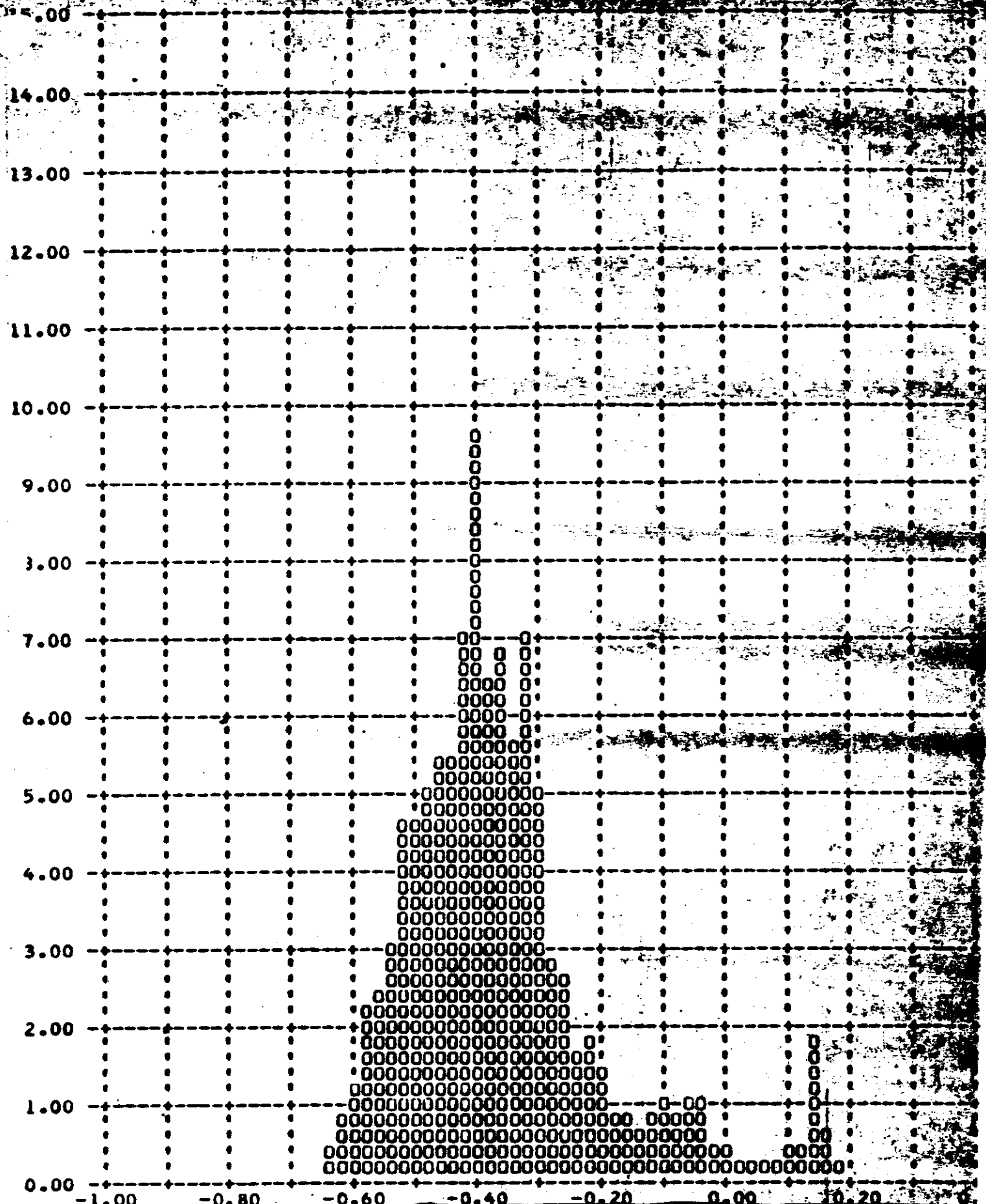


FIGURE 11.8

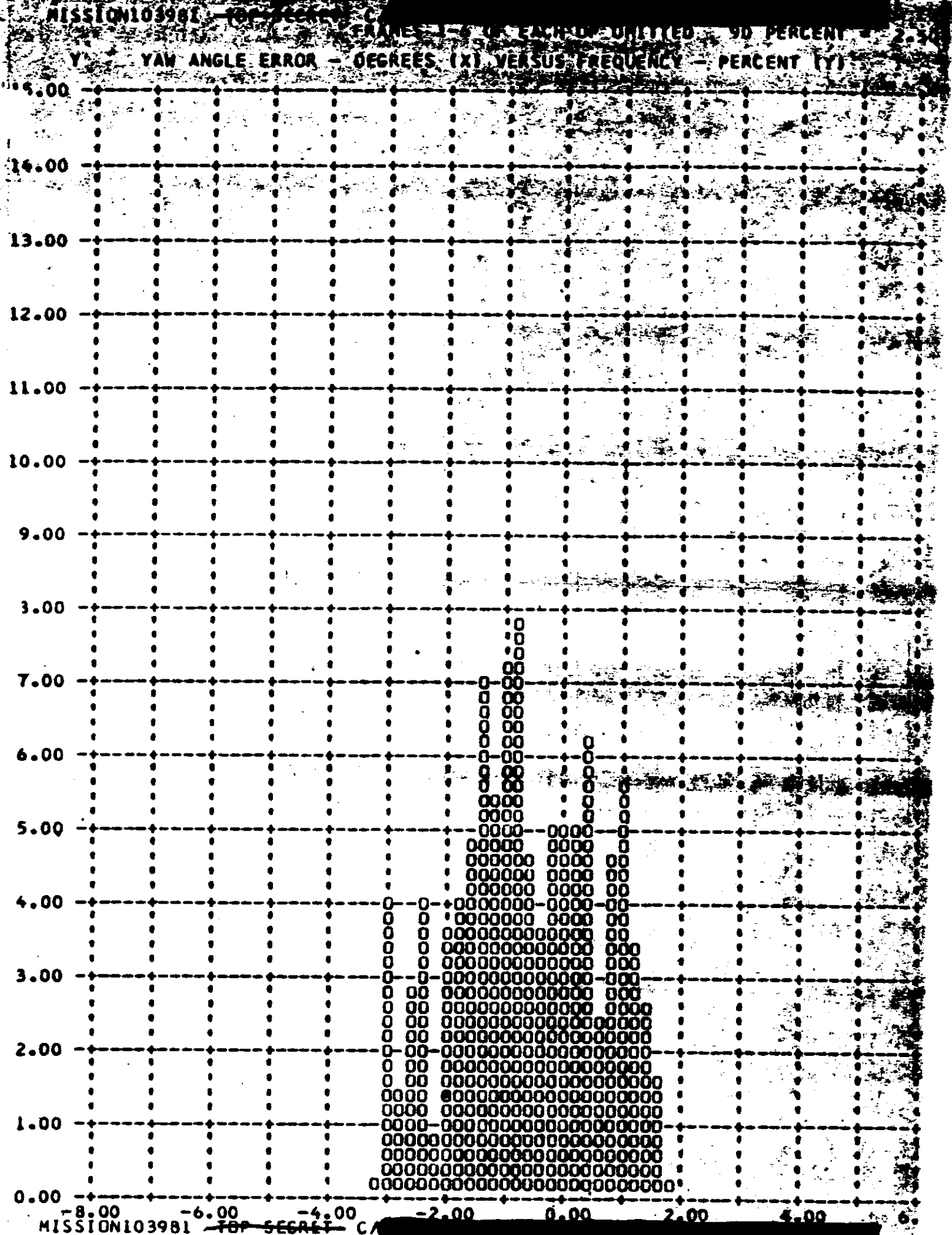

FRAMES 1-6 OF EACH 6 UNITED 90 PERCENT
Y - YAW ANGLE ERROR - DEGREES (X) VERSUS FREQUENCY - PERCENT (Y)
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-8.00
-6.00
-4.00
-2.00
0.00
2.00
4.00
6.

FIGURE 11-9

FRAMES 1-6 OF EACH OF UNITED - 90 PERCENT

Y PITCH RATE ERROR - DEG/HOUR (X) VERSUS FREQUENCY - PERCENT (Y)

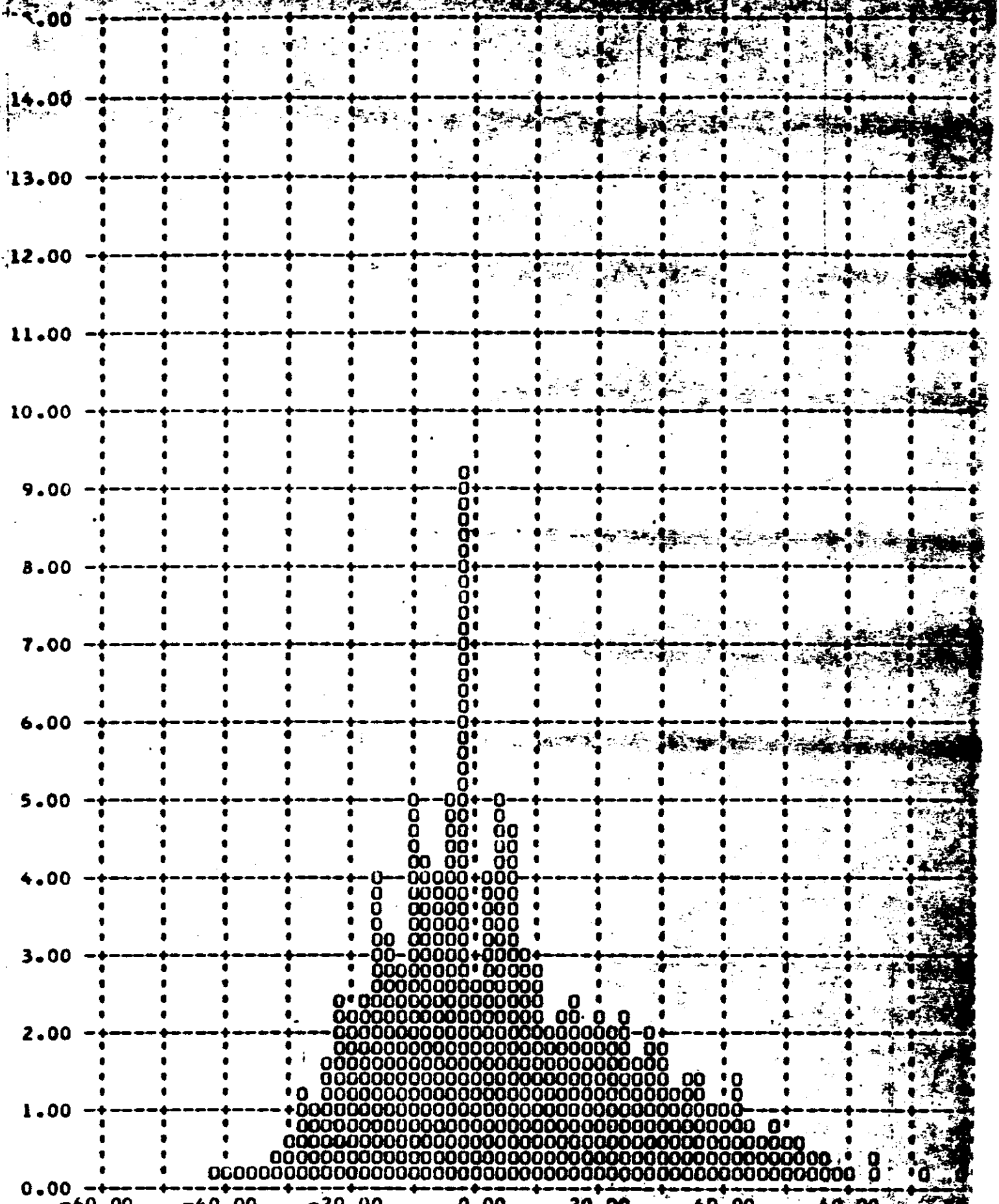


FIGURE 11-10

FRAMES 1-6 OF EACH OF UNRTTED = 90 PERCENT = 30.23

Y ROLL RATE ERROR - DEG/HOUR (X) VERSUS FREQUENCY - PERCENT (Y)

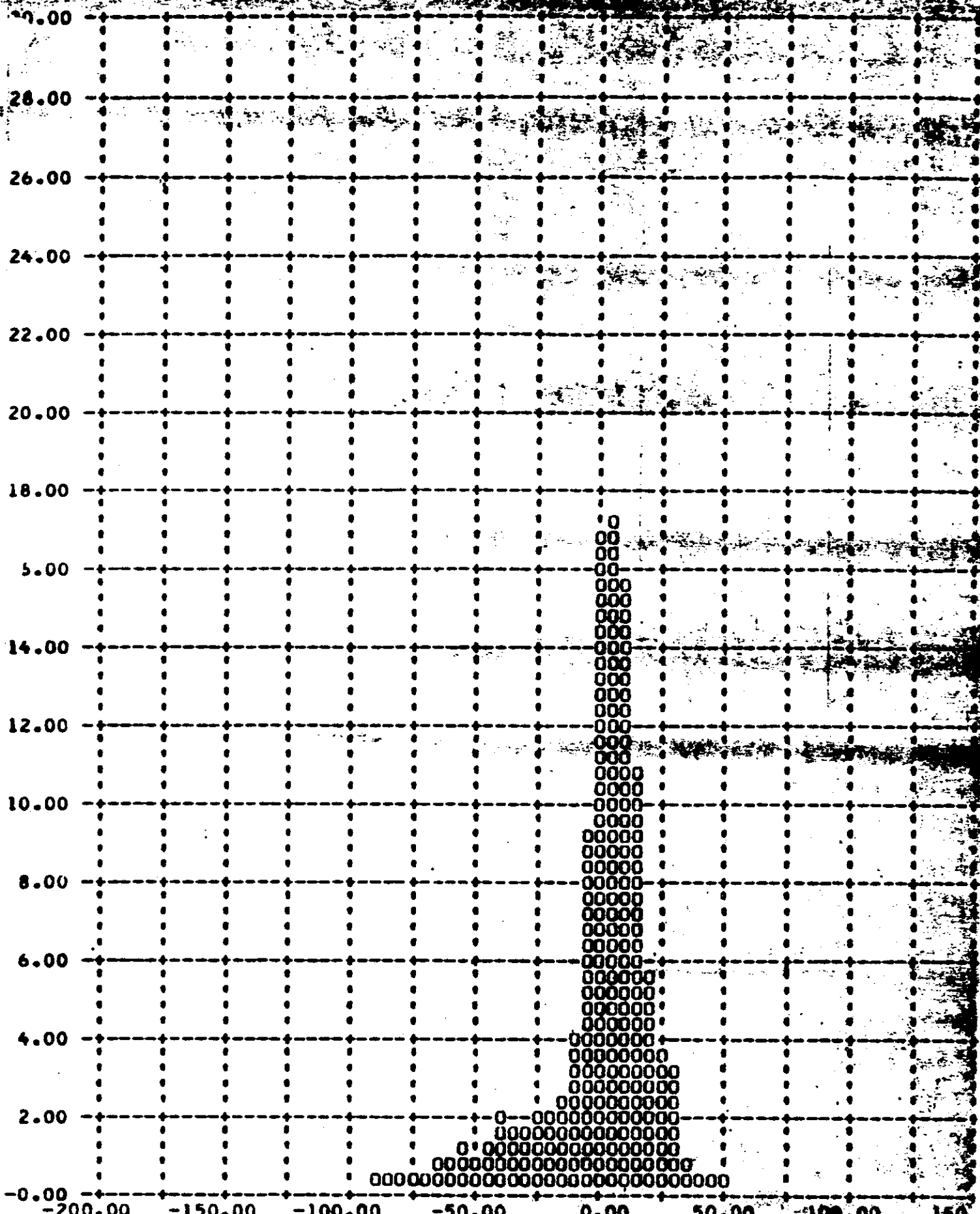
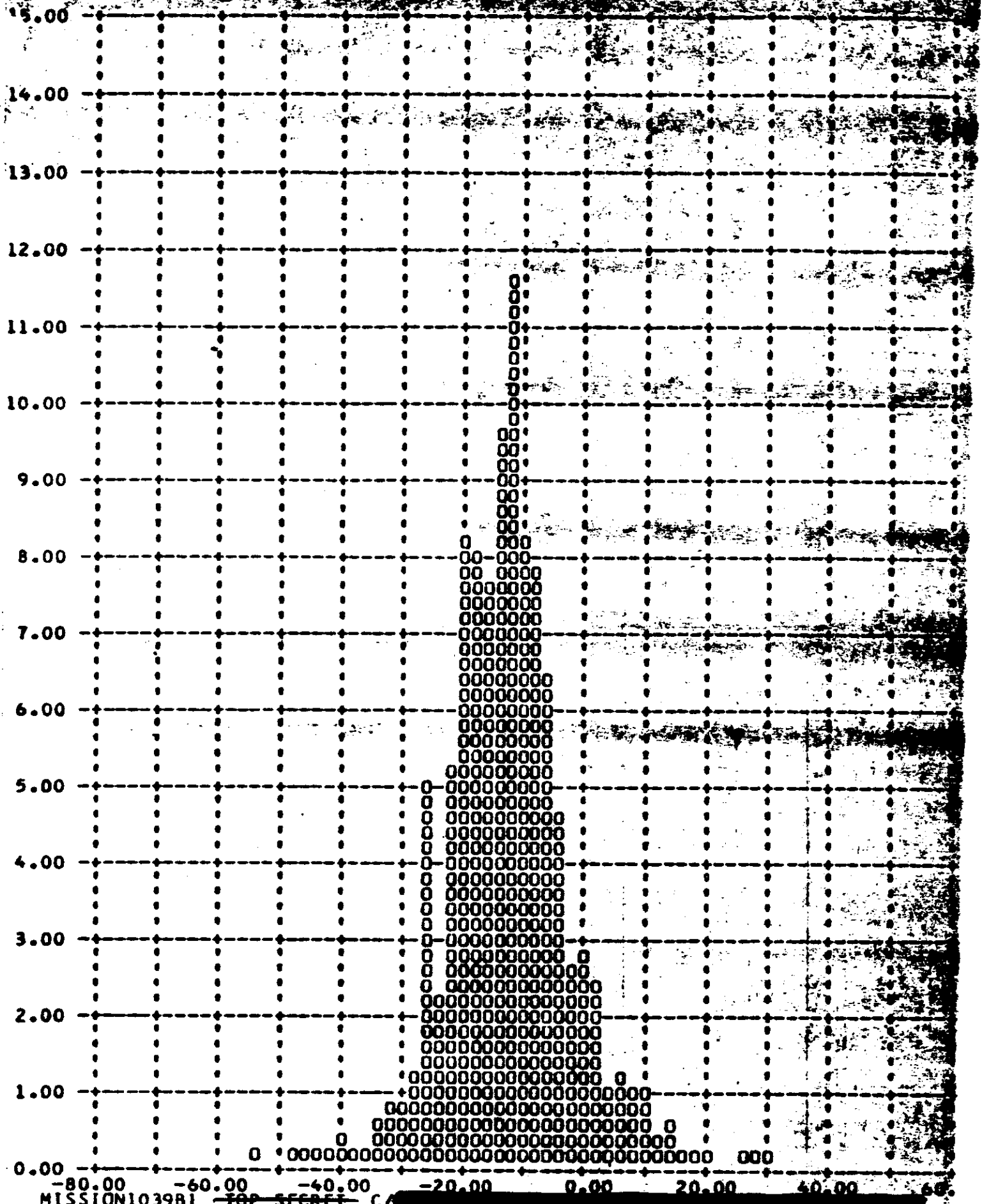


FIGURE 11 11

FRAMES 1-6 OF EACH [illegible] UNITTED . 90 PERCENT [illegible]

Y YAW RATE ERROR - DEG/HOUR (X) VERSUS FREQUENCY - PERCENT (Y)



[redacted]

SECTION 12

IMAGE SMEAR ANALYSIS

The frame correlation tape supplied to A/P by MPIC contains the binary time word of each frame of photography. A computer program has been assembled at A/P which calculates the exposure time of each frame and compares the camera cycle rate with the ephemeris to calculate the V/h mismatch. This data is combined with the vehicle attitude error and rate values of each frame and the crab error caused by earth rotation at the latitude of each frame. The program outputs the total along track and cross track IMC error and the limit of ground resolution that can be acquired by a camera regardless of focal length and system capabilities.

The computer rejects the first six frames of all operations as the large V/h error induced by camera start-up is not representative of the overall system operations. The frequency distribution of the V/h errors and resolution limits are computer plotted and are shown in Figures 12-1 through 12-16.

The summary table 12-1 presents the maximum V/h ratio errors and resolution limits that existed during 90% of the photographic operations and the total range of values during all operations that were computed.

MISSION 1039

V/h RATIO AND RESOLUTION LIMITS

VALUE	UNITS	CAMERA	MISSION 1039-1 90%	MISSION 1039-1 Range	MISSION 1039-2 90%	MISSION 1039-2 Range
V/h Ratio Error	%	FWD	5.08	-8.0 to + 6.5	4.59	-6.6 to + 3.0
		AFT	5.22	-8.0 to + 7.0	4.79	-6.8 to + 5.8
Along Track Resolution Limit	Feet	FWD	6.16	0.2 to 10.0	5.48	0.2 to 8.4
		AFT	4.81	0.2 to 8.4	4.57	0.2 to 7.0
Cross Track Resolution Limit	Feet	FWD	4.64	0.2 to 6.4	5.44	0.2 to 7.2
		AFT	3.15	0.2 to 5.2	3.84	0.2 to 4.8

TABLE 12-1

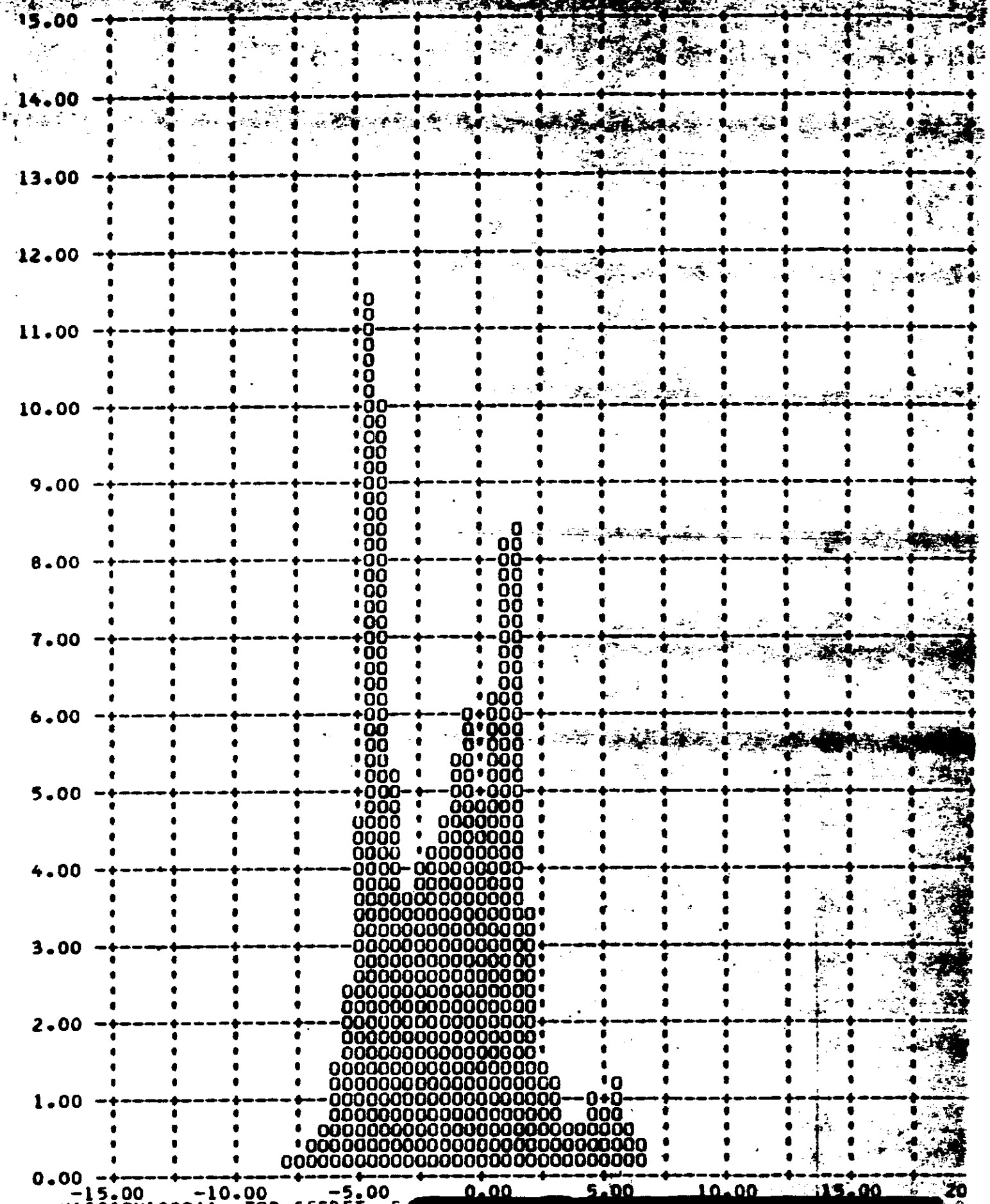
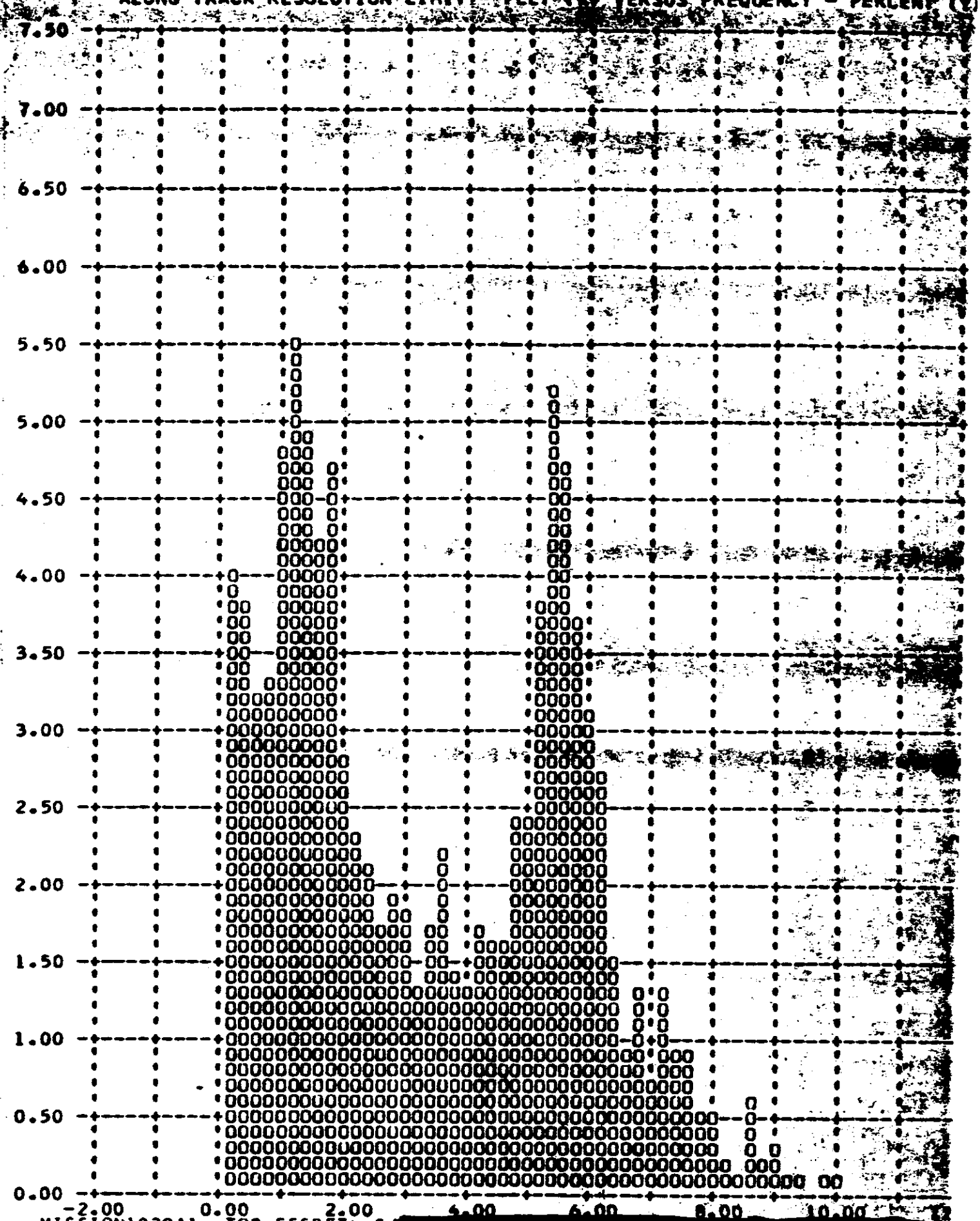

FRAMES 1-6 OF EACH 10 OMITTED - 90 PERCENT
Y Y/H RATIO ERROR - PERCENT (X) VERSUS FREQUENCY - PERCENT (Y)
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-15.00
-10.00
-5.00
0.00
5.00
10.00
15.00
20

FIGURE 12-1

FRAMES 1-6 OF EACH OF UNITYED = 90 PERCENT = [illegible]

Y ALONG TRACK RESOLUTION LIMIT - FEET (X) VERSUS FREQUENCY - PERCENT (Y)



FRAMES 1-8 OF EACH OR OMITTED = 90 PERCENT = A.[illegible]

Y = CROSS TRACK RESOLUTION LIMIT = FEET(X) VERSUS FREQUENCY = PERCENT (Y)

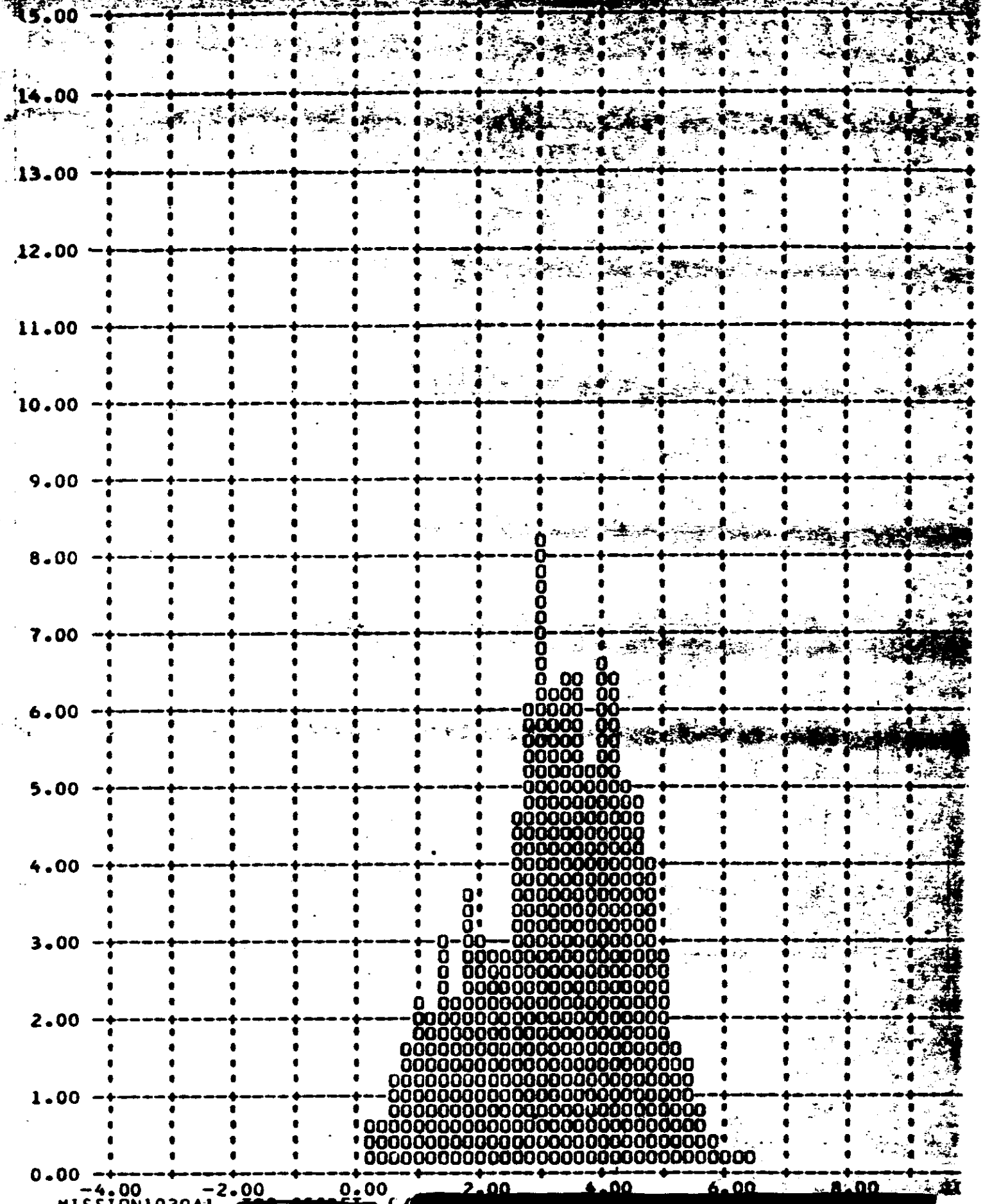


FIGURE 12-3

FRAMES 1-6 OF EACH SP DELETED = 90 PERCENT

Y IMC ERROR — PERCENT (X) VERSUS FREQUENCY — PERCENT (Y)

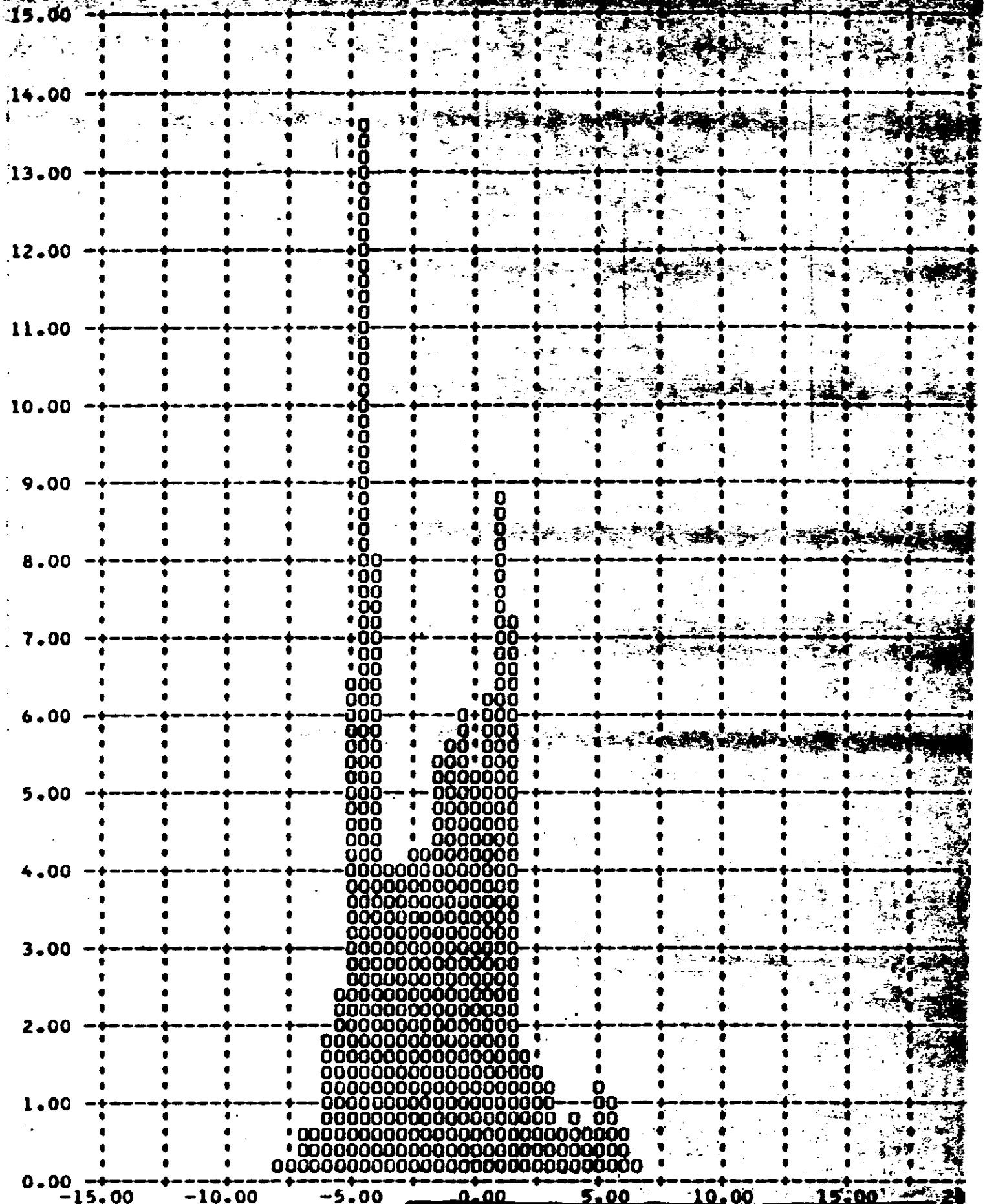
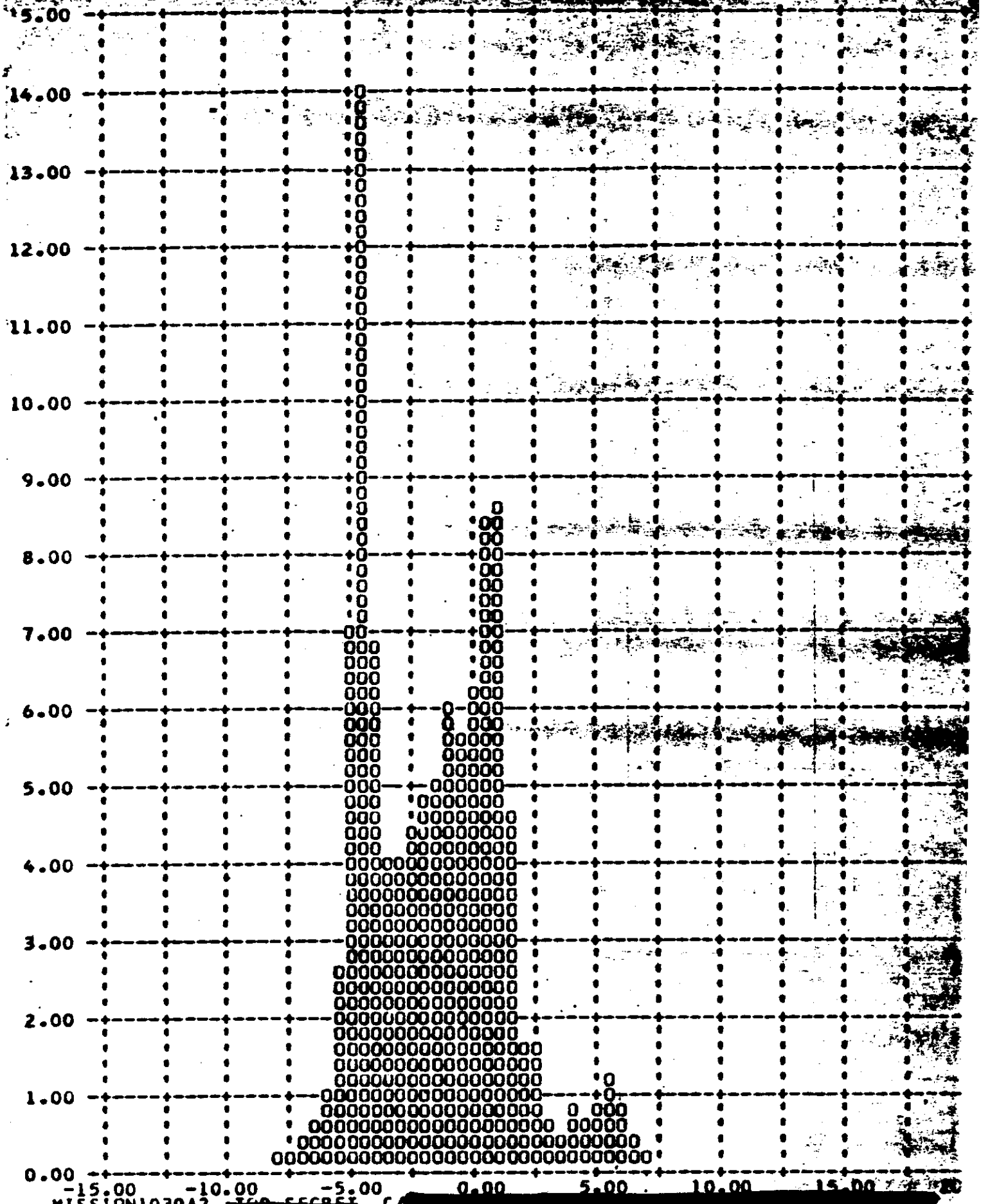


FIGURE 12-4

MISSION1039A2 ~~TOP SECRET~~ C[redacted]

FRAMES 1-6 OF EACH OF OMITTED 90 PERCENT = 5.22

Y V/H RATIO ERROR - PERCENT (X) VERSUS FREQUENCY - PERCENT (Y)



MISSION1039A2 ~~TOP SECRET~~ C[redacted]

FIGURE 12-5

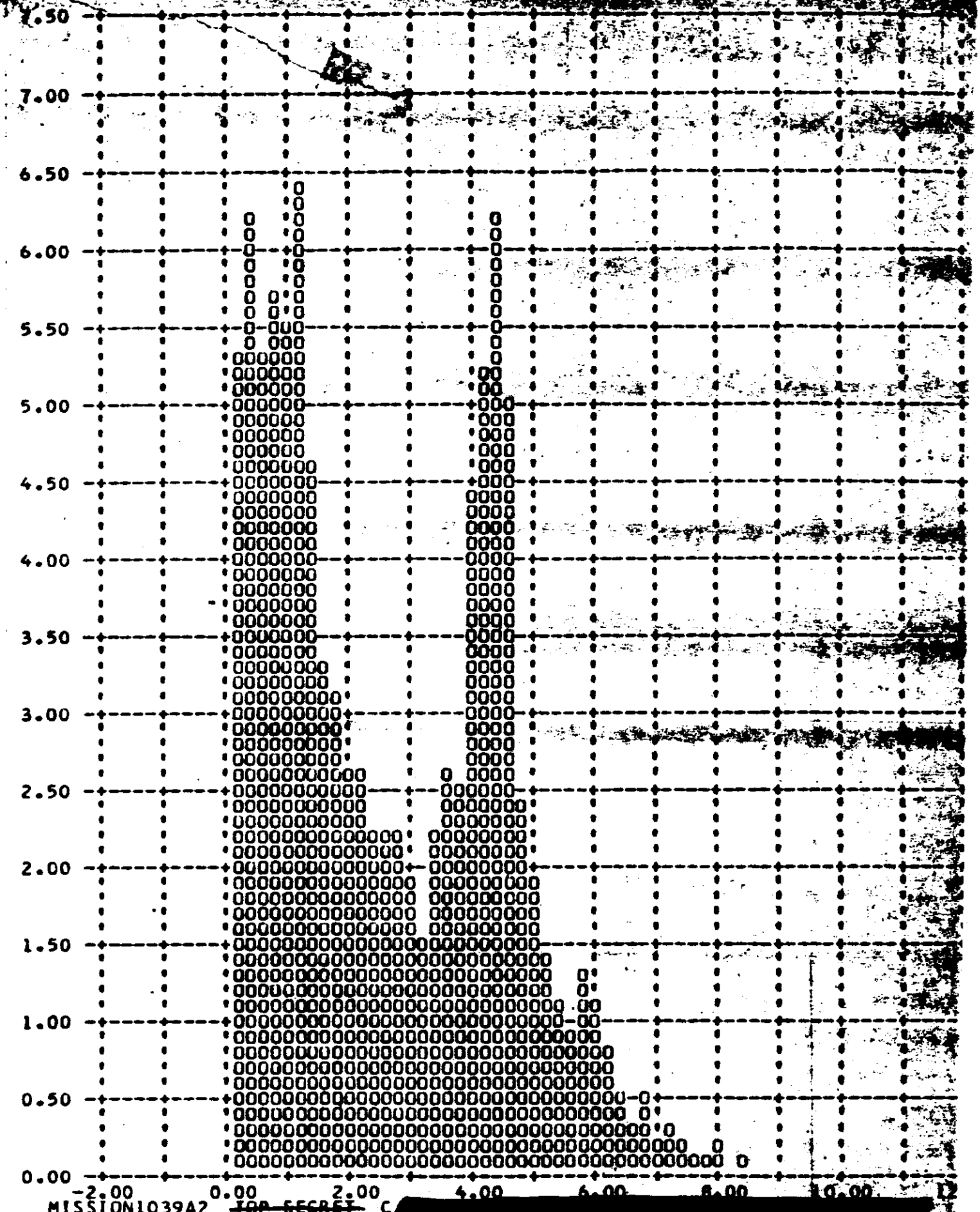

Y - ALONG TRACK RESOLUTION LIMIT - FEET (X) VERSUS FREQUENCY - PERCENT (Y)
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-2.00
0.00
2.00
4.00
6.00
8.00
10.00
12

FIGURE 12-6

FRAMES 1-6 OF EACH D[redacted] OMITTED 90 PERCENT = 3.1

Y CROSS TRACK RESOLUTION LIMIT - FEET (X) VERSUS FREQUENCY - PERCENT (Y)

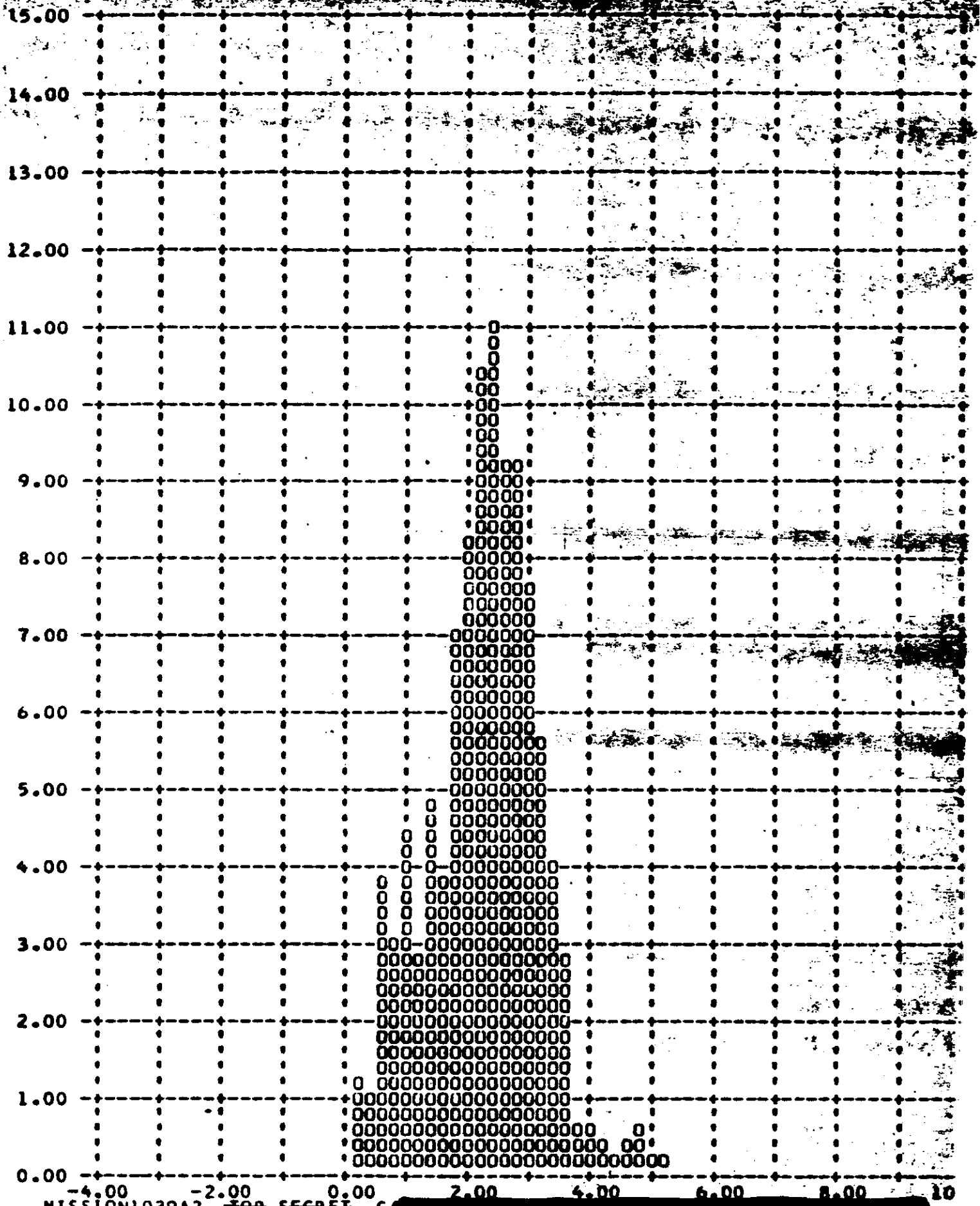


FIGURE 12-7

FRAMES (STOP EACH) OMITTED — 90 PERCENT

Y INC ERROR — PERCENT (X) VERSUS FREQUENCY — PERCENT (Y)

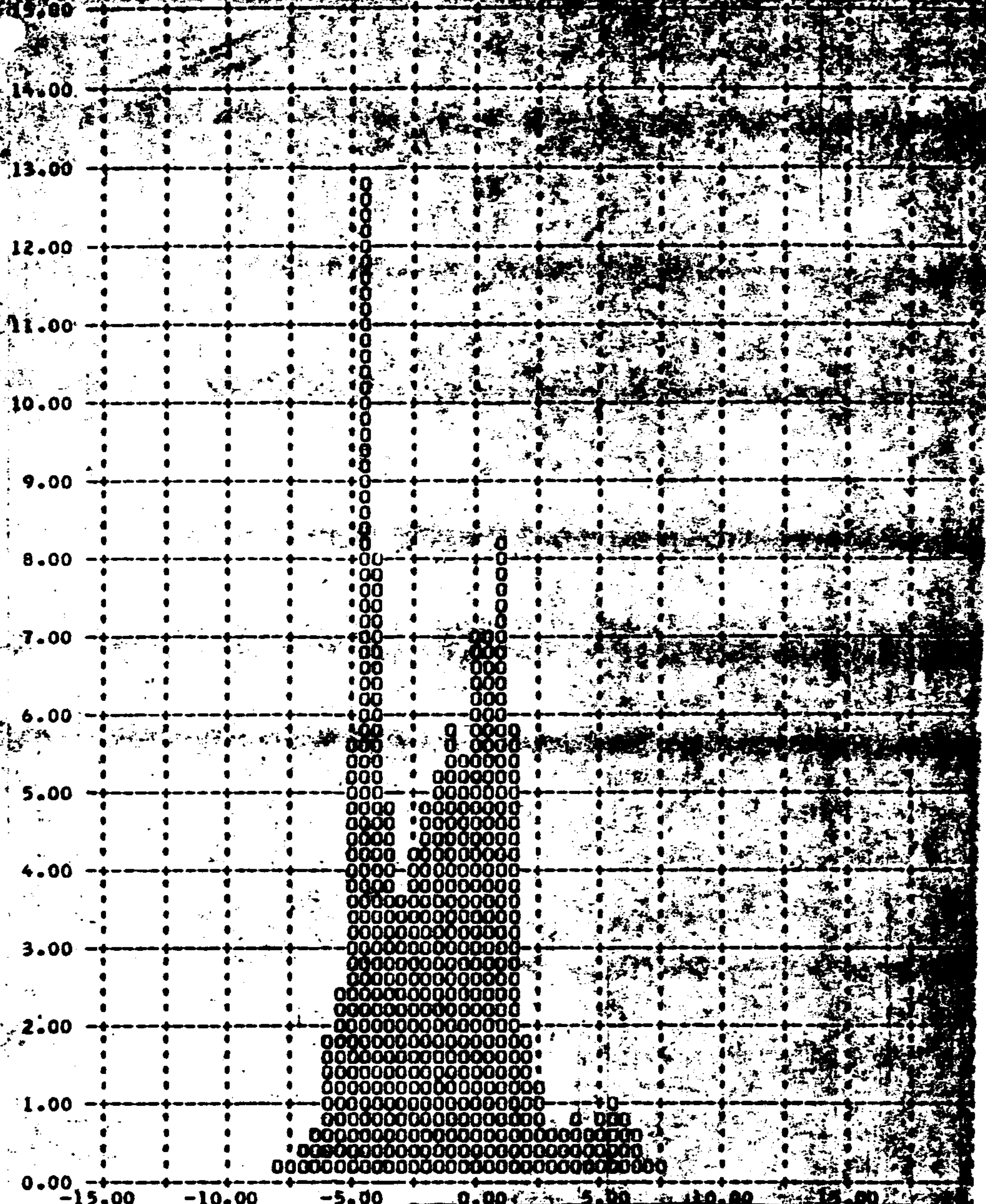
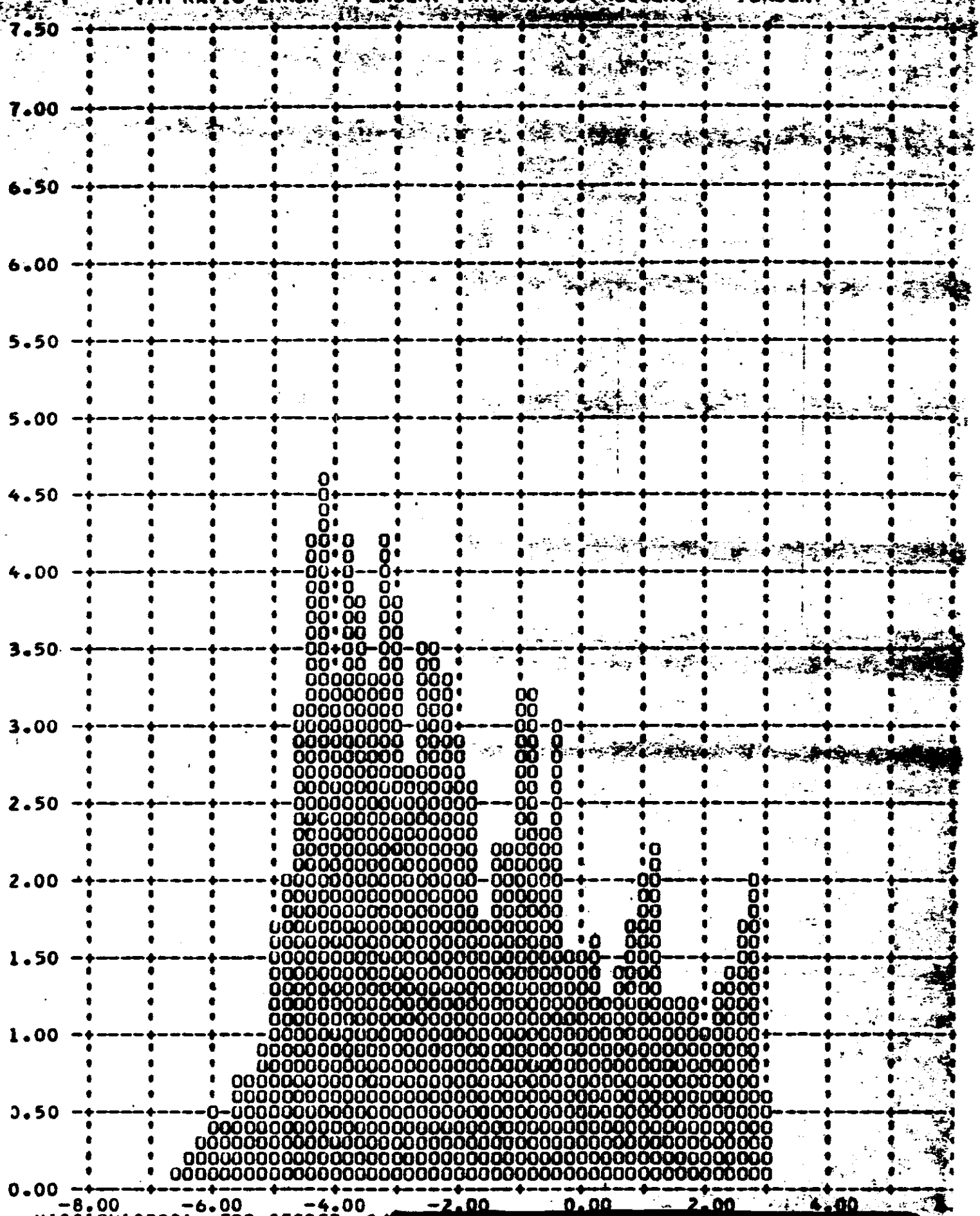


FIGURE 12-8

FRAMES 1-6 OF EACH OF OMITTED 90 PERCENT [illegible] 4.59



FRAMES 1-6 OF EACH OF OMITTED 90 PERCENT

Y ALONG TRACK RESOLUTION LIMIT - FEET (X) VERSUS FREQUENCY - PERCENT (Y)

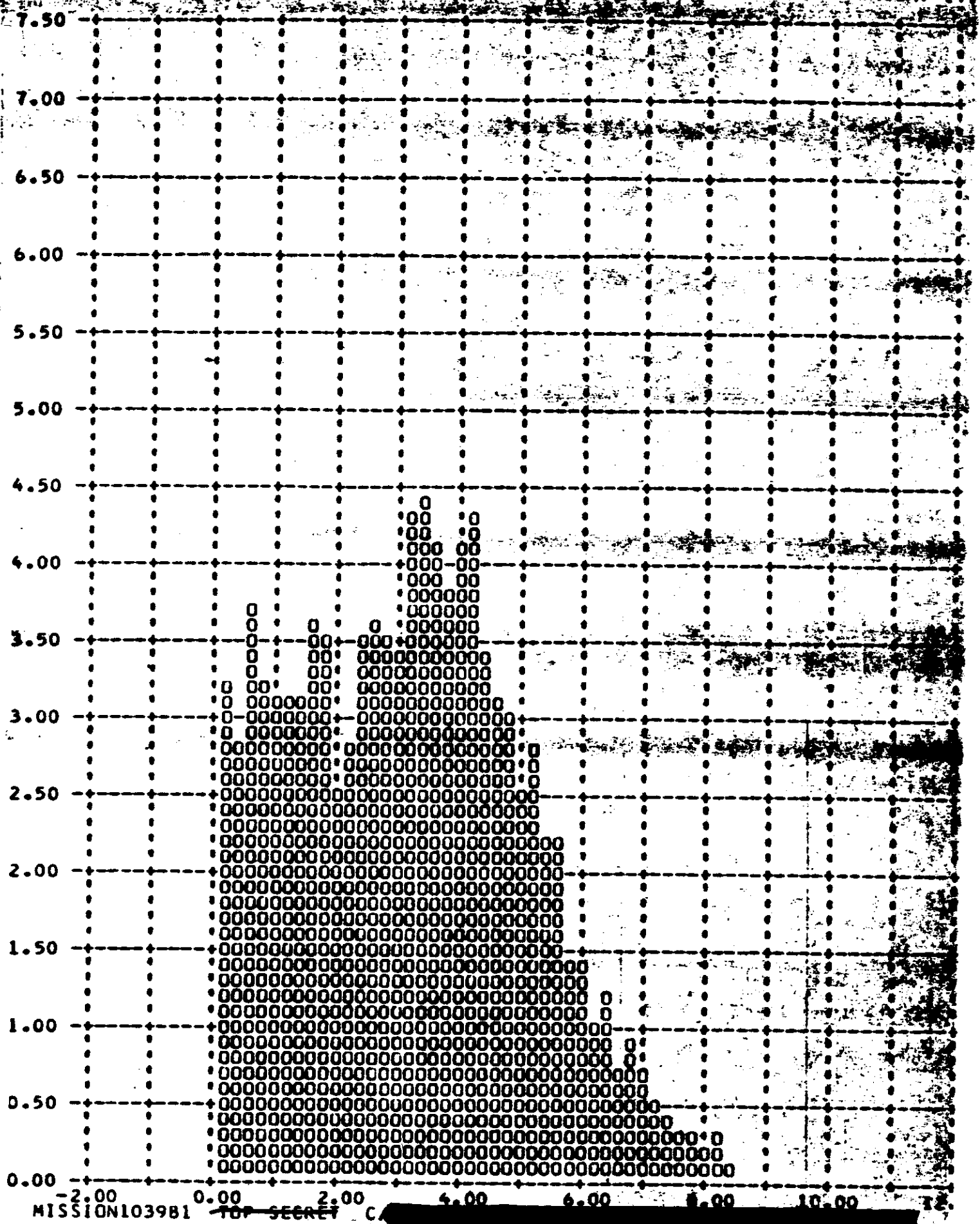


FIGURE 12-10

FRAMES 1-6 OF EACH OF OMITTED = 90 PERCENT = 5.4

Y CROSS TRACK RESOLUTION LIMIT - FEET (X) VERSUS FREQUENCY - PERCENT (Y)

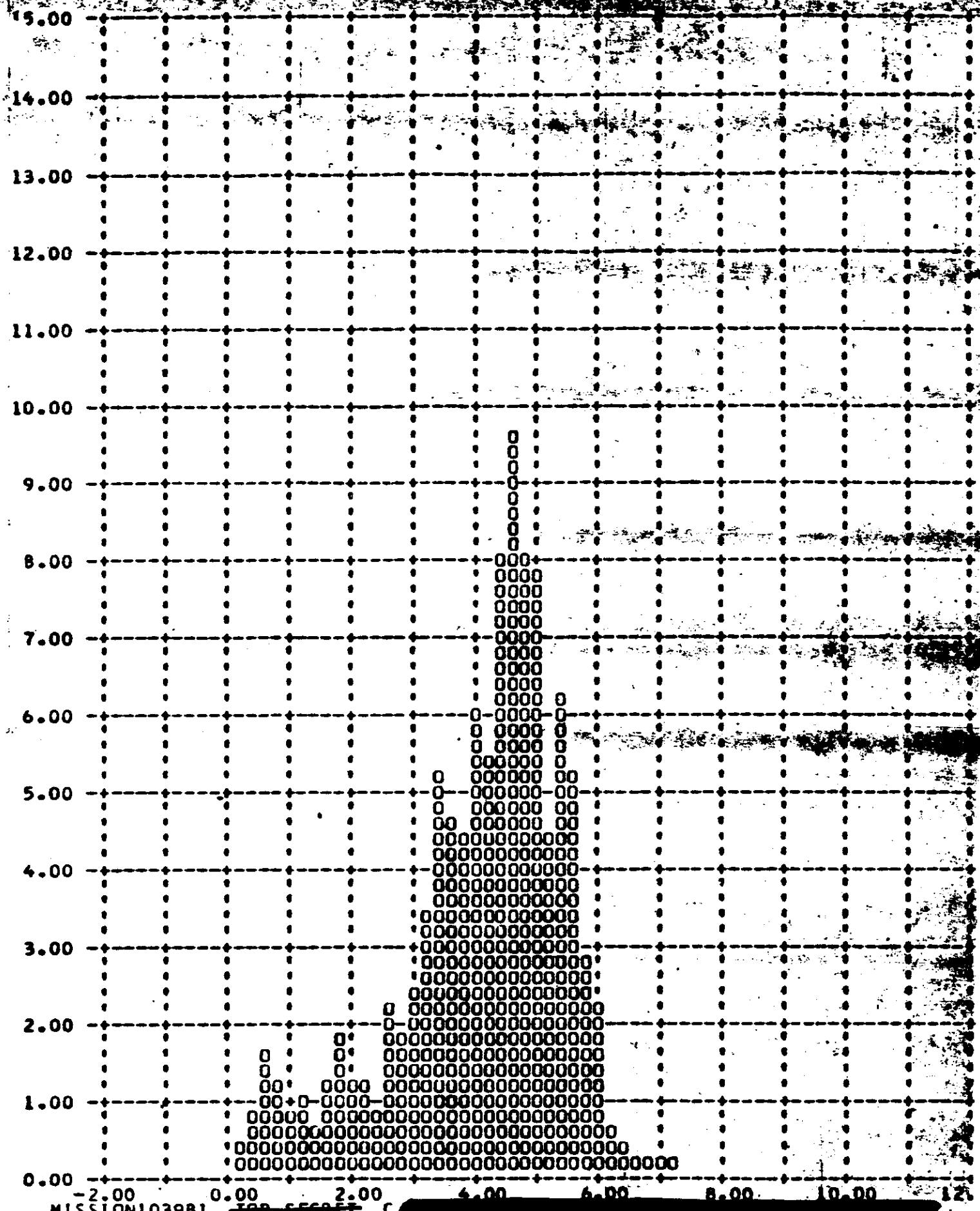
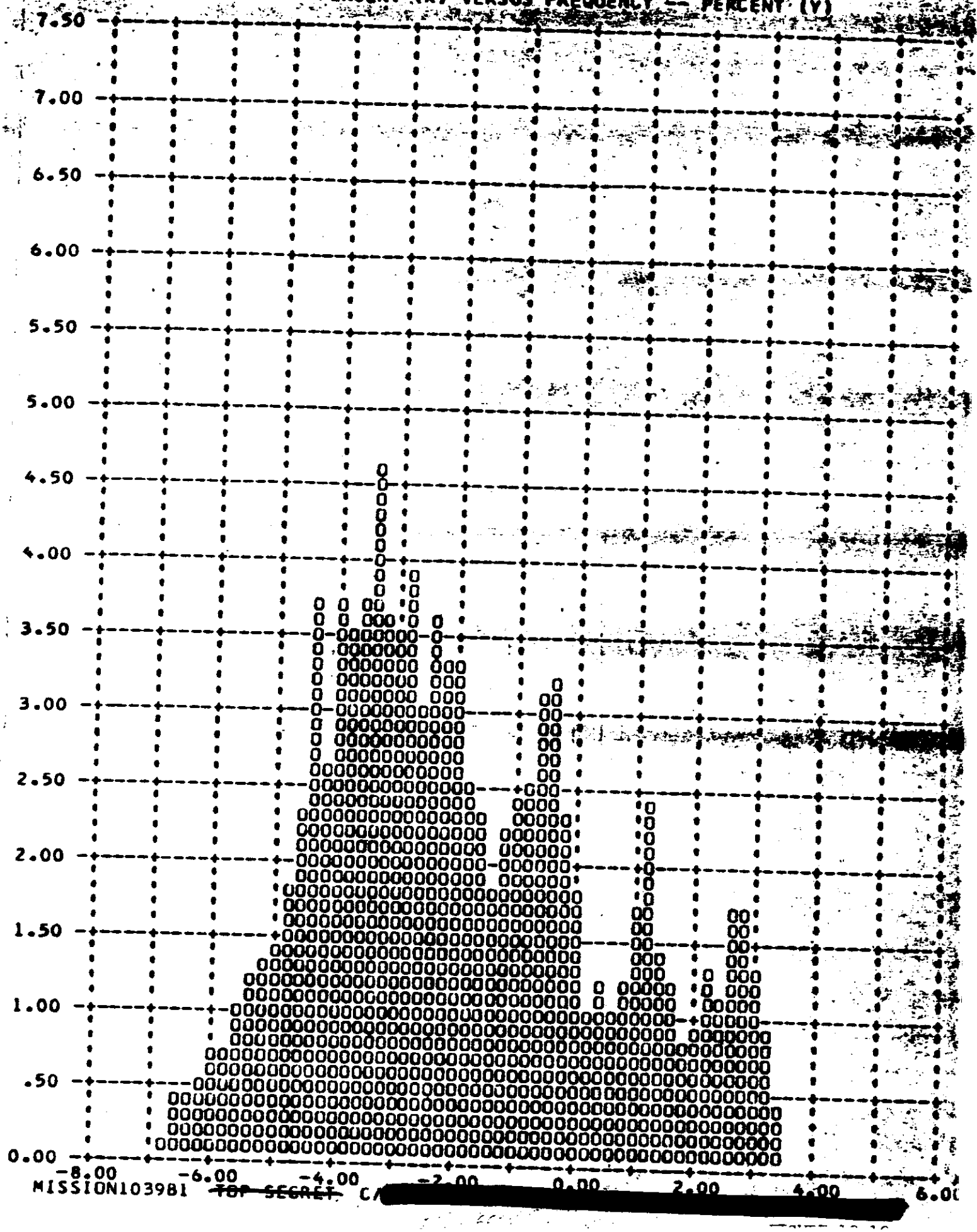


FIGURE 12-11

FRAMES 1-6 OF EACH UP UNTYED 90 PERCENT [illegible]



FRAMES 1-6 OF EACH OF UNITYED 90 PERCENT = 5.70

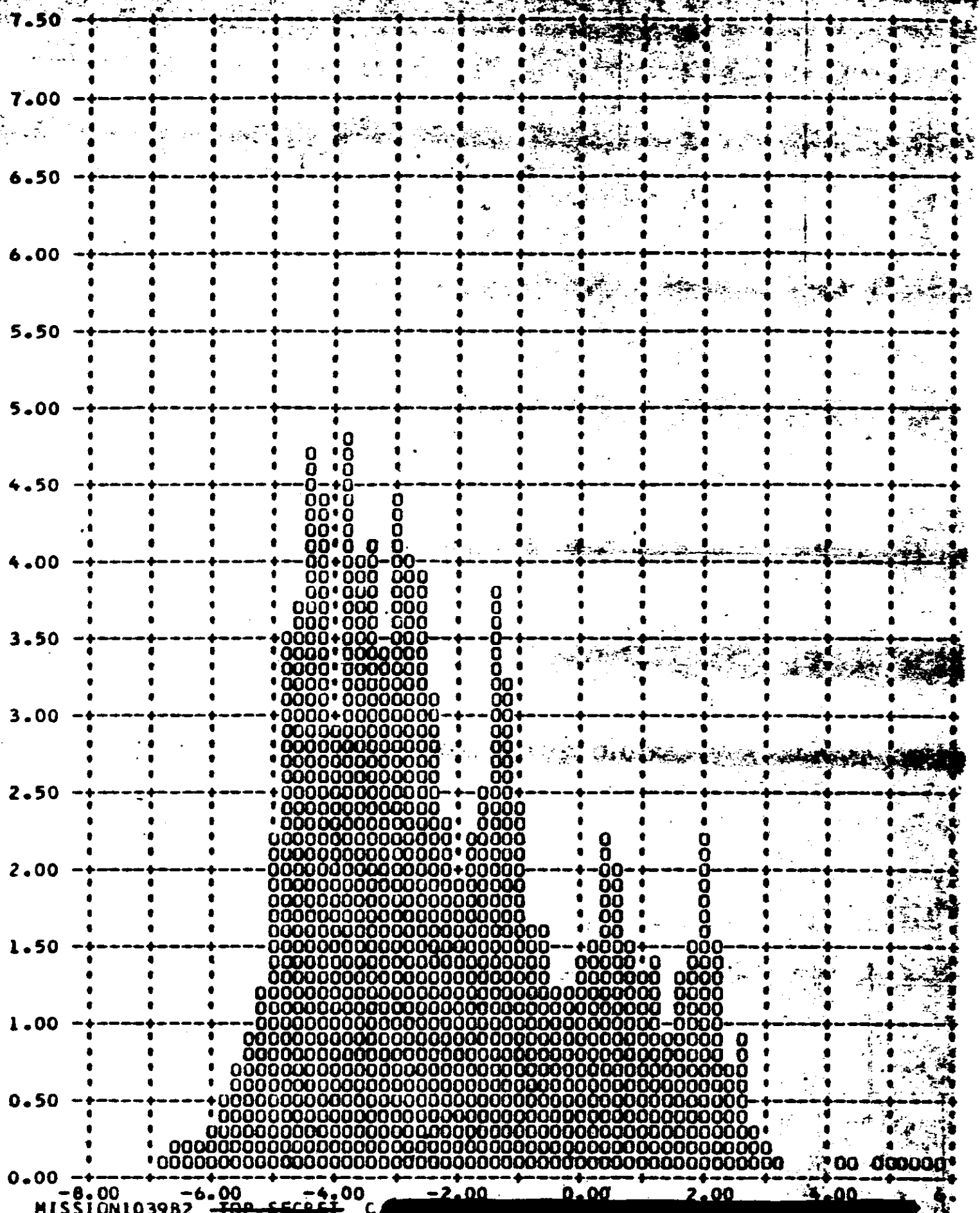


FIGURE 12-13

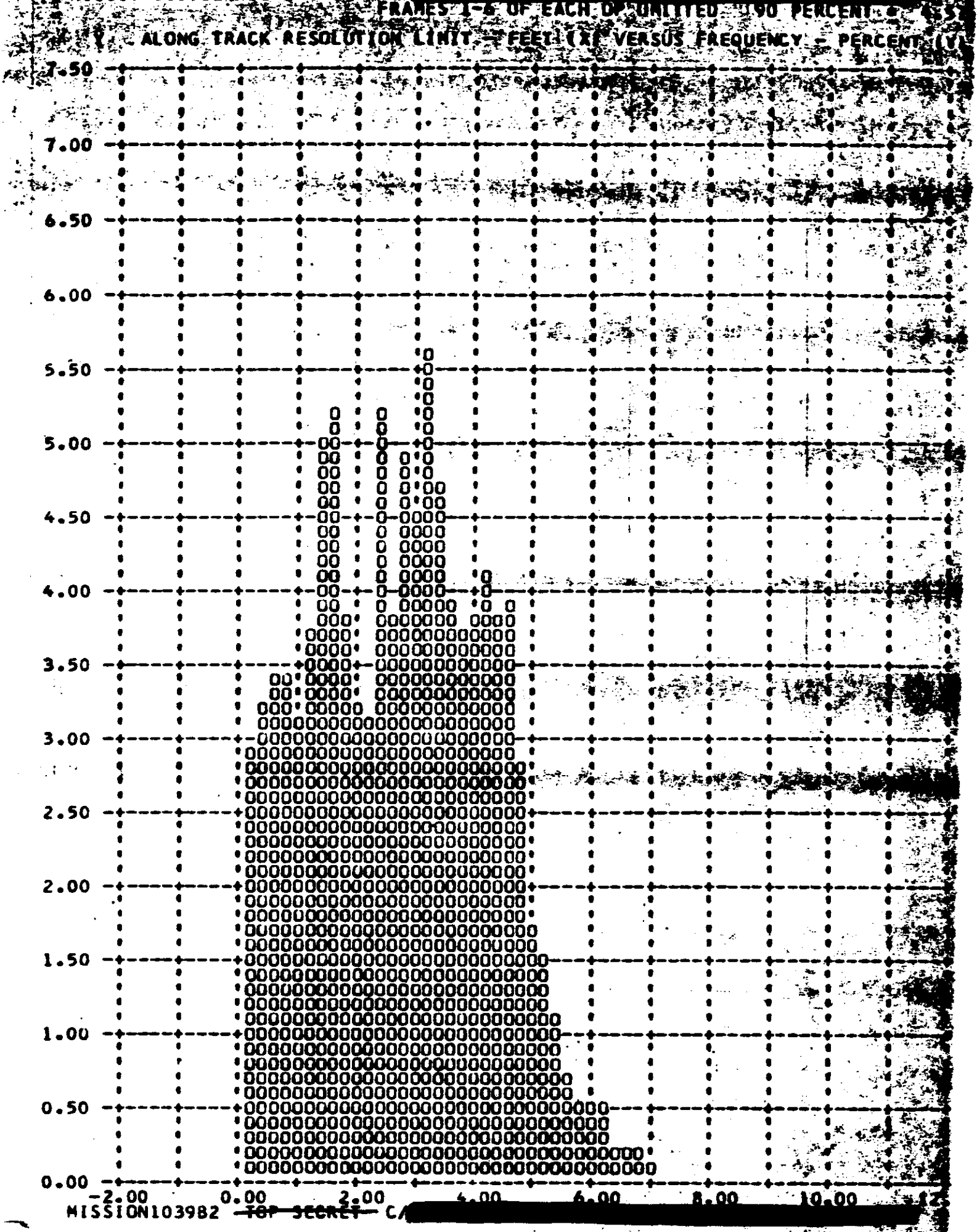

FRAMES 1-6 OF EACH OF UNITED 90 PERCENT
Y - ALONG TRACK RESOLUTION LIMIT - FEET (X) VERSUS FREQUENCY - PERCENT (Y)
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-2.00
0.00
2.00
4.00
6.00
8.00
10.00
MISSION103982 TOP SECRET C/

FIGURE 12-14

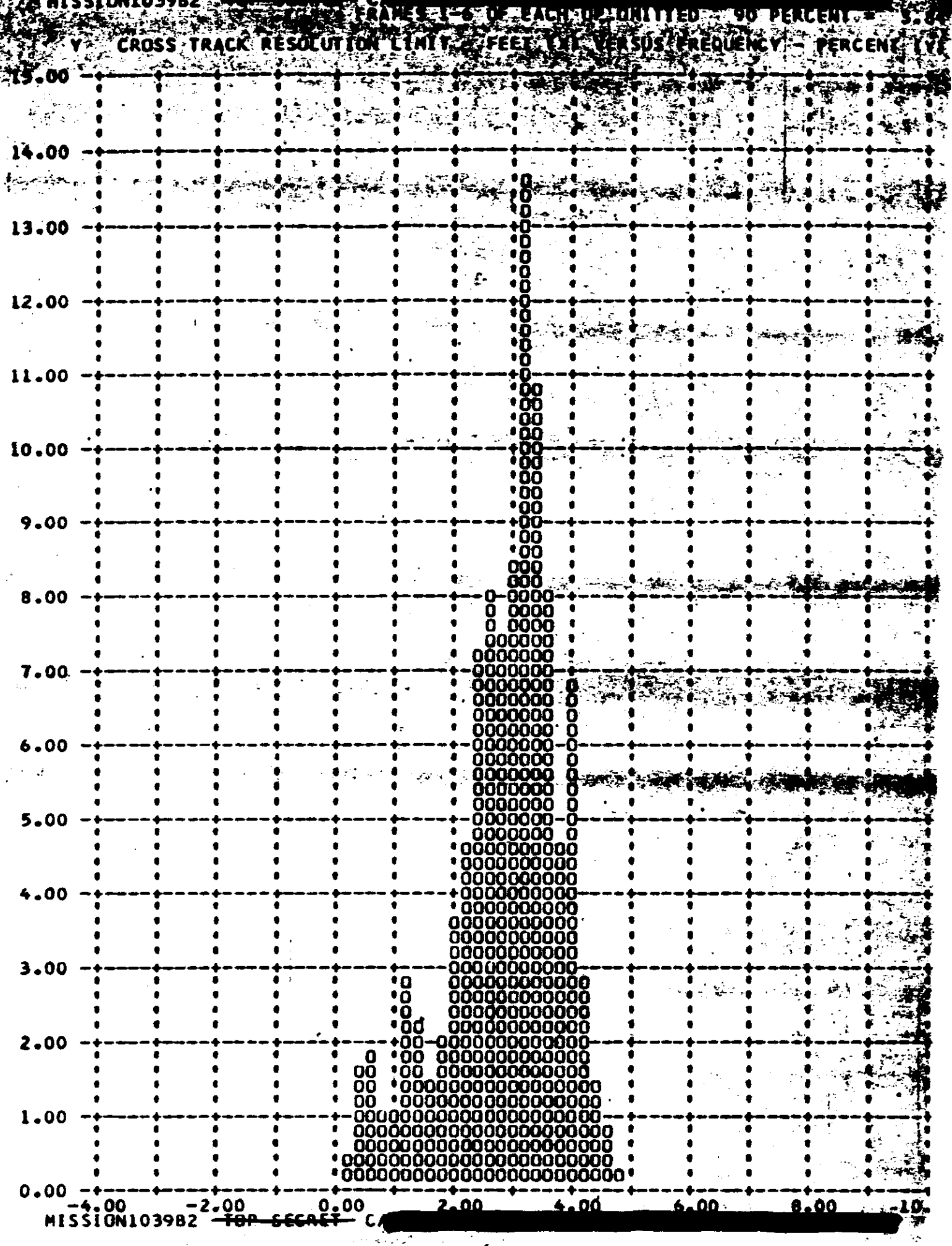

MISSION1039B2 FRAMES 1-6 OF EACH ID OMITTED 90 PERCENT = 5.0
Y CROSS TRACK RESOLUTION LIMIT, FEET (Y) VERSUS FREQUENCY - PERCENT (Y)
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-4.00
-2.00
0.00
2.00
4.00
6.00
8.00
10.
MISSION1039B2 TOP SECRET C

FIGURE 12-15

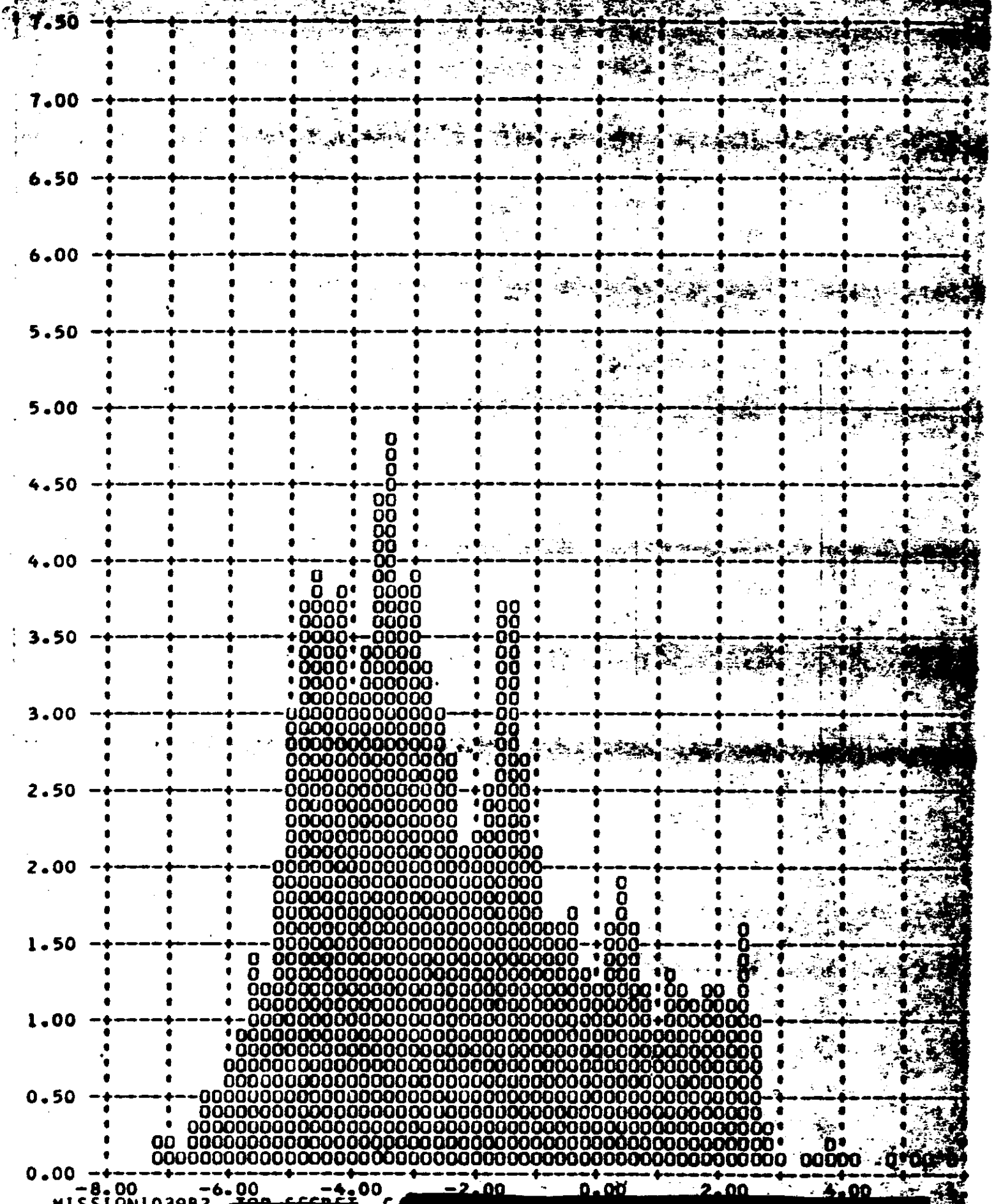

Y IMC ERROR -- PERCENT (X) VERSUS FREQUENCY -- PERCENT (Y)
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-8.00
-6.00
-4.00
-2.00
0.00
2.00
4.00

FIGURE 12-16

SECTION 13

RADIATION DOSIMETRY

Each recovery system flown on a Corona mission contains a sealed packet of Eastman Type 3401 and Royal X Pan emulsions to determine the total radiation received at the take-up cassette. Both film types have been irradiated by LMSC at various levels and the base plus fog densities recorded after controlled processing.

Following recovery the film dosimeter packets are removed at A/P and processed with a pre-flight sample of the same film type and sensitometric control film. The resulting base plus fog density measurement of the dosimeter strips is used to ascertain the total radiation level. The table below presents the base plus fog readings for the dosimeter strips and the radiation level equivalents.

	Mission 1039-1		Mission 1039-2	
Emulsion	B + F Density	Radiation	B + F Density	Radiation
Type 3401	0.17	0.3 R	0.20	0.7 R
Royal X Pan	0.23	0.3 R	0.26	0.55 R

These levels are below that which will degrade the photography.

SECTION 14

SYSTEM RELIABILITY

Reliability calculations for the payload are based on a sample beginning with M-7. Hence both the major part of the Mural Program and the "J" Program are covered in the calculation. For certain auxiliaries, i.e., the stellar-index camera and the horizon cameras, the sample size is changed to recognize incorporation of modified equipment or new designs where reliability was one of the principal reasons for the modification. However, for primary mission function, the sample size is consistent with reliability reporting for the vehicle.

The reliability estimates of this section deal exclusively with the payload. Failures to achieve orbit or vehicle induced failures are thereby excluded. Recoveries before a complete mission has been completed are considered as full missions providing that early termination was caused by reasons not connected with payload operation. Film quality is not considered in the reliability estimate calculation. Hence, only electrical and mechanical functioning are considered.

The reliability estimate is also divided into primary and secondary functions. The primary functions are operation of the panoramic cameras, main camera door operation, operation of the payload clock, and recovery operations. The secondary mission functions are horizon camera operation excluding catastrophic open shutter failure mode, auxiliary data recording, and stellar-index camera operation. A summary of estimated reliability is shown in Tables 14-1.

Panoramic Camera Reliability

Sample Size - 171 opportunities to operate.
One failure.
Assume - 3000 cycles per camera per mission.
Estimated Reliability - 99.0% at 50% confidence level.

Main Camera Door Reliability

Sample Size - 56 vehicles x 2 doors = 112 opportunities to operate.
Estimated Reliability = 99.4% at 50% confidence level.

Payload Command and Control

Sample Size - 9600 hours operation in sample
Two Failures
Estimated Reliability = 97.4% at 50% confidence level

[redacted]

Payload Clock Reliability

Sample Size = 9600 hours operation in sample
No failures
Estimated Reliability = 99.3% at 50% confidence level

Estimated Reliability of Payload Functioning on orbit = 97.5% at 50% confidence level

Recovery System Reliability

77 opportunities to recover
1 failure - improper separation due to water seal - cutter failure
Estimated Reliability = 97.8% at 50% confidence level

Stellar-Index Camera Reliability

Sample begins with J5
Sample size = 24,230
Four failures.
Estimated Reliability = 92.1% at 50% confidence level.

Horizon Camera Reliability

Sample begins with J5 - 97,500 cycles
Estimated Reliability of Single Camera = 98.9% at 50% confidence level
Estimated Reliability of Four Horizon Cameras at a Parallel Redundant System = 99.9% at 50% confidence level.

[redacted]

~~TOP SECRET~~ C [redacted]

ESTIMATED RELIABILITY SUMMARY

(AT 50% CONFIDENCE LEVEL)

MISSION NUMBER	PRIMARY FUNCTIONS: PANORAMIC CAMERA (Sample / Failures / Reliability)	PANORAMIC CAMERA DOORS (Sample / Failures / Reliability)	COMMAND & CONTROL SYSTEM (Sample / Failures / Reliability)	PAYLOAD CLOCK (Sample / Failures / Reliability)	ON-ORBIT FUNCTIONS (Reliability)	RECOVERY SYSTEM (Sample / Failures / Reliability)	SECONDARY FUNCTIONS: STELLAR - INDEX CAMERAS (Sample / Failures / Reliability)	HORIZON CAMERAS (Sample / Failures / Reliability)
9058 TO 1008	60 / 1 / 97.3	52 / 0 / 98.6	3124 / 0 / 98.0	3124 / 0 / 98.0	96.1	18 / 1 / 95.7	3400 / 3 / 98.1	18,000 / 0 / [illegible]
1009	64 / 1 / 97.4	54 / 0 / 98.7	3216 / 0 / 98.0	3216 / 0 / 98.0	96.2	20 / 1 / 94.8	4250 / 3 / 98.3	18,000 / 0 / [illegible]
1010	68 / 1 / 97.6	56 / 0 / 98.8	3432 / 0 / 98.1	3432 / 0 / 98.1	96.4	22 / 1 / 92.8	5100 / 3 / 73.7	18,000 / 0 / 94.4
1011	72 / 1 / 97.7	58 / 0 / 98.9	3600 / 0 / 98.1	3600 / 0 / 98.1	96.6	24 / 1 / 95.0	5865 / 0 / 94.7	21,000 / 0 / [illegible]
1012	76 / 1 / 97.8	60 / 0 / 98.9	3720 / 0 / 98.2	3720 / 0 / 98.2	96.9	26 / 1 / [illegible]	6868 / 6 / [illegible]	24,000 / 0 / [illegible]
1013	78 / 1 / 97.8	62 / 0 / 99.0	3840 / 1 / [illegible]	3840 / 0 / [illegible]	96.9	28 / [illegible] / [illegible]	5900 / [illegible] / [illegible]	[illegible]
1014	82 / 1 / 97.9	64 / 0 / [illegible]	[illegible] / 1 / [illegible]	[illegible] / 0 / [illegible]	96.1	30 / [illegible] / [illegible]	6375 / [illegible] / [illegible]	[illegible]
1015	86 / 1 / [illegible]	66 / 0 / [illegible]	[illegible]	[illegible] / 0 / [illegible]	96.1	32 / [illegible] / [illegible]	[illegible]	[illegible]
1016	90 / 1 / 98.1	68 / 0 / [illegible]	[illegible]	[illegible] / 0 / [illegible]	96.4	34 / 1 / [illegible]	[illegible]	[illegible]
1017	94 / [illegible] / [illegible]	70 / [illegible] / [illegible]	[illegible]	4700 / [illegible] / [illegible]	97.0	36 / [illegible] / [illegible]	[illegible]	[illegible]
1018	98 / 1 / [illegible]	72 / 0 / [illegible]	[illegible]	[illegible] / 0 / [illegible]	96.7	38 / [illegible] / [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	72 / [illegible] / [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[redacted]

ESTIMATED RELIABILITY SUMMARY

(AT 50% CONFIDENCE LEVEL)

MISSION NUMBER	PRIMARY FUNCTIONS																SECONDARY FUNCTIONS					
	PANORAMIC CAMERA			PANORAMIC CAMERA DOORS			COMMAND & CONTROL SYSTEM			PAYLOAD CLOCK			ON-ORBIT FUNCTIONS	RECOVERY SYSTEM			STELLAR - INDEX CAMERAS			HORIZON CAMERAS		
	SAMPLE	FAILURES	RELIABILITY	SAMPLE	FAILURES	RELIABILITY	SAMPLE	FAILURES	RELIABILITY	SAMPLE	FAILURES	RELIABILITY	RELIABILITY	SAMPLE	FAILURES	RELIABILITY	SAMPLE	FAILURES	RELIABILITY	SAMPLE	FAILURES	RELIABILITY
1020	108	1	98.5	78	0	99.1	5544	1	97.1	5544	0	98.9	96.9	43	1	96.1	10,080	2	89.9	46,000	[illegible]	[illegible]
1021	104	1	98.5	78	0	99.1	5376	1	97.0	5376	0	98.8	96.9	41	1	96.0	9830	2	89.1	[illegible]	[illegible]	[illegible]
1022	112	1	98.5	80	0	99.2	5784	1	97.3	5784	0	98.9	96.9	45	1	96.3	11,560	2	90.7	81,000	[illegible]	[illegible]
1023	114	1	98.6	82	0	99.2	6000	2	95.6	6000	0	98.9	96.8	47	1	96.5	12,190	2	[illegible]	84,000	[illegible]	[illegible]
1024	118	1	98.6	84	0	99.2	6240	2	96.0	6240	0	98.9	96.3	49	1	96.6	13,040	2	91.6	[illegible]	[illegible]	[illegible]
1025	122	1	98.6	86	0	99.2	6480	2	96.1	6480	0	99.0	96.4	51	1	96.7	13,880	[illegible]	92.[illegible]	90,000	[illegible]	[illegible]
1026	126	1	98.7	88	0	99.2	6720	2	96.3	6720	0	99.0	96.6	53	1	96.8	14,740	2	92.6	63,000	[illegible]	[illegible]
1027	128	1	98.7	90	0	99.2	6744	2	96.3	6744	0	99.0	96.5	55	1	97.0	15,168	3	90.0	64,800	[illegible]	[illegible]
1028	132	1	98.7	92	0	99.2	6960	2	96.4	6960	0	99.0	96.7	57	1	97.1	16,015	3	90.7	67,600	[illegible]	[illegible]
1029	136	[illegible]	98.8	[illegible]	0	99.3	[illegible]	[illegible]	[illegible]	7200	[illegible]	99.1	96.8	59	[illegible]	97.1	16,560	[illegible]	90.7	[illegible]	[illegible]	[illegible]
[illegible]	140	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7440	[illegible]	99.1	96.9	61	[illegible]	97.2	17,440	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

~~TOP SECRET~~ [redacted]

ESTIMATED RELIABILITY SUMMARY

(AT 50% CONFIDENCE LEVEL)

MISSION NUMBER	PRIMARY FUNCTIONS						SECONDARY FUNCTIONS	
	PANORAMIC CAMERA	PANORAMIC CAMERA DOORS	COMMAND & CONTROL SYSTEM	PAYLOAD CLOCK	ON-ORBIT FUNCTIONS	RECOVERY SYSTEM	STELLAR-INDEX CAMERAS	HORIZON CAMERAS
	SAMPLE / FAILURES / RELIABILITY	SAMPLE / FAILURES / RELIABILITY	SAMPLE / FAILURES / RELIABILITY	SAMPLE / FAILURES / RELIABILITY	RELIABILITY	SAMPLE / FAILURES / RELIABILITY	SAMPLE / FAILURES / RELIABILITY	SAMPLE / FAILURES / RELIABILITY
1033	147 / 1 / 98.9	100 / 0 / 99.3	7968 / 2 / 96.8	7968 / 0 / 99.2	97.1	66 / 1 / 97.4	19,130 / 4 / 90.2	79,500 / 0 / 98.9
1034	161 / 1 / 98.9	102 / 0 / 99.3	8208 / 2 / 96.9	8208 / 0 / 99.2	97.2	67 / 1 / 97.8	19,980 / 4 / 90.8	82,800 / 0 / 98.9
1035	159 / 1 / 98.0	106 / 0 / 99.4	8760 / 2 / 97.1	8760 / 0 / 99.2	97.4	71 / 1 / 97.8	21,880 / 4 / 91.3	88,200 / 0 / 98.9
1036	155 / 1 / 98.9	104 / 0 / 99.3	8520 / 2 / 97.0	8520 / 0 / 99.2	97.3	69 / 1 / 97.6	20,830 / 4 / 90.9	86,400 / 0 / 98.9
1037	163 / 1 / 99.0	109 / 0 / 99.4	9048 / 2 / 97.2	9048 / 0 / 99.3	97.5	73 / 1 / 97.7	22,230 / 4 / 91.4	91,800 / 0 / 98.9
1038	167 / 1 / 99.0	110 / 0 / 99.4	9336 / 2 / 97.3	9336 / 0 / 99.3	97.6	75 / 1 / 97.8	22,980 / 4 / 91.6	94,800 / 0 / 98.9
1039	171 / 1 / 99.0	112 / 0 / 99.4	9600 / 2 / 97.4	9600 / 0 / 99.3	97.6	77 / 1 / 97.8	24,230 / 4 / 92.1	97,800 / 0 / 98.9

[redacted]

SECTION 15

SUMMARY DATA

The comparison of the operating parameters and the performance achieved by previous missions has been difficult due to the large volume of data that results from each mission. Some of the pertinent characteristics from prior missions have been summarized in Tables 15-1 through 15-3.

The summary data was started with Mission 1004 as the J-05 camera system was the first to incorporate the major modifications of the titanium drum and scan arm, four roller scan head and Corona J capabilities. Only those missions that culminated in the recovery of some photography have been listed, therefore Missions 1003, 1005, and 1032 are deleted.

MISSION SUMMARY

Mission Number	[illegible] Number	[illegible] Number	Launch Date	Launch Time	Orbit Inclination (°)	[illegible] (NM)	[illegible] (NM)	Recovery Pass	Master Camera: Camera Number	Master Camera: Filter	Master Camera: Filter Type	Slave Camera: Camera Number	Slave Camera: Filter	Slave Camera: Filter Type	Stellar/Index Camera Numbers
1004	J-03	1174	2/15/64	2136 Z	74.9	99.9	29.0	48/115	124	0.250	W-21	125	0.250	W-21	[illegible]
1006	J-05	1176	6/4/64	2259 Z	79.9	84.0	63.2	48/128	148	0.200	W-21	149	0.200	W-21	[illegible]
1007	J-07	[illegible]	6/19/64	2316 Z	85.0	99.2	47.5	65/128	144	0.250	W-25	145	0.200	W-25	[illegible]
[illegible]	J-10	1177	7/10/64	[illegible]	[illegible]	99.8	20.9	48/112	160	0.200	W-21	159	0.200	W-21	[illegible]
[illegible]	J-1[illegible]	1180	8/5/64	2316 Z	80.1	99.6	30.9	[illegible]/128	154	0.200	W-21	155	0.200	W-21	[illegible]
[illegible]	[illegible]	1179	9/14/64	2204 Z	84.0	92.4	46.5	[illegible]/104	162	[illegible]	W-21	163	0.175	W-21	[illegible]
[illegible]	J-22	1178	10/5/64	2150 Z	79.9	98.3	20.9	[illegible]	160	0.175	W-21	161	0.175	W-21	[illegible]
[illegible]	J-18	1176	10/17/64	2202 Z	75.0	96.2	32.4	[illegible]/91	157	0.200	W-21	157	[illegible]	[illegible]	[illegible]
[illegible]	J-15	[illegible]	11/2/64	2130 Z	80.0	100.0	25.0	[illegible]/81	158	0.250	W-21	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	11/18/64	[illegible]	70.0	103.2	33.8	61/148	162	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	12/19/64	2110 Z	74.9	99.7	21.5	[illegible]/123	138	[illegible]	[illegible]	143	[illegible]	[illegible]	[illegible]
[illegible]	J-16	[illegible]	1/15/65	2101 Z	74.9	99.4	30.2	81/156	132	[illegible]	W-25	133	0.175	W-21	[illegible]
1017	J-14	[illegible]	2/25/65	2144 Z	75.0	97.4	28.9	81/142	140	0.200	W-25	[illegible]	0.175	W-21	[illegible]
1018	J-13	[illegible]	3/25/65	2111 Z	94.0	100.2	40.3	80/99	122	[illegible]	W-25	123	0.175	W-21	020/20/20
1019	J-06	[illegible]	4/29/65	2144 Z	85.0	99.1	27.1	[illegible]	118	[illegible]	W-25	119	0.175	W-21	[illegible]
[illegible]	J-20	[illegible]	6/9/65	2150 Z	75.[illegible]	97.4	40.6	[illegible]/113	136	[illegible]	W-25	[illegible]	0.175	W-25	[illegible]
[illegible]	J-21	[illegible]	[illegible]	1803 Z	75.[illegible]	100.[illegible]	24.3	81/161	166	0.175	W-21	167	0.250	W-25	[illegible]
[illegible]	J-2[illegible]	1817	7/19/65	2201 Z	85.[illegible]	99.7	30.3	80/144	168	0.200	W-25	[illegible]	0.175	W-21	[illegible]
[illegible]	J-23	[illegible]	8/17/65	2100 Z	70.[illegible]	97.0	29.0	81/144	170	[illegible]	W-25	171	0.160	W-21	017/10/02
[illegible]	J-24	[illegible]	9/22/65	2151 Z	80.[illegible]	[illegible]	18.3	81/161	172	[illegible]	W-25	173	0.160	W-21	[illegible]
[illegible]	[illegible]	[illegible]	10/5/65	1740 Z	75.[illegible]	110.[illegible]	44.3	81/161	142	0.175	W-21	[illegible]	0.175	W-21	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2117 Z	75.[illegible]	[illegible]	17.0	81/160	174	[illegible]	W-25	[illegible]	0.160	W-21	[illegible]
[illegible]	[illegible]	[illegible]	12/[illegible]/65	[illegible]	[illegible]	97.[illegible]	17.3	[illegible]	[illegible]	[illegible]	W-25	[illegible]	0.175	W-21	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	W-25	[illegible]	0.175	[illegible]	[illegible]

~~T.P SECRET~~ C [redacted]

MISSION SUMMARY

MISSION NUMBER	PAYLOAD NUMBER	VEHICLE NUMBER	LAUNCH DATE	LAUNCH TIME	ORBIT INCLINATION (°)	PERIGEE ALTITUDE (NM)	PERIGEE LOCATION (°N)	RECOVERY PASS	MASTER CAMERA CAMERA NUMBER	MASTER CAMERA SLIT (°)	MASTER CAMERA FILTER TYPE	SLAVE CAMERA CAMERA NUMBER	SLAVE CAMERA SLIT (°)	SLAVE CAMERA FILTER TYPE	STELLAR/INDEX CAMERA NUMBER
1029-?	J-27	1023	2/2/66	2154.3	75.1	99.5	22.0	91 / 160	178	0.275	W-25	179	0.175	W-21	[illegible]
1030	J-29	1022	3/9/66	2203 Z	75.0	[illegible]	10.7	81 / 159	182	0.275	W-25	183	0.175	W-21	[illegible]
1031	J-34	1027	4/7/66	2202 Z	75.1	104.5	23.3	113 / 177	184	0.225	W-23A	185	0.150	W-21	[illegible]
1032	J-28	1028	5/3/66	1820.2	—	—	—	— / —	180	0.100	W-21	181	0.150	W-21	[illegible]
1033	J-33	1030	[illegible]	0213 Z	85.1	102.0	40.[illegible]	82 / 178	194	0.200	W-21	[illegible]	0.200	W-21	[illegible]
1034	J-31	1026	6/21/66	2151 Z	85.1	100.4	10.[illegible]	81 / 161	186	0.200	W-23A	187	0.150	W-21	[illegible]
1035	J-36	1029	8/9/66	2114 Z	80.0	[illegible]	29.1	81 / 160	188	0.225	W-23A	189	0.175	W-21	[illegible]
1036	J-32	1031	9/20/66	2046 Z	100.0	100.4	32.5	113 / 212	190	0.200	W-23A	191	0.150	W-21	[illegible]
1037	J-30	1032	11/8/66	1907 Z	100.0	91.9	14.6	66 / 107	198	0.225	W-23A	199	0.175	W-21	[illegible]
1038	J-34	1033	1/14/67	2129.3	80.1	[illegible]	30.2	81 / 193	192	0.225	W-23A	193	0.175	W-21	[illegible]
[illegible]	[illegible]	1036	2/22/67	[illegible]	80.0	87.0	30.2	41 / 177	206	0.225	W-23A	207	0.175	W-21	[illegible]

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PERFORMANCE SUMMARY

MISSION NUMBER	CAMERA	SERIAL NUMBER	M.I.P VALUE	VISUAL RES	EFPPL SLIT (µ)	EFPPL AVERAGE	MTF/AIM SLIT (µ)	MTF/AIM AVERAGE	[redacted] SLIT (µ)	AVERAGE AUL	AVERAGE HIGH	90% ATTITUDE ERROR (°) PITCH	ROLL	YAW	90% ATTITUDE RATES (°/HR) PITCH	ROLL	YAW	90% V/H ERROR (%)	90% RESOLUTION ALONG TRACK	ACROSS TRACK
1004-1	FWD / AFT	124	88	78 / 86	360	97 / 90	43	109 / 98	320	115 / 117	127 / 124	0.45	0.48	1.06	30.0	25.0	21.0	[illegible]	7.7	[illegible]
1004-2	FWD / AFT	125	88	74 / 73		88 / 83		114 / 106		82 / 89	96 / 95	0.74	0.50	0.91	44.0	30.0	29.0	[illegible]	[illegible]	[illegible]
1005-1	FWD / AFT	148	88	78 / 78	360	88 / 71	43	88 / 96	380	84 / 87	97 / 98	0.41	0.42	1.14	26.8	20.5	27.8	15.9	13.8	[illegible]
1005-2	FWD / AFT	149	[illegible]	85 / 86		64 / 72		61 / 90		64 / 87	90 / 94	0.49	0.40	1.06	31.1	27.0	30.0	11.8	10.1	[illegible]
1007-1	FWD / AFT	144	88	80 / 86	360	80 / 63	43	87 / 83	320	82 / 97	91 / 110	0.38	0.46	1.43	37.6	23.9	29.9	3.6 / 4.6	[illegible]	[illegible]
1007-2	FWD / AFT	148	88	79 / 81		72 / 77		81 / 92		80 / 74	74 / 81	0.64	0.47	—	45.0	28.3	—	3.2 / 4.2	[illegible]	[illegible]
1008-1	FWD / AFT	150	88	80 / 76	360	80 / 73	43	98 / 89	320	87 / 86	89 / 95	0.38	0.38	0.94	45.8	28.9	28.8	2.9	4.2	[illegible]
1008-2	FWD / AFT	154	88	82 / 79		84 / 91		86 / 83		83 / 85	92 / 91	0.65	0.36	0.71	48.5	24.0	32.5	2.8	4.2	[illegible]
1009-1	FWD / AFT	164	85	92 / 89	350	80 / 85	—	—	80	75 / 75	86 / 83	0.65	0.65	0.71	[illegible]	28.7	27.0	[illegible]	[illegible]	[illegible]
1009-2	FWD / AFT	155	85	84 / 87		85 / 87				76 / 72	84 / 79	0.48	0.65	0.59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1010-1	FWD / AFT	152	85	90 / 88	380	90 / 88	80	88 / 80	80	87 / 92	96 / 103	[illegible]	0.30	0.87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1010-2	FWD / AFT	153	86	92 / 90		81 / 82		82 / 88		82 / 87	93 / 99	[illegible]	0.70	1.81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1011-1	FWD / AFT	160 / 161	90	84 / 84	360	78 / 77	80	[illegible]	80	78 / 81	[illegible]	0.77	0.39	0.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1012-1	FWD / AFT	156	86	[illegible]	—	—	80	81 / 87	80	[illegible]	[illegible] / 100	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1012-2	FWD / AFT	157	86	[illegible]				[illegible]		[illegible]	91 / [illegible]	0.97	0.71	0.61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1013-1	FWD / AFT	158 / 159	85	[illegible]	—	—	80	[illegible]	80	[illegible]	[illegible] / 103	[illegible]	[illegible]	1.34 / 1.34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1014-1	FWD / AFT	162	80	[illegible]	—	—	80	78 / 80	80	[illegible]	[illegible] / 107	[illegible]	0.41 / 0.41	1.46 / 1.46	38.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1014-2	FWD / AFT	139	[illegible]	[illegible]				[illegible]		[illegible]	72 / [illegible]	1.06 / 1.06	[illegible]	—	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]
1015-1	FWD / AFT	138	88	[illegible]	[illegible]	[illegible]	80	78 / 73	80	[illegible]	[illegible]	0.65 / 0.64	0.38 / 0.39	0.85 / 0.85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1015-2	FWD / AFT	141	88	[illegible]				73 / 72		[illegible]	[illegible]	0.60 / [illegible]	0.61 / 0.61	0.64 / 0.64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1016-1	FWD / AFT	[illegible]	85	[illegible]	—	[illegible]	80	[illegible]	80	[illegible]	[illegible]	[illegible]	[illegible]	2.01 / 2.01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1016-2	FWD / AFT	[illegible]	[illegible]	[illegible]				[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1017-1	FWD / AFT	140	86	[illegible]	[illegible]	[illegible]	80	[illegible]	80	[illegible]	[illegible] / 107	[illegible]	0.76 / 0.76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1017-2	FWD / AFT	[illegible]	86	[illegible]				[illegible]		[illegible]	94 / 101	[illegible]	0.48 / 0.49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1018-1	FWD / AFT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.46 / 0.47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1018-2	FWD / AFT	[illegible]	[illegible]	[illegible]				[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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PERFORMANCE SUMMARY

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MISSION NUMBER	CAMERA	SERIAL NUMBER	M I P VALUE	VISUAL RES.	AFSPPF SLIT (µ)	AFSPPF AVERAGE	MTF/AIM SLIT (µ)	MTF/AIM AVERAGE	[redacted] SLIT (µ)	AVERAGE ALL	AVERAGE HIGH	90% ATTITUDE ERROR (°) PITCH	ROLL	YAW	90% ATTITUDE RATES (YHR) PITCH	ROLL	YAW	90% V/H ERROR	90% RESOLUTION LIMIT ALONG TRACK	CROSS TRACK
1019-1	FWD AFT	118 / 119	85	81 89	—	—	80	78 63	80	88 87	104 101	0.43 0.44	0.36 0.37	0.97 0.96	31.6 31.6	34.7 34.9	33.0 33.1	3.3 3.8	9.3 9.0	[illegible]
1020-1 1020-2	FWD AFT FWD AFT	136 / 137	90 —	88 89 — —	—	—	80	69 82 — —	80	78 94 — —	90 108 — —	0.46 0.46 0.41 0.41	0.35 0.35 0.17 0.17	0.78 0.78 1.06 1.06	37.4 37.4 42.6 42.6	31.8 31.8 23.8 23.8	26.7 26.7 42.5 42.5	6.4 6.3 3.8 3.4	5.6 4.2 6.4 4.5	[illegible]
1021-1 1021-2	FWD AFT FWD AFT	166 / 167	85 88	88 90 66 74	—	—	80	77 90 74 62	80	86 98 88 —	99 109 112 —	0.59 0.55 0.59 —	0.37 0.38 0.65 —	0.81 0.81 — —	34.9 34.8 44.7 —	32.6 33.0 30.6 —	26.2 26.3 — —	2.7 3.4 3.1 —	6.8 8.8 8.2 —	[illegible]
1022-1 1022-2	FWD AFT FWD AFT	168 / 169	86 88	88 91 90 92	—	—	80	66 83 68 92	80	78 101 74 92	91 111 94 110	0.47 0.47 0.40 0.40	0.51 0.51 0.51 0.51	0.89 0.90 0.90 0.90	26.3 27.5 29.4 29.4	27.1 26.6 27.3 27.3	23.6 23.8 31.0 31.1	3.6 3.0 2.6 1.8	[illegible] [illegible] [illegible] 4.0	[illegible]
1023-1 1023-2	FWD AFT FWD AFT	170 / 171	88 65	—	—	—	80	94 87 71 89	80	97 83 76 88	110 101 87 76	0.49 0.49 0.42 0.43	0.33 0.33 0.36 0.37	0.80 0.80 0.53 0.53	33.0 32.9 29.7 29.6	28.7 28.7 21.0 21.3	23.5 23.5 28.6 28.6	3.4 3.6 2.4 2.5	4.0 2.7 3.3 2.7	[illegible]
1024-1 1024-2	FWD AFT FWD AFT	172 / 173	85 85	—	—	—	80	79 95 86 95	80	90 94 89 100	102 105 101 114	0.42 0.42 0.36 0.36	0.25 0.25 0.31 0.31	0.62 0.62 0.93 0.93	32.8 32.8 30.4 30.6	24.9 24.9 24.6 [illegible]	30.6 30.4 30.4 30.4	[illegible] 2.1 5.5 5.4	5.9 3.2 4.3 3.3	[illegible]
1025-1 1025-2	FWD AFT FWD AFT	142 / 127	85 88	—	—	—	80	87 97 85 91	80	80 101 86 88	97 114 107 105	0.50 0.51 0.52 0.52	0.41 0.42 0.44 0.44	0.85 0.85 0.82 0.82	28.1 26.6 28.0 28.1	28.7 29.7 26.1 26.0	25.9 25.7 29.0 29.0	2.0 [illegible] [illegible] 1.6	3.9 3.3 4.7 6.7	[illegible]
1026-1 1026-2	FWD AFT FWD AFT	174 / 175	85 88	—	—	—	80	76 86 85 93	80	80 90 92 90	92 113 104 103	0.65 0.65 0.55 0.59	0.24 0.24 0.56 0.68	0.70 0.70 0.87 0.86	37.9 37.9 41.1 43.3	33.2 33.2 46.8 50.0	28.8 28.8 30.6 27.7	[illegible]	13.0 [illegible] [illegible] 8.3	[illegible]
1027-1	FWD AFT	164 / 165	[illegible]	—	—	—	80	69 79	80	80 92	—	0.51 0.51	0.37 0.37	0.74 0.74	47.2 47.3	28.5 [illegible]	26.4 26.2	4.7 3.8	10.6 [illegible]	[illegible]
1028-1 1028-2	FWD AFT FWD AFT	176 / 177	85 88	—	—	—	80	81 92 88 77	80	90 93 87 84	—	0.52 0.52 0.76 0.76	0.37 0.37 0.32 0.32	0.80 0.80 — —	26.6 26.6 42.7 42.8	28.0 28.0 25.7 [illegible]	30.5 30.5 — —	[illegible]	[illegible]	[illegible]
1029-1 1029-2	FWD AFT FWD AFT	178 / 179	85 88	—	80	[redacted] [illegible] 91 83 91	80	[redacted] 91 98 92 84	80	73 73 77 81	—	0.67 0.68 0.64 0.65	0.34 0.33 0.46 0.46	0.77 0.77 0.44 0.44	29.1 [illegible] [illegible] [illegible]	31.3 30.8 [illegible] [illegible]	34.4 34.6 25.7 25.7	[illegible]	[illegible]	[illegible]
1030-1 1030-2	FWD AFT FWD AFT	182 / 183	85 86	—	80	80 74 72 66	80	76 77 81 74	80	86 77 71 71	—	0.67 0.67 0.70 0.70	0.25 0.25 0.27 0.26	[illegible] [illegible] 0.87 0.87	[illegible]	22.7 22.6 22.7 21.8	36.1 35.8 36.3 36.3	3.9 3.4 4.9 6.9	[illegible]	[illegible]
1031-1 1031-2	FWD AFT FWD AFT	184 / 185	85 88	[illegible]	80	68 77 91 —	80	76 71 84 —	80	86 86 [illegible] —	—	0.90 0.90 0.87 —	0.41 0.41 0.20 —	0.96 0.91 0.75 —	16.2 16.1 19.4 —	17.3 16.7 19.3 —	20.9 22.9 15.7 —	6.1 6.0 5.4 —	13.0 12.6 10.3 —	[illegible]
1032-1 1032-2	FWD AFT FWD AFT	184 / [illegible]	88 [illegible]	[illegible]	80	[illegible]	80	94 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.90 0.39 1.06 1.06	11.3 [illegible]	34.9 35.0 40.3 50.7	27.3 19.8 17.4 17.4	[illegible]	[illegible]	[illegible]

PERFORMANCE SUMMARY

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MISSION NUMBER	CAMERA	SERIAL NUMBER	M.I.P. VALUE	AFSPPF MTF/AIM			90% ATTITUDE ERROR (")			90% ATTITUDE RATES (°/HR.)			90% V/H ERROR (%)	90% RESOLUTION LIMIT (FEET)		2 R.M.S. ERROR
				AVERAGE	SLIT (μ)	AVERAGE	PITCH	ROLL	YAW	PITCH	ROLL	YAW		ALONG-TRACK	CROSS TRACK	
1034-1	FWD	186	90	78	80	81	0.20	0.19	0.99	19.3	20.4	24.9	15.0	17.8	5.9	
	AFT			93		90	0.20	0.19	0.99	19.3	20.4	24.9	15.2	13.8	4.8	
1034-2	FWD	187	90	74		89	0.34	0.36	0.33	21.1	26.9	16.2	8.7	10.4	7.1	
	AFT			69		85	0.34	0.36	0.33	21.1	29.0	16.2	8.9	8.0	5.3	
1035-1	FWD	188	88	66	80	—	0.16	0.55	2.39	18.9	27.9	33.9	4.0	4.8	3.7	
	AFT			80			0.17	0.54	2.43	19.3	23.4	32.2	4.1	3.7	2.6	
1035-2	FWD	189	96	81			0.16	0.50	3.02	18.4	36.1	27.5	3.2	4.0	3.6	
	AFT			82			0.17	0.51	3.02	19.9	24.7	26.3	3.4	3.3	2.4	
1036-1	FWD	190	85	89	90	—	0.76	0.96	0.60	31.2	25.6	29.5	3.4	5.1	4.8	
	AFT			94			0.76	0.96	0.60	31.1	25.5	29.4	3.3	3.8	5.1	
1036-2	FWD	191	86	73			0.94	0.70	0.40	33.0	28.7	23.3	3.3	3.8	4.8	
	AFT			84			0.94	0.70	0.40	32.9	28.7	23.3	3.1	2.7	4.9	
1037-1	FWD	196	88	80	90	—	0.28	0.28	1.80	22.8	40.0	29.3	9.5	10.1	8.0	
	AFT			71			0.28	0.27	1.81	20.7	36.9	32.4	10.1	8.0	6.1	
1037-2	FWD	199	86	86			0.24	0.30	1.17	26.5	32.8	26.2	6.3	6.7	7.8	
	AFT			81			0.27	0.32	1.18	33.8	36.9	33.4	6.6	5.4	8.9	
1038-1	FWD	192	80	83	80	—	0.28	0.25	2.98	18.7	33.7	39.9	3.6	4.1	3.7	
	AFT			79			0.27	0.24	2.99	41.8	27.2	24.4	3.4	3.5	2.8	
1038-2	FWD	193	80	63			0.38	0.31	2.87	20.0	46.7	27.8	3.4	3.0	3.0	
	AFT			77			0.36	0.31	2.90	50.4	28.3	27.3	3.4	3.8	2.4	
1039-1	FWD	206	96	59	80	—	0.21	0.43	3.05	19.0	27.8	39.2	4.2	4.2	4.0	
	AFT			71			0.20	0.41	3.05	37.5	25.0	29.5	4.2	3.8	3.2	
1039-2	FWD	207	86	71			0.38	0.84	2.80	33.1	38.8	28.0	4.6	5.4	4.7	
	AFT			68			0.34	0.83	2.82	27.1	24.2	23.9	4.0	4.8	3.9	

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EXPOSURE - PROCESSING SUMMARY

MISSION NUMBER	CAMERA	SOLAR ELEVATION RANGE (°) LOW	SOLAR ELEVATION RANGE (°) HIGH	SOLAR AZIMUTH RANGE (°) LOW	SOLAR AZIMUTH RANGE (°) HIGH	PREDICTED PROCESSING (%) P	PREDICTED PROCESSING (%) T	PREDICTED PROCESSING (%) F	REPORTED PROCESSING (%) P	REPORTED PROCESSING (%) T	REPORTED PROCESSING (%) F	COMPUTED PROCESSING (%) P	COMPUTED PROCESSING (%) T	COMPUTED PROCESSING (%) F	TERRAIN D-MIN RANGE LOW	TERRAIN D-MIN RANGE HIGH	TERRAIN D-MIN MEAN	TERRAIN D-MIN MEDIAN	TERRAIN D-MAX RANGE LOW	TERRAIN D-MAX RANGE HIGH	TERRAIN D-MAX MEAN	TERRAIN D-MAX MEDIAN	CLOUD D-MAX RANGE LOW	CLOUD D-MAX RANGE HIGH	CLOUD D-MAX MEAN	CLOUD D-MAX MEDIAN	UNDER EXPOSED (%)	UNDER PROCESSED (%)	NOMINAL EXP & PROCESSED (%)	OVER PROCESSED (%)	OVER EXPOSED (%)	CLOUD COVER (%)
1004-1	FWD	45	81	25	124	5	76	19	4	79	17	0	79	21	0.26	1.89	0.83	0.78	0.43	2.43	1.97	2.02	1.00	2.43	2.04	2.06	0	4	80	[illegible]	[illegible]	[illegible]
	AFT	-8	81	23	124	6	74	21	4	79	17	0	80	20	0.22	1.56	0.76	0.70	0.33	2.45	1.92	1.94	1.08	2.43	1.96	2.03	1	4	67	26	2	[illegible]
1004-2	FWD	-4	68	10	131	7	76	17	37	50	13	4	83	13	0.29	1.80	0.83	0.78	0.36	2.30	1.84	1.90	0.41	2.37	1.87	1.93	0	4	69	27	0	[illegible]
	AFT	-4	68	10	131	7	76	17	37	50	13	4	77	19	0.29	1.91	0.81	0.73	0.36	2.39	1.89	1.99	0.43	2.46	1.89	1.98	0	4	67	20	9	[illegible]
1005-1	FWD	38	56	52	140	1	99	0	1	51	48	0	51	49	0.23	1.81	0.71	0.68	0.80	2.31	1.58	1.52	1.31	2.40	2.20	2.24	0	6	72	21	1	[illegible]
	AFT	38	56	52	140	1	99	0	0	23	77	0	24	76	0.36	1.66	0.87	0.84	0.96	2.35	1.72	1.72	1.14	2.40	2.24	2.28	0	1	58	40	1	[illegible]
1005-2	FWD	32	64	38	147	2	98	0	30	41	29	11	59	30	0.21	1.14	0.55	0.50	0.56	2.20	1.49	1.50	1.30	2.33	2.11	2.16	2	21	72	4	0	[illegible]
	AFT	32	64	38	147	2	98	0	35	40	25	21	54	25	0.26	1.34	0.62	0.58	0.65	2.19	1.46	1.47	1.56	2.50	2.12	2.16	0	11	77	9	3	[illegible]
1007-1	FWD	12	40	50	103	0	5	95	1	20	79	0	25	75	0.26	1.22	0.52	0.47	0.62	2.20	1.44	1.40	1.22	[illegible]	2.17	2.21	20	5	67	8	0	[illegible]
	AFT	11	40	48	102	0	100	0	10	42	48	6	77	17	0.36	1.76	0.66	0.55	0.78	2.31	1.62	1.52	1.54	2.39	2.20	2.24	1	13	80	5	1	[illegible]
1007-2	FWD	32	57	43	112	0	25	75	3	28	69	0	26	74	0.36	1.23	0.61	0.48	0.70	2.38	1.44	1.40	0.90	2.37	2.15	2.20	18	9	71	2	0	[illegible]
	AFT	31	57	36	111	0	100	0	19	41	40	3	88	9	0.24	1.56	0.60	0.56	0.44	2.27	1.50	1.52	0.84	2.41	2.17	2.26	1	16	74	9	0	[illegible]
1008-1	FWD	30	61	50	108	0	100	0	4	32	64	1	35	64	0.32	1.48	0.66	0.62	0.76	2.24	1.55	1.54	1.48	2.35	2.21	2.24	2	2	88	8	1	[illegible]
	AFT	30	61	50	108	0	100	0	4	27	69	0	34	66	0.32	1.57	0.74	0.69	0.81	2.24	1.57	1.58	1.08	2.37	2.21	2.24	1	1	84	13	0	[illegible]
1008-2	FWD	29	56	42	105	0	100	0	3	31	66	0	27	73	0.14	1.81	0.76	0.72	0.57	2.10	1.54	1.55	1.09	2.40	2.20	2.28	2	1	73	23	1	[illegible]
	AFT	29	56	42	105	0	100	0	3	30	67	0	29	71	0.32	1.64	0.77	0.76	0.73	2.10	1.56	1.55	1.10	2.35	2.18	2.22	1	3	69	27	0	[illegible]
1009-1	FWD	12	49	42	136	0	100	0	1	26	73	0	34	66	0.32	1.40	0.65	0.62	0.65	2.41	1.53	1.52	0.83	2.51	2.30	2.30	5	4	77	14	0	[illegible]
	AFT	12	49	42	132	0	100	0	0	40	60	0	45	55	0.20	1.42	0.70	0.64	0.32	2.26	1.50	1.55	0.63	2.51	2.32	2.30	1	5	73	20	0	[illegible]
1009-2	FWD	23	60	35	138	2	98	0	3	21	76	0	40	60	0.29	1.55	0.69	0.64	0.73	2.37	1.53	1.53	1.06	2.46	2.25	2.30	4	4	74	17	0	[illegible]
	AFT	23	60	35	138	2	98	0	4	47	49	0	56	44	0.26	1.47	0.65	0.64	0.44	2.45	1.61	1.60	1.61	2.60	2.31	2.34	1	4	77	18	0	[illegible]
1010-1	FWD	18	47	46	83	0	21	79	0	13	87	0	9	91	0.28	1.14	0.52	0.47	0.43	2.32	1.38	1.32	1.11	2.48	2.18	2.20	18	3	76	[illegible]	0	[illegible]
	AFT	18	47	48	83	0	21	79	0	19	81	0	16	84	0.27	1.23	0.57	0.52	0.78	2.42	1.45	1.41	0.96	2.45	2.20	2.26	9	4	81	[illegible]	0	[illegible]
1010-2	FWD	18	62	30	76	0	50	50	0	16	84	0	13	87	0.26	1.31	0.55	0.50	0.62	2.36	1.41	1.38	1.00	2.44	2.14	2.20	22	4	67	6	0	[illegible]
	AFT	18	62	30	76	0	50	50	0	23	77	0	21	79	0.20	1.48	0.59	0.56	0.50	2.40	1.47	1.46	1.29	2.48	2.18	2.22	13	3	76	[illegible]	0	[illegible]
1011-1	FWD	2	55	33	66	0	64	36	2	23	75	2	23	75	0.18	0.89	0.50	0.48	0.58	2.36	1.40	1.43	0.78	2.40	2.07	2.10	17	11	70	[illegible]	[illegible]	[illegible]
	AFT	2	55	33	66	0	67	33	3	47	50	0	37	63	0.24	1.48	0.40	0.36	0.50	2.36	1.37	1.35	0.74	2.37	2.11	2.10	5	7	81	[illegible]	[illegible]	[illegible]
1012-1	FWD	0	49	38	74	0	64	36	7	56	37	0	65	35	0.23	1.30	[illegible]	0.53	0.64	2.39	1.40	1.42	0.90	2.39	[illegible]	2.00	6	17	66	10	[illegible]	[illegible]
	AFT	0	49	38	71	0	64	36	0	33	67	0	49	51	0.26	1.40	0.87	0.50	0.47	2.27	1.44	1.40	0.72	2.32	1.60	1.96	5	10	74	[illegible]	[illegible]	[illegible]
1012-2	FWD	0	57	34	106	0	77	23	6	44	50	0	49	51	0.30	1.20	[illegible]	[illegible]	0.73	2.38	1.48	1.42	0.67	2.34	1.81	2.00	4	9	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	0	57	34	106	0	77	23	3	15	82	0	10	90	0.20	1.27	0.40	0.42	0.48	2.33	1.58	1.58	0.70	2.35	1.86	2.02	4	0	[illegible]	[illegible]	[illegible]	[illegible]
1013-1	FWD	0	56	28	63	0	64	36	0	42	58	0	35	65	0.20	1.06	0.38	0.36	0.52	2.29	1.56	1.59	1.21	2.41	2.03	2.10	7	13	75	[illegible]	[illegible]	[illegible]
	AFT	0	66	25	62	0	64	36	2	7	91	0	33	67	0.30	1.56	[illegible]	0.44	0.64	2.28	1.59	1.63	1.10	2.36	1.97	2.03	5	8	74	[illegible]	[illegible]	[illegible]
1014-1	FWD	0	57	12	71	0	21	79	1	38	61	0	63	37	0.17	0.99	0.48	0.36	0.26	2.36	1.40	1.42	1.01	2.38	1.94	2.00	27	33	38	1	[illegible]	[illegible]
	AFT	0	65	14	65	0	31	69	0	13	87	0	36	64	0.10	1.26	0.31	0.40	0.25	2.38	1.42	1.49	0.42	2.43	1.91	2.00	10	12	64	[illegible]	[illegible]	[illegible]
1014-2	FWD	0	77	6	34	0	26	74	0	26	74	0	61	39	0.17	1.06	0.34	0.31	0.23	2.32	1.30	1.36	0.42	2.38	1.72	1.80	21	40	27	[illegible]	[illegible]	[illegible]
	AFT	0	78	6	34	0	29	71	0	5	95	0	65	35	0.16	1.42	0.44	0.40	0.27	2.28	1.34	1.45	0.26	2.44	1.71	1.84	19	29	50	[illegible]	[illegible]	[illegible]
1015-1	FWD	5	66	19	65	0	[illegible]	[illegible]	2	8	94	0	8	96	0.26	1.70	0.64	0.47	0.54	2.28	1.44	1.46	0.40	2.41	1.86	1.90	28	0	66	7	[illegible]	[illegible]
	AFT	4	66	18	67	0	30	70	0	5	95	0	4	96	0.27	1.20	0.60	0.56	0.46	2.30	1.49	1.50	0.60	2.36	1.86	1.86	14	6	77	[illegible]	[illegible]	[illegible]
1015-2	FWD	0	65	-2	71	0	19	80	0	10	90	0	11	89	0.22	1.10	0.50	0.46	0.34	2.07	1.29	1.30	0.28	2.34	1.69	1.78	28	4	66	3	[illegible]	[illegible]
	AFT	0	73	-2	71	0	21	79	0	9	91	0	9	91	0.26	1.21	0.38	0.32	0.36	2.22	1.37	1.38	0.38	2.40	1.74	1.80	17	1	70	2	[illegible]	[illegible]
1016-1	FWD	8	69	13	75	0	[illegible]	[illegible]	1	45	55	0	56	44	0.13	1.36	0.61	0.45	0.70	2.45	1.67	1.66	0.85	2.49	1.91	1.90	19	17	56	8	[illegible]	[illegible]
	AFT	4	65	16	75	0	27	73	0	26	74	0	42	58	0.22	1.35	0.49	0.50	0.62	2.38	1.65	1.72	0.96	2.46	1.90	1.92	11	9	82	7	[illegible]	[illegible]
1016-2	FWD	1	64	-4	75	0	3	98	0	31	69	0	40	60	0.18	1.50	0.46	0.44	0.29	2.30	1.45	1.44	0.34	2.50	1.70	1.82	22	10	66	3	[illegible]	[illegible]
	AFT	[illegible]	64	-4	76	0	19	81	5	27	72	0	40	60	0.20	1.33	0.60	0.42	0.26	2.36	1.62	1.60	0.30	2.49	1.72	1.82	23	8	68	6	[illegible]	[illegible]
1017-1	FWD	-1	80	21	80	0	0	100	13	63	24	0	82	18	0.30	1.66	0.66	0.61	0.46	2.23	1.74	1.76	0.60	2.36	1.93	2.00	1	8	77	13	[illegible]	[illegible]
	AFT	-1	87	11	95	0	17	83	24	60	16	4	80	16	0.20	1.62	0.64	0.60	0.60	2.29	1.75	1.78	1.10	2.36	1.86	1.90	1	13	74	11	[illegible]	[illegible]
1017-2	FWD	1	75	9	135	0	0	100	5	62	33	7	77	16	0.28	1.22	0.56	0.56	0.37	2.36	1.70	1.80	0.85	2.37	1.86	1.94	3	14	74	[illegible]	[illegible]	[illegible]
	AFT	1	79	7	136	0	7	93	18	62	20	0	89	11	0.20	1.64	0.64	0.62	0.30	2.30	1.62	1.60	0.26	2.34	1.86	1.92	2	13	74	10	[illegible]	[illegible]
1018-1	FWD	6	77	13	134	0	0	100	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	0.19	1.44	[illegible]	[illegible]	0.84	2.32	1.66	1.73	1.00	2.32	1.96	1.99	2	11	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	6	78	10	[illegible]	[illegible]	22	78	[illegible]	[illegible]	[illegible]	8	72	22	0.10	1.36	[illegible]	[illegible]	0.86	2.30	1.66	1.90	1.03	2.36	1.90	2.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1018-2	FWD	6	79	14	134	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.90	2.34	1.60	1.74	0.90	2.36	1.80	1.91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	6	70	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.74	2.30	1.70	1.74	1.08	[illegible]	[illegible]	1.94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[redacted]

EXPOSURE - PROCESSING SUMMARY

~~TOP SECRET~~ C/[redacted]

MISSION NUMBER	CAMERA	SOLAR ELEVATION RANGE (°) LOW	SOLAR ELEVATION RANGE (°) HIGH	SOLAR AZIMUTH RANGE (°) LOW	SOLAR AZIMUTH RANGE (°) HIGH	PREDICTED PROCESSING (%) P	PREDICTED PROCESSING (%) I	PREDICTED PROCESSING (%) F	REPORTED PROCESSING (%) P	REPORTED PROCESSING (%) I	REPORTED PROCESSING (%) F	COMPUTED PROCESSING (%) P	COMPUTED PROCESSING (%) I	COMPUTED PROCESSING (%) F	TERRAIN D-MIN RANGE LOW	TERRAIN D-MIN RANGE HIGH	TERRAIN D-MIN MEAN	TERRAIN D-MIN MEDIAN
1019-1	FWD	24	70	24	182	0	21	79	22	32	46	4	56	40	0.26	1.92	0.71	0.61
	AFT	23	70	21	182	0	92	8	26	55	19	3	87	10	0.13	1.70	0.86	0.80
1020-1	FWD	30	75	19	186	0	19	81	13	48	39	1	58	41	0.23	1.30	0.56	0.52
	AFT	29	73	17	188	0	64	36	15	56	29	0	74	26	0.23	1.20	0.55	0.54
1020-2	FWD	47	69	18	35	INSUFFICIENT DATA												
	AFT	46	66	17	33													
1021-1	FWD	18	66	-148	-23	0	68	32	14	39	47	1	52	47	[illegible]	1.90	0.64	0.56
	AFT	14	66	-147	-28	0	99	1	15	38	47	0	57	43	0.17	1.70	0.65	0.57
1021-2	FWD	13	82	-133	-41	0	29	71	13	41	46	0	57	43	0.18	1.52	0.54	0.50
	AFT	13	82	-133	-41	0	100	0	53	25	22	0	50	50	0.33	1.38	0.78	0.76
1022-1	FWD	28	67	30	180	0	36	64	8	36	56	0	42	58	0.18	1.47	0.45	0.40
	AFT	27	67	26	180	0	89	11	7	42	51	0	53	47	0.24	1.48	0.57	0.50
1022-2	FWD	29	74	21	182	0	8	92	1	37	62	0	43	57	0.20	0.99	0.38	0.35
	AFT	28	74	19	152	0	100	0	10	44	46	0	53	47	0.21	1.40	0.45	0.44
1023-1	FWD	22	82	8	164	0	5	95	19	54	27	0	72	28	0.15	1.26	0.39	0.35
	AFT	20	81	8	163	0	11	89	0	39	61	0	42	58	0.20	1.40	0.53	0.48
1023-2	FWD	29	81	-13	177	0	7	93	0	19	81	0	18	82	0.22	1.38	0.48	0.42
	AFT	28	80	-13	170	0	3	97	0	34	66	0	28	72	0.22	1.60	0.52	0.46
1024-1	FWD	10	81	24	137	0	0	100	0	57	43	0	72	28	0.17	1.74	0.36	0.32
	AFT	9	61	21	136	0	0	100	0	28	72	0	82	18	0.20	1.22	0.40	0.37
1024-2	FWD	9	79	11	181	0	0	100	12	19	69	0	25	75	0.24	1.17	0.46	0.42
	AFT	8	79	9	181	0	0	100	1	22	77	0	66	34	0.29	1.39	0.47	0.40
1025-1	FWD	1	70	-123	-19	0	68	32	10	41	49	0	56	44	0.18	1.42	0.43	0.37
	AFT	0	70	-121	-19	0	72	28	8	49	43	0	61	39	0.18	1.69	0.49	0.42
1025-2	FWD	0	56	-124	-31	0	71	29	3	42	[illegible]	0	56	44	0.18	1.22	0.48	0.39
	AFT	0	56	-122	-33	0	73	[illegible]	3	45	52	0	51	49	0.21	1.32	0.55	0.48
1026-1	FWD	0	57	23	138	0	4	96	0	31	70	0	24	76	0.20	1.26	0.36	0.33
	AFT	0	57	21	138	0	[illegible]	95	0	4	96	0	38	62	0.20	1.16	0.39	0.34
1026-2	FWD	1	72	8	94	0	0	100	1	5	94	0	5	95	0.18	1.32	0.36	0.30
	AFT	0	57	13	78	0	0	100	2	5	93	0	15	85	0.21	1.38	0.39	0.32
1027-1	FWD	3	63	26	110	0	0	100	0	0	100	0	3	97	0.26	1.64	0.52	0.46
	AFT	2	63	26	106	0	0	100	0	21	79	0	60	40	0.26	1.34	0.56	0.53
1028-1	FWD	3	73	15	138	0	4	96	0	4	96	0	11	89	0.22	1.08	0.37	0.32
	AFT	1	73	14	133	0	5	95	0	16	84	0	11	89	0.20	1.01	0.41	0.36
1028-2	FWD	2	81	8	48	0	3	97	1	9	90	0	15	85	0.23	0.96	0.40	0.35
	AFT	1	80	5	45	0	10	90	0	6	94	0	6	94	0.22	1.40	0.30	0.40
1029-1	FWD	3	63	18	130	0	8	92	1	16	83	0	14	86	0.23	1.80	0.64	0.54
	AFT	2	62	16	138	0	80	20	0	21	79	0	25	75	0.16	1.73	0.57	0.48
1029-2	FWD	0	60	4	146	0	4	96	2	28	70	0	20	80	0.22	1.66	0.54	0.45
	AFT	0	60	3	146	0	10	90	2	24	74	0	25	75	0.20	1.58	0.58	0.49
1030-1	FWD	8	63	27	130	0	58	42	3	32	65	1	52	47	0.30	1.80	0.81	0.75
	AFT	4	63	22	129	0	53	47	0	46	54	0	71	29	0.28	1.64	0.78	0.69
1030-2	FWD	3	70	-10	155	1	42	57	8	45	47	0	70	30	0.24	1.66	0.65	0.57
	AFT	2	[illegible]	7	157	[illegible]	23	76	0	28	72	0	30	70	0.34	1.74	0.62	0.77
1031-1	FWD	17	70	20	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	76	0	41	[illegible]	0.25	1.67	[illegible]	0.63
	AFT	17	70	19	[illegible]	0	14	[illegible]	15	43	42	0	47	[illegible]	0.24	1.64	[illegible]	0.62
1031-2	FWD	18	82	[illegible]	[illegible]	0	69	[illegible]	[illegible]	23	39	0	60	[illegible]	0.26	1.80	[illegible]	0.72
	AFT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1032-1	FWD	[illegible]	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.80
	AFT	[illegible]	[illegible]	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.30
1032-2	FWD	[illegible]	[illegible]	34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MISSION NUMBER	CAMERA	TERRAIN D-MAX RANGE LOW	TERRAIN D-MAX RANGE HIGH	TERRAIN D-MAX MEAN	TERRAIN D-MAX MEDIAN	CLOUD D-MAX RANGE LOW	CLOUD D-MAX RANGE HIGH	CLOUD D-MAX MEAN	CLOUD D-MAX MEDIAN	UNDER EXPOSED (%)	UNDER PROCESSED (%)	NOMINAL EXP & PRO (%)	OVER PROCESSED (%)	OVER EXPOSED (%)	CLOUD COVER (%)
1019-1	FWD	0.60	2.15	1.49	1.50	0.84	2.26	1.94	2.00	4	7	64	17	7	48
	AFT	0.39	2.28	1.46	1.45	0.80	2.50	1.96	2.02	1	13	70	14	[illegible]	45
1020-1	FWD	0.80	2.28	1.57	1.54	1.40	2.36	2.10	2.16	[illegible]	18	78	4	0	[illegible]
	AFT	0.70	2.20	1.47	1.46	1.22	2.29	2.04	2.10	0	18	76	5	0	[illegible]
1020-2	FWD	INSUFFICIENT DATA													
	AFT														
1021-1	FWD	0.74	2.38	1.50	1.50	0.87	2.36	1.92	2.00	8	8	78	14	8	[illegible]
	AFT	0.54	2.24	1.45	1.42	0.85	2.20	1.90	2.00	8	8	78	12	3	[illegible]
1021-2	FWD	0.60	2.36	1.36	1.34	1.05	2.23	1.82	1.88	14	13	66	6	0	[illegible]
	AFT	0.70	2.30	1.52	1.50	1.30	2.38	1.94	1.94	8	0	71	21	[illegible]	[illegible]
1022-1	FWD	0.54	2.42	1.57	1.60	1.32	2.85	2.24	2.25	30	19	47	3	0	[illegible]
	AFT	0.52	2.30	1.63	1.69	1.30	2.47	2.21	2.25	4	15	71	5	1	[illegible]
1022-2	FWD	0.62	2.08	1.48	1.45	1.16	2.45	2.23	2.28	38	28	38	1	0	[illegible]
	AFT	0.50	2.32	1.51	1.52	1.48	2.49	2.25	2.28	19	23	51	4	0	[illegible]
1023-1	FWD	0.43	2.41	1.22	1.22	0.87	2.41	2.06	2.11	20	44	34	2	0	[illegible]
	AFT	0.41	2.21	1.31	1.37	0.94	2.45	2.19	2.20	13	14	65	7	0	[illegible]
1023-2	FWD	0.41	2.05	1.18	1.22	0.90	2.47	2.08	2.11	38	2	60	[illegible]	1	[illegible]
	AFT	0.44	2.31	1.24	1.24	1.08	2.46	2.10	2.17	13	10	73	4	[illegible]	[illegible]
1024-1	FWD	0.40	2.28	1.22	1.15	0.58	2.34	1.97	2.03	27	40	23	0	[illegible]	[illegible]
	AFT	0.48	2.32	1.30	1.24	0.94	2.40	1.97	2.06	14	46	39	[illegible]	[illegible]	[illegible]
1024-2	FWD	0.55	2.40	1.30	1.27	1.01	2.45	1.81	1.99	36	3	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	0.29	2.26	1.31	1.32	0.90	2.40	1.69	1.90	20	25	50	[illegible]	[illegible]	[illegible]
1025-1	FWD	0.29	2.36	1.37	1.39	0.42	2.36	1.81	1.92	33	25	36	[illegible]	[illegible]	[illegible]
	AFT	0.26	2.26	1.33	1.38	0.23	2.32	1.75	1.90	25	20	47	7	[illegible]	[illegible]
1025-2	FWD	0.26	2.24	1.32	1.33	0.63	2.29	1.70	1.69	29	21	48	4	[illegible]	[illegible]
	AFT	0.39	2.18	1.31	1.35	0.48	2.23	1.71	1.79	19	12	61	8	[illegible]	[illegible]
1026-1	FWD	0.31	2.27	1.22	1.22	0.40	2.26	1.77	1.87	57	13	28	2	[illegible]	[illegible]
	AFT	0.24	2.36	1.29	1.30	0.37	2.40	1.70	1.88	39	27	33	1	[illegible]	[illegible]
1026-2	FWD	0.23	2.17	1.05	1.02	0.49	2.06	1.63	1.70	78	2	19	1	[illegible]	[illegible]
	AFT	0.27	2.20	1.08	1.03	0.30	2.26	1.61	1.70	60	12	28	3	[illegible]	[illegible]
1027-1	FWD	0.30	2.36	1.45	1.50	0.71	[illegible]	[illegible]	2.10	38	2	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	0.34	2.30	1.44	1.46	0.40	2.40	1.98	2.06	12	3	75	[illegible]	[illegible]	[illegible]
1028-1	FWD	0.40	2.32	1.42	1.42	0.62	2.30	1.77	1.83	68	6	26	1	[illegible]	30
	AFT	0.30	2.23	1.35	1.40	0.68	2.26	1.72	1.77	56	5	37	1	[illegible]	30
1028-2	FWD	0.37	2.20	1.36	1.38	0.30	2.33	1.72	1.77	59	3	37	1	[illegible]	30
	AFT	0.28	2.21	1.40	1.43	0.30	2.35	1.69	1.75	47	1	44	7	[illegible]	30
1029-1	FWD	0.80	2.60	1.72	1.76	0.48	2.39	2.03	2.06	80	0	92	14	[illegible]	[illegible]
	AFT	0.20	2.32	1.62	1.65	0.36	2.40	1.91	1.95	24	5	69	10	[illegible]	[illegible]
1029-2	FWD	0.31	2.36	1.52	1.59	0.45	2.40	1.88	2.00	53	9	55	11	[illegible]	[illegible]
	AFT	0.30	2.84	1.52	1.60	0.34	2.40	1.87	1.93	23	5	58	11	[illegible]	[illegible]
1030-1	FWD	0.61	2.34	1.75	1.78	0.78	2.38	2.01	2.08	4	3	61	28	[illegible]	40
	AFT	0.65	2.50	1.69	1.74	1.09	2.50	1.97	2.06	1	9	64	22	[illegible]	40
1030-2	FWD	0.76	2.35	1.69	1.70	1.17	2.36	1.99	2.06	[illegible]	9	71	13	[illegible]	30
	AFT	0.83	2.40	1.79	1.85	0.82	2.43	2.06	2.10	[illegible]	0	66	30	[illegible]	30
1031-1	FWD	0.72	[illegible]	1.74	1.98	0.38	2.44	2.10	2.18	[illegible]	0	76	17	[illegible]	[illegible]
	AFT	0.53	[illegible]	1.65	1.70	1.15	2.35	2.00	2.05	[illegible]	4	75	18	[illegible]	45
1031-2	FWD	0.46	[illegible]	1.73	1.82	1.40	2.07	2.08	2.09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40
	AFT	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1032-1	FWD	0.70	[illegible]	1.38	1.30	1.26	2.42	2.15	2.20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	0.64	[illegible]	1.40	1.40	0.84	2.44	2.13	2.20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1032-2	FWD	0.49	[illegible]	1.30	1.26	0.94	[illegible]	[illegible]	2.21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	AFT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[redacted]

EXPOSURE - PROCESSING SUMMARY

[redacted]

MISSION NUMBER	CAMERA	SOLAR ELEVATION RANGE (°) LOW	SOLAR ELEVATION RANGE (°) HIGH	SOLAR AZIMUTH RANGE (°) LOW	SOLAR AZIMUTH RANGE (°) HIGH	PREDICTED PROCESSING (%) P	PREDICTED PROCESSING (%) I	PREDICTED PROCESSING (%) F	REPORTED PROCESSING (%) P	REPORTED PROCESSING (%) I	REPORTED PROCESSING (%) F	COMPUTED PROCESSING (%) P	COMPUTED PROCESSING (%) I	COMPUTED PROCESSING (%) F	TERRAIN D-MIN RANGE LOW	TERRAIN D-MIN RANGE HIGH	TERRAIN D-MIN MEAN	TERRAIN D-MIN MEDIAN	TERRAIN D-MAX RANGE LOW	TERRAIN D-MAX RANGE HIGH	TERRAIN D-MAX MEAN	TERRAIN D-MAX MEDIAN	CLOUD D-MAX RANGE LOW	CLOUD D-MAX RANGE HIGH	CLOUD D-MAX MEAN	CLOUD D-MAX MEDIAN	UNDER EXPOSED (%)	UNDER PROCESSED (%)	NOMINAL EXP. & PROC (%)	OVER PROCESSED (%)	OVER EXPOSED (%)	CLOUD COVER (%)
1034-1	FWD	23	77	16	168	0	96	4	3	21	76	0	20	80	0.25	1.80	0.57	0.50	0.85	2.42	1.58	1.61	0.88	2.45	2.22	2.26	16	3	70	7	2	38
	AFT	23	77	10	168	0	55	45	2	31	67	0	16	84	0.29	1.63	0.56	0.50	0.41	2.35	1.55	1.60	0.97	2.44	2.19	2.25	16	4	71	7	0	38
1034-2	FWD	28	86	0	178	0	88	12	9	26	65	0	27	73	0.19	1.52	0.57	0.52	0.72	2.40	1.63	1.60	1.21	2.47	2.28	2.31	12	4	76	8	0	48
	AFT	30	86	0	178	0	41	59	6	37	57	0	34	66	0.26	1.60	0.54	0.49	0.70	2.32	1.59	1.62	1.08	2.48	2.22	2.29	12	10	75	4	2	48
1035-1	FWD	13	68	19	144	0	17	83	0	11	89	0	6	94	0.28	1.90	0.52	0.45	0.61	2.44	1.40	1.40	1.06	2.43	2.15	2.22	23	1	71	4	1	30
	AFT	13	68	18	144	0	9	86	1	14	85	0	9	91	0.24	1.39	0.50	0.43	0.60	2.42	1.48	1.53	0.90	2.58	2.15	2.24	27	3	68	6	0	30
1036-2	FWD	4	81	10	188	0	22	78	4	18	78	0	18	82	0.21	1.50	0.52	0.47	0.43	2.33	1.32	1.30	0.96	2.90	2.09	2.18	24	5	66	4	0	40
	AFT	3	81	8	188	0	23	77	1	20	79	0	12	88	0.21	1.39	0.56	0.51	0.50	2.28	1.34	1.30	0.74	2.80	2.09	2.18	14	3	78	7	0	40
1036-1	FWD	13	82	7	170	0	66	34	8	14	78	1	14	85	0.20	1.91	0.48	0.42	0.80	2.40	1.54	1.53	1.10	2.47	2.26	2.33	35	5	59	2	1	40
	AFT	15	83	9	171	0	5	95	3	9	88	0	10	90	0.24	1.66	0.55	0.51	0.55	2.25	1.49	1.52	1.20	2.43	2.23	2.29	12	2	80	5	0	40
1036-2	FWD	10	78	12	167	0	15	85	1	19	80	0	18	82	0.26	1.43	0.47	0.42	0.50	2.20	1.30	1.36	1.18	2.60	2.12	2.16	38	6	53	3	0	35
	AFT	12	78	9	168	0	4	96	3	20	77	0	17	83	0.28	1.14	0.48	0.44	0.48	2.18	1.37	1.40	1.54	2.40	2.15	2.20	28	4	64	4	0	35
1037-1	FWD	9	84	-172	-6	0	29	71	8	10	82	0	11	89	0.31	1.47	0.64	0.58	0.61	2.38	1.54	1.53	1.05	2.46	2.07	2.14	4	1	83	12	0	38
	AFT	9	84	-171	-6	0	25	75	0	19	81	0	12	88	0.25	1.45	0.66	0.61	0.84	2.33	1.48	1.44	1.15	2.48	2.02	2.10	3	2	79	16	0	36
1037-2	FWD	8	87	-175	-3	0	25	75	14	26	60	0	12	88	0.26	1.20	0.66	0.61	0.82	2.43	1.51	1.46	0.90	2.50	2.04	2.12	4	0	84	12	0	30
	AFT	8	87	-173	-3	0	24	76	11	33	56	0	23	77	0.28	1.80	0.67	0.64	0.55	2.35	1.51	1.45	1.10	2.43	2.03	2.10	4	5	77	14	0	35
1038-1	FWD	8	68	18	131	0	22	78	2	16	82	1	15	84	0.16	1.11	0.51	0.48	0.84	2.36	1.56	1.52	1.18	2.46	2.11	2.19	20	3	65	8	0	30
	AFT	6	69	18	130	0	22	78	1	13	86	0	14	86	0.25	1.37	0.53	0.47	0.52	2.31	1.53	1.52	1.13	2.43	2.08	2.16	33	3	57	6	0	36
1038-2	FWD	7	80	1	184	1	37	62	0	18	85	0	13	88	0.21	1.40	0.58	0.51	0.55	2.42	1.57	1.54	1.00	2.80	1.99	2.06	23	1	68	10	0	40
	AFT	7	80	1	184	3	29	68	0	27	73	0	26	74	0.19	1.78	0.61	0.49	0.47	2.36	1.66	1.67	0.35	2.48	1.96	2.01	14	12	56	17	1	40
1039-1	FWD	7	68	27	140	0	62	38	8	22	70	1	24	75	0.24	1.85	0.69	0.58	0.79	2.39	1.78	1.80	1.11	2.88	2.14	2.18	3	4	79	14	0	40
	AFT	7	68	28	140	0	60	40	6	30	64	0	31	69	0.27	1.85	0.67	0.52	0.77	2.39	1.78	1.79	1.11	2.47	2.13	2.18	4	3	77	16	1	40
1039-2	FWD	8	78	10	144	4	61	35	19	38	43	3	41	56	0.30	1.38	0.88	0.59	1.06	2.36	1.89	1.88	0.84	2.80	2.06	2.12	2	5	81	12	0	38
	AFT	8	78	10	144	2	47	51	20	48	32	7	57	36	0.27	1.60	0.67	0.55	0.83	2.30	1.61	1.80	0.97	2.81	2.05	2.09	1	4	67	15	2	38

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SECTION A

APPENDIX

MISSION * 1039-1 * INSTRUMENT * FWD * 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVECS MIN	ALL LEVECS MAX	ALL LEVECS LIM
0.01	0	0	0	0	0	0	0	0	0	0	0	0
0.02	0	0	0	0	0	0	0	0	0	0	0	0
0.03	0	0	0	0	0	0	0	0	0	0	0	0
0.04	0	0	0	0	0	0	0	0	0	0	0	0
0.05	0	0	0	0	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	0	0	0	0	0	0	0
0.07	0	0	0	0	0	0	0	0	0	0	0	0
0.08	0	0	0	0	0	0	0	0	0	0	0	0
0.09	0	0	0	0	0	0	0	0	0	0	0	0
0.10	0	0	0	0	0	0	0	0	0	0	0	0
0.11	0	0	0	0	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	0	0	0	0	0	0	0
0.13	0	0	0	0	0	0	0	0	0	0	0	0
0.14	0	0	0	0	0	0	0	0	0	0	0	0
0.15	0	0	0	0	0	0	0	0	0	0	0	0
0.16	0	0	0	0	0	0	0	0	0	0	0	0
0.17	0	0	0	0	0	0	0	0	0	0	0	0
0.18	0	0	0	0	0	0	0	0	0	0	0	0
0.19	0	0	0	0	0	0	0	0	0	0	0	0
0.20	0	0	0	0	0	0	0	0	0	0	0	0
0.21	0	0	0	0	0	0	0	0	0	0	0	0
0.22	0	0	0	0	0	0	0	0	0	0	0	0
0.23	0	0	0	0	0	0	0	0	0	0	0	0
0.24	0	0	0	0	0	0	0	0	0	0	0	0
0.25	0	0	0	0	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	0	0	0	0	0	0	0
0.27	0	0	0	0	0	0	0	0	0	0	0	0
0.28	0	0	0	0	0	0	0	0	0	0	0	0
0.29	0	0	0	0	0	0	0	0	0	0	0	0
0.30	0	0	0	0	0	0	0	0	0	0	0	0
0.31	0	0	0	0	0	0	0	0	0	0	0	0
0.32	0	0	0	0	0	0	0	0	0	0	0	0
0.33	0	0	0	0	0	0	0	0	0	0	0	0
0.34	0	0	0	0	0	0	0	0	0	0	0	0
0.35	0	0	0	0	0	0	0	0	0	0	0	0
0.36	0	0	0	0	0	0	0	0	0	0	0	0
0.37	0	0	0	0	0	0	0	0	0	0	0	0
0.38	0	0	0	0	0	0	0	0	0	0	0	0
0.39	0	0	0	0	0	0	0	0	0	0	0	0
0.40	0	0	0	0	0	0	0	0	0	0	0	0
0.41	0	0	0	0	0	0	0	0	0	0	0	0
0.42	0	0	0	0	0	0	0	0	0	0	0	0
0.43	0	0	0	0	0	0	0	0	0	0	0	0
0.44	0	0	0	0	0	0	0	0	0	0	0	0
0.45	0	0	0	0	0	0	0	0	0	0	0	0
0.46	1	0	0	0	0	0	0	0	0	0	0	0
0.47	0	0	0	0	0	0	0	0	0	0	0	0
0.48	0	0	0	0	0	0	0	0	0	0	0	0
0.49	0	0	0	0	0	0	0	0	0	0	0	0
0.50	0	0	0	1	0	0	0	0	0	0	0	0
SUBTOTAL	1	0	0	15	0	0	61	0	0	77	0	0

MISSION * 1039-1 * INSTRUMENT * FWD * 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
0.51	0	0	0	2	0	0	2	0	0	4	0	0
0.52	0	0	0	2	0	0	2	0	0	4	0	0
0.53	0	0	0	1	0	0	8	0	0	9	0	0
0.54	0	0	0	3	0	0	1	0	0	4	0	0
0.55	0	0	0	2	0	0	4	0	0	6	0	0
0.56	0	0	0	0	0	0	3	0	0	3	0	0
0.57	0	0	0	1	0	0	5	0	0	5	0	0
0.58	0	0	0	0	0	0	4	0	0	5	0	0
0.59	0	0	0	0	0	0	4	0	0	4	0	0
0.60	0	0	0	0	0	0	7	0	0	8	0	0
0.61	0	0	0	0	0	0	3	0	0	3	0	0
0.62	0	0	0	0	0	0	2	0	0	4	0	0
0.63	0	0	0	0	0	0	2	0	0	2	0	0
0.64	0	0	0	0	0	0	1	0	0	3	0	0
0.65	0	0	0	0	0	0	3	0	0	4	0	0
0.66	0	0	0	0	0	0	4	0	0	4	0	0
0.67	0	0	0	0	0	0	0	0	0	0	0	0
0.68	0	0	0	1	0	0	2	0	0	3	0	0
0.69	0	0	0	1	0	0	1	0	0	2	0	0
0.70	0	0	0	1	0	0	3	0	0	6	0	0
0.71	0	0	0	1	0	0	3	0	0	4	0	0
0.72	0	0	0	3	0	0	1	0	0	4	0	0
0.73	0	0	0	1	0	0	4	0	0	4	0	0
0.74	0	0	0	3	0	0	1	0	0	4	0	0
0.75	0	0	0	0	0	0	0	0	0	0	0	0
0.76	0	0	0	0	0	0	4	0	0	4	0	0
0.77	0	0	0	0	0	0	1	0	0	1	0	0
0.78	0	0	0	0	0	0	0	0	0	0	0	0
0.79	0	0	0	0	0	0	4	0	0	4	0	0
0.80	0	0	0	0	0	0	0	0	0	0	0	0
0.81	0	0	0	0	0	0	2	0	0	2	0	0
0.82	0	0	0	0	0	0	0	0	0	0	0	0
0.83	0	0	0	0	0	0	3	0	0	3	0	0
0.84	0	0	0	0	0	0	0	0	0	0	0	0
0.85	0	0	0	1	0	0	2	0	0	3	0	0
0.86	0	0	0	0	0	0	0	0	0	0	0	0
0.87	0	0	0	0	0	0	1	0	0	1	0	0
0.88	0	0	0	0	0	0	0	0	0	0	0	0
0.89	0	0	0	1	0	0	3	0	0	4	0	0
0.90	0	0	0	0	0	0	0	0	0	0	0	0
0.91	0	0	0	2	0	0	2	0	0	4	0	0
0.92	0	0	0	0	0	0	0	0	0	0	0	0
0.93	0	0	0	1	0	0	1	0	0	2	0	0
0.94	0	0	0	0	0	0	0	0	0	0	0	0
0.95	0	0	0	1	0	0	1	0	0	2	0	0
0.96	0	0	0	0	0	0	0	0	0	0	0	0
0.97	0	0	0	1	0	0	1	0	0	2	0	0
0.98	0	0	0	0	0	0	0	0	0	0	0	0
0.99	0	0	0	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	0	0	31	2	0	98	0	0	129	2	0

MISSION * 1039-1 * INSTRUMENT * FWD 05/18/67 DENSITY FREQ DISTR

DE SITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
1.01	0	0	0	0	0	0	2	0	0	2	0	0
1.02	0	0	0	0	0	0	0	0	0	0	0	0
1.03	0	0	0	0	0	0	1	0	0	1	0	0
1.04	0	0	0	0	0	0	1	0	0	1	0	0
1.05	0	0	0	0	0	0	0	0	0	0	0	0
1.06	0	0	0	1	0	0	0	0	0	1	0	0
1.07	0	0	0	1	0	0	1	0	0	2	0	0
1.08	0	0	0	1	0	0	1	0	0	2	0	0
1.09	0	0	0	0	0	0	1	0	0	1	0	0
1.10	0	0	0	0	0	0	0	0	0	0	0	0
1.11	0	0	0	0	0	0	0	0	0	0	0	0
1.12	0	0	0	1	0	0	0	0	0	1	0	0
1.13	0	0	0	0	0	0	0	0	0	0	0	0
1.14	0	0	0	1	0	0	0	0	0	1	0	0
1.15	0	0	0	1	0	0	0	0	0	1	0	0
1.16	0	0	0	0	0	0	0	0	0	0	0	0
1.17	0	0	0	0	0	0	0	0	0	0	0	0
1.18	0	0	0	0	0	0	0	0	0	0	0	0
1.19	0	0	0	0	0	0	1	0	0	1	0	0
1.20	0	0	0	0	0	0	3	0	0	3	0	0
1.21	0	0	0	0	0	0	2	0	0	2	0	0
1.22	0	0	0	0	0	0	0	0	0	0	0	0
1.23	0	0	0	0	0	0	1	0	0	1	0	0
1.24	0	0	0	0	0	0	0	0	0	0	0	0
1.25	0	0	0	0	0	0	2	0	0	2	0	0
1.26	0	0	0	0	0	0	0	0	0	0	0	0
1.27	0	0	0	0	0	0	2	0	0	2	0	0
1.28	0	0	0	0	0	0	2	0	0	2	0	0
1.29	0	0	0	0	0	0	0	0	0	0	0	0
1.30	0	0	0	0	0	0	2	0	0	2	0	0
1.31	0	0	0	0	0	0	2	0	0	2	0	0
1.32	0	0	0	0	0	0	2	0	0	2	0	0
1.33	0	0	0	0	0	0	1	0	0	1	0	0
1.34	0	0	0	0	0	0	1	0	0	1	0	0
1.35	0	0	0	0	0	0	0	0	0	0	0	0
1.36	0	0	0	0	0	0	1	0	0	1	0	0
1.37	0	0	0	0	0	0	1	0	0	1	0	0
1.38	0	0	0	0	0	0	2	0	0	2	0	0
1.39	0	0	0	0	0	0	1	0	0	1	0	0
1.40	0	0	0	0	0	0	1	0	0	1	0	0
1.41	0	0	0	0	0	0	2	0	0	2	0	0
1.42	0	0	0	0	0	0	1	0	0	1	0	0
1.43	0	0	0	0	0	0	1	0	0	1	0	0
1.44	0	0	0	0	0	0	2	0	0	2	0	0
1.45	0	0	0	0	0	0	4	0	0	4	0	0
1.46	0	0	0	0	0	0	1	0	0	1	0	0
1.47	0	0	0	0	0	0	1	0	0	1	0	0
1.48	0	0	0	0	0	0	1	0	0	1	0	0
1.49	0	0	0	0	0	0	0	0	0	0	0	0
1.50	0	0	0	0	0	0	2	0	0	2	0	0
SUBTOTAL	0	0	0	8	10	0	14	37	3	22	47	3

MISSION * 1039-1 * INSTRUMENT * FWD 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
1.51	0	0	0	0	1	0	0	0	0	0	1	0
1.52	0	0	0	0	0	0	0	0	0	0	0	0
1.53	0	0	0	0	0	0	0	0	0	0	0	0
1.54	0	0	0	0	0	0	0	0	0	0	0	0
1.55	0	0	0	0	0	0	0	0	0	0	0	0
1.56	0	0	0	0	0	0	0	0	0	0	0	0
1.57	0	0	0	0	0	0	0	0	0	0	0	0
1.58	0	0	0	0	0	0	0	0	0	0	0	0
1.59	0	0	0	0	0	0	0	0	0	0	0	0
1.60	0	0	0	0	0	0	0	0	0	0	0	0
1.61	0	0	0	0	0	0	0	0	0	0	0	0
1.62	0	0	0	0	0	0	0	0	0	0	0	0
1.63	0	0	0	0	0	0	0	0	0	0	0	0
1.64	0	0	0	0	0	0	0	0	0	0	0	0
1.65	0	0	0	0	0	0	0	0	0	0	0	0
1.66	0	0	0	0	0	0	0	0	0	0	0	0
1.67	0	0	0	0	0	0	0	0	0	0	0	0
1.68	0	0	0	0	0	0	0	0	0	0	0	0
1.69	0	0	0	0	0	0	0	0	0	0	0	0
1.70	0	0	0	0	0	0	0	0	0	0	0	0
1.71	0	0	0	0	0	0	0	0	0	0	0	0
1.72	0	0	0	0	0	0	0	0	0	0	0	0
1.73	0	0	0	0	0	0	0	0	0	0	0	0
1.74	0	0	0	0	0	0	0	0	0	0	0	0
1.75	0	0	0	0	0	0	0	0	0	0	0	0
1.76	0	0	0	0	0	0	0	0	0	0	0	0
1.77	0	0	0	0	0	0	0	0	0	0	0	0
1.78	0	0	0	0	0	0	0	0	0	0	0	0
1.79	0	0	0	0	0	0	0	0	0	0	0	0
1.80	0	0	0	0	0	0	0	0	0	0	0	0
1.81	0	0	0	0	0	0	0	0	0	0	0	0
1.82	0	0	0	0	0	0	0	0	0	0	0	0
1.83	0	0	0	0	0	0	0	0	0	0	0	0
1.84	0	0	0	0	0	0	0	0	0	0	0	0
1.85	0	0	0	0	0	0	0	0	0	0	0	0
1.86	0	0	0	0	0	0	0	0	0	0	0	0
1.87	0	0	0	0	0	0	0	0	0	0	0	0
1.88	0	0	0	0	0	0	0	0	0	0	0	0
1.89	0	0	0	0	0	0	0	0	0	0	0	0
1.90	0	0	0	0	0	0	0	0	0	0	0	0
1.91	0	0	0	0	0	0	0	0	0	0	0	0
1.92	0	0	0	0	0	0	0	0	0	0	0	0
1.93	0	0	0	0	0	0	0	0	0	0	0	0
1.94	0	0	0	0	0	0	0	0	0	0	0	0
1.95	0	0	0	0	0	0	0	0	0	0	0	0
1.96	0	0	0	0	0	0	0	0	0	0	0	0
1.97	0	0	0	0	0	0	0	0	0	0	0	0
1.98	0	0	0	0	0	0	0	0	0	0	0	0
1.99	0	0	0	0	0	0	0	0	0	0	0	0
2.00	0	1	0	0	32	19	1	86	22	1	119	41
SUBTOTAL												

MISSION * 1039-1 * INSTRUMENT * FWD 05/18/69 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
2.01	0	0	0	0	0	1	0	2	2	0	2	3
2.02	0	0	0	0	1	1	0	1	1	0	2	2
2.03	0	0	0	0	0	0	0	3	3	0	3	3
2.04	0	0	0	0	1	1	0	3	3	0	4	4
2.05	0	0	0	0	0	0	0	2	2	0	3	3
2.06	0	0	0	0	0	0	0	3	3	0	3	3
2.07	0	0	0	0	0	0	0	2	2	0	2	2
2.08	0	0	0	0	0	0	0	2	2	0	2	2
2.09	0	0	0	0	0	0	0	1	1	0	1	1
2.10	0	0	0	0	0	0	0	2	2	0	2	2
2.11	0	0	0	0	0	0	0	1	1	0	1	1
2.12	0	0	0	0	0	0	0	1	1	0	1	1
2.13	0	0	0	0	0	0	0	1	1	0	1	1
2.14	0	0	0	0	0	0	0	1	1	0	1	1
2.15	0	0	0	0	0	0	0	1	1	0	1	1
2.16	0	0	0	0	0	0	0	1	1	0	1	1
2.17	0	0	0	0	0	0	0	1	1	0	1	1
2.18	0	0	0	0	0	0	0	1	1	0	1	1
2.19	0	0	0	0	0	0	0	1	1	0	1	1
2.20	0	0	0	0	0	0	0	1	1	0	1	1
2.21	0	0	0	0	0	0	0	1	1	0	1	1
2.22	0	0	0	0	0	0	0	1	1	0	1	1
2.23	0	0	0	0	0	0	0	1	1	0	1	1
2.24	0	0	0	0	0	0	0	1	1	0	1	1
2.25	0	0	0	0	0	0	0	1	1	0	1	1
2.26	0	0	0	0	0	0	0	1	1	0	1	1
2.27	0	0	0	0	0	0	0	1	1	0	1	1
2.28	0	0	0	0	0	0	0	1	1	0	1	1
2.29	0	0	0	0	0	0	0	1	1	0	1	1
2.30	0	0	0	0	0	0	0	1	1	0	1	1
2.31	0	0	0	0	0	0	0	1	1	0	1	1
2.32	0	0	0	0	0	0	0	1	1	0	1	1
2.33	0	0	0	0	0	0	0	1	1	0	1	1
2.34	0	0	0	0	0	0	0	1	1	0	1	1
2.35	0	0	0	0	0	0	0	1	1	0	1	1
2.36	0	0	0	0	0	0	0	1	1	0	1	1
2.37	0	0	0	0	0	0	0	1	1	0	1	1
2.38	0	0	0	0	0	0	0	1	1	0	1	1
2.39	0	0	0	0	0	0	0	1	1	0	1	1
2.40	0	0	0	0	0	0	0	1	1	0	1	1
2.41	0	0	0	0	0	0	0	1	1	0	1	1
2.42	0	0	0	0	0	0	0	1	1	0	1	1
2.43	0	0	0	0	0	0	0	1	1	0	1	1
2.44	0	0	0	0	0	0	0	1	1	0	1	1
2.45	0	0	0	0	0	0	0	1	1	0	1	1
2.46	0	0	0	0	0	0	0	1	1	0	1	1
2.47	0	0	0	0	0	0	0	1	1	0	1	1
2.48	0	0	0	0	0	0	0	1	1	0	1	1
2.49	0	0	0	0	0	0	0	1	1	0	1	1
2.50	0	0	0	0	0	0	0	1	1	0	1	1
SUBTOTAL	0	0	0	0	10	30	0	51	112	0	61	142

MISSION * 1039-1 * INSTRUMENT * FWD 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
2.51	0	0	0	0	0	0	0	0	0	0	0	0
2.52	0	0	0	0	0	0	0	0	0	0	0	0
2.53	0	0	0	0	0	0	0	0	0	0	0	0
2.54	0	0	0	0	0	0	0	0	0	0	0	0
2.55	0	0	0	0	0	0	0	0	0	0	0	0
2.56	0	0	0	0	0	0	0	0	0	0	0	0
2.57	0	0	0	0	0	0	0	0	0	0	0	0
2.58	0	0	0	0	0	0	0	0	0	0	0	0
2.59	0	0	0	0	0	0	0	0	0	0	0	0
2.60	0	0	0	0	0	0	0	0	0	0	0	0
2.61	0	0	0	0	0	0	0	0	0	0	0	0
2.62	0	0	0	0	0	0	0	0	0	0	0	0
2.63	0	0	0	0	0	0	0	0	0	0	0	0
2.64	0	0	0	0	0	0	0	0	0	0	0	0
2.65	0	0	0	0	0	0	0	0	0	0	0	0
2.66	0	0	0	0	0	0	0	0	0	0	0	0
2.67	0	0	0	0	0	0	0	0	0	0	0	0
2.68	0	0	0	0	0	0	0	0	1	0	0	1
2.69	0	0	0	0	0	0	0	0	0	0	0	0
2.70	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL	1	1	0	54	54	49	174	174	138	229	229	187

MISSION 1039-1 INSTR - FWD 05/18/ PROCESSING AND EXPOSURE ANALYS

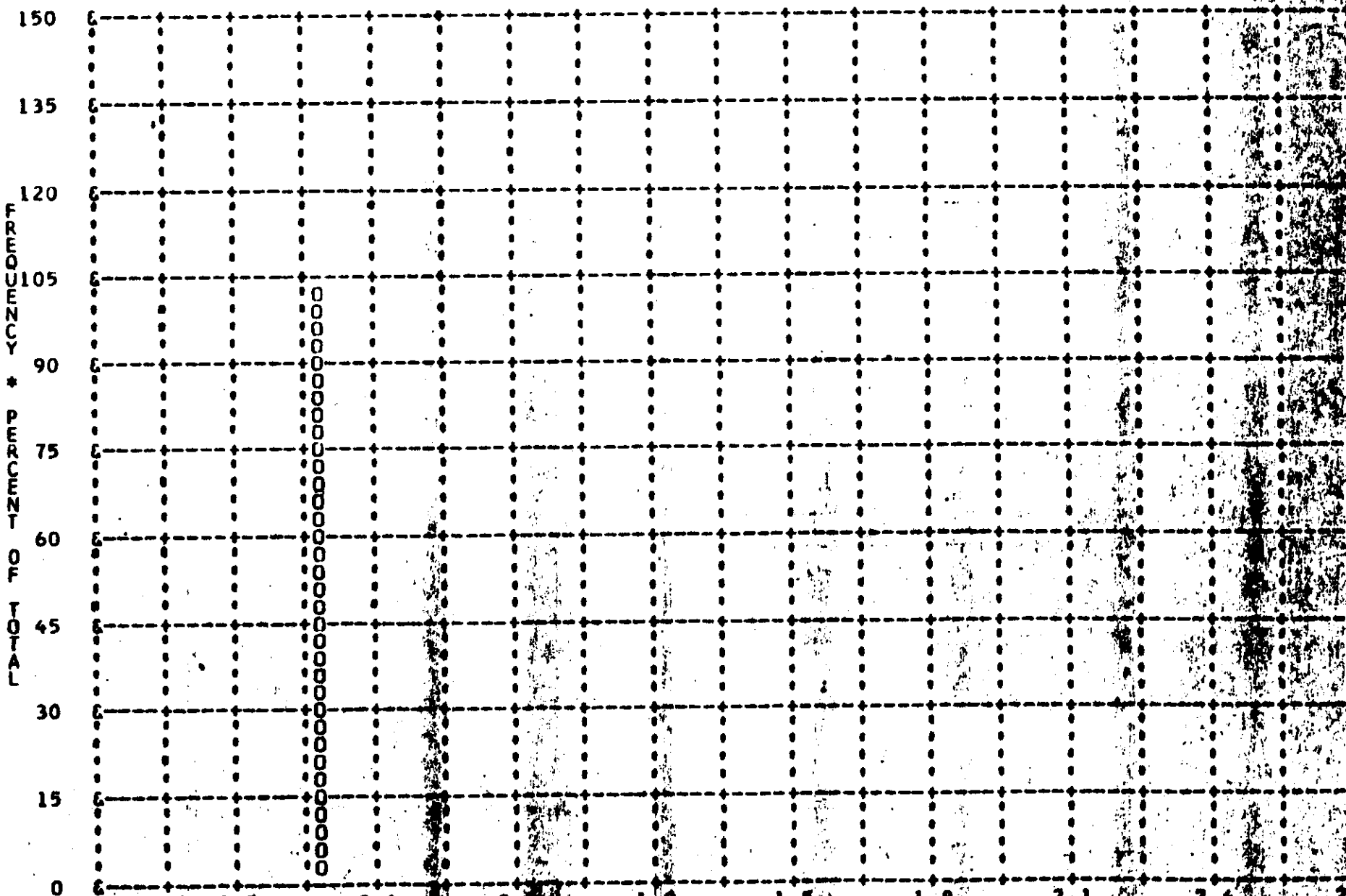
PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	1	0 PC	0 PC	100 PC	0 PC	0 PC
INTERMEDIATE	54	0 PC	17 PC	63 PC	19 PC	2 PC
FULL	174	5 PC	0 PC	83 PC	12 PC	0 PC
ALL LEVELS	229	3 PC	4 PC	79 PC	14 PC	[illegible]

PROCESS LEVEL	BASE & FOG	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	0.01-0.09	0.01-0.13	0.14-0.39	0.40-0.90	---------	0.91 AND U
INTERMED	0.10-0.17	0.01-0.20	0.21-0.39	0.40-0.90	0.91-1.34	1.35 AND U
FULL	0.18 AND UP	0.01-0.39	---------	0.40-0.90	0.91-1.[illegible]	1.[illegible]

~~TOP SECRET~~ C[redacted]

MISSION * 1039-1 * INSTR * FWD * 05/18/67PLOT OF D MIN * TERRAIN * PROCESSING * PRIMARY

AIRTH MEAN * 0.46 * MEDIAN * 0.46 * STD DEV * 0.00 * RANGE * 0.46 TO 0.46 WITH 1 SAMPLES



[redacted]

FIGURE A-1

MISSION * 1039-1 * INSTR * FWD * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * PRIMARY

AIRTH MEAN * 1.63 * MEDIAN * 1.63 * STD DEV * 0.00 * RANGE * 1.63 TO 1.63 WITH 1 SAMPLES

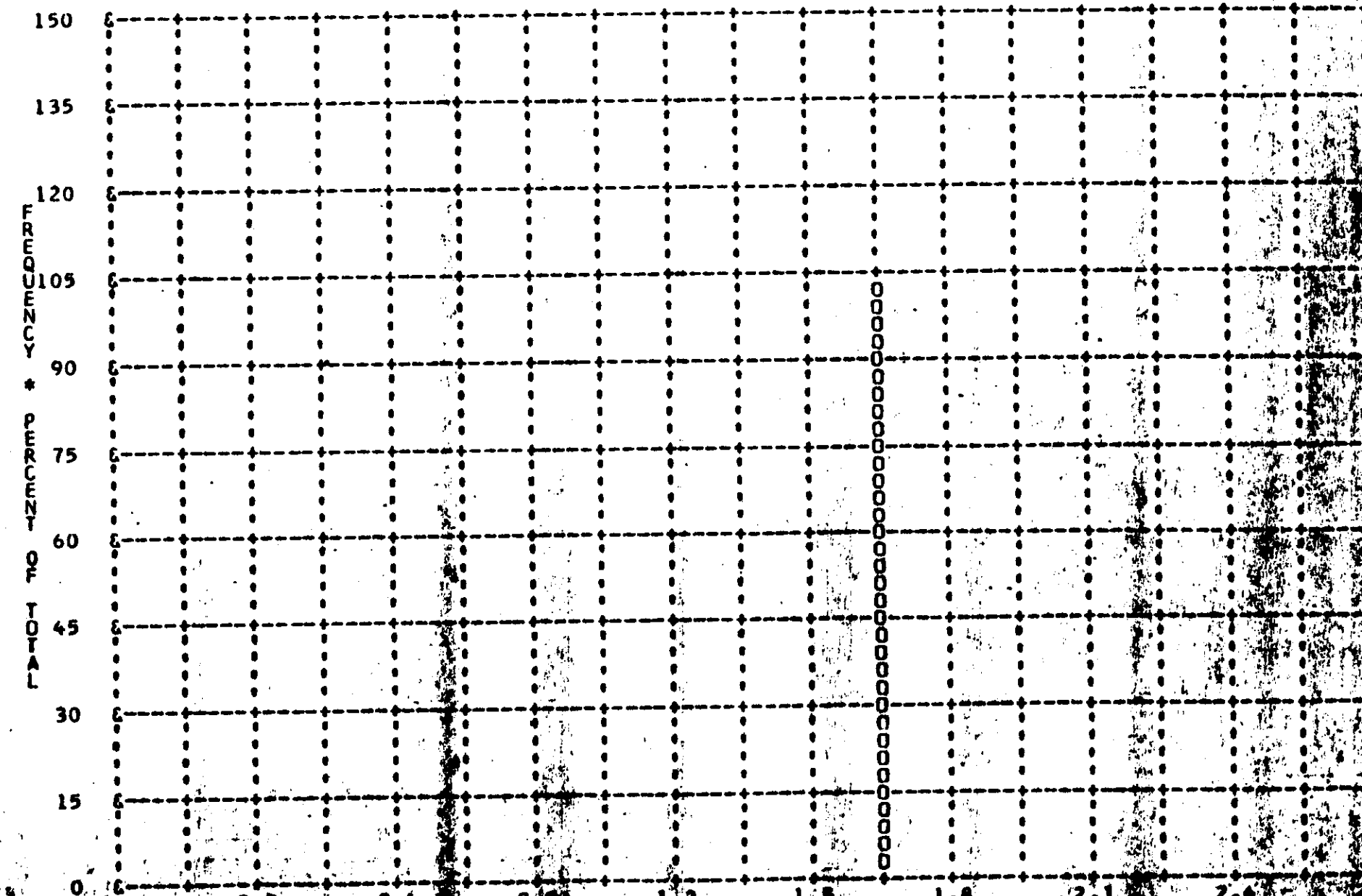


FIGURE A-2

MISSION * 1039-1 * INSTR * FWD * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * PRIMARY

AIRTH MEAN * 0.0 * MEDIAN * 0.00 * STD DEV * 0.0 * RANGE * 2.70 TO 0.00 WITH 0 SAMPLES

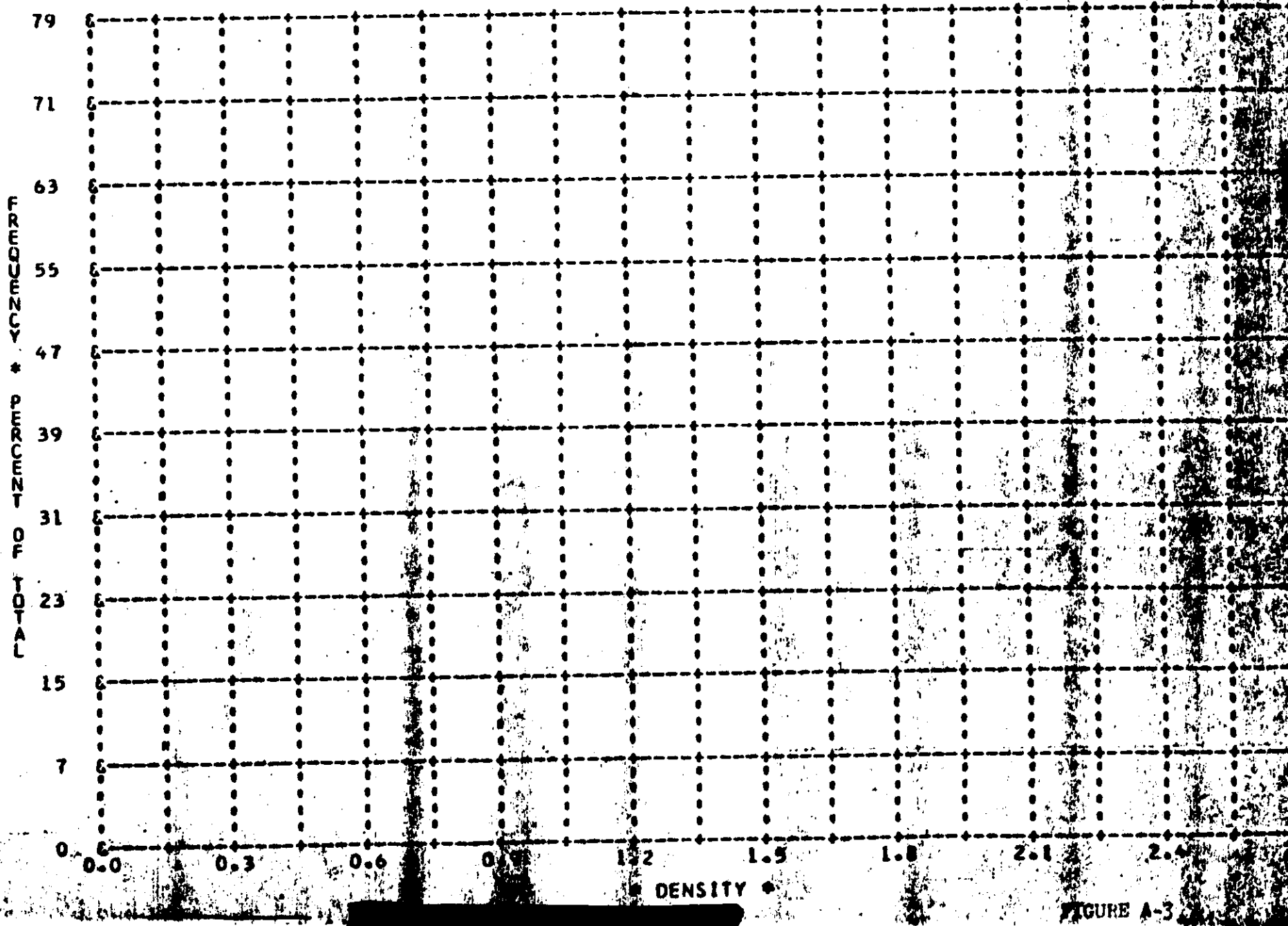


FIGURE A-3

~~TOP SECRET~~ C/[redacted]

MISSION * 1039-1 * INSTR * FWD * 05/18/7 PLOT OF D MIN * TERRAIN * PROCESSING * INTERMEDIATE

AIRTH MEAN * 0.67 * MEDIAN * 0.60 * STD DEV * 0.28 * RANGE * 0.24 TO 1.38 WITH 54 SAMPLES

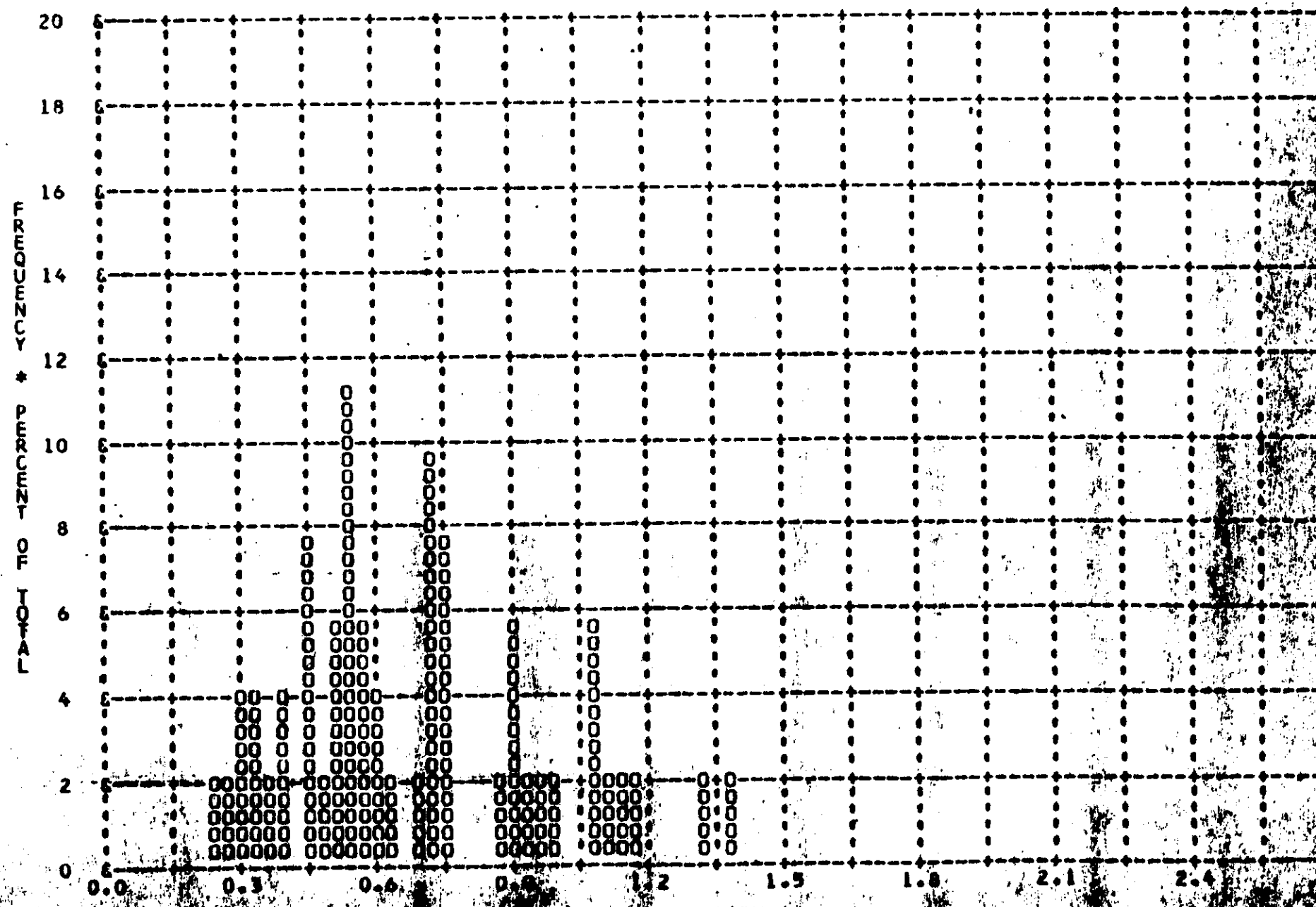


FIGURE A-4

[redacted]

~~TOP SECRET~~ C/[redacted]

MISSION * 1039-1 * INSTR * FWD * 05/18/7 PLOT OF D MAX * TERRAIN * PROCESSING * INTERMEDIATE

AIRTH MEAN * 1.73 * MEDIAN * 1.76 * STD DEV * 0.29 * RANGE * 0.79 TO 2.24 WITH 94 SAMPLES

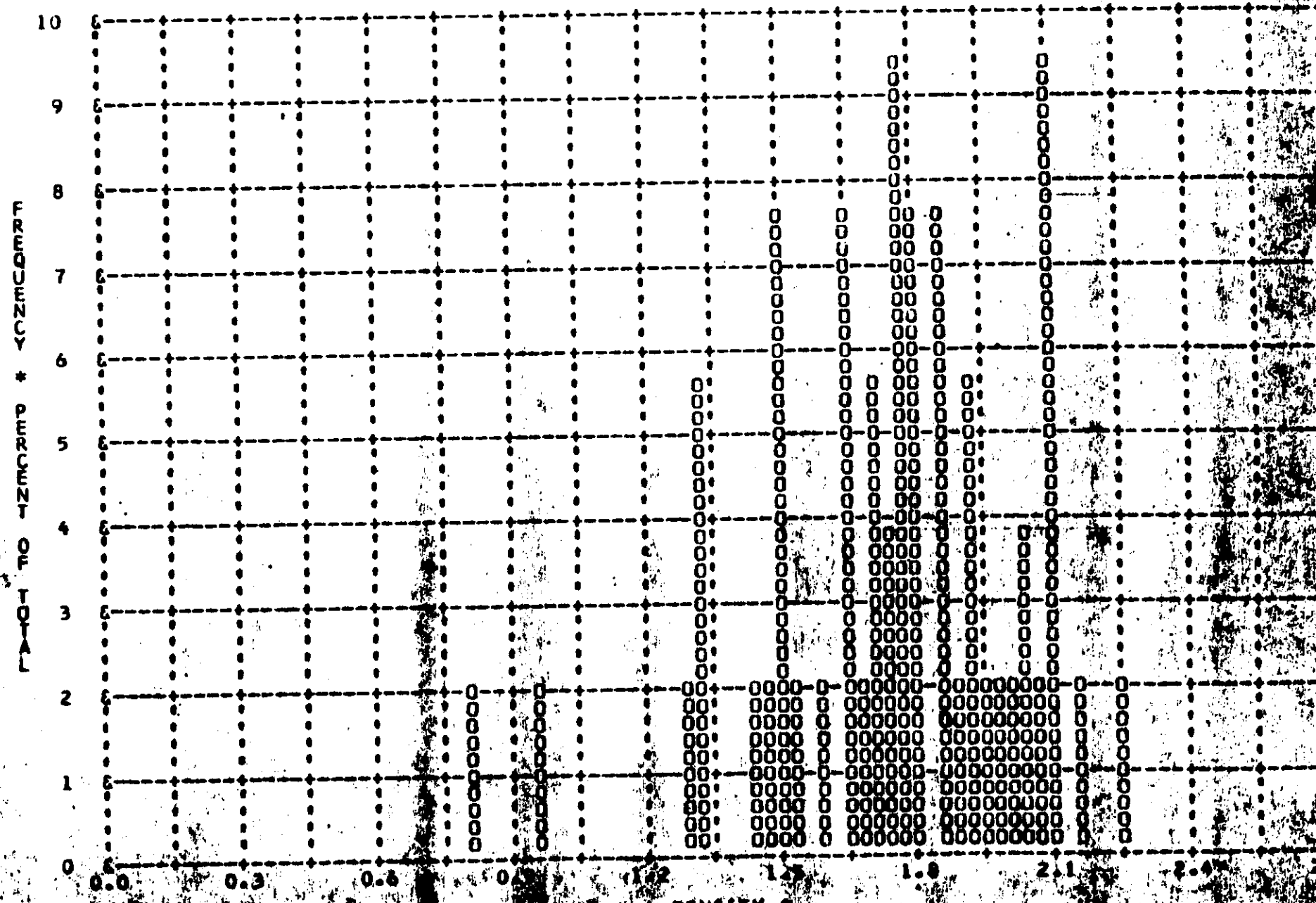
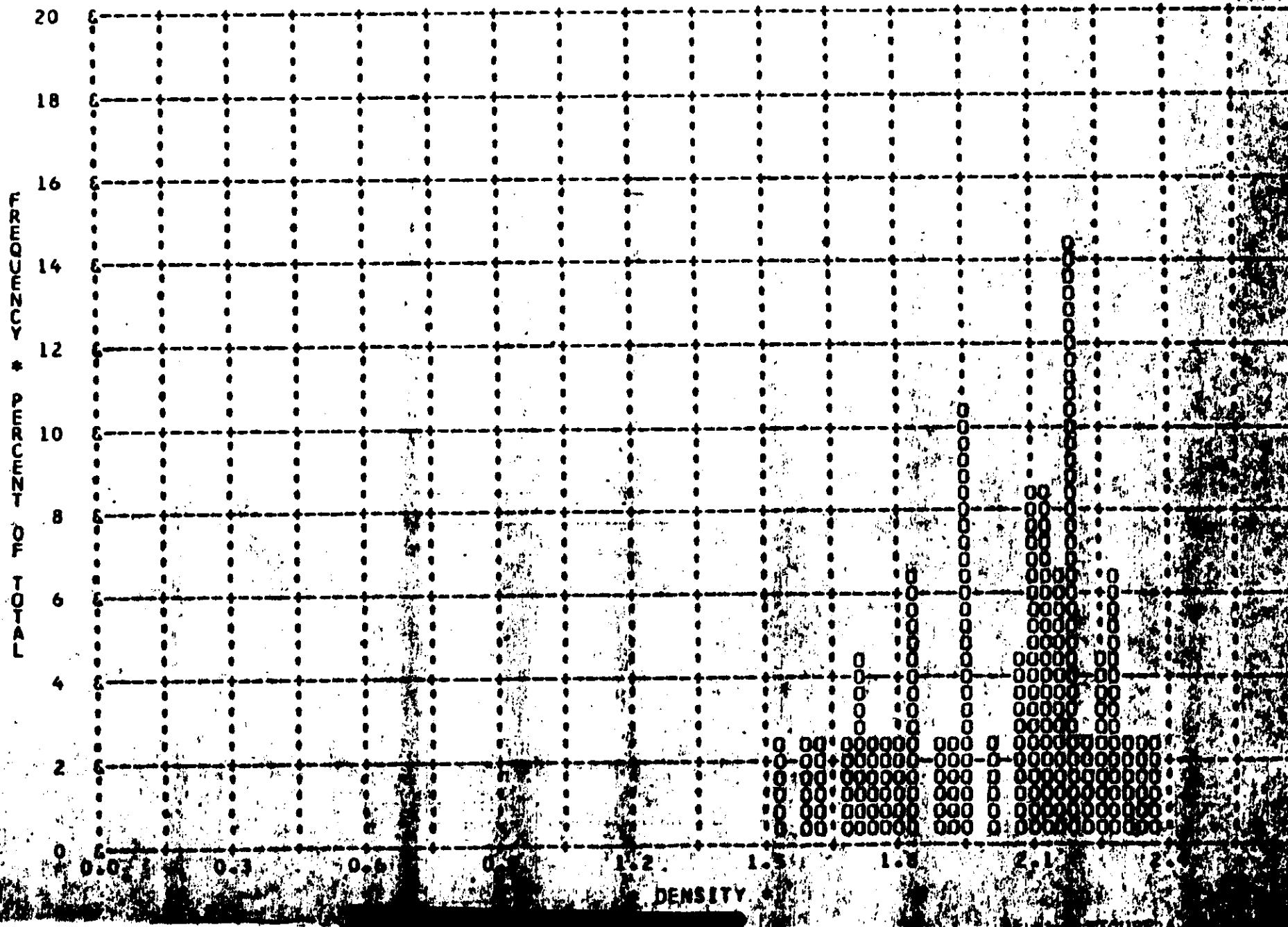


FIGURE A-5

~~TOP SECRET~~ C/[redacted]

MISSION * 1039-1 * INSTR * FWD * 05/18/7 PLOT OF D MAX * CLOUD * PROCESSING * INTERMEDIATE

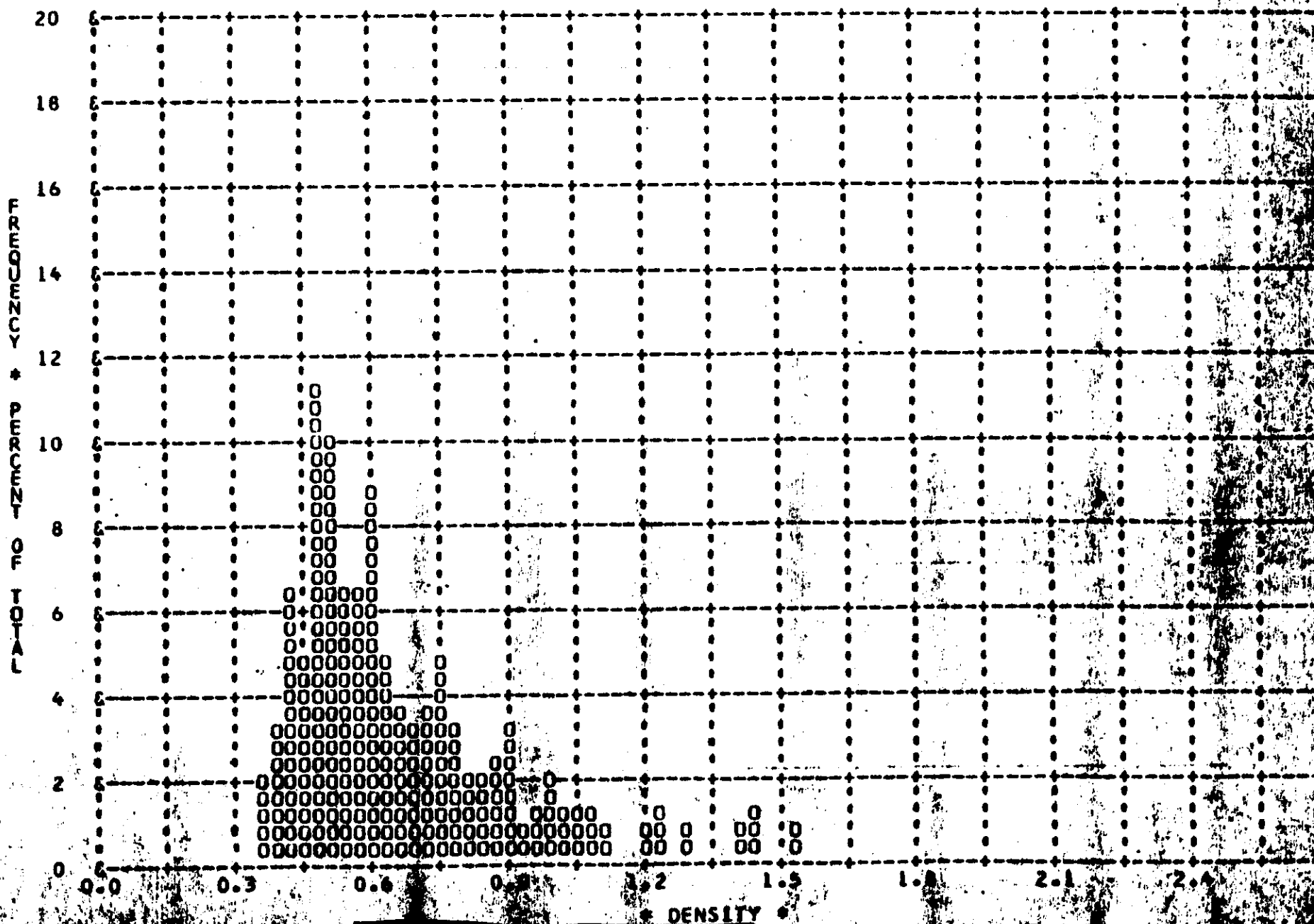
AIRTH MEAN * 2.02 * MEDIAN * 2.10 * STD DEV * 0.21 * RANGE * 1.53 TO 2.37 WITH 49 SAMPLES



[redacted]

MISSIO * 1039-1 * INSTR * FWD * 05/18/7 PLOT OF D MIN * TERRAIN * PROCESSING * FULL

AIRTH MEAN * 0.64 * MEDIAN * 0.58 * STD DEV * 0.23 * RANGE * 0.35 TO 1.53 WITH 174 SAMPLES



MISSION * 1039-1 * INSTR * FWD * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * FULL

AIRTH MEAN * 1.79 * MEDIAN * 1.83 * STD DEV * 0.31 * RANGE * 1.14 TO 2.39 WITH 174 SAMPLES

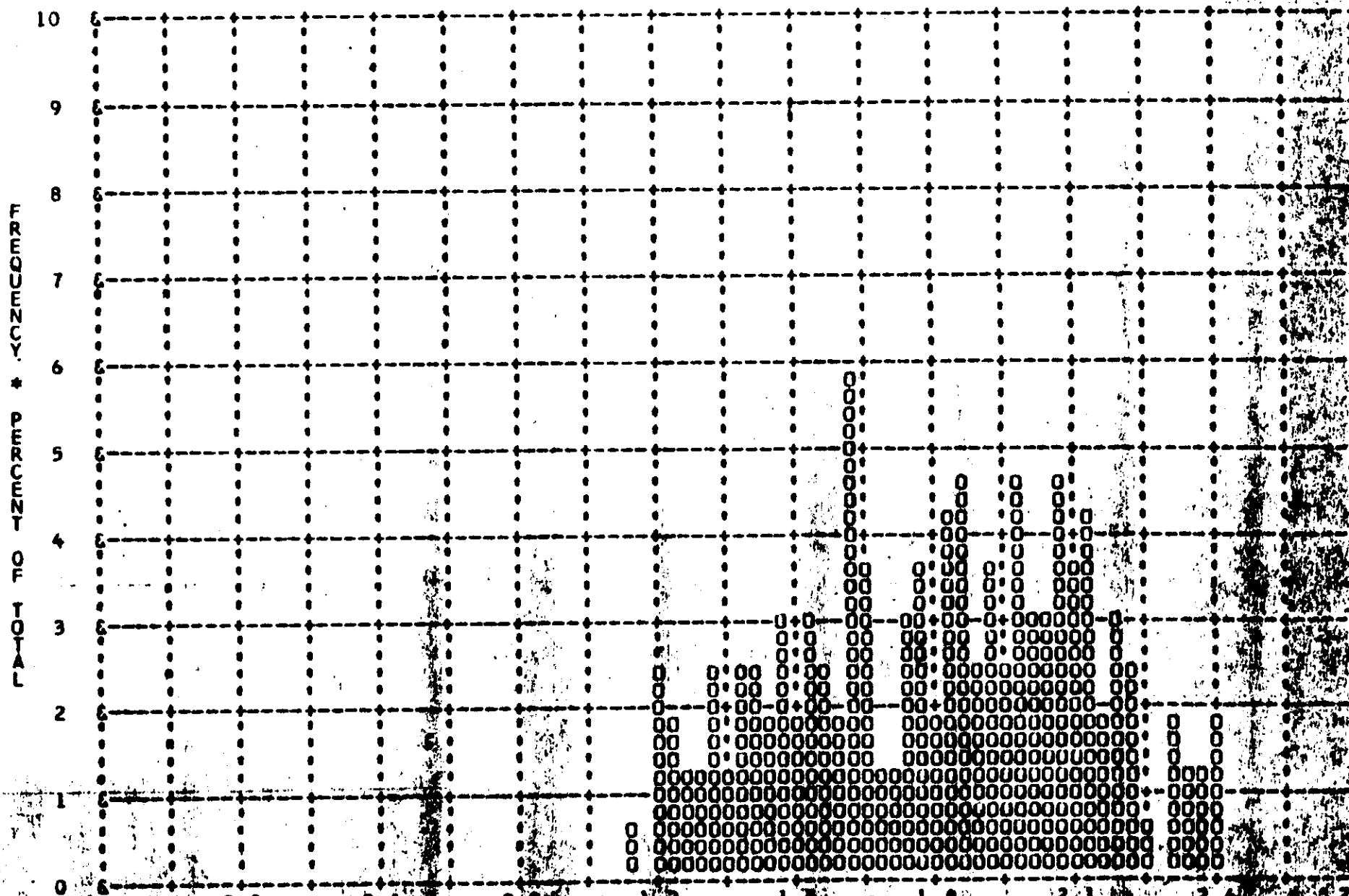


FIGURE A-

MISSION * 1039-1 * INSTR * FWD * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * FULL

AIRTH MEAN * 2.18 * MEDIAN * 2.26 * STD DEV * 0.24 * RANGE * 1.11 TO 2.68 WITH 138 SAMPLES

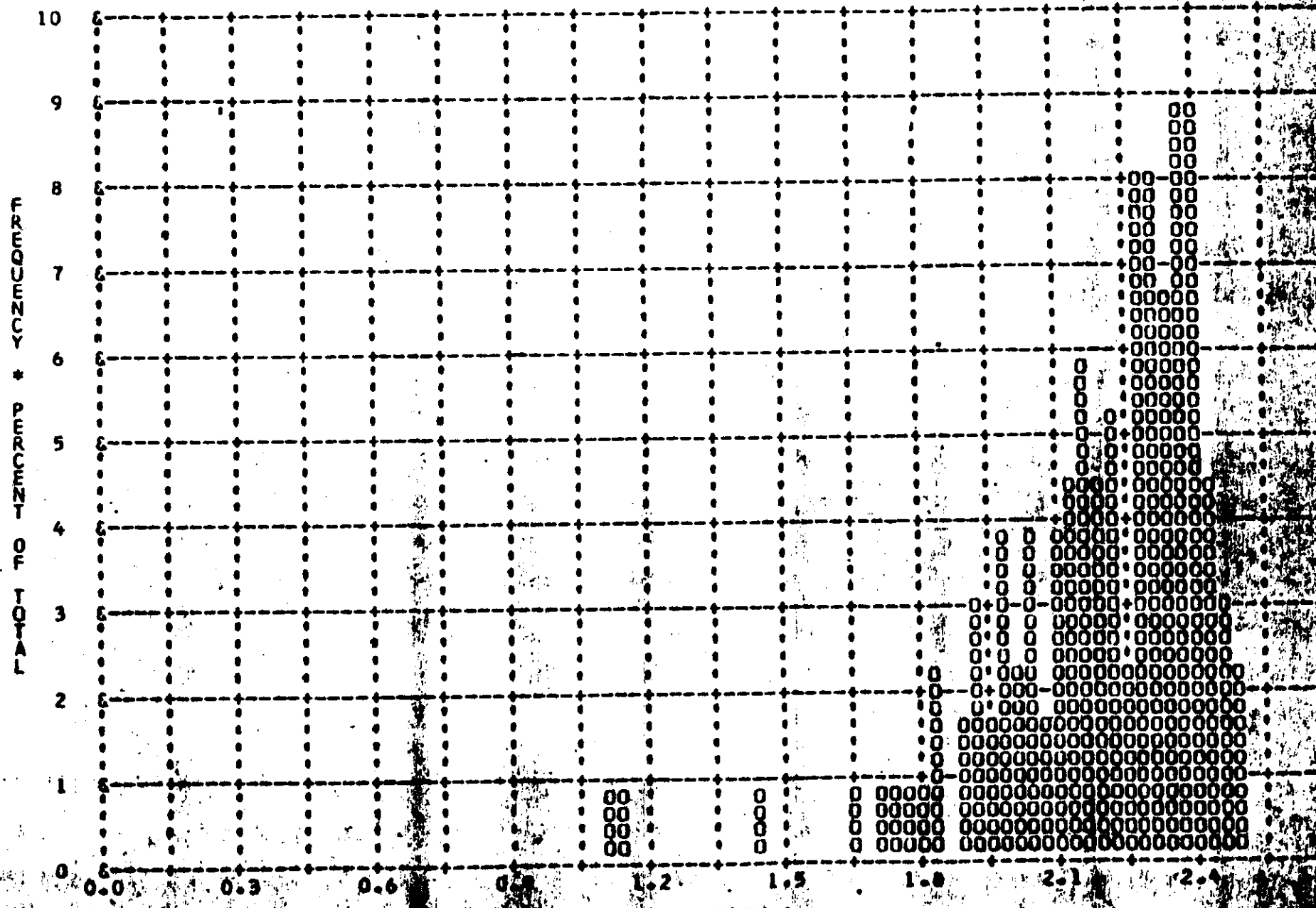
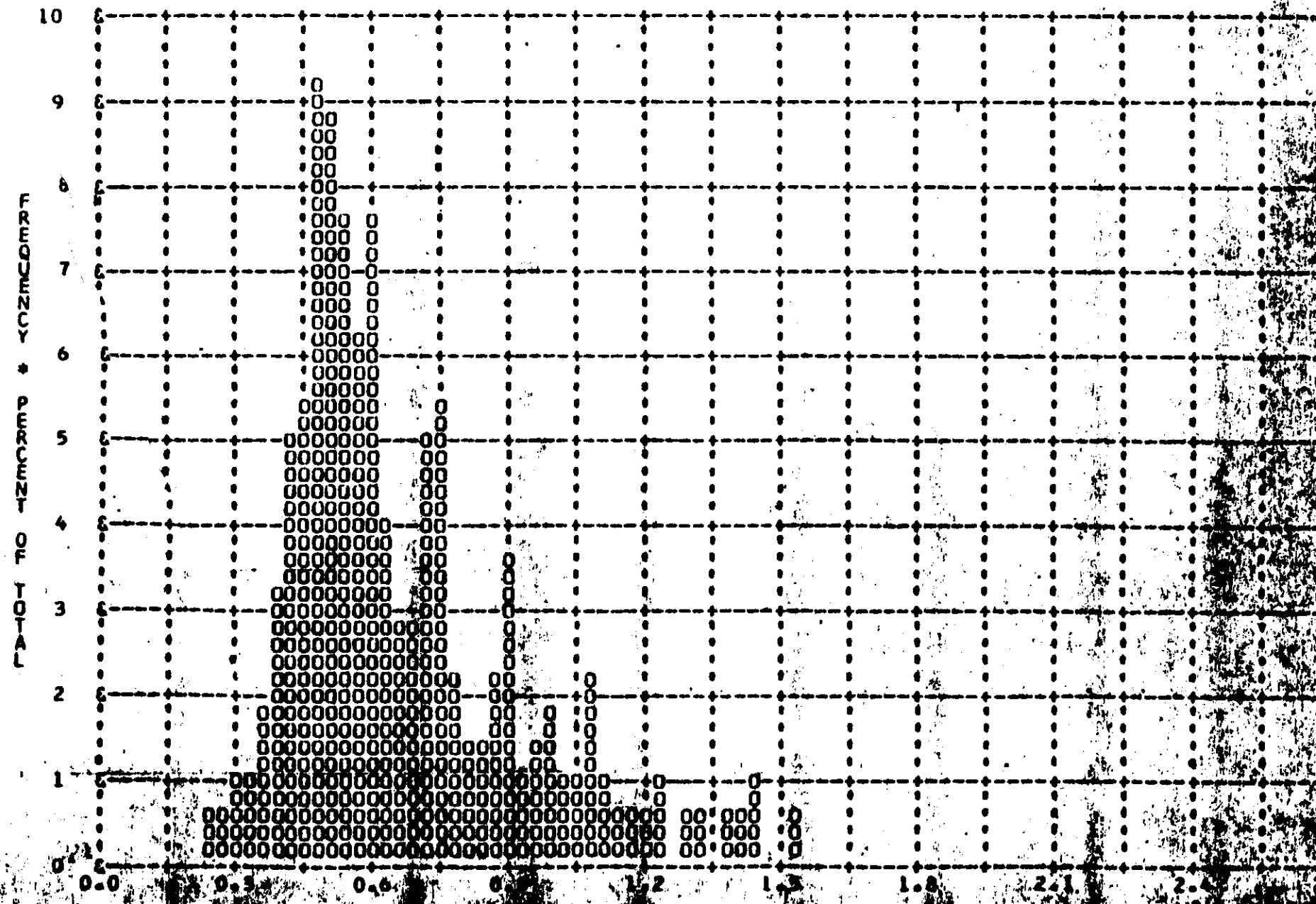


FIGURE A-9

MISSION * 1039-1 * INSTR * FWD * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * ALL LEVELS

AIRTH MEAN * 0.65 * MEDIAN * 0.58 * STD DEV * 0.24 * RANGE * 0.24 TO 1.53 WITH 229 SAMPLES



[redacted]

FIGURE A-2.0

MISSION * 1039-1 * INSTR * FWD * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * ALL LEVELS

AIRTH MEAN * 1.78 * MEDIAN * 1.80 * STD DEV * 0.31 * RANGE * 0.79 TO 2.39 WITH 229 SAMPLES

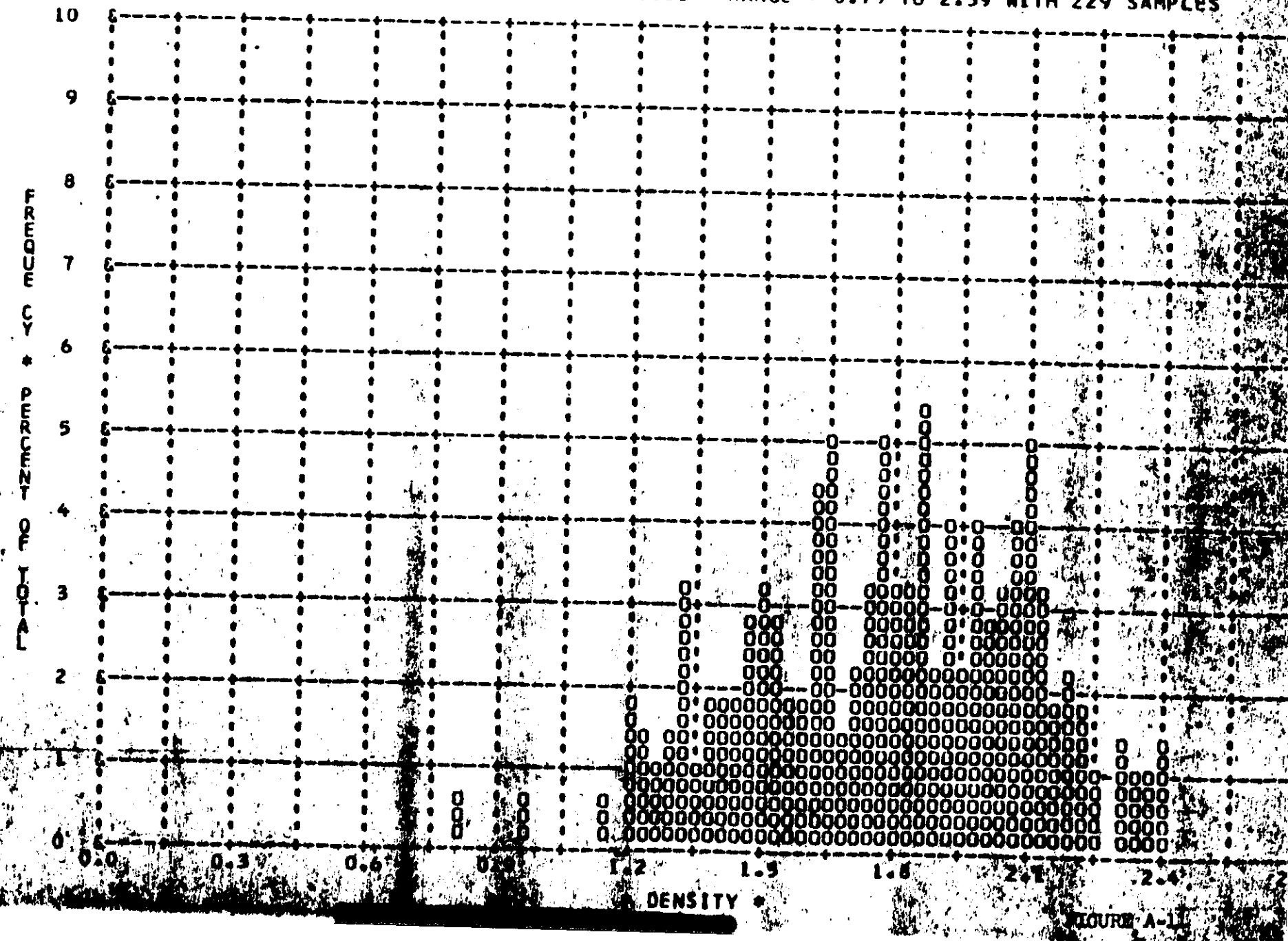
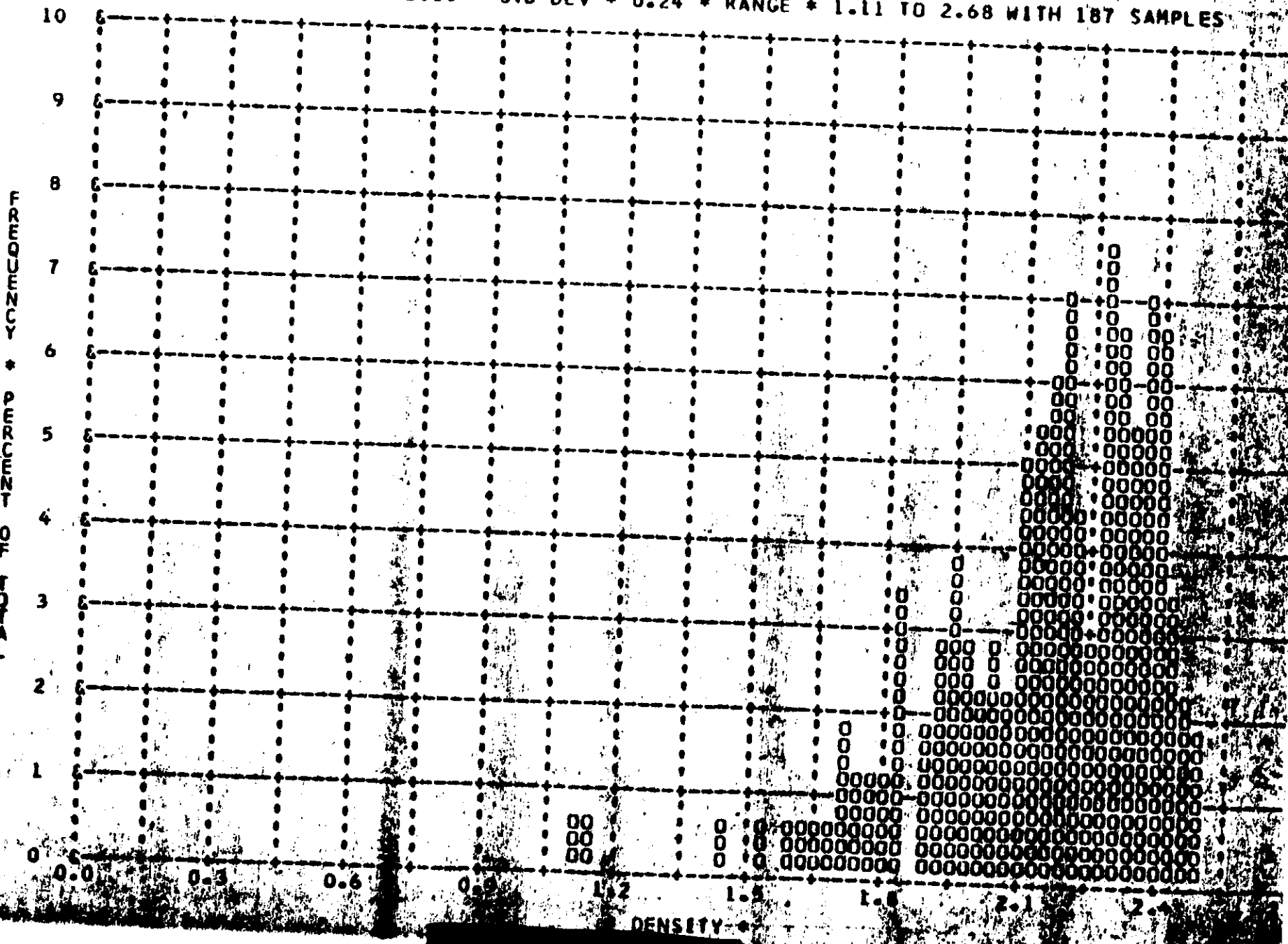


FIGURE A-11

~~TOP SECRET~~ C[redacted]

MISSION * 1039-1 * INSTR * FWD * 05/18/71 PLOT OF D MAX * CLOUD * PROCESSING * ALL LEVELS

AIRTH MEAN * 2.14 * MEDIAN * 2.18 * STD DEV * 0.24 * RANGE * 1.11 TO 2.68 WITH 187 SAMPLES



[redacted]

MISSION * 1039-1 * INSTRUMENT * AFT * 05/18/67 DENSITY FREQ DISTR

DE SITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
0.01	0	0	0	0	0	0	0	0	0	0	0	0
0.02	0	0	0	0	0	0	0	0	0	0	0	0
0.03	0	0	0	0	0	0	0	0	0	0	0	0
0.04	0	0	0	0	0	0	0	0	0	0	0	0
0.05	0	0	0	0	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	0	0	0	0	0	0	0
0.07	0	0	0	0	0	0	0	0	0	0	0	0
0.08	0	0	0	0	0	0	0	0	0	0	0	0
0.09	0	0	0	0	0	0	0	0	0	0	0	0
0.10	0	0	0	0	0	0	0	0	0	0	0	0
0.11	0	0	0	0	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	0	0	0	0	0	0	0
0.13	0	0	0	0	0	0	0	0	0	0	0	0
0.14	0	0	0	0	0	0	0	0	0	0	0	0
0.15	0	0	0	0	0	0	0	0	0	0	0	0
0.16	0	0	0	0	0	0	0	0	0	0	0	0
0.17	0	0	0	0	0	0	0	0	0	0	0	0
0.18	0	0	0	0	0	0	0	0	0	0	0	0
0.19	0	0	0	0	0	0	0	0	0	0	0	0
0.20	0	0	0	0	0	0	0	0	0	0	0	0
0.21	0	0	0	0	0	0	0	0	0	0	0	0
0.22	0	0	0	0	0	0	0	0	0	0	0	0
0.23	0	0	0	0	0	0	0	0	0	0	0	0
0.24	0	0	0	0	0	0	0	0	0	0	0	0
0.25	0	0	0	0	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	0	0	0	0	0	0	0
0.27	0	0	0	1	0	0	0	0	0	1	0	0
0.28	0	0	0	0	0	0	0	0	0	0	0	0
0.29	0	0	0	0	0	0	0	0	0	0	0	0
0.30	0	0	0	0	0	0	0	0	0	0	0	0
0.31	0	0	0	0	0	0	0	0	0	0	0	0
0.32	0	0	0	2	0	0	0	0	0	2	0	0
0.33	0	0	0	0	0	0	0	0	0	0	0	0
0.34	0	0	0	0	0	0	0	0	0	0	0	0
0.35	0	0	0	0	0	0	0	0	0	0	0	0
0.36	0	0	0	1	0	0	0	0	0	1	0	0
0.37	0	0	0	0	0	0	0	0	0	0	0	0
0.38	0	0	0	0	0	0	0	0	0	0	0	0
0.39	0	0	0	2	0	0	4	0	0	5	0	0
0.40	0	0	0	1	0	0	3	0	0	4	0	0
0.41	0	0	0	0	0	0	3	0	0	3	0	0
0.42	0	0	0	1	0	0	5	0	0	6	0	0
0.43	0	0	0	1	0	0	3	0	0	4	0	0
0.44	0	0	0	0	0	0	3	0	0	3	0	0
0.45	0	0	0	2	0	0	3	0	0	5	0	0
0.46	0	0	0	1	0	0	4	0	0	5	0	0
0.47	0	0	0	0	0	0	4	0	0	4	0	0
0.48	0	0	0	1	0	0	7	0	0	8	0	0
0.49	0	0	0	0	0	0	0	0	0	0	0	0
0.50	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	0	0	14	0	0	49	0	0	63	0	0

TABLE A-2

~~TOP SECRET~~ C[redacted]

MISSION * 1039-1 * INSTRUMENT * AFT 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
0.51	0	0	0	2	0	0	3	0	0	5	0	0
0.52	0	0	0	3	0	0	3	0	0	6	0	0
0.53	0	0	0	1	0	0	2	0	0	3	0	0
0.54	0	0	0	3	0	0	3	0	0	6	0	0
0.55	0	0	0	1	0	0	3	0	0	4	0	0
0.56	0	0	0	3	0	0	2	0	0	5	0	0
0.57	0	0	0	2	0	0	4	0	0	6	0	0
0.58	0	0	0	2	0	0	3	0	0	5	0	0
0.59	0	0	0	0	0	0	2	0	0	2	0	0
0.60	0	0	0	3	0	0	4	0	0	7	0	0
0.61	0	0	0	1	0	0	3	0	0	4	0	0
0.62	0	0	0	1	0	0	2	0	0	3	0	0
0.63	0	0	0	0	0	0	3	0	0	3	0	0
0.64	0	0	0	1	0	0	3	0	0	4	0	0
0.65	0	0	0	1	0	0	3	0	0	4	0	0
0.66	0	0	0	0	0	0	5	0	0	5	0	0
0.67	0	0	0	1	0	0	4	0	0	5	0	0
0.68	0	0	0	0	0	0	6	0	0	6	0	0
0.69	0	0	0	0	0	0	5	0	0	5	0	0
0.70	0	0	0	0	0	0	5	0	0	5	0	0
0.71	0	0	0	1	0	0	5	0	0	6	0	0
0.72	0	0	0	2	0	0	3	0	0	5	0	0
0.73	0	0	0	0	0	0	3	0	0	3	0	0
0.74	0	0	0	0	0	0	3	0	0	3	0	0
0.75	0	0	0	0	0	0	2	0	0	2	0	0
0.76	0	0	0	1	0	0	3	0	0	4	0	0
0.77	0	0	0	0	0	0	2	0	0	2	0	0
0.78	0	0	0	0	0	0	2	0	0	2	0	0
0.79	0	0	0	1	0	0	2	0	0	3	0	0
0.80	0	0	0	0	0	0	4	0	0	4	0	0
0.81	0	0	0	1	0	0	2	0	0	3	0	0
0.82	0	0	0	0	0	0	3	0	0	3	0	0
0.83	0	0	0	0	0	0	2	0	0	2	0	0
0.84	0	0	0	0	0	0	3	0	0	3	0	0
0.85	0	0	0	1	0	0	2	0	0	3	0	0
0.86	0	0	0	0	0	0	1	0	0	1	0	0
0.87	0	0	0	0	0	0	1	0	0	1	0	0
0.88	0	0	0	0	0	0	1	0	0	1	0	0
0.89	0	0	0	1	0	0	3	0	0	4	0	0
0.90	0	0	0	0	0	0	1	0	0	1	0	0
0.91	0	0	0	3	0	0	0	0	0	3	0	0
0.92	0	0	0	1	0	0	1	0	0	2	0	0
0.93	0	0	0	0	0	0	1	0	0	1	0	0
0.94	0	0	0	0	0	0	3	0	0	3	0	0
0.95	0	0	0	0	0	0	2	0	0	2	0	0
0.96	0	0	0	0	0	0	2	0	0	2	0	0
0.97	0	0	0	1	0	0	0	0	0	1	0	0
0.98	0	0	0	0	0	0	2	0	0	2	0	0
0.99	0	0	0	1	0	0	2	0	0	3	0	0
1.00	0	0	0	1	0	0	1	0	0	2	0	0
SUBTOTAL	0	0	0	43	2	0	104	1	0	147	3	0

~~TOP SECRET~~ C[redacted]

TABLE A-2

MISSION * 1039-1 * INSTRUMENT * AFT * 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
1.01	0	0	0	0	0	0	1	0	0	1	0	0
1.02	0	0	0	0	0	0	0	0	0	0	0	0
1.03	0	0	0	0	0	0	0	0	0	0	0	0
1.04	0	0	0	0	0	0	0	0	0	0	0	0
1.05	0	0	0	0	0	0	0	0	0	0	0	0
1.06	0	0	0	1	0	0	0	0	0	1	0	0
1.07	0	0	0	2	0	0	0	0	0	2	0	0
1.08	0	0	0	0	0	0	0	0	0	0	0	0
1.09	0	0	0	0	0	0	1	0	0	1	0	0
1.10	0	0	0	0	0	0	0	0	0	0	0	0
1.11	0	0	0	0	0	0	2	0	0	2	0	0
1.12	0	0	0	0	0	0	0	0	0	0	0	0
1.13	0	0	0	0	0	0	0	0	0	0	0	0
1.14	0	0	0	0	0	0	0	0	0	0	0	0
1.15	0	0	0	1	0	0	0	0	0	1	0	0
1.16	0	0	0	2	0	0	0	0	0	2	0	0
1.17	0	0	0	0	0	0	0	0	0	0	0	0
1.18	0	0	0	0	0	0	0	0	0	0	0	0
1.19	0	0	0	0	0	0	0	0	0	0	0	0
1.20	0	0	0	0	0	0	0	0	0	0	0	0
1.21	0	0	0	0	0	0	0	0	0	0	0	0
1.22	0	0	0	0	0	0	0	0	0	0	0	0
1.23	0	0	0	0	0	0	0	0	0	0	0	0
1.24	0	0	0	0	0	0	0	0	0	0	0	0
1.25	0	0	0	0	0	0	0	0	0	0	0	0
1.26	0	0	0	0	0	0	0	0	0	0	0	0
1.27	0	0	0	0	0	0	0	0	0	0	0	0
1.28	0	0	0	0	0	0	0	0	0	0	0	0
1.29	0	0	0	1	0	0	0	0	0	1	0	0
1.30	0	0	0	2	0	0	0	0	0	2	0	0
1.31	0	0	0	1	0	0	0	0	0	1	0	0
1.32	0	0	0	0	0	0	0	0	0	0	0	0
1.33	0	0	0	0	0	0	0	0	0	0	0	0
1.34	0	0	0	0	0	0	0	0	0	0	0	0
1.35	0	0	0	1	0	0	0	0	0	1	0	0
1.36	0	0	0	2	0	0	0	0	0	2	0	0
1.37	0	0	0	1	0	0	0	0	0	1	0	0
1.38	0	0	0	0	0	0	0	0	0	0	0	0
1.39	0	0	0	0	0	0	0	0	0	0	0	0
1.40	0	0	0	0	0	0	0	0	0	0	0	0
1.41	0	0	0	0	0	0	0	0	0	0	0	0
1.42	0	0	0	0	0	0	0	0	0	0	0	0
1.43	0	0	0	0	0	0	0	0	0	0	0	0
1.44	0	0	0	0	0	0	0	0	0	0	0	0
1.45	0	0	0	0	0	0	0	0	0	0	0	0
1.46	0	0	0	0	0	0	0	0	0	0	0	0
1.47	0	0	0	0	0	0	0	0	0	0	0	0
1.48	0	0	0	0	0	0	0	0	0	0	0	0
1.49	0	0	0	0	0	0	0	0	0	0	0	0
1.50	0	0	0	1	1	1	0	0	0	1	1	1
SUBTOTAL	0	0	0	13	20	5	9	41	0	22	61	5

MISSION * 1039-1 * INSTRUMENT * AFT 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MI	ALL LEVELS MAX	ALL LEVELS LIM
1.51	0	0	0	0	0	1	0	1	0	0	1	1
1.52	0	0	0	0	1	0	0	1	0	0	1	1
1.53	0	0	0	0	1	0	0	1	0	0	1	1
1.54	0	0	0	0	1	0	0	1	0	0	1	1
1.55	0	0	0	0	1	0	0	1	0	0	1	1
1.56	0	0	0	0	1	0	0	1	0	0	1	1
1.57	0	0	0	0	1	0	0	1	0	0	1	1
1.58	0	0	0	0	1	0	0	1	0	0	1	1
1.59	0	0	0	0	1	0	0	1	0	0	1	1
1.60	0	0	0	0	1	0	0	1	0	0	1	1
1.61	0	0	0	0	1	0	0	1	0	0	1	1
1.62	0	0	0	0	1	0	0	1	0	0	1	1
1.63	0	0	0	0	1	0	0	1	0	0	1	1
1.64	0	0	0	0	1	0	0	1	0	0	1	1
1.65	0	0	0	0	1	0	0	1	0	0	1	1
1.66	0	0	0	0	1	0	0	1	0	0	1	1
1.67	0	0	0	0	1	0	0	1	0	0	1	1
1.68	0	0	0	0	1	0	0	1	0	0	1	1
1.69	0	0	0	0	1	0	0	1	0	0	1	1
1.70	0	0	0	0	1	0	0	1	0	0	1	1
1.71	0	0	0	0	1	0	0	1	0	0	1	1
1.72	0	0	0	0	1	0	0	1	0	0	1	1
1.73	0	0	0	0	1	0	0	1	0	0	1	1
1.74	0	0	0	0	1	0	0	1	0	0	1	1
1.75	0	0	0	0	1	0	0	1	0	0	1	1
1.76	0	0	0	0	1	0	0	1	0	0	1	1
1.77	0	0	0	0	1	0	0	1	0	0	1	1
1.78	0	0	0	0	1	0	0	1	0	0	1	1
1.79	0	0	0	0	1	0	0	1	0	0	1	1
1.80	0	0	0	0	1	0	0	1	0	0	1	1
1.81	0	0	0	0	1	0	0	1	0	0	1	1
1.82	0	0	0	0	1	0	0	1	0	0	1	1
1.83	0	0	0	0	1	0	0	1	0	0	1	1
1.84	0	0	0	0	1	0	0	1	0	0	1	1
1.85	0	0	0	0	1	0	0	1	0	0	1	1
1.86	0	0	0	0	1	0	0	1	0	0	1	1
1.87	0	0	0	0	1	0	0	1	0	0	1	1
1.88	0	0	0	0	1	0	0	1	0	0	1	1
1.89	0	0	0	0	1	0	0	1	0	0	1	1
1.90	0	0	0	0	1	0	0	1	0	0	1	1
1.91	0	0	0	0	1	0	0	1	0	0	1	1
1.92	0	0	0	0	1	0	0	1	0	0	1	1
1.93	0	0	0	0	1	0	0	1	0	0	1	1
1.94	0	0	0	0	1	0	0	1	0	0	1	1
1.95	0	0	0	0	1	0	0	1	0	0	1	1
1.96	0	0	0	0	1	0	0	1	0	0	1	1
1.97	0	0	0	0	1	0	0	1	0	0	1	1
1.98	0	0	0	0	1	0	0	1	0	0	1	1
1.99	0	0	0	0	1	0	0	1	0	0	1	1
2.00	0	0	0	0	1	0	0	1	0	0	1	1
SUBTOTAL	0	0	0	1	34	19	0	77	17	1	111	36

MISSION * 1039-1 * INSTRUMENT * AFT * 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
2.01	0	0	0	0	2	0	0	3	2	0	5	2
2.02	0	0	0	0	1	2	0	3	2	0	4	2
2.03	0	0	0	0	2	2	0	4	2	0	5	2
2.04	0	0	0	0	1	1	0	4	2	0	4	2
2.05	0	0	0	0	3	2	0	4	2	0	5	2
2.06	0	0	0	0	2	2	0	4	2	0	5	2
2.07	0	0	0	0	1	1	0	4	2	0	4	2
2.08	0	0	0	0	2	2	0	4	2	0	5	2
2.09	0	0	0	0	2	2	0	4	2	0	5	2
2.10	0	0	0	0	1	1	0	4	2	0	4	2
2.11	0	0	0	0	2	2	0	4	2	0	5	2
2.12	0	0	0	0	2	2	0	4	2	0	5	2
2.13	0	0	0	0	1	1	0	4	2	0	4	2
2.14	0	0	0	0	2	2	0	4	2	0	5	2
2.15	0	0	0	0	2	2	0	4	2	0	5	2
2.16	0	0	0	0	1	1	0	4	2	0	4	2
2.17	0	0	0	0	2	2	0	4	2	0	5	2
2.18	0	0	0	0	2	2	0	4	2	0	5	2
2.19	0	0	0	0	1	1	0	4	2	0	4	2
2.20	0	0	0	0	2	2	0	4	2	0	5	2
2.21	0	0	0	0	2	2	0	4	2	0	5	2
2.22	0	0	0	0	1	1	0	4	2	0	4	2
2.23	0	0	0	0	2	2	0	4	2	0	5	2
2.24	0	0	0	0	2	2	0	4	2	0	5	2
2.25	0	0	0	0	1	1	0	4	2	0	4	2
2.26	0	0	0	0	2	2	0	4	2	0	5	2
2.27	0	0	0	0	2	2	0	4	2	0	5	2
2.28	0	0	0	0	1	1	0	4	2	0	4	2
2.29	0	0	0	0	2	2	0	4	2	0	5	2
2.30	0	0	0	0	2	2	0	4	2	0	5	2
2.31	0	0	0	0	1	1	0	4	2	0	4	2
2.32	0	0	0	0	2	2	0	4	2	0	5	2
2.33	0	0	0	0	2	2	0	4	2	0	5	2
2.34	0	0	0	0	1	1	0	4	2	0	4	2
2.35	0	0	0	0	2	2	0	4	2	0	5	2
2.36	0	0	0	0	2	2	0	4	2	0	5	2
2.37	0	0	0	0	1	1	0	4	2	0	4	2
2.38	0	0	0	0	2	2	0	4	2	0	5	2
2.39	0	0	0	0	2	2	0	4	2	0	5	2
2.40	0	0	0	0	1	1	0	4	2	0	4	2
2.41	0	0	0	0	2	2	0	4	2	0	5	2
2.42	0	0	0	0	2	2	0	4	2	0	5	2
2.43	0	0	0	0	1	1	0	4	2	0	4	2
2.44	0	0	0	0	2	2	0	4	2	0	5	2
2.45	0	0	0	0	2	2	0	4	2	0	5	2
2.46	0	0	0	0	1	1	0	4	2	0	4	2
2.47	0	0	0	0	2	2	0	4	2	0	5	2
2.48	0	0	0	0	2	2	0	4	2	0	5	2
2.49	0	0	0	0	1	1	0	4	2	0	4	2
2.50	0	0	0	0	2	2	0	4	2	0	5	2
SUBTOTAL	0	0	0	0	15	38	0	43	102	0	58	140

~~TOP SECRET~~ C[redacted]

MISSION * 1039-1 * I STRUME T * AFT 05/18/67 DENSITY FREQ DISTR.

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
2.51	0	0	0	0	0	0	0	0	0	0	0	0
2.52	0	0	0	0	0	0	0	0	0	0	0	0
2.53	0	0	0	0	0	0	0	0	0	0	0	0
2.54	0	0	0	0	0	0	0	0	0	0	0	0
2.55	0	0	0	0	0	0	0	0	0	0	0	0
2.56	0	0	0	0	0	0	0	0	0	0	0	0
2.57	0	0	0	0	0	0	0	0	0	0	0	0
2.58	0	0	0	0	0	0	0	0	0	0	0	0
2.59	0	0	0	0	0	0	0	0	0	0	0	0
2.60	0	0	0	0	0	0	0	0	0	0	0	0
2.61	0	0	0	0	0	0	0	0	0	0	0	0
2.62	0	0	0	0	0	0	0	0	0	0	0	0
2.63	0	0	0	0	0	0	0	0	0	0	0	0
2.64	0	0	0	0	0	0	0	0	0	0	0	0
2.65	0	0	0	0	0	0	0	0	0	0	0	0
2.66	0	0	0	0	0	0	0	0	0	0	0	0
2.67	0	0	0	0	0	0	0	0	0	0	0	0
2.68	0	0	0	0	0	0	0	0	0	0	0	0
2.69	0	0	0	0	0	0	0	0	0	0	0	0
2.70	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	71	71	62	162	162	119	233	233	181

MISSION 1039-1 INSTR - AFT 05/18/ PROCESSING AND EXPOSURE ANALYS

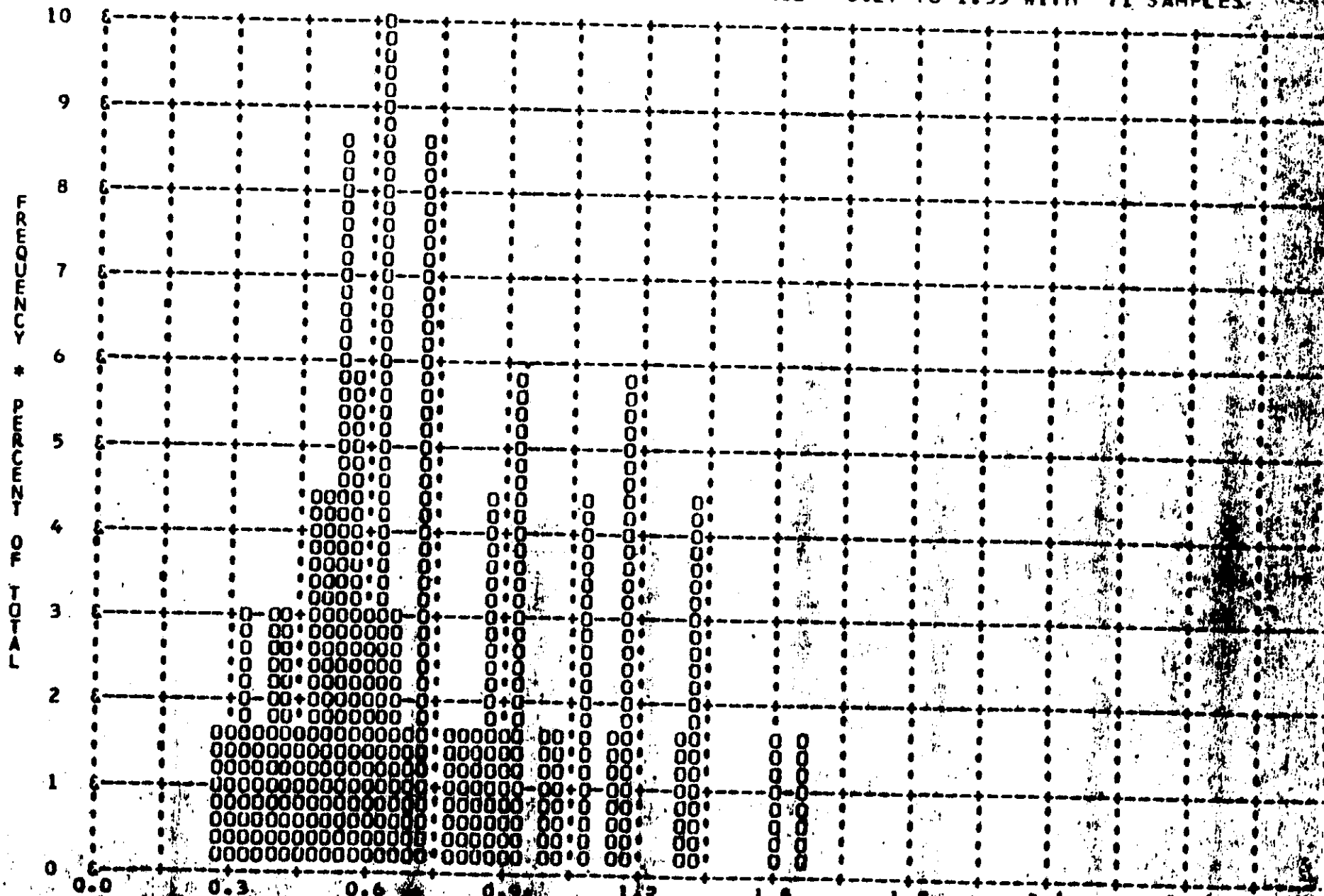
PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	0	0 PC	0 PC	0 PC	36 PC	36 PC
INTERMEDIATE	71	0 PC	10 PC	62 PC	25 PC	3 PC
FULL	162	6 PC	0 PC	83 PC	11 PC	0 PC
ALL LEVELS	233	4 PC	3 PC	77 PC	15 PC	1 PC

PROCESS LEVEL	BASE & FOG	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	0.01-0.09	0.01-0.13	0.14-0.39	0.40-0.90	---------	0.91 AND U
INTERMED	0.10-0.17	0.01-0.20	0.21-0.39	0.40-0.90	0.91-1.34	1.35 AND U
FULL	0.18 AND UP	0.01-0.39	---------	0.40-0.90	0.91-1.67	1.76 AND U

~~TOP SECRET~~ C/[redacted]

MISSION * 1039-1 * INSTR * AFT * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * INTERMEDIATE

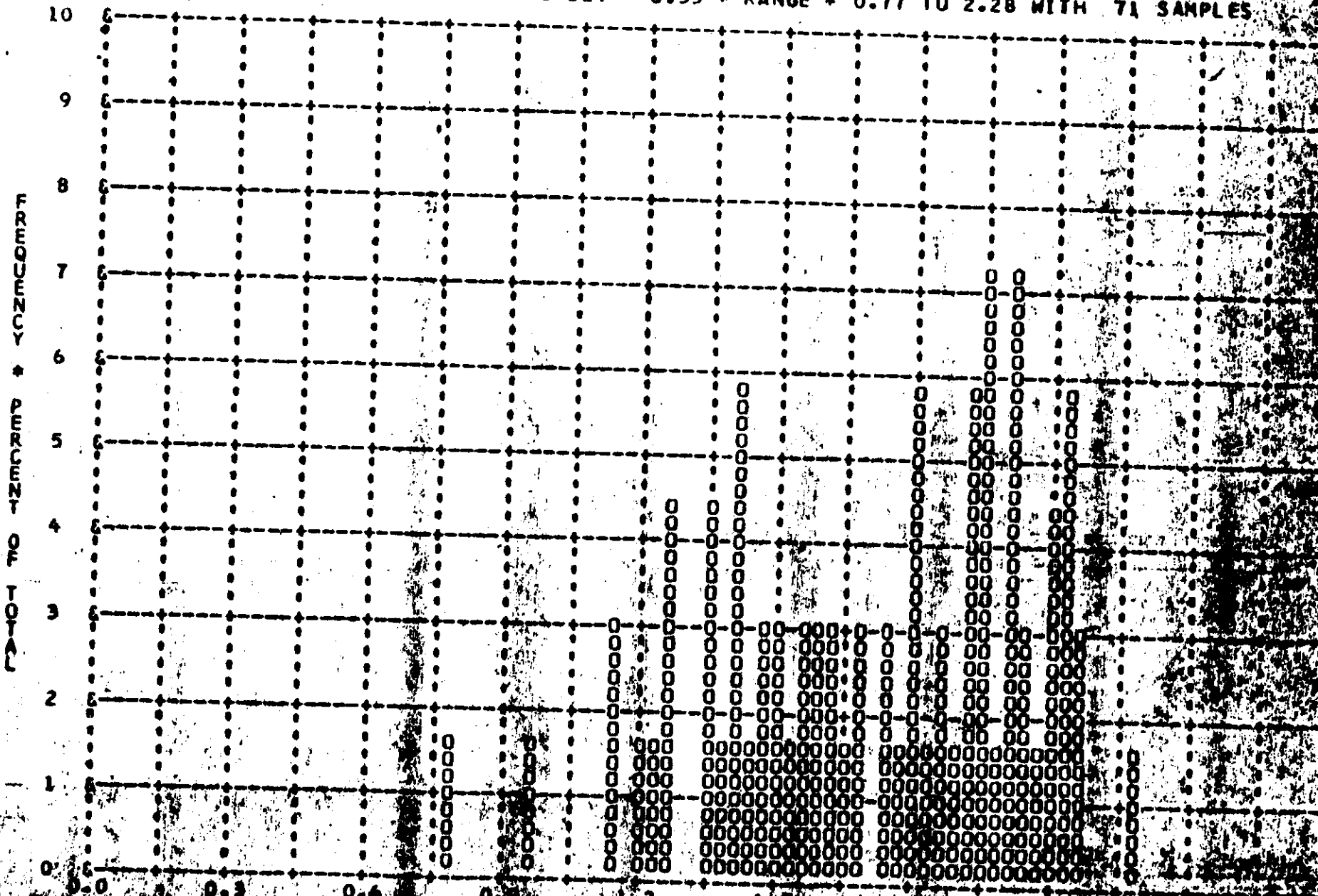
AIRTH MEAN * 0.74 * MEDIAN * 0.65 * STD DEV * 0.30 * RANGE * 0.27 TO 1.55 WITH 71 SAMPLES



[redacted]

MISSION * 1039-1 * INSTR * AFT * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * INTERMEDIAT

AIRTH MEAN * 1.70 * MEDIAN * 1.78 * STD DEV * 0.33 * RANGE * 0.77 TO 2.28 WITH 71 SAMPLES



[redacted]

FIGURE A-26

A-26

MISSION * 1039-1 * INSTR * AFT * 05/18/7 PLOT OF D MAX * CLOUD * PROCESSING * INTERMEDIAT

AIRTH MEAN * 2.00 * MEDIAN * 2.05 * STD DEV * 0.27 * RANGE * 1.11 TO 2.39 WITH 62 SAMPLES

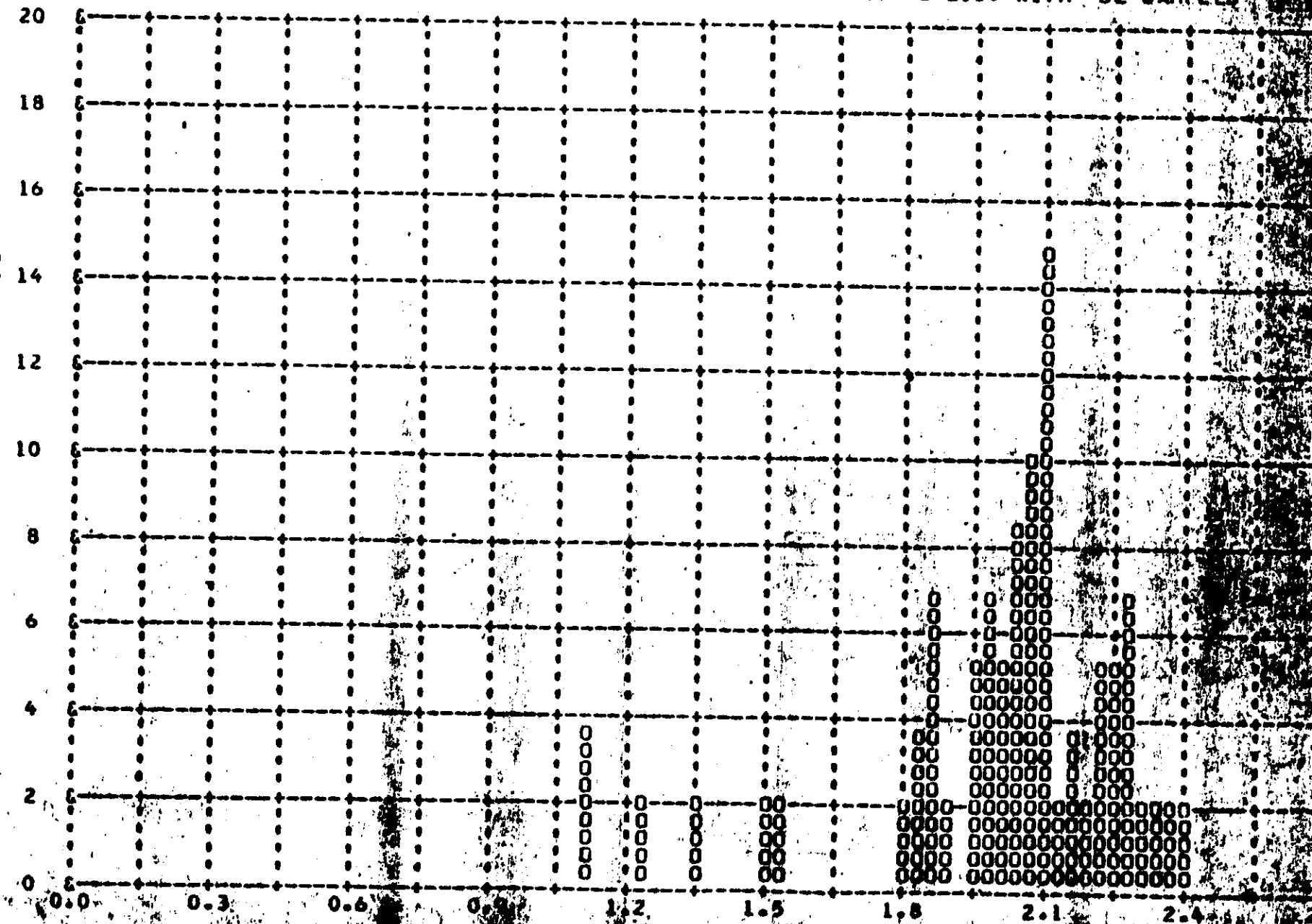
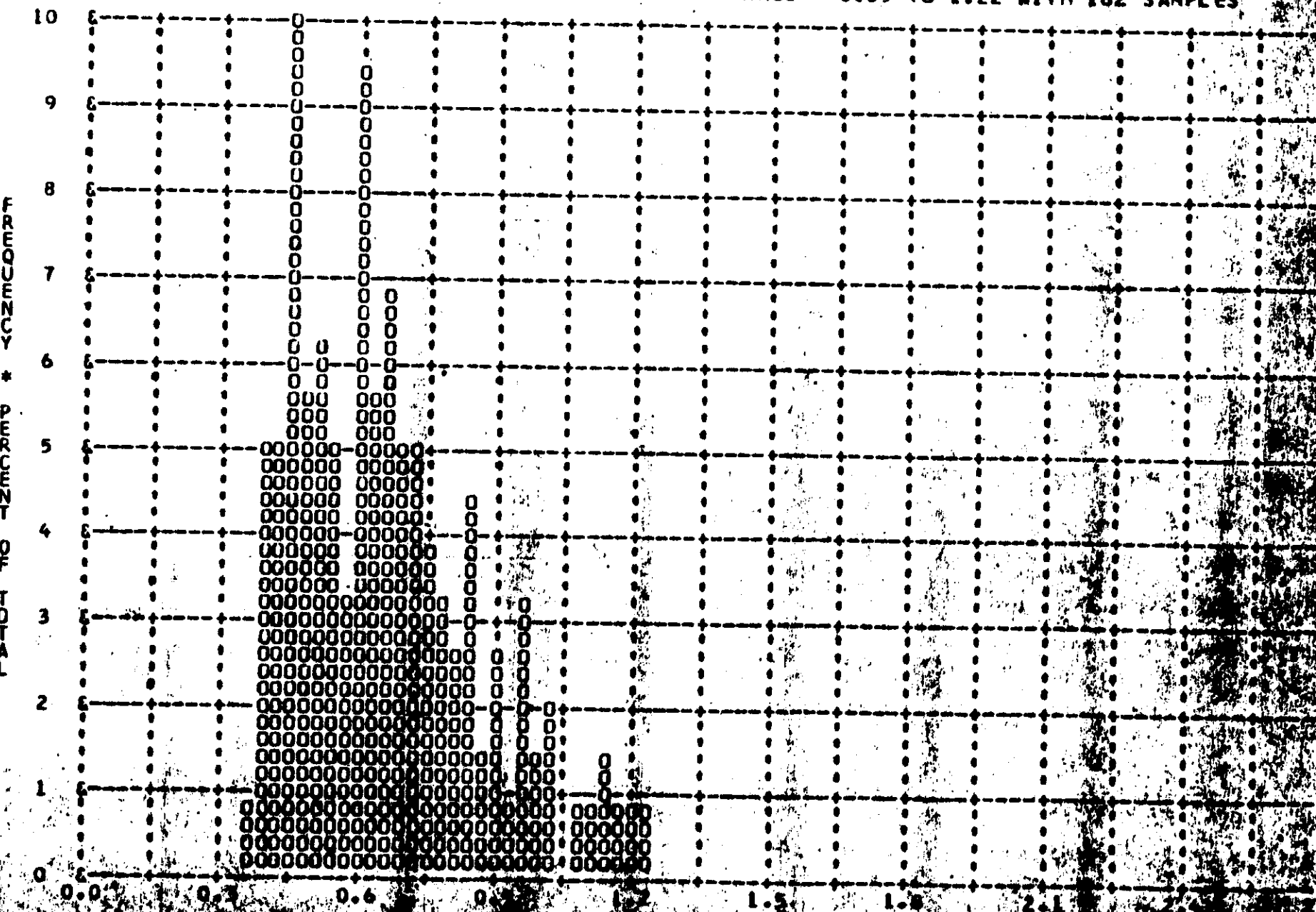


FIGURE A-12

MISSION * 1039-1 * INSTR * AFT * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * FULL

AIRTH MEAN * 0.64 * MEDIAN * 0.61 * STD DEV * 0.20 * RANGE * 0.35 TO 1.22 WITH 162 SAMPLES

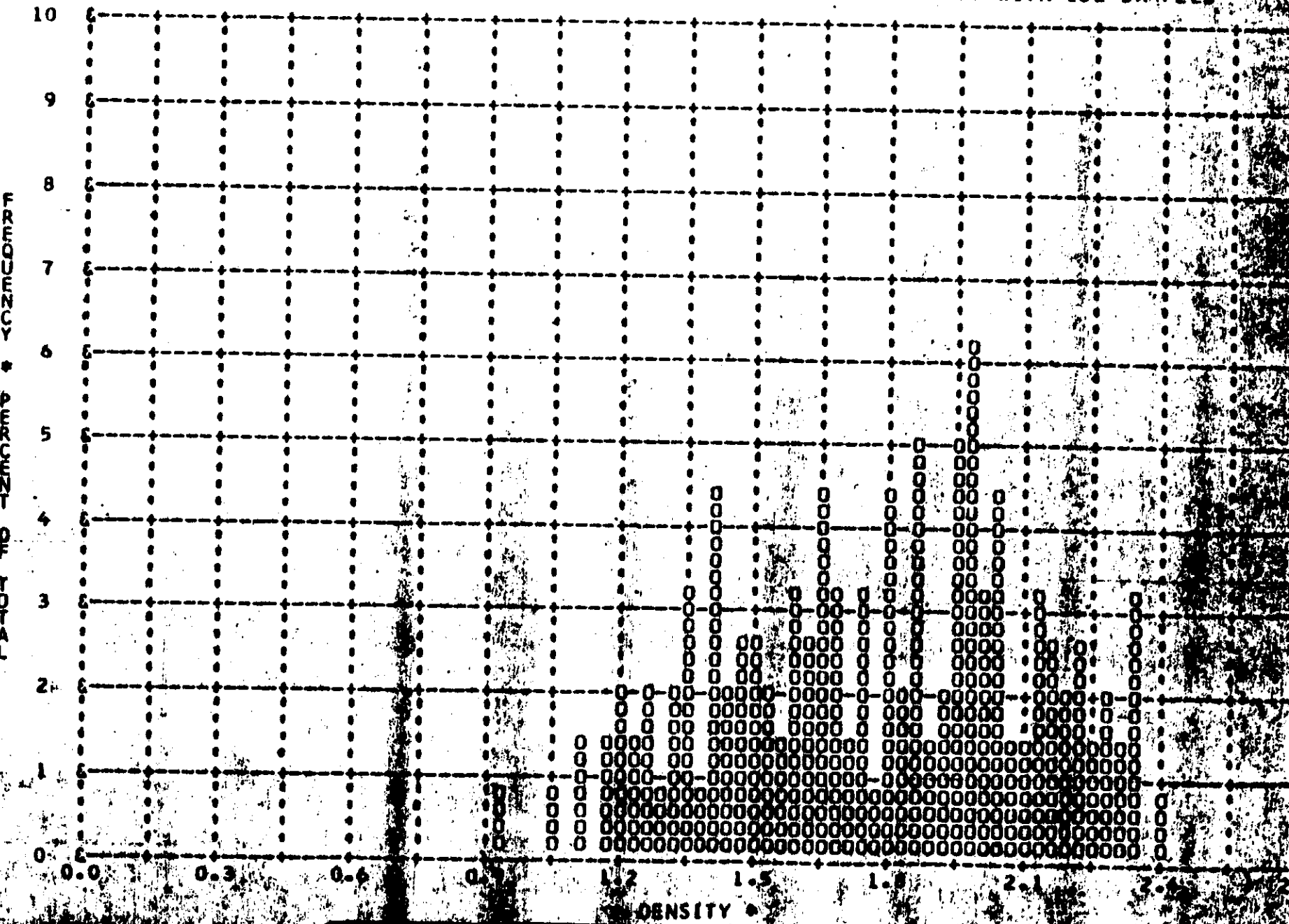


[redacted]

FIGURE

MISSION * 1039-1 * INSTR * AFT * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * FULL

AIRTH MEAN * 1.76 * MEDIAN * 1.80 * STD DEV * 0.34 * RANGE * 0.92 TO 2.39 WITH 162 SAMPLES



[redacted]

FIGURE A-17

MISSION * 1039-1 * INSTR * AFT * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * FULL

AIRTH MEAN * 2.20 * MEDIAN * 2.25 * STD DEV * 0.19 * RANGE * 1.53 TO 2.47 WITH 119 SAMPLES

[redacted]

MISSION * 1039-1 * INSTR * AFT * 05/18/7 PLOT OF D MIN * TERRAIN * PROCESSING * ALL LEVELS

AIRTH MEAN * 0.67 * MEDIAN * 0.62 * STD DEV * 0.24 * RANGE * 0.27 TO 1.55 WITH 233 SAMPLES

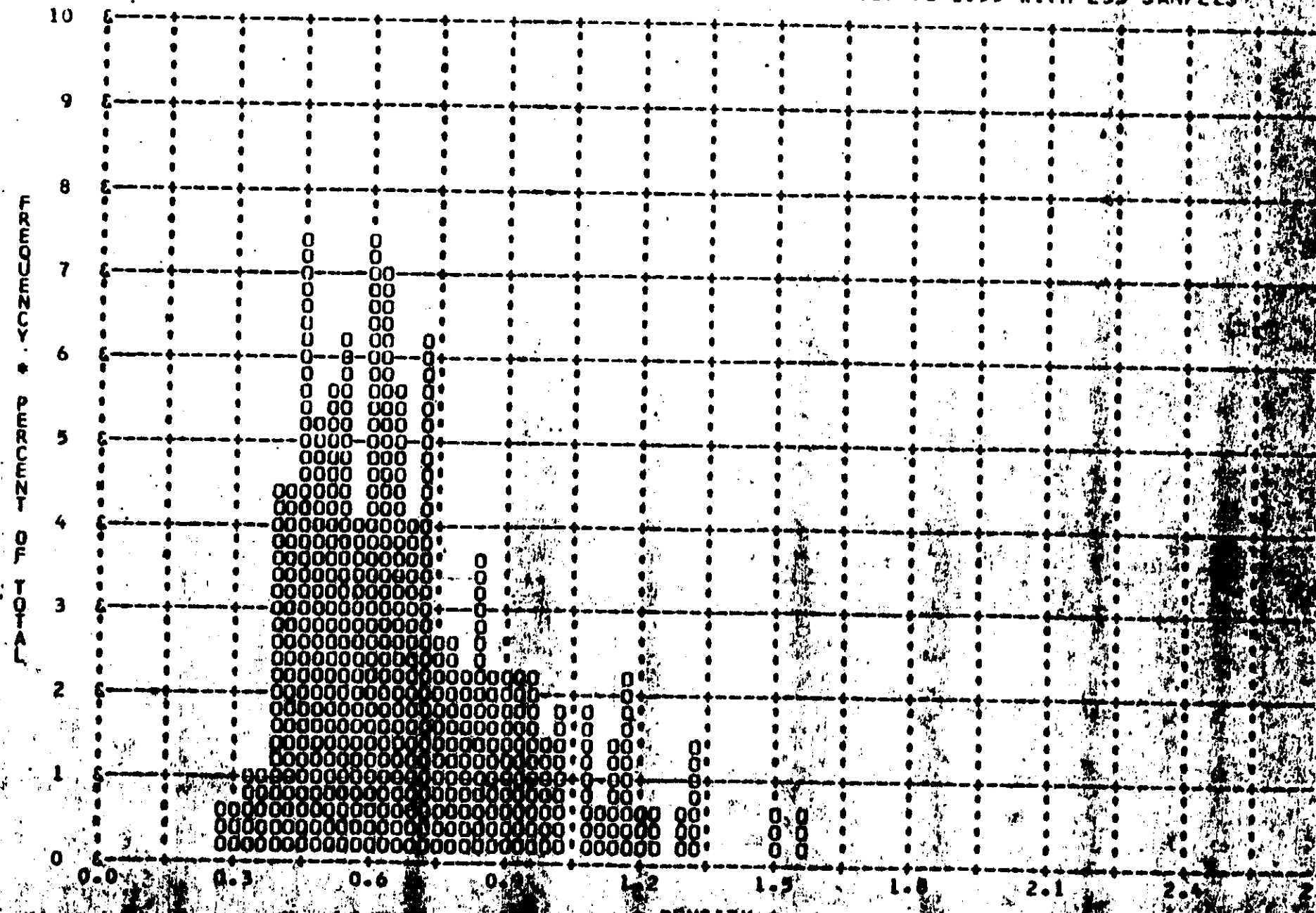


FIGURE A-19

MISSION * 1039-1 * INSTR * AFT * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * ALL LEVELS

AIRTH MEAN * 1.75 * MEDIAN * 1.79 * STD DEV * 0.34 * RANGE * 0.77 TO 2.39 WITH 233 SAMPLES

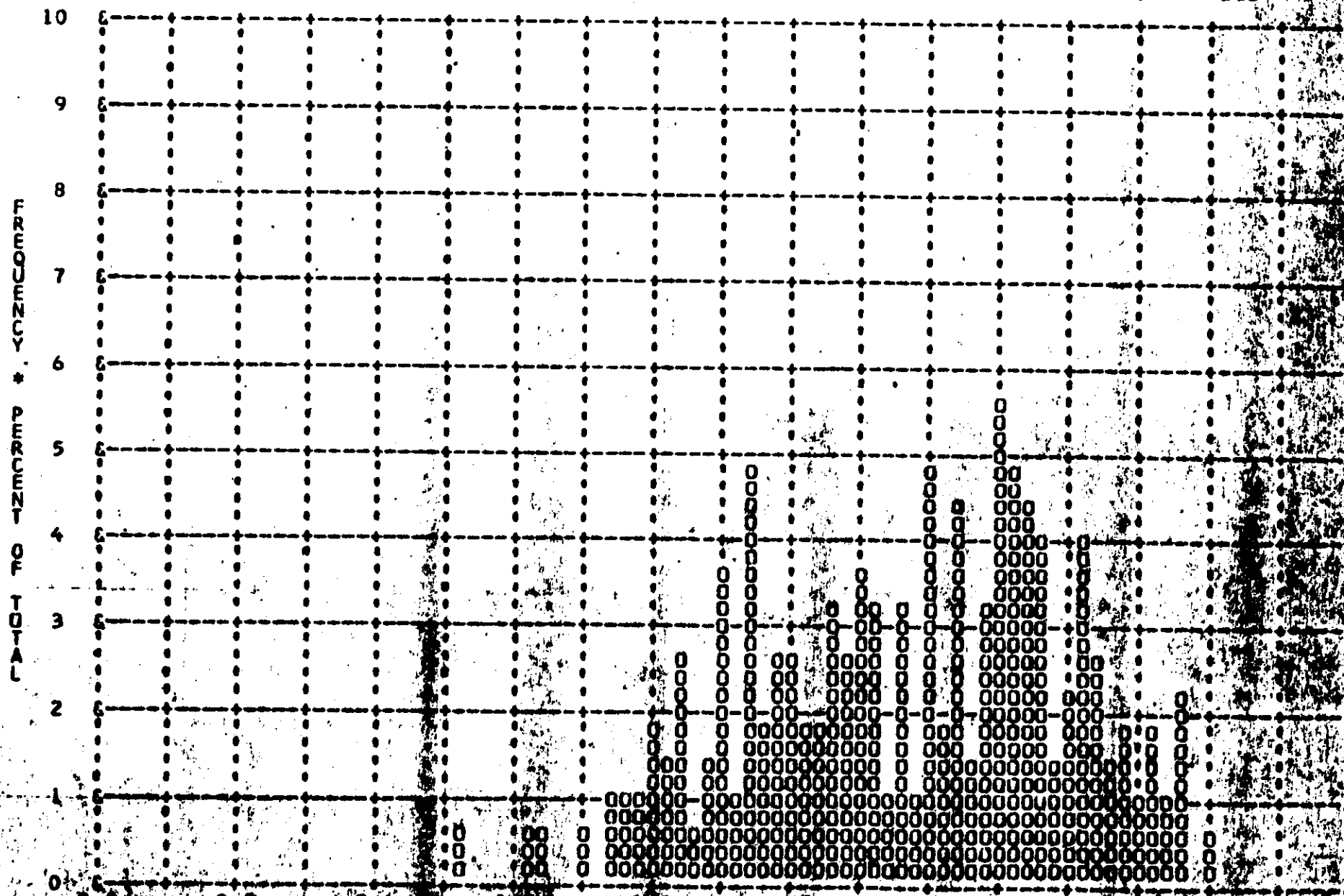


FIGURE A-10

MISSION * 1039-1 * INSTR * AFT * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * ALL LEVELS

AIRTH MEAN * 2.13 * MEDIAN * 2.18 * STD DEV * 0.24 * RANGE * 1.11 TO 2.47 WITH 181 SAMPLES

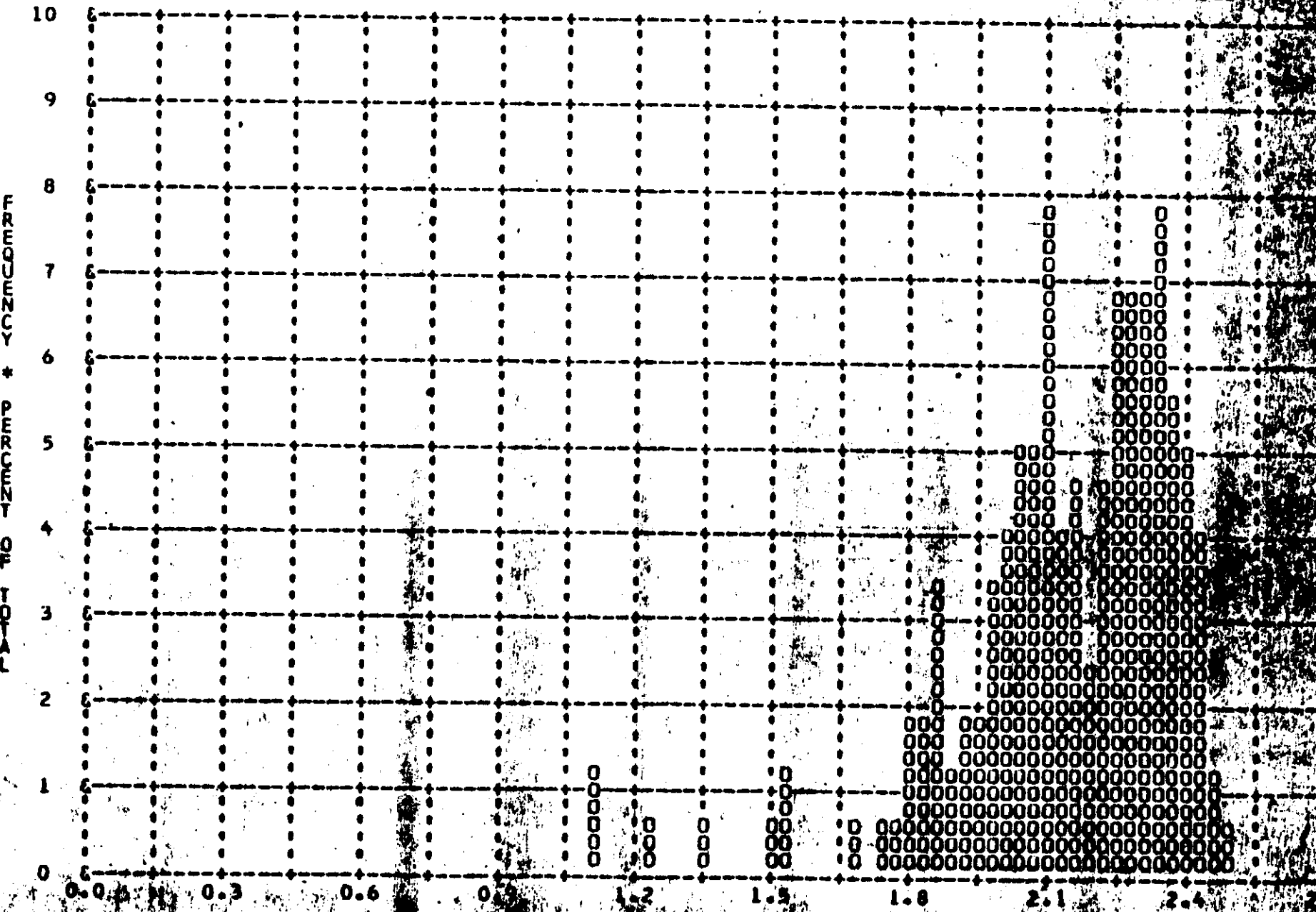


FIGURE A-21

~~TOP SECRET~~ C[redacted]

MISSION * 1039-2 * INSTRUMENT * FWD 05/18/67 DENSITY FREQ DISTR.

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
0.01	0	0	0	0	0	0	0	0	0	0	0	0
0.02	0	0	0	0	0	0	0	0	0	0	0	0
0.03	0	0	0	0	0	0	0	0	0	0	0	0
0.04	0	0	0	0	0	0	0	0	0	0	0	0
0.05	0	0	0	0	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	0	0	0	0	0	0	0
0.07	0	0	0	0	0	0	0	0	0	0	0	0
0.08	0	0	0	0	0	0	0	0	0	0	0	0
0.09	0	0	0	0	0	0	0	0	0	0	0	0
0.10	0	0	0	0	0	0	0	0	0	0	0	0
0.11	0	0	0	0	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	0	0	0	0	0	0	0
0.13	0	0	0	0	0	0	0	0	0	0	0	0
0.14	0	0	0	0	0	0	0	0	0	0	0	0
0.15	0	0	0	0	0	0	0	0	0	0	0	0
0.16	0	0	0	0	0	0	0	0	0	0	0	0
0.17	0	0	0	0	0	0	0	0	0	0	0	0
0.18	0	0	0	0	0	0	0	0	0	0	0	0
0.19	0	0	0	0	0	0	0	0	0	0	0	0
0.20	0	0	0	0	0	0	0	0	0	0	0	0
0.21	0	0	0	0	0	0	0	0	0	0	0	0
0.22	0	0	0	0	0	0	0	0	0	0	0	0
0.23	0	0	0	0	0	0	0	0	0	0	0	0
0.24	0	0	0	0	0	0	0	0	0	0	0	0
0.25	0	0	0	0	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	0	0	0	0	0	0	0
0.27	0	0	0	0	0	0	0	0	0	0	0	0
0.28	0	0	0	0	0	0	0	0	0	0	0	0
0.29	0	0	0	0	0	0	0	0	0	0	0	0
0.30	0	0	0	2	0	0	0	0	0	2	0	0
0.31	0	0	0	2	0	0	0	0	0	2	0	0
0.32	0	0	0	1	0	0	0	0	0	1	0	0
0.33	0	0	0	3	0	0	0	0	0	3	0	0
0.34	1	0	0	0	0	0	0	0	0	1	0	0
0.35	0	0	0	0	0	0	2	0	0	2	0	0
0.36	0	0	0	0	0	0	1	0	0	1	0	0
0.37	0	0	0	1	0	0	0	0	0	1	0	0
0.38	0	0	0	1	0	0	1	0	0	2	0	0
0.39	0	0	0	3	0	0	2	0	0	5	0	0
0.40	0	0	0	1	0	0	2	0	0	3	0	0
0.41	0	0	0	2	0	0	3	0	0	5	0	0
0.42	0	0	0	1	0	0	0	0	0	1	0	0
0.43	0	0	0	3	0	0	2	0	0	5	0	0
0.44	0	0	0	0	0	0	0	0	0	0	0	0
0.45	1	0	0	1	0	0	1	0	0	3	0	0
0.46	1	0	0	2	0	0	2	0	0	5	0	0
0.47	0	0	0	0	0	0	0	0	0	0	0	0
0.48	0	0	0	3	0	0	2	0	0	5	0	0
0.49	0	0	0	4	0	0	3	0	0	7	0	0
0.50	0	0	0	1	0	0	0	0	0	1	0	0
SUBTOTAL	2	0	0	31	0	0	20	0	0	53	0	0

~~TOP SECRET~~ C[redacted]

TABLE A-3

~~TOP SECRET~~ C [redacted]

MISSION * 1039-2 * INSTRUMENT * PWD 05/16/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
0.51	1	0	0	2	0	0	2	0	0	5	0	0
0.52	0	0	0	0	0	0	0	0	0	0	0	0
0.53	0	0	0	2	0	0	3	0	0	7	0	0
0.54	0	0	0	2	0	0	3	0	0	8	0	0
0.55	0	0	0	3	0	0	5	0	0	6	0	0
0.56	0	0	0	1	0	0	5	0	0	7	0	0
0.57	0	0	0	3	0	0	3	0	0	6	0	0
0.58	1	0	0	0	0	0	5	0	0	6	0	0
0.59	0	0	0	0	0	0	3	0	0	4	0	0
0.60	0	0	0	0	0	0	3	0	0	2	0	0
0.61	0	0	0	0	0	0	4	0	0	6	0	0
0.62	0	0	0	0	0	0	2	0	0	6	0	0
0.63	0	0	0	1	0	0	4	0	0	5	0	0
0.64	0	0	0	2	0	0	3	0	0	3	0	0
0.65	0	0	0	0	0	0	4	0	0	4	0	0
0.66	0	0	0	0	0	0	2	0	0	7	0	0
0.67	0	0	0	0	0	0	2	0	0	5	0	0
0.68	0	0	0	0	0	0	2	0	0	2	0	0
0.69	0	0	0	0	0	0	1	0	0	3	0	0
0.70	0	0	0	0	0	0	1	0	0	4	0	0
0.71	1	0	0	0	0	0	2	0	0	7	0	0
0.72	0	0	0	0	0	0	1	0	0	5	0	0
0.73	0	0	0	0	0	0	1	0	0	2	0	0
0.74	0	0	0	0	0	0	1	0	0	3	0	0
0.75	0	0	0	0	0	0	1	0	0	2	0	0
0.76	0	0	0	0	0	0	1	0	0	3	0	0
0.77	0	0	0	0	0	0	0	0	0	2	0	0
0.78	0	0	0	0	0	0	0	0	0	4	0	0
0.79	0	0	0	0	0	0	0	0	0	4	0	0
0.80	0	0	0	0	0	0	0	0	0	1	0	0
0.81	1	0	0	0	0	0	0	0	0	3	0	0
0.82	0	0	0	0	0	0	0	0	0	3	0	0
0.83	0	0	0	0	0	0	0	0	0	3	0	0
0.84	0	0	0	0	0	0	0	0	0	3	0	0
0.85	0	0	0	0	0	0	0	0	0	3	0	0
0.86	0	0	0	0	0	0	0	0	0	2	0	0
0.87	0	0	0	0	0	0	0	0	0	2	0	0
0.88	0	0	0	0	0	0	0	0	0	2	0	0
0.89	0	0	0	1	0	0	0	0	0	2	0	0
0.90	0	0	0	1	0	0	0	0	0	2	0	0
0.91	0	0	0	0	0	0	0	0	0	2	0	0
0.92	0	0	0	0	0	0	0	0	0	2	0	0
0.93	0	0	0	0	0	0	0	0	0	2	0	0
0.94	0	0	0	0	0	0	0	0	0	2	0	0
0.95	0	0	0	1	0	0	0	0	0	2	0	0
0.96	0	0	0	3	0	0	0	0	0	0	0	0
0.97	0	0	0	0	0	0	0	0	0	0	0	0
0.98	0	0	0	0	0	0	0	0	0	0	0	0
0.99	0	0	0	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	5	0	0	53	0	3	93	0	0	151	0	0

~~TOP SECRET~~ C [redacted]

TABLE A-3

~~TOP SECRET~~ C[redacted]

MISSION * 1039-2 * INSTRUMENT * FWD * 05/[redacted]/67 DENSITY FREQ DIST

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM.	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
1.01	0	0	0	0	0	0	0	0	0	0	0	0
1.02	0	0	0	0	0	0	0	0	0	0	0	0
1.03	0	0	0	0	0	0	0	0	0	0	0	0
1.04	0	0	0	0	0	0	0	0	0	0	0	0
1.05	0	0	0	0	0	0	0	0	0	0	0	0
1.06	0	0	0	0	0	0	0	0	0	0	0	0
1.07	0	0	0	0	0	0	0	0	0	0	0	0
1.08	0	0	0	0	0	0	0	0	0	0	0	0
1.09	0	0	0	0	0	0	0	0	0	0	0	0
1.10	0	0	0	0	0	0	0	0	0	0	0	0
1.11	0	0	0	0	0	0	0	0	0	0	0	0
1.12	0	0	0	0	0	0	0	0	0	0	0	0
1.13	0	0	0	0	0	0	0	0	0	0	0	0
1.14	0	0	0	0	0	0	0	0	0	0	0	0
1.15	0	0	0	0	0	0	0	0	0	0	0	0
1.16	0	0	0	0	0	0	0	0	0	0	0	0
1.17	0	0	0	0	0	0	0	0	0	0	0	0
1.18	0	0	0	0	0	0	0	0	0	0	0	0
1.19	0	0	0	0	0	0	0	0	0	0	0	0
1.20	0	0	0	0	0	0	0	0	0	0	0	0
1.21	0	0	0	0	0	0	0	0	0	0	0	0
1.22	0	0	0	0	0	0	0	0	0	0	0	0
1.23	0	0	0	0	0	0	0	0	0	0	0	0
1.24	0	0	0	0	0	0	0	0	0	0	0	0
1.25	0	0	0	0	0	0	0	0	0	0	0	0
1.26	0	0	0	0	0	0	0	0	0	0	0	0
1.27	0	0	0	0	0	0	0	0	0	0	0	0
1.28	0	0	0	0	0	0	0	0	0	0	0	0
1.29	0	0	0	0	0	0	0	0	0	0	0	0
1.30	0	0	0	0	0	0	0	0	0	0	0	0
1.31	0	0	0	0	0	0	0	0	0	0	0	0
1.32	0	0	0	0	0	0	0	0	0	0	0	0
1.33	0	0	0	0	0	0	0	0	0	0	0	0
1.34	0	0	0	0	0	0	0	0	0	0	0	0
1.35	0	0	0	0	0	0	0	0	0	0	0	0
1.36	0	0	0	0	0	0	0	0	0	0	0	0
1.37	0	0	0	0	0	0	0	0	0	0	0	0
1.38	0	0	0	0	0	0	0	0	0	0	0	0
1.39	0	0	0	0	0	0	0	0	0	0	0	0
1.40	0	0	0	0	0	0	0	0	0	0	0	0
1.41	0	0	0	0	0	0	0	0	0	0	0	0
1.42	0	0	0	0	0	0	0	0	0	0	0	0
1.43	0	0	0	0	0	0	0	0	0	0	0	0
1.44	0	0	0	0	0	0	0	0	0	0	0	0
1.45	0	0	0	0	0	0	0	0	0	0	0	0
1.46	0	0	0	0	0	0	0	0	0	0	0	0
1.47	0	0	0	0	0	0	0	0	0	0	0	0
1.48	0	0	0	0	0	0	0	0	0	0	0	0
1.49	0	0	0	0	0	0	0	0	0	0	0	0
1.50	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	4	0	3	32	5	8	28	3	1	64	8

~~TOP SECRET~~ C[redacted]

TABLE A-3

MISSION * 1039-2 * INSTRUMENT * FWD 05/18/67 DENSITY FREQ DIST

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
1.51	0	0	1	0	1	1	0	2	2	0	4	4
1.52	0	0	0	0	2	2	0	1	1	0	3	3
1.53	0	0	0	0	2	2	0	1	1	0	3	3
1.54	0	0	0	0	1	1	0	1	1	0	3	3
1.55	0	0	0	0	0	0	0	1	1	0	2	2
1.56	0	0	0	0	0	0	0	1	1	0	2	2
1.57	0	0	0	0	0	0	0	1	1	0	2	2
1.58	0	0	0	0	0	0	0	1	1	0	2	2
1.59	0	0	0	0	0	0	0	1	1	0	2	2
1.60	0	0	0	0	0	0	0	1	1	0	2	2
1.61	0	0	0	0	0	0	0	1	1	0	2	2
1.62	0	0	0	0	0	0	0	1	1	0	2	2
1.63	0	0	0	0	0	0	0	1	1	0	2	2
1.64	0	0	0	0	0	0	0	1	1	0	2	2
1.65	0	0	0	0	0	0	0	1	1	0	2	2
1.66	0	0	0	0	0	0	0	1	1	0	2	2
1.67	0	0	0	0	0	0	0	1	1	0	2	2
1.68	0	0	0	0	0	0	0	1	1	0	2	2
1.69	0	0	0	0	0	0	0	1	1	0	2	2
1.70	0	0	0	0	0	0	0	1	1	0	2	2
1.71	0	0	0	0	0	0	0	1	1	0	2	2
1.72	0	0	0	0	0	0	0	1	1	0	2	2
1.73	0	0	0	0	0	0	0	1	1	0	2	2
1.74	0	0	0	0	0	0	0	1	1	0	2	2
1.75	0	0	0	0	0	0	0	1	1	0	2	2
1.76	0	0	0	0	0	0	0	1	1	0	2	2
1.77	0	0	0	0	0	0	0	1	1	0	2	2
1.78	0	0	0	0	0	0	0	1	1	0	2	2
1.79	0	0	0	0	0	0	0	1	1	0	2	2
1.80	0	0	0	0	0	0	0	1	1	0	2	2
1.81	0	0	0	0	0	0	0	1	1	0	2	2
1.82	0	0	0	0	0	0	0	1	1	0	2	2
1.83	0	0	0	0	0	0	0	1	1	0	2	2
1.84	0	0	0	0	0	0	0	1	1	0	2	2
1.85	0	0	0	0	0	0	0	1	1	0	2	2
1.86	0	0	0	0	0	0	0	1	1	0	2	2
1.87	0	0	0	0	0	0	0	1	1	0	2	2
1.88	0	0	0	0	0	0	0	1	1	0	2	2
1.89	0	0	0	0	0	0	0	1	1	0	2	2
1.90	0	0	0	0	0	0	0	1	1	0	2	2
1.91	0	0	0	0	0	0	0	1	1	0	2	2
1.92	0	0	0	0	0	0	0	1	1	0	2	2
1.93	0	0	0	0	0	0	0	1	1	0	2	2
1.94	0	0	0	0	0	0	0	1	1	0	2	2
1.95	0	0	0	0	0	0	0	1	1	0	2	2
1.96	0	0	0	0	0	0	0	1	1	0	2	2
1.97	0	0	0	0	0	0	0	1	1	0	2	2
1.98	0	0	0	0	0	0	0	1	1	0	2	2
1.99	0	0	0	0	0	0	0	1	1	0	2	2
2.00	0	3	3	0	46	46	0	64	64	0	113	113
SUBTOTAL	0	3	3	0	46	45	0	64	15	0	113	63

TABLE A-3

MISSION * 1039-2 * INSTRUMENT * FWD 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
2.01	0	0	0	0	0	0	0	1	0	0	1	0
2.02	0	0	0	0	0	0	0	1	0	0	1	0
2.03	0	0	0	0	0	0	0	1	0	0	1	0
2.04	0	0	0	0	0	0	0	1	0	0	1	0
2.05	0	0	0	0	0	0	0	1	0	0	1	0
2.06	0	0	0	0	0	0	0	1	0	0	1	0
2.07	0	0	0	0	0	0	0	1	0	0	1	0
2.08	0	0	0	0	0	0	0	1	0	0	1	0
2.09	0	0	0	0	0	0	0	1	0	0	1	0
2.10	0	0	0	0	0	0	0	1	0	0	1	0
2.11	0	0	0	0	0	0	0	1	0	0	1	0
2.12	0	0	0	0	0	0	0	1	0	0	1	0
2.13	0	0	0	0	0	0	0	1	0	0	1	0
2.14	0	0	0	0	0	0	0	1	0	0	1	0
2.15	0	0	0	0	0	0	0	1	0	0	1	0
2.16	0	0	0	0	0	0	0	1	0	0	1	0
2.17	0	0	0	0	0	0	0	1	0	0	1	0
2.18	0	0	0	0	0	0	0	1	0	0	1	0
2.19	0	0	0	0	0	0	0	1	0	0	1	0
2.20	0	0	0	0	0	0	0	1	0	0	1	0
2.21	0	0	0	0	0	0	0	1	0	0	1	0
2.22	0	0	0	0	0	0	0	1	0	0	1	0
2.23	0	0	0	0	0	0	0	1	0	0	1	0
2.24	0	0	0	0	0	0	0	1	0	0	1	0
2.25	0	0	0	0	0	0	0	1	0	0	1	0
2.26	0	0	0	0	0	0	0	1	0	0	1	0
2.27	0	0	0	0	0	0	0	1	0	0	1	0
2.28	0	0	0	0	0	0	0	1	0	0	1	0
2.29	0	0	0	0	0	0	0	1	0	0	1	0
2.30	0	0	0	0	0	0	0	1	0	0	1	0
2.31	0	0	0	0	0	0	0	1	0	0	1	0
2.32	0	0	0	0	0	0	0	1	0	0	1	0
2.33	0	0	0	0	0	0	0	1	0	0	1	0
2.34	0	0	0	0	0	0	0	1	0	0	1	0
2.35	0	0	0	0	0	0	0	1	0	0	1	0
2.36	0	0	0	0	0	0	0	1	0	0	1	0
2.37	0	0	0	0	0	0	0	1	0	0	1	0
2.38	0	0	0	0	0	0	0	1	0	0	1	0
2.39	0	0	0	0	0	0	0	1	0	0	1	0
2.40	0	0	0	0	0	0	0	1	0	0	1	0
2.41	0	0	0	0	0	0	0	1	0	0	1	0
2.42	0	0	0	0	0	0	0	1	0	0	1	0
2.43	0	0	0	0	0	0	0	1	0	0	1	0
2.44	0	0	0	0	0	0	0	1	0	0	1	0
2.45	0	0	0	0	0	0	0	1	0	0	1	0
2.46	0	0	0	0	0	0	0	1	0	0	1	0
2.47	0	0	0	0	0	0	0	1	0	0	1	0
2.48	0	0	0	0	0	0	0	1	0	0	1	0
2.49	0	0	0	0	0	0	0	1	0	0	1	0
2.50	0	0	0	0	0	0	0	1	0	0	1	0
SUBTOTAL	0	0	3	0	9	43	0	29	79	0	38	125

TABLE A-3

~~TOP SECRET~~ C[redacted]

MISSION * 1039-2 * INSTRUMENT * FWD * 05/18/67 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
2.51	0	0	0	0	0	0	0	0	0	0	0	0
2.52	0	0	0	0	0	0	0	0	0	0	0	0
2.53	0	0	0	0	0	0	0	0	0	0	0	0
2.54	0	0	0	0	0	0	0	0	0	0	0	0
2.55	0	0	0	0	0	0	0	0	0	0	0	0
2.56	0	0	0	0	0	0	0	0	0	0	0	0
2.57	0	0	0	0	0	0	0	0	0	0	0	0
2.58	0	0	0	0	0	0	0	0	0	0	0	0
2.59	0	0	0	0	0	0	0	0	0	0	0	0
2.60	0	0	0	0	0	0	0	0	0	0	0	0
2.61	0	0	0	0	0	0	0	0	0	0	0	0
2.62	0	0	0	0	0	0	0	0	0	0	0	0
2.63	0	0	0	0	0	0	0	0	0	0	0	0
2.64	0	0	0	0	0	0	0	0	0	0	0	0
2.65	0	0	0	0	0	0	0	0	0	0	0	0
2.66	0	0	0	0	0	0	0	0	0	0	0	0
2.67	0	0	0	0	0	0	0	0	0	0	0	0
2.68	0	0	0	0	0	0	0	0	0	0	0	0
2.69	0	0	0	0	0	0	0	0	0	0	0	0
2.70	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7	7	6	67	87	96	121	121	97	215	215	199

MISSION 1039-2 I STR - FWD 05/18/ PROCESSING AND EXPOSURE ANALYS

PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	7	0 PC	14 PC	86 PC	0 PC	0 PC
INTERMEDIATE	87	0 PC	11 PC	79 PC	8 PC	1 PC
FULL	121	3 PC	0 PC	82 PC	15 PC	0 PC
ALL LEVELS	215	2 PC	5 PC	81 PC	12 PC	[illegible]

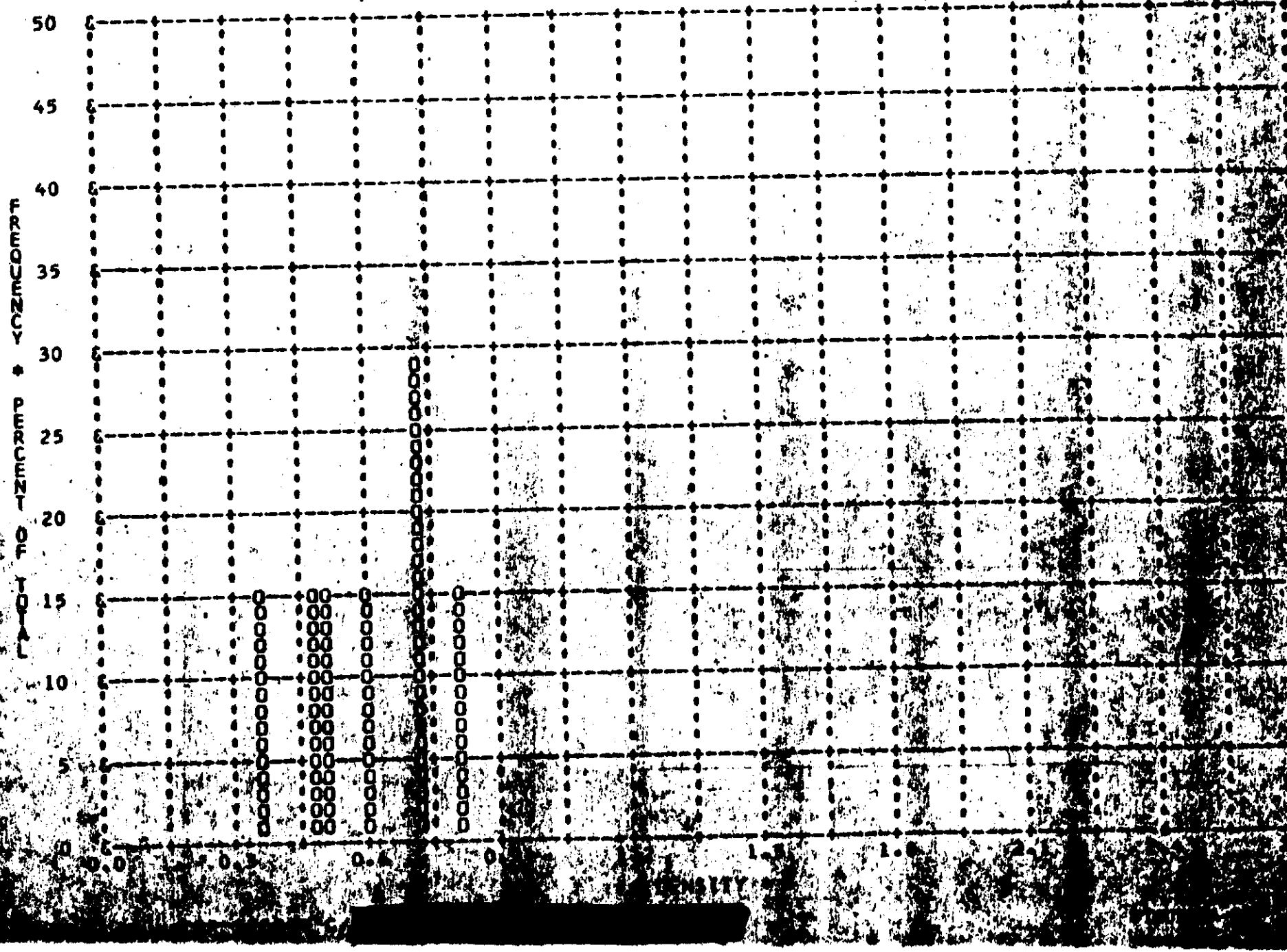
PROCESS LEVEL	BASE & FOG	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	0.01-0.09	0.01-0.13	0.14-0.39	0.40-0.90	———	0.91 AND U
INTERMED	0.10-0.17	0.01-0.20	0.21-0.39	0.40-0.90	0.91-1.35	1.35 AND U
FULL	0.18 AND UP	0.01-0.39	———	0.40-0.90	0.91-1.6[illegible]	[illegible]

~~TOP SECRET~~ C[redacted]

TABLE A-3

MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * PRIMARY

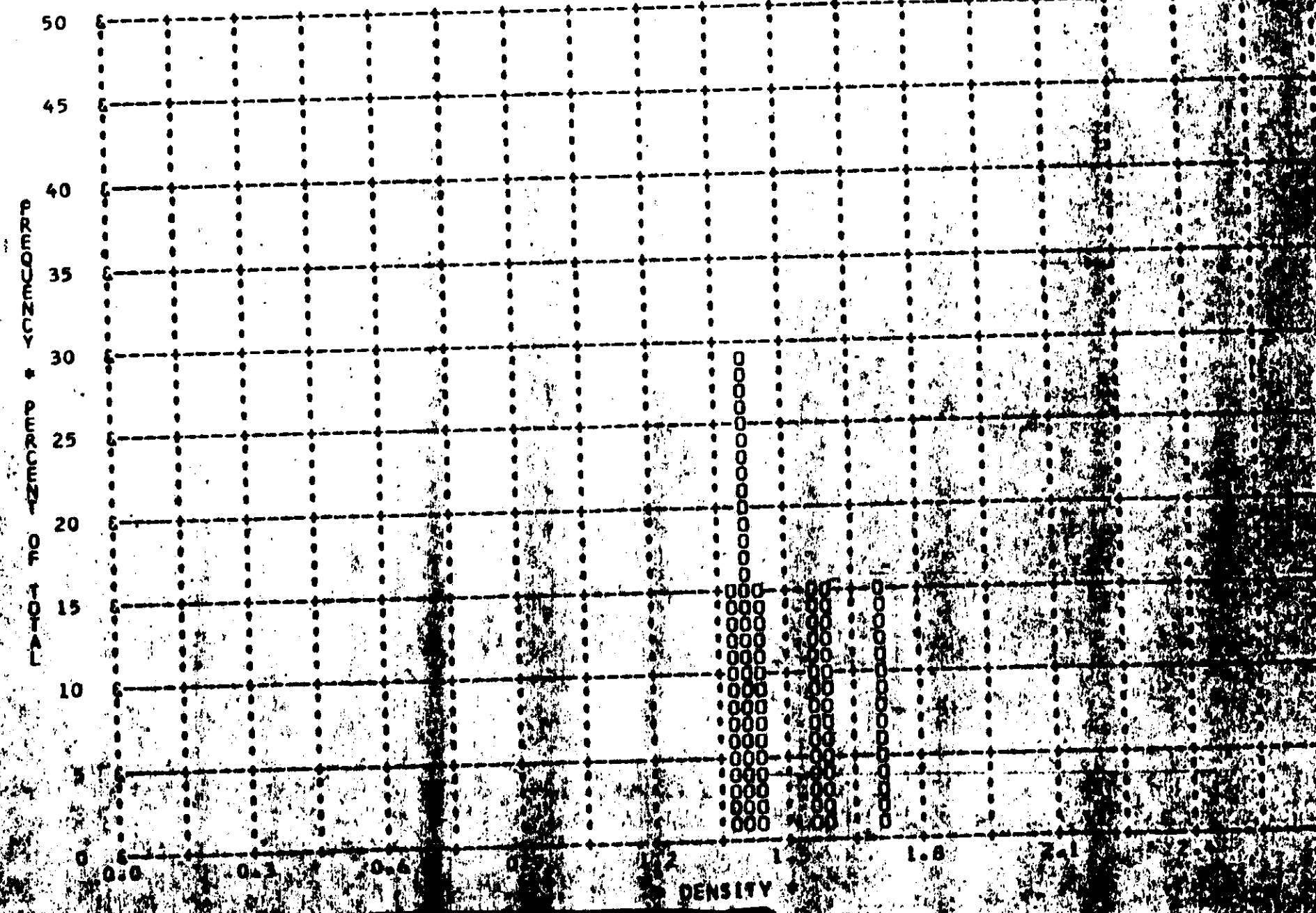
AIRTH MEAN * 0.59 * MEDIAN * 0.58 * STD DEV * 0.16 * RANGE * 0.34 TO 0.81 WITH 7 SAMPLES



~~TOP SECRET~~ C/[redacted]

MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * PRIMARY

AIRTH MEAN * 1.49 * MEDIAN * 1.44 * STD DEV * 0.12 * RANGE * 1.38 TO 1.70 WITH 7 SAMPLES



[redacted]

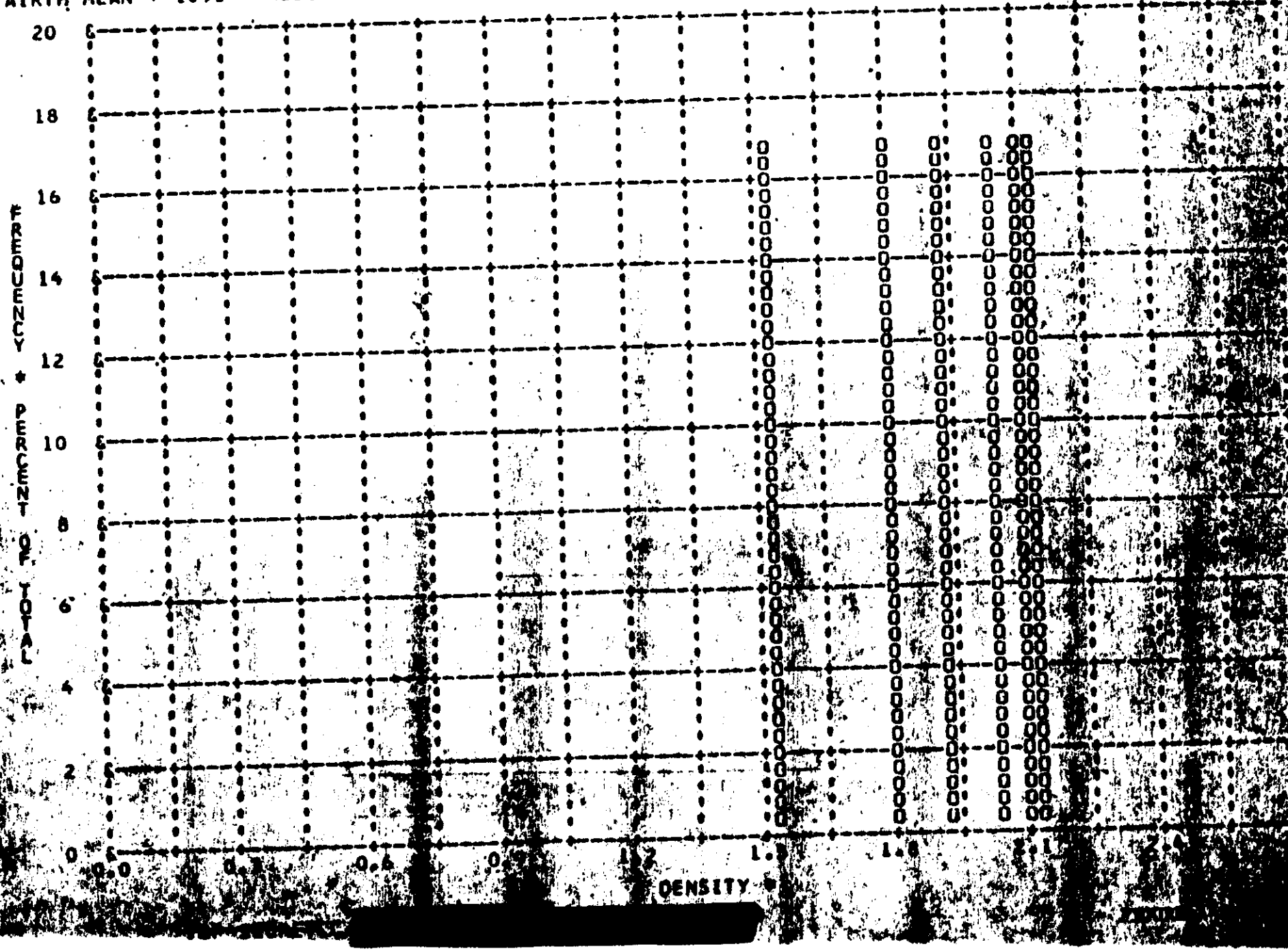
FIGURE A-

A-41

~~TOP SECRET~~ C/[redacted]

MISSION * 1039-2 * INSTR * FWD * 05/18/7 PLOT OF D MAX * CLOUD * PROCESSING * PRIMARY

AIRTH MEAN * 1.91 * MEDIAN * 2.03 * STD DEV * 0.23 * RANGE * 1.51 TO 2.11 WITH [redacted] SAMPLES



A-42

[redacted]

MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * INTERMEDIATE

AIRTH MEAN * 0.61 * MEDIAN * 0.56 * STD DEV * 0.21 * RANGE * 0.30 TO 1.38 WITH 87 SAMPLES

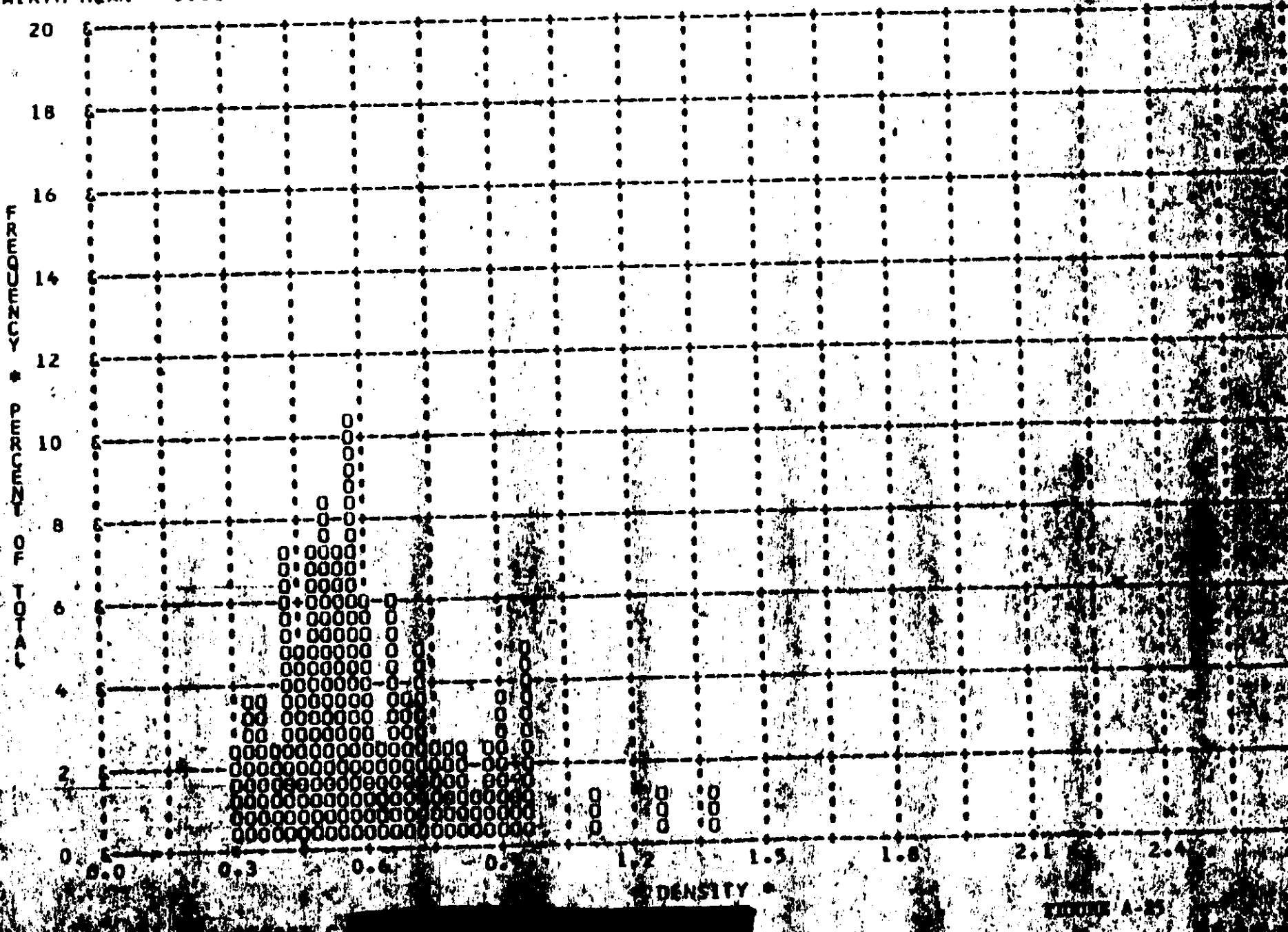
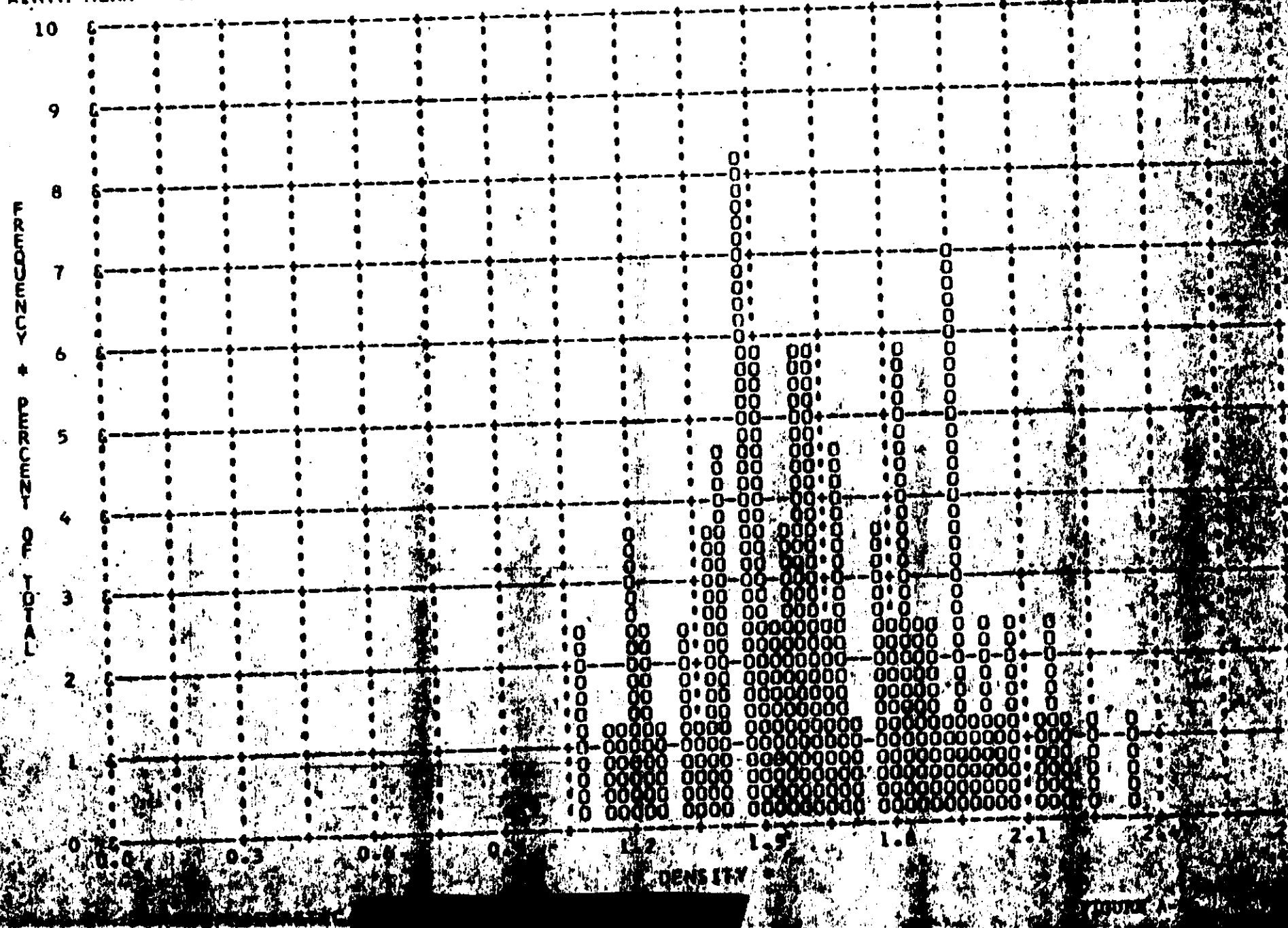


FIGURE A-25

~~TOP SECRET~~ C/[redacted]

MISSION * 1039-2 * INSTR * FWD * 05/18/7 PLOT OF D MAX * TERRAIN * PROCESSING * INTERMEDIATE

AIRTH MEAN * 1.64 * MEDIAN * 1.61 * STD DEV * 0.29 * RANGE * 1.06 TO 2.34 WITH 87 SAMPLES



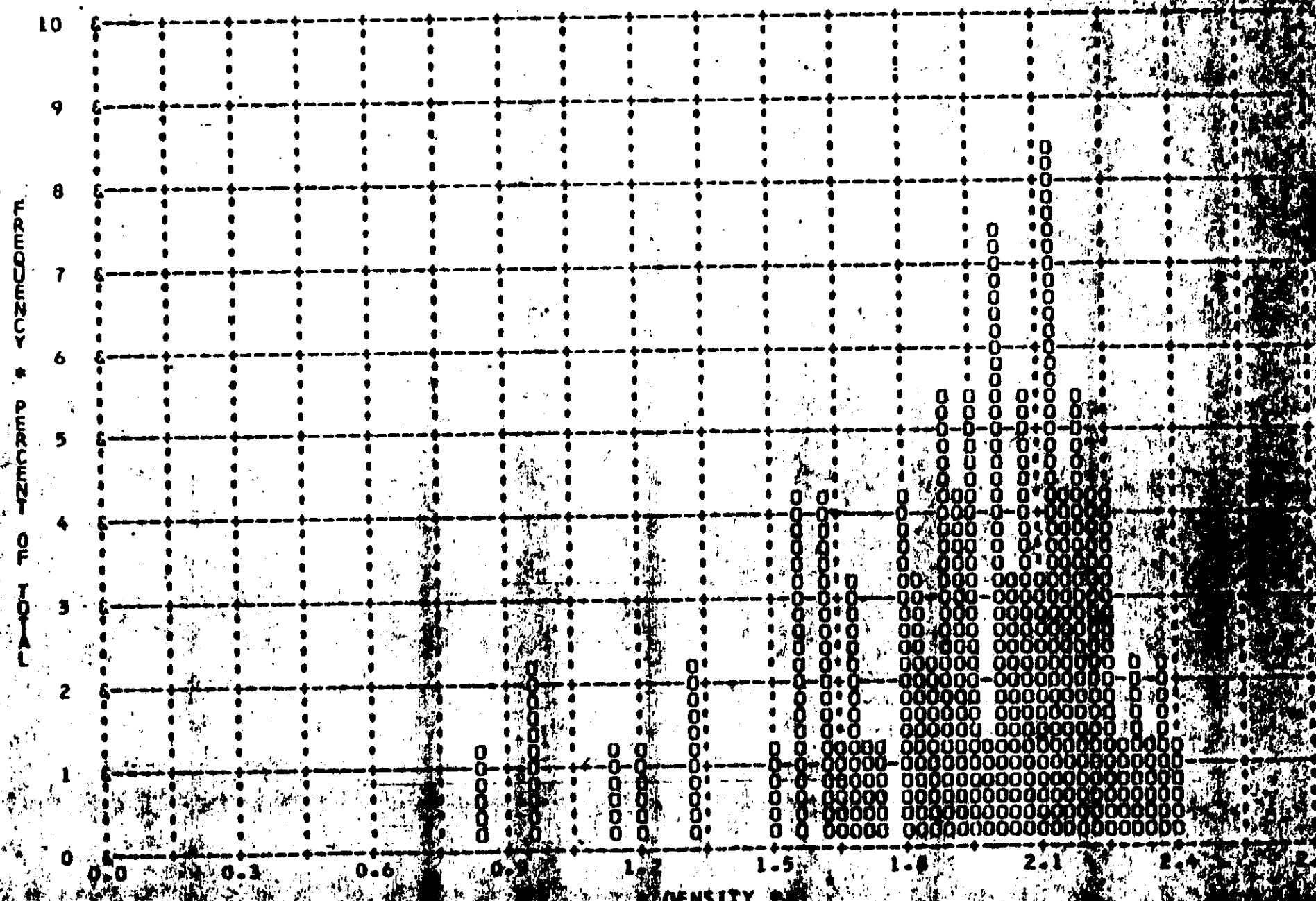
[redacted]

FIGURE A-

~~TOP SECRET~~ C[redacted]

MISSION * 1039-2 * INSTR * FWD * 05/18/7 PLOT OF D MAX * CLOUD * PROCESSING * INTERMEDIATE

AIRTH MEAN * 1.92 * MEDIAN * 2.00 * STD DEV * 0.32 * RANGE * 0.84 TO 2.39 WITH 96 SAMPLES



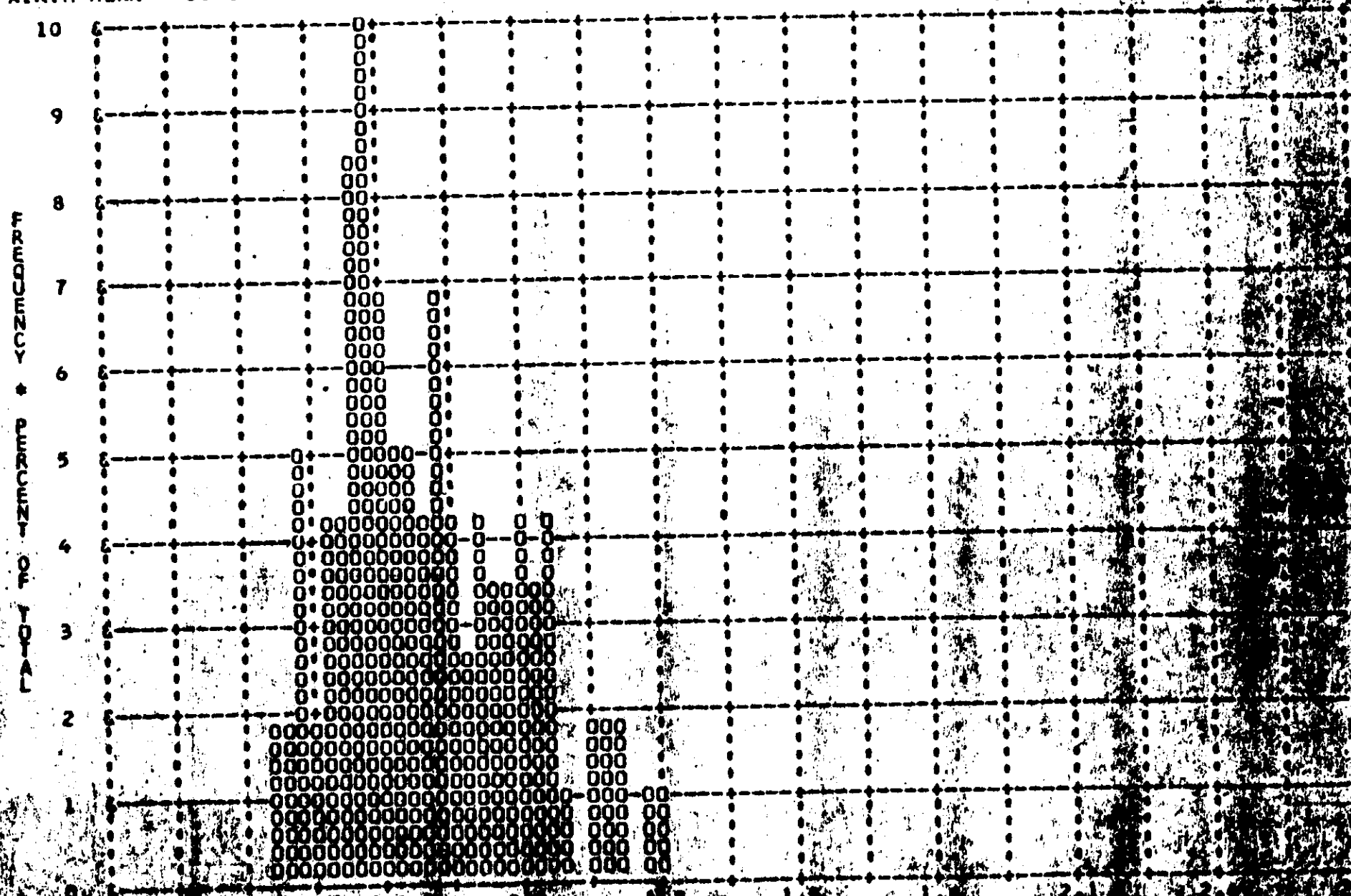
A-45

[redacted]

FIGURE A-2

MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * FULL

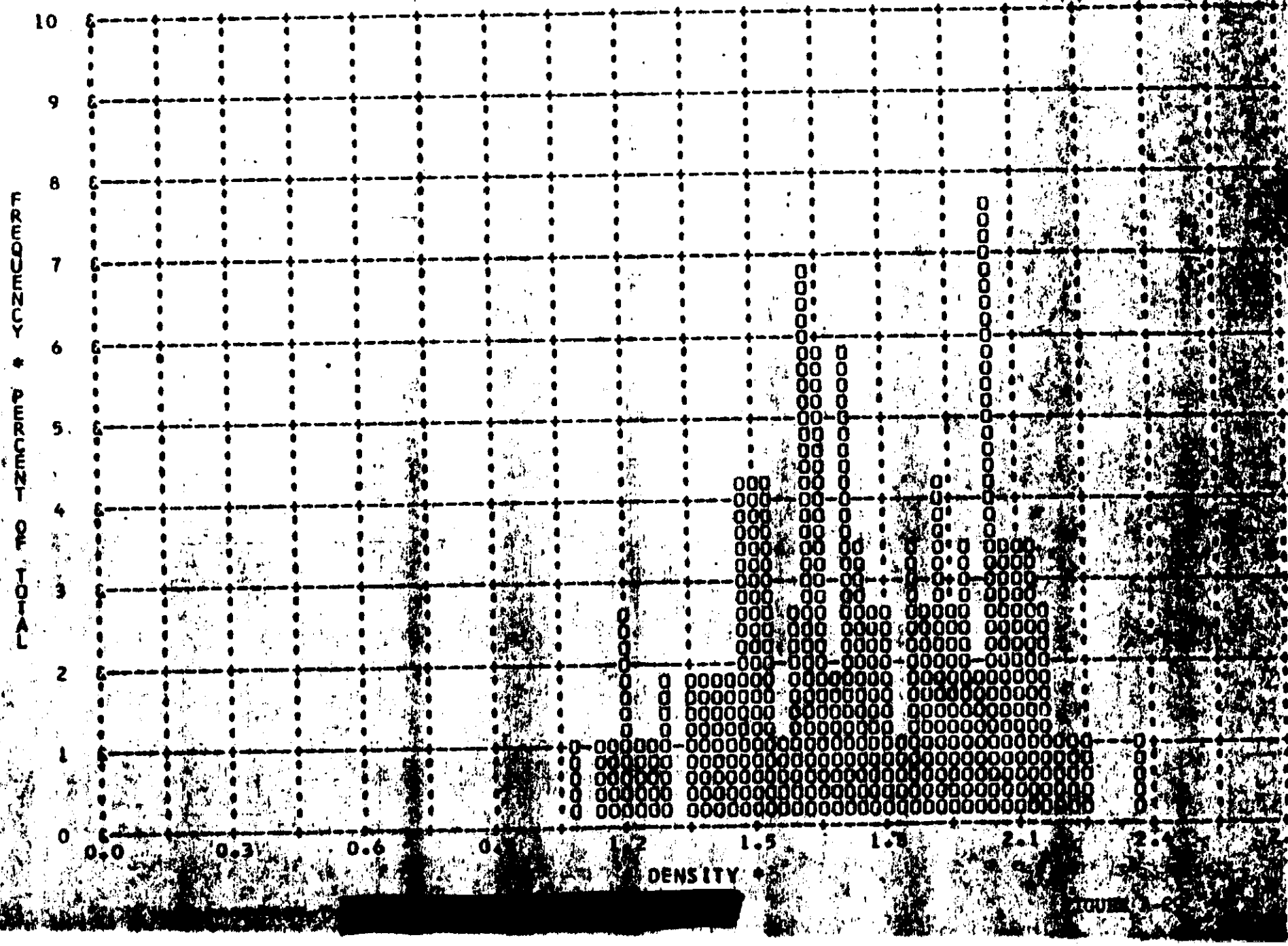
AIRTH MEAN * 0.68 * MEDIAN * 0.64 * STD DEV * 0.19 * RANGE * 0.36 TO 1.20 WITH 121 SAMPLES



[redacted]

MISSION * 1039-2 * INSTR * FWD * 05/10/7PLOT OF D MAX * TERRAIN * PROCESSING * FULL

AIRTH MEAN * 1.73 * MEDIAN * 1.71 * STD DEV * 0.29 * RANGE * 1.08 TO 2.36 WITH 121 SAMPLES

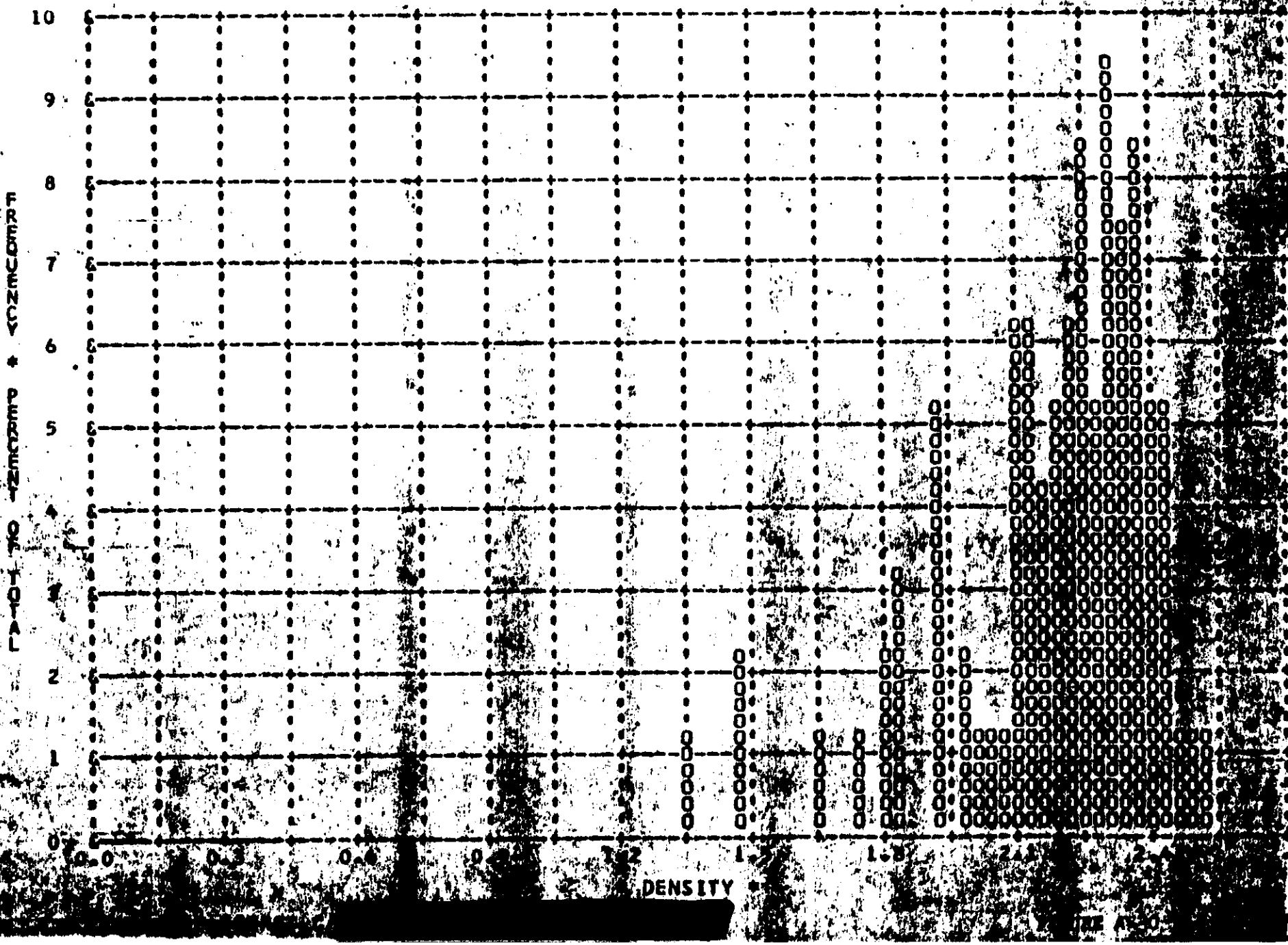


A-47

~~TOP SECRET~~ C[redacted]

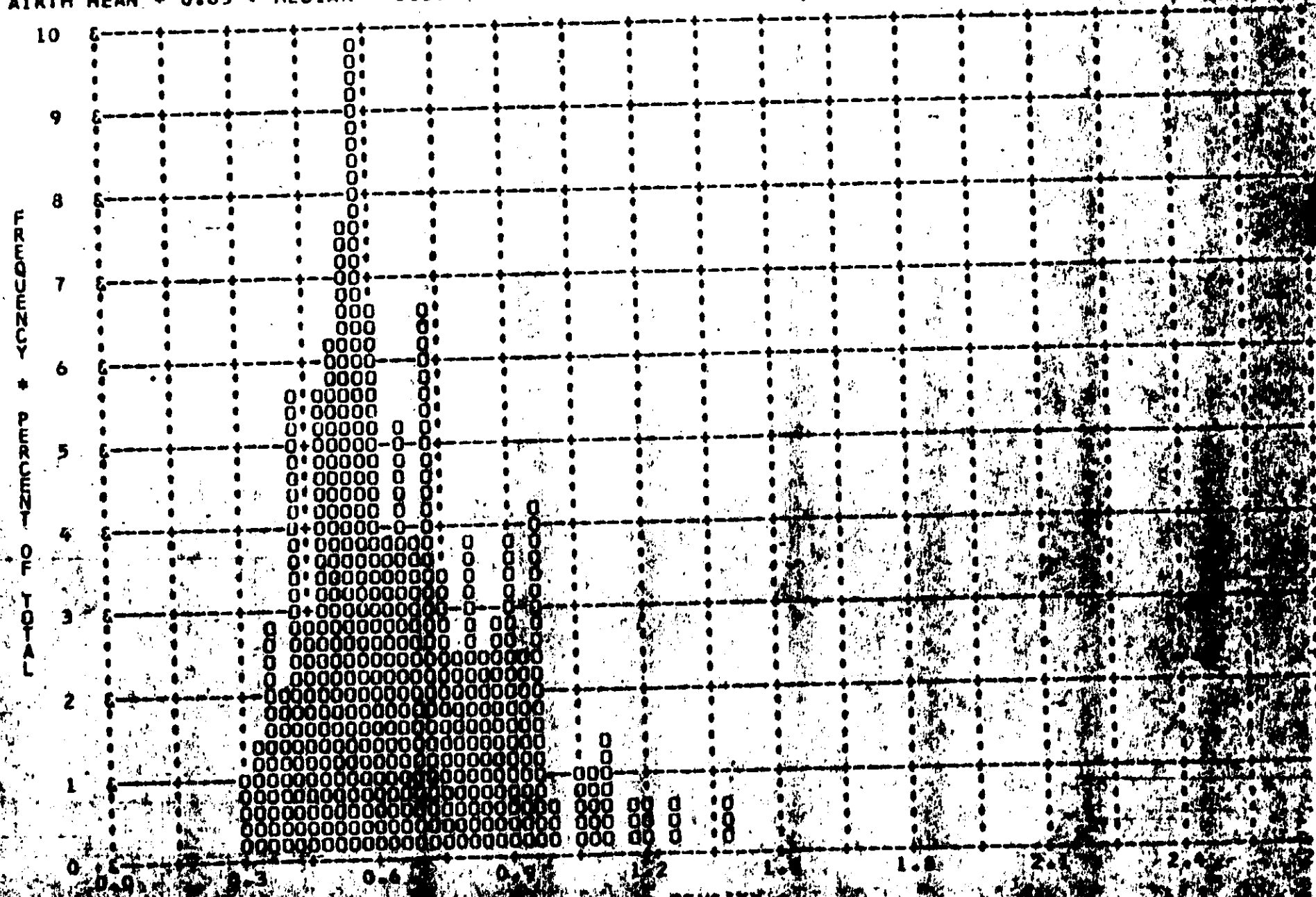
MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * FULL

AIRTH MEAN * 2.17 * MEDIAN * 2.24 * STD DEV * 0.23 * RANGE * 1.33 TO 2.50 WITH 97 SAMPLES



MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * ALL LEVELS

AIRTH MEAN * 0.65 * MEDIAN * 0.59 * STD DEV * 0.20 * RANGE * 0.30 TO 1.38 WITH 215 SAMPLES

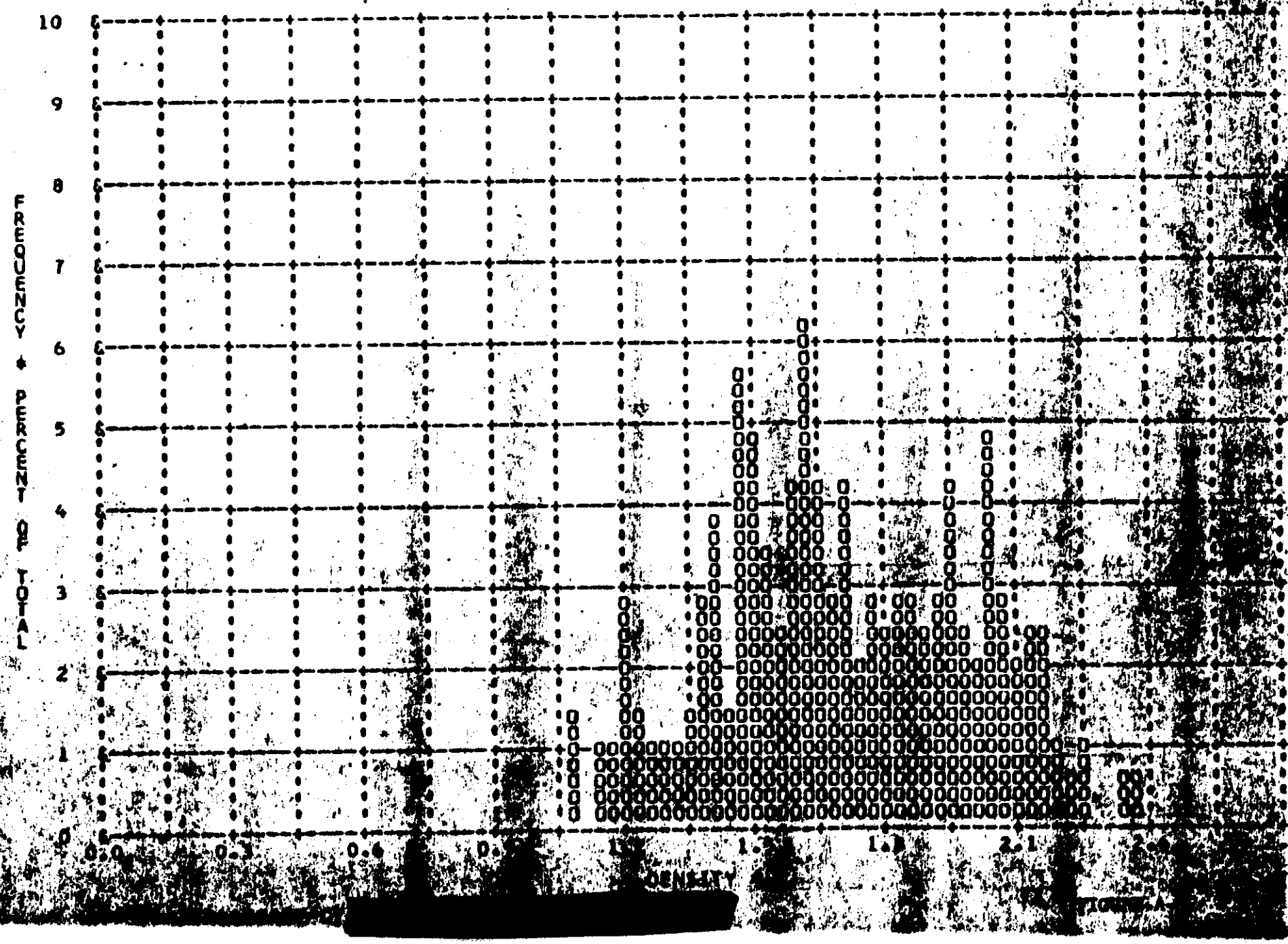


[redacted]

FIGURE A-11

MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * ALL LEVELS

AIRTH MEAN * 1.69 * MEDIAN * 1.66 * STD. DEV * 0.29 * RANGE * 1.06 TO 2.36 WITH 215 SAMPLES



MISSION * 1039-2 * INSTR * FWD * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * ALL LEVEL

AIRTH MEAN * 2.04 * MEDIAN * 2.12 * STD DEV * 0.30 * RANGE * 0.84 TO 2.50 WITH 195 SAMPLES

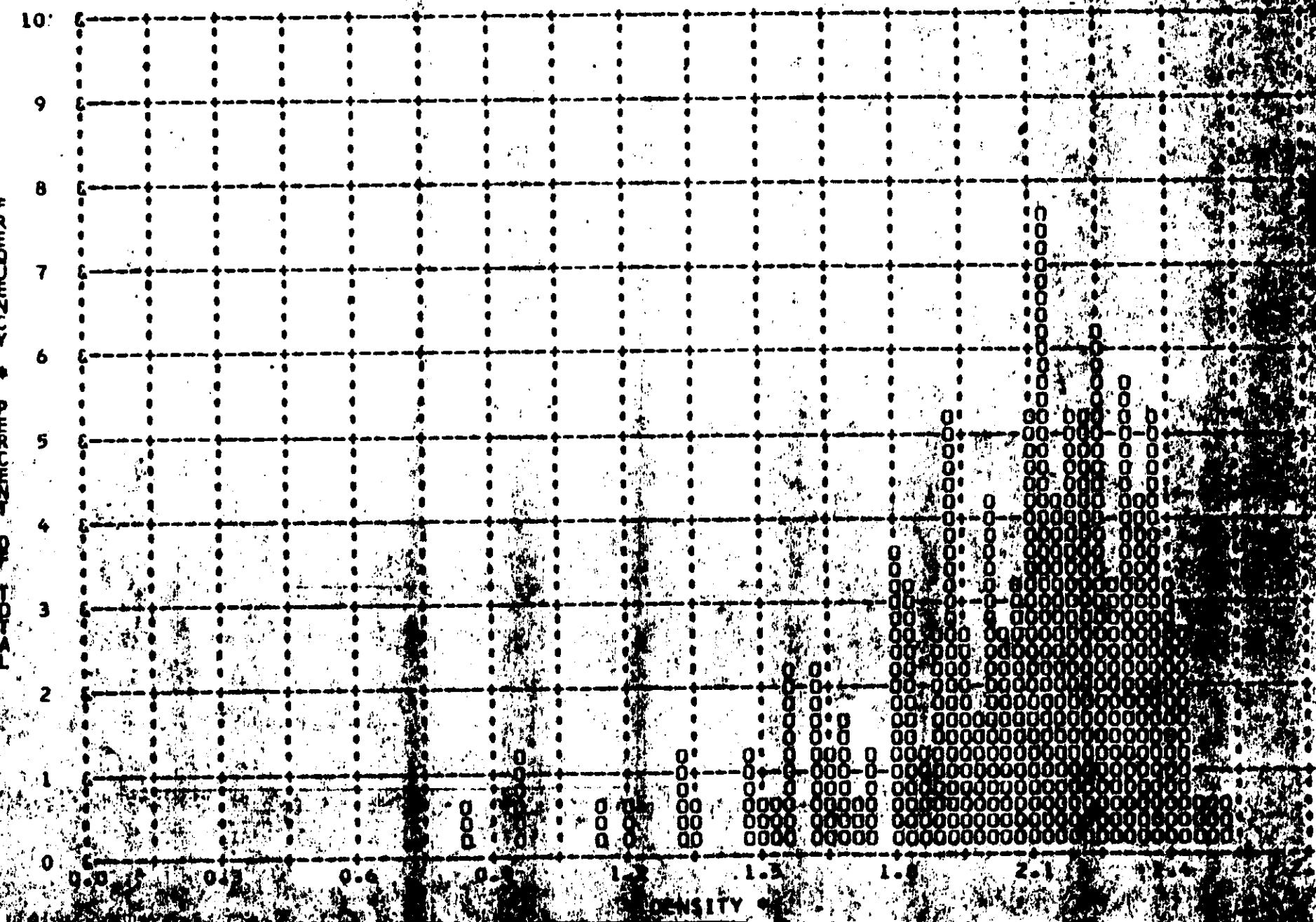


FIGURE A-3

MISSION # L039-2 # INSTRUMENT # AFT [redacted] 3/18/67 DENSITY REC DISTR

DE SITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
0.01	0	0	0	0	0	0	0	0	0	0	0	0
0.02	0	0	0	0	0	0	0	0	0	0	0	0
0.03	0	0	0	0	0	0	0	0	0	0	0	0
0.04	0	0	0	0	0	0	0	0	0	0	0	0
0.05	0	0	0	0	0	0	0	0	0	0	0	0
0.06	0	0	0	0	0	0	0	0	0	0	0	0
0.07	0	0	0	0	0	0	0	0	0	0	0	0
0.08	0	0	0	0	0	0	0	0	0	0	0	0
0.09	0	0	0	0	0	0	0	0	0	0	0	0
0.10	0	0	0	0	0	0	0	0	0	0	0	0
0.11	0	0	0	0	0	0	0	0	0	0	0	0
0.12	0	0	0	0	0	0	0	0	0	0	0	0
0.13	0	0	0	0	0	0	0	0	0	0	0	0
0.14	0	0	0	0	0	0	0	0	0	0	0	0
0.15	0	0	0	0	0	0	0	0	0	0	0	0
0.16	0	0	0	0	0	0	0	0	0	0	0	0
0.17	0	0	0	0	0	0	0	0	0	0	0	0
0.18	0	0	0	0	0	0	0	0	0	0	0	0
0.19	0	0	0	0	0	0	0	0	0	0	0	0
0.20	0	0	0	0	0	0	0	0	0	0	0	0
0.21	0	0	0	0	0	0	0	0	0	0	0	0
0.22	0	0	0	0	0	0	0	0	0	0	0	0
0.23	0	0	0	0	0	0	0	0	0	0	0	0
0.24	0	0	0	0	0	0	0	0	0	0	0	0
0.25	0	0	0	0	0	0	0	0	0	0	0	0
0.26	0	0	0	0	0	0	0	0	0	0	0	0
0.27	0	0	0	0	0	0	0	0	0	0	0	0
0.28	0	0	0	0	0	0	0	0	0	0	0	0
0.29	0	0	0	0	0	0	0	0	0	0	0	0
0.30	0	0	0	0	0	0	0	0	0	0	0	0
0.31	0	0	0	0	0	0	0	0	0	0	0	0
0.32	0	0	0	0	0	0	0	0	0	0	0	0
0.33	0	0	0	0	0	0	0	0	0	0	0	0
0.34	0	0	0	0	0	0	0	0	0	0	0	0
0.35	0	0	0	0	0	0	0	0	0	0	0	0
0.36	0	0	0	0	0	0	0	0	0	0	0	0
0.37	0	0	0	0	0	0	0	0	0	0	0	0
0.38	0	0	0	0	0	0	0	0	0	0	0	0
0.39	0	0	0	0	0	0	0	0	0	0	0	0
0.40	0	0	0	0	0	0	0	0	0	0	0	0
0.41	0	0	0	0	0	0	0	0	0	0	0	0
0.42	0	0	0	0	0	0	0	0	0	0	0	0
0.43	0	0	0	0	0	0	0	0	0	0	0	0
0.44	0	0	0	0	0	0	0	0	0	0	0	0
0.45	0	0	0	0	0	0	0	0	0	0	0	0
0.46	0	0	0	0	0	0	0	0	0	0	0	0
0.47	0	0	0	0	0	0	0	0	0	0	0	0
0.48	0	0	0	0	0	0	0	0	0	0	0	0
0.49	0	0	0	0	0	0	0	0	0	0	0	0
0.50	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	0	0	44	0	0	15	0	0	6	0	0

TABLE A-

[redacted]

MISSION # 1039-2 * INSTRUMENT * AFT [redacted] 65/10/07 DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
0.51	0	0	0	[illegible]	[illegible]	0	[illegible]	0	0	[illegible]	0	[illegible]
0.52	0	0	0	3	3	0	1	1	0	4	4	0
0.53	0	0	0	3	3	0	0	0	0	3	3	0
0.54	1	0	0	4	4	0	0	0	0	4	4	0
0.55	0	0	0	4	4	0	0	0	0	4	4	0
0.56	0	0	0	4	4	0	0	0	0	4	4	0
0.57	1	0	0	6	6	0	0	0	0	6	6	0
0.58	0	0	0	4	4	0	0	0	0	4	4	0
0.59	0	0	0	2	2	0	0	0	0	2	2	0
0.60	1	0	0	3	3	0	0	0	0	3	3	0
0.61	0	0	0	4	4	0	0	0	0	4	4	0
0.62	0	0	0	3	3	0	0	0	0	3	3	0
0.63	0	0	0	3	3	0	0	0	0	3	3	0
0.64	0	0	0	3	3	0	0	0	0	3	3	0
0.65	0	0	0	5	5	0	0	0	0	5	5	0
0.66	0	0	0	5	5	0	0	0	0	5	5	0
0.67	0	0	0	5	5	0	0	0	0	5	5	0
0.68	1	0	0	6	6	0	0	0	0	6	6	0
0.69	0	0	0	5	5	0	0	0	0	5	5	0
0.70	0	0	0	2	2	0	0	0	0	2	2	0
0.71	0	0	0	2	2	0	0	0	0	2	2	0
0.72	0	0	0	2	2	0	0	0	0	2	2	0
0.73	0	0	0	2	2	0	0	0	0	2	2	0
0.74	1	0	0	3	3	0	0	0	0	3	3	0
0.75	0	0	0	3	3	0	0	0	0	3	3	0
0.76	0	0	0	3	3	0	0	0	0	3	3	0
0.77	0	0	0	1	1	0	0	0	0	1	1	0
0.78	1	0	0	3	3	0	0	0	0	3	3	0
0.79	0	0	0	3	3	0	0	0	0	3	3	0
0.80	1	0	0	3	3	0	0	0	0	3	3	0
0.81	0	0	0	1	1	0	0	0	0	1	1	0
0.82	0	0	0	0	0	0	0	0	0	0	0	0
0.83	0	0	0	1	1	0	0	0	0	1	1	0
0.84	0	0	0	0	0	0	0	0	0	0	0	0
0.85	1	0	0	2	2	0	0	0	0	2	2	0
0.86	0	0	0	0	0	0	0	0	0	0	0	0
0.87	1	0	0	2	2	0	0	0	0	2	2	0
0.88	0	0	0	2	2	0	0	0	0	2	2	0
0.89	1	0	0	2	2	0	0	0	0	2	2	0
0.90	0	0	0	0	0	0	0	0	0	0	0	0
0.91	0	0	0	0	0	0	0	0	0	0	0	0
0.92	0	0	0	0	0	0	0	0	0	0	0	0
0.93	0	0	0	0	0	0	0	0	0	0	0	0
0.94	0	0	0	0	0	0	0	0	0	0	0	0
0.95	0	0	0	0	0	0	0	0	0	0	0	0
0.96	0	0	0	1	1	0	0	0	0	1	1	0
0.97	0	0	0	2	2	0	0	0	0	2	2	0
0.98	0	0	0	1	1	0	0	0	0	1	1	0
0.99	0	0	0	0	0	0	0	0	0	0	0	0
1.00	0	1	0	0	0	1	0	0	1	0	1	1
SUBTOTAL	10	1	0	91	5	4	68	1	1	16	1	1

[redacted]

TABLE A-1

[redacted]

MISSION # 1039-2 # INSTRUMENT [redacted]

	DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	[illegible] MIN	[illegible] MAX	[illegible] LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
1	1.01	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	1.02	0	0	0	0	0	0						
	1.03	0	0	0	0	0	0						
	1.04	0	0	0	0	0	0						
	1.05	0	0	0	0	0	0						
	1.06	0	0	0	0	0	0						
	1.07	0	0	0	0	0	0						
	1.08	0	0	0	0	0	0						
	1.09	0	0	0	0	0	0						
	1.10	0	0	0	0	0	0						
	1.11	0	0	0	0	0	0						
	1.12	0	0	0	0	0	0						
	1.13	0	0	0	0	0	0						
	1.14	0	0	0	0	0	0						
	1.15	0	0	0	0	0	0						
	1.16	0	0	0	0	0	0						
	1.17	0	0	0	0	0	0						
	1.18	0	0	0	0	0	0						
	1.19	0	0	0	0	0	0						
	1.20	0	0	0	0	0	0						
	1.21	0	0	0	0	0	0						
	1.22	0	0	0	0	0	0						
	1.23	0	0	0	0	0	0						
	1.24	0	0	0	0	0	0						
	1.25	0	0	0	0	0	0						
	1.26	0	0	0	0	0	0						
	1.27	0	0	0	0	0	0						
	1.28	0	0	0	0	0	0						
	1.29	0	0	0	0	0	0						
	1.30	0	0	0	0	0	0						
	1.31	0	0	0	0	0	0						
	1.32	0	0	0	0	0	0						
	1.33	0	0	0	0	0	0						
	1.34	0	0	0	0	0	0						
	1.35	0	0	0	0	0	0						
	1.36	0	0	0	0	0	0						
	1.37	0	0	0	0	0	0						
	1.38	0	0	0	0	0	0						
	1.39	0	0	0	0	0	0						
	1.40	0	0	0	0	0	0						
	1.41	0	0	0	0	0	0						
	1.42	0	0	0	0	0	0						
	1.43	0	0	0	0	0	0						
	1.44	0	0	0	0	0	0						
	1.45	0	0	0	0	0	0						
	1.46	0	0	0	0	0	0						
	1.47	0	0	0	0	0	0						
	1.48	0	0	0	0	0	0						
	1.49	0	0	0	0	0	0						
	1.50	0	0	0	0	0	0						
SUBTOTAL		3	7	0	7	52	6	8	31	2	18	90	[illegible]

~~TOP SECRET~~ C/[redacted]

TABLE A-4

~~TOP SECRET~~ [redacted]

MISSION * 1039-2 * INSTRUMENT * AFT [redacted] DENSITY FREQ DISTR

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
1.51	0	6	0	0	0	0	0	0	0	0	1	0
1.52	0	0	0	0	0	0	0	0	0	0	0	0
1.53	0	0	0	0	0	0	0	0	0	0	0	0
1.54	0	0	0	0	0	0	0	0	0	0	0	0
1.55	0	1	0	0	0	0	0	0	0	0	1	0
1.56	0	0	0	0	0	0	0	0	0	0	0	0
1.57	1	0	0	0	0	0	0	0	0	1	0	0
1.58	0	0	0	0	0	0	0	0	0	0	0	0
1.59	0	1	0	0	0	0	0	0	0	0	1	0
1.60	0	0	0	1	0	0	0	0	0	1	0	0
1.61	0	1	0	0	0	0	0	0	0	0	1	0
1.62	0	0	0	0	0	0	0	0	0	0	0	0
1.63	0	0	0	0	0	0	0	0	0	0	0	0
1.64	0	0	0	0	0	0	0	0	0	0	0	0
1.65	0	0	0	0	0	0	0	0	0	0	0	0
1.66	0	0	0	0	0	0	0	0	0	0	0	0
1.67	0	0	0	0	0	0	0	0	0	0	0	0
1.68	0	0	0	0	0	0	0	0	0	0	0	0
1.69	0	0	0	0	0	0	0	0	0	0	0	0
1.70	0	0	0	0	0	0	0	0	0	0	0	0
1.71	0	0	0	0	0	0	0	0	0	0	0	0
1.72	0	0	0	0	0	0	0	0	0	0	0	0
1.73	0	0	0	0	0	0	0	0	0	0	0	0
1.74	0	0	0	0	0	0	0	0	0	0	0	0
1.75	0	0	0	0	0	0	0	0	0	0	0	0
1.76	0	0	0	0	0	0	0	0	0	0	0	0
1.77	0	0	0	0	0	0	0	0	0	0	0	0
1.78	0	0	0	0	0	0	0	0	0	0	0	0
1.79	0	0	0	0	0	0	0	0	0	0	0	0
1.80	0	0	0	0	0	0	0	0	0	0	0	0
1.81	0	0	0	0	0	0	0	0	0	0	0	0
1.82	0	0	0	0	0	0	0	0	0	0	0	0
1.83	0	0	0	0	0	0	0	0	0	0	0	0
1.84	0	0	0	0	0	0	0	0	0	0	0	0
1.85	0	0	0	0	0	0	0	0	0	0	0	0
1.86	0	0	0	0	0	0	0	0	0	0	0	0
1.87	0	0	0	0	0	0	0	0	0	0	0	0
1.88	0	0	0	0	0	0	0	0	0	0	0	0
1.89	0	0	0	0	0	0	0	0	0	0	0	0
1.90	0	0	0	0	0	0	0	0	0	0	0	0
1.91	0	0	0	0	0	0	0	0	0	0	0	0
1.92	0	0	0	0	0	0	0	0	0	0	0	0
1.93	0	0	0	0	0	0	0	0	0	0	0	0
1.94	0	0	0	0	0	0	0	0	0	0	0	0
1.95	0	0	0	0	0	0	0	0	0	0	0	0
1.96	0	0	0	0	0	0	0	0	0	0	0	0
1.97	0	0	0	0	0	0	0	0	0	0	0	0
1.98	0	0	0	0	0	0	0	0	0	0	0	0
1.99	0	0	0	0	0	0	0	0	0	0	0	0
2.00	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	8	8	1	71	43	0	48	17	2	127	68

~~TOP SECRET~~ C/ [redacted]

TABLE A-4

[redacted]

MISSION * 1039-2 * INSTRUMENT * AFT [redacted] DENSITY FREQ DIST

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
2.01	0	0	0	0	2	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.02	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.03	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.04	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.05	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.06	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.07	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.08	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.09	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.10	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.11	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.12	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.13	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.14	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.15	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.16	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.17	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.18	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.19	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.20	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.21	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.22	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.23	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.24	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.25	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.26	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.27	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.28	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.29	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.30	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.31	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.32	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.33	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.34	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.35	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.36	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.37	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.38	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.39	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.40	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.41	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.42	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.43	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.44	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.45	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.46	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.47	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.48	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.49	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2.50	0	0	0	0	0	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SUBTOTAL	0	0	3	0	15	54	0	11	47	0	26	104

[redacted]

TABLE A-4

[redacted]

MISSION * 1039-2 * INSTRUMENT * AFT * C/[redacted] DENSITY FREQ DIST *

DENSITY VALUE	PRIMARY MIN	PRIMARY MAX	PRIMARY LIM	INTERMEDIATE MIN	INTERMEDIATE MAX	INTERMEDIATE LIM	FULL MIN	FULL MAX	FULL LIM	ALL LEVELS MIN	ALL LEVELS MAX	ALL LEVELS LIM
[redacted]												
2.52	0	0	0	0	0	0						
2.53	0	0	0	0	0	0						
2.54	0	0	0	0	0	0						
2.55	0	0	0	0	0	0						
2.56	0	0	0	0	0	0						
2.57	0	0	0	0	0	0						
2.58	0	0	0	0	0	0						
2.59	0	0	0	0	0	0						
2.60	0	0	0	0	0	0						
2.61	0	0	0	0	0	0						
2.62	0	0	0	0	0	0						
2.63	0	0	0	0	0	0						
2.64	0	0	0	0	0	0						
2.65	0	0	0	0	0	0						
2.66	0	0	0	0	0	0						
2.67	0	0	0	0	0	0						
2.68	0	0	0	0	0	0						
2.69	0	0	0	0	0	0						
2.70	0	0	0	0	0	0						
SUBTOTAL	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL	16	16	11	143	143	107	91	91	68	250	250	186

MISSION 1039-2 INSTR - AFT 05/18/ PROCESSING AND EXPOSURE ANALYSI

PROCESS LEVEL	SAMPLE SIZE	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	16	0 PC	0 PC	75 PC	0 PC	25 PC
INTERMEDIATE	143	0 PC	8 PC	81 PC	10 PC	1 PC
FULL	91	3 PC	0 PC	81 PC	15 PC	[redacted]
ALL LEVELS	250	1 PC	4 PC	[redacted]	[redacted]	[redacted]

PROCESS LEVEL	BASE & FOG	UNDER EXPOSED	UNDER PROCESSED	CORRECT EXP&PROC	OVER PROCESSED	OVER EXPOSED
PRIMARY	0.01-0.09	0.01-0.13	0.14-0.39	0.40-0.90	[redacted]	0.91 AND UP
INTERMED	0.10-0.17	0.01-0.20	0.21-0.39	0.40-0.90	0.91-1.[redacted]	[redacted]
FULL	0.18 AND UP	0.01-0.39	[redacted]	0.40-0.90	0.91-[redacted]	[redacted]

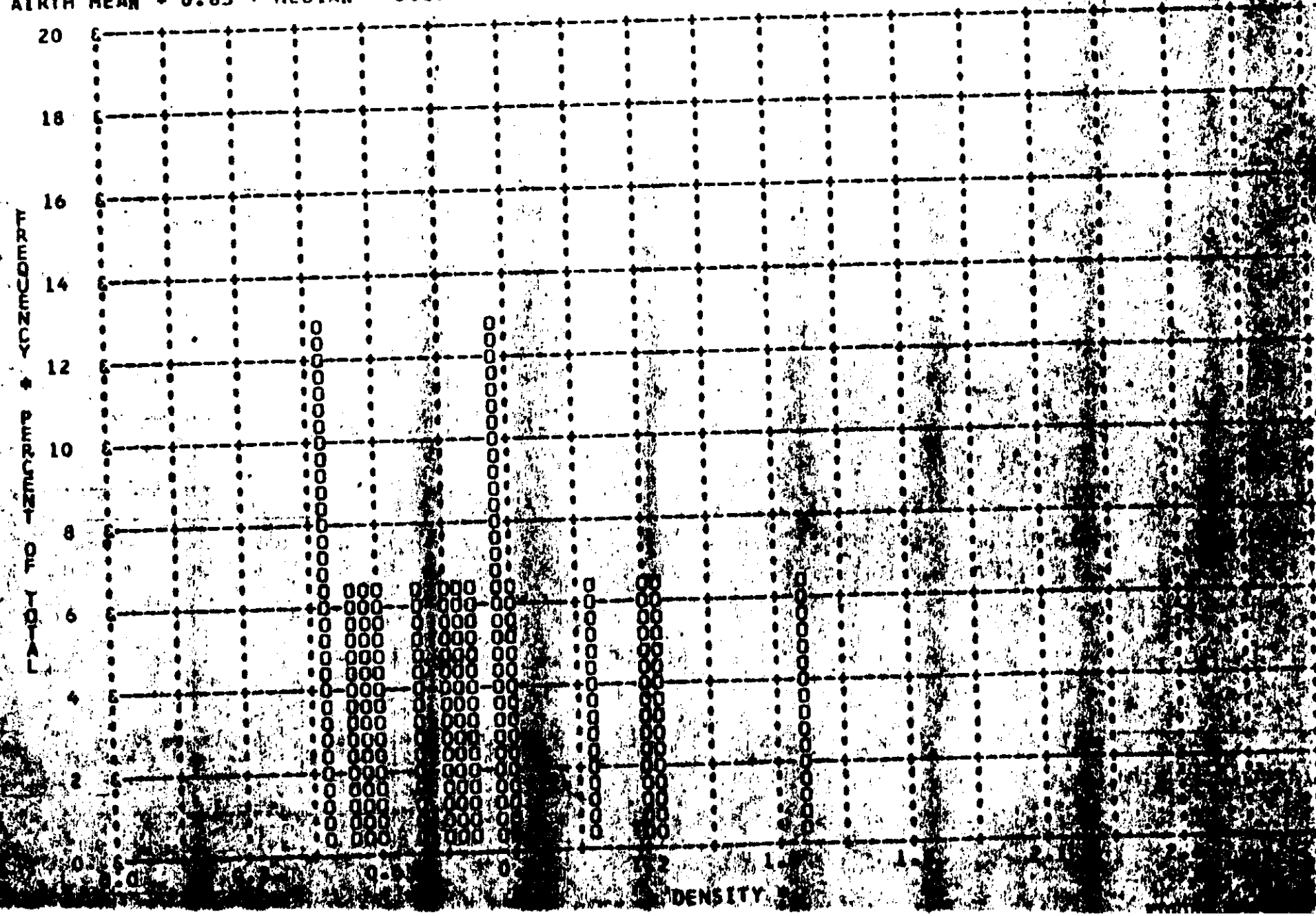
~~TOP SECRET~~ C/[redacted]

TABLE A-4

~~TOP SECRET~~ C [redacted]

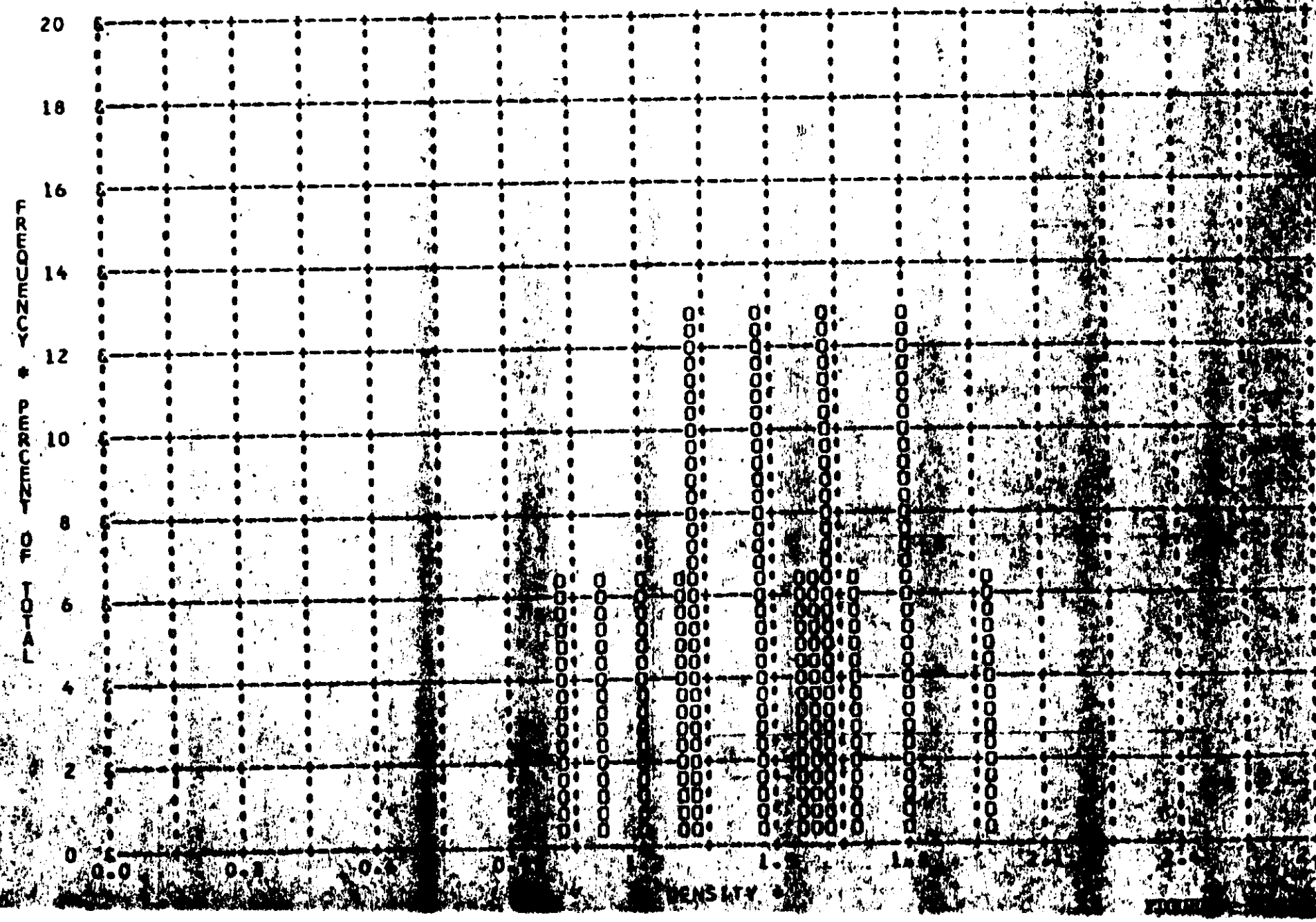
MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * PRIMARY

AIRTH MEAN * 0.83 * MEDIAN * 0.80 * STD DEV * 0.30 * RANGE * 0.48 TO 1.56 WITH 16 SAMPLES



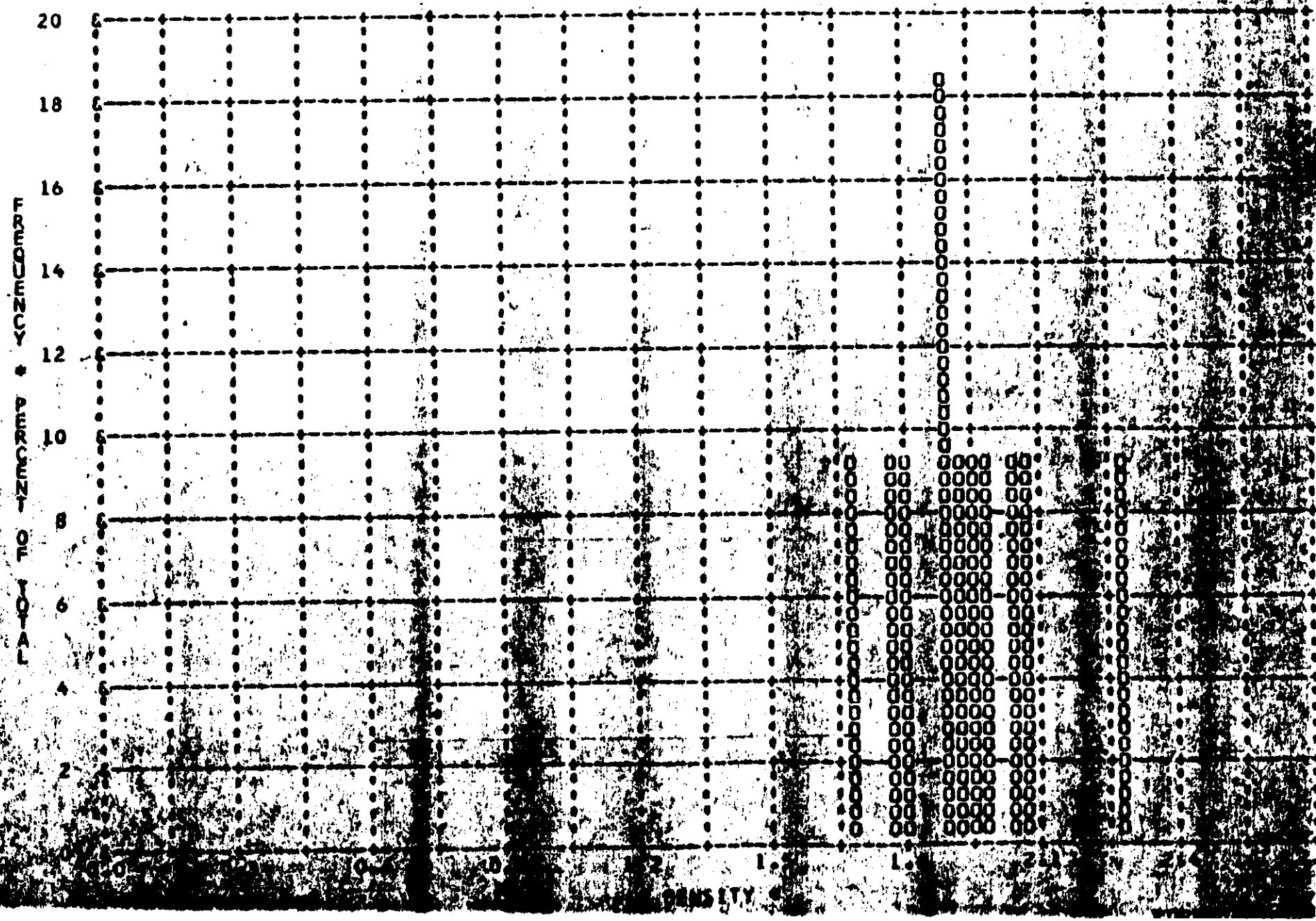
MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * PRIMARY

AIRTH MEAN * 1.48 * MEDIAN * 1.56 * STD DEV * 0.26 * RANGE * 1.00 TO 1.96 WITH 16 SAMPLES



MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * PRIMARY

AIRTH MEAN * 1.93 * MEDIAN * 1.91 * STD DEV * 0.16 * RANGE * 1.68 TO 2.26 WITH 11 SAMPLES



MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * INTERMEDIATE

AIRTH MEAN * 0.64 * MEDIAN * 0.61 * STD DEV * 0.22 * RANGE * 0.27 TO 1.60 WITH 143 SAMPLES

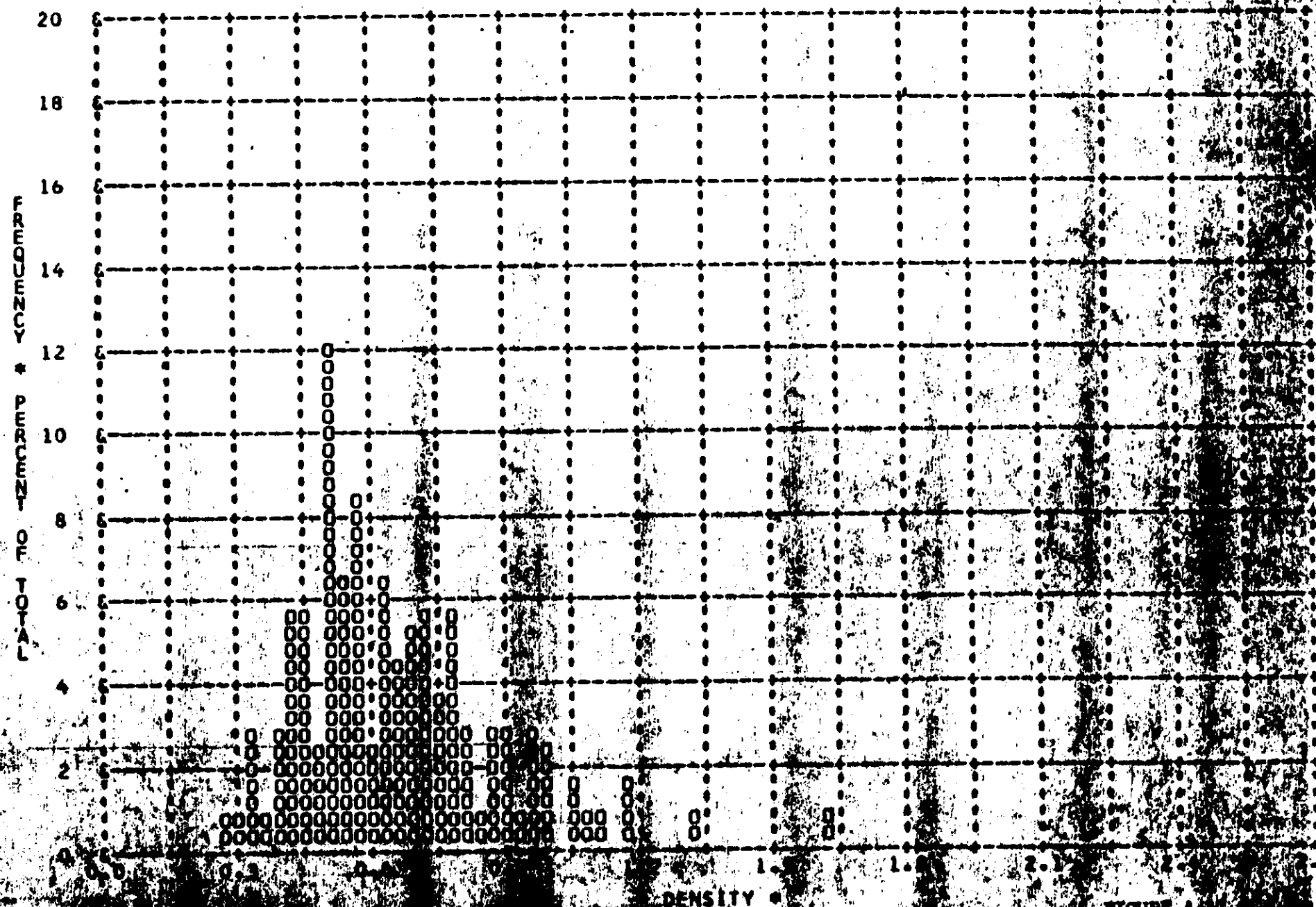
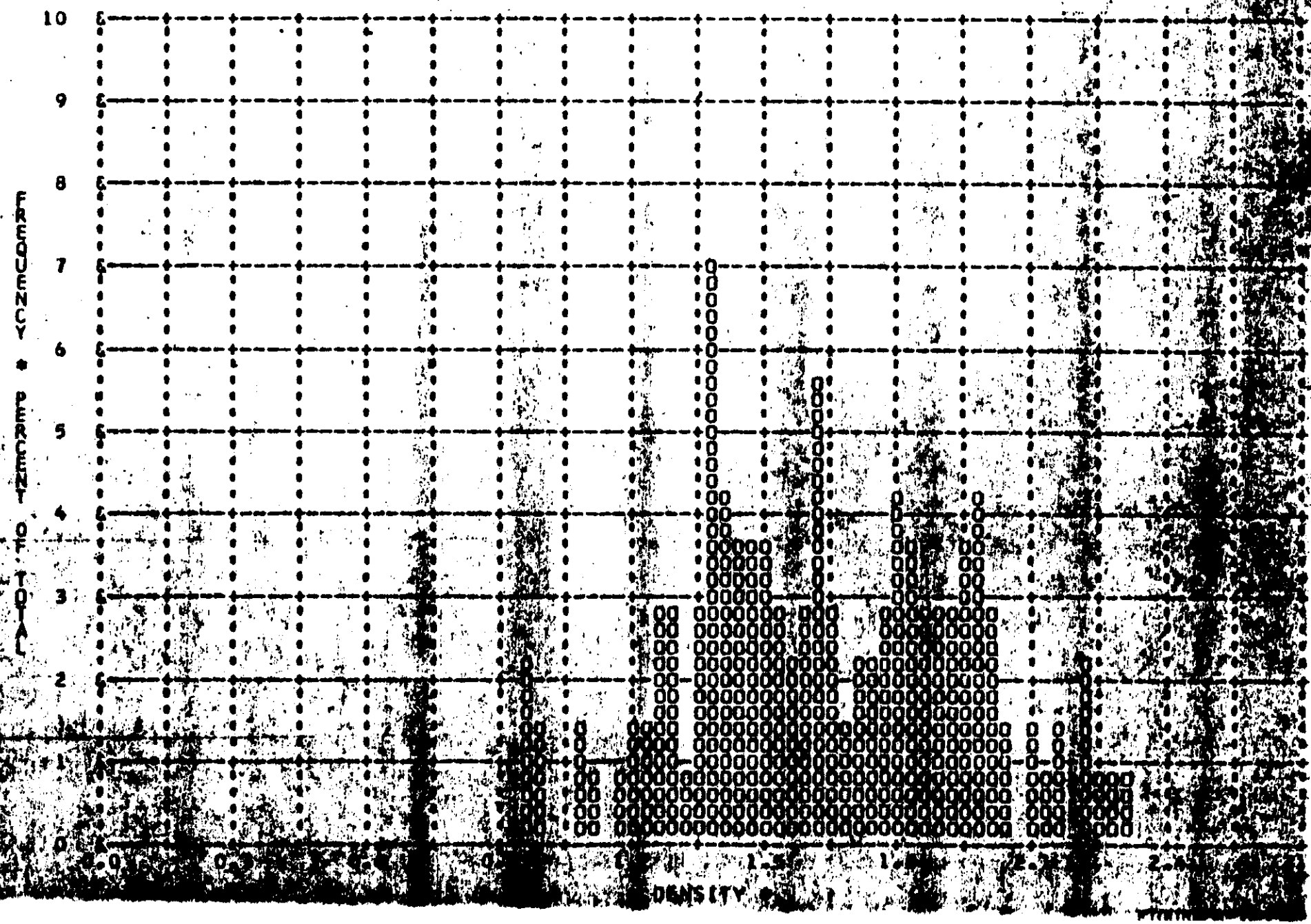


FIGURE A-

~~TOP SECRET~~ C [redacted]

MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * INTERMEDIATE

AIRTH MEAN * 1.62 * MEDIAN * 1.60 * STD DEV * 0.31 * RANGE * 0.94 TO 2.30 WITH 143 SAMPLES



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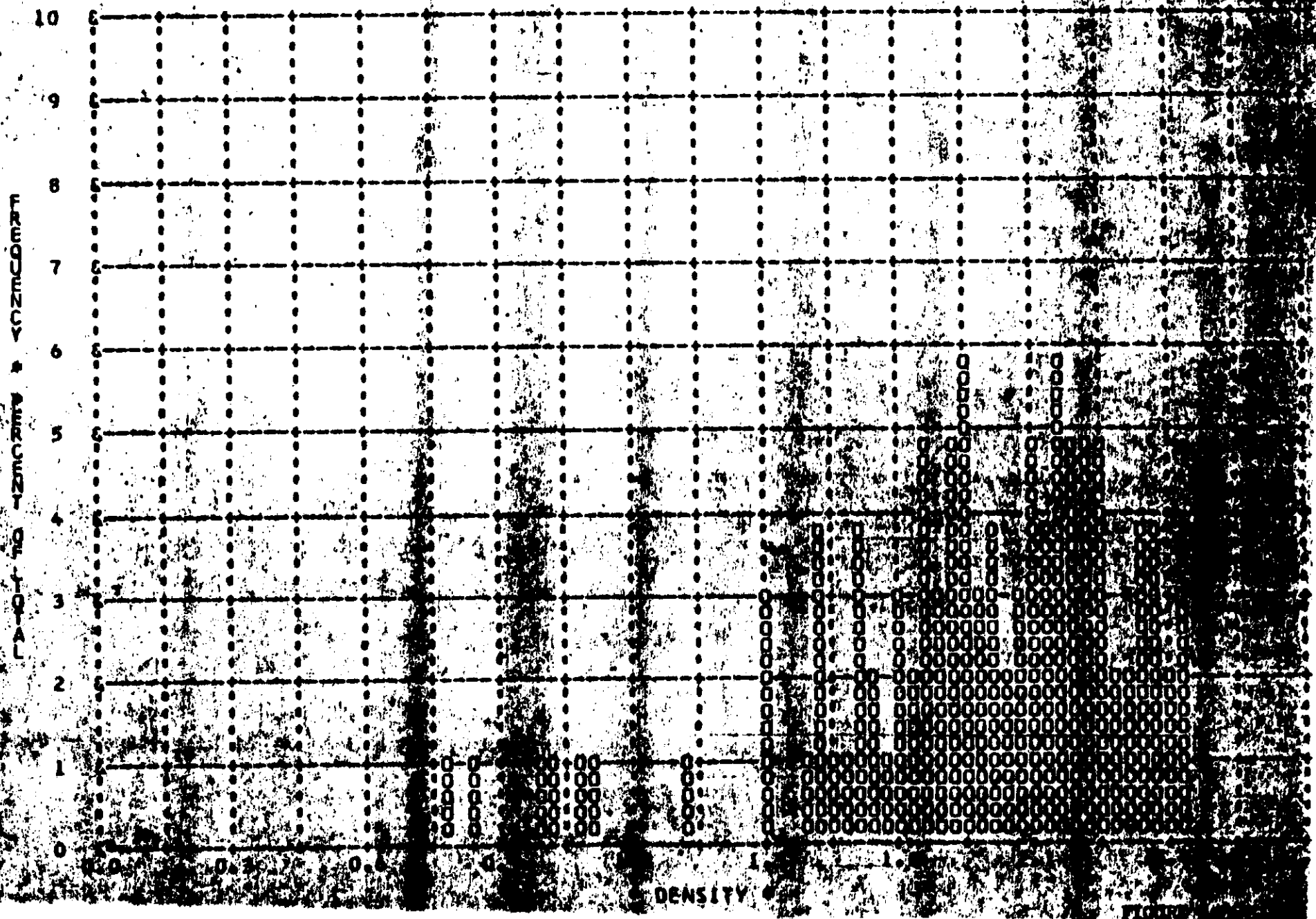
MISSION * 1039-2 * INSTR * AFE * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * INTERVAL

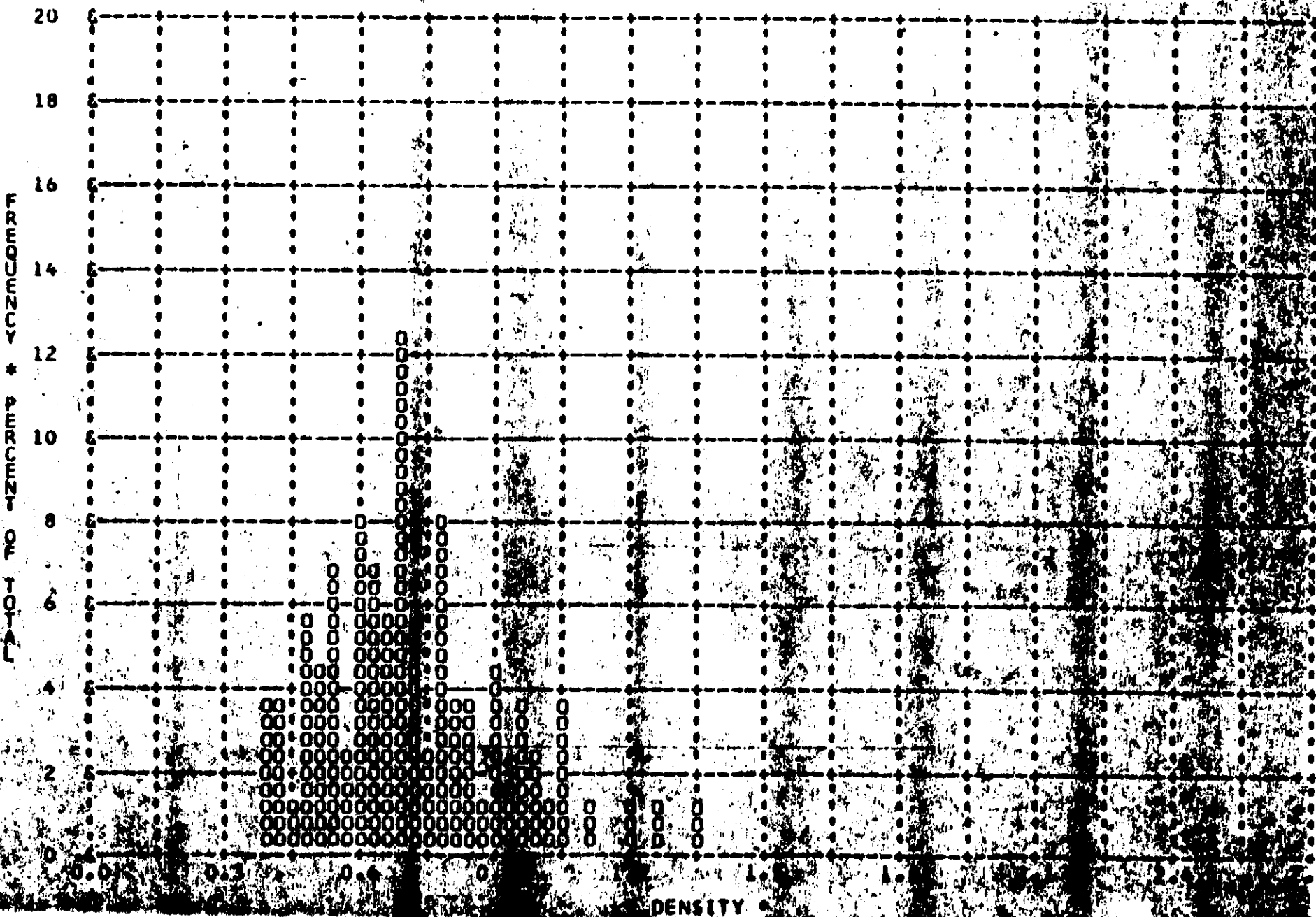
AIRTH MEAN * 1.95 * MEDIAN * 2.01 * STD DEV * 0.35 * RANGE * 0.77 TO 2.43 WITH 10[illegible] SAMPLES



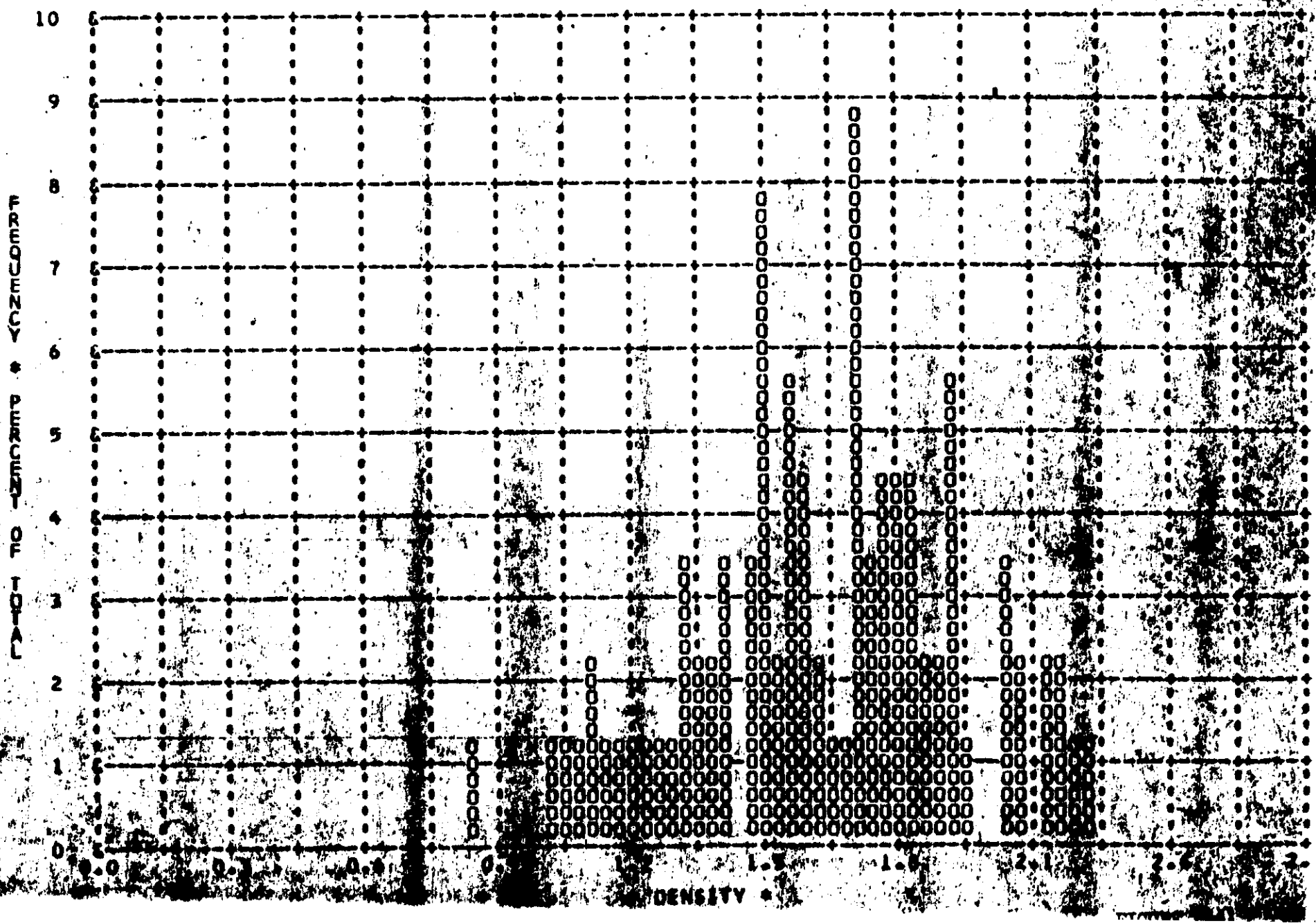
FIGURE

MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * FULL

AIRTH MEAN * 0.70 * MEDIAN * 0.68 * STD DEV * 0.20 * RANGE * 0.37 TO 1.33 WITH 91 SAMPLES



MISSION * 1039-2 * INSTR * AFT * 05/18/7 PLOT OF D MAX * TERRAIN * PROCESSING * FULL
AIRTH MEAN * 1.62 * MEDIAN * 1.65 * STD DEV * 0.30 * RANGE * 0.83 TO 2.21 WITH 91 SAMPLES



~~TOP SECRET~~ C/[redacted]

MISSION * 1039-2 * INSTR * AFT * 05/18/7 PLOT OF D MAX * CLOUD * PROCESSING * FULL

AIRTH MEAN * 2.14 * MEDIAN * 2.25 * STD DEV * 0.31 * RANGE * 0.98 TO 2.51 WITH 68 SAMPLES

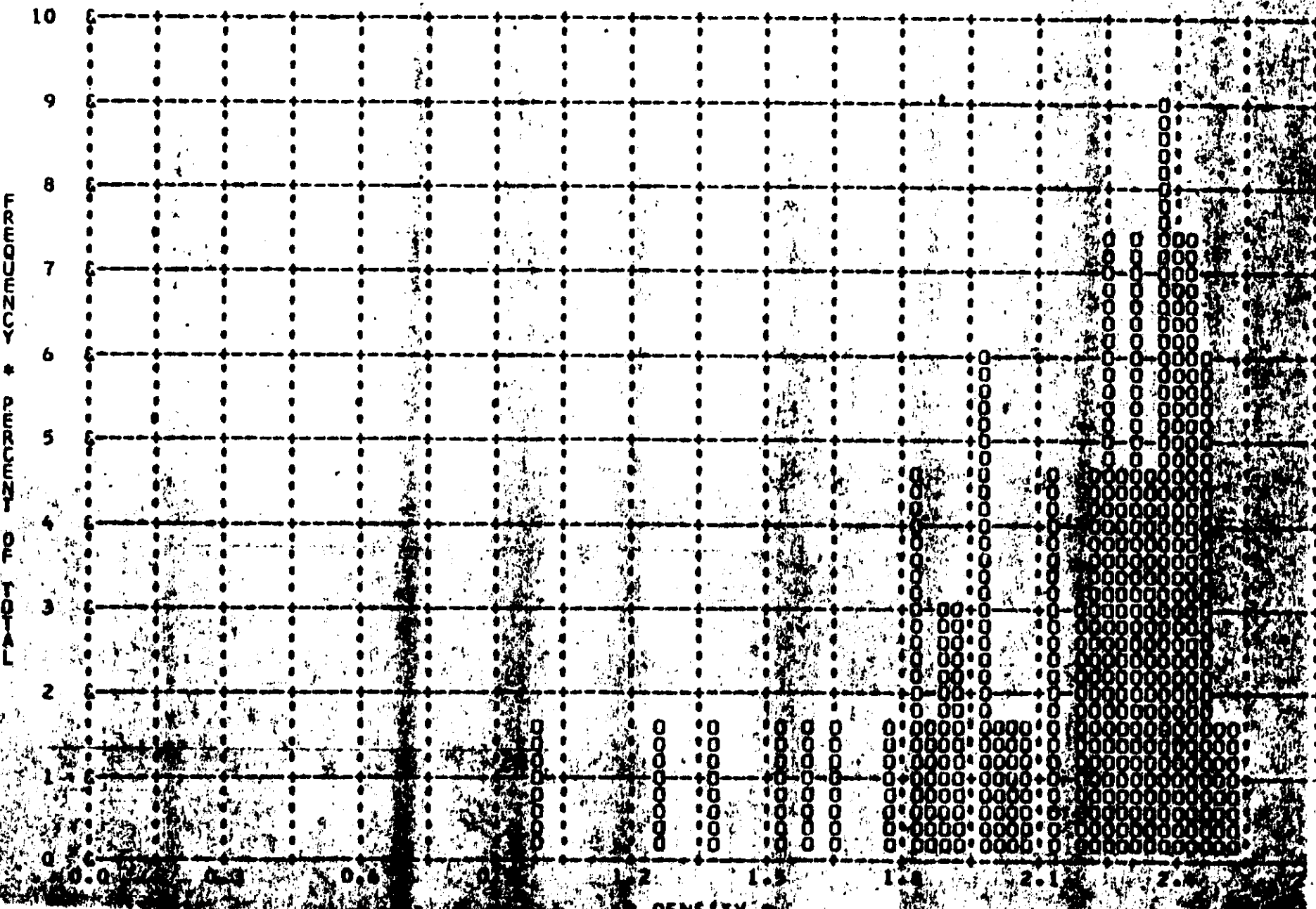
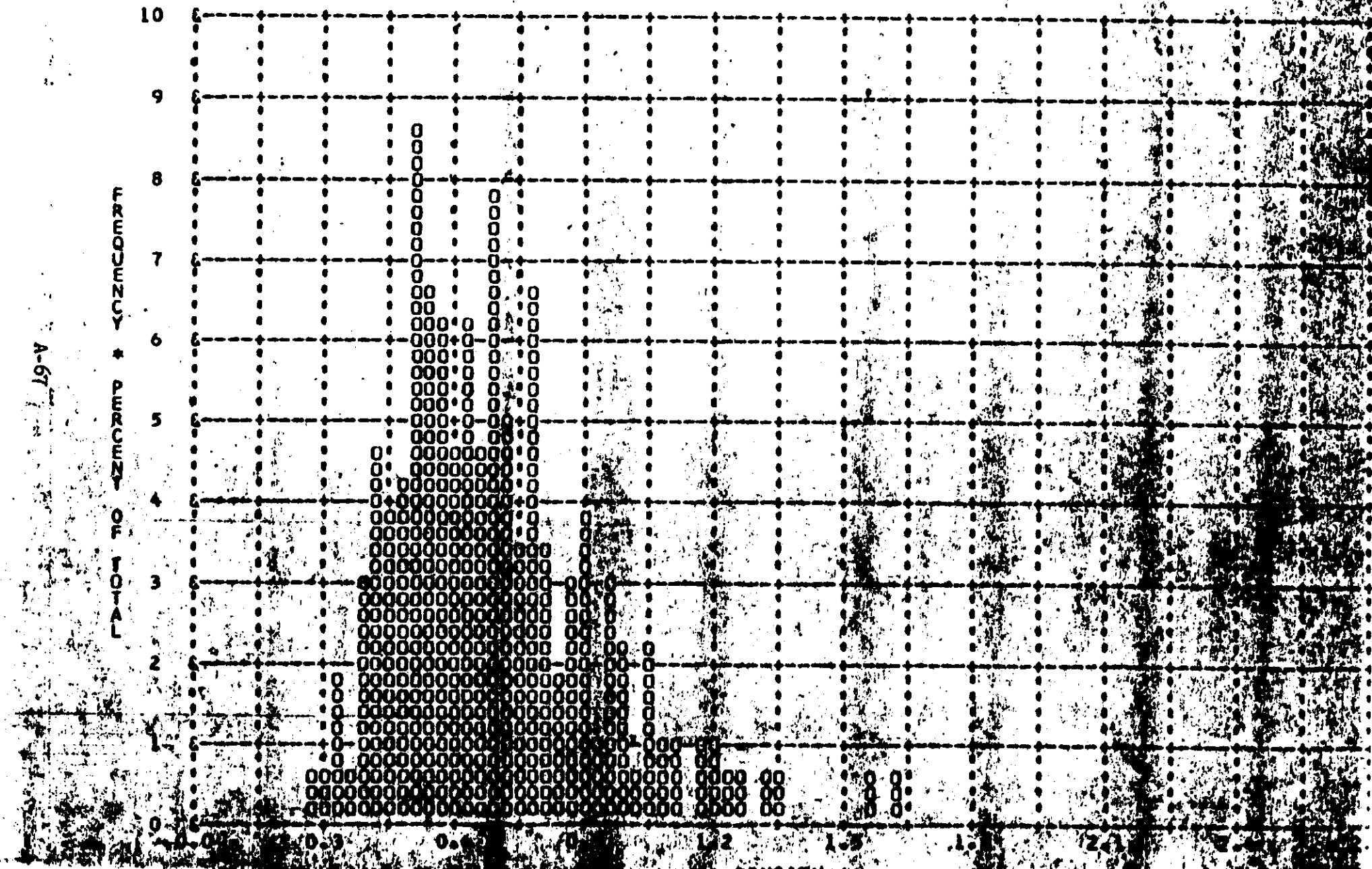


FIGURE A

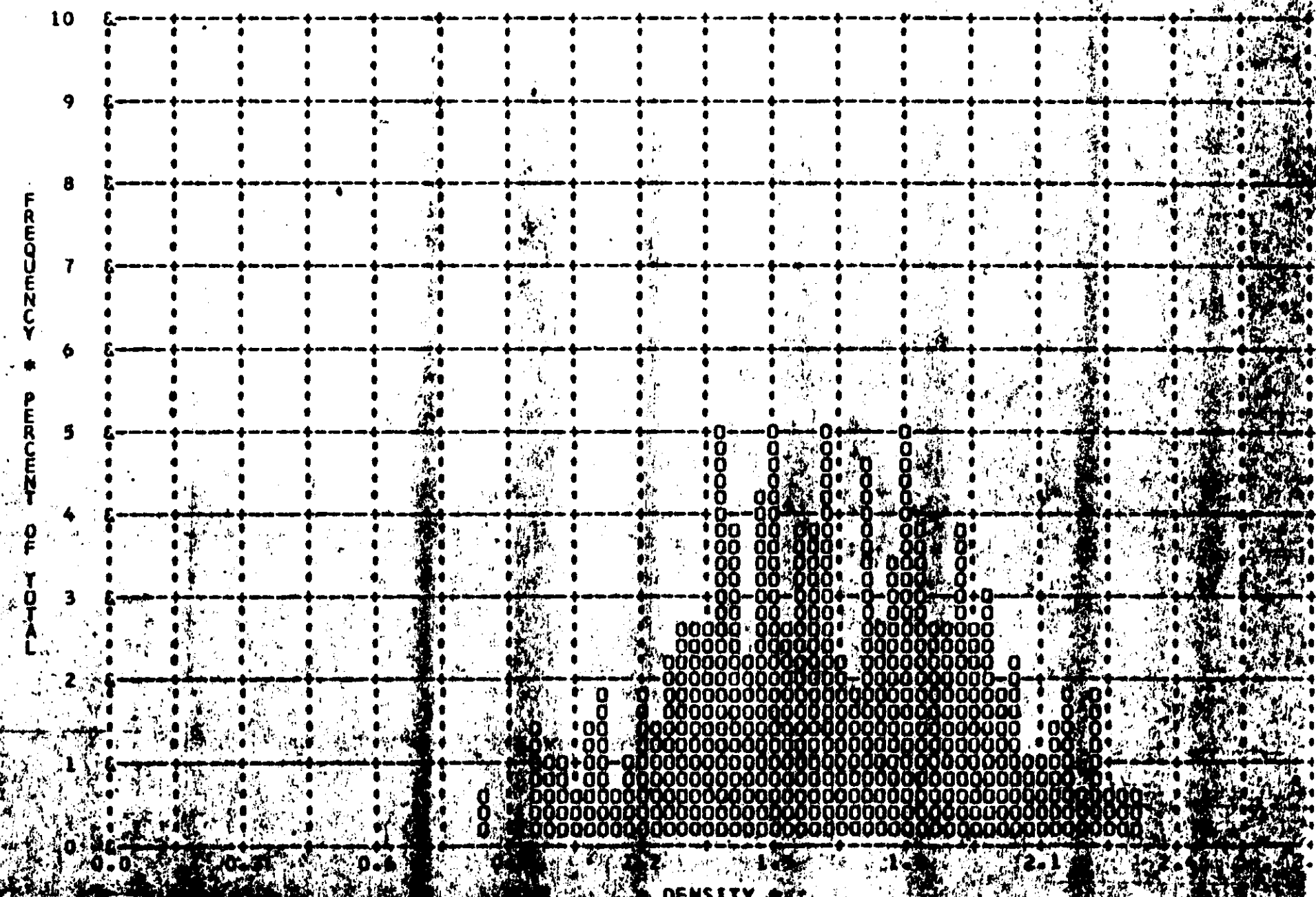
MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MIN * TERRAIN * PROCESSING * ALL LEVELS

AIRTH MEAN * 0.67 * MEDIAN * 0.65 * STD DEV * 0.22 * RANGE * 0.27 TO 1.60 WITH 250 SAMPLES



MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MAX * TERRAIN * PROCESSING * ALL LEVEL

AIRTH MEAN * 1.61 * MEDIAN * 1.60 * STD DEV * 0.30 * RANGE * 0.83 TO 2.30 WITH 250 SAMPLES



~~TOP SECRET~~ C[redacted]

MISSION * 1039-2 * INSTR * AFT * 05/18/7PLOT OF D MAX * CLOUD * PROCESSING * ALL LEVELS

AIRTH MEAN * 2.02 * MEDIAN * 2.09 * STD DEV * 0.34 * RANGE * 0.77 TO 2.51 WITH 186 SAMPLES