

# **DATA REPORT SCOR DISCOVERER EXPEDITION MAY 1970**

## **MEASUREMENTS OF PHOTOSYNTHESIS AVAILABLE RADIANT FLUX AND SUPPORTING OCEANOGRAPHIC DATA**

**CHAIRMAN SCOR WORKING GROUP 15**

**VOLUME I**

Introduction through Section F

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## S. C. O. R. DISCOVERER EXPEDITION

## DATA REPORT

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## ACRONYMS

S. C. O. R.	Scientific Committee on Oceanic Research
UNESCO	United Nations Educational, Scientific & Cultural Organization
IAPSO	International Association for Physical Sciences of the Ocean
NSF	U. S. National Science Foundation
ONR	U. S. Office of Naval Research
ESSA	Environmental Science Services Administration*
NOAA	National Oceanographic & Atmospheric Administration

\* Now a part of NOAA.

S. C. O. R. DISCOVERER EXPEDITION

MAY 1970

INTRODUCTION TO DATA REPORT

At its executive meeting in November 1963, S. C. O. R. decided to establish, in cooperation with IAP0 (now IAPSO) and UNESCO, a working group on Photosynthetic Radiant Energy, designated as Working Group 15.

The terms of reference of this Working Group were:

- 1) To identify exactly what measurement of irradiance is required by biological oceanographers.
- 2) To recommend apparatus and procedure for measuring the variable defined above.

Working Group 15 was originally composed of four biologists and four physicists:

Professor Alexander A. Ivanoff  
Laboratoire d'Océanographie Physique  
University of Paris  
Paris, France

Dr. Nils Jerlov  
University of Copenhagen  
Copenhagen, Denmark

Mr. H. R. Jitts  
Commonwealth Scientific and Industrial Research Organization  
Division of Fisheries and Oceanography  
Sydney, Australia

Dr. Yulen E. Ochakovsky  
Institute of Oceanology  
USSR Academy of Sciences  
Moscow, USSR

Dr. Yatsuka Saijo  
Water Research Laboratory  
Faculty of Science  
Nagoya University  
Nagoya, Japan

Mr. John H. Steele  
Department of Agriculture and Fisheries for Scotland  
Marine Laboratory  
Torry, Aberdeen, Scotland

Dr. E. Steemann Nielsen  
University of Copenhagen  
Copenhagen, Denmark

Mr. John E. Tyler (Chairman, Working Group 15)  
Visibility Laboratory  
Scripps Institution of Oceanography  
La Jolla, California, U. S. A.

The first meeting of Working Group 15 took place in Moscow, USSR, 5-9 October 1964. At this meeting, "The working group decided to deal with the problem of measuring the amount of radiant energy [flux] available at any depth in the range of wavelengths, approximately 350 to 700 nm, inside which radiant energy can be utilized by plants for photosynthesis." It was also decided that radiant energy flux measurements should be expressed in energy or quantum units rather than in photometric units.

In addition to these decisions the Working Group recommended that individual members of the group undertake specific preliminary research tasks. Most important of these tasks were the development of a quanta meter, the development of spectroradiometric instrumentation for underwater measurements, an investigation of the use of a broad-band detector of radiant energy flux to estimate quanta or energy (per unit time) in the ocean, an investigation of a narrow-band detector for the same purpose, and an investigation of design features for a deck incubator that would simulate the spectral and directional lighting conditions encountered by phytoplankton in their natural environment.

The Working Group also recommended that sea trials should be undertaken for the purpose of testing and intercalibrating the new radiometric instrumentation and gathering preliminary data. The full report of this first meeting was published by UNESCO in Unesco Technical Papers in Marine Science, No. 2 (1965).

The second meeting of Working Group 15 took place in Karuizawa, Japan, 15-19 August 1966. At this meeting individual members discussed their investigations and efforts to develop a detector that would have high sensitivity, favorable response time, and wavelength sensitivity confined to the region 350 to 700 nm. It was decided to construct quanta meters using photocells, or phototubes, combined with controlled areas of selected optical filters such that the resulting detector would respond to total quanta per second within the wavelength limits 350-700 nm. It was also decided to build an instrument sensitive to total energy flux (rather than total quanta flux) within these wavelength limits. This latter instrument was to make use of an Amici prism with a template

in the spectrum plane that controlled the spectral sensitivity to achieve equal response for equal radiant energy flux at all wavelengths between 350 and 700 nm.

A report was given illustrating the wide variability of incubator design in use by persons engaged in productivity determinations by the simulated-in-situ method. The need for standardization in S. I. S. incubator design was recognized by the Working Group and it was recommended that an effort be made to locate optical filters that would simulate the absorption characteristics of different types of ocean water, particularly clear ocean water and coastal water.

The Working Group also discussed the proposed sea trials. Since a major objective of the sea trials was to test and intercompare instruments for measuring radiant energy flux, it was decided to choose a time and location which would offer a high probability of favorable weather conditions for the work. The full report of this meeting was published in Unesco Technical Papers in Marine Science, No. 5 (1966).

Sea trials were conducted in the Gulf of California in May of 1968. According to plan, the sea trials were carried out by less than the full Working Group.

The specific objectives of the research measurements undertaken during these sea trials were:

1. To intercompare the radiometric measurements made with the various instruments.
2. To collect data which would demonstrate the accuracy of estimates of radiant energy flux available for photosynthesis underwater, based on measurements made with simple instruments employing a restricted bandwidth of wavelengths.
3. To obtain data which would assist in the development of a simple radiometric instrument suitable for routine use at sea.
4. To test the usefulness and accuracy of the quanta meter, a suggestion made at the Working Group 15 meetings, and since developed into a practical instrument by Kjell Nygård under the direction of Working Group member Professor N. G. Jerlov and by L. Prieur under the direction of Working Group member, Professor A. Ivanoff.
5. To intercompare photocells, thermopiles and phototubes with respect to their suitability for measuring the total radiant energy flux available for photosynthesis within the bandwidth 350 to 700 nm.
6. To acquaint the physicist members of the Working Group with the

techniques of the  $^{14}\text{C}$  method for measuring photosynthesis and in particular with the radiant flux measuring requirements of this method.

Probably the most important feature of the sea trials was the opportunity for the physicists to intercompare their instruments and methods, and to experience together the many special problems associated with precision radiometry at sea. The second most important feature was the opportunity to witness and study the simulated-in-situ (S. I. S.) technique for determining photosynthesis with the equipment that had been redesigned to simulate the spectral and directional lighting characteristics encountered by phytoplankton in their natural environment.

The sea trials also provided some answers to questions that had been posed at the Working Group meetings. It was found that both narrow- and broad-band filters could be used to estimate total radiant flux underwater but it was necessary in both cases for the band of wavelengths to match the transmittance characteristics of the water in order to achieve good accuracy at all depths. It was also found that at least a meter of ocean water was necessary to remove the natural infrared wavelengths beyond about 720 nm. This result had direct application to incubator design and also demonstrated that at depths greater than one meter, a thermopile-type radiometer with no optical filtering could be used to measure the total radiant flux available in the ocean for photosynthesis.

An important and unexpected feature of the sea trials was the keen interest shown in the work by Mexican scientists from the Universidad Nacional de Mexico and the Instituto Nacional de Investigaciones Biologico Pesqueras. Dr. Armin Zarur, Director of the Instituto Nacional de Investigaciones Biologico Pesqueras, visited the ship for a day of the trials and his assistant, Dr. Anna Maria Lopez, remained with the ship for three days, actively participating in the biological work. Mr. Alberto Ramirez, a graduate of the Universidad Nacional de Mexico, remained with the expedition for its entire duration. The technical report of these sea trials was published in Unesco Technical Papers in Marine Science, No. 13 (1969).

In September 1963, Mr. John Steele resigned from Working Group 15 and was replaced by Mr. Ian Baird, Department of Agriculture and Fisheries for Scotland, Marine Laboratory, Aberdeen, Scotland.

Late in 1969 Dr. Warren Wooster, President of S. C. O. R., made arrangements with Dr. Harris Stewart, Director of the Atlantic Oceanographic and Meteorological Laboratories (now a laboratory of the U. S. Department of Commerce, NOAA) for the Working Group to use the USC and GSS DISCOVERER for expeditionary research. A planning meeting was held on the ship in Miami, Florida, in November 1969.

In order to answer the terms of reference of the Working Group, the experimental program planned for the DISCOVERER expedition had two principle

objectives. The first objective was to obtain a complete and accurate documentation of the available radiant energy flux as a function of time and depth at every station. This effort was planned to obtain the data necessary to numerically specify the total radiant flux, in watts as well as in quanta/sec, available to each and every productivity sample during the entire period of incubation. Direct measurements of total flux were to be made at deck level and at selected depths with thermopile-type instruments having uniform sensitivity as a function of wavelength. Direct measurements of total quanta/sec were to be made at selected depths in the ocean and in the incubators, with quanta meters developed for the purpose by Working Group members. Spectral measurements of the radiant flux were to be made with two spectroradiometers in order to determine the spectral composition of the radiant flux available for photosynthesis. The spectral data was also planned to provide a duplicate method for obtaining total radiant flux at all depths by integration; and for determining spectral values of the attenuation coefficients which would be needed to compute the available radiant flux at intermediate depths.

The second objective was to determine photosynthesis at several depths by three methods; the in-situ method, the simulated-in-situ (S. I. S.) method using a deck incubator, and a laboratory method using controlled artificial light for incubation. The photosynthesis determinations were to be conducted, insofar as possible, under conditions that simulated the spectral and directional characteristics of the radiant flux available to the phytoplankton in their natural environment and the procedural variables were to be minimized.

The plan of the experiment also included the measurement of many additional physical and biological parameters that would be required to fully understand and interpret the oceanographic situation at each station.

The track of the ship was planned so as to provide a wide range of water types. The Sargasso Sea was included as a low-productivity area and the coastal waters of South America were included as a region of high productivity. Intermediate productivity was anticipated in adjoining regions. Ultimately it was necessary to modify these plans because of clearance problems raised by the Government of Ecuador. As a result it was not possible for the scientific party to work with the range of phytoplankton populations that the Working Group had planned. The expedition report of the S. C. O. R. DISCOVERER expedition was published in Scripps Institution of Oceanography Reference Report No. 70-25 (1970).

The following scientists participated in the expeditionary research for Working Group 15 on the DISCOVERER. Affiliations are correct for May 1970.

James J. Alberts; Chemist, State Geological Survey of Kansas,  
The University of Kansas, U. S.; sponsored by Dr. C. Oppenheimer.

Roswell W. Austin; Research Engineer; Scripps Institution of  
Oceanography, University of California, San Diego, U. S.;  
accompanied Mr. J. E. Tyler



Ian E. Baird; Biologist; Department of Agriculture and Fisheries, Marine Laboratory, Scotland; member of Working Group 15.

Jean-Pierre Bethoux; Attaché de Recherche, C. N. R. S.; Laboratoire d'Océanographie Physique, France; accompanied Dr. A. Morel.

David Carpenter; Experimental Officer, C. S. I. R. O.; Division of Fisheries and Oceanography, Australia; accompanied Mr. H. R. Jitts.

Niels Højerslev; Research Associate; Institute of Physical Oceanography, University of Copenhagen, Denmark; accompanied K. Nygård.

Harry R. Jitts; Senior Research Scientist, C. S. I. R. O.; Division of Fisheries and Oceanography, Australia; member of Working Group 15.

Thomas C. Malone; Graduate Student; Hopkins Marine Station, U. S.; sponsored by Dr. M. Gilmartin.

André Morel; Maître Assistant; Laboratoire d'Océanographie Physique, University of Paris, France; delegated by Working Group member Professor A. Ivanoff.

Hobutada Nakamoto; Graduate Student; Department of Biology, Tokyo Metropolitan University, Japan; accompanied Dr. Y. Saijo.

Kjell Nygård; Chief Engineer, Institute of Physical Oceanography, University of Copenhagen, Denmark; delegated by Working Group member Dr. N. Jerlov.

Yulen Ochakovsky; Physicist; Institute of Oceanology, USSR Academy of Sciences, USSR; member of Working Group 15.

Yatsuka Saijo; Biologist; Water Research Laboratory, Nagoya University, Japan; member of Working Group 15.

Raymond C. Smith; Physicist; Scripps Institution of Oceanography, University of California, San Diego, U. S.; accompanied Mr. J. Tyler.

Anatol Susliaev; Engineer; Institute of Oceanology, USSR; accompanied Dr. Y. Ochakovsky.

Jahn Thronsen; Magister Scientia; Institute of Marine Biology, University of Oslo, Norway; delegated by Professor Steemann-Nielsen.

John E. Tyler; Research Physicist; Scripps Institution of Oceanography, University of California, San Diego, U. S.; Chief Scientist and Chairman of Working Group 15.

## Acknowledgment

Working Group 15 on Photosynthetic Radiant Energy in the Ocean was initiated by S. C. O. R. in cooperation with UNESCO and IAPSO (formerly IAPO). Financial support for meeting expenses for the group was provided by these three international organizations. The cost of ship time for the 1968 Working Group 15 sea trials on the R/V E. B. SCRIPPS (Scripps Institution of Oceanography) was provided by the U. S. National Science Foundation.

Arrangements for the use of the USC and GSS DISCOVERER, Captain Hubert W. Keith, Jr., commanding, were made by Professor W. Wooster, President of S. C. O. R.; Dr. Harris B. Stewart, Jr., Director, Atlantic Oceanographic and Meteorological Laboratories, NOAA; Dr. Robert M. White, Administrator, Environmental Science Services Administration (now a part of NOAA); and Rear Admiral D. A. Jones, Director, U. S. Coast and Geodetic Survey.

Funds for the transportation of equipment and travel expenses for the scientific party were largely provided by S. C. O. R. and UNESCO. Assisting funds were provided by the Royal Society, London; the Office of Naval Research (N00014-69-A-0200-6017); and by the U. S. National Science Foundation (GB-23434, GA-19830, and GA-10155). An emergency air-shipment of heavy equipment was handled by the U. S. Air National Guard. Liaison between the S. C. O. R. scientific party and the officers and crew of the DISCOVERER was effectively and courteously handled by Commander Archibald Patrick, Jr. Dr. Harris B. Stewart, Jr. and Mr. John W. Kofoed, of NOAA's Atlantic Oceanographic and Meteorological Laboratories were each aboard the DISCOVERER for different portions of the work at sea and helped enable the Working Group in carrying out its project within the operations framework of a Federal Research Ship. In addition, AOML Scientists gave up planned research time at sea so that the DISCOVERER could, instead, be utilized for this international effort.

The work of the S. C. O. R. scientific party was given tremendous and invaluable support by the officers and crew of the DISCOVERER. We are especially grateful to Captain H. W. Keith, Jr., for his advice and constant watchfulness with respect to the track proposed by the Working Group; to Commander Richard Alderman, executive officer, who made all arrangements for assistance to our awkward schedule by members of the crew who daily launched and recovered the Roberts' Buoy and supported the work in many other ways; to Commander Ralph C. Johnson, Jr., who gave invaluable technical assistance to the scientific party; to the officers who were assigned to the bridge and who maneuvered the ship to satisfy the requirements of our measurements and kept watch on our drifting equipment; and to LTJG. Lawrence L. Lake and Ensign Stephen J. Mangis, who made daily lowerings of the ship's STD equipment and have contributed section N to this data report.

Among the crew we are most grateful to Mr. Robert E. Hopkins, Chief Survey Technician, who took responsibility for the daily BT measurements as well as the special XBT determinations which are reported by him in section M of this data report.

John E. Tyler  
Chairman, S. C. O. R.,  
Working Group 15

Foreword  
to  
S. C. O. R. DISCOVERER EXPEDITION  
DATA REPORT

The DISCOVERER left the port of Miami, Florida, U. S. A., on May 2, 1970, and returned June 4, 1970. During that time the ship worked 21, ten-to-twelve hour stations. The program of research incorporated a number of unusual features:

The entire scientific program was regulated and recorded on sun time, that is, the time that indicated 1200 at maximum sun altitude for the ship's latitude and longitude. A clock was installed in the ship's laboratory and was reset by the navigation officer at the start of each station, to conform to this requirement.

The station location and weather notes which are included in the introduction were obtained from the ship's log and are recorded against the time indicated by the clock on the ship's bridge, that is, "local time" or "ship time."

All major analytical procedures were performed on portions of a single 12-liter sample collected at about 1100 from each depth, with Niskin bottles. The depths were specified by the procedure employed for simulated-in-situ (SIS) photosynthesis and are numerically recognizable throughout the various reports. At stations 11, 12, and 13 there is an unresolved error in reporting the percent of surface light at two depths. And at stations 16, 17, 18, 19, and 21 there is a similar unresolved error of lesser magnitude at two depths. In resolving this confusion it should be remembered that for each station there was only one sample from each depth and it is, therefore, the "percent of surface light" that requires correction. This can generally be done by examination of the radiometric data in sections F, G, or I, which give total watts or quanta per sec as a function of depth for the same stations and times.

Photosynthesis was determined, on portions of each 12-liter sample, by three methods, the simulated-in-situ (SIS) method, the in-situ method, and a method utilizing artificial light. The same CSIRO-supplied Carbon 14 was used for all three methods and all three determinations were counted with the same equipment. (The photosynthesis determinations by T. Malone used a different stock of C<sup>14</sup>, specifically Na<sub>2</sub><sup>14</sup>CO<sub>3</sub>, 5μC per ampule prepared as described by Strickland and Parsons (see section E of this report).

Photosynthesis by these three methods was regularly conducted for the period from noon to sunset. The incubation equipment used for the photosynthesis

determinations under artificial light and in the deck incubator was designed to simulate the spacial and spectral lighting conditions encountered by the phytoplankton in their natural environment.

The radiant flux available for photosynthesis has been documented in great detail and in absolute radiometric units. An optical bench equipped with a standard of spectral irradiance and appropriate power control equipment was installed on the ship and used to reconfirm the absolute calibrations of the spectroradiometers and other equipment while at sea.

In order to minimize the objectionable influence of the ship and its underwater shadow on the radiant flux measurements a 25 foot boom was mounted at the stern of the ship and the equipment for measuring radiant flux underwater was regularly launched from the outer end of the boom. During these measurements the ship was positioned with the sun at the stern.

The radiant flux data can be used to determine the instantaneous radiant flux (in units of watts or quanta/sec) at any depth and also to determine the total integrated radiant flux (in watts or quanta/unit time) at any depth during the period of incubation. The radiant flux data can also be used to provide a detailed optical specification of the ocean water at each station.

When using these data it should be kept in mind that for studies of the correlation between photosynthesis and radiant flux the existing absolute flux for the incubation period is of greatest interest, whereas for the optical specification of the water mass, normalized-relative values can be used.

When making use of the spectroradiometric data, or the data for total flux, several points should be kept in mind.

(1) On a clear day the flux arriving per unit area of ocean surface will be dominated by the collimated flux from the sun and will vary with sun altitude. For a uniformly clear day the change in ocean surface irradiance due to the sun alone will be the same for equal zenith angles on each side of sun noon. If the irradiance at sun noon is known or can be computed, the irradiance at some other time of day can be estimated by means of the equation,

$$E_{\theta} = E_0 \cos \theta$$

where  $E_0$  is the irradiance for zenith sun and  $\theta$  is the zenith angle. This estimate will give a useful approximation for clear sky and sun zenith angles less than  $45^\circ$ . For sun zenith angles greater than  $45^\circ$  the influence of the sky light must be determined. Furthermore, this estimate will not be satisfactory for cloudy situations or for situations in which large white cumulous clouds are close to, but not obscuring the sun.

(2) In order to determine values of the irradiance attenuation coefficient as a function of depth for the ocean water, it is possible, under adverse conditions, to make use of a constant, or normalized, surface value of radiant flux, applied to all depths. It is not necessary to have absolute values.

In order to determine the total power available for photosynthesis it is necessary to compute the total real radiant power that existed during the period of integration.

The time recordings of quanta/sec in sections A and B and the bar graphs in sections B and H accurately record the variations in the impinging power, but have not, in all cases, been evaluated in absolute units. When absolute units are required but not given, it will be necessary to evaluate the relative data at some moment of time, making use of the appropriate absolute data to be found in one of the other sections of this report. The procedures used by the individual scientists for normalizing their data to a moment of time are discussed in each contributor's introductory section.

(3) The radiant energy flux data in this report are given by individual investigators as follows:

A.) Saijo

- 1) Recordings of relative impinging total quanta per unit area per sec (350-700 nm) vs time at fixed depths.

B.) Jitts

- 1) Recordings of relative impinging total quanta per unit area per sec (350-700 nm) vs time through a blue-green filter transmitting 28% of total quanta per unit area per sec (within the wavelength region 350-700 nm).
- 2) Bar graphs of relative impinging total quanta per unit area per sec (350-700 nm) computed from the original recordings in this section.

F.) Morel

- 1) Bar graphs of total watts/m<sup>2</sup> vs time at the deck (all wavelengths).
- 2) Measured values of total surface watts/m<sup>2</sup> ("EPPLEY") at specified times (all wavelengths) plus tables of % of total "energie" as a function of depth.
- 3) Graphs of relative total watts/m<sup>2</sup> (all wavelengths) as a function of depth.

- 4) Measured values of total absolute surface "photons per  $\text{cm}^2$  per sec" (350-700 nm) at specified times plus tables of % of surface "quanta" (350-700 nm) as a function of depth.
- 5) Graphs of relative total quanta per  $\text{cm}^2$  per sec (350-700 nm) vs depth.
- 6) Tables of absolute spectral watts per  $\text{m}^2$  per nm at specified depths normalized to surface value at a specified time.
- 7) Graphs of absolute spectral watts/ $\text{m}^2$  at the various depths and times.
- 8) Integrated values of quanta/sec/ $\text{cm}^2$  and for watts/ $\text{m}^2$  at specified depths, computed from the spectral data obtained at those depths.

G.) Smith

- 1) Graphs of average spectral watts/ $\text{cm}^2$ /nm at various depths.
- 2) Tables of spectral watts/ $\text{cm}^2$ /nm at various depths.
- 3) Integrated values of total "power" and total "quanta" for various depths at specified times.

H.) Ochakovsky

- 1) Tables of total watts/ $\text{m}^2$  (all wavelengths) within 5-minute intervals as a function of time, on a horizontal plane in air.
- 2) Tables of total watts/ $\text{m}^2$  (400-700 nm) within 5-minute intervals, as a function of time, on a horizontal plane above the ocean surface.
- 3) Tables of total watts/ $\text{m}^2$  within 1-hour intervals in air.

I.) Nygård

- 1) Tables of total quanta per sq. meter per sec at various depths plus related relative sun monitor readings in air.

It was necessary to schedule the use of the ship's winches and the stern boom in order to obtain samples and data at appropriate times and also to avoid interference. The scheduling varied somewhat from day to day but in general followed the sequence given in the following table.

## S. C. O. R.

## DISCOVERER EXPEDITION

MAY 1970

## APPROXIMATE DAILY SEQUENCE OF MEASUREMENTS

## Sun Time

Begin	End	Investigator	
0800	0830	L. Lake & S. Mangis	S. T. D. to 500 m
0830	0915	R. W. Austin	Beam transmittance at 5 wavelengths to 100 m
0830	0900	J. Thronksen	Net samples for additional plankton count and identification, examination of plankton
0900	1800	J. Thronksen	
0900	1030	A. Morel	Spectral irradiance, 400 to 700 nm, to 150 m
0900	0930	T. Malone	Net samples for micro- & nanoplankton to 3 m
1000	1015	R. Hopkins	X-BT to 450 m
1000	1015	R. Hopkins	BT & bucket temp to 300 m
1000	1200	N. Højerslev	Tyndall & fluorescence to 400 m
1030	1045	H. Jitts; A. Morel	Determination of incubation depths by means of quanta-meter to 50 m +
1045	1100	Y. Saijo, H. Jitts	Niskin bottles for water samples <sup>1</sup> to 50 m +
1100	1130	J. Alberts	Nansen bottles for water samples, etc. to 500 m
1115	1200	Y. Saijo, H. Jitts	Preparation of productivity samples
1130	1800	(I. Baird (T. Malone (J. Alberts	Determination of chlorophyll concentration, nutrient analysis, etc.
1145	1215	Y. Saijo	Launch <u>in-situ</u> productivity samples to 50 m +
1145	1215	H. Jitts	Commence S.I.S. incubation
1200	1800	Y. Ochakovski	Total deck irradiance & irradiance 400-700 nm
1145	1400	R. Smith	Spectral irradiance, 350 to 700 nm to 100 m
1145	1800	K. Nygård	Quanta measurements vs. depth to 100 m
1400	1415	R. Hopkins	X-BT to 450 m
1400	1415	R. Hopkins	BT to 300 m
1500	1515	T. Malone	Net samples for plankton to 3 m
1630	1800	R. Austin	Optical scattering to 70 m
1800	2000	N. Højerslev	Scatterance measurements to 90 m
1830	1900	Y. Saijo	Recover <u>in-situ</u> productivity samples to 90 m
1830	1945	R. Austin	Optical scattering to 70 m

## Notes to Daily Sequence of Events

<sup>1</sup> These samples were used for:

- a) In-situ primary productivity
- b) Simulated in-situ primary productivity
- c) Incubator productivity with artificial light
- d) Chemical composition of water; nutrients
- e) Chlorophyll-a concentration
- f) Phaeopigments
- g) Particulate organic matter
- h) Phytoplankton species identification, cell counts and size distribution

John E. Tyler  
Chairman, S. C. O. R.,  
Working Group 15  
Chief Scientist,  
SCOR DISCOVERER Expedition



S.C.O.R.  
DISCOVERER EXPEDITION MAY 1970  
STATION LOCATION

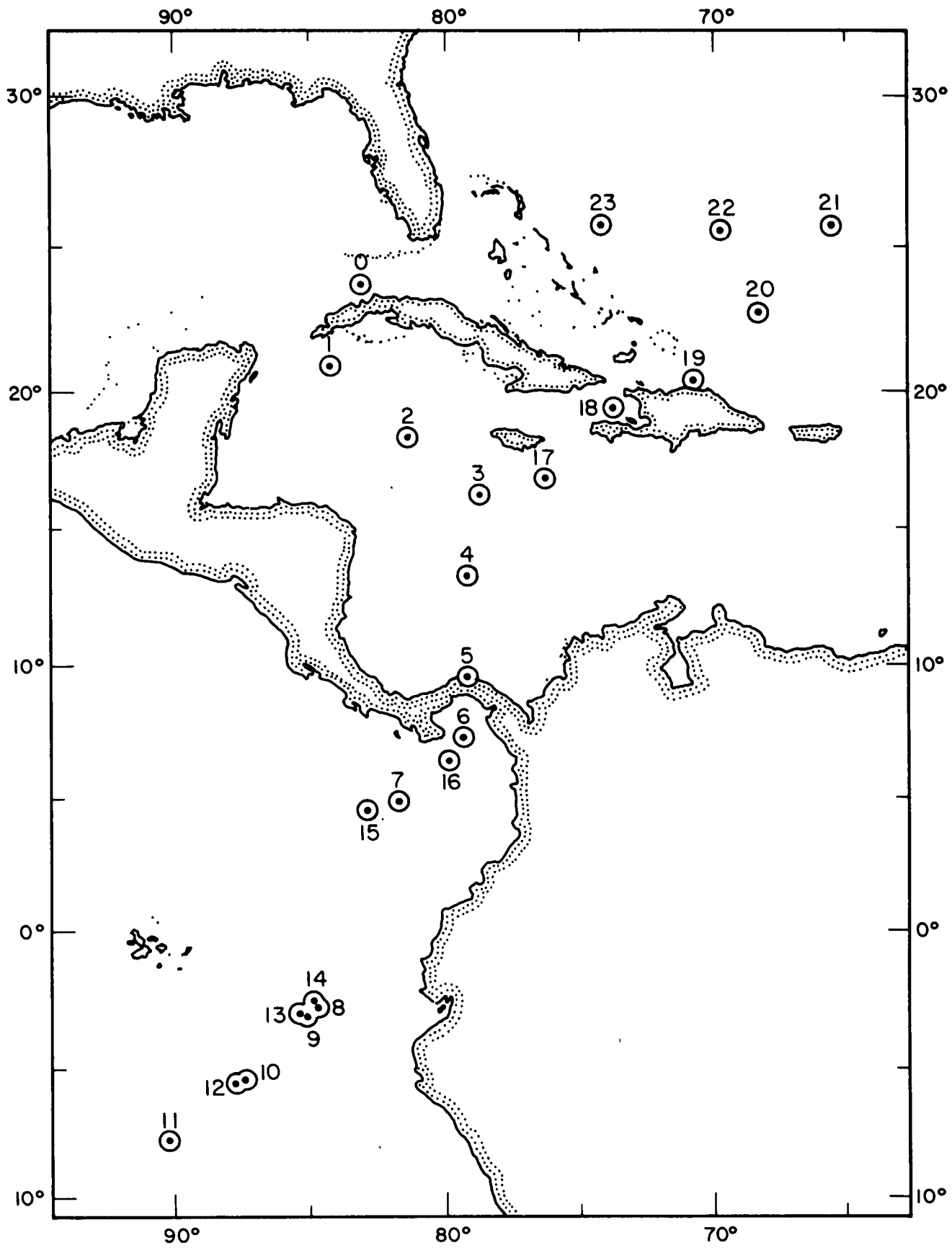
INFORMATION FROM THE BRIDGE

Station Number	Local Time	Ship's Position		Depth of Water (Fathoms)	Date 1970	Ship's Position at 1200 hrs. from Ship's Log
		Lat. North	Lon. West			
0	0940	23°48'	83°11'		May 3	23°41'42"N 83°05'42"W
	1200	23°38'	83°06'			
	1520	23°42'	83°02'			
1	0800	20°54'	84°17'		May 4	20°53'12"N 84°13'30"W
	1234	20°50'	-			
	1736	20°51'	84°13'			
2	0800	18°28'	81°23'	2440	May 5	18°20'00"N 81°25'00"W
	1222	18°19'	81°24'			
	1500	18°12'	81°24'			
3	0800	16°22'	78°46'	735	May 6	16°17'12"N 78°47'25"W
	1212	-	-			
	1853	16°24'	78°42'			
4	0800	13°25'	78°46'	1900	May 7	13°10'18"N 79°05'10"W
	1213	13°10'	78°58'			
	1640	12°58'	79°10'			
5	0607	9°49'	79°41'	830	May 8	09°30'00"N 79°05'00"W
	1215	9°51'	79°41'			
	-	-	-			
6	0900	7°36'	79°21'	240	May 9	07°27'01"N 79°17'54"W
	-	-	-			
	-	-	-			
7	0815	4°49'	81°46'	1200	May 10	04°52'00"N 81°48'00"W
	-	-	-			
	1845	4°48'	81°40'			
8		Lat. South		1730	May 12	02°58'00"S 84°50'00"W
	0810	3°10'	84°42'			
	1235	3°58'	84°48'			
	1930	3°12'	84°54'			
9	0400	3°55'	84°44'	1800	May 13	03°18'48"S 85°04'00"W
	1235	3°19'	85°04'			
	1943	3°12'	85°06'			
10	0900	5°20'	87°17'	2100	May 14	05°28'00"S 87°25'00"W
	1245	5°33'	87°38'			
	1915	5°39'	87°06'			
11	0945	7°52'	90°15'	2200	May 15	07°55'00"S 90°16'00"W
	1257	7°55'	90°15'			
	1910	7°40'	90°25'			

S.C.O.R.  
DISCOVERER EXPEDITION MAY 1970  
STATION LOCATION

Information from the Bridge  
Continued

Station Number	Local Time	Ship's Position		Depth of Water (Fathoms)	Date 1970	Ship's Position at 1200 hrs. from Ship's Log
		Lat. South	Lon. West			
12	0945	5°37'	87°45'	2100	May 16	05°32'24"S 87°52'30"W
	1247	5°32'	87°52'			
	1900	5°34'	87°52'			
13	0930	3°03'	85°25'	1740	May 17	03°04'00"S 85°25'06"W
	1236	3°04'	85°25'			
	2100	3°04'	85°25'			
14	0130	3°05'	84°48'	1730	May 18	02°56'30"S 84°55'00"W
	1235	2°57'	84°55'			
	1837	3°00'	85°00'			
		Lat. North				
15	0915	4°30'	82°54'	1650	May 20	04°32'12"N 82°58'00"W
	1228	4°33'	82°56'			
	1915	4°35'	82°45'			
16	0900	6°35'	79°57'	2000	May 21	06°26'42"N 79°55'00"W
	1216	6°27'	79°57'			
	2000	6°27'	79°57'			
17	0845	16°52'	76°04'	980	May 28	16°54'00"N 76°05'48"W
	1850	16°59'	76°17'			
18	0920	19°21'	73°47'	320	May 29	19°24'00"N 73°50'00"W
	2045	19°33'	73°56'			
19	0930	20°20'	70°57'	2150	May 30	20°22' N 70°55' W
	1141	20°20'	70°56'			
	1935	20°24'	70°58'			
20	0850	22°24'	68°24'	3000	May 31	22°40' N 68°16' W
	-	22°29'	68°27'			
21	0805	25°45'	65°38'	2880	June 1	25°42' N 65°40' W
	1121	25°43'	65°41'			
	2025	25°40'	65°45'			
22	0930	25°37'	69°42'	2998	June 2	25°36' N 69°45' W
	1136	25°38'	69°44'			
	1633	25°35'	69°46'			
23	0930	25°45'	74°10'	2800	June 3	25°45.7' N 74°14.4' W
	1155	25°47'	74°14'			
	-	-	-			



S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #2

Local Apparent Noon 1222

Wind Speed (knots) Max. 11 Min. 6 Average 8

State of the Sea 1 to 2

Weather 0800 to 1800 bc

Station #3

Local Apparent Noon 1212

Wind Speed (knots) Max. 10 Min. 6 Average 7.6

State of the Sea 2

Weather 0800 to 1800 bc

Station #4

Local Apparent Noon 1213

Wind Speed (knots) Max. 10 Min. 8 Average 9.3

State of the Sea 2

Weather 0800 to 1800 bc

S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #5

Local Apparent Noon 1215

Wind Speed (knots) Max. 12 Min. 10 Average 10.8

State of the Sea 2

Weather 0800 to 1800 bc

Station #6

Local Apparent Noon 1213

Wind Speed (knots) Max. 16 Min. 6 Average 11.4

State of the Sea 2

Weather 0800 to 1800 bc

Station #7

Local Apparent Noon 1227

Wind Speed (knots) Max. 14 Min. 5 Average 10.3

State of the Sea 3 to 2

Weather 0800 to 1200 bc  
1300 to 1400 c  
1500 to 1600 c/r  
1700 to 1800 c

S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #8

Local Apparent Noon 1235

Wind Speed (knots) Max. 8 Min. 4 Average 5.9

State of the Sea 2

Weather	0800 to 1000	c/z
	1100 to 1200	f
	1300	f/z
	1400 to 1800	z

Station #9

Local Apparent Noon 1235

Wind Speed (knots) Max. 7 Min. 4 Average 5.6

State of the Sea 2

Weather	0800	c/z
	0900 to 1800	bc/z

Station #10

Local Apparent Noon 1245

Wind Speed (knots) Max. 16 Min. 10 Average 12.5

State of the Sea 2

Weather	0800	c
	0900 to 1000	c/p
	1100 to 1700	c
	1800	bc

S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #11

Local Apparent Noon 1257

Wind Speed (knots) Max. 16 Min. 12 Average 14.4

State of the Sea 3 to 2

Weather	0800 to 1600	bc
	1600 to 1800	c

Station #12

Local Apparent Noon 1247

Wind Speed (knots) Max. 16 Min. 10 Average 12.2

State of the Sea 3

Weather	0800 to 1800	bc
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Station #13

Local Apparent Noon 1236

Wind Speed (knots) Max. 10 Min. 5 Average 7.6

State of the Sea 2

Weather	0800 to 1000	c
	1100	bc
	1200 to 1300	b
	1400	bc
	1500	c
	1600 to 1700	bc
	1800	o

S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #14

Local Apparent Noon 1235

Wind Speed (knots) Max. 12 Min. 4 Average 8.7

State of the Sea 2

Weather	0800 to 0900	z
	1000 to 1100	bc/z
	1200 to 1800	bc

Station #15

Local Apparent Noon 1228

Wind Speed (knots) Max. 14 Min. 10 Average 11.9

State of the Sea 2

Weather	0800 to 1500	bc
	1600 to 1700	c
	1800	bc

Station #16

Local Apparent Noon 1216

Wind Speed (knots) Max. 9 Min. 4 Average 6.6

State of the Sea 2

Weather	0800 to 1800	bc
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S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #17

Local Apparent Noon 1201

Wind Speed (knots) Max. 15 Min. 7 Average 10.3

State of the Sea 3

Weather 0800 to 1800 bc

Station #18

Local Apparent Noon 1153

Wind Speed (knots) Max. 18 Min. 5 Average 9.6

State of the Sea 2 to 3

Weather Not recorded.

Station #19

Local Apparent Noon 1141

Wind Speed (knots) Max. 20 Min. 4 Average 8.5

State of the Sea 2

Weather 0800 to 1700 bc  
1800 o/r

S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #20

Local Apparent Noon 1131

Wind Speed (knots) Max. 20 Min. 7 Average 14.3

State of the Sea 3

Weather	0800 to 0900	bc
	1000	r
	1100	c/r
	1200 to 1300	bc/p
	1400 to 1800	bc

Station #21

Local Apparent Noon 1121

Wind Speed (knots) Max. 14 Min. 10 Average 12

State of the Sea 3

Weather 0800 to 1800 bc

Station #22

Local Apparent Noon 1136

Wind Speed (knots) Max. 15 Min. 10 Average 12.6

State of the Sea 3

Weather 0800 to 1800 bc.

S.C.O.R.  
DISCOVERER EXPEDITION May 1970  
Weather Summary  
For the period 0800 to 1800

Station #23

Local Apparent Noon 1145

Wind Speed (knots) Max. 15 Min. 12 Average 13.3

State of the Sea 3

Weather 0800 to 1800 bc

Weather Code Symbols:

- b blue sky, cloudless
- bc blue sky with detached clouds
- c sky mainly cloudy
- f fog or foggy weather
- o overcast
- p passing showers of rain
- r rainy weather or continuous rain
- z hazy weather

## Report of "DISCOVERER" Cruise

Yatsuka Saijo

Assisted by N. Nakamoto

### Method

#### 1) Determination of in situ photosynthesis

The sample waters were obtained with Niskin bottles from depths having the following light levels (in % of surface light) which were determined with a quanta meter operated by either the Danish and French groups.

St. 02 - 10 (6 stations): 100 (surface), 50, 26, 12, 6, 3, and 1%.

St. 11 - 21 (10 stations): 100, 36, 17, 6.5, 3.4, and 1.5%.

At most of the stations, one more sample was taken from a deeper layer.

The sample water from each depth was poured into a pair of spherical Pyrex flasks of 50 cc capacity each. After inoculation with  $^{14}\text{C}$ , the string of seven pairs of bottles was attached to a Roberts buoy with the samples located at their original depths and launched from the ship to incubate in situ from local noon to sunset. ("local noon" means maximum sun altitude. Editor)

In advance of this experiment, each bottle was wrapped with wet black paper to protect the sample from strong light. These papers were lost immediately after submergence in the sea.

From St. 14, an additional experiment was carried out simultaneously with the above in situ experiment. Namely, a series of bottles filled with a sample taken from a depth where 26% of surface light was measured (later 17%) were inoculated with  $^{14}\text{C}$  and attached at each incubation depth along with the regular in situ bottles.

- 2) Determination of irradiance available for photosynthesis at a specific depth.

During in situ incubation a Danish quanta meter was attached to the string of incubation bottles at the depth where 26% of surface light was measured. At the later stations this was changed to the depth where 17% of surface light was measured. The variation of irradiance at that depth during in situ incubation was recorded with a small battery-operated strip-chart recorder (Toadenpa-EPR-2TD) located inside the Roberts buoy.

- 3) Determination of particulate organic carbon and nitrogen.

To determine the particulate organic carbon and nitrogen, 5 to 10ℓ of sample water were filtered through a glass-fiber filter (Whatman GF/C, 47 mm diameter) which was baked in advance at 450<sup>0</sup>C. The filters were dried in a desiccator in a refrigerator.

After exposing to the fumes of hydrochloric acid for 10 minutes to eliminate the carbonate carbon, the filters were then dried again and the organic carbon, hydrogen, and nitrogen were determined in an autoanalyzer (Yanagimoto, CHN Corder).

Table 1  
DISCOVERER EXPEDITION May 1970  
IN-SITU PHOTOSYNTHESIS

Station 2  
Incubation time 1200-1830 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	107	49	0.17
			186	0.65
50	10	15	269	0.95
			259	0.92
26	27	15	205	0.73
			174	0.62
12	51	20	213	0.75
			205	0.73
6	75	54	101	0.35
			108	0.38
3	101	7	43	0.15

Station 3  
Incubation time 1200-1815 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	31	180	0.64
			255	0.91
50	6	34	299	1.1
			269	0.95
26	18	16	424	1.5
			244	0.82
12	41	31	284	1.0
			264	0.94
6	61	34	336	1.2
			433	1.5
3	82	20	289	1.0
			401	1.4

Table 1  
DISCOVERER EXPEDITION May 1970  
IN SITU PHOTOSYNTHESIS

Station 6  
Incubation time 1220-1815 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	133	2005	7.1
			3196	11.6
50	4	104	4486	15.9
			4786	17.0
26	9	84	6093	21.6
			5713	20.3
12	16	103	5285	18.8
			6225	22.1
6	22	141	7210	25.6
			8290	29.4
3	30	58	1105	3.9
			1213	4.3

Station 7  
Incubation time 1237-1820 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	77	1091	3.9
			1153	4.1
50	4	96	1144	4.1
			1214	4.3
26	12	83	773	2.8
			927	3.3
12	22	71	1283	4.6
			1443	5.1
6	30	31	611	2.2
			593	2.1
3	39	34	168	0.60
			173	0.61
1	53	21	144	0.51
			139	0.49
0.2	75	106		0.0

Table 1  
DISCOVERER EXPEDITION May 1970

IN-SITU PHOTOSYNTHESIS

Station 8  
Incubation time 1210-1800 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	56	1487	5.3
			1949	6.9
50	4	55	1885	6.7
			1835	6.5
26	10	78	2382	8.5
			3082	10.9
12	17	94	2316	8.2
			2566	9.1
6	25	19	1551	5.5
			1096	3.9
3	32	64	468	1.7
			613	2.2
1	50	58	0	0.0
			10	0.04
0.2	75	55	25	0.09
			0	0.0

Station 9  
Incubation time 1210-1758 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	49	3291	11.7
			3101	11.0
50	4	30	3190	11.6
			3430	12.3
26	10	46	2964	10.5
			3204	11.4
12	18	51	2309	8.2
			2059	7.3
6	24	30	1970	7.0
			1770	6.3
3	29	54	1761	6.3
			2686	9.5
1	37	113	2157	7.6
			937	3.3
0.2	50	82	880	3.1
			892	3.2



Table 1  
DISCOVERER EXPEDITION May 1970  
IN-SITU PHOTOSYNTHESIS

Station 10  
Incubation time 1200-1820 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	24	1256	4.5
			1296	4.6
50	5	41	1569	5.5
			1849	6.5
26	11	50	1630	5.8
			1685	6.0
12	23	50	1320	4.7
			1310	4.6
6	33	32	1098	3.9
			1088	3.9
3	45	45	681	2.4
			583	2.1
1	62	40	257	0.92
			287	1.02
			37	0.13
			31	0.11

Station 11  
Incubation time 1200-1825 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	34	681	2.4
			1023	3.6
36	10	94	1066	3.8
			963	3.4
17	20	44	1234	4.3
			1001	3.6
6.5	33	35	739	2.6
			515	1.8
3.4	46	122	468	1.6
			114	0.40
1.5	60	45	75	0.27
			17	0.06
0.5	75	11	2	0.0

Table 1  
DISCOVERER EXPEDITION May 1970  
IN-SITU PHOTOSYNTHESIS

Station 12  
Incubation time 1205-1815 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	36	779	2.8
			798	2.8
36	9	83	1286	4.6
			1612	5.7
17	21	52	1142	4.1
			1338	4.7
6.5	36	20	872	3.1
			1029	3.7
3.4	45	77	596	2.1
			688	2.5
1.5	57	26	223	0.79
			192	0.68
0.5	75	14	42	0.15
			46	0.16

Station 13  
Incubation time 1200-1755 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	22	734	2.6
			769	2.7
36	8	53	1193	4.2
			1200	4.3
17	17	53	1357	4.8
			1252	4.5
6.5	27	41	731	2.6
			688	2.5
3.4	34	73	343	1.2
			361	1.3
1.5	44	52	136	0.48
			12	0.04
0.4	60	14	11	0.04

Table 1  
DISCOVERER EXPEDITION May 1970  
IN-SITU PHOTOSYNTHESIS

Station 14  
Incubation time 1200-1810 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	43	1047	3.7
			1457	5.2
36	11	50	2380	8.5
			2270	8.1
17	15	44	1511	5.4
			2226	7.9
6.5	28	57	1227	4.4
			1397	5.0
3.4	35	71	692	2.5
			919	3.3
1.5	43	41	497	1.8
			546	1.9
0.3	60	38	85	0.30
			79	0.28

Station 15  
Incubation time 1215-1820 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	144	1584	5.6
			750	2.7
36	11	102	2154	7.6
			2237	7.9
17	22	84	2051	7.3
			1868	6.6
6.5	34	115	362	1.3
			349	1.3
3.4	44	715	100	0.35
			38	0.13
1.5	53	284	27	0.09
			95	0.34
0.3	75	23		

Table 1

DISCOVERER EXPEDITION May 1970

IN-SITU PHOTOSYNTHESIS

Station 16

Incubation time 1200-1825 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	159	3911	13.9
			3731	13.3
36	8	88	5812	20.7
			5892	21.0
17	14	51	8899	31.5
			5719	21.0
6.5	20	72	5698	21.0
			6138	21.7
3.4	28	51	2019	7.1
			1804	6.4
1.5	35	87	1007	3.5
			1165	4.1
0.3	50	58	163	0.54

Station 17

Incubation time 1205-1823 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	57	419	1.5
			444	1.6
36	11	60	553	2.0
			533	1.9
17	29	67	546	1.8
			551	2.0
6.5	52	70	603	2.1
			488	1.7
3.4	71	87	814	2.9
			841	2.9
1.5	86	85	184	0.65
			157	0.56
0.9	100	36	237	0.85
			227	0.80

Table 1  
DISCOVERER EXPEDITION May 1970  
IN-SITU PHOTOSYNTHESIS

Station 18  
Incubation time 1223-1827 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	54	147	0.52
			186	0.66
36	12	79	395	1.4
			265	0.94
17	28	116	297	1.1
			378	1.4
6.5	49	118	433	1.6
			368	1.3
3.4	76	54	296	1.1
			298	1.1
1.5	91	49	564	2.0
			514	1.8
0.3	125	67	20	0.07
			15	0.05

Station 19  
Incubation time 1200-1837 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	72	226	0.80
			276	0.98
36	9	84	359	1.3
			354	1.3
17	25	85	326	1.2
			375	1.3
6.5	46	66	378	1.3
			403	1.4
3.4	68	67	318	1.2
			299	1.1
1.5	85	78	239	0.85
			241	0.85
0.3	100	23	160	0.57
			132	0.47

Table 1  
 DISCOVERER EXPEDITION May 1970  
IN SITU PHOTOSYNTHESIS

Station 21  
 Incubation time 1225-1848 local solar time

% of Surface Light	Depth m	Dark Count	Net Count	mg C/day · m <sup>3</sup>
100	0	49	179	0.63
			180	0.64
36	11	29	169	0.60
			17	33
6.5	65	40	173	0.62
			266	0.95
3.4	87	80	307	1.09
			201	0.71
1.5	105	67	179	0.64
			152	0.54
0.6	125		138	0.49

Table 2  
 DISCOVERER EXPEDITION May 1970  
IN-SITU PHOTOSYNTHESIS  
SAMPLE RELOCATION STUDY

Station 14

Incubation time 1200-1810 local solar time

Sample taken from 15 meters depth, incubated at the depths shown in the table.

% of Surface Light	Depth m	Net Count	mg C/day · m <sup>3</sup>
100	0	989	3.5
36	11	1666	5.9
17	15	1511	5.4
		2226	7.9
6.5	28	1015	3.6
3.4	35	696	2.5
1.5	43	255	.09
		Dark Count 44	

Station 15

Incubation time 1215-1820 local solar time

Sample taken from 22 meters depth, incubated at the depths shown in the table.

% of Surface Light	Depth m	Net Count	mg C/day · m <sup>3</sup>
100	0	1041	3.7
36	11	1499	5.3
17	22	2237	7.9
6.5	34	1175	4.2
3.4	44	408	1.5
1.5	53	147	0.5
		Dark Count 84	

Table 2

DISCOVERER EXPEDITION May 1970

IN-SITU PHOTOSYNTHESISSAMPLE RELOCATION STUDY

Station 16

Incubation time 1200-1825 local solar time

Sample taken from 14 meters depth, incubated at the depths shown in the table.

% of Surface Light	Depth m	Net Count	mg C/day · m <sup>3</sup>
100	0	3049	10.7
36	8	8337	29.5
17	14	8900	31.5
		5719	21.0
6.5	20	6448	22.9
3.4	28	2644	9.3
1.5	35	1200	4.2
		Dark Count	51

Station 17

Incubation time 1205-1823 local solar time

Sample taken from 29 meters depth, incubated at the depths shown in the table.

% of Surface Light	Depth m	Net Count	mg C/day · m <sup>3</sup>
100	0	201	0.71
36	11	276	0.98
17	23	546	1.8
		551	2.0
6.5	52	566	2.0
3.4	71	139	0.49
1.5	86	121	0.43
		Dark Count	67



Table 2

## DISCOVERER EXPEDITION May 1970

IN-SITU PHOTOSYNTHESISSAMPLE RELOCATION STUDY

## Station 18

Incubation time 1223-1827 local solar time

Sample taken from 28 meters depth, incubated at the depths shown in the table.

% of Surface Light	Depth m	Net Count	mg C/day · m <sup>3</sup>
100	0	116	0.42
36	12	59	0.21
17	28	297	1.05
		378	1.37
6.5	49	178	0.63
3.4	76	338	1.20
1.5	91	213	0.75
		Dark Count	116

## Station 19

Incubation time 1200-1837 local solar time

Sample taken from 25 meters depth, incubated at the depths shown in the table.

% of Surface Light	Depth m	Net Count	mg C/day · m <sup>3</sup>
100	0	252	0.89
36	9	582	2.1
17	25	326	1.2
		375	1.3
6.5	46	137	0.49
3.4	68	36	0.13
		Dark Count	85

Table 2

## DISCOVERER EXPEDITION May 1970

IN-SITU PHOTOSYNTHESISSAMPLE RELOCATION STUDY

Station 21

Incubation time 1225-1848 local solar time

Sample taken from 33 meters depth, incubated at the depths shown in the table.

% of Surface Light	Depth m	Net Count	mg C/day · m <sup>3</sup>
100	0	72	0.25
36	11	106	0.37
17	33	65	0.23
		116	0.41
6.5	65	13	0.04
3.4	81	8	0.03
1.5	105	0	0.0
Dark Count 89			

Table 3

S.C.O.R.  
DISCOVERER EXPEDITION May 1970

## Particulate Organic Carbon and Nitrogen

Station #	Depth m	C ug/l	N ug/l	C/N	Sample Volume l
2	0	88.4	5.3	16.6	6
	75	101.7	6.4	16.0	6
3	0	67.6	8.9	7.6	6
	12	79.1	4.4	17.8	6
	18	82.1	4.4	18.5	6
	82	47.4	4.1	11.5	6
	100	67.5	4.4	15.3	6
	125	44.0	4.9	9.0	6
	150	166.7	10.9	15.2	5
4	0	54.3	8.0	6.8	6
	10	79.6	9.6	8.3	6
	25	51.3	2.7	19.0	6
	50	74.0	5.1	14.5	6
	75	63.2	4.3	14.7	6
	100	53.9	4.9	11.0	6
	125	34.2	2.1	16.3	10.8
	150	63.0	3.5	18.0	10.8
	200	47.6	4.0	11.9	4.8
5	0	87.4	7.1	12.3	6
	10	84.3	6.9	12.2	6
	25	48.6	3.5	13.9	6
	50	52.0	4.3	12.1	6
	75	36.2	2.5	14.5	6
	100	27.1	2.8	9.7	6
6	0	77.7	5.4	14.4	6
	4	76.0	7.6	10.0	6
	9	109.0	9.1	12.0	6
	16	94.8	9.1	10.4	6
	22	105.4	12.7	8.3	6
	30	106.8	10.9	9.8	6
	50	81.5	9.7	8.4	6
	75	160.9	18.1	8.9	4
	100	81.3	5.2	15.6	5.7
	125	30.8	3.8	8.1	5.7
	150	53.6	4.7	11.4	5.7

Table 3

S.C.O.R.  
DISCOVERER EXPEDITION May 1970

## Particulate Organic Carbon and Nitrogen

Station #	Depth m	C ug/l	N ug/l	C/N	Sample Volume l
7	0	124.0	12.4	10.0	6
	4	75.7	7.9	9.6	6
	12	89.2	9.1	9.8	6
	22	107.0	11.4	9.4	6
	30	70.9	7.7	9.2	6
	39	67.0	14.9	4.5	6
	50	50.2	7.6	6.6	6
	75	68.3	13.4	5.1	5.8
	100	68.8	4.0	17.2	6
	125	38.7	3.2	12.1	6
8	0	64.5	6.2	10.4	6
	4	78.0	8.3	9.4	6
	10	139.1	9.8	14.2	6
	17	127.6	17.5	7.3	6
	25	164.2	22.2	7.4	6
	32	98.9	13.0	7.6	6
	50	78.0	11.0	7.1	6
	75	98.1	19.2	5.1	5.8
	100	99.8	14.5	6.9	6
	125	36.6	2.6	14.1	5.5
	150	35.9	3.2	11.2	6
9	0	84.6	11.3	7.5	6
	4	149.1	18.9	7.9	4.6
	10	130.8	21.8	6.0	6
	18	97.4	16.2	6.0	6
	24	173.6	23.2	7.5	6
	29	163.6	26.4	6.2	6
	37	102.1	16.2	6.3	6
	50	55.2	8.0	6.9	5.7
	75	46.1	6.4	7.2	5.7
	100	29.1	3.0	9.7	6
	125	35.0	3.3	10.6	6
	150	37.6	2.5	15.0	11
	200	25.0	2.1	11.9	11
10	0	56.3	8.4	6.7	6
	5	74.4	12.4	6.0	6
	11	48.4	9.3	5.2	6
	23	82.9	10.9	7.6	6
	33	74.3	9.3	8.0	6
	45	63.1	10.2	6.2	6
	50	171.6	22.3	7.7	6

Table 3

S.C.O.R.  
DISCOVERER EXPEDITION May 1970

## Particulate Organic Carbon and Nitrogen

Station #	Depth m	C ug/l	N ug/l	C/N	Sample Volume l
10	62	45.7	4.4	10.4	10.7
	75	36.4	3.0	12.1	6
	100	32.1	2.7	11.9	11
	125	31.0	2.2	14.1	5.8
	150	38.1	2.2	17.3	11
11	0	57.2	10.2	5.6	6
	10	62.5	10.6	5.9	6
	20	54.6	7.8	7.0	6
	35	70.5	8.2	8.6	6
	46	59.6	6.4	9.3	6
	60	51.7	5.5	9.4	6
	75	57.6	6.0	9.6	6
	100	30.6	3.3	9.3	10.5
125	27.8	3.2	8.7	5.5	
12	0	53.6	9.1	5.9	6
	21	61.5	10.6	5.8	6
	45	53.2	7.4	7.2	6
	57	45.6	6.0	7.6	6
	75	28.2	3.0	9.4	5.5
	100	74.2	4.4	16.9	6
	125	45.7	3.6	12.7	5.5
13	0	52.2	7.8	6.7	6
	17	67.0	13.4	5.0	6
	34	79.2	13.2	6.0	6
	44	85.7	15.6	5.5	6
	60	34.4	4.6	7.5	11
	75	63.2	9.6	6.6	4.8
	100	42.3	4.7	9.0	4.8
	125	32.1	2.9	11.1	10.8
	150	29.0	2.3	12.6	10
200	27.8	2.9	9.6	10.8	
14	0	70.6	12.4	5.7	6
	11	104.8	18.4	5.7	6
	28	109.1	24.8	4.4	6
	43	165.1	25.4	6.5	6
	60	267.9	28.2	9.5	6
	75	160.8	20.4	7.9	9.5
	100	39.8	3.8	10.5	11

Table 3

S.C.O.R.  
DISCOVERER EXPEDITION May 1970

## Particulate Organic Carbon and Nitrogen

Station #	Depth m	C ug/l	N ug/l	C/N	Sample Volume l
14	125	51.7	3.8	13.6	11
	150	42.4	3.4	13.4	11
	200	36.7	5.4	6.8	11
	300	20.1	1.7	11.8	6
	500	38.0	2.9	13.1	5
	800	32.3	3.4	9.5	11
15	0	60.0	7.8	7.7	6
	22	56.4	9.1	6.2	6
	44	79.8	12.7	6.3	6
	53	58.2	6.4	9.1	6
	75	41.6	3.8	10.8	10
	100	20.9	1.9	11.0	11
	125	18.2	1.9	9.6	11
150	24.4	2.6	9.4	11	
16	0	69.5	11.6	6.0	6
	14	133.1	26.6	5.0	6
	28	59.0	8.2	7.2	6
	35	84.0	8.0	10.5	6
	50	47.0	5.0	9.4	11
	75	28.8	1.9	15.2	11
	100	28.7	2.1	13.6	11
	125	17.7	1.3	13.6	11
150	28.8	3.1	9.3	11	
17	0	42.6	4.9	8.7	6
	29	37.6	5.3	7.1	6
	52	36.7	4.7	7.6	6
	71	46.4	5.1	9.1	6
	100	33.6	4.0	8.4	11
	125	24.6	3.0	8.2	11
	150	21.2	2.1	10.1	11
	200	46.0	4.8	9.6	11
18	0	20.9	2.2	9.5	6
	28	40.6	3.1	13.1	6
	49	33.4	3.0	11.1	6
	76	34.2	3.2	10.7	6
	91	36.2	5.1	7.1	6
	125	18.2	1.7	10.7	11
	150	13.9	1.2	11.6	11
200	18.2	2.0	9.1	11	

Table 3

S.C.O.R.  
DISCOVERER EXPEDITION May 1970

## Particulate Organic Carbon and Nitrogen

Station #	Depth m	C ug/l	N ug/l	C/N	Sample Volume l
19	0	29.8	3.2	9.3	6
	25	28.8	4.5	6.4	6
	46	31.0	3.3	9.4	6
	65	31.2	4.0	7.8	6
	85	38.8	4.4	8.8	6
	100	25.6	2.1	12.2	11
	125	18.7	2.4	7.8	11
	150	18.7	1.6	11.7	11
	200	13.6	1.3	10.5	11
20	100	22.0	2.4	9.2	11
	125	29.4	2.7	10.9	11
	150	20.2	2.0	10.1	11
	200	22.1	2.3	9.6	11
21	0	32.4	2.6	12.5	6
	33	33.6	3.2	10.5	6
	65	31.6	3.1	10.2	6
	87	29.8	3.6	8.3	6
	100	33.2	3.6	9.2	11
	125	32.4	3.0	10.8	11
	200	22.0	2.2	10.0	11
22	0	33.6	3.6	9.3	11
	25	45.6	4.8	9.5	11
	50	34.6	3.8	9.1	11
	75	31.8	3.5	9.1	11
	100	26.8	3.3	8.1	11
	125	32.6	3.8	8.6	11
	150	31.1	3.7	8.4	11

Editor's Notes:

The  $C^{14}$  for the in-situ productivity experiments conducted by Professor Saijo was identical with that used by Mr. Jitts for the simulated-in-situ experiments and for incubation under Xenon light.

This Carbon<sup>14</sup> stock is specified as follows:

Carbon<sup>14</sup> stock #CSIRO 30  
Stock activity 20  
Background count 12

All counting of the radioactive productivity samples for Professor Saijo and Mr. Jitts was done on the Berthold window Geiger counter provided by C.S.I.R.O. via Mr. Jitts.

The quanta meter used by Professor Saijo to make the in-situ recordings of quanta versus time, given in this report, was made at the Institute of Physical Oceanography, University of Copenhagen and was designated "number 15". \* A different quanta meter was used by H. Jitts to determine the selected incubation depths (designated by % of surface light). Table 4 gives the details for the listed stations.

Details of the procedure were as follows: The SIS incubator employed by Jitts was equipped with blue-green glass filters which transmitted fixed percentages of the quanta irradiance from the sun and sky. S.I.S. incubation of a sample obtained from a depth in the ocean where 17% of surface quanta penetrated was carried out under the 17% quanta transmitting filter, etc. The in-situ incubation was also arranged so that the sample from the "17% quanta" depth was returned to that depth during in-situ incubation, and the recording quanta meter was also affixed at that depth. This procedure was adhered to for the 25% and 26% "quanta depths" but no S.I.S. determinations are available for these quanta depths.

In the quanta recordings the chart travel for the Toadenpa strip-chart recorder was uniform. Response to impinging quanta was linear. The wide excursions of the pen are due to rapid changes in quanta level, caused by the focusing and defocusing of sunlight by convex and concave areas of the water surface.

For Stations 2-17 inclusive photosynthesis samples were washed after filtration. For Stations 18, 19, and 21 washing after filtration was discontinued.

\* Quanta meter number FC 21 in housing no. Q15, supplied by K. Nygård. For additional details see report section I, Figure 1.



Table 4

Station #	Depth Location of Recording		Depth determined by
	Quanta	Meter	
Station #	% of Surface Light	Depth m	
2	25%	27	Probably Danish
3	25%	18	Probably Danish
6	26%	9	French
7	26%	12	French
8	26%	10	French
9	26%	10	French
10	26%	11	French
11	17%	20	French
12	17%	21	French
13	17%	17	Probably Danish
14	17%	15	Danish
15	17%	22	French
16	17%	17	French
17	17%	29	French
18	17%	28	French
19	17%	25	French
21	17%	33	French

Table 5

## SCOR DISCOVERER EXPEDITION

RELATIVE AREAS UNDER IN-SITU QUANTA RECORDINGS  
OBTAINED BY MEANS OF COMPENSATING  
POLAR PLANIMETER

(J. E. Tyler, Editor)

% Surface Light	Station #	Time Interval	Area (Sq.In.)		Average	Total
			Max.	Min.		
25%	2	1200-1500	18.40	14.42	16.41	21.38
		1500-1800	5.24	4.70	4.97	
25%	3	1200-1500	22.62	18.13	20.38	26.26
		1500-1800	7.58	4.18	5.88	
26%	6	1220-1500	18.17	15.13	16.65	23.38
		1500-1800	7.13	6.32	6.73	
26%	7	1237-1500	3.83	3.57	3.70	3.98
		1500-1800	0.27	0.29	0.28	
26%	8	1205-1500	14.60	14.08	14.34	18.25
		1500-1740	3.90	3.85	3.88	
26%	9	1205-1500	15.17	14.10	14.64	17.96
		1500-1730	3.35	3.29	3.32	
26%	10	1200-1500	13.14	12.16	12.65	17.59
		1500-1800	5.17	4.70	4.94	
17%	11	1200-1500	10.76	8.89	9.83	11.60
		1500-1800	1.82	1.71	1.77	
17%	12	1205-1500	13.05	10.50	11.78	15.47
		1500-1736	2.74	2.64	2.69	
17%	13	1200-1500	12.23	10.30	11.27	14.39
		1500-1735	3.12		3.12	
17%	14	1200-1500			12.75	15.05
		1500-1600	2.25	2.35	2.30	
	15	1215-1500	12.52	10.83	11.68	13.93
		1500-1745	2.25	2.25	2.25	
	16	1200-1500	14.55	12.31	13.43	16.88
		1500-1800			3.45	
	17	1205-1500	13.36	11.20	12.28	17.68
		1500-1800			5.40	

Table 5

SCOR DISCOVERER EXPEDITION  
 RELATIVE AREAS UNDER IN-SITU QUANTA RECORDINGS  
 OBTAINED BY MEANS OF COMPENSATING  
 POLAR PLANIMETER

2.

% Surface Light	Station #	Time Interval	Area (Sq.In.)		Average	Total
			Max.	Min.		
17%	18	1223-1500	14.60	12.87	13.74	18.72
		1500-1800			5.18	
	19	1200-1500	17.25	14.96	16.11	22.13
		1500-1800			6.02	
	21	1225-1500	16.30	13.00	14.65	21.45
		1500-1800			6.80	

## NOTES:

The time intervals given in Column 2 have been determined from the beginning time of each recording and an average chart speed of 5.58 cm/hr. The recording for station 14 is not included in this average because of indicated motor trouble. The recording for station 7 gives two time intervals differing by 15 minutes; both have been used in determining the average chart speed. The beginning time in the caption of the recording for station 18 does not correspond with the time recorded along the abscissa. The time interval 12<sup>23</sup> to 18<sup>07</sup> has been used in this case to compute chart speed.

Area integrations have been made along the top edge of the recordings (called "max" in Column 3) and along the bottom edge (called "min" in Column 4). The average of these areas is given in Column 5. In some cases the average has been determined directly.

The areas obtained for the station 2 recording have been multiplied by 2 to compensate for its gain setting which was half of the gain used on all other recordings.

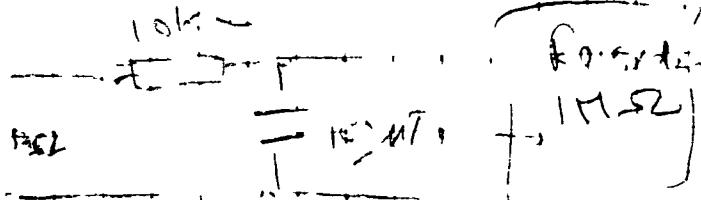
The ordinate for time = 1500, determined by the method outlined above, has been inked in on each recording.

The planimeter used is calibrated to provide areas in square inches as recorded in the heading to columns 4 and 5, Table 5. However, for purposes of data reduction these integrals have the units

$$\text{mv} \times \text{time} \times \text{constant}$$

and must be multiplied by the calibration factor in  $\frac{\text{quanta}}{\text{sec} \cdot \text{mv}}$  to yield the total quanta for any chosen period of incubation.

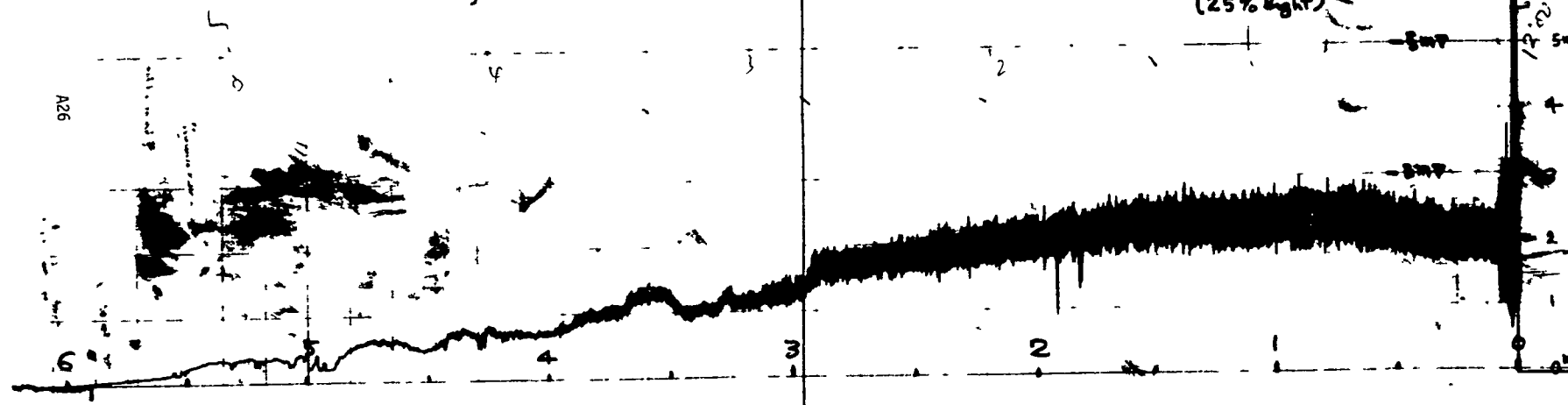
1.2 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



TOA Electronics Ltd.

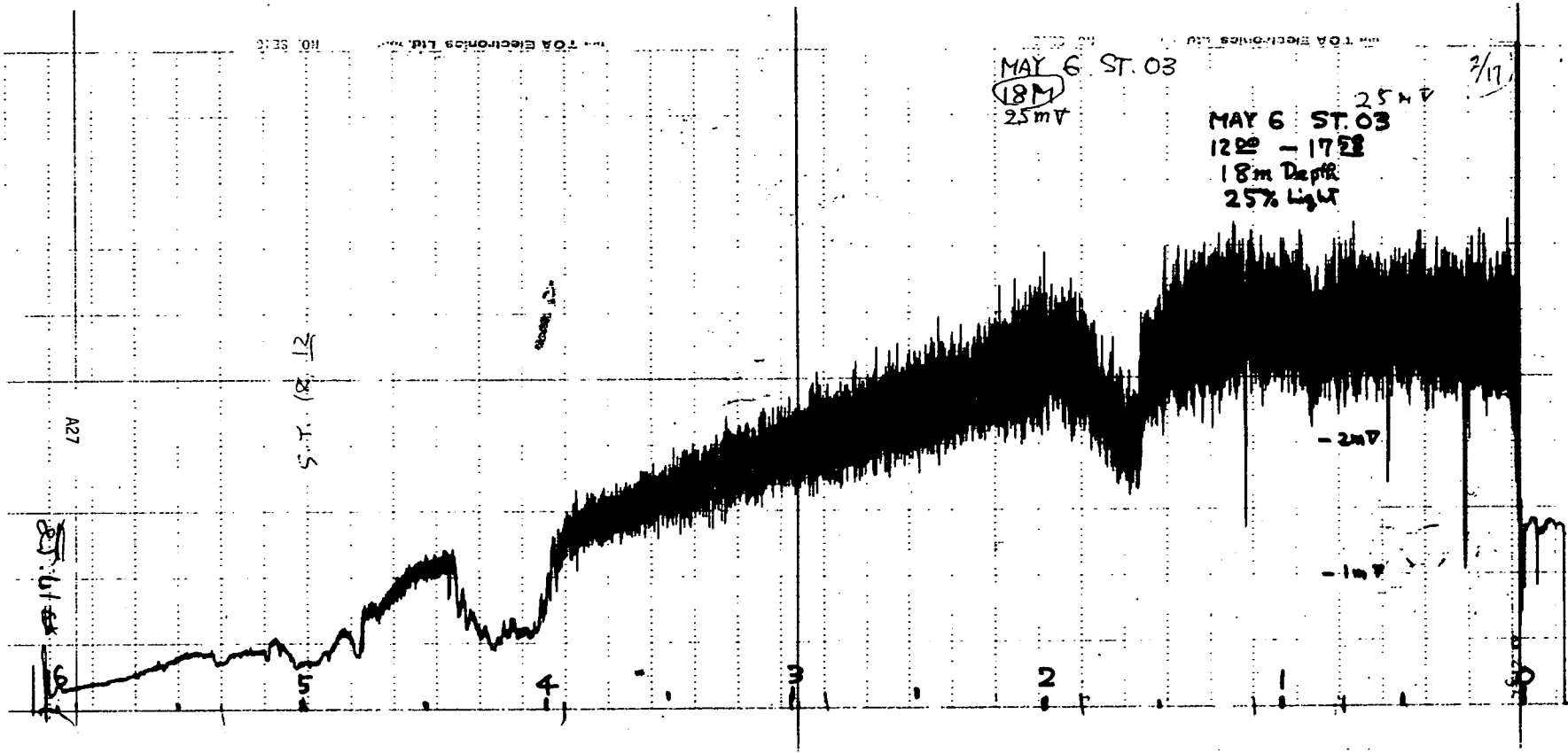
MAY 5 STATION 02  
27 METERS  
12:00 → 6:30  
Sun Time

MAY 5 ST. 02  
12:28 - 18:30  
27m DEPR  
(25% light)



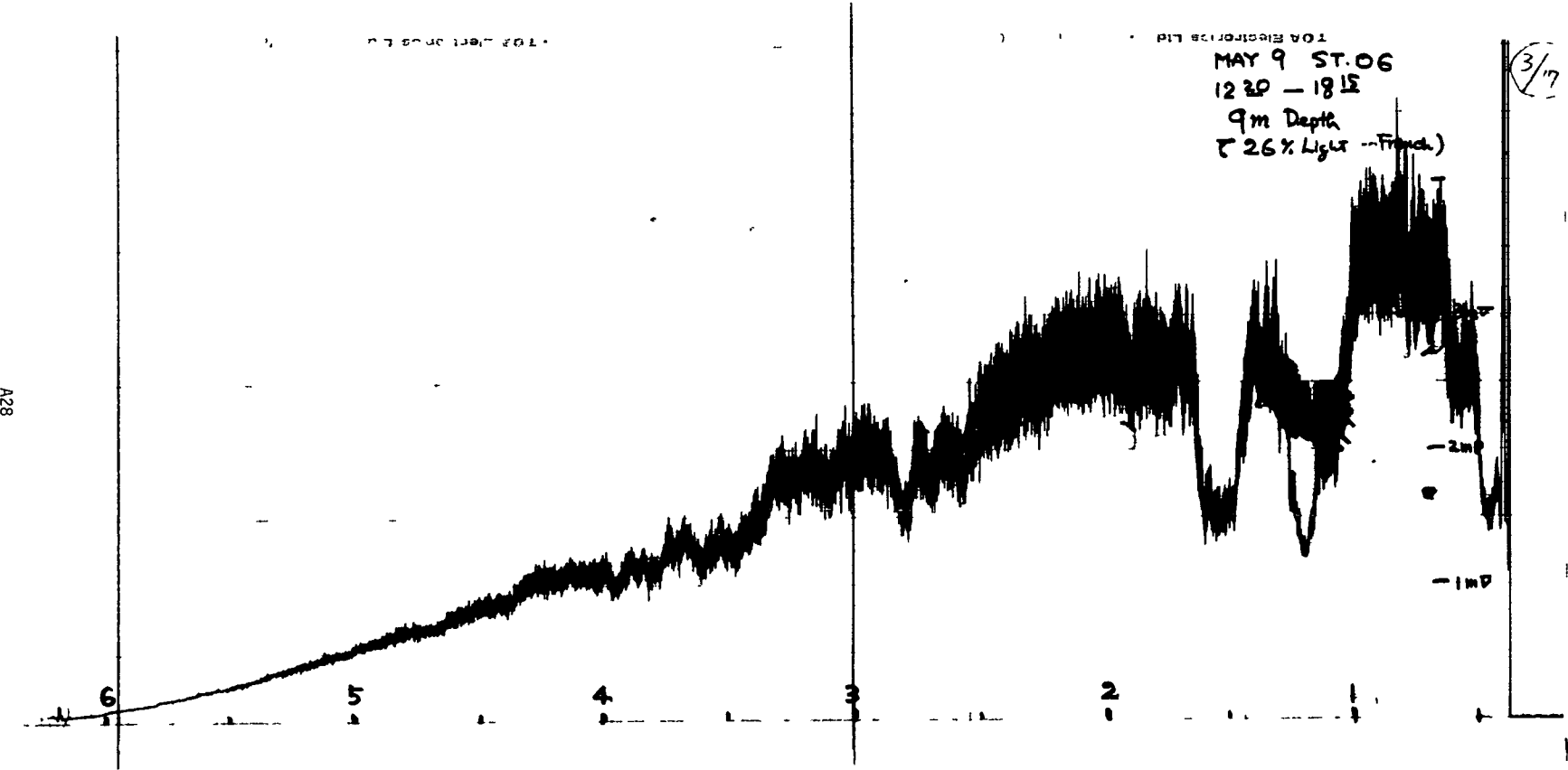
1/17





3/7

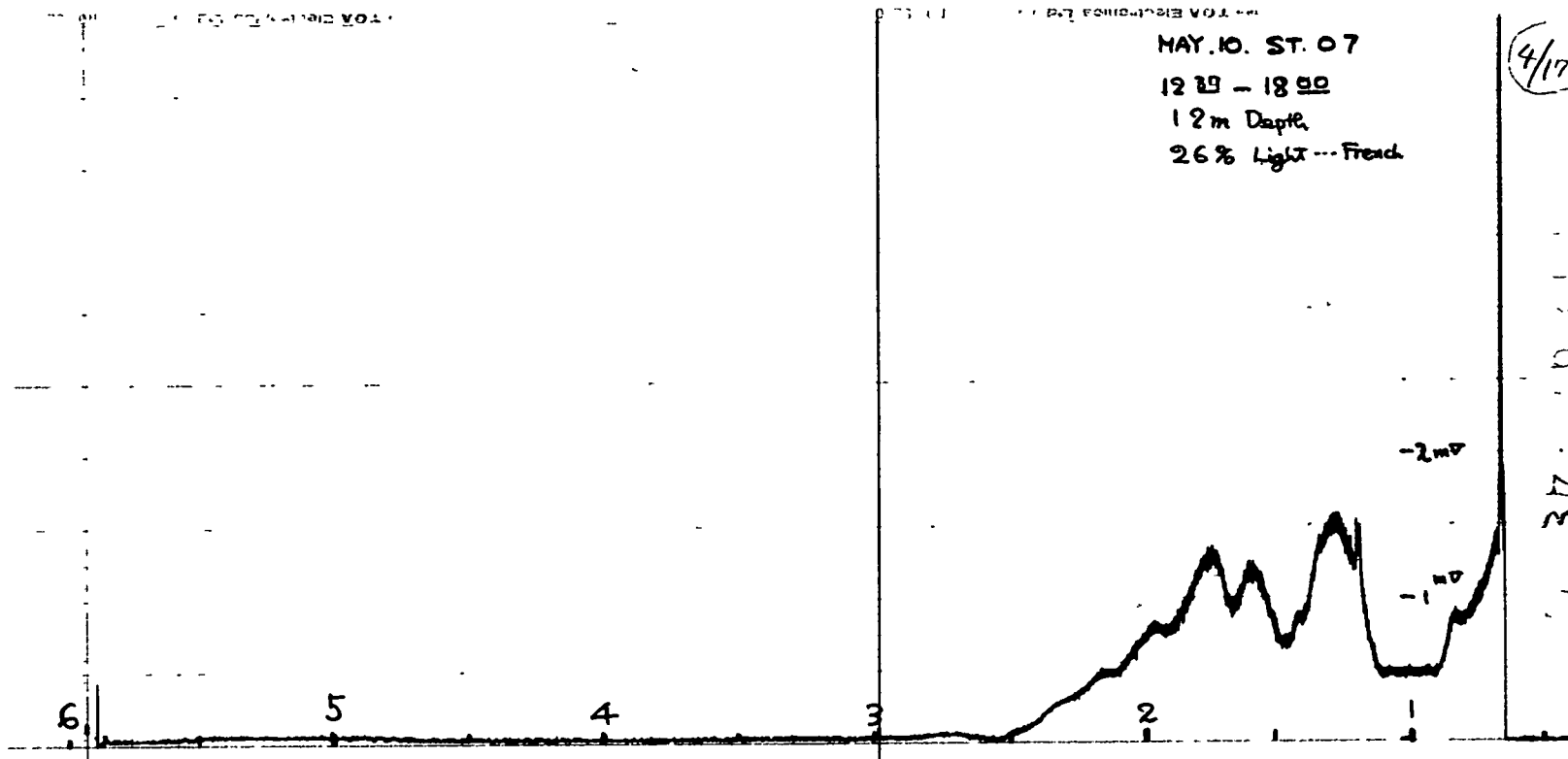
MAY 9 ST. 06  
1230 - 1915  
9m Depth  
(26% Light -- French)



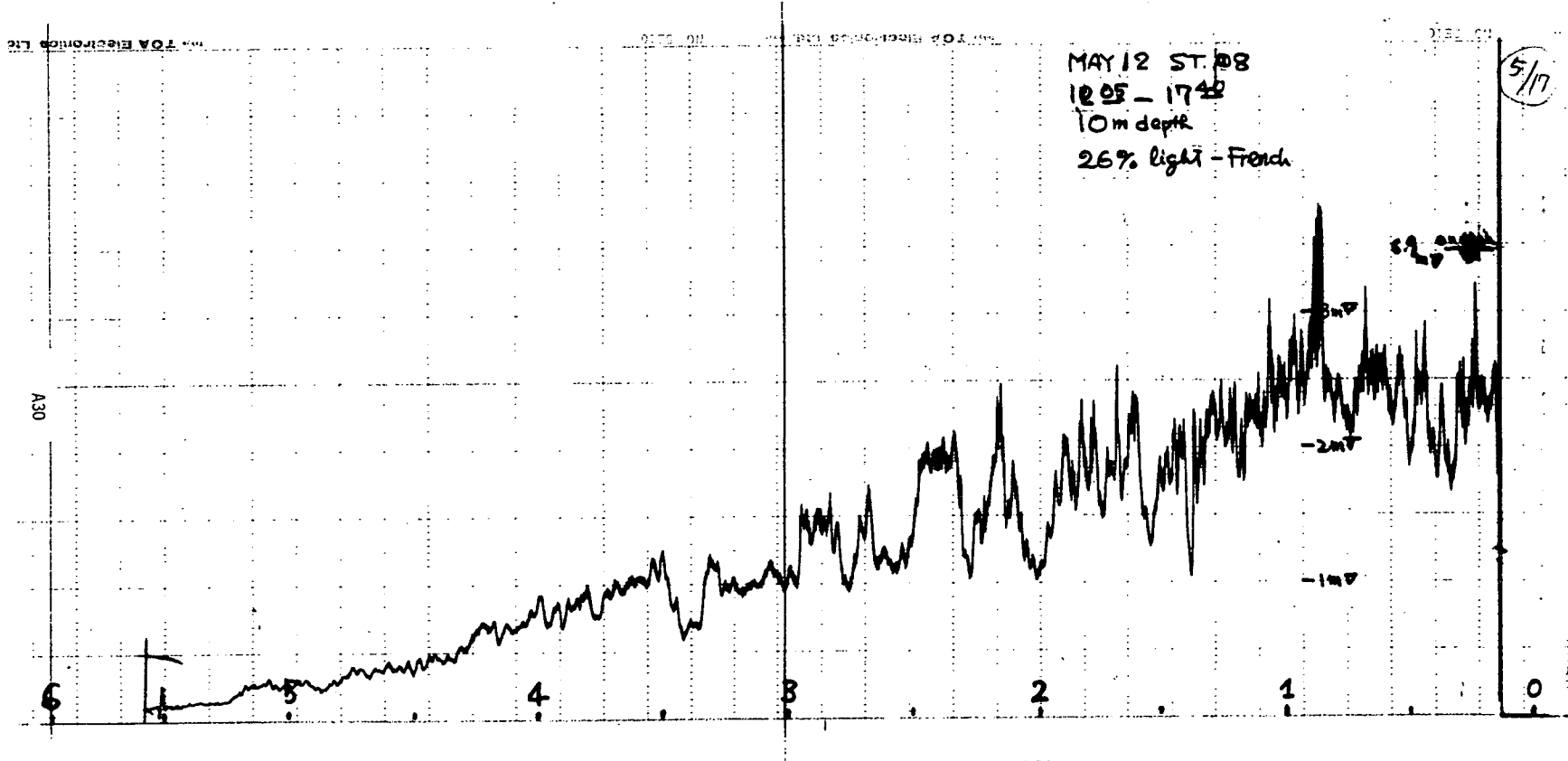
-2m  
-1m

A28

A29







MAY 12 ST. #8  
1205 - 1742  
10m depth  
26% light - French

5/17

A30

6

5

4

3

2

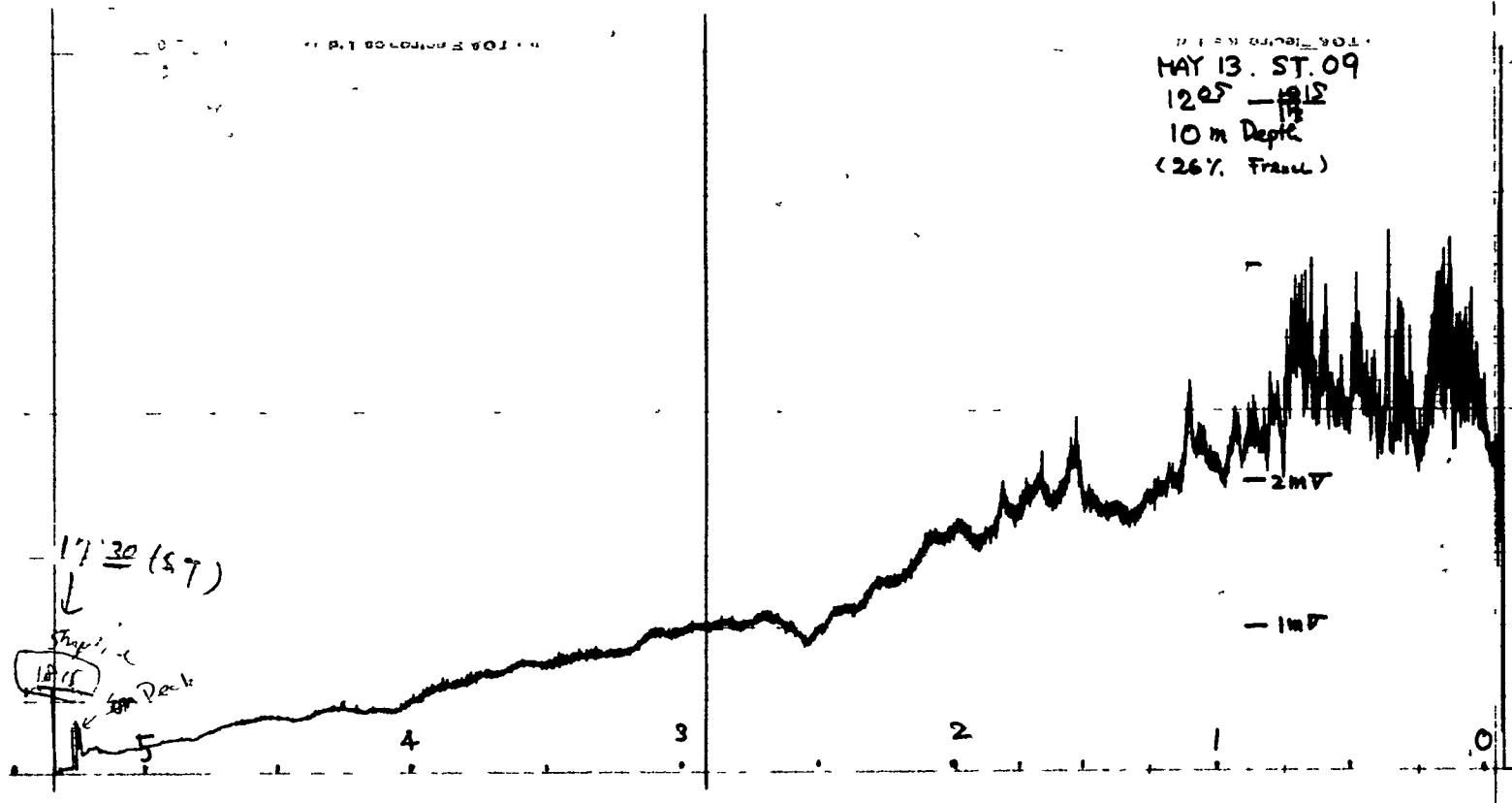
1

0

3mV  
2mV  
1mV

5.2  
1.7

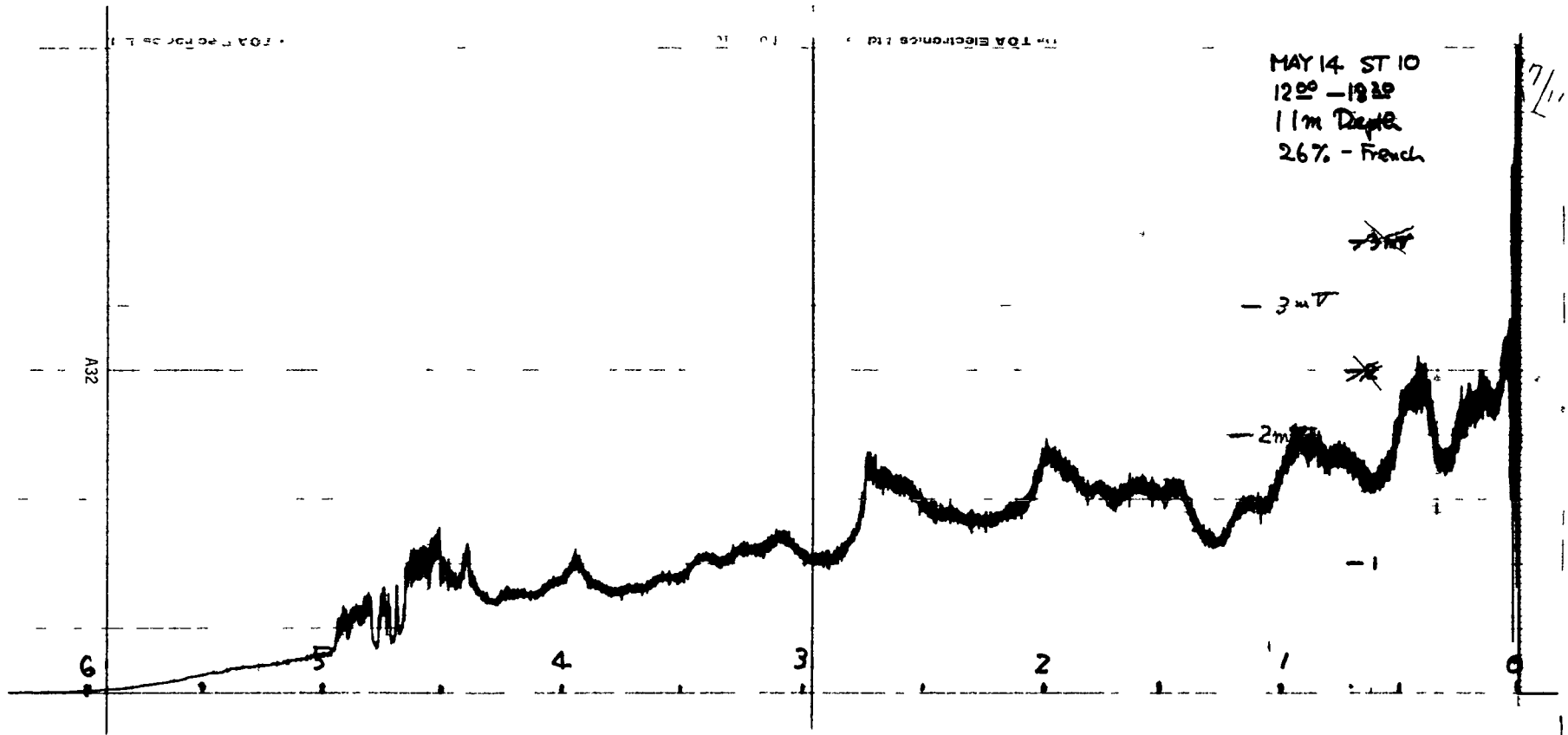
A31

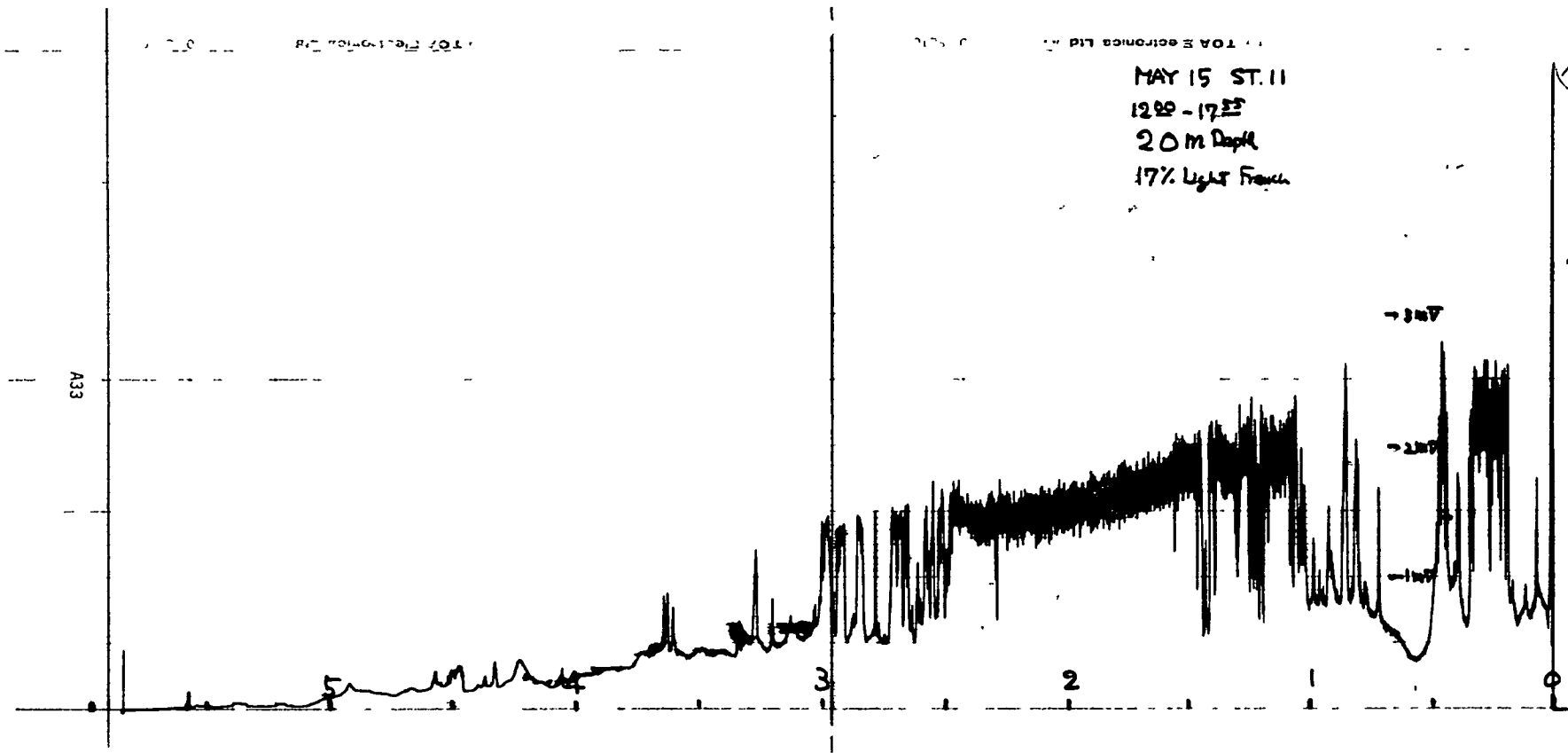


MAY 13. ST. 09  
1205 - 1215  
10 m Depth  
(26% Fossil)

17:30 (57)  
↓  
Stop  
Deck

6/1





MAY 15 ST. 11  
1200-1700  
20 m Depth  
17% Light Flux

A33

-30V

-20V

-10V

3

2

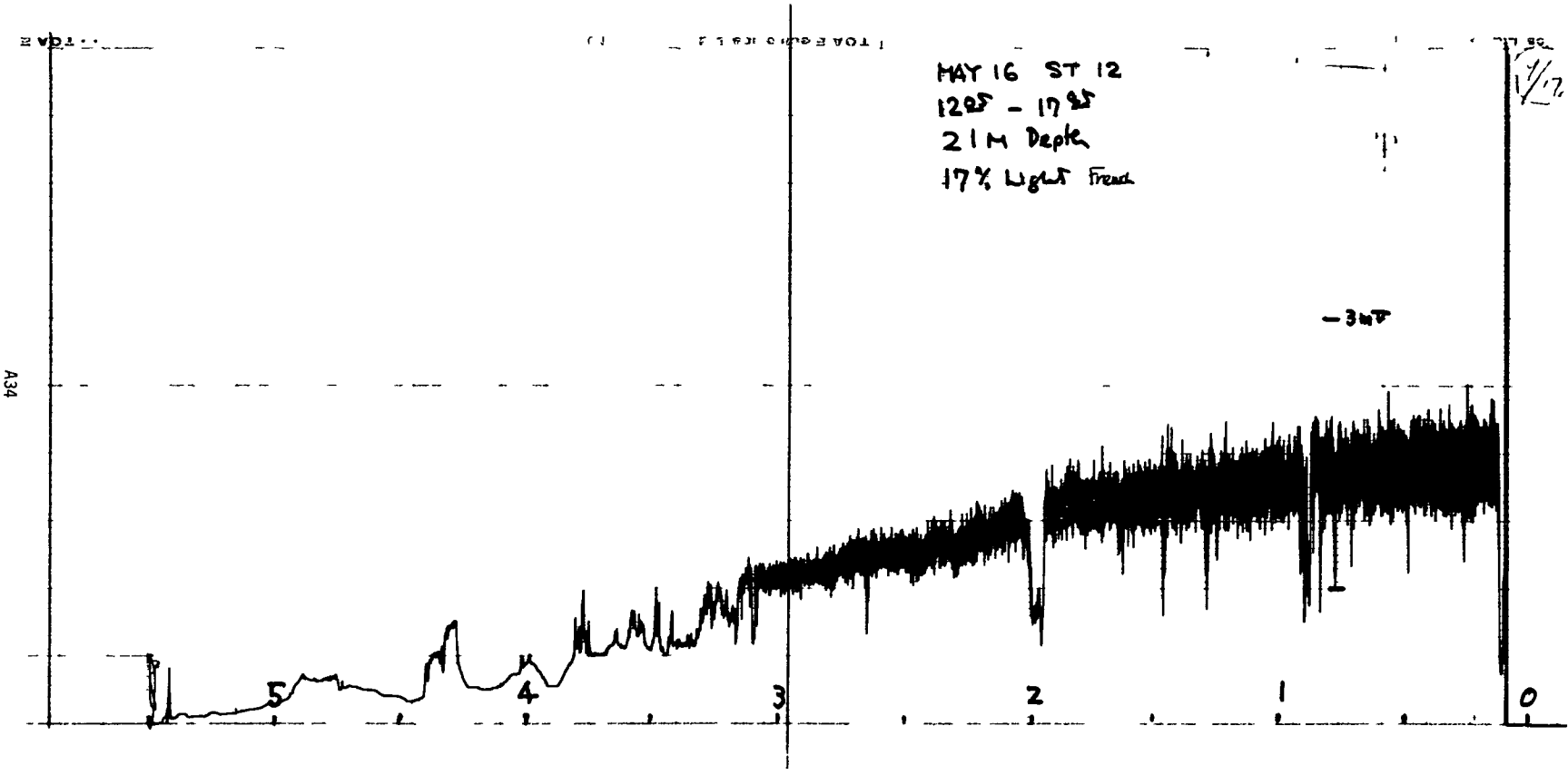
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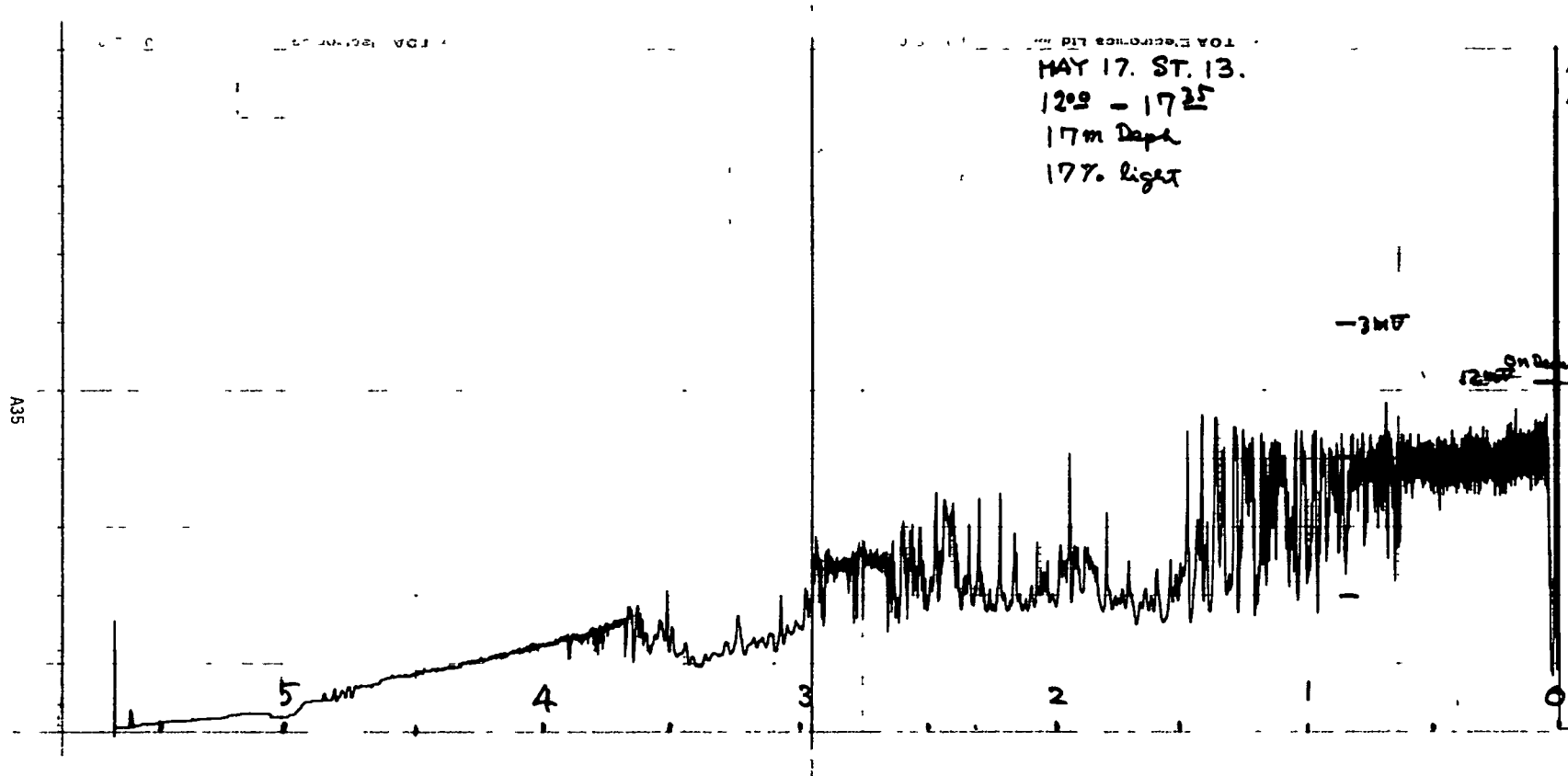
0

1/17

MAY 16 ST 12  
1205 - 1725  
21M Depth  
17% Light Trans

-3mV





MAY 17. ST. 13.  
1200 - 1725  
17m Depth  
17% light

A35

5

4

3

2

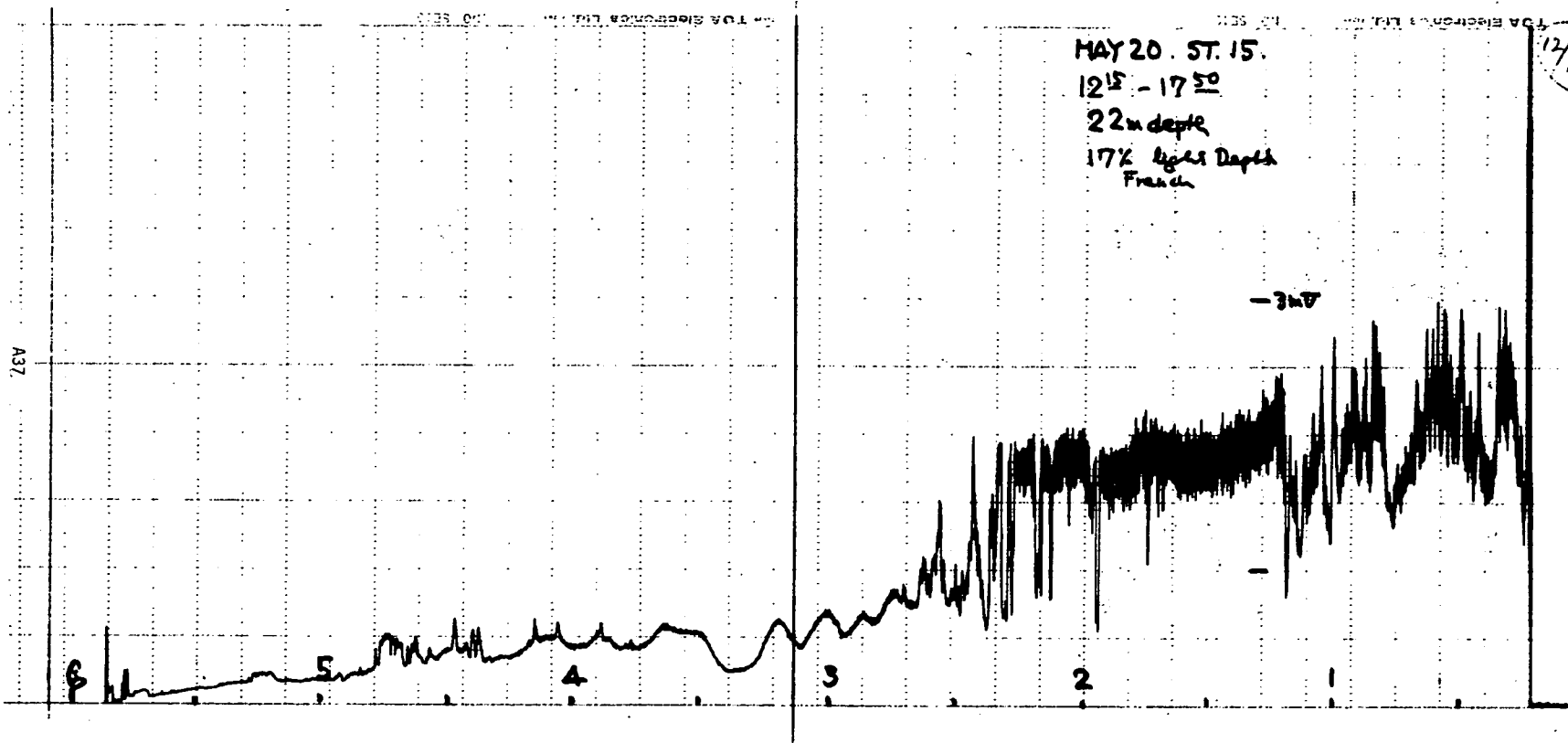
1

0

-3mV

1200 2mV





MAY 20. ST. 15.  
12:15 - 17:50  
22m depth  
17 1/2 light Depth  
French

127

-327

A37

6

5

4

3

2

1



NO. 5210 TWA ELECTRONICS LTD. TORONTO

NO. 5210 TWA ELECTRONICS LTD. TORONTO

MAY 21 ST. 16.  
12<sup>00</sup> - 17<sup>00</sup>  
17m Depth  
17% light French

13/11

A38

-3.40

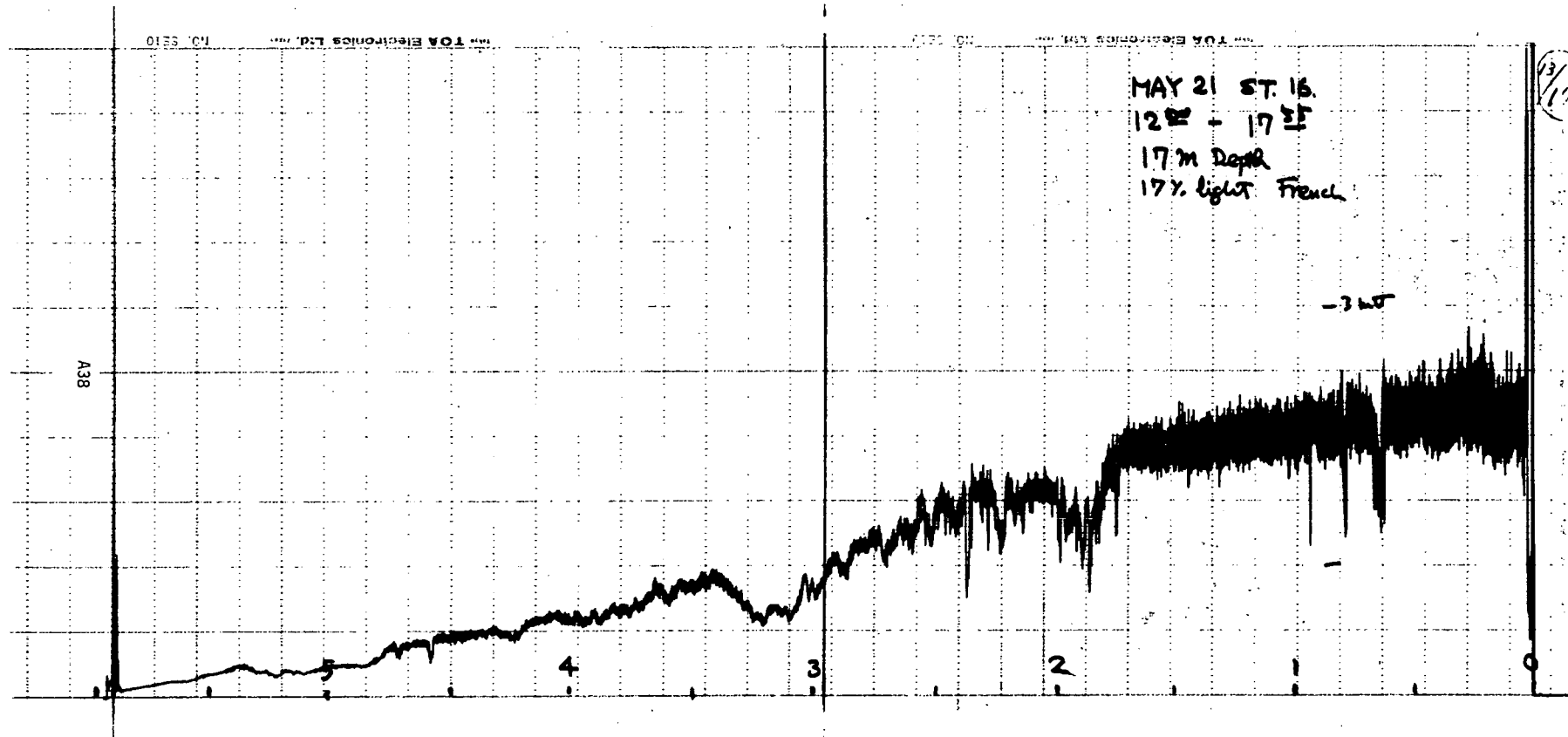
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3

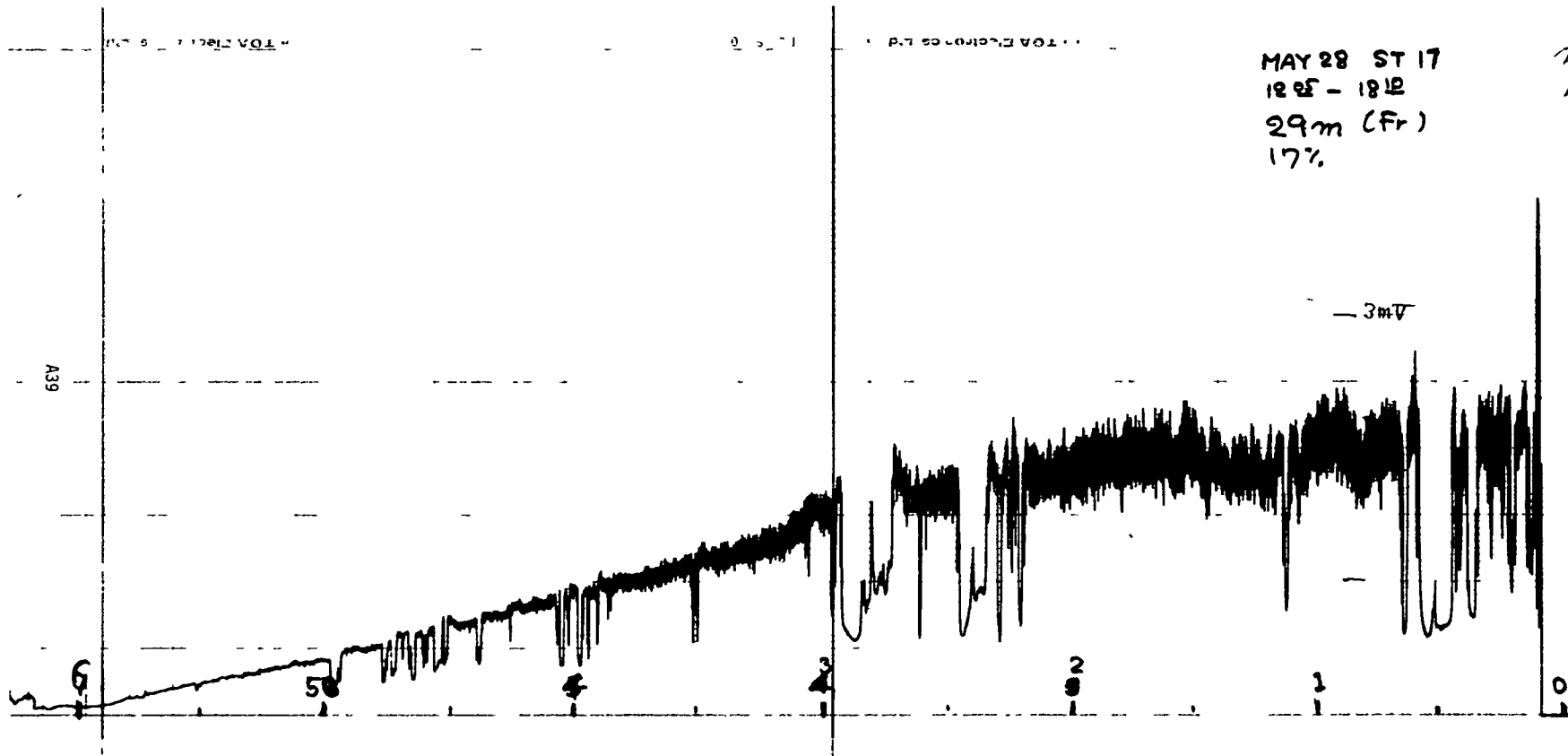
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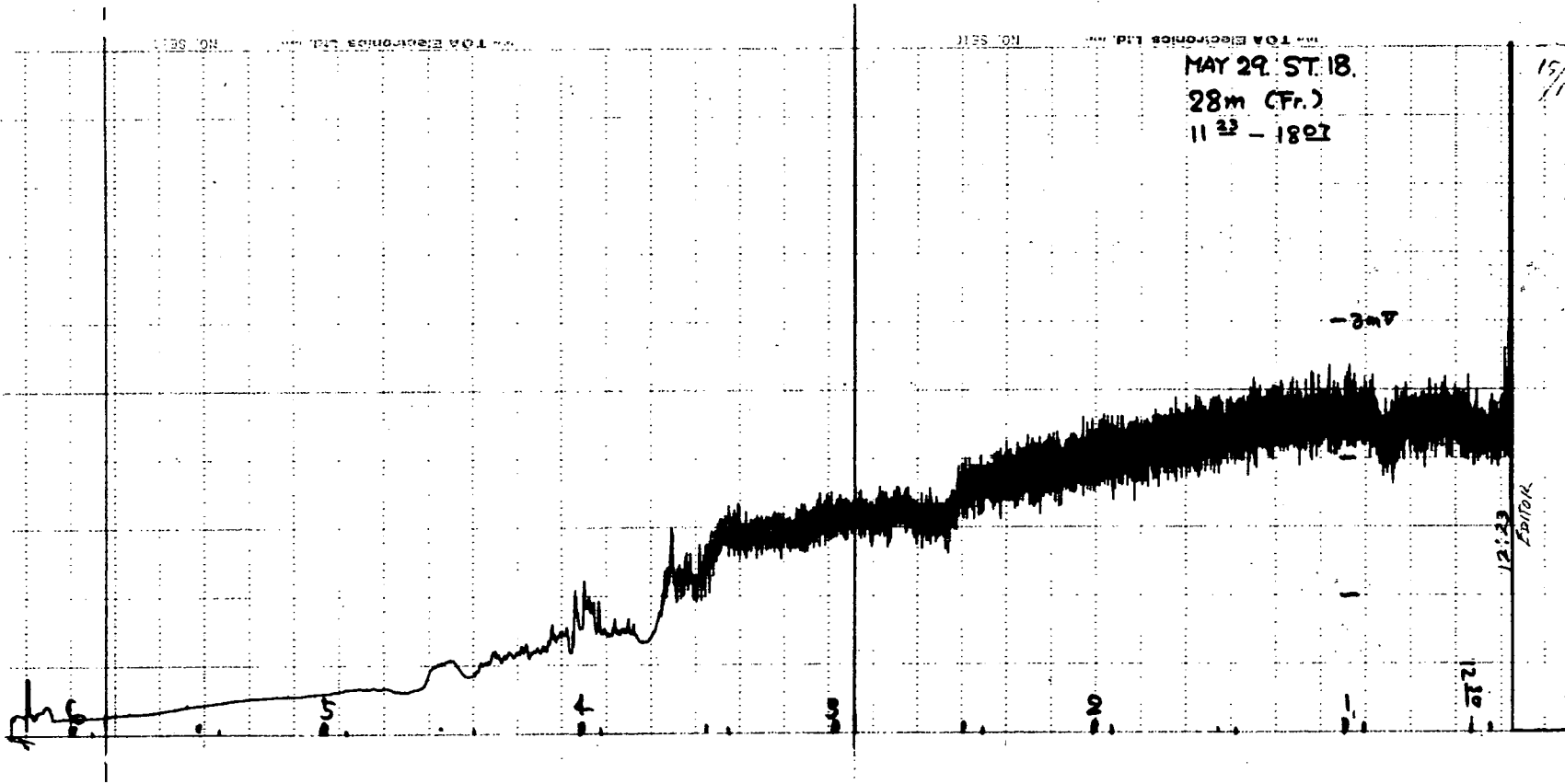
1

0



MAY 28 ST 17  
1825 - 1812  
29m (Fr)  
17%





MAY 29 ST. 18.  
28m (Fr.)  
11 22 - 1807

4m

12:23

12:23  
L2104K

15/1

AAO

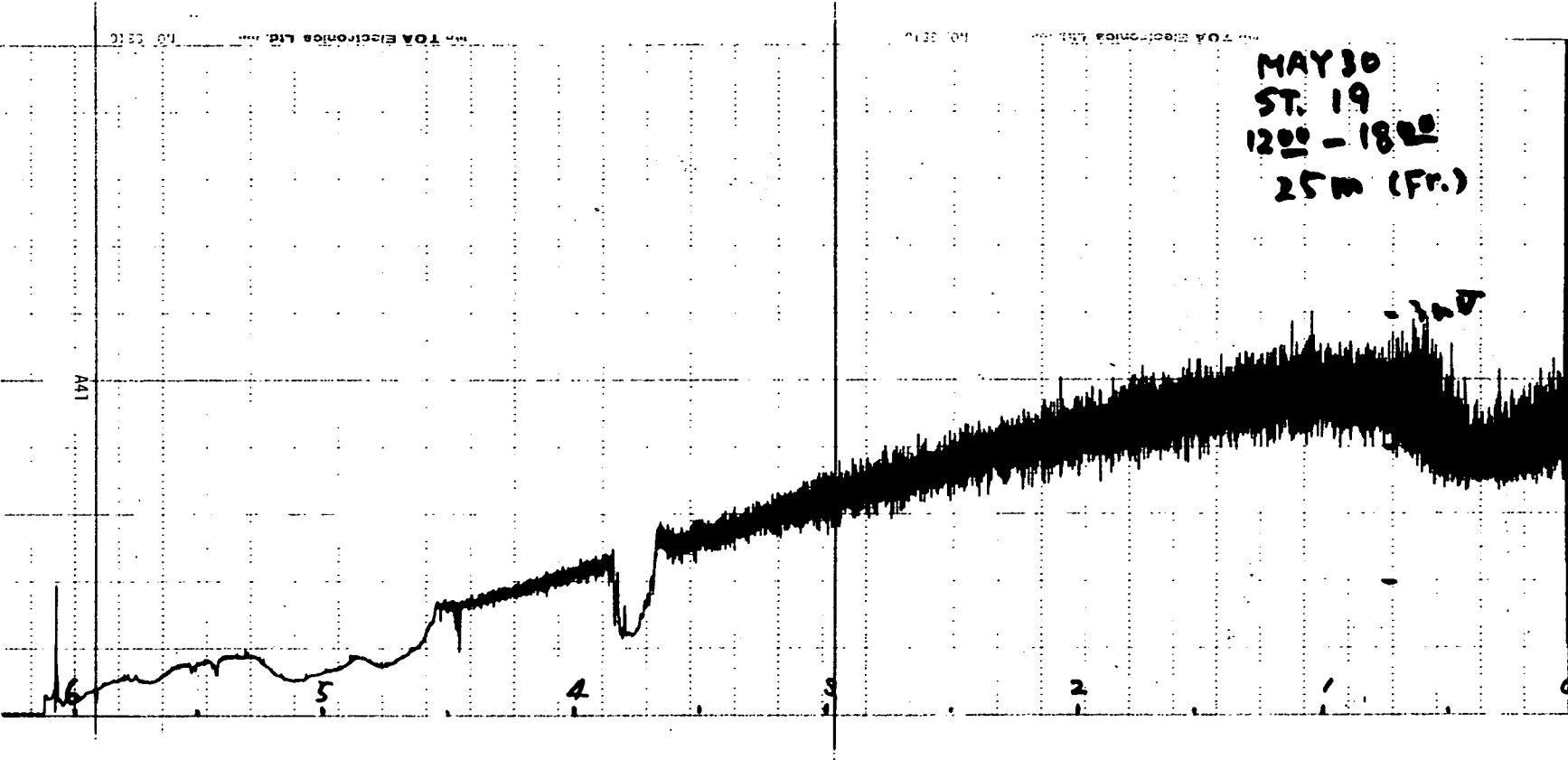
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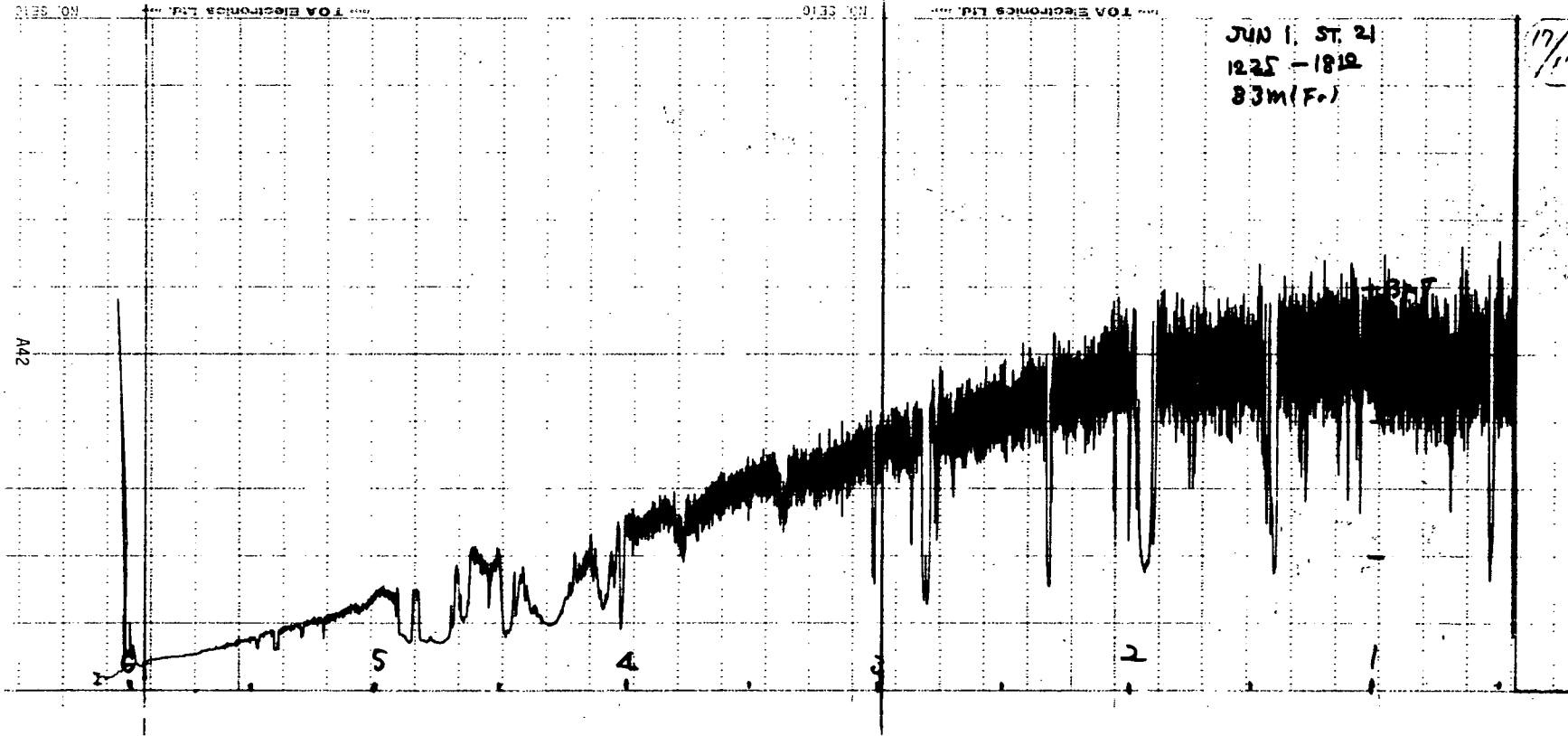
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## SCOR/UNESCO Working Group 15

### Cruise of USC and GS ship DISCOVERER

Data Report: by H. R. Jitts and D. J. Carpenter

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#### I. Introduction

During the cruise of USC and GS ship DISCOVERER for Working Group 15, data were collected at 17 stations in the Pacific and Atlantic oceans for the measurement of oceanic primary production by the simulated in-situ technique (Jitts, 1963) and at 15 stations for determining the relation between the rate of photosynthesis of natural populations of oceanic phytoplankton and the irradiance to which they were exposed in a constant light incubator. The methods used and the data obtained are reported here.

#### II. Methods

##### 1. Sampling and C<sup>14</sup> techniques

The depths from which samples were taken were determined from the curves of submarine penetration of solar irradiance as measured with a quantum meter, made with either the French or Danish meters between the hours of 1000 and 1100 sun time. Depths were selected to match the percentage transmissions of the filters used in the simulated in-situ incubator (see below and also Table 1 and Fig. 1).

Samples from each depth were taken with a twin 6-liter plastic, Niskin type sampler (Jitts, 1964) between 1100 and 1130 hours at each station. Subsamples from each depth were poured into 50 ml round-bottomed Pyrex bottles. One ml of 3 o/o NaCl solution containing a known amount of carbon<sup>14</sup> (CSIRO.C<sup>14</sup>.ml<sup>-1</sup>) in the form of NaHCO<sub>3</sub> was injected into each bottle. The subsamples were incubated as described below, then filtered through Millipore Type HA membrane filters (pore size 0.45 microns). The membrane filters were exposed to fumes of concentrated HCl for 10 minutes to remove inorganic C<sup>14</sup>, then dried overnight in vacuum over soda lime and silica gel in a desiccator. The activity retained on the membrane filters was counted

with an ultra-thin mica end-window Geiger counter (Berthold, counting efficiency = 30 o/o) for 10 minutes. All activities were corrected for background activity by subtracting 12 counts per minutes. Further details of techniques are given in Dyson, Jitts and Scott (1965).

## 2. Measurement of primary production by the simulated in-situ technique

Subsamples from each of six depths were incubated from noon to sunset in an incubator on deck using sunlight and increasing thicknesses of blue glass filters which matched the submarine irradiance at the six depths. This incubator is similar to the Type 2 incubator described in Jitts (1963) and uses identical filters. The differences are that it is mounted in gimbals, has circular compartments, blue glass filters, and the round-bottom 50 ml bottles are held with their stoppers pointing down. These changes minimize shading and ensure a more uniform irradiance for the samples.

The percent transmissions of the various thicknesses of blue glass filters were measured by placing them in turn over a Danish quantum meter in the incubator, close to noon on a clear day. The temperature in the incubator was maintained to within 1°C of the temperature of the seawater at the surface by pumping a continuous flow of seawater through the incubator. Duplicate subsamples from each of the six depths were incubated in the dark in a tank of flowing seawater.

The rate of primary production (in  $\text{mgC}\cdot\text{day}^{-1}\cdot\text{m}^{-3}$ ) was calculated as follows:

$$\text{Production} = \frac{\text{Net Activity}}{\text{Added Activity}} \times \frac{\text{Total CO}_2}{\text{Period of Incubation}}$$

where:

Net Activity = Difference in the activities of the duplicate subsamples incubated in the light and in the dark.

Added Activity = the zero thickness Geiger activity in  $\text{counts}\cdot\text{min}^{-1}$  of the  $\text{C}^{14}$  stock 30 solution, i.e.,  $13.78 \times 10^6$  (see Jitts and Scott, 1961).

Total  $\text{CO}_2$  =  $24500 \text{ mgC}\cdot\text{m}^{-3}$ , the amount of total inorganic  $\text{CO}_2$  in seawater, which is assumed to be constant.

Period of Incubation = 0.5, i.e., half a day, assuming a day to be from sunrise to sunset.

The rate of production under 1 m<sup>2</sup> of the water column (in gC.day<sup>-1</sup>.m<sup>-2</sup>) can be obtained by integrating all the results in the column as follows:

$$\text{Column Production} = \frac{1}{1000} (d_1 - d_0) \left(\frac{a+b}{2}\right) + (d_2 - d_1) \left(\frac{b+c}{2}\right)$$

where d<sub>0</sub>, d<sub>1</sub>, d<sub>2</sub> etc. are the depths sampled

a, b, c, etc. are the respective rates of production.

This integration should be extended to the depth of 1 o/o of surface irradiance where production can be assumed to equal zero.

### 3. The relation of photosynthesis to irradiance

This was measured by exposing samples to various levels of constant irradiance in an incubator. The incubator consisted of four separate tanks filled with water of which the temperature was controlled thermostatically to ± 0.5°C of the temperature of surface seawater at each station. All four tanks were illuminated by a single high pressure Xenon lamp (1000-watt, water-cooled, Wotan). Samples in 50 ml round-bottom bottles were put in light-proof containers with end-windows facing the Xenon lamp. By placing these containers closer to or further away from the lamp, different levels of irradiance were obtained. Further differences were obtained by using metal oxide (Balzer) filters in the windows of the containers. Blue glass filters similar to those used in the simulated in-situ incubator (see above) were used in some of the windows to obtain spectral distributions of irradiance comparable to those found at the depths sampled in the ocean.

Spectral irradiances to which samples were exposed in the incubator were determined with an ISCO Spectroradiometer (Model SR1) with a bandwidth of about 15 nm, by placing the collector of the remote fibre optics probe in the container in place of the 50 ml bottle. The Spectroradiometer was calibrated against a standard lamp and the results calculated as quanta.cm<sup>-2</sup>.sec<sup>-1</sup>.nm<sup>-1</sup>. The irradiance (in quanta.cm<sup>-2</sup>.sec<sup>-1</sup>) was obtained by integrating the spectral curve between 350 and 700 nm. An arbitrary correction for the effect of immersion of the plastic cosine collector was made by multiplying the integrated result by 1.25.

Six subsamples from each of the upper three of the samples taken for measuring primary production (see above) were incubated in three of the tanks in the incubator. The six from the surface were incubated



at six levels of irradiance between 20 and 850 quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>. The spectral distribution of irradiance was as given by the curve labelled "Surface" in Figure 2. The six from the second depth, to which about 36 o/o of surface irradiance penetrated, were exposed to levels between 7 and 300 with spectra as given by the curve labelled "36 o/o" in Figure 2. Those from the third depth, to which about 17 o/o of surface irradiance penetrated, were exposed to levels between 4 and 150 with spectra as given by the curve labelled "17 o/o" in Figure 2.

All subsamples were exposed in the incubator for a period of 4 hours from 1230 to 1630. A seventh subsample from each depth was incubated in the dark. The rate of photosynthesis of each subsample was calculated in mgC.hr<sup>-1</sup>.m<sup>-3</sup> as follows:

$$\text{Photosynthesis} = \frac{\text{Net Activity}}{\text{Added Activity}} \times \frac{\text{Total CO}_2}{\text{Period of Incubation}}$$

where:

Net Activity = Difference in the activities of the subsample incubated in the light and that in the dark.

Added Activity = 13.78 x 10<sup>6</sup> counts per minute (see Section 2).

Total CO<sub>2</sub> = 24500 mgC.m<sup>-3</sup> (see Section 2).

Period of Incubation = 4 hours.

#### 4. Results

These are given for each station sampled in the following 17 tables. Times throughout are sun time.

At Stations 2, 3, 6, 7, 8, 9, and 10 depths from which samples were taken did not match the transmission of the filters in the simulated in-situ incubator, due to an error in the determination of these transmissions. Therefore at these stations simulated in-situ production is reported only for the surface.

For simulated in-situ production, the depths are those from which samples were taken, except (where applicable) the last which is that depth to which 1 o/o surface irradiance penetrated. Values of "o/o Surface Irradiance" are given for each depth, and match the transmissions of the filters used in the simulated in-situ incubator. The count rates in counts per minute (CPM) are for the duplicate subsamples incubated in the light and in the dark.

Photosynthesis vs Irradiance was not measured at Stations 2 and 3. Photosynthesis vs Irradiance was measured at the surface and second depths only at Stations 6 and 19. Results from the surface, second, and third depths are given successively in the three columns. The spectral distributions of irradiance for these three depths are given respectively as curves marked "Surface," "36 o/o" and "17 o/o" in Figure 1. Photosynthesis is reported as the Net Activity (CPM), except for "Dark" which is the activity of the replicate subsample incubated in the dark.

## 5. References

- Dyson, N., Jitts, H. R., and Scott, B. D. (1965). Techniques for measuring oceanic primary production using radioactive carbon. CSIRO Aust. Div. Fish. Oceanogr. Tech. Pap. No. 18.
- Jitts, H. R. (1963). The simulated in-situ measurement of oceanic primary production. Aust. of Mar. Freshw. Res. 14: 139-47.
- Jitts, H. R. (1964). A twin six-liter plastic sampler. Limnol. Oceanogr. 9: 452.
- Jitts, H. R., and Scott, B. D. (1961). The determination of zero-thickness activity in Geiger counting of <sup>14</sup>C solutions used in marine productivity studies. Limnol. Oceanogr. 6: 116-23.

Table 1

S. C. O. R. WG-15

DISCOVERER EXPEDITION

Spectral Transmittance of 0.100" of Belgian Signal Glass  
CAREY SPECTROPHOTOMETER

Wavelength (nm)	% T	Wavelength (nm)	% T
320	0.0	760	0.0
340	0.02	↓	↑
360	1.30		
380	6.60	980	0.0
400	14.7	1000	0.01
420	22.8	1020	0.02
440	30.3	1040	0.04
460	36.1	1060	0.10
Max. 477	38.0		
480	37.9	1080	0.11
500	34.7	1100	0.23
520	26.4	1120	0.34
540	16.4	1140	0.47
560	8.80	1160	0.64
580	3.28	1180	0.85
600	0.98	1200	1.10
620	0.28	1220	1.43
640	0.06	1240	1.80
660	0.01	1260	2.22
680	0.0	1280	2.73
700	^	1300	3.33
720	:	1320	4.01
740	:	1340	4.77
760	∇	1360	5.60

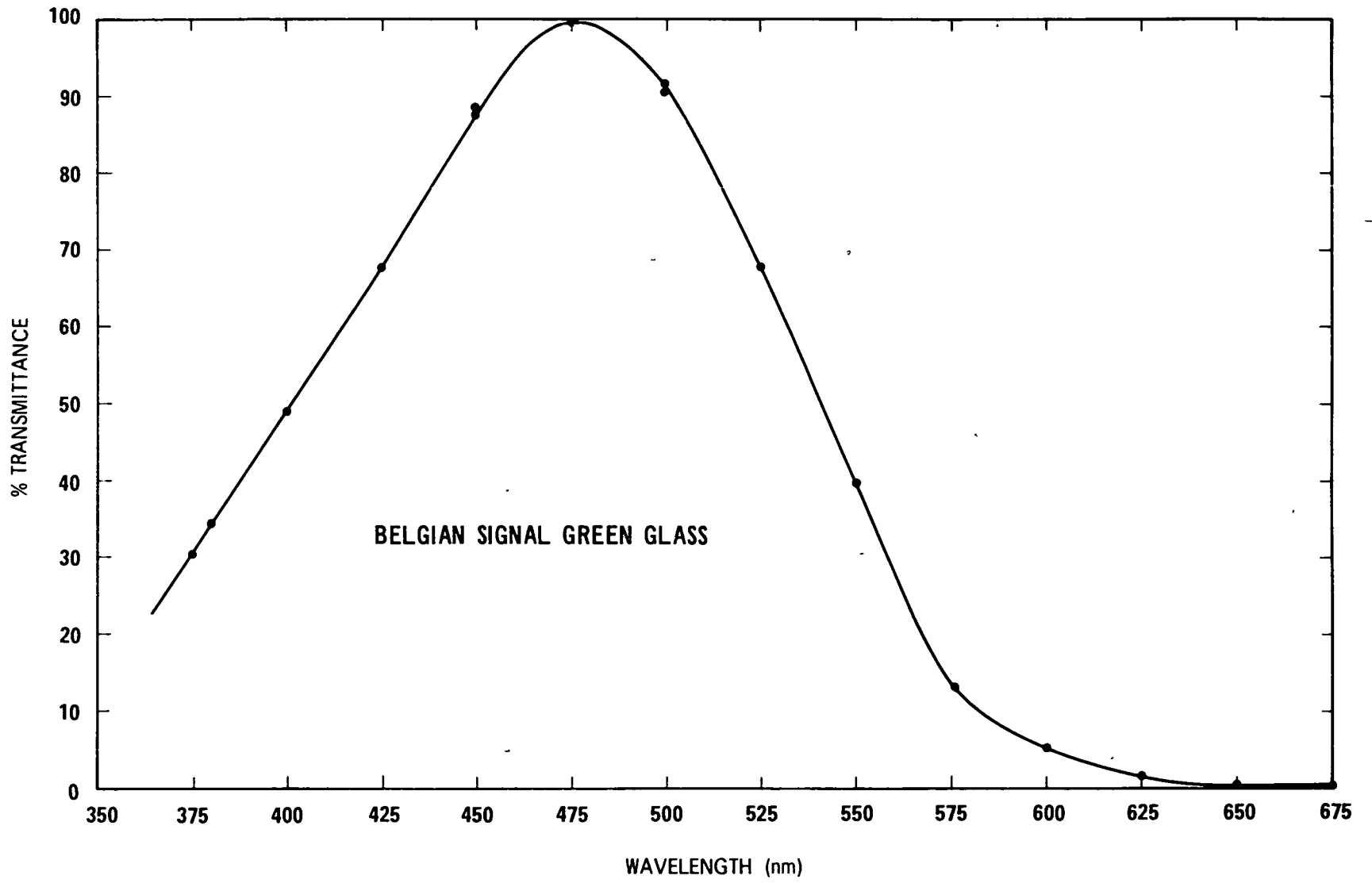


Fig. 1

SPECTRAL IRRADIANCE IN XENON INCUBATOR

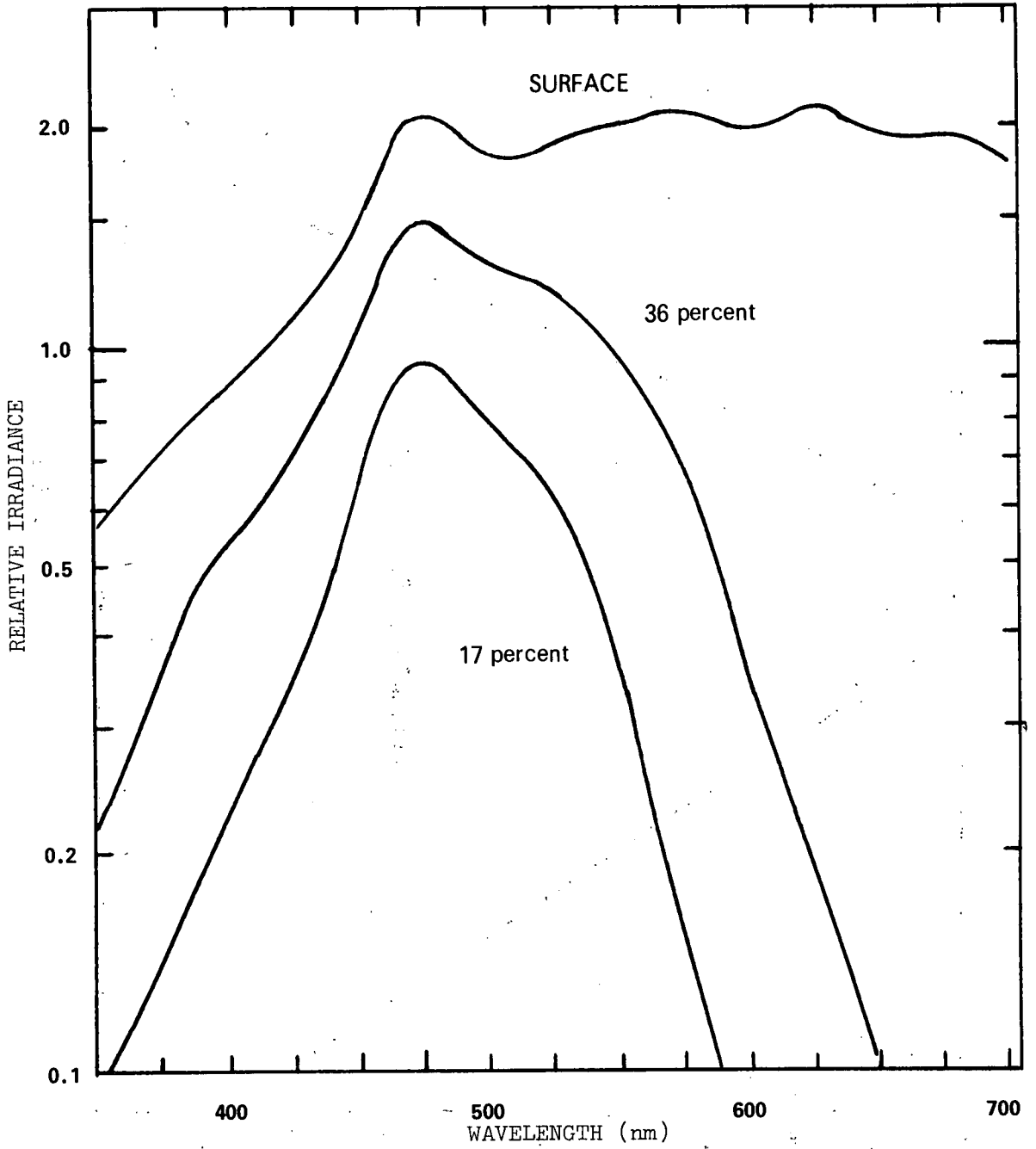


Fig. 2

Table 2

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

Simulated In-Situ Production

Station 02  
Sampling time: 1100  
Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	108	4440	15.79

Station 03  
Sampling time: 1100  
Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	32	213	0.76

Station 06  
Sampling time: 1130  
Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	125	4286	15.27

Table 2

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

Simulated In-Situ Production

Station 07

Sampling time: 1130

Incubation period: 1200 to sunset

Depth (m)	o/o Irradiance	Surface Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	77	1657	5.90

Station 08

Sampling time: 1130

Incubation period: 1200 to sunset

Depth (m)	o/o Irradiance	Surface Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	57	2556	9.11

Station 09

Sampling time: 1100

Incubation period: 1200 to sunset

Depth (m)	o/o Irradiance	Surface Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	49	4136	14.73

Table 2

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Simulated In-Situ Production

## Station 10

Sampling time: 1100

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> .m <sup>-3</sup> )
0	100	24	1979	7.05

## Station 11

Sampling time: 1100

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> .m <sup>-3</sup> )
0	100	34	1599	5.70
10	36	94	1850	6.59
20	17	44	1082	3.85
35	11	35	780	2.78
46	6	122	457	1.63
60	1.5	45	126	0.45

## Station 12

Sampling time: 1100

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> .m <sup>-3</sup> )
0	100	36	1241	4.42
9	36	83	1446	5.15
21	17	51	1086	3.87
36	11	19	629	2.24
45	6	76	585	2.08
57	1.5	27	190	0.68



Table 2

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MAY 1970

Simulated In-Situ Production

Station 13

Sampling time: 1100

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	23	893	3.18
8	36	54	2709	9.65
17	17	53	2237	7.97
27	11	42	1153	4.11
34	6	73	378	1.35
44	1.5	53	159	0.57
49	1.0			0.00

Station 14

Sampling time: 1100

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	43	3409	12.41
11	36	50	3391	12.08
15	17	44	2481	8.84
28	6.5	57	1478	5.27
35	3.4	71	922	3.28
43	1.5	41	380	1.35
47	1.0			0.00

Station 15

Sampling time: 1115

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	145	2533	9.02
11	36	102	2674	9.53
22	17	83	868	3.09
34	6.5	115	1754	6.25
44	3.4	715	1228	4.37
53	1.5	286	342	1.22
59	1.0			0.00

Table 2

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MAY 1970

Simulated In-Situ Production

## Station 16

Sampling time: 1130

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	159	5600	19.95
8	36	88	5305	18.90
14	17	51	7205	25.67
20	7	72	2701	9.62
28	3	51	700	2.49
35	1.5	87	446	1.59
40	1.0			0.00

## Station 17

Sampling time: 1100

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	58	356	1.27
11	36	62	537	1.91
29	17	69	361	1.29
52	7	71	263	0.94
71	3	89	401	1.43
86	1.5	87	135	0.48

## Station 18

Sampling time: 1130

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	54	247	0.88
12	36	79	385	1.37
28	17	116	282	1.00
49	7	108	181	0.64
76	3	54	101	0.36
91	1.5	49	326	1.16
98	1.0			0.00

Table 2

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

Simulated In-Situ Production

Station 19

Sampling time: 1115

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	72	361	1.29
9	36	84	331	1.18
25	17	85	287	1.02
46	7	66	166	0.59
68	3	67	132	0.47
85	1.5	78	175	0.62
95	1.0			0.00

Station 21

Sampling time: 1115

Incubation period: 1200 to sunset

Depth (m)	o/o Surface Irradiance	Dark Count	Net Count	Production (mgC.day <sup>-1</sup> m <sup>-3</sup> )
0	100	49	231	0.82
11	36	29	147	0.52
33	17	32	113	0.40
65	7	40	81	0.29
87	3	80	118	0.42
105	1.5	67	83	0.30
116	1.0			

Table 3

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

Photosynthesis vs. Xenon Irradiance

Station 06  
Sampling time: 1130  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 4 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
830	2437	1.08	324	3137	1.39
409	1510	0.67	155	2220	0.99
201	1920	0.85	79	918	0.41
97	1129	0.50	41	690	0.31
49	537	0.24	21	245	0.11
23	42	0.02	8	19	0.01
Dark	125		Dark	95	

\* Irradiance units: quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>.

Table 3

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

## Photosynthesis vs. Xenon Irradiance

Station 07

Sampling time: 1130

Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 4 m			Sample Depth 12 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
830	3714	1.65	324	3179	1.41	144	2391	1.06
409	4355	1.94	155	3089	1.37	77	1702	0.76
201	2825	1.26	79	1571	0.70	37	987	0.44
97	2001	0.89	41	678	0.30	20	396	0.18
49	703	0.31	21	367	0.16	9	226	0.10
23	20	0.01	8	25	0.01	4	25	0.01
Dark	77		Dark	95		Dark	82	

Station 08

Sampling time: 1130

Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 4 m			Sample Depth 10 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
830	2207	0.98	324	2124	0.94	144	1995	0.89
409	1767	0.79	155	2009	0.89	77	1653	0.73
201	1432	0.64	79	1700	0.76	37	1346	0.60
97	1041	0.46	41	1163	0.52	20	617	0.27
49	669	0.30	21	689	0.31	9	246	0.11
23	372	0.17	8	443	0.20	4	7	0.00
Dark	56		Dark	54		Dark	83	

\* Irradiance units: quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>

Table 3

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

## Photosynthesis vs. Xenon Irradiance

Station 09  
Sampling time: 1100  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 4 m			Sample Depth 10 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> .m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> .m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> .m <sup>-3</sup>
741	4075	1.81	320	3802	1.69	153	2807	1.25
403	4003	1.79	153	2970	1.32	81	2385	1.06
191	2719	1.21	77	1951	0.87	40	1247	0.55
91	1915	0.85	41	1061	0.47	21	672	0.30
47	903	0.40	21	404	0.18	9	274	0.12
32	198	0.09	7	63	0.03	5	47	0.02
Dark	48		Dark	30		Dark	46	

Station 10  
Sampling time: 1100  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 5 m			Sample Depth 11 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> .m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> .m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> .m <sup>-3</sup>
741	1117	0.50	320	1353	0.64	153	1241	0.55
403	1386	0.62	153	1339	0.60	81	1059	0.47
191	1318	0.59	77	1242	0.55	40	462	0.21
91	971	0.43	41	69	0.03	21	220	0.10
47	132	0.06	21	1003	0.45	9	131	0.06
32	242	0.11	7	233	0.10	5	0	0.00
Dark	24		Dark	40		Dark	50	

\* Irradiance units: quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>

Table 3

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

## Photosynthesis vs. Xenon Irradiance

Station 11  
Sampling time: 1100  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 10 m			Sample Depth 20 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
741	1236	0.55	320	1550	0.69	153	1453	0.65
403	1527	0.68	153	1490	0.66	81	1312	0.58
191	1235	0.55	77	910	0.40	40	1023	0.45
91	913	0.41	41	421	0.19	21	268	0.12
47	291	0.13	21	195	0.09	9	141	0.06
32	156	0.07	7	13	0.01	5	11	0.00
Dark	34		Dark	94		Dark	44	

Station 12  
Sampling time: 1100  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 9 m			Sample Depth 21 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
732	943	0.42	261	1463	0.65	153	1262	0.56
429	1283	0.57	156	1411	0.63	82	1163	0.52
212	1117	0.50	89	940	0.42	40	623	0.28
95	831	0.37	41	501	0.22	21	295	0.13
51	388	0.17	20	128	0.06	9	137	0.06
32	148	0.07	8	0	0.00	5	0	0.00
Dark	36		Dark	83		Dark	52	

\* Irradiance units: quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>

Table 3

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

## Photosynthesis vs. Xenon Irradiance

Station 13  
Sampling time: 1100  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth .8 m			Sample Depth 17 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
732	1336	0.59	261	1883	0.84	153	2180	0.97
429	1576	0.70	156	2051	0.91	82	2104	0.94
212	1427	0.63	89	1378	0.61	80	1851	0.82
95	1020	0.45	41	720	0.32	40	1237	0.55
51	535	0.24	20	204	0.09	9	373	0.17
32	235	0.10	8	27	0.01	0	0	0.00
Dark	22		Dark	53		Dark	53	

Station 14  
Sampling time: 1100  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 11 m			Sample Depth 15 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
732	1627	0.72	261	2425	1.08	153	2147	0.95
429	2272	1.01	156	2301	1.02	82	1562	0.69
212	430	0.19	89	1543	0.69	40	511	0.23
95	920	0.41	31	1006	0.45	21	536	0.24
51	506	0.22	20	423	0.19	9	276	0.12
32	191	0.08	8	66	0.03	5	53	0.02
Dark	42		Dark	49		Dark	43	

\* Irradiance units: quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>



Table 3  
S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

Photosynthesis vs. Xenon Irradiance

Station 15  
Sampling time: 1115  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 11 m			Sample Depth 22 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
732	1902	0.85	261	2832	1.26	153	2571	1.14
429	2122	0.94	156	1950	0.87	82	1813	0.81
212	1749	0.78	89	1205	0.54	40	1172	0.52
95	1250	0.56	31	706	0.31	21	583	0.26
51	550	0.24	20	259	0.12	9	180	0.08
32	236	0.10	8	53	0.02	5	44	0.02
Dark	145		Dark	102		Dark	84	

Station 16  
Sampling time: 1130  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 8 m			Sample Depth 14 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
732	4528	2.01	261	5190	2.31	169	5738	2.55
429	4585	2.04	156	4138	1.84	91	5385	2.39
212	3367	1.50	89	2076	0.92	44	3600	1.60
95	2038	0.91	31	1270	0.56	24	1997	0.89
51	820	0.36	20	441	0.20	11	66	0.03
32	0	0.00	8	64	0.03	6	1177	0.52
Dark	159		Dark	88		Dark	51	

\* Irradiance units: quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>

Table 3  
S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

Photosynthesis vs. Xenon Irradiance

Station 17  
Sampling time: 1100  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 11 m			Sample Depth 29 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
774	301	0.13	304	563	0.25	156	567	0.25
395	336	0.15	139	314	0.14	76	241	0.11
193	229	0.10	81	93	0.04	39	69	0.03
92	111	0.05	39	57	0.03	21	14	0.01
48	19	0.01	17	21	0.01	12	4	0.00
25	0	0.00	7	11	0.00	4	0	0.00
Dark	70		Dark	74		Dark	81	

Station 18  
Sampling time: 1130  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 12 m			Sample Depth 28 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
774	198	0.09	304	325	0.14	156	270	0.12
395	218	0.10	139	202	0.09	76	152	0.07
193	110	0.05	81	87	0.04	39	25	0.01
92	41	0.02	39	0	0.00	21	0	0.00
48	0	0.00	17	0	0.00	12	0	0.00
25	33	0.01	7	0	0.00	4	0	0.00
Dark	66		Dark	91		Dark	128	

\* Irradiance units: quanta.cm<sup>-2</sup>.sec<sup>-1</sup> x 10<sup>14</sup>

Table 3

S. C. O. R.  
DISCOVERER EXPEDITION  
MAY 1970

## Photosynthesis vs. Xenon Irradiance

Station 19  
Sampling time: 1115  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 9 m			Sample Depth m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
774	218	0.10	304	270	0.12			
395	193	0.09	299	153	0.07			
193	114	0.05	139	126	0.06			
92	19	0.01	81	41	0.02			
48	0	0.00	17	0	0.00			
25	0	0.00	1	0	0.00			
Dark	84		Dark	96				

Station 21  
Sampling time: 1115  
Incubation period: 4 hours

Sample Depth 0 m			Sample Depth 11 m			Sample Depth 33 m		
Irradiance	Photosynthesis		Irradiance	Photosynthesis		Irradiance	Photosynthesis	
(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>	(*)	Net Count	mgC.hr <sup>-1</sup> m <sup>-3</sup>
780	124	0.06	291	126	0.06	156	237	0.11
399	139	0.06	133	117	0.05	76	165	0.07
185	0	0.00	77	59	0.03	39	85	0.04
108	0	0.00	37	7	0.00	21	23	0.01
48	8	0.00	16	0	0.00	12	11	0.00
28	56	0.02	7	0	0.00	4	1	0.00
Dark	61		Dark	41		Dark	44	

\* Irradiance units: quanta.cm<sup>-2</sup>sec<sup>-1</sup> x 10<sup>14</sup>

Table 4

## SCOR DISCOVERER EXPEDITION

RELATIVE TOTAL AREAS UNDER QUANTA RECORDINGS  
FROM DECK INCUBATOR

Obtained by Means of Compensating Polar Planimeter

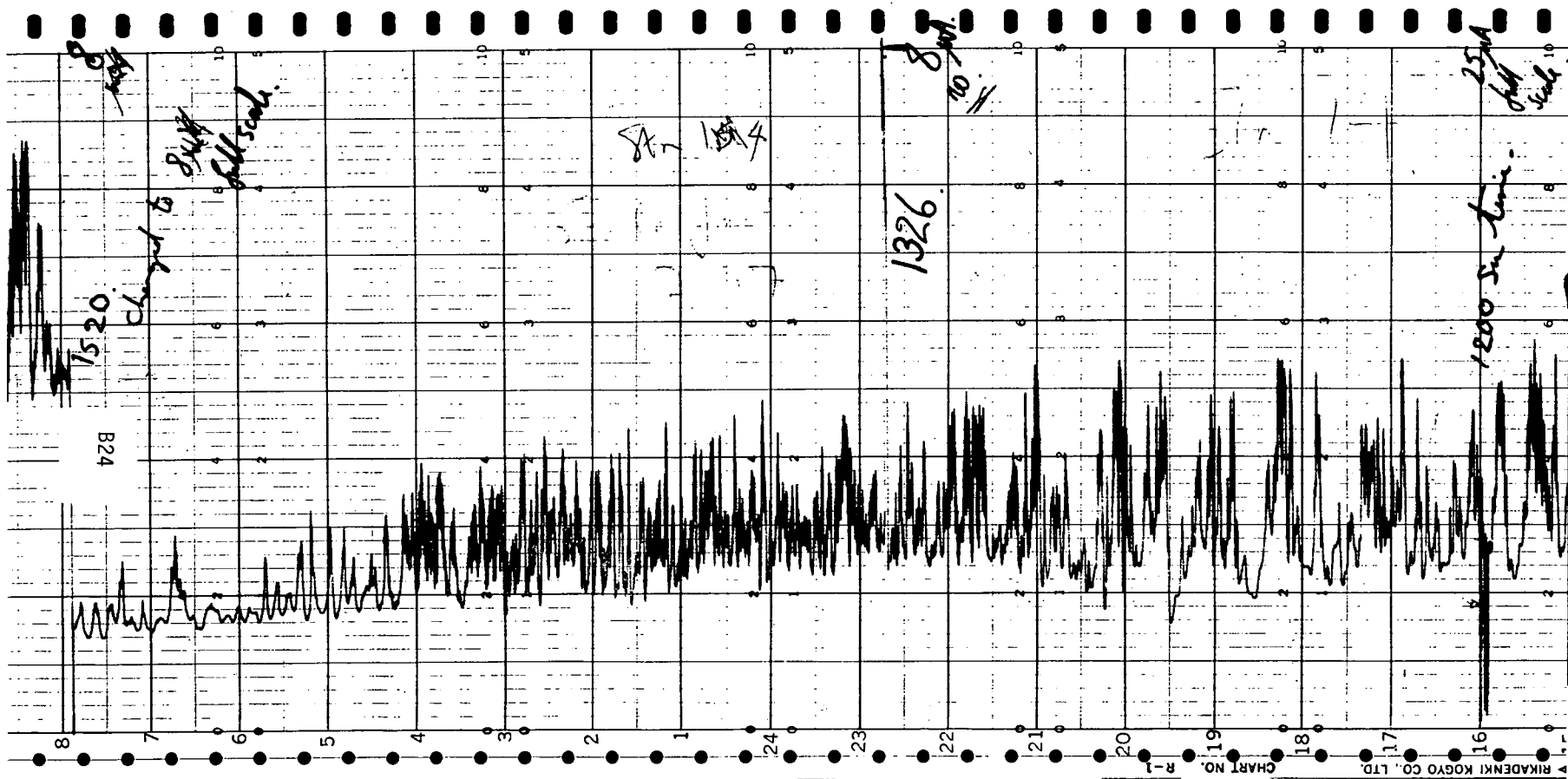
(J. E. Tyler: Editor)

Station #	Time Interval	Average Chart Speed cm/hr	Scale Factor	Average Area	Total Area
14	1200-1520	9.50	25 $\mu$ a	9.62	12.72
	1520-1650	9.50	25 $\mu$ a	2.16	
	1650-1745	9.50	25 $\mu$ a	.86	
	1745-1840	9.50	25 $\mu$ a	0.08	
15	1200-1445	9.50	25 $\mu$ a	9.23	11.00
	1445-1600	9.50	25 $\mu$ a	1.46	
	1600-1815	9.50	25 $\mu$ a	0.31	
16	1210-1830	4.75	25 $\mu$ a	13.84	13.84
17	1200-1800	4.75	25 $\mu$ a	16.08	16.08
18	1205-1830	4.75	25 $\mu$ a	14.04	14.04
19	1200-1830	4.75	25 $\mu$ a	14.89	14.89
21	1210-1840	4.75	25 $\mu$ a	15.77	15.77

## NOTES:

The time intervals noted on the recordings have been used to determine the average chart speed of 9.50 cm/hr for stations 14 and 15 and 4.75 cm/hr for the remaining stations.

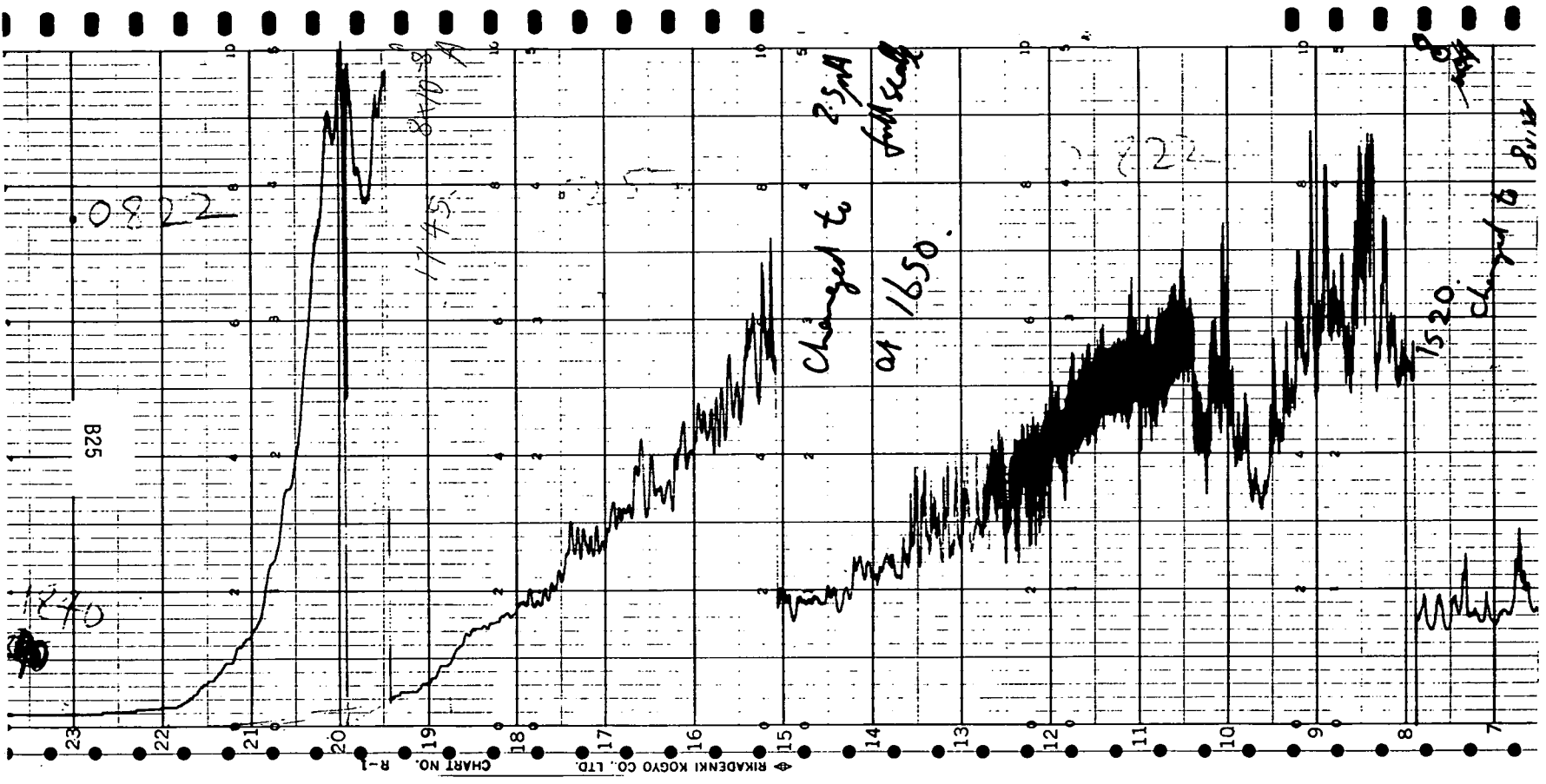
The integrated areas have been normalized to a common chart speed and a common scale factor.



Station 14 May 18, 1970

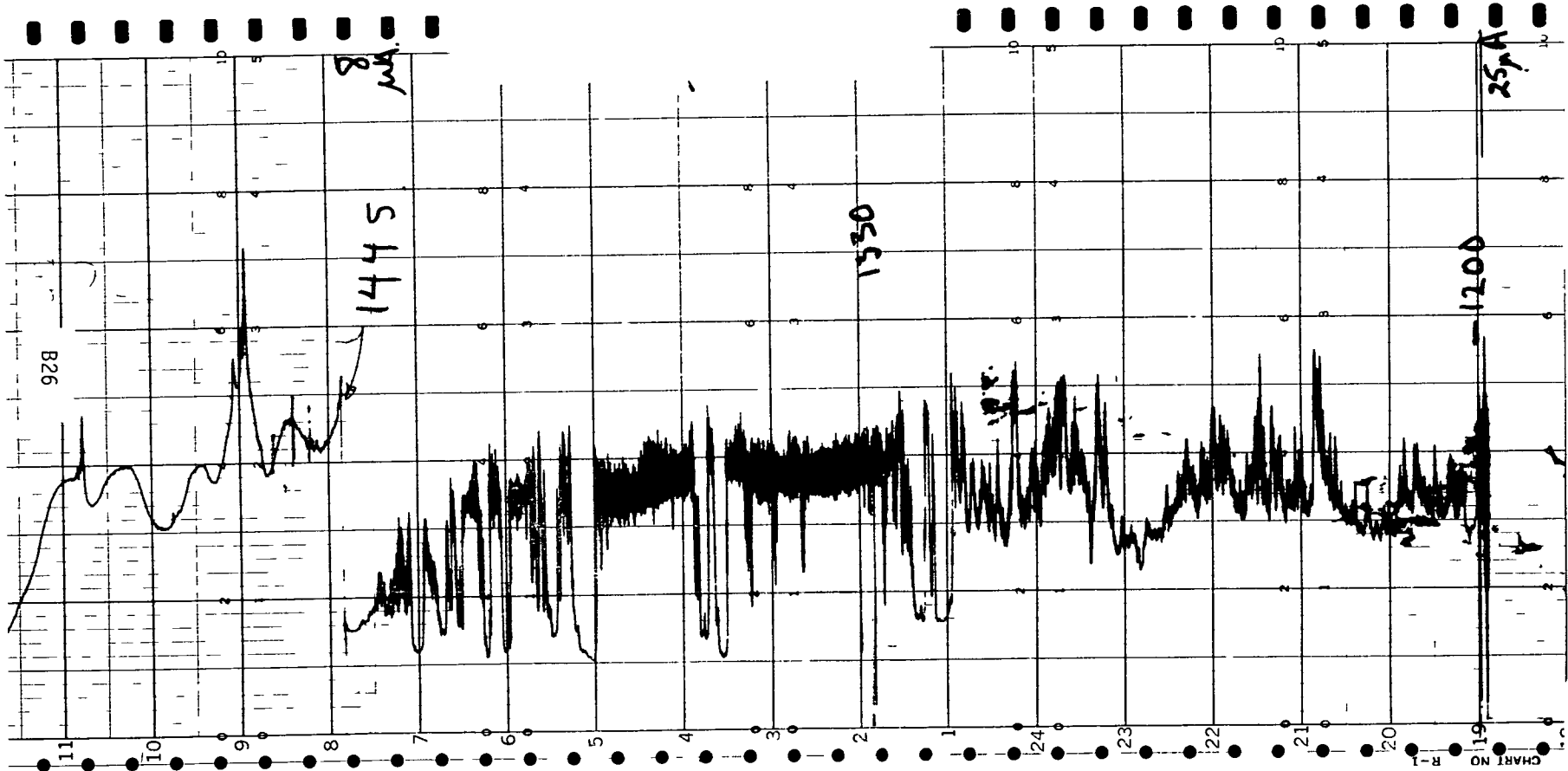
Time	Scale Factor	Full Scale
1200-1520	2.57	25µA
1520-1650	0.822	8µA
1650-1745	.257	2.5µA
1745-1840	.0822	8x10 <sup>-8</sup> A

Quanta meter under 28% transmitting blue filter



Station 14

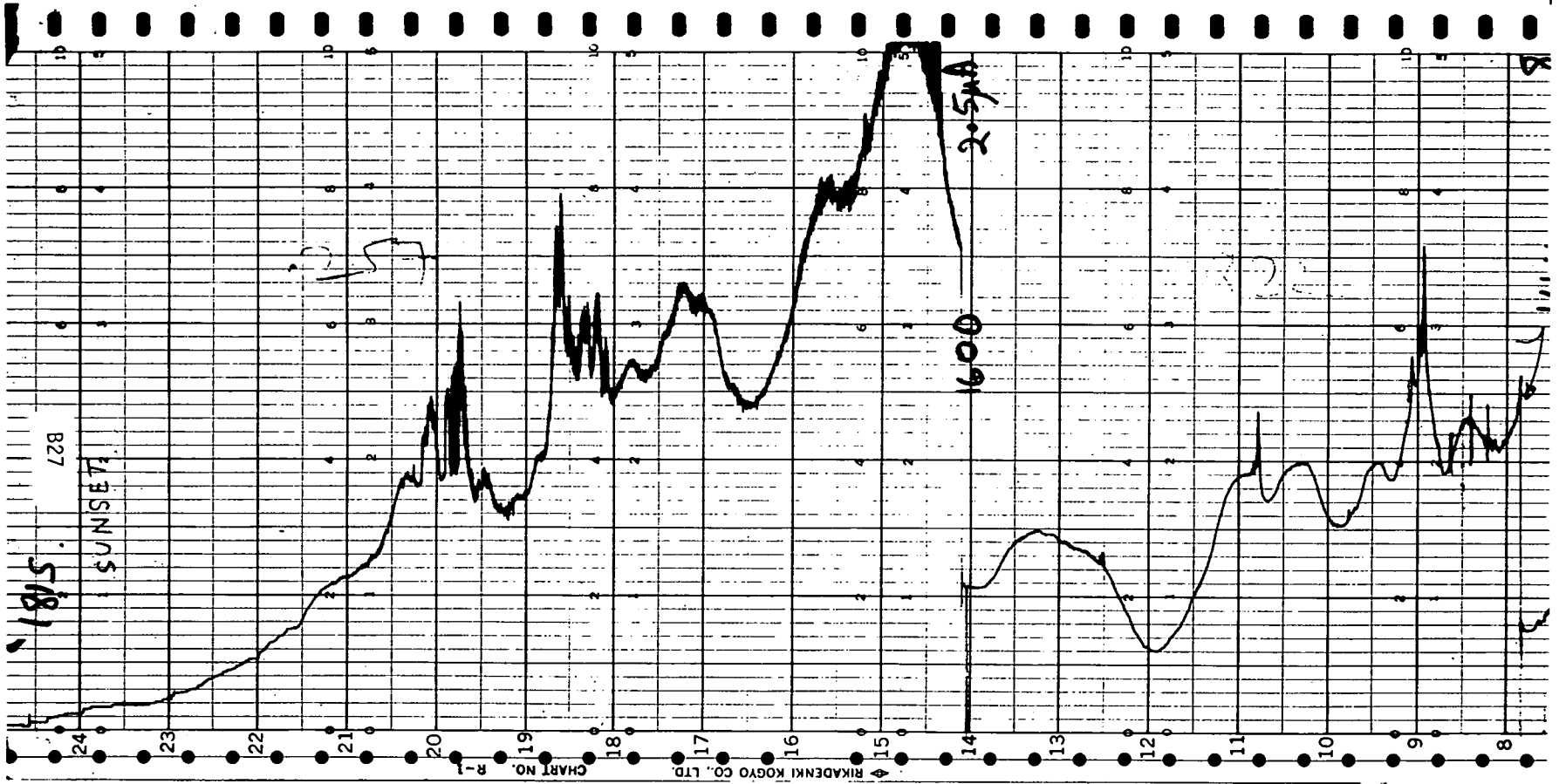
PART 2



Station 15      May 20, 1970

Time	Scale Factor	Full Scale
1200-1445	2.57	25 $\mu$ A
1445-1600	0.822	8 $\mu$ A
1600-1815	.257	2.5 $\mu$ A

Quanta meter under 28% transmitting  
blue filter

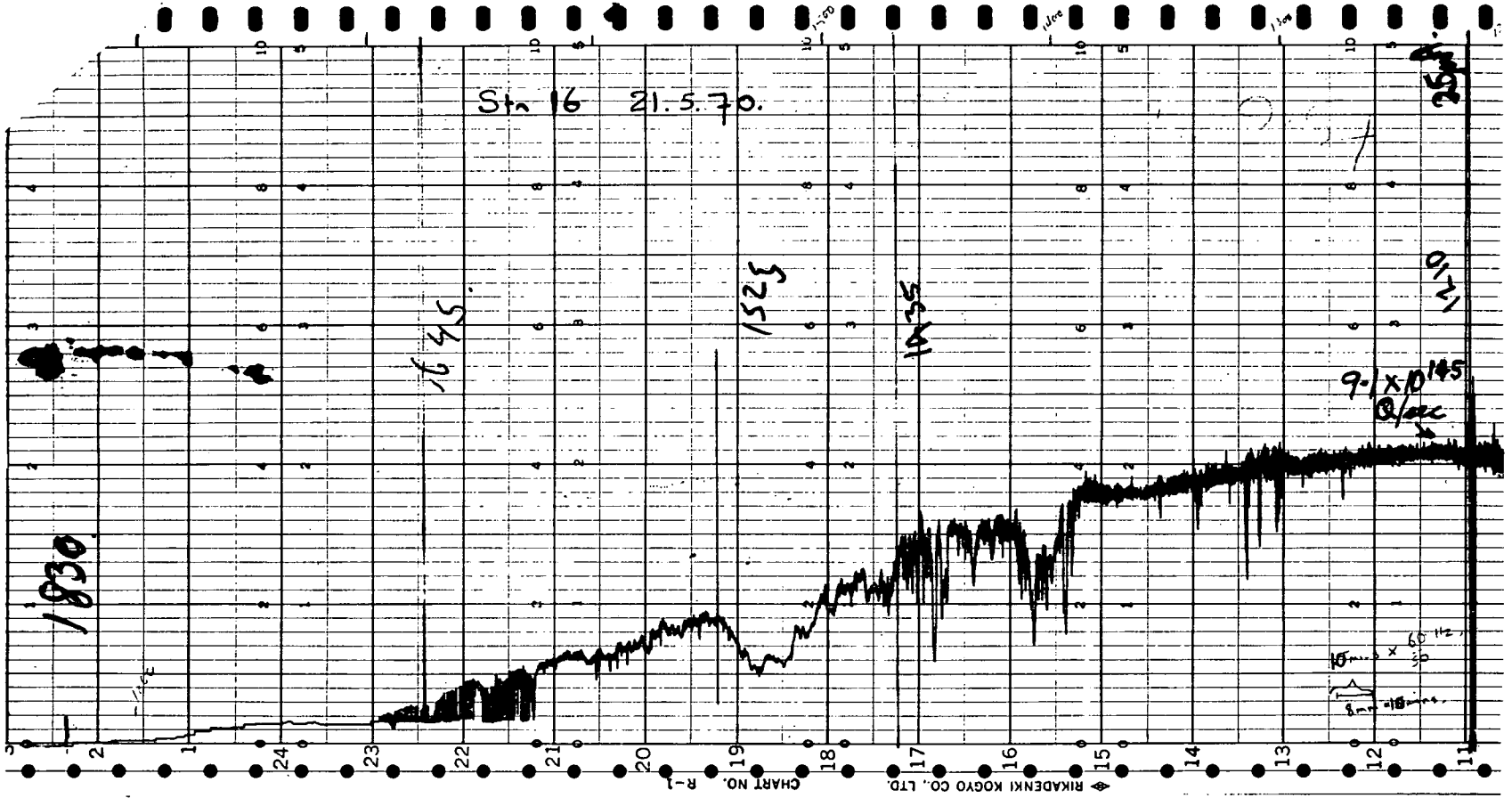


Station 15

PART 2



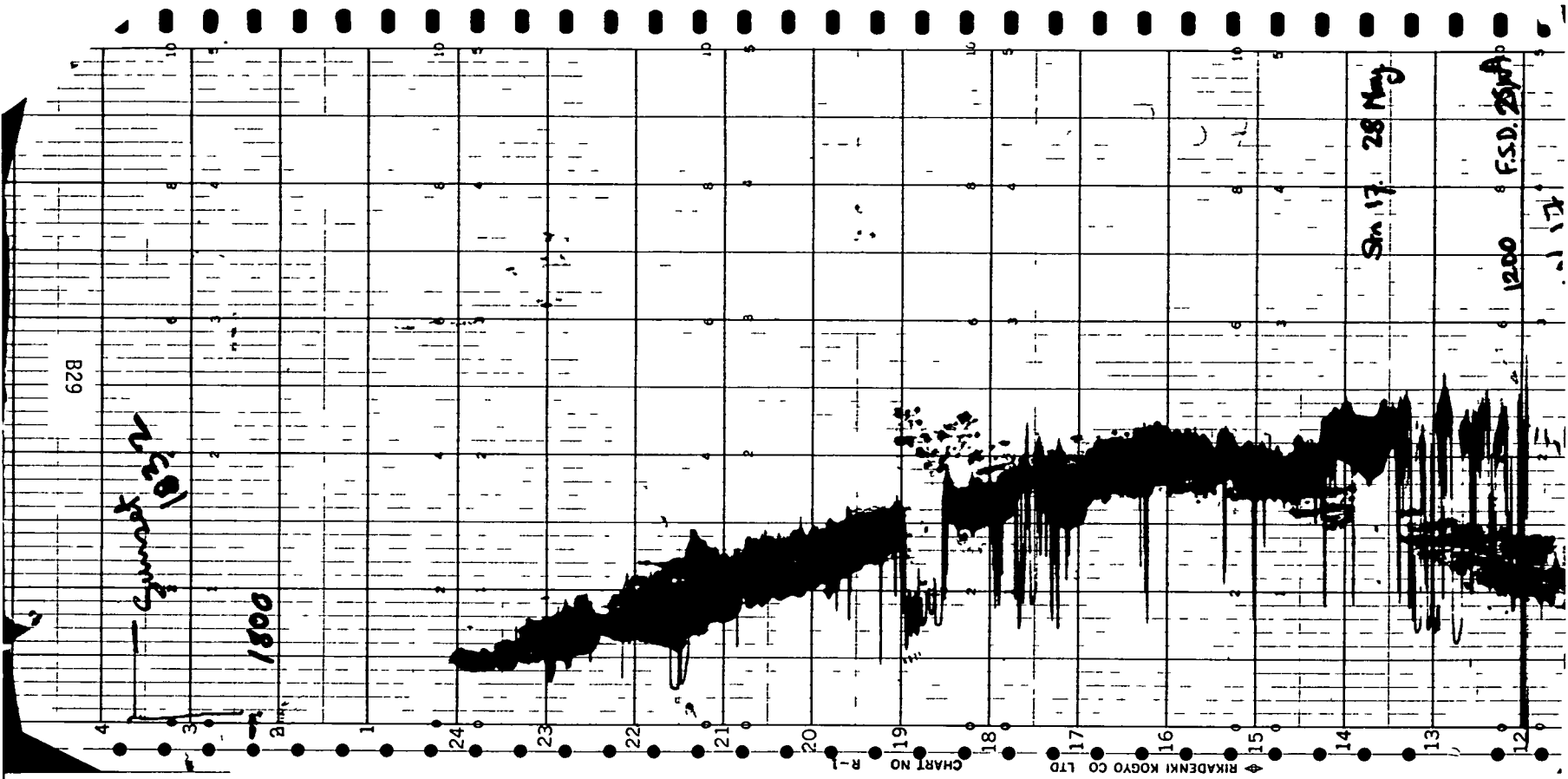
B28



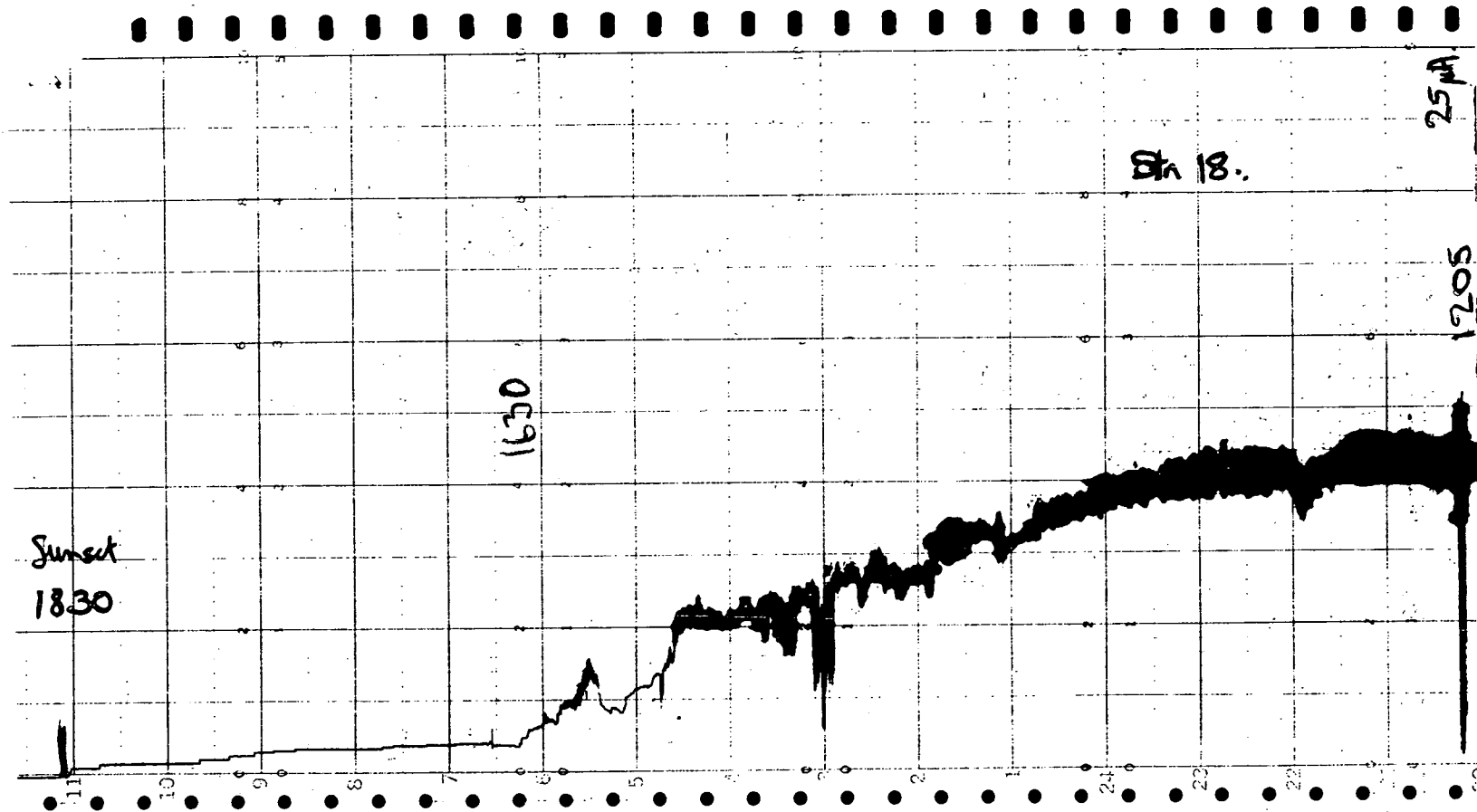
Station 16 May 21, 1970

Scale Factor 2.57  
25µA full scale

Quanta meter under 28% transmitting  
blue filter



B30

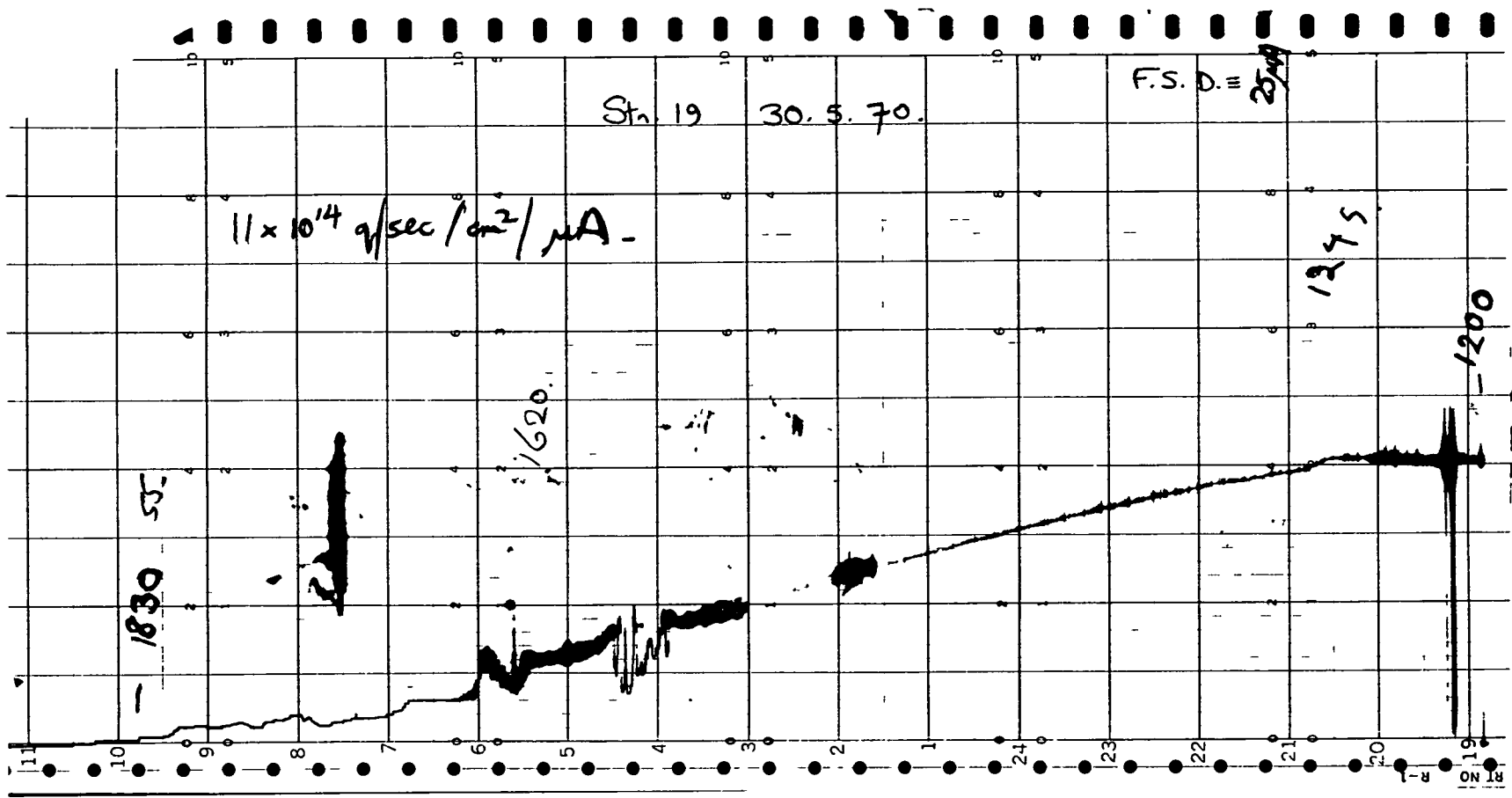


Station 18 May 29, 1970.

Scale Factor 2.57  
25  $\mu$ A full scale

Quanta meter under 28% transmitting  
blue filter

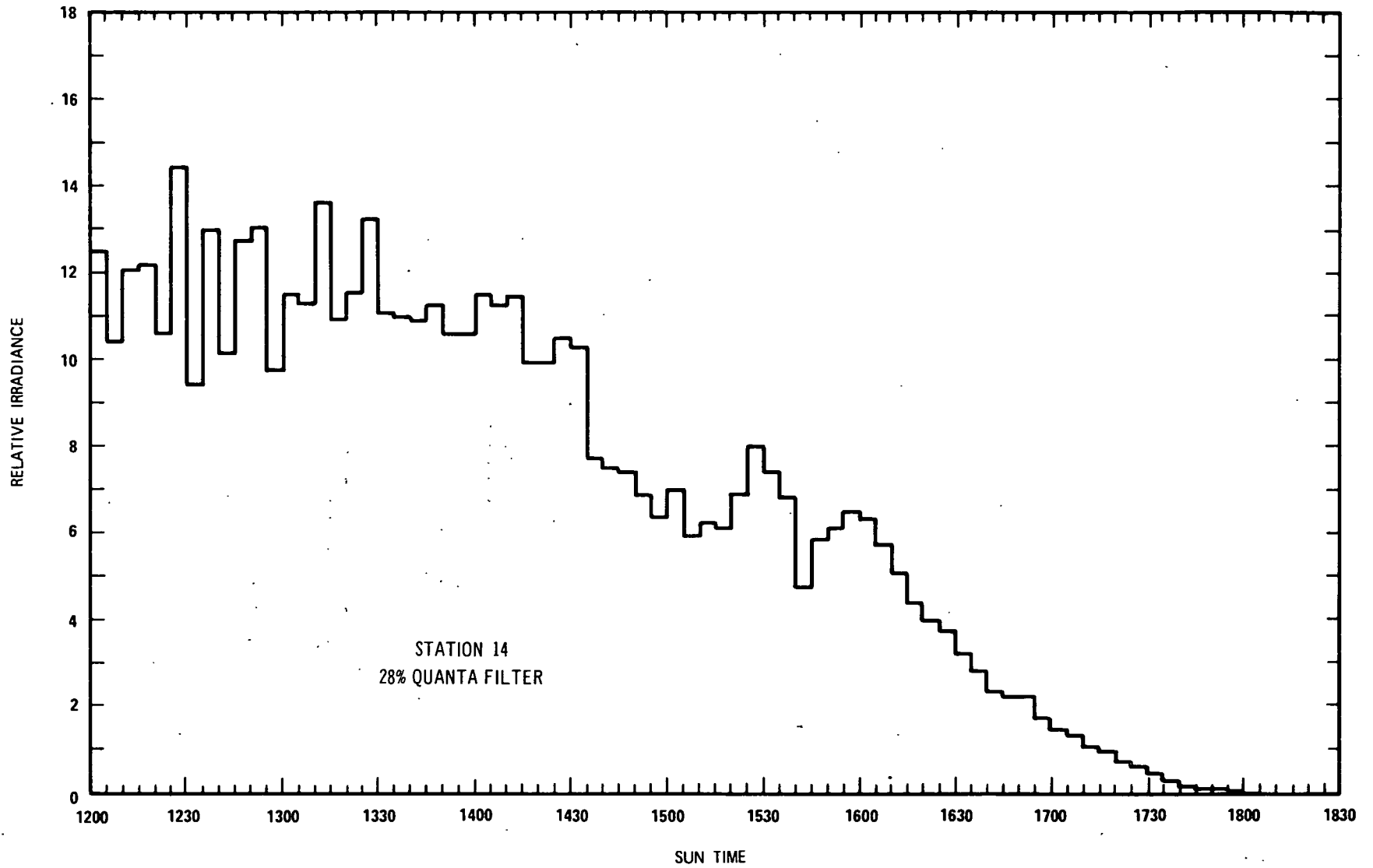
B31



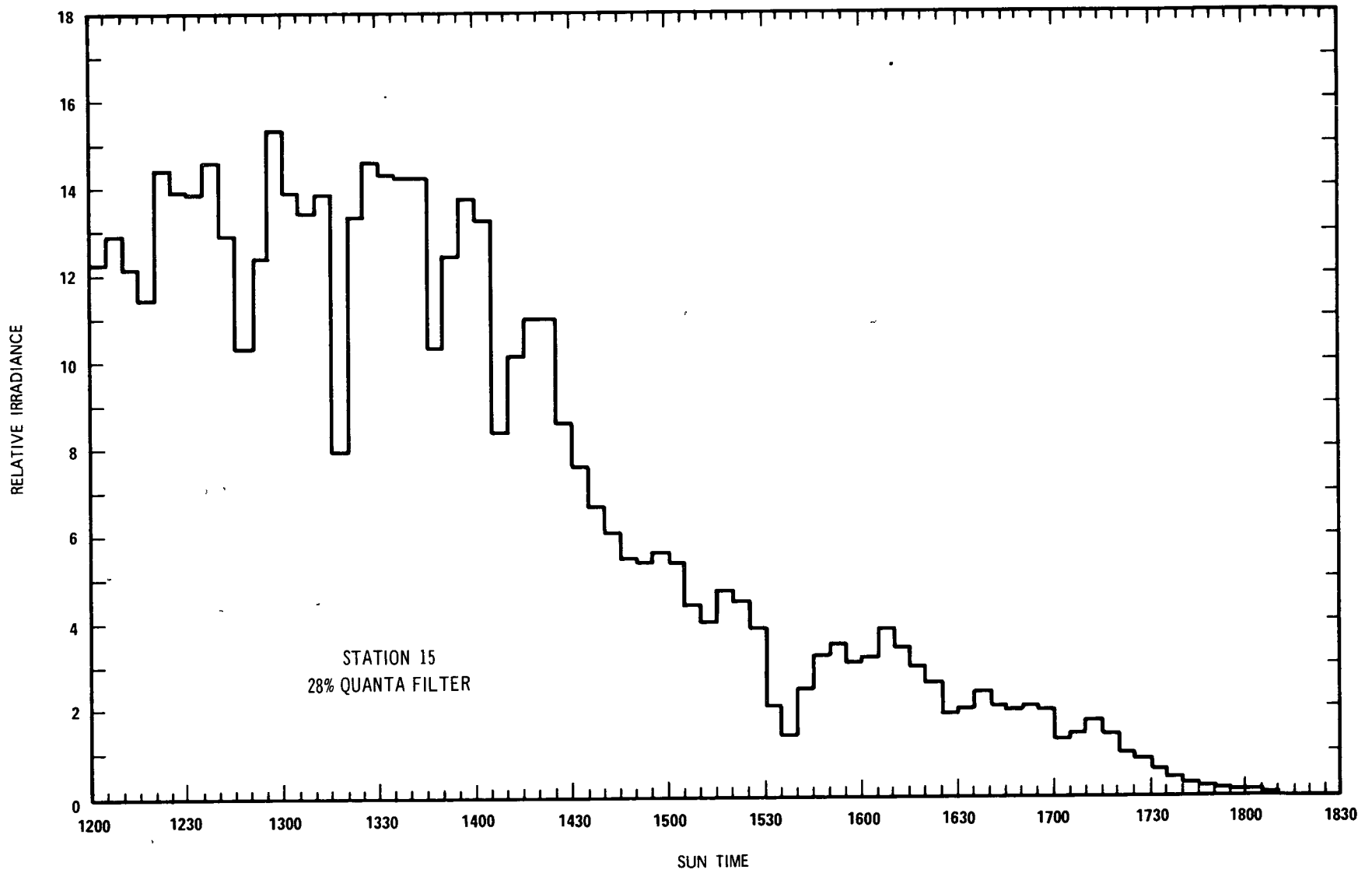
Station 19 May 30, 1970  
 Scale Factor 2.57  
 25 $\mu$ A full scale  
 Quanta meter under 28% transmitting  
 blue filter



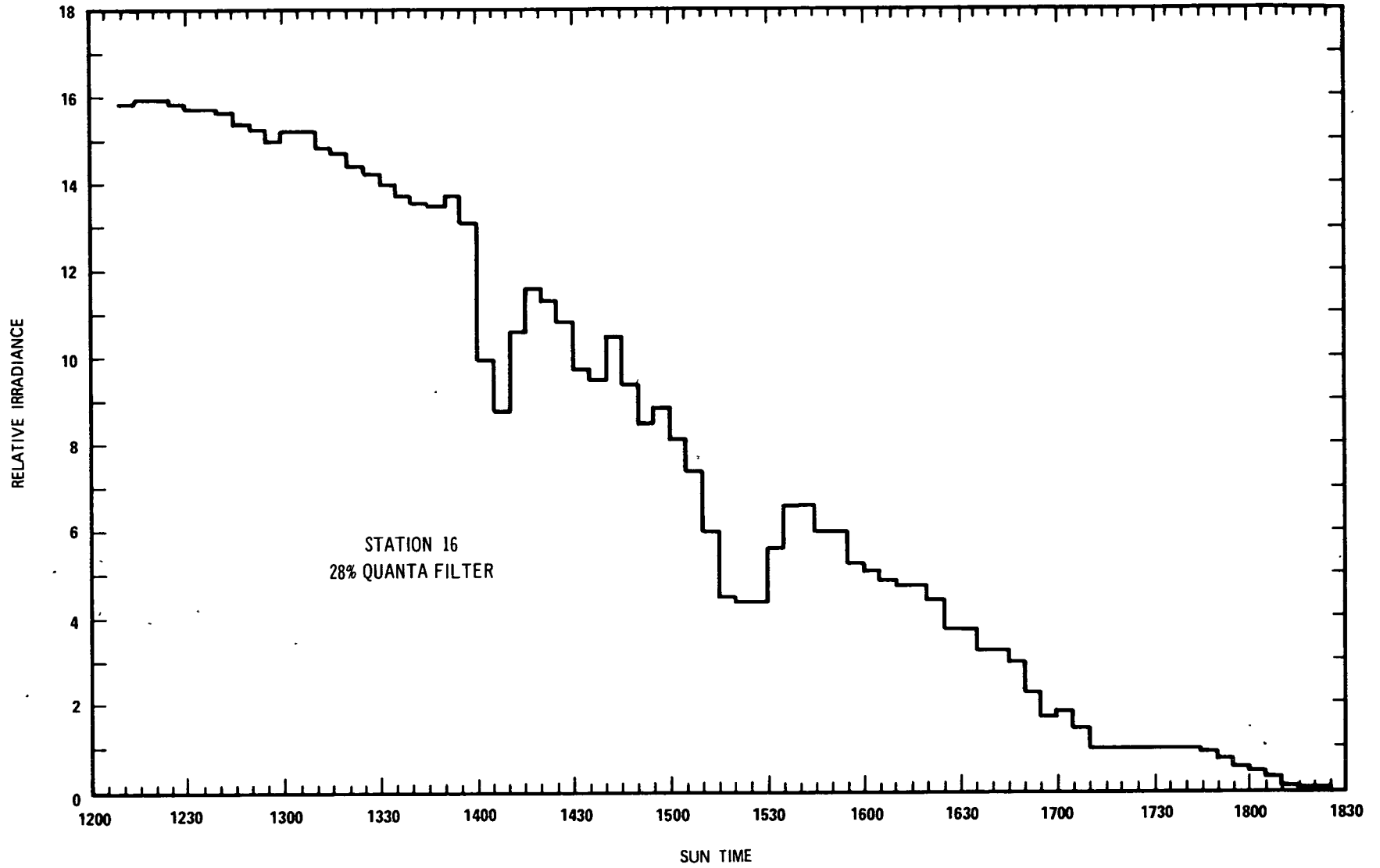
B33



B34

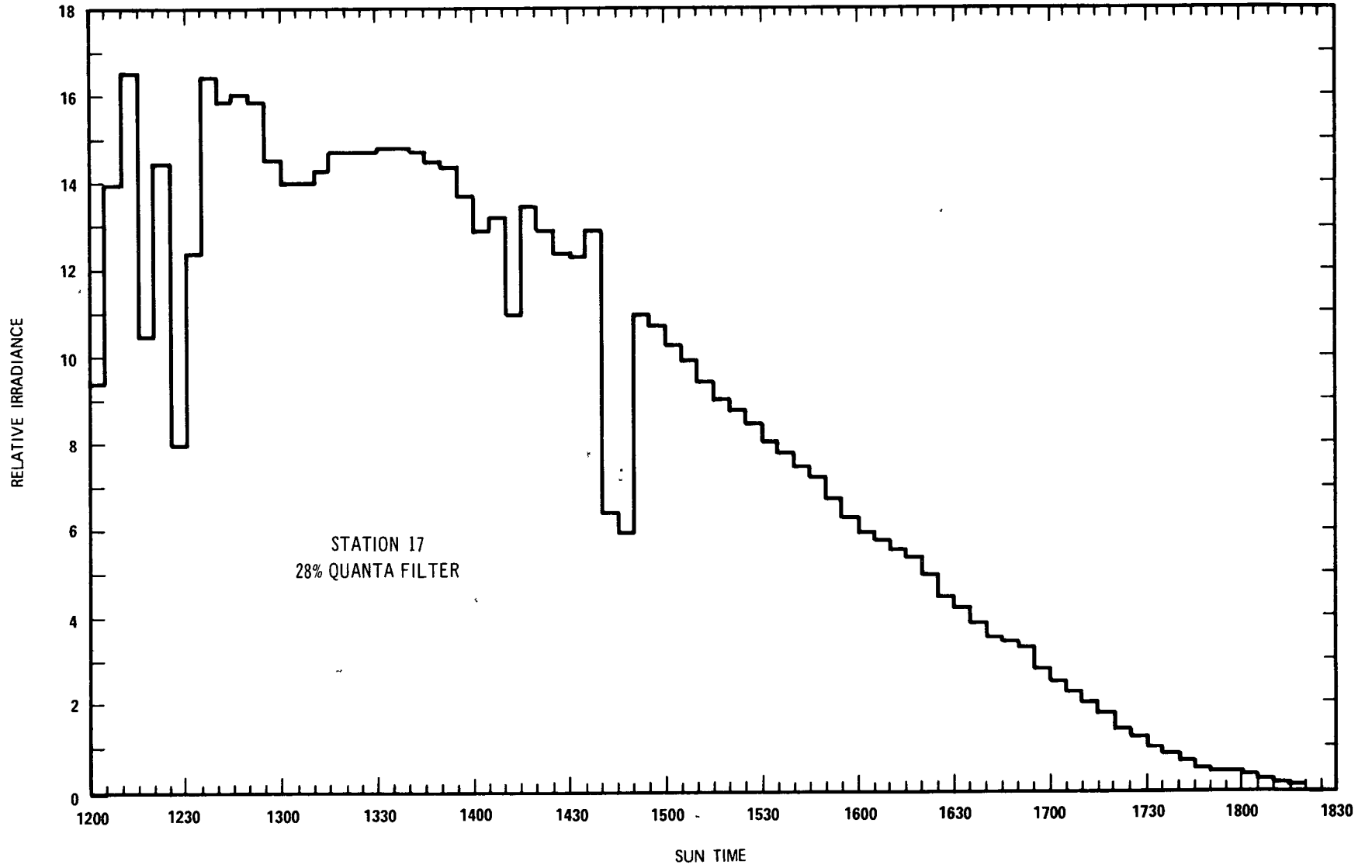


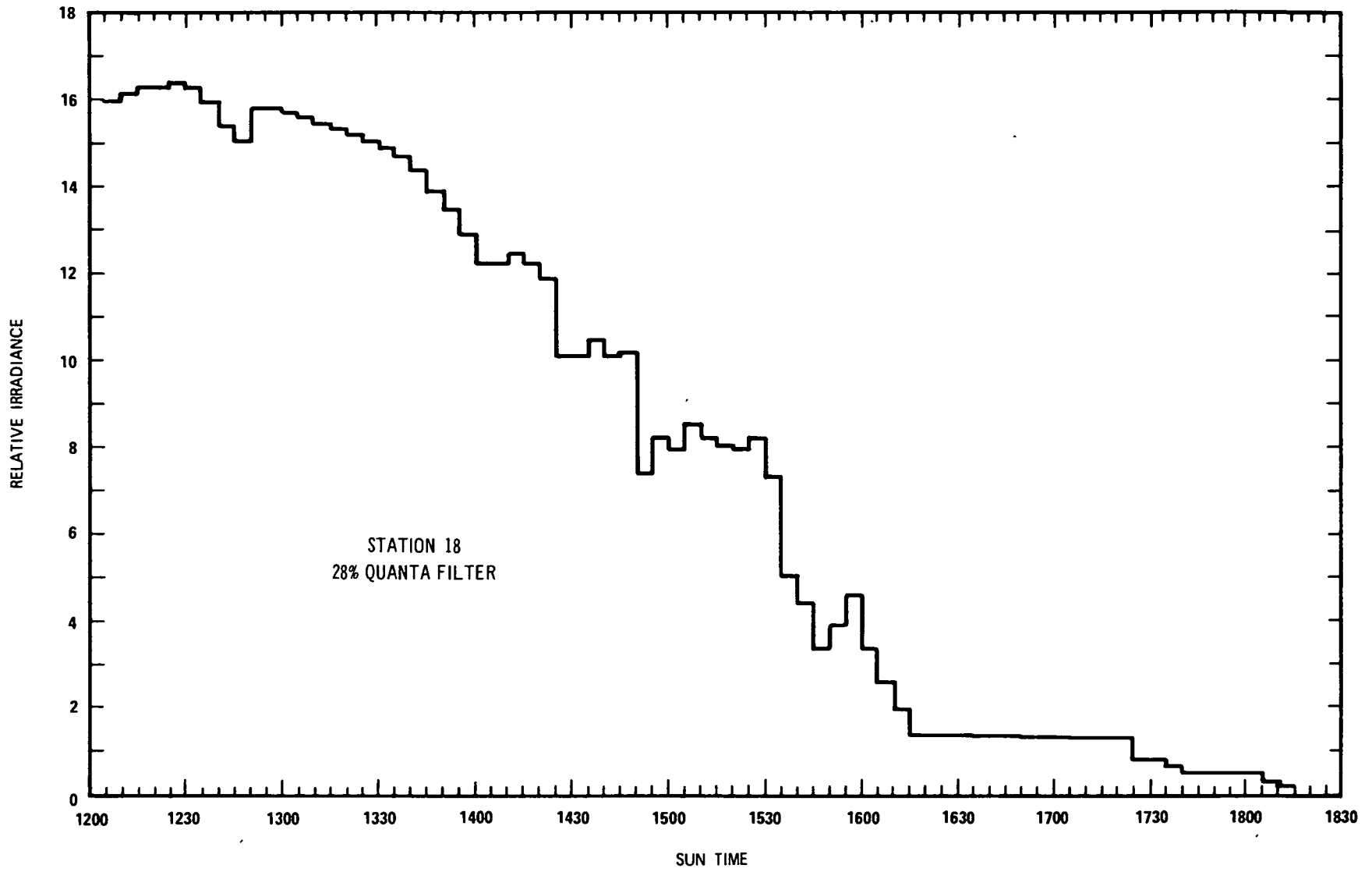
B35

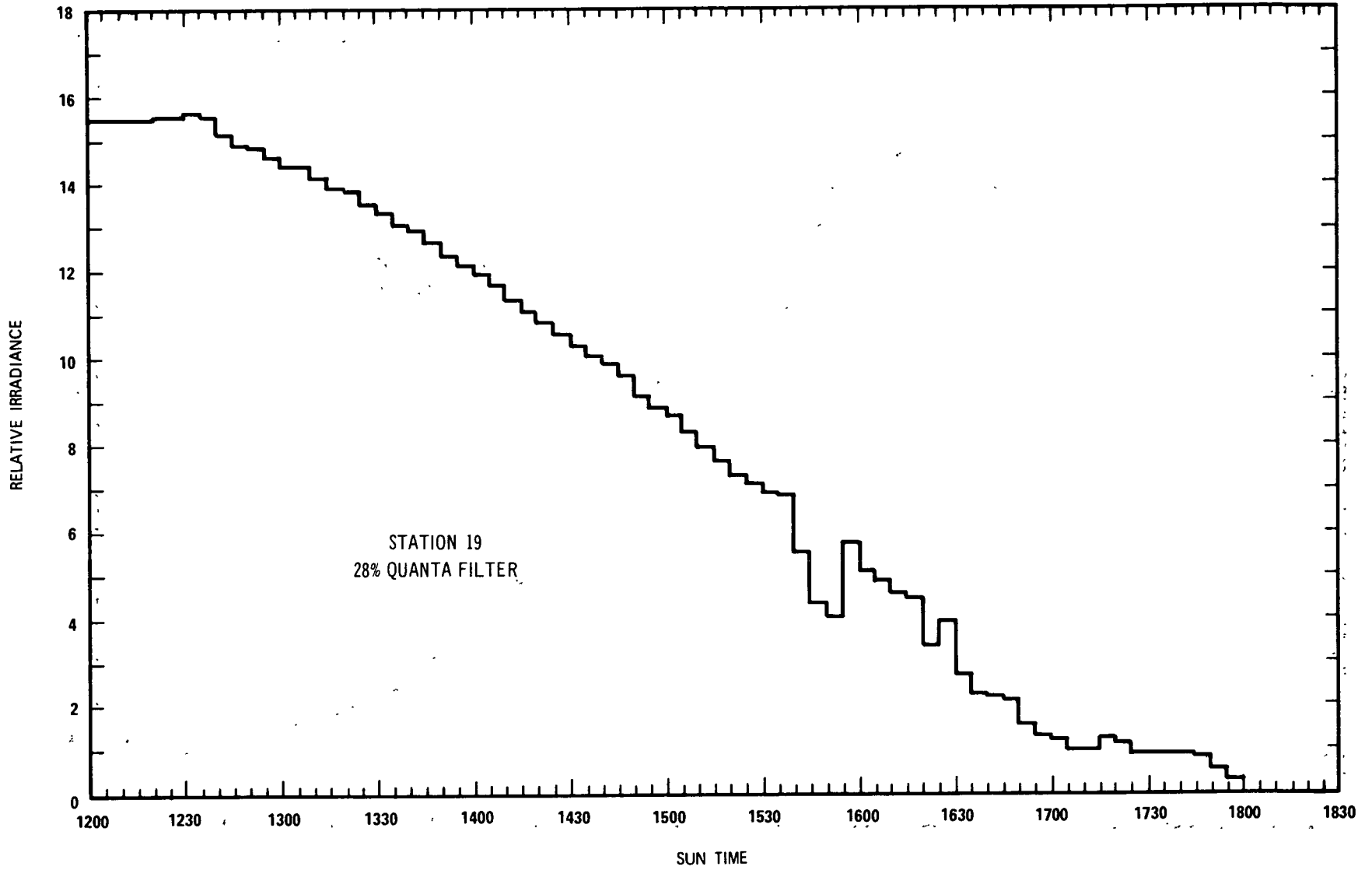


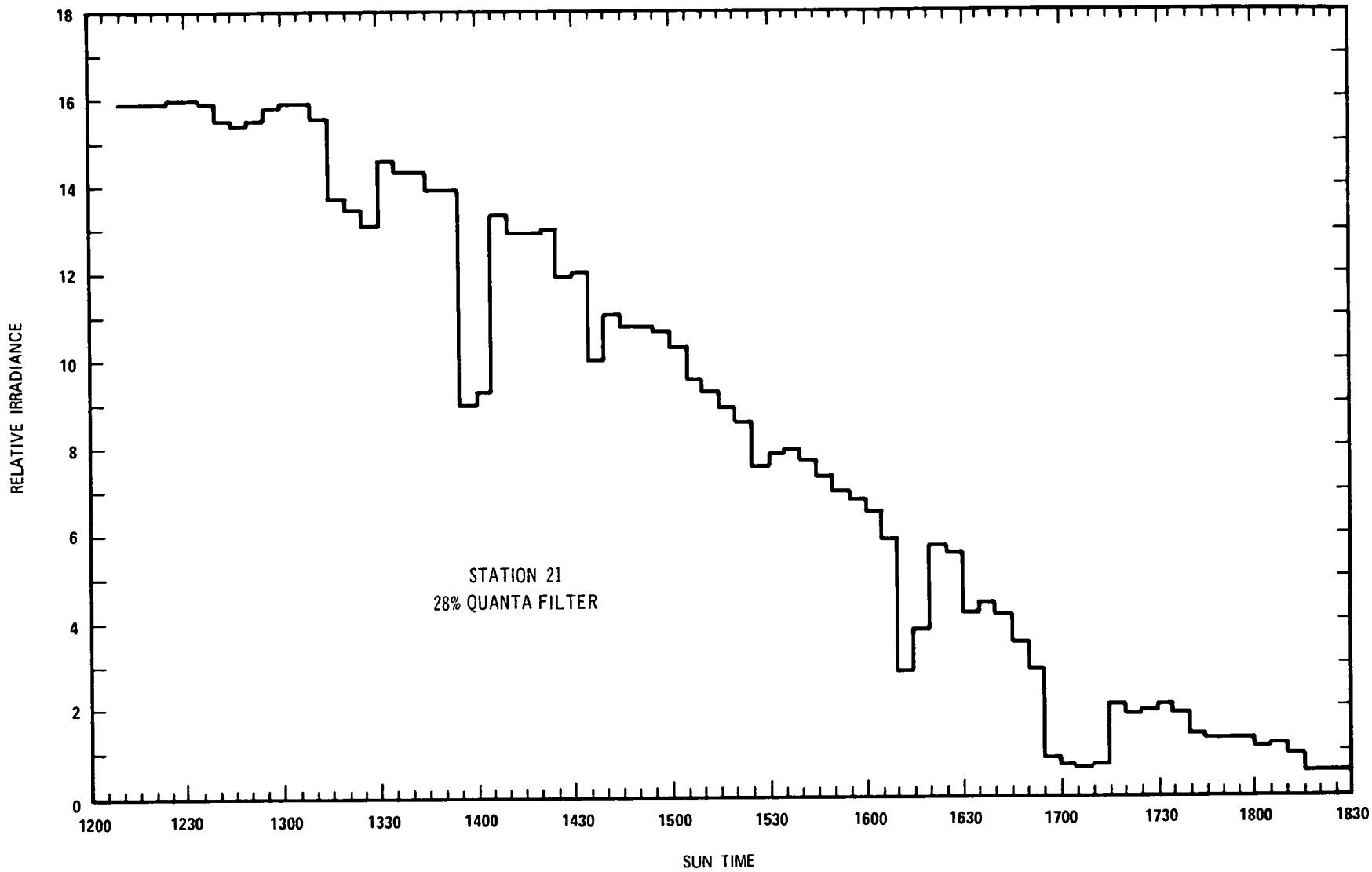


B36









SCOR WORKING GROUP 15  
DISCOVERER EXPEDITION 1970  
Chlorophyll a and Phaeopigments

Report by I. E. Baird

Chlorophyll analyses were done by I. E. Baird and T. Malone. Mr. Malone was collecting data for a PhD thesis and his work included determination of chlorophyll and phaeopigments in the euphotic zone. His values make a useful contribution to this report.

### Sampling

Water was collected in twin 6-litre plastic samplers (Jitts 1964). This provided enough water from one cast for determination of chlorophyll a and phaeopigments, primary productivity in the euphotic zone, particulate organic matter, phytoplankton species identification and cell counts, and nutrients. Sampling in the euphotic zone at percentage light depths for productivity was always done between 11.00 hours and 11.50 hours. Deeper samples were collected earlier, usually at 10.30.

### Methods

Chlorophyll a and phaeopigments were determined at all depths sampled, by the fluorescence technique described by Yentsch and Menzel (1965) and discussed by Holm-Hansen et al. (1965) with improved instrumentation (Lorenzen 1966). Samples of 0.555 l or occasionally 1.24 l were filtered on Whatman GF/C glass-fibre filters with the addition of 4 ml of a 1% suspension of magnesium carbonate. The vacuum pressure did not exceed 1/6 atmospheric. The filters were immediately ground in a Teflon tissue grinder with about 5 ml 90% acetone. The extracts were transferred to a centrifuge tube and the volumes were made up to 10 ml with 90% acetone washings of the grinder tube and pestle. After a few minutes the extracts were centrifuged at 4,000 rpm for 10 minutes and were immediately measured, before and after acidification with 0.1 ml 0.5 N HCl in a Turner Model 111 fluorometer. The fluorometer was one supplied specifically for in vivo chlorophyll measurement with selected red-sensitive photomultiplier and Turner 'blue lamp' No. 110-853. The filter for excitation wavelengths was the Corning CS-5-60 and for emission, Corning CS-2-64. A standard cuvette door was fitted in place of the flow-through door. The fluorometer was calibrated with dilutions of a 90% acetone extract of a phaeodactylum culture. The chlorophyll concentration of the culture was determined by the SCOR-UNESCO (1966) tri-chromatic method using a Unicam SP600 spectrophotometer.

Chlorophyll a was also determined at a few depths at each station by the trichromatic procedure quoted above. Chlorophyll a and phaeopigments were estimated in the same extracts as chlorophyll a alone by the fluorescence method and at most stations by the spectrophotometric method described by Lorenzen (1967). The procedure was briefly as follows. 4 to 6 l water were filtered through Whatman GF/C glass-fibre filters and 90% acetone extracts were prepared as in the fluorescence method. Vacuum pressures were kept below 1/6 atmospheric at the start of filtration and were progressively increased to 1/3 or at most 1/2 atmospheric.

After centrifuging, the acetone extracts were put in 4 cm cuvettes fitted with lids in the spectrophotometer. The extinctions of the extracts were measured against a 90% acetone reference, at 750 nm, 630 nm, 645 nm, and 663 nm. 1 ml of the extract was pipetted from each cell for dilution and measurement by fluorimetry. The extracts remaining in the cells were acidified with 0.2 ml 0.5 N HCl and were stirred with a polythene rod. The extinctions were again read at 663 nm and 750 nm. The extinctions were corrected for cell to cell blank at each wavelength and for turbidity. Chlorophyll a was calculated using the SCOR-UNESCO equations. Chlorophyll a and phaeopigments were calculated by Lorenzen's equations and by the fluorescence method.

At several stations Sartorius membrane filters pore size 500 nm, soluble in 90% acetone, were used for comparison with glass filters. To do this, water was first mixed in a large container before filtering 4-6 litres through each type of filter. Only chlorophyll values obtained by the trichromatic method were used in this comparison because of the turbidity caused on acidification of acetone solutions of membranes.

### Discussion of Methods

The fluorescence method was chosen for routine measurements because of its sensitivity and the need to distinguish between chlorophyll a and its degradation products. The trichromatic procedure was considered unsuitable because in this method the presence of phaeopigments leads to overestimates of chlorophyll a (Yentsch 1965, Lorenzen 1965). The spectrophotometric method for determination of chlorophyll and phaeopigments was not considered for routine measurements because of its poor sensitivity.

Data obtained during the cruise indicate that phaeopigments were always present in significant amounts (Table I). Chlorophyll a values obtained by the trichromatic method (Table II) are, in all but two cases, higher than the corresponding fluorometric values, by an amount increasing with increasing phaeopigment:chlorophyll ratio. The two values which do not fit this picture are calculated from extinctions of .011 and .006 and there are large errors associated with these measurements.

The spectrophotometric determinations of chlorophyll a and phaeopigments were done out of interest only as the concentrations of the extracts were too low for this method. Lorenzen states that extinctions at 663 nm before acidification should be at least 0.2. In Table II only one value exceeds this limit and only eight others exceed 0.1. Despite this, the agreement with the fluorometric values is remarkably good, Figs. 1a and b.

#### Comparison of Filters

The use of glass-fibre filters can be criticised as they have been shown to give lower values than membranes (SCOR-UNESCO 1966). The results of the comparison between Sartorius membrane filters and Whatman GF/C glass-fibre filters (Table III) indicate that on average 89.4% of chlorophyll was retained by the glass filters.

#### Routine Measurements

The routine measurements are listed in Table I and chlorophyll a and total pigment profiles are presented for each station. Any chlorophyllide present will be expressed as chlorophyll a and phaeopigments will include phaeophorbide a and phaeophytin a. (Yentsch 1965).

At percentage light depths at most stations one of each pair of samples was analysed by Baird and the other by Malone. Statistical analysis of the data shows that there is no significant difference between chlorophyll a values obtained by either Baird or Malone. The precision of the chlorophyll a data based on analysis of 176 pairs of determinations was  $\pm 10\%$  with 95% confidence limits.

## References

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- Jitts, H. R. (1964). A twin six litre plastic sampler. Limnol. Oceanogr. 9, 452.
- Lorenzen, C. J. (1965). A note on the chlorophyll and phaeophytin content of the chlorophyll maximum. Limnol. Oceanogr. 10, 482-483.
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- (1967). Determination of chlorophyll and phaeopigments: spectrophotometric equations. Limnol. Oceanogr. 12, 343-346.
- SCOR-UNESCO Working Group Number 17, 1966. Determination of photosynthetic pigments. UNESCO Monographs in Oceanographic Methodology No. 1.
- Yentsch, C. S. and D. W. Menzel (1963). A method for the determination of phytoplankton, chlorophyll and phaeophytin by fluorescence. Deep Sea Res. 10, 221-31.
- Yentsch, C. S. (1965). Distribution of chlorophyll and phaeophytin in the open ocean. Deep Sea Res. 12, 653-66.



Table I

Routine chlorophyll a and phaeopigment measurements

Depths sampled for productivity are indicated by 'P'

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>
Station 02 5 May 1970	{ 0	.555	.033	.023	.056
	{ "	"	.034	.015	.049
	{ 10	"	.030	.015	.045
	{ "	"	.027	.013	.040
	P { 27	"	.033	.015	.048
	{ "	"	.041	.026	.067
	{ 51	"	.041	.016	.057
	{ "	"	.038	.021	.059
	{ 75	"	.062	.029	.091
	{ "	"	.058	.040	.098
Station 03 6 May 1970	{ 0	.555	.037	.026	.063
	{ "	"	.047	.021	.068
	{ 6	"	.045	.024	.069
	{ "	"	.047	.021	.068
	P { 18	"	.048	.018	.066
	{ "	"	.050	.020	.070
	{ 41	"	.066	.035	.101
	{ "	"	.057	.028	.085
	{ 61	"	.146	.087	.233
	{ "	"	.138	.099	.237
Station 04 7 May 1970	{ 0	.555	.066	.029	.095
	{ "	"	.052	.021	.073
	{ 10	"	.051	.021	.072
	{ "	"	.055	.021	.076
	{ 25	"	.065	.021	.086
	{ "	"	.070	.026	.096
	{ 50	"	.146	.083	.229
	{ "	"	.129	.083	.212
Station 04 7 May 1970	{ 75	"	.352	.178	.530
	{ "	"	.297	.157	.454
	{ 100	"	.112	.125	.237
	{ "	"	.099	.119	.218
	{ 125	1.24	.056	.089	.135
	{ 150	"	.016	.039	.055
	{ 200	"	.002	.014	.032

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>	
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	
Station 05 8 May 1970	0	.555	.144	.054	.198	
	"	"	.144	.042	.186	
	10	"	.196	.051	.247	
	"	"	.261	.103	.364	
	25	"	.164	.073	.237	
	"	"	.160	.073	.233	
	50	"	.287	.168	.455	
	"	"	.295	.151	.446	
75	"	.082	.157	.239		
"	"	.085	.181	.266		
100	"	.041	.090	.131		
"	"	.031	.088	.119		
Station 06 9 May 1970	P {	0	.555	.233	.086	.319
		"	"	.241	.069	.310
		4	"	.211	.088	.299
		"	"	.232	.079	.311
		9	"	.215	.079	.294
		"	"	.232	.070	.302
		16	"	.207	.084	.291
		"	"	.241	.088	.329
		22	"	.297	.104	.401
		"	"	.340	.144	.484
		30	"	.704	.264	.968
		"	"	.704	.218	.922
		50	"	.189	.350	.539
		"	"	.133	.365	.498
75	"	.716	.723	1.439		
"	"	.666	.760	1.426		
100	"	.015	.079	.094		
"	"	.011	.080	.091		
125	"	.013	.095	.108		
"	"	.011	.098	.109		
150	"	.008	.057	.065		
"	"	.006	.058	.064		
*75	1		.644	.468	1.101	

\*The 75 m value was checked by analysing  $\frac{1}{4}$  part of the 4 g particulate organic matter sample from a different cast, for chlorophyll. Although the chlorophyll a and phaeopigments are significantly different, the second chlorophyll a maximum at 75 m indicated by the first cast is confirmed.

Station 07 10 May 1970	P {	0	.555	.220	.083	.303
		"	"	.301	.066	.367
		4	"	.211	.088	.299
		"	"	.258	.102	.360
		12	"	.224	.087	.311
		"	"	.267	.101	.368
		22	"	.437	.174	.611
		"	"	.461	.207	.668
30	"	.352	.166	.518		
"	"	.388	.188	.576		

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>
Station 07 10 May 1970 (cont'd)	{ 30	.555	.241	.151	.392
		"	.242	.150	.392
	{ 50	"	.436	.507	.943
		"	.424	.542	.966
	{ 75	"	.103	.260	.363
		"	.108	.338	.446
	100	"	.036	.094	.130
		"	.037	.097	.134
	125	"	.007	.044	.051
		"	.007	.046	.053
	150	"	.215	.189	.404
	"	.211	.194	.405	
≠150	1.25	.009	.042	.051	

The 150 m value was checked by analysing  $\frac{1}{4}$  part of the 6l particulate organic matter sample from another cast, for chlorophyll. Clearly in the first cast the 150 m bottle had triggered at a shallower depth.

Station 08 12 May 1970	{ 0	.555	.159	.032	.191
		"	.164	.041	.205
	{ 4	"	.168	.041	.209
		"	.164	.041	.205
	{ 10	"	.258	.077	.335
		"	.258	.085	.343
	P { 17	"	.310	.132	.442
		"	.267	.118	.385
	{ 25	"	.284	.125	.409
		"	.284	.141	.425
	{ 32	"	.211	.128	.339
		"	.224	.137	.361
	{ 50	"	.045	.059	.104
		"	.055	.108	.163
{ 75	"	.017	.033	.050	
	"	.018	.040	.058	
100	"	.018	.065	.083	
	"	.017	.060	.077	
125	"	.016	.104	.120	
	"	.014	.087	.101	
150	"	.018	.157	.175	
	"	.014	.169	.183	

Station 09 13 May 1970	{ 0	.555	.388	.118	.506
		"	.400	.118	.518
	{ 4	"	.388	.094	.482
		"	.388	.094	.482
	P { 10	"	.412	.093	.505
		"	.376	.084	.460
	{ 18	"	.340	.097	.437
		"	.340	.097	.437
	{ 24	"	.388	.141	.529
"		.376	.141	.517	

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>	
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	
Station 09 13 May 1970 (Contd)	P {	29	.555	.764	.261	1.025
		"	"	.752	.285	1.037
		37	"	.534	.330	.864
		"	"	.558	.386	.944
		50	"	.211	.132	.343
		"	"	.202	.129	.331
		75	"	.074	.061	.135
		"	"	.065	.066	.131
		100	"	.020	.055	.075
		"	"	.017	.053	.070
		125	"	.047	.081	.128
		"	"	.042	.083	.125
		150	"	.008	.052	.060
		"	"	.006	.049	.055
200	"	"	.006	.054	.060	
		"	.005	.052	.057	
3	"	1.0	.384	.142	.526	
		1.0	.364	.135	.499	
Station 10 14 May 1970	P {	0	.555	.202	.125	.327
		"	"	.220	.128	.348
		5	"	.224	.132	.356
		"	"	.189	.105	.294
		11	"	.220	.128	.348
		"	"	.207	.136	.343
		23	"	.220	.124	.344
		"	"	.215	.136	.351
		33	"	.215	.128	.343
		"	"	.189	.121	.310
		45	"	.280	.215	.495
		"	"	.301	.222	.523
		50	"	.245	.298	.543
		62	"	.230	.402	.632
		"	"	.230	.379	.609
		75	"	.103	.195	.298
		"	"	.103	.195	.298
		100	"	.054	.113	.167
"	"	.055	.124	.179		
125	"	.008	.034	.042		
150	"	.003	.031	.034		
"	"	.004	.028	.032		
2nd cast	75	"	.129	.198	.327	
0	"	1.0	.195	.106	.301	
		1.0	.175	.094	.269	
Station 11 15 May 1970	P {	0	.555	.211	.132	.343
		"	"	.222	.148	.370
		10	"	.227	.132	.359
		"	"	.210	.123	.333
		20	"	.207	.137	.344
"	"	.220	.137	.357		

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>	
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	
Station 11 15 May 1970 (Contd)	P {	35	.555	.202	.141	.343
		"	"	.242	.174	.416
		46	"	.202	.141	.343
		"	"	.233	.156	.389
		60	"	.130	.188	.318
		75	"	.133	.275	.408
		"	"	.138	.287	.425
		100	"	.047	.092	.139
		"	"	.054	.093	.147
		125	"	.011	.091	.102
	3	1.0	.222	.149	.371	
		1.0	.209	.143	.352	
Station 12 16 May 1970	P {	0	.555	.146	.087	.233
		"	"	.144	.105	.249
		9	"	.138	.091	.229
		"	"	.140	.090	.230
		21	"	.155	.102	.257
		"	"	.156	.104	.260
		36	"	.207	.292	.499
		"	"	.226	.300	.526
		45	"	.215	.341	.556
		"	"	.215	.317	.532
		57	"	.129	.243	.372
		"	"	.116	.229	.345
		75	"	.052	.122	.174
"	"	.066	.140	.206		
100	"	.005	.036	.041		
"	"	.005	.034	.039		
125	"	.004	.022	.026		
	3	1.0	.148	.097	.245	
			.148	.099	.247	
Station 13 17 May 1970	P {	0	.555	.194	.043	.237
		"	"	.200	.045	.245
		8	"	.194	.064	.258
		"	"	.202	.058	.260
		17	"	.289	.084	.373
		"	"	.261	.072	.333
		27	"	.237	.147	.384
		"	"	.252	.143	.395
		34	"	.177	.134	.311
		"	"	.157	.127	.284
		44	"	.159	.127	.286
		"	"	.146	.114	.260
		60	"	.041	.052	.093
"	"	.044	.049	.093		
75	"	.052	.041	.093		
"	"	.058	.045	.103		
100	"	.021	.035	.056		
"	"	.021	.036	.057		

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>	
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	
Station 13 17 May 1970 (Contd)	125	.555	.009	.044	.053	
	"	"	.008	.041	.049	
	150	"	.008	.052	.060	
	"	"	.006	.054	.060	
	200	"	.005	.050	.055	
	"	"	.005	.061	.066	
Station 14 18 May 1970	P {	0	.555	.220	.063	.283
		"	"	.194	.047	.241
		11	"	.263	.085	.348
		"	"	.250	.078	.328
		15	"	.280	.109	.389
		"	"	.276	.100	.376
		28	"	.352	.235	.587
		"	"	.340	.214	.554
		35	"	.400	.221	.621
		"	"	.437	.231	.668
		43	"	.413	.232	.645
		"	"	.485	.206	.691
		60	"	.310	.185	.495
		"	"	.303	.192	.495
		75	1.24	.168	.131	.299
100	"	.064	.068	.132		
125	"	.025	.062	.087		
150	"	.021	.073	.094		
200	"	.012	.074	.086		
300	"	.003	.053	.056		
500	"	.002	.027	.029		
800	"	.002	.023	.025		
Station 15 20 May 1970	P {	0	.555	.138	.042	.180
		"	"	.149	.054	.203
		11	"	.133	.071	.204
		"	"	.148	.057	.205
		22	"	.146	.062	.208
		"	"	.146	.073	.219
		34	"	.352	.201	.553
		"	"	.267	.333	.600
		44	"	.340	.247	.587
		"	"	.294	.282	.576
		53	"	.211	.251	.462
		"	"	.189	.233	.422
75	"	.076	.123	.199		
"	"	.076	.129	.205		
100	"	.005	.042	.047		
"	"	.004	.041	.045		
125	"	.004	.034	.038		
"	"	.004	.032	.036		
150	"	.004	.031	.035		
"	"	.004	.036	.040		

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>	
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	
Station 15 20 May 1970 (Contd)	75	.555	.074	.126	.200	
		"	.062	.097	.159	
	3	1.0	.160	.056	.216	
			.162	.046	.208	
	3	1.0	.141	.050	.191	
Station 16 21 May 1970	P {	0	.555	.215	.071	.286
			"	.220	.071	.291
		8	"	.263	.118	.381
			"	.264	.106	.372
		14	"	.667	.542	1.209
			"	.723	.517	1.240
		20	"	.607	.453	1.060
			"	.558	.455	1.013
		28	"	.510	.388	.898
			"	.510	.441	.951
		35	"	.449	.426	.875
			"	.505	.480	.985
		50	"	.185	.256	.441
			"	.185	.248	.433
		75	"	.016	.063	.079
			"	.015	.062	.077
		100	"	.011	.062	.073
			"	.010	.053	.063
		125	"	.007	.041	.048
	"	.006	.046	.052		
150	"	.004	.037	.041		
	"	.004	.038	.042		
	3	1.0	.216	.092	.308	
		1.0	.236	.123	.359	
Station 17 28 May 1970	P {	0	.555	.050	.018	.068
			"	.051	.023	.074
		11	"	.052	.021	.073
			"	.054	.025	.079
		29	"	.068	.024	.092
			"	.062	.021	.083
		52	"	.112	.065	.177
			"	.109	.039	.148
		71	"	.267	.175	.442
			"	.269	.157	.426
		86	"	.129	.079	.208
			"	.157	.103	.260
		100	"	.291	.261	.552
			"	.255	.263	.518
		100	1.24	.239	.216	.455
125	"	.073	.150	.223		
150	"	.025	.052	.077		
200	"	.008	.022	.030		
	3	1.0	.068	.027	.095	
		1.0	.063	.027	.090	

	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>	
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	
Station 18 29 May 1970	P {	0	.555	.030	.011	.041
		"	"	.029	.010	.039
		12	"	.039	.014	.053
		"	"	.040	.017	.057
		28	"	.050	.019	.069
		"	"	.049	.023	.072
		49	"	.060	.029	.089
		"	"	.063	.036	.099
		76	"	.096	.042	.138
		"	"	.075	.045	.120
		91	"	.291	.296	.587
		"	"	.282	.302	.584
125	"	.076	.140	.216		
125	1.24	.089	.010	.099		
150	"	.023	.050	.073		
200	"	.001	.011	.012		
Station 19 30 May 1970	P {	0	.555	.029	.010	.039
		"	"	.027	.010	.037
		9	"	.029	.012	.041
		"	"	.021	.009	.030
		25	"	.033	.012	.045
		"	"	.027	.013	.040
		46	"	.047	.022	.069
		"	"	.056	.021	.077
		68	"	.071	.024	.095
		"	"	.069	.029	.098
		85	"	.101	.037	.138
		"	"	.078	.038	.116
100	"	.097	.043	.140		
"	"	.099	.046	.145		
100	1.24	.102	.056	.158		
125	"	.116	.181	.297		
150	"	.046	.115	.161		
200	"	.008	.015	.023		
Station 20 31 May 1970		0	1	.058	.014	.072
		100	1.24	.094	.056	.150
		125	"	.188	.193	.381
		150	"	.075	.102	.177
	200	"	.012	.014	.026	
Station 21 1 June 1970	P {	0	.555	.020	.007	.027
		"	"	.020	.007	.027
		11	"	.020	.007	.027
		"	"	.020	.006	.026
		33	"	.022	.009	.031
		"	"	.022	.006	.028
65	"	.037	.013	.050		
"	"	.040	.014	.054		



	Depth	Volume	Chlor. <u>a</u>	Phaeo. <u>a</u>	Chlor. <u>a</u> + Phaeo. <u>a</u>
	m	l	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>
Station 21 1 June 1970 (Contd)	{ 87	.555	.057	.025	.082
		"	.062	.022	.084
	{ 105	"	.068	.038	.106
		"	.085	.047	.132
	P { 125	"	.129	.063	.192
		"	.129	.063	.192
	{ 100	"	.081	.038	.119
		"	.070	.030	.100
	{ 125	1.24	.110	.101	.211
	150	"	.104	.147	.151
200	"	.016	.026	.042	
0	1.0	.024	.007	.031	
Station 22 2 June 1970	0	.555	.022	.006	.028
	"	"	.025	.009	.034
	25	"	.024	.009	.033
		"	.026	.009	.035
	50	"	.026	.010	.036
		"	.028	.012	.040
	75	"	.042	.013	.055
		"	.049	.019	.068
100	"	.070	.024	.094	
	"	.070	.026	.096	
125	"	.120	.067	.187	
150	"	.091	.090	.181	

Table II

Chlorophyll a and Phaeopigments:- Comparison of Methods

Extinctions are corrected for cell to cell blank and turbidity.

Station	Depth m	Volume ℓ	$E_{663}^{1\text{ cm}}$	$E_{645}^{1\text{ cm}}$	$E_{650}^{1\text{ cm}}$	$E_{663}^{1\text{ cm}}$ after acidification	Chlorophyll <u>a</u> by trichromatic method  $\text{mg/m}^3$	Chlorophyll <u>a</u> and Phaeopigments					
								(1) Spectrophotometric method			(2) Fluorescence method		
								Chl <u>a</u> $\text{mg/m}^3$	Phaeo. <u>a</u> $\text{mg/m}^3$	Chl <u>a</u> + Phaeo. <u>a</u> $\text{mg/m}^3$	Chl <u>a</u> $\text{mg/m}^3$	Phaeo. <u>a</u> $\text{mg/m}^3$	Chl <u>a</u> + Phaeo. <u>a</u> $\text{mg/m}^3$
02	10	6	.007	.003	.000	-	.031	-	-	-	.021	.006	.027
	51	6	.018	.008	.001	-	.080	-	-	-	.061	.032	.093
	101	6	.035	.020	.012	-	.152	-	-	-	.126	.068	.194
03	6	6	.014	.003	.004	-	.065	-	-	-	.048	.014	.062
	41	6	.023	.010	.005	-	.103	-	-	-	.082	.022	.104
	61	6	.049	.019	.009	-	.221	-	-	-	.175	.068	.243
	100	5	.094	.059	.032	-	.545	-	-	-	.340	.322	.662
	125	5	.024	.014	.009	-	.125	-	-	-	.077	.093	.170
04	10	6	.011	.004	.003	-	.050	-	-	-	.059	.019	.078
	75	6	.103	.047	.030	.073	.458	.340	.238	.578	.370	.206	.576
05	0	2	.006	.004	.003	-	.077	-	-	-	.168	.056	.224
	10	6	.087	.031	.014	.061	.395	.295	.189	.484	.327	.056	.383
	25	4	.037	.015	.012	.020	.250	.289	.051	.238	.188	.075	.263
	50	4	.066	.027	.021	.047	.445	.323	.236	.559	.347	.164	.511
	75	6	.049	.029	.018	.035	.212	.159	.119	.278	.147	.163	.310
	100	4	.017	.011	.006	-	.110	-	-	-	.052	.080	.132
06	30	2	.065	.022	.013	.046	.888	.646	.449	1.095	-	-	-
	50	4	.055	.027	.010	.045	.364	.170	.366	.536	.155	.337	.492
07	4	6	.057	.021	.012	.034	.258	.261	.009	.270	.195	.070	.265
	39	6	.086	.040	.027	.057	.382	.329	.124	.453	.295	.159	.454
08	0	4	.030	.007	.008	-	.209	-	-	-	.178	.026	.204
09	0	4	.077	.031	.021	.050	.520	.459	.136	.595	.454	.101	.555
	18	4	.058	.026	.019	.043	.388	.255	.257	.512	.335	.113	.448
10	0	5	.052	.022	.018	.035	.280	.231	.102	.333	.221	.124	.345
	33	5	.056	.031	.025	.037	.294	.259	.094	.353	.231	.138	.369
11	0	6	.061	.026	.018	.045	.273	.181	.176	.357	.228	.130	.358
	46	6	.070	.032	.016	.049	.311	.238	.151	.389	.241	.167	.408
12	0	6	.037	.024	.013	.026	.158	.125	.082	.207	.140	.089	.229
	36	6	.085	.058	.034	.066	.362	.216	.308	.524	.219	.310	.529
13	8	5	.051	.019	.015	.035	.277	.218	.116	.334	.226	.049	.275
	27	5	.066	.030	.022	.045	.353	.286	.143	.429	.247	.152	.399
	44	5	.021	.009	.009	.043	.113	.109	.015	.124	.091	.061	.151
14	15	6	.068	.034	.019	.051	.300	.193	.212	.405	.263	.112	.375
	35	6	.111	.057	.037	.082	.488	.329	.322	.651	.383	.251	.634
15	11	6	.044	.017	.011	.033	.198	.125	.136	.261	.166	.058	.224
	22	6	.056	.025	.018	.038	.250	.204	.098	.302	.197	.069	.266
	34	6	.121	-	-	.094	(.565)	.306	.440	.746	.395	.239	.634
16	8	6	.081	.038	.024	.056	.360	.284	.161	.445	.258	.137	.395
	20	6	.239	.134	.083	.173	1.042	.748	.625	1.373	.707	.548	1.255
	35	6	.154	.088	.053	.116	.670	.431	.490	.921	.420	.438	.858
17	11	6	.017	.006	.003	-	.077	-	-	-	.061	.023	.084
	52	6	.032	.012	.008	.021	.145	.125	.042	.167	.127	.047	.174
	86	6	.100	.049	.027	.072	.442	.318	.254	.572	.358	.241	.599
18	91	6	.101	.059	.035	.075	.438	.295	.301	.596	.301	.295	.596
19	85	6	.024	.011	.008	.019	.107	.057	.094	.151	.096	.047	.143
	100	6	.028	.017	.010	.022	.121	.068	.107	.175	.111	.043	.154
21	11	6	.005	.005	.001	-	.029	-	-	-	.019	.005	.024
	125	6	.039	.013	.014	.024	.178	.170	.020	.190	.126	.064	.190

Table III

Comparison of Whatman GF/C glass fibre filters and Sartorius membrane filters, pore size 500 nm

Station	Depth	Chlorophyll <u>a</u> mg/m <sup>3</sup> (det. by trichromatic method)		Retention by GF/C as percentage of Sartorius
		GF/C	Sartorius	
7	4	.258	.299	86.3
	39	.382	.377	101.3
8	0	.209	.227	92.1
9	0	.520	.496	104.8
	18	.388	.420	92.4
13	44	.113	.146	77.4
15	22	.250	.248	100.8
17	52	.145	.191	75.9
	86	.442	.557	79.4
18	91	.438	.519	84.4
19	85	.107	.157	68.2
21	125	.178	.204	87.3
	mean	.286	.320	89.4

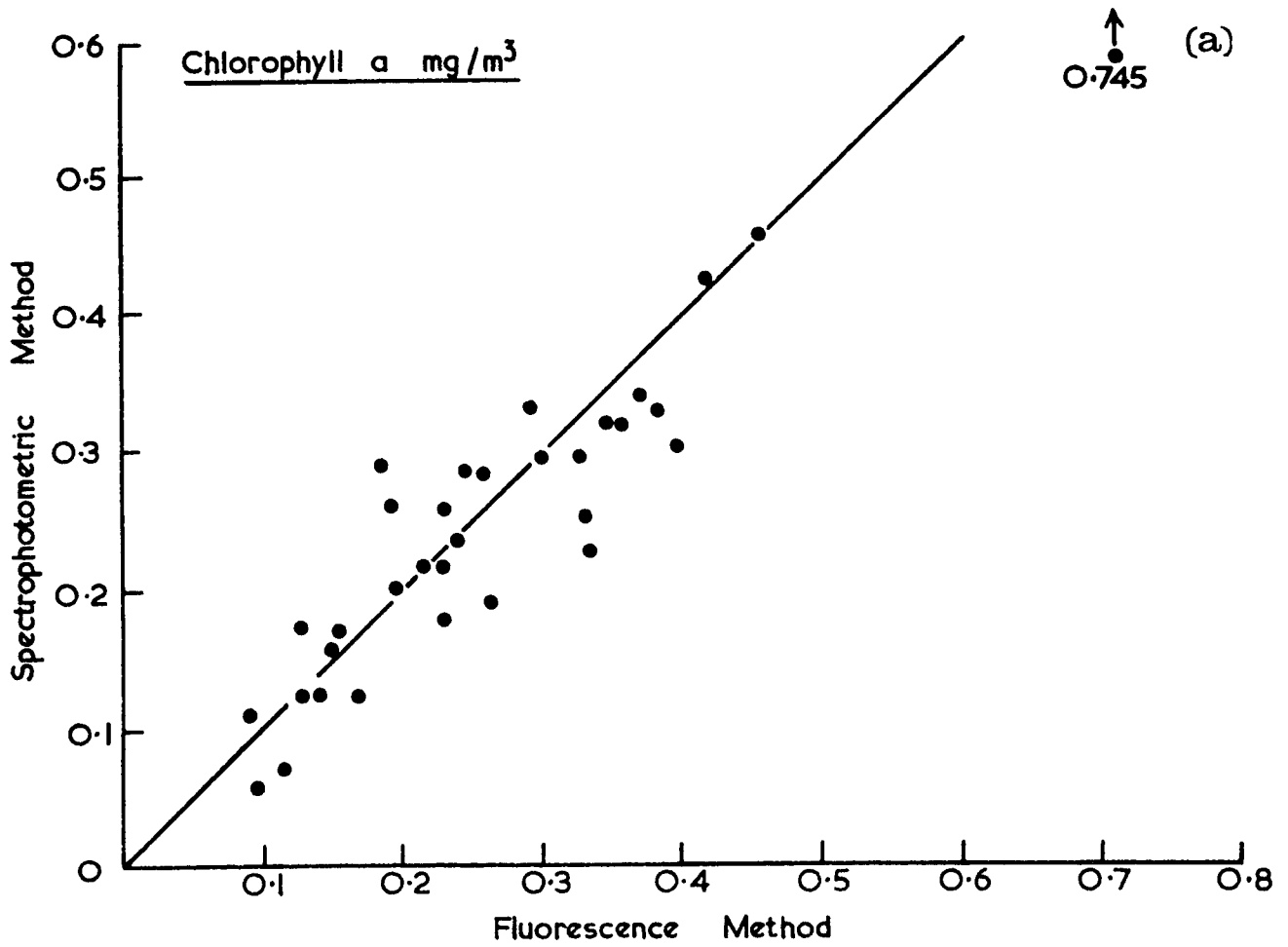


Fig. 1  
 Comparison of fluorimetric and spectrophotometric  
 determinations of chlorophyll a

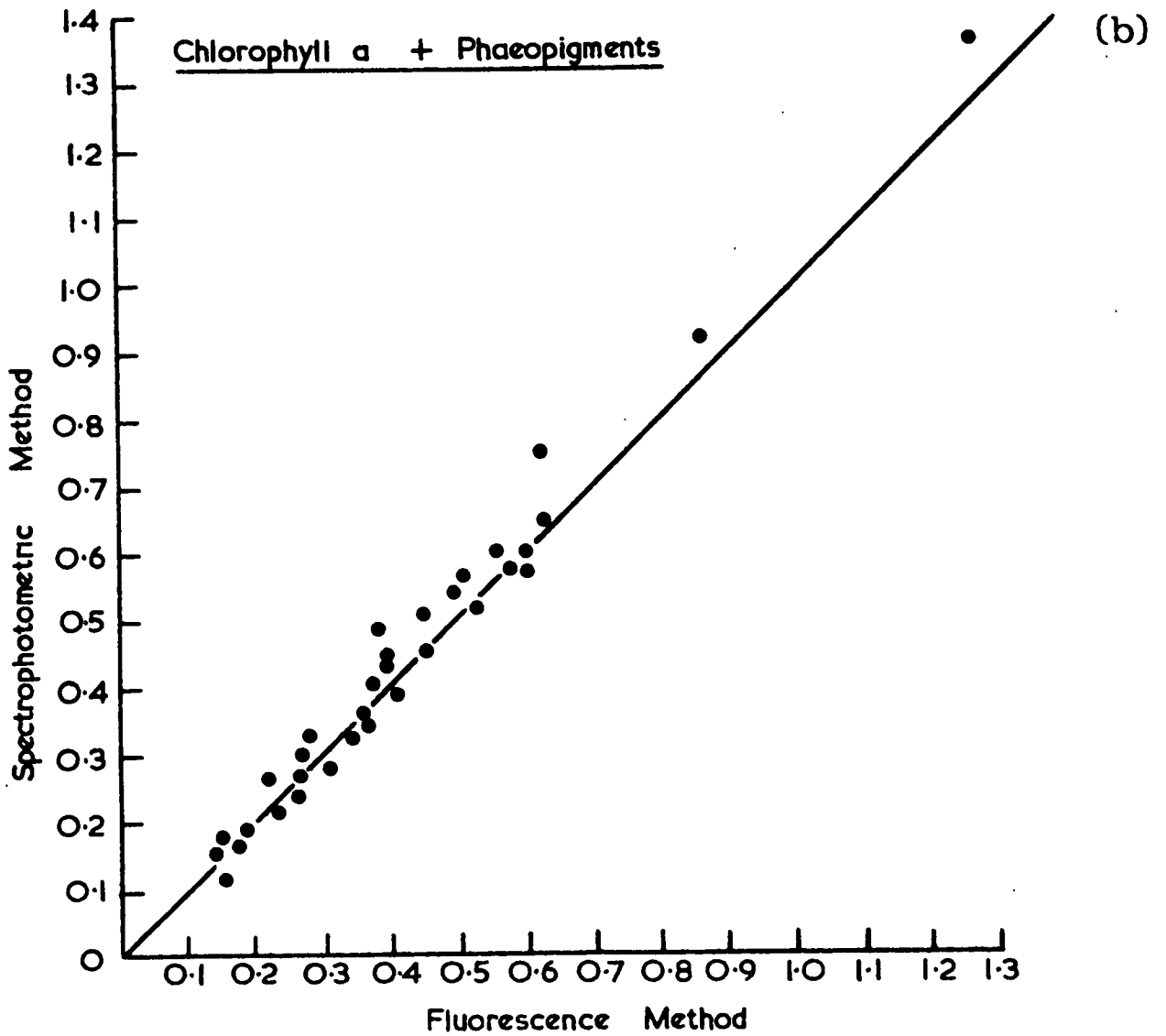
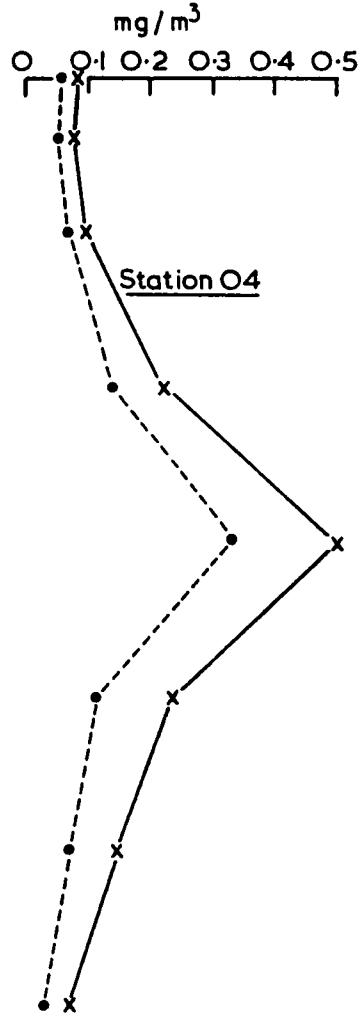
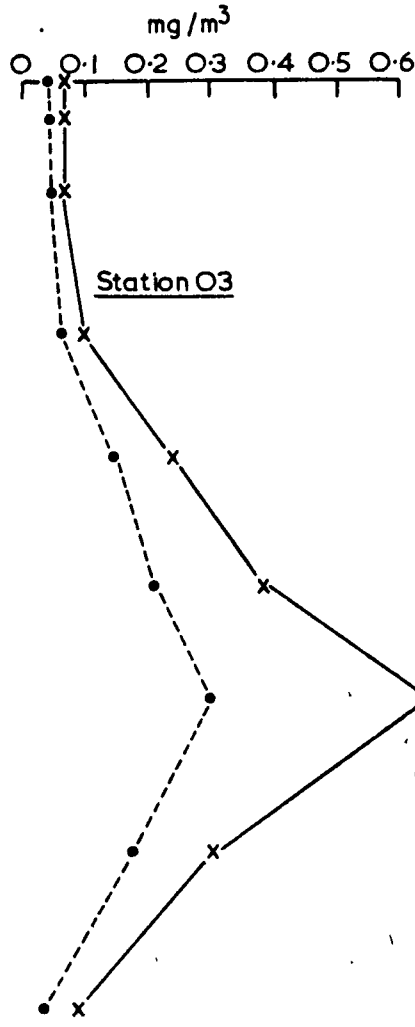
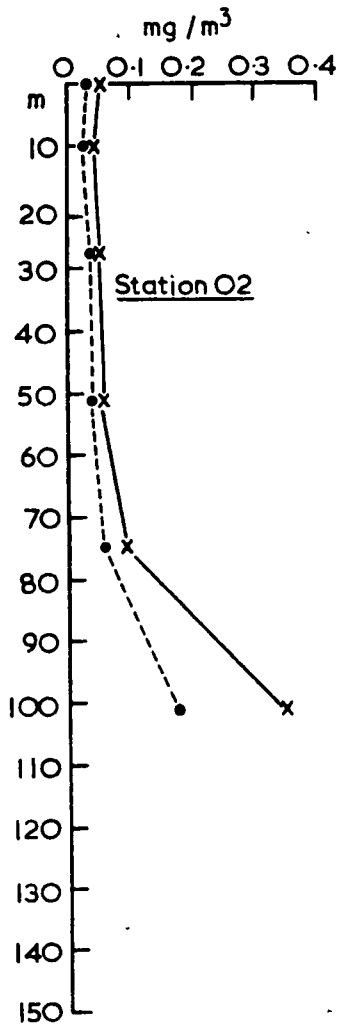
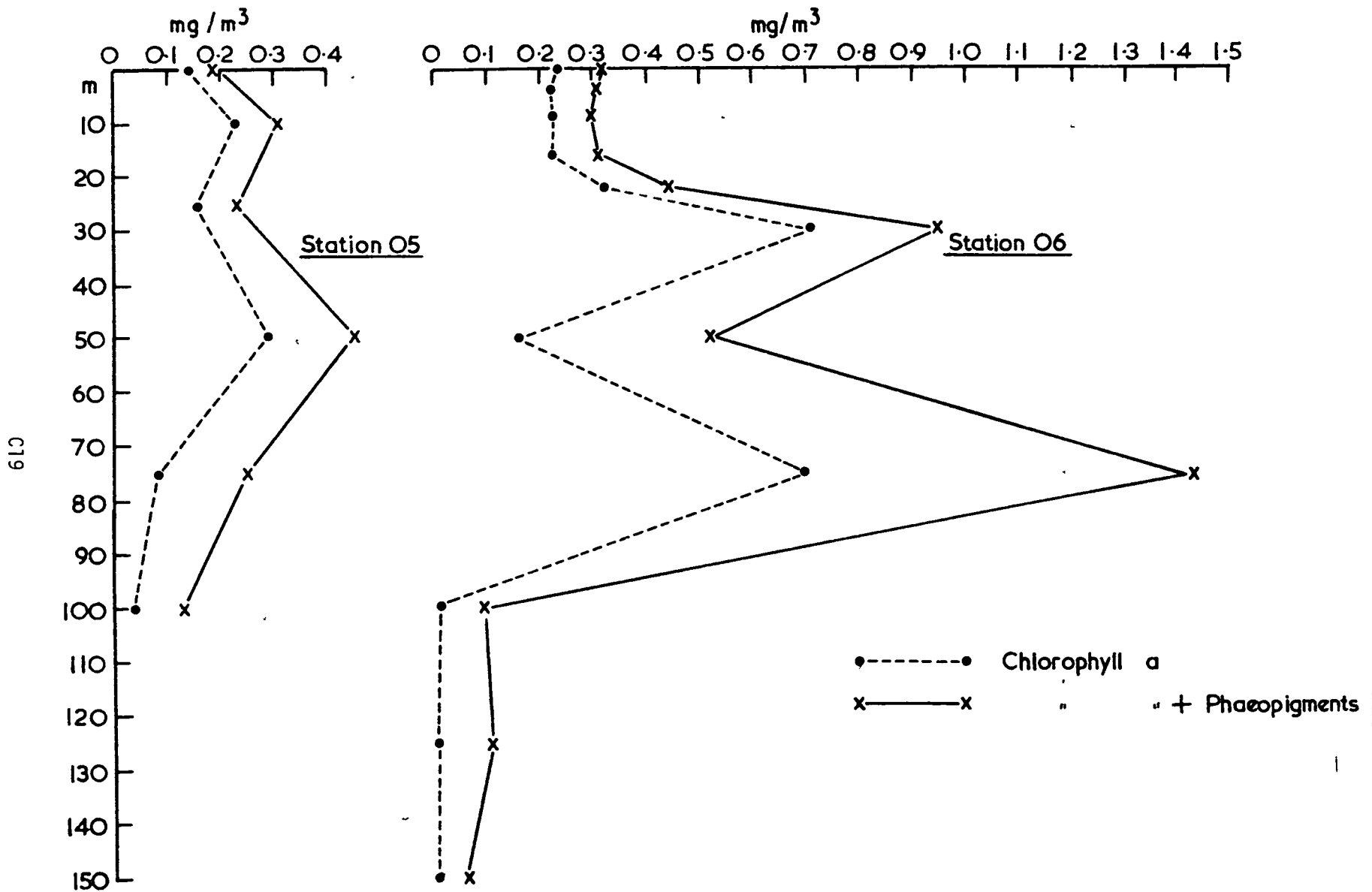


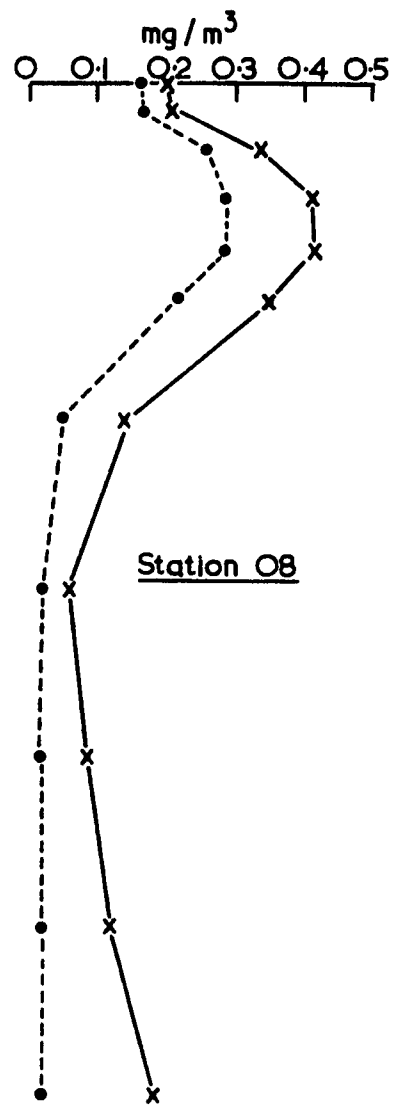
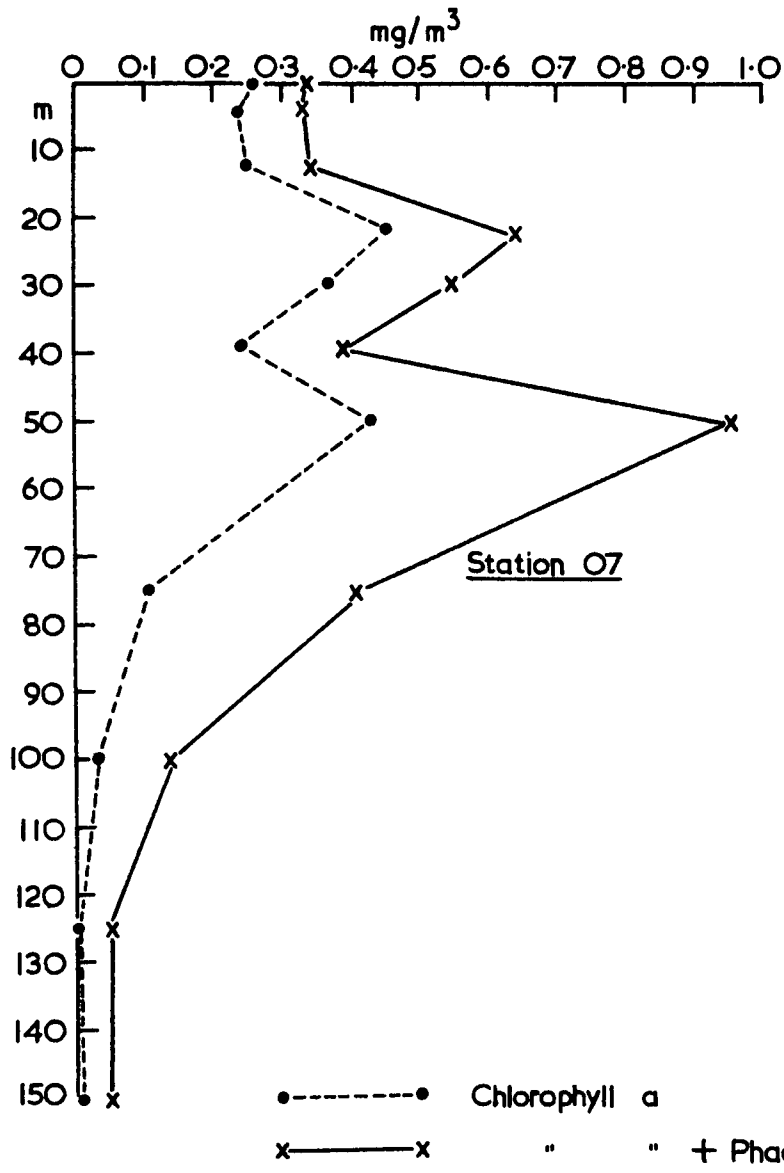
Fig. 2

Comparison of fluorimetric and spectrophotometric determinations of chlorophyll a and phaeopigments combined

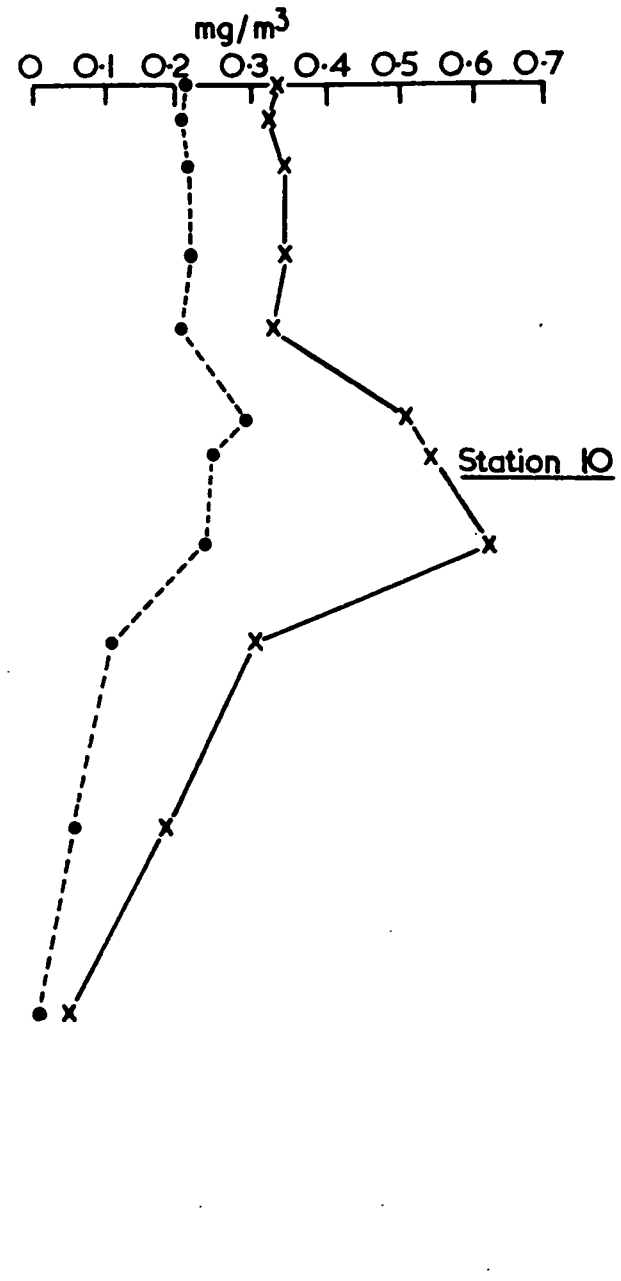
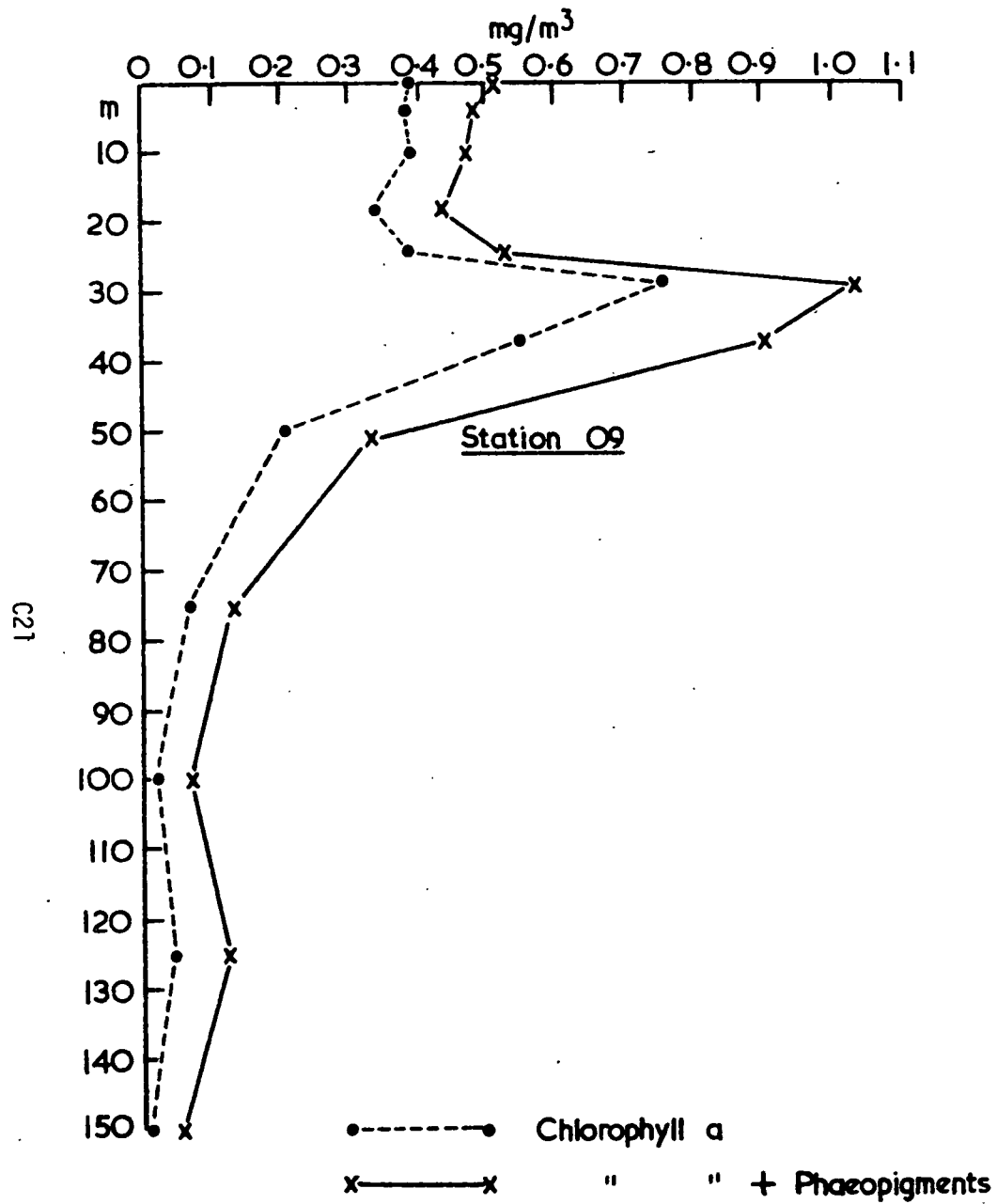


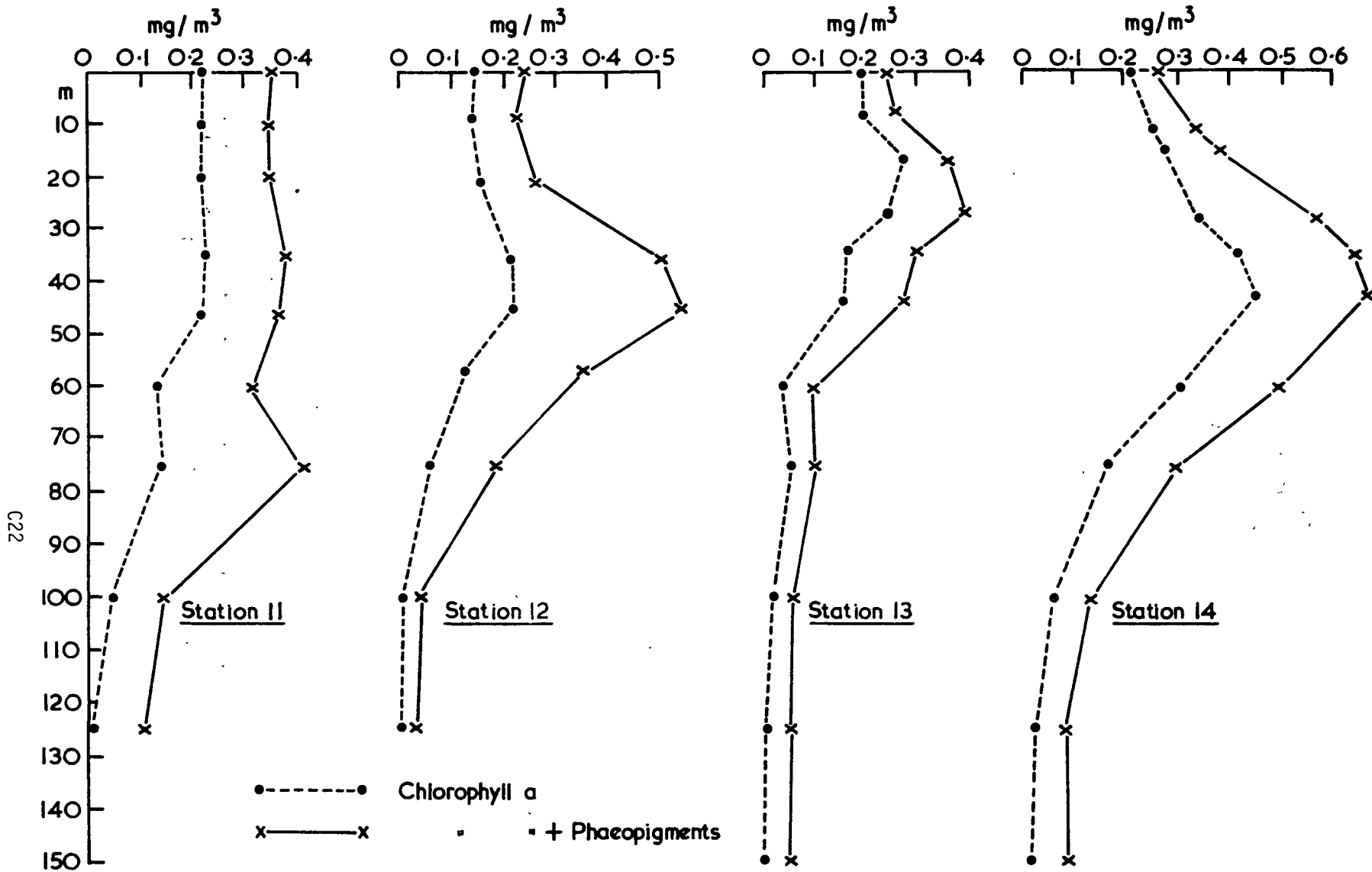
•-----• Chlorophyll a  
 x-----x " + Phaeopigments



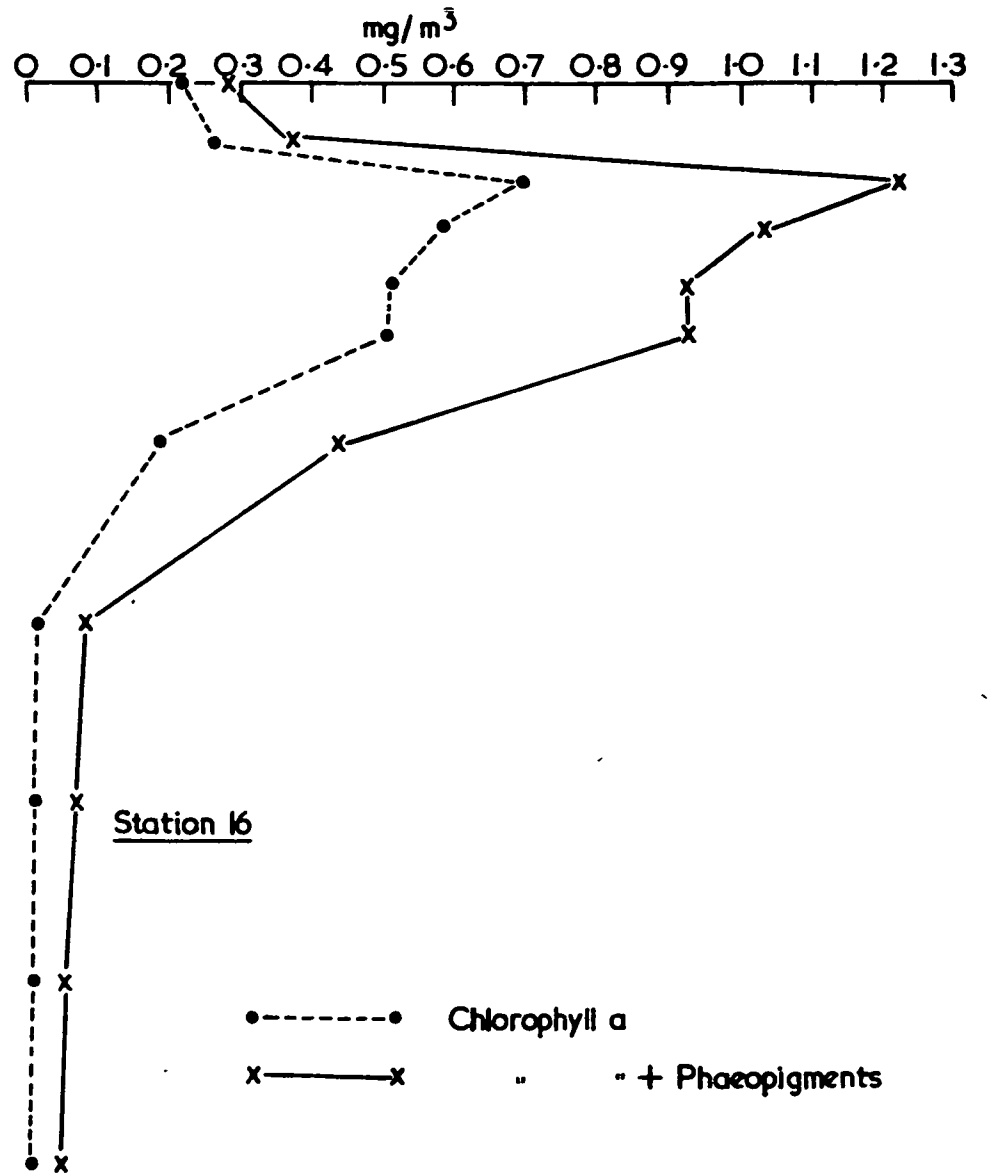
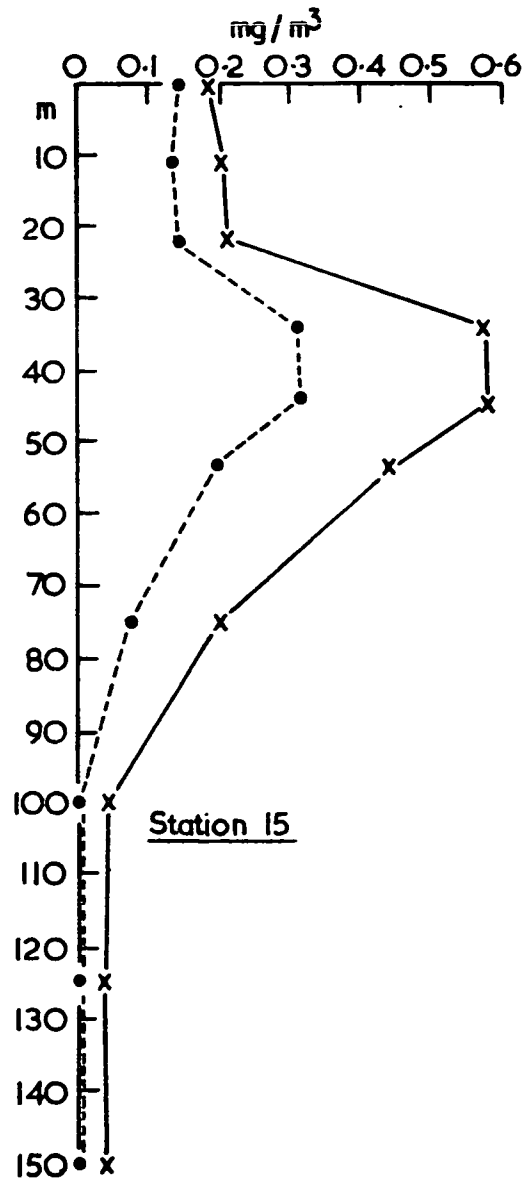




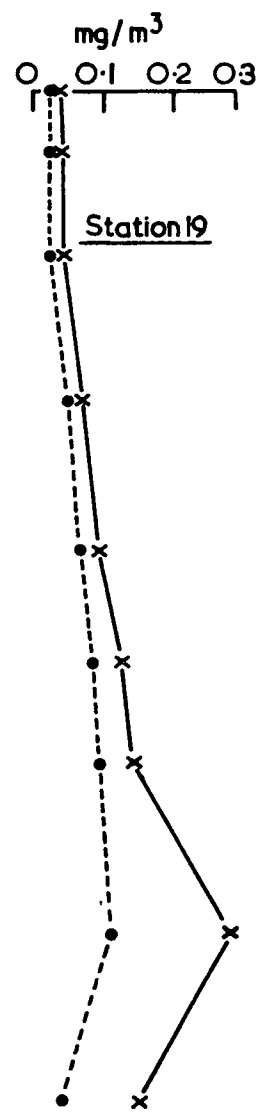
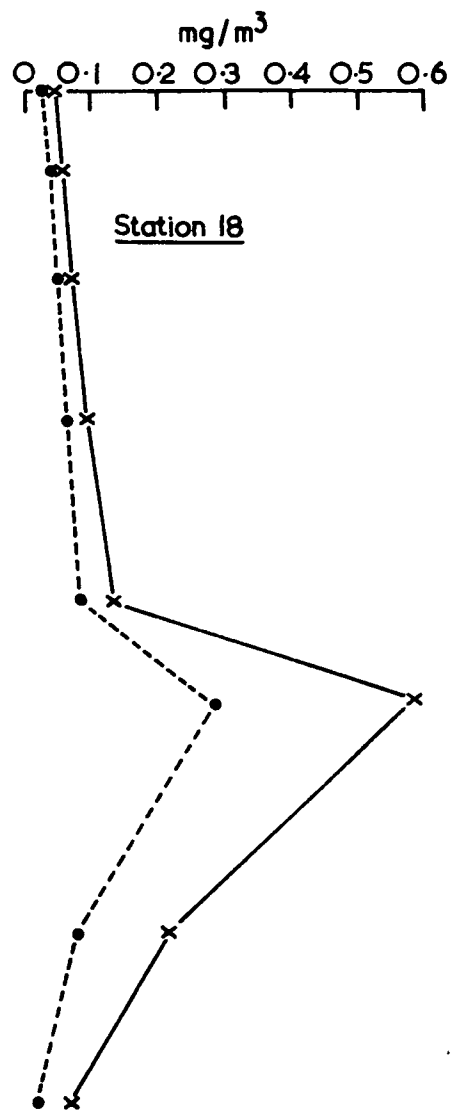
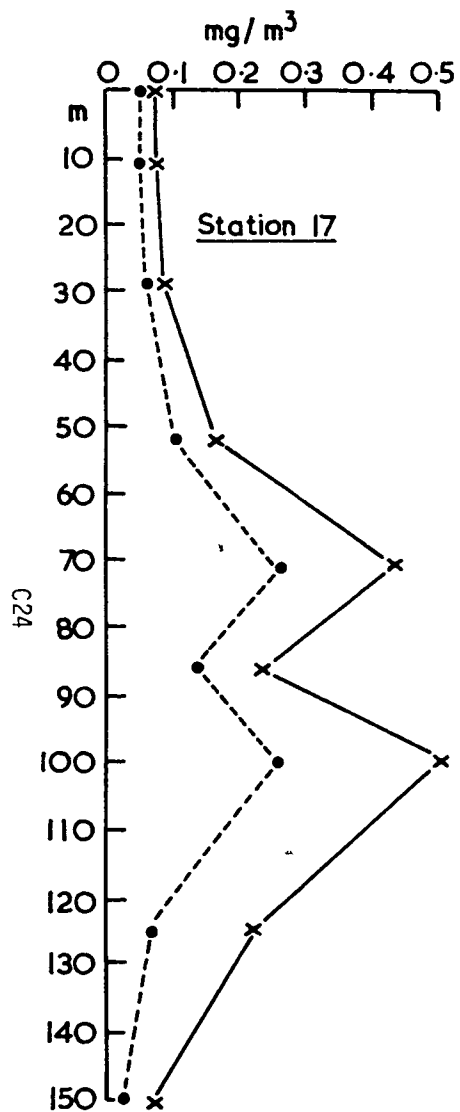




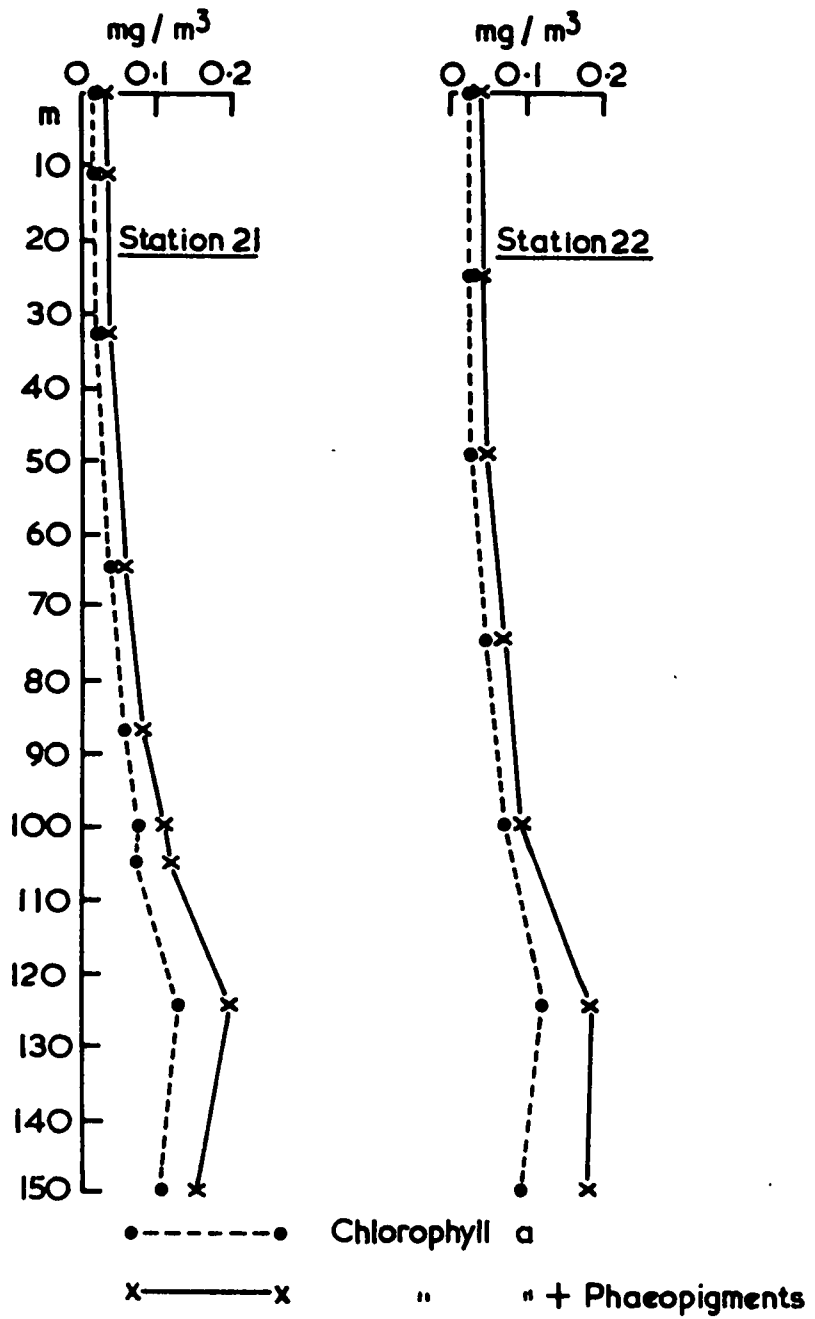
C23



● - - - ● Chlorophyll a  
x - - - x " " + Phaeopigments



●-----● Chlorophyll a  
 x-----x " " + Phaeopigments



PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION  
ON STATIONS SAMPLED DURING THE SCOR WG 15  
CRUISE TO THE CARIBBEAN SEA, PACIFIC OCEAN  
AND SARGASSO SEA IN MAY 1970, BASED ON  
DIRECT CELL COUNTS

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## SCOPE OF THE WORK

The seemingly simple task of identifying the dominating species at each depth turned out to be relatively complicated in the waters sampled and will probably be so in other oceanic tropical waters as well. The two main difficulties were that the numerically dominating species in most cases were less than  $2.5\mu\text{m}$  in diameter and that a size spectrum of the phytoplankton community had to be obtained before the species dominating by cell volume, plasma volume or cell surface area could be found. To facilitate this the technique was modified in the first days, and it was not until station 03 that the procedure to be used for the rest of the cruise was taken into general use. However, for all stations sampled preserved material exists which will be worked up in the future.

## WORK AT SEA

The work on the phytoplankton occurrence was carried out on water samples drawn as subsamples from the contents of NISKIN Bottles, collected from six depths chosen in accordance with the light intensities measured in the sea. As a rule the cell contents of a 100 ml subsample from each depth was enumerated, but in some cases only a few samples could be counted (due to difficulties with other types of particulate matter or simply with the phytoplankton itself) and in other cases additional depths were counted.

At each station sampled net hauls and water samples were collected in addition to the material for direct counts.

1. Net hauls were taken with a plankton (nylon) net having  $20\mu\text{m}$  square meshes. The diameter of the widest part (opening) was 25cm, the length of the net was 140cm. The net was left trailing behind the drifting ship for about 30 minutes and was usually sampling nearly horizontally at depths from 5 to 20m. The sample was fixed with the addition of 20-30ml neutralized formaldehyde solution (see below).
2. Water samples were preserved with formaldehyde solution neutralized with hexamethylene tetramine. 2ml of 20% HCHO were added to 100ml sample.
3. Direct counts were made on 100ml samples concentrated to 0.2ml by centrifugation for 30 minutes at 1000-1200 rpm. Prior to centrifugation three drops of 2% (aqueous) solution of osmic acid ( $\text{OsO}_4$ ) were added to each (100ml) sample. Graduated pear-shaped KIMAX centrifuge tubes (type 45220 - 100 ml) were used in an INTERNATIONAL centrifuge size 2 model K. Counting of the cells resuspended in the 500:1 concentrations were carried out in a Fuchs-Rosenthal (0.2mm deep)

haemocytometer holding 3.2mm<sup>3</sup> sample, under a WILD M 11 microscope at magnification 400X.

4. Dilution cultures from the fresh material were inoculated in 34% Erd-Schreiber medium in some cases.

## DIRECT CELL COUNTS

### The technique

The estimation of phytoplankton concentrations by means of direct counts on centrifuged material was introduced by Lohmann (1908), and has been used intermittently by other investigators up to now.

For the present investigation the method was modified by using a weak osmic acid fixation prior to centrifugation and the use of large (100ml) pear-shaped centrifuge bottles.

The consistency of the estimated values for cell concentrations may be more or less suboptimal for two main reasons:

1. Because very small cells were numerically important and high (400 x) microscope magnification had to be used when the counts were made. This gave a practical limit of the area (and volume) which could be searched during the counting procedure. Hence only a small fraction of the concentrate (equal to 2-4ml of a 100ml sample) was actually counted.
2. The phytoplankton cell concentration at many of the stations sampled was so low that only a few cells were observed in the counting chamber. Repeated counts showed less variation (see station 04, 0m, p.D11) than did counts of different subsamples from the same concentrate (see station 19, 85m, p.D26).

However, at present there does not seem to be any practical alternative method for use at sea when the very delicate forms are to be included in the counts.

### Presentation of the data

The counting work raised some problems as the numerically dominating species were rather small (less than 2.5µm) at nearly all stations and hence the identification could not be made with reasonable certainty in the counting chamber (as the depth of this will now allow for high power objectives to be used). However, suitable preparations of the same material were examined to the extent that time and equipment allowed. For larger walled species which were difficult to



identify on board (limited supply of literature and shortness of time), the preserved material will constitute a source for further information. The cultures, which were not all successful, have added mainly to the information on the very small species (less than  $2.5\mu\text{m}$ ).

When counted the cells were referred to different systematical groups: Dinoflagellates (DIN), Coccolithophorids (COC), Centric Diatoms (C.DIAT), Pennsate Diatoms (P.DIAT) and Flagellates (FLAG, exclusive of dinoflagellates and flagella-bearing coccolithophorids), the latter group also including a few forms lacking flagella.

Each of the systematical groups were divided into five cell size groups: less than  $2.5\mu\text{m}$ ,  $2.5-5\mu\text{m}$ ,  $5-10\mu\text{m}$ ,  $10-20\mu\text{m}$  and larger than  $20\mu\text{m}$ . The cell size is based on the diameter of spherical cells, or the mean diameter of oval cells of dinoflagellates, coccolithophorids and flagellates. For the diatoms the valva diameter of centric forms and half the length of the main cytoplasm containing part of the pennate diatom frustules was used.

The composition of the phytoplankton was morphologically inhomogeneous, and hence it is not possible to calculate exact values for cell surface area or cell volumes corresponding to the cell concentration from the direct counts. (The preserved material will render a better basis for such calculations, but in that case most of the forms of the smaller size groups as well as larger delicate forms will not come into consideration simply because they only occasionally will be recognizable as cells by the present methods of enumeration.) Values based on average cell types and sizes in each group (Table 1) will, however, give a reasonably good basis for the comparison of the different phytoplankton groups, and also make possible calculation of the depth distribution of cells expressed as cell surface area and cell-plasma volume.

The material varied with regard to the systematical composition, though the other phytoplankton organisms were frequently outnumbered by very small green monads. The large numbers of these minute cells also made the cell size group '<2.5µm' the numerically most abundant, but also within the cell size spectrum there were some variations in the frequency. This is indicated by the different depth distribution curves for cell numbers and cell-plasma volumes in the graphs for stations 03 to 22. When pennate diatoms were not particularly abundant the curves for cell surface area follow the shape of those for the cell-plasma volume.

#### Differences in the phytoplankton communities

The stations sampled during the present cruise were all more or less oceanic though some of the stations were closer to the coast than others (see station chart in introductory section). They also represent very different water masses, but even so, some common trends can be seen regarding the phytoplankton composition. The most conspicuous fact is that small green monads probably dominated by Micromonas pusilla in most cases, are the most numerous component of the phytoplankton on all stations sampled but one. At this station (19) haptophycean flagellates were the most common species in the size group 2.5-5µm which dominated. The small monads (<2.5µm) were also present at this station and exceeded the remaining groups in cell concentration.

The general impression is that the direct cell counts support the commonly accepted view that there is a decrease in cell numbers with an increase of cell size in oceanic plankton communities.

The systematical composition of the direct count samples is characterized by relatively low cell concentrations of all groups but the flagellates (FLAG). There are, however, exceptions when coccolithophorids (COC) or diatoms (DIAT) were numerically important (e.g., stations 05 and 09).

Dinoflagellates were recorded at all stations in concentrations varying from 450 to 13 200 cells/litre (station 09).

Coccolithophorids also were present in varying numbers, but were very scarce at stations 13 and 14, and were absent from the cell counts at station 08. Coccolithus huxleyi, Gephyroscaps oceanica and Umbellosphaera tenuis were among the species most frequently encountered. The highest coccolithophorid concentration recorded during the cruise was 20,100 cells/litre at station 05 in the Caribbean Sea.

Diatoms were present at all stations, but in some cases in small numbers only. They were especially scarce at stations 13, 21, and 22. At stations 15 and 16 the pennate diatoms were particularly abundant and at station 09 high concentrations of both centric and pennate forms were recorded in the surface layer (0m).

Table 1. Cell-plasma volumes and cell surface areas (in parenthesis) for the phytoplankton groups enumerated in the direct counts, average values,  $\mu\text{m}^3$  and  $\mu\text{m}^2$ .

Size group	DINO	COC	C.DIAT	P.DIAT	FLAG
2.5 $\mu\text{m}$	-	-	6 <sup>x</sup>	1.5	1
	-	-	(20 <sup>x</sup> )	(8)	(5)
2.5-5 $\mu\text{m}$	30	30	45 <sup>x</sup>	12.5	30
	(50)	(50)	(75 <sup>x</sup> )	(30)	(50)
5-10 $\mu\text{m}$	250	250	250 <sup>x</sup>	80	250
	(200)	(200)	(300 <sup>x</sup> )	(125)	(200)
10-20 $\mu\text{m}$	2000	2000	800	400	2000
	(800)	(800)	(800)	(500)	(800)
20 $\mu\text{m}$	16000	16000	7000	2000	16000
	(5000)	(5000)	(5000)	(3000)	(5000)

<sup>x</sup>Diatom frustules with pervalvar axis about equal to the valva diameter, 'high cells.'

The values of Table 1 are based on the cell types most commonly observed in each of the size groups, and will in some cases vary with the systematical groups, e.g., the naked flagellates of the group '<2.5 $\mu\text{m}$ ' were generally smaller than the diatoms of the same size group. In accordance with Strathmann (1967) plasma volumes are used for diatoms, whereas simple cell volumes are used for the other groups. The diatom plasma volumes were calculated on the basis of a 1 $\mu\text{m}$ -thick cytoplasm lining and a vacuole plasma fraction factor (cf. Strathmann 1967)  $F = 0.10$ .

The unit values of Table 1 have been used for the preparation of the phytoplankton depth distribution graphs.

Due to the uncertainties of the method mentioned above, the cell number estimates should not be regarded as exact values, but they will indicate the size order of the abundance of each group and show the trends of the phytoplankton composition at the stations sampled.

The flagellate group, consisting mainly of monads which could not be referred to the other groups, was generally the most numerous group and was dominated by forms less than 5µm, particularly less than 2.5µm in diameter. As already mentioned the green flagellate Micromonas pusilla probably was the major component of the smallest size group, whereas haptophycean flagellates, Dicrateria sp. and Chrysochromulina spp. were frequently found in the 2.5-5µm group.

The general presence of very small phytoplankton monads in relatively large numbers in tropical waters was not known until recently (see Zeitzschel 1970) though Micromonas pusilla has been found at other oceanic localities before (e.g., Bay of Biscay, Manton & Parke 1960; Barents Sea and adjacent waters, Thronsen 1970).

It should be kept in mind, however, that the larger species contribute relatively much more to the biomass and hence may be important even when greatly outnumbered by smaller forms, see, e.g., Sheldon and Parsons (1967). This can also be seen in the present material when the cell concentrations are expressed in terms of cell-plasma volume or cell surface area as shown in the examples below:

In the surface sample at station 09 all groups were represented in reasonably large quantities, but even then flagellates of size less than 5µm were dominating by number as shown in Table 2.

Table 2. Concentration of phytoplankton at station 09, 0m sample.

	DINO	COC	C.DIAT	P.DIAT	FLAG
cell number	4.6%	1.2%	3.8%	9.9%	80.5%
cell-plasma vol.	47.6%	0.2%	20 %	2 %	30.2%
cell surf. area	27 %	0.2%	18 %	4.8%	50 %

At station 11 coccolithophorids were more abundant than dinoflagellates and diatoms though flagellates less than 2.5µm were most numerous, and as can be seen from Table 3 also were important in terms of cell-plasma volume and cell surface area.

The 65m sample of station 21 is probably in the most productive layer in these water masses, and showed low flagellate concentrations only; diatoms were absent from the count whereas dinoflagellates and coccolithophorids were relatively abundant. The importance of the last two groups

becomes more evident from the cell-plasma volumes and cell surface areas shown in Table 4.

Table 3. Concentration of phytoplankton at station 11, 0m sample.

	DINO	COC	C.DIAT	P.DIAT	FLAG
cell number	0.2%	1.4%	0.2%	0.4%	97.8%
cell-plasma vol.	27.6%	27.8%	8.4%	2.3%	33.9%
cell surf. area	10.2%	20 %	8 %	0.4%	61.4%

Table 4. Concentration of phytoplankton at station 21, 65m sample.

	DINO	COC	C.DIAT	P.DIAT	FLAG
cell number	25.5%	27.7%	-	-	46.8%
cell-plasma vol.	61.5%	37.3%	-	-	1.2%
cell surf. area	53 %	43.2%	-	-	3.8%

#### Graphs and tables of the phytoplankton occurrence and distribution

The estimated cell concentrations of the stations sampled are presented in Fig. 2-20, in terms of cell numbers, cell-plasma volumes and cell surface areas. Tables giving the estimated values for cell numbers of systematical groups and cell size groups are shown below the graphs for each station.

Note: Cell numbers are omitted from the graphs of stations 03 to 05 because the smallest size group was not considered in the counts. For the same reason the cell-plasma volumes and cell surface area values will be too low, but this deviation is probably less important as the small cells contribute less to these values than the larger ones. This also applies to the graphs for station 07, 12m.

Further comments on the systematical and specific composition of the phytoplankton at each of the stations will better be given when the preserved samples are worked up.

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PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 03

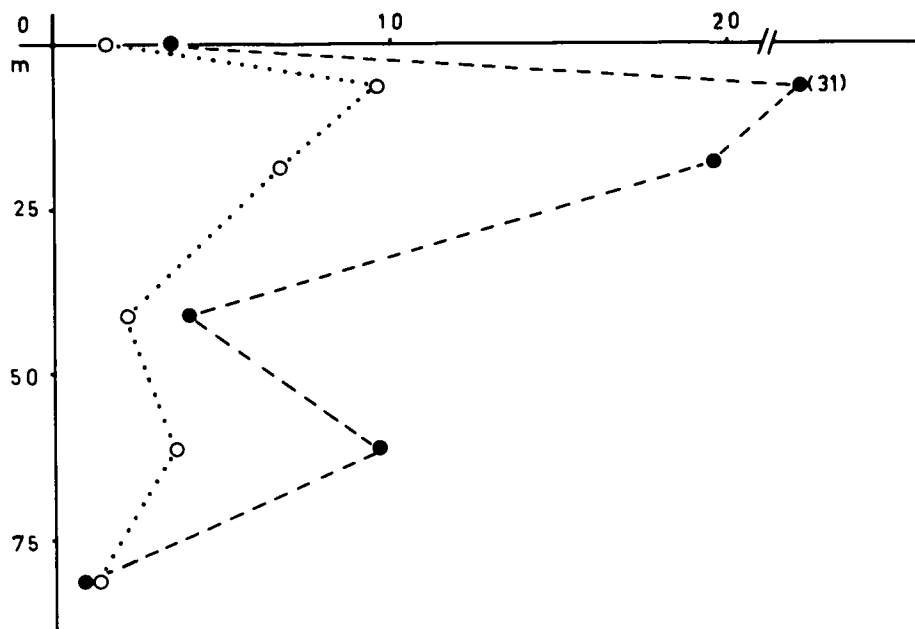


Fig.2. Vertical distribution of phytoplankton at station 03 .  
 ● cell-plasma volume -  $\mu\text{m}^3/\text{litre} \cdot 10^{-6}$ , o cell surface area -  $\mu\text{m}^2/\text{litre} \cdot 10^{-6}$ , cell numbers omitted (see p. 9 )

Cell concentrations of systematical groups, cells/litre, cells >2.5 $\mu\text{m}$						
Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	600	2 400	900	-	1 500	5 400
6m	4 500	4 800	600	-	6 300	16 200
18m	6 600	4 800	-	-	5 400	16 800
41m	2 400	3 000	300	-	2 100	7 800
61m	3 300	5 100	-	600	2 400	11 400
82m	900	1 800	300	-	1 500	4 500

Cell concentrations of size groups, cells/litre					
Depth	<2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m		2 700	900	1 800	-
6m	not counted	4 200	5 100	5 700	1 200
18m		4 500	7 800	3 900	600
41m		2 700	3 600	1 500	-
61m		4 200	5 100	1 800	300
82m		900	3 000	600	-

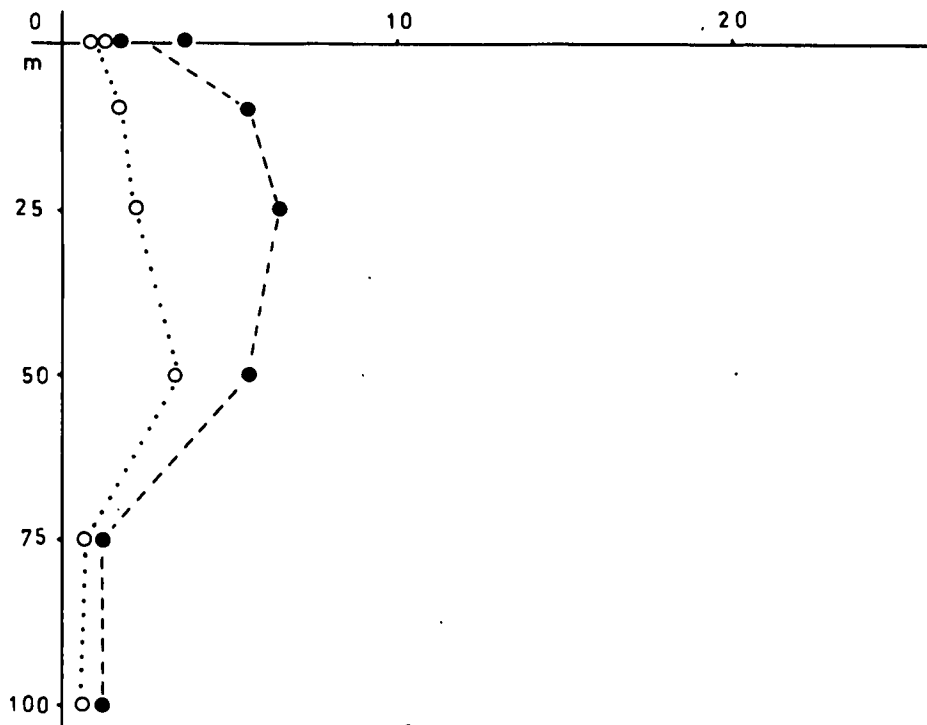


Fig.3. Vertical distribution of phytoplankton at station 04 .  
 ● cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ , ○ cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ , cell numbers omitted (see p. 9 ).

Cell concentrations of systematical groups, cells/litre, cells >2.5µ

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m <sup>x</sup>	600	1 800	300	-	900	3 600
0m <sup>x</sup>	450	1 950	450	-	750	3 600
10m	800	2 600	200	-	600	4 200
25m	1 600	1 400	1 000	-	-	4 000
50m	3 900	7 500	300	1 200	5 700	18 600
75m	1 000	2 200	200	-	800	4 200
100m	-	1 200	200	-	1 200	2 600

Cell concentrations of size groups, cells/litre

Depth	<2.5µ	2.5-5µ	5-10µ	10-20µ	>20µ
0m <sup>x</sup>		1 950	900	750	-
0m <sup>x</sup>		1 800	1 200	450	150
10m	not counted	1 800	1 200	1 000	200
25m	counted	1 000	1 400	1 400	200
50m		9 300	5 700	3 300	300
75m		2 600	1 200	400	-
100m		600	1 600	400	-

<sup>x</sup>repeated counting of same sample



PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 05

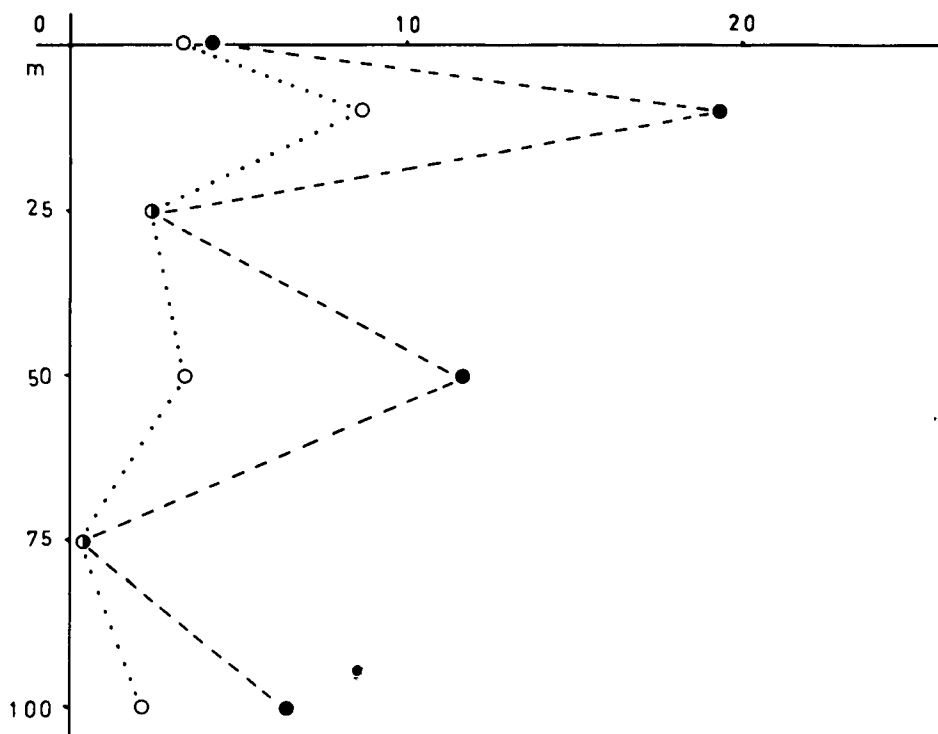


Fig.4. Vertical distribution of phytoplankton at station 05 .  
 ● cell-plasma volume -  $\mu^3/\text{litre} \cdot 10^{-6}$ , o cell surface area -  $\mu^2/\text{litre} \cdot 10^{-6}$ , cell numbers omitted (see p. 9).

Cell concentrations of systematical groups, cells/litre, cells  $>2.5\mu$

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	1 500	7 500	3 000	3 600	3 000	18 600
10m	2 100	20 100	3 300	5 400	4 200	35 100
25m	600	15 000	1 200	1 500	1 800	20 100
50m	3 000	2 400	300	600	3 900	10 200
75m	-	300	300	-	1 200	1 800
100m	-	300	900	1 200	1 800	4 200

Cell concentrations of size groups, cells/litre

Depth	$<2.5\mu$	2.5-5 $\mu$	5-10 $\mu$	10-20 $\mu$	$>20\mu$
0m		6 600	11 100	900	-
10m		15 300	17 400	1 200	1 200
25m	not counted	13 200	6 000	900	-
50m		5 700	3 300	600	600
75m		300	1 500	-	-
100m		-	3 300	600	300

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 06

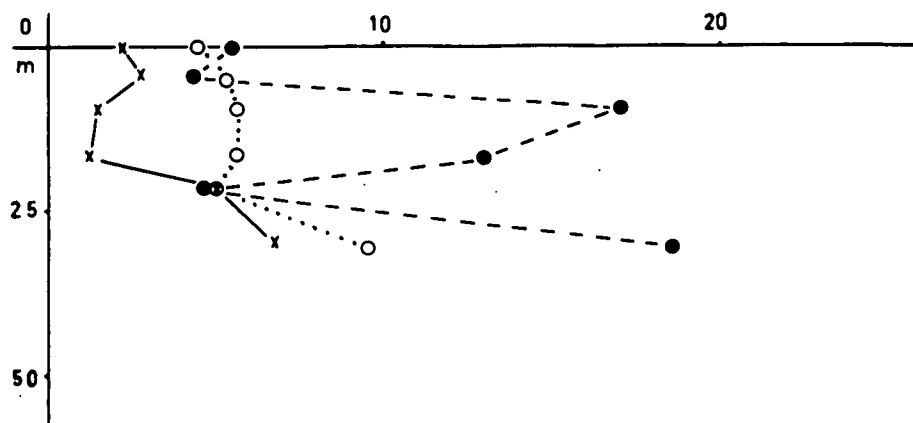


Fig.5. Vertical distribution of phytoplankton at station 06 .  
 x cells/litre · 10<sup>-5</sup>, ● cell-plasma volume - μm<sup>3</sup>/litre · 10<sup>-6</sup>,  
 o cell surface area - μm<sup>2</sup>/litre · 10<sup>-6</sup>.

Cell concentration of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	1 800	4 200	600	2 400	216 600	225 600
4m	600	2 700	600	5 100	275 100	284 100
9m	1 800	1 500	600	2 400	150 800	157 100
16m	2 400	4 800	600	1 200	105 600	114 600
22m	1 200	3 600	1 200	-	495 600	501 600
30m	1 200	3 000	600	1 800	675 400	682 000

Cell concentrations of size groups, cells/litre

Depth	<2.5μm	2.5-5μm	5-10μm	10-20μm	>20μm
0m	210 000	2 100	12 300	1 200	-
4m	240 000	30 900	12 900	300	-
9m	125 000	24 300	6 600	300	900
16m	76 800	27 600	9 600	-	600
22m	489 600	4 200	6 600	1 200	-
30m	640 000	31 200	8 400	1 800	600

## PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 07

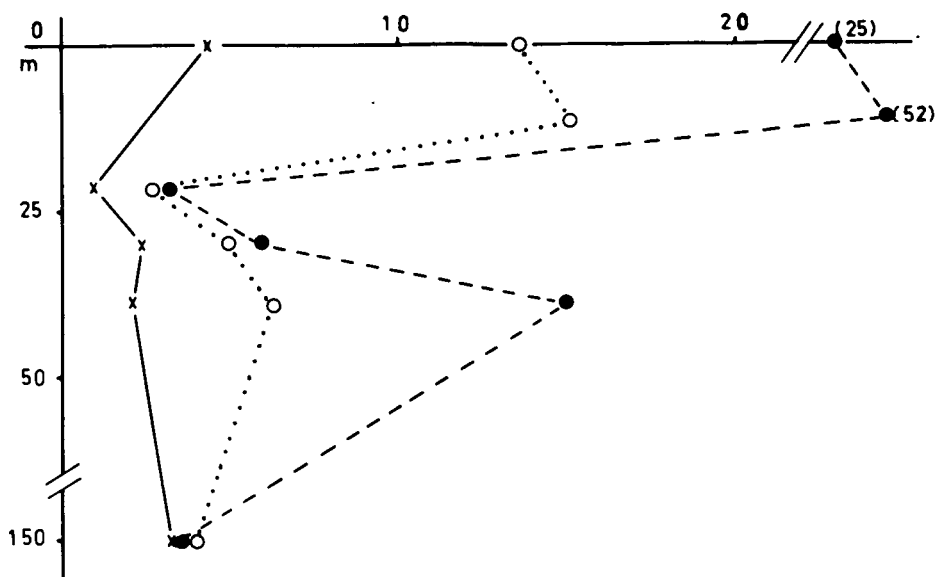


Fig.6. Vertical distribution of phytoplankton at station 07 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

## Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	6 000	9 600	600	-	429 200	445 400
12m	3 600	8 400	1 200	2 400	10 800 <sup>x</sup>	26 400
22m	600	2 400	600	600	103 200	107 400
30m	600	1 200	1 200	1 200	241 800	246 000
39m	3 000	2 400	-	1 800	215 400	222 600
150m	3 600	1 800	-	1 200	314 200	320 800

## Cell concentrations of size groups, cells/litre

Depth	< 2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	365 200	58 600	16 200	4 800	600
12m	- <sup>x</sup>	- <sup>x</sup>	19 200	4 800	2 400
22m	86 400	14 400	6 000	600	-
30m	230 400	9 600	4 800	600	600
39m	201 600	10 800	7 800	1 800	600
150m	298 000	16 200	6 000	600	-

<sup>x</sup>Cells less than 5 $\mu\text{m}$  not counted.

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 08

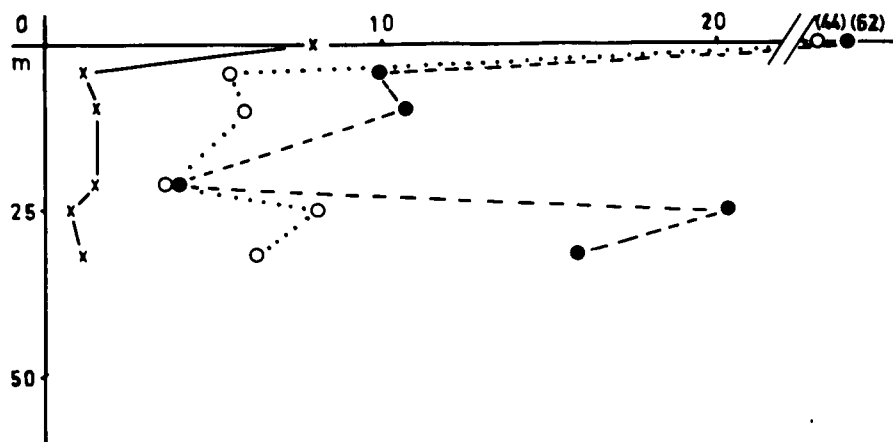


Fig.7. Vertical distribution of phytoplankton at station 08 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

Cell concentration of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	9 600	-	1 200	3 600	799 200	813 600
4m	3 600	-	600	-	109 800	114 000
10m	4 800	-	-	1 200	159 600	165 600
17m	600	-	-	1 200	157 800	159 600
25m	3 000	-	600	-	93 600	97 200
32m	3 600	-	-	-	111 000	114 600

Cell concentration of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2,5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	470 400	236 400	93 600	12 600	600
4m	86 400	23 400	1 200	2 400	600
10m	104 400	54 000	3 000	3 600	600
17m	124 800	31 200	1 800	1 800	-
25m	57 600	33 600	2 400	2 400	1 200
32m	76 800	33 000	1 200	3 000	600

## PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 09

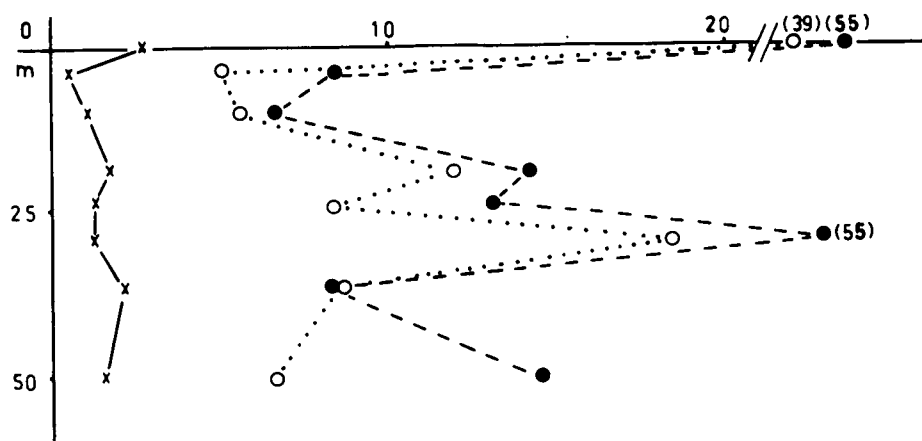


Fig. 8. Vertical distribution of phytoplankton at station 09 .  
 x cells/litre  $\cdot 10^{-5}$ ,  $\bullet$  cell-plasma volume -  $\mu\text{m}^3/\text{litre} \cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre} \cdot 10^{-6}$ .

## Cell concentration of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	13 200	3 600	11 000	28 800	233 400	290 000
4m	1 200	600	1 200	1 200	67 200	71 400
10m	3 600	2 400	3 600	1 800	96 000	107 400
18m	12 000	2 400	600	6 000	161 400	182 400
24m	4 800	-	1 200	2 400	117 600	126 000
29m	7 800	600	1 800	3 000	111 600	124 800
37m	2 400	-	600	2 400	212 800	218 200
50m	2 400	-	-	1 200	160 800	164 400

## Cell concentration of size groups, cells/litre

Depth	< 2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	> 20 $\mu\text{m}$
0m	153 600	60 600	62 200	13 200	1 200
4m	38 400	27 000	4 200	1 200	600
10m	67 200	31 800	5 400	3 000	-
18m	96 000	54 000	27 000	5 400	-
24m	86 400	21 000	13 200	5 400	-
29m	86 400	49 800	9 000	5 400	3 000
37m	96 000	103 200	7 200	1 800	-
50m	105 600	54 000	3 000	1 200	600

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 10

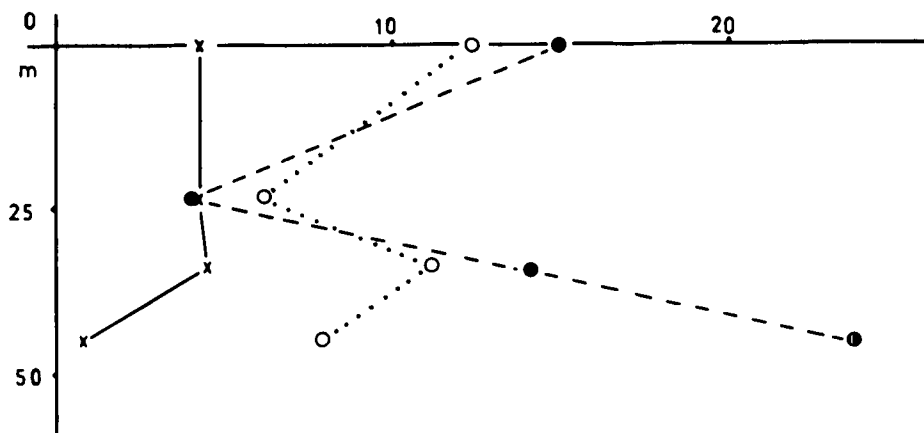


Fig.9. Vertical distribution of phytoplankton at station 10 .  
 x cells/litre·10<sup>-5</sup>, ● cell-plasma volume - μm<sup>3</sup>/litre·10<sup>-6</sup>,  
 o cell surface area - μm<sup>2</sup>/litre·10<sup>-6</sup>.

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	6 600	7 200	600	1 800	420 600	436 800
23m	3 000	3 000	-	3 000	427 200	436 200
33m	7 800	10 200	-	600	429 600	448 200
45m	2 400	1 200	600	2 400	91 800	98 400

Cell concentrations of size groups, cells/litre

Depth	< 2.5μm	2.5-5μm	5-10μm	10-20μm	> 20μm
0m	355 200	63 600	13 200	4 800	-
23m	384 000	45 000	6 000	1 200	-
33m	364 800	65 400	13 800	4 200	-
45m	57 600	37 200	1 200	1 200	1 200

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 11

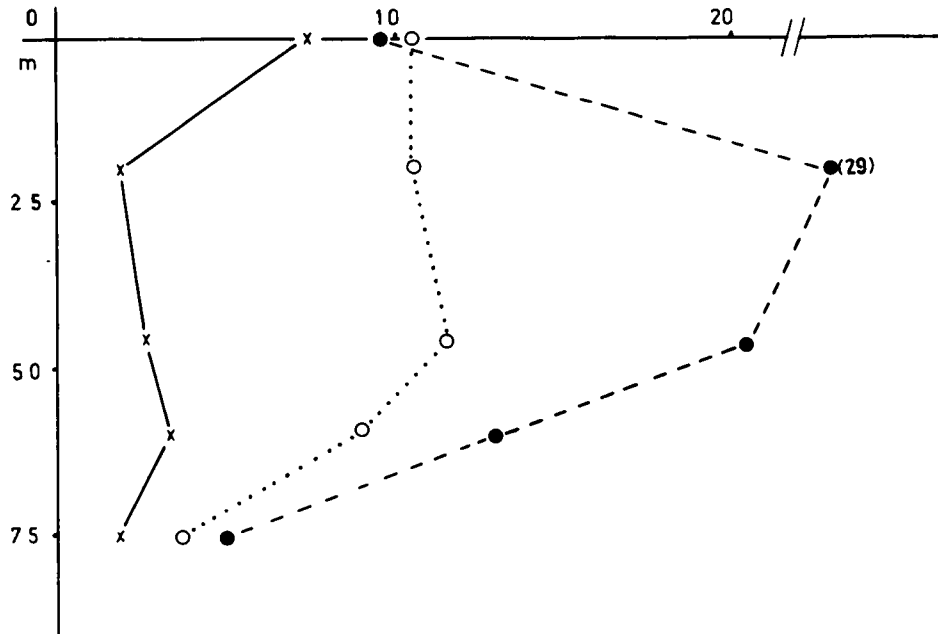


Fig.10. Vertical distribution of phytoplankton at station 11 .  
 x cells/litre·10<sup>-5</sup>, ● cell-plasma volume - μm<sup>3</sup>/litre·10<sup>-6</sup>,  
 o cell surface area - μm<sup>2</sup>/litre·10<sup>-6</sup>.

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	1 800	10 800	1 800	3 000	737 400	754 800
20m	3 600	5 400	1 800	-	184 800	195 600
46m	-	6 600	3 600	1 200	251 400	262 800
60m	6 000	6 600	-	1 800	317 400	331 800
75m	1 800	1 800	600	-	191 400	195 600

Cell concentrations of size groups, cells/litre

Depth	<2.5μm	2.5-5μm	5-10μm	10-20μm	> 20μm
0m	691 200	45 000	16 800	1 800	-
20m	163 200	22 200	6 600	1 800	1 800
46m	220 800	31 200	7 200	1 200	2 400
60m	279 600	36 600	10 800	4 800	-
75m	172 800	18 600	1 800	2 400	-

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 12

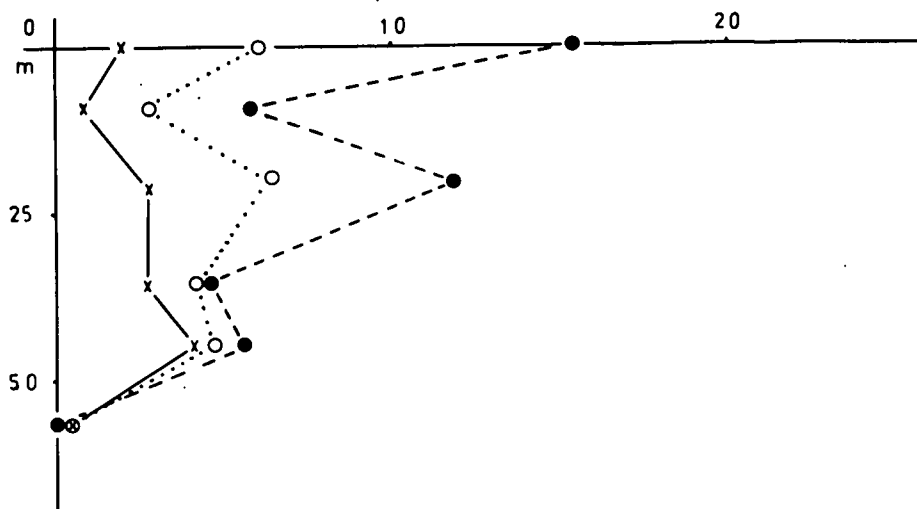


Fig.11. Vertical distribution of phytoplankton at station 12 .  
 x cells/litre·10<sup>-5</sup>, ● cell-plasma volume - μm<sup>3</sup>/litre·10<sup>-6</sup>,  
 o cell surface area - μm<sup>2</sup>/litre·10<sup>-6</sup>.

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	1 200	1 200	300	600	208 200	211 500
9m	1 500	600	-	900	92 400	95 400
21m	2 100	1 200	-	2 400	276 000	281 700
36m	1 800	2 100	-	900	268 200	273 000
45m	1 500	1 200	300	-	407 400	410 400
57m	-	-	-	-	42 300	42 300

Cell concentrations of size groups, cells/litre

Depth	< 2.5μm	2.5-5μm	5-10μm	10-20μm	>20μm
0m	192 000	15 000	2 400	1 200	900
9m	86 400	5 100	600	3 300	-
21m	259 200	15 600	3 600	2 700	600
36m	254 400	13 800	3 300	1 200	300
45m	393 600	12 300	2 400	2 100	-
57m	38 400	3 600	300	-	-



PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 13

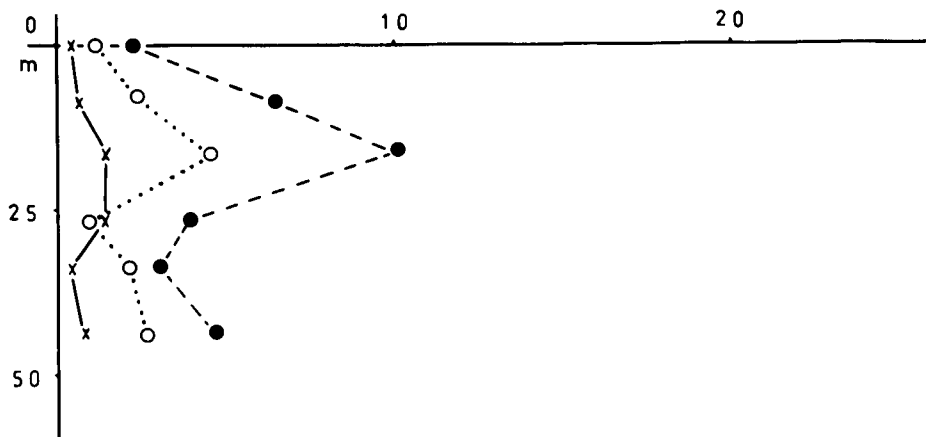


Fig.12. Vertical distribution of phytoplankton at station 13 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	900	300	-	-	36 600	37 800
8m	600	-	-	-	70 800	71 400
17m	2 400	300	-	-	149 700	152 400
27m	3 600	-	-	600	137 400	141 600
34m	1 500	-	600	-	43 500	45 600
44m	1 800	-	300	-	93 000	95 100

Cell concentrations of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	33 600	2 100	1 200	900	-
8m	62 400	5 100	3 300	300	300
17m	134 400	12 300	3 000	2 400	300
27m	120 000	15 000	3 300	1 500	1 800
34m	33 600	8 700	1 800	1 500	-
44m	81 600	11 100	1 200	900	300

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 14

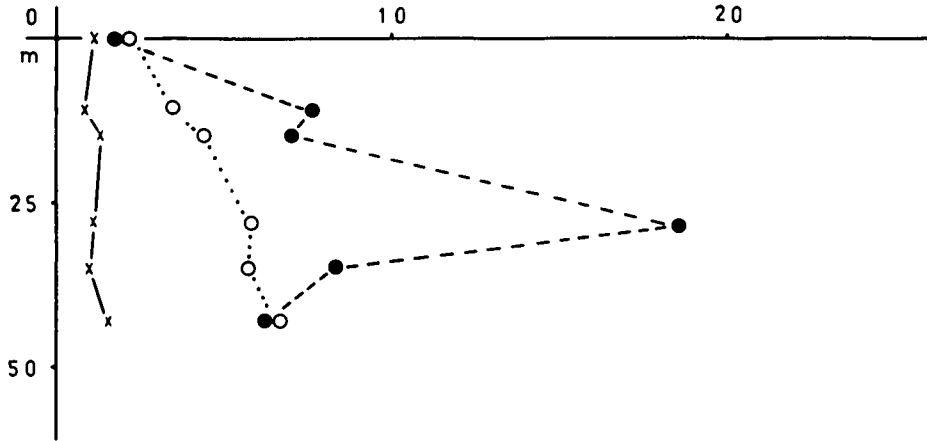


Fig.13. Vertical distribution of phytoplankton at station 14 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	900	-	600	600	109 500	111 600
11m	1 200	-	900	1 500	85 800	89 400
15m	3 600	300	-	300	129 300	133 500
28m	1 800	-	-	600	109 500	111 900
35m	900	-	1 800	1 500	97 800	102 000
43m	1 200	-	-	2 100	152 100	155 400

Cell concentrations of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	101 100	7 500	2 400	300	300
11m	77 400	7 800	3 000	600	600
15m	110 400	16 200	4 200	2 700	-
28m	91 200	13 800	4 800	1 200	900
35m	76 800	18 600	3 300	2 400	900
44m	115 500	34 200	3 600	600	1 500

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 15

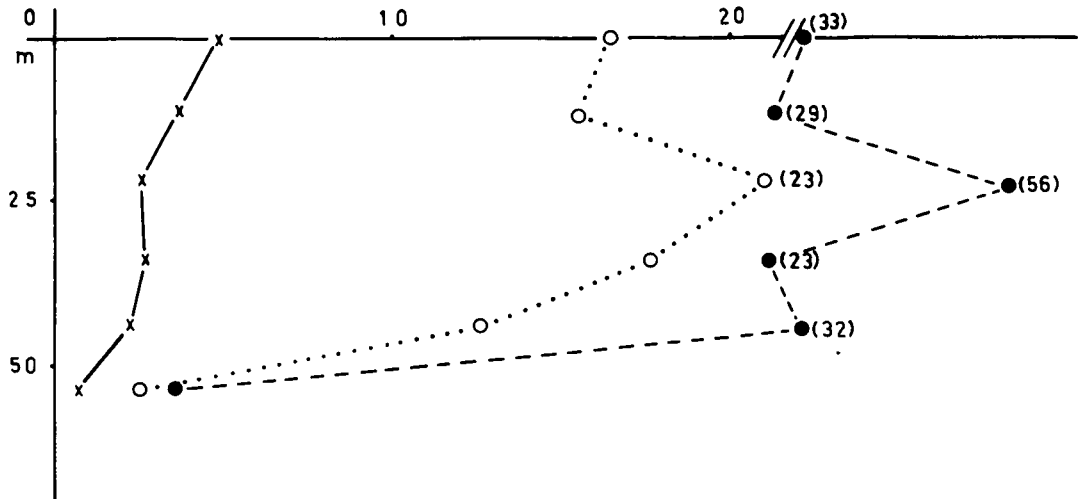


Fig.14. Vertical distribution of phytoplankton at station 15 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	5 400	10 200	-	26 400	449 400	491 400
11m	6 600	7 800	1 200	23 400	330 600	369 600
22m	7 200	2 400	1 800	18 600	217 800	247 800
34m	5 400	600	600	7 200	252 600	266 400
44m	6 000	6 600	600	2 400	196 800	212 400
53m	1 200	1 200	-	600	76 200	79 200

Cell concentrations of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2,5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	399 600	65 400	21 600	3 000	1 800
11m	289 200	54 000	18 600	6 600	1 200
22m	175 200	40 800	21 600	6 000	4 200
34m	231 600	21 000	4 200	4 200	5 400
44m	165 000	34 200	6 600	4 800	1 800
53m	58 200	17 400	2 400	1 200	-

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 16

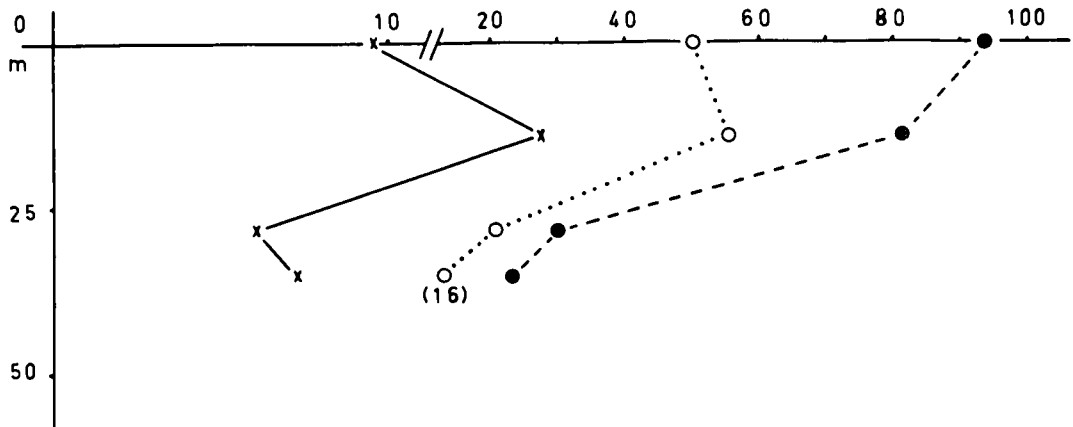


Fig.15. Vertical distribution of phytoplankton at station 16 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu\text{m}^3/\text{litre} \cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre} \cdot 10^{-6}$ .

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	2 400	7 200	8 400	44 400	886 800	949 200
14m	11 700	13 500	4 500	27 900	2598 600	2656 200
28m	4 800	4 800	10 800	30 000	555 600	606 000
35m	7 200	2 400	1 800	6 600	697 200	715 200

Cell concentrations of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	774 000	111 600	45 600	9 600	8 400
14m	2450 700	112 500	70 200	18 900	3 900
28m	452 400	105 600	38 400	8 400	1 200
35m	624 000	63 600	22 200	4 800	600

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 17

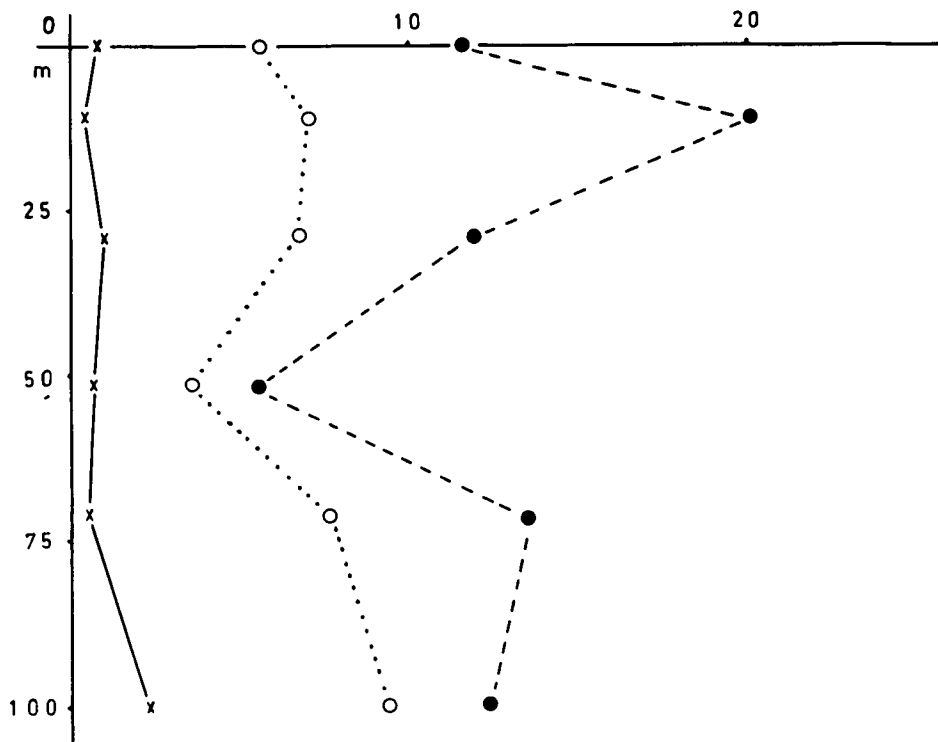


Fig.16. Vertical distribution of phytoplankton at station 17 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu^3$ /litre $\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu^2$ /litre $\cdot 10^{-6}$ .

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	3 600	2 400	-	1 800	88 200	96 000
11m	5 400	1 200	-	-	51 600	58 200
29m	2 400	4 200	-	8 400	86 400	101 400
52m	1 800	2 400	-	3 000	66 600	73 800
71m	4 200	7 800	600	1 800	33 600	48 000
100m	4 800	13 200	-	10 800	192 600	221 400

Cell concentrations of size groups, cells/litre

Depth	< 2.5 $\mu$ m	2.5-5 $\mu$ m	5-10 $\mu$ m	10-20 $\mu$ m	> 20 $\mu$ m
0m	77 400	10 800	2 400	5 400	-
11m	38 400	11 400	3 000	4 800	600
29m	63 000	25 800	7 800	4 800	-
52m	58 200	7 800	4 800	3 000	-
71m	9 600	20 400	12 600	5 400	-
100m	163 800	32 400	21 000	4 200	-

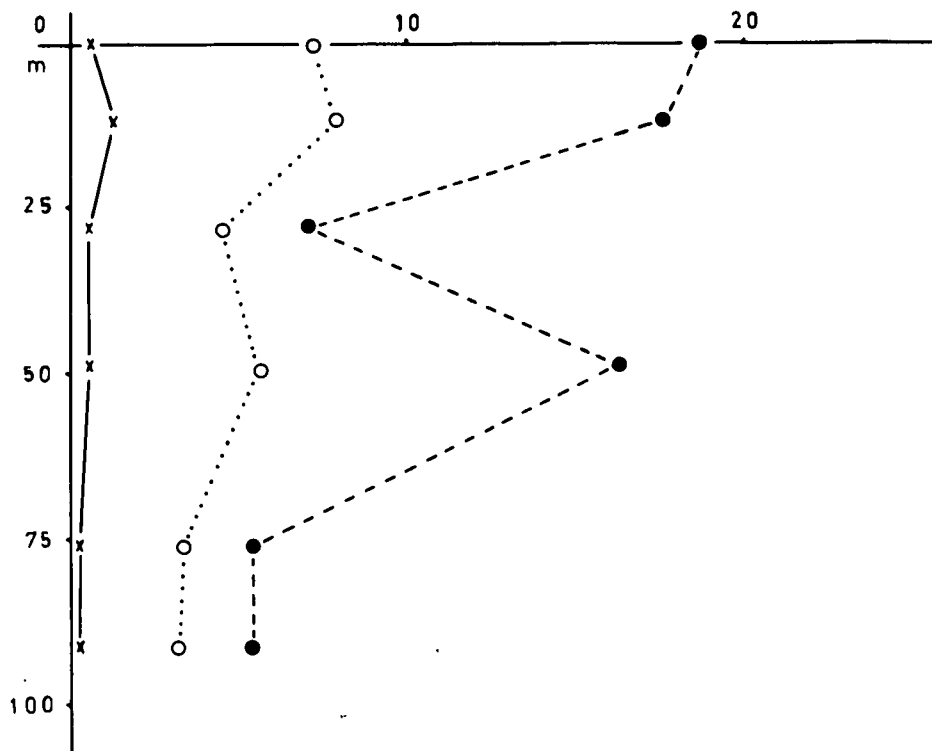


Fig.17. Vertical distribution of phytoplankton at station 18 .  
 x cell/litre·10<sup>-5</sup>, ● cell-plasma volume - µm<sup>3</sup>/litre·10<sup>-6</sup>,  
 o cell surface area - µm<sup>2</sup>/litre·10<sup>-6</sup>.

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	4 800	4 800	600	1 200	56 400	67 800
12m	4 800	1 800	600	1 200	112 200	120 600
28m	2 400	3 000	-	600	48 600	54 600
49m	2 400	3 000	-	-	51 600	57 000
76m	1 200	600	-	600	16 200	18 600
91m	1 800	4 800	-	1 200	15 600	23 400

Cell concentrations of size groups, cells/litre

Depth	<2.5µm	2.5-5µm	5-10µm	10-20µm	>20µm
0m	38 400	18 600	6 600	3 600	600
12m	67 800	41 400	8 400	2 400	600
28m	39 600	9 000	3 000	2 400	600
49m	39 600	8 400	6 000	2 400	600
76m	9 600	4 200	2 400	1 800	600
91m	9 600	5 400	6 000	2 400	-

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 19

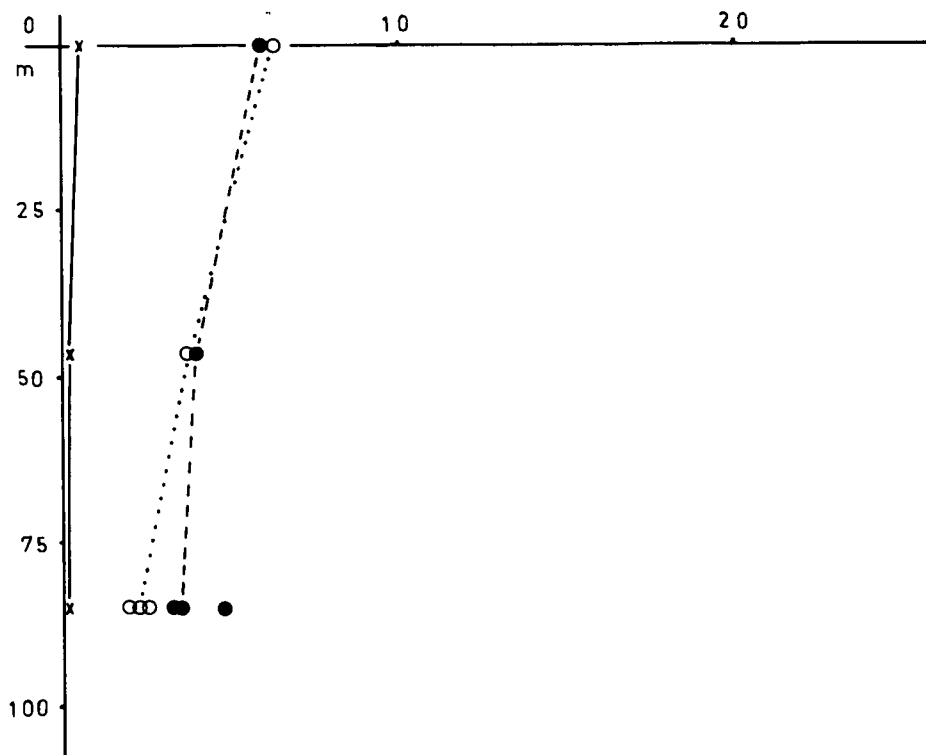


Fig.18. Vertical distribution of phytoplankton at station 19.  
 x cells/litre $\cdot 10^{-5}$ ,  $\bullet$  cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	1 800	1 200	1 800	7 200	61 200	73 200
46m	2 400	1 800	600	600	28 200	33 600
85m <sup>x</sup>	1 200	3 600	-	-	19 200	24 000
85m <sup>x</sup>	1 200	4 200	-	600	13 800	19 800
85m <sup>x</sup>	1 200	-	-	1 200	18 000	20 400

Cell concentrations of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	25 200	37 200	7 800	2 400	600
46m	7 200	18 000	6 600	1 800	-
85m <sup>x</sup>	9 600	8 400	4 200	1 800	-
85m <sup>x</sup>	4 800	7 800	6 000	1 200	-
85m <sup>x</sup>	7 800	7 800	3 600	1 200	-

<sup>x</sup>three different counts from the same sample

PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 21

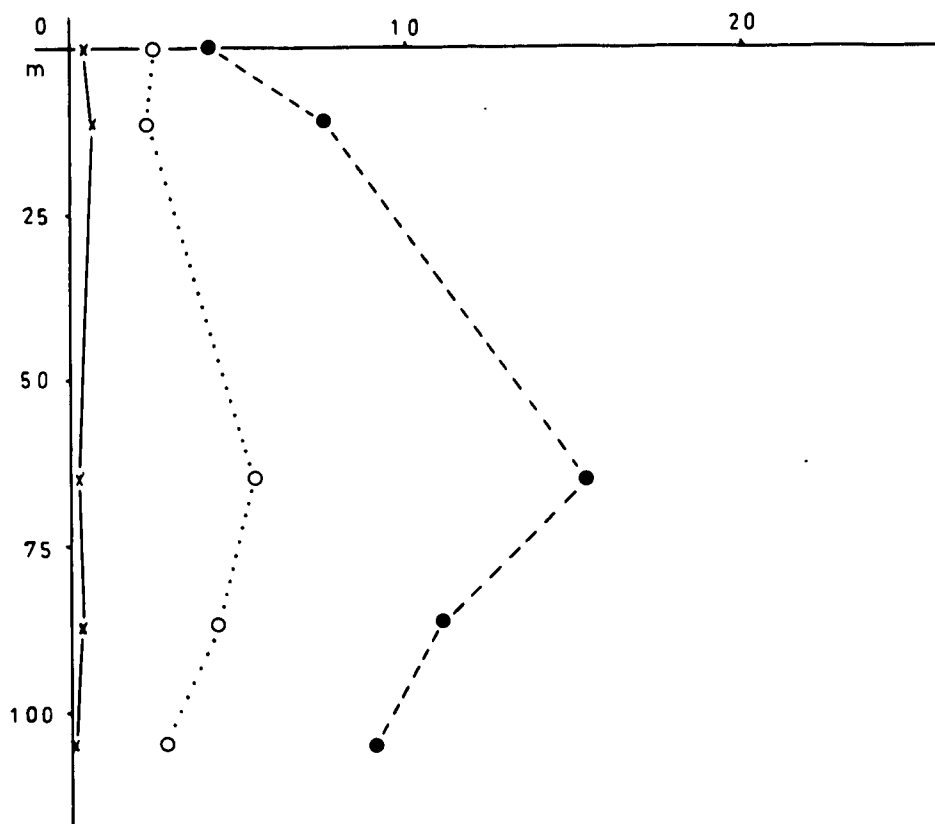


Fig.19. Vertical distribution of phytoplankton at station 21 .  
 x cells/litre $\cdot 10^{-5}$ ,  $\bullet$  cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	1 500	1 200	-	300	44 400	47 400
11m	1 800	600	-	-	7 200	9 600
65m	3 600	3 900	-	-	6 600	14 100
87m	4 200	3 300	-	300	23 400	31 200
105m	1 500	2 100	-	-	4 500	8 100

Cell concentrations of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	33 600	8 700	3 600	1 500	-
11m	4 800	2 100	1 200	1 200	300
65m	4 800	1 500	2 700	4 800	300
87m	14 400	7 200	7 200	2 100	300
105m	2 400	1 200	2 400	1 800	300



## PHYTOPLANKTON OCCURRENCE AND DISTRIBUTION AT STATION 22

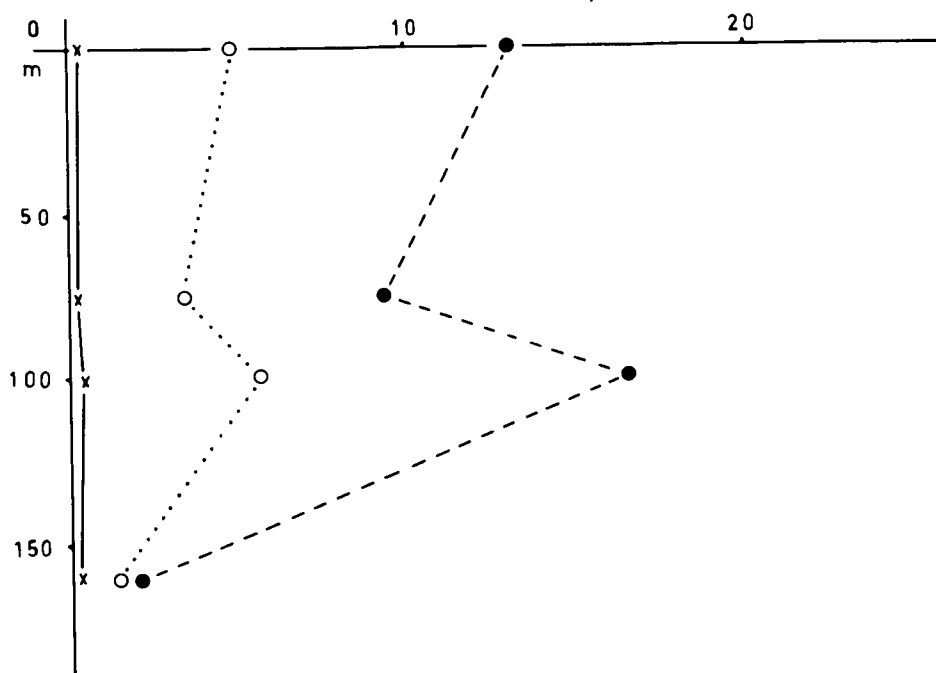


Fig.20. Vertical distribution of phytoplankton at station 22 .  
 x cells/litre $\cdot 10^{-5}$ , ● cell-plasma volume -  $\mu\text{m}^3/\text{litre}\cdot 10^{-6}$ ,  
 o cell surface area -  $\mu\text{m}^2/\text{litre}\cdot 10^{-6}$ .

## Cell concentrations of systematical groups, cells/litre

Depth	DINO	COC	C.DIAT	P.DIAT	FLAG	Total
0m	2 700	4 200	-	-	25 500	32 400
75m	4 200	1 500	-	-	12 900	18 600
100m	4 200	3 900	-	900	14 400	23 400
150m	1 200	1 800	-	300	8 700	12 000

## Cell concentrations of size groups, cells/litre

Depth	<2.5 $\mu\text{m}$	2.5-5 $\mu\text{m}$	5-10 $\mu\text{m}$	10-20 $\mu\text{m}$	>20 $\mu\text{m}$
0m	19 200	5 700	3 600	3 600	300
75m	7 200	4 500	5 100	1 500	300
100m	7 500	6 300	6 300	2 700	600
150m	4 800	3 300	3 300	600	-

SCOR DISCOVERER EXPEDITION

May 1970

NANOPLANKTON (< 22 $\mu$ ) AND NET PLANKTON (> 22 $\mu$ )  
CHLOROPHYLL CONCENTRATIONS IN mg  $\cdot$  m<sup>-3</sup>

Thomas C. Malone

A 0.555 liter sample was fractionated by passing it first through a 22-micron mesh screen and then through a Whatman GF/C glass-fiber filter coated with 2 ml of a 1% suspension of Mg CO<sub>3</sub>. Chlorophyll concentrations were determined on the two fractions by the fluorometric method. The times recorded are sun time.

Chlorophyll concentrations were also determined on duplicate samples collected on a Whatman GF/C filter without fractionation. These results have been incorporated in the report by Ian Baird in order to provide direct comparison with his determinations of chlorophyll concentration (see section C).

For additional information see reference (1).

SCOR DISCOVERER EXPEDITION  
MAY 1970

NANOPLANKTON (< 22 $\mu$ ) AND NET PLANKTON (> 22 $\mu$ )  
CHLOROPHYLL CONCENTRATIONS IN mg  $\cdot$  m<sup>-3</sup>

Station #	Sample Time	Depth (m)	Nanno	Net	Nanno	Net
1	0900	2	0.060	0.037	0.049	0.011
	1500	2	0.043	0.000	0.045	0.010
2	0900	2	0.032	0.004	0.031	0.004
		1100	0	0.027		
		10	0.027	0.000		
		27	0.036	0.005		
		51	0.032	0.006		
		75	0.062	0.000		
		101	0.172	0.013		
		1500	2	0.027	0.003	0.026
3	0900	2	0.049	0.009	0.044	0.006
		1100	0	0.042		
		6	0.042	0.005		
		18	0.052	0.000		
		41	0.057	0.000		
		61	0.133	0.005		
		82	0.220	0.000		
		1500	2	0.037	0.013	0.039
4	0900	2	0.062	0.016	0.058	0.004
		1100	0	0.049		
		10	0.049	0.006		
		25	0.052	0.018		
		50	0.133	0.000		
		75	0.319	0.000		
		100	0.108	0.000		
		1500	2	0.045	0.015	0.052
6	0900	2	0.276	0.038	0.267	0.026
		1100	0	0.215		
		4	0.232	0.000		
		9	0.224	0.008		
		16	0.224	0.017		
		22	0.316	0.024		
		30	0.631	0.073		
		1500	2	0.232	0.000	0.198

SCOR DISCOVERER EXPEDITION  
MAY 1970

NANOPLANKTON (< 22 $\mu$ ) AND NET PLANKTON (> 22 $\mu$ )  
CHLOROPHYLL CONCENTRATIONS IN mg  $\cdot$  m<sup>-3</sup>

Station #	Sample Time	Depth (m)	Nanno	Net	Nanno	Net		
7	0900	2	0.250	0.069	0.258	0.026		
		0	0.224	0.077				
	1100	4	0.224	0.034				
		12	0.232	0.035				
		22	0.461	0.000				
		30	0.388	0.000				
		39	0.218	0.024				
		1500	2	0.224	0.017	0.224	0.000	
		8	0900	2	0.241	0.078	0.241	0.043
	0			0.146	0.018			
1100	4		0.164	0.000				
	10		0.220	0.038				
	17		0.258	0.009				
	25		0.250	0.034				
	32		0.224	0.000				
	1500		2	0.198	0.000	0.159	0.035	
	10		0900	2	0.207	0.000	0.189	0.000
				0	0.189	0.031		
1100		5	0.189	0.000				
		11	0.176	0.031				
		23	0.181	0.034				
		33	0.189	0.000				
		45	0.276	0.025				
		1500	2	0.185	0.009	0.185	0.004	
		11	0900	2	0.196	0.049	0.228	0.000
				0	0.187	0.035		
1100	10		0.210	0.000				
	20		0.204	0.016				
	35		0.219	0.023				
	46		0.233	0.000				
	60		0.127	0.003				
	1500		2	0.189	0.011	0.175	0.013	
	12		0900	2	0.162	0.010	0.154	0.000
				0	0.112	0.032		
1100		9	0.125	0.015				
		21	0.142	0.014				
		36	0.182	0.044				
		45	0.181	0.034				
		57	0.116	0.000				
		1500	2	0.119	0.011	0.108	0.019	

SCOR DISCOVERER EXPEDITION  
MAY 1970

NANOPLANKTON (< 22 $\mu$ ) AND NET PLANKTON (> 22 $\mu$ )  
CHLOROPHYLL CONCENTRATIONS IN mg  $\cdot$  m<sup>-3</sup>

Station #	Sample Time	Depth (m)	Nanno	Net	Nanno	Net	
13	0900	2	0.217	0.002	0.227	0.000	
		0	0.192	0.008			
	1100	8	0.202	0.000			
		17	0.232	0.029			
		27	0.199	0.053			
		34	0.157	0.000			
		44	0.128	0.018			
		2	0.177	0.023	0.218	0.000	
	15	0900	2	0.196	0.019	0.208	0.015
			0	0.118	0.031		
1100		11	0.121	0.027			
		22	0.143	0.003			
		34	0.267	0.000			
		44	0.294	0.000			
		53	0.194	0.000			
		2	0.126	0.000	0.129	0.010	
16		0900	2	0.276	0.000	0.262	0.020
			0	0.204	0.016		
	1100	8	0.224	0.040			
		14	0.558	0.165			
		20	0.561	0.000			
		28	0.490	0.020			
		35	0.461	0.044			
		2	0.197	0.063	0.221	0.016	
	17	0900	2	0.069	0.013	0.066	0.009
			0	0.047	0.004		
1100		11	0.052	0.002			
		29	0.052	0.010			
		52	0.093	0.016			
		71	0.233	0.036			
		86	0.125	0.032			
		2	0.039	0.013	0.043	0.000	

SCOR DISCOVERER EXPEDITION  
MAY 1970

NANOPLANKTON (< 22 $\mu$ ) AND NET PLANKTON (> 22 $\mu$ )  
CHLOROPHYLL CONCENTRATIONS IN mg  $\cdot$  m<sup>-3</sup>

Station #	Sample Time	Depth (m)	Nanno	Net	Nanno	Net		
18	0900	2	0.044	0.013	0.048	0.000		
		0	0.024	0.005				
	1100	12	0.041	0.000				
		28	0.049	0.000				
		49	0.058	0.005				
		76	0.091	0.000				
		91	0.233	0.049				
		1500	2	0.028	0.006	0.033	0.015	
	19	0900	2	0.036	0.013	0.040	0.000	
			0	0.026	0.001			
1100		9	0.026	0.000				
		25	0.026	0.001				
		46	0.038	0.018				
		68	0.064	0.005				
		85	0.067	0.011				
		1500	2	0.020	0.056	0.025	0.009	
		21	0900	2	0.023	0.006	0.028	0.000
				0	0.017	0.003		
1100	11		0.019	0.001				
	33		0.020	0.002				
	65		0.032	0.008				
	87		0.062	0.000				
	105		0.064	0.021				
	1500		2	0.015	0.001	0.020	0.000	

SCOR DISCOVERER EXPEDITION  
MAY 1970

PRIMARY PRODUCTIVITY DATA

Thomas C. Malone

Two water samples were collected from 2 m below the surface at 0900 and 1500 sun time. Four light and two dark bottles were filled from each subsurface sample, inoculated with 5  $\mu$ C C-14 as  $\text{Na}_2^{14}\text{CO}_3$ , and incubated in a fluorescent light incubator for 2 hours at sea surface temperatures. Following incubation, the samples were fractionated by passing the water first through a nitex-net disc with 22  $\mu\text{m}$  apertures and then through an HA Millipore filter. The nanoplankton are those phytoplankters retained on the Millipore filter and the netplankters those retained on the nitex discs.

The C-14 (as  $\text{Na}_2^{14}\text{CO}_3$ ) was prepared as described in Strickland and Parsons (Ref. 2).

Station	mgC $\text{m}^{-3}$ $\text{hr}^{-1}$		Station	mgC $\text{m}^{-3}$ $\text{hr}^{-1}$	
	Nanno	Net		Nanno	Net
1	0.46	0.01	12	1.24	0.14
	0.19	0.01		1.29	0.10
2	0.11	0.01	13	3.15	0.06
	0.12	0.01		2.96	0.10
3	0.16	0.01	15	2.76	0.12
	0.16	0.06		2.49	0.24
4	0.19	0.12	16	6.48	0.43
	0.15	0.06		6.29	0.41
6	3.79	0.05	17	0.54	0.08
	3.46	0.10		0.34	0.07
7	2.28	0.26	18	0.24	0.04
	3.02	0.22		0.30	0.00
8	2.14	0.32	19	0.31	0.01
	1.88	0.28		0.18	0.04
10	1.18	0.10	21	0.28	0.02
	1.76	0.12		0.16	0.04
11	1.26	0.10			
	1.50	0.12			

1) Malone, T. C.

Limnology and Oceanography 16, pp. 633-639 (1971)

2) Strickland, J. D. H. and T. R. Parsons.  
Fisheries Research Board of Canada  
Bulletin #125, second edition  
Ottawa 1965  
"A Manual of sea water analysis"



S. C. O. R. DISCOVERER EXPEDITION  
MAY 1970

MEASUREMENTS OF SPECTRAL AND TOTAL RADIANT FLUX

André Morel

Assisted by J. P. Bethoux

PRESENTATION OF RESULTS\*

1. Instruments

The following instrumentation was used.

- 1.1 An Eppley pyranometer (50-junction model; Eppley #6857), the standard for the measurements of irradiance above the surface, calibrated with reference to standards of the National Bureau of Standards (Washington).
- 1.2 A quanta-meter (L. Prieur, 1970) for measuring in air or in the water, the photon flux within the wavelength limits 370 and 700 nm (see Fig. 2 in above reference).
- 1.3 A thermopile (J. P. Bethoux, A. Ivanoff, 1970), for underwater irradiance measurements in energy units (watts).
- 1.4 A spectral irradiance meter (D. Bauer, A. Ivanoff, 1970) for determining the spectral distribution of the irradiance.

These instruments are equipped with nearly perfect cosine collectors (see Fig. 1) permitting the measurement of downwelling,  $E_D$ , and upwelling,  $E_U$ , irradiance. For the quanta-meter and the thermopile, the immersion factor has been determined for various wavelengths by a method similar to that used by R. Smith (1969). This factor is taken into account in the data reduction. For the spectral irradiance meter, which was used only for relative measurements (as will be seen later (¶ 3), this factor has not been used.

The spectral-irradiance meter makes it possible, as a rule, to carry out measurements between 400 and 700 nm, the interval within which the sensitivity factor can be determined correctly (see Fig. 2). Measurements out

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\* Measurements in the sea have been made by JMM. J. P. Bethoux and A. Morel.

The processing of the thermopile data has been carried out by Mr. J. P. Bethoux, of the quanta-meter data by MM. A. Morel and L. Prieur and of the spectral irradiance data by MM. A. Morel and L. Caloumenos.

The processing of the results has received generous financial assistance from UNESCO, which is acknowledged here with thanks. We also wish to express our thanks to Professor W. S. Wooster for his interest in the work.

of water correspond to the interval 400-700 nm. Measurements under water encompass a more restricted spectral range.

By means of a control circuit the gain of the photomultiplier is adjustable, increasing with depth. This permits measurement over a range of 6 or 7 orders of magnitude. But, at a given depth, the gain is constant and the method of recording the spectral data permits measurement over a range of only 2 orders of magnitude. The spectra at any depth cannot be analyzed if the recorded value is less than 1% of the peak value at that depth; thus, the range of spectral measurement is limited in proportion with the depth increase.

## 2. Measurements

2.1 The signal from the pyranometer, which was installed in a high and unobstructed location, was recorded continuously between sun noon and sunset. It was also recorded in the morning during the period of data collection so that it would be possible to make corrections to the data necessitated by variations of the surface irradiance.

2.2 The three instruments: quanta-meter, thermopile, and spectral-irradiance meter, were assembled together on a tubular frame and submerged simultaneously in the water: measurements with the three instruments were thus performed at the same moment and at the same depth (furnished by a depth gauge). Recording of the spectra was accomplished in the instrument itself (control of the measurement was from the ship, duration of the recording is 3 seconds). The signals from the quanta-meter, the thermopile and also from the pyranometer are recorded simultaneously.

2.3 Measurements of downwelling irradiance ( $E_d$ ) were always made by starting from the greatest depth (usually 150 meters) and proceeding upward in steps. The last measurement was made above the surface (noted by +0 in Table I). Under conditions of stable irradiance at the surface, the duration of the experiment was of the order of 15 to 20 minutes.

Measurements of upwelling irradiance ( $E_u$ ) were made in the same way, starting from a lesser depth than for the preceding experiment (generally 20 meters except at Stations 21 and 23). The experiment was completed by a measurement immediately under the surface (noted -0, in Table I).

## 3. Analysis

3.1 Pyranometer (17 stations): In accordance with the procedure agreed upon, the continuous recording has been analyzed by integrating the radiant flux within 5-minute intervals--by means of a planimeter--and these values have been redrawn in the form of bar graphs using the average values obtained (cf. figures). The irradiance ( $\text{Joules/m}^2$ ) for the period from sun noon to sunset has also been calculated. This value is carried on each figure.

3.2 Quanta-meter and thermopile: All measurements, once reduced, are corrected for variations in surface irradiance during the experiment. This correction is made so that, regardless of depth and surface condition, all measurements will be related to a constant surface irradiance. This is the surface irradiance that existed at the end of the experiment when the measurements above the water were made.

This correction is made from the pyranometer recording, and assumes, therefore, that variations of energy in the visible spectrum (or in a more restricted band) are proportional to the global variations received by the pyranometer. This approximation is sufficient and is justified by the short duration of the experiment.

3.3 Spectral irradiance meter: The analog recordings (on moving photographic paper) are first digitized. It is necessary to digitize both the spectral recording and the recording of pips which permit the location of the wavelengths (the motion of the paper is not synchronized with the rotation of the monochromator).

The spectral recording is not digitized at uniformly spaced wavelength intervals and the coordinates of points from the curve do not occur at even values of wavelength. These points, on the contrary, are chosen with the objective of describing the curve in a better way, that is to say, the points are closer together where the curve is steep and further apart where the curve is less steep. (It is necessary to have a minimum of 50 points to restore the surface spectra with sufficient accuracy. The surface spectra is the most extensive and the most complex.)

Later treatment (establishing the scale of wavelengths along the abscissa, correcting for sensitivity, assigning absolute values, interpolating, calculating the spectral values of the irradiance attenuation coefficients, tracing the curves, etc.) is performed by computer.\* It is only possible from this data reduction to obtain relative values.\*\*

Absolute values of spectral irradiance are obtained from the absolute measurements obtained with the quanta meter. After corrections for sensitivity have been made (cf. Fig. 2) a relative spectra is obtained, that is, a series of Y values in arbitrary units as a function of wavelength,  $\lambda$ .

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\* IBM 7040 at the Nice Observatory.

\*\* The value of the high voltage of the multiplier phototube, which is recorded, is not known with sufficient accuracy and it is, therefore, not possible to determine the gain factor and by this means the absolute values of spectral irradiance.

The following calculations are then made.

$$I_E = \int_{\lambda_1}^{\lambda_2} Y \cdot d\lambda \quad \text{and} \quad I_Q = \int_{\lambda_1}^{\lambda_2} Y \cdot \lambda \cdot d\lambda$$

$\lambda_1$  and  $\lambda_2$  are considered as being the limits of the spectra (for these limiting wavelengths  $Y$  is of the order of 1/100 of its maximum value).  $I_Q$  is placed equal to the number of quanta\*\*\* determined at the same depth (and normalized to a constant irradiance at the surface, cf. ¶ 3.2).

The calculation then determines absolute values for  $Y$  (expressed in  $w \cdot m^{-2} \cdot nm^{-1}$ ) from the relative spectral curve and the absolute value of total quanta obtained with the quanta meter. In a similar way,  $I_E$  is converted to  $E_{calc}$  in absolute values ( $w \cdot m^{-2}$ ).

$E_{calc}$  can be compared to  $E_{meas}$ , the irradiance measured with the thermopile, only for the underwater measurements (from ten meters and greater depths, because the red and infrared radiations to which the thermopile is sensitive are then sufficiently absorbed). This comparison is the object of Fig. 4.

#### 4. Recapitulation

In Table I, at each station, the experiments involving downwelling irradiance,  $E_D$ , are chronologically numbered from 1 to 4 (in column 3). By convention the experiments involving upwelling irradiance,  $E_U$ , are numbered 9 (only one experiment per station).

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\*\*\* The number of quanta is first corrected slightly: it is reduced by 3 to 4% for the measurements above the surface because the quanta meter is sensitive to radiant flux between 350 and 400 nm and similarly beyond 700 nm in accordance with a rapidly decreasing curve, while  $\lambda_1$  and  $\lambda_2$  are, respectively, 400 and 700 nm.

The number of quanta measured under water should likewise be reduced by a quantity corresponding to the photons present between 350 and 400 nm. This quantity is variable with depth and the type of water. It is practically zero for "green" waters and may be 6% for "blue" waters (calculated from the spectral data for the Gulf Stream given by J. E. Tyler and R. C. Smith, 1970). Since the sensitivity curve for the quanta meter is imprecise and the spectral irradiance is not determined below 400 nm, this correction can only be arbitrary and consequently it has not been made. This probably leads to a slight overestimation of the spectral values in the case of "blue" water.

- +0 corresponds to a measurement above the surface at the end of an experiment to determine downwelling irradiances,  $E_D$ .
- 0 corresponds to a measurement just below the surface, obtained at the end of an experiment to determine upwelling irradiances,  $E_U$ .

At the depths indicated between parentheses, the spectra are determined only in relative values because of the absence (for various reasons) of quanta meter measurements.

These measurements have been obtained under very variable conditions ranging from perfectly blue sky to completely overcast sky, the altitude of the sun varying from  $17^\circ$  (Station 19, experiment 4) to  $82^\circ$  (Station 23, experiment 1).

These various conditions are illustrated in Fig. 3 where 30 spectra, obtained above the surface and normalized at 560 nm, are illustrated. The extreme conditions corresponding to these spectra are as follows: altitude of the sun varied from  $27^\circ$  to  $82^\circ$ ; total energy, including infrared, varied from 210 to 1090 watts per sq. meter (pyranometer); radiant flux in the spectral band 400-700 nm varied from 90 to 480 watts per sq. meter ( $E_{ca}lc$ ). The main Fraunhofer lines can be seen equally well in all spectra even though they are not fully resolved.

The color temperatures of these spectra can be determined from the spectral data. They vary from  $5600^\circ$  to  $7500^\circ$  K, and are consistent with the sun and sky conditions that existed when the data were taken.

## 5. Presentation of Results

5.1 Global radiant flux above the surface (pyranometer). The results are presented only in graphical form by means of average values calculated over 5-minute intervals (§ 3.1). The graphs sometimes show blanks, when the pyranometer recording was interrupted. In the calculation of irradiation a linear interpolation has been made to estimate the missing values.

5.2 Downwelling irradiance (quanta meter and thermopile). The results are presented in two ways, in the form of tables and graphs.

### 5.2.1 Tables

First line: identifications, date, number of station, number of experiment, (set) hours of the beginning and end of the experiment.

First column: ("profondeur") depth in meters; where a depth is repeated, the quanta meter has been operated at a higher gain setting. The table, therefore, gives the value of total quanta  $\cdot \text{cm}^{-2} \cdot \text{sec}^{-1}$  for both gain settings.

Second column: ("mesures brutes") rough measurements of the signal furnished by the quanta meter.

Third column: ("référence-pont") This is the signal furnished by the pyranometer (expressed here in arbitrary units) which makes it possible to convert the measurements back to constant surface irradiance.

Columns 2 and 3 have been printed in accordance with the Working Group recommendation (meeting of 27 May 1970). The objective of this is as follows: examination of these values makes it possible to know if the measurements have been obtained under good conditions of stability, or if, on the contrary, the conditions were poor, and corrections are important.

Fourth column: (mesure corrigée) Measurements after correction (including, in addition to the preceding correction, the corrections for change in sensitivity, the dark current of the photomultiplier phototube, and the optical immersion factor). These measurements multiplied by the calibration factor give the number of quanta (only the value above the surface is given in this table; the remaining values appear in the tables that relate to the spectra).

Fifth column: at each depth, the number of quanta is related to the value above the surface; this relation is expressed in percent.

Sixth column: coefficient of attenuation,  $K$ , expressed in  $m^{-1}$ , calculated between the two depths indicated.

Seventh column: Gives the measurements obtained with the submersible thermopile; these are expressed in percent of the value above the surface.

Last lines: Present the conditions existing on the surface at the end of the experiment and to which the measurements have been related, namely,

- the time, the altitude of the sun and the state of the sky.
- the surface irradiance (370-700 nm) expressed in photons  $\cdot cm^{-2} \cdot sec^{-1}$  ( $\times 10^{18}$ ), which is the same as 100% of column 5.
- the total irradiance, measured by the pyranometer, expressed in watts  $\cdot m^{-2}$ , which is the same as 100% of column 7.

5.2.2 Graphs: Percentages (logarithmic scale) as a function of depth (in meters, linear scale). These graphs are plotted from the values in columns 5 and 7 (100% above the surface), and are identified by their numbers (the time at the end of the experiment is noted). The data points for the decrease in quanta as a function of depth are connected by solid lines. There is one graph for each station which exhibits the various experiments. For clarity the data describing the total energy as a function of depth are not connected, the corresponding points are marked  $T_1$ ,  $T_2$ , etc. (thermopile), the subscript 1, 2, etc. is the number of the experiment.

### 5.3 Upwelling irradiance (quanta meter)

The measurements obtained with the quanta meter are presented only in table form.

As above, all the experimental conditions; altitude of sun, state of the sky, absolute value under the surface ( $\text{quanta} \cdot \text{cm}^{-2} \cdot \text{sec}^{-1}$ ) correspond to the conditions at the end of the experiment.

The values at the various depths are expressed in percent of the value immediately under the surface (noted -0).

### 5.4 Spectral distribution of irradiance ( $E_d$ and $E_u$ )

5.4.1 Tables: Tables are included for downwelling irradiance,  $E_d$ , and for upwelling irradiance,  $E_u$ , the latter being identified as set 9 (by convention).

At the head of each column are found:

- identifications: number of station, number of experiment (9 designates experiments dealing with upwelling irradiance), and the depth in meters.
- the wavelength at which the spectra has its maximum value, together with the spectral irradiance ( $\text{watts} \cdot \text{m}^{-2} \cdot \text{nm}^{-1}$ ) at this wavelength.
- the limits of the spectra  $\lambda_1$  and  $\lambda_2$ .  
 $E_{\text{calc}}$  ( $\text{watts} \cdot \text{m}^{-2}$ ) irradiance calculated between these spectral limits (cf. ¶ 3.3) and finally the number of quanta  $\cdot \text{sec}^{-1} \cdot \text{cm}^{-2}$  (cf. ¶ 5.2.1) obtained with the quanta meter. (This is the number that permits the computation of absolute values (cf. ¶ 3.3).)

The aforementioned table then follows. In the tables, the values of spectral irradiance ( $\text{watts} \cdot \text{m}^{-2} \cdot \text{nm}^{-1}$ ) are listed with their corresponding wavelengths (nm). These wavelengths are for the points from the recording which have been digitized (cf. ¶ 3.3).

5.4.2 Graphs: Each graph corresponds to one experiment. The different spectra are identified by the depth which is indicated at the end of each trace. They are traced from the values appearing in the tables 5.4.1; the scale of ordinates is logarithmic.

## 6. Calibration and Precision

The computation of absolute spectral irradiances depends on the use of the absolute value furnished by the quanta meter. At a depth where the

infrared radiation is absorbed, it would be equally valid to use the absolute value furnished by the thermopile. In practice this latter procedure is not used because spectral measurements can be obtained at depths where the thermopile sensitivity is too low to give a measurement.

### 6.1 Quanta Meter

Theoretically,\* the uncertainty in the absolute value furnished by the quanta meter is  $\pm 13\%$  (L. Prieur, 1969). The precision is evidently better for relative measurements ( $\pm 5\%$ ), that is, when the results are compared with one another.

Experiments designed to show that the calibration factor is constant in time (15, XI, 1968/4, X, 1969/27, V, 1970) have shown in each case that variation in its value is not significant: the number of quanta measured is greater, by 1 to 4% (on an average of 2%) than are theoretically emitted by the standard lamps (quartz-iodine type, 1000 watts, Eppley). The deviation of 2% is small if compared to 13% mentioned above. It can be larger with some spectral distributions (thus, for example, it is of the order of 12-15% when a Schott BG18 filter is inserted between the standard lamp and the apparatus, but in this case the "theoretical" number of quanta is itself uncertain).

### 6.2 Spectral irradiance meter

The spectral resolution, determined by the size of the slit, is 4.8 nm. The precision of the wavelength setting is  $\pm 2$  nm. Taking into account the methods of measurement and data analysis, the precision of the relative values obtained for "Y" (cf. ¶ 3.3) is  $\pm 2\%$  where the spectra shows maximum radiant flux. The precision becomes poorer, increasing as the relative values of "Y" decrease from the peak value and each spectra is truncated when the precision reaches 10 to 15%.

The uncertainty in the values of "Y" contribute to an uncertainty in the value of the integral,  $I_Q$ , which can be estimated at  $\pm 4\%$ .

In the calculation of absolute values, the uncertainty in the exact number of quanta is added to the preceding uncertainties. The spectral densities ( $\text{watts} \cdot \text{m}^{-2} \cdot \text{nm}^{-1}$ ) are thus known.

to about 19% in the central region of the spectra (13% + 2% + 4%)

to 28% (and in some cases, 33%) near the extreme ends of the spectra.

---

\* That is to say, taking into account the precision with which the curve of spectral sensitivity is obtained, the mode of standardization and the precision of the standards, and finally, the variable conditions of spectral resolution when the measurements were made.



The "total watts" calculated from the spectra ( $E_{calc}$ ) is affected, at the minimum, by the uncertainty in the value of the number of quanta, which is  $\pm 13\%$ .

### 6.3 Intercomparison

The comparison of calculated irradiance ( $\text{watts} \cdot \text{m}^{-2}$ )  $E_{calc}$  with irradiance measured by the thermopile  $E_{mes}$  (at 10 meters and beyond), for 149 pairs of values, gives a correlation coefficient of 0.974. The regression equations are

$$E_{mes} = 1.107 E_{calc} - 0.825$$

$$E_{calc} = 0.857 E_{mes} - 2.612$$

The scatter of representative points (Fig. 4, plotted in logarithmic scales) is explained by the unfavorable accumulation of two uncertainties,  $\pm 13\%$  (for  $E_{calc}$ ) and  $\pm 15\%$  (for  $E_{mes}$ ). However, a systematic variation shows itself statistically: The measurement leads, on average, to a higher value (of  $\pm 12\%$ ) than the value which is calculated. This fact was established even before the DISCOVERER expedition. Nevertheless, there is not one decisive argument to modify the calibration factors of any of the instruments, nor to bring the results nearer to one another.

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## FIGURES

### Figure 1

Response of the quanta meter to various angles of incidence (experiments in air and in water). The collector of the spectral irradiance meter gives a similar response (not shown). For the thermopile, the experiment is made in air in two perpendicular planes. The circles (dashed lines) correspond to perfect cosine collection.

### Figure 2

Factor which permits the correction of the signal from the spectral irradiance meter in order to take into account the variable sensitivity with wavelength. The sensitivity is maximum at 430 nm (factor shown equal to 1). The precision with which the factor is determined is indicated. In the red region of the spectrum, where the sensitivity decreases, the factor is well known. Below 400 nm the factor is poorly determined; this results from the spectral distribution of the lamp itself (Eppley, quartz-iodine), which is used to determine the factor.

### Figure 3

Spectral distribution (in relative values, normalized to 560 nm) of the daylight, for different meteorological conditions, and the corresponding colorimetric diagram. The main Fraunhofer lines are indicated by their conventional notation (K, H, G ...).

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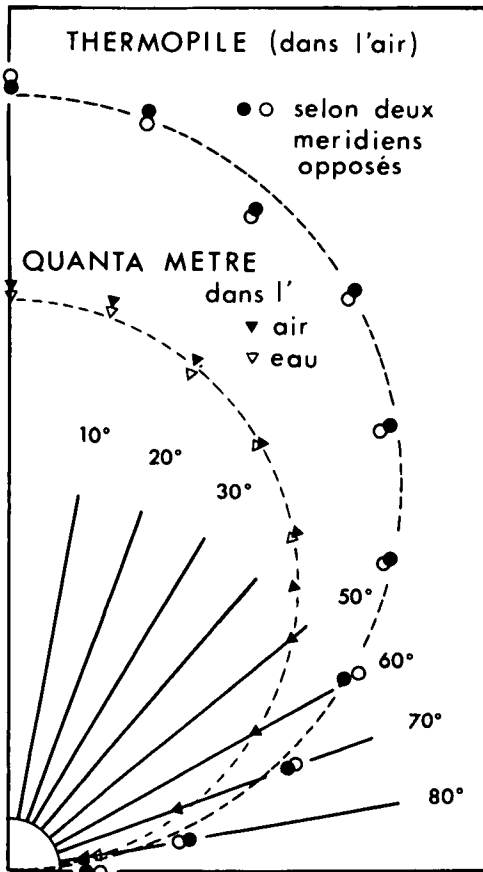


Figure 1 :

Réponse du quanta-mètre pour divers angles d'incidence (expérience dans l'air et dans l'eau). Le collecteur du spectro-irradiance-mètre présente une réponse analogue (non figurée). Pour la thermopile l'expérience est faite dans l'air, selon deux méridiens opposés. Les cercles tracés correspondent à des collecteurs plans parfaits.

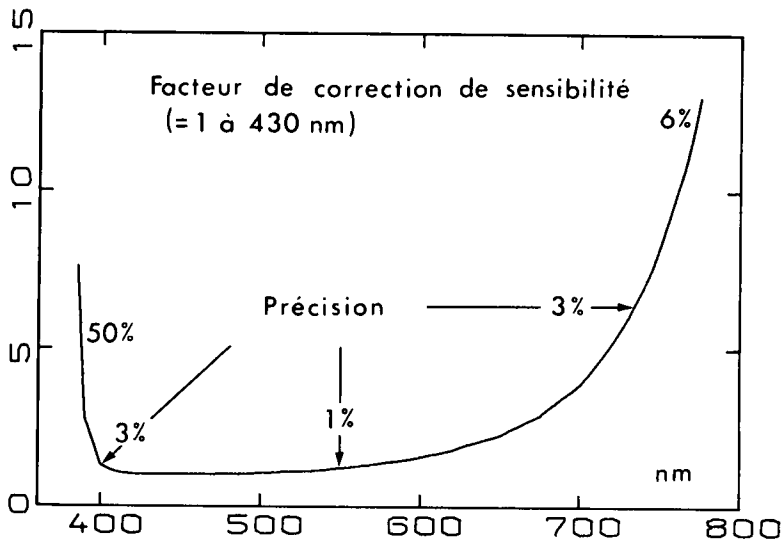


Figure 2

Facteur permettant de corriger le signal du spectro-irradiance-mètre pour tenir compte de sa sensibilité variable avec la longueur d'onde. La sensibilité est maximale à 430nm (facteur posé égal à 1). La précision avec laquelle ce facteur est déterminé est indiquée. Dans le rouge, où la sensibilité décroît, le facteur est cependant bien connu, il l'est mal pour le front en dessous de 400 nm ; ceci résulte de la répartition spectrale de la lampe elle-même (Eppley, quartz-iodé), utilisée pour déterminer le facteur.

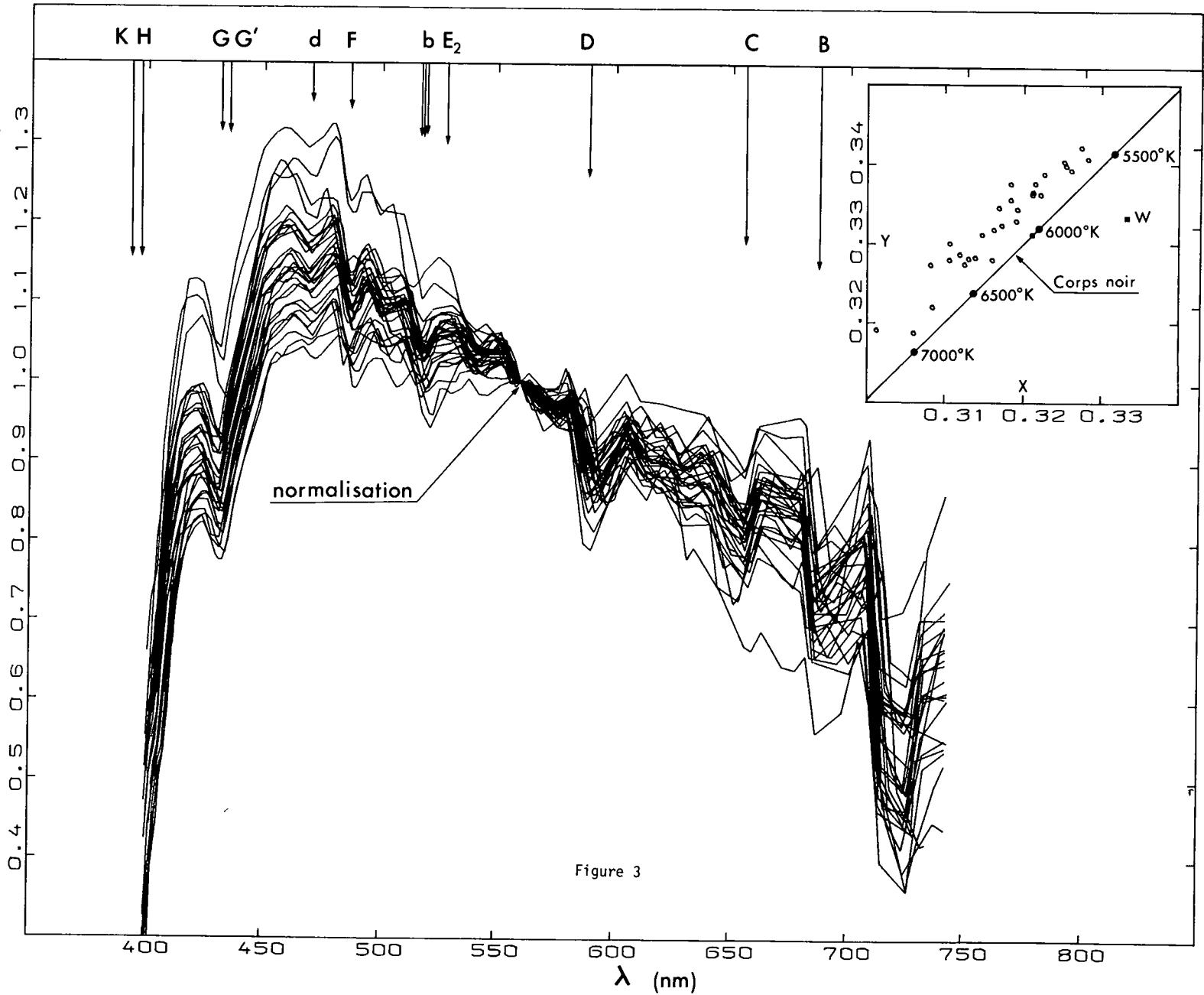


Figure 3

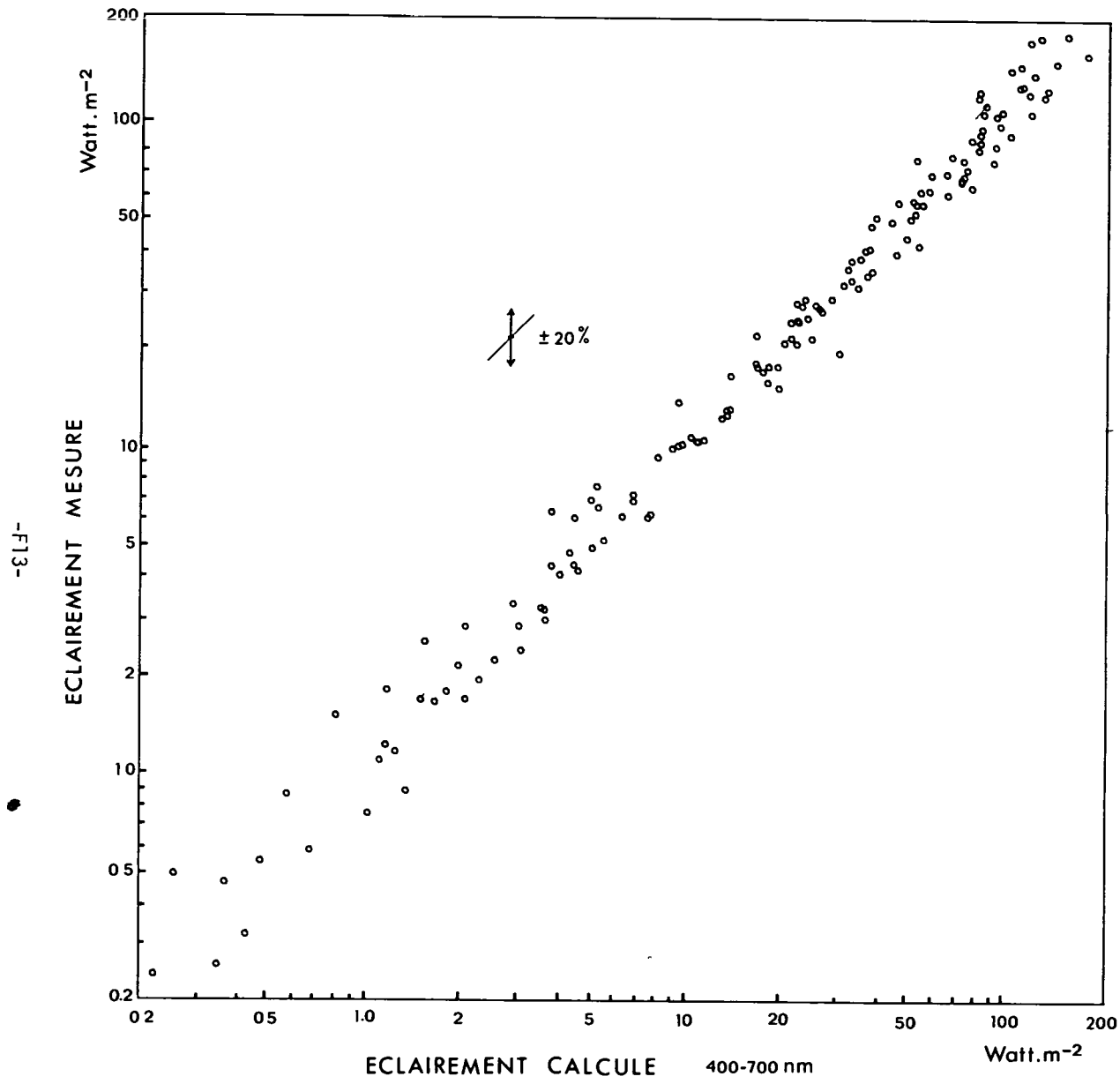


Figure 4

Table I

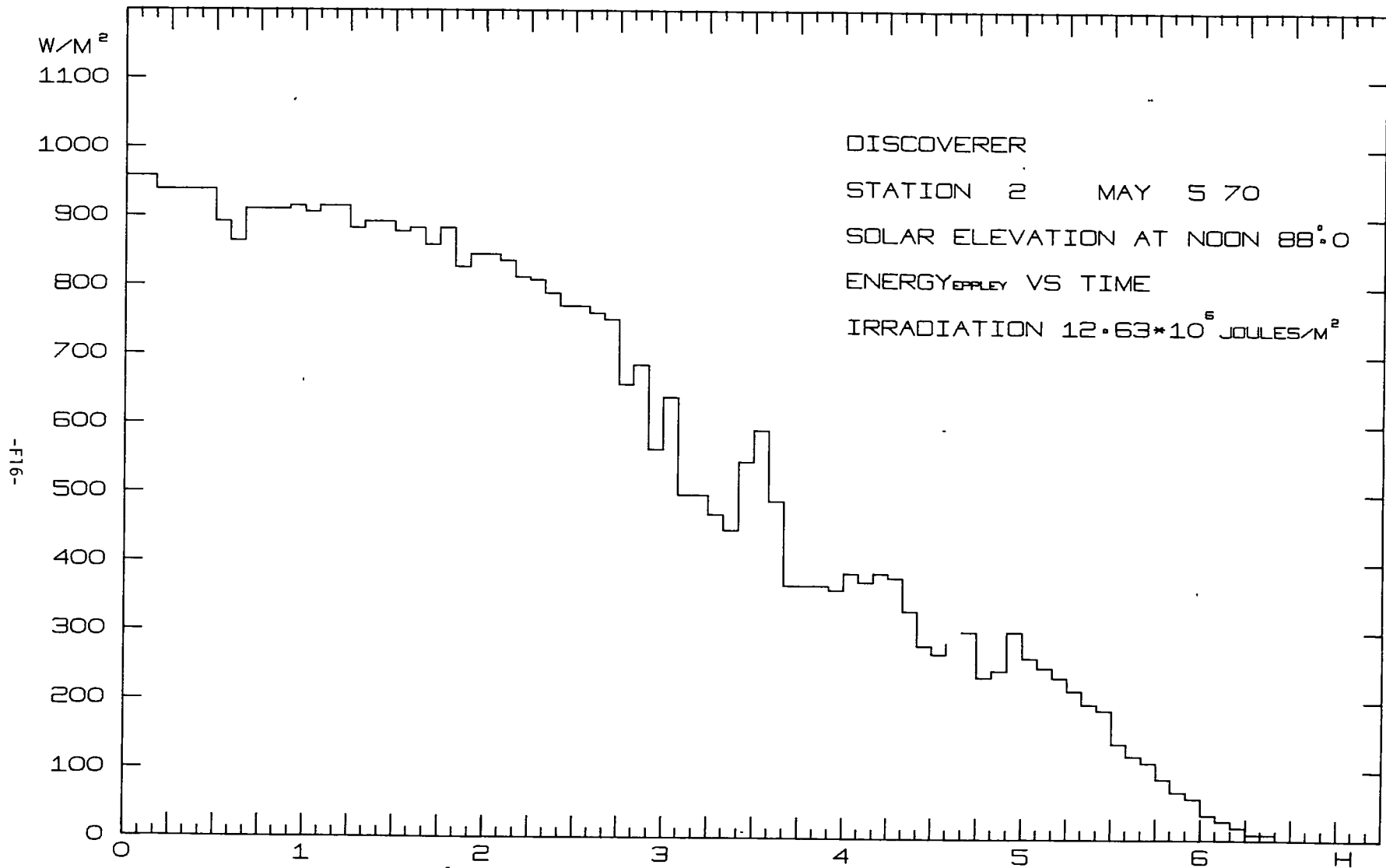
TABLE PLACAPITULATIVE

DISCOVERER

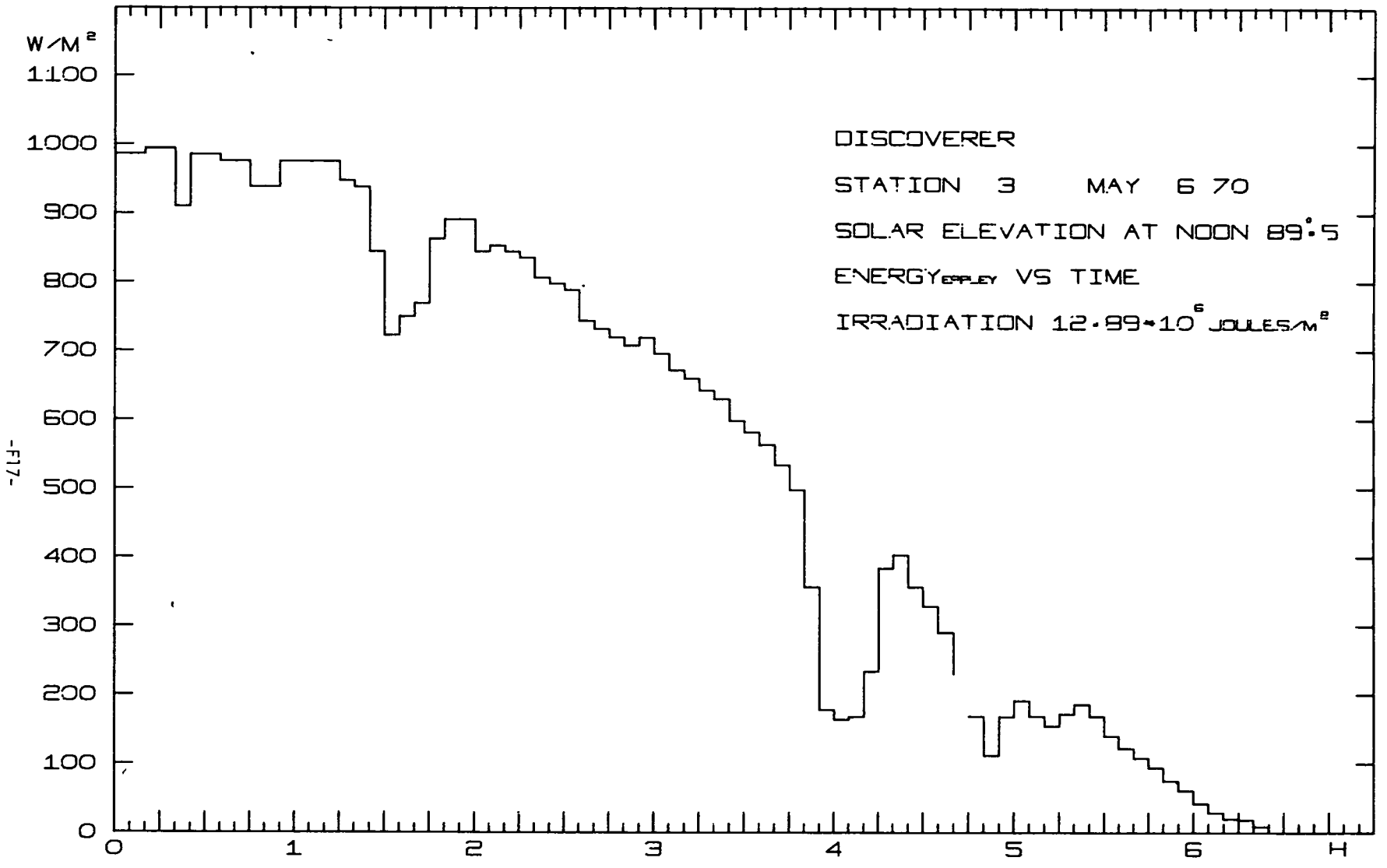
Date 1970	Station	Expérience	Heures		Quanta mètre	Spectro irradiance mètre	Thermopile sous marine	Pyranomètre enregistrement	
			début	Fin				12h	18h00
						Profondeurs extrêmes (m)			
Mai 04	1	1	10.30	11	+0 → 50	+0 → 50 (70,100,120,150)			
		2	14.52	15.20	+0 → 150		0 → 70		
		3	16.41	16.52	+0 → 40	+0 → 30			
Mai 05	2	1	9.54	10.18	+0 → 150		0 → 90	X	
		2	15.57	16.20	+0 → 150	+0 → 150			
Mai 06	3	1	10.00	10.44	+0 → 160		0 → 90	X	
		2	14.45	15.10	+0 → 160	+0 → 150	0 → 100		
		9	15.25	15.36	-0 → 20	-0 → 20			
Mai 07	4	1	9.53	10.20	+0 → 150	+0 → 140	0 → 94		
		2	14.55	15.20	+0 → 150				
		9	15.32	15.49	-0 → 20	-0 → 20			
Mai 08	5	1	9.45	10.14	+0 → 125	+0 → 120	0 → 60		
		9	10.20	10.25	-0 → 18	-0 → 18			
Mai 09	6	1	10.00	10.28	+0 → 57	+0 → 47 (66)	0 → 29	X	
		2	14.48	15.09	+0 → 53	14 → 48			
		9	15.12	15.28	-0 → 18	-0 → 18			
Mai 10	7	1	10.40	11.03	+0 → 76	10 → 70	0 → 60	X	
Mai 12	8	1	9.55	10.23	+0 → 140	+0 → 100	0 → 90	X	
		2	10.25	10.45	+0 → 60				
		3	14.50	15.07	+0 → 90	+0 → 70 (100)	0 → 70		
Mai 13	9	1	9.30	9.55	+0 → 127	10 → 86	0 → 50	X	
		2	15.08	15.28	+0 → 120	+0 → 50			
		9	10.04	10.08	-0 → 20	-0 → 20			
Mai 14	10	1	10.00	10.25	+0 → 100	+0 → 92		X	
		2	15.05	15.23	+0 → 118	9 → 88	0 → 71		
		9	10.34	10.40	1 → 20	1 → 20			
Mai 15	11	1	9.50	10.25	+0 → 111	+0 → 111		X	
		2	14.13	14.20	+0 → 103	+0 → 103	0 → 64		
Mai 16	12	1	10.05	10.38	+0 → 108	+0 → 108		X	
		2	15.00	15.24	+0 → 108	+0 → 108			

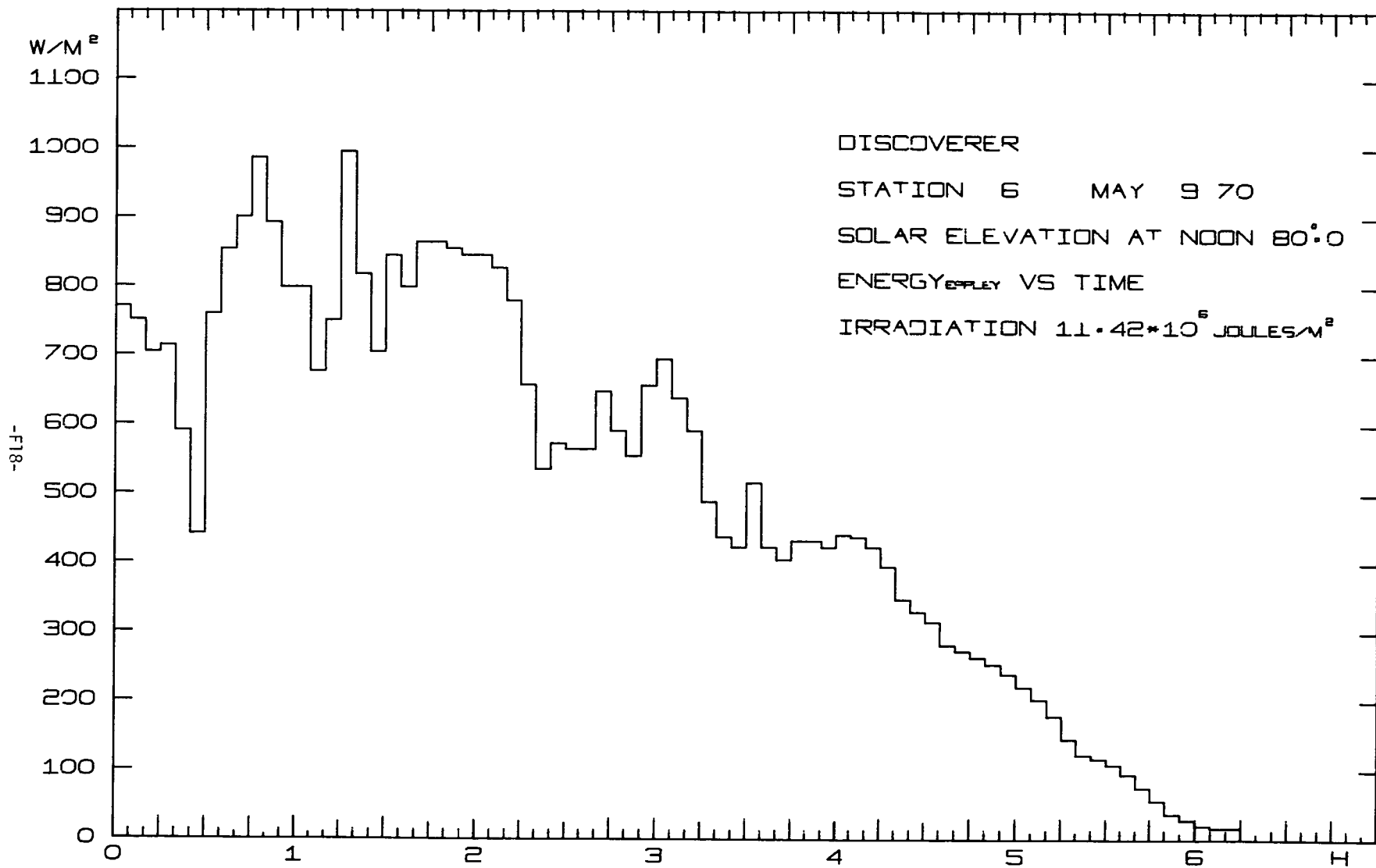
Table I

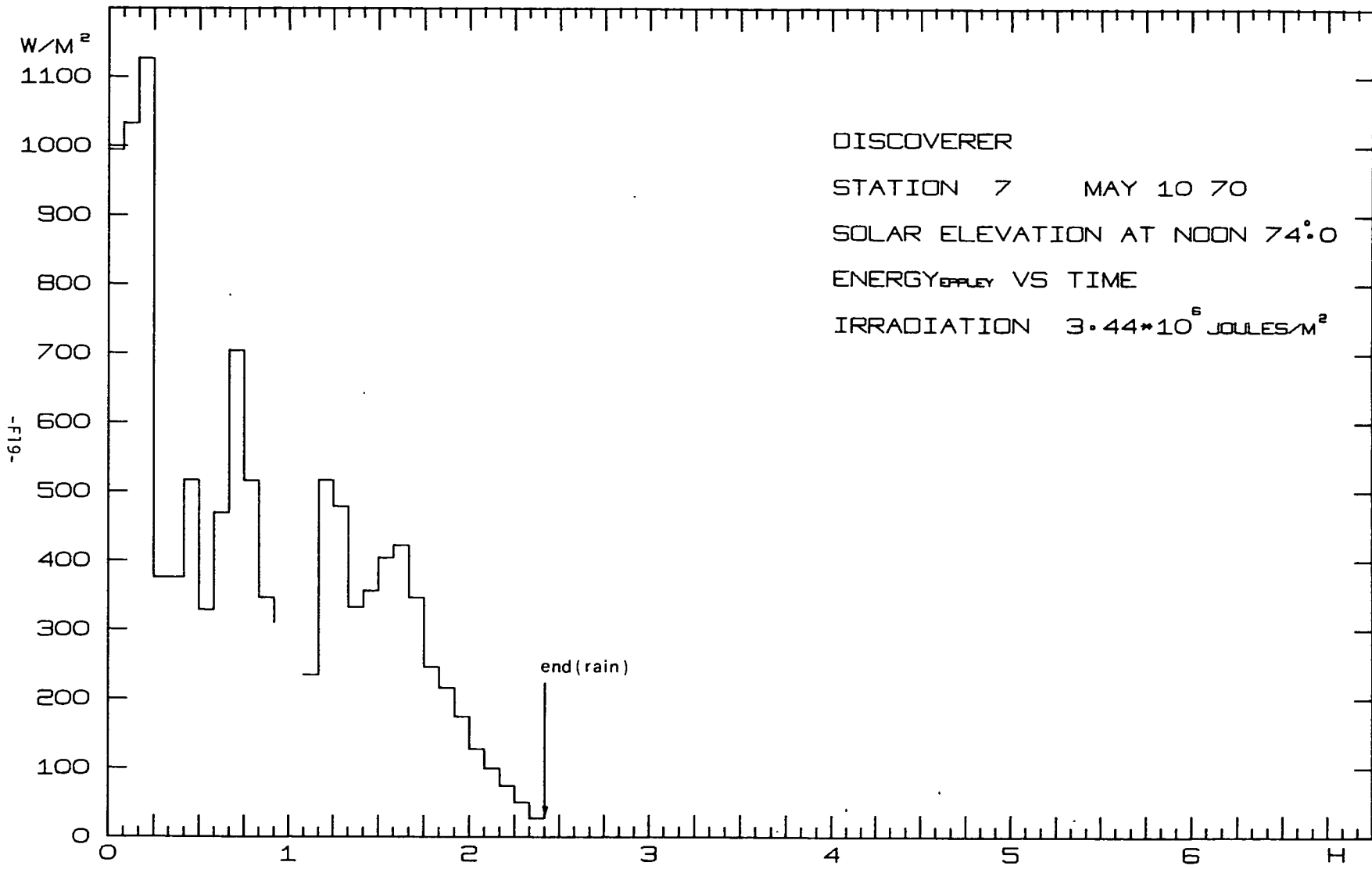
May 17	13	1 2	9.45 15.05	10.24 15.33	+0 → 150 +0 → 140	15 → 120 +0 → 80	0 → 80 0 → 60	X
May 18	14	1 2	10.02 14.48	10.35 15.13	+0 → 140 +0 → 130	10 → 80	0 → 80 0 → 70	X
May 20	15	1 2 9	10.00 14.50 15.18	10.34 15.13 15.22	+0 → 55 +0 → 116 -0 → 20	+0 → 46 (75, 94, 122) +0 → 75 -0 → 20	0 → 55 0 → 75	X
May 21	16	1 2 9	10.00 15.22 15.41	10.33 15.38 15.44	+0 → 150 +0 → 140 -0 → 20	+0 → 60 +0 → 60 -0 → 20	0 → 40 0 → 60	X
May 28	17	1 2 3 4	9.50 15.08 16.11 16.53	10.27 15.35 16.23 17.08	+0 → 130 +0 → 95 +0 → 86 +0 → 92	+0 → 130 +0 → 95	0 → 103 0 → 95 0 → 86 0 → 77	X
May 29	18	1 2 3 4 9	9.30 14.35 15.29 16.21 10.03	9.59 14.53 15.45 16.52 10.10	+0 → 136 +0 → 139 +0 → 82 +0 → 71 -0 → 20	+0 → 136 +0 → 130	0 → 118 0 → 100 0 → 52	X
May 30	19	1 2 3 4 9	9.40 14.55 16.07 17.10 10.08	10.00 15.15 16.20 17.16 10.12	+0 → 160 +0 → 150 +0 → 96 +0 → 48 -0 → 20	+0 → 160 +0 → 150 -0 → 20	0 → 120 0 → 120 0 → 48	X
May 31	20	1 2	9.38 10.02	10.01 10.15	+0 → 140 +0 → 86	+0 → 140	0 → 86	
Jun 01	21	1 2 3 9	9.35 10.02 15.45 14.53	10.00 10.17 15.56 15.22	+0 → 137 +0 → 107 +0 → 98 1 → 89	+0 → 137 1 → 89	0 → 107 0 → 72	X
Jun 02	22	1 2	9.55 11.05	10.13 11.20	+0 → 127 +0 → 40	+0 → 127	0 → 127	
Jun 03	23	1 2 9	12.12 13.55 12.47	12.33 14.20 13.00	+0 → 143 +0 → 44 -0 → 80	+0 → 143 -0 → 80	0 → 114 0 → 44	





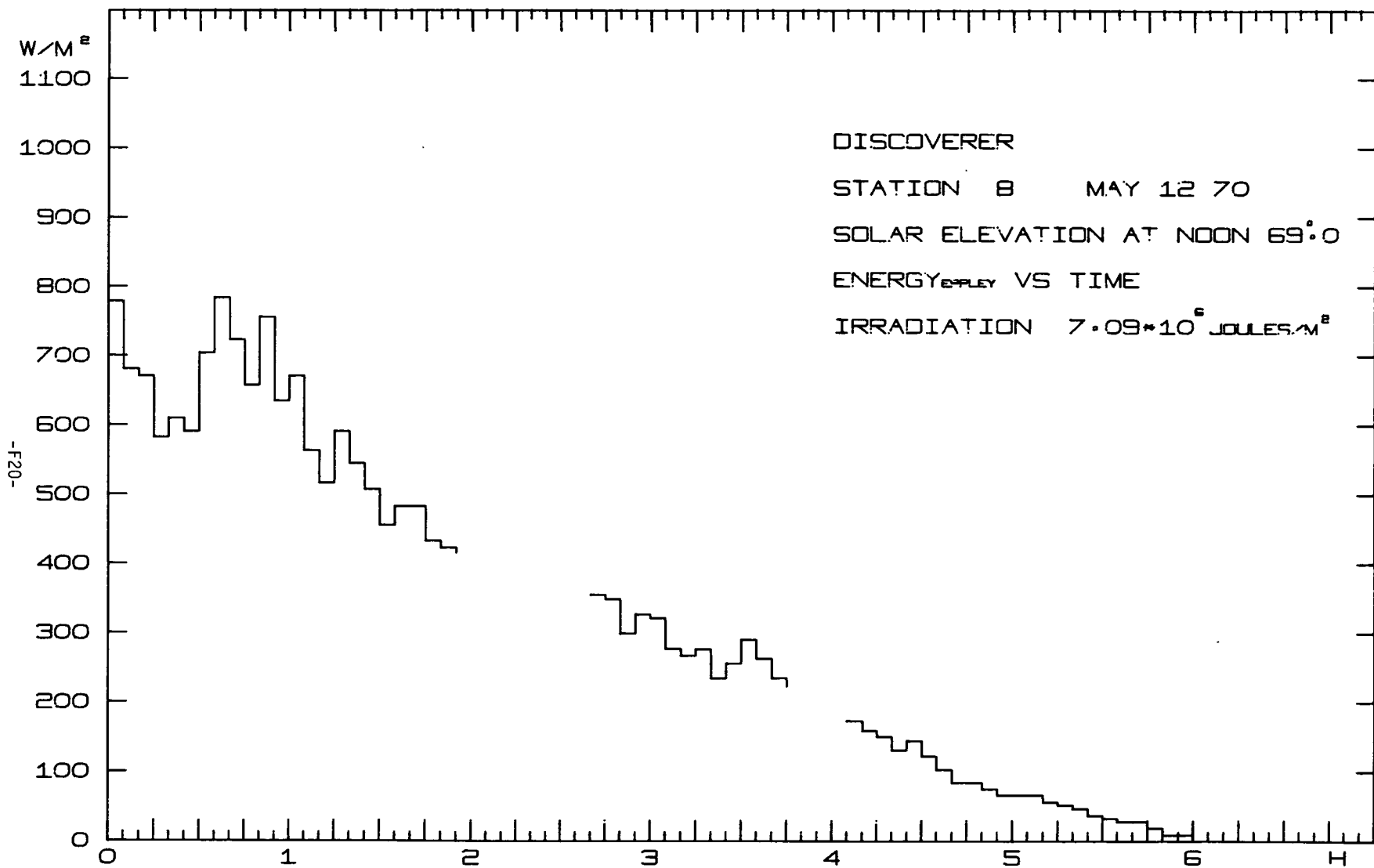


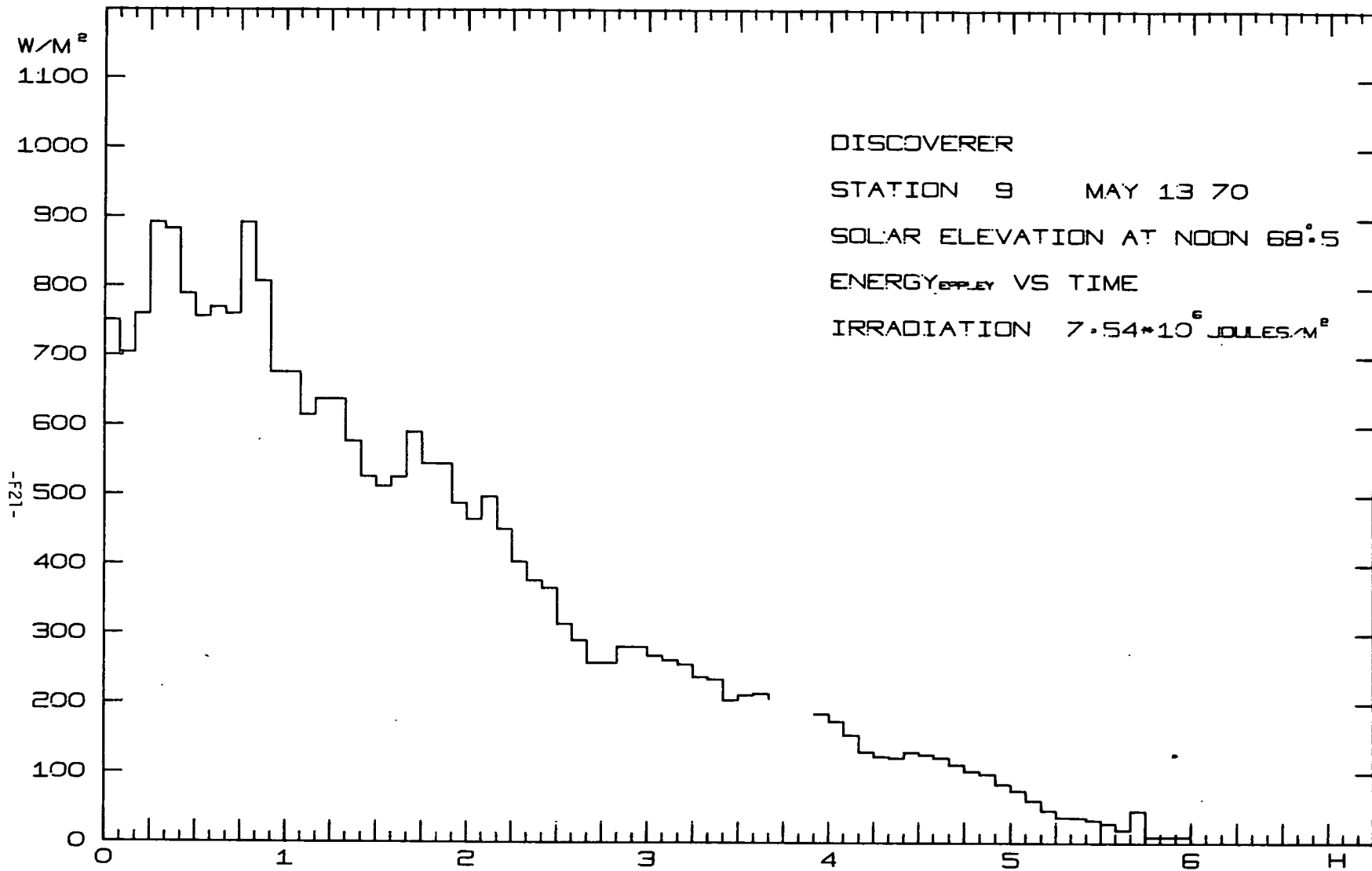


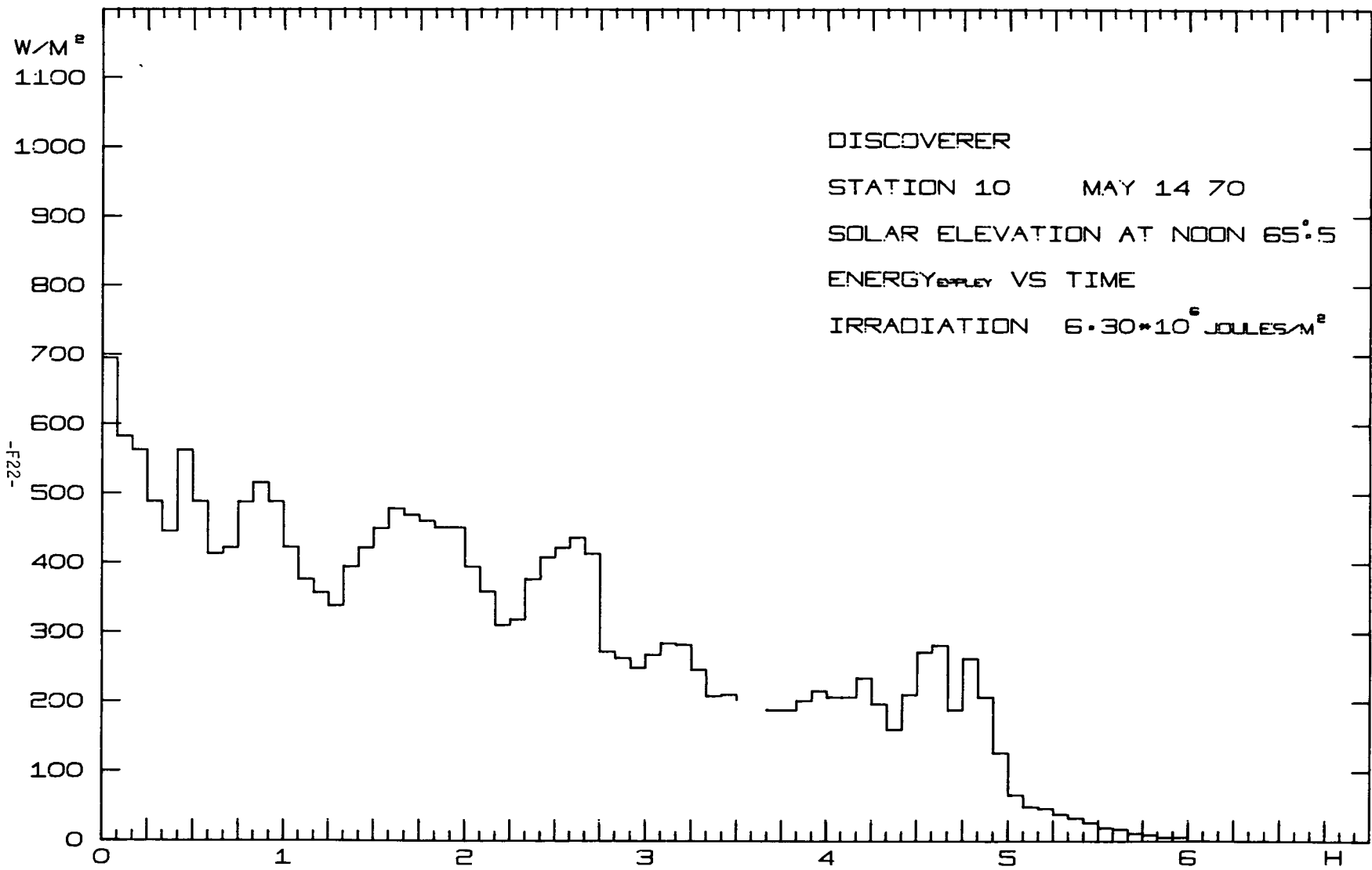


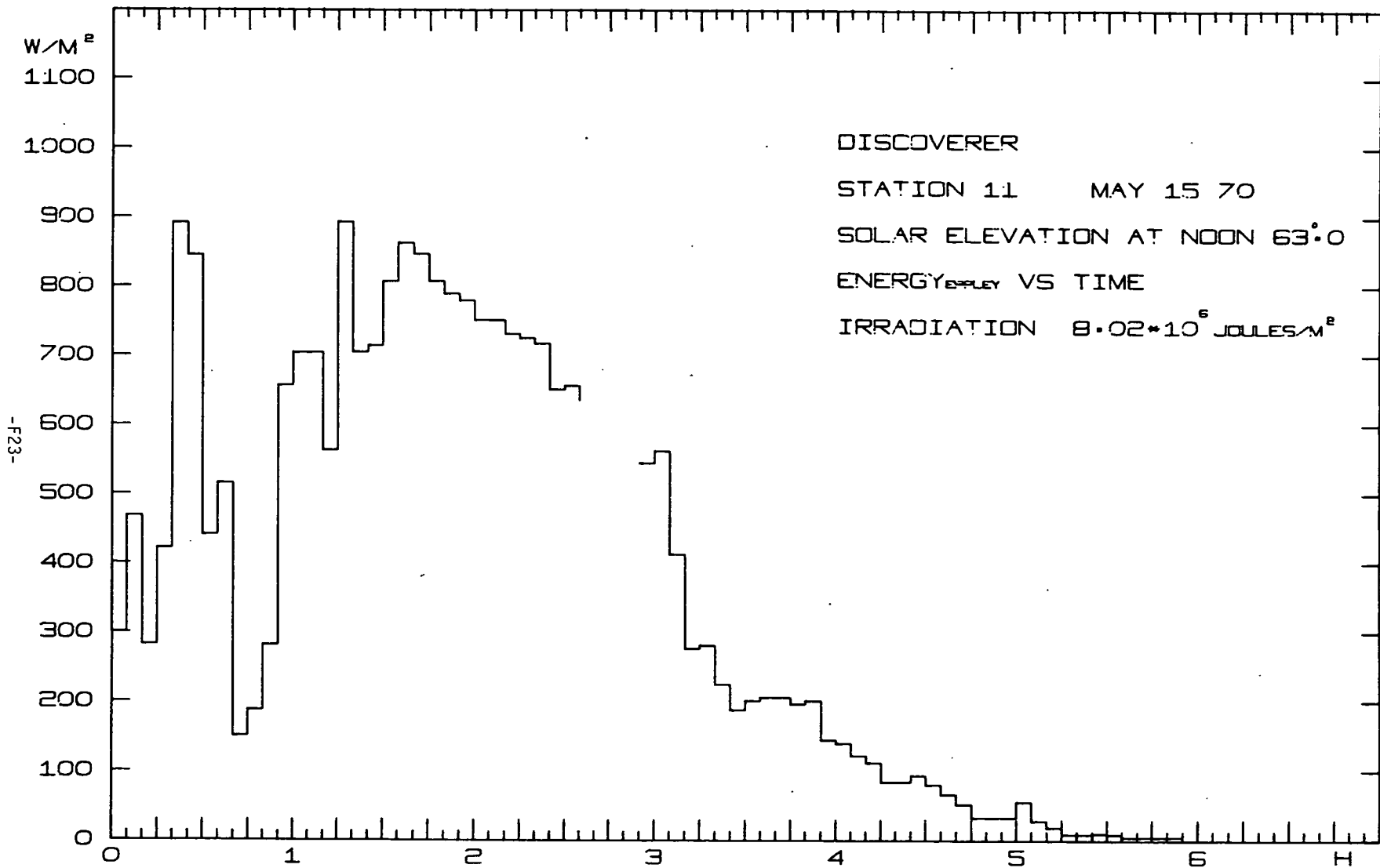
DISCOVERER  
STATION 7 MAY 10 70  
SOLAR ELEVATION AT NOON 74°0  
ENERGY<sub>EFFLEY</sub> VS TIME  
IRRADIATION  $3.44 \times 10^6$  JOULES/M<sup>2</sup>

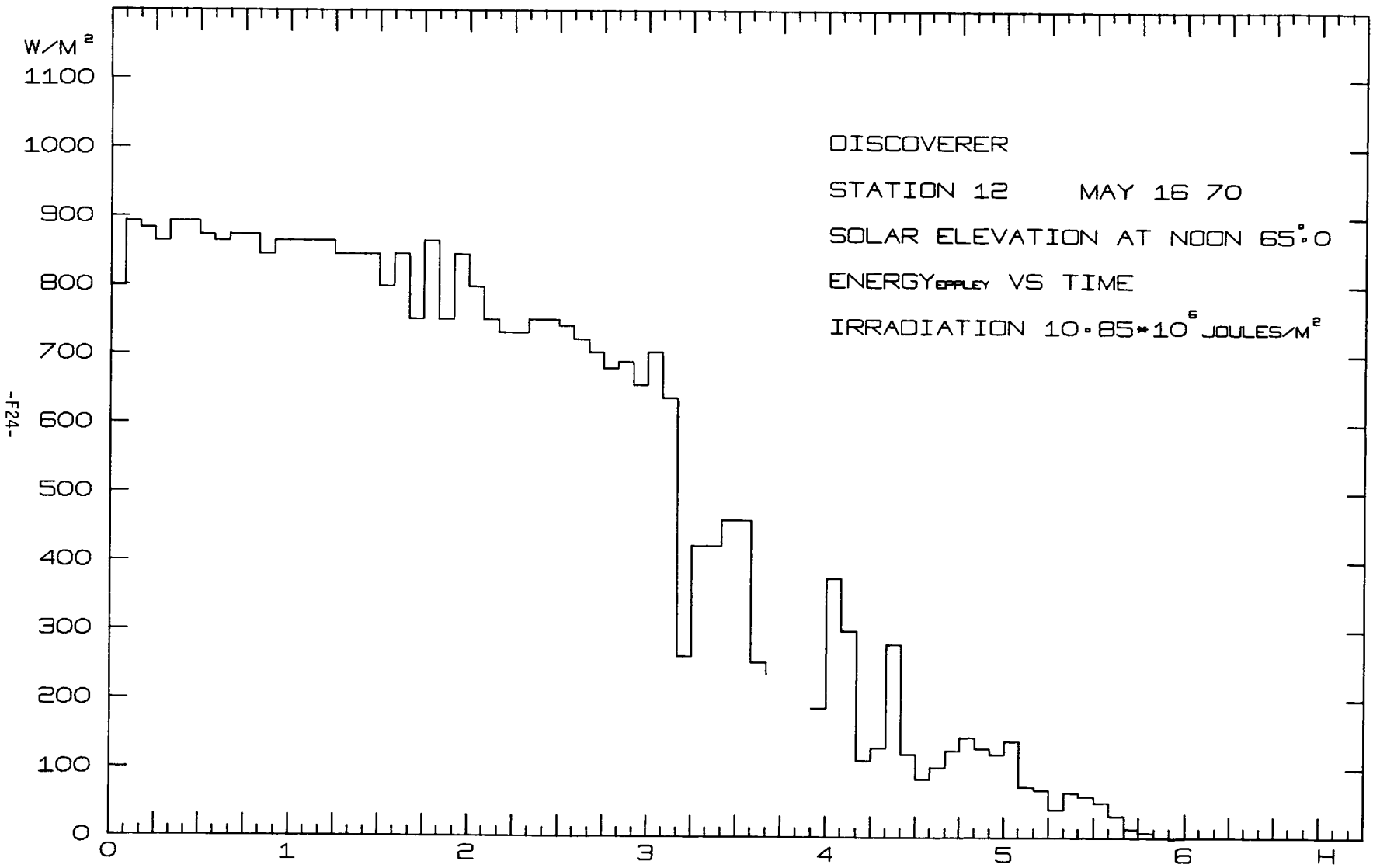
-F19-



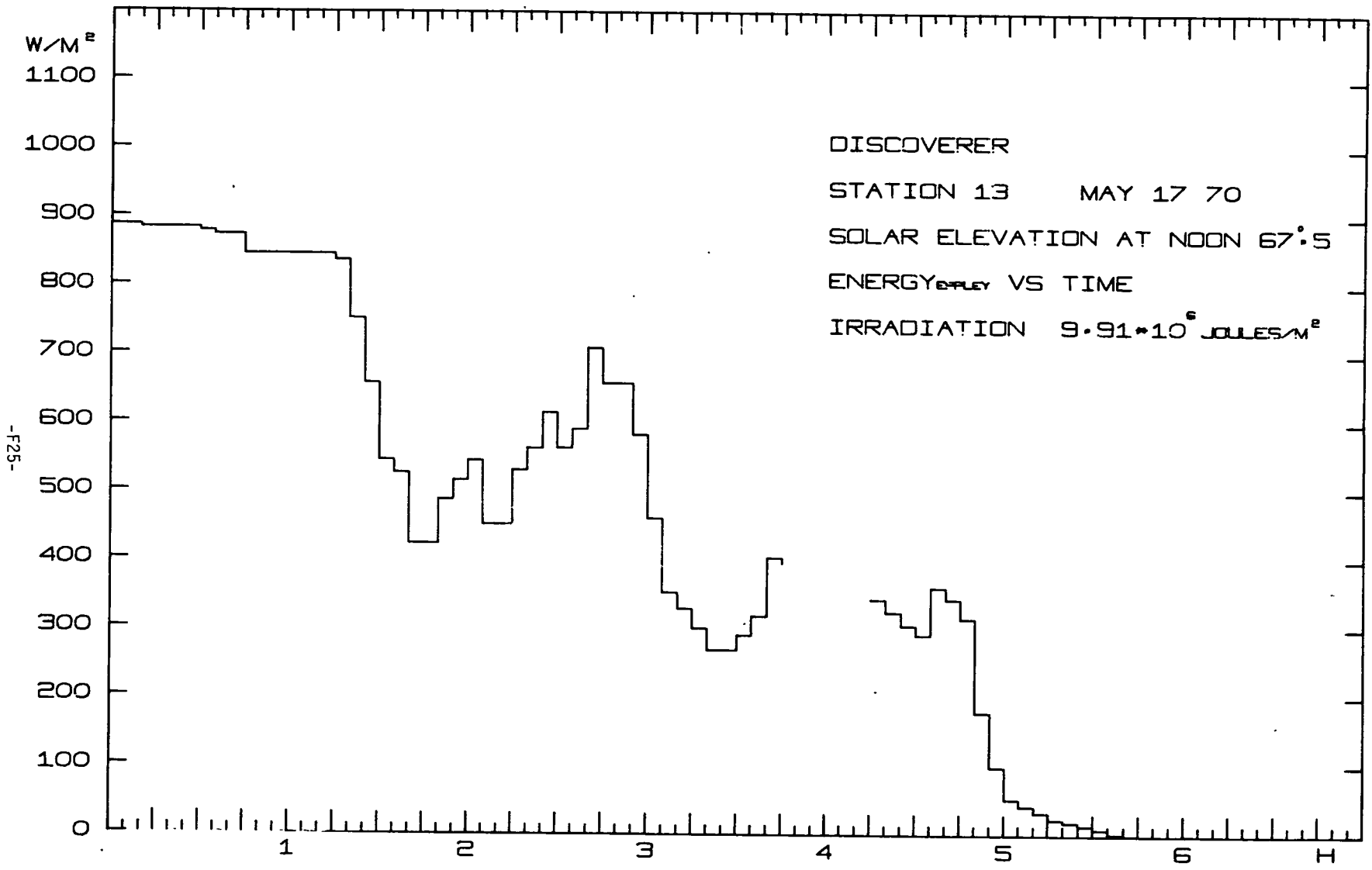


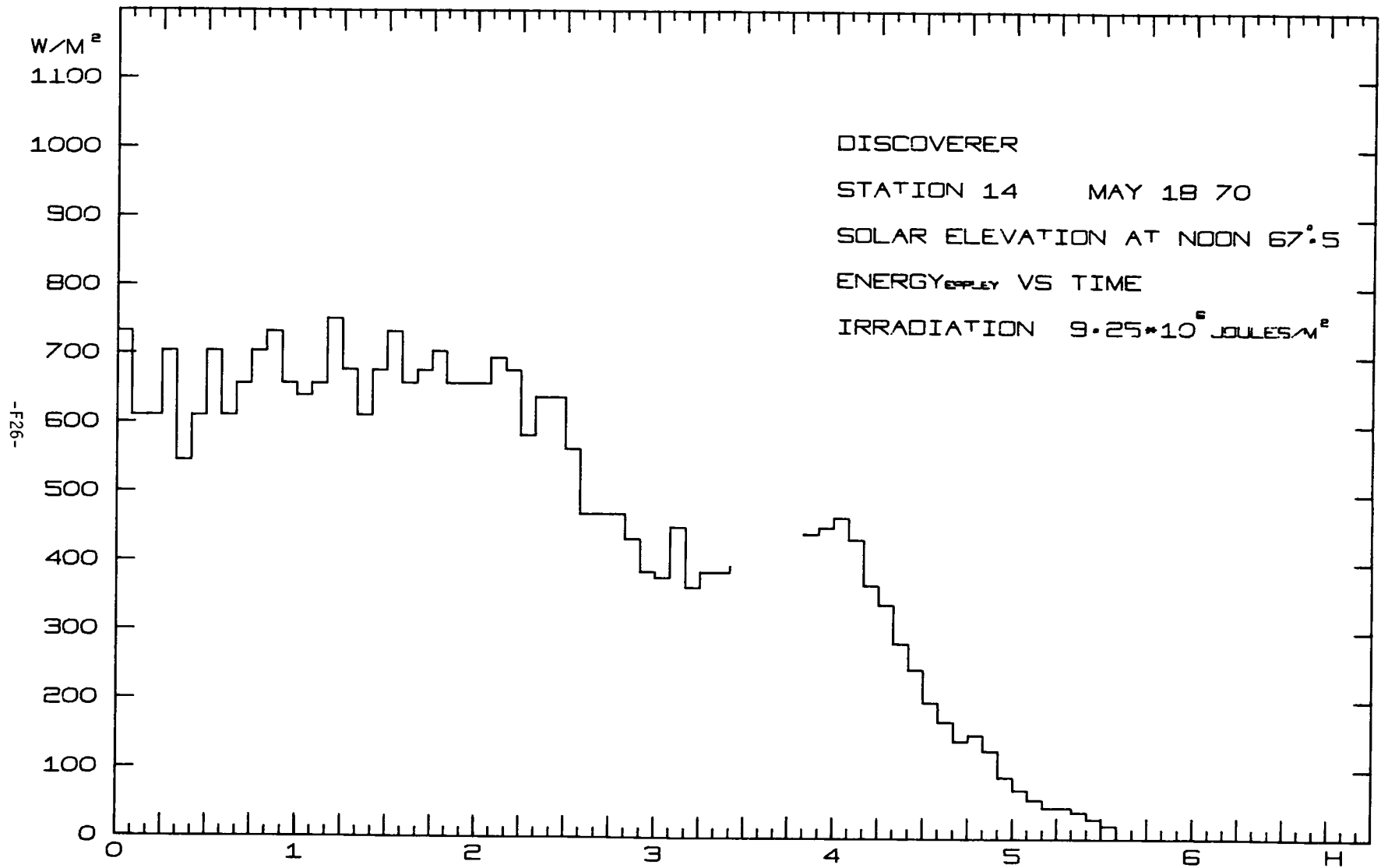


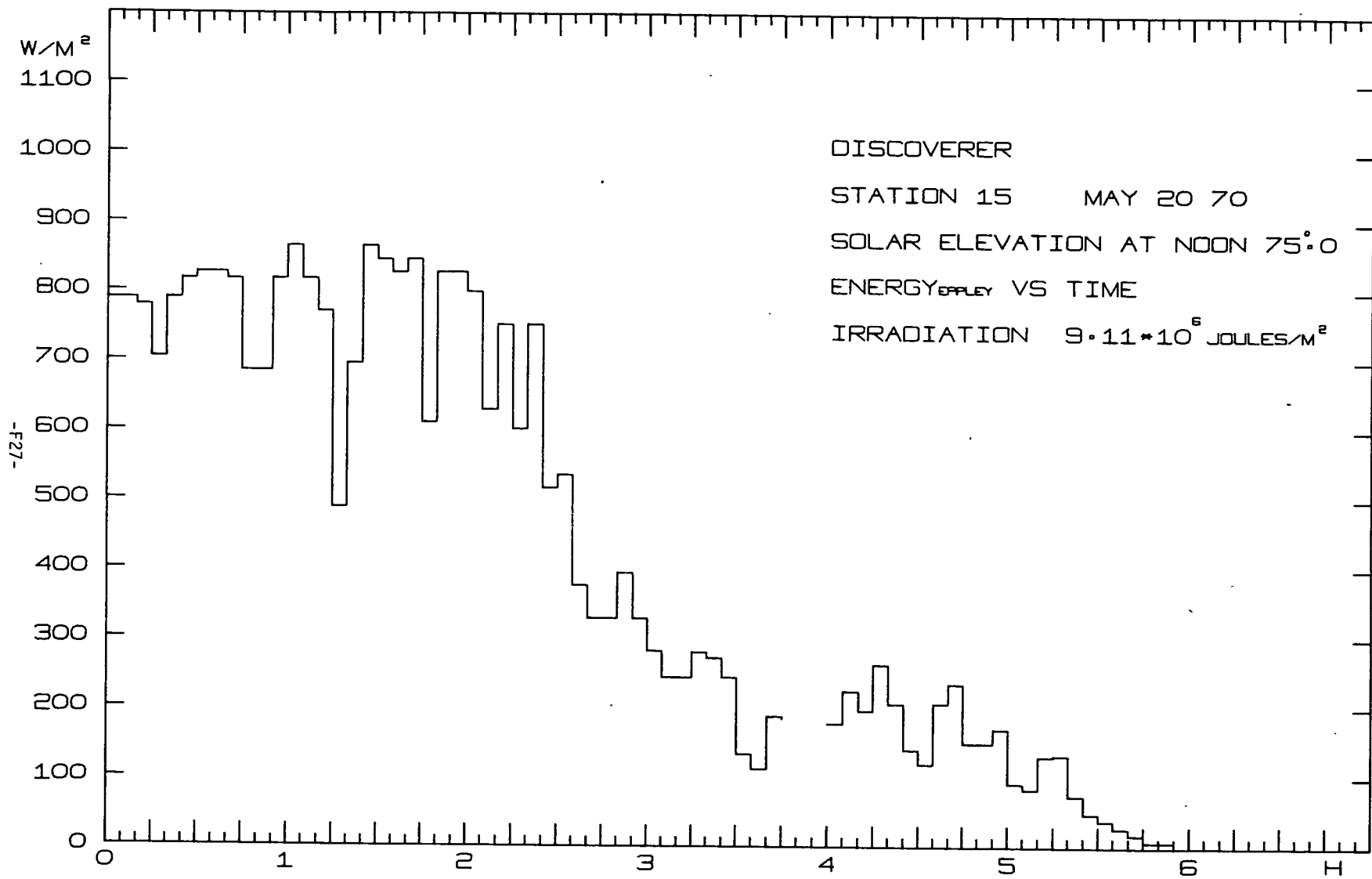


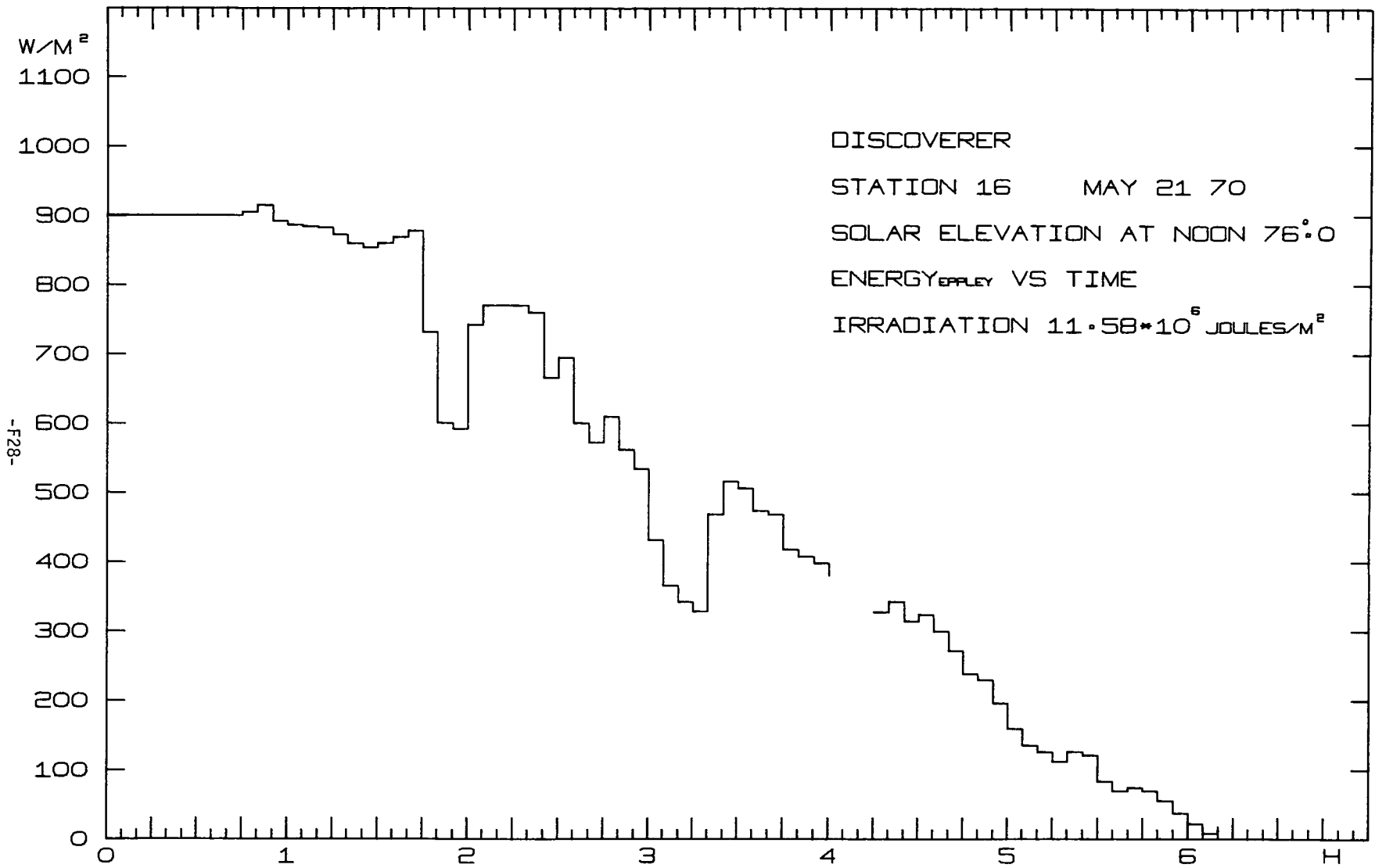


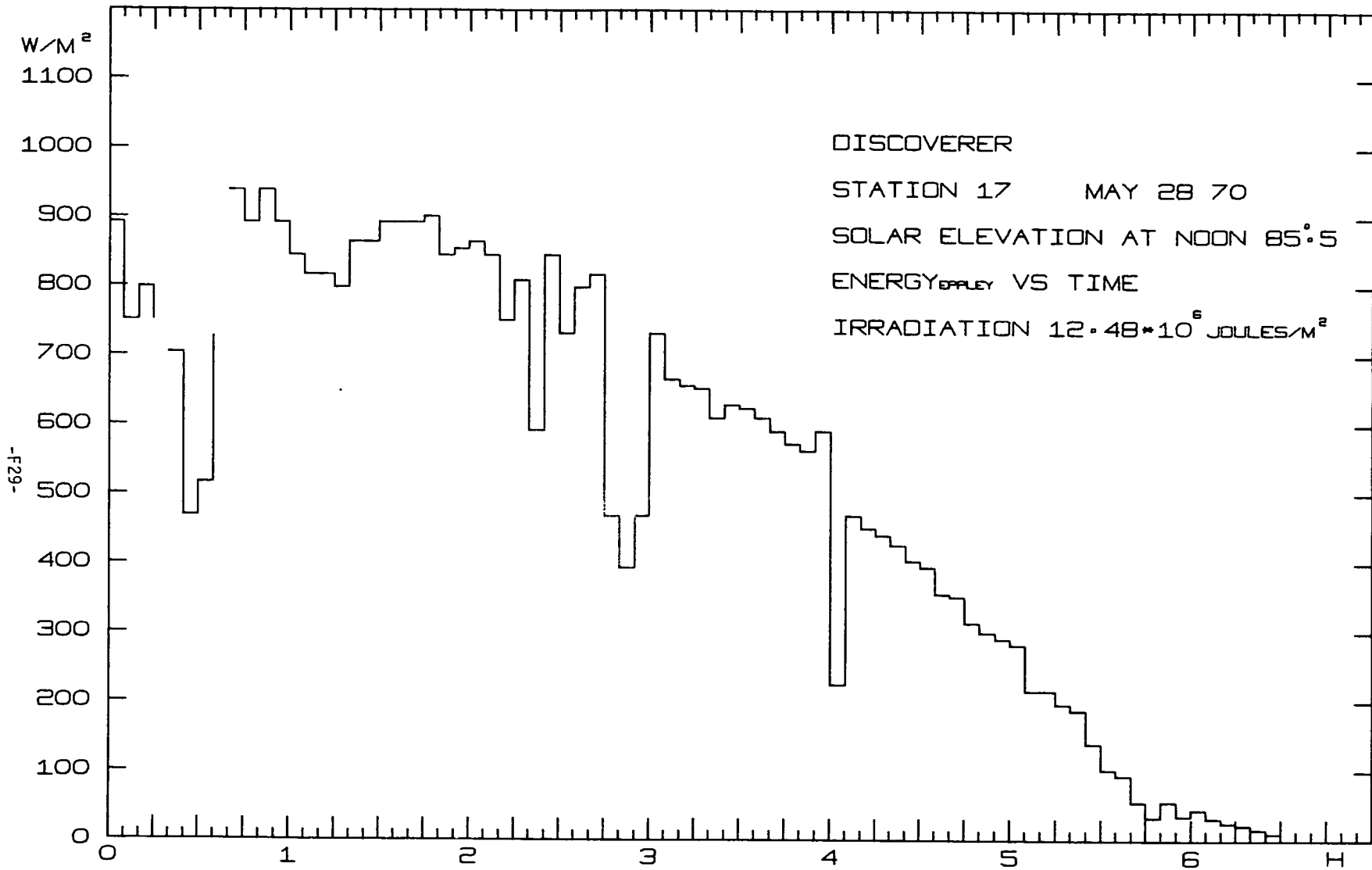


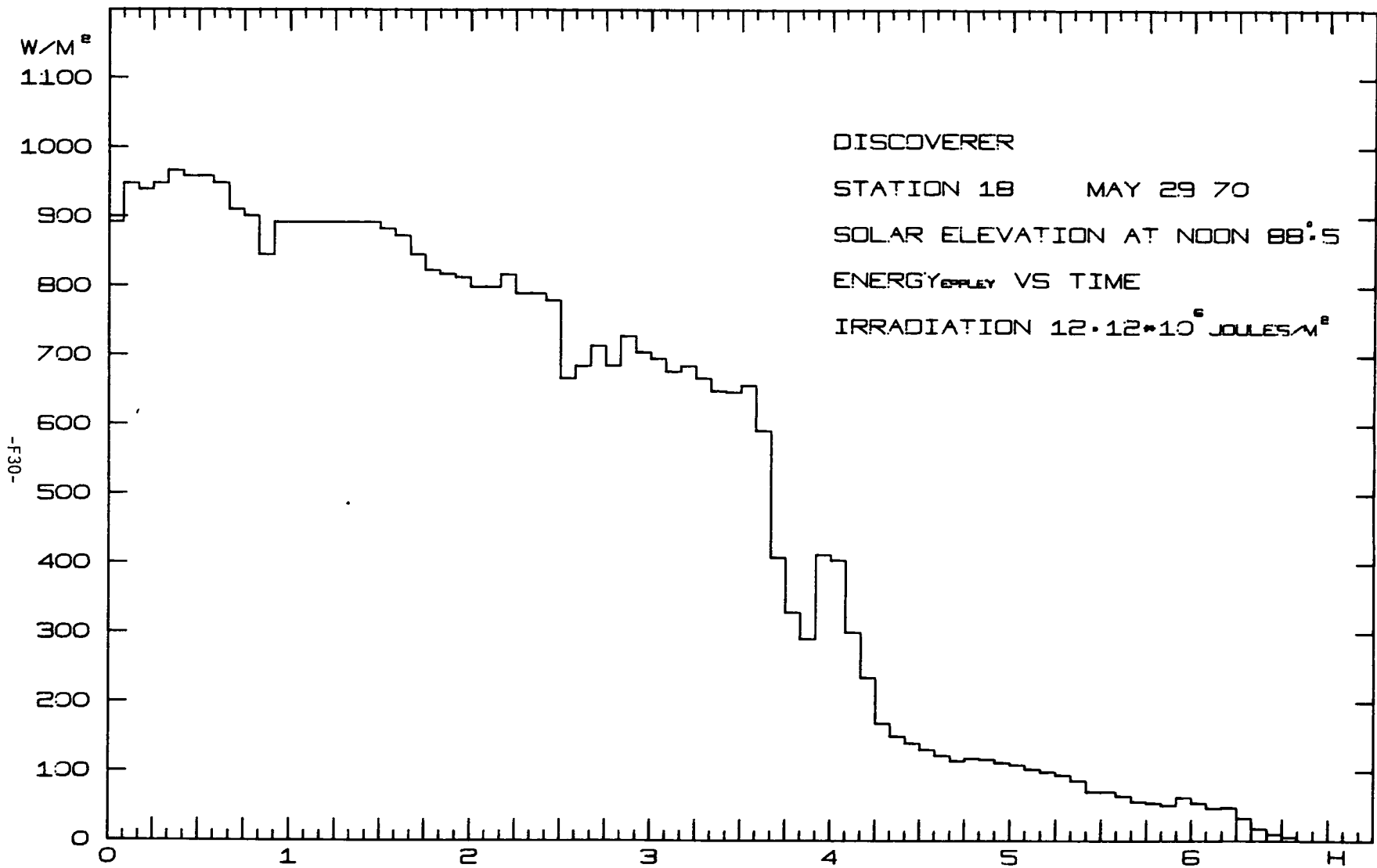


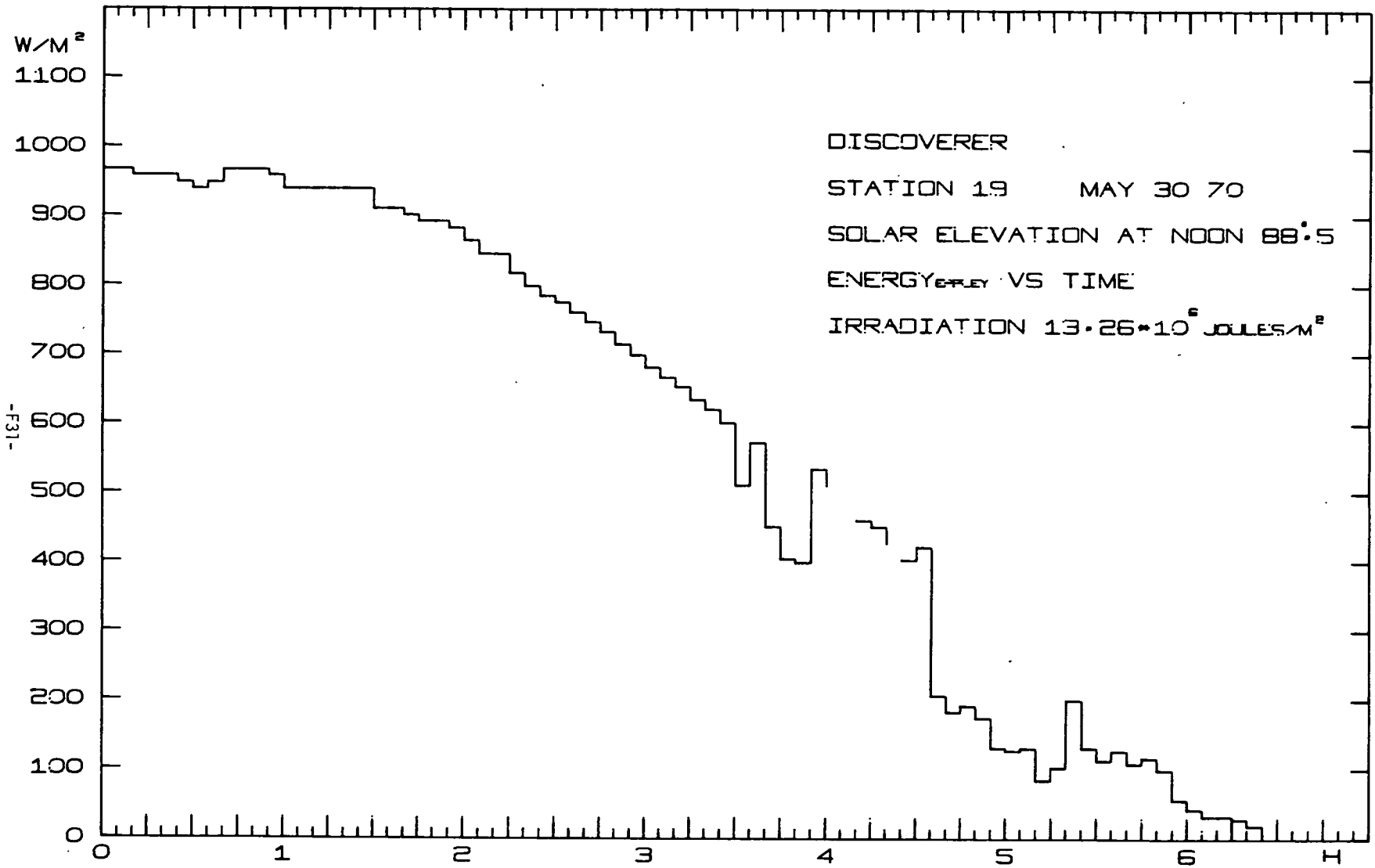


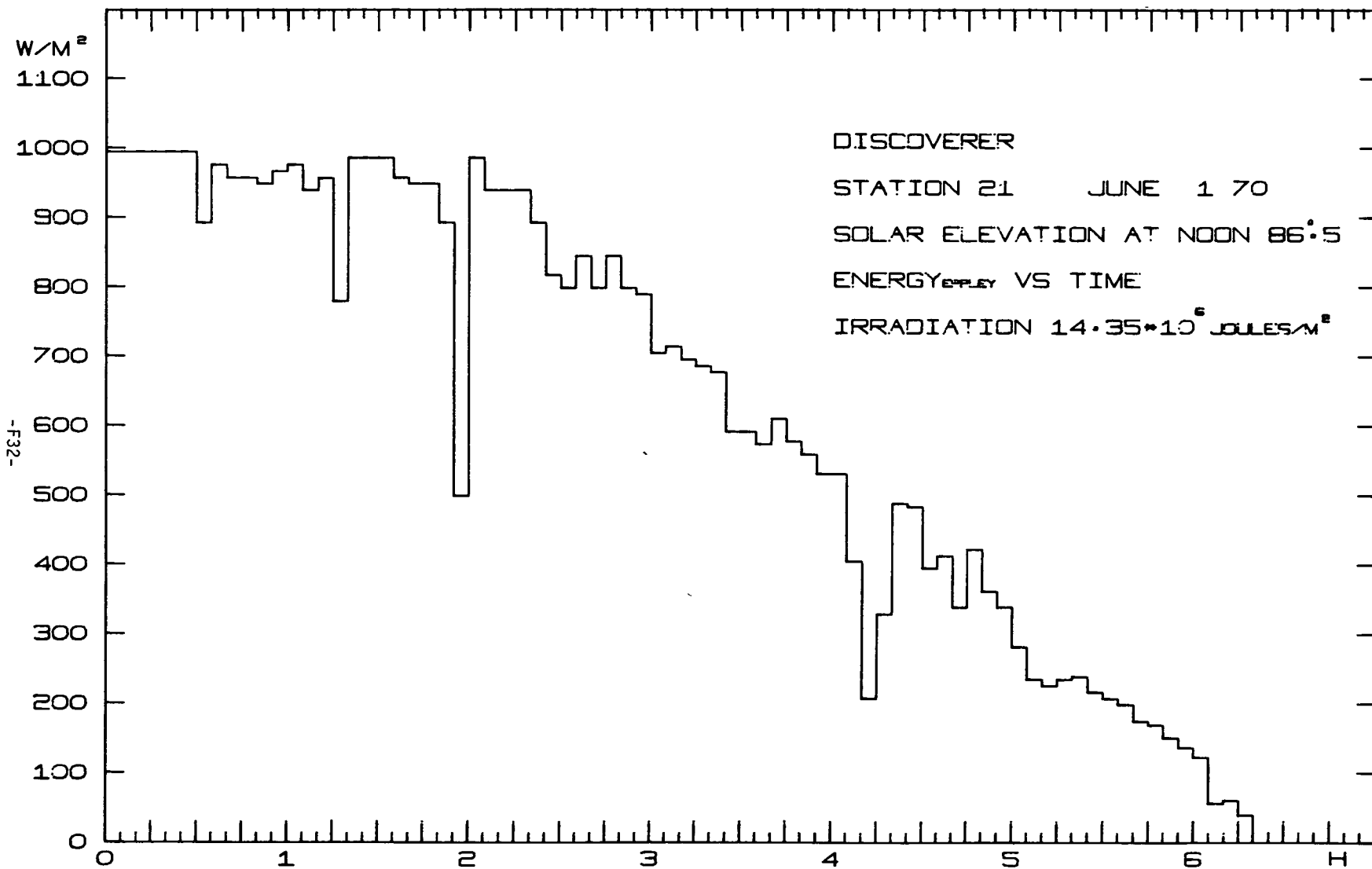














DISCOVERER      MAY 04      STATION 01      SET 1      10.30-11.00 AM

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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	210.00	38.00	0.209E 03	0.100E 03		*
5.M	97.00	38.00	0.138E 03	0.658E 02	0.0836	*
10.M	67.00	38.00	0.950E 02	0.453E 02	0.0746	*
15.M	54.00	38.00	0.764E 02	0.365E 02	0.0436	*
20.M	44.00	38.00	0.621E 02	0.296E 02	0.0415	*
30.M	29.40	38.00	0.412E 02	0.197E 02	0.0410	*
40.M	20.00	40.00	0.264E 02	0.126E 02	0.0446	*
50.M	12.00	41.50	0.149E 02	0.713E 01	0.0568	*
50.M	12.00	41.50	0.157E 02	0.750E 01	*****	*

ECLAIREMENT SURFACE = 0.983E 17 PHOTON/CM2/SEC

HAUTEUR SCLÉIL 74

EPPLEY=            W/M2

HEURE 11.00 AM

VARIABLE

CISCOVERER      MAY 04      STATION 01      SET 2      02.52-03.20 PM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	235.00	58.20	0.234E 03	0.100E 03	0.1194	*	100.00
5.M	92.00	59.00	0.129E 03	0.550E 02	0.0675	*	42.30
10.M	66.00	59.20	0.921E 02	0.393E 02	0.0587	*	31.00
15.M	50.00	60.00	0.687E 02	0.293E 02	0.0401	*	24.50
20.M	41.00	60.00	0.562E 02	0.240E 02	0.0439	*	19.20
30.M	26.60	60.00	0.362E 02	0.154E 02	0.0416	*	12.30
40.M	18.00	61.00	0.239E 02	0.102E 02	0.0589	*	8.20
50.M	10.20	61.00	0.133E 02	0.565E 01	0.0521	*	4.64
60.M	6.30	61.50	0.788E 01	0.336E 01	0.0431	*	2.85
70.M	4.28	61.80	0.512E 01	0.218E 01	0.0386	*	1.90
80.M	3.08	62.20	0.348E 01	0.148E 01	0.0430	*	
90.M	2.18	62.50	0.226E 01	0.965E 00	0.0408	*	
100.M	1.62	63.00	0.151E 01	0.642E 00	*****	*	
100.M	296.00	63.50	0.387E 03	0.637E 00	0.0582	*	
110.M	167.00	64.00	0.216E 03	0.356E 00	0.0413	*	
120.M	111.00	64.20	0.143E 03	0.236E 00	0.0455	*	
130.M	71.00	64.50	0.908E 02	0.150E 00	0.0469	*	
140.M	45.00	65.00	0.568E 02	0.936E-01	0.0462	*	
150.M	29.00	66.00	0.358E 02	0.590E-01		*	

ECLAIREMENT SURFACE = 0.597E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 42

EPPLEY= 547 W/M2

HEURE 03.20 PM

CIEL BLEU

DISCOVERER      MAY 04      STATION 01      SET 3      04.41-04.52 PM

.....

QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	117.00	22.00	0.116E 03	0.100E 03		*	
5.M	38.00	22.30	0.530E 02	0.455E 02	0.1577	*	
10.M	27.00	22.70	0.368E 02	0.316E 02	0.0729	*	
15.M	20.60	23.00	0.276E 02	0.236E 02	0.0578	*	
20.M	16.00	23.50	0.208E 02	0.179E 02	0.0561	*	
30.M	11.20	24.00	0.141E 02	0.121E 02	0.0390	*	
40.M	7.00	24.50	0.841E 01	0.722E 01	0.0516	*	
40.M	7.00	24.50	0.899E 01	0.771E 01	*****	*	

ECLAIREMENT SURFACE = 0.297E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 22

EPPLEY=            W/M2

HEURE 04.52 PM

CIEL BLEU

DISCOVERER / MAY 05 STATION 02 SET 1 09.54-10.18 AM

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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	380.00	94.20	0.379E 03	0.100E 03		100.00
5.M	170.00	94.00	0.243E 03	0.640E 02	0.0852	50.40
10.M	125.00	94.00	0.178E 03	0.470E 02	0.0617	32.50
15.M	95.00	94.00	0.135E 03	0.357E 02	0.0551	25.80
20.M	84.00	94.00	0.120E 03	0.315E 02	0.0247	21.50
25.M	72.00	94.00	0.103E 03	0.270E 02	0.0310	18.80
30.M	60.00	93.50	0.858E 02	0.226E 02	0.0357	15.80
40.M	42.00	94.00	0.595E 02	0.157E 02	0.0365	10.40
50.M	30.50	94.00	0.430E 02	0.113E 02	0.0324	8.20
70.M	17.00	93.50	0.238E 02	0.627E 01	0.0296	4.10
80.M	12.40	93.50	0.172E 02	0.453E 01	0.0326	2.90
90.M	9.25	93.50	0.126E 02	0.333E 01	0.0307	2.10
100.M	6.75	93.00	0.910E 01	0.240E 01	0.0330	
110.M	4.90	92.00	0.649E 01	0.171E 01	0.0338	
120.M	3.20	91.50	0.402E 01	0.106E 01	0.0479	
130.M	2.24	91.00	0.262E 01	0.690E 00	0.0428	
130.M	508.00	91.00	0.751E 03	0.694E 00	*****	
140.M	310.00	90.50	0.461E 03	0.426E 00	0.0489	
150.M	180.00	89.00	0.272E 03	0.251E 00	0.0528	

ECLAIREMENT SURFACE = 0.965E 17 PHOTON/CM2/SEC

HAUTEUR SCLEIL 67

EPPLEY= 885 W/M2

HEURE 10.18 AM

CIEL BLEU

DISCOVERER      MAY 05      STATION 02      SET 2      03.57-04.20 PM  
 .....

QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTIEN K (M-1)	POURCENTAGE (ENERGIE)
0.M	160.00	32.00	0.159E 03	0.100E 03		*
5.M	63.00	32.00	0.893E 02	0.560E 02	0.1160	*
10.M	45.00	30.00	0.678E 02	0.425E 02	0.0551	*
15.M	35.00	29.00	0.543E 02	0.341E 02	0.0442	*
20.M	30.00	31.00	0.435E 02	0.273E 02	0.0447	*
30.M	22.00	33.00	0.297E 02	0.186E 02	0.0380	*
40.M	15.00	32.00	0.206E 02	0.130E 02	0.0364	*
50.M	9.50	30.00	0.136E 02	0.855E 01	0.0415	*
60.M	6.30	30.00	0.870E 01	0.545E 01	0.0450	*
70.M	4.15	29.00	0.566E 01	0.355E 01	0.0429	*
80.M	2.50	28.00	0.315E 01	0.197E 01	0.0587	*
90.M	1.90	30.00	0.204E 01	0.128E 01	0.0432	*
90.M	370.00	30.00	0.563E 03	0.128E 01	*****	*
100.M	190.00	30.50	0.284E 03	0.646E 00	0.0685	*
110.M	98.00	30.50	0.146E 03	0.332E 00	0.0665	*
120.M	54.00	30.00	0.814E 02	0.185E 00	0.0585	*
130.M	30.50	30.00	0.456E 02	0.104E 00	0.0580	*
140.M	19.00	29.00	0.290E 02	0.659E-01	0.0452	*
150.M	13.00	30.00	0.189E 02	0.429E-01	0.0429	*

ECLAIREMENT SURFACE = 0.406E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 27  
 EPPLEY= 301 W/M2      HEURE 04.20 PM  
 CIEL VOILE

DISCOVERER      MAY 06      STATION 03      SET 1      10.08-10.44 AM  
 .....

QUANTA METRE						THERMOPILE SGUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	420.00	21.00	0.419E 03	0.100E 03		*	100.00
5.M	160.00	20.50	0.234E 03	0.557E 02	0.1170	*	40.00
10.M	43.00	7.80	0.164E 03	0.390E 02	0.0712	*	29.40
15.M	33.00	7.80	0.125E 03	0.298E 02	0.0537	*	24.00
20.M	66.00	18.00	0.109E 03	0.260E 02	0.0271	*	20.00
30.M	46.00	19.00	0.719E 02	0.171E 02	0.0418	*	13.30
40.M	35.00	19.00	0.545E 02	0.130E 02	0.0277	*	9.50
50.M	22.00	20.00	0.323E 02	0.770E 01	0.0524	*	6.70
60.M	16.50	20.00	0.240E 02	0.573E 01	0.0295	*	4.70
70.M	10.30	20.50	0.144E 02	0.342E 01	0.0515	*	2.70
80.M	6.00	19.00	0.869E 01	0.207E 01	0.0502	*	1.50
90.M	3.20	19.00	0.427E 01	0.102E 01	0.0711	*	0.86
100.M	2.10	18.20	0.264E 01	0.629E 00	0.0480	*	
100.M	460.00	20.40	0.676E 03	0.630E 00	*****	*	
110.M	305.00	20.00	0.457E 03	0.426E 00	0.0392	*	
120.M	190.00	20.00	0.284E 03	0.265E 00	0.0475	*	
130.M	120.00	21.00	0.171E 03	0.159E 00	0.0510	*	
140.M	90.00	21.00	0.128E 03	0.119E 00	0.0289	*	
150.M	60.00	20.50	0.869E 02	0.810E-01	0.0385	*	
160.M	39.00	20.70	0.556E 02	0.518E-01	0.0446	*	

ECLAIREMENT SURFACE = 0.107E 18 PHOTON/CM2/SEC      HAUTEUR SOLEIL 72

EPPLEY= 986 W/M2      HEURE 10.44 AM

VARIABLE

DISCOVERER      MAY 06      STATION 03      SET 2      02.45-03.10 PM

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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTICN K (M-1)	POURCENTAGE (ENERGIE)
0.M	240.00	53.80	0.239E 03	0.100E 03		100.00
5.M	110.00	54.00	0.156E 03	0.651E 02	0.0857	42.60
10.M	87.00	54.20	0.123E 03	0.513E 02	0.0479	31.60
15.M	68.00	54.20	0.958E 02	0.400E 02	0.0496	25.50
20.M	54.00	54.50	0.755E 02	0.315E 02	0.0476	21.00
30.M	35.00	55.00	0.483E 02	0.201E 02	0.0448	13.50
40.M	23.50	55.50	0.319E 02	0.133E 02	0.0415	8.00
50.M	16.00	55.70	0.214E 02	0.894E 01	0.0398	5.05
60.M	10.70	56.00	0.140E 02	0.585E 01	0.0424	3.40
70.M	7.20	56.20	0.917E 01	0.383E 01	0.0424	2.20
80.M	4.10	56.50	0.490E 01	0.205E 01	0.0626	1.35
90.M	2.48	56.70	0.269E 01	0.112E 01	0.0601	0.90
90.M	550.00	57.00	0.741E 03	0.113E 01	*****	
100.M	290.00	57.00	0.391E 03	0.593E 00	0.0641	0.45
110.M	162.00	57.70	0.215E 03	0.327E 00	0.0596	
120.M	100.00	58.00	0.132E 03	0.200E 00	0.0490	
130.M	66.00	58.20	0.864E 02	0.131E 00	0.0422	
140.M	42.50	58.30	0.552E 02	0.839E-01	0.0447	
150.M	27.40	58.50	0.352E 02	0.534E-01	0.0451	
160.M	18.80	59.00	0.237E 02	0.359E-01	0.0396	

ECLAIREMENT SURFACE = 0.610E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 45  
 EPPELLEY= 550 W/M2      HEURE 03.10 PM  
 CIEL BLEU

DISCOVERER MAY 07 STATION 04 SET 1 09.53-10.20 AM

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QUANTA METRE						THERMOPILE SOUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	415.00	78.00	0.414E 03	0.100E 03		*	100.00
5.M	150.00	80.00	0.209E 03	0.503E 02	0.1374	*	35.70
10.M	130.00	82.00	0.176E 03	0.425E 02	0.0336	*	26.50
15.M	97.00	81.00	0.133E 03	0.321E 02	0.0563	*	22.50
20.M	80.00	81.00	0.110E 03	0.264E 02	0.0387	*	18.20
30.M	55.00	80.50	0.756E 02	0.182E 02	0.0371	*	12.80
40.M	37.00	82.00	0.497E 02	0.120E 02	0.0419	*	8.40
49.M	26.00	82.50	0.346E 02	0.834E 01	0.0404	*	4.95
58.M	14.00	75.00	0.202E 02	0.487E 01	0.0598	*	3.06
67.M	8.50	73.00	0.123E 02	0.297E 01	0.0547	*	1.80
76.M	5.30	71.50	0.760E 01	0.183E 01	0.0538	*	0.97
85.M	3.50	71.50	0.479E 01	0.116E 01	0.0513	*	0.73
94.M	2.70	71.00	0.357E 01	0.860E 00	0.0328	*	0.45
94.M	640.00	71.00	0.100E 04	0.865E 00	*****	*	
105.M	430.00	70.80	0.676E 03	0.583E 00	0.0359	*	0.34
115.M	265.00	70.50	0.418E 03	0.360E 00	0.0481	*	
123.M	190.00	71.00	0.298E 03	0.256E 00	0.0426	*	
132.M	127.00	71.00	0.199E 03	0.256E 00	0.0449	*	
140.M	90.00	69.50	0.143E 03	0.171E 00	0.0406	*	
150.M	68.00	69.50	0.108E 03	0.124E 00	0.0283	*	
				0.932E-01		*	

ECLAIREMENT SURFACE = 0.105E 18 PHOTON/CM2/SEC

HAUTEUR SCLÉIL 66

EPPLEY= 94C W/M2

HEURE 10.20 AM

CIEL BLEU



DISCOVERER      MAY 07      STATION 04      SET 2      02.55-03.20 PM  
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QUANTA METRE

THERMOPILE  
 SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	265.00	65.00	0.264E 03	0.100E 03		*	
5.M	110.00	66.50	0.153E 03	0.579E 02	0.1054	*	
10.M	85.00	67.00	0.117E 03	0.443E 02	0.0533	*	
15.M	67.00	67.50	0.915E 02	0.346E 02	0.0494	*	
20.M	55.00	68.30	0.741E 02	0.280E 02	0.0422	*	
30.M	38.00	68.00	0.512E 02	0.194E 02	0.0370	*	
40.M	24.50	68.00	0.328E 02	0.124E 02	0.0447	*	
50.M	16.30	68.00	0.216E 02	0.815E 01	0.0419	*	
60.M	11.00	68.20	0.143E 02	0.540E 01	0.0413	*	
70.M	6.70	68.70	0.835E 01	0.316E 01	0.0536	*	
80.M	4.00	70.00	0.461E 01	0.174E 01	0.0594	*	
90.M	2.80	70.20	0.301E 01	0.114E 01	0.0427	*	
90.M	630.00	70.70	0.827E 03	0.113E 01	*****	*	
100.M	470.00	71.00	0.614E 03	0.839E 00	0.0298	*	
110.M	280.00	72.50	0.358E 03	0.489E 00	0.0540	*	
120.M	210.00	73.50	0.265E 03	0.361E 00	0.0302	*	
130.M	150.00	74.00	0.188E 03	0.256E 00	0.0345	*	
140.M	107.00	75.00	0.132E 03	0.180E 00	0.0353	*	
150.M	80.00	75.00	0.983E 02	0.134E 00	0.0293	*	

ECLAIREMENT SURFACE = 0.673E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 41  
 EPPLEY= 610 W/M2      HEURE 03.20 PM  
 CIEL BLEU

DISCOVERER      MAY 08      STATION 05      SET 1      09.45-10.14 AM

QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTIGN K (M-1)	POURCENTAGE (ENERGIE)
0.M	370.00	78.00	0.369E 03	0.100E 03		100.00
5.M	130.00	76.50	0.189E 03	0.511E 02	0.1342	27.40
10.M	75.00	76.50	0.109E 03	0.294E 02	0.1105	15.40
14.M	55.00	76.50	0.795E 02	0.215E 02	0.0781	11.00
18.M	37.00	77.00	0.529E 02	0.143E 02	0.1017	6.70
25.M	21.20	75.00	0.309E 02	0.835E 01	0.0771	3.60
31.M	14.50	74.00	0.212E 02	0.573E 01	0.0628	2.50
44.M	8.50	73.00	0.123E 02	0.333E 01	0.0418	1.20
53.M	5.30	72.00	0.751E 01	0.203E 01	0.0548	0.75
62.M	3.50	72.00	0.472E 01	0.128E 01	0.0515	0.60
69.M	2.50	72.00	0.318E 01	0.859E 00	0.0568	0.30
69.M	580.00	72.00	0.898E 03	0.867E 00	*****	
79.M	360.00	72.00	0.557E 03	0.538E 00	0.0478	
87.M	205.00	72.00	0.317E 03	0.306E 00	0.0705	
97.M	125.00	73.00	0.190E 03	0.184E 00	0.0510	
105.M	77.00	72.00	0.118E 03	0.114E 00	0.0592	
115.M	50.00	70.00	0.787E 02	0.760E-01	0.0408	
125.M	34.00	68.00	0.548E 02	0.529E-01	0.0363	

ECLAIREMENT SURFACE = 0.940E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 64

EPPLEY= 810 W/M2

HEURE 10.14 AM

CIEL BLEU

DISCOVERER      MAY 09      STATION 06      SET 1      10.00-10.28 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTIEN K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	410.00	76.00	0.409E 03	0.100E 03		*	100.00
5.M	135.00	73.50	0.199E 03	0.486E 02	0.1444	*	31.70
9.M	80.00	70.00	0.124E 03	0.302E 02	0.1192	*	19.80
14.M	53.00	69.00	0.828E 02	0.202E 02	0.0800	*	12.20
18.M	36.00	68.00	0.569E 02	0.139E 02	0.0940	*	7.50
24.M	17.50	66.00	0.281E 02	0.687E 01	0.1173	*	3.84
29.M	9.50	61.00	0.162E 02	0.395E 01	0.1106	*	2.42
37.M	3.30	39.50	0.792E 01	0.193E 01	0.0852	*	
37.M	740.00	39.50	0.203E 04	0.194E 01	*****	*	
43.M	300.00	41.50	0.784E 03	0.748E 00	0.1589	*	
47.M	270.00	50.00	0.585E 03	0.558E 00	0.0730	*	
54.M	135.00	53.50	0.273E 03	0.260E 00	0.1050	*	
57.M	70.00	48.50	0.155E 03	0.148E 00	0.1877	*	

ECLAIREMENT SURFACE = 0.104E 18 PHOTON/CM2/SEC

HAUTEUR SCLLEIL 65

EPPLEY= 890 W/M2

HEURE 10.28 AM

VARIABLE

DISCOVERER      MAY 09      STATION 06      SET 2      02.48-03.09 PM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PCURCENTAGE (QUANTA)	EXTINCTIGN K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	295.00	13.30	0.294E 03	0.100E 03		*	
5.M	100.00	13.80	0.137E 03	0.465E 02	0.1530	*	
14.M	38.00	14.60	0.488E 02	0.166E 02	0.1148	*	
18.M	26.00	14.60	0.331E 02	0.113E 02	0.0966	*	
26.M	11.50	15.00	0.139E 02	0.471E 01	0.1089	*	
34.M	3.80	15.00	0.410E 01	0.139E 01	0.1524	*	
39.M	2.40	15.00	0.232E 01	0.788E 00	0.1136	*	
44.M	1.20	13.50	0.888E 00	0.301E 00	0.1922	*	
48.M	0.90	13.70	0.458E 00	0.156E 00	0.1653	*	
53.M	0.70	12.70	0.195E 00	0.661E-01	0.1712	*	
53.M	0.70	12.70	0.195E 00	0.661E-01	*****	*	

ECLAIREMENT SURFACE = 0.749E 17 PHOTON/CM2/SEC

HAUTEUR SCLEIL 43

EPPLEY= 650 W/M2

HEURE 03.09 PM

VARIABLE

DISCOVERER      MAY 10      STATION 07      SET 1      10.40-11.03 AM  
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QUANTA METRE						THERNOPILE SOUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	480.00	87.00	0.479E 03	0.100E 03		*	100.00
5.M	150.00	85.00	0.219E 03	0.456E 02	0.1569	*	29.00
10.M	105.00	87.00	0.149E 03	0.312E 02	0.0763	*	17.50
14.M	73.00	85.00	0.106E 03	0.221E 02	0.0856	*	14.10
19.M	48.00	79.00	0.748E 02	0.156E 02	0.0659	*	7.90
26.M	28.00	88.00	0.389E 02	0.811E 01	0.0935	*	3.65
33.M	17.00	95.00	0.216E 02	0.451E 01	0.0839	*	2.35
37.M	12.50	84.00	0.178E 02	0.371E 01	0.0488	*	1.74
44.M	6.50	80.00	0.933E 01	0.195E 01	0.0921	*	1.05
52.M	3.70	79.00	0.504E 01	0.105E 01	0.0770	*	0.66
52.M	700.00	79.00	0.110E 04	0.105E 01	*****	*	
58.M	400.00	78.00	0.637E 03	0.609E 00	0.0913	*	0.41
63.M	280.00	78.00	0.446E 03	0.426E 00	0.0715	*	0.20
66.M	220.00	77.50	0.352E 03	0.337E 00	0.0784	*	
71.M	160.00	77.00	0.257E 03	0.246E 00	0.0626	*	
76.M	120.00	77.00	0.193E 03	0.185E 00	0.0578	*	

ECLAIREMENT SURFACE = 0.122E 18 PHOTON/CM2/SEC      HAUTEUR SCLÉIL 66  
 EPPLEY= 1021 W/M2      HEURE 11.03 AM  
 VARIABLE

DISCOVERER      MAY 12      STATION 08      SET 1      09.55-10.23 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	320.00	53.00	0.319E 03	0.100E 03		*	100.00
5.M	95.00	60.00	0.120E 03	0.374E 02	0.1967	*	21.20
10.M	60.00	64.00	0.706E 02	0.221E 02	0.1052	*	10.00
15.M	38.00	64.00	0.446E 02	0.139E 02	0.0920	*	6.00
20.M	22.00	64.00	0.256E 02	0.802E 01	0.1107	*	4.10
30.M	8.00	64.00	0.906E 01	0.283E 01	0.1040	*	1.52
40.M	4.80	64.00	0.527E 01	0.165E 01	0.0542	*	0.87
50.M	2.80	64.00	0.290E 01	0.908E 00	0.0597	*	0.51
50.M	560.00	64.00	0.663E 03	0.942E 00	*****	*	
60.M	360.00	64.00	0.426E 03	0.605E 00	0.0442	*	0.33
70.M	230.00	64.00	0.272E 03	0.387E 00	0.0449	*	0.18
80.M	125.00	64.00	0.147E 03	0.210E 00	0.0611	*	0.09
90.M	65.00	52.00	0.941E 02	0.134E 00	0.0450	*	0.05
100.M	32.00	45.00	0.531E 02	0.755E-01	0.0571	*	
110.M	16.00	36.00	0.327E 02	0.465E-01	0.0485	*	
120.M	10.50	41.00	0.186E 02	0.264E-01	0.0567	*	
130.M	11.50	67.00	0.125E 02	0.178E-01	0.0396	*	
140.M	7.50	67.00	0.796E 01	0.113E-01	0.0450	*	

ECLAIREMENT SURFACE = 0.813E 17 PHOTON/CM2/SEC

HAUTEUR SCLIL 58

EPPLEY= 637 W/M2

HEURE 10.23 AM

VARIABLE

DISCOVERER      MAY 12      STATION 08      SET 2      10.25-10.45 AM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	337.00	51.50	0.336E 03	0.100E 03		*	
5.M	115.00	66.00	0.128E 03	0.380E 02	0.1935	*	
10.M	70.00	64.00	0.801E 02	0.238E 02	0.0935	*	
15.M	44.00	61.00	0.527E 02	0.157E 02	0.0839	*	
20.M	20.00	51.50	0.281E 02	0.835E 01	0.1258	*	
30.M	8.00	61.00	0.924E 01	0.274E 01	0.1113	*	
40.M	4.80	58.00	0.565E 01	0.168E 01	0.0491	*	
50.M	2.95	58.00	0.330E 01	0.981E 00	0.0527	*	
50.M	560.00	58.00	0.710E 03	0.977E 00	*****	*	
60.M	270.00	61.00	0.325E 03	0.448E 00	0.0781	*	

ECLAIREMENT SURFACE = 0.856E 17 PHOTON/CM2/SEC

HAUTEUR SCLIEIL 62

EPPLEY= 667 W/M2

HEURE 10.45 AM

VARIABLE

DISCOVERER      MAY 12      STATION 08      SET 3      02.50-03.07 PM  
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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	140.00	26.00	0.139E 03	0.100E 03		100.00
5.M	52.00	29.70	0.645E 02	0.462E 02	0.1543	27.10
10.M	30.00	29.00	0.378E 02	0.271E 02	0.1066	16.20
15.M	19.00	31.00	0.222E 02	0.159E 02	0.1066	8.70
20.M	12.00	32.00	0.134E 02	0.959E 01	0.1013	5.30
30.M	4.60	30.00	0.511E 01	0.366E 01	0.0964	1.85
30.M	800.00	30.00	0.991E 03	0.355E 01	*****	
40.M	330.00	27.00	0.454E 03	0.163E 01	0.0781	1.06
50.M	170.00	27.00	0.233E 03	0.836E 00	0.0665	0.58
60.M	100.00	28.00	0.132E 03	0.473E 00	0.0570	0.27
70.M	65.00	32.50	0.736E 02	0.264E 00	0.0583	0.15
80.M	45.00	32.00	0.515E 02	0.185E 00	0.0357	
90.M	27.00	31.70	0.309E 02	0.111E 00	0.0511	

ECLAIREMENT SURFACE = 0.356E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 39  
 EPPLEY= 305 W/M2      HEURE 03.07 PM  
 CGUVERT



DISCOVERER      MAY 13      STATION 09      SET 1      09.30-09.55 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PCURCENTAGE (QUANTA)	EXTINCTIGN K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	370.00	61.50	0.370E 03	0.100E 03		*	100.00
5.M	108.00	61.50	0.154E 03	0.417E 02	0.1752	*	22.00
10.M	65.00	61.50	0.925E 02	0.250E 02	0.1019	*	13.10
15.M	42.00	61.50	0.596E 02	0.161E 02	0.0879	*	7.70
19.M	26.00	61.00	0.370E 02	0.100E 02	0.1190	*	4.70
27.M	9.70	61.00	0.135E 02	0.366E 01	0.1259	*	1.77
36.M	3.50	61.00	0.458E 01	0.124E 01	0.1202	*	0.59
36.M	680.00	61.00	0.980E 03	0.124E 01	*****	*	
44.M	310.00	61.00	0.446E 03	0.564E 00	0.0983	*	0.23
52.M	170.00	61.50	0.242E 03	0.307E 00	0.0763	*	0.15
59.M	98.00	62.00	0.138E 03	0.175E 00	0.0801	*	0.07
67.M	65.00	63.00	0.901E 02	0.114E 00	0.0536	*	
76.M	42.00	64.00	0.571E 02	0.722E-01	0.0507	*	
86.M	30.00	64.00	0.406E 02	0.514E-01	0.0341	*	
93.M	21.50	64.00	0.290E 02	0.366E-01	0.0484	*	
99.M	16.50	65.00	0.217E 02	0.275E-01	0.0477	*	
108.M	12.00	62.00	0.164E 02	0.207E-01	0.0313	*	
118.M	9.80	65.00	0.127E 02	0.160E-01	0.0258	*	
127.M	7.00	64.00	0.903E 01	0.114E-01	0.0377	*	

ECLAIREMENT SURFACE = 0.940E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 53

EPPLEY= 722 W/M2

HEURE 09.55 AM

CIEL BLEU

DISCOVERER      MAY 13      STATION 09      SET 2      03.08-03.28 PM  
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QUANTA METRE

THERMOPILE  
 SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	185.00	22.50	0.184E 03	0.100E 03		*	
5.M	62.00	23.00	0.861E 02	0.467E 02	0.1525	*	
10.M	37.50	23.00	0.518E 02	0.281E 02	0.1015	*	
15.M	23.00	23.00	0.315E 02	0.171E 02	0.0953	*	
20.M	14.50	23.00	0.197E 02	0.107E 02	0.0946	*	
30.M	5.70	23.00	0.734E 01	0.398E 01	0.0984	*	
30.M	810.00	23.00	0.113E 04	0.398E 01	*****	*	
40.M	195.00	24.00	0.261E 03	0.917E 00	0.1469	*	
50.M	90.00	24.00	0.120E 03	0.422E 00	0.0776	*	
60.M	47.00	24.50	0.610E 02	0.215E 00	0.0676	*	
70.M	27.00	26.00	0.327E 02	0.115E 00	0.0623	*	
80.M	15.00	26.00	0.179E 02	0.629E-01	0.0605	*	
90.M	8.80	25.00	0.106E 02	0.374E-01	0.0521	*	
100.M	5.90	25.00	0.689E 01	0.242E-01	0.0433	*	
110.M	4.15	25.00	0.463E 01	0.163E-01	0.0396	*	
120.M	3.10	26.50	0.310E 01	0.109E-01	0.0403	*	

ECLAIREMENT SURFACE = 0.265E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 35

EPPLEY= 211 W/M2      HEURE 03.28 PM

CCUVERT

DISCOVERER      MAY 14      STATION 10      SET 1      10.00-10.25 AM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	125.00	2.20	0.125E 03	0.100E 03		*	
9.M	23.50	2.10	0.347E 02	0.279E 02	0.1420	*	
15.M	19.50	2.50	0.241E 02	0.194E 02	0.0606	*	
20.M	14.50	2.50	0.179E 02	0.143E 02	0.0604	*	
29.M	8.70	2.70	0.978E 01	0.784E 01	0.0669	*	
37.M	5.50	2.70	0.605E 01	0.485E 01	0.0600	*	
46.M	3.40	2.65	0.367E 01	0.294E 01	0.0555	*	
55.M	2.00	2.65	0.201E 01	0.161E 01	0.0670	*	
55.M	360.00	2.65	0.427E 03	0.161E 01	*****	*	
64.M	225.00	3.00	0.236E 03	0.891E 00	0.0661	*	
73.M	122.00	3.20	0.120E 03	0.452E 00	0.0753	*	
83.M	80.00	3.30	0.759E 02	0.287E 00	0.0454	*	
92.M	53.00	3.40	0.487E 02	0.184E 00	0.0454	*	
100.M	39.00	3.40	0.349E 02	0.132E 00	0.0416	*	
109.M	25.00	3.40	0.228E 02	0.861E-01	0.0475	*	

ECLAIREMENT SURFACE = 0.317E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 55

EPPLEY= 266 W/M2

HEURE 10.25 AM

CCUVERT

DISCOVERER      MAY 14      STATION 10      SET 2      03.05-03.23 PM  
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QUANTA METRE

THERMOPILE  
 SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	94.00	2.00	0.933E 02	0.100E 03		*	100.00
5.M	37.00	2.20	0.474E 02	0.507E 02	0.1357	*	25.70
9.M	26.00	2.30	0.317E 02	0.339E 02	0.1008	*	16.90
14.M	19.00	2.40	0.220E 02	0.236E 02	0.0728	*	12.20
19.M	15.00	2.50	0.166E 02	0.177E 02	0.0569	*	8.90
29.M	9.00	2.60	0.933E 01	0.998E 01	0.0574	*	5.00
38.M	5.20	2.60	0.515E 01	0.551E 01	0.0660	*	3.40
46.M	3.60	2.60	0.339E 01	0.362E 01	0.0523	*	2.00
46.M	690.00	2.60	0.747E 03	0.363E 01	*****	*	
54.M	350.00	2.60	0.384E 03	0.187E 01	0.0831	*	0.93
63.M	190.00	2.58	0.210E 03	0.102E 01	0.0672	*	0.47
71.M	100.00	2.54	0.112E 03	0.544E 00	0.0787	*	0.23
80.M	56.00	2.54	0.623E 02	0.303E 00	0.0650	*	
88.M	38.00	2.54	0.421E 02	0.205E 00	0.0492	*	
93.M	26.00	2.50	0.288E 02	0.140E 00	0.0380	*	
108.M	16.50	2.60	0.174E 02	0.848E-01	0.0501	*	
118.M	10.50	2.60	0.108E 02	0.527E-01	0.0475	*	

ECLAIREMENT SURFACE = 0.239E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 34  
 EPPLEY= 188 W/M2      HEURE 03.23 PM  
 CCUVERT

DISCOVERER      MAY 15      STATION 11      SET 1      09.50-10.25 AM

QUANTA METRE						THERMOPILE SCUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	400.00	67.00	0.399E 03	0.100E 03	0.0970	*
5.M	80.00	31.00	0.246E 03	0.616E 02	0.1185	*
10.M	43.00	30.00	0.136E 03	0.340E 02	0.0728	*
15.M	30.00	30.00	0.945E 02	0.237E 02	0.0738	*
20.M	19.50	28.00	0.654E 02	0.164E 02	0.0708	*
29.M	10.50	28.00	0.346E 02	0.865E 01	0.0613	*
38.M	5.70	25.50	0.199E 02	0.498E 01	0.0624	*
47.M	3.60	27.00	0.114E 02	0.284E 01	0.0770	*
56.M	2.00	27.00	0.568E 01	0.142E 01	0.0400	*
66.M	3.30	73.00	0.381E 01	0.952E 00	0.0530	*
75.M	2.20	73.00	0.236E 01	0.591E 00	*****	*
75.M	390.00	73.00	0.511E 03	0.589E 00	0.0728	*
84.M	200.00	72.00	0.265E 03	0.306E 00	0.0552	*
93.M	127.00	75.00	0.162E 03	0.186E 00	0.0652	*
102.M	24.00	25.00	0.899E 02	0.104E 00	0.0485	*
111.M	46.00	75.00	0.581E 02	0.670E-01		*

ECLAIREMENT SURFACE = 0.102E 18 PHOTON/CM2/SEC      HAUTEUR SOLEIL 54  
 APPLEY= 817 W/M2      HEURE 10.25 AM  
 VARIABLE

DISCOVERER      MAY 15      STATION 11      SET 2      02.13-02.29 PM  
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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PORCENTAGE (QUANTA)	EXTINCTIGN K (M-1)	POURCENTAGE (ENERGIE)
0.M	360.00	6.10	0.359E 03	0.100E 03		100.00
5.M	120.00	6.00	0.174E 03	0.483E 02	0.1454	24.10
9.M	83.00	5.75	0.125E 03	0.348E 02	0.0819	15.50
14.M	58.00	5.75	0.873E 02	0.243E 02	0.0722	10.20
18.M	42.00	5.80	0.625E 02	0.174E 02	0.0836	7.25
27.M	23.50	5.80	0.347E 02	0.964E 01	0.0655	3.70
37.M	12.50	5.80	0.181E 02	0.504E 01	0.0649	2.02
46.M	7.60	5.80	0.108E 02	0.299E 01	0.0580	1.19
56.M	4.00	5.82	0.532E 01	0.148E 01	0.0704	0.63
64.M	2.40	5.85	0.291E 01	0.809E 00	0.0755	0.30
64.M	420.00	5.85	0.625E 03	0.844E 00	*****	
73.M	240.00	5.85	0.357E 03	0.482E 00	0.0623	
80.M	150.00	5.90	0.221E 03	0.298E 00	0.0686	
88.M	110.00	5.90	0.162E 03	0.218E 00	0.0390	
96.M	67.00	5.90	0.982E 02	0.133E 00	0.0624	
103.M	39.00	5.90	0.568E 02	0.766E-01	0.0782	

ECLAIREMENT SURFACE = 0.914E 17 PHOTON/CM2/SEC      HAUTEUR SCLIL 44

EPPLEY= 756 W/M<sup>2</sup>      HEURE 02.29 PM

VARIABLE

DISCOVERER      MAY 16      STATION 12      SET 1      10.05-10.38 AM

QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	408.00	6.85	0.407E 03	0.100E 03	0.1193	*
7.M	125.00	6.90	0.177E 03	0.434E 02	0.0630	*
12.M	92.00	6.95	0.129E 03	0.317E 02	0.0891	*
16.M	65.00	7.00	0.904E 02	0.222E 02	0.0595	*
21.M	47.00	6.80	0.671E 02	0.165E 02	0.0607	*
30.M	27.00	6.70	0.389E 02	0.954E 01	0.0708	*
38.M	15.50	6.70	0.221E 02	0.542E 01	0.0769	*
48.M	7.50	6.80	0.102E 02	0.251E 01	0.0729	*
57.M	4.30	7.20	0.531E 01	0.130E 01	0.0589	*
65.M	2.70	6.80	0.331E 01	0.813E 00	*****	*
65.M	500.00	6.80	0.720E 03	0.810E 00	0.0619	*
71.M	340.00	6.70	0.496E 03	0.559E 00	0.0436	*
81.M	220.00	6.70	0.321E 03	0.361E 00	0.0448	*
90.M	145.00	6.60	0.214E 03	0.241E 00	0.0475	*
100.M	89.00	6.50	0.133E 03	0.150E 00	0.0516	*
108.M	60.00	6.60	0.883E 02	0.993E-01		*

ECLAIREMENT SURFACE = 0.104E 18 PHOTON/CM2/SEC      HAUTEUR SCLEIL 58  
 EPPLEY= 936 W/M2      HEURE 10.38 AM  
 VARIABLE

DISCOVERER      MAY 16      STATION 12      SET 2      03.00-03.24 PM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (P-1)	*	POURCENTAGE (ENERGIE)
0.M	185.00	3.40	0.184E 03	0.100E 03		*	
7.M	49.00	2.90	0.814E 02	0.441E 02	0.1169	*	
11.M	29.00	2.70	0.514E 02	0.279E 02	0.1149	*	
15.M	23.00	2.90	0.378E 02	0.205E 02	0.0768	*	
19.M	32.00	5.40	0.284E 02	0.154E 02	0.0715	*	
29.M	7.80	2.30	0.155E 02	0.842E 01	0.0603	*	
38.M	4.00	2.00	0.863E 01	0.468E 01	0.0653	*	
38.M	750.00	2.00	0.182E 04	0.466E 01	*****	*	
48.M	380.00	2.10	0.878E 03	0.225E 01	0.0729	*	
54.M	620.00	5.60	0.538E 03	0.137E 01	0.0818	*	
63.M	280.00	5.70	0.238E 03	0.609E 00	0.0904	*	
72.M	135.00	5.70	0.115E 03	0.293E 00	0.0813	*	
82.M	78.00	5.65	0.666E 02	0.170E 00	0.0543	*	
92.M	50.00	5.50	0.437E 02	0.112E 00	0.0422	*	
99.M	36.00	5.40	0.319E 02	0.815E-01	0.0449	*	
108.M	26.00	5.50	0.225E 02	0.575E-01	0.0389	*	

ECLAIREMENT SURFACE = 0.470E 17 PHOTON/CM2/SEC

HAUTEUR SCLÉIL 34

EPPLEY= 422 W/M2

HEURE 03.24 PM

VARIABLE



DISCOVERER      MAY 17      STATION 13      SET 1      09.45-10.24 AM

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QUANTA METRE						THERMOPILE SGUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	390.00	6.75	0.390E 03	0.100E 03		100.00
5.M	120.00	6.70	0.172E 03	0.442E 02	0.1631	20.00
10.M	83.00	6.70	0.119E 03	0.306E 02	0.0740	12.50
15.M	52.00	6.70	0.745E 02	0.191E 02	0.0940	7.40
20.M	35.50	6.65	0.511E 02	0.131E 02	0.0754	4.90
25.M	20.50	6.67	0.292E 02	0.749E 01	0.1118	2.30
30.M	13.30	6.65	0.188E 02	0.483E 01	0.0877	1.80
40.M	5.50	6.65	0.752E 01	0.193E 01	0.0919	0.72
50.M	2.80	6.60	0.363E 01	0.931E 00	0.0729	0.35
50.M	515.00	6.60	0.753E 03	0.928E 00	*****	
60.M	320.00	6.60	0.467E 03	0.577E 00	0.0476	0.23
70.M	210.00	6.60	0.306E 03	0.378E 00	0.0422	0.15
80.M	143.00	6.57	0.209E 03	0.258E 00	0.0381	0.09
90.M	94.00	6.57	0.137E 03	0.170E 00	0.0421	
100.M	58.00	6.55	0.848E 02	0.105E 00	0.0483	
110.M	36.00	6.55	0.524E 02	0.646E-01	0.0482	
120.M	22.00	6.50	0.320E 02	0.395E-01	0.0493	
130.M	12.50	6.50	0.179E 02	0.221E-01	0.0581	
140.M	8.00	6.50	0.112E 02	0.138E-01	0.0468	
150.M	5.30	6.45	0.726E 01	0.895E-02	0.0435	

ECLAIREMENT SURFACE = 0.991E 17 PHOTON/CM2/SEC

HAUTEUR SCLLEIL 56

EPPLEY= 826 W/M2

HEURE 10.24 AM

CIEL BLEU

DISCOVERER      MAY 17      STATION 13      SET 2      03.05-03.33 PM  
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QUANTA METRE						THERMOPILE SCUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PCURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	205.00	2.30	0.204E 03	0.100E 03		*	100.00
5.M	80.00	2.50	0.105E 03	0.512E 02	0.1340	*	27.80
10.M	39.00	2.25	0.564E 02	0.276E 02	0.1237	*	14.70
15.M	24.00	2.25	0.345E 02	0.168E 02	0.0985	*	9.25
20.M	18.50	2.57	0.231E 02	0.113E 02	0.0797	*	4.93
25.M	12.00	2.55	0.149E 02	0.730E 01	0.0875	*	2.95
30.M	6.20	2.30	0.827E 01	0.404E 01	0.1183	*	2.18
30.M	930.00	2.25	0.136E 04	0.410E 01	*****	*	
40.M	400.00	2.25	0.584E 03	0.176E 01	0.0844	*	1.11
50.M	250.00	2.70	0.304E 03	0.917E 00	0.0653	*	0.61
60.M	125.00	2.50	0.164E 03	0.494E 00	0.0618	*	0.34
70.M	75.00	2.50	0.980E 02	0.296E 00	0.0514	*	
80.M	47.00	2.75	0.556E 02	0.168E 00	0.0567	*	
90.M	26.00	2.60	0.322E 02	0.972E-01	0.0545	*	
100.M	17.50	2.40	0.233E 02	0.702E-01	0.0326	*	
110.M	14.00	2.70	0.164E 02	0.495E-01	0.0349	*	
120.M	9.30	2.55	0.113E 02	0.341E-01	0.0372	*	
130.M	6.30	2.55	0.744E 01	0.225E-01	0.0419	*	
140.M	4.60	2.50	0.535E 01	0.162E-01	0.0329	*	

ECLAIREMENT SURFACE = 0.293E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 33  
 EPPLEY= 249 W/M2      HEURE 03.33 PM  
 VARIABLE

DISCOVERER      MAY 18      STATION 14      SET 1      10.02-10.35 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	250.00	4.50	0.250E 03	0.100E 03		*	100.00
5.M	90.00	5.20	0.111E 03	0.445E 02	0.1621	*	22.60
10.M	50.00	4.00	0.800E 02	0.320E 02	0.0656	*	14.30
15.M	40.00	4.80	0.532E 02	0.213E 02	0.0814	*	
20.M	28.00	4.70	0.379E 02	0.152E 02	0.0678	*	
30.M	10.60	4.20	0.158E 02	0.632E 01	0.0877	*	3.02
40.M	6.35	6.40	0.608E 01	0.244E 01	0.0953	*	1.05
40.M	960.00	6.40	0.965E 03	0.248E 01	*****	*	
50.M	390.00	5.30	0.473E 03	0.121E 01	0.0713	*	0.40
60.M	150.00	5.00	0.193E 03	0.494E 00	0.0899	*	0.17
70.M	62.00	4.40	0.901E 02	0.231E 00	0.0759	*	0.09
80.M	40.00	5.10	0.500E 02	0.128E 00	0.0589	*	0.05
90.M	23.00	5.05	0.288E 02	0.739E-01	0.0551	*	
100.M	12.80	5.00	0.160E 02	0.410E-01	0.0590	*	
110.M	8.00	5.20	0.940E 01	0.241E-01	0.0529	*	
120.M	5.00	4.60	0.643E 01	0.165E-01	0.0379	*	
130.M	3.80	5.40	0.405E 01	0.104E-01	0.0463	*	
140.M	2.90	4.80	0.335E 01	0.860E-02	0.0190	*	

ECLAIREMENT SURFACE = 0.635E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 58

APPLEY= 512 W/M2

HEURE 10.35 AM

VARIABLE

DISCOVERER      MAY 18      STATION 14      SET 2      02.48-03.13 PM

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QUANTA METRE

THERMOPILE  
SGUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	330.00	3.40	0.329E 03	0.100E 03		*	100.00
5.M	87.00	3.00	0.140E 03	0.426E 02	0.1707	*	23.00
10.M	64.00	3.20	0.966E 02	0.293E 02	0.0746	*	14.70
15.M	40.00	3.20	0.602E 02	0.183E 02	0.0948	*	9.25
20.M	32.00	3.30	0.466E 02	0.141E 02	0.0513	*	5.70
25.M	28.50	5.00	0.273E 02	0.829E 01	0.1066	*	3.62
30.M	11.30	3.10	0.171E 02	0.519E 01	0.0938	*	2.40
40.M	5.00	3.10	0.721E 01	0.219E 01	0.0863	*	0.91
40.M	680.00	3.10	0.107E 04	0.218E 01	*****	*	
50.M	255.00	3.40	0.364E 03	0.746E 00	0.1075	*	0.36
60.M	135.00	3.70	0.177E 03	0.362E 00	0.0723	*	0.13
70.M	48.00	3.00	0.768E 02	0.157E 00	0.0832	*	0.07
80.M	27.00	3.10	0.414E 02	0.849E-01	0.0618	*	
90.M	15.00	3.10	0.226E 02	0.463E-01	0.0606	*	
100.M	9.30	3.00	0.141E 02	0.289E-01	0.0471	*	
110.M	6.20	3.10	0.878E 01	0.180E-01	0.0473	*	
120.M	4.00	3.00	0.551E 01	0.113E-01	0.0466	*	
130.M	3.00	3.20	0.365E 01	0.748E-02	0.0413	*	

ECLAIREMENT SURFACE = 0.472E 17 PHOTON/CM2/SEC

HAUTEUR SCLEIL 38

EPPLEY= 390 W/M2

HEURE 03.13 PM

VARIABLE

DISCOVERER      MAY 20      STATION 15      SET 1      10.00-10.34 AM

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QUANTA METRE						THERMOPILE SCUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (P-1)	*	POURCENTAGE (ENERGIE)
0.M	440.00	7.30	0.439E 03	0.100E 03	0.1453	*	100.00
4.M	165.00	7.10	0.242E 03	0.550E 02	0.0842	*	27.80
9.M	110.00	7.20	0.159E 03	0.361E 02	0.0448	*	18.20
14.M	88.00	7.20	0.127E 03	0.289E 02	0.0720	*	13.10
18.M	67.00	7.30	0.952E 02	0.217E 02	0.0631	*	9.40
23.M	51.00	7.60	0.694E 02	0.158E 02	0.0678	*	7.10
28.M	36.00	7.50	0.495E 02	0.113E 02	0.0955	*	5.10
37.M	14.00	7.00	0.202E 02	0.460E 01	0.0842	*	2.27
46.M	6.80	7.00	0.947E 01	0.215E 01	0.0760	*	1.08
55.M	3.70	7.10	0.478E 01	0.109E 01	*****	*	0.60
55.M	3.70	7.10	0.478E 01	0.109E 01		*	

ECLAIREMENT SURFACE = 0.112E 18 PHOTON/CM2/SEC

HAUTEUR SOLEIL 65

EPPLEY= 930 W/M2

HEURE 10.34 AM

VARIABLE

DISCOVERER      MAY 20      STATION 15      SET 2      02.50-03.13 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTIGN K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	130.00	2.45	0.129E 03	0.100E 03		*	100.00
5.M	39.50	2.10	0.651E 02	0.503E 02	0.1375	*	28.30
10.M	25.50	2.10	0.418E 02	0.323E 02	0.0888	*	17.80
15.M	19.00	2.10	0.309E 02	0.239E 02	0.0601	*	12.70
19.M	15.30	2.30	0.226E 02	0.175E 02	0.0784	*	9.05
24.M	10.30	2.20	0.157E 02	0.121E 02	0.0732	*	6.64
29.M	8.30	2.30	0.120E 02	0.923E 01	0.0543	*	4.98
38.M	3.70	2.60	0.438E 01	0.338E 01	0.1116	*	2.21
38.M	700.00	2.60	0.942E 03	0.337E 01	*****	*	
48.M	285.00	2.60	0.383E 03	0.137E 01	0.0900	*	1.14
58.M	125.00	2.52	0.173E 03	0.618E 00	0.0796	*	0.55
67.M	67.00	2.52	0.923E 02	0.330E 00	0.0658	*	0.37
75.M	40.00	2.52	0.548E 02	0.196E 00	0.0652	*	0.18
84.M	26.50	2.60	0.349E 02	0.125E 00	0.0501	*	
93.M	19.00	2.75	0.234E 02	0.838E-01	0.0442	*	
101.M	15.20	3.00	0.171E 02	0.609E-01	0.0398	*	
109.M	12.70	3.33	0.127E 02	0.455E-01	0.0365	*	
116.M	10.50	3.70	0.937E 01	0.335E-01	0.0437	*	

ECLAIREMENT SURFACE = 0.330E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 40

EPPLEY= 269 W/M2

HEURE 03.13 AM

COUVERT

DISCOVERER      MAY 21      STATION 16      SET 1      10.00-10.33 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PCURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	280.00	4.5C	0.279E 03	0.100E 03		*	100.00
5.M	83.00	4.1C	0.130E 03	0.464E 02	0.1537	*	20.30
10.M	47.00	4.1C	0.731E 02	0.262E 02	0.1145	*	11.90
15.M	24.50	3.9C	0.398E 02	0.142E 02	0.1219	*	6.70
20.M	12.50	3.9C	0.200E 02	0.714E 01	0.1378	*	3.50
25.M	7.00	3.8E	0.110E 02	0.395E 01	0.1186	*	1.65
30.M	4.60	3.9C	0.693E 01	0.248E 01	0.0930	*	1.15
30.M	920.00	3.9C	0.152E 04	0.248E 01	*****	*	
40.M	325.00	3.9C	0.535E 03	0.874E 00	0.1042	*	0.45
50.M	137.00	3.8C	0.231E 03	0.377E 00	0.0840	*	
60.M	65.00	3.7E	0.111E 03	0.181E 00	0.0737	*	
70.M	34.50	3.7E	0.582E 02	0.951E-01	0.0641	*	
80.M	19.50	3.7C	0.329E 02	0.537E-01	0.0570	*	
90.M	11.00	3.5C	0.192E 02	0.313E-01	0.0541	*	
100.M	6.20	3.4C	0.106E 02	0.174E-01	0.0588	*	
110.M	3.80	3.4C	0.609E 01	0.995E-02	0.0557	*	
120.M	2.35	3.3C	0.345E 01	0.564E-02	0.0569	*	
130.M	1.85	3.3C	0.248E 01	0.404E-02	0.0332	*	
140.M	1.45	3.3C	0.170E 01	0.277E-02	0.0378	*	
150.M	1.16	3.3C	0.113E 01	0.185E-02	0.0405	*	

ECLAIREMENT SURFACE = 0.711E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 65

APPLEY= 582 W/M2

HEURE 10.33 AM

VARIABLE

DISCOVERER      MAY 21      STATION 16      SET 2      03.22-03.38 PM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	435.00	3.80	0.434E 03	0.100E 03		*	100.00
5.M	113.00	3.85	0.159E 03	0.365E 02	0.2014	*	17.20
10.M	64.00	3.85	0.895E 02	0.206E 02	0.1145	*	10.60
15.M	36.30	3.95	0.491E 02	0.113E 02	0.1159	*	5.80
20.M	17.20	4.00	0.226E 02	0.520E 01	0.1555	*	2.50
25.M	9.00	4.05	0.113E 02	0.260E 01	0.1385	*	1.25
30.M	5.40	4.00	0.655E 01	0.151E 01	0.1051	*	0.65
30.M	770.00	4.00	0.104E 04	0.150E 01	*****	*	
40.M	255.00	4.10	0.337E 03	0.485E 00	0.1132	*	0.25
50.M	105.00	4.10	0.138E 03	0.199E 00	0.0852	*	0.11
60.M	48.00	4.00	0.641E 02	0.923E-01	0.0767	*	0.05
70.M	26.00	4.00	0.343E 02	0.493E-01	0.0627	*	
80.M	14.70	4.10	0.184E 02	0.265E-01	0.0619	*	
90.M	8.70	4.05	0.106E 02	0.153E-01	0.0552	*	
100.M	5.30	4.05	0.606E 01	0.873E-02	0.0561	*	
110.M	3.40	4.00	0.356E 01	0.512E-02	0.0533	*	
120.M	2.32	4.00	0.209E 01	0.301E-02	0.0531	*	
130.M	1.68	4.00	0.122E 01	0.176E-02	0.0537	*	
140.M	1.28	4.00	0.679E 00	0.977E-03	0.0588	*	

ECLAIREMENT SURFACE = 0.622E 17 PHOTON/CM2/SEC

HAUTEUR SCLEIL 36

EPPLEY= 479 W/M2

HEURE 03.38 PM

VOILE



DISCOVERER      MAY 28      STATION 17      SET 1      09.50-10.27 AM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTICTION K (M-1)	*	POURCENTAGE (ENERGIE)
3.M	440.00	7.20	0.439E 03	0.100E 03	0.1455	*	100.00
5.M	145.00	7.15	0.208E 03	0.474E 02	0.0451	*	31.60
10.M	115.00	7.10	0.166E 03	0.378E 02	0.0538	*	22.40
15.M	88.00	7.10	0.127E 03	0.289E 02	0.0540	*	17.50
19.M	71.00	7.10	0.102E 03	0.233E 02	0.0339	*	13.80
24.M	60.00	7.10	0.864E 02	0.196E 02	0.0306	*	11.20
30.M	50.00	7.10	0.719E 02	0.163E 02	0.0451	*	9.50
38.M	35.00	7.10	0.501E 02	0.114E 02	0.0424	*	6.60
47.M	24.70	7.30	0.342E 02	0.778E 01	0.0458	*	4.40
57.M	15.80	7.60	0.208E 02	0.473E 01	0.0460	*	2.64
66.M	10.60	7.60	0.138E 02	0.313E 01	0.0502	*	1.72
75.M	6.70	7.35	0.876E 01	0.199E 01	0.0478	*	1.10
85.M	4.30	7.30	0.543E 01	0.124E 01	0.0449	*	0.60
95.M	2.90	7.20	0.347E 01	0.788E 00	*****	*	0.35
95.M	520.00	7.20	0.734E 03	0.759E 00	0.0617	*	
103.M	323.00	7.40	0.448E 03	0.464E 00	0.0743	*	0.23
112.M	177.00	7.90	0.230E 03	0.238E 00	0.0389	*	
121.M	40.00	2.50	0.162E 03	0.167E 00	0.0291	*	
130.M	89.00	7.30	0.125E 03	0.129E 00		*	

ECLAIREMENT SURFACE = 0.112E 18 PHOTON/CM2/SEC

HAUTEUR SCLIL 67

EPPLEY= 899 W/M2

HEURE 10.27 AM

VARIABLE

CISCOVERER      MAY 28      STATION 17      SET 2      03.08-03.35 PM  
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QUANTA METRE						THERMOPILE SCUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	270.00	5.00	0.269E 03	0.100E 03		100.00
5.M	110.00	5.05	0.155E 03	0.575E 02	0.1107	31.10
9.M	92.00	5.10	0.128E 03	0.476E 02	0.0474	23.60
15.M	67.00	5.12	0.928E 02	0.344E 02	0.0539	18.40
20.M	57.00	5.15	0.783E 02	0.291E 02	0.0338	14.80
24.M	47.00	5.15	0.645E 02	0.239E 02	0.0488	12.20
27.M	39.00	5.17	0.531E 02	0.197E 02	0.0643	9.58
32.M	30.60	5.17	0.415E 02	0.154E 02	0.0493	7.60
37.M	25.00	5.20	0.336E 02	0.125E 02	0.0424	6.26
42.M	20.50	5.20	0.274E 02	0.102E 02	0.0407	5.40
47.M	17.60	5.23	0.233E 02	0.864E 01	0.0326	4.28
56.M	11.70	5.27	0.151E 02	0.560E 01	0.0481	2.83
65.M	7.70	5.30	0.962E 01	0.357E 01	0.0501	1.79
75.M	5.30	5.30	0.638E 01	0.237E 01	0.0410	1.12
85.M	3.90	5.30	0.449E 01	0.167E 01	0.0351	0.73
85.M	680.00	5.30	0.916E 03	0.167E 01	*****	
95.M	370.00	5.40	0.489E 03	0.889E 00	0.0628	0.35

ECLAIREMENT SURFACE = 0.686E 17 PHOTON/CM2/SEC      HAUTEUR SCLIL 40  
 EPPLEY= 624 W/M2      HEURE 03.35 PM  
 VARIABLE

DISCOVERER      MAY 28      STATION 17      SET 3      04.11-04.23 PM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
J.M	327.00	3.20	0.326E 03	0.100E 03		*	100.00
5.M	103.00	3.25	0.144E 03	0.441E 02	0.1635	*	26.30
10.M	80.00	3.30	0.110E 03	0.337E 02	0.0540	*	18.70
15.M	68.00	3.30	0.933E 02	0.286E 02	0.0328	*	15.70
18.M	52.00	3.30	0.711E 02	0.218E 02	0.0905	*	12.60
23.M	44.50	3.30	0.607E 02	0.186E 02	0.0316	*	9.90
27.M	37.00	3.35	0.496E 02	0.152E 02	0.0507	*	8.20
35.M	24.50	3.35	0.325E 02	0.996E 01	0.0528	*	5.45
44.M	16.20	3.35	0.212E 02	0.649E 01	0.0476	*	3.62
52.M	11.20	3.40	0.141E 02	0.433E 01	0.0505	*	2.30
61.M	7.30	3.40	0.888E 01	0.272E 01	0.0516	*	1.42
69.M	4.75	3.45	0.537E 01	0.165E 01	0.0629	*	0.93
76.M	3.35	3.45	0.351E 01	0.108E 01	0.0606	*	0.58
86.M	2.15	3.50	0.190E 01	0.581E 00	0.0617	*	0.35
85.M	2.15	3.50	0.190E 01	0.581E 00	*****	*	

ECLAIREMENT SURFACE = 0.468E 17 PHOTON/CM2/SEC

HAUTEUR SCLIL 28

EPPLEY= 425 W/M2

HEURE 04.23 PM

VARIABLE

DISCOVERER      MAY 28      STATION 17      SET 4      04.53-05.08 PM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PORCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	180.00	1.80	0.175E 03	0.100E 03	0.1553	*	100.00
5.M	68.00	2.10	0.825E 02	0.460E 02	0.0711	*	23.60
10.M	49.00	2.15	0.578E 02	0.323E 02	0.0315	*	18.10
15.M	41.00	2.10	0.494E 02	0.275E 02	0.0572	*	13.80
19.M	32.00	2.05	0.393E 02	0.215E 02	0.0572	*	10.00
23.M	25.60	2.05	0.313E 02	0.174E 02	0.0408	*	8.62
28.M	21.00	2.05	0.255E 02	0.142E 02	0.0486	*	7.06
37.M	14.00	2.00	0.165E 02	0.918E 01	0.0588	*	4.60
44.M	9.60	2.10	0.109E 02	0.608E 01	0.0438	*	3.26
53.M	6.70	2.10	0.735E 01	0.410E 01	0.0522	*	1.81
62.M	4.45	2.10	0.460E 01	0.256E 01	0.0619	*	1.09
71.M	2.90	2.15	0.263E 01	0.147E 01	0.0752	*	0.54
77.M	2.10	2.20	0.164E 01	0.914E 00	0.0462	*	0.36
92.M	1.40	2.20	0.819E 00	0.457E 00	*****	*	
92.M	1.40	2.20	0.819E 00	0.457E 00		*	

ECLAIREMENT SURFACE = 0.257E 17 PHOTON/CM2/SEC

HAUTEUR SCLEIL 18

EPPLEY= 269 W/M2

HEURE 05.08 PM

VARIABLE

DISCOVERER      MAY 25      STATION 18      SET 1      09.30-09.59 AM

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QUANTA METRE						THERMOPILE SOUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTIGN K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	413.00	6.70	0.412E 03	0.100E 03		*	100.00
5.M	145.00	6.70	0.207E 03	0.501E 02	0.1382	*	28.40
9.M	117.00	6.68	0.167E 03	0.405E 02	0.0531	*	20.30
15.M	93.00	6.65	0.133E 03	0.323E 02	0.0377	*	17.50
19.M	76.00	6.60	0.110E 03	0.266E 02	0.0488	*	13.60
24.M	62.00	6.58	0.896E 02	0.217E 02	0.0404	*	12.00
28.M	47.00	6.58	0.678E 02	0.164E 02	0.0658	*	9.45
37.M	32.70	6.55	0.472E 02	0.114E 02	0.0403	*	6.40
45.M	22.30	6.50	0.322E 02	0.781E 01	0.0477	*	4.25
55.M	16.90	6.45	0.245E 02	0.593E 01	0.0276	*	2.93
65.M	12.00	6.43	0.172E 02	0.418E 01	0.0350	*	2.00
76.M	8.70	6.42	0.123E 02	0.299E 01	0.0304	*	1.46
87.M	5.90	6.40	0.817E 01	0.198E 01	0.0374	*	0.94
98.M	3.35	6.40	0.436E 01	0.106E 01	0.0572	*	0.47
98.M	658.00	6.40	0.984E 03	0.106E 01	*****	*	
108.M	362.00	6.40	0.541E 03	0.580E 00	0.0558	*	0.31
118.M	214.00	6.40	0.319E 03	0.343E 00	0.0527	*	0.19
127.M	135.00	6.40	0.201E 03	0.216E 00	0.0514	*	
136.M	90.00	6.40	0.134E 03	0.143E 00	0.0453	*	

ECLAIREMENT SURFACE = 0.105E 18 PHOTON/CM2/SEC      HAUTEUR SOLEIL 62  
 EPPLEY= 869 W/M2      HEURE 09.59 AM  
 CIEL BLEU

DISCOVERER      MAY 29      STATION 18      SET 2      02.35-02.53 PM  
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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	600.00	6.00	0.599E 03	0.100E 03	0.1266	100.00
5.M	225.00	6.05	0.318E 03	0.531E 02	0.0609	26.00
9.M	175.00	6.00	0.249E 03	0.416E 02	0.0382	18.40
15.M	130.00	5.60	0.198E 03	0.331E 02	0.0397	14.10
19.M	112.00	5.65	0.169E 03	0.282E 02	0.0348	12.00
24.M	100.00	6.00	0.142E 03	0.237E 02	0.0360	10.40
29.M	85.00	6.10	0.119E 03	0.198E 02	0.0448	8.75
38.M	57.00	6.10	0.794E 02	0.132E 02	0.0437	5.80
46.M	41.00	6.20	0.559E 02	0.933E 01	0.0375	4.10
55.M	28.50	6.00	0.399E 02	0.666E 01	0.0298	2.85
66.M	20.70	6.00	0.288E 02	0.480E 01	0.0490	1.95
76.M	12.90	6.00	0.176E 02	0.294E 01	0.0340	1.38
88.M	8.50	5.80	0.117E 02	0.195E 01	0.0460	1.00
100.M	5.10	5.75	0.674E 01	0.113E 01	*****	0.54
100.M	560.00	5.75	0.835E 03	0.113E 01	0.0733	
110.M	260.00	5.55	0.401E 03	0.544E 00	0.0746	
120.M	127.00	5.70	0.190E 03	0.258E 00	0.0470	
130.M	81.00	5.80	0.119E 03	0.161E 00	0.0542	
139.M	50.00	5.80	0.730E 02	0.990E-01		

ECLAIREMENT SURFACE = 0.858E 17 PHOTON/CM2/SEC      HAUTEUR SCLIL 50  
 EPPLEY= 737 W/M2      HEURE 02.53 PM  
 VARIABLE

DISCOVERER      MAY 29      STATION 18      SET 3      03.29-03.45 PM

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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PCURCENTAGE (QUANTA)	EXTINCTION K (M-1)	PCURCENTAGE (ENERGIE)
0.M	308.00	3.40	0.307E 03	0.100E 03		*
4.M	132.00	3.65	0.175E 03	0.569E 02	0.1408	*
9.M	98.00	3.60	0.132E 03	0.428E 02	0.0571	*
13.M	82.00	3.70	0.107E 03	0.348E 02	0.0517	*
18.M	73.00	4.00	0.880E 02	0.286E 02	0.0350	*
22.M	61.00	4.10	0.716E 02	0.233E 02	0.0515	*
27.M	63.00	5.00	0.607E 02	0.197E 02	0.0332	*
31.M	55.00	5.30	0.499E 02	0.162E 02	0.0489	*
36.M	42.70	5.45	0.376E 02	0.122E 02	0.0568	*
40.M	39.00	5.40	0.346E 02	0.112E 02	0.0207	*
44.M	34.00	5.40	0.301E 02	0.978E 01	0.0349	*
53.M	24.40	5.50	0.210E 02	0.684E 01	0.0397	*
60.M	19.00	5.50	0.163E 02	0.529E 01	0.0368	*
66.M	15.20	5.45	0.130E 02	0.424E 01	0.0370	*
73.M	11.50	5.30	0.100E 02	0.325E 01	0.0378	*
82.M	8.40	5.20	0.729E 01	0.237E 01	0.0351	*
82.M	8.40	5.20	0.729E 01	0.237E 01	*****	*

ECLAIREMENT SURFACE = 0.440E 17 PHOTON/CM2/SEC      HAUTEUR SOLEIL 38  
 EPPLEY= 388 W/M2      HEURE 03.45 PM  
 VARIABLE

DISCOVERER      MAY 29      STATION 18      SET 4      04.21-04.52 PM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	122.00	1.20	0.121E 03	0.100E 03		*	100.00
4.M	42.00	1.25	0.568E 02	0.468E 02	0.1897	*	32.00
9.M	32.50	1.25	0.438E 02	0.361E 02	0.0521	*	24.50
14.M	26.00	1.27	0.343E 02	0.283E 02	0.0487	*	19.80
18.M	21.00	1.25	0.280E 02	0.231E 02	0.0508	*	15.70
22.M	17.50	1.20	0.242E 02	0.199E 02	0.0368	*	13.00
27.M	14.30	1.20	0.196E 02	0.161E 02	0.0420	*	10.50
35.M	10.50	1.20	0.142E 02	0.117E 02	0.0406	*	6.05
45.M	7.50	1.20	0.987E 01	0.813E 01	0.0361	*	4.64
52.M	5.90	1.20	0.758E 01	0.624E 01	0.0377	*	2.62
61.M	4.40	1.20	0.543E 01	0.448E 01	0.0370	*	
71.M	3.30	1.20	0.386E 01	0.318E 01	0.0342	*	
71.M	3.30	1.20	0.386E 01	0.318E 01	*****	*	

ECLAIREMENT SURFACE = 0.174E 17 PHOTON/CM2/SEC

HAUTEUR SCLIL 23

EPPLEY= 117 W/M2

HEURE 04.52 PM

VCILE



DISCOVERER MAY 30 STATION 19 SET 1 09.40-10.00 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	440.00	6.40	0.439E 03	0.100E 03		*	100.00
5.M	135.00	6.40	0.192E 03	0.438E 02	0.1653	*	26.70
10.M	100.00	6.35	0.143E 03	0.326E 02	0.0587	*	21.60
15.M	85.00	6.32	0.122E 03	0.278E 02	0.0317	*	17.40
20.M	70.00	6.32	0.101E 03	0.229E 02	0.0391	*	13.60
25.M	58.00	6.32	0.833E 02	0.189E 02	0.0379	*	10.70
25.M	535.00	6.32	0.774E 03	0.189E 02	*****	*	
30.M	435.00	6.30	0.631E 03	0.154E 02	0.0408	*	8.60
40.M	294.00	6.20	0.433E 03	0.106E 02	0.0376	*	5.70
50.M	185.00	6.18	0.273E 03	0.668E 01	0.0461	*	4.00
60.M	122.00	6.15	0.181E 03	0.442E 01	0.0413	*	2.75
70.M	92.00	6.18	0.135E 03	0.331E 01	0.0289	*	1.93
80.M	60.00	6.10	0.892E 02	0.218E 01	0.0418	*	1.22
90.M	40.00	6.10	0.592E 02	0.145E 01	0.0410	*	0.79
100.M	25.80	6.10	0.379E 02	0.928E 00	0.0446	*	0.54
110.M	16.30	6.08	0.237E 02	0.581E 00	0.0468	*	0.30
120.M	10.10	6.05	0.145E 02	0.354E 00	0.0495	*	0.19
130.M	6.00	6.05	0.827E 01	0.202E 00	0.0559	*	
140.M	3.64	6.02	0.473E 01	0.116E 00	0.0560	*	
150.M	2.40	6.00	0.285E 01	0.698E-01	0.0505	*	
160.M	1.68	6.00	0.175E 01	0.429E-01	0.0486	*	

ECLAIREMENT SURFACE = 0.112E 18 PHOTON/CM2/SEC

HAUTEUR SOLEIL 62

EPPLEY= 859 W/M2

HEURE 10.00 AM

CIEL BLEU

DISCOVERER      MAY 30      STATION 19      SET 2      02.55-03.15 PM

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QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	308.00	5.4C	0.307E 03	0.100E 03		100.00
5.M	115.00	5.42	0.163E 03	0.530E 02	0.1269	28.50
10.M	90.00	5.44	0.127E 03	0.413E 02	0.0500	22.10
15.M	67.00	5.46	0.940E 02	0.306E 02	0.0602	16.70
20.M	55.00	5.52	0.761E 02	0.248E 02	0.0420	13.00
25.M	43.00	5.5C	0.596E 02	0.194E 02	0.0491	10.00
30.M	35.00	5.54	0.480E 02	0.156E 02	0.0432	8.40
40.M	24.00	5.56	0.325E 02	0.106E 02	0.0389	5.50
48.M	17.20	5.58	0.230E 02	0.749E 01	0.0433	3.78
58.M	11.60	5.6C	0.152E 02	0.495E 01	0.0414	2.67
69.M	7.80	5.62	0.993E 01	0.323E 01	0.0387	1.70
79.M	5.40	5.65	0.660E 01	0.215E 01	0.0409	1.07
90.M	3.50	5.67	0.454E 01	0.148E 01	0.0341	0.61
90.M	720.00	5.7C	0.975E 03	0.145E 01	*****	
100.M	460.00	5.7C	0.622E 03	0.929E 00	0.0449	0.36
110.M	295.00	5.72	0.397E 03	0.593E 00	0.0449	0.22
120.M	180.00	5.75	0.241E 03	0.359E 00	0.0501	0.15
130.M	103.00	5.77	0.137E 03	0.204E 00	0.0564	
140.M	60.80	5.8C	0.801E 02	0.120E 00	0.0537	
150.M	34.00	5.8C	0.444E 02	0.663E-01	0.0589	

ECLAIREMENT SURFACE = 0.782E 17 PHOTON/CM2/SEC

HAUTEUR SCLLEIL 45

EPPLEY= 646 W/M2

HEURE 03.15 PM

CIEL BLEU

DISCOVERER MAY 30 STATION 19 SET 3 04.07-04.20 PM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
J.M	370.30	3.93	0.369E 03	0.100E 03		*	
5.M	137.00	3.93	0.195E 03	0.528E 02	0.1277	*	
10.M	97.00	3.93	0.138E 03	0.373E 02	0.0654	*	
14.M	76.50	3.93	0.108E 03	0.292E 02	0.0614	*	
19.M	59.00	3.93	0.835E 02	0.226E 02	0.0511	*	
24.M	46.50	3.93	0.656E 02	0.178E 02	0.0482	*	
28.M	37.50	3.93	0.528E 02	0.143E 02	0.0546	*	
33.M	31.00	3.93	0.435E 02	0.118E 02	0.0388	*	
38.M	25.70	3.93	0.359E 02	0.972E 01	0.0383	*	
43.M	21.30	3.93	0.296E 02	0.801E 01	0.0385	*	
47.M	18.00	3.93	0.249E 02	0.674E 01	0.0434	*	
57.M	12.40	3.93	0.169E 02	0.457E 01	0.0388	*	
67.M	8.80	3.93	0.117E 02	0.317E 01	0.0364	*	
76.M	6.00	3.93	0.772E 01	0.209E 01	0.0464	*	
87.M	4.15	3.93	0.508E 01	0.137E 01	0.0381	*	
96.M	2.80	3.93	0.315E 01	0.852E 00	0.0532	*	
96.M	2.80	3.93	0.315E 01	0.852E 00	*****	*	

ECLAIREMENT SURFACE = 7.529E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 30

EPPLEY= 465 W/M2

HEURE 04.20 PM

CIEL BLEU

DISCOVERER      MAY 30      STATION 19      SET 4      05.10-05.16 PM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	90.00	1.05	0.891E 02	0.100E 03	0.1346	*	100.00
5.M	32.50	1.05	0.456E 02	0.510E 02	0.0577	*	28.00
10.M	24.50	1.05	0.342E 02	0.382E 02	0.0556	*	20.00
15.M	18.70	1.05	0.259E 02	0.290E 02	0.0429	*	16.00
19.M	15.70	1.04	0.218E 02	0.244E 02	0.0346	*	12.10
24.M	13.30	1.04	0.183E 02	0.205E 02	0.0475	*	9.25
28.M	11.00	1.03	0.152E 02	0.170E 02	0.0357	*	7.36
33.M	9.30	1.03	0.127E 02	0.142E 02	0.0304	*	5.90
38.M	8.00	1.02	0.109E 02	0.122E 02	0.0406	*	4.90
43.M	6.70	1.03	0.889E 01	0.995E 01	0.0397	*	4.00
48.M	5.70	1.05	0.729E 01	0.816E 01	*****	*	3.50
48.M	5.70	1.05	0.729E 01	0.816E 01		*	

ECLAIREMENT SURFACE = 0.129E 17 PHOTON/CM2/SEC

HAUTEUR SOLEIL 17

EPPLEY= 89 W/M2

HEURE 05.16 PM

VCILE

CISCOVERER      MAY 31      STATION 20      SET 1      09.38-10.01 AM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PCURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	540.00	8.20	0.539E 03	0.100E 03		
5.M	65.00	2.75	0.275E 03	0.510E 02	0.1347	
10.M	49.00	2.75	0.207E 03	0.384E 02	0.0570	
15.M	42.00	2.80	0.174E 03	0.322E 02	0.0348	
20.M	36.00	2.80	0.149E 03	0.276E 02	0.0312	
24.M	80.00	7.90	0.118E 03	0.219E 02	0.0579	
29.M	70.00	7.80	0.105E 03	0.194E 02	0.0243	
39.M	52.00	7.75	0.780E 02	0.145E 02	0.0253	
48.M	40.00	7.75	0.598E 02	0.111E 02	0.0255	
58.M	30.50	7.75	0.454E 02	0.842E 01	0.0275	
67.M	22.50	7.75	0.333E 02	0.618E 01	0.0344	
77.M	15.80	7.80	0.230E 02	0.427E 01	0.0369	
86.M	10.80	8.00	0.151E 02	0.281E 01	0.0467	
95.M	8.50	8.00	0.118E 02	0.218E 01	0.0280	
103.M	5.40	8.00	0.723E 01	0.134E 01	0.0610	
103.M	880.00	8.00	0.129E 04	0.134E 01	*****	
112.M	210.00	2.50	0.982E 03	0.102E 01	0.0302	
122.M	130.00	2.30	0.660E 03	0.685E 00	0.0358	
131.M	78.00	2.20	0.413E 03	0.429E 00	0.0521	
140.M	50.00	2.15	0.270E 03	0.280E 00	0.0473	

ECLAIREMENT SURFACE = 0.137E 18 PHOTON/CM2/SEC

HAUTEUR SCLIL 63

EPPLEY= 1098 W/M2

HEURE 10.01 AM

VARIABLE

DISCOVERER      MAY 31      STATION 20      SET 2      10.02-10.15 AM

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QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PORCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	520.00	7.9C	0.519E 03	0.100E 03		*	100.00
5.M	155.00	7.5E	0.230E 03	0.443E 02	0.1627	*	18.70
10.M	118.00	7.5E	0.175E 03	0.337E 02	0.0547	*	14.40
15.M	97.00	7.87	0.139E 03	0.267E 02	0.0469	*	12.70
20.M	84.00	7.9C	0.120E 03	0.230E 02	0.0297	*	11.00
24.M	75.00	7.9C	0.107E 03	0.205E 02	0.0285	*	10.30
29.M	61.50	8.0C	0.862E 02	0.166E 02	0.0425	*	8.70
39.M	50.00	8.1C	0.691E 02	0.133E 02	0.0221	*	6.60
48.M	40.00	8.2C	0.545E 02	0.105E 02	0.0264	*	5.18
58.M	31.00	8.3C	0.416E 02	0.801E 01	0.0270	*	3.80
67.M	23.50	8.3E	0.312E 02	0.601E 01	0.0319	*	2.64
77.M	16.00	8.4C	0.209E 02	0.403E 01	0.0359	*	1.75
86.M	13.00	8.4E	0.168E 02	0.323E 01	0.0244	*	1.31
86.M	13.00	8.4E	0.168E 02	0.323E 01	*****	*	

ECLAIREMENT SURFACE = 0.132E 18 PHOTON/CM2/SEC

HAUTEUR SCLÉIL 68

EPPLEY= 1070 W/M2

HEURE 10.15 AM

VARIABLE

DISCOVERER JUNE 01 STATION 21 SET 1 09.35-10.00 AM

QUANTA METRE

THERMOPILE  
SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	500.00	7.90	0.499E 03	0.100E 03		*	
4.M	190.00	8.00	0.268E 03	0.536E 02	0.1559	*	
8.M	135.00	8.20	0.185E 03	0.371E 02	0.0918	*	
14.M	115.00	8.50	0.152E 03	0.305E 02	0.0328	*	
18.M	38.00	3.25	0.131E 03	0.262E 02	0.0382	*	
24.M	30.00	3.10	0.108E 03	0.216E 02	0.0320	*	
28.M	26.50	3.10	0.934E 02	0.187E 02	0.0363	*	
37.M	20.00	3.17	0.699E 02	0.140E 02	0.0321	*	
47.M	14.80	2.90	0.562E 02	0.112E 02	0.0219	*	
57.M	11.70	2.90	0.441E 02	0.883E 01	0.0242	*	
67.M	8.10	2.80	0.311E 02	0.623E 01	0.0348	*	
76.M	5.60	2.80	0.211E 02	0.422E 01	0.0435	*	
87.M	4.00	2.83	0.145E 02	0.289E 01	0.0342	*	
97.M	2.85	2.87	0.972E 01	0.195E 01	0.0396	*	
106.M	2.50	3.10	0.773E 01	0.155E 01	0.0255	*	
106.M	460.00	3.10	0.167E 04	0.154E 01	*****	*	
115.M	320.00	3.12	0.116E 04	0.106E 01	0.0411	*	
126.M	200.00	3.12	0.722E 03	0.663E 00	0.0428	*	
137.M	127.00	3.12	0.458E 03	0.421E 00	0.0414	*	

ECLAIREMENT SURFACE = 0.127E 18 PHOTON/CM2/SEC

HAUTEUR SOLEIL 62

EPPLEY= 1080 W/M2

HEURE 10.00 AM

VARIABLE

DISCOVERER JUNE 01 STATION 21 SET 2 10.02-10.17 AM

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QUANTA METRE						THERMOPILE SCUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	490.00	7.80	0.489E 03	0.100E 03		*	100.00
9.M	125.00	7.70	0.181E 03	0.369E 02	0.1109	*	19.00
18.M	85.00	7.70	0.123E 03	0.250E 02	0.0420	*	12.80
28.M	64.00	7.75	0.916E 02	0.187E 02	0.0292	*	8.75
38.M	48.00	7.75	0.685E 02	0.140E 02	0.0290	*	6.63
48.M	41.00	7.80	0.581E 02	0.119E 02	0.0165	*	4.73
58.M	31.00	7.85	0.435E 02	0.889E 01	0.0269	*	3.68
68.M	24.00	7.85	0.336E 02	0.685E 01	0.0260	*	2.48
77.M	18.00	7.90	0.249E 02	0.508E 01	0.0333	*	1.85
87.M	12.50	7.92	0.171E 02	0.349E 01	0.0377	*	1.14
97.M	8.50	7.95	0.114E 02	0.233E 01	0.0404	*	0.80
107.M	5.80	8.10	0.746E 01	0.152E 01	0.0423	*	0.47
107.M	5.80	8.10	0.746E 01	0.152E 01	*****	*	

ECLAIREMENT SURFACE = 0.124E 18 PHOTON/CM2/SEC

HAUTEUR SCLÉIL 67

EPPLEY= 1060 W/M2

HEURE 10.17 AM

VARIABLE



DISCOVERER JUNE 01 STATION 21 SET 3 03.45-03.56 PM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	444.00	4.35	0.443E 03	0.100E 03		*	100.00
5.M	170.00	4.38	0.241E 03	0.543E 02	0.1221	*	28.70
10.M	141.00	4.40	0.199E 03	0.448E 02	0.0384	*	20.80
14.M	112.00	4.42	0.157E 03	0.354E 02	0.0589	*	17.30
19.M	97.00	4.45	0.135E 03	0.304E 02	0.0302	*	14.50
24.M	83.00	4.48	0.115E 03	0.259E 02	0.0327	*	11.80
28.M	72.00	4.50	0.990E 02	0.223E 02	0.0368	*	10.20
37.M	54.00	4.50	0.741E 02	0.167E 02	0.0322	*	7.50
47.M	40.00	4.53	0.544E 02	0.123E 02	0.0309	*	5.35
55.M	30.50	4.57	0.410E 02	0.924E 01	0.0354	*	4.00
64.M	23.50	4.60	0.312E 02	0.704E 01	0.0301	*	2.88
72.M	18.30	4.60	0.242E 02	0.546E 01	0.0319	*	1.90
81.M	14.00	4.62	0.183E 02	0.413E 01	0.0310	*	
89.M	11.30	4.66	0.146E 02	0.328E 01	0.0287	*	
98.M	8.30	4.70	0.105E 02	0.236E 01	0.0367	*	
98.M	8.30	4.70	0.105E 02	0.236E 01	*****	*	

ECLAIREMENT SURFACE = 0.635E 17 PHOTON/CM2/SEC

HAUTEUR SCLLIL 36

EPPLEY= 550 W/M2

HEURE 03.56 PM

VARIABLE

DISCOVERER JUNE 02 STATION 22 SET 1 09.55-10.13 AM  
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QUANTA METRE

THERMOPILE  
 SOUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	425.00	6.90	0.424E 03	0.100E 03		*	100.00
5.M	155.00	6.80	0.224E 03	0.528E 02	0.1276	*	25.30
10.M	125.00	6.75	0.182E 03	0.429E 02	0.0417	*	21.70
15.M	105.00	6.72	0.154E 03	0.362E 02	0.0341	*	19.20
19.M	90.00	6.70	0.132E 03	0.311E 02	0.0379	*	15.30
24.M	76.50	6.70	0.112E 03	0.264E 02	0.0327	*	13.70
28.M	66.00	6.70	0.966E 02	0.228E 02	0.0371	*	11.70
36.M	51.00	6.70	0.745E 02	0.176E 02	0.0324	*	8.30
45.M	39.60	6.55	0.591E 02	0.139E 02	0.0258	*	7.00
54.M	31.00	6.65	0.454E 02	0.107E 02	0.0292	*	5.30
65.M	25.00	6.67	0.364E 02	0.858E 01	0.0201	*	4.10
76.M	19.30	6.70	0.279E 02	0.656E 01	0.0243	*	3.20
83.M	15.20	6.70	0.218E 02	0.514E 01	0.0349	*	2.50
91.M	11.50	6.75	0.163E 02	0.383E 01	0.0368	*	1.80
98.M	9.10	6.80	0.127E 02	0.298E 01	0.0358	*	1.40
106.M	7.30	6.90	0.990E 01	0.233E 01	0.0307	*	1.06
117.M	5.30	6.95	0.698E 01	0.164E 01	0.0317	*	0.75
127.M	3.75	7.00	0.475E 01	0.112E 01	0.0386	*	0.50
127.M	3.75	7.00	0.475E 01	0.112E 01	*****	*	

ECLAIREMENT SURFACE = 0.108E 18 PHOTON/CM2/SEC HAUTEUR SCLLEIL 65  
 EPPLEY= 960 W/M2 HEURE 10.13 AM  
 CIEL BLEU

DISCOVERER JUNE 02 STATION 22 SET 2 11.05-11.20 AM

\*\*\*\*\*

QUANTA METRE						THERMOPILE SOUS MARINE
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	POURCENTAGE (ENERGIE)
0.M	473.00	7.32	0.472E 03	0.100E 03		*
5.M	165.00	7.30	0.236E 03	0.499E 02	0.1389	*
9.M	133.00	7.30	0.190E 03	0.402E 02	0.0541	*
14.M	108.00	7.30	0.154E 03	0.326E 02	0.0418	*
19.M	95.00	7.30	0.136E 03	0.287E 02	0.0258	*
24.M	86.00	7.32	0.122E 03	0.259E 02	0.0206	*
28.M	76.00	7.35	0.108E 03	0.228E 02	0.0321	*
33.M	67.00	7.35	0.947E 02	0.200E 02	0.0254	*
37.M	60.00	7.30	0.853E 02	0.181E 02	0.0261	*
42.M	54.00	7.30	0.767E 02	0.162E 02	0.0213	*
49.M	51.00	7.90	0.669E 02	0.142E 02	0.0195	*
49.M	51.00	7.90	0.669E 02	0.142E 02	*****	*

ECLAIREMENT SURFACE = 0.120E 18 PHOTON/CM2/SEC

HAUTEUR SCLIL 79

EPPLEY= 967 W/M2

HEURE 11.20 AM

CIEL BLEU

DISCOVERER JUNE 03 STATION 23 SET 1 12.12-12.33 PM

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QUANTA METRE

THERMOPILE  
SCUS MARINE

PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	POURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	POURCENTAGE (ENERGIE)
0.M	450.00	7.50	0.449E 03	0.100E 03		*	100.00
5.M	165.00	7.50	0.233E 03	0.518E 02	0.1316	*	31.60
9.M	135.00	7.60	0.190E 03	0.422E 02	0.0510	*	26.30
14.M	111.00	7.70	0.154E 03	0.342E 02	0.0419	*	23.40
19.M	96.00	7.60	0.135E 03	0.300E 02	0.0266	*	20.00
24.M	81.00	7.55	0.114E 03	0.254E 02	0.0329	*	16.30
29.M	72.00	7.50	0.102E 03	0.227E 02	0.0224	*	14.20
38.M	54.00	7.50	0.765E 02	0.170E 02	0.0322	*	10.50
48.M	41.00	7.50	0.579E 02	0.129E 02	0.0278	*	7.90
57.M	29.50	7.50	0.415E 02	0.923E 01	0.0371	*	5.60
67.M	21.40	7.50	0.299E 02	0.665E 01	0.0328	*	4.00
77.M	14.50	7.50	0.200E 02	0.445E 01	0.0401	*	2.75
87.M	9.90	7.50	0.134E 02	0.299E 01	0.0398	*	1.90
97.M	6.60	7.50	0.872E 01	0.194E 01	0.0432	*	1.37
106.M	4.50	7.50	0.572E 01	0.127E 01	0.0469	*	0.90
114.M	3.00	7.50	0.358E 01	0.795E 00	0.0588	*	0.63
114.M	540.00	7.50	0.771E 03	0.794E 00	*****	*	
124.M	350.00	7.55	0.496E 03	0.511E 00	0.0441	*	
133.M	215.00	7.70	0.299E 03	0.308E 00	0.0565	*	
143.M	130.00	7.60	0.183E 03	0.188E 00	0.0492	*	

ECLAIREMENT SURFACE = 0.114E 18 PHOTON/CM2/SEC

HAUTEUR SOLEIL 82

EPPLEY= 981 W/M2

HEURE 12.33 PM

CIEL BLEU

DISCOVERER JUNE 03 STATION 23 SET 2 01.55-02.20 PM

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QUANTA METRE						THERMOPILE SCUS MARINE	
PROF.	MESURE BRUTE	REF. PONT	MESURE CORRIGEE	PCURCENTAGE (QUANTA)	EXTINCTION K (M-1)	*	PCURCENTAGE (ENERGIE)
0.M	405.00	67.00	0.404E 03	0.100E 03		*	100.00
5.M	160.00	66.00	0.231E 03	0.572E 02	0.1116	*	31.60
9.M	122.00	66.00	0.176E 03	0.436E 02	0.06E1	*	25.00
14.M	100.00	66.00	0.144E 03	0.357E 02	0.0400	*	20.60
18.M	85.00	66.00	0.123E 03	0.303E 02	0.0409	*	17.20
23.M	74.00	67.80	0.104E 03	0.257E 02	0.0333	*	14.30
27.M	63.00	67.80	0.882E 02	0.218E 02	0.0406	*	12.30
32.M	53.00	67.60	0.743E 02	0.184E 02	0.0343	*	10.20
35.M	47.00	67.70	0.657E 02	0.162E 02	0.0410	*	8.70
40.M	43.00	67.80	0.599E 02	0.148E 02	0.0183	*	8.15
44.M	37.50	68.00	0.520E 02	0.129E 02	0.0355	*	6.75
44.M	37.50	68.00	0.520E 02	0.129E 02	*****	*	

ECLAIREMENT SURFACE = 0.103E 18 PHOTON/CM2/SEC

HAUTEUR SCLÉIL 61

EPPLEY= 850 W/M2

HEURE 02.20 PM

CIEL BLEU

$10^{-2}$

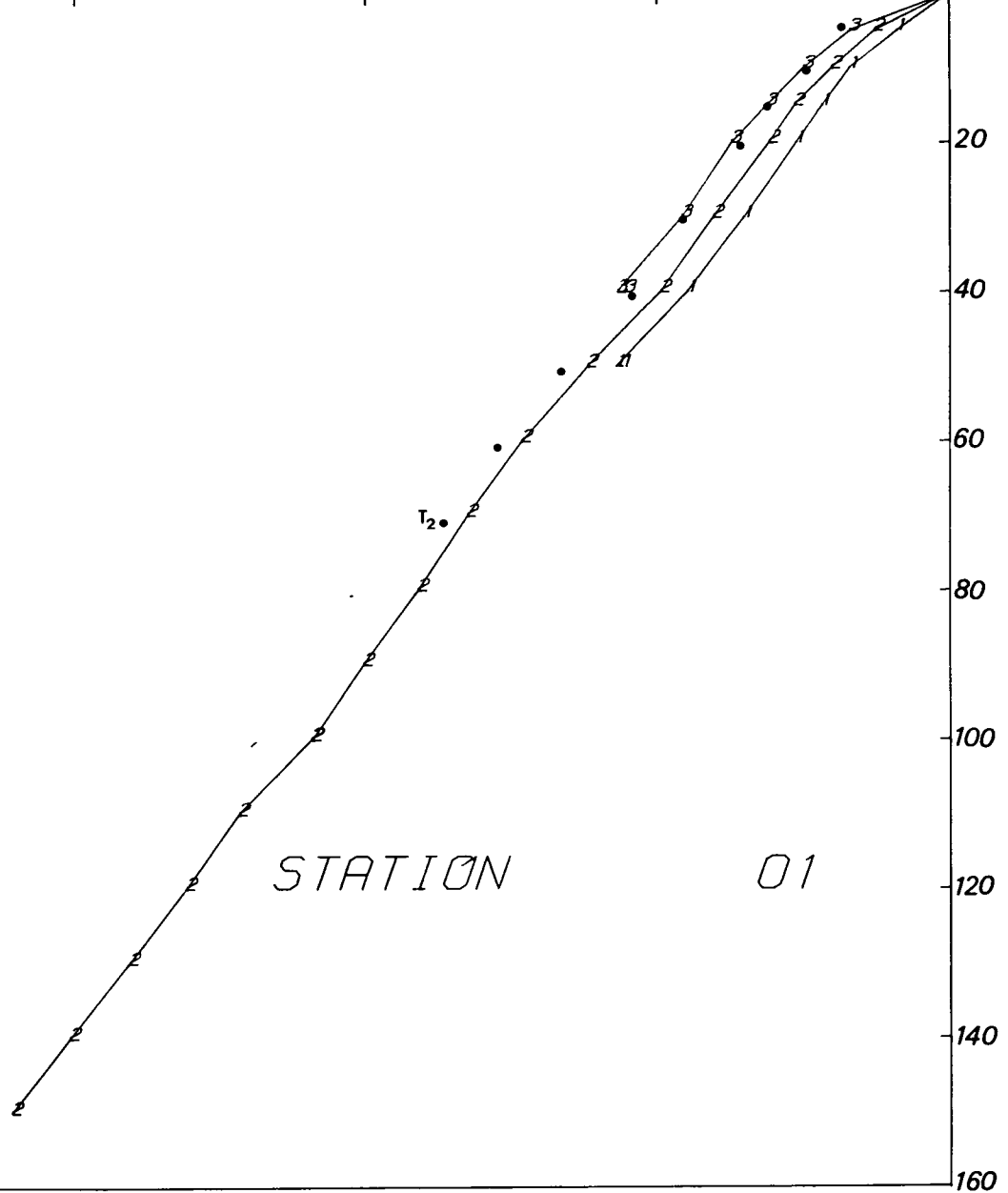
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$10^0$

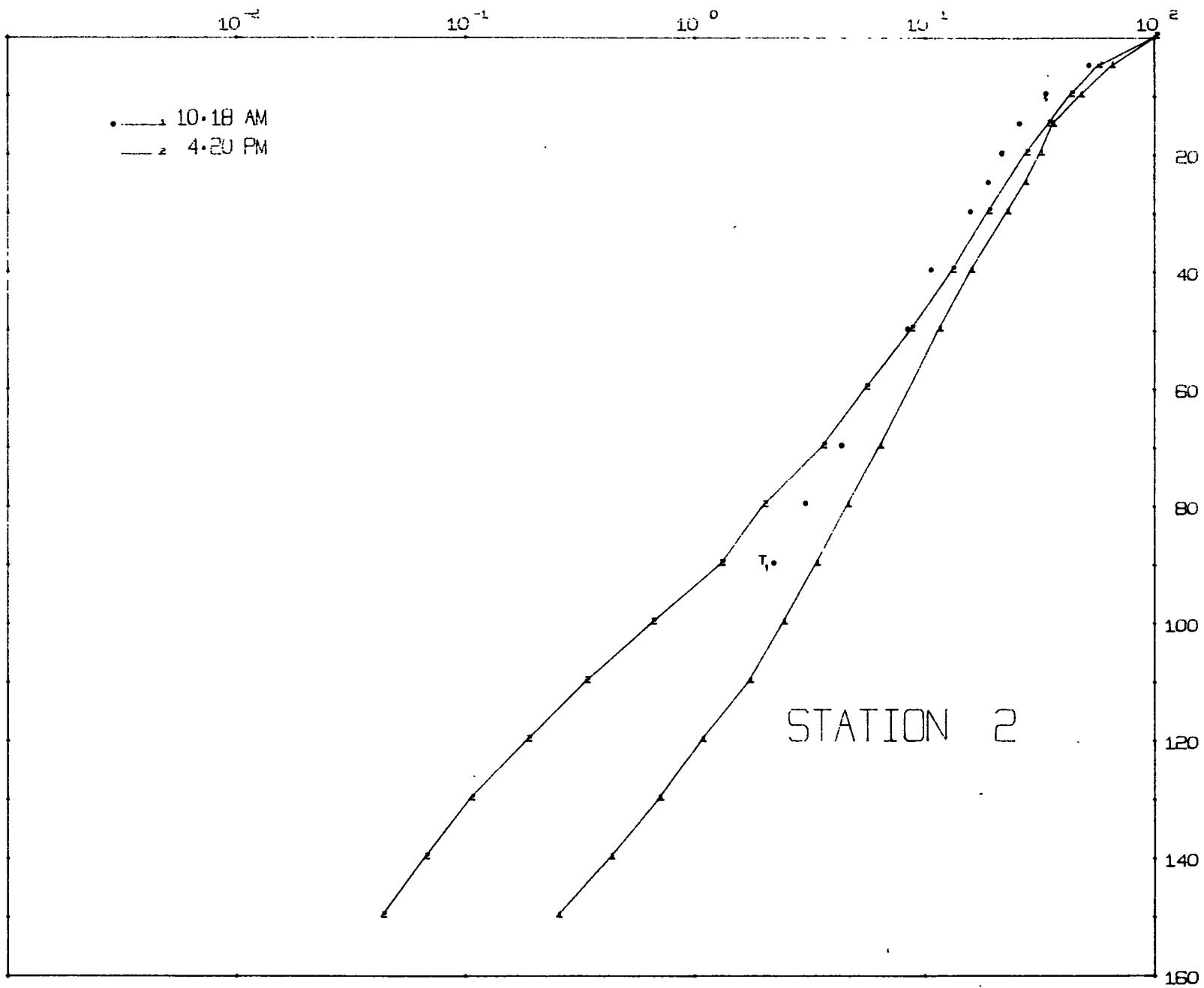
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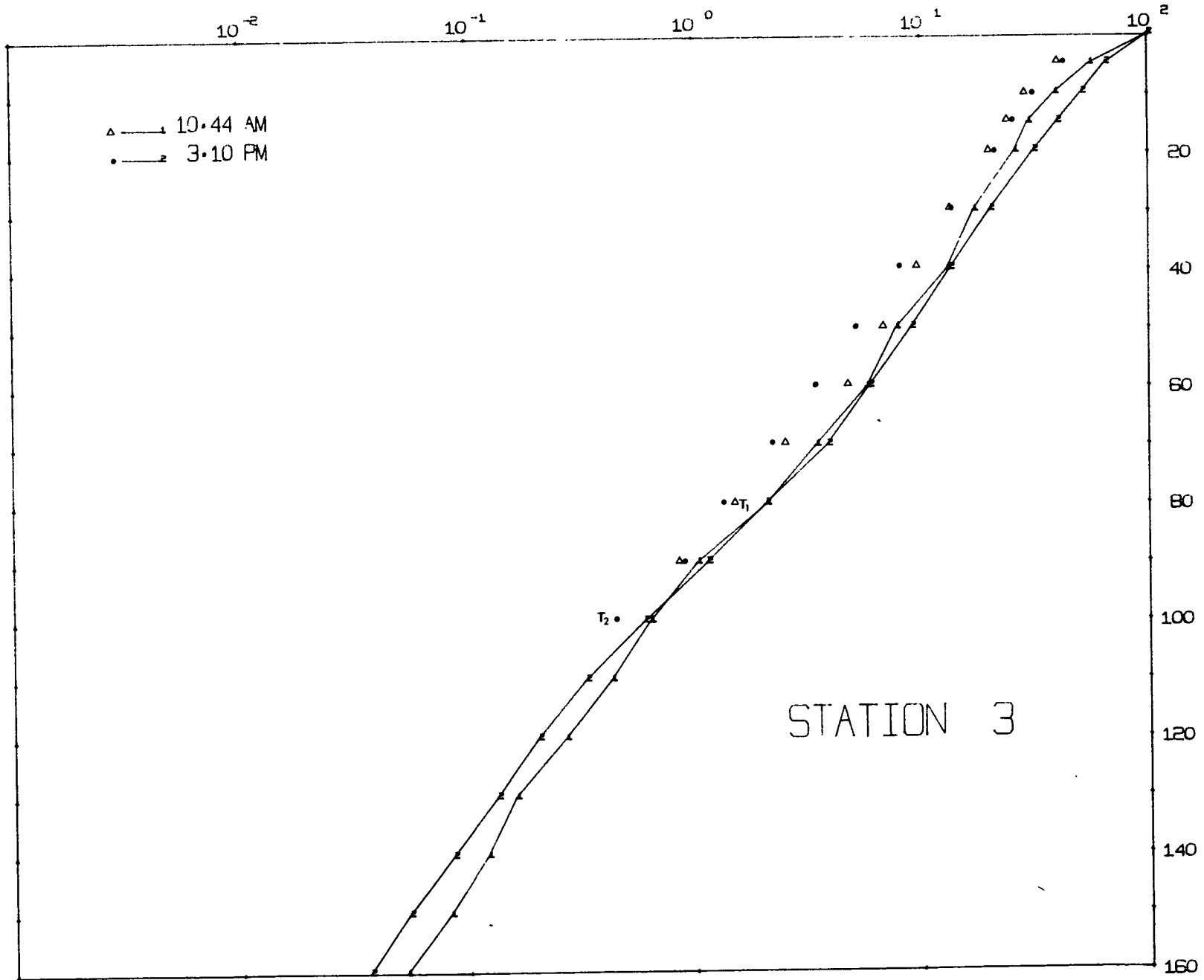
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- 1 — 11.00 AM
- 2 • 03.20 PM
- 3 — 04.52 PM

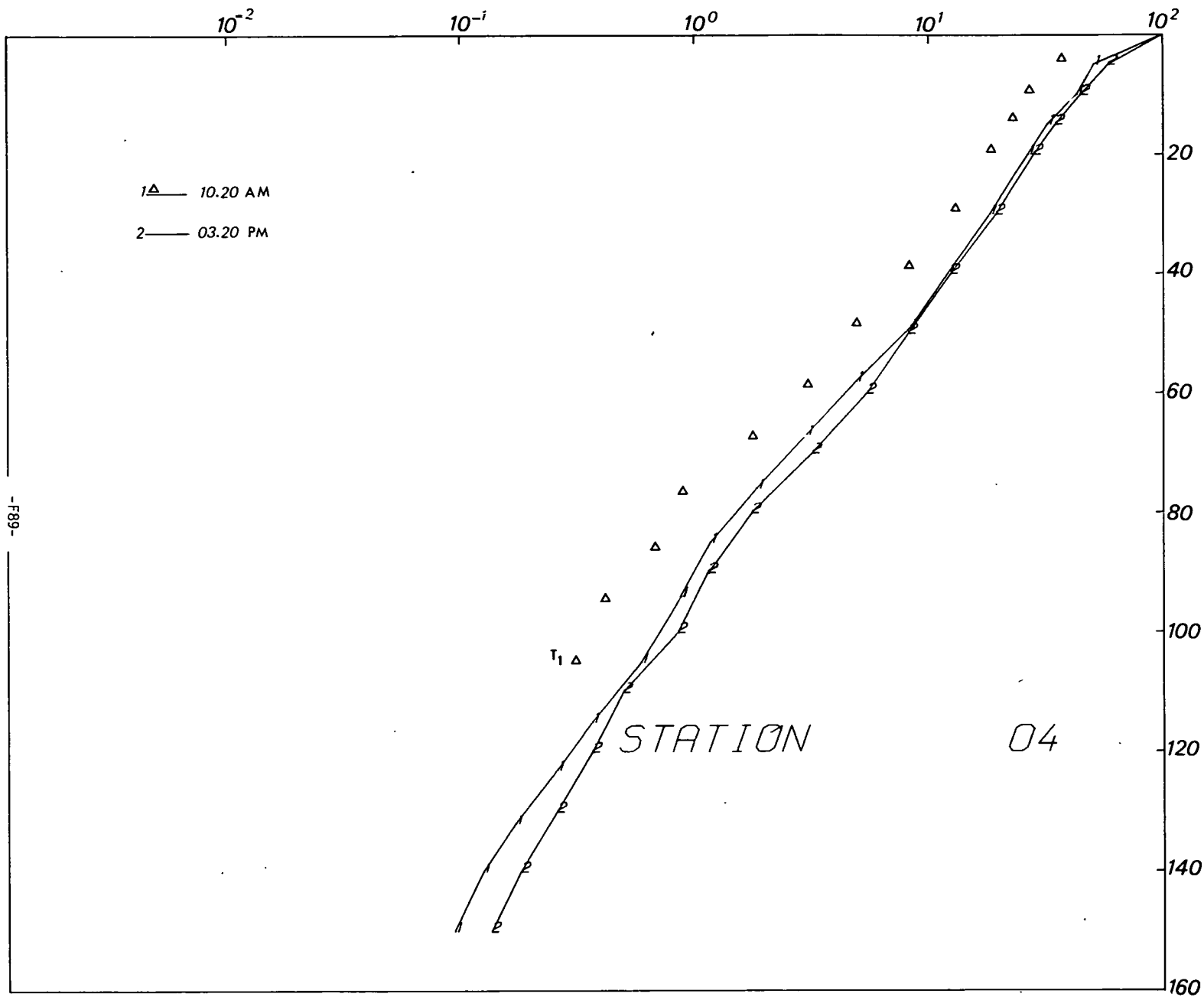


-F86-

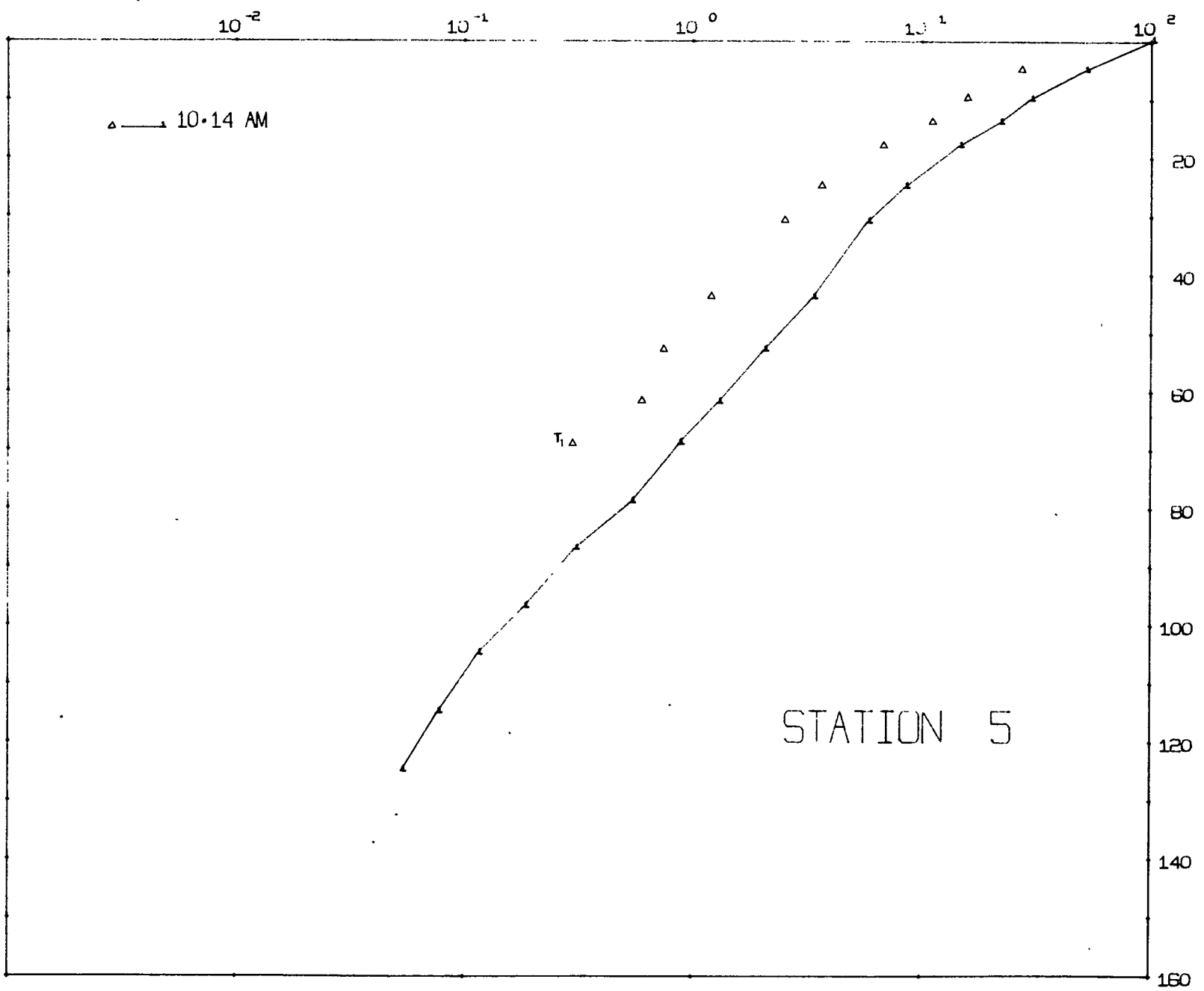




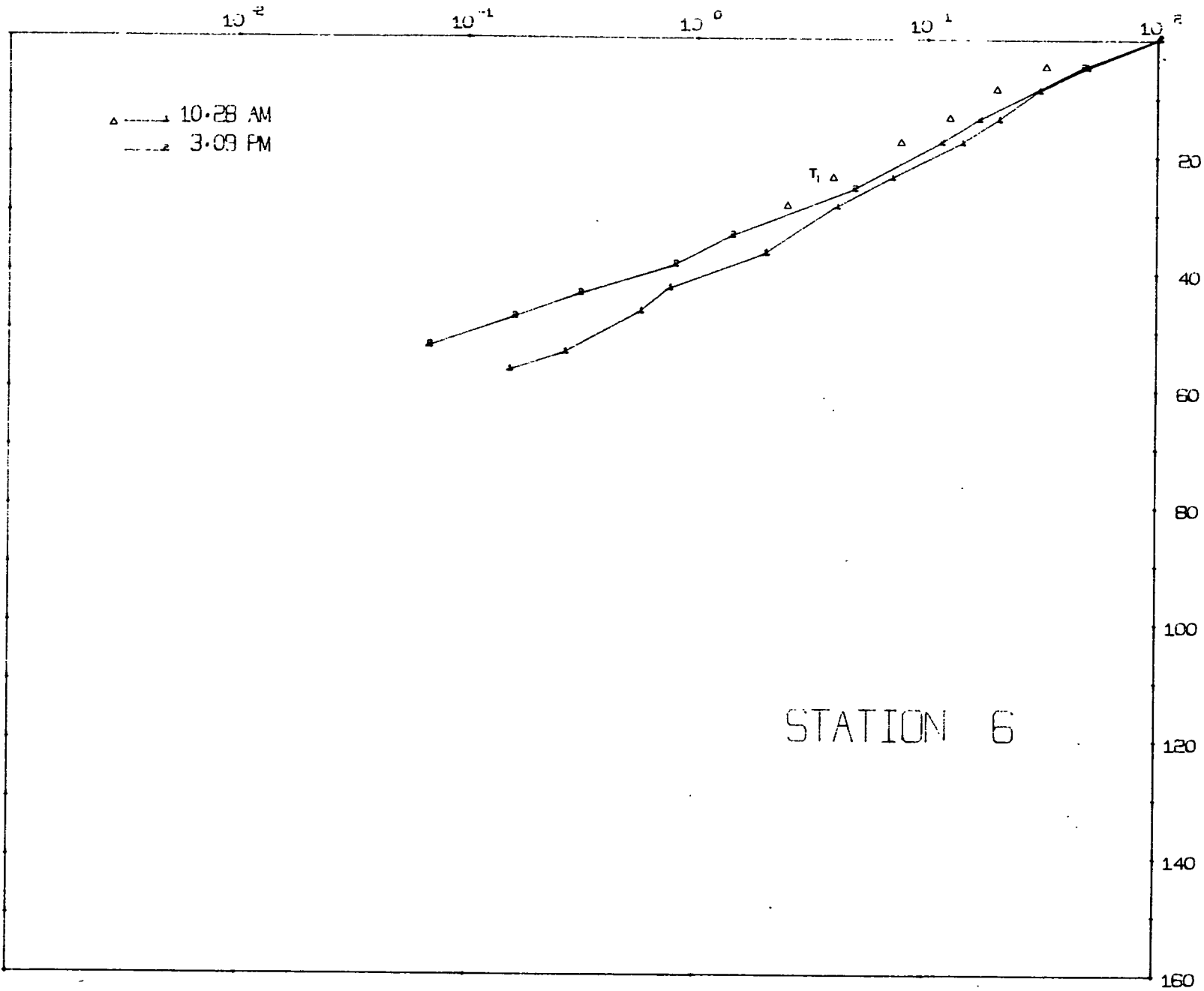


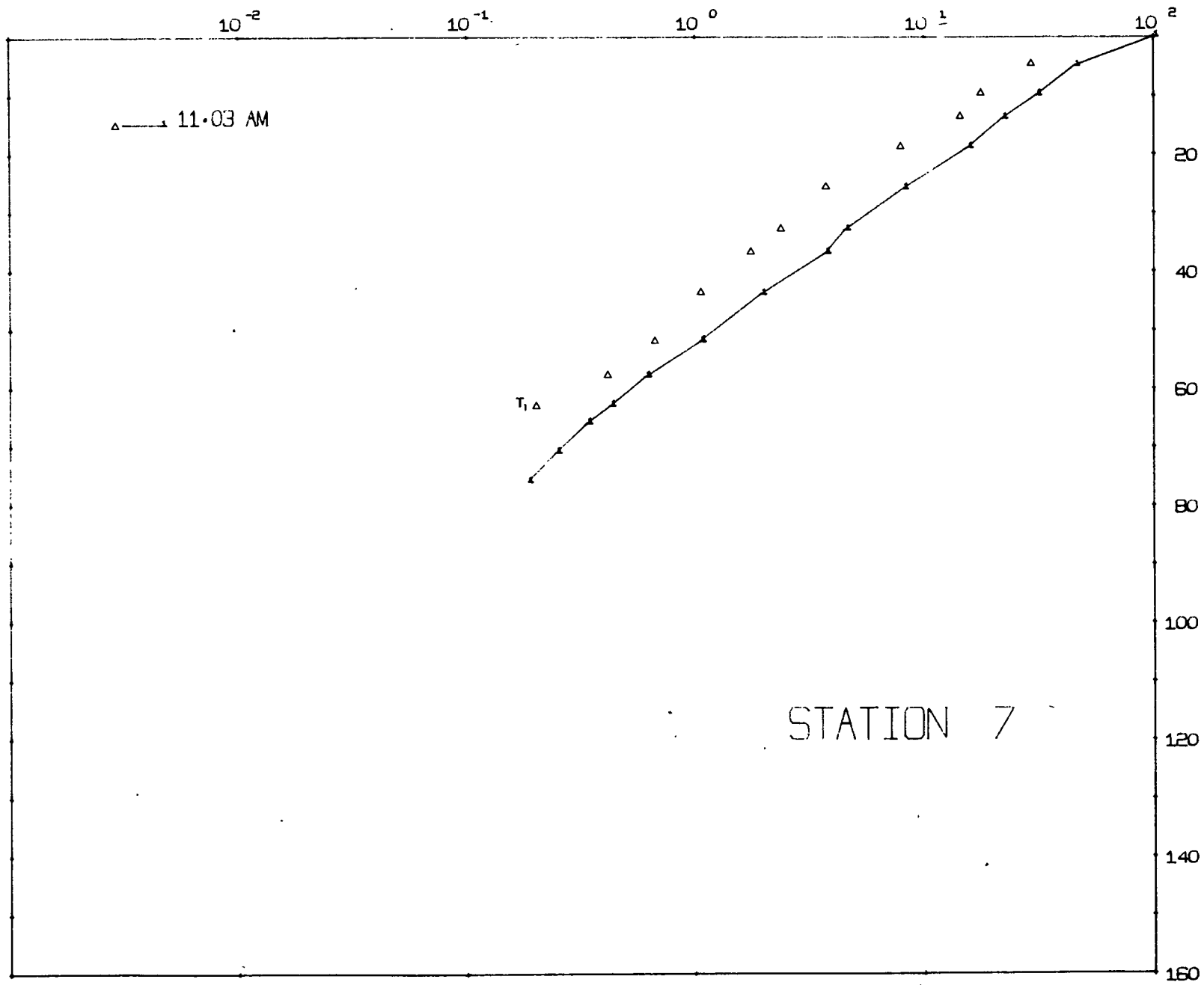


-F90-

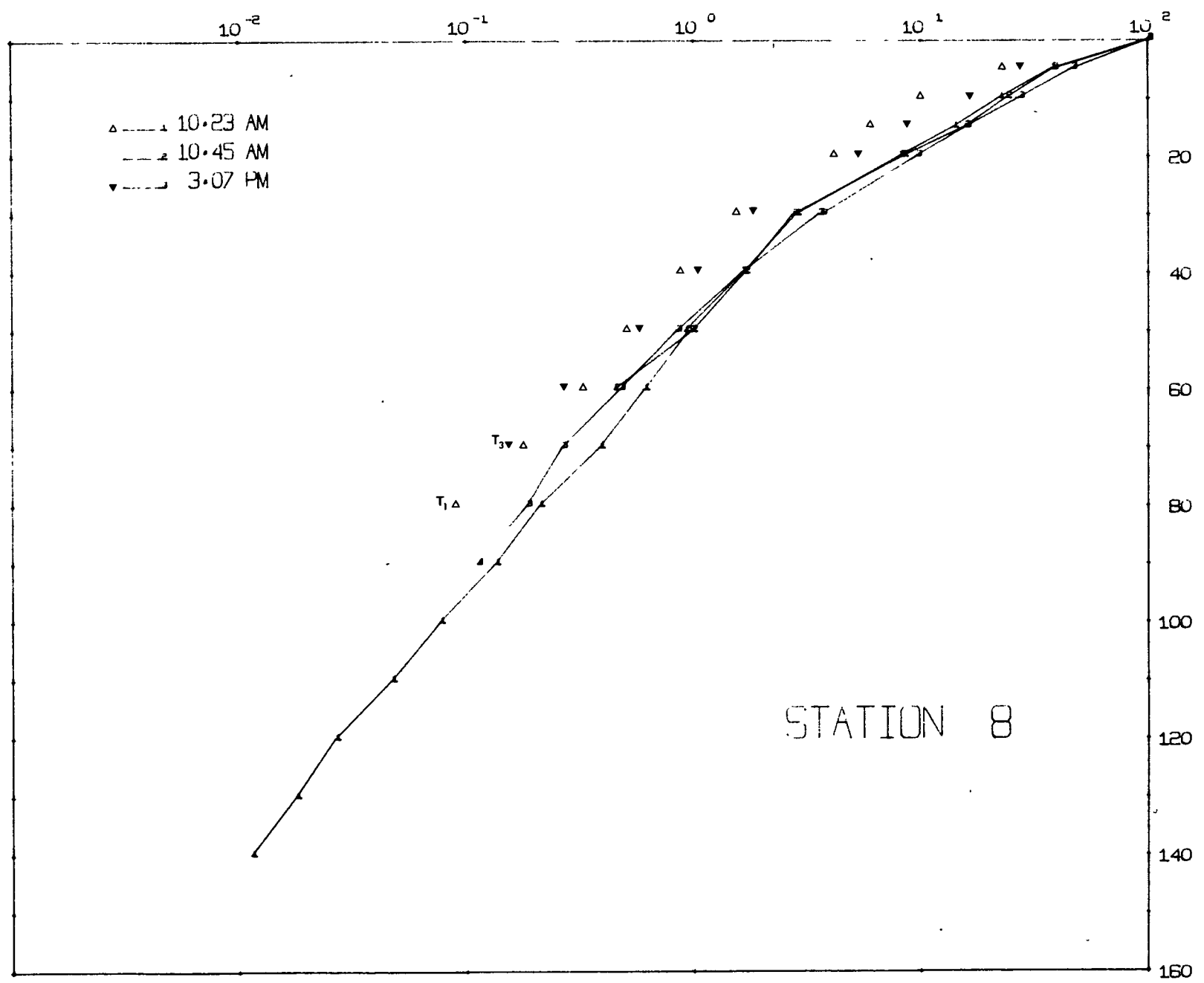


-F91-

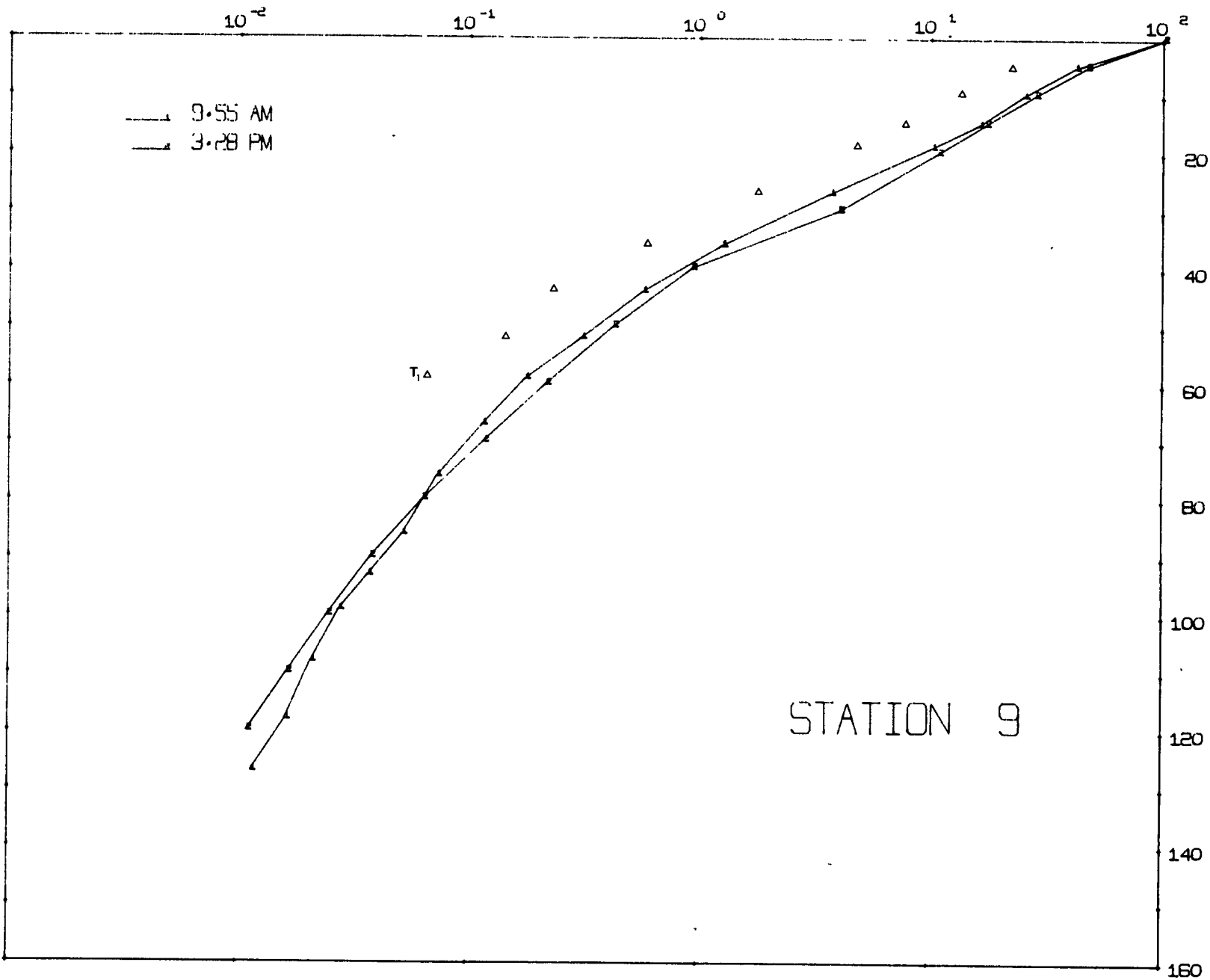




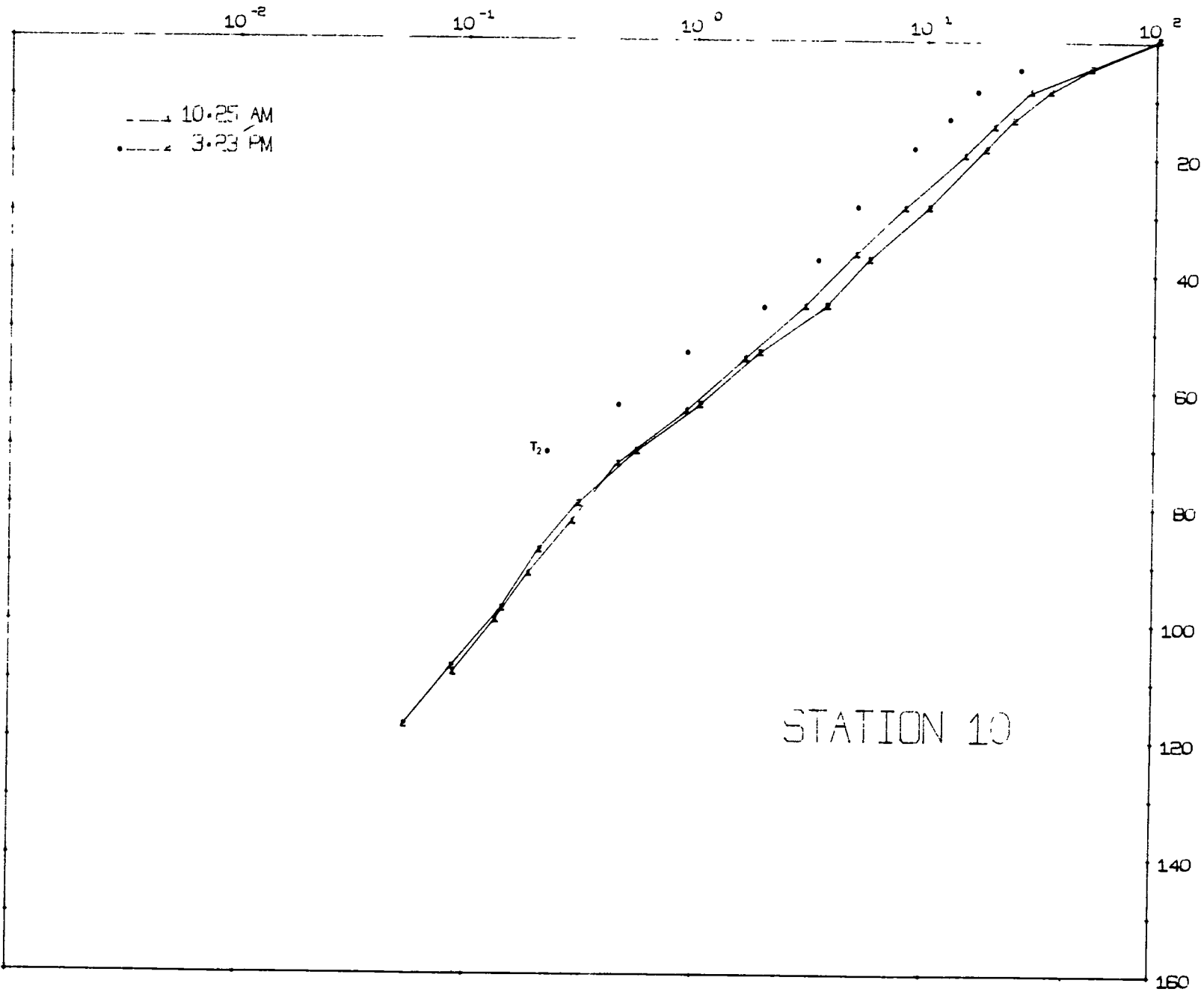
-F93-

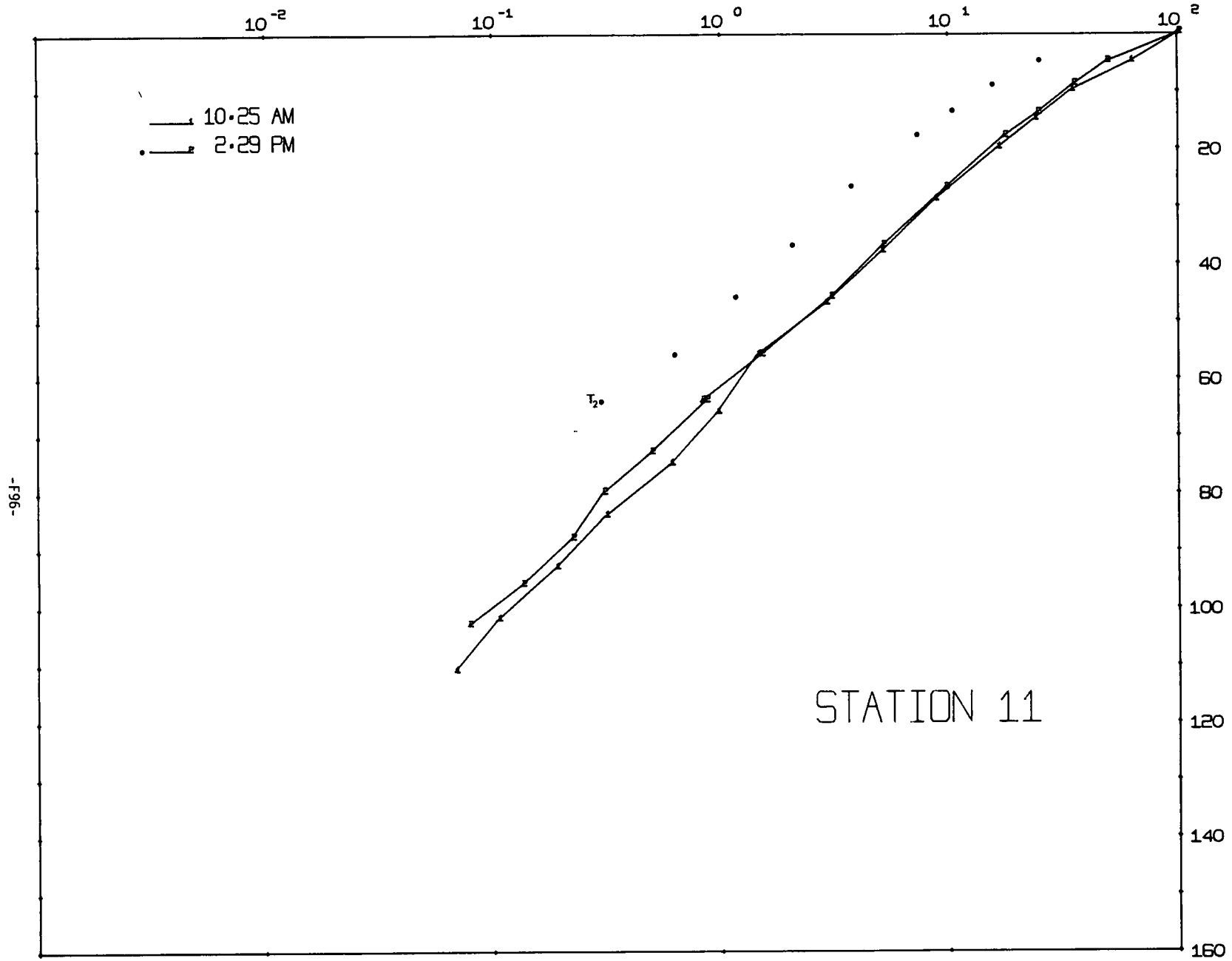


-F94-



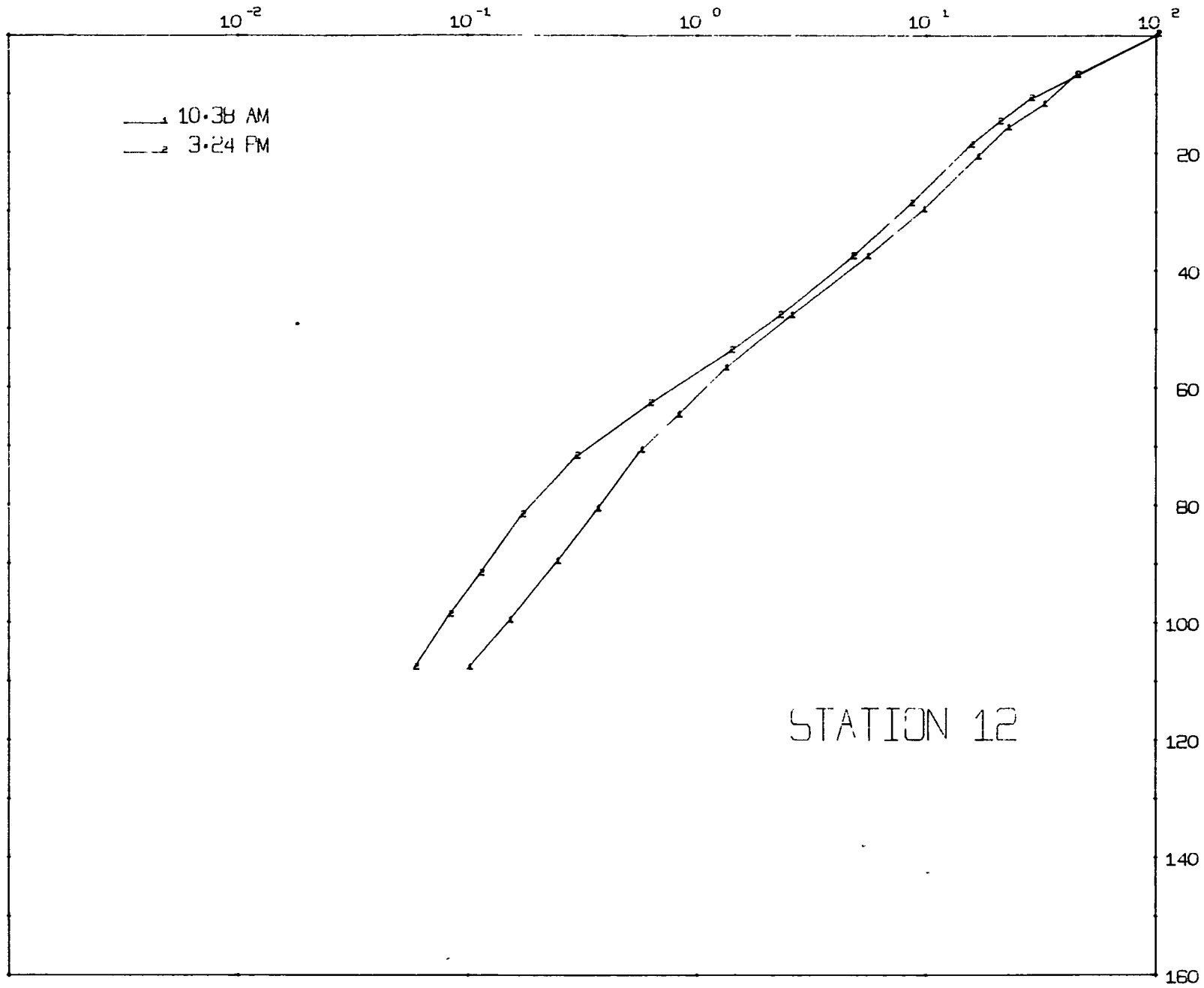
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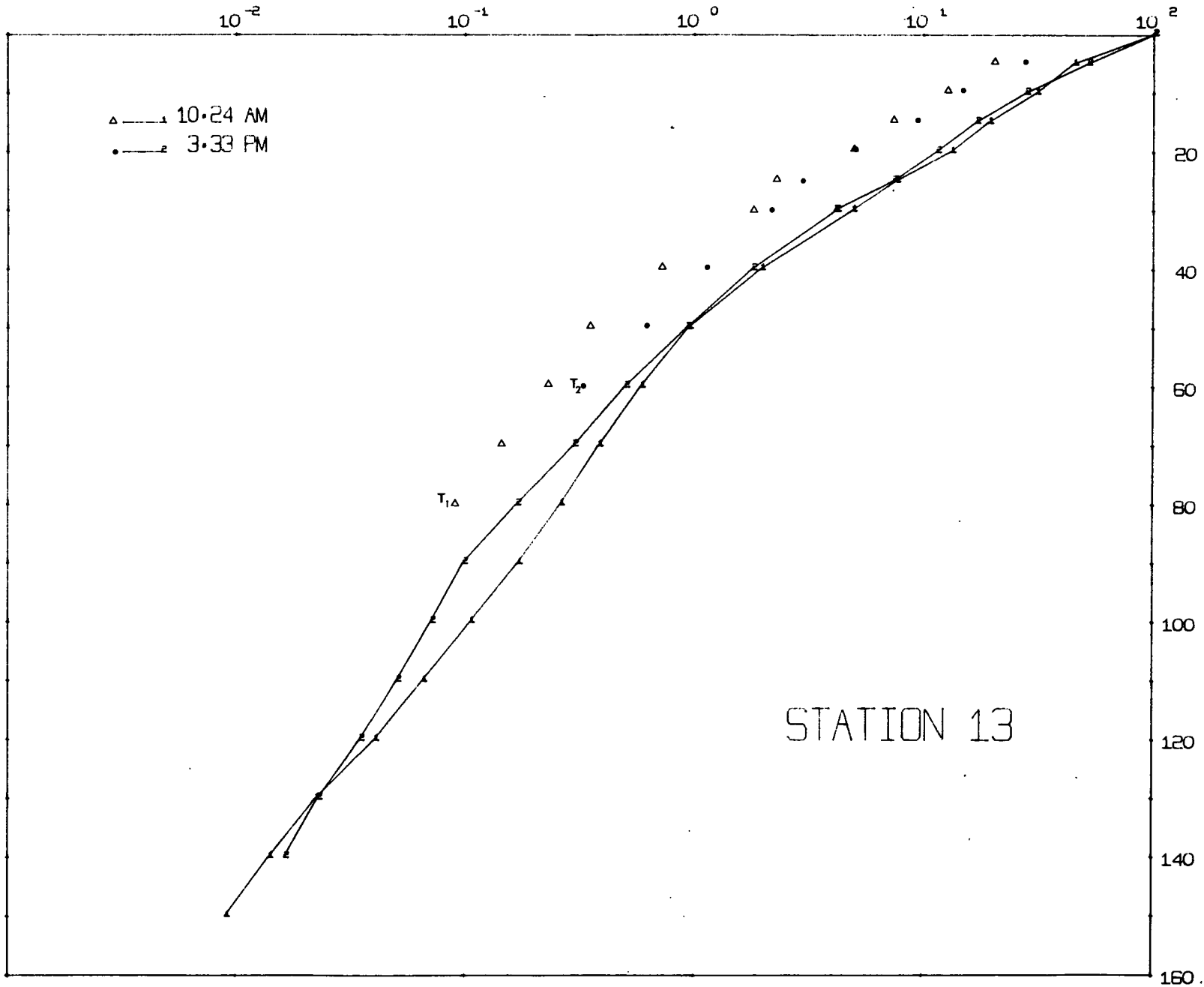


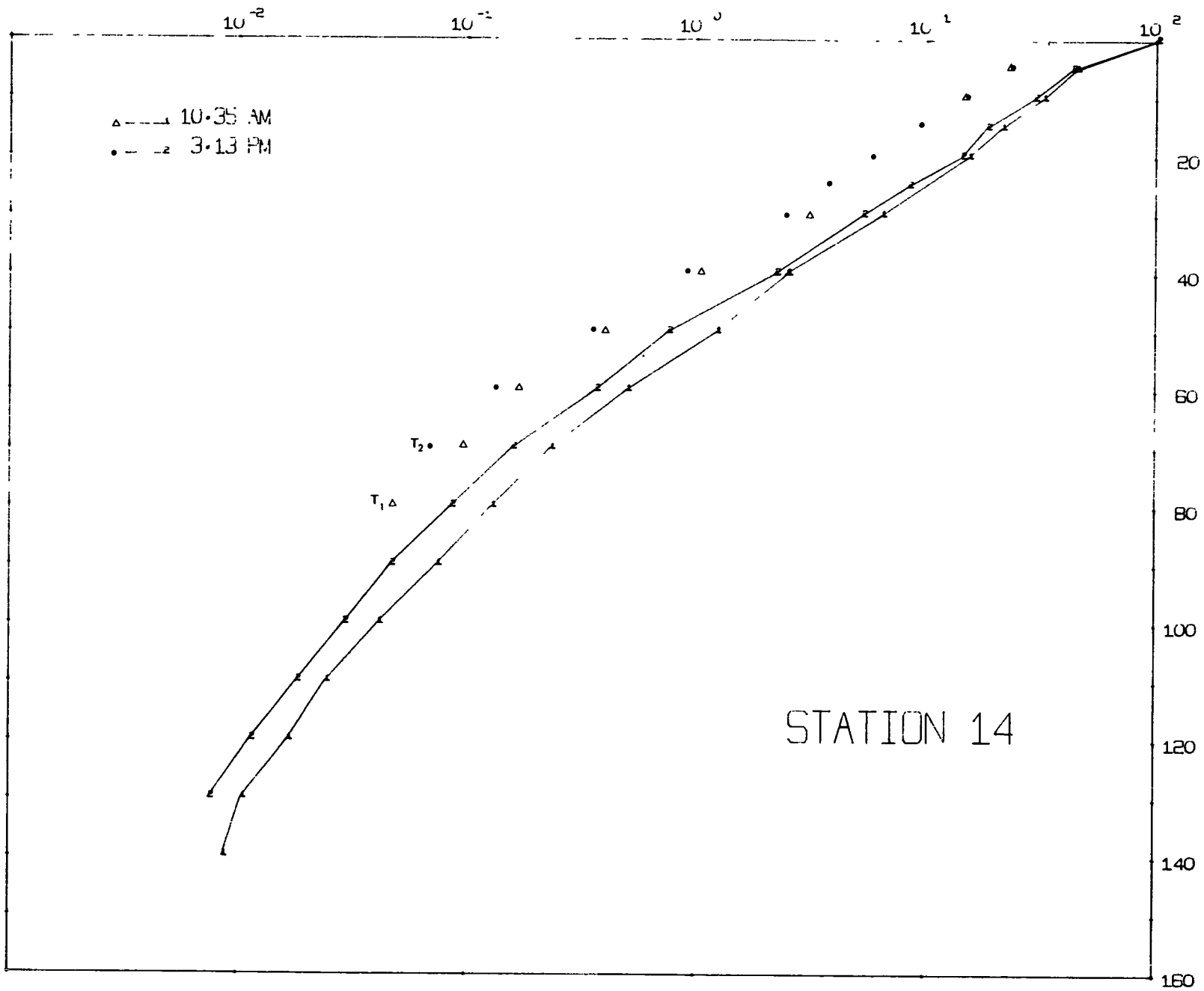


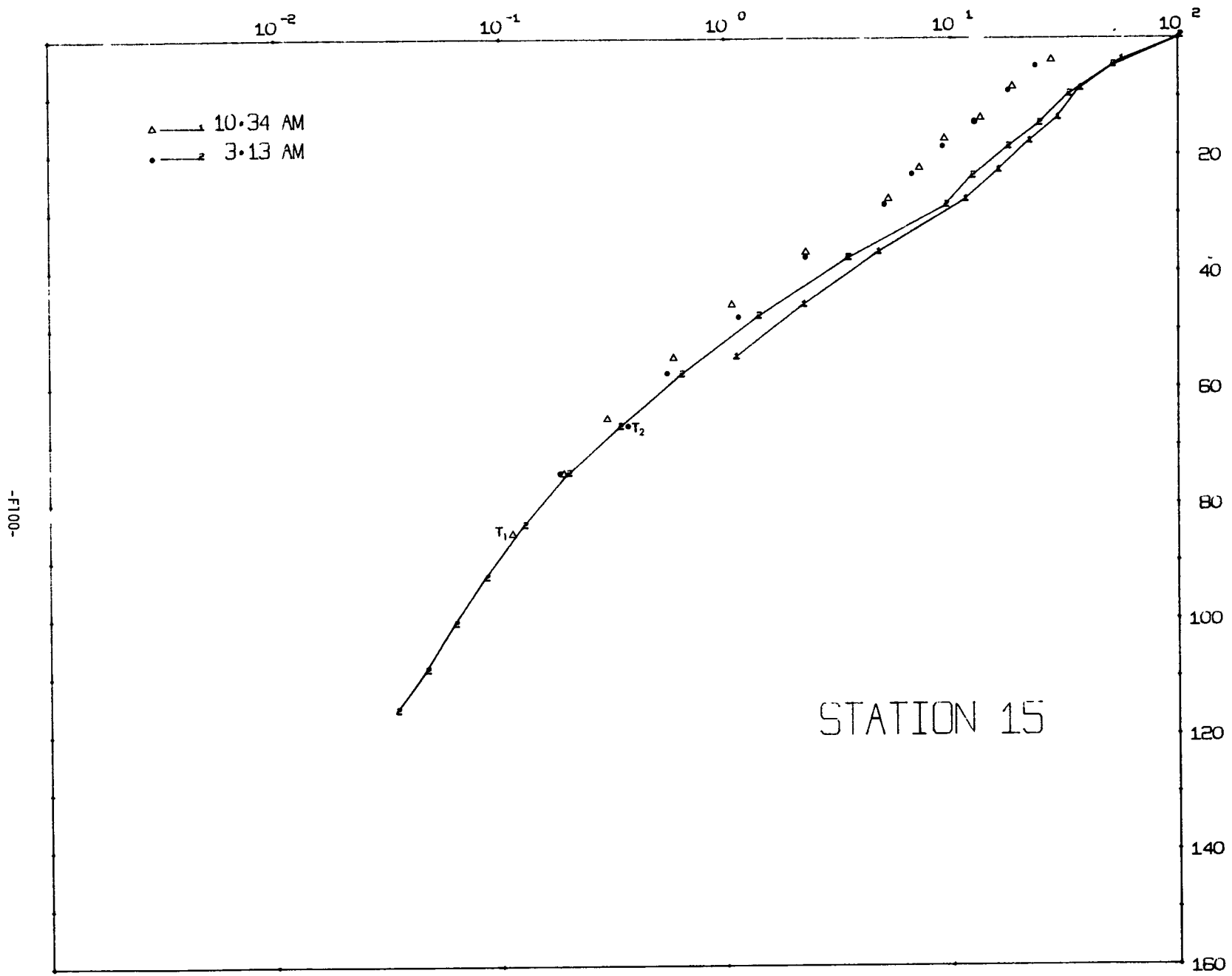


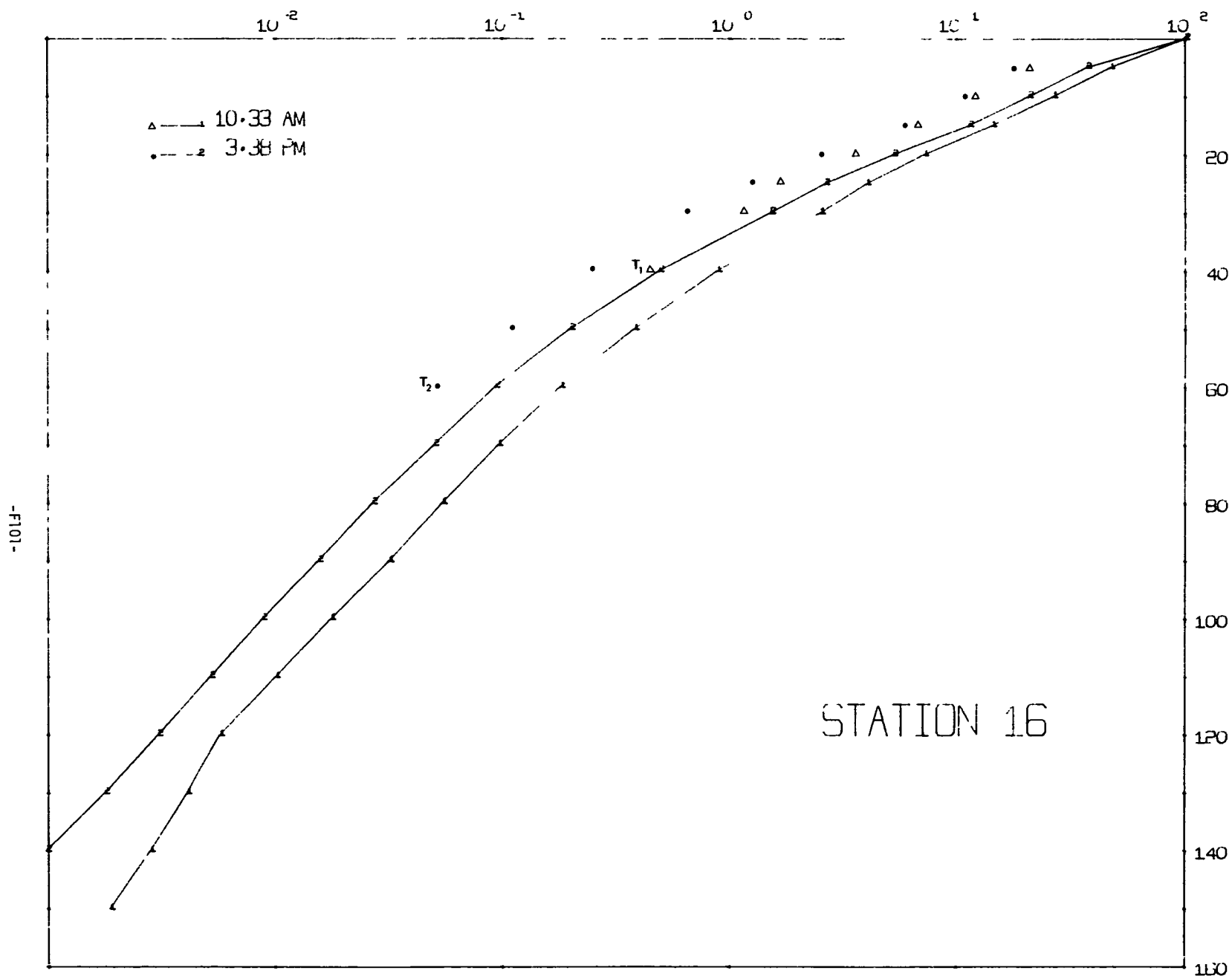
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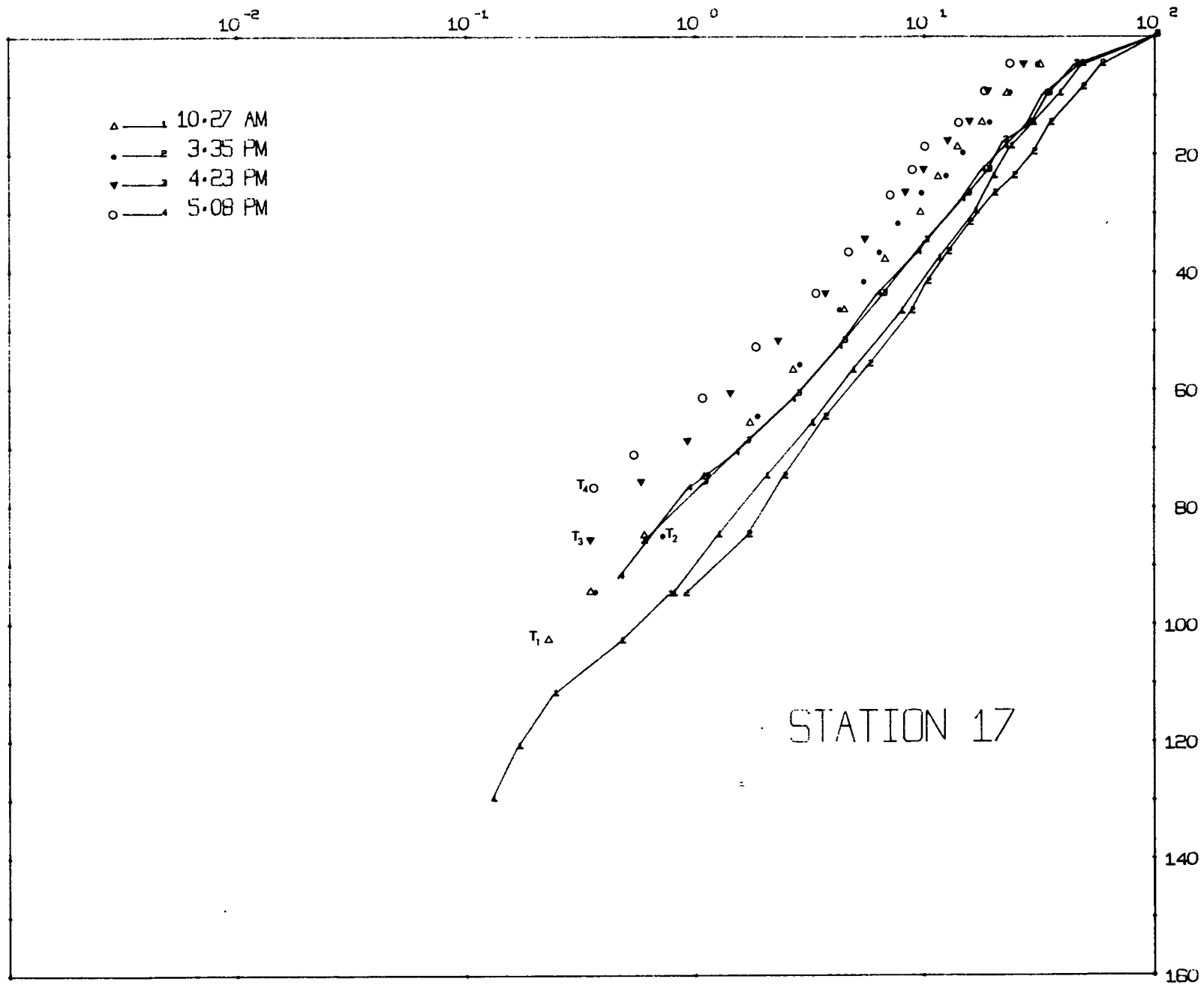




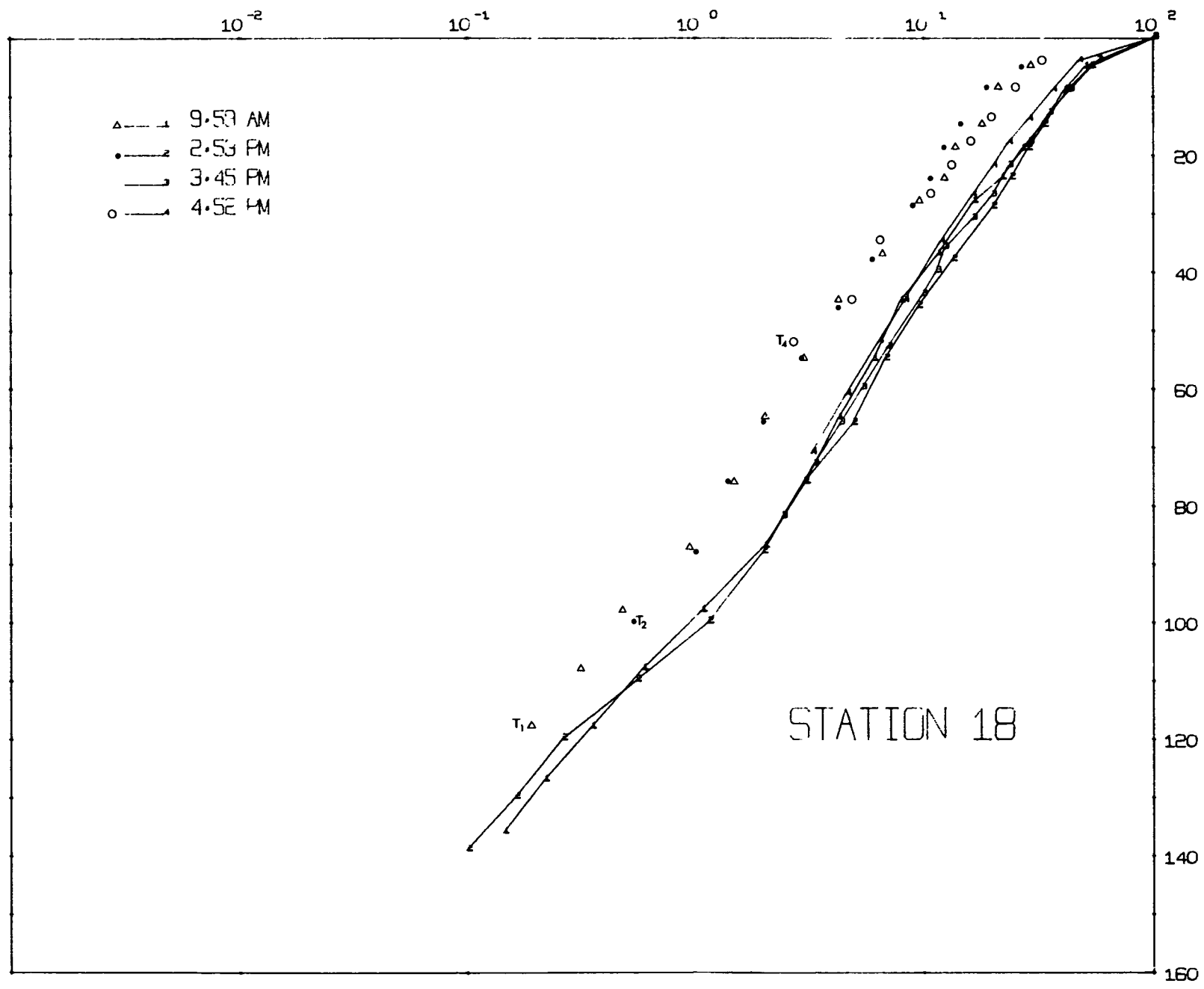




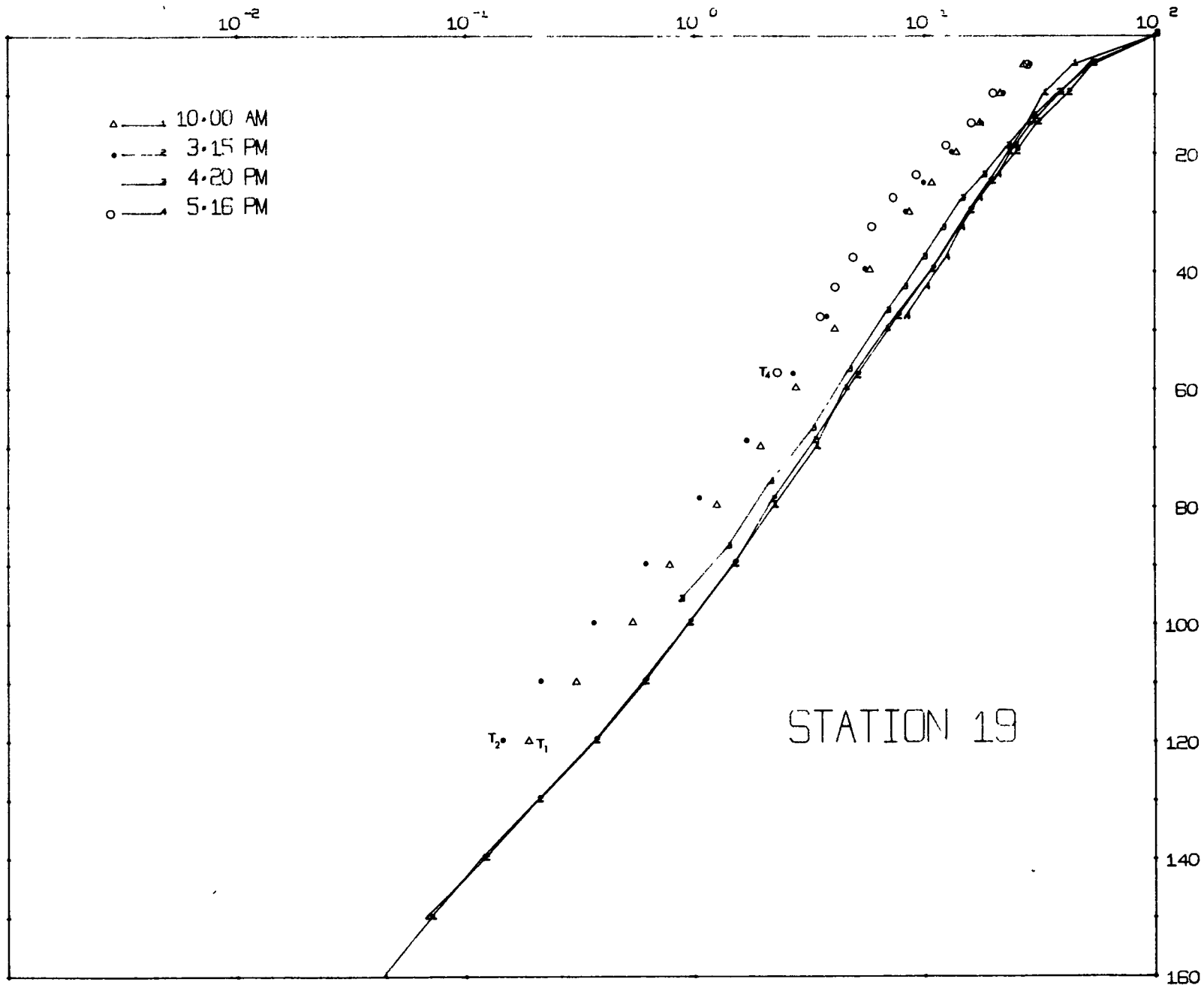




-F103-

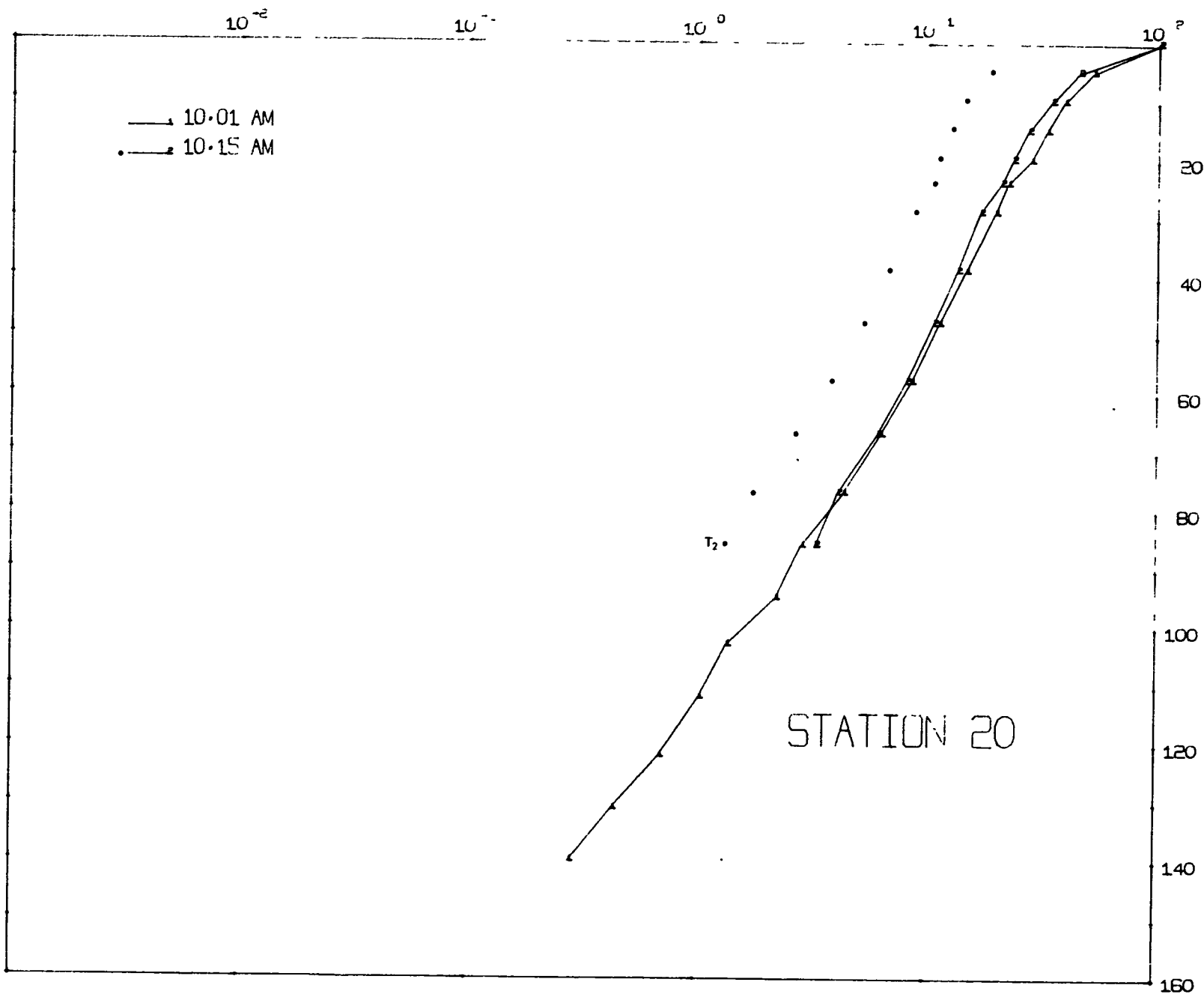


-F104-

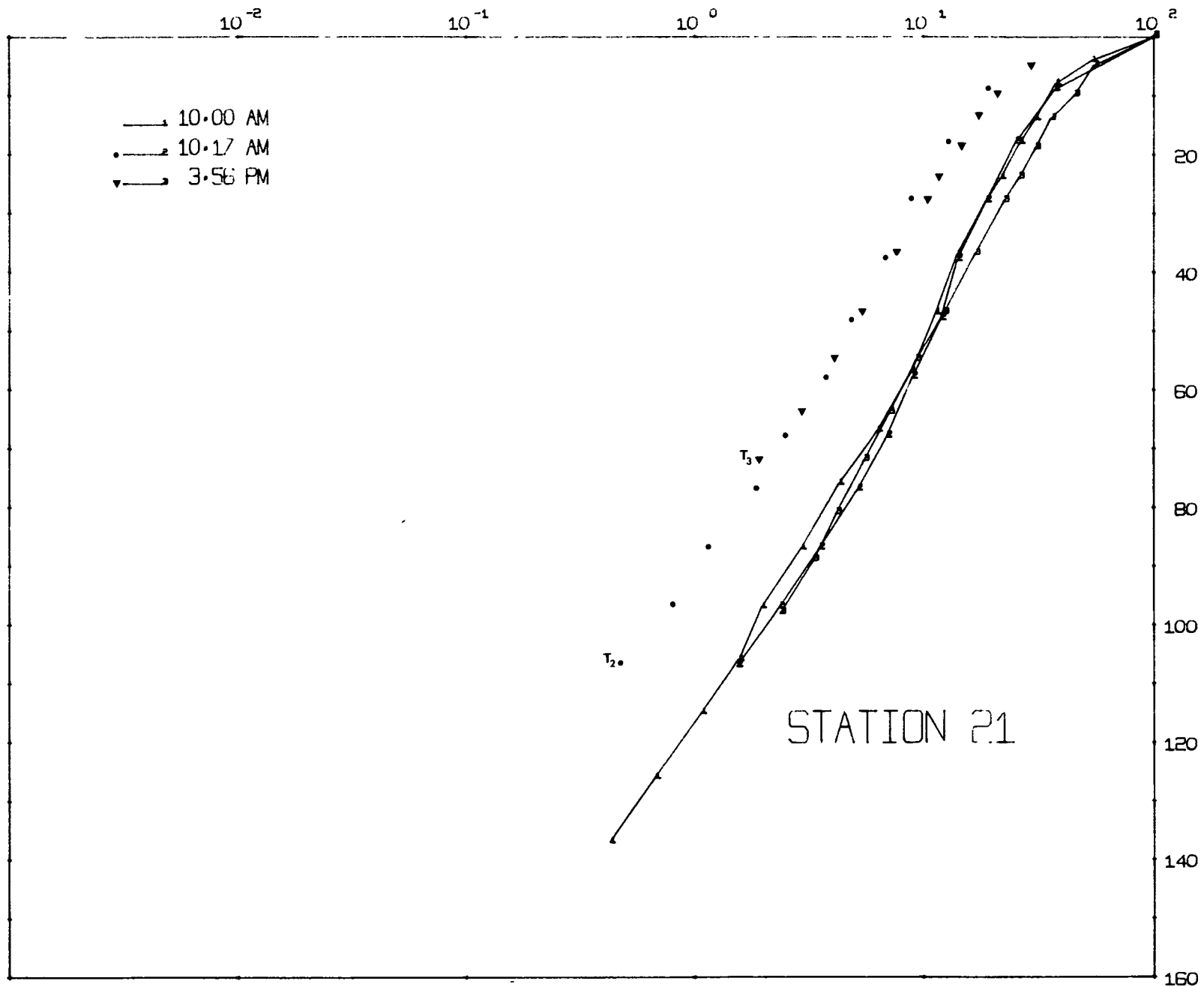


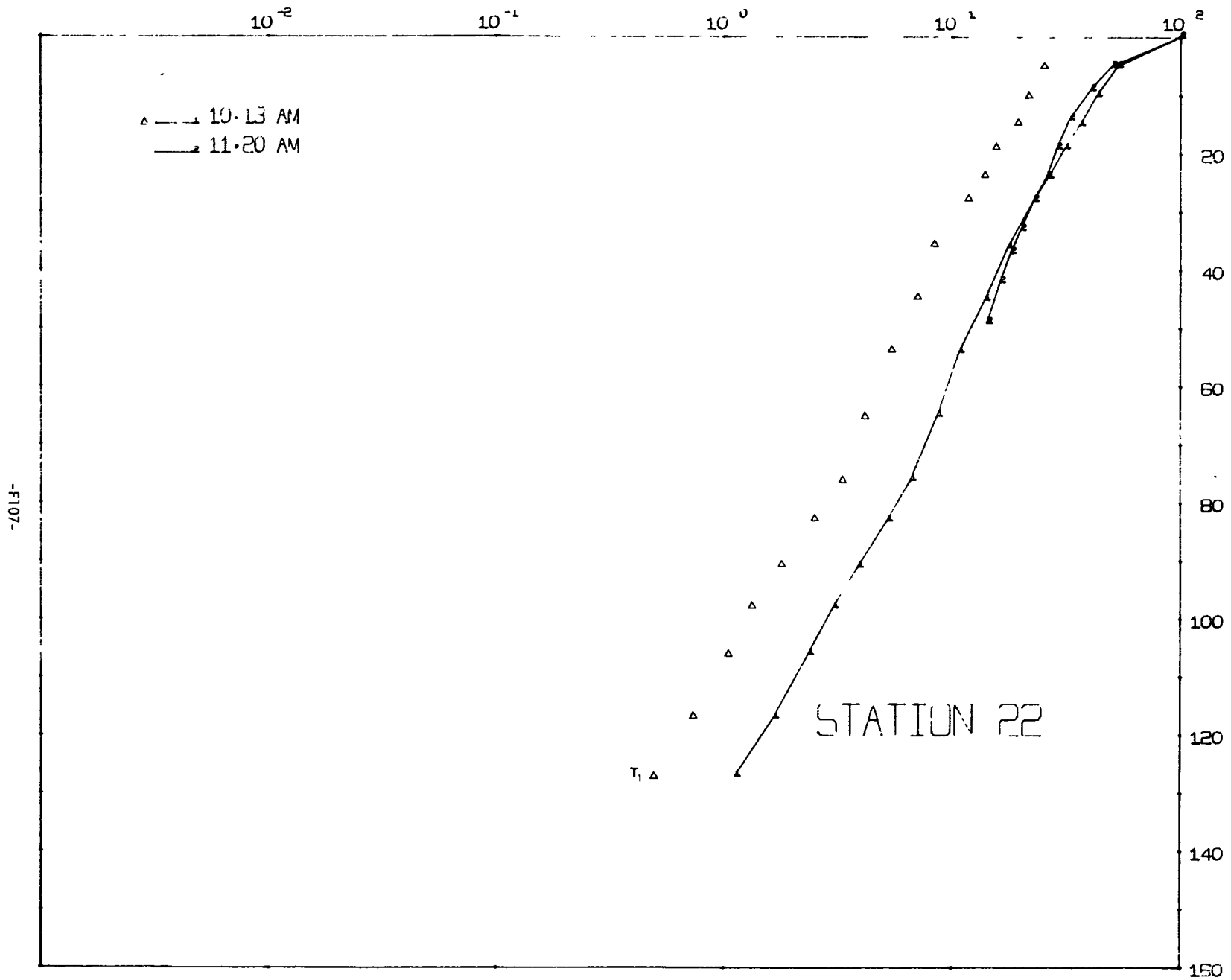


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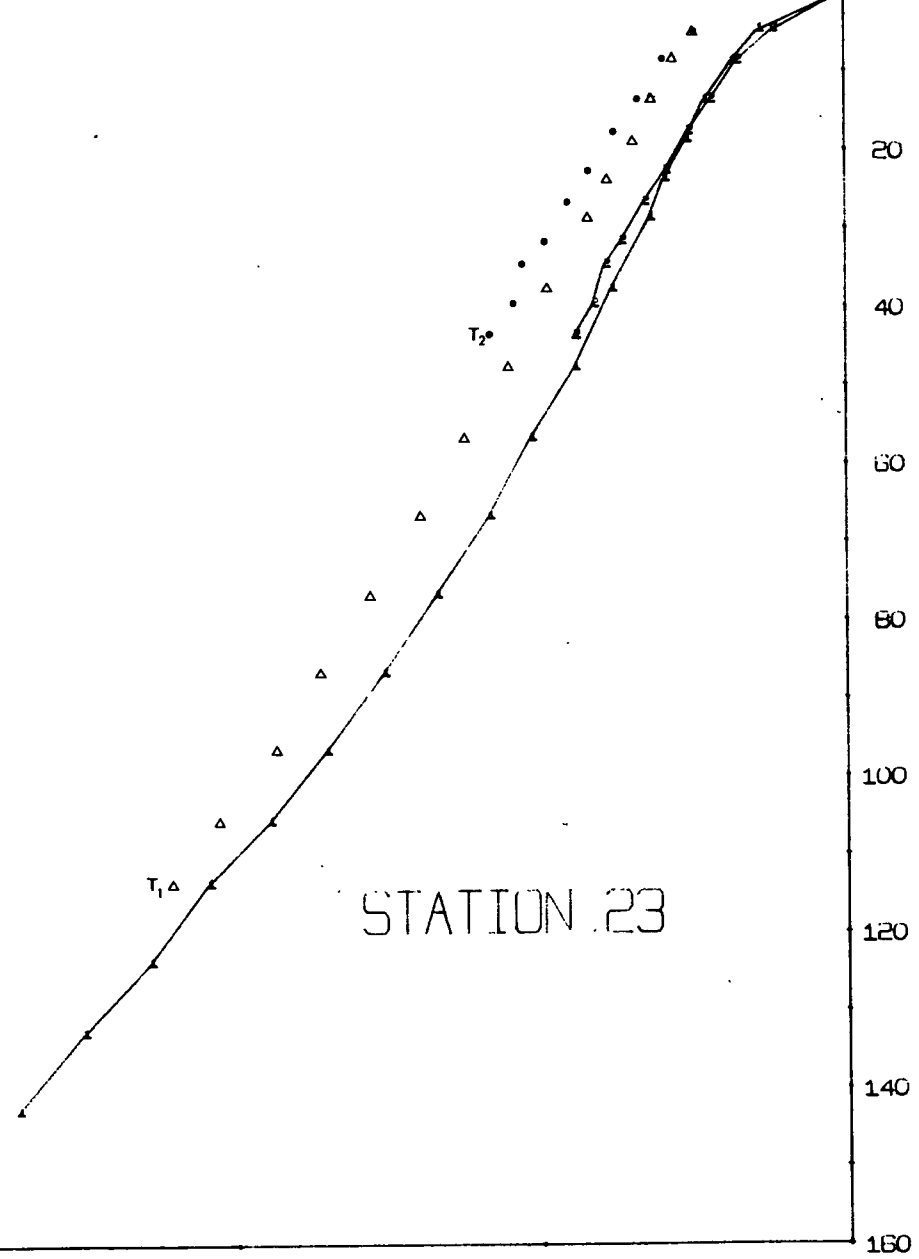
-F106-





$10^{-2}$        $10^{-1}$        $10^0$        $10^1$        $10^2$

△ — 12:33 PM  
● — 2:20 PM



-F108-

DISCOVERER . ECLAIREMENT ASCENDANT  $L_u$

MAI 06 STATION 03

SET 9 15<sup>h</sup>25-15<sup>h</sup>36

HAUTEUR SOLEIL 40° - CIEL BLEU

---

PROF.	POURCENTAGE
-0*	100**
5	87
10	73
20	49

\* SOUS LA SURFACE

\*\*  $L_u(-0) = 9.9 \times 10^{14}$  quanta  $\text{cm}^{-2}\text{sec}^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $F_u$

MAI 07 STATION 04

SET 9 15<sup>h</sup>32-15<sup>h</sup>49

HAUTEUR SOLEIL 35° - CIEL BLEU

---

PROF.	POURCENTAGE
-0*	100**
5	83
10	71
20	47

\* SOUS LA SURFACE

\*\*  $F_u(-0) = 12.97 \times 10^{14}$  quanta  $\text{cm}^{-2}\text{sec}^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $L_u$

MAI 08 STATION 05

SET 9 10<sup>h</sup>20-10<sup>h</sup>25

HAUTEUR SOLEIL 65° - CIEL BLEU

---

PROF.	POURCENTAGE
-0*	100**
5	70
10	54
20	35

\* SOUS LA SURFACE

\*\*  $L_u(-0) = 10.89 \times 10^{14}$  quanta  $\text{cm}^{-2}\text{sec}^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $F_u$

MAI 09 STATION 06

SET 9 15<sup>h</sup>12-15<sup>h</sup>28

HAUTEUR SOLEIL 38° - VARIABLE

---

PROF.	POURCENTAGE
-0*	100**
5	67
10	50
20	30

\* SOUS LA SURFACE

\*\*  $F_u(-0) = 5.89 \times 10^{14}$  quanta  $\text{cm}^{-2}\text{sec}^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

MAI 13 STATION 09  
 SET 9 10<sup>h</sup>04-10<sup>h</sup>08

HAUTEUR SOLEIL 54° - CIEL BLEU

---

QUANTA - METRE	
PROF.	POURCENTAGE
-0*	100**
5	77
10	57
20	23

\* SOUS LA SURFACE

\*\* $E_u$  (-0) =  $17.2 \times 10^{14}$  quanta  $cm^{-2}sec^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

MAI 14 STATION 10  
 SET 9 10<sup>h</sup>34-10<sup>h</sup>40

HAUTEUR SOLEIL (59°) - COUVERT

---

QUANTA - METRE	
PROF.	POURCENTAGE
-0*	100**
5	71
10	55
20	29

\* SOUS LA SURFACE

\*\* $E_u$  (-0) =  $3.07 \times 10^{14}$  quanta  $cm^{-2}sec^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

MAI 20 STATION 15  
 SET 9 15<sup>h</sup>18-15<sup>h</sup>22

HAUTEUR SOLEIL (38°) - COUVERT

---

QUANTA - METRE	
PROF.	POURCENTAGE
-0*	100**
5	84
10	67
20	31

\* SOUS LA SURFACE

\*\* $E_u$  (-0) =  $9.3 \times 10^{14}$  quanta  $cm^{-2}sec^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

MAI 21 STATION 16  
 SET 9 15<sup>h</sup>41-15<sup>h</sup>44

HAUTEUR SOLEIL 34° - CIEL VOILE

---

QUANTA - METRE	
PROF.	POURCENTAGE
-0*	100**
5	60
10	31
20	5.6

\* SOUS LA SURFACE

\*\* $E_u$  (-0) =  $9.54 \times 10^{14}$  quanta  $cm^{-2}sec^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

MAI 29                      STATION 18  
SET 9                        10<sup>h</sup>03-10<sup>h</sup>10

HAUTEUR SOLEIL 66° - CIEL BLEU

---

PROF.	QUANTA - METRE POURCENTAGE
-0*	100**
5	89
10	76
20	56

\* SOUS LA SURFACE

\*\* $E_u$  (-0) =  $16.97 \times 10^{14}$  quanta  $\text{cm}^{-2}\text{sec}^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

MAI 30                      STATION 19  
SET 9                        10<sup>h</sup>08-10<sup>h</sup>12

HAUTEUR SOLEIL 66° - CIEL BLEU

---

PROF.	QUANTA - METRE POURCENTAGE
-0*	100**
5	89.5
10	79.5
20	56

\* SOUS LA SURFACE

\*\* $E_u$  (-0) =  $11.05 \times 10^{14}$  quanta  $\text{cm}^{-2}\text{sec}^{-1}$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

JUIN 01                      STATION 21  
SET 9                         14<sup>h</sup>53-15<sup>h</sup>22

HAUTEUR SOLEIL 44° - VARIABLE

QUANTA-METRE

PROF.	POURCENTAGE
-0*	100**
4	93
9	81
18	64
25	53
37	43
44	33
53	24
72	12
89	5.7

\* SOUS LA SURFACE

$$**E_u (-0) = 20.65 \times 10^{14} \text{ quanta cm}^{-2}\text{sec}^{-1}$$

DISCOVERER . ECLAIREMENT ASCENDANT  $E_u$

JUIN 03                      STATION 23  
SET 9                         12<sup>h</sup>47-13<sup>h</sup>00

HAUTEUR SOLEIL 76° - CIEL BLEU

QUANTA - METRE

PROF.	POURCENTAGE
-0*	100**
4	94.5
9	87
18	72
36	42
55	18
80	4.8

\* SOUS LA SURFACE

$$**E_u (-0) = 21.88 \times 10^{14} \text{ quanta cm}^{-2}\text{sec}^{-1}$$



STATION 1 EXP 1 PROF 0

MAXIMUM A LAMDA= 478.3 AVEC ECLAIREMENT SPECTRAL= 1.56605 WATT/M2/NM

ENTRE 400.7 NM ET 700.0 NM , ECLAIREMENT 349.184 WATT/M2 950.600E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.781E 00	402.5	0.860E 00	404.9	0.900E 00	406.3	0.976E 00	407.4	0.109E 01
410.3	0.118E 01	412.7	0.125E 01	414.5	0.128E 01	416.9	0.130E 01	420.9	0.131E 01
424.0	0.130E 01	426.5	0.127E 01	428.0	0.125E 01	429.7	0.124E 01	431.7	0.123E 01
434.2	0.129E 01	437.7	0.136E 01	441.4	0.142E 01	444.4	0.146E 01	447.2	0.150E 01
449.4	0.153E 01	451.9	0.154E 01	454.9	0.155E 01	457.9	0.156E 01	460.7	0.156E 01
465.0	0.154E 01	468.3	0.153E 01	470.5	0.154E 01	474.6	0.155E 01	478.3	0.157E 01
479.6	0.157E 01	481.4	0.155E 01	484.5	0.147E 01	486.3	0.145E 01	488.1	0.146E 01
489.5	0.147E 01	490.4	0.148E 01	493.0	0.149E 01	496.6	0.145E 01	498.8	0.143E 01
502.2	0.144E 01	504.5	0.145E 01	507.3	0.140E 01	509.5	0.135E 01	511.2	0.133E 01
513.5	0.132E 01	516.4	0.133E 01	518.1	0.135E 01	524.3	0.137E 01	529.2	0.135E 01
531.1	0.133E 01	535.1	0.128E 01	539.8	0.126E 01	545.0	0.127E 01	553.4	0.123E 01
561.0	0.118E 01	568.5	0.114E 01	573.4	0.115E 01	576.9	0.117E 01	579.7	0.117E 01
582.3	0.112E 01	586.3	0.107E 01	588.9	0.106E 01	598.3	0.110E 01	605.3	0.111E 01
610.5	0.104E 01	618.7	0.104E 01	625.8	0.104E 01	631.2	0.921E 00	634.0	0.938E 00
645.6	0.874E 00	656.1	0.791E 00	658.9	0.785E 00	663.2	0.814E 00	672.2	0.761E 00
677.8	0.756E 00	682.2	0.778E 00	686.5	0.662E 00	697.7	0.695E 00	700.0	0.730E 00
711.2	0.673E 00	717.8	0.529E 00	724.8	0.456E 00	737.6	0.531E 00	742.0	0.520E 00

STATION 1 EXP 1 PROF 20

MAXIMUM A LAMDA= 477.4 AVEC ECLAIREMENT SPECTRAL= 0.99089 WATT/M2/NM

ENTRE 401.3 NM ET 602.8 NM , ECLAIREMENT 116.465 WATT/M2 284.200E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.3	0.481E 00	404.2	0.521E 00	406.0	0.542E 00	409.2	0.605E 00	416.2	0.675E 00
418.8	0.719E 00	422.6	0.733E 00	426.0	0.736E 00	428.9	0.702E 00	431.8	0.709E 00
436.0	0.771E 00	439.5	0.797E 00	445.5	0.817E 00	449.2	0.845E 00	451.0	0.859E 00
452.7	0.876E 00	456.7	0.913E 00	459.5	0.927E 00	461.2	0.933E 00	465.2	0.957E 00
468.1	0.960E 00	471.0	0.975E 00	473.8	0.980E 00	477.4	0.991E 00	479.3	0.970E 00
481.7	0.939E 00	483.1	0.928E 00	486.4	0.963E 00	488.6	0.919E 00	490.0	0.903E 00
494.6	0.857E 00	502.5	0.711E 00	508.0	0.577E 00	511.1	0.543E 00	515.7	0.526E 00
529.2	0.529E 00	537.0	0.460E 00	540.7	0.447E 00	559.1	0.321E 00	572.1	0.228E 00
575.5	0.197E 00	579.8	0.183E 00	583.3	0.114E 00	602.8	0.		

STATION 1 EXP 1 PROF 30

MAXIMUM A LAMDA= 476.0 AVEC ECLAIREMENT SPECTRAL= 0.69798 WATT/M2/NM

ENTRE 401.7 NM ET 588.5 NM , ECLAIREMENT 77.318 WATT/M2 186.200E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.345E 00	404.4	0.355E 00	406.5	0.397E 00	410.1	0.469E 00	414.2	0.502E 00
417.5	0.528E 00	420.8	0.534E 00	424.4	0.537E 00	427.2	0.523E 00	430.0	0.526E 00
432.7	0.532E 00	435.5	0.569E 00	439.3	0.599E 00	445.4	0.627E 00	448.7	0.644E 00
453.3	0.652E 00	457.4	0.668E 00	460.6	0.682E 00	463.2	0.684E 00	465.2	0.688E 00
468.1	0.688E 00	473.0	0.692E 00	476.0	0.698E 00	477.2	0.698E 00	479.7	0.679E 00
482.2	0.648E 00	485.1	0.630E 00	488.6	0.635E 00	491.1	0.630E 00	493.8	0.604E 00
497.6	0.547E 00	502.0	0.488E 00	504.5	0.438E 00	507.0	0.373E 00	509.6	0.328E 00
512.4	0.309E 00	517.7	0.301E 00	522.4	0.306E 00	527.0	0.302E 00	533.5	0.265E 00
539.5	0.237E 00	546.3	0.207E 00	555.9	0.172E 00	563.1	0.158E 00	576.6	0.705E-01
588.5	0.								

STATION 1 EXP 1 PROF 50

MAXIMUM A LAMDA= 481.5 AVEC ECLAIREMENT SPECTRAL= 0.30608 WATT/M2/NM

ENTRE 400.5 NM ET 588.2 NM , ECLAIREMENT 28.769 WATT/M2 68.600E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.5	0.103E 00	402.6	0.110E 00	404.7	0.117E 00	409.2	0.148E 00	413.4	0.174E 00
419.4	0.192E 00	424.2	0.195E 00	428.1	0.196E 00	430.6	0.198E 00	433.9	0.216E 00
437.5	0.229E 00	443.6	0.247E 00	447.8	0.257E 00	451.6	0.263E 00	454.1	0.264E 00
457.4	0.278E 00	460.5	0.288E 00	464.2	0.289E 00	466.9	0.290E 00	472.1	0.298E 00
476.1	0.304E 00	479.3	0.305E 00	481.5	0.306E 00	483.5	0.292E 00	485.6	0.281E 00
488.6	0.278E 00	491.5	0.269E 00	493.4	0.260E 00	498.8	0.214E 00	503.0	0.174E 00
505.6	0.141E 00	508.2	0.112E 00	511.8	0.970E-01	515.8	0.918E-01	527.3	0.872E-01
530.8	0.811E-01	536.9	0.670E-01	547.9	0.453E-01	555.1	0.361E-01	578.4	0.490E-02
588.2	0.								

STATION 1 EXP 3 PROF 0

MAXIMUM A LAMDA= 480.9 AVEC ECLAIREMENT SPECTRAL= 0.41323 WATT/M2/NM

ENTRE 402.7 NM ET 700.0 NM , ECLAIREMENT 103.304 WATT/M2 289.060E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.7	0.177E 00	405.1	0.192E 00	407.5	0.221E 00	410.2	0.254E 00	416.3	0.290E 00
420.3	0.305E 00	424.4	0.309E 00	426.9	0.310E 00	430.8	0.296E 00	432.6	0.295E 00
436.0	0.316E 00	441.7	0.344E 00	445.7	0.364E 00	449.7	0.388E 00	452.6	0.395E 00
457.1	0.399E 00	462.2	0.405E 00	469.6	0.400E 00	472.5	0.404E 00	479.8	0.412E 00
480.9	0.413E 00	482.8	0.410E 00	485.1	0.396E 00	487.0	0.392E 00	490.1	0.402E 00
492.9	0.406E 00	499.5	0.391E 00	502.4	0.393E 00	510.2	0.399E 00	514.1	0.388E 00
517.3	0.379E 00	520.1	0.378E 00	523.3	0.386E 00	534.0	0.381E 00	539.7	0.372E 00
551.5	0.383E 00	557.9	0.362E 00	561.6	0.360E 00	569.8	0.338E 00	576.3	0.344E 00
580.3	0.352E 00	585.6	0.326E 00	589.0	0.311E 00	593.6	0.314E 00	604.9	0.338E 00
608.0	0.344E 00	613.8	0.336E 00	619.5	0.343E 00	627.9	0.326E 00	640.2	0.346E 00
649.9	0.317E 00	656.8	0.322E 00	661.1	0.340E 00	671.2	0.336E 00	680.6	0.337E 00
684.9	0.283E 00	700.0	0.310E 00	714.2	0.218E 00	728.0	0.210E 00	734.6	0.286E 00
742.0	0.310E 00								

STATION 1 EXP 3 PROF 10

MAXIMUM A LAMDA= 466.4 AVEC ECLAIREMENT SPECTRAL= 0.29170 WATT/M2/NM

ENTRE 402.1 NM ET 605.6 NM , ECLAIREMENT 37.607 WATT/M2 92.678E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.1	0.134E 00	405.5	0.144E 00	407.9	0.173E 00	410.9	0.197E 00	414.7	0.217E 00
419.5	0.223E 00	425.3	0.229E 00	429.1	0.218E 00	432.2	0.208E 00	436.2	0.222E 00
439.2	0.238E 00	442.3	0.251E 00	444.8	0.262E 00	446.6	0.267E 00	456.2	0.277E 00
458.2	0.283E 00	466.4	0.292E 00	471.6	0.287E 00	476.3	0.281E 00	478.5	0.284E 00
480.1	0.291E 00	482.9	0.281E 00	484.8	0.268E 00	487.8	0.265E 00	488.9	0.271E 00
492.0	0.264E 00	495.5	0.258E 00	498.0	0.237E 00	502.4	0.229E 00	506.9	0.224E 00
512.4	0.194E 00	516.9	0.177E 00	519.5	0.171E 00	523.9	0.180E 00	527.7	0.185E 00
533.0	0.182E 00	536.0	0.168E 00	540.2	0.151E 00	545.2	0.149E 00	553.3	0.141E 00
557.9	0.137E 00	562.7	0.132E 00	564.8	0.116E 00	572.4	0.106E 00	581.1	0.688E-01
587.6	0.382E-01	605.6	0.						

STATION 1 EXP 3 PROF 20

MAXIMUM A LAMDA= 473.0 AVEC ECLAIREMENT SPECTRAL= 0.20459 WATT/M2/NM

ENTRE 403.1 NM ET 591.3 NM , ECLAIREMENT 23.159 WATT/M2 56.024E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.1	0.872E-01	406.2	0.957E-01	409.2	0.122E 00	414.0	0.141E 00	420.5	0.155E 00
424.6	0.156E 00	430.5	0.150E 00	432.3	0.150E 00	439.2	0.170E 00	446.9	0.187E 00
451.3	0.194E 00	455.7	0.195E 00	462.0	0.202E 00	463.7	0.204E 00	470.3	0.202E 00
473.0	0.205E 00	479.1	0.204E 00	481.6	0.201E 00	484.1	0.192E 00	486.2	0.188E 00
490.3	0.192E 00	494.9	0.191E 00	499.1	0.179E 00	506.1	0.143E 00	509.1	0.116E 00
515.8	0.964E-01	529.7	0.966E-01	549.4	0.591E-01	554.4	0.556E-01	584.5	0.982E-02
591.3	0.								

STATION 1 EXP 3 PROF 30

MAXIMUM A LAMDA= 477.5 AVEC ECLAIREMENT SPECTRAL= 0.14667 WATT/M2/NM

ENTRE 403.6 NM ET 589.3 NM , ECLAIREMENT 14.927 WATT/M2 35.760E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.6	0.594E-01	405.8	0.650E-01	408.3	0.764E-01	411.6	0.905E-01	415.9	0.101E 00
421.3	0.107E 00	423.8	0.110E 00	427.9	0.108E 00	432.1	0.106E 00	436.2	0.117E 00
441.4	0.126E 00	448.4	0.134E 00	455.8	0.137E 00	458.3	0.141E 00	461.9	0.144E 00
468.4	0.143E 00	472.4	0.145E 00	477.5	0.147E 00	480.2	0.144E 00	483.4	0.132E 00
488.5	0.131E 00	492.6	0.128E 00	495.9	0.118E 00	502.4	0.915E-01	507.1	0.694E-01
510.3	0.571E-01	514.3	0.527E-01	525.3	0.538E-01	532.7	0.484E-01	547.4	0.307E-01
552.3	0.273E-01	576.7	0.733E-02	589.3	0.				

STATION 2 EXP 2 PROF 0

MAXIMUM A LAMDA= 478.2 AVEC ECLAIREMENT SPECTRAL= 0.55485 WATT/M2/NM

ENTRE 402.2 NM ET 700.0 NM , ECLAIREMENT 140.829 WATT/M2 393.820E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.2	0.223E 00	403.9	0.262E 00	406.4	0.280E 00	410.0	0.340E 00	413.3	0.381E 00
417.7	0.423E 00	422.4	0.429E 00	426.5	0.428E 00	430.4	0.411E 00	433.2	0.407E 00
435.8	0.431E 00	441.5	0.468E 00	446.2	0.498E 00	450.6	0.527E 00	457.0	0.536E 00
462.7	0.547E 00	465.3	0.543E 00	470.5	0.533E 00	478.2	0.555E 00	481.0	0.539E 00
483.4	0.514E 00	488.7	0.536E 00	495.9	0.529E 00	501.2	0.526E 00	506.5	0.528E 00
514.7	0.502E 00	516.9	0.505E 00	521.9	0.523E 00	536.5	0.522E 00	543.3	0.516E 00
552.5	0.533E 00	554.7	0.515E 00	558.0	0.501E 00	563.2	0.510E 00	570.5	0.498E 00
575.5	0.482E 00	580.9	0.497E 00	584.3	0.468E 00	589.0	0.440E 00	604.0	0.487E 00
607.6	0.473E 00	613.2	0.466E 00	623.9	0.469E 00	628.3	0.452E 00	637.8	0.464E 00
656.1	0.422E 00	667.8	0.462E 00	680.4	0.428E 00	685.1	0.365E 00	700.0	0.406E 00
714.0	0.297E 00	743.0	0.277E 00						

STATION 2 EXP 2 PROF 10

MAXIMUM A LAMDA= 462.3 AVEC ECLAIREMENT SPECTRAL= 0.51759 WATT/M2/NM

ENTRE 402.1 NM ET 607.4 NM , ECLAIREMENT 69.899 WATT/M2 172.550E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.1	0.278E 00	404.8	0.288E 00	410.8	0.365E 00	415.6	0.399E 00	421.0	0.414E 00
426.3	0.409E 00	427.9	0.395E 00	432.5	0.399E 00	437.4	0.438E 00	441.4	0.452E 00
445.7	0.498E 00	448.4	0.507E 00	454.7	0.509E 00	457.1	0.514E 00	462.3	0.518E 00
465.8	0.501E 00	472.3	0.513E 00	473.1	0.510E 00	476.3	0.514E 00	478.6	0.509E 00
481.4	0.486E 00	484.0	0.473E 00	490.1	0.490E 00	494.5	0.464E 00	500.6	0.437E 00
507.4	0.384E 00	511.8	0.355E 00	516.0	0.351E 00	531.7	0.345E 00	534.6	0.324E 00
538.7	0.326E 00	544.3	0.295E 00	553.1	0.278E 00	561.7	0.243E 00	565.7	0.221E 00
574.3	0.185E 00	575.7	0.168E 00	580.0	0.159E 00	584.5	0.108E 00	588.8	0.709E-01
607.4	0.								

STATION 2 EXP 2 PROF 20

MAXIMUM A LAMDA= 481.4 AVEC ECLAIREMENT SPECTRAL= 0.39674 WATT/M2/NM

ENTRE 402.5 NM ET 595.7 NM , ECLAIREMENT 45.643 WATT/M2 110.432E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.5	0.200E 00	405.6	0.204E 00	409.3	0.254E 00	415.5	0.290E 00	421.7	0.309E 00
424.2	0.312E 00	427.7	0.303E 00	430.8	0.299E 00	433.7	0.307E 00	438.8	0.338E 00
446.4	0.368E 00	451.3	0.377E 00	454.8	0.377E 00	460.2	0.391E 00	464.0	0.392E 00
470.4	0.390E 00	481.4	0.397E 00	486.4	0.366E 00	491.7	0.360E 00	495.7	0.338E 00
499.7	0.309E 00	503.6	0.295E 00	514.2	0.209E 00	517.1	0.190E 00	520.7	0.188E 00
538.2	0.167E 00	549.2	0.120E 00	553.6	0.118E 00	556.4	0.100E 00	575.7	0.599E-01
583.2	0.190E-01	595.7	0.						

STATION 2 EXP 2 PROF 30

MAXIMUM A LAMDA= 474.6 AVEC ECLAIREMENT SPECTRAL= 0.30873 WATT/M2/NM

ENTRE 401.6 NM ET 587.7 NM , ECLAIREMENT 31.732 WATT/M2 75.516E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.6	0.152E 00	405.0	0.158E 00	408.7	0.198E 00	414.3	0.230E 00	420.8	0.246E 00
422.7	0.246E 00	427.5	0.241E 00	431.8	0.237E 00	436.4	0.256E 00	444.7	0.284E 00
448.7	0.287E 00	455.1	0.295E 00	462.2	0.302E 00	464.7	0.303E 00	469.3	0.302E 00
474.6	0.309E 00	477.2	0.307E 00	479.9	0.292E 00	482.9	0.277E 00	485.6	0.270E 00
491.8	0.251E 00	497.0	0.225E 00	503.1	0.185E 00	506.4	0.143E 00	511.0	0.112E 00
517.3	0.102E 00	529.0	0.994E-01	547.7	0.562E-01	559.7	0.411E-01	578.9	0.105E-01
587.7	0.								

STATION 2 EXP 2 PROF 50

MAXIMUM A LAMDA= 477.4 AVEC ECLAIREMENT SPECTRAL= 0.15927 WATT/M2/NM

ENTRE 401.9 NM ET 576.5 NM , ECLAIREMENT 14.762 WATT/M2 34.713E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.734E-01	405.7	0.768E-01	409.1	0.933E-01	413.8	0.111E 00	419.5	0.122E 00
423.9	0.125E 00	426.6	0.123E 00	430.2	0.123E 00	432.6	0.122E 00	436.7	0.133E 00
443.0	0.144E 00	446.8	0.145E 00	451.0	0.145E 00	454.2	0.148E 00	456.8	0.155E 00
458.7	0.157E 00	467.7	0.156E 00	473.2	0.159E 00	477.4	0.159E 00	480.6	0.151E 00
482.8	0.141E 00	485.7	0.135E 00	489.7	0.133E 00	494.3	0.122E 00	498.4	0.102E 00
502.3	0.764E-01	507.6	0.459E-01	511.1	0.358E-01	516.5	0.326E-01	527.6	0.322E-01
547.7	0.119E-01	563.3	0.589E-02	576.5	0.				

STATION 2 EXP 2 PROF 70

MAXIMUM A LAMDA= 477.4 AVEC ECLAIREMENT SPECTRAL= 0.07411 WATT/M2/NM

ENTRE 402.0 NM ET 558.2 NM , ECLAIREMENT 6.153 WATT/M2 14.413E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.0	0.268E-01	404.6	0.287E-01	408.2	0.362E-01	412.2	0.434E-01	418.4	0.498E-01
424.0	0.514E-01	427.9	0.508E-01	431.1	0.508E-01	434.5	0.550E-01	439.6	0.597E-01
445.3	0.623E-01	449.1	0.624E-01	453.7	0.627E-01	458.4	0.669E-01	462.5	0.696E-01
469.9	0.717E-01	477.4	0.741E-01	480.2	0.707E-01	484.2	0.637E-01	489.0	0.580E-01
493.8	0.536E-01	496.9	0.456E-01	502.7	0.299E-01	507.1	0.176E-01	509.7	0.127E-01
513.3	0.103E-01	520.3	0.986E-02	531.4	0.815E-02	539.5	0.593E-02	558.2	0.

STATION 2 EXP 2 PROF 100

MAXIMUM A LAMDA= 476.9 AVEC ECLAIREMENT SPECTRAL= 0.01619 WATT/M2/NM

ENTRE 402.3 NM ET 559.8 NM , ECLAIREMENT 1.117 WATT/M2 2.639E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.3	0.364E-02	405.7	0.403E-02	409.4	0.505E-02	415.4	0.615E-02	421.9	0.711E-02
424.5	0.733E-02	429.5	0.750E-02	432.4	0.764E-02	435.9	0.855E-02	441.4	0.950E-02
444.9	0.991E-02	449.0	0.100E-01	451.4	0.108E-01	455.8	0.125E-01	459.8	0.141E-01
463.7	0.147E-01	472.0	0.157E-01	476.9	0.162E-01	482.3	0.150E-01	484.7	0.143E-01
487.5	0.138E-01	491.4	0.119E-01	495.3	0.963E-02	501.5	0.695E-02	505.3	0.434E-02
509.2	0.244E-02	515.0	0.176E-02	529.7	0.141E-02	545.6	0.453E-03	559.8	0.

STATION 2 EXP 2 PROF 120

MAXIMUM A LAMDA= 476.2 AVEC ECLAIREMENT SPECTRAL= 0.00467 WATT/M2/NM

ENTRE 403.5 NM ET 551.6 NM , ECLAIREMENT 0.307 WATT/M2 0.731E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.5	0.743E-03	408.0	0.953E-03	413.0	0.119E-02	417.9	0.137E-02	422.1	0.154E-02
426.3	0.159E-02	430.1	0.183E-02	432.5	0.210E-02	438.6	0.224E-02	446.2	0.245E-02
450.7	0.266E-02	452.5	0.303E-02	455.1	0.338E-02	457.3	0.378E-02	461.0	0.416E-02
466.9	0.447E-02	472.5	0.462E-02	476.2	0.467E-02	478.7	0.466E-02	481.3	0.451E-02
482.9	0.444E-02	485.4	0.441E-02	489.3	0.419E-02	492.5	0.363E-02	496.0	0.298E-02
499.5	0.245E-02	501.9	0.210E-02	505.4	0.152E-02	508.2	0.939E-03	510.5	0.574E-03
516.8	0.453E-03	530.2	0.350E-03	551.6	0.				



STATION 2 EXP 2 PROF 150

MAXIMUM A LAMDA= 478.6 AVEC ECLAIREMENT SPECTRAL= 0.00117 WATT/M2/NM

ENTRE 407.9 NM ET 558.0 NM , ECLAIREMENT 0.068 WATT/M2 0.162E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.9	0.117E-03	418.1	0.192E-03	428.0	0.297E-03	431.9	0.309E-03	439.9	0.434E-03
446.2	0.520E-03	448.3	0.549E-03	454.6	0.623E-03	458.7	0.748E-03	463.2	0.902E-03
469.2	0.106E-02	471.5	0.108E-02	473.7	0.112E-02	478.6	0.117E-02	480.2	0.116E-02
481.8	0.114E-02	483.1	0.113E-02	484.8	0.112E-02	486.7	0.112E-02	492.6	0.102E-02
494.9	0.933E-03	496.6	0.823E-03	499.3	0.686E-03	500.6	0.561E-03	503.7	0.407E-03
510.3	0.153E-03	515.8	0.105E-03	537.3	0.690E-04	558.0	0.		

STATION 3 EXP 2 PROF 0

MAXIMUM A LAMDA= 480.1 AVEC ECLAIREMENT SPECTRAL= 0.85559 WATT/M2/NM

ENTRE 401.2 NM ET 700.0 NM , ECLAIREMENT 212.117 WATT/M2 590.730E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.391E 00	403.3	0.465E 00	408.5	0.540E 00	412.1	0.620E 00	416.3	0.668E 00
422.4	0.680E 00	426.0	0.667E 00	428.8	0.648E 00	431.5	0.637E 00	435.3	0.686E 00
440.8	0.735E 00	449.2	0.810E 00	455.5	0.827E 00	461.5	0.842E 00	464.7	0.838E 00
468.7	0.825E 00	472.4	0.834E 00	480.1	0.856E 00	483.6	0.816E 00	485.6	0.791E 00
487.8	0.791E 00	491.5	0.819E 00	494.7	0.804E 00	499.1	0.781E 00	507.2	0.794E 00
513.7	0.741E 00	518.7	0.755E 00	529.6	0.766E 00	537.1	0.736E 00	553.2	0.761E 00
556.4	0.732E 00	566.5	0.709E 00	576.0	0.713E 00	580.1	0.733E 00	590.9	0.667E 00
605.0	0.707E 00	610.1	0.678E 00	620.1	0.684E 00	627.5	0.657E 00	637.8	0.681E 00
656.0	0.637E 00	662.0	0.685E 00	679.3	0.693E 00	682.1	0.685E 00	687.8	0.551E 00
692.0	0.517E 00	695.2	0.507E 00	700.0	0.568E 00	709.3	0.674E 00	715.1	0.511E 00
724.1	0.517E 00	733.2	0.564E 00						

STATION 3 EXP 2 PROF 15

MAXIMUM A LAMDA= 481.5 AVEC ECLAIREMENT SPECTRAL= 0.78804 WATT/M2/NM

ENTRE 401.1 NM ET 600.7 NM , ECLAIREMENT 99.544 WATT/M2 243.600E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.1	0.380E 00	404.7	0.418E 00	407.7	0.500E 00	412.6	0.574E 00	419.5	0.612E 00
423.4	0.623E 00	426.9	0.608E 00	430.9	0.588E 00	436.8	0.641E 00	438.8	0.653E 00
447.8	0.732E 00	451.6	0.738E 00	457.6	0.769E 00	465.7	0.746E 00	468.1	0.750E 00
470.8	0.782E 00	476.0	0.783E 00	481.5	0.788E 00	485.8	0.733E 00	487.6	0.725E 00
491.6	0.734E 00	498.0	0.665E 00	501.3	0.658E 00	511.1	0.505E 00	514.2	0.478E 00
529.3	0.471E 00	534.6	0.433E 00	546.2	0.368E 00	551.2	0.357E 00	553.5	0.325E 00
573.0	0.217E 00	578.6	0.172E 00	587.6	0.788E-01	600.7	0.		

STATION 3 EXP 2 PROF 20

MAXIMUM A LAMDA= 478.0 AVEC ECLAIREMENT SPECTRAL= 0.67029 WATT/M2/NM

ENTRE 401.7 NM ET 598.1 NM , ECLAIREMENT 79.015 WATT/M2 191.835E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.332E 00	404.4	0.353E 00	408.0	0.424E 00	412.6	0.477E 00	416.5	0.513E 00
423.6	0.521E 00	428.3	0.497E 00	431.4	0.497E 00	436.0	0.545E 00	442.0	0.568E 00
447.2	0.619E 00	455.6	0.629E 00	461.5	0.658E 00	469.6	0.648E 00	478.0	0.670E 00
483.2	0.613E 00	488.3	0.617E 00	493.8	0.580E 00	497.8	0.564E 00	510.1	0.373E 00
513.8	0.352E 00	519.4	0.358E 00	527.5	0.353E 00	546.4	0.249E 00	553.2	0.237E 00
575.2	0.117E 00	578.5	0.105E 00	582.4	0.576E-01	598.1	0.		

STATION 3 EXP 2 PROF 30

MAXIMUM A LAMDA= 479.7 AVEC ECLAIREMENT SPECTRAL= 0.47683 WATT/M2/NM

ENTRE 401.1 NM ET 587.5 NM , ECLAIREMENT 51.104 WATT/M2 122.409E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.1	0.218E 00	405.2	0.244E 00	406.7	0.289E 00	411.1	0.332E 00	415.9	0.359E 00
423.3	0.366E 00	427.6	0.350E 00	430.7	0.351E 00	434.4	0.380E 00	441.4	0.416E 00
448.8	0.433E 00	454.5	0.442E 00	460.2	0.466E 00	468.1	0.463E 00	479.7	0.477E 00
482.3	0.454E 00	484.6	0.437E 00	490.8	0.425E 00	496.3	0.386E 00	500.6	0.343E 00
503.9	0.288E 00	508.7	0.217E 00	513.3	0.184E 00	523.7	0.195E 00	529.0	0.185E 00
543.5	0.125E 00	548.2	0.108E 00	564.2	0.715E-01	570.0	0.610E-01	575.0	0.362E-01
587.5	0.								

STATION 3 EXP 2 PROF 50

MAXIMUM A LAMDA= 480.1 AVEC ECLAIREMENT SPECTRAL= 0.24773 WATT/M2/NM

ENTRE 401.9 NM ET 581.3 NM , ECLAIREMENT 22.980 WATT/M2 54.384E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.105E 00	405.1	0.112E 00	408.1	0.138E 00	412.6	0.159E 00	419.7	0.176E 00
424.2	0.181E 00	429.3	0.173E 00	431.5	0.174E 00	435.2	0.189E 00	440.5	0.204E 00
445.8	0.212E 00	449.9	0.212E 00	453.1	0.216E 00	460.9	0.233E 00	466.5	0.235E 00
473.3	0.243E 00	480.1	0.248E 00	485.5	0.225E 00	490.0	0.216E 00	495.6	0.186E 00
500.4	0.156E 00	503.6	0.115E 00	507.4	0.795E-01	512.6	0.629E-01	528.8	0.577E-01
532.5	0.486E-01	539.9	0.396E-01	547.9	0.258E-01	558.5	0.181E-01	581.3	0.

STATION 3 EXP 2 PROF 80

MAXIMUM A LAMDA= 476.8 AVEC ECLAIREMENT SPECTRAL= 0.06823 WATT/M2/NM

ENTRE 403.4 NM ET 568.1 NM , ECLAIREMENT 5.265 WATT/M2 12.424E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.4	0.219E-01	406.0	0.245E-01	407.5	0.295E-01	412.9	0.343E-01	419.6	0.381E-01
424.0	0.392E-01	427.6	0.379E-01	430.6	0.386E-01	433.3	0.411E-01	438.6	0.452E-01
444.8	0.475E-01	453.1	0.495E-01	457.0	0.543E-01	461.5	0.594E-01	467.5	0.625E-01
473.4	0.671E-01	476.8	0.682E-01	479.2	0.661E-01	481.4	0.629E-01	484.6	0.606E-01
488.6	0.593E-01	492.7	0.542E-01	496.4	0.455E-01	501.4	0.345E-01	504.9	0.232E-01
507.6	0.145E-01	510.7	0.113E-01	516.2	0.962E-02	529.8	0.860E-02	541.8	0.471E-02
547.9	0.287E-02	568.1	0.						

STATION 3 EXP 2 PROF 100

MAXIMUM A LAMDA= 480.7 AVEC ECLAIREMENT SPECTRAL= 0.02153 WATT/M2/NM

ENTRE 402.9 NM ET 562.4 NM , ECLAIREMENT 1.539 WATT/M2 3.654E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.499E-02	405.7	0.532E-02	408.4	0.665E-02	411.7	0.814E-02	416.8	0.911E-02
422.9	0.975E-02	426.9	0.982E-02	431.7	0.999E-02	434.9	0.110E-01	441.0	0.118E-01
449.3	0.129E-01	454.3	0.135E-01	458.4	0.155E-01	461.8	0.174E-01	467.5	0.191E-01
475.5	0.211E-01	480.7	0.215E-01	484.5	0.203E-01	489.4	0.201E-01	492.7	0.185E-01
495.4	0.162E-01	497.7	0.142E-01	499.5	0.130E-01	502.0	0.125E-01	504.1	0.101E-01
507.7	0.687E-02	510.9	0.400E-02	514.8	0.297E-02	519.4	0.263E-02	526.4	0.260E-02
530.0	0.237E-02	540.3	0.114E-02	546.6	0.517E-03	562.4	0.		

STATION 3 EXP 2 PROF 120

MAXIMUM A LAMDA= 476.0 AVEC ECLAIREMENT SPECTRAL= 0.00780 WATT/M2/NM

ENTRE 400.4 NM ET 553.1 NM , ECLAIREMENT 0.514 WATT/M2 1.218E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.4	0.113E-02	404.1	0.143E-02	406.8	0.182E-02	411.1	0.229E-02	418.9	0.271E-02
424.6	0.308E-02	430.7	0.307E-02	435.9	0.367E-02	453.1	0.452E-02	456.0	0.499E-02
459.8	0.586E-02	464.3	0.659E-02	470.1	0.724E-02	476.0	0.780E-02	477.9	0.780E-02
480.9	0.740E-02	487.9	0.723E-02	491.5	0.704E-02	494.5	0.639E-02	496.9	0.547E-02
499.7	0.410E-02	502.5	0.311E-02	505.7	0.181E-02	508.8	0.115E-02	514.3	0.670E-03
519.9	0.741E-03	528.9	0.593E-03	535.4	0.359E-03	553.1	0.		

STATION 3 EXP 2 PROF 150

MAXIMUM A LAMDA= 478.3 AVEC ECLAIREMENT SPECTRAL= 0.00240 WATT/M2/NM

ENTRE 401.8 NM ET 545.9 NM , ECLAIREMENT 0.136 WATT/M2 0.323E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.208E-03	410.0	0.354E-03	420.7	0.568E-03	430.0	0.714E-03	434.6	0.869E-03
443.5	0.109E-02	453.1	0.125E-02	457.4	0.149E-02	461.4	0.178E-02	467.7	0.211E-02
471.3	0.223E-02	478.3	0.240E-02	483.3	0.228E-02	487.2	0.220E-02	489.7	0.196E-02
493.5	0.158E-02	495.4	0.137E-02	498.2	0.119E-02	500.7	0.965E-03	504.0	0.707E-03
508.3	0.256E-03	511.5	0.156E-03	529.4	0.108E-03	545.9	0.		

STATION 4 EXP 1 PROF 0

MAXIMUM A LAMDA= 456.2 AVEC ECLAIREMENT SPECTRAL= 1.62768 WATT/M2/NM

ENTRE 400.4 NM ET 700.0 NM , ECLAIREMENT 370.547 WATT/M2 1018.500E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.4	0.705E 00	404.9	0.102E 01	410.1	0.117E 01	413.0	0.125E 01	416.8	0.135E 01
423.5	0.138E 01	427.3	0.134E 01	430.6	0.127E 01	434.3	0.125E 01	439.9	0.135E 01
441.9	0.140E 01	453.0	0.160E 01	456.2	0.163E 01	458.2	0.162E 01	462.6	0.160E 01
467.5	0.154E 01	471.9	0.153E 01	474.7	0.158E 01	476.1	0.158E 01	482.1	0.146E 01
484.2	0.146E 01	487.3	0.147E 01	491.9	0.146E 01	496.1	0.141E 01	503.3	0.143E 01
507.3	0.138E 01	513.6	0.132E 01	519.3	0.137E 01	524.5	0.138E 01	529.7	0.138E 01
537.8	0.131E 01	554.2	0.131E 01	561.8	0.126E 01	569.1	0.123E 01	578.8	0.125E 01
584.8	0.113E 01	588.4	0.109E 01	597.9	0.115E 01	604.0	0.119E 01	611.6	0.113E 01
618.3	0.113E 01	625.9	0.108E 01	637.4	0.108E 01	645.6	0.101E 01	655.7	0.959E 00
662.2	0.104E 01	680.1	0.973E 00	682.7	0.884E 00	700.0	0.897E 00	713.8	0.589E 00
728.5	0.553E 00	730.1	0.674E 00	742.0	0.692E 00				

STATION 4 EXP 1 PROF 20

MAXIMUM A LAMDA= 475.8 AVEC ECLAIREMENT SPECTRAL= 0.97441 WATT/M2/NM

ENTRE 402.5 NM ET 604.0 NM , ECLAIREMENT 114.009 WATT/M2 277.200E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.5	0.513E 00	404.1	0.530E 00	406.6	0.584E 00	410.1	0.654E 00	418.0	0.746E 00
420.9	0.752E 00	423.1	0.768E 00	425.3	0.763E 00	428.8	0.740E 00	431.1	0.729E 00
433.5	0.742E 00	435.0	0.765E 00	440.2	0.801E 00	443.7	0.838E 00	446.7	0.894E 00
453.3	0.911E 00	458.2	0.909E 00	463.4	0.969E 00	464.9	0.969E 00	468.6	0.936E 00
471.3	0.929E 00	475.8	0.974E 00	480.0	0.919E 00	483.1	0.849E 00	486.0	0.865E 00
488.9	0.871E 00	491.5	0.859E 00	497.7	0.794E 00	503.4	0.705E 00	507.5	0.594E 00
511.2	0.523E 00	513.9	0.494E 00	520.3	0.512E 00	523.3	0.502E 00	530.2	0.491E 00
535.0	0.435E 00	539.3	0.418E 00	542.3	0.406E 00	546.8	0.366E 00	553.1	0.351E 00
556.3	0.323E 00	579.0	0.154E 00	585.6	0.731E-01	588.5	0.507E-01	604.0	0.

STATION 4 EXP 1 PROF 30

MAXIMUM A LAMDA= 480.2 AVEC ECLAIREMENT SPECTRAL= 0.73820 WATT/M2/NM

ENTRE 401.0 NM ET 597.3 NM , ECLAIREMENT 79.571 WATT/M2 191.100E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.0	0.344E 00	404.6	0.373E 00	407.8	0.444E 00	412.1	0.500E 00	415.4	0.534E 00
420.6	0.555E 00	425.4	0.558E 00	429.0	0.537E 00	432.2	0.538E 00	436.4	0.584E 00
442.6	0.633E 00	448.3	0.665E 00	455.1	0.678E 00	462.0	0.704E 00	468.3	0.708E 00
476.2	0.735E 00	480.2	0.738E 00	484.5	0.693E 00	486.4	0.669E 00	491.8	0.667E 00
495.2	0.629E 00	498.8	0.560E 00	502.2	0.523E 00	507.5	0.375E 00	511.9	0.312E 00
515.6	0.309E 00	518.6	0.312E 00	529.7	0.290E 00	539.3	0.233E 00	549.0	0.176E 00
551.8	0.172E 00	575.6	0.657E-01	582.7	0.244E-01	597.3	0.		

STATION 4 EXP 1 PROF 49

MAXIMUM A LAMDA= 475.6 AVEC ECLAIREMENT SPECTRAL= 0.39686 WATT/M2/NM

ENTRE 401.1 NM ET 585.3 NM , ECLAIREMENT 36.882 WATT/M2 87.465E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.1	0.158E 00	404.5	0.177E 00	407.6	0.212E 00	412.0	0.246E 00	417.5	0.266E 00
422.9	0.277E 00	427.8	0.268E 00	430.7	0.267E 00	436.7	0.300E 00	446.5	0.336E 00
454.5	0.345E 00	460.7	0.368E 00	463.0	0.373E 00	469.2	0.380E 00	475.6	0.397E 00
479.5	0.383E 00	482.3	0.355E 00	485.7	0.347E 00	493.1	0.299E 00	498.4	0.266E 00
502.8	0.219E 00	507.1	0.148E 00	510.7	0.119E 00	514.6	0.111E 00	527.3	0.106E 00
547.2	0.496E-01	585.3	0.						



STATION 4 EXP 1 PROF 76

MAXIMUM A LAMDA= 476.6 AVEC ECLAIREMENT SPECTRAL= 0.10408 WATT/M2/NM

ENTRE 431.7 NM ET 572.7 NM , ECLAIREMENT 8.090 WATT/M2 19.215E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.308E-01	404.1	0.306E-01	408.3	0.378E-01	411.7	0.433E-01	415.1	0.475E-01
419.3	0.511E-01	424.7	0.534E-01	429.2	0.537E-01	432.4	0.567E-01	435.5	0.614E-01
442.2	0.682E-01	448.5	0.716E-01	454.7	0.750E-01	462.7	0.898E-01	469.7	0.965E-01
476.6	0.104E 00	479.3	0.103E 00	482.3	0.960E-01	485.9	0.944E-01	490.3	0.861E-01
493.8	0.743E-01	497.1	0.681E-01	501.8	0.551E-01	504.7	0.415E-01	507.6	0.290E-01
512.3	0.213E-01	529.0	0.188E-01	547.2	0.770E-02	572.7	0.		

STATION 4 EXP 1 PROF 94

MAXIMUM A LAMDA= 476.6 AVEC ECLAIREMENT SPECTRAL= 0.05259 WATT/M2/NM

ENTRE 401.1 NM ET 561.7 NM , ECLAIREMENT 3.809 WATT/M2 9.030E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.1	0.104E-01	404.7	0.117E-01	407.2	0.145E-01	412.9	0.182E-01	418.9	0.206E-01
422.8	0.223E-01	428.5	0.237E-01	431.0	0.260E-01	434.2	0.292E-01	442.2	0.311E-01
448.6	0.335E-01	451.7	0.362E-01	457.2	0.440E-01	461.4	0.470E-01	463.4	0.481E-01
469.3	0.492E-01	476.6	0.526E-01	479.6	0.520E-01	482.5	0.485E-01	486.1	0.475E-01
491.9	0.408E-01	493.7	0.400E-01	499.6	0.320E-01	503.9	0.227E-01	507.0	0.127E-01
509.7	0.862E-02	513.6	0.747E-02	529.5	0.599E-02	545.0	0.237E-02	561.7	0.

STATION 4 EXP 1 PROF 115

MAXIMUM A LAMDA= 477.5 AVEC ECLAIREMENT SPECTRAL= 0.02439 WATT/M2/NM

ENTRE 402.3 NM ET 557.3 NM , ECLAIREMENT 1.596 WATT/M2 3.780E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.8	0.429E-02	408.7	0.576E-02	413.3	0.693E-02	420.9	0.844E-02	426.1	0.881E-02
430.1	0.103E-01	433.9	0.122E-01	437.2	0.129E-01	443.5	0.132E-01	448.9	0.140E-01
452.4	0.156E-01	455.9	0.182E-01	458.8	0.204E-01	464.7	0.223E-01	470.6	0.235E-01
477.5	0.244E-01	480.8	0.233E-01	482.2	0.227E-01	485.2	0.225E-01	489.3	0.203E-01
491.6	0.180E-01	493.9	0.154E-01	497.6	0.120E-01	502.1	0.988E-02	504.3	0.820E-02
506.5	0.520E-02	508.7	0.322E-02	513.3	0.234E-02	525.2	0.210E-02	527.9	0.200E-02
540.9	0.805E-03	557.3	0.						

STATION 4 EXP 1 PROF 140

MAXIMUM A LAMDA= 477.6 AVEC ECLAIREMENT SPECTRAL= 0.00931 WATT/M2/NM

ENTRE 400.9 NM ET 553.6 NM , ECLAIREMENT 0.544 WATT/M2 1.291E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.773E-03	417.6	0.202E-02	426.0	0.220E-02	429.3	0.263E-02	434.0	0.355E-02
438.9	0.414E-02	450.0	0.517E-02	453.6	0.602E-02	458.2	0.744E-02	464.4	0.829E-02
474.1	0.918E-02	475.8	0.919E-02	477.6	0.931E-02	480.3	0.895E-02	483.1	0.865E-02
486.2	0.838E-02	488.9	0.751E-02	492.6	0.631E-02	495.7	0.490E-02	497.7	0.393E-02
502.3	0.294E-02	505.0	0.185E-02	508.0	0.107E-02	511.9	0.633E-03	519.5	0.503E-03
529.7	0.410E-03	553.6	0.						

STATION 5 EXP 1 PROF 0

MAXIMUM A LAMDA= 479.4 AVEC ECLAIREMENT SPECTRAL= 1.32052 WATT/M2/NM

ENTRE 401.5 NM ET 700.0 NM , ECLAIREMENT 327.407 WATT/M2 910.830E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.646E 00	405.6	0.697E 00	408.0	0.864E 00	412.7	0.969E 00	418.5	0.101E 01
424.1	0.102E 01	427.4	0.994E 00	431.5	0.980E 00	435.2	0.105E 01	450.5	0.126E 01
457.0	0.128E 01	462.1	0.131E 01	468.9	0.128E 01	474.3	0.130E 01	479.4	0.132E 01
482.2	0.131E 01	484.1	0.126E 01	486.5	0.124E 01	490.0	0.125E 01	494.0	0.129E 01
500.0	0.125E 01	510.5	0.125E 01	515.7	0.118E 01	519.8	0.118E 01	521.0	0.120E 01
534.4	0.121E 01	541.8	0.118E 01	552.8	0.119E 01	556.6	0.114E 01	576.2	0.112E 01
581.4	0.113E 01	586.6	0.102E 01	591.3	0.101E 01	605.2	0.109E 01	612.1	0.104E 01
618.8	0.105E 01	629.4	0.101E 01	639.5	0.104E 01	655.8	0.936E 00	661.5	0.102E 01
680.9	0.979E 00	684.8	0.848E 00	700.0	0.896E 00	708.9	0.890E 00	715.2	0.629E 00
727.9	0.588E 00	732.9	0.747E 00	742.0	0.761E 00				

STATION 5 EXP 1 PROF 10

MAXIMUM A LAMDA= 483.2 AVEC ECLAIREMENT SPECTRAL= 0.75899 WATT/M2/NM

ENTRE 410.3 NM ET 645.2 NM , ECLAIREMENT 108.009 WATT/M2 276.066E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
410.3	0.374E 00	412.9	0.409E 00	416.6	0.452E 00	423.9	0.469E 00	428.8	0.455E 00
432.1	0.458E 00	435.8	0.481E 00	438.9	0.523E 00	450.2	0.638E 00	457.4	0.655E 00
463.1	0.698E 00	471.0	0.701E 00	481.1	0.751E 00	483.2	0.759E 00	488.3	0.711E 00
492.7	0.732E 00	494.8	0.730E 00	501.3	0.688E 00	508.5	0.684E 00	517.1	0.588E 00
519.4	0.584E 00	532.3	0.615E 00	536.9	0.605E 00	549.0	0.572E 00	552.9	0.545E 00
555.3	0.546E 00	585.5	0.351E 00	591.7	0.231E 00	599.6	0.146E 00	609.7	0.706E-01
623.9	0.592E-01	645.2	0.						

STATION 5 EXP 1 PROF 14

MAXIMUM A LAMDA= 485.6 AVEC ECLAIREMENT SPECTRAL= 0.60203 WATT/M2/NM

ENTRE 406.5 NM ET 620.1 NM , ECLAIREMENT 79.966 WATT/M2 201.885E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
406.5	0.240E 00	412.0	0.311E 00	421.5	0.336E 00	424.1	0.334E 00	429.9	0.331E 00
432.9	0.345E 00	436.9	0.397E 00	448.5	0.486E 00	453.3	0.497E 00	455.8	0.512E 00
460.3	0.540E 00	465.9	0.546E 00	469.2	0.557E 00	476.4	0.592E 00	479.1	0.596E 00
481.6	0.602E 00	485.8	0.575E 00	487.0	0.569E 00	491.9	0.590E 00	493.5	0.592E 00
500.3	0.555E 00	505.6	0.547E 00	509.3	0.516E 00	514.8	0.452E 00	517.8	0.445E 00
522.4	0.462E 00	535.5	0.455E 00	544.3	0.421E 00	554.3	0.373E 00	559.2	0.365E 00
576.6	0.265E 00	584.7	0.193E 00	589.3	0.126E 00	604.2	0.259E-01	620.1	0.

STATION 5 EXP 1 PROF 18

MAXIMUM A LAMDA= 483.6 AVEC ECLAIREMENT SPECTRAL= 0.43723 WATT/M2/NM

ENTRE 407.4 NM ET 612.0 NM , ECLAIREMENT 53.253 WATT/M2 134.277E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.4	0.121E 00	412.0	0.181E 00	421.2	0.215E 00	424.2	0.219E 00	432.0	0.216E 00
437.7	0.258E 00	442.8	0.296E 00	450.0	0.332E 00	455.8	0.345E 00	463.1	0.380E 00
472.9	0.401E 00	479.9	0.432E 00	483.6	0.437E 00	485.8	0.428E 00	488.8	0.417E 00
492.5	0.424E 00	494.2	0.427E 00	499.2	0.407E 00	501.7	0.395E 00	508.7	0.374E 00
511.7	0.341E 00	515.6	0.302E 00	518.2	0.292E 00	520.8	0.293E 00	524.4	0.303E 00
535.9	0.300E 00	548.2	0.264E 00	552.6	0.240E 00	559.7	0.226E 00	570.1	0.192E 00
580.2	0.143E 00	590.7	0.634E-01	600.6	0.232E-01	612.0	0.		

STATION 5 EXP 1 PROF 30

MAXIMUM A LAMDA= 483.7 AVEC ECLAIREMENT SPECTRAL= 0.21047 WATT/M2/NM

ENTRE 407.5 NM ET 606.2 NM , ECLAIREMENT 21.628 WATT/M2 53.805E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.5	0.570E-01	411.9	0.707E-01	414.1	0.707E-01	423.8	0.907E-01	429.5	0.911E-01
435.4	0.101E 00	440.9	0.120E 00	449.4	0.140E 00	454.6	0.155E 00	458.4	0.160E 00
463.8	0.177E 00	471.6	0.188E 00	478.8	0.204E 00	483.7	0.210E 00	488.3	0.202E 00
491.6	0.204E 00	494.2	0.206E 00	497.5	0.197E 00	498.8	0.192E 00	502.3	0.180E 00
508.5	0.166E 00	512.9	0.138E 00	516.7	0.115E 00	519.3	0.110E 00	523.1	0.113E 00
530.6	0.110E 00	536.2	0.110E 00	546.2	0.926E-01	555.0	0.699E-01	561.2	0.661E-01
563.5	0.608E-01	591.8	0.800E-02	606.2	0.				

STATION 5 EXP 1 PROF 52

MAXIMUM A LAMDA= 483.7 AVEC ECLAIREMENT SPECTRAL= 0.09458 WATT/M2/NM

ENTRE 407.6 NM ET 592.2 NM , ECLAIREMENT 7.708 WATT/M2 19.062E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.6	0.138E-01	410.2	0.145E-01	413.8	0.198E-01	421.3	0.271E-01	430.8	0.333E-01
435.9	0.329E-01	438.1	0.344E-01	441.6	0.410E-01	447.0	0.457E-01	452.1	0.512E-01
455.9	0.567E-01	461.3	0.625E-01	467.1	0.732E-01	476.3	0.832E-01	483.7	0.946E-01
485.8	0.946E-01	488.6	0.920E-01	491.7	0.928E-01	494.3	0.921E-01	501.5	0.787E-01
503.3	0.768E-01	508.3	0.670E-01	512.0	0.545E-01	514.6	0.404E-01	518.9	0.347E-01
522.3	0.348E-01	524.7	0.354E-01	535.3	0.335E-01	552.5	0.188E-01	560.4	0.152E-01
584.2	0.312E-02	592.2	0.						

STATION 5 EXP 1 PROF 84

MAXIMUM A LAMDA= 491.8 AVEC ECLAIREMENT SPECTRAL= 0.01788 WATT/M2/NM

ENTRE 408.6 NM ET 584.0 NM , ECLAIREMENT 1.163 WATT/M2 2.864E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
408.6	0.894E-03	411.5	0.965E-03	424.1	0.238E-02	433.8	0.343E-02	438.5	0.497E-02
443.8	0.631E-02	456.1	0.897E-02	459.8	0.104E-01	464.1	0.127E-01	470.7	0.145E-01
477.3	0.165E-01	482.4	0.176E-01	487.9	0.175E-01	491.8	0.179E-01	495.2	0.174E-01
500.1	0.146E-01	509.0	0.102E-01	511.1	0.822E-02	514.1	0.586E-02	517.2	0.424E-02
520.7	0.393E-02	534.2	0.366E-02	536.5	0.347E-02	554.1	0.125E-02	571.3	0.429E-03
584.0	0.								

STATION 5 EXP 1 PROF 104

MAXIMUM A LAMDA= 491.9 AVEC ECLAIREMENT SPECTRAL= 0.00773 WATT/M2/NM

ENTRE 406.8 NM ET 585.0 NM , ECLAIREMENT 0.434 WATT/M2 1.070E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
406.8	0.147E-03	417.3	0.371E-03	424.0	0.556E-03	431.6	0.912E-03	435.3	0.935E-03
439.5	0.133E-02	447.1	0.204E-02	453.8	0.261E-02	457.0	0.318E-02	461.1	0.430E-02
464.5	0.508E-02	472.9	0.635E-02	480.7	0.671E-02	485.6	0.754E-02	487.6	0.757E-02
489.3	0.770E-02	490.4	0.769E-02	491.9	0.773E-02	494.7	0.757E-02	497.0	0.710E-02
501.0	0.596E-02	503.7	0.536E-02	506.6	0.478E-02	509.8	0.377E-02	511.9	0.267E-02
516.9	0.137E-02	520.4	0.120E-02	525.4	0.122E-02	534.2	0.108E-02	555.0	0.278E-03
563.0	0.178E-03	576.1	0.850E-04	585.0	0.				

STATION 5 EXP 1 PROF 126

MAXIMUM  $\lambda$  LAMDA= 493.8 AVEC ECLAIREMENT SPECTRAL= 0.00413 WATT/M2/NM

ENTRE 410.7 NM ET 565.7 NM , ECLAIREMENT 0.201 WATT/M2 0.498E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
410.7	0.372E-04	429.0	0.116E-03	431.3	0.289E-03	435.6	0.343E-03	439.9	0.520E-03
451.0	0.987E-03	455.0	0.122E-02	459.9	0.147E-02	463.4	0.189E-02	470.0	0.258E-02
475.2	0.303E-02	477.7	0.331E-02	479.1	0.351E-02	482.4	0.370E-02	484.6	0.381E-02
487.6	0.405E-02	490.7	0.408E-02	493.8	0.413E-02	495.7	0.405E-02	500.1	0.363E-02
502.9	0.320E-02	505.8	0.268E-02	508.3	0.211E-02	510.5	0.149E-02	513.1	0.875E-03
517.0	0.516E-03	522.5	0.429E-03	534.4	0.388E-03	539.4	0.285E-03	543.1	0.248E-03
549.4	0.153E-03	552.8	0.784E-04	565.7	0.				

STATION 6 EXP 1 PROF 0

MAXIMUM A LAMDA= 481.9 AVEC ECLAIREMENT SPECTRAL= 1.45459 WATT/M2/NM

ENTRE 434.5 NM ET 700.0 NM , ECLAIREMENT 367.927 WATT/M2 1008.800E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.3	0.647E 00	407.3	0.740E 00	409.8	0.870E 00	412.1	0.101E 01	416.9	0.109E 01
422.7	0.113E 01	426.0	0.113E 01	431.1	0.128E 01	433.0	0.108E 01	438.3	0.118E 01
445.2	0.128E 01	452.5	0.139E 01	459.1	0.142E 01	465.3	0.143E 01	472.0	0.140E 01
475.7	0.142E 01	481.9	0.145E 01	483.6	0.143E 01	487.0	0.138E 01	489.0	0.138E 01
495.0	0.143E 01	497.9	0.144E 01	503.5	0.137E 01	511.7	0.135E 01	517.8	0.124E 01
521.2	0.122E 01	532.9	0.132E 01	536.5	0.134E 01	542.7	0.133E 01	548.3	0.136E 01
553.7	0.135E 01	557.8	0.130E 01	563.1	0.129E 01	568.5	0.129E 01	574.0	0.126E 01
582.3	0.128E 01	584.7	0.124E 01	588.3	0.114E 01	593.9	0.113E 01	602.3	0.116E 01
613.9	0.110E 01	621.7	0.117E 01	629.0	0.115E 01	642.2	0.118E 01	650.1	0.110E 01
657.7	0.108E 01	662.0	0.115E 01	682.4	0.114E 01	687.3	0.985E 00	700.0	0.104E 01
716.0	0.796E 00	729.0	0.719E 00	733.5	0.916E 00	744.0	0.973E 00		

STATION 6 EXP 1 PROF 9

MAXIMUM A LAMDA= 479.5 AVEC ECLAIREMENT SPECTRAL= 0.86895 WATT/M2/NM

ENTRE 404.6 NM ET 650.0 NM , ECLAIREMENT 122.650 WATT/M2 313.040E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.6	0.274E 00	407.4	0.291E 00	411.6	0.373E 00	415.4	0.434E 00	419.3	0.469E 00
426.3	0.503E 00	432.1	0.492E 00	434.0	0.500E 00	436.7	0.536E 00	442.0	0.592E 00
447.4	0.654E 00	452.6	0.731E 00	456.4	0.736E 00	463.5	0.787E 00	472.6	0.811E 00
476.3	0.836E 00	479.5	0.869E 00	481.9	0.852E 00	484.8	0.819E 00	491.4	0.847E 00
496.0	0.824E 00	504.6	0.810E 00	509.5	0.743E 00	514.8	0.681E 00	518.6	0.691E 00
520.0	0.705E 00	531.3	0.707E 00	535.6	0.695E 00	555.6	0.624E 00	568.3	0.552E 00
578.2	0.451E 00	583.6	0.381E 00	587.3	0.286E 00	601.5	0.110E 00	606.1	0.904E-01
620.8	0.478E-01	639.2	0.348E-01	650.0	0.				



STATION 6 EXP 1 PROF 14

MAXIMUM A LAMDA= 479.4 AVEC ECLAIREMENT SPECTRAL= 0.65158 WATT/M2/NM

ENTRE 404.5 NM ET 606.5 NM , ECLAIREMENT 82.966 WATT/M2 210.080E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.5	0.156E 00	407.1	0.174E 00	410.1	0.217E 00	414.6	0.265E 00	421.4	0.302E 00
426.2	0.321E 00	431.1	0.314E 00	433.6	0.315E 00	437.2	0.356E 00	443.1	0.403E 00
446.4	0.433E 00	449.2	0.479E 00	454.5	0.528E 00	461.6	0.577E 00	466.1	0.590E 00
472.0	0.597E 00	476.3	0.625E 00	479.4	0.652E 00	482.1	0.635E 00	483.2	0.622E 00
484.8	0.622E 00	489.4	0.642E 00	492.6	0.641E 00	498.3	0.603E 00	504.8	0.593E 00
508.6	0.562E 00	513.8	0.502E 00	517.0	0.498E 00	521.6	0.518E 00	532.7	0.518E 00
540.6	0.468E 00	552.0	0.419E 00	556.6	0.406E 00	568.7	0.345E 00	578.4	0.259E 00
586.6	0.136E 00	595.8	0.632E-01	606.5	0.				

STATION 6 EXP 1 PROF 18

MAXIMUM A LAMDA= 490.5 AVEC ECLAIREMENT SPECTRAL= 0.48372 WATT/M2/NM

ENTRE 404.0 NM ET 608.0 NM , ECLAIREMENT 56.659 WATT/M2 143.520E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.0	0.977E-01	407.5	0.105E 00	411.9	0.131E 00	417.4	0.184E 00	422.4	0.203E 00
429.5	0.216E 00	433.2	0.213E 00	437.9	0.212E 00	440.7	0.235E 00	443.1	0.259E 00
448.8	0.295E 00	456.8	0.352E 00	466.2	0.390E 00	469.5	0.409E 00	472.0	0.418E 00
476.3	0.452E 00	478.2	0.483E 00	480.5	0.484E 00	484.0	0.459E 00	487.8	0.472E 00
491.6	0.477E 00	497.8	0.452E 00	505.5	0.433E 00	509.7	0.389E 00	513.5	0.356E 00
516.9	0.351E 00	520.6	0.364E 00	532.3	0.367E 00	543.9	0.319E 00	549.7	0.290E 00
556.4	0.273E 00	563.7	0.250E 00	574.1	0.192E 00	581.5	0.128E 00	587.1	0.687E-01
593.1	0.377E-01	602.5	0.871E-02	608.0	0.				

STATION 6 EXP 1 PROF 29

MAXIMUM A LAMDA= 492.1 AVEC ECLAIREMENT SPECTRAL= 0.16624 WATT/M2/NM

ENTRE 408.0 NM ET 600.4 NM , ECLAIREMENT 16.200 WATT/M2 40.976E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
408.0	0.291E-01	411.3	0.337E-01	414.9	0.347E-01	417.2	0.402E-01	424.5	0.479E-01
428.0	0.504E-01	434.8	0.505E-01	439.4	0.564E-01	445.8	0.700E-01	454.8	0.969E-01
462.2	0.113E 00	464.2	0.114E 00	468.1	0.125E 00	473.2	0.133E 00	478.8	0.144E 00
483.7	0.162E 00	485.8	0.164E 00	488.6	0.160E 00	491.3	0.165E 00	492.1	0.166E 00
498.5	0.155E 00	504.9	0.148E 00	508.4	0.132E 00	511.3	0.115E 00	514.0	0.107E 00
517.2	0.108E 00	520.8	0.112E 00	531.9	0.112E 00	537.6	0.992E-01	548.8	0.788E-01
555.8	0.710E-01	566.0	0.569E-01	574.7	0.377E-01	576.5	0.298E-01	586.2	0.964E-02
600.4	0.								

STATION 6 EXP 1 PROF 47

MAXIMUM A LAMDA= 502.0 AVEC ECLAIREMENT SPECTRAL= 0.02500 WATT/M2/NM

ENTRE 407.1 NM ET 595.4 NM , ECLAIREMENT 2.273 WATT/M2 5.824E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.1	0.173E-02	410.2	0.243E-02	423.3	0.318E-02	428.7	0.343E-02	433.4	0.398E-02
439.4	0.523E-02	447.8	0.808E-02	457.0	0.115E-01	468.5	0.158E-01	474.5	0.182E-01
477.6	0.196E-01	482.2	0.200E-01	486.3	0.217E-01	491.6	0.241E-01	496.2	0.246E-01
502.0	0.250E-01	507.1	0.235E-01	510.0	0.202E-01	512.5	0.181E-01	515.4	0.176E-01
523.2	0.195E-01	532.6	0.191E-01	541.4	0.155E-01	549.7	0.119E-01	556.2	0.112E-01
564.0	0.943E-02	570.8	0.680E-02	580.3	0.250E-02	589.1	0.800E-03	595.4	0.

STATION 6 EXP 2 PROF 14

MAXIMUM A LAMDA= 489.9 AVFC ECLAIREMENT SPECTRAL= 0.38294 WATT/M2/NM

ENTRE 403.8 NM ET 614.2 NM , ECLAIREMENT 48.651 WATT/M2 123.585E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.8	0.904E-01	406.7	0.101E 00	410.8	0.127E 00	416.7	0.154E 00	426.2	0.177E 00
431.6	0.173E 00	434.3	0.178E 00	438.2	0.203E 00	446.7	0.239E 00	451.7	0.276E 00
453.1	0.285E 00	456.5	0.290E 00	464.9	0.322E 00	471.3	0.334E 00	475.6	0.352E 00
480.6	0.376E 00	481.8	0.381E 00	485.3	0.370E 00	487.5	0.372E 00	489.9	0.383E 00
497.7	0.379E 00	506.5	0.361E 00	511.5	0.313E 00	515.0	0.298E 00	517.5	0.296E 00
521.3	0.310E 00	533.1	0.312E 00	550.9	0.257E 00	556.4	0.248E 00	568.6	0.208E 00
578.3	0.156E 00	587.5	0.804E-01	593.4	0.433E-01	600.7	0.176E-01	614.2	0.

STATION 6 EXP 2 PROF 43

MAXIMUM A LAMDA= 493.9 AVEC ECLAIREMENT SPECTRAL= 0.00859 WATT/M2/NM

ENTRE 410.3 NM ET 597.9 NM , ECLAIREMENT 0.886 WATT/M2 2.254E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
410.3	0.180E-02	422.5	0.208E-02	430.4	0.212E-02	437.6	0.272E-02	444.9	0.366E-02
451.9	0.453E-02	457.3	0.510E-02	461.5	0.587E-02	470.4	0.676E-02	477.9	0.787E-02
479.5	0.807E-02	482.5	0.817E-02	485.2	0.806E-02	490.4	0.848E-02	493.9	0.859E-02
497.4	0.857E-02	504.3	0.845E-02	507.8	0.808E-02	510.2	0.734E-02	513.4	0.654E-02
515.9	0.619E-02	518.1	0.613E-02	522.9	0.654E-02	532.8	0.642E-02	539.1	0.554E-02
545.3	0.479E-02	551.1	0.412E-02	563.2	0.385E-02	567.9	0.345E-02	576.3	0.210E-02
586.4	0.653E-03	597.9	0.						

STATION 6 EXP 2 PROF 48

MAXIMUM A LAMDA= 501.9 AVEC ECLAIREMENT SPECTRAL= 0.00510 WATT/M2/NM

ENTRE 438.8 NM ET 600.4 NM , ECLAIREMENT 0.449 WATT/M2 1.161E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
408.8	0.357E-03	425.7	0.536E-03	426.7	0.536E-03	433.8	0.613E-03	441.3	0.949E-03
442.9	0.108E-02	444.9	0.113E-02	445.6	0.125E-02	447.8	0.131E-02	450.1	0.148E-02
452.4	0.156E-02	454.4	0.170E-02	456.3	0.189E-02	458.6	0.197E-02	460.2	0.214E-02
466.1	0.241E-02	470.1	0.272E-02	477.9	0.337E-02	480.5	0.355E-02	485.0	0.374E-02
491.5	0.447E-02	494.1	0.473E-02	501.9	0.510E-02	505.9	0.500E-02	510.2	0.444E-02
513.8	0.374E-02	516.0	0.366E-02	520.0	0.386E-02	523.6	0.410E-02	529.2	0.417E-02
532.2	0.409E-02	540.8	0.335E-02	547.9	0.272E-02	553.1	0.251E-02	558.1	0.242E-02
565.1	0.229E-02	575.0	0.139E-02	582.2	0.551E-03	589.9	0.970E-04	600.4	0.

STATION 7 EXP 1 PROF 10

MAXIMUM A LAMDA= 484.5 AVEC ECLAIREMENT SPECTRAL= 1.06683 WATT/M2/NM

ENTRE 404.4 NM ET 651.9 NM , ECLAIREMENT 148.289 WATT/M2 376.310E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.4	0.365E 00	407.8	0.394E 00	411.2	0.483E 00	416.1	0.577E 00	421.6	0.637E 00
425.6	0.651E 00	430.2	0.641E 00	431.6	0.623E 00	433.3	0.621E 00	438.0	0.677E 00
452.9	0.879E 00	456.7	0.890E 00	461.4	0.932E 00	463.9	0.954E 00	470.4	0.980E 00
474.0	0.101E 01	476.5	0.101E 01	479.0	0.104E 01	482.5	0.106E 01	484.5	0.107E 01
488.5	0.103E 01	490.2	0.103E 01	494.6	0.106E 01	496.4	0.107E 01	503.7	0.100E 01
509.7	0.981E 00	516.9	0.863E 00	519.8	0.850E 00	525.5	0.872E 00	530.1	0.868E 00
535.0	0.848E 00	542.9	0.789E 00	552.6	0.748E 00	558.1	0.696E 00	562.6	0.672E 00
566.5	0.634E 00	572.2	0.593E 00	577.4	0.506E 00	582.8	0.437E 00	586.9	0.317E 00
598.0	0.119E 00	603.3	0.725E-01	612.3	0.523E-01	651.9	0.		

STATION 7 EXP 1 PROF 15

MAXIMUM A LAMDA= 480.8 AVEC ECLAIREMENT SPECTRAL= 0.82792 WATT/M2/NM

ENTRE 402.7 NM ET 609.3 NM , ECLAIREMENT 106.558 WATT/M2 267.410E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.7	0.262E 00	406.2	0.295E 00	409.2	0.351E 00	413.1	0.411E 00	419.1	0.451E 00
423.5	0.470E 00	426.2	0.472E 00	430.5	0.459E 00	432.7	0.464E 00	436.9	0.511E 00
449.8	0.658E 00	452.1	0.671E 00	455.4	0.683E 00	462.1	0.740E 00	471.5	0.783E 00
479.0	0.825E 00	480.8	0.828E 00	484.5	0.791E 00	495.1	0.817E 00	498.0	0.801E 00
504.7	0.734E 00	508.9	0.678E 00	514.2	0.608E 00	516.2	0.605E 00	520.7	0.634E 00
524.7	0.637E 00	532.2	0.622E 00	545.8	0.538E 00	551.3	0.496E 00	562.4	0.424E 00
574.5	0.326E 00	582.9	0.229E 00	589.7	0.116E 00	596.6	0.530E-01	609.3	0.

STATION 7 EXP 1 PROF 32

MAXIMUM A LAMDA= 490.9 AVEC ECLAIREMENT SPECTRAL= 0.20843 WATT/M2/NM

ENTRE 404.2 NM ET 603.9 NM , ECLAIREMENT 21.693 WATT/M2 54.450E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.2	0.469E-01	407.0	0.484E-01	409.9	0.563E-01	421.4	0.648E-01	426.3	0.671E-01
432.1	0.761E-01	455.9	0.144E-00	458.5	0.154E-00	473.2	0.185E-00	477.0	0.198E-00
479.6	0.203E-00	485.2	0.199E-00	488.3	0.205E-00	490.9	0.208E-00	493.8	0.207E-00
498.0	0.196E-00	505.8	0.182E-00	509.0	0.156E-00	513.1	0.136E-00	515.8	0.131E-00
521.5	0.137E-00	533.0	0.136E-00	549.4	0.961E-01	556.2	0.861E-01	568.0	0.629E-01
575.0	0.444E-01	580.0	0.273E-01	588.1	0.792E-02	603.9	0.		

STATION 7 EXP 1 PROF 48

MAXIMUM A LAMDA= 490.7 AVEC ECLAIREMENT SPECTRAL= 0.06062 WATT/M2/NM

ENTRE 404.1 NM ET 590.7 NM , ECLAIREMENT 5.069 WATT/M2 12.705E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.1	0.576E-02	410.3	0.770E-02	420.2	0.101E-01	430.8	0.122E-01	435.1	0.162E-01
454.4	0.318E-01	458.4	0.376E-01	465.3	0.430E-01	472.2	0.496E-01	478.7	0.552E-01
482.8	0.553E-01	485.3	0.568E-01	487.6	0.588E-01	490.7	0.606E-01	495.6	0.577E-01
503.5	0.525E-01	508.9	0.399E-01	512.9	0.318E-01	515.6	0.309E-01	520.6	0.326E-01
530.8	0.327E-01	537.5	0.276E-01	543.2	0.244E-01	548.6	0.184E-01	556.7	0.156E-01
567.6	0.101E-01	581.8	0.255E-02	590.7	0.				

STATION 7 EXP 1 PROF 70

MAXIMUM A LAMDA= 491.4 AVEC ECLAIREMENT SPECTRAL= 0.01712 WATT/M2/NM

ENTRE 403.3 NM ET 589.7 NM , ECLAIREMENT 1.187 WATT/M2 2.977E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.3	0.428E-03	419.3	0.152E-02	428.2	0.161E-02	431.4	0.204E-02	436.9	0.342E-02
445.9	0.409E-02	448.8	0.462E-02	457.8	0.858E-02	468.1	0.118E-01	473.1	0.122E-01
480.4	0.146E-01	483.3	0.152E-01	489.0	0.170E-01	491.4	0.171E-01	496.5	0.165E-01
502.3	0.150E-01	505.2	0.139E-01	509.7	0.981E-02	513.2	0.760E-02	516.8	0.731E-02
520.4	0.765E-02	531.2	0.729E-02	548.0	0.351E-02	562.8	0.212E-02	580.0	0.325E-03
589.7	0.								

STATION 8 EXP 1 PROF 0

MAXIMUM A LAMDA= 481.2 AVEC ECLAIREMENT SPECTRAL= 1.08140 WATT/M2/NM

ENTRE 400.0 NM ET 700.0 NM , ECLAIREMENT 281.153 WATT/M2 787.640E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.334E 00	400.8	0.381E 00	401.8	0.454E 00	404.1	0.513E 00	406.5	0.585E 00
409.5	0.648E 00	411.9	0.688E 00	413.2	0.736E 00	414.9	0.784E 00	417.6	0.812E 00
420.9	0.833E 00	423.5	0.849E 00	424.8	0.840E 00	427.8	0.820E 00	430.1	0.797E 00
431.4	0.792E 00	432.7	0.793E 00	435.4	0.819E 00	437.3	0.859E 00	439.6	0.890E 00
443.7	0.944E 00	448.1	0.991E 00	450.8	0.102E 01	453.2	0.104E 01	455.3	0.105E 01
457.3	0.105E 01	461.4	0.106E 01	464.9	0.106E 01	466.6	0.107E 01	469.5	0.105E 01
471.8	0.105E 01	474.4	0.106E 01	478.1	0.107E 01	481.2	0.108E 01	483.5	0.107E 01
485.5	0.106E 01	487.5	0.102E 01	488.4	0.101E 01	489.6	0.102E 01	493.7	0.104E 01
496.4	0.105E 01	499.9	0.105E 01	504.7	0.102E 01	506.4	0.101E 01	509.1	0.102E 01
512.9	0.104E 01	514.6	0.103E 01	516.2	0.102E 01	519.7	0.992E 00	520.9	0.981E 00
522.5	0.979E 00	525.3	0.101E 01	527.2	0.101E 01	530.0	0.101E 01	534.7	0.101E 01
537.8	0.103E 01	542.3	0.101E 01	545.9	0.100E 01	551.6	0.102E 01	554.6	0.102E 01
563.3	0.102E 01	564.9	0.101E 01	568.6	0.100E 01	574.5	0.980E 00	581.1	0.970E 00
583.4	0.967E 00	587.7	0.992E 00	589.3	0.992E 00	591.7	0.970E 00	593.3	0.911E 00
595.3	0.872E 00	597.0	0.868E 00	600.1	0.873E 00	605.2	0.925E 00	609.2	0.955E 00
613.3	0.981E 00	617.7	0.953E 00	622.4	0.953E 00	626.8	0.961E 00	631.2	0.935E 00
634.6	0.913E 00	639.0	0.926E 00	645.8	0.938E 00	649.1	0.898E 00	653.3	0.856E 00
657.5	0.840E 00	662.2	0.837E 00	664.4	0.854E 00	668.5	0.906E 00	673.2	0.889E 00
681.3	0.888E 00	687.1	0.917E 00	689.2	0.868E 00	692.9	0.784E 00	698.7	0.772E 00
700.0	0.766E 00	711.8	0.745E 00	715.6	0.785E 00	718.2	0.670E 00	722.3	0.500E 00
727.0	0.466E 00	732.3	0.428E 00	734.0	0.431E 00				

STATION 8 EXP 1 PROF 5

MAXIMUM A LAMDA= 435.1 AVEC ECLAIREMENT SPECTRAL= 0.74564 WATT/M2/NM

ENTRE 400.0 NM ET 698.2 NM , ECLAIREMENT 117.398 WATT/M2 303.688E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.134E 00	400.8	0.149E 00	402.6	0.206E 00	404.6	0.248E 00	405.8	0.268E 00
407.0	0.273E 00	408.4	0.300E 00	410.4	0.344E 00	412.1	0.375E 00	415.2	0.401E 00
418.5	0.427E 00	422.2	0.438E 00	424.7	0.448E 00	426.9	0.458E 00	428.6	0.456E 00
431.3	0.447E 00	433.0	0.441E 00	434.1	0.438E 00	435.0	0.450E 00	436.6	0.473E 00
438.4	0.493E 00	441.1	0.524E 00	444.9	0.557E 00	447.8	0.585E 00	449.8	0.607E 00
451.6	0.626E 00	453.1	0.646E 00	454.5	0.653E 00	457.1	0.658E 00	459.2	0.661E 00
461.2	0.673E 00	462.9	0.684E 00	465.5	0.690E 00	467.2	0.693E 00	470.1	0.691E 00
472.3	0.693E 00	474.8	0.699E 00	477.1	0.709E 00	479.6	0.726E 00	481.8	0.735E 00
483.9	0.744E 00	485.1	0.746E 00	486.4	0.731E 00	488.2	0.716E 00	489.4	0.706E 00
491.0	0.705E 00	492.4	0.711E 00	493.5	0.720E 00	496.3	0.733E 00	499.0	0.734E 00
501.7	0.721E 00	503.1	0.712E 00	505.3	0.708E 00	508.1	0.696E 00	510.7	0.681E 00
513.6	0.649E 00	515.9	0.624E 00	517.6	0.611E 00	519.5	0.614E 00	522.2	0.626E 00
524.3	0.635E 00	528.5	0.638E 00	531.8	0.639E 00	535.6	0.632E 00	540.1	0.625E 00
542.8	0.624E 00	547.5	0.610E 00	553.5	0.591E 00	556.3	0.574E 00	558.4	0.550E 00
560.2	0.550E 00	563.7	0.537E 00	568.0	0.514E 00	572.7	0.491E 00	576.1	0.464E 00
579.2	0.434E 00	582.7	0.415E 00	584.5	0.390E 00	586.8	0.331E 00	591.0	0.275E 00
596.0	0.226E 00	600.0	0.192E 00	606.3	0.139E 00	610.4	0.125E 00	616.4	0.108E 00
622.1	0.109E 00	630.5	0.101E 00	638.1	0.932E-01	643.6	0.835E-01	650.3	0.731E-01
656.8	0.686E-01	664.2	0.462E-01	670.3	0.313E-01	676.2	0.336E-01	680.8	0.350E-01
687.0	0.239E-01	693.0	0.112E-01	698.2	0.				



STATION 8 EXP 1 PROF 10

MAXIMUM A LAMDA= 491.2 AVEC ECLAIREMENT SPECTRAL= 0.51322 WATT/M2/NM

ENTRE 400.0 NM ET 648.2 NM , ECLAIREMENT 69.974 WATT/M2 178.640E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.729E-01	401.1	0.847E-01	403.4	0.108E 00	405.4	0.123E 00	405.8	0.133E 00
407.0	0.139E 00	409.2	0.154E 00	410.8	0.169E 00	413.2	0.190E 00	415.9	0.208E 00
419.2	0.228E 00	423.0	0.244E 00	426.1	0.257E 00	427.7	0.259E 00	430.2	0.260E 00
432.6	0.255E 00	434.0	0.255E 00	435.6	0.266E 00	437.5	0.288E 00	440.7	0.305E 00
444.1	0.337E 00	447.5	0.358E 00	450.0	0.375E 00	452.5	0.392E 00	455.2	0.407E 00
457.5	0.420E 00	458.9	0.431E 00	460.4	0.442E 00	461.8	0.451E 00	463.7	0.457E 00
456.9	0.461E 00	469.0	0.462E 00	471.3	0.467E 00	474.7	0.483E 00	476.8	0.498E 00
478.4	0.506E 00	479.9	0.509E 00	479.8	0.511E 00	480.7	0.507E 00	482.5	0.496E 00
483.4	0.487E 00	484.4	0.485E 00	485.4	0.488E 00	487.4	0.498E 00	489.4	0.507E 00
491.2	0.513E 00	493.5	0.511E 00	495.3	0.507E 00	496.6	0.505E 00	498.2	0.504E 00
500.2	0.501E 00	502.7	0.492E 00	504.5	0.486E 00	506.3	0.484E 00	508.1	0.477E 00
509.9	0.461E 00	511.7	0.438E 00	514.3	0.411E 00	516.9	0.400E 00	518.5	0.398E 00
520.5	0.403E 00	522.5	0.413E 00	525.9	0.416E 00	528.7	0.416E 00	531.9	0.411E 00
534.3	0.413E 00	537.9	0.396E 00	541.0	0.390E 00	544.4	0.387E 00	547.1	0.381E 00
550.0	0.371E 00	553.5	0.356E 00	555.6	0.350E 00	558.5	0.347E 00	561.2	0.334E 00
563.7	0.328E 00	567.9	0.314E 00	573.9	0.288E 00	578.3	0.260E 00	583.3	0.229E 00
586.5	0.197E 00	590.0	0.154E 00	591.6	0.128E 00	593.6	0.113E 00	598.1	0.790E-01
602.3	0.503E-01	604.9	0.395E-01	609.2	0.267E-01	617.6	0.128E-01	624.0	0.133E-01
632.2	0.139E-01	639.8	0.118E-01	648.2	0.				

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STATION 8 EXP 1 PROF 15

MAXIMUM A LAMDA= 499.0 AVEC ECLAIREMENT SPECTRAL= 0.36275 WATT/M2/NM

ENTRE 400.0 NM ET 617.3 NM , ECLAIREMENT 44.172 WATT/M2 112.868E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.301E-01	401.7	0.395E-01	404.0	0.551E-01	406.1	0.646E-01	407.0	0.682E-01
408.4	0.696E-01	410.2	0.755E-01	411.4	0.852E-01	413.8	0.947E-01	416.3	0.106E 00
419.1	0.114E 00	422.4	0.126E 00	424.5	0.131E 00	426.6	0.136E 00	427.5	0.135E 00
428.9	0.140E 00	430.4	0.140E 00	432.3	0.140E 00	433.4	0.140E 00	435.1	0.144E 00
436.5	0.157E 00	438.6	0.169E 00	441.6	0.184E 00	445.0	0.202E 00	448.5	0.215E 00
450.4	0.226E 00	452.9	0.242E 00	454.5	0.251E 00	455.7	0.257E 00	457.5	0.260E 00
459.9	0.265E 00	461.7	0.273E 00	464.0	0.280E 00	465.9	0.287E 00	467.4	0.294E 00
469.3	0.300E 00	471.9	0.305E 00	474.0	0.313E 00	476.4	0.321E 00	478.1	0.329E 00
481.1	0.337E 00	482.4	0.342E 00	483.7	0.345E 00	485.3	0.343E 00	486.6	0.340E 00
488.4	0.338E 00	489.8	0.343E 00	491.6	0.345E 00	493.4	0.349E 00	495.4	0.356E 00
497.0	0.359E 00	499.0	0.363E 00	500.6	0.359E 00	502.6	0.353E 00	505.1	0.344E 00
506.7	0.340E 00	508.2	0.341E 00	511.2	0.328E 00	514.0	0.311E 00	516.8	0.290E 00
518.5	0.275E 00	519.9	0.267E 00	520.8	0.266E 00	522.3	0.266E 00	524.0	0.267E 00
526.3	0.273E 00	529.5	0.272E 00	532.4	0.274E 00	534.8	0.275E 00	537.1	0.276E 00
540.7	0.268E 00	544.7	0.262E 00	548.3	0.255E 00	551.5	0.245E 00	553.8	0.234E 00
555.5	0.230E 00	557.0	0.227E 00	558.9	0.226E 00	560.2	0.221E 00	564.1	0.207E 00
568.1	0.199E 00	570.6	0.188E 00	574.0	0.178E 00	577.6	0.170E 00	579.4	0.159E 00
581.6	0.147E 00	582.6	0.126E 00	584.6	0.114E 00	586.6	0.954E-01	588.9	0.809E-01
590.4	0.696E-01	592.8	0.519E-01	596.3	0.348E-01	600.1	0.203E-01	604.1	0.112E-01
608.2	0.689E-02	612.4	0.399E-02	617.3	0.				

STATION 8 EXP 1 PROF 20

MAXIMUM A LAMDA= 499.8 AVEC ECLAIREMENT SPECTRAL= 0.23070 WATT/M2/NM

ENTRE 400.0 NM ET 609.0 NM , ECLAIREMENT 25.484 WATT/M2 65.122E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.155E-01	401.0	0.180E-01	403.2	0.235E-01	405.5	0.288E-01	406.7	0.305E-01
409.0	0.318E-01	410.2	0.367E-01	411.6	0.404E-01	413.9	0.450E-01	416.7	0.505E-01
420.2	0.565E-01	423.7	0.623E-01	426.3	0.681E-01	428.1	0.694E-01	430.5	0.717E-01
432.2	0.713E-01	433.5	0.722E-01	434.8	0.743E-01	437.3	0.840E-01	440.1	0.941E-01
443.5	0.105E-00	447.1	0.117E-00	450.4	0.129E-00	453.3	0.139E-00	454.0	0.143E-00
455.0	0.146E-00	455.7	0.148E-00	457.8	0.149E-00	460.0	0.152E-00	461.7	0.155E-00
464.0	0.163E-00	466.3	0.170E-00	468.1	0.174E-00	469.6	0.176E-00	471.1	0.178E-00
474.2	0.187E-00	476.5	0.195E-00	479.7	0.203E-00	481.8	0.209E-00	483.4	0.213E-00
483.9	0.213E-00	486.0	0.211E-00	487.7	0.211E-00	489.1	0.212E-00	490.5	0.214E-00
492.1	0.218E-00	493.5	0.223E-00	495.4	0.227E-00	498.2	0.231E-00	499.8	0.231E-00
502.3	0.225E-00	504.7	0.220E-00	507.5	0.218E-00	509.5	0.208E-00	511.4	0.192E-00
513.1	0.176E-00	514.8	0.167E-00	516.1	0.162E-00	519.5	0.159E-00	518.8	0.160E-00
520.3	0.163E-00	521.9	0.167E-00	524.5	0.169E-00	528.0	0.169E-00	531.2	0.168E-00
533.3	0.169E-00	536.2	0.164E-00	539.2	0.158E-00	543.0	0.155E-00	547.8	0.146E-00
551.3	0.138E-00	554.3	0.133E-00	558.5	0.128E-00	561.1	0.123E-00	564.1	0.118E-00
567.9	0.111E-00	570.8	0.103E-00	575.4	0.895E-01	580.3	0.734E-01	584.9	0.551E-01
588.4	0.308E-01	590.4	0.281E-01	593.6	0.208E-01	597.2	0.125E-01	600.6	0.738E-02
603.5	0.392E-02	609.0	0.						

STATION 8 EXP 1 PROF 30

MAXIMUM A LAMDA= 497.9 AVEC ECLAIREMENT SPECTRAL= 0.09631 WATT/M2/NM

ENTRE 400.0 NM ET 607.3 NM , ECLAIREMENT 8.966 WATT/M2 22.980E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.318E-02	400.0	0.356E-02	404.9	0.530E-02	408.8	0.607E-02	411.3	0.751E-02
415.7	0.934E-02	419.6	0.114E-01	422.7	0.130E-01	425.0	0.146E-01	427.3	0.164E-01
430.0	0.172E-01	433.2	0.175E-01	435.4	0.196E-01	438.7	0.245E-01	442.8	0.291E-01
447.2	0.350E-01	450.4	0.390E-01	452.3	0.427E-01	454.0	0.452E-01	455.2	0.469E-01
456.2	0.480E-01	457.7	0.482E-01	459.6	0.501E-01	461.5	0.532E-01	463.6	0.559E-01
465.6	0.587E-01	467.6	0.616E-01	470.6	0.652E-01	473.4	0.685E-01	475.6	0.726E-01
478.4	0.762E-01	481.2	0.802E-01	483.0	0.822E-01	483.6	0.840E-01	484.6	0.850E-01
486.0	0.853E-01	487.9	0.858E-01	489.3	0.867E-01	491.7	0.897E-01	493.1	0.917E-01
494.3	0.934E-01	496.2	0.953E-01	497.9	0.963E-01	500.1	0.956E-01	502.4	0.939E-01
504.6	0.915E-01	506.5	0.910E-01	508.2	0.896E-01	509.8	0.860E-01	512.4	0.786E-01
514.0	0.723E-01	515.7	0.661E-01	517.4	0.618E-01	519.2	0.598E-01	520.5	0.596E-01
521.6	0.599E-01	523.5	0.614E-01	526.1	0.623E-01	530.0	0.625E-01	532.4	0.623E-01
534.4	0.615E-01	536.8	0.591E-01	539.3	0.573E-01	544.1	0.546E-01	547.1	0.518E-01
550.6	0.477E-01	553.3	0.453E-01	555.4	0.445E-01	556.6	0.442E-01	559.8	0.413E-01
562.3	0.391E-01	565.3	0.375E-01	568.7	0.340E-01	571.7	0.301E-01	573.8	0.287E-01
576.0	0.278E-01	579.5	0.236E-01	582.0	0.184E-01	584.3	0.137E-01	588.2	0.867E-02
591.1	0.501E-02	595.0	0.260E-02	601.0	0.106E-02	607.3	0.		

STATION 8 EXP 1 PROF 50  
 MAXIMUM A LAMDA= 498.1 AVEC ECLAIREMENT SPECTRAL= 0.04099 WATT/M2/NM  
 ENTREE 4.00 NM ET 594.9 NM , ECLAIREMENT 2.904 WATT/M2 7.365E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
420.0	0.410E-03	425.7	0.820E-03	411.7	0.139E-02	418.5	0.180E-02	424.4	0.262E-02
428.4	0.340E-02	430.3	0.373E-02	432.7	0.389E-02	436.5	0.516E-02	440.0	0.668E-02
444.1	0.861E-02	448.4	1.111E-01	452.4	0.133E-01	453.9	0.149E-01	455.9	0.160E-01
456.4	0.163E-01	458.5	0.159E-01	460.0	0.174E-01	462.0	0.191E-01	464.2	0.210E-01
465.7	0.225E-01	468.6	0.245E-01	471.5	0.262E-01	473.8	0.282E-01	476.1	0.304E-01
478.6	0.321E-01	480.4	0.334E-01	482.1	0.344E-01	482.9	0.351E-01	483.8	0.361E-01
484.6	0.364E-01	486.7	0.369E-01	488.2	0.372E-01	497.7	0.382E-01	491.9	0.390E-01
493.4	0.399E-01	494.9	0.406E-01	496.4	0.408E-01	498.1	0.410E-01	500.1	0.401E-01
502.6	0.382E-01	504.3	0.373E-01	505.3	0.359E-01	506.8	0.356E-01	508.0	0.350E-01
510.0	0.331E-01	511.0	0.303E-01	513.0	0.271E-01	513.9	0.248E-01	515.3	0.221E-01
517.5	0.196E-01	518.9	0.177E-01	521.0	0.169E-01	523.7	0.165E-01	525.6	0.168E-01
529.1	0.168E-01	532.7	0.167E-01	537.2	0.159E-01	542.0	0.148E-01	545.7	0.135E-01
548.6	0.124E-01	551.1	0.105E-01	553.2	0.971E-02	555.5	0.877E-02	558.4	0.849E-02
563.9	0.775E-02	565.3	0.701E-02	570.3	0.594E-02	574.5	0.492E-02	576.9	0.414E-02
579.2	0.303E-02	581.3	0.209E-02	586.0	0.102E-02	590.4	0.451E-03	594.9	0.

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STATION 8 EXP 1 PROF 60  
 MAXIMUM A LAMDA= 497.1 AVEC ECLAIREMENT SPECTRAL= 0.03059 WATT/M2/NM  
 ENTREE 4.00 NM ET 593.4 NM , ECLAIREMENT 1.953 WATT/M2 4.913E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
420.0	0.306E-03	420.8	0.336E-03	410.1	0.642E-03	417.3	0.979E-03	423.3	0.141E-02
425.4	0.174E-02	428.3	0.208E-02	430.7	0.226E-02	432.7	0.245E-02	435.1	0.300E-02
438.5	0.410E-02	442.9	0.560E-02	446.3	0.707E-02	450.7	0.863E-02	453.2	0.997E-02
454.3	0.110E-01	455.8	0.115E-01	467.6	0.120E-01	458.4	0.122E-01	461.7	0.135E-01
463.7	0.151E-01	466.1	0.169E-01	469.0	0.187E-01	471.4	0.201E-01	473.3	0.214E-01
476.2	0.232E-01	478.8	0.246E-01	480.5	0.255E-01	481.4	0.263E-01	482.3	0.266E-01
483.4	0.273E-01	484.3	0.278E-01	485.7	0.281E-01	488.0	0.284E-01	490.1	0.291E-01
494.2	0.297E-01	494.3	0.303E-01	495.8	0.305E-01	497.1	0.306E-01	498.7	0.301E-01
500.2	0.294E-01	501.7	0.283E-01	503.8	0.267E-01	505.3	0.257E-01	506.6	0.252E-01
508.1	0.247E-01	509.4	0.223E-01	510.4	0.214E-01	511.6	0.193E-01	512.8	0.174E-01
514.8	0.151E-01	516.3	0.131E-01	517.6	0.118E-01	519.0	0.106E-01	520.3	0.102E-01
521.7	0.979E-02	523.5	0.988E-02	526.0	0.991E-02	529.8	0.924E-02	536.0	0.847E-02
540.0	0.801E-02	542.1	0.774E-02	544.8	0.697E-02	548.1	0.593E-02	552.9	0.477E-02
557.0	0.404E-02	561.3	0.312E-02	565.8	0.251E-02	570.6	0.214E-02	575.1	0.193E-02
579.0	0.135E-02	583.0	0.612E-03	587.3	0.245E-03	593.4	0.		

STATION 8 EXP 1 PROF 70

MAXIMUM A LAMDA= 494.0 AVEC ECLAIREMENT SPECTRAL= 0.02117 WATT/M2/NM

ENTRE 400.0 NM ET 593.3 NM , ECLAIREMENT 1.250 WATT/M2 3.134E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.212E-04	407.0	0.847E-04	415.9	0.339E-03	423.5	0.678E-03	427.6	0.974E-03
429.5	0.119E-02	432.4	0.119E-02	435.6	0.176E-02	438.9	0.243E-02	444.0	0.341E-02
447.8	0.455E-02	451.0	0.555E-02	452.9	0.646E-02	455.0	0.716E-02	457.7	0.756E-02
461.2	0.891E-02	463.5	0.102E-01	466.8	0.118E-01	472.3	0.144E-01	475.0	0.158E-01
477.6	0.170E-01	479.8	0.178E-01	481.4	0.182E-01	482.5	0.190E-01	482.9	0.193E-01
484.0	0.196E-01	484.9	0.197E-01	486.8	0.199E-01	488.7	0.202E-01	490.8	0.206E-01
492.7	0.210E-01	494.0	0.212E-01	495.4	0.212E-01	497.0	0.210E-01	498.9	0.203E-01
500.3	0.196E-01	501.4	0.186E-01	503.9	0.174E-01	505.2	0.168E-01	507.4	0.164E-01
508.8	0.151E-01	509.9	0.135E-01	511.5	0.118E-01	513.6	0.955E-02	515.9	0.779E-02
518.0	0.667E-02	519.8	0.611E-02	522.0	0.559E-02	526.8	0.544E-02	532.7	0.544E-02
538.4	0.470E-02	544.5	0.396E-02	548.7	0.322E-02	551.3	0.246E-02	553.4	0.205E-02
557.4	0.188E-02	560.0	0.157E-02	565.6	0.116E-02	572.6	0.889E-03	577.3	0.593E-03
585.1	0.635E-04	593.3	0.						

STATION 8 EXP 1 PROF 80

MAXIMUM A LAMDA= 495.3 AVEC ECLAIREMENT SPECTRAL= 0.01258 WATT/M2/NM

ENTRE 400.0 NM ET 593.3 NM , ECLAIREMENT 0.678 WATT/M2 1.697E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.126E-04	404.7	0.377E-04	413.2	0.101E-03	420.7	0.189E-03	426.5	0.403E-03
429.7	0.516E-03	432.7	0.516E-03	435.2	0.767E-03	439.1	0.112E-02	443.2	0.155E-02
446.1	0.204E-02	449.6	0.245E-02	452.1	0.299E-02	454.2	0.351E-02	456.1	0.380E-02
457.2	0.396E-02	458.8	0.410E-02	460.7	0.459E-02	463.3	0.525E-02	464.7	0.590E-02
467.1	0.662E-02	469.8	0.735E-02	473.0	0.814E-02	475.6	0.898E-02	477.9	0.970E-02
479.9	0.102E-01	481.5	0.106E-01	483.2	0.111E-01	483.7	0.114E-01	484.6	0.116E-01
486.4	0.117E-01	488.6	0.119E-01	491.5	0.122E-01	493.4	0.125E-01	495.3	0.126E-01
496.4	0.125E-01	498.3	0.122E-01	499.3	0.118E-01	501.5	0.110E-01	503.3	0.103E-01
505.5	0.952E-02	508.2	0.892E-02	509.0	0.839E-02	509.8	0.785E-02	511.3	0.689E-02
512.4	0.598E-02	513.9	0.503E-02	515.4	0.420E-02	517.9	0.326E-02	519.6	0.287E-02
521.9	0.271E-02	525.2	0.263E-02	529.7	0.253E-02	534.7	0.233E-02	539.9	0.206E-02
543.3	0.177E-02	547.2	0.132E-02	549.9	0.107E-02	553.5	0.881E-03	556.2	0.830E-03
558.6	0.717E-03	562.2	0.541E-03	569.9	0.478E-03	576.6	0.214E-03	584.6	0.503E-04
593.3	0.								

STATION 8 EXP 1 PROF 90

MAXIMUM A LAMDA= 496.0 AVEC ECLAIREMENT SPECTRAL= 0.00855 WATT/M2/NM

ENTRE 411.7 NM ET 582.1 NM , ECLAIREMENT 0.432 WATT/M2 1.089E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
411.7	0.	421.2	0.171E-04	426.5	0.137E-03	431.6	0.257E-03	436.0	0.445E-03
441.3	0.795E-03	446.2	0.115E-02	450.3	0.160E-02	453.8	0.207E-02	455.4	0.230E-02
457.3	0.246E-02	458.1	0.256E-02	460.5	0.301E-02	463.2	0.344E-02	465.9	0.407E-02
469.7	0.493E-02	473.3	0.571E-02	476.4	0.637E-02	477.8	0.669E-02	478.9	0.690E-02
479.8	0.701E-02	481.4	0.726E-02	482.5	0.754E-02	483.6	0.776E-02	484.3	0.780E-02
486.0	0.794E-02	488.0	0.805E-02	488.8	0.808E-02	489.9	0.823E-02	491.0	0.828E-02
492.1	0.841E-02	492.7	0.848E-02	494.9	0.852E-02	496.0	0.855E-02	497.1	0.828E-02
498.7	0.791E-02	500.4	0.746E-02	501.5	0.688E-02	502.0	0.652E-02	503.1	0.627E-02
504.5	0.613E-02	505.4	0.598E-02	507.6	0.551E-02	508.7	0.505E-02	510.0	0.450E-02
513.5	0.343E-02	516.0	0.251E-02	518.0	0.195E-02	519.5	0.170E-02	522.3	0.162E-02
525.5	0.160E-02	529.0	0.147E-02	535.8	0.129E-02	543.7	0.966E-03	549.9	0.641E-03
554.6	0.445E-03	561.0	0.231E-03	567.5	0.162E-03	576.2	0.171E-04	582.1	0.

STATION 8 EXP 1 PROF 100

MAXIMUM A LAMDA= 495.0 AVEC ECLAIREMENT SPECTRAL= 0.00500 WATT/M2/NM

ENTRE 417.2 NM ET 577.5 NM , ECLAIREMENT 0.244 WATT/M2 0.609E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
417.2	0.	426.6	0.900E-04	431.6	0.120E-03	435.9	0.185E-03	441.5	0.370E-03
447.3	0.615E-03	450.4	0.815E-03	453.6	0.106E-02	455.6	0.120E-02	458.8	0.136E-02
461.4	0.164E-02	464.2	0.203E-02	467.9	0.248E-02	471.6	0.291E-02	475.0	0.343E-02
479.3	0.395E-02	482.3	0.432E-02	483.7	0.448E-02	486.8	0.465E-02	488.5	0.468E-02
490.2	0.484E-02	491.0	0.485E-02	492.8	0.500E-02	494.2	0.500E-02	495.0	0.500E-02
497.6	0.490E-02	499.8	0.475E-02	500.9	0.439E-02	502.6	0.416E-02	504.0	0.388E-02
506.0	0.361E-02	508.0	0.339E-02	509.1	0.306E-02	511.0	0.248E-02	512.9	0.195E-02
515.4	0.138E-02	518.0	0.106E-02	520.1	0.905E-03	523.5	0.805E-03	529.2	0.700E-03
534.4	0.630E-03	540.8	0.535E-03	547.4	0.380E-03	553.8	0.205E-03	560.9	0.130E-03
566.6	0.650E-04	577.5	0.						

STATION 8 EXP 3 PROF 0

MAXIMUM A LAMDA= 480.0 AVEC ECLAIREMENT SPECTRAL= 0.52216 WATT/M2/NM

ENTRE 420.7 NM ET 750.0 NM , ECLAIREMENT 124.669 WATT/M2 344.350E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.7	0.277E 00	450.0	0.32E 00	408.7	0.352E 00	413.2	0.409E 00	419.0	0.431E 00
424.3	0.432E 00	420.9	0.413E 00	433.1	0.407E 00	437.2	0.437E 00	451.3	0.512E 00
452.5	0.514E 00	456.6	0.519E 00	461.5	0.521E 00	464.4	0.522E 00	470.0	0.511E 00
481.2	0.520E 00	437.0	0.486E 00	488.3	0.486E 00	492.1	0.496E 00	495.6	0.499E 00
501.4	0.481E 00	510.0	0.483E 00	517.1	0.454E 00	520.1	0.456E 00	523.4	0.468E 00
536.4	0.465E 00	543.5	0.454E 00	555.3	0.455E 00	558.6	0.441E 00	564.9	0.433E 00
577.0	0.425E 00	550.0	0.419E 00	587.6	0.365E 00	591.5	0.356E 00	606.4	0.398E 00
614.0	0.384E 00	621.6	0.392E 00	629.7	0.371E 00	643.1	0.372E 00	649.0	0.348E 00
652.4	0.246E 00	658.0	0.235E 00	663.8	0.360E 00	682.6	0.350E 00	686.3	0.288E 00
700.0	0.306E 00	724.1	0.25E 00	727.6	0.273E 00	732.1	0.244E 00	743.0	0.264E 00

STATION 8 EXP 3 PROF 1

MAXIMUM A LAMDA= 495.7 AVEC ECLAIREMENT SPECTRAL= 0.28219 WATT/M2/NM

ENTRE 420.0 NM ET 656.0 NM , ECLAIREMENT 38.177 WATT/M2 96.205E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.0	0.959E-01	405.3	0.100E 00	408.4	0.122E 00	413.4	0.142E 00	419.7	0.159E 00
425.8	0.163E 00	420.3	0.160E 00	431.6	0.160E 00	437.3	0.181E 00	445.0	0.212E 00
451.5	0.237E 00	455.6	0.242E 00	461.8	0.255E 00	463.9	0.257E 00	467.8	0.259E 00
472.2	0.266E 00	482.5	0.277E 00	486.0	0.267E 00	488.7	0.267E 00	490.8	0.276E 00
493.4	0.280E 00	495.7	0.282E 00	501.9	0.264E 00	507.2	0.258E 00	512.8	0.237E 00
517.2	0.217E 00	518.9	0.215E 00	523.4	0.220E 00	534.2	0.218E 00	544.2	0.204E 00
546.5	0.202E 00	549.5	0.191E 00	553.8	0.186E 00	557.3	0.173E 00	562.3	0.164E 00
580.1	0.106E 00	585.8	0.652E-01	593.7	0.367E-01	602.7	0.155E-01	636.0	0.

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STATION 8 EXP 3 PROF 15

MAXIMUM A LAMDA= 494.6 AVEC ECLAIREMENT SPECTRAL= 0.18376 WATT/M2/NM

ENTRE 432.2 NM ET 606.4 NM , ECLAIREMENT 22.434 WATT/M2 56.445E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.2	0.461E-01	405.7	0.494E-01	407.9	0.595E-01	413.0	0.733E-01	423.9	0.869E-01
428.9	0.858E-01	432.0	0.882E-01	442.1	0.117E 00	451.6	0.141E 00	455.5	0.144E 00
462.4	0.156E 00	468.2	0.158E 00	474.3	0.167E 00	477.0	0.172E 00	482.6	0.178E 00
486.1	0.172E 00	487.7	0.173E 00	493.0	0.183E 00	494.6	0.184E 00	501.4	0.172E 00
505.3	0.168E 00	514.4	0.142E 00	517.4	0.134E 00	524.7	0.137E 00	531.4	0.134E 00
546.4	0.112E 00	551.7	0.108E 00	556.0	0.101E 00	568.0	0.827E-01	577.2	0.608E-01
587.6	0.266E-01	594.6	0.125E-01	606.4	0.				

STATION 8 EXP 3 PROF 20

MAXIMUM A LAMDA= 495.4 AVEC ECLAIREMENT SPECTRAL= 0.12059 WATT/M2/NM

ENTRE 401.9 NM ET 602.8 NM , ECLAIREMENT 13.509 WATT/M2 34.080E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.213E-01	405.8	0.232E-01	409.8	0.314E-01	417.6	0.397E-01	430.3	0.455E-01
435.7	0.534E-01	442.7	0.650E-01	446.5	0.725E-01	452.2	0.820E-01	454.6	0.838E-01
462.0	0.936E-01	467.8	0.972E-01	478.3	0.109E 00	482.8	0.112E 00	485.1	0.112E 00
488.8	0.112E 00	491.3	0.117E 00	495.4	0.121E 00	502.9	0.113E 00	505.2	0.112E 00
511.7	0.100E 00	515.6	0.889E-01	518.7	0.839E-01	526.0	0.863E-01	532.8	0.851E-01
551.4	0.652E-01	562.5	0.535E-01	567.3	0.467E-01	575.0	0.398E-01	584.1	0.181E-01
588.9	0.856E-02	602.8	0.						

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STATION 8 EXP 3 PROF 50

MAXIMUM A LAMDA= 490.0 AVEC ECLAIREMENT SPECTRAL= 0.01627 WATT/M2/NM

ENTRE 419.5 NM ET 586.7 NM , ECLAIREMENT 1.174 WATT/M2 2.964E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
419.5	0.928E-03	431.5	0.173E-02	443.5	0.418E-02	452.5	0.658E-02	459.1	0.902E-02
470.6	0.116E-01	473.8	0.221E-01	478.6	0.133E-01	483.6	0.144E-01	490.0	0.163E-01
492.0	0.161E-01	498.1	0.142E-01	503.6	0.130E-01	507.9	0.972E-02	511.9	0.801E-02
516.1	0.770E-02	519.1	0.807E-02	530.9	0.780E-02	540.7	0.614E-02	550.6	0.428E-02
557.5	0.373E-02	579.1	0.879E-03	586.7	0.				

STATION 8 EXP 3 PROF 70

MAXIMUM A LAMDA= 493.4 AVEC ECLAIREMENT SPECTRAL= 0.00647 WATT/M2/NM

ENTRE 429.7 NM ET 582.5 NM , ECLAIREMENT 0.372 WATT/M2 0.934E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
429.7	0.388E-03	441.8	0.105E-02	447.1	0.141E-02	451.2	0.201E-02	454.5	0.219E-02
462.5	0.303E-02	465.8	0.347E-02	472.1	0.411E-02	478.5	0.519E-02	483.9	0.591E-02
490.6	0.643E-02	493.4	0.647E-02	498.0	0.595E-02	502.2	0.478E-02	509.1	0.279E-02
514.7	0.220E-02	517.4	0.216E-02	528.5	0.217E-02	534.2	0.191E-02	549.2	0.963E-03
559.1	0.621E-03	572.4	0.194E-03	582.5	0.				



STATION 9 EXP 1 PROF 10

MAXIMUM A LAMDA= 481.0 AVEC ECLAIREMENT SPECTRAL= 0.63110 WATT/M2/NM

ENTRE 405.2 NM ET 635.1 NM , ECLAIREMENT 92.045 WATT/M2 234.750E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
405.2	0.212E 00	412.7	0.358E 00	422.8	0.375E 00	425.7	0.372E 00	432.1	0.359E 00
437.3	0.406E 00	449.9	0.512E 00	458.1	0.541E 00	460.9	0.559E 00	465.8	0.560E 00
473.2	0.598E 00	478.8	0.623E 00	481.0	0.631E 00	486.5	0.599E 00	491.0	0.621E 00
496.2	0.626E 00	500.2	0.609E 00	507.8	0.588E 00	517.5	0.522E 00	520.6	0.524E 00
523.2	0.538E 00	537.9	0.535E 00	544.2	0.502E 00	548.2	0.512E 00	561.6	0.446E 00
574.1	0.399E 00	584.4	0.283E 00	589.6	0.193E 00	606.0	0.574E-01	619.7	0.328E-01
635.1	0.								

STATION 9 EXP 1 PROF 20

MAXIMUM A LAMDA= 494.9 AVEC ECLAIREMENT SPECTRAL= 0.30329 WATT/M2/NM

ENTRE 407.0 NM ET 608.2 NM , ECLAIREMENT 37.040 WATT/M2 93.900E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.0	0.931E-01	412.7	0.120E 00	423.0	0.133E 00	428.3	0.129E 00	433.9	0.136E 00
439.0	0.163E 00	449.1	0.207E 00	463.4	0.243E 00	468.9	0.251E 00	474.4	0.271E 00
479.8	0.289E 00	482.5	0.291E 00	486.3	0.285E 00	487.9	0.287E 00	492.2	0.300E 00
494.9	0.303E 00	497.3	0.303E 00	499.8	0.292E 00	508.0	0.282E 00	515.7	0.229E 00
518.5	0.223E 00	523.8	0.234E 00	536.2	0.233E 00	555.6	0.178E 00	558.8	0.176E 00
569.8	0.145E 00	577.9	0.115E 00	584.2	0.767E-01	590.8	0.361E-01	596.6	0.158E-01
608.2	0.								

STATION 9 EXP 1 PROF 27

MAXIMUM A LAMDA= 497.0 AVEC ECLAIREMENT SPECTRAL= 0.12843 WATT/M2/NM

ENTRE 415.7 NM ET 600.8 NM , ECLAIREMENT 13.465 WATT/M2 34.273E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
405.7	0.238E-01	410.4	0.247E-01	412.1	0.277E-01	423.5	0.348E-01	429.2	0.353E-01
434.5	0.399E-01	451.0	0.700E-01	459.4	0.803E-01	462.7	0.853E-01	468.7	0.918E-01
480.0	0.113E-00	482.3	0.115E-00	484.2	0.114E-00	487.3	0.116E-00	492.0	0.124E-00
493.9	0.127E-00	497.0	0.128E-00	507.6	0.118E-00	516.7	0.893E-01	519.8	0.871E-01
524.1	0.913E-01	535.6	0.920E-01	557.0	0.629E-01	559.3	0.624E-01	569.6	0.505E-01
581.2	0.279E-01	590.0	0.100E-01	600.8	0.				

STATION 9 EXP 1 PROF 36

MAXIMUM A LAMDA= 496.5 AVEC ECLAIREMENT SPECTRAL= 0.04704 WATT/M2/NM

ENTRE 468.8 NM ET 599.4 NM , ECLAIREMENT 4.487 WATT/M2 11.550E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
406.8	0.503E-02	419.7	0.494E-02	413.0	0.583E-02	425.1	0.790E-02	429.5	0.804E-02
434.9	0.927E-02	442.9	0.139E-01	448.2	0.182E-01	463.2	0.250E-01	468.9	0.274E-01
476.2	0.321E-01	481.4	0.365E-01	485.2	0.367E-01	489.5	0.421E-01	493.9	0.458E-01
496.5	0.471E-01	506.8	0.446E-01	511.0	0.380E-01	516.5	0.323E-01	519.1	0.318E-01
523.5	0.337E-01	531.9	0.348E-01	536.6	0.346E-01	544.3	0.312E-01	548.6	0.294E-01
552.9	0.255E-01	555.8	0.241E-01	558.8	0.237E-01	566.4	0.206E-01	575.4	0.142E-01
584.3	0.663E-02	590.3	0.273E-02	599.4	0.				

STATION 9 EXP 1 PROF 44

MAXIMUM A LAMDA= 497.5 AVEC ECLAIREMENT SPECTRAL= 0.02297 WATT/M2/NM

ENTRE 411.0 NM ET 594.2 NM , ECLAIREMENT 2.053 WATT/M2 5.296E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
411.0	0.165E-02	424.6	0.292E-02	429.0	0.303E-02	434.9	0.363E-02	449.1	0.760E-02
455.7	0.942E-02	459.2	0.986E-02	460.2	0.104E-01	466.3	0.116E-01	472.3	0.133E-01
481.6	0.168E-01	484.4	0.171E-01	490.2	0.202E-01	493.2	0.216E-01	497.5	0.230E-01
508.9	0.216E-01	514.3	0.170E-01	517.5	0.152E-01	519.6	0.152E-01	524.3	0.163E-01
536.3	0.166E-01	544.5	0.150E-01	551.7	0.119E-01	562.9	0.103E-01	573.7	0.673E-02
582.7	0.262E-02	594.2	0.						

STATION 9 EXP 1 PROF 52

MAXIMUM A LAMDA= 497.6 AVEC ECLAIREMENT SPECTRAL= 0.01425 WATT/M2/NM

ENTRE 411.3 NM ET 592.0 NM , ECLAIREMENT 1.117 WATT/M2 2.873E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
411.3	0.613E-03	435.5	0.175E-02	442.9	0.296E-02	453.0	0.467E-02	459.8	0.557E-02
471.2	0.743E-02	481.4	0.102E-01	485.3	0.105E-01	490.4	0.124E-01	494.8	0.140E-01
497.6	0.143E-01	506.9	0.130E-01	510.8	0.108E-01	514.4	0.878E-02	517.0	0.827E-02
520.9	0.837E-02	522.8	0.862E-02	534.7	0.899E-02	537.2	0.879E-02	547.9	0.696E-02
554.5	0.543E-02	558.6	0.527E-02	571.3	0.348E-02	581.5	0.110E-02	592.0	0.

STATION 9 EXP 1 PROF 67

MAXIMUM A LAMDA= 498.6 AVEC ECLAIREMENT SPECTRAL= 0.00610 WATT/M2/NM

ENTRE 415.3 NM ET 592.6 NM , ECLAIREMENT 0.415 WATT/M2 1.061E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
415.3	0.213E-03	435.2	0.561E-03	459.5	0.217E-02	462.6	0.245E-02	471.6	0.313E-02
477.7	0.385E-02	487.8	0.428E-02	483.7	0.446E-02	491.7	0.575E-02	495.7	0.606E-02
498.6	0.610E-02	506.1	0.534E-02	510.9	0.412E-02	514.1	0.324E-02	519.1	0.282E-02
523.6	0.296E-02	534.9	0.296E-02	547.2	0.227E-02	551.7	0.175E-02	559.5	0.146E-02
568.7	0.101E-02	582.5	0.177E-03	592.6	0.				

STATION 9 EXP 1 PROF 86

MAXIMUM A LAMDA= 494.0 AVEC ECLAIREMENT SPECTRAL= 0.00342 WATT/M2/NM

ENTRE 422.8 NM ET 584.0 NM , ECLAIREMENT 0.189 WATT/M2 0.479E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
422.8	0.684E-04	436.1	0.216E-03	447.9	0.623E-03	460.9	0.119E-02	473.9	0.196E-02
481.2	0.255E-02	484.5	0.264E-02	489.7	0.315E-02	494.0	0.342E-02	498.9	0.318E-02
506.7	0.253E-02	510.9	0.191E-02	514.3	0.127E-02	517.0	0.110E-02	522.9	0.109E-02
525.2	0.110E-02	535.2	0.103E-02	538.9	0.889E-03	545.8	0.715E-03	555.3	0.390E-03
563.2	0.298E-03	584.0	0.						

STATION 9 EXP 2 PROF 0

MAXIMUM A LAMDA= 480.5 AVEC ECLAIREMENT SPECTRAL= 0.38041 WATT/M2/NM

ENTRE 403.2 NM ET 700.0 NM , ECLAIREMENT 92.292 WATT/M2 256.080E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.2	0.197E 00	405.7	0.202E 00	410.4	0.269E 00	415.5	0.300E 00	423.2	0.305E 00
426.3	0.298E 00	428.2	0.291E 00	431.8	0.285E 00	435.7	0.312E 00	443.0	0.340E 00
449.5	0.365E 00	456.3	0.374E 00	461.1	0.378E 00	468.5	0.367E 00	480.5	0.380E 00
485.0	0.355E 00	487.4	0.355E 00	494.4	0.367E 00	500.9	0.353E 00	509.3	0.358E 00
512.2	0.353E 00	517.9	0.335E 00	522.9	0.345E 00	526.7	0.348E 00	534.9	0.347E 00
543.9	0.334E 00	552.6	0.339E 00	557.2	0.326E 00	560.0	0.324E 00	565.0	0.312E 00
575.4	0.310E 00	581.2	0.314E 00	587.2	0.276E 00	589.1	0.270E 00	605.6	0.304E 00
612.7	0.291E 00	620.3	0.294E 00	628.5	0.282E 00	641.2	0.283E 00	645.6	0.266E 00
656.3	0.259E 00	661.2	0.282E 00	681.6	0.277E 00	685.7	0.230E 00	699.6	0.230E 00
700.0	0.231E 00	715.4	0.164E 00	726.1	0.142E 00	733.2	0.208E 00	742.0	0.210E 00

STATION 9 EXP 2 PROF 5

MAXIMUM A LAMDA= 480.0 AVEC ECLAIREMENT SPECTRAL= 0.29013 WATT/M2/NM

ENTRE 402.2 NM ET 694.9 NM , ECLAIREMENT 47.783 WATT/M2 123.024E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.2	0.140E 00	404.4	0.143E 00	408.4	0.181E 00	415.6	0.202E 00	422.6	0.209E 00
425.3	0.207E 00	428.5	0.200E 00	431.2	0.199E 00	435.0	0.215E 00	450.9	0.269E 00
454.9	0.270E 00	461.1	0.278E 00	462.6	0.280E 00	468.4	0.276E 00	480.0	0.290E 00
485.3	0.273E 00	486.9	0.273E 00	490.9	0.281E 00	494.4	0.283E 00	500.7	0.270E 00
510.2	0.263E 00	517.0	0.240E 00	519.7	0.240E 00	522.9	0.247E 00	535.2	0.242E 00
541.5	0.231E 00	551.1	0.226E 00	555.0	0.212E 00	562.3	0.206E 00	579.7	0.165E 00
587.3	0.114E 00	590.0	0.106E 00	593.8	0.992E-01	604.5	0.661E-01	620.3	0.554E-01
656.9	0.316E-01	671.4	0.200E-01	694.9	0.				

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STATION 9 EXP 2 PROF 20

MAXIMUM A LAMDA= 493.0 AVEC ECLAIREMENT SPECTRAL= 0.09437 WATT/M2/NM

ENTRE 402.3 NM ET 606.2 NM , ECLAIREMENT 11.157 WATT/M2 27.984E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.3	0.248E-01	404.4	0.253E-01	409.3	0.332E-01	417.9	0.400E-01	424.6	0.433E-01
428.6	0.427E-01	430.6	0.433E-01	437.6	0.521E-01	451.4	0.712E-01	454.4	0.729E-01
461.4	0.796E-01	468.4	0.819E-01	475.6	0.896E-01	481.1	0.930E-01	485.2	0.896E-01
486.6	0.899E-01	491.2	0.936E-01	493.0	0.944E-01	496.5	0.921E-01	499.9	0.887E-01
503.2	0.880E-01	515.9	0.653E-01	518.9	0.644E-01	522.6	0.662E-01	533.0	0.652E-01
549.2	0.510E-01	553.3	0.496E-01	556.3	0.467E-01	564.6	0.419E-01	576.9	0.289E-01
585.0	0.112E-01	590.5	0.878E-02	606.2	0.				

STATION 9 EXP 2 PROF 50

MAXIMUM A LAMDA= 494.4 AVEC ECLAIREMENT SPECTRAL= 0.00554 WATT/M2/NM

ENTRE 423.4 NM ET 588.9 NM , ECLAIREMENT 0.434 WATT/M2 1.111E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
423.4	0.610E-03	429.6	0.648E-03	439.0	0.106E-02	444.6	0.141E-02	449.1	0.191E-02
452.9	0.204E-02	462.3	0.260E-02	473.1	0.326E-02	479.6	0.385E-02	482.9	0.427E-02
484.1	0.433E-02	489.7	0.500E-02	494.4	0.554E-02	497.9	0.546E-02	499.3	0.549E-02
502.7	0.515E-02	508.0	0.395E-02	510.9	0.335E-02	512.9	0.334E-02	530.8	0.367E-02
539.0	0.318E-02	546.8	0.252E-02	549.6	0.234E-02	552.9	0.227E-02	566.7	0.147E-02
579.2	0.438E-03	588.9	0.						

STATION 10 EXP 1 PROF 0

MAXIMUM A LAMDA= 479.3 AVEC ECLAIREMENT SPECTRAL= 0.47663 WATT/M2/NM

ENTRE 401.8 NM ET 700.0 NM , ECLAIREMENT 111.663 WATT/M2 307.490E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.248E 00	404.7	0.271E 00	409.4	0.350E 00	414.7	0.384E 00	422.3	0.392E 00
428.3	0.372E 00	432.1	0.363E 00	439.6	0.412E 00	445.9	0.438E 00	450.7	0.463E 00
456.2	0.469E 00	462.4	0.471E 00	470.0	0.457E 00	479.3	0.477E 00	485.3	0.442E 00
487.3	0.441E 00	490.8	0.450E 00	494.8	0.450E 00	499.8	0.435E 00	505.0	0.435E 00
509.3	0.438E 00	513.9	0.408E 00	521.5	0.417E 00	528.9	0.425E 00	538.3	0.414E 00
546.0	0.409E 00	553.8	0.412E 00	557.5	0.398E 00	563.8	0.389E 00	575.4	0.372E 00
580.1	0.379E 00	587.0	0.314E 00	590.1	0.311E 00	604.6	0.358E 00	612.3	0.343E 00
620.6	0.342E 00	629.6	0.324E 00	641.3	0.325E 00	644.6	0.293E 00	653.6	0.286E 00
660.0	0.321E 00	681.7	0.312E 00	685.2	0.256E 00	700.0	0.251E 00	708.7	0.273E 00
715.0	0.157E 00	726.4	0.143E 00	733.0	0.204E 00	742.0	0.212E 00		

STATION 10 EXP 1 PROF 9

MAXIMUM A LAMDA= 476.0 AVEC ECLAIREMENT SPECTRAL= 0.25149 WATT/M2/NM

ENTRE 402.9 NM ET 634.2 NM , ECLAIREMENT 35.378 WATT/M2 88.126E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.126E 00	406.7	0.143E 00	414.8	0.185E 00	423.4	0.191E 00	426.2	0.186E 00
427.7	0.182E 00	430.5	0.181E 00	433.7	0.193E 00	440.8	0.212E 00	446.5	0.232E 00
450.7	0.232E 00	456.1	0.242E 00	458.7	0.244E 00	464.7	0.239E 00	476.0	0.251E 00
477.7	0.251E 00	483.5	0.236E 00	486.7	0.238E 00	492.5	0.245E 00	494.8	0.245E 00
501.6	0.231E 00	511.2	0.213E 00	517.5	0.187E 00	522.5	0.193E 00	531.5	0.187E 00
544.3	0.161E 00	552.2	0.151E 00	566.9	0.122E 00	581.4	0.787E-01	586.3	0.500E-01
599.6	0.161E-01	617.4	0.754E-02	634.2	0.				

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STATION 10 EXP 1 PROF 15

MAXIMUM A LAMDA= 481.3 AVEC ECLAIREMENT SPECTRAL= 0.19191 WATT/M2/NM

ENTRE 400.6 NM ET 608.3 NM , ECLAIREMENT 24.787 WATT/M2 61.181E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.6	0.779E-01	402.5	0.900E-01	405.9	0.940E-01	408.6	0.113E 00	414.9	0.129E 00
424.3	0.135E 00	426.8	0.132E 00	429.2	0.130E 00	431.9	0.128E 00	435.7	0.139E 00
450.2	0.169E 00	454.4	0.172E 00	460.7	0.181E 00	469.3	0.182E 00	481.3	0.192E 00
485.7	0.182E 00	490.0	0.188E 00	494.5	0.187E 00	499.7	0.174E 00	504.1	0.172E 00
509.9	0.154E 00	516.0	0.134E 00	519.2	0.131E 00	523.3	0.134E 00	529.9	0.131E 00
545.0	0.104E-00	550.0	0.102E 00	565.8	0.739E-01	567.8	0.729E-01	583.5	0.263E-01
593.8	0.806E-02	608.3	0.						

STATION 10 EXP 1 PROF 20

MAXIMUM A LAMDA= 481.4 AVEC ECLAIREMENT SPECTRAL= 0.15288 WATT/M2/NM

ENTRE 402.8 NM ET 599.1 NM , ECLAIREMENT 18.418 WATT/M2 45.331E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.8	0.656E-01	404.7	0.671E-01	410.4	0.888E-01	415.0	0.962E-01	423.6	0.101E 00
425.5	0.100E 00	429.9	0.968E-01	431.9	0.965E-01	436.2	0.105E 00	444.4	0.118E 00
451.4	0.131E 00	457.5	0.135E 00	462.8	0.142E 00	469.2	0.143E 00	481.4	0.153E 00
486.1	0.145E 00	488.2	0.146E 00	491.6	0.150E 00	498.1	0.145E 00	501.5	0.139E 00
504.3	0.136E 00	515.8	0.985E-01	518.9	0.963E-01	522.9	0.980E-01	529.3	0.963E-01
547.3	0.696E-01	551.9	0.680E-01	575.5	0.326E-01	583.0	0.136E-01	599.1	0.



STATION 10 EXP 1 PROF 29

MAXIMUM A LAMDA= 491.0 AVEC ECLAIREMENT SPECTRAL= 0.08867 WATT/M2/NM

ENTRE 401.6 NM ET 597.4 NM , ECLAIREMENT 9.701 WATT/M2 23.712E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.6	0.340E-01	404.5	0.357E-01	410.5	0.458E-01	419.3	0.521E-01	423.9	0.529E-01
429.0	0.511E-01	431.8	0.505E-01	439.4	0.598E-01	450.5	0.714E-01	454.6	0.737E-01
460.7	0.789E-01	467.6	0.812E-01	471.2	0.833E-01	481.0	0.887E-01	485.6	0.853E-01
487.8	0.859E-01	491.7	0.885E-01	494.4	0.879E-01	502.9	0.763E-01	508.1	0.586E-01
512.4	0.498E-01	514.5	0.484E-01	518.8	0.491E-01	529.2	0.481E-01	548.0	0.299E-01
552.8	0.278E-01	575.0	0.113E-01	580.6	0.621E-02	597.4	0.		

STATION 10 EXP 1 PROF 37

MAXIMUM A LAMDA= 492.9 AVEC ECLAIREMENT SPECTRAL= 0.06445 WATT/M2/NM

ENTRE 402.3 NM ET 587.9 NM , ECLAIREMENT 6.296 WATT/M2 15.343E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.3	0.204E-01	404.7	0.211E-01	410.3	0.275E-01	415.4	0.307E-01	425.6	0.332E-01
429.6	0.324E-01	431.7	0.324E-01	440.6	0.392E-01	450.9	0.471E-01	455.0	0.488E-01
462.8	0.549E-01	467.7	0.567E-01	481.2	0.639E-01	485.4	0.616E-01	487.1	0.619E-01
491.0	0.642E-01	492.9	0.645E-01	499.7	0.570E-01	501.9	0.559E-01	506.4	0.441E-01
514.1	0.325E-01	517.9	0.299E-01	522.6	0.304E-01	526.1	0.305E-01	530.1	0.284E-01
546.2	0.166E-01	563.1	0.980E-02	587.9	0.				

STATION 10 EXP 1 PROF 46

MAXIMUM A LAMDA= 494.3 AVEC ECLAIREMENT SPECTRAL= 0.04053 WATT/M2/NM

ENTRE 432.2 NM ET 600.0 NM , ECLAIREMENT 3.820 WATT/M2 9.320E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
432.2	0.112E-01	435.1	0.116E-01	407.7	0.145E-01	415.9	0.177E-01	424.4	0.191E-01
431.2	0.188E-01	440.6	0.233E-01	450.8	0.284E-01	453.4	0.289E-01	463.6	0.339E-01
469.8	0.355E-01	482.9	0.398E-01	487.0	0.390E-01	494.3	0.405E-01	499.2	0.399E-01
536.1	0.301E-01	511.0	0.214E-01	518.8	0.170E-01	526.9	0.173E-01	530.7	0.163E-01
549.3	0.835E-02	565.4	0.511E-02	580.0	0.154E-02	600.0	0.		

STATION 10 EXP 1 PROF 55

MAXIMUM A LAMDA= 493.4 AVEC ECLAIREMENT SPECTRAL= 0.02504 WATT/M2/NM

ENTRE 432.3 NM ET 582.6 NM , ECLAIREMENT 2.983 WATT/M2 5.072E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
432.3	0.541E-02	404.4	0.568E-02	410.0	0.751E-02	416.9	0.902E-02	424.7	0.977E-02
429.9	0.969E-02	432.3	0.987E-02	441.3	0.125E-01	449.5	0.154E-01	453.3	0.159E-01
461.1	0.185E-01	470.2	0.204E-01	480.6	0.233E-01	485.0	0.233E-01	490.0	0.249E-01
493.4	0.250E-01	500.2	0.210E-01	504.2	0.193E-01	509.7	0.123E-01	514.0	0.937E-02
517.6	0.944E-02	529.2	0.914E-02	548.7	0.383E-02	556.3	0.331E-02	582.6	0.

STATION 10 EXP 1 PROF 73

MAXIMUM A LAMDA= 493.1 AVEC ECLAIREMENT SPECTRAL= 0.00839 WATT/M2/NM

ENTRE 401.8 NM ET 582.2 NM , ECLAIREMENT 0.582 WATT/M2 1.426E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.697E-03	404.3	0.697E-03	410.1	0.108E-02	425.4	0.171E-02	428.7	0.174E-02
437.9	0.270E-02	444.5	0.377E-02	447.2	0.391E-02	454.8	0.517E-02	465.3	0.577E-02
480.1	0.736E-02	485.9	0.775E-02	490.5	0.831E-02	493.1	0.839E-02	499.5	0.739E-02
505.3	0.540E-02	508.2	0.381E-02	512.3	0.279E-02	515.6	0.265E-02	521.2	0.266E-02
529.3	0.249E-02	540.5	0.153E-02	549.0	0.764E-03	568.6	0.319E-03	582.2	0.

STATION 10 EXP 1 PROF 92

MAXIMUM A LAMDA= 489.6 AVEC ECLAIREMENT SPECTRAL= 0.00386 WATT/M2/NM

ENTRE 404.4 NM ET 575.9 NM , ECLAIREMENT 0.233 WATT/M2 0.571E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.4	0.170E-03	410.7	0.262E-03	414.5	0.328E-03	417.7	0.416E-03	420.2	0.474E-03
425.0	0.505E-03	427.1	0.567E-03	429.5	0.725E-03	431.9	0.821E-03	434.0	0.867E-03
438.2	0.968E-03	443.0	0.110E-02	446.9	0.130E-02	451.2	0.157E-02	455.1	0.196E-02
457.9	0.232E-02	462.7	0.256E-02	466.5	0.277E-02	469.4	0.290E-02	470.6	0.293E-02
473.2	0.300E-02	475.1	0.313E-02	477.5	0.326E-02	478.8	0.333E-02	481.2	0.339E-02
483.1	0.347E-02	484.7	0.356E-02	485.8	0.366E-02	486.6	0.374E-02	488.0	0.385E-02
489.6	0.386E-02	490.9	0.382E-02	493.6	0.357E-02	495.2	0.341E-02	496.8	0.328E-02
499.3	0.317E-02	501.1	0.296E-02	502.7	0.259E-02	504.9	0.218E-02	505.8	0.177E-02
507.4	0.139E-02	509.6	0.115E-02	512.4	0.103E-02	514.0	0.979E-03	519.6	0.983E-03
527.4	0.887E-03	529.6	0.860E-03	535.5	0.636E-03	542.8	0.420E-03	550.4	0.235E-03
559.4	0.146E-03	567.8	0.540E-04	575.9	0.				

STATION 10 EXP 2 PROF 9

MAXIMUM A LAMDA= 481.9 AVEC ECLAIREMENT SPECTRAL= 0.22045 WATT/M2/NM

ENTRE 400.0 NM ET 652.8 NM , ECLAIREMENT 31.941 WATT/M2 80.444E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.542E-01	402.2	0.666E-01	403.5	0.838E-01	404.8	0.930E-01	406.0	0.979E-01
407.6	0.103E-00	409.2	0.110E-00	411.0	0.121E-00	412.3	0.132E-00	414.3	0.142E-00
416.7	0.148E-00	418.3	0.156E-00	421.5	0.159E-00	424.2	0.161E-00	426.3	0.162E-00
429.0	0.158E-00	431.9	0.153E-00	433.8	0.152E-00	434.9	0.152E-00	435.9	0.157E-00
439.5	0.165E-00	443.0	0.176E-00	447.7	0.185E-00	451.6	0.193E-00	453.1	0.197E-00
454.8	0.201E-00	456.9	0.203E-00	459.6	0.203E-00	463.1	0.207E-00	465.6	0.209E-00
468.5	0.211E-00	471.0	0.210E-00	472.7	0.211E-00	477.2	0.216E-00	480.7	0.219E-00
481.9	0.220E-00	483.1	0.219E-00	484.9	0.214E-00	487.2	0.210E-00	488.7	0.208E-00
490.3	0.209E-00	492.7	0.213E-00	495.7	0.216E-00	497.9	0.216E-00	500.3	0.214E-00
503.3	0.206E-00	504.2	0.204E-00	507.2	0.203E-00	510.2	0.198E-00	513.5	0.189E-00
516.3	0.178E-00	519.5	0.169E-00	520.2	0.166E-00	521.4	0.167E-00	523.6	0.168E-00
527.3	0.170E-00	531.9	0.168E-00	536.1	0.166E-00	539.7	0.160E-00	544.1	0.155E-00
549.9	0.151E-00	556.0	0.141E-00	559.3	0.133E-00	562.0	0.127E-00	569.6	0.116E-00
577.2	0.102E-00	582.8	0.853E-01	586.4	0.785E-01	588.6	0.639E-01	591.8	0.481E-01
596.9	0.331E-01	599.9	0.287E-01	603.5	0.234E-01	608.1	0.141E-01	614.7	0.104E-01
624.5	0.882E-02	636.8	0.617E-02	647.6	0.529E-02	662.8	0.		

STATION 10 EXP 2 PROF 19

MAXIMUM A LAMDA= 482.9 AVEC ECLAIREMENT SPECTRAL= 0.13601 WATT/M2/NM

ENTRE 400.0 NM ET 612.6 NM , ECLAIREMENT 16.982 WATT/M2 42.126E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.316E-01	402.3	0.423E-01	404.2	0.499E-01	405.4	0.548E-01	407.6	0.598E-01
410.4	0.672E-01	413.2	0.756E-01	416.4	0.836E-01	419.9	0.875E-01	423.7	0.898E-01
426.3	0.910E-01	428.1	0.910E-01	431.6	0.875E-01	433.1	0.866E-01	435.7	0.862E-01
438.7	0.923E-01	444.7	0.101E-00	450.7	0.109E-00	453.1	0.114E-00	455.0	0.116E-00
457.7	0.117E-00	460.1	0.118E-00	462.8	0.121E-00	465.3	0.124E-00	466.7	0.126E-00
469.7	0.127E-00	472.4	0.127E-00	476.0	0.131E-00	479.2	0.134E-00	481.6	0.135E-00
482.9	0.136E-00	485.1	0.132E-00	487.6	0.130E-00	489.1	0.130E-00	490.4	0.131E-00
493.5	0.134E-00	495.0	0.134E-00	497.8	0.134E-00	500.9	0.130E-00	502.5	0.128E-00
505.0	0.126E-00	507.8	0.117E-00	510.6	0.106E-00	512.8	0.971E-01	514.5	0.914E-01
518.1	0.884E-01	521.0	0.887E-01	525.1	0.906E-01	529.8	0.899E-01	532.8	0.881E-01
535.7	0.841E-01	539.5	0.796E-01	544.3	0.756E-01	547.7	0.709E-01	551.6	0.656E-01
556.4	0.626E-01	559.8	0.581E-01	565.3	0.532E-01	572.7	0.439E-01	580.6	0.317E-01
587.1	0.192E-01	592.8	0.117E-01	595.9	0.585E-02	602.9	0.204E-02	612.6	0.

STATION 10 EXP 2 PROF 38

MAXIMUM A LAMDA= 495.1 AVEC ECLAIREMENT SPECTRAL= 0.05293 WATT/M2/NM

ENTRE 400.0 NM ET 601.9 NM , ECLAIREMENT 5.326 WATT/M2 13.090E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.916E-02	400.3	0.947E-02	403.1	0.130E-01	405.3	0.156E-01	407.1	0.166E-01
409.8	0.185E-01	411.7	0.209E-01	414.4	0.231E-01	418.3	0.254E-01	422.7	0.266E-01
425.6	0.273E-01	428.0	0.274E-01	430.9	0.265E-01	432.6	0.260E-01	435.0	0.261E-01
436.7	0.279E-01	443.0	0.310E-01	448.7	0.339E-01	453.5	0.363E-01	455.7	0.380E-01
458.5	0.384E-01	461.4	0.396E-01	463.5	0.415E-01	466.7	0.434E-01	469.9	0.451E-01
471.6	0.455E-01	475.0	0.478E-01	478.5	0.493E-01	481.2	0.506E-01	482.9	0.512E-01
484.6	0.510E-01	486.0	0.501E-01	488.3	0.503E-01	489.9	0.509E-01	492.8	0.520E-01
495.1	0.529E-01	497.0	0.529E-01	499.8	0.518E-01	501.1	0.508E-01	503.0	0.491E-01
504.0	0.482E-01	506.5	0.470E-01	509.4	0.445E-01	511.9	0.397E-01	514.1	0.348E-01
515.8	0.315E-01	517.7	0.280E-01	519.7	0.260E-01	521.4	0.250E-01	522.3	0.248E-01
525.2	0.252E-01	529.5	0.248E-01	532.3	0.242E-01	534.6	0.230E-01	537.2	0.218E-01
540.4	0.206E-01	543.9	0.187E-01	547.4	0.164E-01	549.8	0.148E-01	552.4	0.138E-01
556.9	0.126E-01	561.6	0.109E-01	568.3	0.868E-02	574.2	0.625E-02	578.1	0.556E-02
582.5	0.307E-02	588.1	0.159E-02	593.8	0.318E-03	601.9	0.		

STATION 10 EXP 2 PROF 54

MAXIMUM A LAMDA= 493.4 AVEC ECLAIREMENT SPECTRAL= 0.02148 WATT/M2/NM

ENTRE 400.0 NM ET 600.6 NM , ECLAIREMENT 1.799 WATT/M2 4.427E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.204E-02	401.6	0.232E-02	403.6	0.331E-02	405.9	0.395E-02	408.8	0.434E-02
410.8	0.516E-02	413.9	0.606E-02	418.6	0.696E-02	422.6	0.752E-02	425.8	0.784E-02
427.3	0.799E-02	430.7	0.790E-02	433.0	0.784E-02	435.1	0.812E-02	438.7	0.902E-02
444.3	0.102E-01	449.2	0.111E-01	451.8	0.117E-01	453.7	0.123E-01	454.7	0.125E-01
457.3	0.129E-01	460.6	0.136E-01	463.9	0.146E-01	465.2	0.152E-01	467.8	0.158E-01
470.9	0.164E-01	474.3	0.174E-01	477.4	0.182E-01	479.3	0.189E-01	480.8	0.195E-01
482.4	0.196E-01	484.4	0.197E-01	487.0	0.201E-01	488.3	0.206E-01	489.4	0.211E-01
491.4	0.213E-01	493.4	0.215E-01	495.8	0.214E-01	499.5	0.212E-01	502.8	0.205E-01
504.8	0.196E-01	506.2	0.183E-01	507.2	0.170E-01	508.8	0.150E-01	510.1	0.129E-01
511.5	0.114E-01	513.3	0.973E-02	516.0	0.859E-02	518.3	0.838E-02	519.8	0.836E-02
521.3	0.853E-02	526.4	0.846E-02	529.6	0.833E-02	532.0	0.801E-02	535.6	0.726E-02
541.0	0.623E-02	545.3	0.546E-02	549.9	0.440E-02	554.1	0.361E-02	559.6	0.320E-02
567.3	0.234E-02	575.1	0.142E-02	581.9	0.601E-03	589.3	0.172E-03	600.6	0.

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STATION 10 EXP 2 PROF 88

MAXIMUM A LAMDA= 496.7 AVEC ECLAIREMENT SPECTRAL= 0.00320 WATT/M2/NM

ENTRE 400.0 NM ET 590.8 NM , ECLAIREMENT 0.196 WATT/M2 0.486E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.799E-14	405.1	0.147E-03	414.5	0.249E-03	420.1	0.345E-03	424.1	0.409E-03
427.2	0.464E-03	432.4	0.473E-03	435.8	0.569E-03	441.2	0.751E-03	444.7	0.847E-03
446.1	0.882E-03	449.6	0.101E-02	452.0	0.116E-02	454.5	0.123E-02	457.6	0.125E-02
460.4	0.138E-02	464.1	0.163E-02	467.8	0.185E-02	471.1	0.199E-02	474.7	0.216E-02
479.0	0.245E-02	482.3	0.267E-02	483.7	0.269E-02	485.1	0.280E-02	487.2	0.295E-02
489.2	0.306E-02	491.3	0.312E-02	493.3	0.316E-02	496.7	0.320E-02	498.8	0.316E-02
500.5	0.316E-02	501.9	0.310E-02	504.2	0.292E-02	506.5	0.261E-02	507.9	0.228E-02
509.8	0.178E-02	510.8	0.141E-02	512.7	0.113E-02	515.6	0.949E-03	517.4	0.892E-03
523.5	0.889E-03	529.5	0.857E-03	534.8	0.722E-03	541.3	0.531E-03	548.8	0.342E-03
555.4	0.243E-03	565.2	0.166E-03	573.7	0.799E-04	580.4	0.	590.8	0.

STATION 11 EXP 1 PROF 0

MAXIMUM A LAMDA= 462.9 AVEC ECLAIREMENT SPECTRAL= 1.54251 WATT/M2/NM

ENTRE 400.0 NM ET 700.0 NM , ECLAIREMENT 357.159 WATT/M2 979.700E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.577E 00	402.0	0.697E 00	403.6	0.808E 00	404.4	0.859E 00	406.9	0.904E 00
408.5	0.101E 01	409.5	0.113E 01	411.4	0.121E 01	414.0	0.128E 01	416.2	0.134E 01
417.8	0.138E 01	421.2	0.138E 01	424.1	0.137E 01	426.7	0.134E 01	429.1	0.128E 01
431.5	0.126E 01	433.0	0.125E 01	434.6	0.130E 01	436.8	0.135E 01	440.1	0.139E 01
443.7	0.144E 01	447.0	0.146E 01	448.7	0.150E 01	450.6	0.152E 01	453.4	0.154E 01
456.4	0.153E 01	459.5	0.153E 01	462.9	0.154E 01	464.9	0.153E 01	467.5	0.151E 01
469.5	0.149E 01	472.7	0.150E 01	474.7	0.151E 01	478.2	0.151E 01	480.4	0.150E 01
481.8	0.147E 01	484.2	0.142E 01	486.1	0.139E 01	488.2	0.139E 01	491.4	0.141E 01
494.4	0.142E 01	496.5	0.143E 01	499.7	0.140E 01	502.1	0.137E 01	504.3	0.136E 01
509.9	0.137E 01	512.7	0.135E 01	516.1	0.130E 01	518.1	0.127E 01	520.0	0.127E 01
524.1	0.129E 01	529.7	0.129E 01	534.9	0.128E 01	541.8	0.125E 01	548.3	0.126E 01
555.5	0.124E 01	566.4	0.120E 01	576.0	0.115E 01	582.0	0.115E 01	585.1	0.116E 01
586.4	0.117E 01	589.1	0.113E 01	592.4	0.106E 01	594.7	0.104E 01	602.9	0.108E 01
609.7	0.111E 01	618.3	0.105E 01	625.4	0.106E 01	631.2	0.101E 01	635.0	0.102E 01
640.7	0.101E 01	644.7	0.986E 00	652.9	0.938E 00	657.6	0.910E 00	661.6	0.956E 00
669.7	0.939E 00	676.8	0.979E 00	680.6	0.952E 00	683.9	0.899E 00	685.9	0.842E 00
691.4	0.855E 00	700.0	0.798E 00	710.1	0.855E 00	715.4	0.714E 00	718.2	0.574E 00
724.8	0.563E 00	728.0	0.554E 00						

STATION 11 EXP 1 PROF 5

MAXIMUM A LAMDA= 479.1 AVEC ECLAIREMENT SPECTRAL= 1.47528 WATT/M2/NM

ENTRE 400.0 NM ET 685.4 NM , ECLAIREMENT 243.198 WATT/M2 621.150E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.524E 00	400.5	0.556E 00	401.9	0.695E 00	403.6	0.777E 00	406.6	0.839E 00
408.0	0.921E 00	411.1	0.101E 01	413.4	0.109E 01	415.6	0.114E 01	417.4	0.118E 01
420.7	0.119E 01	423.0	0.119E 01	425.5	0.118E 01	428.0	0.115E 01	430.5	0.112E 01
432.6	0.111E 01	434.1	0.113E 01	437.3	0.120E 01	441.1	0.127E 01	445.4	0.133E 01
448.9	0.137E 01	452.2	0.142E 01	453.0	0.143E 01	456.5	0.143E 01	458.7	0.143E 01
461.1	0.145E 01	463.2	0.145E 01	465.3	0.145E 01	467.7	0.144E 01	470.0	0.143E 01
474.0	0.145E 01	477.0	0.147E 01	479.1	0.148E 01	480.8	0.146E 01	483.4	0.142E 01
485.6	0.138E 01	487.0	0.137E 01	489.7	0.138E 01	492.8	0.141E 01	495.2	0.142E 01
497.2	0.141E 01	501.0	0.136E 01	503.8	0.135E 01	507.3	0.134E 01	510.6	0.132E 01
513.2	0.124E 01	515.2	0.119E 01	516.8	0.117E 01	518.8	0.118E 01	521.9	0.120E 01
526.3	0.121E 01	531.2	0.120E 01	535.3	0.115E 01	541.3	0.112E 01	548.3	0.109E 01
554.3	0.108E 01	560.3	0.101E 01	568.0	0.957E 00	573.1	0.960E 00	576.8	0.901E 00
581.9	0.817E 00	584.6	0.786E 00	587.2	0.687E 00	590.4	0.581E 00	594.7	0.500E 00
600.1	0.381E 00	605.1	0.310E 00	612.3	0.257E 00	622.6	0.239E 00	634.3	0.198E 00
646.0	0.153E 00	654.8	0.111E 00	664.1	0.693E-01	673.1	0.516E-01	679.8	0.325E-01
685.4	0.								

STATION 11 EXP 1 PROF 10

MAXIMUM A LAMDA= 479.7 AVEC ECLAIREMENT SPECTRAL= 0.96577 WATT/M2/NM

ENTRE 400.0 NM ET 623.5 NM , ECLAIREMENT 137.683 WATT/M2 343.400E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.38 E 00	402.2	0.424E 00	403.3	0.478E 00	406.3	0.511E 00	408.3	0.568E 00
410.6	0.634E 00	412.4	0.677E 00	415.5	0.718E 00	417.5	0.740E 00	421.1	0.747E 00
424.2	0.748E 00	427.7	0.718E 00	429.8	0.699E 00	431.3	0.691E 00	432.6	0.691E 00
435.4	0.722E 00	439.1	0.765E 00	444.5	0.812E 00	448.1	0.845E 00	451.0	0.871E 00
452.4	0.881E 00	455.2	0.893E 00	458.6	0.899E 00	461.3	0.919E 00	463.8	0.925E 00
466.1	0.932E 00	470.3	0.923E 00	473.5	0.947E 00	477.1	0.961E 00	479.7	0.966E 00
481.3	0.955E 00	483.7	0.923E 00	485.7	0.905E 00	487.6	0.907E 00	489.9	0.919E 00
493.2	0.928E 00	495.5	0.928E 00	498.3	0.921E 00	501.7	0.884E 00	504.8	0.875E 00
508.5	0.851E 00	512.5	0.795E 00	515.4	0.739E 00	517.0	0.715E 00	519.1	0.708E 00
520.7	0.710E 00	524.6	0.728E 00	529.6	0.720E 00	536.7	0.678E 00	542.8	0.644E 00
549.1	0.625E 00	554.6	0.587E 00	558.3	0.541E 00	565.2	0.505E 00	571.3	0.466E 00
573.9	0.448E 00	578.2	0.382E 00	582.4	0.350E 00	586.1	0.259E 00	590.5	0.185E 00
595.3	0.124E 00	598.8	0.946E-01	602.8	0.773E-01	607.5	0.415E-01	614.2	0.261E-01
623.5	0.								

STATION 11 EXP 1 PROF 15

MAXIMUM A LAMDA= 479.9 AVEC ECLAIREMENT SPECTRAL= 0.72026 WATT/M2/NM

ENTRE 400.0 NM ET 604.5 NM , ECLAIREMENT 96.304 WATT/M2 238.360E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.267E 00	401.7	0.308E 00	403.7	0.346E 00	405.1	0.367E 00	406.8	0.378E 00
418.5	0.413E 00	410.7	0.452E 00	412.3	0.490E 00	414.5	0.511E 00	416.1	0.530E 00
419.6	0.543E 00	422.9	0.542E 00	424.8	0.540E 00	426.9	0.532E 00	429.1	0.519E 00
431.2	0.506E 00	432.8	0.520E 00	434.2	0.511E 00	436.1	0.532E 00	438.9	0.555E 00
442.8	0.574E 00	446.2	0.601E 00	449.3	0.619E 00	451.2	0.635E 00	452.3	0.643E 00
453.7	0.647E 00	456.2	0.653E 00	458.5	0.658E 00	461.5	0.673E 00	463.1	0.681E 00
464.5	0.683E 00	466.7	0.687E 00	468.8	0.686E 00	470.9	0.687E 00	474.2	0.702E 00
477.3	0.715E 00	479.9	0.720E 00	481.3	0.718E 00	483.3	0.697E 00	485.2	0.681E 00
486.4	0.671E 00	487.5	0.674E 00	489.5	0.679E 00	492.0	0.693E 00	494.2	0.697E 00
495.9	0.701E 00	498.2	0.689E 00	501.3	0.668E 00	502.7	0.656E 00	505.2	0.651E 00
508.3	0.627E 00	511.8	0.584E 00	514.7	0.539E 00	517.3	0.503E 00	518.9	0.496E 00
520.2	0.490E 00	522.8	0.502E 00	526.1	0.506E 00	530.3	0.496E 00	531.9	0.487E 00
536.6	0.452E 00	541.8	0.426E 00	547.5	0.399E 00	551.0	0.387E 00	554.0	0.381E 00
556.7	0.367E 00	559.1	0.343E 00	564.0	0.322E 00	571.3	0.280E 00	576.1	0.238E 00
579.9	0.202E 00	582.6	0.186E 00	585.8	0.138E 00	589.9	0.814E-01	594.8	0.447E-01
599.2	0.202E-01	604.5	0.						



STATION 11 EXP 1 PROF 20

MAXIMUM A LAMDA= 479.2 AVEC ECLAIREMENT SPECTRAL= 0.53276 WATT/M2/NM

ENTRE 400.0 NM ET 607.7 NM , ECLAIREMENT 66.938 WATT/M2 164.630E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.194E 00	401.4	0.222E 00	402.5	0.245E 00	403.7	0.261E 00	405.7	0.274E 00
408.1	0.302E 00	410.4	0.334E 00	412.3	0.360E 00	414.5	0.379E 00	416.9	0.386E 00
420.2	0.391E 00	423.7	0.392E 00	424.8	0.387E 00	427.7	0.374E 00	429.6	0.368E 00
431.3	0.363E 00	432.6	0.364E 00	434.5	0.372E 00	437.0	0.386E 00	441.4	0.408E 00
444.7	0.425E 00	447.7	0.442E 00	450.6	0.459E 00	453.2	0.466E 00	456.4	0.469E 00
458.7	0.477E 00	461.5	0.491E 00	463.6	0.501E 00	465.5	0.503E 00	468.9	0.506E 00
472.0	0.513E 00	476.1	0.527E 00	478.2	0.533E 00	479.9	0.528E 00	481.1	0.522E 00
483.0	0.504E 00	484.2	0.499E 00	486.2	0.500E 00	489.5	0.509E 00	492.7	0.513E 00
496.5	0.505E 00	501.8	0.482E 00	505.9	0.437E 00	508.8	0.388E 00	511.4	0.354E 00
513.6	0.338E 00	515.6	0.333E 00	518.3	0.337E 00	521.4	0.343E 00	526.1	0.343E 00
530.8	0.334E 00	535.0	0.311E 00	540.7	0.288E 00	546.9	0.266E 00	550.4	0.245E 00
555.9	0.232E 00	558.6	0.216E 00	565.7	0.190E 00	572.1	0.159E 00	576.0	0.143E 00
582.2	0.895E-01	587.2	0.538E-01	593.3	0.208E-01	599.6	0.	607.7	0.

STATION 11 EXP 1 PROF 29

MAXIMUM A LAMDA= 480.8 AVEC ECLAIREMENT SPECTRAL= 0.31456 WATT/M2/NM

ENTRE 400.0 NM ET 601.0 NM , ECLAIREMENT 35.711 WATT/M2 87.264E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.969E-01	411.3	0.113E 00	402.8	0.131E 00	404.7	0.138E 00	406.8	0.150E 00
408.6	0.160E 00	410.1	0.174E 00	412.3	0.188E 00	414.5	0.198E 00	416.6	0.206E 00
419.3	0.209E 00	422.2	0.209E 00	424.1	0.210E 00	425.4	0.207E 00	428.1	0.202E 00
429.7	0.198E 00	432.3	0.195E 00	434.5	0.201E 00	436.8	0.210E 00	442.1	0.224E 00
446.8	0.237E 00	451.0	0.247E 00	453.6	0.255E 00	455.1	0.258E 00	457.5	0.261E 00
460.4	0.269E 00	462.7	0.279E 00	464.9	0.285E 00	467.0	0.290E 00	470.7	0.296E 00
473.8	0.304E 00	477.2	0.310E 00	479.1	0.313E 00	480.8	0.315E 00	481.8	0.313E 00
483.6	0.304E 00	486.0	0.299E 00	488.3	0.300E 00	490.4	0.305E 00	493.1	0.308E 00
495.8	0.307E 00	498.7	0.300E 00	502.0	0.289E 00	505.3	0.270E 00	507.0	0.243E 00
508.8	0.217E 00	510.5	0.196E 00	512.4	0.182E 00	514.6	0.173E 00	516.8	0.170E 00
520.9	0.173E 00	525.2	0.176E 00	529.3	0.171E 00	534.7	0.155E 00	540.0	0.141E 00
545.0	0.124E 00	547.2	0.116E 00	551.0	0.106E 00	555.7	0.101E 00	562.4	0.824E-01
571.2	0.607E-01	579.2	0.371E-01	586.6	0.132E-01	589.0	0.881E-02	593.4	0.629E-03
601.0	0.								

STATION 11 EXP 1 PROF 38

MAXIMUM A LAMDA= 481.1 AVEC ECLAIREMENT SPECTRAL= 0.19642 WATT/M2/NM

ENTRE 400.0 NM ET 595.0 NM , ECLAIREMENT 20.679 WATT/M2 50.298E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.1	0.570E-01	401.3	0.583E-01	402.2	0.699E-01	404.6	0.794E-01	406.4	0.851E-01
408.3	0.921E-01	410.4	0.101E 00	412.4	0.111E 00	414.1	0.116E 00	416.9	0.120E 00
419.3	0.121E 00	421.8	0.122E 00	424.0	0.122E 00	425.7	0.121E 00	427.6	0.119E 00
430.4	0.115E 00	432.0	0.114E 00	432.9	0.115E 00	434.5	0.118E 00	437.5	0.123E 00
441.6	0.130E 00	445.8	0.137E 00	449.4	0.143E 00	451.8	0.149E 00	453.6	0.151E 00
456.0	0.153E 00	459.9	0.161E 00	462.8	0.169E 00	465.3	0.174E 00	466.8	0.177E 00
469.0	0.180E 00	471.0	0.183E 00	473.5	0.188E 00	476.4	0.192E 00	478.2	0.195E 00
479.9	0.196E 00	481.1	0.196E 00	483.4	0.191E 00	485.2	0.188E 00	486.7	0.189E 00
488.5	0.190E 00	490.9	0.193E 00	492.7	0.194E 00	494.2	0.193E 00	497.8	0.188E 00
500.2	0.182E 00	503.2	0.176E 00	505.3	0.162E 00	506.2	0.150E 00	507.7	0.135E 00
508.6	0.123E 00	510.3	0.113E 00	512.0	0.103E 00	514.0	0.957E-01	516.2	0.931E-01
517.9	0.947E-01	521.3	0.953E-01	526.3	0.945E-01	529.7	0.927E-01	532.5	0.878E-01
536.2	0.799E-01	540.1	0.731E-01	544.6	0.646E-01	547.7	0.548E-01	551.1	0.507E-01
555.9	0.462E-01	561.6	0.383E-01	568.1	0.295E-01	574.9	0.192E-01	578.3	0.157E-01
584.0	0.668E-02	588.0	0.255E-02	595.0	0.				

STATION 11 EXP 1 PROF 47

MAXIMUM A LAMDA= 480.4 AVEC ECLAIREMENT SPECTRAL= 0.11902 WATT/M2/NM

ENTRE 400.0 NM ET 595.2 NM , ECLAIREMENT 11.818 WATT/M2 28.684E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.345E-01	400.2	0.351E-01	403.0	0.423E-01	404.2	0.455E-01	405.8	0.473E-01
408.6	0.511E-01	410.7	0.582E-01	413.5	0.631E-01	416.0	0.656E-01	417.6	0.675E-01
419.5	0.684E-01	422.2	0.686E-01	424.4	0.688E-01	426.9	0.674E-01	429.0	0.653E-01
431.2	0.551E-01	433.1	0.642E-01	435.1	0.668E-01	437.5	0.697E-01	442.9	0.742E-01
447.8	0.782E-01	450.5	0.824E-01	453.2	0.859E-01	456.2	0.878E-01	458.4	0.903E-01
461.3	0.957E-01	463.0	0.996E-01	464.5	0.102E 00	466.7	0.105E 00	469.4	0.107E 00
472.3	0.112E 00	477.5	0.118E 00	478.9	0.119E 00	480.4	0.119E 00	481.9	0.117E 00
484.1	0.114E 00	485.6	0.115E 00	488.4	0.118E 00	489.7	0.119E 00	493.2	0.119E 00
496.6	0.116E 00	500.1	0.112E 00	503.5	0.105E 00	505.7	0.956E-01	507.2	0.865E-01
508.2	0.770E-01	510.0	0.668E-01	512.0	0.571E-01	514.3	0.521E-01	515.7	0.506E-01
518.3	0.506E-01	520.3	0.517E-01	524.8	0.505E-01	528.2	0.499E-01	529.3	0.499E-01
532.5	0.478E-01	535.0	0.439E-01	537.9	0.398E-01	541.7	0.365E-01	545.7	0.317E-01
549.2	0.267E-01	554.9	0.232E-01	561.9	0.170E-01	572.5	0.107E-01	582.2	0.357E-02
586.8	0.357E-02	595.2	0.						

STATION 11 EXP 1 PROF 56

MAXIMUM A LAMDA= 494.2 AVEC ECLAIREMENT SPECTRAL= 0.06486 WATT/M2/NM

ENTRE 400.0 NM ET 590.6 NM , ECLAIREMENT 5.911 WATT/M2 14.342E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.143E-01	402.0	0.167E-01	402.9	0.196E-01	404.5	0.203E-01	406.3	0.210E-01
409.1	0.235E-01	411.2	0.268E-01	414.0	0.292E-01	418.4	0.308E-01	422.8	0.316E-01
425.0	0.317E-01	427.7	0.309E-01	430.2	0.307E-01	432.2	0.306E-01	435.5	0.326E-01
440.1	0.352E-01	446.2	0.386E-01	451.4	0.414E-01	454.4	0.432E-01	456.3	0.437E-01
458.7	0.457E-01	460.5	0.485E-01	462.6	0.512E-01	464.2	0.527E-01	467.7	0.553E-01
472.3	0.586E-01	475.9	0.615E-01	478.7	0.630E-01	481.0	0.637E-01	482.8	0.633E-01
484.9	0.619E-01	486.4	0.620E-01	487.9	0.623E-01	490.3	0.636E-01	491.8	0.646E-01
494.2	0.649E-01	496.3	0.642E-01	498.1	0.625E-01	499.9	0.599E-01	502.3	0.574E-01
504.7	0.561E-01	507.1	0.523E-01	508.6	0.472E-01	510.4	0.404E-01	512.4	0.331E-01
515.0	0.275E-01	517.0	0.245E-01	518.9	0.236E-01	522.6	0.235E-01	526.2	0.234E-01
529.6	0.230E-01	534.1	0.214E-01	538.4	0.178E-01	543.6	0.141E-01	547.4	0.113E-01
551.5	0.915E-02	555.8	0.869E-02	566.0	0.532E-02	574.5	0.272E-02	582.5	0.324E-03
590.6	0.								

STATION 11 EXP 1 PROF 75

MAXIMUM A LAMDA= 491.7 AVEC ECLAIREMENT SPECTRAL= 0.03391 WATT/M2/NM

ENTRE 400.0 NM ET 584.7 NM , ECLAIREMENT 2.445 WATT/M2 5.969E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.319E-02	400.9	0.356E-02	402.7	0.441E-02	404.0	0.471E-02	406.1	0.485E-02
409.2	0.573E-02	412.5	0.688E-02	417.0	0.800E-02	421.5	0.888E-02	425.7	0.946E-02
428.4	0.960E-02	431.1	0.956E-02	433.5	0.102E-01	437.2	0.114E-01	441.0	0.129E-01
445.4	0.143E-01	449.2	0.157E-01	451.7	0.168E-01	453.6	0.175E-01	455.4	0.181E-01
458.3	0.194E-01	460.8	0.212E-01	463.5	0.230E-01	466.7	0.249E-01	470.9	0.271E-01
472.8	0.283E-01	475.4	0.297E-01	478.1	0.309E-01	479.9	0.313E-01	482.1	0.321E-01
484.8	0.319E-01	486.8	0.320E-01	487.4	0.322E-01	489.1	0.330E-01	490.7	0.337E-01
491.7	0.339E-01	495.7	0.329E-01	498.6	0.322E-01	502.2	0.309E-01	503.5	0.291E-01
504.5	0.264E-01	506.5	0.229E-01	508.1	0.177E-01	510.3	0.134E-01	512.4	0.109E-01
515.3	0.970E-02	517.6	0.936E-02	520.8	0.963E-02	524.8	0.970E-02	528.6	0.936E-02
533.9	0.773E-02	539.4	0.651E-02	545.0	0.451E-02	550.7	0.312E-02	557.7	0.231E-02
566.7	0.136E-02	576.3	0.407E-03	584.7	0.				

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STATION 11 EXP 1 PROF 93

MAXIMUM A LAMDA= 487.8 AVEC ECLAIREMENT SPECTRAL= 0.01250 WATT/M2/NM

ENTRE 400.0 NM ET 582.8 NM , ECLAIREMENT 0.766 WATT/M2 1.879E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.488E-03	404.5	0.750E-03	409.3	0.988E-03	413.7	0.140E-02	419.1	0.171E-02
422.7	0.196E-02	425.1	0.213E-02	429.0	0.226E-02	431.7	0.238E-02	434.8	0.279E-02
439.0	0.320E-02	442.0	0.354E-02	446.0	0.403E-02	449.3	0.448E-02	451.6	0.498E-02
452.6	0.520E-02	455.6	0.545E-02	458.5	0.616E-02	462.5	0.701E-02	464.8	0.779E-02
467.7	0.861E-02	471.6	0.950E-02	475.2	0.104E-01	477.1	0.109E-01	478.1	0.113E-01
481.5	0.115E-01	483.7	0.119E-01	485.8	0.122E-01	487.8	0.125E-01	490.1	0.124E-01
493.8	0.119E-01	496.2	0.115E-01	498.9	0.112E-01	500.5	0.108E-01	502.9	0.991E-02
503.8	0.896E-02	506.2	0.763E-02	508.1	0.571E-02	509.8	0.420E-02	512.5	0.324E-02
514.1	0.298E-02	516.5	0.279E-02	521.5	0.285E-02	523.9	0.276E-02	526.4	0.264E-02
527.9	0.265E-02	531.6	0.246E-02	536.5	0.199E-02	542.0	0.148E-02	547.1	0.104E-02
551.3	0.750E-03	558.6	0.475E-03	568.3	0.225E-03	574.9	0.750E-04	582.8	0.

STATION 11 EXP 1 PROF 111

MAXIMUM A LAMDA= 485.4 AVEC ECLAIREMENT SPECTRAL= 0.00504 WATT/M2/NM

ENTRE 400.0 NM ET 587.9 NM , ECLAIREMENT 0.275 WATT/M2 0.677E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.806E-04	402.1	0.101E-03	411.6	0.237E-03	419.9	0.363E-03	424.4	0.498E-03
427.6	0.549E-03	430.2	0.564E-03	435.0	0.740E-03	443.4	0.113E-02	448.7	0.139E-02
452.1	0.161E-02	456.1	0.179E-02	459.8	0.211E-02	462.2	0.251E-02	465.2	0.283E-02
469.7	0.321E-02	473.3	0.364E-02	476.2	0.391E-02	479.7	0.421E-02	482.4	0.442E-02
485.0	0.466E-02	487.0	0.489E-02	489.4	0.504E-02	491.8	0.497E-02	494.5	0.484E-02
496.1	0.487E-02	499.2	0.477E-02	502.2	0.444E-02	504.5	0.384E-02	506.5	0.314E-02
507.4	0.246E-02	509.1	0.182E-02	511.0	0.134E-02	513.2	0.109E-02	516.0	0.982E-03
522.0	0.972E-03	529.3	0.871E-03	534.4	0.680E-03	541.9	0.438E-03	550.0	0.206E-03
556.3	0.151E-03	565.0	0.504E-04	576.2	0.302E-04	587.9	0.		

STATION 11 EXP 2 PROF 0

MAXIMUM A LAMDA= 491.1 AVEC ECLAIREMENT SPECTRAL= 1.26481 WATT/M2/NM

ENTRE 401.6 NM ET 700.0 NM , ECLAIREMENT 318.141 WATT/M2 886.580E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.6	0.584E 00	403.9	0.622E 00	409.2	0.832E 00	414.9	0.931E 00	423.9	0.960E 00
425.2	0.950E 00	427.4	0.928E 00	429.2	0.922E 00	431.3	0.913E 00	432.3	0.918E 00
434.1	0.957E 00	436.4	0.993E 00	439.5	0.104E 01	443.1	0.109E 01	446.2	0.114E 01
447.7	0.115E 01	449.6	0.118E 01	451.7	0.120E 01	453.8	0.121E 01	456.4	0.121E 01
460.0	0.123E 01	462.7	0.123E 01	466.5	0.122E 01	469.7	0.122E 01	471.8	0.122E 01
474.8	0.124E 01	478.6	0.125E 01	481.1	0.126E 01	482.3	0.125E 01	485.3	0.120E 01
487.6	0.118E 01	490.2	0.120E 01	492.1	0.121E 01	494.0	0.123E 01	496.1	0.123E 01
499.5	0.120E 01	502.7	0.119E 01	506.1	0.121E 01	509.5	0.122E 01	510.9	0.120E 01
514.3	0.117E 01	516.3	0.114E 01	517.4	0.113E 01	520.5	0.115E 01	524.9	0.119E 01
532.4	0.119E 01	535.3	0.119E 01	539.5	0.117E 01	543.7	0.117E 01	548.2	0.119E 01
553.2	0.119E 01	554.7	0.118E 01	557.5	0.116E 01	562.0	0.116E 01	570.3	0.113E 01
575.0	0.112E 01	580.2	0.114E 01	582.8	0.115E 01	585.8	0.110E 01	588.9	0.104E 01
592.8	0.103E 01	600.5	0.106E 01	606.5	0.111E 01	612.8	0.107E 01	617.1	0.106E 01
620.9	0.107E 01	627.9	0.102E 01	634.9	0.104E 01	640.7	0.104E 01	647.1	0.961E 00
653.8	0.942E 00	656.2	0.913E 00	660.3	0.970E 00	668.6	0.980E 00	675.8	0.938E 00
680.3	0.927E 00	682.4	0.858E 00	684.7	0.772E 00	693.0	0.759E 00	700.0	0.790E 00
709.3	0.788E 00	713.3	0.598E 00	719.2	0.522E 00	726.3	0.422E 00	731.2	0.496E 00
738.3	0.573E 00	742.0	0.602E 00						

STATION 11 EXP 2 PROF 5

MAXIMUM A LAMDA= 478.2 AVEC ECLAIREMENT SPECTRAL= 1.05144 WATT/M2/NM

ENTRE 401.3 NM ET 699.4 NM , ECLAIREMENT 170.919 WATT/M2 441.462E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.3	0.487E 00	404.2	0.516E 00	408.3	0.631E 00	411.8	0.691E 00	415.3	0.722E 00
422.3	0.751E 00	425.7	0.732E 00	430.1	0.700E 00	431.4	0.698E 00	435.3	0.751E 00
439.7	0.795E 00	446.4	0.906E 00	450.9	0.946E 00	456.0	0.960E 00	461.4	0.998E 00
466.4	0.983E 00	472.4	0.101E 01	475.2	0.104E 01	478.2	0.105E 01	480.4	0.104E 01
485.9	0.966E 00	495.7	0.994E 00	500.5	0.948E 00	503.5	0.954E 00	510.3	0.934E 00
517.1	0.847E 00	519.2	0.845E 00	521.3	0.859E 00	524.7	0.875E 00	530.6	0.836E 00
537.2	0.822E 00	541.3	0.793E 00	543.9	0.790E 00	547.4	0.751E 00	556.5	0.721E 00
558.2	0.709E 00	563.9	0.677E 00	571.7	0.655E 00	582.1	0.487E 00	592.4	0.346E 00
596.2	0.320E 00	599.0	0.305E 00	604.0	0.252E 00	626.0	0.193E 00	641.2	0.192E 00
662.4	0.123E 00	675.8	0.113E 00	699.4	0.				

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STATION 11 EXP 2 PROF 9

MAXIMUM A LAMDA= 479.6 AVEC ECLAIREMENT SPECTRAL= 0.86218 WATT/M2/NM

ENTRE 402.6 NM ET 661.4 NM , ECLAIREMENT 126.291 WATT/M2 318.072E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.6	0.413E 00	405.2	0.432E 00	409.0	0.546E 00	414.7	0.605E 00	422.2	0.622E 00
427.4	0.590E 00	437.1	0.585E 00	435.0	0.638E 00	447.9	0.766E 00	451.9	0.771E 00
460.4	0.818E 00	468.5	0.823E 00	479.6	0.862E 00	484.8	0.807E 00	486.5	0.806E 00
492.7	0.841E 00	500.2	0.796E 00	504.2	0.789E 00	513.0	0.703E 00	518.2	0.657E 00
521.9	0.670E 00	532.9	0.672E 00	549.8	0.574E 00	570.2	0.481E 00	578.2	0.393E 00
586.7	0.222E 00	592.5	0.194E 00	618.8	0.517E-01	661.4	0.		

STATION 11 EXP 2 PROF 14

MAXIMUM A LAMDA= 478.5 AVEC ECLAIREMENT SPECTRAL= 0.67584 WATT/M2/NM

ENTRE 401.4 NM ET 613.2 NM , ECLAIREMENT 89.294 WATT/M2 221.188E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.324E 00	404.2	0.345E 00	408.1	0.418E 00	414.3	0.471E 00	421.3	0.477E 00
427.9	0.451E 00	431.1	0.451E 00	436.4	0.491E 00	450.7	0.584E 00	454.8	0.596E 00
461.0	0.631E 00	468.0	0.635E 00	478.5	0.676E 00	479.8	0.674E 00	484.6	0.638E 00
486.9	0.642E 00	491.1	0.662E 00	493.7	0.664E 00	499.4	0.624E 00	502.3	0.627E 00
508.4	0.579E 00	515.1	0.483E 00	518.0	0.478E 00	521.5	0.492E 00	528.1	0.489E 00
536.5	0.448E 00	544.2	0.393E 00	548.3	0.385E 00	560.6	0.307E 00	570.6	0.274E 00
581.4	0.147E 00	589.3	0.642E-01	595.2	0.291E-01	613.2	0.		

STATION 11 EXP 2 PROF 18

MAXIMUM A LAMDA= 478.9 AVEC ECLAIREMENT SPECTRAL= 0.49603 WATT/M2/NM

ENTRE 401.8 NM ET 609.1 NM , ECLAIREMENT 63.567 WATT/M2 157.208E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.221E 00	405.5	0.242E 00	408.5	0.295E 00	415.3	0.334E 00	423.6	0.341E 00
428.6	0.326E 00	431.5	0.321E 00	436.6	0.352E 00	449.9	0.419E 00	453.9	0.425E 00
461.8	0.457E 00	463.9	0.460E 00	469.6	0.466E 00	478.9	0.496E 00	480.4	0.495E 00
482.1	0.492E 00	486.9	0.470E 00	487.9	0.470E 00	492.0	0.488E 00	493.0	0.489E 00
495.5	0.484E 00	499.0	0.464E 00	504.4	0.456E 00	508.6	0.426E 00	513.6	0.362E 00
517.8	0.338E 00	519.7	0.339E 00	522.6	0.345E 00	531.7	0.341E 00	542.4	0.304E 00
546.3	0.280E 00	548.1	0.263E 00	554.2	0.238E 00	563.5	0.216E 00	569.7	0.176E 00
574.2	0.133E 00	577.9	0.109E 00	584.7	0.506E-01	591.9	0.208E-01	609.1	0.

STATION 11 EXP 2 PROF 27

MAXIMUM A LAMDA= 479.8 AVEC ECLAIREMENT SPECTRAL= 0.31216 WATT/M2/NM

ENTRE 401.9 NM ET 590.7 NM , ECLAIREMENT 35.819 WATT/M2 87.744E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.132E 00	406.6	0.157E 00	410.9	0.186E 00	414.4	0.196E 00	422.7	0.197E 00
426.7	0.188E 00	431.4	0.187E 00	434.9	0.199E 00	443.0	0.223E 00	449.0	0.245E 00
453.0	0.252E 00	462.1	0.279E 00	466.7	0.287E 00	474.6	0.306E 00	479.8	0.312E 00
483.8	0.299E 00	485.6	0.297E 00	490.2	0.312E 00	492.8	0.310E 00	497.5	0.293E 00
502.2	0.287E 00	508.2	0.241E 00	513.3	0.195E 00	516.7	0.183E 00	519.4	0.182E 00
523.0	0.189E 00	525.8	0.191E 00	530.5	0.182E 00	532.9	0.174E 00	535.7	0.170E 00
544.8	0.129E 00	546.9	0.121E 00	550.4	0.119E 00	556.8	0.977E-01	559.1	0.918E-01
569.6	0.656E-01	572.7	0.621E-01	577.7	0.328E-01	590.7	0.		

STATION 11 EXP 2 PROF 37

MAXIMUM A LAMDA= 492.6 AVEC ECLAIREMENT SPECTRAL= 0.17738 WATT/M2/NM

ENTRE 471.4 NM ET 590.7 NM , ECLAIREMENT 18.856 WATT/M2 46.066E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.699E-01	404.8	0.754E-01	408.4	0.912E-01	415.1	0.100E 00	417.2	0.102E 00
421.7	0.102E 00	425.7	0.992E-01	427.7	0.961E-01	430.6	0.960E-01	434.7	0.101E 00
450.1	0.128E 00	453.2	0.132E 00	461.8	0.151E 00	468.2	0.157E 00	475.1	0.170E 00
480.5	0.175E 00	485.0	0.169E 00	487.2	0.170E 00	490.9	0.176E 00	492.6	0.177E 00
496.6	0.170E 00	499.2	0.164E 00	503.2	0.161E 00	508.9	0.131E 00	512.9	0.107E 00
516.0	0.940E-01	518.7	0.917E-01	521.4	0.938E-01	529.5	0.921E-01	543.0	0.708E-01
550.1	0.536E-01	564.5	0.353E-01	574.7	0.147E-01	590.7	0.		

STATION 11 EXP 2 PROF 46

MAXIMUM A LAMDA= 492.6 AVEC ECLAIREMENT SPECTRAL= 0.11365 WATT/M2/NM

ENTRE 472.6 NM ET 586.5 NM , ECLAIREMENT 11.212 WATT/M2 27.329E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.6	0.435E-01	406.8	0.500E-01	410.6	0.580E-01	414.8	0.599E-01	422.4	0.603E-01
431.0	0.567E-01	436.6	0.617E-01	444.3	0.691E-01	450.2	0.764E-01	454.2	0.792E-01
460.4	0.908E-01	467.4	0.972E-01	477.3	0.109E 00	481.3	0.110E 00	484.2	0.107E 00
486.1	0.108E 00	490.2	0.113E 00	492.6	0.114E 00	494.4	0.112E 00	499.2	0.104E 00
502.6	0.101E 00	509.3	0.759E-01	514.3	0.583E-01	519.0	0.528E-01	522.5	0.540E-01
531.1	0.525E-01	539.4	0.427E-01	549.0	0.272E-01	553.2	0.251E-01	555.3	0.216E-01
563.0	0.170E-01	567.5	0.156E-01	580.4	0.216E-02	586.5	0.		



STATION 11 EXP 2 PROF 56

MAXIMUM A LAMDA= 490.5 AVEC ECLAIREMENT SPECTRAL= 0.06180 WATT/M2/NM

ENTRE 400.1 NM ET 585.9 NM , ECLAIREMENT 5.538 WATT/M2 13.436E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.1	0.185E-01	405.4	0.213E-01	411.1	0.263E-01	415.7	0.281E-01	424.0	0.282E-01
427.9	0.272E-01	431.2	0.273E-01	437.1	0.302E-01	444.6	0.338E-01	450.0	0.380E-01
453.1	0.389E-01	461.9	0.476E-01	471.6	0.545E-01	476.6	0.580E-01	481.0	0.594E-01
484.6	0.583E-01	486.4	0.585E-01	490.5	0.618E-01	493.1	0.610E-01	496.4	0.568E-01
498.6	0.556E-01	501.3	0.554E-01	506.3	0.475E-01	509.1	0.353E-01	512.7	0.272E-01
514.7	0.253E-01	517.8	0.252E-01	523.9	0.256E-01	527.4	0.248E-01	544.7	0.124E-01
563.6	0.544E-02	585.9	0.						

STATION 11 EXP 2 PROF 64

MAXIMUM A LAMDA= 490.3 AVEC ECLAIREMENT SPECTRAL= 0.03709 WATT/M2/NM

ENTRE 401.0 NM ET 580.0 NM , ECLAIREMENT 3.033 WATT/M2 7.385E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.0	0.812E-02	406.2	0.935E-02	410.8	0.115E-01	415.5	0.125E-01	423.7	0.134E-01
430.2	0.131E-01	434.1	0.144E-01	442.6	0.169E-01	449.6	0.201E-01	451.2	0.206E-01
456.4	0.241E-01	463.5	0.282E-01	472.5	0.329E-01	478.5	0.347E-01	483.5	0.343E-01
487.6	0.364E-01	490.3	0.371E-01	498.0	0.338E-01	501.1	0.328E-01	505.4	0.278E-01
509.8	0.195E-01	515.6	0.135E-01	518.6	0.131E-01	523.0	0.133E-01	528.2	0.128E-01
532.1	0.113E-01	534.7	0.109E-01	543.9	0.805E-02	551.3	0.471E-02	563.2	0.241E-02
580.0	0.								

STATION 11 EXP 2 PROF 73

MAXIMUM A LAMDA= 491.1 AVEC ECLAIREMENT SPECTRAL= 0.02497 WATT/M2/NM

ENTRE 401.9 NM ET 579.7 NM , ECLAIREMENT 1.797 WATT/M2 4.387E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.342E-02	404.9	0.370E-02	408.4	0.462E-02	423.1	0.642E-02	429.9	0.669E-02
438.6	0.864E-02	448.1	0.119E-01	451.2	0.121E-01	457.2	0.153E-01	460.9	0.166E-01
477.0	0.219E-01	473.7	0.219E-01	480.6	0.225E-01	484.3	0.226E-01	487.4	0.234E-01
491.1	0.250E-01	496.2	0.235E-01	499.1	0.222E-01	501.6	0.218E-01	506.6	0.163E-01
510.9	0.107E-01	516.5	0.757E-02	527.2	0.747E-02	544.3	0.320E-02	556.6	0.170E-02
579.7	0.								

STATION 11 EXP 2 PROF 80

MAXIMUM A LAMDA= 490.0 AVEC ECLAIREMENT SPECTRAL= 0.01620 WATT/M2/NM

ENTRE 400.7 NM ET 578.5 NM , ECLAIREMENT 1.113 WATT/M2 2.724E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.167E-02	404.0	0.178E-02	407.2	0.235E-02	422.2	0.342E-02	429.6	0.361E-02
433.9	0.441E-02	442.7	0.554E-02	449.8	0.685E-02	452.7	0.731E-02	457.4	0.902E-02
463.3	0.117E-01	473.1	0.134E-01	479.8	0.144E-01	482.3	0.145E-01	487.7	0.159E-01
490.0	0.162E-01	494.3	0.155E-01	498.8	0.144E-01	500.6	0.140E-01	503.7	0.121E-01
507.1	0.959E-02	512.1	0.621E-02	516.9	0.463E-02	523.8	0.462E-02	530.5	0.426E-02
554.4	0.104E-02	566.2	0.616E-03	578.5	0.				

STATION 11 EXP 2 PROF 88

MAXIMUM A LAMDA= 492.1 AVEC ECLAIREMENT SPECTRAL= 0.01274 WATT/M2/NM

ENTRE 423.9 NM ET 576.8 NM , ECLAIREMENT 0.815 WATT/M2 2.011E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
423.9	0.264E-02	429.6	0.269E-02	453.7	0.601E-02	458.1	0.727E-02	471.3	0.983E-02
480.8	0.112E-01	484.2	0.114E-01	489.7	0.126E-01	492.1	0.127E-01	498.1	0.114E-01
500.3	0.111E-01	506.4	0.818E-02	514.6	0.400E-02	517.3	0.362E-02	524.9	0.362E-02
532.1	0.293E-02	538.5	0.250E-02	544.8	0.164E-02	556.7	0.573E-03	576.8	0.

STATION 11 EXP 2 PROF 103

MAXIMUM A LAMDA= 492.7 AVEC ECLAIREMENT SPECTRAL= 0.00506 WATT/M2/NM

ENTRE 429.4 NM ET 578.5 NM , ECLAIREMENT 0.284 WATT/M2 0.704E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
429.4	0.683E-03	444.3	0.132E-02	455.1	0.198E-02	461.2	0.270E-02	466.8	0.314E-02
477.7	0.400E-02	485.8	0.436E-02	490.4	0.488E-02	492.7	0.506E-02	498.4	0.467E-02
503.4	0.431E-02	506.4	0.336E-02	509.7	0.219E-02	515.8	0.130E-02	518.6	0.118E-02
531.1	0.103E-02	540.6	0.668E-03	548.6	0.298E-03	578.5	0.		



STATION 12 EXP 1 PROF 21

MAXIMUM A LAMDA= 481.6 AVEC ECLAIREMENT SPECTRAL= 0.55520 WATT/M2/NM

ENTRE 400.0 NM ET 618.6 NM , ECLAIREMENT 67.772 WATT/M2 168.920E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.104E 00	402.5	0.147E 00	405.0	0.168E 00	406.2	0.177E 00	407.6	0.190E 00
409.9	0.215E 00	412.2	0.239E 00	414.6	0.267E 00	418.2	0.288E 00	421.1	0.305E 00
424.2	0.316E 00	426.8	0.321E 00	429.7	0.316E 00	431.3	0.314E 00	432.6	0.315E 00
434.9	0.326E 00	438.2	0.354E 00	442.4	0.385E 00	447.2	0.420E 00	450.9	0.442E 00
453.7	0.464E 00	457.4	0.469E 00	459.9	0.481E 00	462.6	0.494E 00	464.0	0.501E 00
466.6	0.510E 00	469.9	0.512E 00	472.2	0.523E 00	476.4	0.543E 00	478.3	0.551E 00
480.4	0.555E 00	481.6	0.555E 00	483.2	0.544E 00	485.7	0.532E 00	487.4	0.530E 00
488.3	0.531E 00	490.7	0.540E 00	493.0	0.545E 00	496.2	0.545E 00	500.9	0.526E 00
503.3	0.512E 00	506.8	0.497E 00	510.3	0.464E 00	513.1	0.422E 00	515.0	0.390E 00
518.3	0.360E 00	520.5	0.355E 00	521.5	0.354E 00	522.9	0.358E 00	525.6	0.364E 00
531.1	0.357E 00	535.7	0.347E 00	542.0	0.325E 00	547.6	0.307E 00	552.6	0.279E 00
556.2	0.260E 00	561.1	0.236E 00	567.5	0.209E 00	573.0	0.183E 00	579.4	0.145E 00
582.1	0.126E 00	585.7	0.922E-01	590.0	0.516E-01	594.8	0.311E-01	601.1	0.999E-02
607.7	0.167E-02	618.6	0.						

STATION 12 EXP 1 PROF 30

MAXIMUM A LAMDA= 481.0 AVEC ECLAIREMENT SPECTRAL= 0.37457 WATT/M2/NM

ENTRE 400.0 NM ET 611.6 NM , ECLAIREMENT 39.835 WATT/M2 98.262E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.663E-01	401.4	0.745E-01	402.6	0.869E-01	403.4	0.948E-01	406.1	0.985E-01
407.3	0.105E 00	409.7	0.118E 00	411.4	0.137E 00	414.6	0.156E 00	417.8	0.169E 00
420.9	0.180E 00	423.5	0.187E 00	424.8	0.189E 00	426.4	0.190E 00	429.0	0.188E 00
432.1	0.190E 00	433.4	0.199E 00	435.3	0.210E 00	438.1	0.224E 00	442.2	0.244E 00
445.7	0.265E 00	449.8	0.279E 00	452.7	0.291E 00	455.1	0.294E 00	457.7	0.301E 00
459.7	0.309E 00	462.5	0.323E 00	465.4	0.332E 00	467.3	0.334E 00	469.2	0.338E 00
471.1	0.345E 00	472.3	0.349E 00	473.7	0.357E 00	476.0	0.365E 00	478.4	0.372E 00
479.6	0.373E 00	481.0	0.375E 00	483.6	0.367E 00	485.0	0.363E 00	488.6	0.365E 00
490.3	0.370E 00	493.6	0.373E 00	495.4	0.370E 00	496.9	0.369E 00	499.5	0.358E 00
503.1	0.337E 00	505.7	0.302E 00	508.1	0.258E 00	510.5	0.230E 00	512.4	0.210E 00
513.8	0.202E 00	516.0	0.199E 00	518.5	0.202E 00	523.7	0.205E 00	528.1	0.203E 00
531.1	0.197E 00	534.1	0.184E 00	539.5	0.166E 00	545.6	0.149E 00	549.3	0.133E 00
552.5	0.122E 00	554.9	0.122E 00	560.2	0.109E 00	568.5	0.873E-01	574.4	0.667E-01
580.6	0.412E-01	585.9	0.217E-01	591.1	0.120E-01	600.6	0.150E-02	611.6	0.

STATION 12 EXP 1 PROF 38

MAXIMUM A LAMDA= 493.1 AVEC ECLAIREMENT SPECTRAL= 0.22589 WATT/M2/NM

ENTRE 400.0 NM ET 603.7 NM , ECLAIREMENT 22.531 WATT/M2 55.723E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.264E-01	411.9	0.361E-01	402.8	0.429E-01	404.7	0.465E-01	406.8	0.499E-01
409.0	0.581E-01	412.3	0.689E-01	415.8	0.777E-01	419.2	0.856E-01	423.1	0.924E-01
425.7	0.974E-01	427.6	0.994E-01	429.6	0.987E-01	431.9	0.987E-01	433.9	0.101E 00
436.7	0.111E 00	440.3	0.122E 00	445.1	0.135E 00	449.2	0.147E 00	454.0	0.161E 00
456.3	0.166E 00	459.3	0.177E 00	462.0	0.178E 00	463.7	0.184E 00	466.3	0.191E 00
470.9	0.199E 00	474.6	0.207E 00	477.3	0.216E 00	479.7	0.220E 00	481.9	0.223E 00
483.5	0.219E 00	486.1	0.216E 00	488.0	0.218E 00	491.0	0.223E 00	493.1	0.226E 00
495.2	0.224E 00	498.3	0.219E 00	501.0	0.211E 00	503.1	0.204E 00	505.5	0.202E 00
508.8	0.188E 00	511.2	0.168E 00	513.1	0.147E 00	515.3	0.127E 00	517.2	0.118E 00
519.5	0.112E 00	522.2	0.110E 00	523.6	0.113E 00	528.1	0.112E 00	531.4	0.110E 00
537.5	0.102E 00	541.5	0.953E-01	546.0	0.838E-01	551.0	0.709E-01	556.9	0.594E-01
562.6	0.508E-01	570.5	0.382E-01	574.5	0.339E-01	577.1	0.294E-01	582.2	0.151E-01
587.8	0.723E-02	593.2	0.339E-02	603.7	0.				

STATION 12 EXP 1 PROF 48

MAXIMUM A LAMDA= 495.7 AVEC ECLAIREMENT SPECTRAL= 0.12006 WATT/M2/NM

ENTRE 400.0 NM ET 602.3 NM , ECLAIREMENT 10.375 WATT/M2 25.750E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.972E-02	401.5	0.113E-01	404.5	0.152E-01	406.9	0.161E-01	408.4	0.187E-01
410.8	0.222E-01	415.0	0.270E-01	420.7	0.313E-01	425.1	0.365E-01	428.9	0.373E-01
431.4	0.277E-01	435.2	0.423E-01	439.9	0.496E-01	444.7	0.562E-01	451.2	0.652E-01
455.0	0.705E-01	457.9	0.719E-01	459.8	0.756E-01	461.4	0.789E-01	463.5	0.826E-01
465.2	0.870E-01	467.6	0.899E-01	470.5	0.935E-01	471.7	0.959E-01	474.4	0.101E 00
477.3	0.106E 00	480.0	0.109E 00	482.2	0.112E 00	485.0	0.111E 00	486.2	0.111E 00
487.7	0.111E 00	490.3	0.115E 00	491.8	0.118E 00	493.3	0.119E 00	495.7	0.120E 00
497.5	0.120E 00	499.0	0.118E 00	501.3	0.114E 00	502.8	0.111E 00	505.8	0.108E 00
507.2	0.104E 00	509.0	0.963E-01	510.5	0.899E-01	513.0	0.772E-01	514.1	0.670E-01
516.3	0.597E-01	518.3	0.561E-01	520.5	0.544E-01	522.2	0.550E-01	524.7	0.553E-01
527.2	0.551E-01	529.9	0.534E-01	532.1	0.514E-01	534.9	0.473E-01	538.3	0.437E-01
542.9	0.389E-01	545.7	0.351E-01	548.3	0.312E-01	550.6	0.288E-01	554.0	0.269E-01
558.9	0.237E-01	565.7	0.185E-01	571.1	0.149E-01	575.4	0.116E-01	579.3	0.696E-02
585.6	0.312E-02	591.4	0.960E-03	602.3	0.				

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STATION 12 EXP 1 PROF 65

MAXIMUM A LAMDA= 495.3 AVEC ECLAIREMENT SPECTRAL= 0.04794 WATT/M2/NM

ENTRE 400.0 NM ET 585.7 NM , ECLAIREMENT 3.368 WATT/M2 8.364E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.153E-02	401.3	0.177E-02	404.5	0.268E-02	407.0	0.302E-02	410.4	0.407E-02
416.3	0.556E-02	422.0	0.709E-02	426.6	0.858E-02	429.6	0.896E-02	432.4	0.930E-02
436.7	0.115E-01	441.2	0.145E-01	447.1	0.175E-01	451.6	0.204E-01	453.9	0.224E-01
456.5	0.232E-01	459.4	0.251E-01	461.4	0.270E-01	463.0	0.290E-01	465.7	0.314E-01
468.8	0.334E-01	472.2	0.356E-01	475.1	0.383E-01	478.5	0.404E-01	480.9	0.419E-01
483.0	0.428E-01	485.6	0.426E-01	487.2	0.432E-01	489.1	0.440E-01	490.8	0.457E-01
492.7	0.469E-01	494.0	0.478E-01	495.3	0.479E-01	498.8	0.474E-01	501.0	0.457E-01
503.3	0.430E-01	505.9	0.387E-01	507.1	0.344E-01	508.1	0.303E-01	509.7	0.255E-01
511.9	0.212E-01	513.3	0.187E-01	516.5	0.173E-01	518.8	0.172E-01	522.6	0.176E-01
525.5	0.177E-01	530.5	0.168E-01	533.7	0.151E-01	538.4	0.131E-01	542.8	0.115E-01
546.3	0.973E-02	549.3	0.762E-02	554.3	0.666E-02	556.4	0.623E-02	562.3	0.470E-02
570.8	0.307E-02	578.7	0.139E-02	585.7	0.				

STATION 12 EXP 1 PROF 71

MAXIMUM A LAMDA= 494.7 AVEC ECLAIREMENT SPECTRAL= 0.03439 WATT/M2/NM

ENTRE 400.0 NM ET 600.1 NM , ECLAIREMENT 2.313 WATT/M2 5.747E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.963E-03	400.2	0.963E-03	403.9	0.158E-02	407.3	0.169E-02	411.7	0.251E-02
417.8	0.330E-02	422.3	0.416E-02	425.7	0.485E-02	427.8	0.530E-02	431.5	0.550E-02
434.2	0.619E-02	438.6	0.812E-02	444.1	0.101E-01	448.3	0.119E-01	451.8	0.135E-01
453.7	0.150E-01	456.9	0.157E-01	459.8	0.174E-01	463.1	0.197E-01	466.3	0.218E-01
470.1	0.238E-01	473.8	0.262E-01	476.7	0.281E-01	479.6	0.291E-01	481.2	0.296E-01
482.3	0.305E-01	486.4	0.309E-01	489.2	0.321E-01	491.2	0.330E-01	492.8	0.338E-01
494.7	0.344E-01	497.5	0.339E-01	499.7	0.324E-01	501.3	0.311E-01	502.9	0.299E-01
505.4	0.290E-01	507.6	0.271E-01	509.2	0.244E-01	511.1	0.209E-01	513.2	0.175E-01
515.1	0.141E-01	516.9	0.119E-01	518.8	0.110E-01	520.9	0.108E-01	523.4	0.110E-01
526.2	0.111E-01	529.6	0.106E-01	533.3	0.939E-02	536.6	0.843E-02	541.0	0.736E-02
543.7	0.671E-02	547.2	0.533E-02	554.9	0.385E-02	562.6	0.258E-02	569.7	0.172E-02
577.1	0.107E-02	583.9	0.275E-03	589.3	0.103E-03	600.1	0.		

STATION 12 EXP 1 PROF 90

MAXIMUM A LAMDA= 491.3 AVEC ECLAIREMENT SPECTRAL= 0.01733 WATT/M2/NM

ENTRE 400.0 NM ET 588.9 NM , ECLAIREMENT 1.003 WATT/M2 2.482E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.312E-03	401.7	0.347E-03	412.0	0.745E-03	421.1	0.118E-02	427.2	0.175E-02
432.4	0.201E-02	436.0	0.265E-02	438.7	0.300E-02	441.9	0.359E-02	445.9	0.452E-02
448.8	0.546E-02	450.5	0.598E-02	452.1	0.645E-02	454.1	0.662E-02	455.7	0.681E-02
458.3	0.743E-02	461.3	0.863E-02	464.2	0.967E-02	467.3	0.109E-01	470.6	0.119E-01
473.4	0.128E-01	476.2	0.139E-01	477.8	0.147E-01	479.2	0.153E-01	480.1	0.154E-01
482.0	0.157E-01	484.6	0.162E-01	485.9	0.166E-01	487.3	0.170E-01	488.9	0.173E-01
491.3	0.173E-01	492.9	0.169E-01	495.2	0.161E-01	498.2	0.151E-01	501.1	0.142E-01
503.4	0.131E-01	505.0	0.119E-01	507.0	0.991E-02	508.9	0.794E-02	511.2	0.612E-02
513.0	0.496E-02	515.2	0.435E-02	517.1	0.418E-02	519.3	0.414E-02	524.7	0.404E-02
531.6	0.383E-02	534.2	0.334E-02	536.6	0.296E-02	543.9	0.220E-02	548.1	0.161E-02
554.4	0.107E-02	558.3	0.953E-03	567.0	0.537E-03	576.7	0.260E-03	588.9	0.

STATION 12 EXP 1 PROF 108

MAXIMUM A LAMDA= 493.9 AVEC ECLAIREMENT SPECTRAL= 0.00763 WATT/M2/NM

ENTRE 400.0 NM ET 588.4 NM , ECLAIREMENT 0.411 WATT/M2 1.020E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.229E-04	405.2	0.382E-04	416.4	0.206E-03	425.0	0.404E-03	431.6	0.572E-03
438.3	0.931E-03	444.7	0.151E-02	450.6	0.204E-02	454.0	0.244E-02	456.6	0.256E-02
460.6	0.309E-02	463.9	0.380E-02	467.2	0.449E-02	471.0	0.512E-02	475.1	0.575E-02
476.8	0.605E-02	480.1	0.636E-02	481.4	0.665E-02	482.8	0.681E-02	483.9	0.690E-02
485.9	0.689E-02	488.2	0.717E-02	490.2	0.741E-02	493.9	0.763E-02	495.5	0.755E-02
498.9	0.712E-02	500.9	0.652E-02	503.6	0.670E-02	506.3	0.556E-02	508.9	0.468E-02
510.3	0.381E-02	512.6	0.293E-02	514.5	0.216E-02	516.1	0.176E-02	518.0	0.152E-02
521.3	0.137E-02	527.7	0.129E-02	533.4	0.120E-02	538.8	0.923E-03	546.7	0.595E-03
554.2	0.298E-03	562.0	0.191E-03	575.7	0.763E-04	588.4	0.		



STATION 12 EXP 2 PROF 0

MAXIMUM A LAMDA= 481.9 AVEC ECLAIREMENT SPECTRAL= 0.67389 WATT/M2/NM

ENTRE 403.1 NM ET 750.0 NM , ECLAIREMENT 163.806 WATT/M2 454.930E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.1	0.320E 00	405.5	0.339E 00	410.3	0.454E 00	416.8	0.516E 00	424.1	0.529E 00
429.3	0.503E 00	432.4	0.500E 00	437.3	0.547E 00	444.2	0.594E 00	450.1	0.646E 00
458.3	0.660E 00	461.7	0.665E 00	464.8	0.665E 00	470.8	0.653E 00	479.7	0.671E 00
481.9	0.674E 00	483.9	0.655E 00	487.7	0.629E 00	491.4	0.646E 00	495.0	0.652E 00
500.0	0.631E 00	510.2	0.635E 00	513.3	0.626E 00	518.2	0.596E 00	520.3	0.600E 00
523.7	0.616E 00	536.0	0.615E 00	541.9	0.602E 00	554.5	0.604E 00	559.6	0.583E 00
577.3	0.557E 00	583.8	0.564E 00	591.9	0.509E 00	607.1	0.538E 00	612.9	0.518E 00
633.5	0.497E 00	640.3	0.508E 00	657.3	0.470E 00	663.2	0.497E 00	681.2	0.466E 00
685.5	0.393E 00	700.0	0.425E 00	715.5	0.300E 00	725.8	0.282E 00	733.3	0.350E 00
743.0	0.356E 00								

STATION 12 EXP 2 PROF 5

MAXIMUM A LAMDA= 482.9 AVEC ECLAIREMENT SPECTRAL= 0.55615 WATT/M2/NM

ENTRE 403.3 NM ET 663.4 NM , ECLAIREMENT 82.058 WATT/M2 206.829E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.3	0.269E 00	405.7	0.282E 00	411.5	0.364E 00	416.7	0.403E 00	424.4	0.414E 00
428.0	0.408E 00	429.8	0.399E 00	433.1	0.395E 00	437.6	0.432E 00	451.1	0.521E 00
457.7	0.531E 00	461.9	0.542E 00	463.8	0.541E 00	471.3	0.537E 00	479.5	0.556E 00
482.9	0.556E 00	487.6	0.524E 00	489.0	0.526E 00	493.0	0.537E 00	495.9	0.537E 00
500.7	0.515E 00	505.8	0.494E 00	513.9	0.428E 00	516.6	0.427E 00	521.7	0.438E 00
532.2	0.433E 00	539.0	0.403E 00	554.0	0.366E 00	578.1	0.259E 00	587.4	0.164E 00
597.7	0.873E-01	606.0	0.578E-01	625.8	0.384E-01	663.4	0.		

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STATION 12 EXP 2 PROF 11

MAXIMUM A LAMDA= 482.3 AVEC ECLAIREMENT SPECTRAL= 0.38014 WATT/M2/NM

ENTRE 401.5 NM ET 660.6 NM , ECLAIREMENT 52.232 WATT/M2 130.382E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.152E 00	406.3	0.182E 00	409.3	0.222E 00	417.0	0.258E 00	424.4	0.269E 00
427.4	0.268E 00	429.2	0.263E 00	432.6	0.260E 00	437.3	0.285E 00	443.6	0.311E 00
451.3	0.346E 00	456.6	0.354E 00	462.5	0.364E 00	470.6	0.365E 00	478.9	0.379E 00
482.3	0.380E 00	486.0	0.358E 00	488.8	0.360E 00	494.2	0.369E 00	501.2	0.345E 00
504.5	0.344E 00	511.8	0.306E 00	515.7	0.277E 00	519.7	0.276E 00	523.3	0.281E 00
532.1	0.273E 00	538.9	0.249E 00	549.3	0.227E 00	552.4	0.226E 00	570.8	0.168E 00
572.9	0.165E 00	584.7	0.886E-01	594.8	0.430E-01	602.1	0.228E-01	626.1	0.798E-02
660.6	0.								

STATION 12 EXP 2 PROF 15

MAXIMUM A LAMDA= 482.3 AVEC ECLAIREMENT SPECTRAL= 0.30791 WATT/M2/NM

ENTRE 402.8 NM ET 609.8 NM , ECLAIREMENT 38.529 WATT/M2 95.676E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.8	0.115E 00	407.2	0.137E 00	411.2	0.164E 00	415.3	0.180E 00	422.6	0.192E 00
425.9	0.192E 00	427.9	0.188E 00	430.7	0.188E 00	436.3	0.210E 00	443.8	0.237E 00
450.8	0.263E 00	454.6	0.269E 00	462.4	0.285E 00	468.9	0.288E 00	479.7	0.306E 00
482.3	0.308E 00	485.9	0.294E 00	488.2	0.294E 00	489.7	0.298E 00	492.5	0.302E 00
496.1	0.297E 00	500.7	0.281E 00	503.2	0.278E 00	510.6	0.245E 00	517.2	0.207E 00
519.1	0.205E 00	521.2	0.207E 00	529.5	0.207E 00	541.5	0.176E 00	547.7	0.162E 00
567.1	0.118E 00	572.3	0.115E 00	580.0	0.705E-01	585.9	0.388E-01	592.9	0.197E-01
609.8	0.								

STATION 12 EXP 2 PROF 19

MAXIMUM A LAMDA= 481.5 AVEC ECLAIREMENT SPECTRAL= 0.23837 WATT/M2/NM

ENTRE 402.9 NM ET 606.7 NM , ECLAIREMENT 29.021 WATT/M2 71.757E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.920E-01	405.9	0.973E-01	412.0	0.128E 00	417.8	0.146E 00	424.0	0.153E 00
427.4	0.153E 00	429.9	0.149E 00	432.6	0.149E 00	435.4	0.159E 00	443.7	0.184E 00
453.0	0.209E 00	454.7	0.210E 00	457.9	0.214E 00	462.3	0.221E 00	466.4	0.223E 00
468.7	0.224E 00	474.5	0.230E 00	479.1	0.238E 00	481.5	0.238E 00	485.9	0.226E 00
487.7	0.228E 00	489.0	0.230E 00	491.3	0.232E 00	493.9	0.228E 00	497.8	0.213E 00
500.4	0.212E 00	507.2	0.193E 00	515.8	0.158E 00	520.0	0.156E 00	523.5	0.159E 00
535.5	0.150E 00	555.6	0.104E 00	573.9	0.622E-01	585.1	0.231E-01	592.6	0.100E-01
606.7	0.								

STATION 12 EXP 2 PROF 29

MAXIMUM A LAMDA= 481.1 AVEC ECLAIREMENT SPECTRAL= 0.15411 WATT/M2/NM

ENTRE 402.3 NM ET 607.5 NM , ECLAIREMENT 16.128 WATT/M2 39.443E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.3	0.467E-01	405.5	0.516E-01	410.3	0.673E-01	417.0	0.777E-01	424.6	0.841E-01
430.0	0.832E-01	432.2	0.848E-01	436.8	0.971E-01	450.0	0.124E 00	453.7	0.126E 00
460.0	0.136E 00	464.6	0.139E 00	467.3	0.140E 00	478.9	0.154E 00	481.1	0.154E 00
485.7	0.148E 00	486.4	0.149E 00	488.5	0.151E 00	491.2	0.151E 00	497.8	0.134E 00
500.9	0.133E 00	507.1	0.103E 00	511.8	0.806E-01	514.7	0.791E-01	518.5	0.794E-01
528.7	0.784E-01	534.2	0.692E-01	549.2	0.479E-01	553.5	0.450E-01	588.4	0.339E-02
607.5	0.								

STATION 12 EXP 2 PROF 38

MAXIMUM A LAMDA= 489.4 AVEC ECLAIREMENT SPECTRAL= 0.09128 WATT/M2/NM

ENTRE 402.0 NM ET 593.0 NM , ECLAIREMENT 8.989 WATT/M2 21.902E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.0	0.236E-01	405.3	0.267E-01	408.1	0.344E-01	415.7	0.420E-01	423.0	0.464E-01
426.8	0.456E-01	429.5	0.464E-01	436.2	0.542E-01	445.2	0.646E-01	449.5	0.689E-01
453.3	0.709E-01	463.8	0.799E-01	469.0	0.818E-01	481.2	0.911E-01	485.2	0.886E-01
489.4	0.913E-01	497.2	0.883E-01	500.0	0.854E-01	504.7	0.700E-01	510.7	0.452E-01
514.7	0.413E-01	529.8	0.401E-01	536.1	0.337E-01	543.2	0.277E-01	550.0	0.215E-01
555.2	0.197E-01	581.3	0.311E-02	593.0	0.				

STATION 12 EXP 2 PROF 49

MAXIMUM A LAMDA= 493.0 AVEC ECLAIREMENT SPECTRAL= 0.05035 WATT/M2/NM

ENTRE 401.7 NM ET 595.8 NM , ECLAIREMENT 4.285 WATT/M2 10.506E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.896E-02	405.3	0.982E-02	409.3	0.131E-01	424.3	0.183E-01	430.1	0.187E-01
432.7	0.193E-01	452.4	0.316E-01	454.5	0.319E-01	462.0	0.374E-01	465.4	0.390E-01
481.2	0.473E-01	483.1	0.475E-01	484.7	0.472E-01	487.7	0.478E-01	489.3	0.488E-01
493.0	0.503E-01	494.9	0.497E-01	499.6	0.453E-01	502.8	0.428E-01	507.4	0.347E-01
512.0	0.242E-01	515.5	0.209E-01	522.4	0.210E-01	529.0	0.189E-01	533.6	0.163E-01
538.9	0.147E-01	548.5	0.992E-02	552.5	0.901E-02	576.3	0.227E-02	595.8	0.

STATION 12 EXP 2 PROF 54

MAXIMUM A LAMDA= 489.8 AVEC ECLAIREMENT SPECTRAL= 0.03439 WATT/M2/NM

ENTRE 402.6 NM ET 584.6 NM , ECLAIREMENT 2.607 WATT/M2 6.425E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.6	0.382E-02	405.2	0.437E-02	424.4	0.915E-02	431.4	0.932E-02	438.1	0.120E-01
445.6	0.153E-01	448.9	0.172E-01	455.0	0.189E-01	462.3	0.225E-01	471.5	0.258E-01
476.7	0.288E-01	479.9	0.312E-01	483.1	0.315E-01	488.0	0.338E-01	489.8	0.344E-01
495.6	0.326E-01	498.6	0.319E-01	504.2	0.268E-01	507.7	0.193E-01	511.2	0.149E-01
515.1	0.132E-01	520.8	0.137E-01	530.1	0.130E-01	535.4	0.109E-01	542.4	0.836E-02
549.2	0.571E-02	566.5	0.296E-02	584.6	0.				

STATION 12 EXP 2 PROF 72

MAXIMUM A LAMDA= 492.3 AVEC ECLAIREMENT SPECTRAL= 0.00870 WATT/M2/NM

ENTRE 427.3 NM ET 596.8 NM , ECLAIREMENT 0.551 WATT/M2 1.374E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
427.3	0.145E-02	431.1	0.151E-02	451.1	0.339E-02	456.4	0.383E-02	466.1	0.523E-02
477.2	0.647E-02	482.0	0.745E-02	492.3	0.870E-02	498.2	0.860E-02	505.6	0.639E-02
508.8	0.417E-02	514.1	0.312E-02	529.4	0.310E-02	548.5	0.116E-02	577.8	0.148E-03
596.8	0.								

STATION 12 EXP 2 PROF 92

MAXIMUM A LAMDA= 491.2 AVEC ECLAIREMENT SPECTRAL= 0.00380 WATT/M2/NM

ENTRE 429.9 NM ET 577.4 NM , ECLAIREMENT 0.209 WATT/M2 0.521E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
429.9	0.384E-03	443.9	0.851E-03	450.9	0.122E-02	455.1	0.139E-02	461.2	0.195E-02
472.2	0.263E-02	478.9	0.301E-02	481.7	0.320E-02	485.8	0.335E-02	491.2	0.380E-02
497.3	0.348E-02	499.8	0.339E-02	505.5	0.221E-02	510.9	0.133E-02	516.1	0.106E-02
520.1	0.103E-02	527.9	0.101E-02	547.1	0.327E-03	577.4	0.		

STATION 12 EXP 2 PROF 108

MAXIMUM A LAMDA= 493.8 AVEC ECLAIREMENT SPECTRAL= 0.00214 WATT/M2/NM

ENTRE 430.7 NM ET 567.2 NM , ECLAIREMENT 0.108 WATT/M2 0.267E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
430.7	0.128E-03	445.6	0.439E-03	452.4	0.649E-03	453.5	0.655E-03	461.4	0.995E-03
475.0	0.155E-02	483.8	0.185E-02	486.5	0.192E-02	492.3	0.213E-02	493.8	0.214E-02
499.5	0.181E-02	502.9	0.175E-02	508.6	0.105E-02	514.0	0.499E-03	518.2	0.381E-03
529.6	0.342E-03	553.7	0.471E-04	567.2	0.				

STATION 13 EXP 1 PROF 15

MAXIMUM A LAMDA= 482.6 AVEC ECLAIREMENT SPECTRAL= 0.58417 WATT/M2/NM

ENTRE 401.3 NM ET 619.1 NM , ECLAIREMENT 75.353 WATT/M2 189.090E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.3	0.182E 00	403.4	0.200E 00	406.4	0.216E 00	408.7	0.256E 00	411.7	0.287E 00
416.1	0.310E 00	423.3	0.330E 00	425.3	0.334E 00	428.3	0.331E 00	431.0	0.321E 00
431.8	0.310E 00	433.6	0.321E 00	434.9	0.335E 00	443.0	0.404E 00	450.6	0.464E 00
452.0	0.476E 00	456.1	0.484E 00	458.8	0.503E 00	465.4	0.522E 00	469.3	0.527E 00
476.1	0.560E 00	476.9	0.568E 00	481.5	0.582E 00	482.6	0.584E 00	483.6	0.578E 00
485.8	0.555E 00	487.1	0.551E 00	489.0	0.556E 00	493.7	0.561E 00	495.8	0.564E 00
499.9	0.544E 00	502.4	0.538E 00	506.1	0.530E 00	509.1	0.513E 00	514.1	0.458E 00
518.3	0.426E 00	519.6	0.419E 00	522.0	0.424E 00	525.6	0.433E 00	533.3	0.421E 00
540.5	0.401E 00	548.1	0.360E 00	551.4	0.341E 00	556.3	0.330E 00	558.9	0.312E 00
573.4	0.255E 00	577.3	0.207E 00	580.3	0.195E 00	588.5	0.105E 00	596.8	0.450E-01
599.8	0.292E-01	605.1	0.701E-02	619.1	0.				

STATION 13 EXP 1 PROF 20

MAXIMUM A LAMDA= 482.2 AVEC ECLAIREMENT SPECTRAL= 0.42297 WATT/M2/NM

ENTRE 402.1 NM ET 608.0 NM , ECLAIREMENT 51.730 WATT/M2 129.690E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.1	0.118E 00	404.0	0.127E 00	405.7	0.128E 00	408.9	0.163E 00	412.2	0.182E 00
418.0	0.202E 00	423.8	0.216E 00	426.0	0.218E 00	428.9	0.215E 00	429.8	0.212E 00
432.4	0.212E 00	435.6	0.229E 00	440.5	0.258E 00	445.3	0.292E 00	451.9	0.336E 00
455.0	0.341E 00	460.8	0.368E 00	465.3	0.376E 00	468.8	0.382E 00	472.6	0.399E 00
479.8	0.417E 00	482.2	0.423E 00	483.7	0.419E 00	486.7	0.403E 00	488.7	0.400E 00
493.9	0.408E 00	495.7	0.409E 00	502.2	0.384E 00	507.3	0.378E 00	510.3	0.354E 00
516.4	0.301E 00	517.9	0.289E 00	521.0	0.288E 00	524.6	0.295E 00	533.6	0.291E 00
548.2	0.243E 00	551.1	0.226E 00	555.6	0.218E 00	566.2	0.191E 00	572.8	0.165E 00
577.9	0.124E 00	580.8	0.117E 00	587.8	0.609E-01	596.8	0.203E-01	608.0	0.

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STATION 13 EXP 1 PROF 25

MAXIMUM A LAMDA= 483.1 AVEC ECLAIREMENT SPECTRAL= 0.26147 WATT/M2/NM

ENTRE 402.6 NM ET 604.6 NM , ECLAIREMENT 29.507 WATT/M2 74.151E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.6	0.541E-01	406.4	0.575E-01	407.8	0.685E-01	410.6	0.763E-01	418.4	0.931E-01
424.5	0.103E 00	426.8	0.105E 00	428.3	0.105E 00	431.2	0.104E 00	432.9	0.108E 00
437.4	0.127E 00	443.5	0.150E 00	452.5	0.190E 00	455.6	0.195E 00	463.3	0.219E 00
469.1	0.228E 00	477.2	0.251E 00	483.1	0.261E 00	484.2	0.260E 00	486.9	0.249E 00
488.5	0.249E 00	490.2	0.251E 00	493.4	0.256E 00	495.1	0.256E 00	500.0	0.247E 00
503.0	0.244E 00	507.0	0.239E 00	510.7	0.220E 00	515.3	0.187E 00	518.3	0.176E 00
520.3	0.174E 00	524.8	0.178E 00	534.2	0.174E 00	541.3	0.154E 00	552.3	0.123E 00
560.9	0.113E 00	571.3	0.913E-01	577.4	0.630E-01	580.7	0.583E-01	588.3	0.238E-01
593.5	0.120E-01	604.6	0.						

STATION 13 EXP 1 PROF 30

MAXIMUM A LAMDA= 483.4 AVEC ECLAIREMENT SPECTRAL= 0.17656 WATT/M2/NM

ENTRE 403.4 NM ET 603.2 NM , ECLAIREMENT 19.011 WATT/M2 47.817E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.4	0.307E-01	405.4	0.307E-01	408.6	0.417E-01	414.8	0.494E-01	423.9	0.600E-01
426.3	0.616E-01	429.7	0.620E-01	431.6	0.618E-01	437.8	0.766E-01	443.8	0.934E-01
451.9	0.118E 00	453.6	0.122E 00	455.8	0.125E 00	462.1	0.141E 00	465.7	0.146E 00
470.1	0.153E 00	475.2	0.163E 00	478.1	0.170E 00	483.4	0.177E 00	486.5	0.171E 00
488.0	0.168E 00	489.6	0.169E 00	493.1	0.173E 00	495.9	0.174E 00	502.8	0.166E 00
505.9	0.164E 00	508.2	0.160E 00	512.8	0.138E 00	517.5	0.119E 00	520.0	0.114E 00
525.4	0.119E 00	533.4	0.114E 00	540.6	0.101E 00	549.9	0.793E-01	555.6	0.738E-01
564.1	0.680E-01	572.0	0.546E-01	576.2	0.397E-01	581.0	0.323E-01	585.8	0.168E-01
591.5	0.777E-02	603.2	0.						



STATION 13 EXP 1 PROF 40

MAXIMUM A LAMDA= 495.4 AVEC ECLAIREMENT SPECTRAL= 0.08120 WATT/M2/NM

ENTRE 402.9 NM ET 598.8 NM , ECLAIREMENT 7.547 WATT/M2 19.008E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.698E-02	406.4	0.698E-02	409.6	0.974E-02	425.0	0.169E-01	427.7	0.180E-01
430.1	0.184E-01	438.1	0.259E-01	447.2	0.386E-01	453.1	0.469E-01	455.3	0.484E-01
462.2	0.576E-01	470.3	0.654E-01	477.5	0.751E-01	483.1	0.799E-01	486.4	0.779E-01
487.7	0.776E-01	492.6	0.807E-01	495.4	0.812E-01	499.4	0.781E-01	502.9	0.763E-01
505.3	0.754E-01	509.8	0.656E-01	517.3	0.486E-01	519.2	0.471E-01	521.6	0.467E-01
525.5	0.481E-01	533.9	0.462E-01	542.7	0.376E-01	551.2	0.279E-01	565.7	0.221E-01
571.8	0.171E-01	576.9	0.108E-01	580.6	0.893E-02	586.2	0.341E-02	598.8	0.

STATION 13 EXP 1 PROF 50

MAXIMUM A LAMDA= 493.2 AVEC ECLAIREMENT SPECTRAL= 0.04508 WATT/M2/NM

ENTRE 408.9 NM ET 593.0 NM , ECLAIREMENT 3.661 WATT/M2 9.207E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
408.9	0.302E-02	420.0	0.482E-02	426.7	0.663E-02	430.9	0.712E-02	435.4	0.956E-02
441.9	0.134E-01	447.7	0.187E-01	452.3	0.224E-01	456.2	0.246E-01	461.9	0.297E-01
468.9	0.337E-01	473.3	0.374E-01	477.4	0.407E-01	481.6	0.428E-01	483.1	0.440E-01
487.1	0.433E-01	489.1	0.436E-01	493.2	0.451E-01	494.8	0.449E-01	502.1	0.412E-01
504.4	0.407E-01	509.3	0.340E-01	514.8	0.259E-01	517.4	0.226E-01	520.2	0.220E-01
525.7	0.224E-01	528.3	0.220E-01	532.8	0.216E-01	543.7	0.160E-01	546.8	0.143E-01
551.4	0.115E-01	559.3	0.947E-02	562.1	0.947E-02	571.7	0.622E-02	578.7	0.325E-02
581.1	0.279E-02	583.8	0.162E-02	593.0	0.				

STATION 13 EXP 1 PROF 60

MAXIMUM A LAMDA= 493.2 AVEC ECLAIREMENT SPECTRAL= 0.03150 WATT/M2/NM

ENTRE 405.3 NM ET 590.4 NM , ECLAIREMENT 2.279 WATT/M2 5.702E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
405.3	0.976E-03	420.3	0.236E-02	427.2	0.346E-02	431.4	0.384E-02	440.8	0.768E-02
445.2	0.954E-02	453.0	0.145E-01	455.6	0.152E-01	463.9	0.206E-01	468.8	0.232E-01
474.7	0.269E-01	478.6	0.289E-01	480.9	0.297E-01	483.0	0.309E-01	486.2	0.304E-01
488.8	0.306E-01	491.3	0.313E-01	493.2	0.315E-01	495.3	0.309E-01	501.3	0.276E-01
505.3	0.266E-01	510.7	0.196E-01	517.6	0.127E-01	519.8	0.123E-01	531.6	0.118E-01
552.1	0.535E-02	566.2	0.378E-02	574.1	0.252E-02	577.9	0.132E-02	590.4	0.

STATION 13 EXP 1 PROF 80

MAXIMUM A LAMDA= 491.0 AVEC ECLAIREMENT SPECTRAL= 0.01729 WATT/M2/NM

ENTRE 417.2 NM ET 580.9 NM , ECLAIREMENT 1.028 WATT/M2 2.554E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
417.2	0.380E-03	424.4	0.830E-03	426.8	0.100E-02	430.1	0.107E-02	439.7	0.270E-02
448.2	0.488E-02	454.6	0.695E-02	455.4	0.709E-02	461.0	0.954E-02	469.3	0.123E-01
474.6	0.142E-01	478.1	0.156E-01	481.1	0.163E-01	483.5	0.172E-01	487.2	0.170E-01
491.0	0.173E-01	493.8	0.170E-01	498.0	0.156E-01	502.7	0.136E-01	505.0	0.130E-01
510.3	0.861E-02	515.7	0.539E-02	517.4	0.446E-02	519.6	0.424E-02	524.2	0.410E-02
530.9	0.386E-02	551.0	0.133E-02	554.8	0.126E-02	567.4	0.622E-03	580.9	0.

STATION 13 EXP 1 PROF 100

MAXIMUM A LAMDA= 490.9 AVEC ECLAIREMENT SPECTRAL= 0.00792 WATT/M2/NM

ENTRE 415.8 NM ET 571.9 NM , ECLAIREMENT 0.416 WATT/M2 1.030E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
415.8	0.127E-03	425.2	0.214E-03	430.3	0.309E-03	435.9	0.586E-03	440.8	0.974E-03
445.7	0.157E-02	449.0	0.199E-02	451.7	0.238E-02	454.7	0.272E-02	458.8	0.344E-02
462.4	0.422E-02	465.6	0.476E-02	468.9	0.529E-02	471.4	0.572E-02	474.1	0.626E-02
475.8	0.653E-02	477.2	0.679E-02	478.1	0.689E-02	479.1	0.712E-02	480.5	0.725E-02
481.2	0.740E-02	482.3	0.758E-02	483.7	0.769E-02	483.9	0.779E-02	484.9	0.778E-02
486.5	0.782E-02	487.9	0.778E-02	488.8	0.785E-02	490.4	0.789E-02	490.9	0.792E-02
492.3	0.791E-02	493.9	0.779E-02	496.2	0.731E-02	498.1	0.668E-02	499.8	0.623E-02
501.0	0.596E-02	504.5	0.556E-02	505.1	0.529E-02	507.4	0.436E-02	509.8	0.352E-02
511.2	0.268E-02	513.6	0.191E-02	517.4	0.152E-02	519.1	0.135E-02	523.2	0.131E-02
527.6	0.124E-02	530.9	0.116E-02	538.1	0.855E-03	545.9	0.554E-03	551.0	0.341E-03
560.8	0.230E-03	565.1	0.206E-03	571.9	0.				

STATION 13 EXP 1 PROF 120

MAXIMUM A LAMDA= 491.5 AVEC ECLAIREMENT SPECTRAL= 0.00325 WATT/M2/NM

ENTRE 426.5 NM ET 562.8 NM , ECLAIREMENT 0.156 WATT/M2 0.386E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
426.5	0.358E-04	433.2	0.910E-04	437.5	0.192E-03	443.1	0.377E-03	447.4	0.559E-03
449.7	0.693E-03	451.4	0.800E-03	453.1	0.842E-03	455.3	0.936E-03	458.7	0.120E-02
465.7	0.159E-02	469.7	0.192E-02	472.2	0.212E-02	474.5	0.227E-02	476.4	0.249E-02
478.0	0.265E-02	479.0	0.273E-02	480.4	0.281E-02	482.6	0.292E-02	484.3	0.308E-02
484.8	0.317E-02	486.0	0.318E-02	486.7	0.322E-02	488.4	0.322E-02	490.3	0.324E-02
491.5	0.325E-02	493.2	0.323E-02	494.2	0.320E-02	495.2	0.315E-02	495.7	0.311E-02
499.0	0.284E-02	501.5	0.261E-02	503.9	0.236E-02	504.8	0.221E-02	507.0	0.205E-02
508.8	0.167E-02	511.3	0.128E-02	514.0	0.901E-03	517.1	0.592E-03	519.5	0.423E-03
526.5	0.387E-03	533.3	0.276E-03	540.0	0.156E-03	542.8	0.159E-03	549.5	0.553E-04
555.6	0.813E-04	562.8	0.						

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STATION 13 EXP 2 PROF 0

MAXIMUM A LAMDA= 460.6 AVEC ECLAIREMENT SPECTRAL= 0.42979 WATT/M2/NM

ENTRE 403.7 NM ET 700.0 NM , ECLAIREMENT 102.629 WATT/M2 284.210E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.7	0.216E 00	406.1	0.226E 00	408.6	0.269E 00	410.3	0.302E 00	413.7	0.332E 00
417.3	0.349E 00	419.3	0.352E 00	424.1	0.353E 00	426.5	0.348E 00	429.5	0.334E 00
431.8	0.329E 00	433.2	0.329E 00	434.2	0.335E 00	436.5	0.354E 00	443.9	0.389E 00
450.6	0.416E 00	452.2	0.422E 00	456.3	0.425E 00	457.5	0.425E 00	460.6	0.430E 00
462.0	0.429E 00	464.7	0.426E 00	469.4	0.420E 00	470.6	0.419E 00	474.2	0.422E 00
477.3	0.424E 00	480.7	0.428E 00	482.7	0.424E 00	485.8	0.401E 00	487.3	0.398E 00
488.5	0.396E 00	492.7	0.409E 00	495.2	0.409E 00	498.4	0.400E 00	500.9	0.395E 00
506.4	0.395E 00	509.8	0.397E 00	512.9	0.395E 00	515.7	0.380E 00	518.1	0.371E 00
520.1	0.371E 00	522.2	0.372E 00	525.1	0.382E 00	535.2	0.378E 00	539.5	0.373E 00
543.0	0.370E 00	555.5	0.367E 00	560.3	0.354E 00	563.7	0.356E 00	571.3	0.346E 00
577.9	0.340E 00	582.2	0.344E 00	584.5	0.343E 00	586.1	0.338E 00	590.2	0.315E 00
591.6	0.310E 00	594.1	0.308E 00	607.4	0.333E 00	615.9	0.319E 00	620.6	0.320E 00
630.5	0.309E 00	641.9	0.314E 00	648.9	0.296E 00	657.1	0.288E 00	659.8	0.291E 00
662.5	0.303E 00	681.8	0.297E 00	686.1	0.248E 00	688.5	0.239E 00	700.0	0.261E 00
710.9	0.257E 00	715.1	0.197E 00	726.0	0.171E 00	733.4	0.215E 00	743.0	0.216E 00

STATION 13 EXP 2 PROF 10

MAXIMUM A LAMDA= 482.1 AVEC ECLAIREMENT SPECTRAL= 0.23044 WATT/M2/NM

ENTRE 403.5 NM ET 650.4 NM , ECLAIREMENT 31.970 WATT/M2 80.575E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.5	0.919E-01	405.6	0.956E-01	408.8	0.114E 00	410.3	0.125E 00	413.4	0.134E 00
416.4	0.142E 00	419.9	0.144E 00	424.2	0.147E 00	425.5	0.147E 00	427.2	0.147E 00
430.4	0.143E 00	432.3	0.142E 00	433.9	0.144E 00	437.7	0.158E 00	451.2	0.198E 00
453.3	0.203E 00	456.9	0.206E 00	459.1	0.210E 00	460.5	0.213E 00	462.9	0.215E 00
464.8	0.215E 00	469.6	0.215E 00	475.3	0.225E 00	479.2	0.228E 00	482.1	0.230E 00
484.9	0.222E 00	486.4	0.217E 00	487.8	0.215E 00	491.0	0.220E 00	493.8	0.222E 00
496.5	0.220E 00	502.3	0.211E 00	508.2	0.208E 00	510.6	0.202E 00	514.6	0.188E 00
519.1	0.175E 00	519.9	0.174E 00	521.8	0.174E 00	525.2	0.179E 00	533.1	0.177E 00
541.5	0.165E 00	548.5	0.155E 00	553.5	0.146E 00	555.6	0.145E 00	558.9	0.137E 00
572.5	0.118E 00	576.7	0.100E 00	580.7	0.949E-01	585.9	0.724E-01	590.6	0.498E-01
596.7	0.300E-01	605.3	0.113E-01	618.9	0.714E-02	650.4	0.		

STATION 13 EXP 2 PROF 20

MAXIMUM A LAMDA= 482.0 AVEC ECLAIREMENT SPECTRAL= 0.10980 WATT/M2/NM

ENTRE 403.3 NM ET 610.0 NM , ECLAIREMENT 13.200 WATT/M2 33.109E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.3	0.316E-01	405.9	0.325E-01	407.7	0.377E-01	411.0	0.443E-01	416.1	0.496E-01
422.3	0.537E-01	425.6	0.546E-01	427.3	0.548E-01	430.5	0.536E-01	432.0	0.535E-01
433.6	0.551E-01	436.0	0.593E-01	444.9	0.731E-01	451.1	0.827E-01	452.8	0.859E-01
456.0	0.882E-01	458.7	0.910E-01	459.9	0.923E-01	463.8	0.955E-01	469.4	0.981E-01
475.0	0.104E 00	479.9	0.108E 00	482.0	0.110E 00	484.7	0.107E 00	487.0	0.104E 00
488.3	0.104E 00	489.9	0.104E 00	492.3	0.106E 00	494.7	0.107E 00	497.1	0.105E 00
501.3	0.101E 00	504.6	0.100E 00	508.6	0.962E-01	513.6	0.852E-01	518.1	0.766E-01
519.5	0.751E-01	522.0	0.757E-01	525.3	0.776E-01	532.5	0.764E-01	537.8	0.718E-01
546.1	0.629E-01	552.7	0.557E-01	555.4	0.545E-01	568.3	0.462E-01	574.1	0.387E-01
577.2	0.317E-01	579.9	0.296E-01	586.4	0.167E-01	591.7	0.944E-02	596.5	0.472E-02
610.0	0.								

STATION 13 EXP 2 PROF 40

MAXIMUM A LAMDA= 482.8 AVEC ECLAIREMENT SPECTRAL= 0.02185 WATT/M2/NM

ENTRE 402.9 NM ET 598.4 NM , ECLAIREMENT 2.054 WATT/M2 5.157E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.229E-02	405.5	0.247E-02	408.1	0.310E-02	417.3	0.417E-02	423.9	0.524E-02
427.6	0.551E-02	431.8	0.564E-02	437.0	0.717E-02	443.4	0.924E-02	448.9	0.112E-01
453.6	0.132E-01	455.8	0.137E-01	461.9	0.156E-01	465.8	0.168E-01	470.3	0.180E-01
475.6	0.197E-01	478.7	0.209E-01	481.5	0.217E-01	482.8	0.218E-01	483.8	0.217E-01
485.6	0.212E-01	487.9	0.211E-01	492.3	0.217E-01	493.5	0.217E-01	496.3	0.215E-01
502.2	0.205E-01	504.9	0.204E-01	507.5	0.195E-01	510.1	0.176E-01	513.0	0.153E-01
515.6	0.135E-01	518.8	0.126E-01	520.9	0.124E-01	523.8	0.128E-01	531.0	0.125E-01
539.0	0.109E-01	550.2	0.749E-02	555.7	0.679E-02	565.1	0.572E-02	573.5	0.406E-02
578.4	0.260E-02	581.1	0.221E-02	586.9	0.743E-03	598.4	0.		

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STATION 13 EXP 2 PROF 60

MAXIMUM A LAMDA= 493.8 AVEC ECLAIREMENT SPECTRAL= 0.00765 WATT/M2/NM

ENTRE 414.4 NM ET 593.9 NM , ECLAIREMENT 0.578 WATT/M2 -1.447E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
414.4	0.597E-03	427.0	0.109E-02	431.4	0.114E-02	434.2	0.139E-02	442.3	0.232E-02
450.2	0.346E-02	450.7	0.361E-02	455.0	0.405E-02	461.6	0.499E-02	465.6	0.541E-02
468.7	0.572E-02	473.6	0.642E-02	478.0	0.700E-02	480.8	0.733E-02	483.8	0.760E-02
487.7	0.746E-02	493.8	0.765E-02	496.3	0.750E-02	497.2	0.723E-02	498.4	0.713E-02
499.6	0.694E-02	504.0	0.668E-02	507.2	0.607E-02	511.6	0.475E-02	514.5	0.387E-02
516.2	0.338E-02	518.9	0.319E-02	524.2	0.325E-02	531.7	0.308E-02	541.5	0.227E-02
550.0	0.153E-02	554.9	0.133E-02	567.5	0.934E-03	581.0	0.237E-03	593.9	0.

STATION 13 EXP 2 PROF 80

MAXIMUM A LAMDA= 484.0 AVEC ECLAIREMENT SPECTRAL= 0.00318 WATT/M2/NM

ENTRE 418.4 NM ET 581.1 NM , ECLAIREMENT 0.197 WATT/M2 0.489E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
418.4	0.134E-03	426.8	0.245E-03	430.5	0.267E-03	438.9	0.525E-03	447.9	0.104E-02
454.0	0.135E-02	455.1	0.141E-02	459.7	0.174E-02	467.1	0.220E-02	468.9	0.226E-02
473.4	0.258E-02	476.7	0.287E-02	479.5	0.298E-02	480.9	0.304E-02	481.4	0.309E-02
484.0	0.318E-02	485.1	0.315E-02	487.9	0.313E-02	490.5	0.316E-02	493.3	0.317E-02
496.8	0.295E-02	500.1	0.268E-02	503.1	0.260E-02	505.5	0.231E-02	508.8	0.181E-02
512.4	0.127E-02	515.1	0.103E-02	518.4	0.897E-03	521.4	0.884E-03	531.2	0.827E-03
539.8	0.572E-03	552.5	0.242E-03	581.1	0.				

STATION 14 EXP 1 PROF 10

MAXIMUM A LAMDA= 480.0 AVEC ECLAIREMENT SPECTRAL= 0.60694 WATT/M2/NM

ENTRE 402.6 NM ET 662.6 NM , ECLAIREMENT 87.873 WATT/M2 221.760E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.6	0.257E 00	405.0	0.263E 00	408.1	0.316E 00	409.8	0.349E 00	414.3	0.385E 00
421.5	0.408E 00	424.2	0.412E 00	425.4	0.409E 00	428.9	0.394E 00	430.1	0.395E 00
431.5	0.393E 00	436.0	0.435E 00	442.1	0.478E 00	446.3	0.515E 00	451.6	0.547E 00
454.7	0.554E 00	456.9	0.558E 00	459.6	0.568E 00	462.5	0.573E 00	464.7	0.575E 00
467.1	0.577E 00	468.6	0.575E 00	470.7	0.580E 00	478.0	0.599E 00	480.0	0.607E 00
481.9	0.605E 00	483.9	0.584E 00	485.6	0.576E 00	487.0	0.575E 00	490.1	0.590E 00
493.2	0.594E 00	494.6	0.592E 00	498.8	0.569E 00	500.7	0.566E 00	503.6	0.562E 00
509.6	0.532E 00	514.2	0.483E 00	517.4	0.461E 00	519.6	0.455E 00	520.7	0.456E 00
523.1	0.473E 00	533.3	0.476E 00	546.4	0.432E 00	551.3	0.412E 00	554.3	0.407E 00
570.1	0.343E 00	573.6	0.323E 00	577.0	0.291E 00	579.5	0.277E 00	586.7	0.194E 00
594.6	0.113E 00	603.8	0.528E-01	615.4	0.328E-01	662.6	0.		

STATION 14 EXP 1 PROF 20

MAXIMUM A LAMDA= 493.2 AVEC ECLAIREMENT SPECTRAL= 0.33989 WATT/M2/NM

ENTRE 401.2 NM ET 606.1 NM , ECLAIREMENT 41.857 WATT/M2 104.643E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.914E-01	403.1	0.104E 00	404.6	0.108E 00	407.7	0.130E 00	410.6	0.149E 00
414.9	0.161E 00	419.6	0.173E 00	423.2	0.178E 00	425.1	0.180E 00	427.2	0.180E 00
430.2	0.177E 00	431.4	0.177E 00	432.5	0.180E 00	436.2	0.199E 00	441.9	0.225E 00
447.2	0.248E 00	452.4	0.273E 00	455.7	0.279E 00	457.8	0.284E 00	459.9	0.292E 00
463.2	0.300E 00	466.0	0.303E 00	468.6	0.305E 00	481.6	0.338E 00	484.3	0.329E 00
485.8	0.325E 00	487.3	0.326E 00	489.6	0.332E 00	491.9	0.339E 00	493.2	0.340E 00
494.9	0.339E 00	498.1	0.326E 00	500.8	0.322E 00	504.1	0.319E 00	510.3	0.284E 00
515.2	0.248E 00	517.6	0.234E 00	519.5	0.231E 00	523.0	0.240E 00	531.9	0.239E 00
537.0	0.229E 00	545.9	0.204E 00	551.8	0.182E 00	554.1	0.179E 00	557.4	0.167E 00
564.8	0.154E 00	574.3	0.101E 00	579.1	0.918E-01	586.8	0.445E-01	591.9	0.269E-01
606.1	0.								

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STATION 14 EXP 1 PROF 30

MAXIMUM A LAMDA= 494.7 AVEC ECLAIREMENT SPECTRAL= 0.16398 WATT/M2/NM

ENTRE 401.5 NM ET 605.8 NM , ECLAIREMENT 17.554 WATT/M2 43.798E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.359E-01	405.0	0.379E-01	408.2	0.466E-01	412.1	0.546E-01	418.3	0.612E-01
423.5	0.667E-01	426.3	0.679E-01	428.9	0.674E-01	430.9	0.672E-01	433.0	0.715E-01
435.4	0.777E-01	442.4	0.928E-01	451.1	0.114E 00	454.8	0.117E 00	458.3	0.123E 00
462.3	0.130E 00	464.7	0.131E 00	469.5	0.135E 00	473.0	0.141E 00	478.2	0.150E 00
481.4	0.154E 00	482.2	0.155E 00	486.4	0.152E 00	487.9	0.153E 00	489.8	0.159E 00
493.0	0.163E 00	494.7	0.164E 00	501.6	0.154E 00	504.3	0.152E 00	506.5	0.145E 00
511.8	0.126E 00	516.0	0.108E 00	517.9	0.104E 00	519.8	0.103E 00	523.6	0.106E 00
529.4	0.105E 00	531.6	0.103E 00	536.6	0.925E-01	542.1	0.871E-01	546.2	0.763E-01
555.0	0.679E-01	567.6	0.495E-01	579.7	0.223E-01	585.2	0.918E-02	591.0	0.377E-02
605.8	0.								

STATION 14 EXP 1 PROF 60

MAXIMUM A LAMDA= 495.0 AVEC ECLAIREMENT SPECTRAL= 0.01957 WATT/M2/NM

ENTRE 407.8 NM ET 590.2 NM , ECLAIREMENT 1.351 WATT/M2 3.423E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.8	0.470E-03	427.7	0.159E-02	429.8	0.168E-02	439.0	0.301E-02	446.8	0.503E-02
451.0	0.632E-02	455.8	0.730E-02	459.1	0.861E-02	466.4	0.104E-01	467.7	0.105E-01
473.2	0.123E-01	477.9	0.139E-01	479.7	0.144E-01	480.8	0.148E-01	481.2	0.152E-01
482.6	0.156E-01	483.7	0.159E-01	485.0	0.161E-01	487.7	0.171E-01	489.9	0.180E-01
490.6	0.185E-01	492.3	0.191E-01	493.7	0.194E-01	495.0	0.196E-01	497.3	0.192E-01
498.7	0.188E-01	499.8	0.186E-01	502.7	0.182E-01	505.5	0.169E-01	508.4	0.143E-01
511.5	0.122E-01	514.3	0.986E-02	516.9	0.898E-02	519.2	0.875E-02	521.2	0.900E-02
527.0	0.929E-02	533.3	0.892E-02	542.9	0.706E-02	545.8	0.622E-02	550.2	0.513E-02
560.1	0.364E-02	570.5	0.221E-02	579.9	0.626E-03	581.1	0.607E-03	590.2	0.



STATION 14 EXP 1 PROF 80

MAXIMUM A LAMDA= 495.2 AVEC ECLAIREMENT SPECTRAL= 0.00603 WATT/M2/NM

ENTRE 419.9 NM ET 584.9 NM , ECLAIREMENT 0.352 WATT/M2 0.887E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
419.9	0.103E-03	429.6	0.278E-03	440.5	0.694E-03	449.8	0.135E-02	451.4	0.154E-02
455.1	0.176E-02	458.5	0.223E-02	465.1	0.280E-02	467.5	0.304E-02	472.8	0.355E-02
476.1	0.401E-02	479.3	0.435E-02	482.5	0.483E-02	485.3	0.512E-02	488.8	0.557E-02
490.1	0.586E-02	492.2	0.597E-02	492.7	0.600E-02	495.2	0.603E-02	496.6	0.591E-02
497.3	0.585E-02	498.8	0.563E-02	501.8	0.548E-02	502.7	0.540E-02	504.5	0.516E-02
506.8	0.454E-02	508.6	0.379E-02	512.4	0.284E-02	514.8	0.237E-02	516.3	0.217E-02
518.4	0.206E-02	524.1	0.210E-02	526.9	0.208E-02	529.5	0.205E-02	535.2	0.186E-02
541.4	0.154E-02	549.8	0.911E-03	555.0	0.814E-03	556.9	0.682E-03	571.0	0.314E-03
584.9	0.								

STATION 15 EXP 1 PROF 0

MAXIMUM A LAMDA= 480.8 AVEC ECLAIREMENT SPECTRAL= 1.62358 WATT/M2/NM

ENTRE 402.1 NM ET 700.0 NM , ECLAIREMENT 389.493 WATT/M2 1076.700E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.1	0.805E 00	405.1	0.852E 00	407.2	0.986E 00	409.3	0.111E 01	411.9	0.123E 01
415.9	0.129E 01	421.3	0.131E 01	423.1	0.131E 01	426.3	0.129E 01	428.5	0.125E 01
431.2	0.123E 01	432.4	0.123E 01	435.3	0.130E 01	442.1	0.145E 01	447.5	0.154E 01
449.5	0.157E 01	454.5	0.159E 01	457.5	0.162E 01	460.0	0.162E 01	464.4	0.159E 01
468.3	0.158E 01	468.8	0.159E 01	474.7	0.161E 01	478.7	0.162E 01	480.8	0.162E 01
484.4	0.154E 01	486.5	0.152E 01	488.1	0.153E 01	491.0	0.157E 01	492.8	0.158E 01
493.8	0.159E 01	500.5	0.152E 01	503.8	0.152E 01	508.0	0.153E 01	510.3	0.152E 01
514.5	0.148E 01	517.8	0.145E 01	522.3	0.148E 01	530.3	0.148E 01	540.5	0.144E 01
554.0	0.142E 01	558.0	0.136E 01	567.7	0.131E 01	576.6	0.130E 01	579.5	0.130E 01
585.9	0.117E 01	589.1	0.116E 01	604.6	0.125E 01	612.9	0.119E 01	628.6	0.114E 01
640.3	0.115E 01	655.6	0.105E 01	662.4	0.113E 01	680.4	0.112E 01	684.0	0.960E 00
700.0	0.100E 01	715.0	0.775E 00	725.0	0.664E 00	732.6	0.825E 00	742.0	0.849E 00

STATION 15 EXP 1 PROF 14

MAXIMUM A LAMDA= 480.3 AVEC ECLAIREMENT SPECTRAL= 1.00167 WATT/M2/NM

ENTRE 400.9 NM ET 610.6 NM , ECLAIREMENT 128.894 WATT/M2 319.680E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.412E 00	404.4	0.453E 00	406.6	0.537E 00	411.5	0.605E 00	417.3	0.653E 00
423.6	0.666E 00	428.2	0.634E 00	430.6	0.636E 00	432.2	0.646E 00	436.0	0.699E 00
441.6	0.759E 00	450.5	0.866E 00	455.2	0.892E 00	460.9	0.937E 00	464.8	0.942E 00
467.0	0.940E 00	474.1	0.981E 00	478.2	0.100E 01	480.3	0.100E 01	481.8	0.981E 00
484.1	0.945E 00	486.7	0.930E 00	489.6	0.946E 00	493.8	0.939E 00	497.8	0.887E 00
505.1	0.850E 00	511.7	0.730E 00	516.1	0.668E 00	518.9	0.661E 00	523.3	0.685E 00
530.9	0.678E 00	539.5	0.623E 00	548.2	0.540E 00	553.4	0.524E 00	568.0	0.419E 00
577.1	0.318E 00	584.3	0.165E 00	588.0	0.118E 00	591.7	0.114E 00	596.5	0.631E-01
603.2	0.190E-01	610.6	0.						

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STATION 15 EXP 1 PROF 23

MAXIMUM A LAMDA= 478.2 AVEC ECLAIREMENT SPECTRAL= 0.63533 WATT/M2/NM

ENTRE 402.2 NM ET 603.1 NM , ECLAIREMENT 71.295 WATT/M2 174.270E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.2	0.261E 00	404.2	0.275E 00	406.9	0.309E 00	410.5	0.354E 00	415.7	0.391E 00
422.0	0.409E 00	423.4	0.407E 00	426.2	0.399E 00	427.6	0.395E 00	429.5	0.392E 00
431.8	0.393E 00	435.1	0.424E 00	442.0	0.477E 00	450.6	0.536E 00	454.8	0.552E 00
458.1	0.572E 00	461.9	0.587E 00	463.3	0.592E 00	468.9	0.600E 00	475.9	0.631E 00
478.2	0.635E 00	479.4	0.635E 00	482.4	0.616E 00	486.5	0.586E 00	491.0	0.594E 00
495.7	0.560E 00	500.1	0.525E 00	503.8	0.512E 00	510.0	0.427E 00	514.9	0.353E 00
516.2	0.343E 00	518.6	0.339E 00	523.8	0.346E 00	526.9	0.342E 00	532.9	0.309E 00
546.7	0.232E 00	551.6	0.220E 00	566.9	0.155E 00	568.8	0.149E 00	576.1	0.972E-01
583.8	0.381E-01	590.9	0.114E-01	603.1	0.				

STATION 15 EXP 1 PROF 37

MAXIMUM A LAMDA= 481.1 AVEC ECLAIREMENT SPECTRAL= 0.21652 WATT/M2/NM

ENTRE 401.9 NM ET 589.9 NM , ECLAIREMENT 20.754 WATT/M2 51.060E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.476E-01	404.4	0.517E-01	407.3	0.600E-01	409.9	0.684E-01	416.5	0.795E-01
421.9	0.866E-01	424.2	0.886E-01	426.7	0.888E-01	428.4	0.888E-01	430.0	0.886E-01
431.4	0.896E-01	438.1	0.110E 00	444.6	0.130E 00	449.8	0.148E 00	453.1	0.152E 00
454.3	0.154E 00	457.0	0.164E 00	462.3	0.177E 00	468.5	0.189E 00	473.3	0.201E 00
475.8	0.209E 00	479.3	0.214E 00	481.1	0.217E 00	483.1	0.215E 00	484.4	0.210E 00
485.9	0.209E 00	488.2	0.212E 00	491.0	0.216E 00	495.3	0.212E 00	499.3	0.195E 00
503.2	0.167E 00	507.7	0.131E 00	509.9	0.115E 00	513.4	0.110E 00	517.2	0.110E 00
519.7	0.113E 00	529.0	0.111E 00	537.0	0.890E-01	547.9	0.645E-01	552.4	0.593E-01
574.5	0.255E-01	578.8	0.139E-01	589.9	0.				

STATION 15 EXP 1 PROF 46

MAXIMUM A LAMDA= 492.5 AVEC ECLAIREMENT SPECTRAL= 0.11293 WATT/M2/NM

ENTRE 401.7 NM ET 598.4 NM , ECLAIREMENT 9.633 WATT/M2 23.865E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.158E-01	404.1	0.167E-01	406.9	0.206E-01	410.5	0.229E-01	416.6	0.269E-01
425.3	0.313E-01	429.3	0.323E-01	431.1	0.329E-01	436.8	0.400E-01	443.1	0.501E-01
447.7	0.574E-01	451.2	0.640E-01	454.5	0.670E-01	458.4	0.751E-01	461.5	0.812E-01
464.8	0.844E-01	468.3	0.882E-01	472.0	0.944E-01	477.1	0.103E 00	480.5	0.107E 00
482.1	0.108E 00	485.2	0.107E 00	486.8	0.108E 00	489.4	0.111E 00	491.5	0.113E 00
492.5	0.113E 00	494.1	0.113E 00	498.2	0.108E 00	501.6	0.100E 00	504.1	0.883E-01
505.3	0.763E-01	508.1	0.648E-01	510.3	0.564E-01	512.5	0.549E-01	514.4	0.541E-01
517.8	0.552E-01	522.5	0.569E-01	527.3	0.566E-01	534.3	0.481E-01	541.8	0.391E-01
544.7	0.335E-01	549.0	0.291E-01	554.8	0.261E-01	568.1	0.156E-01	576.9	0.678E-02
582.1	0.271E-02	587.1	0.903E-03	598.4	0.				

STATION 15 EXP 2 PROF 0

MAXIMUM A LAMDA= 480.8 AVEC ECLAIREMENT SPECTRAL= 0.46774 WATT/M2/NM

ENTRE 431.1 NM ET 700.0 NM , ECLAIREMENT 115.449 WATT/M2 320.100E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.1	0.207E 00	402.6	0.235E 00	404.7	0.248E 00	407.7	0.295E 00	411.0	0.334E 00
414.9	0.362E 00	417.3	0.371E 00	421.4	0.378E 00	424.4	0.372E 00	427.3	0.355E 00
430.2	0.354E 00	431.5	0.354E 00	433.6	0.369E 00	435.4	0.384E 00	438.3	0.401E 00
442.5	0.425E 00	446.1	0.441E 00	448.2	0.450E 00	452.6	0.453E 00	457.1	0.462E 00
459.7	0.464E 00	464.9	0.462E 00	468.8	0.457E 00	474.7	0.463E 00	478.7	0.467E 00
480.8	0.468E 00	484.4	0.444E 00	486.5	0.437E 00	488.1	0.440E 00	491.0	0.453E 00
492.8	0.456E 00	493.8	0.457E 00	500.5	0.438E 00	503.8	0.438E 00	508.0	0.442E 00
510.3	0.439E 00	514.5	0.425E 00	517.8	0.419E 00	522.3	0.425E 00	530.3	0.427E 00
533.5	0.430E 00	542.3	0.415E 00	554.6	0.420E 00	558.6	0.408E 00	564.9	0.406E 00
577.1	0.390E 00	580.4	0.397E 00	582.9	0.398E 00	586.5	0.377E 00	589.9	0.351E 00
591.8	0.341E 00	597.4	0.352E 00	604.0	0.381E 00	607.0	0.384E 00	615.0	0.373E 00
619.0	0.371E 00	629.0	0.357E 00	641.5	0.354E 00	656.8	0.326E 00	661.7	0.348E 00
680.2	0.339E 00	685.4	0.283E 00	691.6	0.268E 00	700.0	0.288E 00	708.5	0.292E 00
714.7	0.202E 00	725.2	0.185E 00	730.8	0.213E 00	740.0	0.269E 00	742.0	0.271E 00

STATION 15 EXP 2 PROF 5

MAXIMUM A LAMDA= 478.8 AVEC ECLAIREMENT SPECTRAL= 0.41011 WATT/M2/NM

ENTRE 400.7 NM ET 696.9 NM , ECLAIREMENT 65.099 WATT/M2 165.660E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.210E 00	404.1	0.226E 00	406.9	0.257E 00	410.0	0.285E 00	413.4	0.308E 00
417.5	0.313E 00	420.9	0.313E 00	421.9	0.313E 00	424.0	0.309E 00	428.2	0.297E 00
430.3	0.297E 00	432.6	0.308E 00	434.9	0.323E 00	441.0	0.346E 00	445.1	0.367E 00
449.5	0.383E 00	454.3	0.391E 00	458.0	0.398E 00	460.7	0.401E 00	464.6	0.395E 00
467.9	0.396E 00	474.6	0.406E 00	477.2	0.410E 00	478.8	0.410E 00	481.2	0.401E 00
484.1	0.384E 00	485.7	0.382E 00	486.2	0.383E 00	489.9	0.391E 00	491.9	0.390E 00
495.1	0.384E 00	499.2	0.370E 00	501.2	0.370E 00	509.3	0.350E 00	513.3	0.326E 00
515.9	0.317E 00	517.8	0.317E 00	521.4	0.324E 00	529.3	0.324E 00	533.7	0.321E 00
543.5	0.301E 00	553.3	0.284E 00	564.7	0.261E 00	570.1	0.243E 00	574.0	0.224E 00
578.7	0.216E 00	584.6	0.175E 00	589.6	0.136E 00	594.1	0.112E 00	601.7	0.722E-01
610.4	0.578E-01	625.9	0.562E-01	653.0	0.283E-01	675.8	0.221E-01	696.9	0.

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STATION 15 EXP 2 PROF 9

MAXIMUM A LAMDA= 480.2 AVEC ECLAIREMENT SPECTRAL= 0.30930 WATT/M2/NM

ENTRE 402.1 NM ET 641.7 NM , ECLAIREMENT 42.678 WATT/M2 196.260E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.1	0.151E 00	403.7	0.158E 00	406.0	0.170E 00	408.0	0.191E 00	410.3	0.209E 00
413.1	0.217E 00	415.7	0.225E 00	420.4	0.229E 00	422.6	0.229E 00	424.5	0.228E 00
427.7	0.219E 00	430.4	0.218E 00	432.5	0.219E 00	434.9	0.231E 00	439.4	0.246E 00
444.5	0.264E 00	450.6	0.283E 00	455.8	0.288E 00	458.2	0.292E 00	461.3	0.296E 00
463.8	0.297E 00	469.9	0.297E 00	475.1	0.305E 00	479.1	0.309E 00	480.2	0.309E 00
483.1	0.305E 00	484.1	0.296E 00	486.0	0.290E 00	487.9	0.289E 00	491.1	0.294E 00
494.3	0.293E 00	497.6	0.282E 00	500.0	0.273E 00	503.0	0.271E 00	509.1	0.253E 00
513.8	0.230E 00	516.1	0.220E 00	518.2	0.219E 00	519.9	0.219E 00	521.2	0.222E 00
531.9	0.220E 00	541.2	0.201E 00	550.5	0.183E 00	552.5	0.181E 00	556.8	0.171E 00
567.5	0.150E 00	570.9	0.142E 00	574.0	0.123E 00	578.6	0.114E 00	584.9	0.823E-01
589.2	0.551E-01	597.0	0.278E-01	602.7	0.118E-01	615.1	0.711E-02	641.7	0.

STATION 15 EXP 2 PROF 19

MAXIMUM A LAMDA= 480.1 AVEC ECLAIREMENT SPECTRAL= 0.19603 WATT/M2/NM

ENTRE 401.0 NM ET 601.2 NM , ECLAIREMENT 23.391 WATT/M2 57.420E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.0	0.863E-01	403.7	0.898E-01	405.5	0.984E-01	408.5	0.112E 00	411.0	0.119E 00
414.3	0.126E 00	418.3	0.128E 00	422.6	0.129E 00	423.6	0.128E 00	427.2	0.124E 00
429.0	0.124E 00	430.2	0.124E 00	431.9	0.126E 00	434.3	0.134E 00	438.4	0.143E 00
443.7	0.154E 00	446.3	0.162E 00	449.2	0.167E 00	452.5	0.169E 00	454.7	0.173E 00
457.3	0.178E 00	459.9	0.182E 00	463.5	0.182E 00	467.7	0.184E 00	472.2	0.189E 00
476.7	0.195E 00	479.1	0.196E 00	480.1	0.196E 00	482.3	0.191E 00	483.6	0.186E 00
484.7	0.184E 00	486.0	0.183E 00	487.1	0.183E 00	488.1	0.184E 00	491.3	0.185E 00
494.3	0.180E 00	498.3	0.168E 00	502.5	0.164E 00	505.3	0.153E 00	508.0	0.143E 00
509.5	0.136E 00	512.6	0.124E 00	515.4	0.115E 00	517.4	0.113E 00	519.1	0.113E 00
521.5	0.114E 00	529.3	0.113E 00	533.8	0.110E 00	539.7	0.954E-01	548.8	0.819E-01
553.4	0.796E-01	558.1	0.721E-01	569.7	0.574E-01	574.1	0.427E-01	577.9	0.388E-01
584.2	0.216E-01	590.6	0.102E-01	601.2	0.				

STATION 15 EXP 2 PROF 38

MAXIMUM A LAMDA= 493.0 AVEC ECLAIREMENT SPECTRAL= 0.04591 WATT/M2/NM

ENTRE 402.5 NM ET 593.0 NM , ECLAIREMENT 4.506 WATT/M2 11.154E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.5	0.112E-01	404.1	0.110E-01	406.7	0.131E-01	409.9	0.148E-01	415.3	0.162E-01
418.8	0.170E-01	421.4	0.178E-01	423.6	0.180E-01	428.5	0.180E-01	432.2	0.184E-01
434.6	0.196E-01	438.9	0.222E-01	445.0	0.252E-01	449.0	0.285E-01	451.0	0.298E-01
454.0	0.304E-01	456.7	0.324E-01	459.6	0.348E-01	461.6	0.355E-01	467.9	0.383E-01
472.6	0.405E-01	476.5	0.433E-01	480.0	0.445E-01	481.8	0.449E-01	483.9	0.443E-01
486.3	0.442E-01	490.3	0.455E-01	493.0	0.459E-01	493.5	0.458E-01	497.2	0.437E-01
503.1	0.413E-01	508.3	0.356E-01	511.7	0.293E-01	514.8	0.258E-01	515.5	0.247E-01
519.0	0.243E-01	521.8	0.251E-01	525.4	0.255E-01	531.5	0.247E-01	537.6	0.219E-01
542.7	0.189E-01	549.1	0.145E-01	553.1	0.140E-01	556.4	0.126E-01	564.9	0.106E-01
569.2	0.863E-02	574.7	0.519E-02	577.7	0.441E-02	583.5	0.188E-02	593.0	0.

STATION 15 EXP 2 PROF 58

MAXIMUM A LAMDA= 491.9 AVEC ECLAIREMENT SPECTRAL= 0.01043 WATT/M2/NM

ENTRE 403.2 NM ET 591.6 NM , ECLAIREMENT 0.817 WATT/M2 2.039E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.2	0.897E-03	414.1	0.141E-02	424.3	0.185E-02	430.2	0.198E-02	435.8	0.257E-02
443.5	0.352E-02	449.4	0.455E-02	453.3	0.493E-02	457.6	0.584E-02	464.9	0.686E-02
472.8	0.799E-02	478.3	0.881E-02	481.5	0.921E-02	483.5	0.934E-02	486.7	0.973E-02
488.7	0.101E-01	491.9	0.104E-01	495.9	0.102E-01	501.6	0.975E-02	504.5	0.887E-02
508.5	0.736E-02	512.6	0.586E-02	515.2	0.509E-02	517.4	0.496E-02	523.7	0.509E-02
530.1	0.501E-02	536.1	0.443E-02	543.3	0.342E-02	548.4	0.248E-02	560.6	0.174E-02
574.7	0.584E-03	591.6	0.						

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STATION 15 EXP 2 PROF 75

MAXIMUM A LAMDA= 492.8 AVEC ECLAIREMENT SPECTRAL= 0.00400 WATT/M2/NM

ENTRE 411.0 NM ET 579.4 NM , ECLAIREMENT 0.258 WATT/M2 0.643E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
411.0	0.188E-03	425.6	0.432E-03	430.3	0.448E-03	437.4	0.717E-03	443.9	0.105E-02
448.5	0.136E-02	452.6	0.152E-02	457.7	0.193E-02	465.6	0.240E-02	472.8	0.284E-02
476.7	0.316E-02	482.6	0.351E-02	484.1	0.352E-02	487.1	0.366E-02	488.9	0.378E-02
492.8	0.400E-02	494.9	0.398E-02	498.2	0.381E-02	501.6	0.370E-02	504.6	0.339E-02
508.0	0.277E-02	510.7	0.220E-02	514.2	0.170E-02	516.4	0.152E-02	518.7	0.147E-02
521.6	0.149E-02	527.6	0.149E-02	533.3	0.115E-02	544.7	0.589E-03	560.1	0.320E-03
579.4	0.								



STATION 16 EXP 1 PROF 9

MAXIMUM A LAMDA= 480.0 AVEC ECLAIREMENT SPECTRAL= 1.02544 WATT/M2/NM

ENTRE 400.0 NM ET 700.0 NM , ECLAIREMENT 248.144 WATT/M2 689.670E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.248E 00	401.0	0.294E 00	402.6	0.347E 00	403.4	0.403E 00	404.8	0.436E 00
405.6	0.457E 00	407.2	0.475E 00	408.5	0.514E 00	409.9	0.564E 00	410.7	0.611E 00
412.6	0.671E 00	414.9	0.717E 00	416.8	0.743E 00	417.9	0.764E 00	419.7	0.773E 00
423.1	0.784E 00	424.7	0.790E 00	426.6	0.792E 00	428.4	0.778E 00	430.8	0.752E 00
433.1	0.740E 00	433.7	0.739E 00	435.5	0.758E 00	436.9	0.794E 00	440.4	0.834E 00
443.4	0.870E 00	446.9	0.922E 00	449.6	0.933E 00	452.3	0.967E 00	453.4	0.979E 00
455.3	0.990E 00	457.2	0.986E 00	459.6	0.988E 00	461.8	0.995E 00	463.6	0.100E 01
464.6	0.100E 01	466.4	0.100E 01	469.1	0.992E 00	470.4	0.989E 00	471.8	0.991E 00
474.5	0.999E 00	477.3	0.101E 01	480.0	0.103E 01	481.6	0.102E 01	483.1	0.100E 01
485.2	0.973E 00	486.8	0.956E 00	488.7	0.954E 00	490.6	0.959E 00	493.1	0.981E 00
496.1	0.991E 00	497.4	0.995E 00	499.9	0.985E 00	503.2	0.967E 00	505.3	0.960E 00
508.9	0.962E 00	512.3	0.970E 00	514.6	0.954E 00	517.1	0.928E 00	519.1	0.910E 00
520.4	0.905E 00	522.2	0.909E 00	524.9	0.933E 00	529.5	0.938E 00	534.8	0.938E 00
538.6	0.936E 00	543.6	0.921E 00	546.6	0.924E 00	551.2	0.927E 00	555.2	0.917E 00
557.8	0.901E 00	560.3	0.876E 00	564.1	0.876E 00	567.5	0.864E 00	573.6	0.849E 00
578.6	0.846E 00	584.1	0.858E 00	587.2	0.873E 00	589.5	0.850E 00	591.9	0.803E 00
594.6	0.774E 00	597.3	0.765E 00	602.1	0.794E 00	607.2	0.823E 00	609.4	0.818E 00
612.8	0.805E 00	615.8	0.790E 00	621.7	0.792E 00	627.4	0.772E 00	632.8	0.762E 00
638.0	0.771E 00	643.2	0.759E 00	647.3	0.727E 00	653.2	0.696E 00	657.0	0.682E 00
660.5	0.700E 00	664.1	0.734E 00	669.1	0.727E 00	675.6	0.696E 00	682.7	0.733E 00
684.5	0.699E 00	688.2	0.642E 00	693.2	0.627E 00	700.0	0.605E 00	706.5	0.636E 00
710.9	0.647E 00	714.6	0.573E 00	718.9	0.432E 00	724.2	0.408E 00	729.0	0.380E 00

STATION 16 EXP 1 PROF 10

MAXIMUM A LAMDA= 481.5 AVEC ECLAIREMENT SPECTRAL= 0.51847 WATT/M2/NM

ENTRE 400.0 NM ET 629.6 NM , ECLAIREMENT 72.968 WATT/M2 185.571E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.866E-01	402.7	0.125E 00	404.4	0.156E 00	405.3	0.159E 00	407.7	0.174E 00
409.1	0.195E 00	411.5	0.220E 00	413.4	0.247E 00	417.0	0.266E 00	420.9	0.282E 00
423.4	0.290E 00	425.9	0.295E 00	426.4	0.295E 00	428.3	0.292E 00	430.5	0.286E 00
431.4	0.286E 00	433.0	0.285E 00	435.2	0.299E 00	438.2	0.322E 00	441.1	0.347E 00
445.8	0.375E 00	448.8	0.395E 00	452.1	0.418E 00	455.0	0.436E 00	458.6	0.445E 00
461.5	0.456E 00	464.3	0.470E 00	465.7	0.474E 00	468.3	0.479E 00	470.7	0.481E 00
474.1	0.495E 00	477.2	0.510E 00	479.6	0.516E 00	481.5	0.518E 00	482.2	0.515E 00
483.9	0.500E 00	485.9	0.489E 00	487.6	0.490E 00	489.4	0.493E 00	492.6	0.503E 00
494.4	0.508E 00	497.0	0.507E 00	499.4	0.500E 00	502.9	0.485E 00	506.1	0.480E 00
508.8	0.474E 00	512.2	0.457E 00	515.5	0.429E 00	518.0	0.411E 00	519.3	0.406E 00
520.7	0.406E 00	524.3	0.417E 00	527.6	0.420E 00	532.8	0.415E 00	536.4	0.415E 00
540.6	0.401E 00	546.3	0.387E 00	549.7	0.374E 00	553.0	0.361E 00	557.2	0.360E 00
560.7	0.342E 00	564.4	0.334E 00	570.1	0.318E 00	574.4	0.302E 00	577.0	0.280E 00
579.8	0.260E 00	583.0	0.248E 00	587.3	0.212E 00	591.9	0.159E 00	596.0	0.111E 00
601.5	0.638E-01	606.2	0.347E-01	609.8	0.166E-01	614.3	0.985E-02	619.7	0.830E-02
628.6	0.								

STATION 16 EXP 1 PROF 20

MAXIMUM A LAMDA= 497.0 AVEC ECLAIREMENT SPECTRAL= 0.16312 WATT/M2/NM

ENTRE 400.0 NM ET 618.6 NM , ECLAIREMENT 19.801 WATT/M2 50.765E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.150E-01	403.8	0.179E-01	403.8	0.250E-01	405.0	0.277E-01	407.5	0.297E-01
409.3	0.333E-01	412.3	0.400E-01	415.8	0.457E-01	422.2	0.515E-01	424.9	0.537E-01
426.3	0.551E-01	429.9	0.546E-01	431.8	0.545E-01	433.8	0.568E-01	436.9	0.638E-01
442.5	0.752E-01	446.9	0.832E-01	450.6	0.925E-01	453.5	0.990E-01	453.8	0.104E 00
458.1	0.108E 00	461.0	0.114E 00	462.9	0.119E 00	464.4	0.122E 00	467.3	0.126E 00
470.5	0.130E 00	473.1	0.137E 00	475.6	0.143E 00	477.3	0.147E 00	479.2	0.150E 00
479.5	0.151E 00	481.9	0.153E 00	483.6	0.152E 00	485.1	0.150E 00	486.9	0.150E 00
488.5	0.152E 00	490.6	0.156E 00	493.4	0.159E 00	494.9	0.162E 00	497.0	0.163E 00
501.0	0.161E 00	503.5	0.159E 00	506.6	0.159E 00	508.1	0.158E 00	511.4	0.150E 00
514.7	0.140E 00	516.9	0.131E 00	518.6	0.128E 00	520.0	0.127E 00	521.3	0.128E 00
527.7	0.134E 00	532.1	0.134E 00	535.1	0.132E 00	539.5	0.127E 00	545.0	0.120E 00
551.4	0.111E 00	554.5	0.104E 00	557.8	0.103E 00	561.9	0.980E-01	567.3	0.948E-01
571.8	0.878E-01	575.2	0.796E-01	579.1	0.701E-01	581.4	0.623E-01	584.5	0.563E-01
588.1	0.424E-01	592.0	0.268E-01	596.5	0.155E-01	601.1	0.848E-02	606.5	0.245E-02
608.9	0.147E-02	618.6	0.						

STATION 16 EXP 1 PROF 30

MAXIMUM A LAMDA= 505.7 AVEC ECLAIREMENT SPECTRAL= 0.07374 WATT/M2/NM

ENTRE 400.0 NM ET 615.9 NM , ECLAIREMENT 6.798 WATT/M2 17.562E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.184E-02	410.7	0.465E-02	422.7	0.752E-02	427.7	0.922E-02	432.7	0.988E-02
438.2	0.129E-01	444.6	0.168E-01	449.7	0.221E-01	452.2	0.264E-01	457.3	0.301E-01
459.2	0.321E-01	462.4	0.358E-01	464.2	0.390E-01	466.0	0.406E-01	468.6	0.422E-01
473.3	0.481E-01	478.5	0.543E-01	481.6	0.585E-01	483.4	0.605E-01	484.8	0.610E-01
487.6	0.618E-01	490.4	0.645E-01	492.8	0.678E-01	494.4	0.701E-01	496.2	0.720E-01
498.4	0.730E-01	500.2	0.728E-01	503.6	0.732E-01	505.7	0.737E-01	508.2	0.720E-01
510.9	0.668E-01	513.3	0.607E-01	515.9	0.554E-01	517.1	0.526E-01	518.9	0.517E-01
520.4	0.520E-01	521.9	0.527E-01	524.0	0.544E-01	527.2	0.551E-01	532.0	0.550E-01
537.8	0.524E-01	544.0	0.466E-01	548.2	0.420E-01	553.0	0.370E-01	558.4	0.344E-01
563.6	0.322E-01	567.5	0.296E-01	574.0	0.234E-01	579.4	0.164E-01	583.9	0.116E-01
587.2	0.811E-02	589.8	0.450E-02	591.5	0.324E-02	594.0	0.295E-02	597.6	0.516E-03
604.5	0.516E-03	615.9	0.						

STATION 16 EXP 1 PROF 60

MAXIMUM A LAMDA= 499.5 AVEC ECLAIREMENT SPECTRAL= 0.00683 WATT/M2/NM

ENTRE 400.0 NM ET 608.4 NM , ECLAIREMENT 0.498 WATT/M2 1.280E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.820E-04	403.3	0.123E-03	414.2	0.178E-03	423.8	0.321E-03	428.4	0.410E-03
431.8	0.424E-03	436.7	0.635E-03	445.2	0.102E-02	451.8	0.157E-02	457.5	0.212E-02
462.3	0.266E-02	466.1	0.314E-02	470.6	0.360E-02	475.1	0.421E-02	477.2	0.459E-02
480.2	0.495E-02	481.8	0.519E-02	483.9	0.538E-02	485.5	0.549E-02	488.1	0.564E-02
491.4	0.605E-02	493.7	0.641E-02	495.3	0.663E-02	497.9	0.679E-02	499.5	0.683E-02
502.1	0.674E-02	505.0	0.672E-02	507.0	0.656E-02	509.6	0.618E-02	510.9	0.572E-02
512.4	0.508E-02	514.2	0.456E-02	516.0	0.417E-02	517.8	0.385E-02	520.6	0.373E-02
523.6	0.381E-02	528.2	0.389E-02	532.1	0.382E-02	536.7	0.362E-02	540.2	0.339E-02
544.3	0.303E-02	549.1	0.256E-02	554.4	0.206E-02	560.8	0.176E-02	569.6	0.131E-02
576.7	0.874E-03	580.8	0.485E-03	584.9	0.246E-03	590.4	0.956E-04	596.8	0.205E-04
608.4	0.								

STATION 16 EXP 2 PROF 0

MAXIMUM A LAMDA= 479.7 AVEC ECLAIREMENT SPECTRAL= 0.85771 WATT/M2/NM

ENTRE 430.8 NM ET 700.0 NM , ECLAIREMENT 216.543 WATT/M2 603.340E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.359E 00	401.9	0.395E 00	404.6	0.428E 00	406.9	0.504E 00	409.0	0.570E 00
411.7	0.609E 00	414.9	0.642E 00	416.7	0.651E 00	422.0	0.653E 00	424.1	0.654E 00
425.2	0.654E 00	428.2	0.627E 00	429.8	0.626E 00	431.4	0.625E 00	434.0	0.651E 00
437.0	0.690E 00	442.5	0.739E 00	445.2	0.772E 00	447.1	0.788E 00	449.8	0.810E 00
451.5	0.817E 00	453.8	0.826E 00	457.0	0.835E 00	461.4	0.846E 00	468.3	0.832E 00
474.4	0.847E 00	478.6	0.858E 00	479.7	0.858E 00	481.0	0.847E 00	483.3	0.816E 00
485.9	0.803E 00	487.5	0.807E 00	491.2	0.832E 00	493.3	0.839E 00	494.8	0.842E 00
499.7	0.813E 00	503.8	0.814E 00	506.2	0.817E 00	510.0	0.824E 00	514.0	0.790E 00
518.4	0.781E 00	520.2	0.787E 00	521.8	0.802E 00	534.2	0.815E 00	543.4	0.787E 00
554.4	0.801E 00	558.2	0.781E 00	564.4	0.777E 00	573.3	0.744E 00	576.0	0.745E 00
580.8	0.764E 00	582.6	0.759E 00	587.1	0.709E 00	590.9	0.662E 00	593.0	0.663E 00
598.3	0.694E 00	604.6	0.735E 00	612.7	0.708E 00	621.0	0.709E 00	628.8	0.686E 00
643.4	0.695E 00	649.8	0.643E 00	657.2	0.637E 00	660.9	0.672E 00	669.7	0.669E 00
677.6	0.667E 00	679.6	0.667E 00	683.7	0.564E 00	685.1	0.546E 00	700.0	0.570E 00
714.4	0.375E 00	724.9	0.347E 00	731.3	0.444E 00	742.0	0.537E 00		

STATION 16 EXP 2 PROF 10

MAXIMUM A LAMDA= 492.7 AVEC ECLAIREMENT SPECTRAL= 0.36651 WATT/M2/NM

ENTRE 403.0 NM ET 631.9 NM , ECLAIREMENT 50.496 WATT/M2 128.132E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.0	0.119E 00	405.4	0.127E 00	406.9	0.149E 00	409.9	0.164E 00	413.5	0.181E 00
418.0	0.189E 00	422.5	0.196E 00	423.4	0.196E 00	426.3	0.195E 00	428.0	0.192E 00
430.2	0.190E 00	432.4	0.193E 00	436.4	0.213E 00	441.4	0.235E 00	445.3	0.258E 00
451.0	0.289E 00	455.7	0.299E 00	458.6	0.309E 00	461.2	0.317E 00	463.8	0.324E 00
468.1	0.331E 00	472.5	0.341E 00	476.9	0.359E 00	478.4	0.364E 00	481.7	0.365E 00
484.3	0.357E 00	486.1	0.351E 00	487.6	0.353E 00	492.7	0.367E 00	494.8	0.365E 00
497.7	0.355E 00	503.7	0.349E 00	506.5	0.349E 00	511.5	0.329E 00	516.1	0.306E 00
518.3	0.294E 00	521.1	0.292E 00	523.7	0.298E 00	525.3	0.303E 00	530.8	0.303E 00
534.1	0.305E 00	540.4	0.287E 00	548.7	0.264E 00	553.2	0.254E 00	555.5	0.250E 00
558.9	0.238E 00	566.6	0.225E 00	571.7	0.207E 00	575.1	0.186E 00	578.2	0.167E 00
581.0	0.158E 00	587.0	0.115E 00	592.1	0.700E-01	600.3	0.345E-01	604.4	0.183E-01
631.9	0.								

STATION 16 EXP 2 PROF 15

MAXIMUM A LAMDA= 490.9 AVEC ECLAIREMENT SPECTRAL= 0.22051 WATT/M2/NM

ENTRE 401.6 NM ET 604.4 NM , ECLAIREMENT 27.858 WATT/M2 70.286E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
401.6	0.606E-01	404.2	0.635E-01	405.6	0.750E-01	409.2	0.831E-01	414.1	0.931E-01
419.0	0.986E-01	423.5	0.102E 00	427.3	0.100E 00	429.5	0.995E-01	431.2	0.103E 00
435.6	0.114E 00	440.6	0.127E 00	445.0	0.143E 00	448.1	0.155E 00	449.5	0.163E 00
452.6	0.166E 00	457.2	0.179E 00	461.8	0.186E 00	467.0	0.191E 00	472.8	0.204E 00
477.0	0.214E 00	481.1	0.219E 00	484.0	0.212E 00	484.5	0.211E 00	486.0	0.211E 00
488.0	0.215E 00	490.9	0.221E 00	492.8	0.220E 00	495.0	0.216E 00	498.3	0.209E 00
502.8	0.210E 00	505.4	0.201E 00	511.9	0.181E 00	515.1	0.167E 00	517.4	0.167E 00
519.7	0.170E 00	521.3	0.174E 00	528.6	0.177E 00	532.7	0.175E 00	543.5	0.153E 00
550.0	0.138E 00	553.6	0.136E 00	557.6	0.129E 00	566.9	0.115E 00	570.8	0.104E 00
575.6	0.847E-01	578.2	0.800E-01	583.3	0.567E-01	589.8	0.280E-01	598.8	0.794E-02
604.4	0.								

STATION 16 EXP 2 PROF 20

MAXIMUM A LAMDA= 493.9 AVEC ECLAIREMENT SPECTRAL= 0.10780 WATT/M2/NM

ENTRE 400.2 NM ET 603.0 NM , ECLAIREMENT 12.721 WATT/M2 32.344E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
400.2	0.209E-01	404.2	0.220E-01	406.6	0.255E-01	410.9	0.298E-01	417.0	0.331E-01
423.7	0.355E-01	428.2	0.356E-01	430.5	0.357E-01	435.2	0.404E-01	441.5	0.494E-01
446.6	0.587E-01	450.0	0.651E-01	453.5	0.693E-01	456.5	0.736E-01	460.6	0.783E-01
465.3	0.815E-01	470.9	0.887E-01	476.1	0.965E-01	479.4	0.992E-01	480.5	0.100E 00
482.6	0.100E 00	484.2	0.995E-01	484.7	0.995E-01	488.0	0.103E 00	489.9	0.105E 00
492.3	0.107E 00	493.9	0.108E 00	498.1	0.106E 00	503.6	0.106E 00	509.1	0.986E-01
511.6	0.914E-01	515.1	0.847E-01	516.7	0.843E-01	518.0	0.847E-01	522.0	0.888E-01
528.0	0.902E-01	531.3	0.907E-01	537.5	0.840E-01	543.4	0.756E-01	550.5	0.674E-01
554.6	0.656E-01	557.2	0.624E-01	565.9	0.578E-01	570.5	0.502E-01	575.4	0.390E-01
578.7	0.347E-01	584.4	0.218E-01	590.4	0.949E-02	594.2	0.528E-02	603.0	0.

STATION 16 EXP 2 PROF 25

MAXIMUM A LAMDA= 571.9 AVEC ECLAIREMENT SPECTRAL= 0.05910 WATT/M2/NM

ENTRE 401.5 NM ET 602.0 NM , ECLAIREMENT 6.316 WATT/M2 16.172E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.721E-02	405.3	0.780E-02	407.8	0.940E-02	415.3	0.113E-01	420.6	0.124E-01
424.1	0.131E-01	430.8	0.134E-01	436.9	0.170E-01	442.7	0.211E-01	446.3	0.249E-01
451.0	0.288E-01	452.8	0.297E-01	458.2	0.349E-01	462.6	0.372E-01	467.9	0.405E-01
473.3	0.456E-01	479.2	0.498E-01	481.0	0.511E-01	483.2	0.512E-01	485.1	0.517E-01
487.7	0.539E-01	490.2	0.562E-01	492.0	0.578E-01	493.9	0.584E-01	496.9	0.584E-01
498.8	0.586E-01	501.9	0.591E-01	506.4	0.569E-01	510.5	0.511E-01	512.4	0.479E-01
514.3	0.460E-01	516.5	0.456E-01	519.0	0.466E-01	522.2	0.491E-01	525.5	0.499E-01
527.9	0.500E-01	531.1	0.496E-01	539.4	0.437E-01	545.8	0.388E-01	549.6	0.352E-01
561.6	0.315E-01	566.8	0.285E-01	572.2	0.238E-01	575.3	0.189E-01	578.7	0.160E-01
583.2	0.987E-02	588.9	0.461E-02	593.5	0.230E-02	602.0	0.		

STATION 16 EXP 2 PROF 30

MAXIMUM A LAMDA= 504.3 AVEC ECLAIREMENT SPECTRAL= 0.03537 WATT/M2/NM

ENTRE 401.1 NM ET 599.2 NM , ECLAIREMENT 3.635 WATT/M2 9.330E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.1	0.311E-02	410.5	0.506E-02	425.0	0.658E-02	429.5	0.676E-02	434.3	0.782E-02
440.4	0.951E-02	445.9	0.123E-01	450.3	0.154E-01	453.7	0.167E-01	458.4	0.190E-01
462.2	0.208E-01	469.4	0.233E-01	475.9	0.269E-01	480.4	0.291E-01	482.3	0.297E-01
484.3	0.299E-01	487.3	0.316E-01	490.4	0.334E-01	493.7	0.348E-01	499.1	0.354E-01
504.3	0.354E-01	510.1	0.322E-01	514.7	0.283E-01	515.4	0.278E-01	517.5	0.274E-01
520.6	0.280E-01	523.1	0.293E-01	530.9	0.295E-01	533.7	0.293E-01	542.6	0.251E-01
549.1	0.212E-01	562.1	0.185E-01	570.2	0.144E-01	574.4	0.102E-01	578.5	0.874E-02
585.0	0.389E-02	591.6	0.117E-02	599.2	0.				

STATION 16 EXP 2 PROF 40

MAXIMUM A LAMDA= 501.8 AVEC ECLAIREMENT SPECTRAL= 0.01297 WATT/M2/NM

ENTRE 406.9 NM ET 604.6 NM , ECLAIREMENT 1.167 WATT/M2 3.010E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
406.9	0.791E-03	420.7	0.125E-02	425.6	0.144E-02	430.6	0.152E-02	438.0	0.213E-02
444.3	0.311E-02	449.7	0.428E-02	455.0	0.483E-02	456.6	0.544E-02	461.3	0.612E-02
466.5	0.673E-02	475.1	0.837E-02	479.3	0.938E-02	481.5	0.986E-02	484.8	0.103E-01
488.4	0.111E-01	492.0	0.122E-01	495.3	0.126E-01	501.8	0.130E-01	505.1	0.129E-01
510.0	0.114E-01	512.6	0.101E-01	514.6	0.959E-02	517.2	0.955E-02	520.2	0.977E-02
522.5	0.102E-01	525.7	0.104E-01	528.4	0.104E-01	535.0	0.978E-02	544.0	0.793E-02
550.2	0.668E-02	557.6	0.611E-02	564.1	0.559E-02	571.5	0.398E-02	575.6	0.269E-02
585.7	0.662E-03	589.7	0.415E-03	604.6	0.				

STATION 16 EXP 2 PROF 50

MAXIMUM A LAMDA= 501.2 AVEC ECLAIREMENT SPECTRAL= 0.00594 WATT/M2/NM

ENTRE 410.4 NM ET 595.2 NM , ECLAIREMENT 0.478 WATT/M2 1.232E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
410.4	0.214E-03	423.7	0.410E-03	430.7	0.499E-03	436.7	0.659E-03	444.2	0.110E-02
450.4	0.159E-02	454.8	0.200E-02	458.5	0.234E-02	463.9	0.263E-02	467.0	0.290E-02
472.4	0.341E-02	476.5	0.380E-02	481.0	0.420E-02	482.4	0.439E-02	484.5	0.456E-02
487.7	0.488E-02	489.5	0.525E-02	491.8	0.556E-02	493.9	0.576E-02	497.5	0.583E-02
499.5	0.588E-02	501.2	0.594E-02	504.9	0.581E-02	509.3	0.510E-02	511.9	0.457E-02
515.3	0.401E-02	517.7	0.394E-02	521.4	0.412E-02	524.7	0.429E-02	527.3	0.434E-02
529.7	0.433E-02	535.8	0.392E-02	542.0	0.330E-02	546.4	0.285E-02	549.3	0.248E-02
558.1	0.222E-02	565.0	0.189E-02	570.0	0.153E-02	574.1	0.962E-03	575.9	0.795E-03
578.1	0.730E-03	584.3	0.279E-03	595.2	0.				

STATION 16 EXP 2 PROF 60

MAXIMUM A LAMDA= 496.7 AVEC ECLAIREMENT SPECTRAL= 0.00312 WATT/M2/NM

ENTRE 410.8 NM ET 589.6 NM , ECLAIREMENT 0.223 WATT/M2 0.572E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
410.8	0.562E-04	428.2	0.150E-03	437.9	0.259E-03	447.4	0.506E-03	454.8	0.859E-03
462.2	0.122E-02	465.3	0.137E-02	472.0	0.171E-02	477.5	0.205E-02	482.4	0.230E-02
484.2	0.238E-02	487.5	0.261E-02	490.6	0.285E-02	491.8	0.298E-02	494.5	0.309E-02
496.7	0.312E-02	498.5	0.311E-02	500.8	0.312E-02	505.4	0.295E-02	507.7	0.266E-02
510.8	0.235E-02	513.1	0.203E-02	514.6	0.187E-02	516.6	0.182E-02	520.7	0.188E-02
523.0	0.195E-02	526.2	0.196E-02	528.3	0.196E-02	536.3	0.172E-02	542.9	0.137E-02
548.9	0.101E-02	560.0	0.768E-03	566.3	0.681E-03	574.0	0.350E-03	583.3	0.103E-03
589.6	0.								



STATION 17 EXP 1 PROF 0

MAXIMUM A LAMDA= 480.8 AVEC ECLAIREMENT SPECTRAL= 1.53354 WATT/M2/NM

ENTRE 401.7 NM ET 700.0 NM , ECLAIREMENT 386.539 WATT/M2 1076.700E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.742E 00	403.8	0.791E 00	406.8	0.932E 00	409.5	0.107E 01	414.3	0.118E 01
418.6	0.121E 01	422.9	0.121E 01	426.7	0.119E 01	429.1	0.115E 01	431.4	0.115E 01
433.3	0.118E 01	437.4	0.127E 01	443.3	0.137E 01	450.4	0.146E 01	456.1	0.149E 01
458.2	0.150E 01	461.4	0.151E 01	463.5	0.151E 01	467.9	0.149E 01	474.0	0.151E 01
478.1	0.153E 01	480.8	0.153E 01	483.4	0.146E 01	485.4	0.143E 01	487.1	0.143E 01
489.8	0.146E 01	493.5	0.148E 01	495.3	0.147E 01	500.0	0.144E 01	507.8	0.146E 01
513.0	0.141E 01	515.4	0.137E 01	518.6	0.138E 01	521.9	0.141E 01	533.7	0.144E 01
540.5	0.139E 01	553.9	0.141E 01	558.8	0.138E 01	575.7	0.133E 01	582.5	0.136E 01
590.4	0.123E 01	605.5	0.131E 01	612.0	0.124E 01	630.7	0.122E 01	644.0	0.118E 01
655.3	0.112E 01	661.3	0.119E 01	675.2	0.116E 01	680.6	0.118E 01	684.9	0.103E 01
700.0	0.109E 01	714.5	0.840E 00	725.4	0.802E 00	732.2	0.945E 00	742.0	0.980E 00

STATION 17 EXP 1 PROF 19

MAXIMUM A LAMDA= 479.8 AVEC ECLAIREMENT SPECTRAL= 0.87293 WATT/M2/NM

ENTRE 401.5 NM ET 602.4 NM , ECLAIREMENT 105.723 WATT/M2 257.520E14 QUANTA/SEC/CM2

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LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.424E 00	404.4	0.452E 00	406.7	0.528E 00	408.5	0.594E 00	414.1	0.642E 00
416.5	0.677E 00	419.9	0.673E 00	423.9	0.678E 00	424.8	0.673E 00	428.6	0.635E 00
429.9	0.635E 00	431.5	0.653E 00	433.1	0.680E 00	434.4	0.707E 00	437.1	0.718E 00
439.5	0.744E 00	441.4	0.776E 00	444.6	0.787E 00	447.3	0.814E 00	452.5	0.816E 00
455.6	0.823E 00	457.0	0.831E 00	458.9	0.831E 00	463.9	0.853E 00	468.4	0.844E 00
470.7	0.844E 00	472.3	0.837E 00	472.9	0.834E 00	475.1	0.848E 00	476.9	0.864E 00
479.8	0.873E 00	482.9	0.829E 00	483.9	0.793E 00	487.7	0.797E 00	491.7	0.785E 00
498.9	0.718E 00	500.4	0.690E 00	504.1	0.667E 00	510.1	0.562E 00	513.9	0.484E 00
517.3	0.457E 00	521.2	0.464E 00	524.0	0.457E 00	529.0	0.450E 00	535.9	0.441E 00
544.4	0.361E 00	551.3	0.323E 00	552.1	0.324E 00	559.6	0.286E 00	569.9	0.224E 00
574.5	0.170E 00	577.7	0.164E 00	590.6	0.463E-01	602.4	0.		

STATION 17 EXP 1 PROF 24

MAXIMUM A LAMDA= 478.4 AVEC ECLAIREMENT SPECTRAL= 0.78084 WATT/M2/NM

ENTRE 401.4 NM ET 602.9 NM , ECLAIREMENT 89.812 WATT/M2 217.560E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.359E 00	404.3	0.392E 00	406.6	0.456E 00	409.5	0.531E 00	414.4	0.583E 00
418.3	0.597E 00	424.2	0.596E 00	427.8	0.581E 00	430.8	0.580E 00	432.5	0.593E 00
436.4	0.629E 00	442.0	0.666E 00	448.7	0.712E 00	450.3	0.722E 00	454.1	0.725E 00
461.3	0.746E 00	466.2	0.764E 00	470.6	0.760E 00	473.9	0.772E 00	476.0	0.773E 00
478.4	0.781E 00	479.6	0.781E 00	482.0	0.754E 00	485.5	0.707E 00	488.0	0.712E 00
491.6	0.695E 00	495.1	0.643E 00	499.8	0.593E 00	502.9	0.575E 00	508.3	0.485E 00
513.2	0.394E 00	516.2	0.364E 00	518.7	0.358E 00	526.5	0.355E 00	531.8	0.355E 00
542.8	0.282E 00	551.8	0.234E 00	565.9	0.180E 00	572.2	0.152E 00	574.9	0.116E 00
579.4	0.105E 00	587.1	0.484E-01	602.9	0.				

STATION 17 EXP 1 PROF 30

MAXIMUM A LAMDA= 477.8 AVEC ECLAIREMENT SPECTRAL= 0.67041 WATT/M2/NM

ENTRE 400.8 NM ET 599.1 NM , ECLAIREMENT 75.135 WATT/M2 180.930E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.327E 00	403.7	0.349E 00	406.6	0.413E 00	410.0	0.471E 00	413.5	0.510E 00
417.9	0.524E 00	422.0	0.528E 00	426.7	0.500E 00	427.8	0.491E 00	430.0	0.492E 00
433.4	0.520E 00	438.9	0.566E 00	442.2	0.595E 00	445.8	0.607E 00	449.4	0.603E 00
453.2	0.610E 00	456.3	0.630E 00	458.3	0.648E 00	460.9	0.648E 00	465.6	0.638E 00
467.9	0.641E 00	473.6	0.664E 00	477.8	0.670E 00	479.3	0.667E 00	484.0	0.612E 00
486.5	0.596E 00	488.8	0.600E 00	490.7	0.591E 00	495.3	0.540E 00	498.6	0.503E 00
501.7	0.487E 00	507.7	0.394E 00	513.3	0.309E 00	516.7	0.288E 00	521.9	0.292E 00
531.6	0.275E 00	543.0	0.217E 00	549.5	0.177E 00	552.9	0.176E 00	566.5	0.126E 00
573.4	0.804E-01	579.0	0.704E-01	583.7	0.389E-01	599.1	0.		

STATION 17 EXP 1 PROF 38

MAXIMUM A LAMDA= 481.2 AVEC ECLAIREMENT SPECTRAL= 0.50744 WATT/M2/NM

ENTRE 400.9 NM ET 592.8 NM , ECLAIREMENT 52.444 WATT/M2 125.430E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.211E 00	404.5	0.236E 00	407.5	0.286E 00	411.2	0.330E 00	415.7	0.364E 00
421.1	0.380E 00	423.8	0.379E 00	428.7	0.367E 00	430.7	0.367E 00	432.5	0.367E 00
436.3	0.396E 00	442.9	0.428E 00	450.5	0.452E 00	454.6	0.457E 00	458.8	0.471E 00
463.2	0.483E 00	465.6	0.489E 00	469.1	0.493E 00	475.6	0.507E 00	478.9	0.507E 00
481.2	0.507E 00	484.7	0.473E 00	487.0	0.456E 00	490.9	0.455E 00	494.9	0.424E 00
497.0	0.392E 00	500.7	0.362E 00	503.2	0.350E 00	505.7	0.315E 00	508.8	0.253E 00
512.2	0.206E 00	515.6	0.178E 00	518.7	0.169E 00	529.7	0.164E 00	540.1	0.128E 00
551.2	0.893E-01	552.9	0.888E-01	568.8	0.518E-01	578.5	0.228E-01	592.8	0.

STATION 17 EXP 1 PROF 47

MAXIMUM A LAMDA= 477.9 AVEC ECLAIREMENT SPECTRAL= 0.36942 WATT/M2/NM

ENTRE 401.4 NM ET 591.8 NM , ECLAIREMENT 36.357 WATT/M2 86.580E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.160E 00	404.3	0.167E 00	407.3	0.202E 00	410.2	0.239E 00	414.6	0.260E 00
418.4	0.267E 00	422.0	0.269E 00	427.8	0.257E 00	430.2	0.259E 00	433.2	0.273E 00
437.3	0.293E 00	443.3	0.309E 00	448.6	0.317E 00	454.7	0.325E 00	458.8	0.339E 00
463.1	0.352E 00	467.7	0.355E 00	470.6	0.364E 00	477.9	0.369E 00	480.0	0.366E 00
483.0	0.342E 00	485.1	0.330E 00	489.1	0.327E 00	492.9	0.306E 00	496.3	0.273E 00
499.5	0.249E 00	502.1	0.239E 00	505.7	0.202E 00	511.6	0.144E 00	515.1	0.115E 00
518.1	0.106E 00	530.8	0.986E-01	539.4	0.794E-01	551.5	0.521E-01	568.1	0.288E-01
576.1	0.137E-01	591.8	0.						

STATION 17 EXP 1 PROF 57

MAXIMUM A LAMDA= 483.0 AVEC ECLAIREMENT SPECTRAL= 0.24468 WATT/M2/NM

ENTRE 402.2 NM ET 589.0 NM , ECLAIREMENT 21.963 WATT/M2 52.170E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.2	0.874E-01	404.0	0.964E-01	406.8	0.115E 00	410.3	0.133E 00	414.6	0.149E 00
418.9	0.158E 00	423.4	0.163E 00	429.1	0.158E 00	431.5	0.159E 00	434.0	0.166E 00
440.3	0.184E 00	447.3	0.195E 00	450.9	0.199E 00	455.6	0.203E 00	458.9	0.215E 00
462.8	0.225E 00	472.0	0.238E 00	477.9	0.245E 00	480.0	0.245E 00	483.1	0.231E 00
486.3	0.218E 00	489.4	0.215E 00	492.8	0.203E 00	495.9	0.179E 00	497.9	0.162E 00
499.5	0.154E 00	501.8	0.151E 00	505.6	0.121E 00	509.1	0.886E-01	512.6	0.658E-01
515.8	0.570E-01	524.8	0.543E-01	529.4	0.521E-01	543.6	0.318E-01	549.5	0.225E-01
568.1	0.120E-01	589.0	0.						

STATION 17 EXP 1 PROF 75

MAXIMUM A LAMDA= 479.1 AVEC ECLAIREMENT SPECTRAL= 0.11539 WATT/M2/NM

ENTRE 401.5 NM ET 587.8 NM , ECLAIREMENT 9.373 WATT/M2 22.200E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.366E-01	404.7	0.390E-01	406.9	0.488E-01	411.4	0.569E-01	415.5	0.623E-01
422.5	0.654E-01	424.7	0.654E-01	428.1	0.649E-01	431.0	0.642E-01	434.1	0.697E-01
439.3	0.764E-01	444.7	0.804E-01	452.5	0.835E-01	457.3	0.912E-01	460.6	0.982E-01
466.0	0.104E 00	470.8	0.109E 00	475.5	0.114E 00	479.1	0.115E 00	480.6	0.115E 00
482.7	0.111E 00	484.2	0.107E 00	487.5	0.104E 00	489.8	0.101E 00	493.9	0.897E-01
497.7	0.758E-01	499.9	0.700E-01	502.5	0.658E-01	506.8	0.472E-01	510.3	0.313E-01
513.9	0.225E-01	516.2	0.202E-01	521.1	0.194E-01	526.2	0.188E-01	538.7	0.113E-01
551.5	0.577E-02	569.5	0.150E-02	587.8	0.				

STATION 17 EXP 1 PROF 95

MAXIMUM A LAMDA= 480.9 AVEC ECLAIREMENT SPECTRAL= 0.04938 WATT/M2/NM

ENTRE 402.9 NM ET 572.5 NM , ECLAIREMENT 3.547 WATT/M2 8.436E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.111E-01	404.8	0.120E-01	408.3	0.156E-01	410.6	0.183E-01	417.0	0.204E-01
423.4	0.221E-01	426.4	0.222E-01	428.1	0.220E-01	430.7	0.221E-01	433.9	0.238E-01
438.7	0.261E-01	447.3	0.281E-01	453.6	0.305E-01	457.6	0.343E-01	462.8	0.400E-01
468.6	0.444E-01	475.0	0.482E-01	478.5	0.492E-01	480.9	0.494E-01	484.7	0.475E-01
487.3	0.453E-01	490.0	0.444E-01	492.4	0.420E-01	497.3	0.346E-01	501.6	0.286E-01
503.6	0.263E-01	506.9	0.187E-01	511.2	0.114E-01	515.1	0.741E-02	518.1	0.637E-02
529.3	0.568E-02	533.6	0.405E-02	545.8	0.173E-02	572.5	0.		

STATION 17 EXP 1 PROF 130

MAXIMUM A LAMDA= 481.0 AVEC ECLAIREMENT SPECTRAL= 0.00967 WATT/M2/NM

ENTRE 403.8 NM ET 575.5 NM , ECLAIREMENT 0.604 WATT/M2 1.443E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.8	0.131E-02	407.1	0.180E-02	412.9	0.225E-02	419.4	0.272E-02	424.5	0.302E-02
429.3	0.305E-02	432.9	0.340E-02	434.7	0.365E-02	442.4	0.423E-02	450.8	0.463E-02
454.2	0.509E-02	457.7	0.619E-02	460.5	0.704E-02	465.8	0.805E-02	470.2	0.890E-02
473.6	0.931E-02	476.8	0.960E-02	481.0	0.967E-02	485.8	0.917E-02	489.2	0.911E-02
492.5	0.835E-02	495.5	0.735E-02	498.4	0.600E-02	500.9	0.541E-02	503.2	0.514E-02
504.7	0.430E-02	506.0	0.346E-02	508.8	0.219E-02	512.0	0.126E-02	516.8	0.745E-03
529.5	0.648E-03	542.5	0.300E-03	549.8	0.967E-04	575.5	0.		

STATION 17 EXP 2 PROF 0

MAXIMUM A LAMDA= 481.9 AVEC ECLAIREMENT SPECTRAL= 0.97985 WATT/M2/NM

ENTRE 400.0 NM ET 700.0 NM , ECLAIREMENT 238.781 WATT/M2 664.450E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.207E 00	401.7	0.255E 00	402.7	0.336E 00	405.2	0.391E 00	406.2	0.434E 00
408.0	0.462E 00	409.9	0.513E 00	411.5	0.596E 00	414.2	0.656E 00	417.0	0.713E 00
419.8	0.746E 00	422.0	0.760E 00	425.1	0.765E 00	426.8	0.763E 00	428.7	0.747E 00
431.0	0.734E 00	432.1	0.725E 00	433.7	0.723E 00	436.3	0.755E 00	438.3	0.794E 00
442.9	0.829E 00	447.7	0.886E 00	450.1	0.910E 00	453.2	0.944E 00	454.7	0.952E 00
459.2	0.955E 00	462.2	0.962E 00	464.4	0.969E 00	467.6	0.967E 00	470.1	0.953E 00
472.1	0.955E 00	476.4	0.969E 00	479.6	0.978E 00	481.9	0.980E 00	483.4	0.966E 00
485.8	0.938E 00	487.4	0.919E 00	489.3	0.921E 00	491.5	0.926E 00	494.0	0.941E 00
496.9	0.953E 00	498.8	0.950E 00	501.3	0.935E 00	503.9	0.917E 00	509.6	0.922E 00
512.7	0.919E 00	515.6	0.910E 00	518.5	0.873E 00	520.8	0.862E 00	521.7	0.865E 00
525.5	0.886E 00	531.9	0.883E 00	538.0	0.892E 00	541.5	0.874E 00	545.9	0.868E 00
552.6	0.867E 00	559.0	0.872E 00	562.8	0.843E 00	569.7	0.832E 00	576.0	0.814E 00
581.1	0.810E 00	584.7	0.816E 00	587.4	0.814E 00	591.1	0.783E 00	594.7	0.738E 00
596.8	0.730E 00	602.6	0.754E 00	608.0	0.782E 00	611.5	0.788E 00	617.8	0.765E 00
621.1	0.759E 00	625.3	0.772E 00	628.0	0.748E 00	631.4	0.738E 00	638.5	0.745E 00
643.4	0.729E 00	650.4	0.678E 00	655.1	0.676E 00	659.1	0.670E 00	663.6	0.710E 00
669.2	0.707E 00	675.7	0.693E 00	680.1	0.707E 00	682.7	0.717E 00	685.5	0.667E 00
687.5	0.620E 00	695.6	0.650E 00	700.0	0.642E 00	711.5	0.697E 00	715.6	0.649E 00
719.7	0.522E 00	730.0	0.502E 00						

STATION 17 EXP 2 PROF 20

MAXIMUM A LAMDA= 480.7 AVEC ECLAIREMENT SPECTRAL= 0.66795 WATT/M2/NM

ENTRE 400.0 NM ET 612.5 NM , ECLAIREMENT 80.978 WATT/M2 198.650E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.148E 00	401.0	0.158E 00	402.0	0.216E 00	404.2	0.252E 00	405.9	0.283E 00
406.2	0.297E 00	409.1	0.316E 00	410.7	0.347E 00	413.3	0.393E 00	415.1	0.438E 00
417.5	0.466E 00	419.3	0.488E 00	421.1	0.498E 00	423.5	0.509E 00	426.2	0.518E 00
428.3	0.511E 00	430.7	0.496E 00	433.1	0.482E 00	434.6	0.482E 00	437.0	0.508E 00
441.0	0.540E 00	445.3	0.576E 00	448.3	0.586E 00	451.3	0.609E 00	453.3	0.613E 00
455.7	0.617E 00	461.0	0.629E 00	464.6	0.644E 00	468.6	0.655E 00	470.2	0.659E 00
472.1	0.654E 00	475.1	0.657E 00	478.3	0.663E 00	480.7	0.668E 00	483.4	0.660E 00
485.3	0.637E 00	487.7	0.617E 00	491.0	0.606E 00	493.7	0.611E 00	497.0	0.598E 00
500.3	0.568E 00	503.3	0.536E 00	505.0	0.522E 00	508.3	0.517E 00	511.7	0.476E 00
514.7	0.425E 00	517.2	0.377E 00	519.0	0.351E 00	521.1	0.335E 00	527.2	0.342E 00
530.0	0.343E 00	533.3	0.339E 00	536.4	0.339E 00	542.2	0.311E 00	546.2	0.285E 00
552.9	0.254E 00	561.8	0.217E 00	566.2	0.198E 00	571.6	0.186E 00	577.4	0.153E 00
584.0	0.114E 00	588.3	0.781E-01	592.5	0.454E-01	598.6	0.200E-01	605.6	0.334E-02
612.5	0.								

STATION 17 EXP 2 PROF 27

MAXIMUM A LAMDA= 475.4 AVEC ECLAIREMENT SPECTRAL= 0.50552 WATT/M2/NM

ENTRE 400.0 NM ET 613.0 NM , ECLAIREMENT 55.760 WATT/M2 134.945E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.128E 00	401.9	0.157E 00	403.2	0.192E 00	405.4	0.206E 00	407.0	0.222E 00
408.0	0.240E 00	409.6	0.258E 00	411.2	0.286E 00	412.5	0.314E 00	415.2	0.336E 00
416.9	0.354E 00	419.0	0.369E 00	420.5	0.373E 00	421.7	0.377E 00	424.0	0.379E 00
426.1	0.384E 00	427.0	0.382E 00	428.8	0.381E 00	431.5	0.370E 00	432.3	0.365E 00
433.5	0.364E 00	434.4	0.365E 00	436.8	0.377E 00	438.0	0.394E 00	441.0	0.415E 00
445.5	0.436E 00	447.4	0.444E 00	450.7	0.450E 00	452.6	0.458E 00	454.9	0.464E 00
458.8	0.465E 00	461.4	0.473E 00	463.3	0.483E 00	464.9	0.490E 00	466.7	0.494E 00
469.1	0.494E 00	471.0	0.492E 00	472.3	0.494E 00	476.3	0.503E 00	479.4	0.506E 00
481.6	0.499E 00	483.2	0.491E 00	484.5	0.476E 00	486.0	0.466E 00	488.0	0.461E 00
491.3	0.455E 00	493.6	0.451E 00	496.6	0.435E 00	498.9	0.419E 00	499.9	0.404E 00
503.2	0.382E 00	507.5	0.352E 00	509.8	0.321E 00	512.2	0.287E 00	515.1	0.246E 00
516.7	0.223E 00	518.0	0.207E 00	520.9	0.197E 00	524.7	0.200E 00	529.2	0.195E 00
534.4	0.188E 00	538.8	0.177E 00	543.2	0.165E 00	548.9	0.144E 00	553.6	0.124E 00
556.4	0.115E 00	560.2	0.111E 00	563.0	0.981E-01	570.2	0.864E-01	575.9	0.672E-01
582.8	0.430E-01	586.9	0.288E-01	591.4	0.131E-01	596.0	0.809E-02	600.3	0.506E-03
605.4	0.101E-02	613.0	0.						

STATION 17 EXP 2 PROF 37

MAXIMUM A LAMDA= 481.0 AVEC ECLAIREMENT SPECTRAL= 0.34550 WATT/M2/NM

ENTRE 400.0 NM ET 602.6 NM , ECLAIREMENT 35.361 WATT/M2 84.940E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.750E-01	400.2	0.770E-01	402.6	0.992E-01	404.3	0.119E 00	406.3	0.139E 00
407.7	0.147E 00	409.7	0.157E 00	410.8	0.174E 00	412.2	0.191E 00	414.7	0.210E 00
416.9	0.227E 00	419.4	0.240E 00	421.3	0.249E 00	423.8	0.254E 00	426.0	0.258E 00
427.9	0.258E 00	429.1	0.256E 00	431.3	0.252E 00	432.5	0.248E 00	435.0	0.246E 00
437.3	0.257E 00	440.1	0.275E 00	444.7	0.290E 00	448.9	0.300E 00	452.8	0.307E 00
456.6	0.311E 00	460.2	0.312E 00	462.3	0.314E 00	464.1	0.322E 00	465.7	0.328E 00
467.8	0.334E 00	470.5	0.336E 00	473.2	0.338E 00	476.4	0.342E 00	479.1	0.344E 00
481.0	0.345E 00	483.4	0.343E 00	485.6	0.337E 00	486.9	0.325E 00	489.4	0.313E 00
492.2	0.310E 00	495.9	0.305E 00	497.8	0.292E 00	500.3	0.281E 00	502.8	0.262E 00
505.0	0.244E 00	507.2	0.229E 00	508.7	0.214E 00	510.9	0.186E 00	513.3	0.160E 00
515.8	0.136E 00	517.3	0.117E 00	518.9	0.110E 00	521.9	0.103E 00	529.3	0.102E 00
533.7	0.964E-01	537.4	0.912E-01	543.4	0.795E-01	550.7	0.639E-01	555.1	0.522E-01
564.3	0.411E-01	571.9	0.314E-01	578.8	0.214E-01	584.4	0.121E-01	590.8	0.449E-02
594.1	0.242E-02	602.6	0.						

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STATION 17 EXP 2 PROF 47

MAXIMUM A LAMDA= 479.8 AVEC ECLAIREMENT SPECTRAL= 0.25622 WATT/M2/NM

ENTRE 400.0 NM ET 598.3 NM , ECLAIREMENT 24.814 WATT/M2 59.184E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.576E-01	401.5	0.684E-01	403.6	0.853E-01	405.3	0.925E-01	406.4	0.101E 00
408.4	0.108E 00	409.8	0.120E 00	411.2	0.139E 00	413.2	0.153E 00	416.4	0.165E 00
417.9	0.175E 00	421.1	0.180E 00	423.0	0.184E 00	425.8	0.186E 00	428.4	0.185E 00
430.3	0.181E 00	431.8	0.179E 00	433.4	0.179E 00	434.7	0.183E 00	436.6	0.193E 00
440.0	0.204E 00	444.6	0.215E 00	447.0	0.219E 00	450.2	0.221E 00	453.0	0.223E 00
455.8	0.224E 00	457.9	0.226E 00	459.7	0.228E 00	462.1	0.234E 00	465.4	0.242E 00
467.1	0.245E 00	471.9	0.250E 00	475.0	0.255E 00	477.8	0.255E 00	479.8	0.256E 00
482.0	0.254E 00	484.0	0.249E 00	485.5	0.241E 00	486.6	0.234E 00	488.3	0.230E 00
491.4	0.225E 00	493.9	0.221E 00	496.3	0.213E 00	498.7	0.203E 00	500.8	0.187E 00
502.9	0.173E 00	505.7	0.161E 00	507.4	0.154E 00	510.2	0.137E 00	511.9	0.118E 00
513.2	0.102E 00	515.1	0.863E-01	517.6	0.743E-01	519.2	0.661E-01	521.0	0.615E-01
524.5	0.600E-01	530.4	0.571E-01	533.9	0.553E-01	539.8	0.477E-01	548.8	0.369E-01
553.7	0.282E-01	556.2	0.236E-01	559.9	0.228E-01	566.8	0.169E-01	571.8	0.133E-01
581.9	0.487E-02	587.2	0.128E-02	591.8	0.	598.3	0.		

STATION 17 EXP 2 PROF 56

MAXIMUM A LAMDA= 481.5 AVEC ECLAIREMENT SPECTRAL= 0.17536 WATT/M2/NM

ENTRE 400.0 NM ET 602.6 NM , ECLAIREMENT 16.136 WATT/M2 38.360E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.344E-01	401.0	0.419E-01	402.8	0.528E-01	404.8	0.596E-01	406.5	0.665E-01
407.2	0.710E-01	410.0	0.796E-01	412.7	0.921E-01	414.3	0.100E 00	416.5	0.108E 00
419.3	0.113E 00	420.9	0.117E 00	422.1	0.119E 00	424.6	0.121E 00	425.0	0.121E 00
425.9	0.123E 00	428.7	0.123E 00	431.2	0.120E 00	433.1	0.119E 00	434.0	0.119E 00
435.2	0.121E 00	437.1	0.127E 00	439.9	0.136E 00	443.4	0.142E 00	446.9	0.146E 00
448.9	0.148E 00	451.4	0.149E 00	453.8	0.150E 00	456.6	0.150E 00	459.7	0.152E 00
461.4	0.155E 00	465.4	0.164E 00	466.8	0.166E 00	471.0	0.170E 00	473.9	0.173E 00
478.1	0.174E 00	479.2	0.175E 00	481.5	0.175E 00	482.9	0.173E 00	484.3	0.168E 00
485.9	0.163E 00	487.2	0.159E 00	489.0	0.156E 00	492.4	0.153E 00	494.8	0.149E 00
497.9	0.139E 00	500.0	0.127E 00	502.1	0.117E 00	504.8	0.107E 00	506.2	0.102E 00
508.6	0.931E-01	510.3	0.803E-01	512.0	0.680E-01	513.7	0.563E-01	515.4	0.459E-01
517.4	0.391E-01	519.1	0.352E-01	521.5	0.331E-01	525.2	0.323E-01	529.6	0.309E-01
534.0	0.296E-01	541.9	0.235E-01	549.7	0.168E-01	555.2	0.117E-01	562.0	0.100E-01
570.1	0.666E-02	579.7	0.263E-02	586.8	0.140E-02	594.1	0.526E-03	602.6	0.

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STATION 17 EXP 2 PROF 75

MAXIMUM A LAMDA= 480.2 AVEC ECLAIREMENT SPECTRAL= 0.08229 WATT/M2/NM

ENTRE 400.0 NM ET 590.8 NM , ECLAIREMENT 6.801 WATT/M2 16.166E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.140E-01	400.4	0.154E-01	403.0	0.194E-01	404.8	0.222E-01	406.7	0.246E-01
407.8	0.257E-01	409.9	0.277E-01	410.7	0.318E-01	412.6	0.360E-01	416.2	0.403E-01
418.9	0.443E-01	420.8	0.459E-01	423.4	0.475E-01	425.7	0.485E-01	427.0	0.491E-01
429.3	0.492E-01	431.2	0.481E-01	433.2	0.478E-01	434.5	0.480E-01	436.5	0.505E-01
438.8	0.539E-01	441.8	0.570E-01	445.1	0.591E-01	447.7	0.608E-01	451.0	0.614E-01
454.7	0.622E-01	457.0	0.629E-01	458.6	0.639E-01	461.0	0.664E-01	463.0	0.697E-01
465.4	0.729E-01	469.4	0.761E-01	472.4	0.789E-01	474.8	0.806E-01	478.1	0.816E-01
480.2	0.823E-01	482.4	0.821E-01	484.1	0.809E-01	485.0	0.783E-01	487.8	0.759E-01
488.5	0.750E-01	489.9	0.736E-01	492.4	0.723E-01	495.2	0.690E-01	498.0	0.649E-01
500.4	0.599E-01	502.2	0.538E-01	504.6	0.490E-01	506.3	0.458E-01	507.7	0.430E-01
509.4	0.373E-01	511.2	0.312E-01	512.8	0.252E-01	515.1	0.193E-01	517.1	0.146E-01
519.1	0.121E-01	522.1	0.108E-01	527.6	0.106E-01	530.6	0.102E-01	533.6	0.979E-02
539.9	0.774E-02	547.2	0.568E-02	551.4	0.420E-02	557.0	0.247E-02	566.7	0.156E-02
573.0	0.823E-03	581.6	0.165E-03	590.8	0.				

STATION 17 EXP 2 PROF 95

MAXIMUM A LAMDA= 481.0 AVEC ECLAIREMENT SPECTRAL= 0.03426 WATT/M2/NM

ENTRE 400.0 NM ET 560.9 NM , ECLAIREMENT 2.554 WATT/M2 6.090E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.377E-02	400.4	0.394E-02	403.7	0.555E-02	405.2	0.747E-02	407.0	0.832E-02
409.6	0.921E-02	411.9	0.109E-01	415.0	0.128E-01	418.1	0.143E-01	421.2	0.155E-01
424.6	0.162E-01	426.3	0.166E-01	430.1	0.166E-01	433.2	0.164E-01	435.9	0.174E-01
438.5	0.188E-01	443.0	0.201E-01	446.7	0.211E-01	449.7	0.213E-01	454.3	0.220E-01
457.7	0.227E-01	459.5	0.236E-01	462.2	0.259E-01	464.7	0.280E-01	467.7	0.298E-01
470.8	0.315E-01	474.1	0.329E-01	477.4	0.337E-01	478.9	0.339E-01	481.0	0.343E-01
483.1	0.339E-01	484.6	0.330E-01	487.8	0.320E-01	491.8	0.307E-01	495.5	0.286E-01
499.2	0.251E-01	501.7	0.224E-01	505.7	0.194E-01	508.3	0.173E-01	510.1	0.142E-01
511.6	0.110E-01	514.7	0.760E-02	517.0	0.572E-02	519.7	0.432E-02	523.7	0.370E-02
528.7	0.373E-02	532.7	0.346E-02	539.8	0.260E-02	546.4	0.182E-02	553.3	0.856E-03
560.9	0.								

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STATION 18 EXP 1 PROF 0

MAXIMUM A LAMDA= 478.8 AVEC ECLAIREMENT SPECTRAL= 1.46834 WATT/M2/NM

ENTRE 431.4 NM ET 700.0 NM , ECLAIREMENT 363.056 WATT/M2 1008.800E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.697E 00	402.7	0.749E 00	404.3	0.775E 00	406.4	0.878E 00	409.5	0.100E 01
411.6	0.110E 01	415.3	0.114E 01	419.5	0.115E 01	421.9	0.116E 01	424.3	0.114E 01
427.3	0.110E 01	430.0	0.109E 01	431.8	0.110E 01	434.3	0.117E 01	438.5	0.124E 01
444.6	0.133E 01	448.6	0.140E 01	450.2	0.141E 01	453.3	0.142E 01	458.4	0.145E 01
461.5	0.144E 01	468.8	0.142E 01	476.0	0.147E 01	478.8	0.147E 01	480.6	0.145E 01
483.9	0.139E 01	485.2	0.137E 01	487.1	0.136E 01	489.6	0.139E 01	492.0	0.141E 01
494.5	0.141E 01	499.7	0.137E 01	508.0	0.138E 01	512.5	0.134E 01	515.2	0.130E 01
518.4	0.130E 01	521.1	0.133E 01	533.9	0.135E 01	541.1	0.131E 01	553.0	0.132E 01
557.0	0.128E 01	574.5	0.122E 01	582.5	0.124E 01	588.4	0.114E 01	591.5	0.112E 01
605.1	0.120E 01	615.8	0.116E 01	620.7	0.116E 01	628.2	0.113E 01	637.0	0.116E 01
644.0	0.113E 01	656.1	0.105E 01	660.2	0.111E 01	679.2	0.109E 01	682.5	0.956E 00
694.1	0.918E 00	700.0	0.962E 00	714.4	0.762E 00	725.8	0.737E 00	732.4	0.852E 00
742.0	0.877E 00								

STATION 18 EXP 1 PROF 19

MAXIMUM A LAMDA= 478.7 AVEC ECLAIREMENT SPECTRAL= 0.93087 WATT/M2/NM

ENTRE 402.1 NM ET 603.0 NM , ECLAIREMENT 113.276 WATT/M2 275.600E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.1	0.498E 00	403.6	0.528E 00	406.0	0.600E 00	408.5	0.676E 00	413.6	0.707E 00
415.7	0.736E 00	417.5	0.747E 00	419.0	0.751E 00	421.7	0.750E 00	424.1	0.735E 00
426.6	0.707E 00	428.8	0.702E 00	430.2	0.708E 00	432.4	0.738E 00	436.3	0.781E 00
440.4	0.821E 00	444.6	0.865E 00	449.9	0.848E 00	455.9	0.876E 00	460.7	0.898E 00
462.8	0.900E 00	465.8	0.885E 00	470.2	0.886E 00	475.0	0.909E 00	477.3	0.929E 00
478.7	0.931E 00	482.9	0.879E 00	484.9	0.853E 00	486.6	0.846E 00	489.3	0.857E 00
490.8	0.856E 00	494.8	0.814E 00	499.1	0.741E 00	503.7	0.709E 00	506.4	0.652E 00
508.2	0.606E 00	512.8	0.530E 00	517.4	0.504E 00	522.6	0.510E 00	526.6	0.492E 00
530.4	0.490E 00	541.5	0.409E 00	550.1	0.345E 00	564.9	0.287E 00	575.5	0.178E 00
577.6	0.171E 00	586.1	0.828E-01	592.9	0.279E-01	603.0	0.		

STATION 18 EXP 1 PROF 24

MAXIMUM A LAMDA= 462.7 AVEC ECLAIREMENT SPECTRAL= 0.80210 WATT/M2/NM

ENTRE 400.3 NM ET 600.3 NM , ECLAIREMENT 93.476 WATT/M2 225.680E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
400.3	0.355E 00	402.2	0.396E 00	404.3	0.411E 00	406.1	0.459E 00	408.2	0.513E 00
410.6	0.571E 00	413.9	0.601E 00	416.6	0.621E 00	419.6	0.631E 00	422.6	0.640E 00
424.3	0.640E 00	426.6	0.630E 00	428.7	0.617E 00	430.1	0.616E 00	431.5	0.614E 00
434.5	0.641E 00	437.8	0.683E 00	442.2	0.726E 00	443.9	0.741E 00	446.6	0.752E 00
453.1	0.760E 00	455.7	0.780E 00	457.2	0.793E 00	460.1	0.794E 00	462.7	0.802E 00
464.1	0.802E 00	466.7	0.799E 00	469.6	0.790E 00	473.6	0.800E 00	477.1	0.802E 00
479.4	0.802E 00	482.0	0.780E 00	484.2	0.750E 00	485.0	0.734E 00	490.6	0.733E 00
493.9	0.702E 00	496.4	0.650E 00	499.6	0.614E 00	502.1	0.600E 00	506.3	0.532E 00
509.9	0.458E 00	515.0	0.387E 00	517.5	0.363E 00	524.7	0.364E 00	529.0	0.359E 00
534.3	0.332E 00	545.0	0.271E 00	552.4	0.225E 00	558.2	0.196E 00	566.1	0.173E 00
575.5	0.116E 00	579.1	0.987E-01	587.5	0.401E-01	600.3	0.		

STATION 18 EXP 1 PROF 37

MAXIMUM A LAMDA= 479.2 AVEC ECLAIREMENT SPECTRAL= 0.48796 WATT/M2/NM

ENTRE 401.6 NM ET 589.3 NM , ECLAIREMENT 49.703 WATT/M2 118.560E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
401.6	0.221E 00	404.0	0.227E 00	405.7	0.261E 00	409.2	0.298E 00	412.4	0.330E 00
417.1	0.351E 00	422.1	0.363E 00	423.5	0.364E 00	427.0	0.357E 00	428.1	0.353E 00
430.3	0.355E 00	432.5	0.364E 00	434.8	0.382E 00	440.9	0.415E 00	445.7	0.434E 00
449.0	0.443E 00	452.5	0.447E 00	454.2	0.451E 00	458.2	0.465E 00	462.0	0.475E 00
464.6	0.475E 00	468.6	0.479E 00	473.3	0.483E 00	478.1	0.488E 00	479.2	0.488E 00
482.1	0.466E 00	486.0	0.439E 00	490.2	0.429E 00	493.9	0.404E 00	498.2	0.358E 00
501.3	0.334E 00	503.5	0.316E 00	506.3	0.266E 00	509.1	0.220E 00	513.8	0.175E 00
515.9	0.158E 00	520.6	0.152E 00	528.1	0.150E 00	534.4	0.131E 00	542.4	0.111E 00
549.5	0.795E-01	554.8	0.698E-01	564.4	0.532E-01	572.9	0.317E-01	577.8	0.181E-01
589.3	0.								

STATION 18 EXP 1 PROF 45

MAXIMUM A LAMDA= 478.2 AVEC ECLAIREMENT SPECTRAL= 0.35221 WATT/M2/NM

ENTRE 400.8 NM ET 588.1 NM , ECLAIREMENT 34.136 WATT/M2 81.120E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.143E 00	404.1	0.149E 00	405.6	0.175E 00	408.4	0.198E 00	412.9	0.221E 00
416.9	0.238E 00	421.2	0.247E 00	423.9	0.249E 00	425.4	0.249E 00	427.8	0.245E 00
430.0	0.246E 00	432.7	0.257E 00	436.7	0.275E 00	442.1	0.297E 00	445.8	0.308E 00
448.5	0.310E 00	453.6	0.315E 00	456.3	0.322E 00	459.1	0.330E 00	461.2	0.337E 00
466.9	0.341E 00	475.8	0.350E 00	478.2	0.352E 00	480.0	0.352E 00	481.1	0.347E 00
484.5	0.322E 00	486.6	0.315E 00	490.5	0.308E 00	494.5	0.288E 00	496.9	0.256E 00
499.5	0.233E 00	502.5	0.222E 00	505.5	0.194E 00	508.1	0.157E 00	512.4	0.117E 00
516.4	0.983E-01	519.7	0.947E-01	529.6	0.873E-01	539.6	0.673E-01	550.2	0.416E-01
560.6	0.303E-01	574.5	0.141E-01	588.1	0.				

STATION 18 EXP 1 PROF 54

MAXIMUM A LAMDA= 478.2 AVEC ECLAIREMENT SPECTRAL= 0.28164 WATT/M2/NM

ENTRE 400.6 NM ET 587.8 NM , ECLAIREMENT 26.018 WATT/M2 61.568E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.6	0.107E 00	404.0	0.115E 00	405.9	0.141E 00	409.4	0.157E 00	413.1	0.173E 00
418.0	0.186E 00	421.7	0.193E 00	423.6	0.194E 00	426.8	0.192E 00	429.1	0.192E 00
430.9	0.193E 00	433.2	0.206E 00	437.9	0.220E 00	442.2	0.235E 00	446.6	0.241E 00
450.1	0.243E 00	453.7	0.246E 00	457.2	0.256E 00	460.8	0.267E 00	468.5	0.272E 00
473.8	0.279E 00	478.2	0.282E 00	480.3	0.279E 00	482.7	0.265E 00	485.0	0.254E 00
488.2	0.246E 00	492.9	0.229E 00	495.7	0.205E 00	498.4	0.184E 00	499.7	0.175E 00
502.3	0.165E 00	504.9	0.144E 00	507.2	0.119E 00	511.1	0.862E-01	514.7	0.698E-01
516.7	0.645E-01	525.7	0.580E-01	530.7	0.549E-01	540.4	0.391E-01	547.3	0.270E-01
559.5	0.180E-01	569.5	0.104E-01	587.8	0.				

STATION 18 EXP 1 PROF 76

MAXIMUM A LAMDA= 475.7 AVEC ECLAIREMENT SPECTRAL= 0.15655 WATT/M2/NM

ENTRE 400.9 NM ET 580.9 NM , ECLAIREMENT 13.167 WATT/M2 30.992E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.493E-01	404.3	0.542E-01	405.9	0.667E-01	409.4	0.773E-01	414.7	0.886E-01
420.3	0.971E-01	422.2	0.988E-01	424.0	0.997E-01	428.0	0.985E-01	429.8	0.988E-01
432.5	0.104E 00	435.8	0.112E 00	440.3	0.120E 00	445.2	0.129E 00	450.3	0.128E 00
453.8	0.130E 00	457.1	0.137E 00	459.7	0.142E 00	461.5	0.145E 00	465.1	0.150E 00
470.7	0.155E 00	475.7	0.157E 00	479.5	0.155E 00	482.5	0.147E 00	485.3	0.139E 00
489.9	0.133E 00	492.4	0.125E 00	494.8	0.114E 00	497.6	0.989E-01	501.1	0.842E-01
503.4	0.787E-01	505.0	0.673E-01	507.5	0.537E-01	510.7	0.384E-01	514.9	0.244E-01
517.8	0.213E-01	530.8	0.183E-01	538.6	0.136E-01	548.4	0.579E-02	564.5	0.219E-02
580.9	0.								

STATION 18 EXP 1 PROF 98

MAXIMUM A LAMDA= 478.6 AVEC ECLAIREMENT SPECTRAL= 0.06210 WATT/M2/NM

ENTRE 402.6 NM ET 574.7 NM , ECLAIREMENT 4.619 WATT/M2 10.920E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.6	0.132E-01	404.3	0.147E-01	405.9	0.171E-01	409.2	0.218E-01	415.1	0.265E-01
420.0	0.294E-01	423.3	0.308E-01	428.4	0.310E-01	430.1	0.314E-01	432.7	0.341E-01
437.6	0.388E-01	444.0	0.430E-01	448.0	0.438E-01	453.0	0.455E-01	455.8	0.486E-01
458.6	0.526E-01	463.9	0.567E-01	471.1	0.608E-01	475.4	0.620E-01	478.6	0.621E-01
481.3	0.598E-01	484.0	0.572E-01	486.1	0.555E-01	487.8	0.548E-01	491.0	0.514E-01
493.7	0.458E-01	496.7	0.390E-01	499.3	0.328E-01	501.1	0.314E-01	503.5	0.255E-01
506.7	0.191E-01	510.5	0.121E-01	513.6	0.832E-02	517.8	0.652E-02	525.7	0.609E-02
529.8	0.571E-02	540.4	0.385E-02	548.7	0.180E-02	562.2	0.745E-03	574.7	0.

STATION 18 EXP 1 PROF 118

MAXIMUM A LAMDA= 479.8 AVEC ECLAIREMENT SPECTRAL= 0.02175 WATT/M2/NM

ENTRE 403.2 NM ET 567.7 NM , ECLAIREMENT 1.498 WATT/M2 3.557E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.2	0.357E-02	405.6	0.450E-02	408.9	0.546E-02	412.9	0.640E-02	418.2	0.748E-02
423.2	0.829E-02	425.7	0.855E-02	428.8	0.877E-02	431.5	0.972E-02	435.5	0.111E-01
441.0	0.125E-01	443.5	0.132E-01	448.9	0.135E-01	452.8	0.142E-01	455.8	0.155E-01
458.2	0.172E-01	461.5	0.184E-01	465.5	0.197E-01	471.7	0.208E-01	476.3	0.215E-01
479.8	0.218E-01	482.2	0.212E-01	485.4	0.204E-01	489.4	0.201E-01	492.3	0.186E-01
494.6	0.164E-01	497.2	0.142E-01	500.0	0.121E-01	502.6	0.110E-01	505.0	0.859E-02
506.7	0.576E-02	510.8	0.331E-02	515.0	0.215E-02	518.3	0.183E-02	530.1	0.157E-02
543.2	0.631E-03	549.4	0.479E-03	567.7	0.				

STATION 18 EXP 1 PROF 136

MAXIMUM A LAMDA= 481.5 AVEC ECLAIREMENT SPECTRAL= 0.00997 WATT/M2/NM

ENTRE 403.1 NM ET 562.2 NM , ECLAIREMENT 0.624 WATT/M2 1.487E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.1	0.102E-02	407.2	0.137E-02	414.8	0.156E-02	418.9	0.237E-02	422.4	0.280E-02
427.4	0.301E-02	430.3	0.324E-02	433.7	0.385E-02	438.8	0.458E-02	442.5	0.508E-02
446.1	0.535E-02	450.3	0.555E-02	453.6	0.594E-02	456.8	0.668E-02	458.6	0.720E-02
460.4	0.779E-02	463.8	0.846E-02	468.2	0.915E-02	472.1	0.964E-02	475.9	0.986E-02
479.5	0.989E-02	481.5	0.997E-02	483.6	0.978E-02	485.2	0.957E-02	487.6	0.942E-02
490.3	0.932E-02	491.8	0.885E-02	494.5	0.804E-02	495.8	0.692E-02	498.5	0.598E-02
500.2	0.529E-02	502.8	0.485E-02	505.1	0.393E-02	506.0	0.296E-02	508.3	0.189E-02
512.8	0.104E-02	515.0	0.678E-03	520.5	0.518E-03	529.3	0.498E-03	540.3	0.199E-03
547.5	0.598E-04	562.2	0.						

STATION 18 EXP 2 PROF 0

MAXIMUM A LAMDA= 478.9 AVEC ECLAIREMENT SPECTRAL= 1.16655 WATT/M2/NM

ENTRE 400.0 NM ET 700.0 NM , ECLAIREMENT 297.235 WATT/M2 831.290E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
400.0	0.325E 00	400.3	0.332E 00	401.5	0.404E 00	403.5	0.469E 00	405.2	0.505E 00
405.7	0.540E 00	408.3	0.572E 00	408.9	0.623E 00	410.3	0.705E 00	413.4	0.789E 00
415.8	0.848E 00	417.2	0.875E 00	419.4	0.891E 00	421.6	0.901E 00	424.1	0.910E 00
425.7	0.910E 00	427.9	0.898E 00	429.8	0.880E 00	431.7	0.857E 00	433.3	0.855E 00
434.7	0.873E 00	436.9	0.910E 00	438.6	0.945E 00	442.5	0.953E 00	446.6	0.104E 01
449.4	0.108E 01	451.6	0.110E 01	453.0	0.112E 01	454.7	0.113E 01	458.0	0.114E 01
460.2	0.114E 01	462.7	0.115E 01	465.0	0.115E 01	467.3	0.114E 01	469.6	0.114E 01
471.2	0.114E 01	475.4	0.115E 01	478.9	0.117E 01	480.5	0.116E 01	483.0	0.114E 01
485.0	0.110E 01	487.7	0.109E 01	489.1	0.110E 01	492.0	0.112E 01	494.6	0.113E 01
496.4	0.114E 01	500.4	0.113E 01	502.5	0.112E 01	504.2	0.111E 01	508.0	0.111E 01
510.0	0.111E 01	511.8	0.112E 01	514.4	0.109E 01	517.5	0.106E 01	519.0	0.105E 01
520.8	0.105E 01	522.3	0.106E 01	524.2	0.108E 01	528.8	0.108E 01	532.9	0.108E 01
535.5	0.109E 01	539.6	0.108E 01	542.9	0.107E 01	547.1	0.108E 01	554.0	0.108E 01
557.1	0.108E 01	559.1	0.106E 01	560.9	0.105E 01	564.2	0.105E 01	569.2	0.105E 01
574.4	0.103E 01	578.8	0.102E 01	582.7	0.103E 01	585.7	0.104E 01	588.2	0.103E 01
591.2	0.975E 00	593.6	0.943E 00	596.4	0.938E 00	601.8	0.973E 00	607.5	0.102E 01
611.1	0.103E 01	615.8	0.101E 01	619.2	0.993E 00	622.6	0.999E 00	625.0	0.100E 01
630.8	0.972E 00	636.4	0.958E 00	642.2	0.969E 00	646.4	0.945E 00	651.9	0.888E 00
655.4	0.878E 00	658.1	0.871E 00	661.6	0.909E 00	665.2	0.931E 00	671.9	0.912E 00
677.1	0.905E 00	680.0	0.940E 00	681.9	0.933E 00	684.2	0.876E 00	686.8	0.836E 00
692.7	0.850E 00	700.0	0.831E 00	705.8	0.852E 00	710.6	0.881E 00	714.0	0.775E 00
717.3	0.659E 00	722.5	0.607E 00	728.0	0.608E 00				

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STATION 18 EXP 2 PROF 15

MAXIMUM A LAMDA= 478.5 AVEC ECLAIREMENT SPECTRAL= 0.92556 WATT/M2/NM

ENTRE 400.0 NM ET 617.2 NM , ECLAIREMENT 114.932 WATT/M2 282.810E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
400.0	0.252E 00	401.2	0.318E 00	402.9	0.372E 00	404.4	0.395E 00	405.5	0.417E 00
407.6	0.433E 00	408.7	0.471E 00	410.2	0.525E 00	411.8	0.573E 00	414.5	0.615E 00
416.9	0.650E 00	420.0	0.677E 00	421.9	0.685E 00	422.7	0.690E 00	424.0	0.693E 00
425.6	0.692E 00	428.5	0.677E 00	430.8	0.665E 00	432.2	0.660E 00	433.0	0.658E 00
435.4	0.683E 00	438.1	0.726E 00	441.8	0.768E 00	445.8	0.796E 00	448.9	0.827E 00
452.8	0.849E 00	456.2	0.856E 00	459.6	0.860E 00	462.8	0.884E 00	465.1	0.892E 00
467.1	0.903E 00	469.9	0.897E 00	473.0	0.907E 00	475.9	0.917E 00	478.5	0.926E 00
480.9	0.919E 00	483.1	0.880E 00	485.4	0.839E 00	487.2	0.833E 00	488.7	0.829E 00
491.0	0.839E 00	493.4	0.848E 00	495.1	0.846E 00	498.6	0.800E 00	501.0	0.765E 00
503.0	0.747E 00	505.7	0.729E 00	508.6	0.689E 00	511.8	0.619E 00	514.9	0.554E 00
517.7	0.521E 00	518.9	0.514E 00	520.6	0.506E 00	523.1	0.514E 00	527.4	0.509E 00
530.5	0.505E 00	535.3	0.490E 00	540.9	0.465E 00	546.4	0.429E 00	552.5	0.391E 00
558.1	0.358E 00	560.8	0.340E 00	566.4	0.321E 00	571.8	0.294E 00	575.2	0.269E 00
578.6	0.229E 00	582.6	0.205E 00	587.1	0.155E 00	591.8	0.100E 00	597.6	0.555E-01
601.9	0.296E-01	605.4	0.926E-02	610.0	0.555E-02	617.2	0.		

STATION 18 EXP 2 PROF 19

MAXIMUM A LAMDA= 477.6 AVEC ECLAIREMENT SPECTRAL= 0.80866 WATT/M2/NM

ENTRE 400.0 NM ET 614.3 NM , ECLAIREMENT 99.034 WATT/M2 241.674E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.260E 00	401.8	0.309E 00	403.0	0.361E 00	405.1	0.378E 00	407.1	0.408E 00
409.2	0.450E 00	410.1	0.513E 00	412.8	0.563E 00	415.8	0.607E 00	418.8	0.636E 00
421.8	0.653E 00	423.7	0.650E 00	425.9	0.644E 00	429.2	0.628E 00	430.6	0.615E 00
432.7	0.611E 00	433.8	0.624E 00	438.8	0.680E 00	443.2	0.721E 00	447.3	0.749E 00
451.2	0.763E 00	456.2	0.777E 00	458.5	0.781E 00	462.1	0.795E 00	463.6	0.802E 00
467.2	0.800E 00	469.4	0.792E 00	472.0	0.790E 00	475.7	0.805E 00	477.6	0.809E 00
479.3	0.805E 00	481.2	0.787E 00	484.1	0.751E 00	486.3	0.724E 00	487.8	0.722E 00
491.8	0.722E 00	494.9	0.714E 00	497.6	0.704E 00	501.0	0.672E 00	502.3	0.650E 00
504.4	0.636E 00	507.5	0.590E 00	510.5	0.543E 00	514.1	0.479E 00	516.6	0.442E 00
518.2	0.413E 00	519.6	0.411E 00	522.3	0.408E 00	527.8	0.404E 00	534.7	0.388E 00
537.5	0.381E 00	541.8	0.351E 00	548.3	0.323E 00	552.8	0.294E 00	556.7	0.275E 00
563.0	0.249E 00	569.4	0.226E 00	573.4	0.206E 00	576.2	0.179E 00	579.0	0.151E 00
583.2	0.132E 00	587.7	0.906E-01	593.7	0.429E-01	599.5	0.162E-01	606.8	0.485E-02
614.3	0.								

STATION 18 EXP 2 PROF 29

MAXIMUM A LAMDA= 480.1 AVEC ECLAIREMENT SPECTRAL= 0.62948 WATT/M2/NM

ENTRE 400.0 NM ET 606.3 NM , ECLAIREMENT 70.248 WATT/M2 169.686E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.196E 00	400.1	0.197E 00	402.2	0.237E 00	403.9	0.260E 00	404.5	0.275E 00
406.6	0.294E 00	408.1	0.307E 00	409.3	0.344E 00	411.3	0.366E 00	412.2	0.402E 00
415.0	0.436E 00	417.5	0.465E 00	420.6	0.480E 00	423.4	0.485E 00	425.0	0.485E 00
427.0	0.481E 00	428.9	0.473E 00	430.3	0.469E 00	431.7	0.467E 00	433.4	0.463E 00
435.1	0.481E 00	437.8	0.511E 00	442.3	0.544E 00	447.3	0.568E 00	449.7	0.575E 00
452.7	0.587E 00	455.4	0.589E 00	457.8	0.589E 00	460.8	0.597E 00	463.1	0.609E 00
465.6	0.616E 00	467.6	0.616E 00	469.8	0.612E 00	473.8	0.621E 00	478.6	0.629E 00
480.1	0.629E 00	481.3	0.626E 00	483.7	0.602E 00	485.3	0.585E 00	487.1	0.573E 00
490.5	0.568E 00	495.2	0.553E 00	498.9	0.521E 00	502.0	0.481E 00	503.6	0.465E 00
506.7	0.451E 00	509.4	0.412E 00	511.8	0.358E 00	514.6	0.303E 00	517.7	0.265E 00
520.3	0.251E 00	525.1	0.246E 00	528.5	0.246E 00	532.5	0.238E 00	539.2	0.216E 00
546.6	0.188E 00	549.7	0.172E 00	552.4	0.151E 00	559.1	0.131E 00	569.5	0.107E 00
577.7	0.724E-01	587.7	0.308E-01	592.2	0.151E-01	598.4	0.629E-02	606.3	0.



STATION 18 EXP 2 PROF 38

MAXIMUM A LAMDA= 477.7 AVEC ECLAIREMENT SPECTRAL= 0.45907 WATT/M2/NM

ENTRE 400.0 NM ET 603.7 NM , ECLAIREMENT 47.341 WATT/M2 113.124E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.127E 00	400.1	0.128E 00	402.0	0.172E 00	403.5	0.189E 00	404.7	0.201E 00
406.5	0.212E 00	408.3	0.238E 00	410.1	0.268E 00	411.9	0.297E 00	415.1	0.314E 00
417.4	0.332E 00	420.2	0.344E 00	421.9	0.348E 00	424.2	0.350E 00	425.9	0.350E 00
428.2	0.343E 00	429.4	0.340E 00	432.2	0.338E 00	434.5	0.349E 00	438.2	0.378E 00
443.5	0.403E 00	448.1	0.416E 00	451.2	0.423E 00	454.6	0.426E 00	458.6	0.427E 00
461.8	0.441E 00	464.0	0.449E 00	466.7	0.450E 00	468.9	0.450E 00	474.0	0.455E 00
477.7	0.459E 00	479.7	0.455E 00	480.9	0.448E 00	483.7	0.426E 00	485.9	0.412E 00
489.4	0.406E 00	491.3	0.401E 00	496.0	0.378E 00	499.1	0.348E 00	501.3	0.322E 00
503.2	0.307E 00	505.7	0.298E 00	508.8	0.257E 00	510.6	0.219E 00	514.1	0.175E 00
516.4	0.150E 00	519.3	0.139E 00	525.1	0.136E 00	531.2	0.131E 00	538.6	0.113E 00
545.3	0.955E-01	548.9	0.767E-01	555.4	0.643E-01	564.5	0.528E-01	571.0	0.422E-01
577.4	0.248E-01	583.6	0.193E-01	587.1	0.826E-02	592.1	0.184E-02	603.7	0.

STATION 18 EXP 2 PROF 46

MAXIMUM A LAMDA= 478.4 AVEC ECLAIREMENT SPECTRAL= 0.34711 WATT/M2/NM

ENTRE 400.0 NM ET 598.1 NM , ECLAIREMENT 33.638 WATT/M2 79.958E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.847E-01	400.2	0.861E-01	401.4	0.108E 00	403.6	0.130E 00	405.8	0.137E 00
406.4	0.149E 00	407.9	0.158E 00	408.9	0.173E 00	410.4	0.191E 00	411.6	0.207E 00
413.7	0.223E 00	417.0	0.237E 00	420.6	0.250E 00	423.5	0.255E 00	425.3	0.259E 00
427.4	0.254E 00	430.0	0.251E 00	431.5	0.250E 00	432.7	0.251E 00	435.1	0.261E 00
437.6	0.277E 00	440.7	0.292E 00	444.5	0.303E 00	448.0	0.310E 00	450.1	0.311E 00
453.9	0.314E 00	456.7	0.315E 00	458.3	0.316E 00	461.4	0.326E 00	463.7	0.334E 00
465.8	0.337E 00	469.2	0.338E 00	473.9	0.343E 00	478.4	0.347E 00	479.7	0.345E 00
481.5	0.341E 00	482.8	0.326E 00	484.7	0.314E 00	486.2	0.308E 00	489.1	0.303E 00
491.3	0.299E 00	494.4	0.287E 00	497.5	0.269E 00	499.1	0.251E 00	500.7	0.236E 00
502.8	0.220E 00	505.4	0.210E 00	507.2	0.189E 00	510.0	0.156E 00	512.2	0.129E 00
514.6	0.104E 00	517.0	0.885E-01	519.8	0.826E-01	523.1	0.809E-01	531.4	0.767E-01
539.2	0.628E-01	549.0	0.427E-01	555.0	0.340E-01	564.3	0.267E-01	572.5	0.167E-01
578.9	0.902E-02	584.0	0.208E-02	589.7	0.139E-02	598.1	0.		

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STATION 18 EXP 2 PROF 55

MAXIMUM A LAMDA= 478.8 AVEC ECLAIREMENT SPECTRAL= 0.26075 WATT/M2/NM

ENTRE 400.0 NM ET 588.5 NM , ECLAIREMENT 24.111 WATT/M2 57.076E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
400.0	0.686E-01	401.3	0.780E-01	403.3	0.944E-01	404.0	0.980E-01	406.0	0.103E 00
408.3	0.118E 00	410.3	0.131E 00	412.8	0.150E 00	415.6	0.162E 00	417.8	0.174E 00
421.8	0.181E 00	423.9	0.186E 00	425.7	0.188E 00	427.9	0.189E 00	430.6	0.185E 00
432.4	0.184E 00	434.5	0.186E 00	436.5	0.197E 00	440.8	0.214E 00	444.5	0.223E 00
448.8	0.231E 00	450.8	0.232E 00	455.1	0.234E 00	457.4	0.234E 00	460.0	0.237E 00
462.8	0.245E 00	465.3	0.251E 00	469.3	0.255E 00	474.3	0.260E 00	478.8	0.261E 00
481.0	0.259E 00	483.3	0.249E 00	485.2	0.238E 00	489.3	0.228E 00	492.7	0.220E 00
495.2	0.207E 00	499.0	0.185E 00	500.5	0.171E 00	503.0	0.158E 00	506.5	0.145E 00
508.0	0.123E 00	510.2	0.980E-01	512.3	0.827E-01	514.0	0.673E-01	517.1	0.540E-01
518.6	0.506E-01	522.5	0.477E-01	528.6	0.467E-01	531.4	0.454E-01	540.0	0.355E-01
549.0	0.224E-01	552.8	0.180E-01	556.6	0.167E-01	564.5	0.104E-01	573.8	0.495E-02
581.0	0.261E-03	588.5	0.						

STATION 18 EXP 2 PROF 76

MAXIMUM A LAMDA= 477.7 AVEC ECLAIREMENT SPECTRAL= 0.12610 WATT/M2/NM

ENTRE 400.0 NM ET 585.9 NM , ECLAIREMENT 10.652 WATT/M2 25.110E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.276E-01	401.5	0.319E-01	403.9	0.388E-01	406.9	0.429E-01	408.2	0.478E-01
409.9	0.562E-01	414.0	0.660E-01	417.8	0.740E-01	421.8	0.799E-01	424.3	0.827E-01
426.1	0.834E-01	427.4	0.836E-01	429.5	0.827E-01	431.7	0.826E-01	434.2	0.860E-01
437.8	0.937E-01	442.6	0.102E 00	446.7	0.106E 00	448.7	0.106E 00	450.8	0.106E 00
453.8	0.107E 00	457.2	0.107E 00	460.6	0.111E 00	463.6	0.117E 00	465.4	0.120E 00
467.0	0.122E 00	468.6	0.122E 00	472.8	0.125E 00	477.0	0.126E 00	478.8	0.126E 00
480.1	0.125E 00	482.4	0.121E 00	484.6	0.115E 00	486.8	0.111E 00	491.4	0.106E 00
493.4	0.997E-01	496.3	0.923E-01	499.2	0.813E-01	501.1	0.728E-01	505.3	0.624E-01
507.3	0.552E-01	508.2	0.489E-01	510.1	0.383E-01	512.8	0.275E-01	514.3	0.222E-01
516.1	0.182E-01	518.5	0.151E-01	522.8	0.149E-01	529.5	0.130E-01	535.6	0.110E-01
544.6	0.794E-02	550.7	0.429E-02	560.6	0.265E-02	574.7	0.504E-03	585.9	0.

STATION 18 EXP 2 PROF 100

MAXIMUM A LAMDA= 477.2 AVEC ECLAIREMENT SPECTRAL= 0.05524 WATT/M2/NM

ENTRE 400.0 NM ET 568.3 NM , ECLAIREMENT 4.057 WATT/M2 9.598E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.718E-02	402.0	0.856E-02	403.8	0.102E-01	404.2	0.115E-01	407.8	0.127E-01
410.4	0.157E-01	411.8	0.191E-01	415.8	0.217E-01	420.0	0.246E-01	424.6	0.272E-01
427.2	0.283E-01	432.1	0.286E-01	434.4	0.302E-01	437.2	0.334E-01	440.8	0.361E-01
444.7	0.386E-01	445.7	0.392E-01	448.2	0.398E-01	453.5	0.408E-01	457.0	0.416E-01
459.5	0.426E-01	462.1	0.451E-01	463.8	0.477E-01	467.4	0.505E-01	470.5	0.525E-01
473.6	0.544E-01	477.2	0.552E-01	479.7	0.552E-01	481.7	0.545E-01	483.0	0.531E-01
484.7	0.515E-01	486.1	0.494E-01	488.8	0.481E-01	490.5	0.469E-01	493.3	0.444E-01
496.0	0.407E-01	498.3	0.355E-01	501.0	0.307E-01	502.4	0.276E-01	503.7	0.262E-01
505.4	0.241E-01	507.4	0.205E-01	508.4	0.164E-01	511.7	0.113E-01	513.9	0.762E-02
516.5	0.530E-02	520.0	0.436E-02	525.6	0.403E-02	532.0	0.354E-02	539.4	0.243E-02
548.7	0.116E-02	555.1	0.442E-03	568.3	0.				

STATION 18 EXP 2 PROF 120

MAXIMUM A LAMDA= 481.2 AVEC ECLAIREMENT SPECTRAL= 0.01356 WATT/M2/NM

ENTRE 400.0 NM ET 579.4 NM , ECLAIREMENT 0.923 WATT/M2 2.202E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.133E-02	402.5	0.170E-02	404.6	0.190E-02	407.5	0.220E-02	409.3	0.278E-02
414.0	0.343E-02	418.8	0.422E-02	423.3	0.479E-02	424.3	0.494E-02	426.2	0.510E-02
427.5	0.518E-02	429.4	0.520E-02	431.4	0.530E-02	433.3	0.577E-02	436.0	0.639E-02
439.9	0.690E-02	444.2	0.753E-02	446.0	0.787E-02	448.5	0.798E-02	452.8	0.822E-02
456.1	0.861E-02	460.0	0.948E-02	462.3	0.106E-01	465.3	0.116E-01	468.9	0.122E-01
470.4	0.125E-01	471.3	0.128E-01	473.4	0.131E-01	475.8	0.133E-01	478.2	0.134E-01
481.2	0.136E-01	482.6	0.134E-01	484.0	0.131E-01	484.7	0.128E-01	488.4	0.127E-01
492.0	0.121E-01	495.6	0.112E-01	498.4	0.997E-02	500.5	0.865E-02	503.0	0.775E-02
504.1	0.726E-02	505.2	0.677E-02	507.3	0.562E-02	509.0	0.425E-02	510.8	0.323E-02
512.4	0.228E-02	514.7	0.168E-02	517.4	0.123E-02	521.1	0.104E-02	530.6	0.909E-03
540.0	0.570E-03	547.6	0.366E-03	552.9	0.149E-03	561.9	0.814E-04	571.1	0.814E-04
579.4	0.								

STATION 18 EXP 2 PROF 139

MAXIMUM A LAMDA= 482.0 AVEC ECLAIREMENT SPECTRAL= 0.00572 WATT/M2/NM

ENTRE 400.0 NM ET 565.4 NM , ECLAIREMENT 0.354 WATT/M2 0.848E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.338E-03	402.6	0.441E-03	405.5	0.458E-03	409.2	0.664E-03	414.6	0.100E-02
420.7	0.130E-02	425.0	0.155E-02	426.7	0.163E-02	428.2	0.166E-02	430.0	0.174E-02
432.5	0.186E-02	436.1	0.211E-02	438.3	0.243E-02	442.4	0.270E-02	444.6	0.290E-02
448.7	0.302E-02	453.1	0.319E-02	456.5	0.334E-02	458.7	0.359E-02	461.2	0.391E-02
463.9	0.442E-02	467.5	0.485E-02	469.2	0.515E-02	472.5	0.540E-02	474.9	0.552E-02
478.1	0.562E-02	479.9	0.566E-02	482.0	0.572E-02	484.0	0.559E-02	486.3	0.547E-02
488.2	0.551E-02	491.6	0.533E-02	493.9	0.501E-02	495.8	0.448E-02	498.9	0.390E-02
500.4	0.344E-02	502.7	0.307E-02	505.8	0.265E-02	506.9	0.221E-02	509.6	0.152E-02
511.1	0.108E-02	512.8	0.796E-03	513.9	0.584E-03	517.1	0.395E-03	520.9	0.332E-03
525.9	0.269E-03	530.8	0.269E-03	537.1	0.160E-03	545.6	0.103E-03	552.2	0.572E-04
559.3	0.343E-04	565.4	0.						

STATION 19 EXP 1 PROF 0

MAXIMUM A LAMDA= 479.1 AVEC ECLAIREMENT SPECTRAL= 1.59287 WATT/M2/NM

ENTRE 400.7 NM ET 700.0 NM , ECLAIREMENT 388.267 WATT/M2 1076.700E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
400.7	0.749E 00	404.3	0.812E 00	406.5	0.925E 00	409.8	0.109E 01	411.2	0.113E 01
414.7	0.121E 01	416.6	0.124E 01	420.2	0.125E 01	423.7	0.125E 01	427.3	0.121E 01
430.4	0.119E 01	431.9	0.119E 01	433.2	0.121E 01	434.7	0.126E 01	439.6	0.135E 01
445.3	0.145E 01	447.6	0.150E 01	450.5	0.154E 01	453.5	0.155E 01	456.2	0.156E 01
459.5	0.158E 01	461.4	0.158E 01	465.5	0.155E 01	469.1	0.155E 01	473.7	0.157E 01
477.5	0.159E 01	479.1	0.159E 01	481.5	0.157E 01	483.7	0.150E 01	485.1	0.148E 01
487.3	0.149E 01	490.6	0.153E 01	493.5	0.153E 01	495.5	0.151E 01	497.6	0.148E 01
501.9	0.148E 01	505.6	0.149E 01	509.3	0.149E 01	512.4	0.146E 01	514.9	0.140E 01
518.6	0.140E 01	522.3	0.143E 01	531.5	0.144E 01	535.8	0.142E 01	540.4	0.139E 01
549.7	0.142E 01	555.7	0.136E 01	561.4	0.136E 01	571.7	0.133E 01	576.4	0.132E 01
579.7	0.133E 01	582.7	0.129E 01	586.2	0.121E 01	591.9	0.121E 01	603.1	0.126E 01
607.0	0.126E 01	613.2	0.121E 01	627.9	0.119E 01	632.9	0.121E 01	654.3	0.109E 01
659.6	0.115E 01	671.4	0.114E 01	680.5	0.112E 01	684.7	0.986E 00	700.0	0.107E 01
713.0	0.827E 00	723.9	0.776E 00	730.7	0.865E 00	742.0	0.892E 00		

STATION 19 EXP 1 PROF 30

MAXIMUM A LAMDA= 477.3 AVEC ECLAIREMENT SPECTRAL= 0.66521 WATT/M2/NM

ENTRE 402.0 NM ET 594.3 NM , ECLAIREMENT 71.030 WATT/M2 170.940E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
402.0	0.273E 00	403.8	0.285E 00	406.3	0.327E 00	409.3	0.380E 00	413.8	0.429E 00
418.0	0.454E 00	421.6	0.472E 00	424.3	0.481E 00	426.8	0.476E 00	428.1	0.470E 00
429.7	0.469E 00	431.3	0.472E 00	433.4	0.496E 00	436.4	0.533E 00	441.2	0.575E 00
446.0	0.607E 00	447.9	0.612E 00	452.8	0.621E 00	456.0	0.634E 00	459.0	0.648E 00
461.4	0.649E 00	468.5	0.653E 00	473.8	0.657E 00	477.3	0.665E 00	479.6	0.664E 00
481.2	0.653E 00	486.1	0.605E 00	490.7	0.595E 00	495.9	0.553E 00	500.3	0.494E 00
502.9	0.480E 00	507.6	0.404E 00	510.8	0.336E 00	514.2	0.285E 00	517.4	0.262E 00
521.2	0.257E 00	527.9	0.251E 00	536.5	0.224E 00	544.2	0.186E 00	548.2	0.151E 00
556.0	0.132E 00	566.3	0.103E 00	574.4	0.732E-01	581.8	0.173E-01	594.3	0.

STATION 19 EXP 1 PROF 40

MAXIMUM A LAMDA= 479.9 AVEC ECLAIREMENT SPECTRAL= 0.49689 WATT/M2/NM

ENTRE 400.3 NM ET 586.3 NM , ECLAIREMENT 48.766 WATT/M2 116.550E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.3	0.158E 00	404.2	0.187E 00	407.1	0.226E 00	409.9	0.259E 00	414.1	0.287E 00
418.8	0.313E 00	422.6	0.328E 00	425.1	0.332E 00	427.3	0.332E 00	429.2	0.330E 00
430.8	0.330E 00	431.9	0.337E 00	435.7	0.368E 00	439.8	0.404E 00	445.0	0.429E 00
449.0	0.441E 00	452.2	0.448E 00	455.4	0.451E 00	457.3	0.461E 00	459.9	0.472E 00
463.1	0.481E 00	465.3	0.483E 00	469.7	0.486E 00	476.1	0.494E 00	479.9	0.497E 00
481.7	0.494E 00	483.4	0.475E 00	485.9	0.455E 00	488.7	0.448E 00	492.2	0.430E 00
495.2	0.402E 00	497.8	0.364E 00	500.3	0.343E 00	502.8	0.332E 00	504.6	0.299E 00
508.6	0.244E 00	512.3	0.201E 00	513.8	0.171E 00	517.2	0.153E 00	521.9	0.150E 00
529.9	0.142E 00	543.4	0.999E-01	547.4	0.765E-01	554.8	0.661E-01	570.5	0.368E-01
586.3	0.								

STATION 19 EXP 1 PROF 50

MAXIMUM A LAMDA= 479.1 AVEC ECLAIREMENT SPECTRAL= 0.34346 WATT/M2/NM

ENTRE 401.2 NM ET 589.6 NM , ECLAIREMENT 31.226 WATT/M2 74.370E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.975E-01	404.2	0.111E 00	405.7	0.124E 00	408.2	0.148E 00	411.3	0.166E 00
415.5	0.188E 00	420.1	0.205E 00	422.5	0.212E 00	424.1	0.214E 00	426.4	0.215E 00
428.4	0.213E 00	430.7	0.216E 00	434.8	0.241E 00	438.0	0.258E 00	442.1	0.278E 00
445.9	0.293E 00	451.3	0.298E 00	454.4	0.303E 00	457.6	0.315E 00	461.0	0.323E 00
463.6	0.327E 00	468.9	0.331E 00	474.8	0.340E 00	479.1	0.343E 00	480.4	0.341E 00
481.9	0.332E 00	484.0	0.316E 00	486.1	0.308E 00	491.3	0.300E 00	492.9	0.286E 00
495.4	0.260E 00	497.7	0.241E 00	499.3	0.224E 00	501.0	0.215E 00	505.0	0.184E 00
507.3	0.151E 00	509.9	0.122E 00	512.6	0.101E 00	515.3	0.903E-01	518.0	0.859E-01
525.6	0.821E-01	531.2	0.752E-01	540.5	0.567E-01	548.7	0.350E-01	558.2	0.282E-01
570.2	0.168E-01	576.3	0.790E-02	589.6	0.				

STATION 19 EXP 1 PROF 60

MAXIMUM A LAMDA= 475.8 AVEC ECLAIREMENT SPECTRAL= 0.23854 WATT/M2/NM

ENTRE 400.6 NM ET 582.2 NM , ECLAIREMENT 20.688 WATT/M2 49.062E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.6	0.608E-01	404.0	0.692E-01	407.1	0.840E-01	410.3	0.103E 00	414.0	0.119E 00
418.7	0.133E 00	422.7	0.142E 00	425.8	0.144E 00	428.5	0.145E 00	429.9	0.145E 00
432.9	0.153E 00	435.5	0.166E 00	439.3	0.182E 00	442.9	0.193E 00	445.4	0.198E 00
448.5	0.202E 00	453.7	0.207E 00	458.2	0.218E 00	461.0	0.224E 00	467.6	0.230E 00
472.0	0.235E 00	477.2	0.239E 00	479.8	0.239E 00	481.9	0.235E 00	486.0	0.215E 00
488.1	0.211E 00	490.5	0.208E 00	493.6	0.193E 00	496.4	0.171E 00	498.5	0.154E 00
499.8	0.145E 00	503.1	0.137E 00	505.3	0.118E 00	508.2	0.909E-01	511.4	0.682E-01
514.6	0.508E-01	517.2	0.458E-01	524.8	0.432E-01	531.0	0.406E-01	540.4	0.281E-01
548.4	0.160E-01	565.5	0.811E-02	582.2	0.				

STATION 19 EXP 1 PROF 80

MAXIMUM A LAMDA= 475.7 AVEC ECLAIREMENT SPECTRAL= 0.13083 WATT/M2/NM

ENTRE 400.4 NM ET 571.7 NM , ECLAIREMENT 10.234 WATT/M2 24.198E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.4	0.276E-01	404.1	0.301E-01	406.5	0.382E-01	409.8	0.468E-01	415.2	0.559E-01
420.7	0.625E-01	424.4	0.674E-01	425.6	0.688E-01	429.6	0.699E-01	431.6	0.716E-01
434.1	0.782E-01	438.8	0.886E-01	442.8	0.963E-01	447.0	0.102E 00	453.8	0.105E 00
456.6	0.109E 00	460.2	0.117E 00	465.4	0.123E 00	473.3	0.129E 00	479.7	0.131E 00
481.3	0.131E 00	482.4	0.128E 00	485.3	0.121E 00	486.2	0.117E 00	490.5	0.113E 00
493.2	0.105E 00	495.7	0.933E-01	498.7	0.806E-01	500.7	0.709E-01	503.4	0.665E-01
505.7	0.544E-01	507.8	0.389E-01	510.8	0.260E-01	514.8	0.188E-01	517.4	0.162E-01
529.5	0.143E-01	540.7	0.850E-02	548.5	0.419E-02	571.7	0.		

STATION 19 EXP 1 PROF 100

MAXIMUM A LAMDA= 478.6 AVEC ECLAIREMENT SPECTRAL= 0.06119 WATT/M2/NM

ENTRE 403.8 NM ET 570.5 NM , ECLAIREMENT 4.345 WATT/M2 10.290E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.8	0.101E-01	407.0	0.138E-01	411.1	0.178E-01	415.6	0.213E-01	420.4	0.244E-01
423.9	0.263E-01	426.4	0.270E-01	428.6	0.275E-01	432.6	0.310E-01	436.3	0.360E-01
440.7	0.399E-01	443.5	0.420E-01	447.2	0.431E-01	452.4	0.449E-01	455.9	0.482E-01
459.0	0.521E-01	463.4	0.557E-01	468.0	0.583E-01	471.8	0.606E-01	476.0	0.609E-01
478.6	0.612E-01	481.5	0.609E-01	485.7	0.558E-01	488.1	0.531E-01	490.7	0.504E-01
493.3	0.455E-01	495.4	0.393E-01	497.9	0.330E-01	500.0	0.303E-01	502.1	0.286E-01
504.5	0.218E-01	508.3	0.147E-01	511.4	0.918E-02	514.9	0.698E-02	518.0	0.545E-02
529.5	0.471E-02	537.4	0.343E-02	548.7	0.110E-02	570.5	0.		

STATION 19 EXP 1 PROF 120

MAXIMUM A LAMDA= 480.8 AVEC ECLAIREMENT SPECTRAL= 0.02626 WATT/M2/NM

ENTRE 400.5 NM ET 556.2 NM , ECLAIREMENT 1.653 WATT/M2 3.929E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.5	0.210E-02	404.3	0.255E-02	408.9	0.407E-02	416.0	0.593E-02	421.9	0.780E-02
425.3	0.838E-02	429.1	0.874E-02	432.3	0.100E-01	436.1	0.119E-01	440.2	0.138E-01
444.6	0.152E-01	449.0	0.157E-01	453.9	0.168E-01	457.8	0.188E-01	460.4	0.206E-01
464.6	0.226E-01	468.8	0.243E-01	472.4	0.255E-01	475.3	0.259E-01	480.8	0.263E-01
483.0	0.255E-01	485.6	0.243E-01	489.3	0.230E-01	492.2	0.211E-01	494.1	0.189E-01
495.7	0.166E-01	498.1	0.141E-01	500.5	0.123E-01	502.6	0.112E-01	504.4	0.914E-02
506.8	0.667E-02	508.6	0.457E-02	512.1	0.265E-02	518.0	0.168E-02	525.9	0.142E-02
530.7	0.129E-02	539.6	0.683E-03	556.2	0.				



STATION 19 EXP 1 PROF 140

MAXIMUM A LAMDA= 480.9 AVEC ECLAIREMENT SPECTRAL= 0.00938 WATT/M2/NM

ENTRE 404.2 NM ET 551.6 NM , ECLAIREMENT 0.534 WATT/M2 1.276E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.2	0.572E-03	412.2	0.116E-02	419.2	0.169E-02	424.9	0.214E-02	429.6	0.238E-02
432.6	0.285E-02	437.8	0.355E-02	443.0	0.431E-02	448.3	0.473E-02	453.2	0.525E-02
456.8	0.586E-02	459.6	0.662E-02	462.6	0.737E-02	466.5	0.814E-02	470.5	0.864E-02
472.3	0.894E-02	477.5	0.923E-02	480.9	0.938E-02	484.2	0.903E-02	484.8	0.884E-02
486.9	0.877E-02	489.9	0.840E-02	491.9	0.772E-02	493.5	0.692E-02	495.3	0.579E-02
496.4	0.494E-02	498.8	0.437E-02	501.5	0.409E-02	504.6	0.307E-02	506.9	0.205E-02
511.1	0.103E-02	514.1	0.610E-03	518.6	0.450E-03	529.9	0.422E-03	537.6	0.253E-03
551.6	0.								

STATION 19 EXP 1 PROF 160

MAXIMUM A LAMDA= 479.8 AVEC ECLAIREMENT SPECTRAL= 0.00361 WATT/M2/NM

ENTRE 405.1 NM ET 544.7 NM , ECLAIREMENT 0.199 WATT/M2 0.477E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
405.1	0.123E-03	418.5	0.404E-03	424.7	0.649E-03	428.9	0.739E-03	433.4	0.102E-02
439.7	0.141E-02	444.0	0.162E-02	447.9	0.172E-02	452.0	0.189E-02	455.3	0.213E-02
457.9	0.248E-02	461.9	0.288E-02	467.1	0.324E-02	473.6	0.349E-02	478.2	0.361E-02
479.8	0.361E-02	482.5	0.355E-02	484.7	0.344E-02	487.7	0.339E-02	490.9	0.318E-02
493.6	0.269E-02	496.3	0.209E-02	498.5	0.177E-02	501.4	0.154E-02	503.6	0.113E-02
507.6	0.620E-03	511.9	0.252E-03	517.0	0.162E-03	530.7	0.162E-03	544.7	0.

STATION 19 EXP 2 PROF 0

MAXIMUM A LAMDA= 479.5 AVEC ECLAIREMENT SPECTRAL= 1.09144 WATT/M2/NM

ENTRE 430.1 NM ET 700.0 NM , ECLAIREMENT 272.566 WATT/M2 758.540E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.1	0.403E 00	401.9	0.482E 00	403.0	0.505E 00	405.6	0.548E 00	407.5	0.631E 00
408.8	0.691E 00	411.7	0.765E 00	414.1	0.811E 00	417.2	0.832E 00	421.1	0.843E 00
423.7	0.848E 00	426.9	0.828E 00	428.6	0.805E 00	431.3	0.802E 00	432.7	0.813E 00
434.2	0.844E 00	437.4	0.886E 00	441.5	0.932E 00	445.7	0.978E 00	447.8	0.101E 01
450.4	0.104E 01	456.0	0.106E 01	459.1	0.107E 01	461.2	0.107E 01	463.2	0.107E 01
468.4	0.106E 01	471.5	0.106E 01	476.5	0.108E 01	479.5	0.109E 01	481.3	0.108E 01
483.8	0.103E 01	485.2	0.102E 01	486.9	0.102E 01	489.9	0.104E 01	492.4	0.106E 01
495.0	0.106E 01	500.1	0.104E 01	504.0	0.104E 01	507.9	0.104E 01	511.2	0.104E 01
514.6	0.995E 00	517.3	0.980E 00	521.2	0.101E 01	526.6	0.102E 01	531.6	0.103E 01
535.3	0.988E 00	540.5	0.981E 00	547.3	0.101E 01	551.6	0.101E 01	555.1	0.971E 00
559.4	0.952E 00	567.1	0.936E 00	573.8	0.941E 00	577.7	0.950E 00	579.7	0.950E 00
582.7	0.906E 00	585.0	0.860E 00	587.8	0.844E 00	594.1	0.868E 00	600.9	0.906E 00
605.0	0.912E 00	612.5	0.884E 00	618.9	0.896E 00	624.9	0.871E 00	628.5	0.866E 00
635.1	0.875E 00	639.3	0.878E 00	646.5	0.828E 00	653.7	0.791E 00	657.2	0.810E 00
660.6	0.837E 00	671.9	0.826E 00	680.7	0.788E 00	683.1	0.725E 00	686.0	0.692E 00
693.3	0.716E 00	700.0	0.742E 00	712.9	0.578E 00	720.0	0.487E 00	724.3	0.464E 00
731.5	0.606E 00	742.0	0.660E 00						

STATION 19 EXP 2 PROF 20

MAXIMUM A LAMDA= 479.3 AVEC ECLAIREMENT SPECTRAL= 0.73194 WATT/M2/NM

ENTRE 401.8 NM ET 598.3 NM , ECLAIREMENT 79.883 WATT/M2 193.154E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.276E 00	404.1	0.300E 00	407.2	0.359E 00	410.3	0.428E 00	414.8	0.480E 00
420.1	0.505E 00	424.0	0.519E 00	428.0	0.510E 00	429.9	0.508E 00	431.2	0.509E 00
433.6	0.534E 00	436.8	0.578E 00	442.0	0.624E 00	447.9	0.662E 00	450.9	0.673E 00
454.2	0.683E 00	455.3	0.687E 00	457.6	0.700E 00	462.1	0.714E 00	467.1	0.714E 00
474.6	0.728E 00	479.3	0.732E 00	482.0	0.713E 00	484.4	0.671E 00	485.9	0.665E 00
490.1	0.665E 00	492.5	0.649E 00	494.5	0.622E 00	498.4	0.560E 00	502.4	0.545E 00
508.0	0.458E 00	512.9	0.356E 00	515.7	0.326E 00	517.9	0.314E 00	522.2	0.324E 00
531.4	0.301E 00	542.4	0.250E 00	543.9	0.240E 00	547.7	0.204E 00	557.3	0.173E 00
565.6	0.141E 00	574.2	0.783E-01	581.9	0.461E-01	590.3	0.878E-02	598.3	0.

STATION 19 EXP 2 PROF 30

MAXIMUM A LAMDA= 478.6 AVEC ECLAIREMENT SPECTRAL= 0.49164 WATT/M2/NM

ENTRE 400.9 NM ET 594.4 NM , ECLAIREMENT 50.754 WATT/M2 121.992E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.174E 00	404.2	0.194E 00	406.6	0.227E 00	410.2	0.270E 00	414.7	0.301E 00
419.2	0.326E 00	424.0	0.336E 00	425.4	0.336E 00	428.9	0.330E 00	430.6	0.335E 00
433.1	0.344E 00	435.6	0.371E 00	441.1	0.407E 00	445.5	0.426E 00	449.6	0.442E 00
454.5	0.451E 00	456.3	0.455E 00	459.8	0.470E 00	463.0	0.478E 00	469.3	0.479E 00
474.2	0.489E 00	478.6	0.492E 00	481.1	0.485E 00	483.8	0.460E 00	485.5	0.446E 00
489.3	0.443E 00	492.0	0.436E 00	496.4	0.396E 00	499.7	0.358E 00	502.0	0.347E 00
505.7	0.306E 00	509.8	0.255E 00	512.6	0.211E 00	516.1	0.188E 00	519.3	0.183E 00
525.9	0.181E 00	530.6	0.171E 00	537.1	0.153E 00	546.3	0.116E 00	549.6	0.104E 00
564.0	0.713E-01	575.2	0.383E-01	582.4	0.688E-02	594.4	0.		

STATION 19 EXP 2 PROF 58

MAXIMUM A LAMDA= 478.7 AVEC ECLAIREMENT SPECTRAL= 0.18737 WATT/M2/NM

ENTRE 401.8 NM ET 583.5 NM , ECLAIREMENT 16.313 WATT/M2 38.631E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.508E-01	405.0	0.568E-01	406.6	0.719E-01	409.8	0.854E-01	413.9	0.982E-01
418.9	0.109E 00	422.1	0.116E 00	424.9	0.117E 00	427.0	0.117E 00	428.7	0.118E 00
430.8	0.122E 00	435.1	0.136E 00	441.1	0.152E 00	445.9	0.159E 00	448.8	0.161E 00
453.8	0.163E 00	456.9	0.170E 00	460.3	0.177E 00	462.2	0.180E 00	467.2	0.182E 00
471.8	0.185E 00	478.7	0.187E 00	480.0	0.187E 00	481.6	0.183E 00	484.0	0.174E 00
485.6	0.169E 00	489.8	0.164E 00	493.3	0.152E 00	495.6	0.135E 00	497.5	0.119E 00
498.7	0.113E 00	502.6	0.108E 00	504.2	0.927E-01	507.6	0.705E-01	510.5	0.543E-01
513.0	0.412E-01	517.2	0.349E-01	523.0	0.326E-01	530.7	0.309E-01	548.9	0.135E-01
574.0	0.319E-02	583.5	0.						

STATION 19 EXP 2 PROF 100

MAXIMUM A LAMDA= 477.2 AVEC ECLAIREMENT SPECTRAL= 0.04314 WATT/M2/NM

ENTRE 401.5 NM ET 562.7 NM , ECLAIREMENT 3.072 WATT/M2 7.257E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.626E-02	404.9	0.759E-02	408.2	0.104E-01	413.6	0.141E-01	420.9	0.180E-01
425.8	0.197E-01	429.9	0.204E-01	431.8	0.217E-01	437.3	0.264E-01	441.5	0.295E-01
445.6	0.311E-01	451.7	0.320E-01	455.0	0.337E-01	457.8	0.359E-01	461.2	0.381E-01
466.9	0.408E-01	472.2	0.426E-01	477.2	0.431E-01	480.2	0.428E-01	483.9	0.395E-01
486.8	0.382E-01	490.9	0.357E-01	495.1	0.302E-01	497.0	0.246E-01	500.3	0.206E-01
502.4	0.196E-01	506.3	0.149E-01	508.9	0.889E-02	513.2	0.479E-02	516.9	0.337E-02
529.8	0.259E-02	545.7	0.561E-03	562.7	0.				

STATION 19 EXP 2 PROF 150

MAXIMUM A LAMDA= 481.2 AVEC ECLAIREMENT SPECTRAL= 0.00375 WATT/M2/NM

ENTRE 434.7 NM ET 554.0 NM , ECLAIREMENT 0.216 WATT/M2 0.516E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.7	0.229E-03	417.7	0.551E-03	425.0	0.802E-03	429.0	0.877E-03	435.0	0.125E-02
442.3	0.165E-02	446.9	0.182E-02	452.0	0.203E-02	455.8	0.234E-02	459.3	0.274E-02
463.5	0.310E-02	466.9	0.338E-02	471.7	0.355E-02	476.4	0.370E-02	477.9	0.374E-02
481.2	0.375E-02	482.7	0.366E-02	486.9	0.359E-02	489.3	0.352E-02	491.3	0.325E-02
494.3	0.285E-02	495.7	0.246E-02	498.4	0.204E-02	503.2	0.162E-02	505.0	0.109E-02
508.8	0.649E-03	513.6	0.270E-03	515.5	0.187E-03	526.1	0.131E-03	536.2	0.712E-04
554.0	0.								

STATION 20 EXP 1 PROF 0

MAXIMUM A LAMDA= 480.0 AVEC ECLAIREMENT SPECTRAL= 2.02886 WATT/M2/NM

ENTRE 400.1 NM ET 700.0 NM , ECLAIREMENT 482.323 WATT/M2 1328.900E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.1	0.872E 00	401.6	0.974E 00	404.3	0.105E 01	406.1	0.119E 01	408.5	0.138E 01
410.9	0.152E 01	414.1	0.159E 01	417.3	0.161E 01	420.7	0.164E 01	423.4	0.163E 01
425.2	0.160E 01	428.0	0.156E 01	429.5	0.155E 01	431.0	0.154E 01	432.5	0.157E 01
434.3	0.164E 01	436.1	0.169E 01	440.4	0.176E 01	444.4	0.183E 01	446.7	0.191E 01
448.2	0.194E 01	450.0	0.197E 01	453.0	0.199E 01	454.9	0.200E 01	458.3	0.201E 01
460.7	0.202E 01	463.4	0.200E 01	467.2	0.197E 01	470.1	0.198E 01	474.4	0.200E 01
478.9	0.203E 01	480.0	0.203E 01	481.4	0.200E 01	484.1	0.190E 01	485.7	0.188E 01
487.6	0.189E 01	491.0	0.193E 01	494.2	0.194E 01	496.0	0.192E 01	498.7	0.188E 01
501.5	0.187E 01	506.9	0.188E 01	510.6	0.186E 01	514.0	0.180E 01	516.9	0.175E 01
518.8	0.174E 01	520.3	0.176E 01	522.3	0.180E 01	527.2	0.180E 01	532.1	0.181E 01
537.7	0.178E 01	543.6	0.175E 01	548.2	0.177E 01	554.0	0.176E 01	558.5	0.170E 01
564.2	0.169E 01	571.9	0.164E 01	576.0	0.162E 01	582.5	0.165E 01	584.1	0.161E 01
588.9	0.148E 01	591.1	0.145E 01	594.2	0.147E 01	606.7	0.157E 01	617.2	0.150E 01
628.2	0.145E 01	633.3	0.144E 01	641.0	0.142E 01	647.0	0.130E 01	650.8	0.131E 01
656.3	0.129E 01	660.7	0.136E 01	672.1	0.128E 01	680.0	0.125E 01	683.9	0.111E 01
695.4	0.110E 01	700.0	0.113E 01	713.9	0.799E 00	724.1	0.704E 00	732.7	0.905E 00
742.0	0.937E 00								

STATION 20 EXP 1 PROF 10

MAXIMUM A LAMDA= 460.9 AVEC ECLAIREMENT SPECTRAL= 1.57658 WATT/M2/NM

ENTRE 401.6 NM ET 637.7 NM , ECLAIREMENT 213.904 WATT/M2 524.710E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.6	0.948E 00	404.8	0.100E 01	405.4	0.110E 01	408.3	0.121E 01	410.4	0.130E 01
414.4	0.137E 01	417.8	0.141E 01	420.4	0.142E 01	423.2	0.141E 01	425.9	0.138E 01
428.5	0.133E 01	431.0	0.130E 01	432.4	0.130E 01	434.4	0.133E 01	435.7	0.138E 01
438.6	0.143E 01	441.6	0.147E 01	444.3	0.151E 01	446.3	0.155E 01	448.5	0.155E 01
451.5	0.156E 01	453.2	0.156E 01	455.2	0.156E 01	457.7	0.157E 01	460.9	0.158E 01
462.3	0.158E 01	465.4	0.156E 01	467.9	0.154E 01	471.9	0.155E 01	477.5	0.155E 01
480.2	0.155E 01	481.1	0.155E 01	482.2	0.153E 01	484.7	0.146E 01	486.7	0.142E 01
487.4	0.140E 01	488.5	0.141E 01	492.8	0.141E 01	495.5	0.136E 01	498.2	0.130E 01
500.8	0.127E 01	504.3	0.123E 01	509.0	0.114E 01	513.3	0.104E 01	515.3	0.982E 00
517.7	0.962E 00	519.1	0.966E 00	524.1	0.982E 00	532.7	0.933E 00	539.4	0.864E 00
548.3	0.779E 00	554.1	0.739E 00	558.5	0.686E 00	570.9	0.577E 00	574.8	0.505E 00
579.6	0.454E 00	587.9	0.262E 00	595.9	0.123E 00	602.6	0.426E-01	637.7	0.

STATION 20 EXP 1 PROF 15

MAXIMUM A LAMDA= 461.1 AVEC ECLAIREMENT SPECTRAL= 1.42240 WATT/M2/NM

ENTRE 400.9 NM ET 606.3 NM , ECLAIREMENT 180.703 WATT/M2 441.140E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.727E 00	402.0	0.777E 00	405.4	0.799E 00	407.2	0.885E 00	408.9	0.100E 01
411.5	0.105E 01	414.1	0.111E 01	416.1	0.115E 01	419.8	0.117E 01	423.5	0.118E 01
426.4	0.116E 01	428.9	0.113E 01	430.7	0.111E 01	431.9	0.109E 01	433.5	0.111E 01
435.3	0.115E 01	437.8	0.120E 01	441.9	0.127E 01	445.4	0.130E 01	447.2	0.132E 01
448.7	0.135E 01	451.1	0.136E 01	455.2	0.138E 01	458.1	0.141E 01	461.1	0.142E 01
463.8	0.142E 01	468.3	0.139E 01	468.8	0.139E 01	472.9	0.141E 01	475.5	0.141E 01
478.1	0.141E 01	481.2	0.141E 01	483.3	0.137E 01	484.9	0.131E 01	486.8	0.129E 01
489.1	0.129E 01	491.5	0.129E 01	494.3	0.127E 01	495.7	0.124E 01	498.0	0.118E 01
500.9	0.114E 01	503.2	0.112E 01	507.2	0.103E 01	513.5	0.885E 00	515.8	0.816E 00
518.4	0.805E 00	520.5	0.802E 00	522.8	0.808E 00	526.7	0.794E 00	529.6	0.791E 00
537.3	0.734E 00	545.2	0.674E 00	557.5	0.529E 00	562.6	0.501E 00	566.6	0.474E 00
572.5	0.403E 00	580.3	0.265E 00	585.0	0.158E 00	589.3	0.104E 00	596.6	0.526E-01
606.3	0.								

STATION 20 EXP 1 PROF 24

MAXIMUM A LAMDA= 474.0 AVEC ECLAIREMENT SPECTRAL= 1.07516 WATT/M2/NM

ENTRE 400.2 NM ET 599.6 NM , ECLAIREMENT 124.239 WATT/M2 298.660E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.2	0.529E 00	402.4	0.574E 00	404.4	0.605E 00	407.0	0.678E 00	409.2	0.756E 00
412.1	0.816E 00	415.2	0.858E 00	416.9	0.872E 00	419.7	0.875E 00	422.8	0.888E 00
424.8	0.885E 00	427.5	0.859E 00	429.3	0.852E 00	431.7	0.841E 00	432.8	0.861E 00
434.9	0.892E 00	436.5	0.929E 00	440.6	0.976E 00	446.7	0.102E 01	448.6	0.103E 01
454.0	0.104E 01	455.7	0.105E 01	459.4	0.107E 01	462.2	0.107E 01	464.0	0.107E 01
468.0	0.107E 01	471.4	0.108E 01	474.0	0.108E 01	478.0	0.107E 01	479.9	0.107E 01
482.3	0.103E 01	484.7	0.981E 00	486.7	0.964E 00	489.1	0.969E 00	493.2	0.929E 00
496.3	0.867E 00	498.9	0.810E 00	503.0	0.777E 00	507.3	0.660E 00	512.9	0.535E 00
515.0	0.484E 00	517.2	0.470E 00	521.2	0.468E 00	529.0	0.456E 00	536.8	0.401E 00
544.1	0.342E 00	547.6	0.296E 00	559.6	0.242E 00	569.1	0.188E 00	574.4	0.127E 00
579.9	0.108E 00	587.4	0.312E-01	599.6	0.				

STATION 20 EXP 1 PROF 39

MAXIMUM A LAMDA= 461.7 AVEC ECLAIREMENT SPECTRAL= 0.79051 WATT/M2/NM

ENTRE 400.2 NM ET 585.7 NM , ECLAIREMENT 83.286 WATT/M2 197.280E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.2	0.353E 00	401.6	0.397E 00	404.3	0.425E 00	406.3	0.474E 00	408.6	0.553E 00
411.9	0.603E 00	413.9	0.636E 00	418.3	0.662E 00	420.9	0.672E 00	423.8	0.677E 00
425.8	0.671E 00	428.6	0.650E 00	430.6	0.645E 00	432.3	0.643E 00	435.3	0.678E 00
438.1	0.717E 00	442.3	0.749E 00	446.2	0.766E 00	452.1	0.767E 00	454.9	0.772E 00
457.8	0.779E 00	460.0	0.787E 00	461.7	0.791E 00	464.5	0.790E 00	468.2	0.782E 00
471.9	0.785E 00	474.4	0.777E 00	479.3	0.775E 00	481.6	0.757E 00	484.6	0.708E 00
485.6	0.690E 00	489.7	0.676E 00	493.5	0.632E 00	496.7	0.560E 00	499.9	0.517E 00
502.8	0.499E 00	506.0	0.434E 00	510.8	0.323E 00	515.3	0.251E 00	517.9	0.232E 00
520.5	0.230E 00	530.5	0.209E 00	539.2	0.175E 00	548.7	0.121E 00	556.6	0.949E-01
565.2	0.759E-01	573.4	0.498E-01	578.3	0.285E-01	585.7	0.		

STATION 20 EXP 1 PROF 58

MAXIMUM A LAMDA= 465.0 AVEC ECLAIREMENT SPECTRAL= 0.50901 WATT/M2/NM

ENTRE 401.4 NM ET 582.6 NM , ECLAIREMENT 49.176 WATT/M2 115.080E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.249E 00	403.6	0.258E 00	405.4	0.296E 00	408.2	0.349E 00	411.1	0.381E 00
414.2	0.405E 00	417.9	0.426E 00	421.1	0.441E 00	423.3	0.444E 00	426.4	0.439E 00
429.6	0.426E 00	431.0	0.425E 00	432.9	0.433E 00	435.7	0.459E 00	439.2	0.481E 00
444.2	0.499E 00	445.5	0.502E 00	446.6	0.502E 00	450.8	0.492E 00	454.6	0.494E 00
457.7	0.500E 00	461.2	0.509E 00	465.0	0.509E 00	468.7	0.505E 00	470.7	0.507E 00
479.3	0.492E 00	481.8	0.484E 00	484.3	0.448E 00	486.2	0.429E 00	490.5	0.407E 00
493.7	0.372E 00	496.4	0.327E 00	500.3	0.280E 00	503.0	0.266E 00	505.5	0.220E 00
508.2	0.162E 00	513.5	0.107E 00	516.9	0.911E-01	523.1	0.860E-01	530.7	0.794E-01
535.3	0.687E-01	541.7	0.478E-01	551.9	0.321E-01	560.3	0.153E-01	572.8	0.458E-02
582.6	0.								

STATION 20 EXP 1 PROF 77

MAXIMUM A LAMDA= 473.0 AVEC ECLAIREMENT SPECTRAL= 0.28659 WATT/M2/NM

ENTRE 400.9 NM ET 573.4 NM , ECLAIREMENT 25.206 WATT/M2 58.910E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.105E 00	404.5	0.115E 00	406.3	0.134E 00	408.2	0.152E 00	411.8	0.179E 00
416.6	0.198E 00	421.4	0.211E 00	424.1	0.217E 00	425.2	0.216E 00	427.0	0.216E 00
428.9	0.214E 00	430.4	0.214E 00	431.7	0.218E 00	434.7	0.230E 00	437.1	0.245E 00
441.0	0.260E 00	443.6	0.267E 00	445.2	0.270E 00	449.7	0.263E 00	452.8	0.265E 00
454.9	0.266E 00	458.6	0.274E 00	461.7	0.281E 00	463.3	0.282E 00	465.1	0.283E 00
468.5	0.284E 00	473.0	0.287E 00	476.9	0.281E 00	480.4	0.277E 00	483.2	0.264E 00
486.4	0.244E 00	488.1	0.235E 00	491.1	0.224E 00	494.1	0.200E 00	497.1	0.167E 00
500.1	0.143E 00	503.5	0.125E 00	505.6	0.101E 00	509.6	0.679E-01	513.9	0.433E-01
517.0	0.338E-01	523.0	0.307E-01	529.0	0.301E-01	539.0	0.186E-01	547.6	0.946E-02
557.3	0.459E-02	573.4	0.						

STATION 20 EXP 1 PROF 104

MAXIMUM A LAMDA= 472.5 AVEC ECLAIREMENT SPECTRAL= 0.10342 WATT/M2/NM

ENTRE 400.8 NM ET 559.9 NM , ECLAIREMENT 7.767 WATT/M2 18.221E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.237E-01	404.2	0.246E-01	406.6	0.305E-01	409.7	0.375E-01	413.4	0.436E-01
419.1	0.509E-01	422.8	0.553E-01	424.6	0.581E-01	426.9	0.589E-01	428.8	0.592E-01
430.8	0.602E-01	432.8	0.640E-01	435.3	0.705E-01	439.8	0.765E-01	442.9	0.813E-01
445.7	0.837E-01	450.3	0.825E-01	453.6	0.833E-01	456.6	0.880E-01	461.1	0.943E-01
463.2	0.971E-01	467.7	0.100E 00	472.5	0.103E 00	475.1	0.102E 00	478.3	0.101E 00
480.6	0.101E 00	482.4	0.961E-01	484.8	0.905E-01	487.9	0.859E-01	490.7	0.810E-01
493.6	0.719E-01	496.4	0.585E-01	499.7	0.475E-01	503.2	0.398E-01	505.9	0.278E-01
510.0	0.168E-01	514.1	0.941E-02	518.2	0.693E-02	525.3	0.631E-02	533.0	0.393E-02
540.4	0.279E-02	559.9	0.						



STATION 20 EXP 1 PROF 112

MAXIMUM A LAMDA= 473.4 AVEC ECLAIREMENT SPECTRAL= 0.08357 WATT/M2/NM

ENTRE 400.2 NM ET 559.5 NM , ECLAIREMENT 5.967 WATT/M2 13.974E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.2	0.143E-01	401.7	0.162E-01	405.1	0.181E-01	407.5	0.226E-01	410.0	0.278E-01
415.2	0.333E-01	421.0	0.397E-01	423.7	0.430E-01	426.1	0.451E-01	428.3	0.456E-01
430.3	0.463E-01	433.4	0.499E-01	436.5	0.559E-01	441.0	0.619E-01	443.8	0.647E-01
445.5	0.659E-01	448.3	0.656E-01	452.6	0.658E-01	454.8	0.669E-01	457.6	0.701E-01
459.2	0.739E-01	462.0	0.773E-01	465.8	0.801E-01	470.8	0.825E-01	473.4	0.836E-01
474.9	0.829E-01	478.8	0.820E-01	482.0	0.804E-01	485.1	0.741E-01	488.4	0.692E-01
491.3	0.655E-01	493.9	0.578E-01	495.4	0.501E-01	498.8	0.393E-01	500.7	0.305E-01
503.2	0.198E-01	505.8	0.113E-01	509.0	0.627E-02	514.2	0.409E-02	525.8	0.309E-02
534.8	0.184E-02	546.8	0.418E-03	559.5	0.				

STATION 20 EXP 1 PROF 140

MAXIMUM A LAMDA= 471.7 AVEC ECLAIREMENT SPECTRAL= 0.02496 WATT/M2/NM

ENTRE 404.6 NM ET 552.1 NM , ECLAIREMENT 1.622 WATT/M2 3.836E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.6	0.312E-02	406.1	0.389E-02	413.0	0.574E-02	417.0	0.696E-02	421.1	0.806E-02
423.9	0.916E-02	426.6	0.956E-02	429.2	0.100E-01	432.8	0.114E-01	435.4	0.130E-01
439.0	0.146E-01	441.9	0.155E-01	443.7	0.164E-01	446.6	0.166E-01	453.3	0.176E-01
455.7	0.188E-01	458.5	0.207E-01	461.3	0.222E-01	464.1	0.234E-01	469.3	0.243E-01
471.7	0.250E-01	478.0	0.247E-01	479.5	0.247E-01	481.9	0.242E-01	484.5	0.227E-01
486.0	0.220E-01	488.9	0.213E-01	491.0	0.199E-01	493.6	0.173E-01	496.1	0.141E-01
499.9	0.111E-01	502.6	0.953E-02	504.3	0.741E-02	506.6	0.434E-02	511.3	0.220E-02
514.7	0.135E-02	523.6	0.102E-02	536.0	0.649E-03	552.1	0.		

STATION 21 EXP 1 PROF 0

MAXIMUM A LAMDA= 476.7 AVEC ECLAIREMENT SPECTRAL= 1.83924 WATT/M2/NM

ENTRE 401.2 NM ET 700.0 NM , ECLAIREMENT 445.056 WATT/M2 1231.900E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.888E 00	403.7	0.953E 00	405.5	0.108E 01	408.0	0.124E 01	409.8	0.134E 01
413.3	0.141E 01	415.8	0.145E 01	420.4	0.146E 01	422.2	0.147E 01	426.6	0.142E 01
428.7	0.138E 01	430.8	0.138E 01	432.7	0.141E 01	433.3	0.146E 01	438.3	0.157E 01
444.1	0.169E 01	447.2	0.175E 01	449.1	0.178E 01	450.9	0.179E 01	454.5	0.181E 01
457.0	0.182E 01	460.1	0.183E 01	462.6	0.182E 01	467.5	0.179E 01	470.2	0.179E 01
474.2	0.181E 01	476.7	0.184E 01	479.0	0.184E 01	480.8	0.183E 01	483.1	0.175E 01
484.9	0.171E 01	487.2	0.172E 01	489.7	0.175E 01	492.3	0.176E 01	495.6	0.175E 01
498.4	0.172E 01	502.1	0.172E 01	508.5	0.173E 01	511.7	0.169E 01	514.6	0.161E 01
517.8	0.159E 01	518.8	0.160E 01	521.5	0.164E 01	525.6	0.166E 01	532.6	0.165E 01
534.8	0.163E 01	537.8	0.158E 01	543.4	0.159E 01	551.6	0.158E 01	557.4	0.152E 01
560.0	0.152E 01	565.6	0.149E 01	573.3	0.149E 01	575.7	0.147E 01	580.1	0.149E 01
583.8	0.142E 01	587.2	0.138E 01	596.4	0.140E 01	599.0	0.142E 01	604.7	0.143E 01
611.7	0.136E 01	618.4	0.137E 01	628.9	0.136E 01	637.7	0.137E 01	652.9	0.126E 01
656.2	0.126E 01	660.9	0.132E 01	673.1	0.127E 01	680.6	0.127E 01	684.4	0.112E 01
688.6	0.111E 01	692.9	0.116E 01	699.2	0.119E 01	700.0	0.119E 01	711.2	0.109E 01
715.5	0.898E 00	724.7	0.896E 00	730.8	0.971E 00	742.0	0.105E 01		

STATION 21 EXP 1 PROF 14

MAXIMUM A LAMDA= 458.3 AVEC ECLAIREMENT SPECTRAL= 1.26922 WATT/M2/NM

ENTRE 401.2 NM ET 607.4 NM , ECLAIREMENT 159.019 WATT/M2 386.080E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.706E 00	402.7	0.742E 00	405.0	0.781E 00	406.5	0.907E 00	408.9	0.100E 01
412.9	0.106E 01	415.3	0.110E 01	419.3	0.112E 01	422.4	0.112E 01	425.6	0.108E 01
427.5	0.105E 01	430.4	0.105E 01	432.9	0.107E 01	435.2	0.112E 01	440.0	0.118E 01
444.2	0.123E 01	447.2	0.125E 01	448.6	0.125E 01	454.8	0.125E 01	458.3	0.127E 01
461.8	0.126E 01	467.8	0.122E 01	474.5	0.123E 01	478.9	0.122E 01	482.1	0.116E 01
485.4	0.110E 01	487.4	0.110E 01	490.3	0.110E 01	493.5	0.106E 01	498.7	0.973E 00
503.0	0.943E 00	509.5	0.792E 00	514.8	0.676E 00	518.3	0.661E 00	521.3	0.668E 00
530.3	0.643E 00	540.5	0.565E 00	549.5	0.484E 00	561.6	0.411E 00	570.4	0.350E 00
575.4	0.283E 00	578.1	0.272E 00	589.3	0.109E 00	598.2	0.419E-01	607.4	0.

STATION 21 EXP 1 PROF 18

MAXIMUM A LAMDA= 455.6 AVEC ECLAIREMENT SPECTRAL= 1.15316 WATT/M2/NM

ENTRE 400.7 NM ET 599.8 NM , ECLAIREMENT 137.798 WATT/M2 331.470E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.613E 00	402.2	0.675E 00	404.6	0.694E 00	406.3	0.822E 00	409.5	0.926E 00
413.0	0.986E 00	415.2	0.102E 01	419.4	0.103E 01	423.4	0.103E 01	426.5	0.994E 00
428.5	0.974E 00	431.1	0.965E 00	432.4	0.986E 00	435.2	0.103E 01	442.5	0.110E 01
447.7	0.114E 01	450.0	0.114E 01	455.3	0.115E 01	459.6	0.115E 01	462.7	0.115E 01
465.8	0.113E 01	469.8	0.112E 01	475.5	0.113E 01	478.2	0.112E 01	479.8	0.110E 01
482.6	0.103E 01	485.5	0.996E 00	488.3	0.993E 00	492.2	0.967E 00	494.7	0.920E 00
499.4	0.841E 00	501.9	0.814E 00	507.3	0.709E 00	512.3	0.586E 00	516.1	0.533E 00
517.9	0.512E 00	522.2	0.520E 00	529.7	0.507E 00	542.2	0.422E 00	553.4	0.337E 00
563.5	0.285E 00	576.6	0.182E 00	583.9	0.761E-01	590.6	0.334E-01	599.8	0.

STATION 21 EXP 1 PROF 25

MAXIMUM A LAMDA= 458.7 AVEC ECLAIREMENT SPECTRAL= 1.00451 WATT/M2/NM

ENTRE 401.7 NM ET 608.0 NM , ECLAIREMENT 114.656 WATT/M2 274.320E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.600E 00	404.2	0.615E 00	405.9	0.704E 00	408.6	0.795E 00	411.8	0.859E 00
414.5	0.886E 00	419.0	0.899E 00	422.2	0.901E 00	425.9	0.878E 00	427.2	0.855E 00
429.3	0.849E 00	430.9	0.854E 00	433.6	0.902E 00	437.7	0.942E 00	441.8	0.983E 00
445.7	0.994E 00	448.0	0.994E 00	454.3	0.991E 00	458.7	0.100E 01	460.9	0.100E 01
463.9	0.977E 00	468.8	0.968E 00	474.2	0.964E 00	477.6	0.961E 00	478.9	0.952E 00
481.6	0.904E 00	483.7	0.865E 00	486.2	0.845E 00	489.7	0.838E 00	493.2	0.808E 00
498.5	0.705E 00	502.2	0.673E 00	510.0	0.499E 00	515.2	0.410E 00	517.2	0.393E 00
523.0	0.393E 00	528.6	0.372E 00	541.3	0.298E 00	550.7	0.240E 00	553.1	0.238E 00
567.3	0.169E 00	571.4	0.147E 00	575.0	0.118E 00	579.0	0.104E 00	587.0	0.472E-01
608.0	0.								

STATION 21 EXP 1 PROF 37

MAXIMUM A LAMDA= 446.0 AVEC ECLAIREMENT SPECTRAL= 0.72142 WATT/M2/NM

ENTRE 400.6 NM ET 596.8 NM , ECLAIREMENT 74.967 WATT/M2 176.530E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.6	0.391E 00	402.9	0.416E 00	405.3	0.455E 00	407.9	0.532E 00	411.0	0.592E 00
415.1	0.634E 00	419.2	0.654E 00	422.6	0.656E 00	427.5	0.630E 00	430.4	0.623E 00
432.3	0.638E 00	434.3	0.664E 00	438.6	0.696E 00	443.2	0.718E 00	446.0	0.721E 00
449.4	0.713E 00	452.6	0.709E 00	455.6	0.709E 00	458.6	0.719E 00	462.5	0.718E 00
468.2	0.695E 00	473.9	0.688E 00	477.3	0.683E 00	478.3	0.682E 00	481.1	0.659E 00
484.3	0.602E 00	486.9	0.584E 00	491.1	0.567E 00	495.4	0.505E 00	499.4	0.437E 00
502.7	0.412E 00	506.5	0.330E 00	510.5	0.263E 00	515.1	0.200E 00	518.2	0.183E 00
522.5	0.181E 00	529.1	0.171E 00	542.6	0.115E 00	549.5	0.851E-01	568.5	0.505E-01
579.7	0.224E-01	596.8	0.						

STATION 21 EXP 1 PROF 47

MAXIMUM A LAMDA= 444.3 AVEC ECLAIREMENT SPECTRAL= 0.62465 WATT/M2/NM

ENTRE 401.1 NM ET 587.2 NM , ECLAIREMENT 60.921 WATT/M2 142.240E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.1	0.354E 00	403.4	0.364E 00	405.2	0.414E 00	407.5	0.468E 00	410.4	0.518E 00
413.9	0.551E 00	418.3	0.563E 00	421.3	0.567E 00	422.9	0.565E 00	427.0	0.545E 00
428.6	0.542E 00	430.7	0.547E 00	432.8	0.572E 00	437.3	0.602E 00	441.5	0.622E 00
444.3	0.625E 00	447.8	0.613E 00	451.3	0.605E 00	454.8	0.607E 00	458.0	0.617E 00
460.5	0.613E 00	467.7	0.590E 00	473.8	0.579E 00	477.0	0.575E 00	478.2	0.572E 00
481.2	0.548E 00	485.3	0.489E 00	490.2	0.460E 00	494.1	0.405E 00	497.6	0.353E 00
499.2	0.332E 00	501.7	0.318E 00	506.8	0.229E 00	510.8	0.171E 00	515.6	0.125E 00
520.2	0.115E 00	530.7	0.104E 00	543.0	0.618E-01	549.5	0.456E-01	553.9	0.425E-01
571.1	0.137E-01	587.2	0.						

STATION 21 EXP 1 PROF 57

MAXIMUM A LAMDA= 444.1 AVEC ECLAIREMENT SPECTRAL= 0.51460 WATT/M2/NM

ENTRE 401.2 NM ET 580.6 NM , ECLAIREMENT 48.004 WATT/M2 111.760E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.254E 00	404.1	0.275E 00	406.7	0.329E 00	409.9	0.380E 00	414.1	0.425E 00
418.3	0.452E 00	422.1	0.459E 00	423.7	0.461E 00	428.5	0.444E 00	430.2	0.444E 00
431.2	0.445E 00	433.6	0.470E 00	436.7	0.490E 00	441.2	0.511E 00	444.1	0.515E 00
450.3	0.494E 00	455.1	0.497E 00	458.6	0.502E 00	462.0	0.502E 00	466.6	0.488E 00
476.0	0.475E 00	478.5	0.470E 00	481.8	0.445E 00	484.3	0.417E 00	487.8	0.391E 00
491.5	0.363E 00	494.8	0.318E 00	498.4	0.262E 00	503.3	0.215E 00	505.6	0.174E 00
510.3	0.119E 00	514.9	0.849E-01	520.0	0.736E-01	529.6	0.633E-01	550.7	0.252E-01
563.8	0.124E-01	580.6	0.						

STATION 21 EXP 1 PROF 76

MAXIMUM A LAMDA= 441.8 AVEC ECLAIREMENT SPECTRAL= 0.26147 WATT/M2/NM

ENTRE 400.7 NM ET 570.4 NM , ECLAIREMENT 23.021 WATT/M2 53.340E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.114E 00	403.2	0.117E 00	404.9	0.135E 00	406.6	0.156E 00	409.7	0.178E 00
413.9	0.196E 00	418.1	0.213E 00	421.7	0.222E 00	423.7	0.223E 00	425.3	0.222E 00
427.5	0.219E 00	429.2	0.219E 00	430.7	0.221E 00	433.1	0.233E 00	435.5	0.246E 00
439.4	0.257E 00	441.8	0.261E 00	444.0	0.261E 00	448.4	0.250E 00	450.2	0.247E 00
453.2	0.248E 00	457.0	0.252E 00	458.1	0.254E 00	460.5	0.255E 00	471.3	0.249E 00
474.3	0.242E 00	478.6	0.236E 00	480.6	0.226E 00	484.1	0.202E 00	489.2	0.185E 00
491.7	0.169E 00	495.0	0.146E 00	497.0	0.122E 00	499.7	0.111E 00	502.5	0.102E 00
504.9	0.784E-01	509.8	0.465E-01	513.5	0.311E-01	517.9	0.246E-01	528.8	0.201E-01
547.3	0.628E-02	570.4	0.						

STATION 21 EXP 1 PROF 97

MAXIMUM A LAMDA= 466.7 AVEC ECLAIREMENT SPECTRAL= 0.12596 WATT/M2/NM

ENTRE 401.3 NM ET 558.9 NM , ECLAIREMENT 10.602 WATT/M2 24.638E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.3	0.411E-01	404.7	0.461E-01	407.0	0.583E-01	411.3	0.715E-01	415.3	0.819E-01
420.4	0.918E-01	423.8	0.975E-01	425.7	0.976E-01	428.2	0.981E-01	429.9	0.984E-01
432.2	0.101E 00	434.5	0.108E 00	437.3	0.115E 00	440.3	0.120E 00	442.8	0.124E 00
444.8	0.124E 00	448.8	0.119E 00	451.6	0.117E 00	453.2	0.118E 00	454.6	0.118E 00
457.7	0.123E 00	460.3	0.124E 00	463.3	0.125E 00	466.7	0.126E 00	472.3	0.125E 00
476.0	0.122E 00	479.0	0.120E 00	483.4	0.110E 00	487.5	0.979E-01	491.7	0.884E-01
495.6	0.690E-01	499.8	0.523E-01	503.6	0.446E-01	505.9	0.309E-01	510.2	0.170E-01
514.3	0.103E-01	519.2	0.831E-02	534.4	0.491E-02	543.7	0.239E-02	558.9	0.

STATION 21 EXP 1 PROF 115

MAXIMUM A LAMDA= 469.2 AVEC ECLAIREMENT SPECTRAL= 0.07524 WATT/M2/NM

ENTRE 401.4 NM ET 551.5 NM , ECLAIREMENT 5.766 WATT/M2 13.462E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.175E-01	404.7	0.195E-01	409.9	0.291E-01	414.4	0.351E-01	420.2	0.417E-01
424.1	0.458E-01	426.8	0.475E-01	428.9	0.479E-01	430.5	0.488E-01	433.6	0.551E-01
438.4	0.617E-01	441.8	0.653E-01	444.4	0.666E-01	445.5	0.665E-01	450.6	0.649E-01
452.4	0.653E-01	454.8	0.672E-01	458.7	0.709E-01	460.8	0.729E-01	462.9	0.743E-01
466.5	0.746E-01	469.2	0.752E-01	474.9	0.746E-01	478.8	0.738E-01	481.2	0.711E-01
485.1	0.643E-01	486.3	0.607E-01	490.7	0.559E-01	493.1	0.483E-01	495.5	0.407E-01
497.8	0.330E-01	499.3	0.295E-01	502.9	0.261E-01	506.2	0.169E-01	510.2	0.888E-02
514.1	0.504E-02	517.8	0.361E-02	529.5	0.256E-02	551.5	0.		

STATION 21 EXP 1 PROF 137

MAXIMUM A LAMDA= 471.6 AVEC ECLAIREMENT SPECTRAL= 0.03233 WATT/M2/NM

ENTRE 400.2 NM ET 549.6 NM , ECLAIREMENT 2.275 WATT/M2 5.334E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.2	0.427E-02	402.2	0.540E-02	404.8	0.576E-02	408.6	0.854E-02	413.8	0.111E-01
419.9	0.136E-01	424.8	0.161E-01	429.0	0.169E-01	431.4	0.177E-01	434.1	0.198E-01
436.4	0.219E-01	440.1	0.240E-01	443.8	0.252E-01	448.9	0.249E-01	451.8	0.251E-01
455.3	0.267E-01	457.6	0.287E-01	461.1	0.303E-01	464.0	0.313E-01	467.5	0.321E-01
470.7	0.323E-01	471.6	0.323E-01	474.8	0.322E-01	476.6	0.321E-01	478.6	0.320E-01
480.6	0.310E-01	483.5	0.285E-01	487.3	0.266E-01	489.9	0.245E-01	492.7	0.215E-01
495.8	0.175E-01	497.8	0.140E-01	499.4	0.124E-01	503.2	0.104E-01	505.2	0.702E-02
508.8	0.424E-02	513.2	0.220E-02	516.4	0.136E-02	530.2	0.938E-03	549.6	0.

STATION 22 EXP 1 PROF 0

MAXIMUM A LAMDA= 478.4 AVEC ECLAIREMENT SPECTRAL= 1.56641 WATT/M2/NM

ENTRE 400.9 NM ET 700.0 NM , ECLAIREMENT 375.769 WATT/M2 1037.900E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.738E 00	401.6	0.793E 00	404.3	0.830E 00	405.9	0.979E 00	408.6	0.112E 01
412.0	0.120E 01	414.4	0.124E 01	417.5	0.126E 01	421.7	0.126E 01	423.6	0.125E 01
427.3	0.119E 01	430.4	0.119E 01	431.6	0.121E 01	434.0	0.126E 01	439.4	0.136E 01
444.4	0.145E 01	447.6	0.150E 01	449.7	0.152E 01	450.7	0.153E 01	455.7	0.155E 01
459.0	0.156E 01	462.1	0.155E 01	467.6	0.152E 01	470.3	0.153E 01	475.9	0.155E 01
478.4	0.157E 01	480.5	0.155E 01	482.2	0.150E 01	485.1	0.145E 01	487.2	0.145E 01
489.9	0.148E 01	493.1	0.150E 01	494.7	0.148E 01	498.9	0.145E 01	504.5	0.147E 01
507.4	0.146E 01	509.8	0.144E 01	515.6	0.135E 01	518.0	0.135E 01	520.6	0.137E 01
521.4	0.139E 01	528.5	0.140E 01	534.4	0.139E 01	541.4	0.134E 01	547.5	0.136E 01
551.7	0.134E 01	555.7	0.128E 01	562.8	0.128E 01	570.4	0.127E 01	575.4	0.124E 01
580.3	0.126E 01	585.6	0.118E 01	592.7	0.118E 01	599.3	0.120E 01	606.8	0.119E 01
612.0	0.116E 01	634.4	0.115E 01	641.9	0.108E 01	651.4	0.926E 00	654.5	0.945E 00
659.1	0.104E 01	663.0	0.112E 01	671.8	0.110E 01	680.4	0.106E 01	683.0	0.960E 00
688.7	0.915E 00	698.2	0.992E 00	700.0	0.992E 00	714.1	0.825E 00	725.7	0.796E 00
731.4	0.902E 00	742.0	0.904E 00						

STATION 22 EXP 1 PROF 19

MAXIMUM A LAMDA= 460.7 AVEC ECLAIREMENT SPECTRAL= 1.14458 WATT/M2/NM

ENTRE 400.2 NM ET 604.9 NM , ECLAIREMENT 137.120 WATT/M2 331.700E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.2	0.494E 00	402.8	0.610E 00	404.9	0.633E 00	407.6	0.754E 00	410.8	0.871E 00
415.5	0.941E 00	419.7	0.956E 00	422.3	0.961E 00	424.1	0.955E 00	429.0	0.916E 00
431.3	0.909E 00	433.7	0.952E 00	436.5	0.100E 01	438.9	0.104E 01	443.3	0.107E 01
446.6	0.110E 01	448.7	0.111E 01	452.2	0.112E 01	455.9	0.112E 01	457.7	0.114E 01
460.7	0.114E 01	463.3	0.114E 01	468.3	0.110E 01	473.4	0.110E 01	478.2	0.109E 01
479.8	0.109E 01	481.1	0.108E 01	484.3	0.102E 01	486.8	0.982E 00	488.4	0.980E 00
490.9	0.980E 00	494.3	0.939E 00	499.1	0.862E 00	500.8	0.845E 00	502.5	0.837E 00
508.8	0.713E 00	513.9	0.587E 00	516.1	0.555E 00	518.4	0.535E 00	525.8	0.538E 00
530.4	0.520E 00	542.6	0.446E 00	557.4	0.334E 00	570.6	0.261E 00	581.9	0.152E 00
589.6	0.675E-01	604.9	0.						

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STATION 22 EXP 1 PROF 36

MAXIMUM A LAMDA= 459.7 AVEC ECLAIREMENT SPECTRAL= 0.75596 WATT/M2/NM

ENTRE 401.9 NM ET 592.0 NM , ECLAIREMENT 79.120 WATT/M2 187.250E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.409E 00	403.6	0.422E 00	406.7	0.504E 00	409.9	0.586E 00	413.6	0.630E 00
416.1	0.652E 00	420.4	0.665E 00	423.6	0.667E 00	428.2	0.638E 00	429.5	0.633E 00
431.1	0.636E 00	433.8	0.672E 00	439.4	0.714E 00	445.0	0.745E 00	447.7	0.745E 00
452.6	0.739E 00	455.0	0.743E 00	459.7	0.756E 00	462.1	0.751E 00	469.0	0.730E 00
477.0	0.723E 00	479.3	0.714E 00	483.9	0.653E 00	485.6	0.630E 00	489.7	0.618E 00
494.2	0.565E 00	498.2	0.500E 00	500.6	0.476E 00	502.9	0.457E 00	507.1	0.376E 00
512.4	0.271E 00	515.7	0.224E 00	518.7	0.213E 00	529.7	0.199E 00	543.3	0.147E 00
549.3	0.114E 00	567.2	0.658E-01	575.0	0.386E-01	592.0	0.		

STATION 22 EXP 1 PROF 45

MAXIMUM A LAMDA= 460.4 AVEC ECLAIREMENT SPECTRAL= 0.62213 WATT/M2/NM

ENTRE 401.5 NM ET 591.0 NM , ECLAIREMENT 62.976 WATT/M2 148.730E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.285E 00	404.1	0.310E 00	405.6	0.348E 00	408.6	0.410E 00	412.1	0.457E 00
415.6	0.498E 00	422.2	0.520E 00	424.8	0.529E 00	426.6	0.524E 00	429.2	0.513E 00
432.2	0.511E 00	434.3	0.533E 00	436.6	0.562E 00	441.8	0.595E 00	445.1	0.613E 00
448.0	0.612E 00	452.2	0.607E 00	455.1	0.611E 00	460.4	0.622E 00	463.9	0.622E 00
470.6	0.610E 00	476.2	0.607E 00	480.1	0.600E 00	482.8	0.572E 00	485.7	0.536E 00
486.9	0.524E 00	491.3	0.507E 00	496.7	0.432E 00	501.4	0.381E 00	503.5	0.362E 00
508.5	0.270E 00	512.6	0.194E 00	515.3	0.161E 00	520.1	0.147E 00	530.5	0.136E 00
552.6	0.672E-01	568.6	0.373E-01	591.0	0.				

STATION 22 EXP 1 PROF 76

MAXIMUM A LAMDA= 444.9 AVEC ECLAIREMENT SPECTRAL= 0.33695 WATT/M2/NM

ENTRE 401.3 NM ET 567.5 NM , ECLAIREMENT 30.229 WATT/M2 70.192E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.3	0.153E 00	403.7	0.162E 00	406.2	0.195E 00	410.5	0.231E 00	413.9	0.260E 00
419.0	0.278E 00	423.5	0.291E 00	425.0	0.290E 00	428.1	0.284E 00	430.4	0.284E 00
433.6	0.297E 00	436.2	0.314E 00	440.6	0.330E 00	444.9	0.337E 00	447.4	0.334E 00
452.6	0.323E 00	455.8	0.322E 00	458.9	0.328E 00	461.8	0.331E 00	464.2	0.330E 00
476.6	0.314E 00	478.7	0.311E 00	482.6	0.286E 00	486.5	0.261E 00	490.9	0.241E 00
495.0	0.198E 00	499.8	0.153E 00	503.8	0.139E 00	507.5	0.964E-01	511.5	0.586E-01
515.2	0.374E-01	523.9	0.327E-01	529.4	0.286E-01	543.7	0.125E-01	550.6	0.573E-02
567.5	0.								

STATION 22 EXP 1 PROF 91

MAXIMUM A LAMDA= 441.2 AVEC ECLAIREMENT SPECTRAL= 0.20592 WATT/M2/NM

ENTRE 400.8 NM ET 562.9 NM , ECLAIREMENT 17.695 WATT/M2 40.874E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.929E-01	403.5	0.964E-01	405.6	0.113E 00	409.0	0.131E 00	412.0	0.155E 00
416.5	0.169E 00	421.6	0.177E 00	422.8	0.180E 00	425.1	0.180E 00	428.7	0.176E 00
429.8	0.176E 00	432.6	0.182E 00	434.3	0.192E 00	439.0	0.202E 00	441.2	0.206E 00
443.1	0.206E 00	445.6	0.201E 00	451.3	0.190E 00	453.7	0.190E 00	454.8	0.191E 00
458.4	0.197E 00	462.0	0.198E 00	472.8	0.188E 00	476.4	0.184E 00	478.5	0.182E 00
482.9	0.160E 00	486.2	0.147E 00	489.1	0.138E 00	494.2	0.111E 00	499.0	0.780E-01
501.8	0.712E-01	509.4	0.309E-01	513.5	0.175E-01	519.5	0.146E-01	532.8	0.107E-01
562.9	0.								

STATION 22 EXP 1 PROF 106

MAXIMUM A LAMDA= 461.9 AVEC ECLAIREMENT SPECTRAL= 0.13015 WATT/M2/NM

ENTRE 431.4 NM ET 555.9 NM , ECLAIREMENT 10.743 WATT/M2 24.931E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.428E-01	404.9	0.476E-01	409.9	0.698E-01	416.0	0.862E-01	421.9	0.964E-01
425.0	0.100E 00	429.1	0.109E 00	432.4	0.104E 00	434.9	0.112E 00	439.2	0.121E 00
443.4	0.127E 00	446.3	0.127E 00	451.5	0.121E 00	453.9	0.121E 00	456.0	0.123E 00
459.1	0.128E 00	461.9	0.130E 00	473.2	0.130E 00	475.2	0.127E 00	478.9	0.124E 00
484.1	0.108E 00	487.4	0.102E 00	490.1	0.928E-01	494.7	0.686E-01	498.8	0.515E-01
502.5	0.449E-01	505.3	0.295E-01	511.6	0.129E-01	516.3	0.742E-02	523.6	0.521E-02
531.6	0.469E-02	555.9	0.						

STATION 22 EXP 1 PROF 127

MAXIMUM A LAMDA= 473.3 AVEC ECLAIREMENT SPECTRAL= 0.06640 WATT/M2/NM

ENTRE 400.0 NM ET 553.6 NM , ECLAIREMENT 5.099 WATT/M2 11.877E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.136E-01	402.5	0.160E-01	403.8	0.171E-01	406.3	0.217E-01	409.2	0.280E-01
415.9	0.341E-01	421.7	0.399E-01	425.2	0.424E-01	427.5	0.432E-01	429.2	0.434E-01
431.5	0.441E-01	434.6	0.483E-01	437.1	0.536E-01	440.8	0.572E-01	443.4	0.594E-01
446.3	0.588E-01	450.7	0.568E-01	454.4	0.574E-01	456.9	0.592E-01	460.0	0.628E-01
463.3	0.649E-01	468.9	0.658E-01	473.3	0.664E-01	477.5	0.647E-01	481.1	0.639E-01
483.0	0.597E-01	486.1	0.546E-01	491.1	0.478E-01	494.6	0.378E-01	498.2	0.282E-01
500.4	0.240E-01	503.3	0.207E-01	506.2	0.113E-01	511.6	0.485E-02	516.7	0.305E-02
553.6	0.								

STATION 23 EXP 1 PROF 0

MAXIMUM A LAMDA= 479.6 AVEC ECLAIREMENT SPECTRAL= 1.71006 WATT/M2/NM

ENTRE 401.5 NM ET 700.0 NM , ECLAIREMENT 398.275 WATT/M2 1105.800E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.744E 00	404.5	0.788E 00	407.0	0.934E 00	409.9	0.107E 01	413.4	0.115E 01
414.5	0.120E 01	419.1	0.121E 01	424.1	0.122E 01	426.6	0.122E 01	428.7	0.119E 01
431.7	0.119E 01	433.6	0.121E 01	437.4	0.130E 01	444.3	0.146E 01	448.8	0.155E 01
452.1	0.162E 01	457.0	0.165E 01	461.6	0.167E 01	463.9	0.167E 01	469.2	0.165E 01
471.8	0.164E 01	476.6	0.169E 01	479.6	0.171E 01	481.6	0.170E 01	485.0	0.160E 01
486.9	0.159E 01	488.6	0.159E 01	491.0	0.162E 01	495.1	0.162E 01	499.4	0.159E 01
509.2	0.158E 01	514.2	0.150E 01	517.2	0.144E 01	519.9	0.146E 01	522.3	0.147E 01
532.5	0.144E 01	537.8	0.140E 01	543.1	0.135E 01	553.6	0.135E 01	556.2	0.132E 01
566.5	0.130E 01	575.8	0.130E 01	579.1	0.133E 01	585.1	0.125E 01	588.3	0.123E 01
604.8	0.132E 01	610.9	0.128E 01	619.9	0.127E 01	629.9	0.126E 01	638.3	0.126E 01
651.9	0.119E 01	655.8	0.116E 01	664.2	0.123E 01	680.6	0.116E 01	684.2	0.100E 01
700.0	0.103E 01	713.2	0.785E 00	724.9	0.735E 00	733.7	0.799E 00	742.0	0.790E 00

STATION 23 EXP 1 PROF 38

MAXIMUM A LAMDA= 463.9 AVEC ECLAIREMENT SPECTRAL= 0.77142 WATT/M2/NM

ENTRE 400.0 NM ET 590.7 NM , ECLAIREMENT 81.741 WATT/M2 193.800E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.346E 00	401.5	0.384E 00	404.6	0.413E 00	406.9	0.501E 00	410.7	0.570E 00
414.9	0.614E 00	419.5	0.637E 00	423.1	0.646E 00	425.8	0.641E 00	428.7	0.628E 00
431.1	0.622E 00	432.2	0.630E 00	435.1	0.670E 00	441.8	0.728E 00	446.8	0.748E 00
450.1	0.754E 00	454.9	0.757E 00	460.5	0.771E 00	463.9	0.771E 00	469.6	0.764E 00
475.6	0.764E 00	480.2	0.756E 00	482.0	0.740E 00	486.1	0.674E 00	491.1	0.652E 00
494.0	0.610E 00	498.1	0.540E 00	500.0	0.515E 00	503.8	0.474E 00	508.9	0.359E 00
513.1	0.265E 00	516.6	0.238E 00	520.0	0.231E 00	529.4	0.215E 00	536.8	0.187E 00
549.7	0.121E 00	552.5	0.110E 00	569.4	0.594E-01	590.7	0.		

STATION 23 EXP 1 PROF 57

MAXIMUM A LAMDA= 463.3 AVEC ECLAIREMENT SPECTRAL= 0.47114 WATT/M2/NM

ENTRE 400.0 NM ET 583.4 NM , ECLAIREMENT 44.560 WATT/M2 104.880E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.0	0.179E 00	402.3	0.194E 00	404.0	0.204E 00	406.1	0.247E 00	409.9	0.286E 00
415.1	0.326E 00	419.6	0.350E 00	424.2	0.363E 00	429.0	0.359E 00	429.8	0.359E 00
432.8	0.366E 00	435.2	0.394E 00	458.7	0.465E 00	461.3	0.470E 00	463.3	0.471E 00
471.3	0.465E 00	478.0	0.465E 00	479.7	0.463E 00	482.2	0.449E 00	485.4	0.413E 00
487.5	0.398E 00	490.5	0.384E 00	494.6	0.349E 00	498.2	0.297E 00	500.3	0.274E 00
503.2	0.259E 00	506.1	0.206E 00	511.0	0.146E 00	516.5	0.966E-01	524.7	0.876E-01
531.7	0.773E-01	544.2	0.495E-01	553.7	0.292E-01	569.1	0.895E-02	583.4	0.

STATION 23 EXP 1 PROF 77

MAXIMUM A LAMDA= 475.0 AVEC ECLAIREMENT SPECTRAL= 0.25462 WATT/M2/NM

ENTRE 400.7 NM ET 576.2 NM , ECLAIREMENT 21.593 WATT/M2 50.730E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.7	0.733E-01	404.4	0.807E-01	407.8	0.107E 00	411.5	0.127E 00	416.3	0.145E 00
421.5	0.159E 00	424.1	0.164E 00	426.0	0.165E 00	428.9	0.167E 00	431.3	0.176E 00
433.9	0.188E 00	437.6	0.204E 00	441.6	0.219E 00	444.8	0.226E 00	447.4	0.226E 00
452.9	0.228E 00	455.8	0.234E 00	460.5	0.246E 00	462.6	0.249E 00	468.8	0.251E 00
475.0	0.255E 00	480.1	0.252E 00	482.8	0.238E 00	486.6	0.219E 00	489.8	0.211E 00
493.0	0.192E 00	496.2	0.161E 00	499.5	0.135E 00	501.9	0.127E 00	504.7	0.106E 00
507.5	0.769E-01	511.9	0.494E-01	516.1	0.336E-01	525.6	0.288E-01	529.3	0.288E-01
544.1	0.135E-01	550.1	0.815E-02	576.2	0.				

STATION 23 EXP 1 PROF 97

MAXIMUM A LAMDA= 480.4 AVEC ECLAIREMENT SPECTRAL= 0.12450 WATT/M2/NM

ENTRE 400.8 NM ET 559.8 NM , ECLAIREMENT 9.363 WATT/M2 22.116E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.223E-01	404.0	0.259E-01	407.2	0.342E-01	412.8	0.432E-01	419.0	0.532E-01
424.0	0.603E-01	429.4	0.624E-01	433.3	0.706E-01	436.5	0.793E-01	441.2	0.900E-01
445.1	0.949E-01	450.3	0.977E-01	453.8	0.101E 00	458.0	0.109E 00	460.7	0.114E 00
463.4	0.117E 00	469.9	0.120E 00	472.0	0.123E 00	477.9	0.124E 00	480.4	0.124E 00
482.3	0.121E 00	486.8	0.110E 00	489.5	0.106E 00	492.4	0.951E-01	496.6	0.772E-01
499.6	0.647E-01	501.7	0.601E-01	504.5	0.467E-01	507.9	0.312E-01	513.7	0.169E-01
516.7	0.136E-01	529.1	0.118E-01	536.7	0.809E-02	559.8	0.		

STATION 23 EXP 1 PROF 114

MAXIMUM A LAMDA= 481.8 AVEC ECLAIREMENT SPECTRAL= 0.05541 WATT/M2/NM

ENTRE 400.2 NM ET 574.3 NM , ECLAIREMENT 3.812 WATT/M2 9.063E14 QUANTA/SEC/CM2

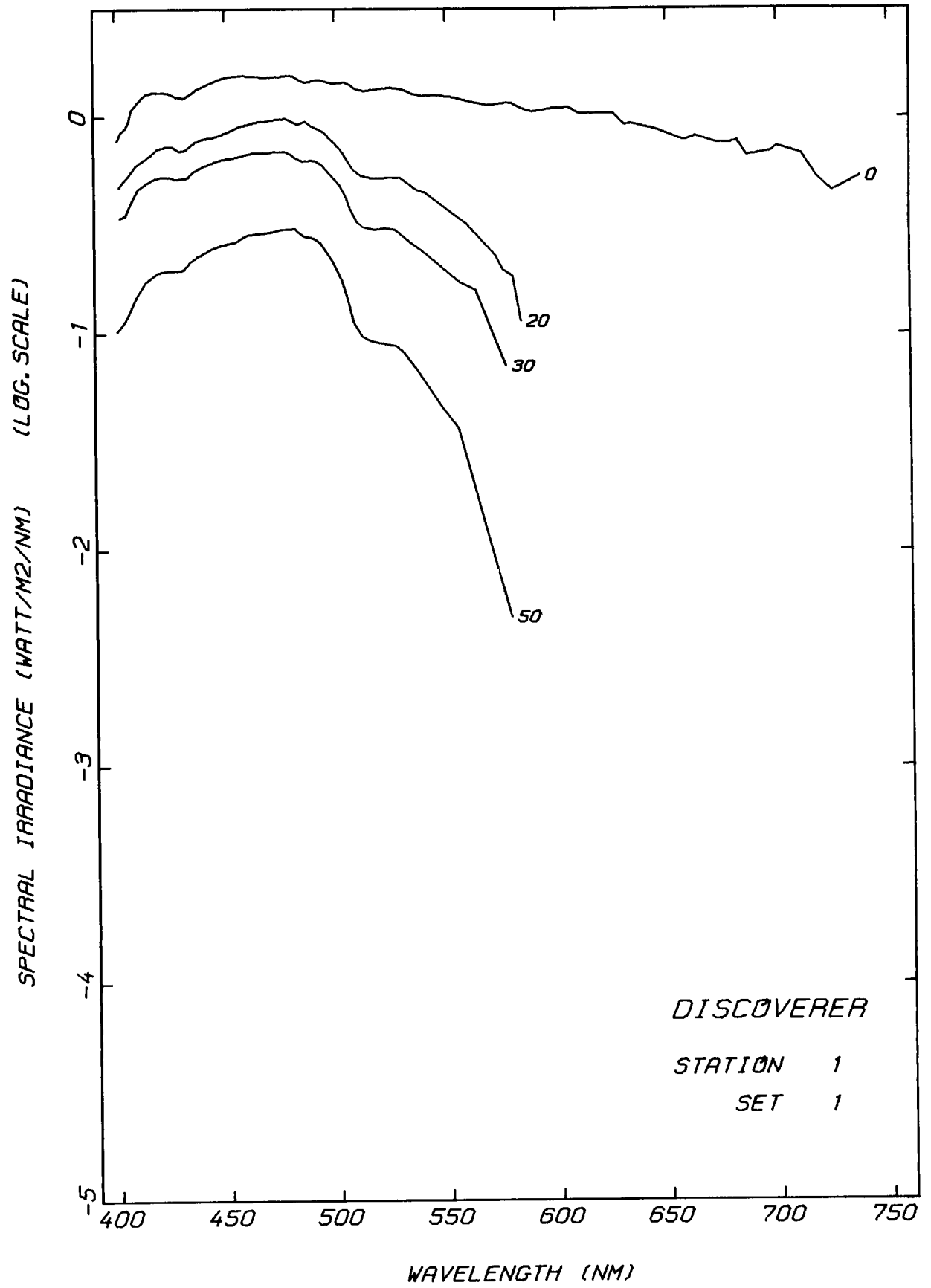
LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.2	0.676E-02	404.0	0.743E-02	407.6	0.102E-01	416.4	0.147E-01	421.4	0.186E-01
425.7	0.207E-01	429.8	0.215E-01	432.2	0.240E-01	436.8	0.294E-01	443.9	0.342E-01
449.6	0.377E-01	454.1	0.396E-01	457.1	0.432E-01	461.9	0.475E-01	467.6	0.512E-01
475.2	0.542E-01	479.6	0.552E-01	481.8	0.554E-01	483.6	0.536E-01	486.5	0.513E-01
490.8	0.494E-01	494.8	0.438E-01	497.1	0.357E-01	500.5	0.300E-01	502.4	0.280E-01
505.0	0.218E-01	507.2	0.166E-01	510.3	0.104E-01	514.7	0.604E-02	518.5	0.477E-02
525.6	0.438E-02	529.8	0.416E-02	541.7	0.150E-02	553.4	0.665E-03	574.3	0.

STATION 23 EXP 1 PROF 143

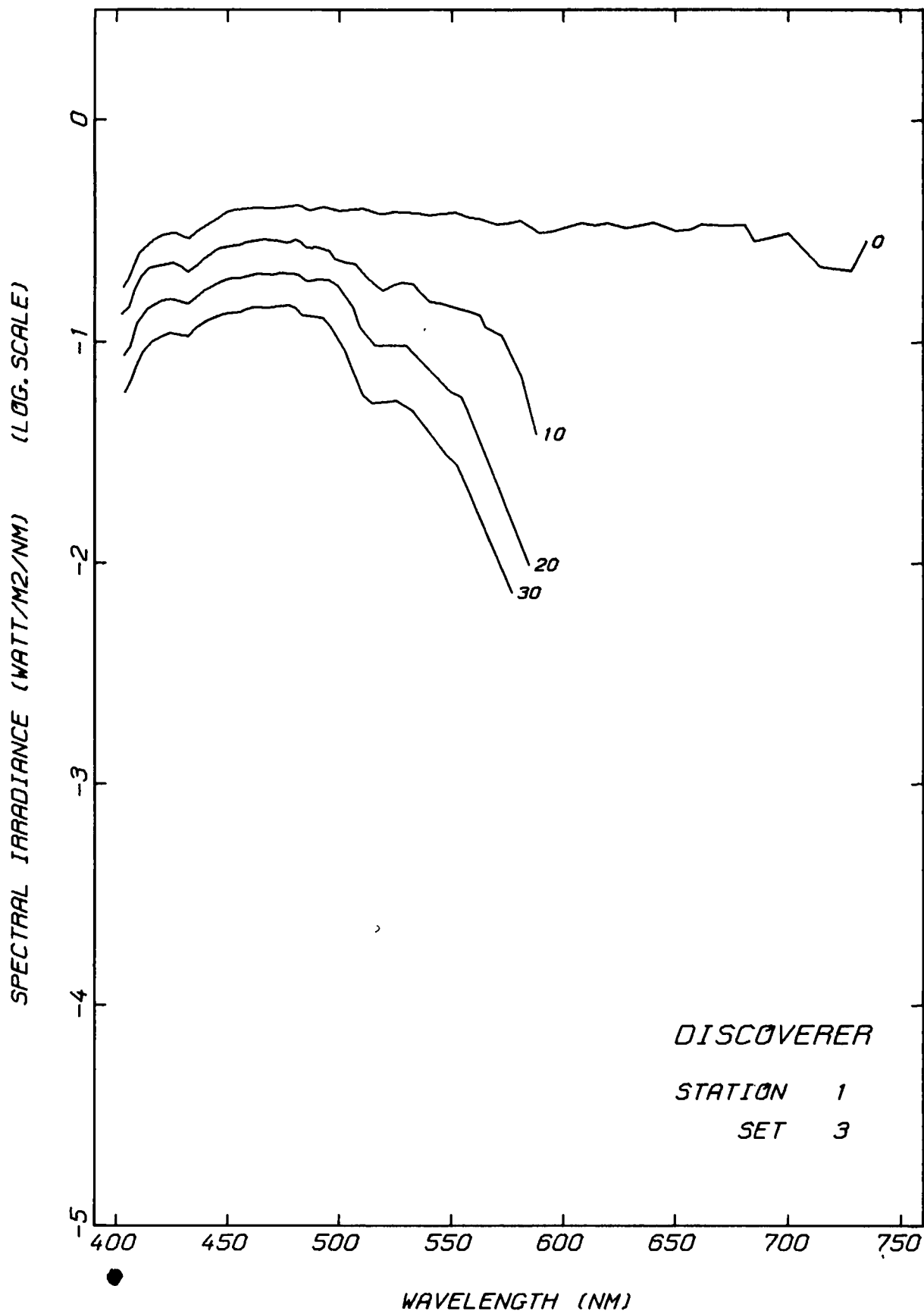
MAXIMUM A LAMDA= 480.3 AVEC ECLAIREMENT SPECTRAL= 0.01448 WATT/M2/NM

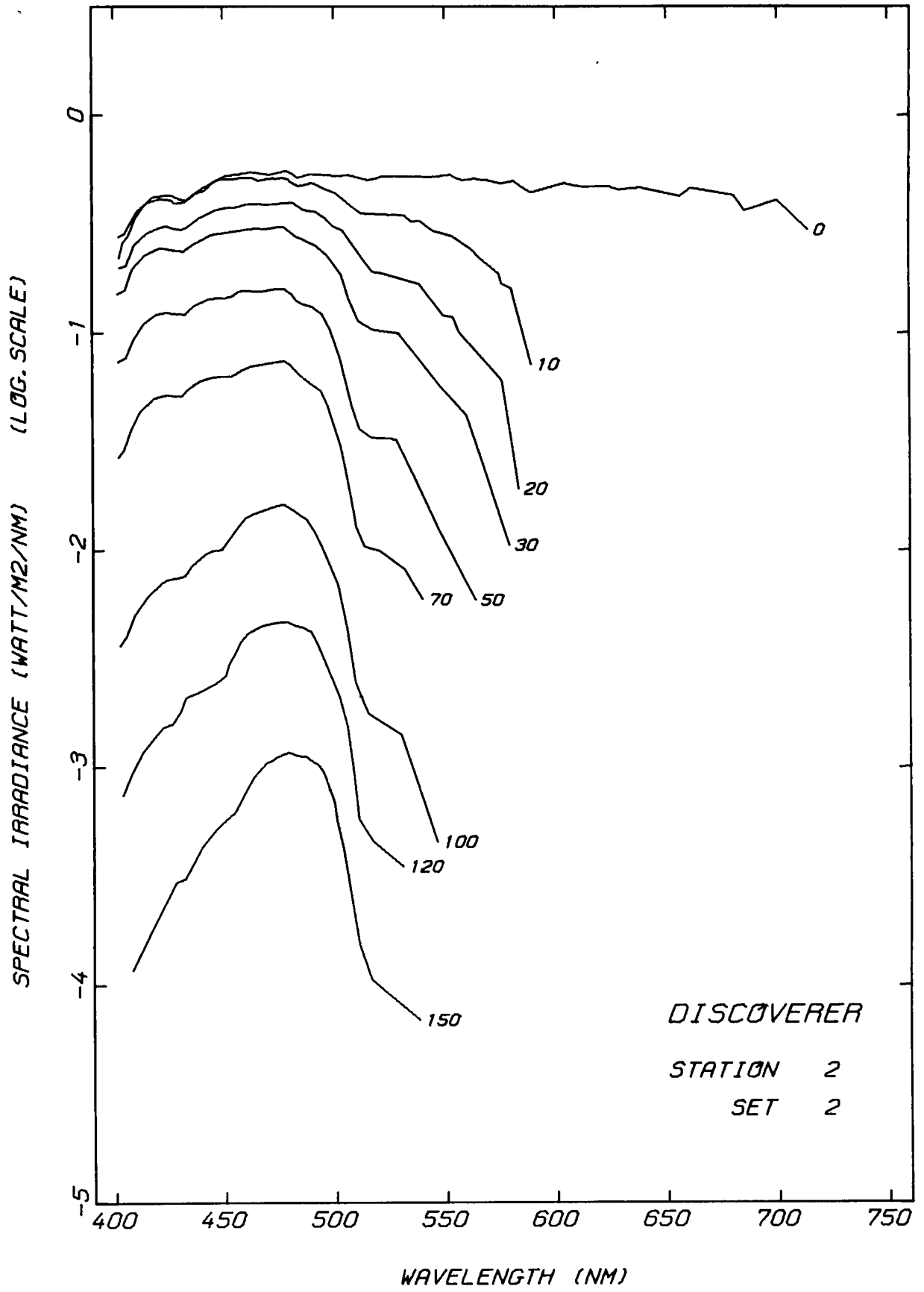
ENTRE 433.9 NM ET 550.5 NM , ECLAIREMENT 0.896 WATT/M2 2.143E14 QUANTA/SEC/CM2

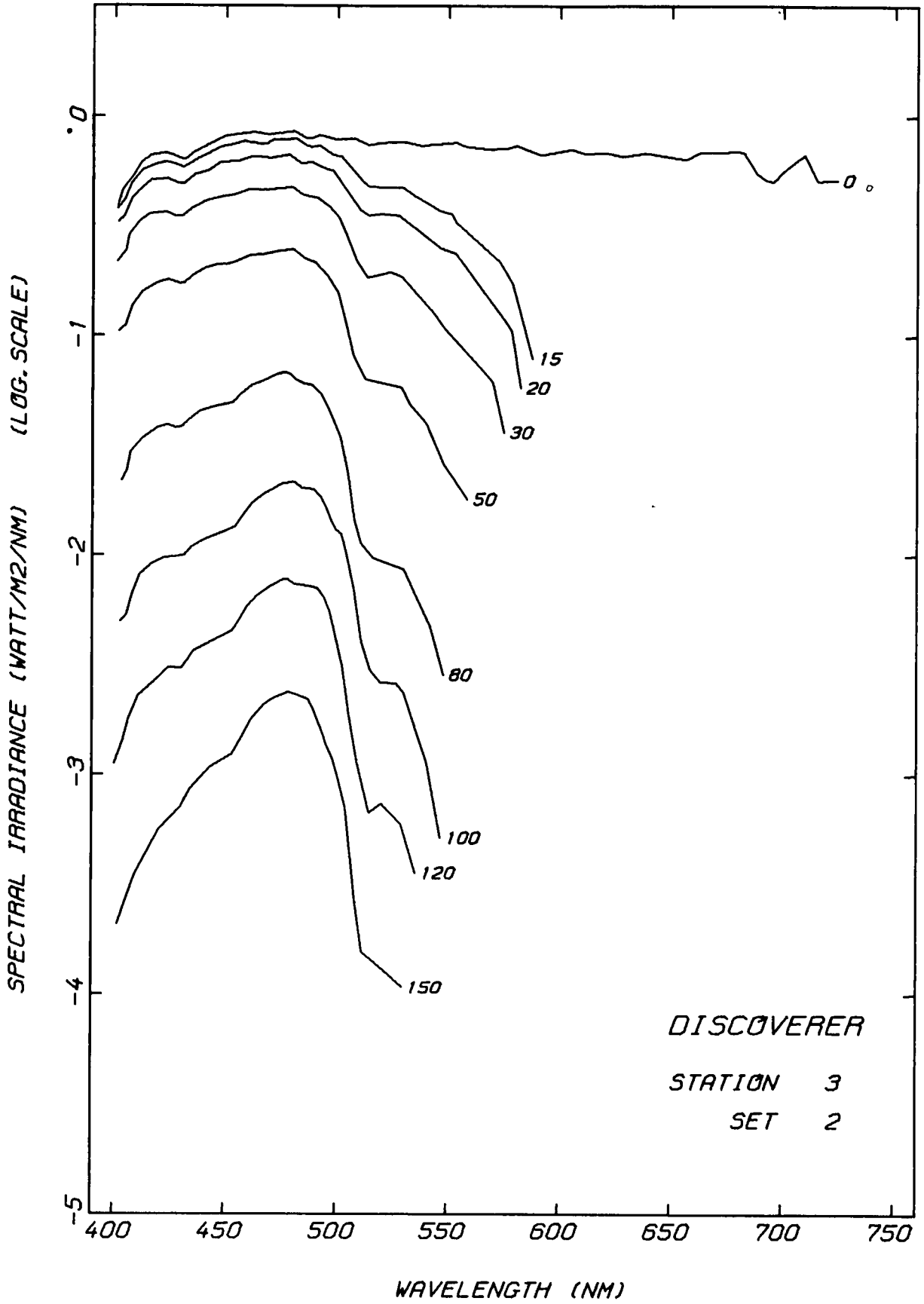
LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.9	0.970E-03	412.9	0.197E-02	421.6	0.317E-02	424.8	0.360E-02	428.9	0.387E-02
433.5	0.517E-02	440.8	0.680E-02	445.4	0.769E-02	449.2	0.827E-02	453.9	0.896E-02
458.4	0.107E-01	462.6	0.122E-01	466.5	0.131E-01	471.8	0.139E-01	476.9	0.144E-01
479.2	0.143E-01	480.3	0.145E-01	482.1	0.144E-01	485.5	0.139E-01	488.9	0.137E-01
492.0	0.131E-01	495.7	0.109E-01	498.2	0.919E-02	501.6	0.772E-02	502.5	0.733E-02
505.9	0.517E-02	509.0	0.298E-02	513.7	0.133E-02	518.1	0.840E-03	528.8	0.608E-03
538.1	0.391E-03	550.5	0.						

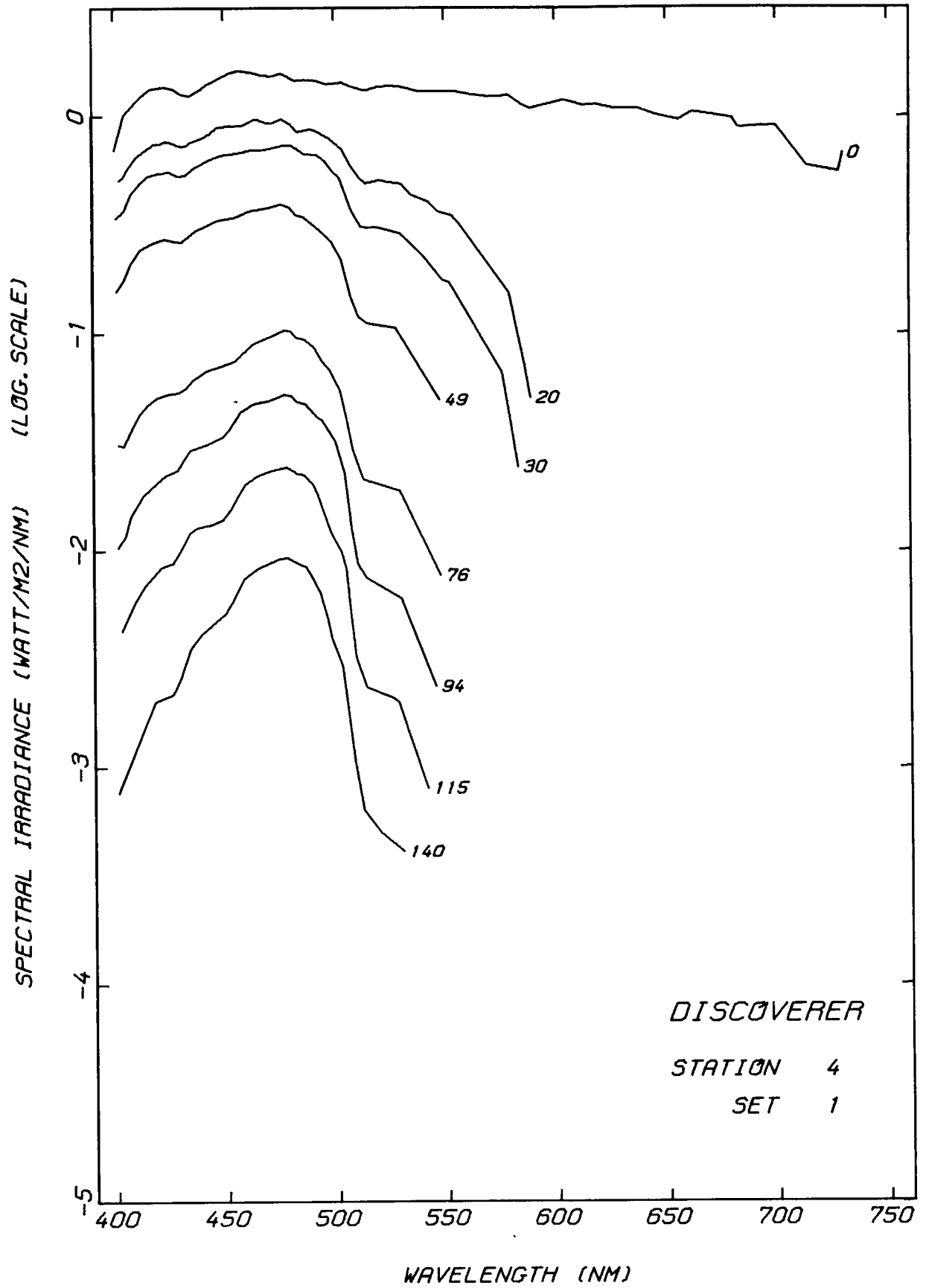


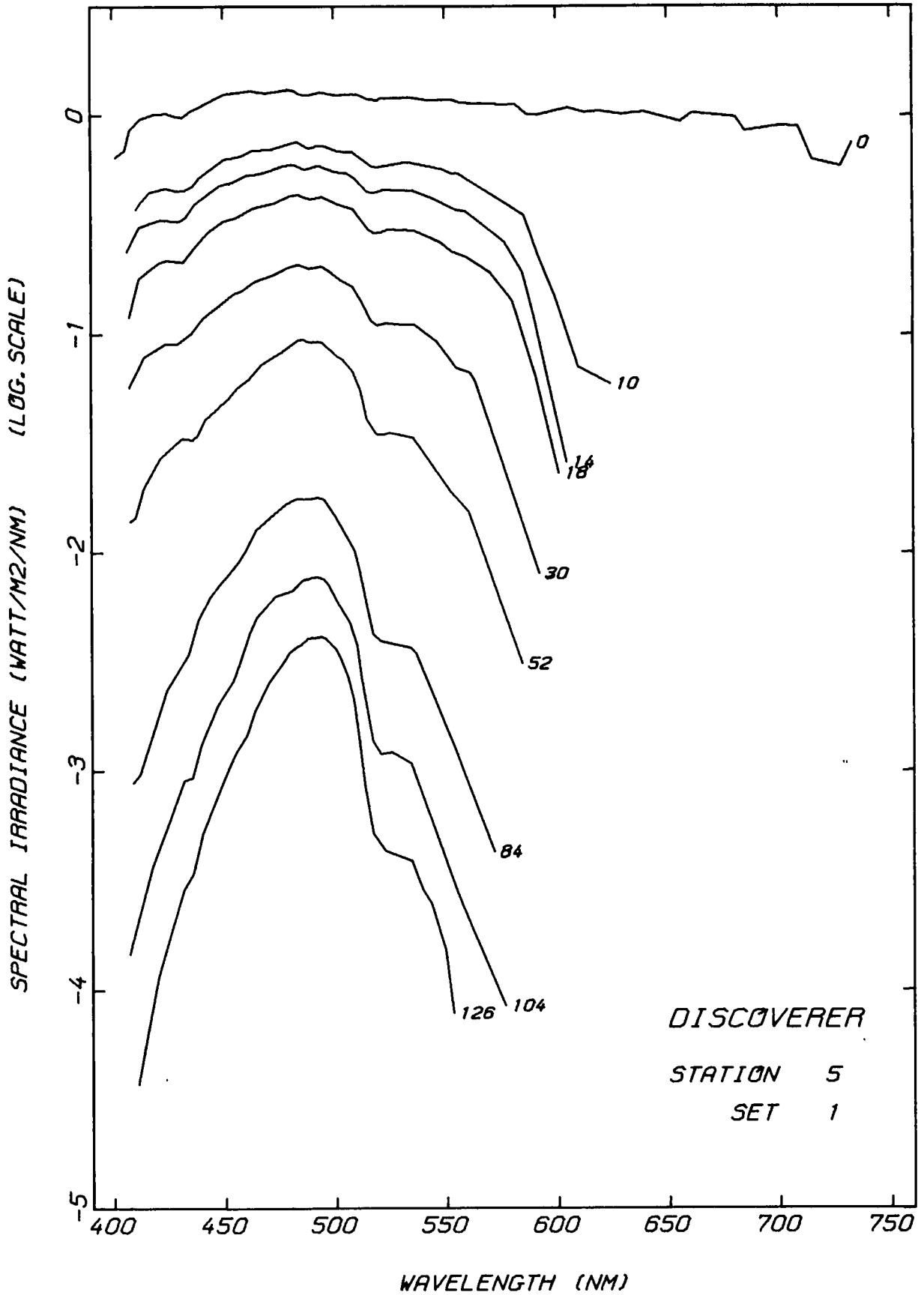


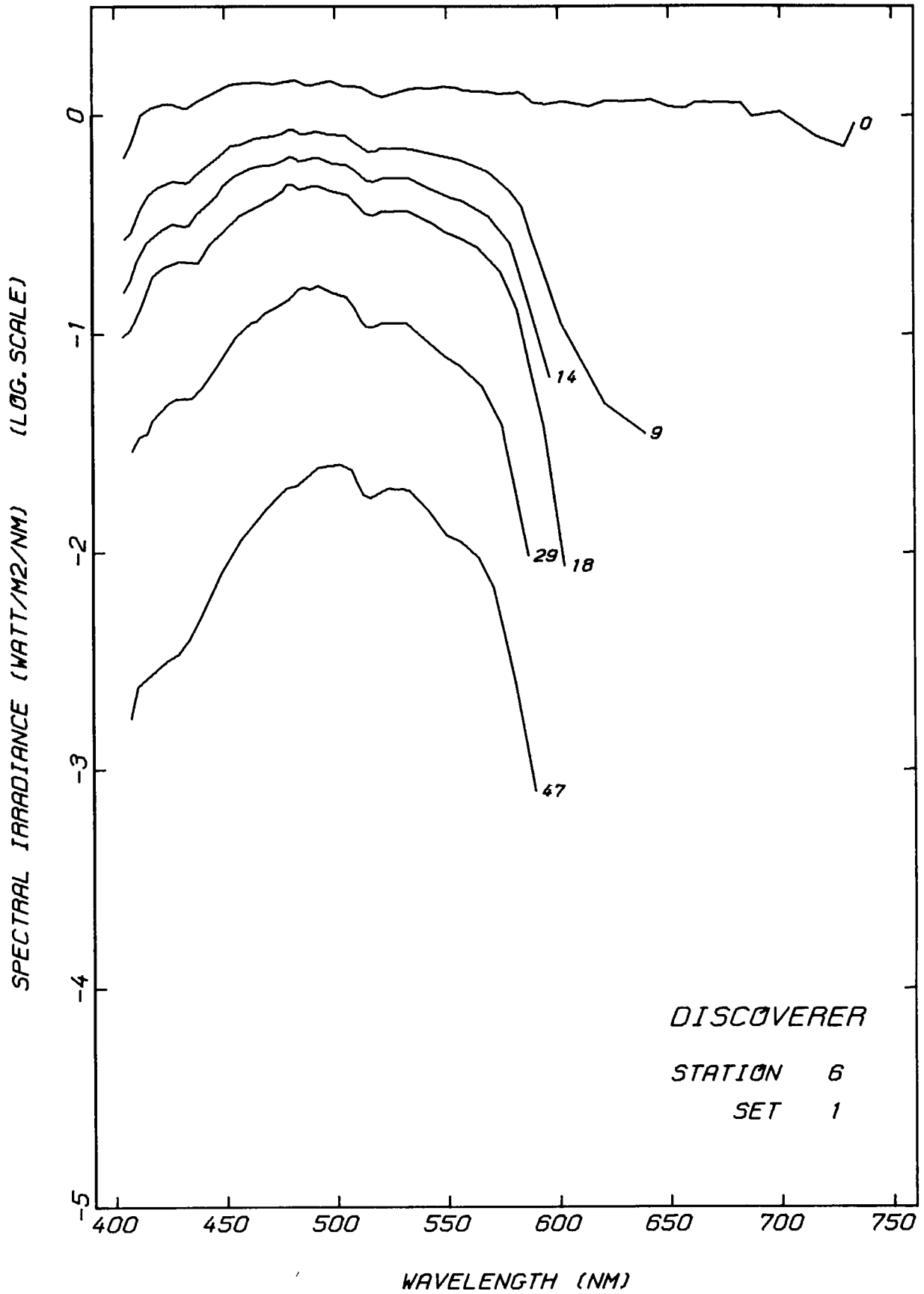


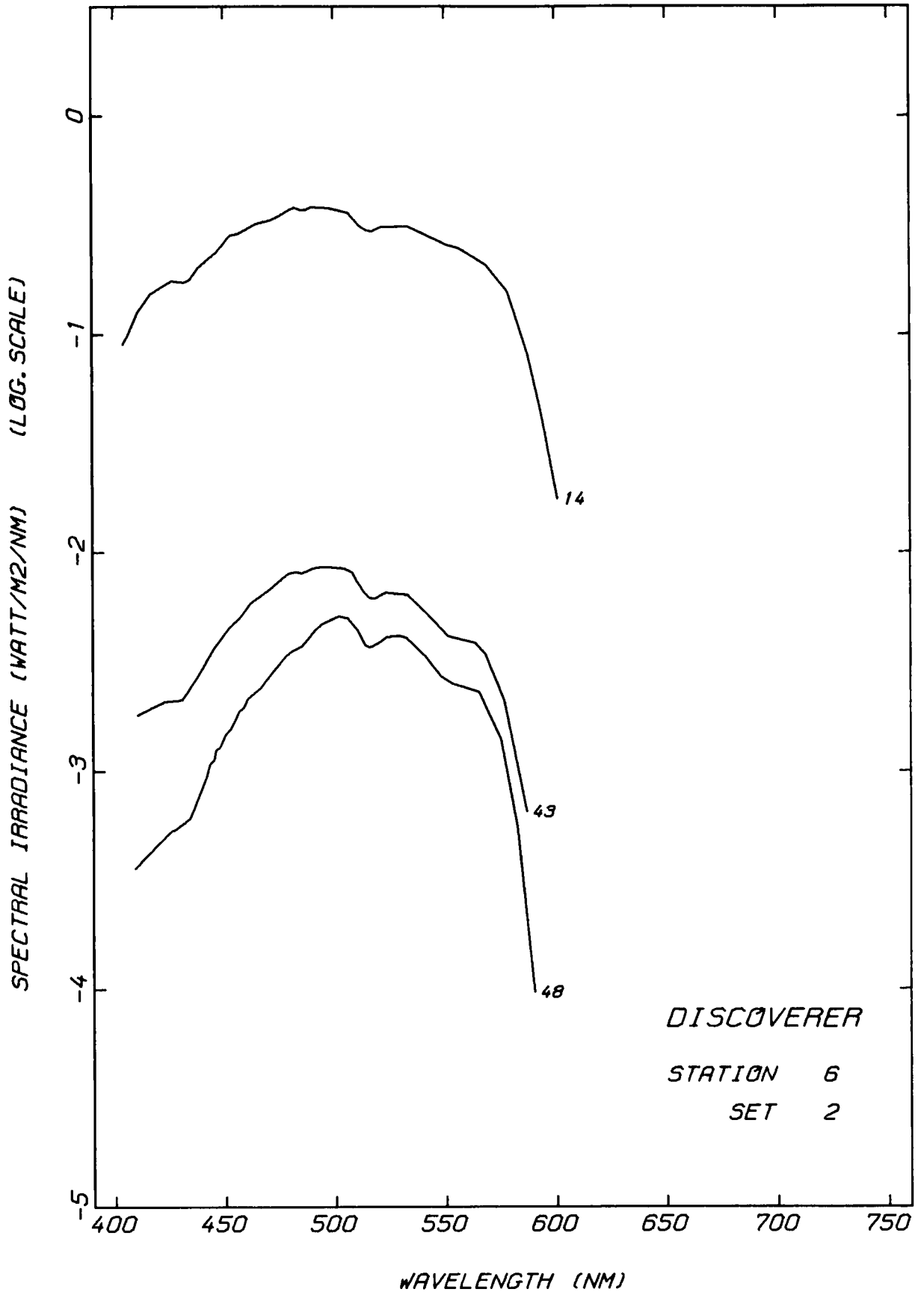










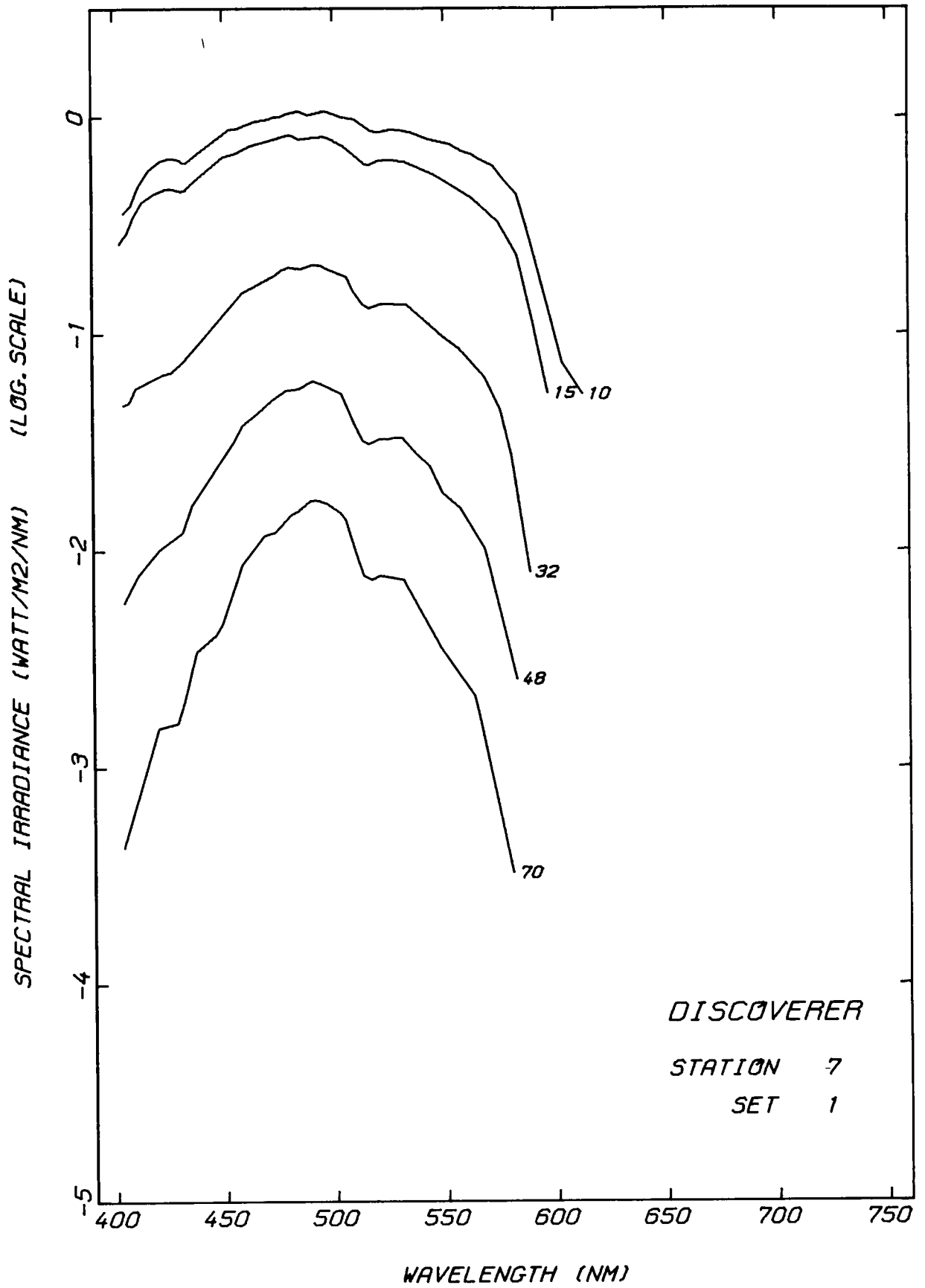


DISCOVERER

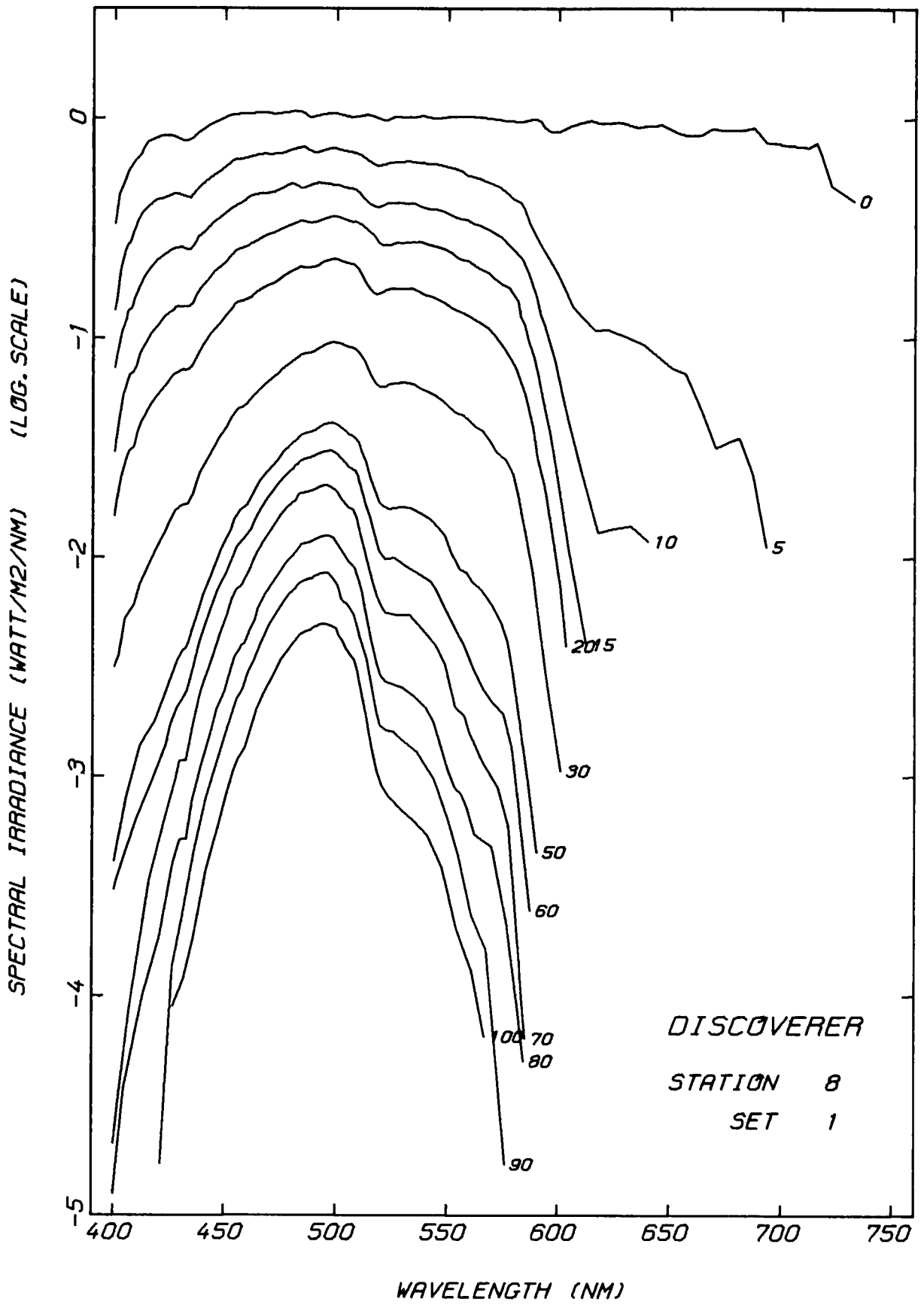
STATION 6

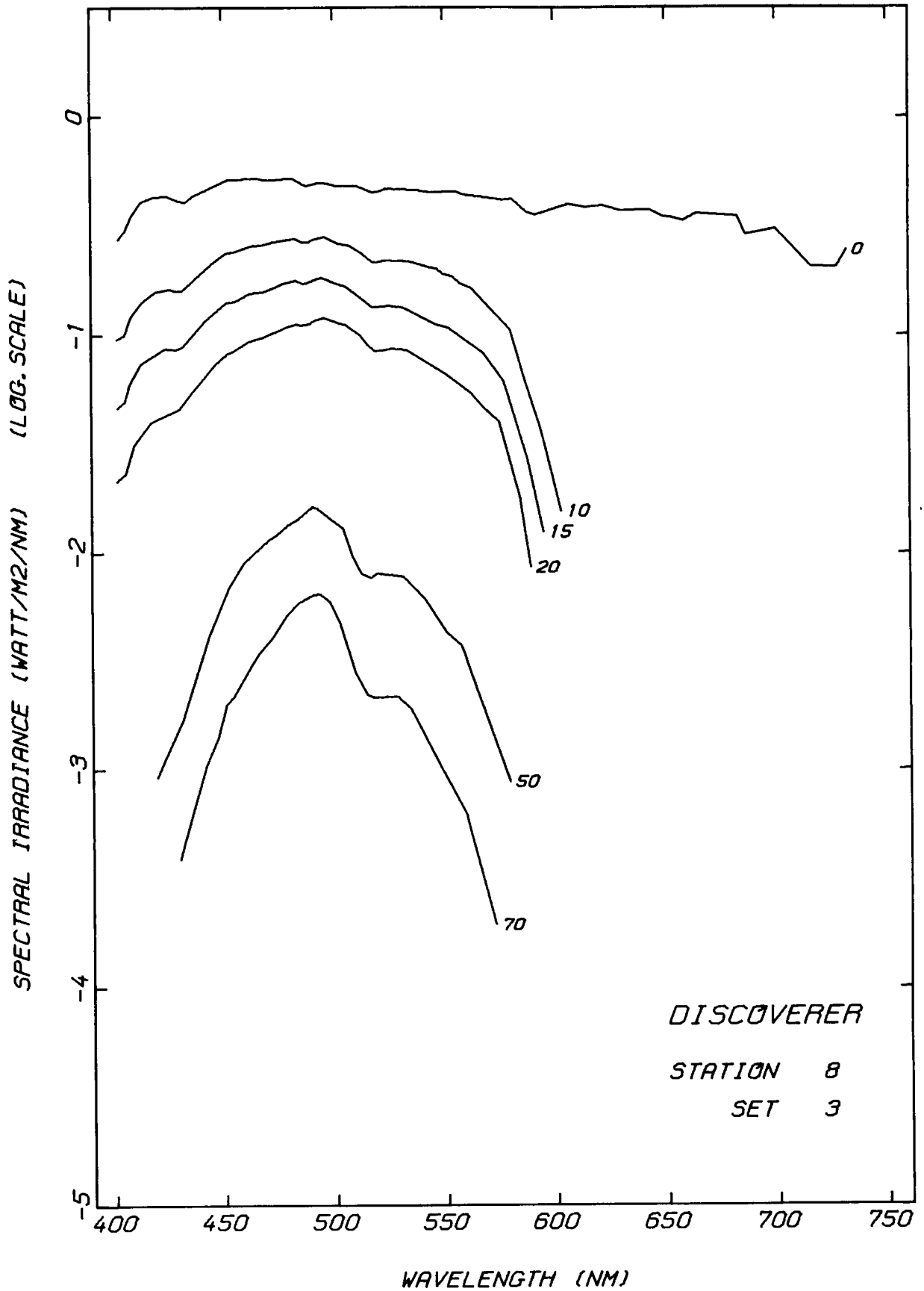
SET 2

WAVELENGTH (NM)







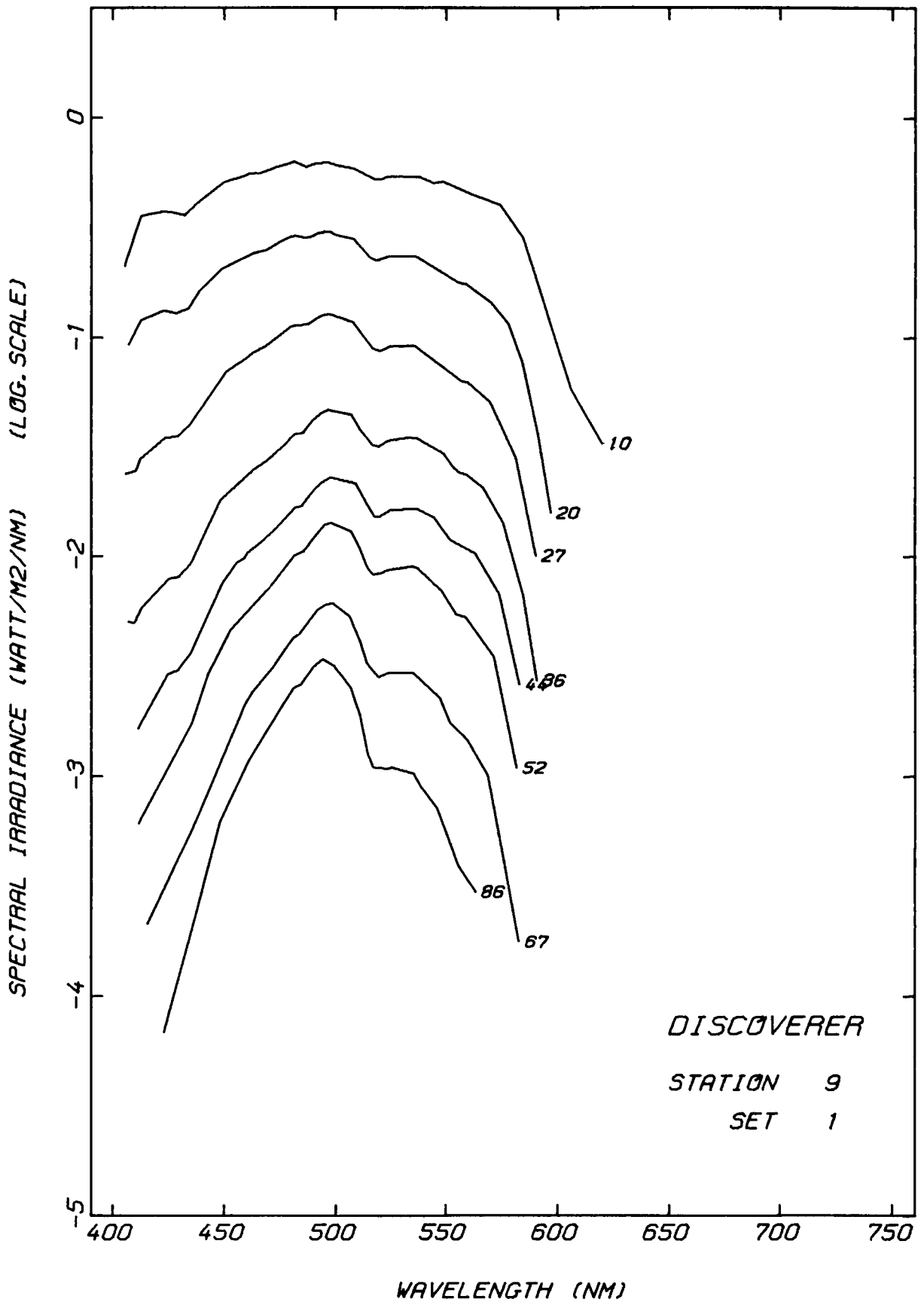


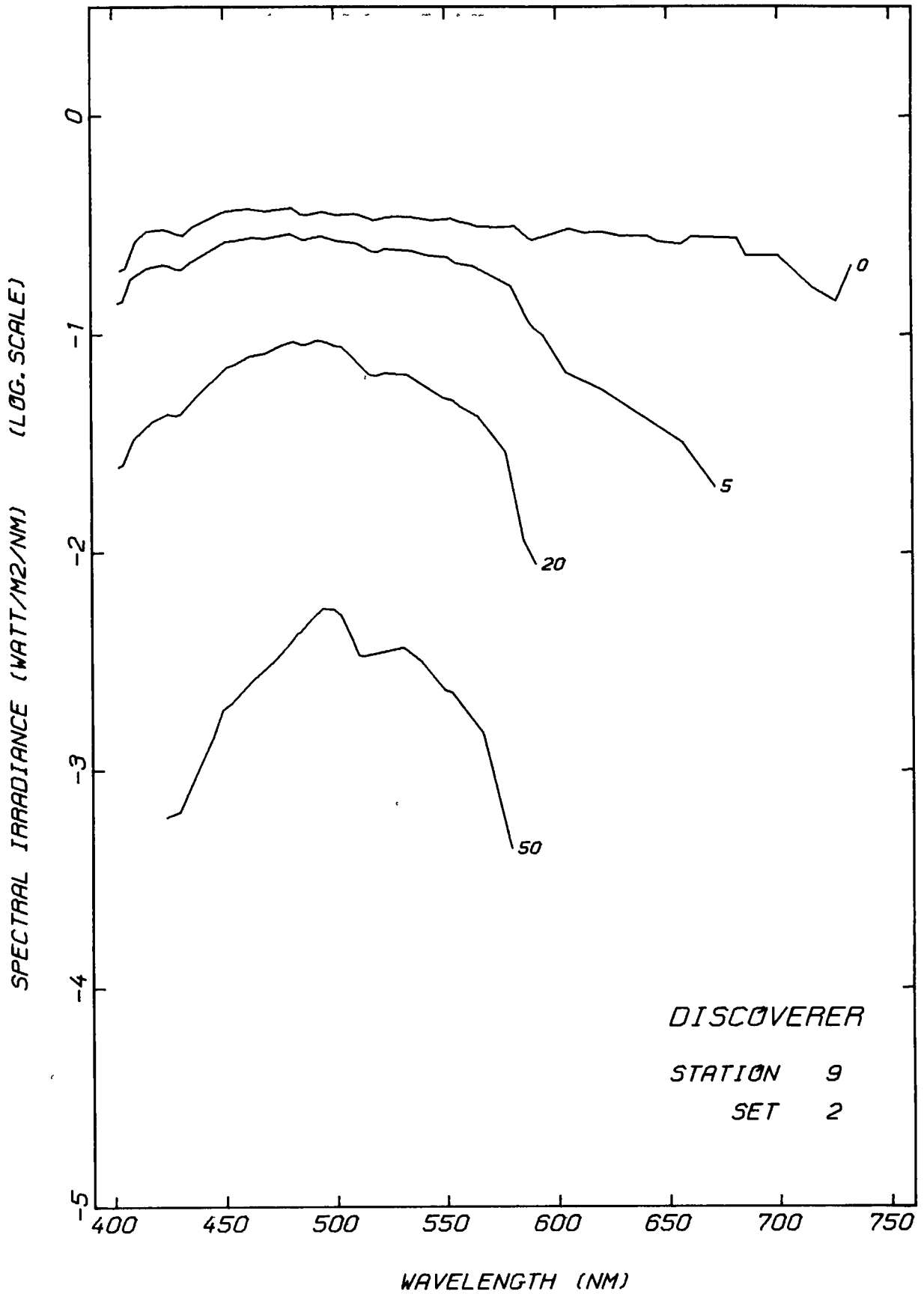
DISCOVERER

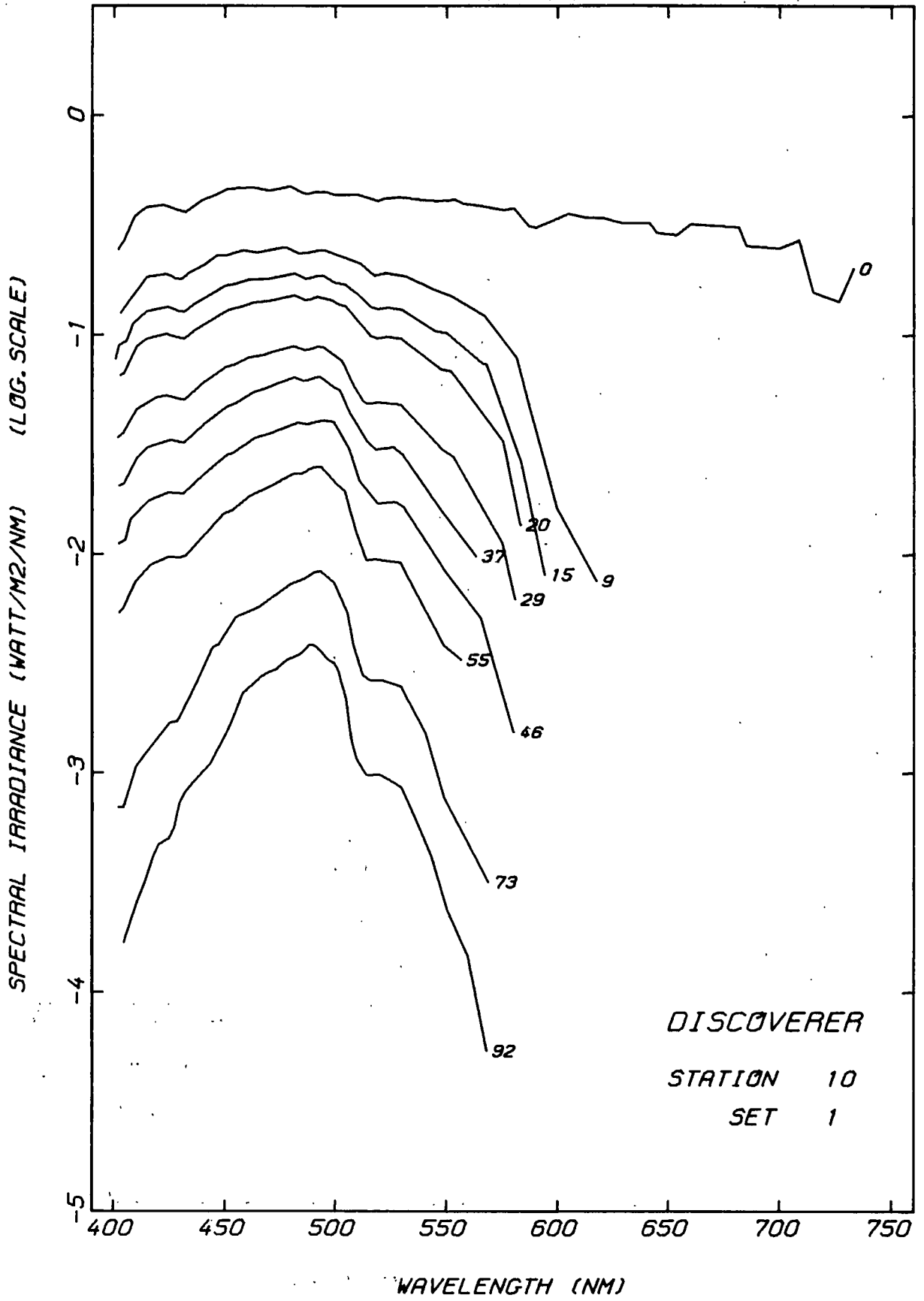
STATION 8

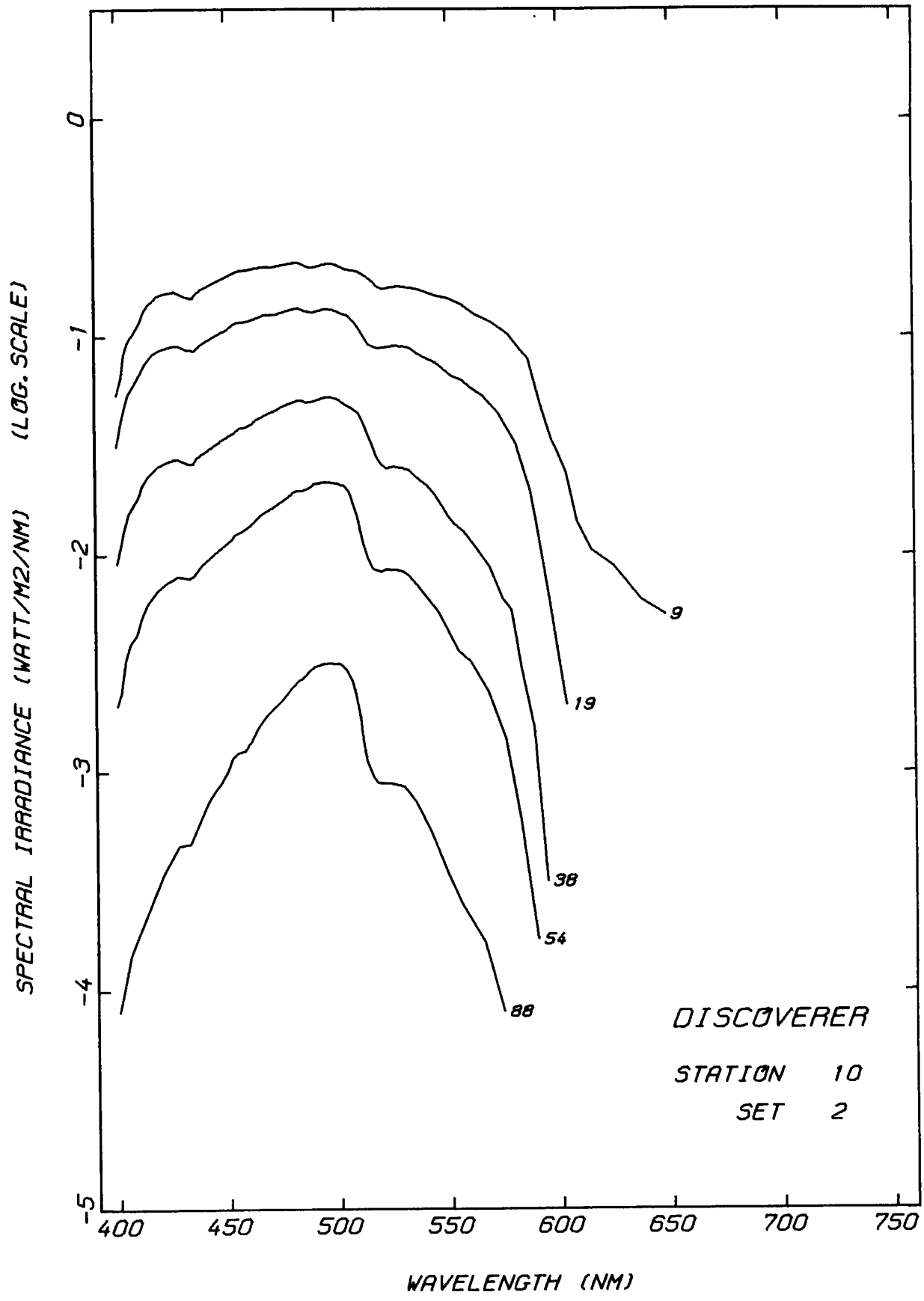
SET 3

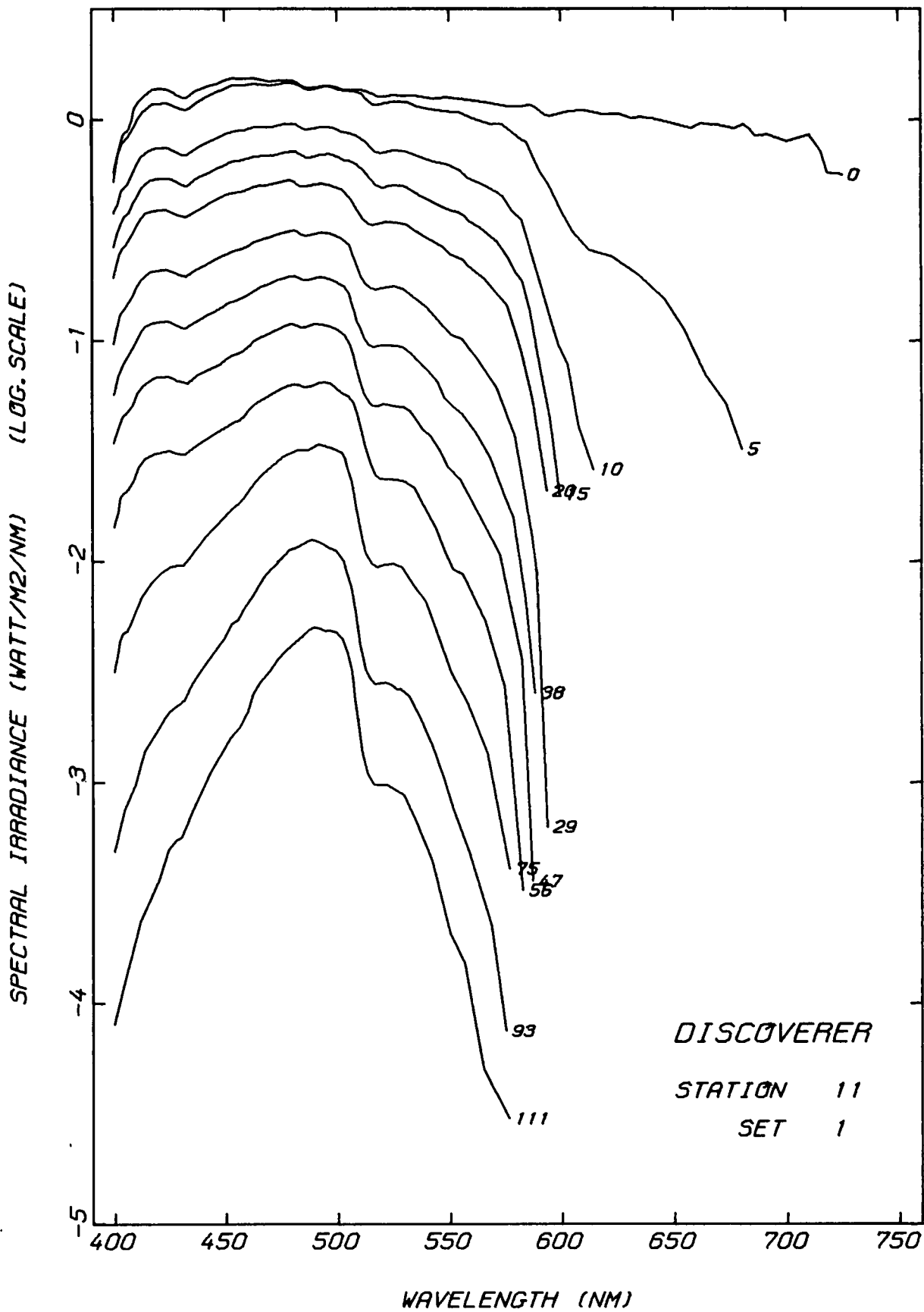
WAVELENGTH (NM)

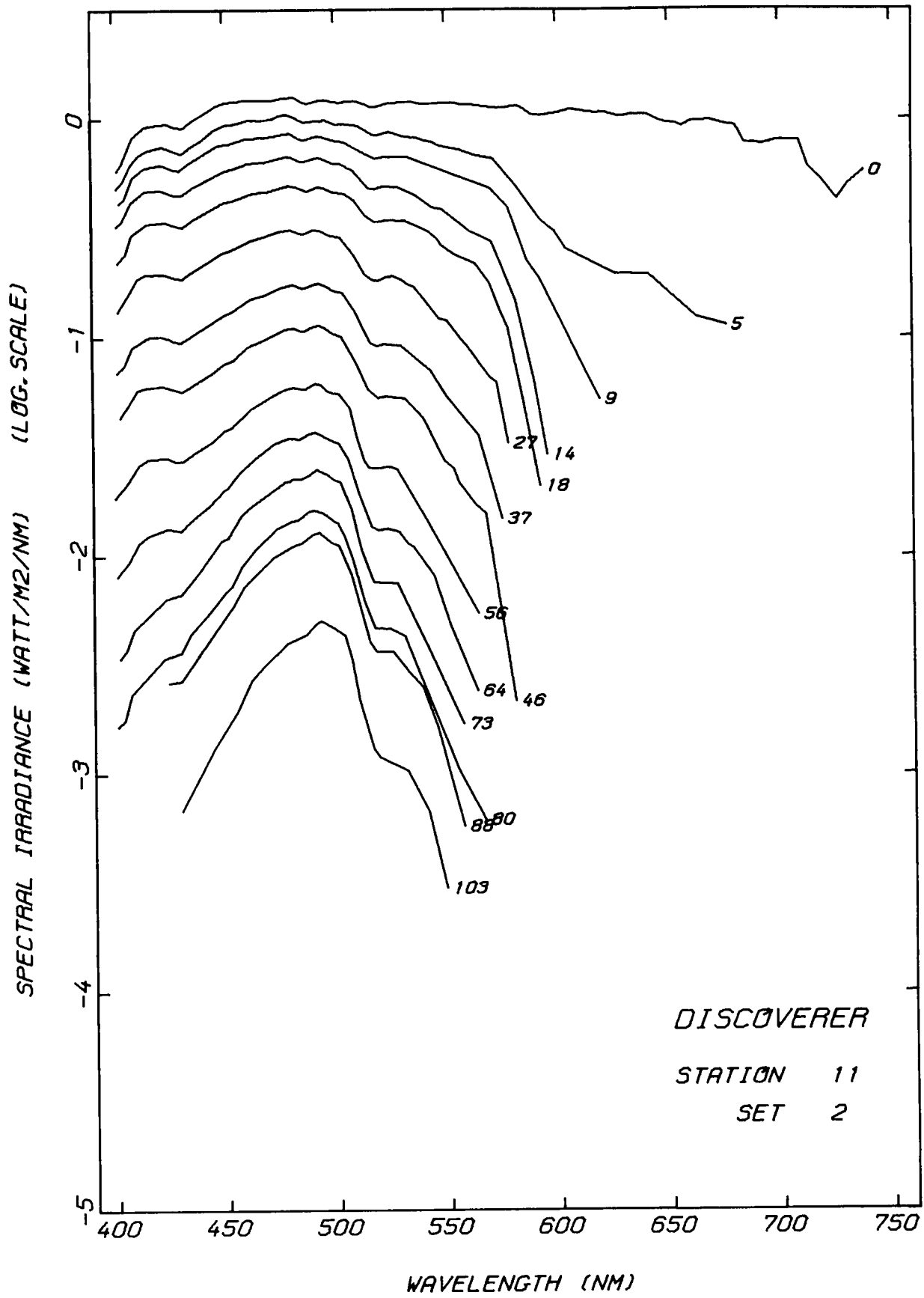




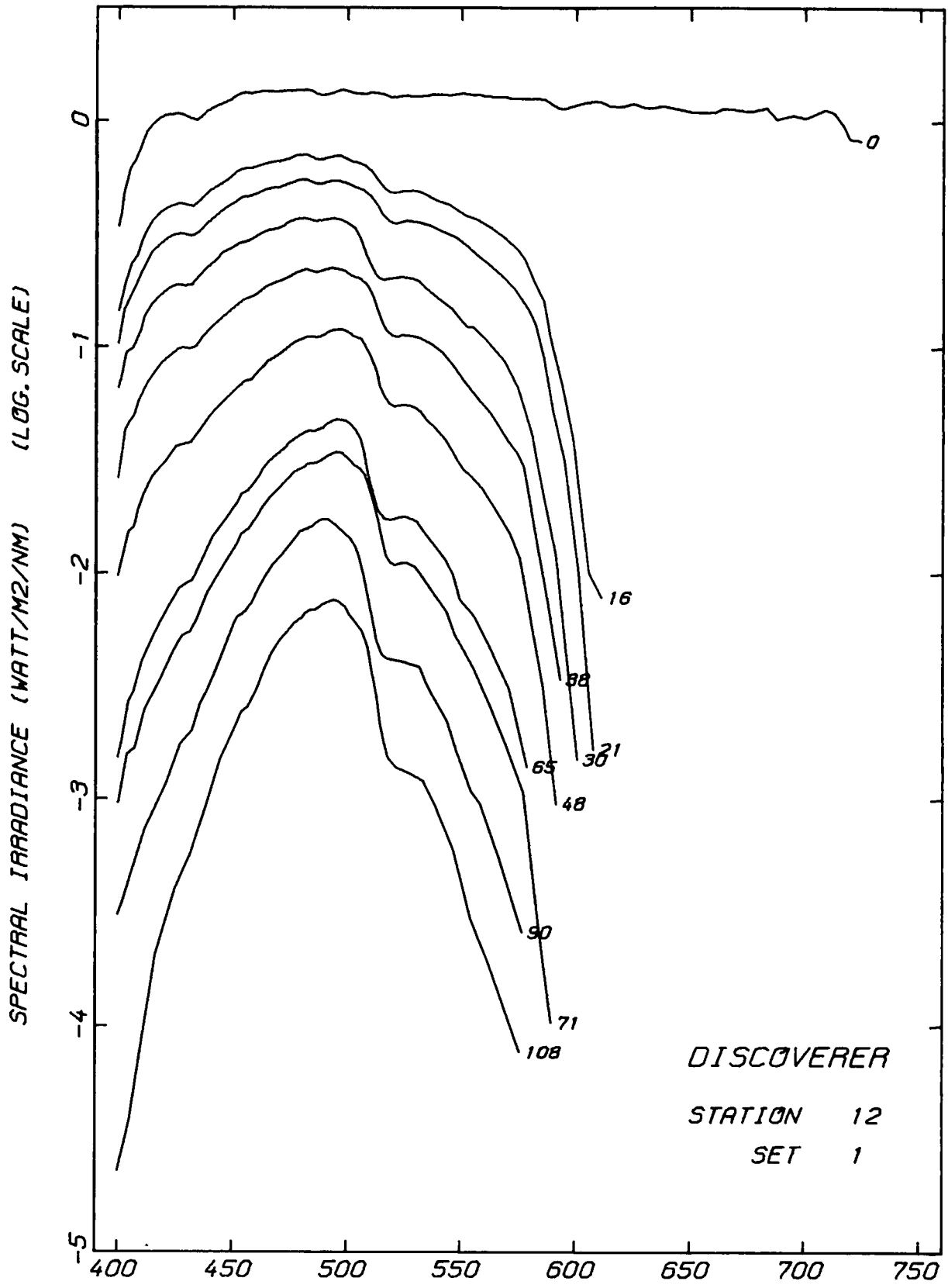




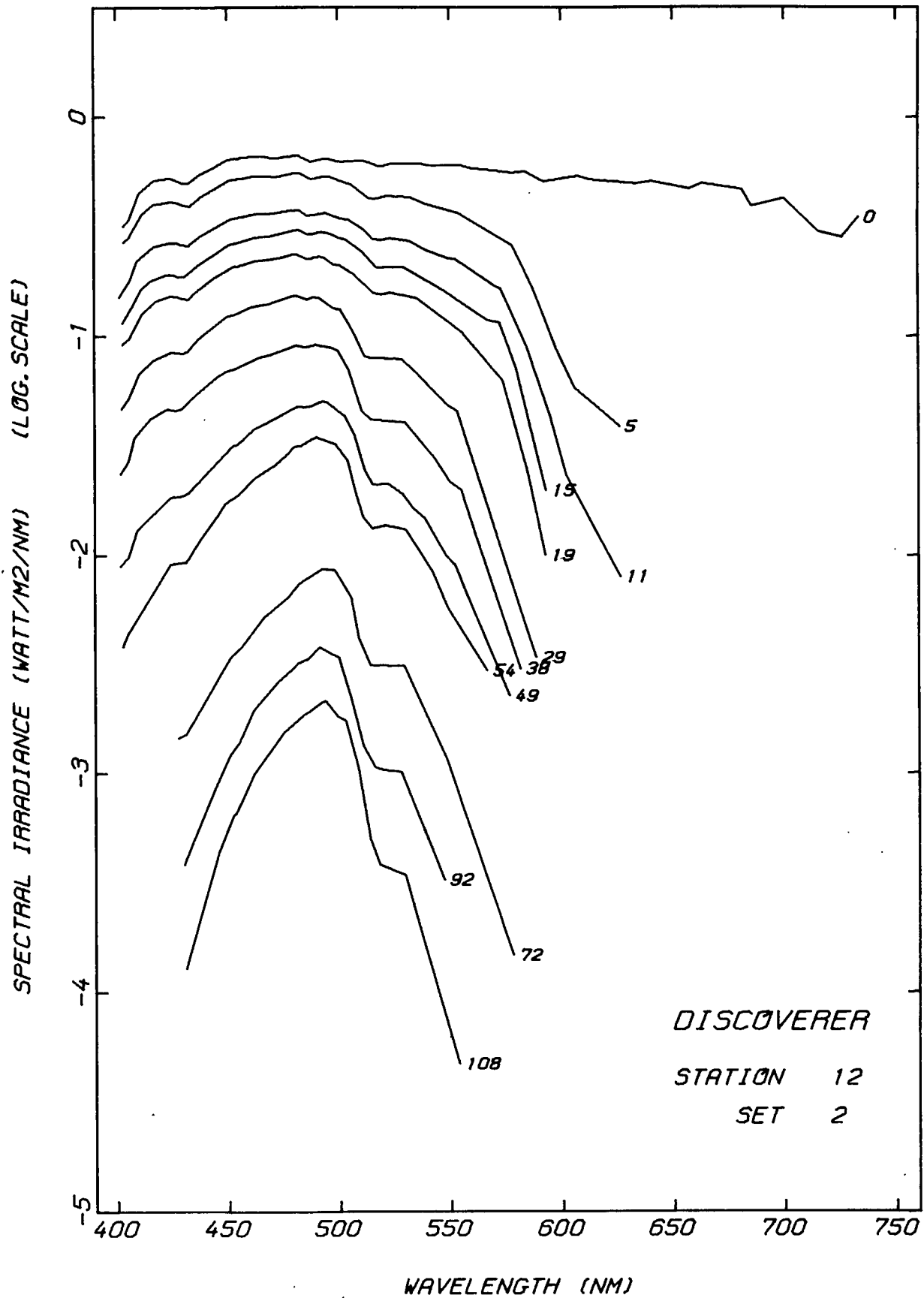








DISCOVERER  
STATION 12  
SET 1

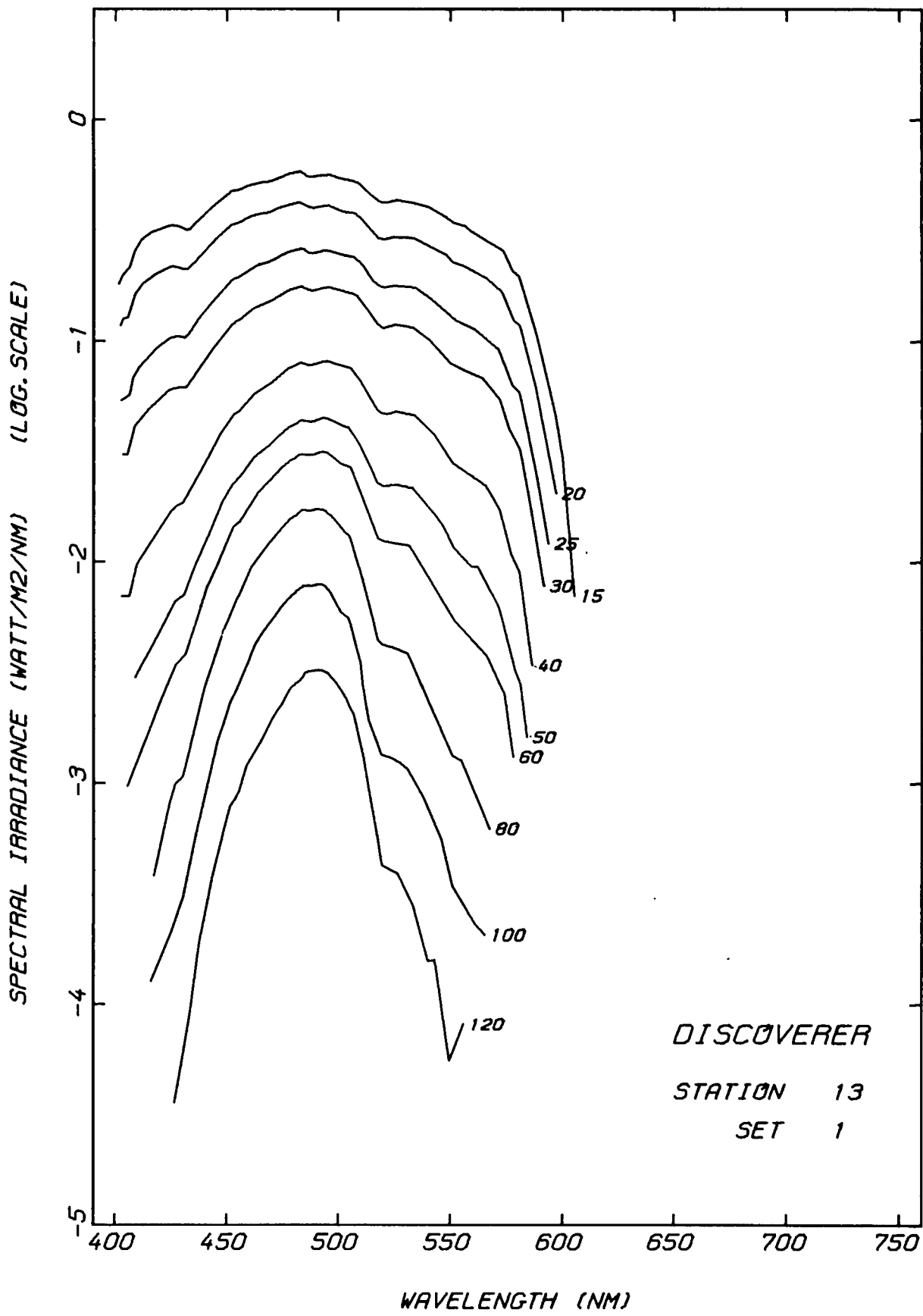


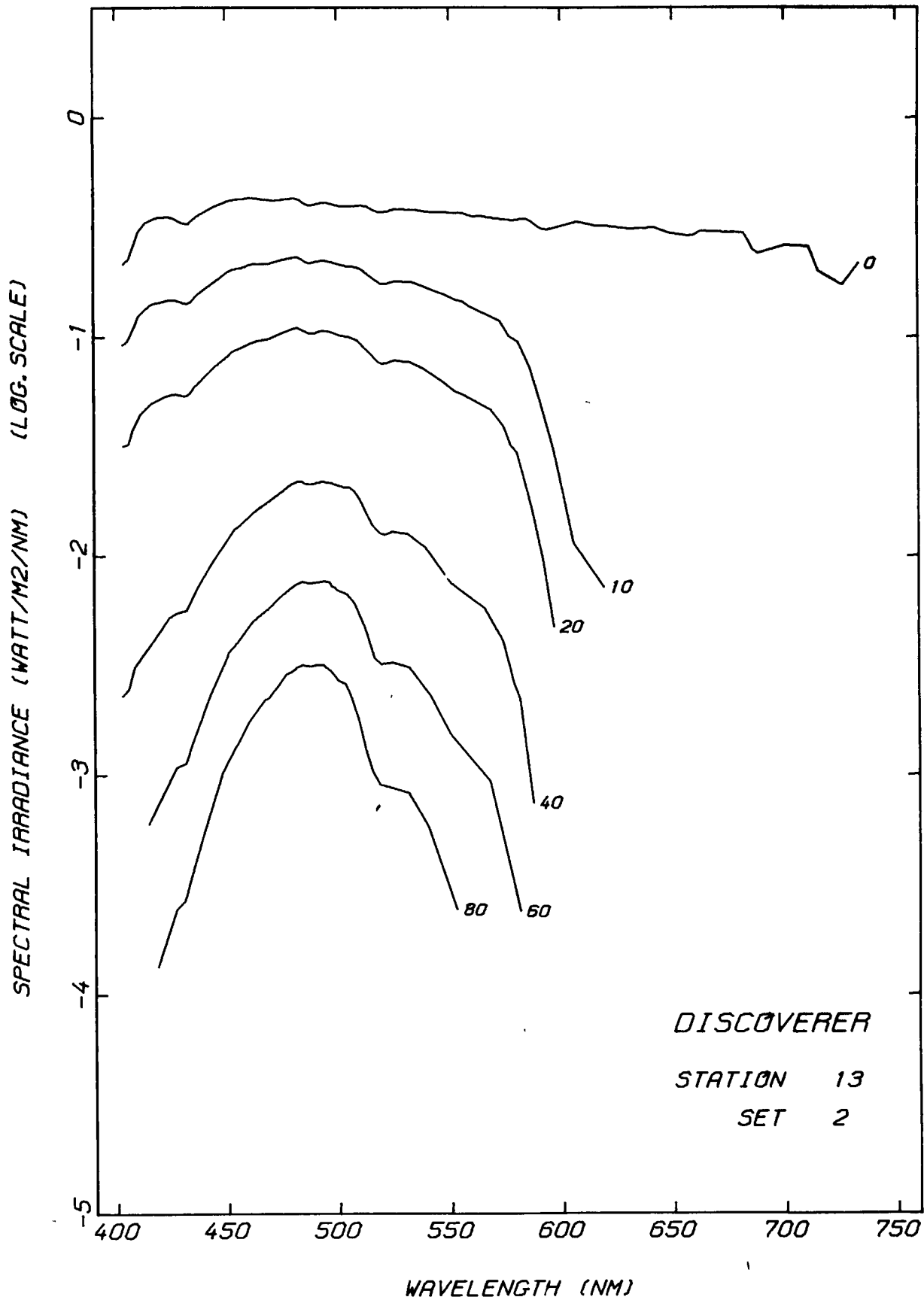
DISCOVERER

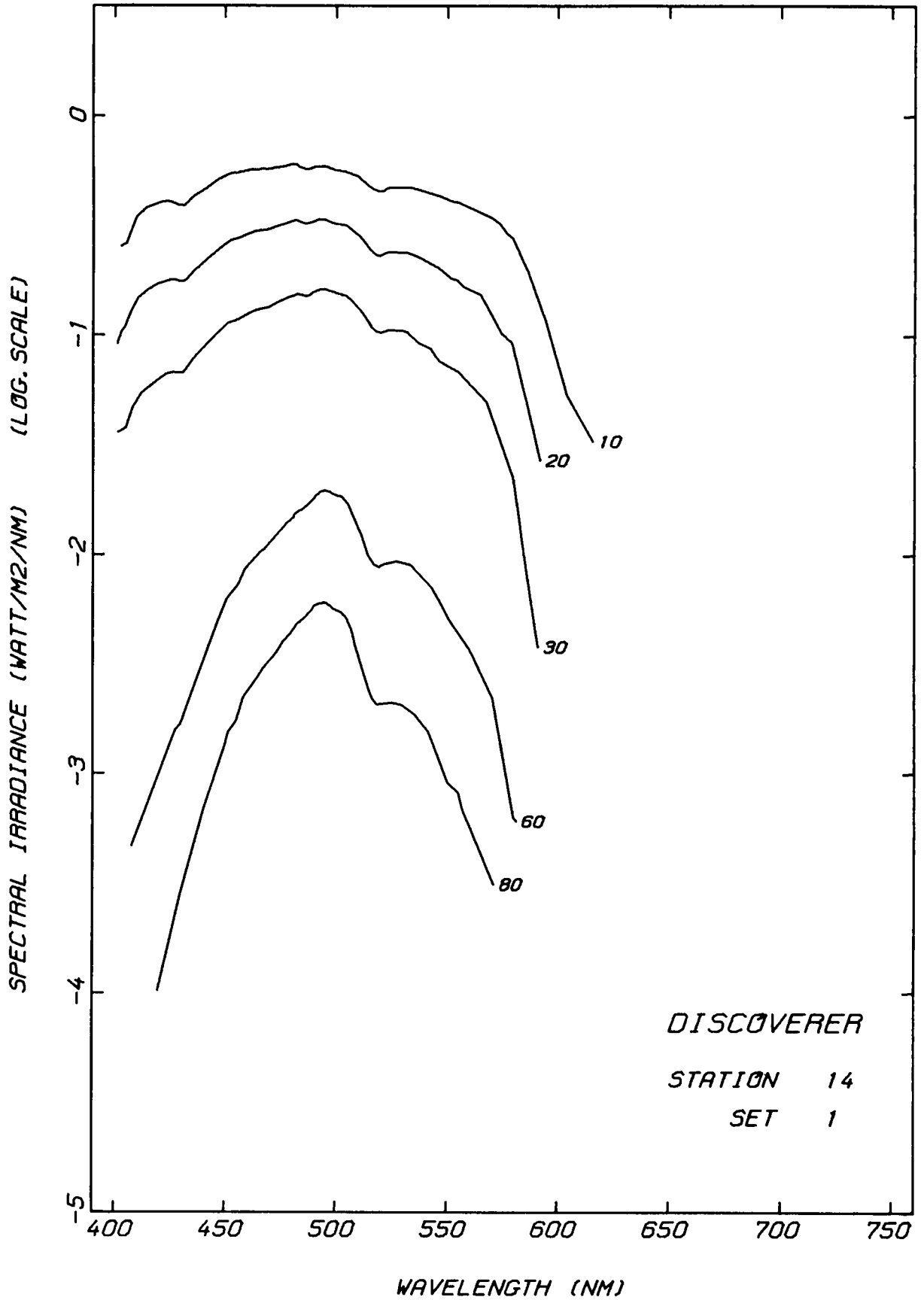
STATION 12

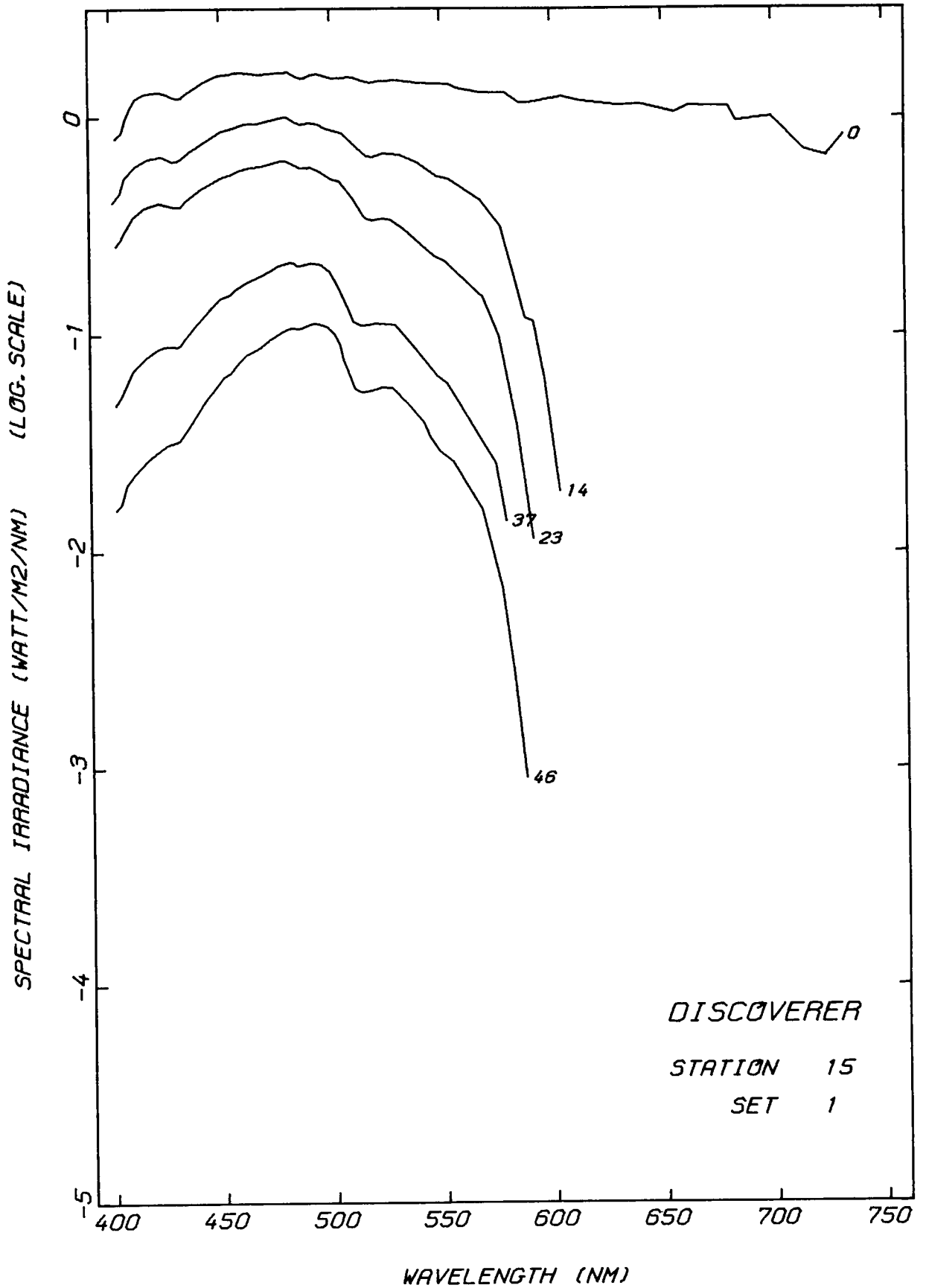
SET 2

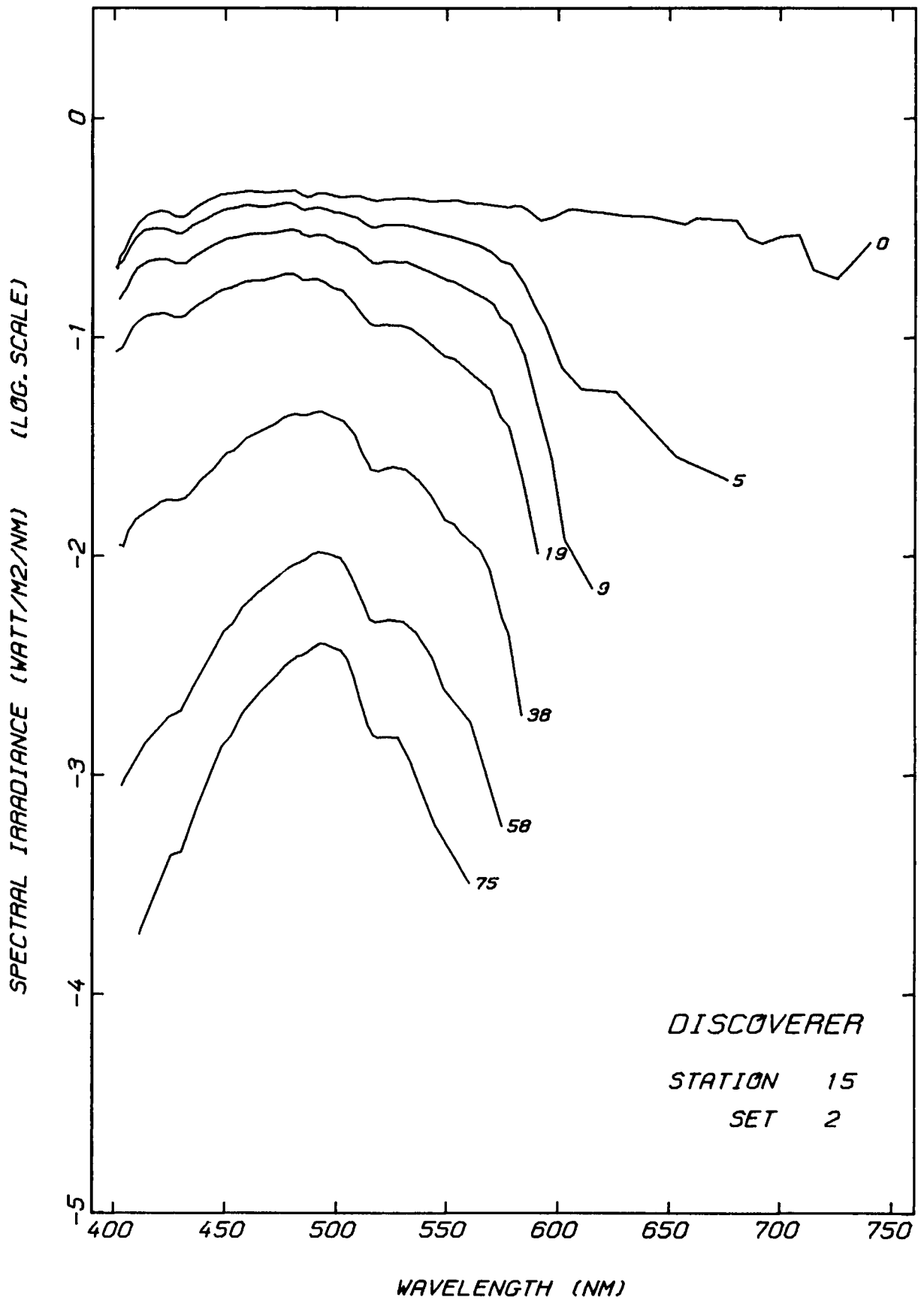
WAVELENGTH (NM)

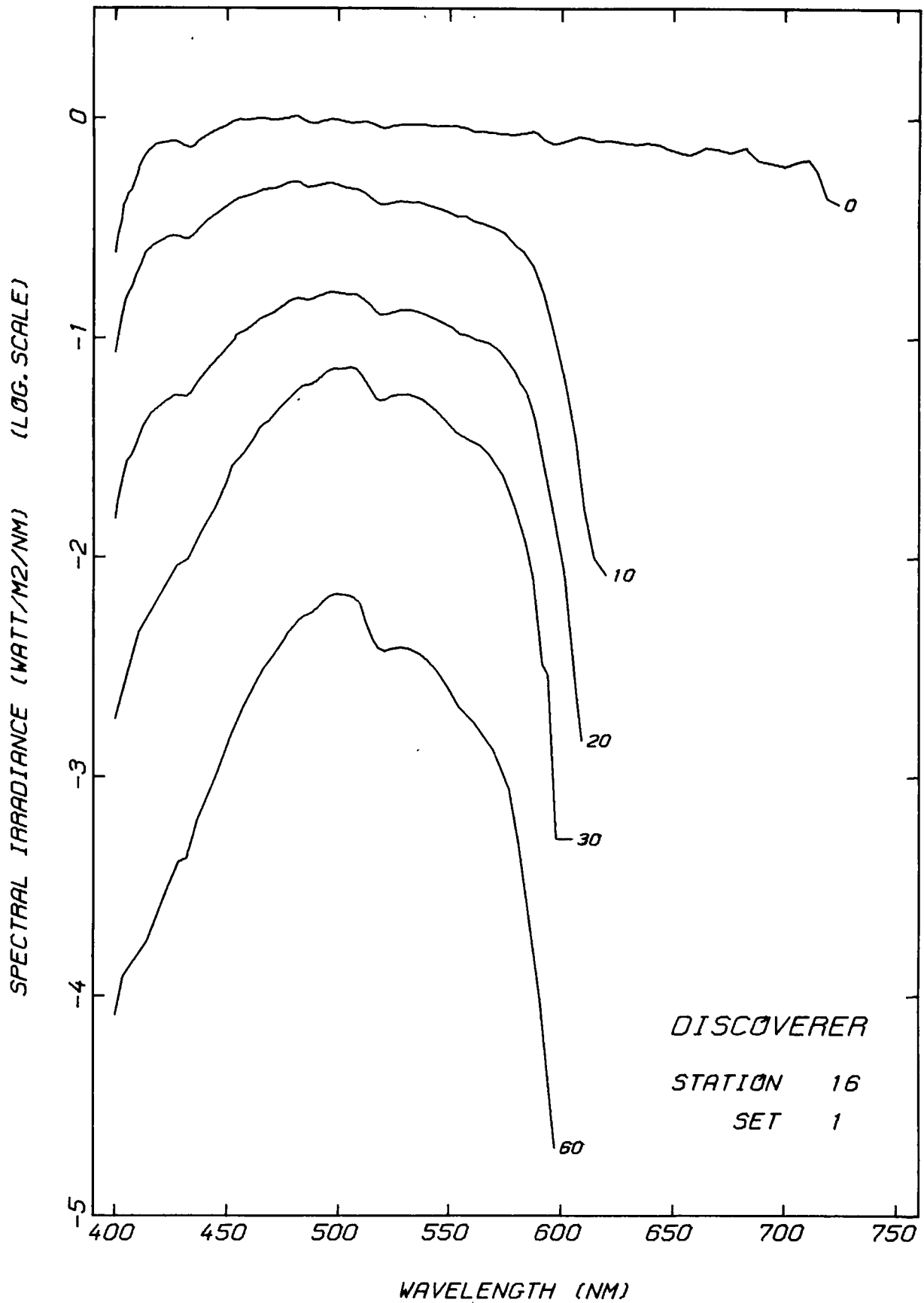




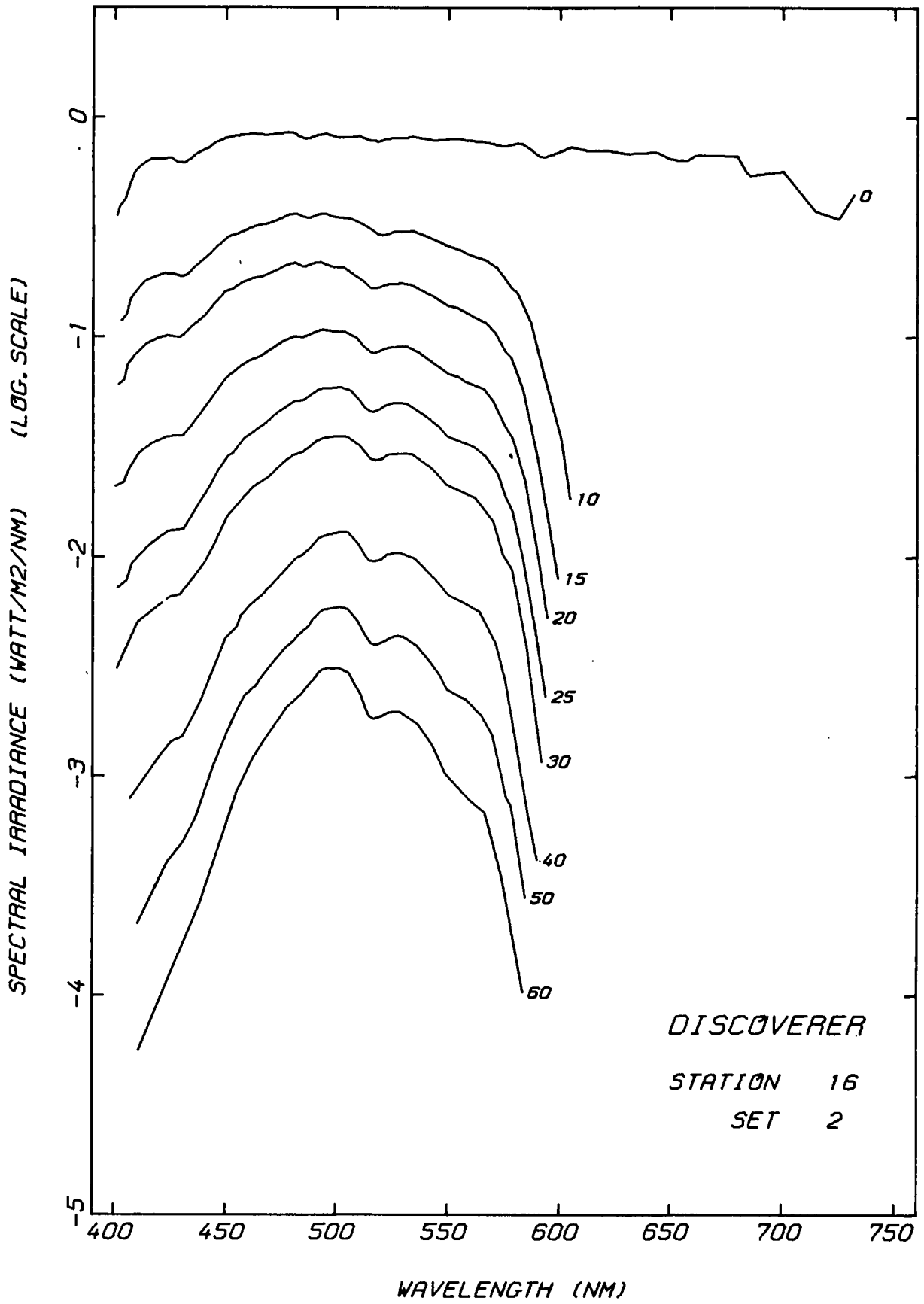


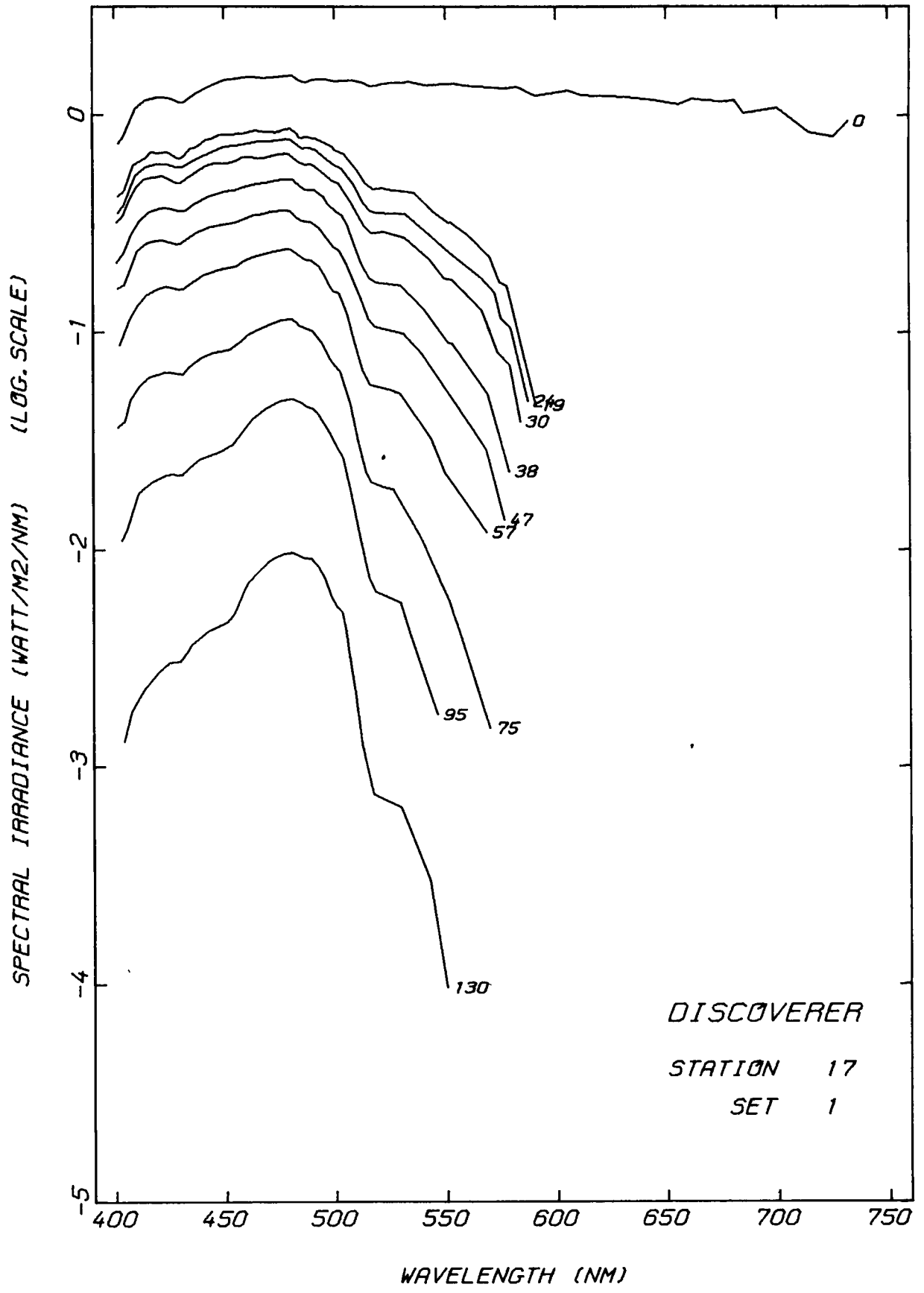


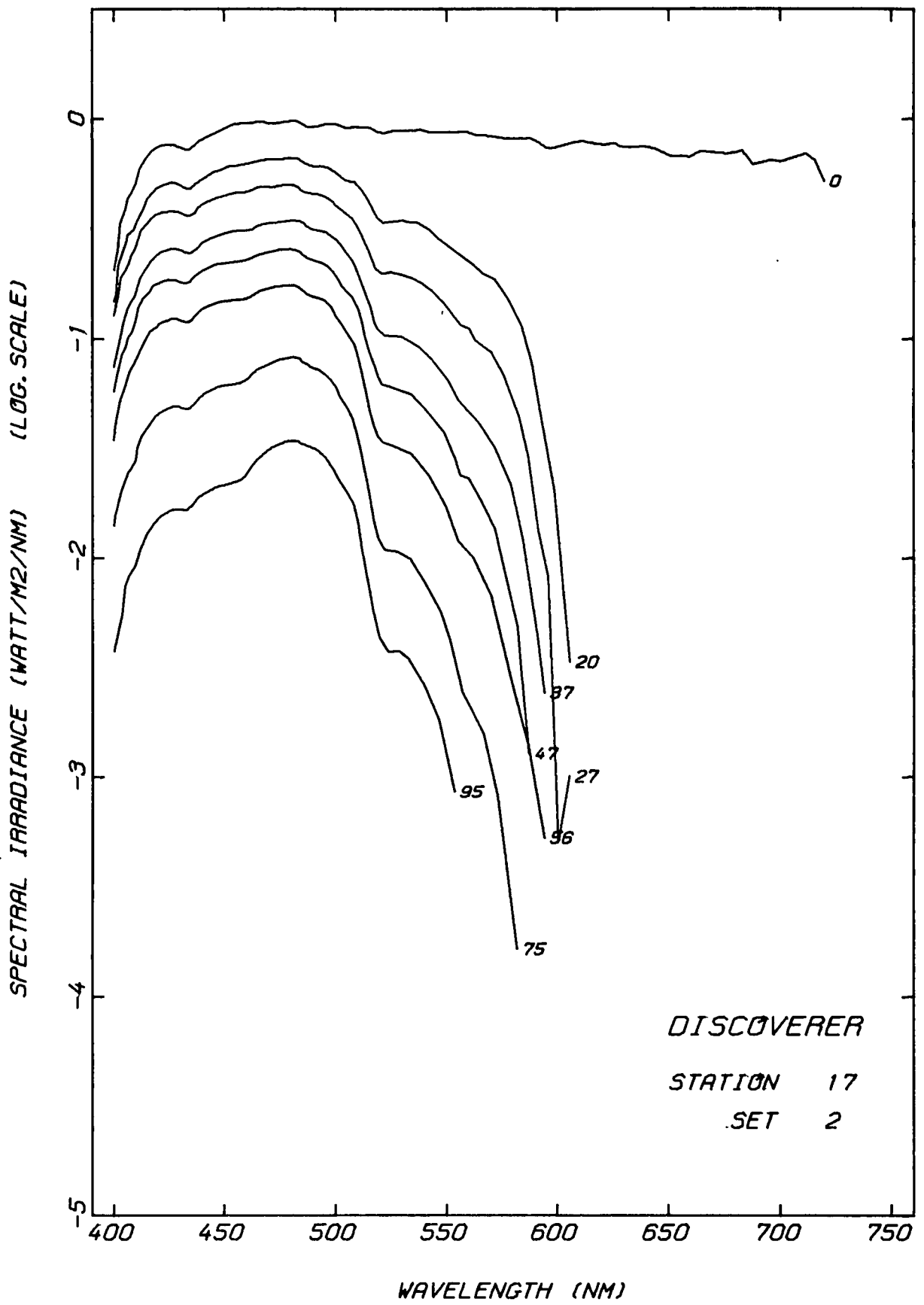


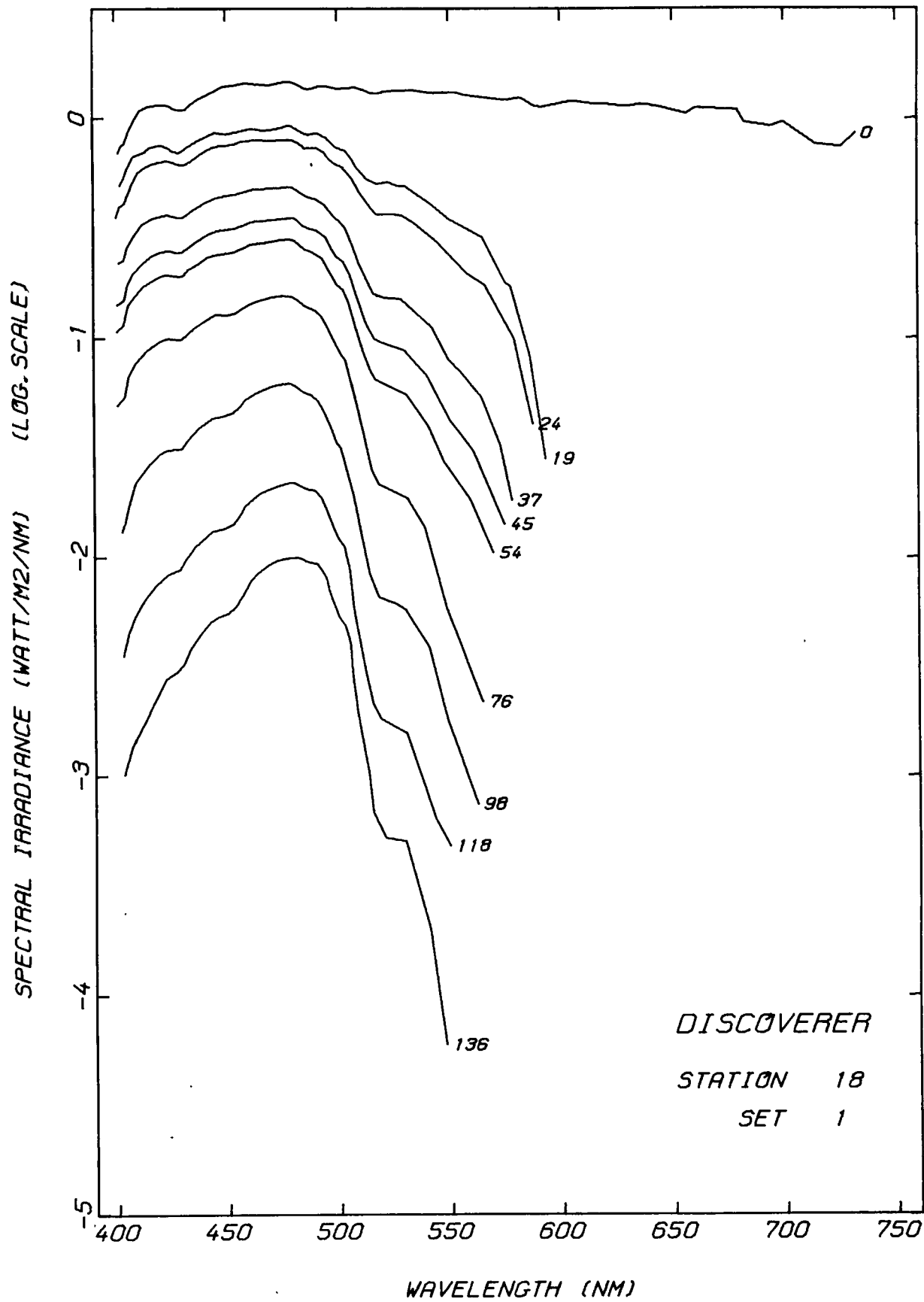


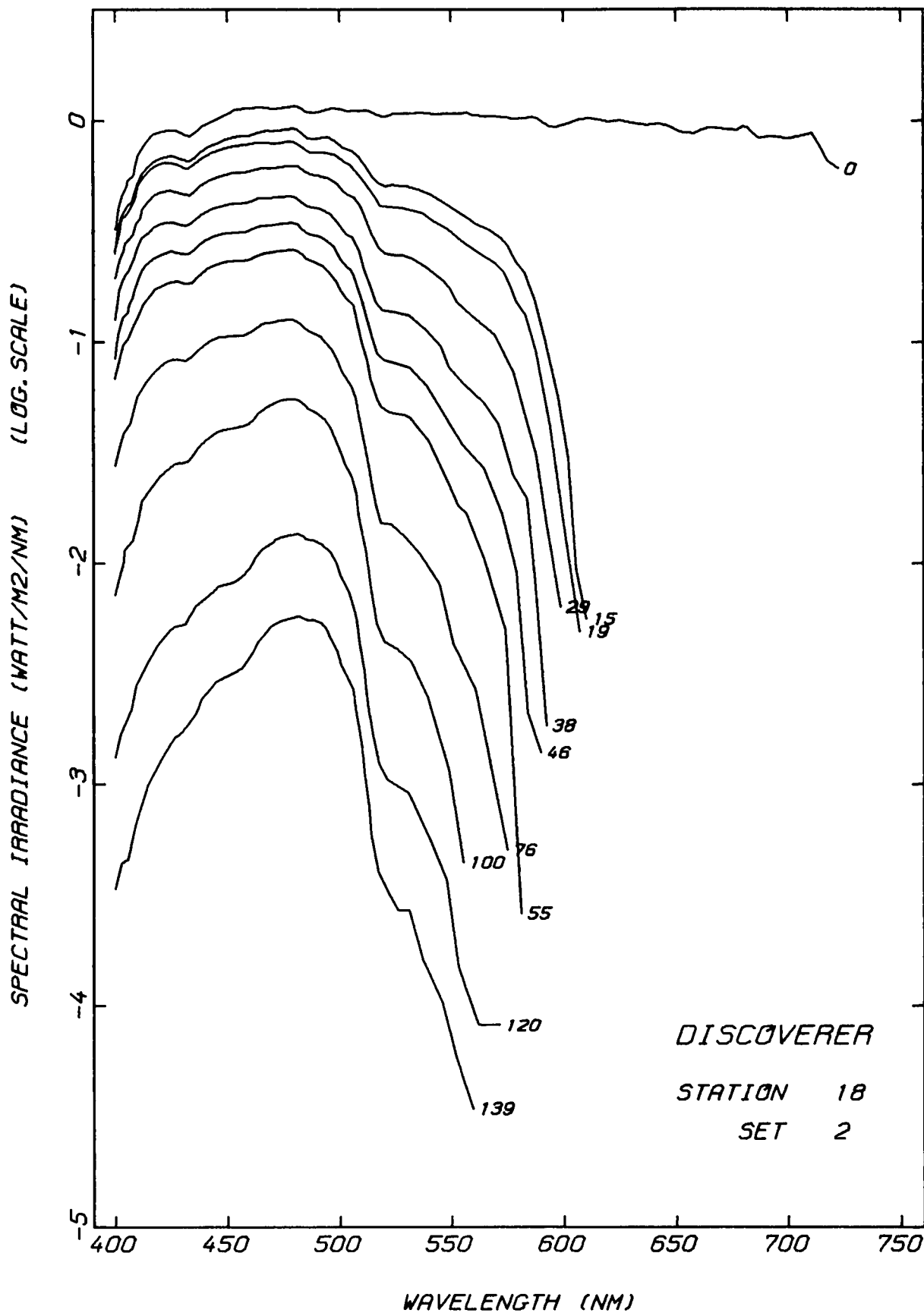


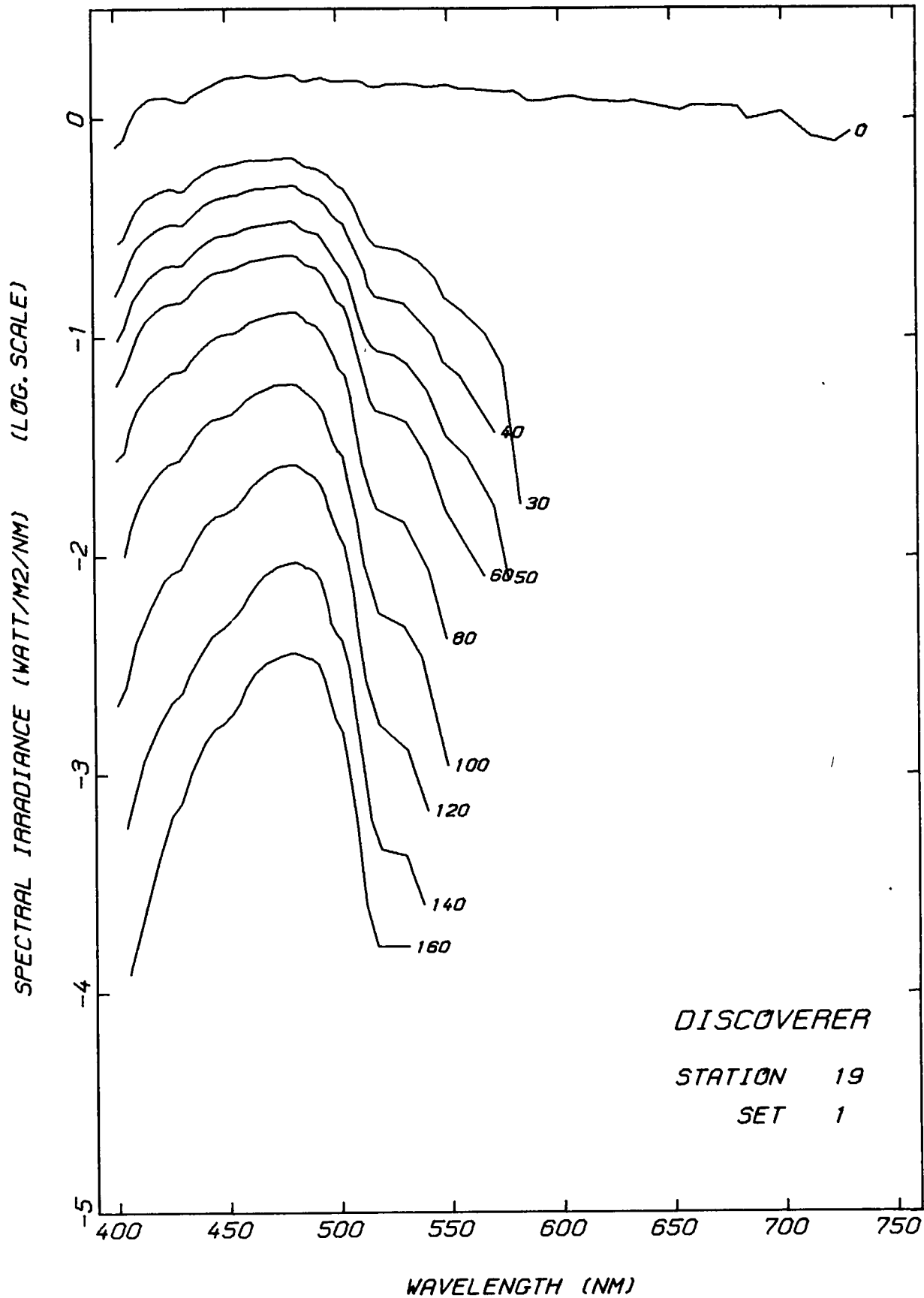


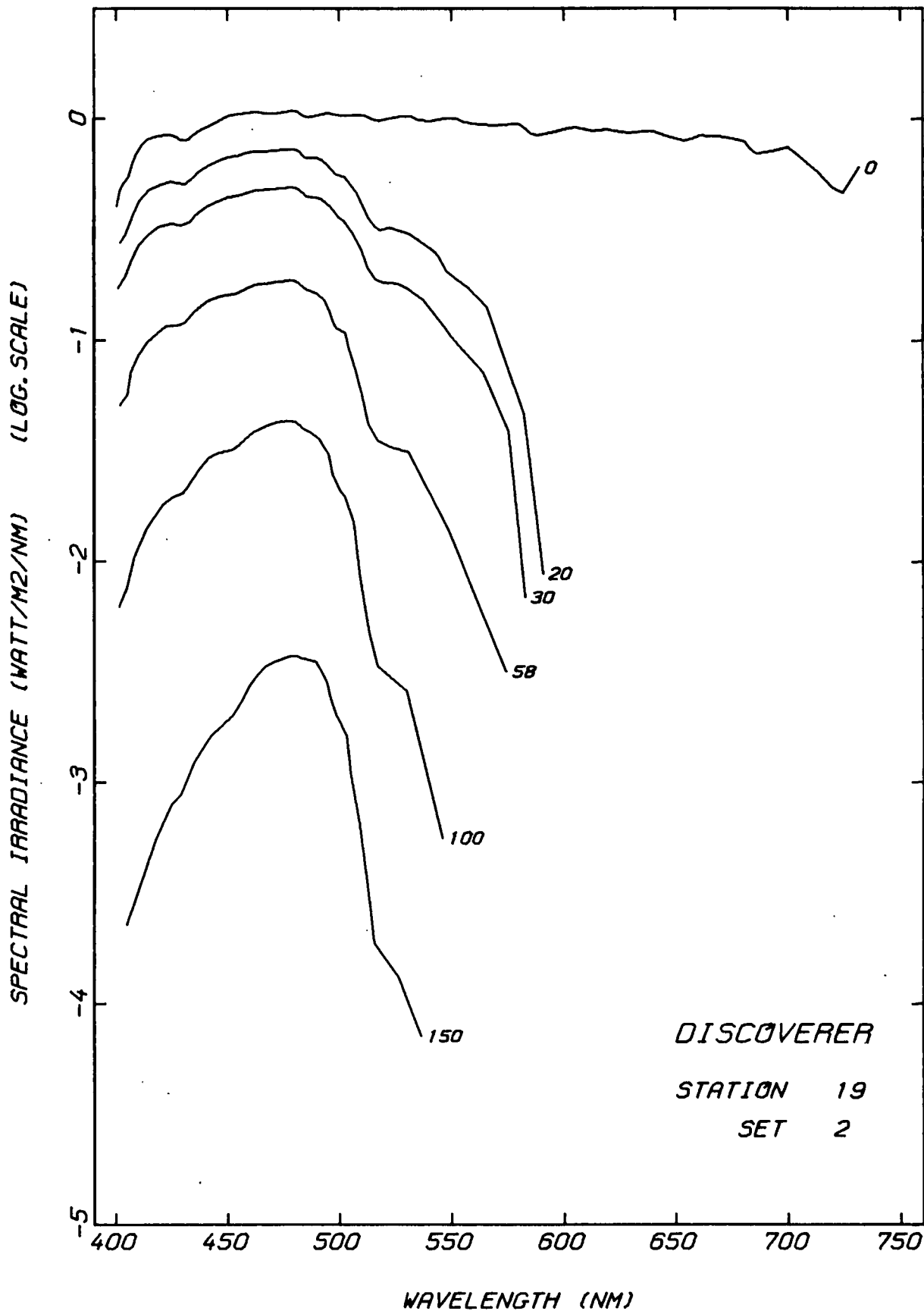


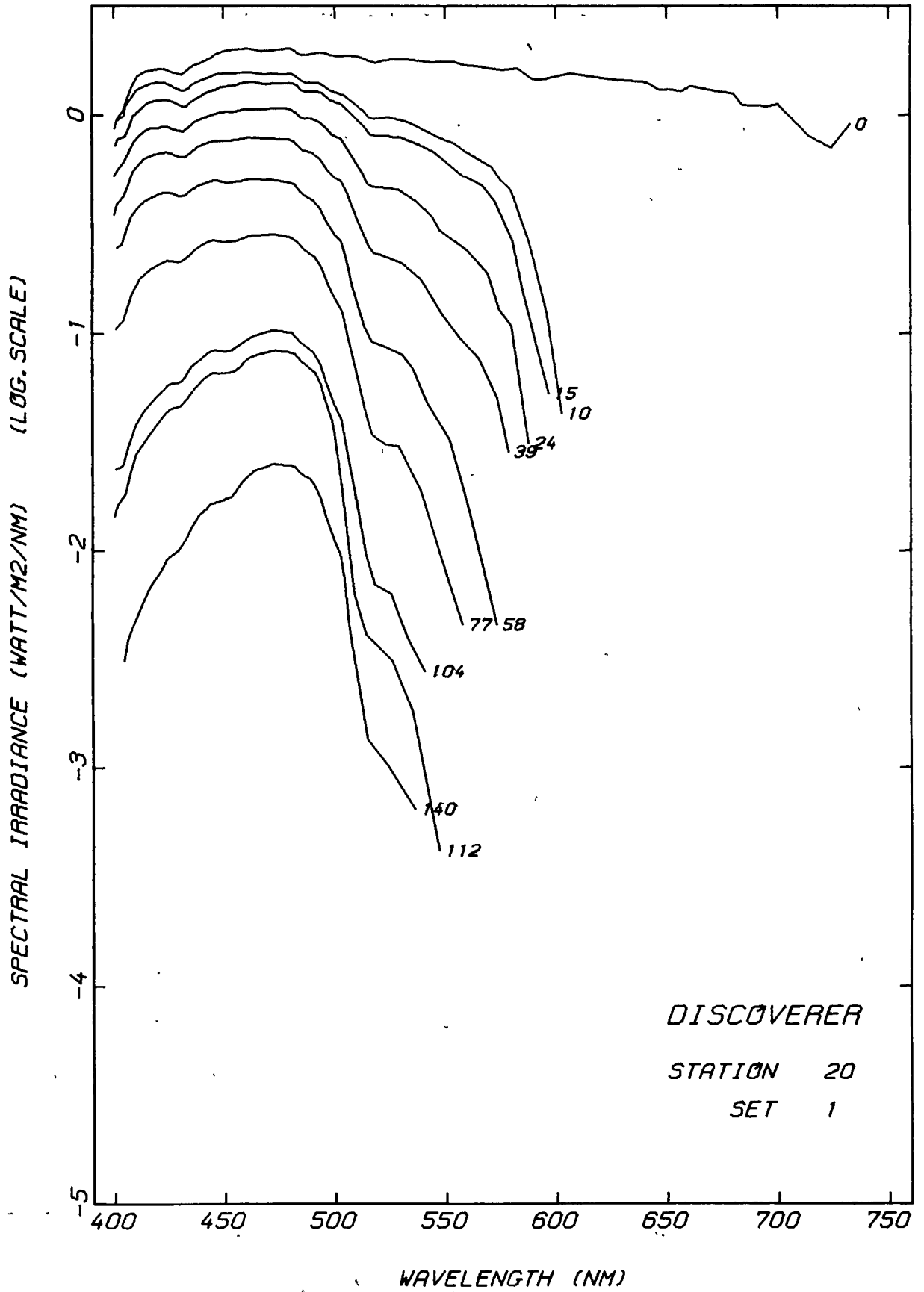




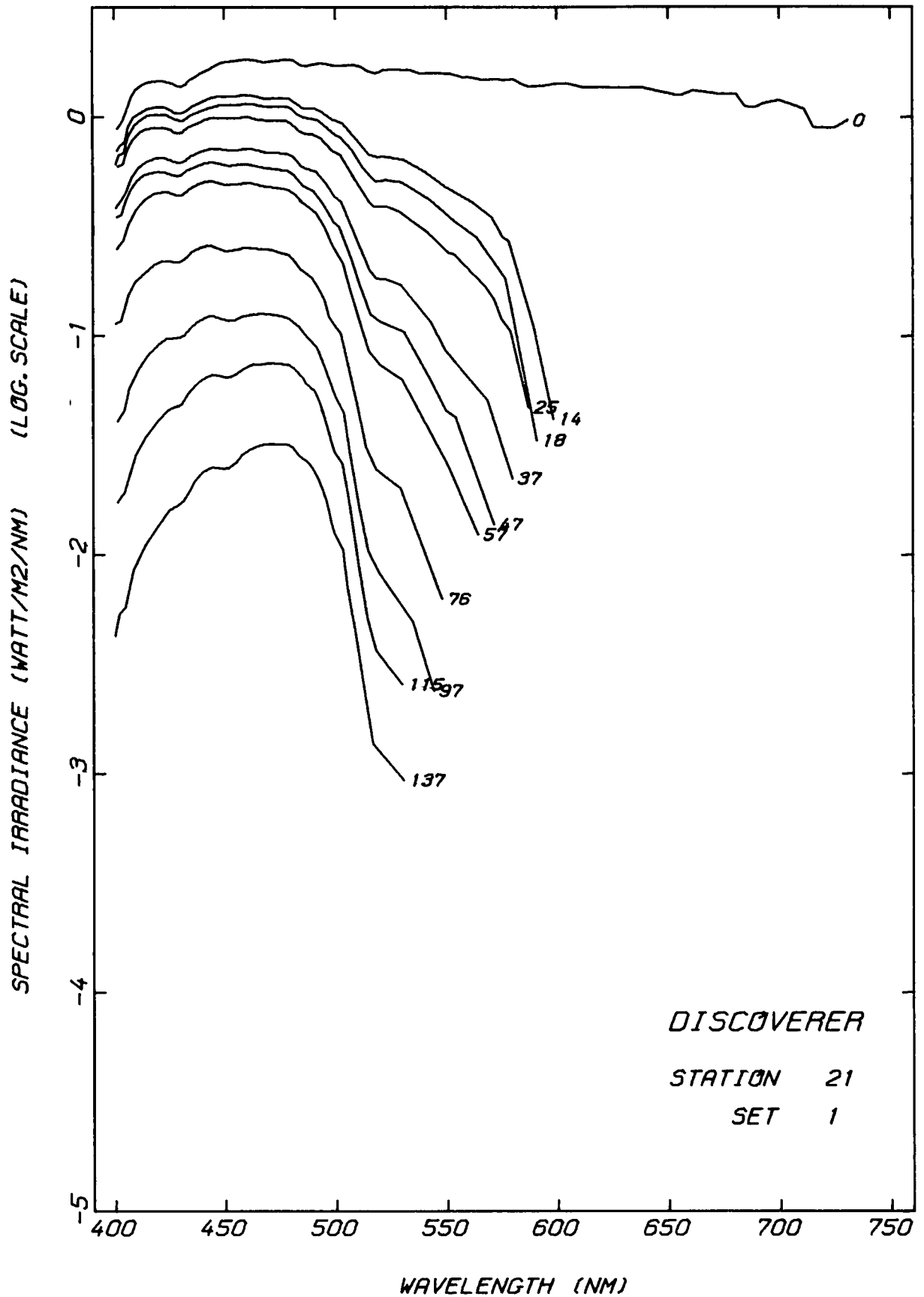


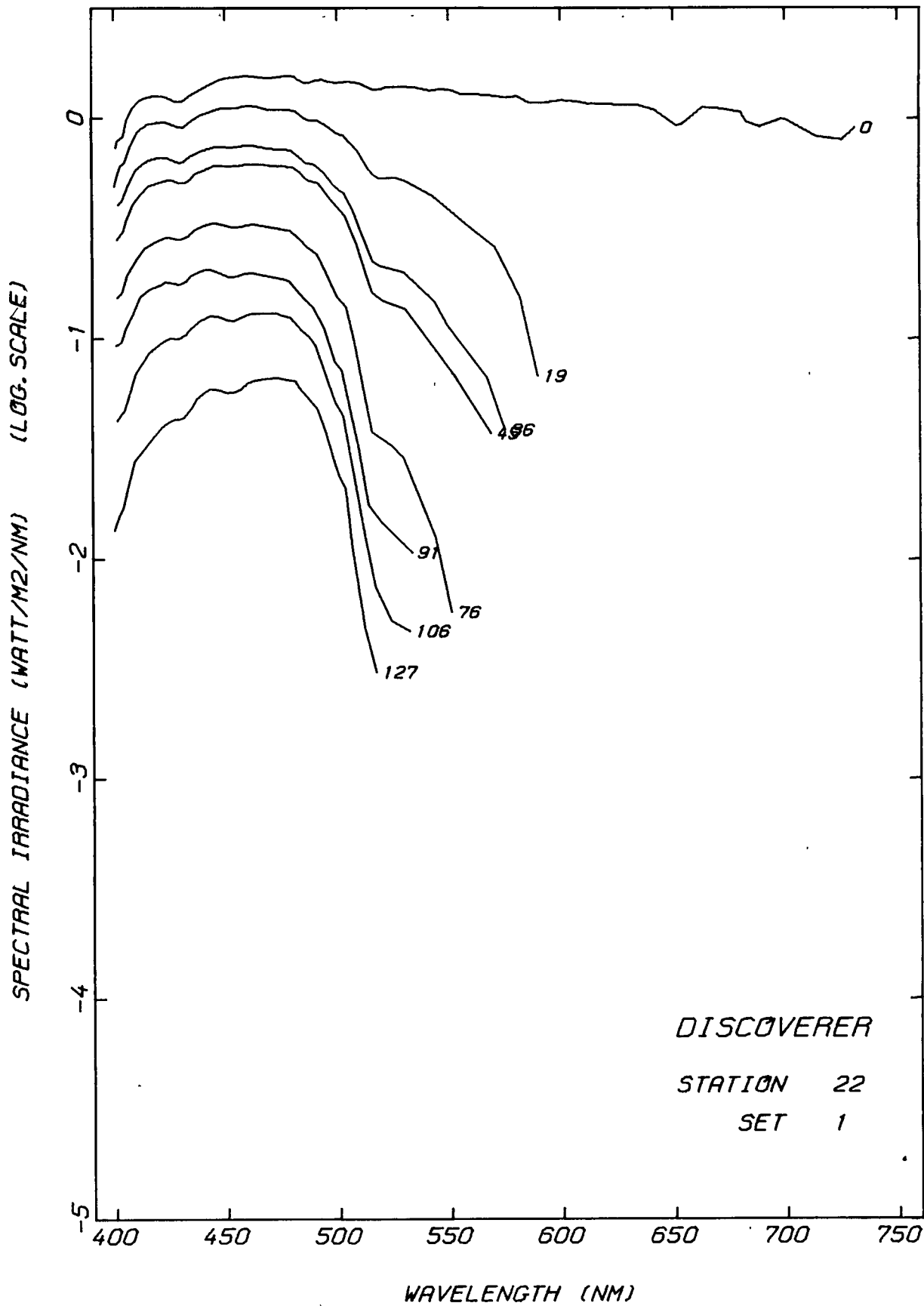


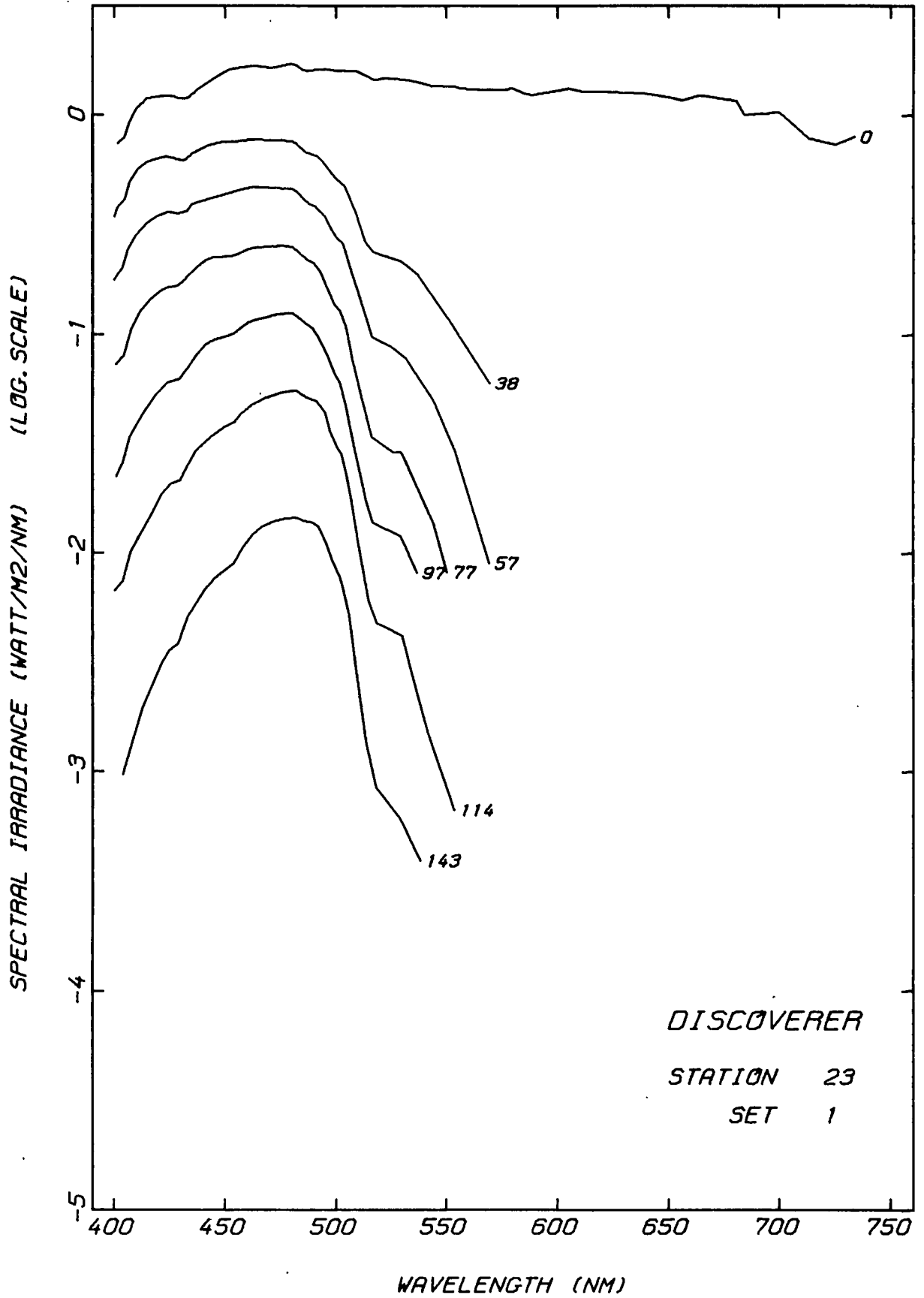












STATION 3 EXP 9 PROF 0

MAXIMUM A LAMDA= 420.6 AVEC ECLAIREMENT SPECTRAL= 0.03831 WATT/M2/NM

ENTRE 402.1 NM ET 607.6 NM ,		ECLAIREMENT 4.176 WATT/M2		9.900E14 QUANTA/SEC/CM2	
LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.1	0.255E-01	405.4	0.306E-01	410.9	0.351E-01
417.0	0.382E-01	420.6	0.383E-01	428.0	0.359E-01
431.8	0.338E-01	435.2	0.344E-01	443.3	0.363E-01
453.0	0.354E-01	456.0	0.349E-01	466.0	0.356E-01
488.1	0.312E-01	491.0	0.293E-01	506.2	0.189E-01
518.9	0.120E-01	523.6	0.107E-01	538.2	0.962E-02
607.6	0.				

STATION 3 EXP 9 PROF 5

MAXIMUM A LAMDA= 420.8 AVEC ECLAIREMENT SPECTRAL= 0.03386 WATT/M2/NM

ENTRE 401.9 NM ET 609.1 NM ,		ECLAIREMENT 3.641 WATT/M2		8.613E14 QUANTA/SEC/CM2	
LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.251E-01	405.0	0.277E-01	413.2	0.320E-01
420.8	0.339E-01	425.5	0.329E-01	431.7	0.300E-01
440.5	0.315E-01	446.9	0.322E-01	456.1	0.311E-01
471.4	0.313E-01	481.7	0.300E-01	490.0	0.260E-01
503.0	0.177E-01	509.7	0.146E-01	520.5	0.907E-02
538.0	0.799E-02	554.5	0.494E-02	609.1	0.

STATION 3 EXP 9 PROF 10

MAXIMUM A LAMDA= 420.6 AVEC ECLAIREMENT SPECTRAL= 0.02891 WATT/M2/NM

ENTRE 401.0 NM ET 595.8 NM , ECLAIREMENT 3.069 WATT/M2 7.227E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.0	0.183E-01	403.7	0.221E-01	407.2	0.250E-01	412.2	0.268E-01	415.7	0.288E-01
420.6	0.289E-01	426.8	0.275E-01	429.9	0.265E-01	431.7	0.257E-01	434.7	0.255E-01
440.3	0.270E-01	446.4	0.275E-01	452.0	0.269E-01	455.9	0.265E-01	461.3	0.269E-01
465.0	0.273E-01	475.3	0.267E-01	484.0	0.255E-01	487.6	0.238E-01	491.0	0.225E-01
494.0	0.212E-01	501.0	0.162E-01	505.5	0.134E-01	511.0	0.116E-01	517.5	0.827E-02
519.9	0.723E-02	538.4	0.584E-02	552.8	0.399E-02	582.4	0.133E-02	595.8	0.

STATION 3 EXP 9 PROF 20

MAXIMUM A LAMDA= 418.0 AVEC ECLAIREMENT SPECTRAL= 0.01938 WATT/M2/NM

ENTRE 402.7 NM ET 600.2 NM , ECLAIREMENT 2.062 WATT/M2 4.851E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.7	0.124E-01	404.5	0.147E-01	407.8	0.165E-01	410.9	0.175E-01	412.8	0.178E-01
414.9	0.185E-01	418.0	0.194E-01	421.8	0.193E-01	424.9	0.191E-01	428.3	0.186E-01
431.0	0.179E-01	433.2	0.177E-01	438.3	0.184E-01	440.5	0.189E-01	445.1	0.192E-01
449.0	0.190E-01	454.4	0.184E-01	458.4	0.184E-01	467.1	0.191E-01	472.4	0.192E-01
482.0	0.185E-01	486.4	0.178E-01	490.1	0.162E-01	494.4	0.151E-01	499.5	0.126E-01
504.0	0.101E-01	509.6	0.816E-02	516.1	0.595E-02	520.2	0.432E-02	523.7	0.405E-02
539.5	0.345E-02	557.0	0.173E-02	578.5	0.698E-03	600.2	0.		

STATION 4 EXP 9 PROF 0

MAXIMUM A LAMDA= 420.9 AVEC ECLAIREMENT SPECTRAL= 0.04698 WATT/M2/NM

ENTRE 401.4 NM ET 620.5 NM , ECLAIREMENT 5.430 WATT/M2 12.970E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.311E-01	405.0	0.375E-01	409.0	0.423E-01	413.5	0.448E-01	418.3	0.470E-01
420.9	0.470E-01	424.2	0.467E-01	429.1	0.437E-01	433.1	0.423E-01	434.4	0.422E-01
438.7	0.440E-01	445.0	0.458E-01	448.3	0.456E-01	456.2	0.446E-01	460.7	0.452E-01
467.3	0.453E-01	481.6	0.430E-01	483.4	0.427E-01	488.2	0.393E-01	490.6	0.376E-01
495.4	0.350E-01	501.4	0.285E-01	507.5	0.240E-01	510.7	0.219E-01	519.1	0.154E-01
522.3	0.146E-01	528.0	0.146E-01	537.3	0.135E-01	543.8	0.118E-01	557.7	0.874E-02
584.1	0.517E-02	586.6	0.526E-02	603.1	0.301E-02	620.5	0.		

STATION 4 EXP 9 PROF 5

MAXIMUM A LAMDA= 415.6 AVEC ECLAIREMENT SPECTRAL= 0.04105 WATT/M2/NM

ENTRE 401.3 NM ET 605.8 NM , ECLAIREMENT 4.549 WATT/M2 10.765E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.3	0.270E-01	405.7	0.336E-01	412.8	0.383E-01	417.0	0.409E-01	419.6	0.411E-01
423.4	0.407E-01	427.9	0.385E-01	430.2	0.375E-01	432.0	0.372E-01	439.0	0.389E-01
446.6	0.399E-01	455.7	0.390E-01	458.3	0.388E-01	461.6	0.395E-01	465.3	0.397E-01
480.2	0.381E-01	485.4	0.368E-01	490.1	0.330E-01	494.3	0.309E-01	501.3	0.250E-01
509.5	0.186E-01	518.3	0.124E-01	521.9	0.116E-01	537.9	0.101E-01	555.0	0.616E-02
564.1	0.513E-02	605.8	0.						

STATION 4 EXP 9 PROF 10

MAXIMUM A LAMDA= 419.4 AVEC ECLAIREMENT SPECTRAL= 0.03608 WATT/M2/NM

ENTRE 402.9 NM ET 601.6 NM , ECLAIREMENT 3.896 WATT/M2 9.209E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.259E-01	405.4	0.285E-01	408.4	0.312E-01	413.3	0.329E-01	416.0	0.352E-01
419.4	0.361E-01	423.6	0.358E-01	426.7	0.345E-01	429.4	0.330E-01	432.1	0.325E-01
435.2	0.332E-01	443.0	0.350E-01	445.7	0.352E-01	449.1	0.351E-01	455.5	0.343E-01
465.6	0.354E-01	469.2	0.347E-01	475.6	0.345E-01	481.2	0.336E-01	487.2	0.318E-01
490.9	0.289E-01	494.6	0.275E-01	500.2	0.228E-01	505.7	0.180E-01	512.2	0.150E-01
519.1	0.996E-02	522.3	0.920E-02	528.8	0.880E-02	530.0	0.852E-02	535.4	0.812E-02
536.4	0.812E-02	551.9	0.575E-02	584.9	0.152E-02	601.6	0.		

STATION 4 EXP 9 PROF 20

MAXIMUM A LAMDA= 465.3 AVEC ECLAIREMENT SPECTRAL= 0.02402 WATT/M2/NM

ENTRE 400.9 NM ET 602.8 NM , ECLAIREMENT 2.587 WATT/M2 6.096E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.143E-01	405.0	0.183E-01	409.1	0.201E-01	413.3	0.210E-01	416.2	0.226E-01
418.9	0.233E-01	421.1	0.234E-01	424.2	0.233E-01	429.6	0.219E-01	432.7	0.214E-01
441.0	0.229E-01	447.2	0.235E-01	456.6	0.230E-01	465.3	0.240E-01	482.7	0.231E-01
488.3	0.211E-01	492.9	0.194E-01	500.1	0.152E-01	509.8	0.102E-01	519.3	0.581E-02
521.4	0.536E-02	527.8	0.521E-02	532.0	0.473E-02	538.5	0.454E-02	554.0	0.267E-02
575.6	0.144E-02	602.8	0.						

STATION 5 EXP 9 PROF 0

MAXIMUM A LAMDA= 482.7 AVEC ECLAIREMENT SPECTRAL= 0.05505 WATT/M2/NM

ENTRE 403.2 NM ET 616.0 NM , ECLAIREMENT 6.812 WATT/M2 16.890E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.2	0.248E-01	408.2	0.295E-01	413.1	0.321E-01	416.5	0.353E-01	422.0	0.362E-01
424.7	0.361E-01	428.4	0.355E-01	430.9	0.353E-01	437.7	0.388E-01	444.3	0.432E-01
449.9	0.467E-01	459.1	0.498E-01	464.7	0.520E-01	470.3	0.521E-01	474.4	0.535E-01
479.8	0.546E-01	482.7	0.551E-01	489.4	0.517E-01	491.5	0.513E-01	495.5	0.510E-01
497.6	0.494E-01	503.9	0.442E-01	509.3	0.417E-01	511.3	0.401E-01	518.5	0.331E-01
520.1	0.320E-01	525.1	0.320E-01	528.7	0.317E-01	532.3	0.312E-01	540.2	0.306E-01
554.6	0.231E-01	562.8	0.215E-01	585.5	0.122E-01	589.5	0.107E-01	592.8	0.705E-02
605.2	0.270E-02	616.0	0.						

STATION 5 EXP 9 PROF 5

MAXIMUM A LAMDA= 481.9 AVEC ECLAIREMENT SPECTRAL= 0.04345 WATT/M2/NM

ENTRE 403.1 NM ET 615.9 NM , ECLAIREMENT 5.183 WATT/M2 12.836E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.1	0.180E-01	407.1	0.202E-01	413.7	0.238E-01	416.2	0.253E-01	421.5	0.266E-01
425.5	0.270E-01	429.5	0.267E-01	432.9	0.269E-01	437.3	0.289E-01	449.6	0.361E-01
455.6	0.380E-01	460.5	0.395E-01	466.3	0.410E-01	470.6	0.413E-01	478.9	0.432E-01
481.9	0.435E-01	485.0	0.429E-01	489.7	0.408E-01	494.2	0.405E-01	499.5	0.380E-01
504.2	0.345E-01	509.3	0.322E-01	513.5	0.291E-01	517.4	0.249E-01	520.3	0.239E-01
527.2	0.239E-01	537.2	0.233E-01	556.2	0.169E-01	564.5	0.154E-01	583.0	0.895E-02
591.9	0.534E-02	607.8	0.135E-02	615.9	0.				



STATION 5 EXP 9 PROF 10

MAXIMUM A LAMDA= 484.0 AVEC ECLAIREMENT SPECTRAL= 0.03367 WATT/M2/NM

ENTRE 406.4 NM ET 605.6 NM , ECLAIREMENT 3.691 WATT/M2 9.121E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
406.4	0.140E-01	410.9	0.154E-01	416.4	0.175E-01	421.6	0.189E-01	425.3	0.191E-01
427.4	0.189E-01	431.4	0.193E-01	438.0	0.213E-01	450.3	0.267E-01	465.4	0.311E-01
472.6	0.320E-01	479.1	0.334E-01	481.6	0.336E-01	484.0	0.337E-01	488.5	0.322E-01
489.9	0.317E-01	493.7	0.314E-01	499.0	0.294E-01	505.3	0.259E-01	510.4	0.235E-01
519.0	0.172E-01	522.7	0.163E-01	525.8	0.166E-01	538.6	0.157E-01	554.8	0.111E-01
568.7	0.902E-02	585.4	0.448E-02	587.8	0.374E-02	605.6	0.		

STATION 5 EXP 9 PROF 18

MAXIMUM A LAMDA= 483.7 AVEC ECLAIREMENT SPECTRAL= 0.02407 WATT/M2/NM

ENTRE 403.2 NM ET 602.2 NM , ECLAIREMENT 2.411 WATT/M2 5.911E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.2	0.785E-02	407.3	0.903E-02	411.5	0.980E-02	415.0	0.110E-01	424.0	0.121E-01
431.0	0.123E-01	436.7	0.134E-01	440.8	0.150E-01	449.7	0.175E-01	460.6	0.199E-01
467.0	0.214E-01	480.4	0.237E-01	483.7	0.241E-01	485.9	0.238E-01	491.5	0.228E-01
495.3	0.225E-01	500.1	0.203E-01	504.4	0.178E-01	509.9	0.160E-01	515.2	0.124E-01
518.1	0.106E-01	520.8	0.101E-01	526.0	0.103E-01	528.7	0.101E-01	531.0	0.970E-02
536.8	0.946E-02	547.7	0.754E-02	552.8	0.619E-02	557.3	0.539E-02	563.1	0.508E-02
591.1	0.108E-02	602.2	0.						

STATION 6 EXP 9 PROF 0

MAXIMUM A LAMDA= 484.9 AVEC ECLAIREMENT SPECTRAL= 0.01731 WATT/M2/NM

ENTRE 414.2 NM ET 682.5 NM , ECLAIREMENT 2.329 WATT/M2 5.890E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.2	0.822E-02	409.7	0.966E-02	413.0	0.987E-02	416.1	0.107E-01	421.9	0.110E-01
425.5	0.110E-01	429.8	0.106E-01	432.3	0.106E-01	436.9	0.111E-01	443.7	0.124E-01
447.7	0.132E-01	452.3	0.141E-01	459.5	0.150E-01	465.6	0.157E-01	471.7	0.159E-01
478.7	0.170E-01	482.8	0.172E-01	484.9	0.173E-01	490.3	0.164E-01	495.1	0.166E-01
498.7	0.163E-01	507.0	0.148E-01	511.1	0.144E-01	515.4	0.131E-01	518.9	0.120E-01
521.7	0.118E-01	524.8	0.120E-01	537.6	0.116E-01	543.0	0.107E-01	555.9	0.897E-02
560.3	0.866E-02	570.2	0.755E-02	583.8	0.523E-02	588.7	0.448E-02	593.5	0.326E-02
606.2	0.164E-02	638.0	0.970E-03	661.5	0.814E-03	682.5	0.		

STATION 6 EXP 9 PROF 5

MAXIMUM A LAMDA= 482.2 AVEC ECLAIREMENT SPECTRAL= 0.01285 WATT/M2/NM

ENTRE 412.9 NM ET 641.8 NM , ECLAIREMENT 1.575 WATT/M2 3.946E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.9	0.475E-02	407.0	0.551E-02	413.2	0.617E-02	416.2	0.669E-02	419.7	0.689E-02
423.8	0.703E-02	427.7	0.696E-02	429.5	0.689E-02	433.6	0.690E-02	435.2	0.721E-02
437.7	0.739E-02	442.1	0.814E-02	451.2	0.970E-02	462.9	0.109E-01	466.3	0.114E-01
474.0	0.120E-01	477.6	0.125E-01	482.2	0.128E-01	486.4	0.125E-01	489.5	0.123E-01
493.5	0.124E-01	496.4	0.123E-01	504.0	0.113E-01	510.4	0.108E-01	515.5	0.939E-02
519.0	0.850E-02	521.5	0.840E-02	526.3	0.859E-02	537.4	0.831E-02	546.2	0.723E-02
553.6	0.615E-02	563.2	0.559E-02	589.1	0.245E-02	593.3	0.149E-02	607.8	0.437E-03
629.1	0.103E-03	641.8	0.						

STATION 6 EXP 9 PROF 10

MAXIMUM A LAMDA= 486.5 AVEC ECLAIREMENT SPECTRAL= 0.01003 WATT/M2/NM

ENTRE 401.4 NM ET 620.4 NM , ECLAIREMENT 1.172 WATT/M2 2.945E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.261E-02	407.8	0.355E-02	411.9	0.375E-02	415.3	0.409E-02	419.0	0.428E-02
424.0	0.445E-02	430.6	0.449E-02	432.8	0.447E-02	436.3	0.473E-02	438.7	0.488E-02
445.7	0.593E-02	449.2	0.645E-02	452.6	0.699E-02	461.1	0.786E-02	466.5	0.846E-02
468.4	0.850E-02	475.9	0.937E-02	482.5	0.100E-01	486.5	0.100E-01	490.7	0.975E-02
494.4	0.992E-02	497.0	0.996E-02	504.4	0.915E-02	510.9	0.869E-02	516.7	0.736E-02
520.9	0.653E-02	527.3	0.670E-02	538.3	0.647E-02	549.8	0.536E-02	556.4	0.450E-02
562.1	0.423E-02	570.6	0.361E-02	576.7	0.291E-02	583.6	0.189E-02	587.7	0.167E-02
592.9	0.983E-03	600.8	0.492E-03	608.3	0.261E-03	620.4	0.		

STATION 6 EXP 9 PROF 18

MAXIMUM A LAMDA= 496.8 AVEC ECLAIREMENT SPECTRAL= 0.00653 WATT/M2/NM

ENTRE 406.1 NM ET 617.5 NM , ECLAIREMENT 0.697 WATT/M2 1.767E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
406.1	0.147E-02	413.7	0.177E-02	416.3	0.194E-02	424.2	0.220E-02	427.7	0.223E-02
429.5	0.221E-02	434.1	0.227E-02	435.5	0.235E-02	437.5	0.238E-02	445.0	0.304E-02
459.3	0.441E-02	462.8	0.453E-02	469.6	0.515E-02	471.6	0.525E-02	479.2	0.591E-02
484.4	0.636E-02	485.4	0.640E-02	489.5	0.631E-02	493.3	0.634E-02	495.2	0.640E-02
499.8	0.653E-02	506.3	0.615E-02	511.0	0.596E-02	514.8	0.522E-02	519.3	0.439E-02
520.2	0.426E-02	523.4	0.424E-02	525.6	0.431E-02	528.5	0.434E-02	538.0	0.417E-02
547.6	0.339E-02	553.4	0.295E-02	562.3	0.272E-02	572.2	0.225E-02	580.1	0.161E-02
584.4	0.110E-02	588.4	0.868E-03	593.5	0.411E-03	601.2	0.150E-03	617.5	0.

STATION 9 EXP 9 PROF 0

MAXIMUM A LAMDA= 484.4 AVEC ECLAIREMENT SPECTRAL= 0.05002 WATT/M2/NM

ENTRE 402.4 NM ET 636.6 NM , ECLAIREMENT 6.896 WATT/M2 17.200E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.4	0.261E-01	408.2	0.336E-01	412.1	0.350E-01	416.7	0.372E-01	424.5	0.376E-01
426.8	0.372E-01	431.5	0.348E-01	434.3	0.346E-01	441.8	0.384E-01	451.5	0.447E-01
454.0	0.455E-01	456.8	0.456E-01	459.1	0.460E-01	461.9	0.462E-01	466.1	0.469E-01
470.7	0.470E-01	477.0	0.486E-01	481.4	0.498E-01	484.4	0.500E-01	489.7	0.476E-01
491.4	0.475E-01	496.3	0.485E-01	499.2	0.478E-01	505.2	0.443E-01	512.2	0.420E-01
519.7	0.341E-01	521.7	0.335E-01	525.6	0.343E-01	534.4	0.328E-01	539.1	0.324E-01
555.3	0.251E-01	571.9	0.212E-01	584.3	0.142E-01	589.1	0.127E-01	593.9	0.845E-02
605.1	0.415E-02	619.9	0.245E-02	636.6	0.				

STATION 9 EXP 9 PROF 5

MAXIMUM A LAMDA= 484.1 AVEC ECLAIREMENT SPECTRAL= 0.04076 WATT/M2/NM

ENTRE 404.4 NM ET 629.0 NM , ECLAIREMENT 5.300 WATT/M2 13.244E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
404.4	0.210E-01	409.5	0.238E-01	412.5	0.246E-01	416.5	0.265E-01	425.0	0.267E-01
432.0	0.252E-01	435.4	0.259E-01	443.0	0.291E-01	450.7	0.342E-01	453.6	0.348E-01
455.8	0.349E-01	461.7	0.361E-01	466.1	0.369E-01	471.1	0.373E-01	477.1	0.395E-01
480.8	0.404E-01	484.1	0.408E-01	489.3	0.395E-01	491.3	0.392E-01	494.9	0.401E-01
497.9	0.402E-01	503.5	0.373E-01	511.3	0.342E-01	518.7	0.278E-01	521.3	0.273E-01
524.3	0.276E-01	528.1	0.277E-01	533.4	0.270E-01	537.0	0.270E-01	553.0	0.211E-01
557.2	0.195E-01	562.2	0.187E-01	569.3	0.168E-01	585.7	0.970E-02	589.1	0.856E-02
594.9	0.505E-02	608.0	0.171E-02	629.0	0.				

STATION 9 EXP 9 PROF 10

MAXIMUM A LAMDA= 497.2 AVEC ECLAIREMENT SPECTRAL= 0.03296 WATT/M2/NM

ENTRE 407.9 NM ET 611.6 NM , ECLAIREMENT 3.913 WATT/M2 9.804E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
407.9	0.154E-01	413.2	0.163E-01	416.8	0.175E-01	425.5	0.184E-01	428.5	0.180E-01
432.1	0.176E-01	438.1	0.187E-01	446.5	0.224E-01	451.3	0.252E-01	455.0	0.262E-01
456.5	0.262E-01	464.4	0.275E-01	467.8	0.284E-01	472.5	0.289E-01	481.2	0.317E-01
484.4	0.324E-01	486.4	0.324E-01	490.6	0.316E-01	494.8	0.325E-01	497.2	0.330E-01
501.2	0.319E-01	503.3	0.308E-01	512.2	0.280E-01	518.7	0.214E-01	522.7	0.210E-01
526.4	0.217E-01	538.5	0.207E-01	556.0	0.150E-01	561.5	0.141E-01	576.5	0.995E-02
585.7	0.600E-02	588.4	0.544E-02	592.6	0.313E-02	601.1	0.125E-02	611.6	0.

STATION 9 EXP 9 PROF 20

MAXIMUM A LAMDA= 498.6 AVEC ECLAIREMENT SPECTRAL= 0.01486 WATT/M2/NM

ENTRE 402.4 NM ET 621.4 NM , ECLAIREMENT 1.565 WATT/M2 3.956E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.4	0.279E-02	408.0	0.367E-02	414.0	0.406E-02	417.2	0.461E-02	426.5	0.532E-02
431.6	0.520E-02	437.4	0.573E-02	444.3	0.709E-02	449.8	0.854E-02	456.9	0.958E-02
461.4	0.992E-02	470.9	0.111E-01	480.3	0.130E-01	485.6	0.135E-01	486.9	0.134E-01
489.8	0.135E-01	496.3	0.148E-01	498.6	0.149E-01	504.1	0.141E-01	510.3	0.130E-01
516.1	0.104E-01	519.3	0.923E-02	521.3	0.911E-02	525.9	0.943E-02	538.7	0.932E-02
554.4	0.660E-02	558.7	0.612E-02	561.1	0.621E-02	578.1	0.373E-02	586.3	0.218E-02
588.1	0.208E-02	593.4	0.995E-03	598.2	0.654E-03	621.4	0.		

STATION 10 EXP 9 PROF 1

MAXIMUM A LAMDA= 466.9 AVEC ECLAIREMENT SPECTRAL= 0.00958 WATT/M2/NM

ENTRE 401.4 NM ET 639.4 NM , ECLAIREMENT 1.260 WATT/M2 3.070E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.4	0.595E-02	407.4	0.776E-02	411.2	0.825E-02	413.9	0.849E-02	417.4	0.896E-02
421.6	0.897E-02	425.1	0.882E-02	431.3	0.802E-02	434.2	0.792E-02	436.8	0.818E-02
443.6	0.870E-02	448.8	0.900E-02	452.4	0.924E-02	458.1	0.931E-02	466.9	0.958E-02
474.6	0.946E-02	476.7	0.949E-02	484.9	0.955E-02	491.2	0.886E-02	495.2	0.893E-02
508.0	0.719E-02	510.3	0.703E-02	518.5	0.526E-02	523.9	0.496E-02	538.1	0.456E-02
555.9	0.317E-02	562.5	0.297E-02	582.0	0.169E-02	588.5	0.144E-02	593.0	0.901E-03
609.3	0.470E-03	639.4	0.						

STATION 10 EXP 9 PROF 5

MAXIMUM A LAMDA= 484.1 AVEC ECLAIREMENT SPECTRAL= 0.00731 WATT/M2/NM

ENTRE 405.8 NM ET 611.5 NM , ECLAIREMENT 0.895 WATT/M2 2.180E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
405.8	0.558E-02	413.0	0.608E-02	417.2	0.646E-02	421.1	0.644E-02	424.7	0.626E-02
430.8	0.585E-02	432.2	0.580E-02	452.0	0.684E-02	459.3	0.696E-02	466.6	0.720E-02
471.7	0.716E-02	477.1	0.730E-02	484.1	0.731E-02	491.5	0.683E-02	493.5	0.691E-02
495.7	0.687E-02	500.9	0.637E-02	511.7	0.505E-02	519.1	0.365E-02	523.7	0.359E-02
538.3	0.320E-02	553.6	0.224E-02	561.9	0.196E-02	587.7	0.863E-03	597.5	0.365E-03
611.5	0.								

STATION 10 EXP 9 PROF 10

MAXIMUM A LAMDA= 482.8 AVEC ECLAIREMENT SPECTRAL= 0.00595 WATT/M2/NM

ENTRE 403.8 NM ET 605.5 NM , ECLAIREMENT 0.696 WATT/M2 1.688E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.8	0.348E-02	409.9	0.432E-02	414.2	0.453E-02	418.5	0.483E-02	420.4	0.488E-02
423.6	0.486E-02	431.8	0.441E-02	433.4	0.439E-02	442.1	0.479E-02	451.1	0.532E-02
455.1	0.536E-02	462.6	0.559E-02	468.6	0.582E-02	474.6	0.581E-02	482.8	0.595E-02
490.1	0.556E-02	494.8	0.557E-02	498.1	0.549E-02	509.9	0.422E-02	519.0	0.286E-02
526.6	0.268E-02	538.9	0.243E-02	556.0	0.148E-02	570.9	0.111E-02	584.1	0.535E-03
588.5	0.446E-03	605.5	0.						

STATION 10 EXP 9 PROF 20

MAXIMUM A LAMDA= 482.5 AVEC ECLAIREMENT SPECTRAL= 0.00347 WATT/M2/NM

ENTRE 406.9 NM ET 603.6 NM , ECLAIREMENT 0.367 WATT/M2 0.890E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
406.9	0.214E-02	416.5	0.244E-02	423.1	0.248E-02	425.7	0.244E-02	430.8	0.230E-02
433.6	0.229E-02	436.7	0.239E-02	438.0	0.241E-02	451.6	0.290E-02	456.8	0.298E-02
465.0	0.322E-02	475.6	0.342E-02	482.5	0.347E-02	485.8	0.344E-02	490.2	0.333E-02
494.9	0.335E-02	501.4	0.310E-02	505.4	0.269E-02	513.9	0.214E-02	517.2	0.166E-02
518.4	0.147E-02	521.7	0.136E-02	527.1	0.136E-02	531.9	0.127E-02	537.4	0.121E-02
556.5	0.617E-03	583.6	0.166E-03	603.6	0.				

STATION 15 EXP 9 PROF 0

MAXIMUM A LAMDA= 476.4 AVEC ECLAIREMENT SPECTRAL= 0.03012 WATT/M2/NM

ENTRE 401.8 NM ET 647.6 NM , ECLAIREMENT 3.834 WATT/M2 9.300E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.209E-01	403.5	0.232E-01	405.5	0.249E-01	408.2	0.259E-01	410.1	0.262E-01
411.7	0.269E-01	413.6	0.277E-01	415.8	0.281E-01	418.0	0.283E-01	420.9	0.281E-01
422.2	0.279E-01	423.5	0.276E-01	425.4	0.271E-01	429.7	0.255E-01	430.6	0.252E-01
431.6	0.250E-01	433.2	0.249E-01	436.9	0.256E-01	442.7	0.271E-01	450.4	0.288E-01
454.4	0.291E-01	456.7	0.292E-01	459.8	0.295E-01	463.1	0.298E-01	465.0	0.300E-01
467.1	0.301E-01	470.2	0.299E-01	474.2	0.301E-01	478.4	0.301E-01	480.0	0.301E-01
485.0	0.294E-01	488.3	0.285E-01	490.2	0.272E-01	494.0	0.266E-01	497.3	0.256E-01
500.9	0.239E-01	505.1	0.217E-01	510.3	0.199E-01	512.7	0.184E-01	515.3	0.167E-01
517.3	0.152E-01	519.3	0.146E-01	520.3	0.144E-01	526.8	0.142E-01	536.5	0.131E-01
544.5	0.116E-01	553.9	0.937E-02	558.1	0.871E-02	560.8	0.865E-02	571.5	0.711E-02
586.0	0.419E-02	588.3	0.380E-02	594.7	0.232E-02	603.4	0.142E-02	618.5	0.542E-03
647.6	0.								

STATION 15 EXP 9 PROF 5

MAXIMUM A LAMDA= 482.7 AVEC ECLAIREMENT SPECTRAL= 0.02636 WATT/M2/NM

ENTRE 401.8 NM ET 617.9 NM , ECLAIREMENT 3.227 WATT/M2 7.812E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.8	0.163E-01	403.3	0.182E-01	404.5	0.197E-01	407.0	0.205E-01	409.1	0.214E-01
412.2	0.220E-01	413.7	0.229E-01	416.2	0.233E-01	417.4	0.236E-01	418.6	0.236E-01
421.7	0.232E-01	423.8	0.225E-01	426.3	0.217E-01	429.3	0.211E-01	431.5	0.210E-01
437.8	0.219E-01	443.2	0.231E-01	446.8	0.240E-01	450.1	0.245E-01	453.7	0.247E-01
458.0	0.252E-01	464.2	0.259E-01	474.4	0.260E-01	478.4	0.262E-01	482.7	0.264E-01
485.7	0.258E-01	488.5	0.245E-01	490.2	0.239E-01	492.9	0.239E-01	497.8	0.225E-01
502.0	0.205E-01	505.0	0.188E-01	509.7	0.174E-01	514.1	0.152E-01	517.5	0.131E-01
520.2	0.123E-01	522.9	0.120E-01	528.0	0.120E-01	534.2	0.112E-01	535.1	0.112E-01
539.9	0.105E-01	548.9	0.857E-02	556.4	0.714E-02	564.1	0.646E-02	576.8	0.467E-02
583.0	0.359E-02	587.8	0.308E-02	595.3	0.137E-02	603.4	0.685E-03	617.9	0.



STATION 15 EXP 9 PROF 10

MAXIMUM A LAMDA= 482.8 AVEC ECLAIREMENT SPECTRAL= 0.02236 WATT/M2/NM

ENTRE 411.2 NM ET 606.9 NM , ECLAIREMENT 2.581 WATT/M2 6.231E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.129E-01	403.8	0.145E-01	407.0	0.158E-01	409.9	0.167E-01	412.1	0.171E-01
414.7	0.178E-01	416.7	0.185E-01	422.1	0.182E-01	425.7	0.176E-01	428.5	0.169E-01
431.4	0.167E-01	434.3	0.167E-01	440.7	0.179E-01	447.2	0.191E-01	450.6	0.199E-01
458.1	0.205E-01	464.8	0.215E-01	471.9	0.218E-01	475.8	0.221E-01	478.7	0.222E-01
482.8	0.224E-01	486.1	0.219E-01	488.6	0.210E-01	490.5	0.204E-01	491.0	0.203E-01
491.9	0.203E-01	496.3	0.196E-01	500.6	0.176E-01	505.6	0.154E-01	510.8	0.141E-01
514.9	0.120E-01	517.3	0.993E-02	520.0	0.944E-02	523.8	0.950E-02	536.2	0.868E-02
543.1	0.751E-02	551.8	0.590E-02	558.3	0.490E-02	569.7	0.405E-02	576.5	0.300E-02
582.0	0.219E-02	586.3	0.174E-02	592.3	0.961E-03	606.9	0.		

STATION 15 EXP 9 PROF 20

MAXIMUM A LAMDA= 483.6 AVEC ECLAIREMENT SPECTRAL= 0.01106 WATT/M2/NM

ENTRE 402.3 NM ET 604.4 NM , ECLAIREMENT 1.189 WATT/M2 2.883E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.3	0.486E-02	404.5	0.570E-02	407.0	0.647E-02	411.2	0.679E-02	414.2	0.718E-02
417.1	0.760E-02	420.3	0.755E-02	424.6	0.762E-02	427.5	0.759E-02	430.1	0.723E-02
433.0	0.700E-02	437.1	0.714E-02	440.1	0.759E-02	445.4	0.825E-02	450.5	0.881E-02
456.7	0.941E-02	459.6	0.962E-02	462.9	0.977E-02	465.1	0.100E-01	470.7	0.103E-01
472.6	0.105E-01	476.8	0.108E-01	481.0	0.111E-01	483.6	0.111E-01	487.3	0.109E-01
489.6	0.105E-01	491.0	0.103E-01	495.6	0.102E-01	499.3	0.978E-02	502.1	0.910E-02
507.4	0.801E-02	510.8	0.746E-02	513.2	0.637E-02	515.9	0.537E-02	518.0	0.480E-02
520.7	0.451E-02	526.2	0.458E-02	532.9	0.411E-02	535.3	0.424E-02	539.4	0.393E-02
543.9	0.351E-02	551.9	0.269E-02	557.3	0.232E-02	558.5	0.231E-02	563.7	0.214E-02
577.2	0.116E-02	592.3	0.232E-03	604.4	0.				

STATION 16 EXP 9 PROF 0

MAXIMUM A LAMDA= 482.3 AVEC ECLAIREMENT SPECTRAL= 0.02690 WATT/M2/NM

ENTRE 401.5 NM ET 682.3 NM , ECLAIREMENT 3.787 WATT/M2 9.540E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.5	0.132E-01	404.6	0.154E-01	408.0	0.167E-01	411.8	0.170E-01	414.8	0.181E-01
417.2	0.187E-01	421.7	0.190E-01	423.7	0.189E-01	429.9	0.180E-01	431.7	0.176E-01
433.9	0.179E-01	437.6	0.185E-01	441.4	0.202E-01	445.1	0.215E-01	448.1	0.224E-01
451.8	0.236E-01	455.2	0.239E-01	463.8	0.251E-01	468.2	0.253E-01	472.3	0.256E-01
475.8	0.263E-01	477.9	0.267E-01	479.6	0.268E-01	482.3	0.269E-01	487.3	0.256E-01
489.6	0.253E-01	492.0	0.254E-01	495.9	0.255E-01	499.3	0.247E-01	503.9	0.233E-01
509.8	0.222E-01	514.2	0.203E-01	518.3	0.186E-01	521.2	0.185E-01	524.4	0.189E-01
530.8	0.185E-01	537.9	0.180E-01	544.3	0.165E-01	552.4	0.148E-01	558.7	0.136E-01
568.6	0.126E-01	583.6	0.874E-02	587.4	0.818E-02	592.0	0.554E-02	606.9	0.285E-02
625.4	0.218E-02	647.2	0.180E-02	665.4	0.780E-03	682.3	0.		

STATION 16 EXP 9 PROF 5

MAXIMUM A LAMDA= 484.3 AVEC ECLAIREMENT SPECTRAL= 0.01784 WATT/M2/NM

ENTRE 400.2 NM ET 642.9 NM , ECLAIREMENT 2.287 WATT/M2 5.724E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.2	0.548E-02	402.1	0.726E-02	406.0	0.844E-02	409.5	0.903E-02	413.3	0.944E-02
415.3	0.997E-02	421.0	0.103E-01	423.6	0.105E-01	427.8	0.104E-01	430.0	0.102E-01
432.6	0.100E-01	436.6	0.105E-01	441.8	0.115E-01	445.6	0.126E-01	448.6	0.134E-01
450.6	0.139E-01	454.9	0.146E-01	464.5	0.156E-01	466.4	0.159E-01	472.0	0.163E-01
474.5	0.168E-01	481.1	0.177E-01	484.3	0.178E-01	487.1	0.174E-01	490.5	0.170E-01
494.9	0.173E-01	498.6	0.172E-01	501.6	0.164E-01	506.6	0.154E-01	510.9	0.150E-01
514.8	0.138E-01	518.0	0.126E-01	520.9	0.121E-01	522.6	0.120E-01	525.9	0.123E-01
527.6	0.123E-01	535.5	0.120E-01	539.0	0.119E-01	549.8	0.100E-01	556.3	0.883E-02
565.6	0.810E-02	571.8	0.705E-02	584.2	0.448E-02	587.6	0.392E-02	594.7	0.210E-02
605.8	0.696E-03	611.9	0.357E-03	642.9	0.				

STATION 16 EXP 9 PROF 10

MAXIMUM A LAMDA= 495.3 AVEC ECLAIREMENT SPECTRAL= 0.00958 WATT/M2/NM

ENTRE 402.4 NM ET 620.6 NM , ECLAIREMENT 1.175 WATT/M2 2.957E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.4	0.304E-02	405.8	0.367E-02	413.2	0.402E-02	414.8	0.424E-02	420.8	0.457E-02
425.2	0.468E-02	430.3	0.452E-02	432.9	0.449E-02	437.8	0.485E-02	442.2	0.556E-02
448.3	0.635E-02	451.8	0.699E-02	459.3	0.763E-02	464.7	0.791E-02	470.0	0.833E-02
476.5	0.910E-02	478.8	0.941E-02	483.2	0.958E-02	488.0	0.933E-02	488.0	0.933E-02
489.3	0.930E-02	490.3	0.930E-02	491.4	0.941E-02	495.3	0.958E-02	500.6	0.940E-02
504.0	0.896E-02	509.6	0.859E-02	514.2	0.774E-02	516.5	0.697E-02	518.1	0.675E-02
520.1	0.665E-02	523.7	0.683E-02	527.9	0.699E-02	536.5	0.672E-02	545.4	0.584E-02
555.6	0.472E-02	562.8	0.460E-02	568.9	0.424E-02	580.0	0.284E-02	589.2	0.155E-02
594.0	0.939E-03	603.2	0.393E-03	620.6	0.				

STATION 16 EXP 9 PROF 15

MAXIMUM A LAMDA= 497.8 AVEC ECLAIREMENT SPECTRAL= 0.00453 WATT/M2/NM

ENTRE 403.6 NM ET 618.3 NM , ECLAIREMENT 0.523 WATT/M2 1.336E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.6	0.111E-02	407.9	0.125E-02	419.2	0.146E-02	423.9	0.154E-02	430.5	0.150E-02
433.3	0.150E-02	442.0	0.188E-02	450.4	0.255E-02	457.0	0.294E-02	470.1	0.340E-02
475.9	0.379E-02	481.7	0.407E-02	482.9	0.414E-02	486.6	0.418E-02	487.6	0.415E-02
490.1	0.420E-02	492.8	0.438E-02	494.3	0.448E-02	497.8	0.453E-02	501.0	0.453E-02
502.0	0.446E-02	507.8	0.440E-02	510.3	0.425E-02	513.1	0.389E-02	516.2	0.348E-02
518.8	0.338E-02	523.5	0.348E-02	527.2	0.363E-02	530.7	0.358E-02	538.4	0.344E-02
546.8	0.301E-02	553.2	0.258E-02	559.3	0.245E-02	567.0	0.233E-02	575.6	0.179E-02
585.1	0.104E-02	587.2	0.906E-03	592.2	0.462E-03	607.0	0.906E-04	618.3	0.

STATION 16 EXP 9 PROF 20

MAXIMUM A LAMDA= 501.1 AVEC ECLAIREMENT SPECTRAL= 0.00197 WATT/M2/NM

ENTRE 403.3 NM ET 604.2 NM , ECLAIREMENT 0.208 WATT/M2 0.534E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMCA	W/M2/NM
403.3	0.309E-03	411.7	0.359E-03	421.8	0.443E-03	435.0	0.471E-03	443.9	0.643E-03
451.2	0.873E-03	454.5	0.952E-03	463.5	0.116E-02	467.9	0.121E-02	475.0	0.142E-02
482.2	0.162E-02	484.5	0.168E-02	487.5	0.168E-02	491.4	0.180E-02	495.3	0.194E-02
501.1	0.197E-02	505.9	0.193E-02	511.5	0.187E-02	517.6	0.151E-02	521.9	0.152E-02
523.9	0.156E-02	527.2	0.159E-02	534.3	0.158E-02	537.8	0.153E-02	545.2	0.130E-02
549.8	0.123E-02	554.2	0.106E-02	563.0	0.103E-02	569.9	0.928E-03	579.1	0.613E-03
583.6	0.416E-03	590.5	0.282E-03	594.5	0.966E-04	604.2	0.		

STATION 18 EXP 9 PROF 0

MAXIMUM A LAMDA= 420.3 AVEC ECLAIREMENT SPECTRAL= 0.06744 WATT/M2/NM

ENTRE 401.3 NM ET 624.3 NM , ECLAIREMENT 7.179 WATT/M2 16.970E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.3	0.413E-01	403.4	0.496E-01	405.0	0.543E-01	407.7	0.595E-01	410.8	0.616E-01
413.0	0.634E-01	415.6	0.651E-01	417.5	0.672E-01	420.3	0.674E-01	422.6	0.672E-01
427.0	0.645E-01	429.5	0.624E-01	431.5	0.612E-01	432.6	0.611E-01	438.1	0.629E-01
442.5	0.639E-01	446.6	0.647E-01	450.7	0.639E-01	455.4	0.620E-01	459.1	0.616E-01
461.3	0.616E-01	463.8	0.618E-01	471.0	0.604E-01	480.4	0.572E-01	485.8	0.537E-01
489.1	0.494E-01	493.0	0.469E-01	497.8	0.416E-01	501.2	0.365E-01	504.6	0.314E-01
510.1	0.272E-01	515.7	0.210E-01	519.1	0.181E-01	528.2	0.175E-01	537.8	0.155E-01
547.4	0.127E-01	555.5	0.100E-01	565.2	0.870E-02	582.7	0.438E-02	594.5	0.243E-02
606.3	0.270E-03	624.3	0.						

STATION 18 EXP 9 PROF 5

MAXIMUM A LAMDA= 420.9 AVEC ECLAIREMENT SPECTRAL= 0.05959 WATT/M2/NM

ENTRE 402.3 NM ET 610.4 NM , ECLAIREMENT 6.385 WATT/M2 15.103E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.3	0.443E-01	405.2	0.495E-01	409.1	0.530E-01	413.3	0.553E-01	415.3	0.581E-01
418.6	0.595E-01	420.9	0.596E-01	423.6	0.592E-01	426.7	0.576E-01	430.5	0.550E-01
432.3	0.540E-01	436.8	0.549E-01	440.5	0.569E-01	443.4	0.579E-01	446.1	0.580E-01
450.6	0.571E-01	456.1	0.554E-01	465.7	0.562E-01	475.1	0.536E-01	478.7	0.532E-01
485.5	0.495E-01	491.4	0.436E-01	494.6	0.416E-01	500.7	0.329E-01	504.1	0.293E-01
510.3	0.246E-01	515.9	0.179E-01	517.7	0.162E-01	523.8	0.151E-01	540.2	0.125E-01
556.9	0.846E-02	572.6	0.620E-02	590.3	0.316E-02	610.4	0.		

STATION 18 EXP 9 PROF 10

MAXIMUM A LAMDA= 420.2 AVEC ECLAIREMENT SPECTRAL= 0.05156 WATT/M2/NM

ENTRE 400.9 NM ET 606.3 NM , ECLAIREMENT 5.482 WATT/M2 12.897E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.316E-01	402.0	0.360E-01	404.5	0.400E-01	407.2	0.441E-01	409.3	0.458E-01
411.7	0.470E-01	414.4	0.490E-01	416.3	0.508E-01	417.5	0.515E-01	420.2	0.516E-01
423.4	0.510E-01	426.7	0.494E-01	430.0	0.478E-01	432.4	0.468E-01	434.3	0.471E-01
438.7	0.487E-01	443.0	0.503E-01	446.5	0.507E-01	451.1	0.498E-01	456.7	0.490E-01
466.1	0.498E-01	470.3	0.484E-01	478.3	0.469E-01	481.6	0.459E-01	486.9	0.428E-01
490.0	0.390E-01	493.9	0.362E-01	498.0	0.326E-01	501.0	0.278E-01	506.4	0.230E-01
508.3	0.216E-01	509.9	0.205E-01	515.0	0.156E-01	517.6	0.130E-01	520.8	0.124E-01
537.5	0.104E-01	548.4	0.799E-02	555.9	0.598E-02	564.4	0.495E-02	579.1	0.289E-02
589.7	0.103E-02	606.3	0.						

STATION 18 EXP 9 PROF 20

MAXIMUM A LAMDA= 446.4 AVEC ECLAIREMENT SPECTRAL= 0.03863 WATT/M2/NM

ENTRE 400.9 NM ET 601.0 NM , ECLAIREMENT 4.048 WATT/M2 9.503E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.9	0.195E-01	402.6	0.240E-01	404.7	0.269E-01	407.7	0.307E-01	410.2	0.320E-01
413.8	0.330E-01	415.5	0.353E-01	417.6	0.367E-01	418.9	0.374E-01	422.1	0.378E-01
423.9	0.376E-01	426.8	0.368E-01	430.3	0.358E-01	432.9	0.350E-01	434.9	0.355E-01
439.7	0.372E-01	441.9	0.382E-01	444.2	0.386E-01	446.4	0.386E-01	450.8	0.384E-01
453.2	0.376E-01	456.8	0.375E-01	466.0	0.385E-01	478.6	0.371E-01	483.4	0.359E-01
486.6	0.344E-01	490.5	0.308E-01	494.4	0.287E-01	498.3	0.251E-01	503.4	0.203E-01
507.2	0.166E-01	511.5	0.145E-01	514.1	0.114E-01	518.0	0.877E-02	520.8	0.815E-02
529.9	0.703E-02	533.3	0.676E-02	536.6	0.676E-02	557.1	0.297E-02	573.0	0.178E-02
585.2	0.541E-03	601.0	0.						

STATION 15 EXP 9 PROF 0

MAXIMUM A LAMDA= 447.1 AVEC ECLAIREMENT SPECTRAL= 0.04304 WATT/M2/NM

ENTRE 401.7 NM ET 604.4 NM , ECLAIREMENT 4.664 WATT/M2 11.050E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.7	0.258E-01	403.0	0.295E-01	405.4	0.322E-01	407.3	0.343E-01	409.3	0.355E-01
412.1	0.365E-01	413.6	0.388E-01	415.9	0.406E-01	418.4	0.412E-01	421.6	0.417E-01
424.4	0.415E-01	427.9	0.405E-01	429.6	0.395E-01	431.9	0.389E-01	433.5	0.388E-01
437.7	0.406E-01	440.8	0.421E-01	445.0	0.430E-01	447.1	0.430E-01	449.2	0.429E-01
454.7	0.418E-01	457.0	0.415E-01	460.6	0.419E-01	465.3	0.421E-01	471.9	0.405E-01
479.7	0.387E-01	484.5	0.371E-01	486.9	0.358E-01	488.3	0.341E-01	489.8	0.325E-01
493.6	0.310E-01	497.3	0.278E-01	502.1	0.236E-01	504.8	0.207E-01	508.5	0.189E-01
515.6	0.146E-01	516.9	0.124E-01	520.8	0.118E-01	531.7	0.108E-01	538.5	0.990E-02
550.2	0.758E-02	568.5	0.521E-02	584.4	0.293E-02	604.4	0.		

STATION 15 EXP 9 PROF 5

MAXIMUM A LAMDA= 446.9 AVEC ECLAIREMENT SPECTRAL= 0.03919 WATT/M2/NM

ENTRE 401.9 NM ET 610.7 NM , ECLAIREMENT 4.176 WATT/M2 9.890E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.214E-01	403.4	0.248E-01	406.0	0.283E-01	408.5	0.312E-01	412.0	0.316E-01
414.6	0.334E-01	416.7	0.357E-01	419.8	0.366E-01	423.0	0.372E-01	426.8	0.364E-01
430.2	0.350E-01	431.1	0.350E-01	433.4	0.348E-01	437.4	0.364E-01	441.8	0.383E-01
446.9	0.392E-01	452.3	0.384E-01	457.7	0.380E-01	462.5	0.383E-01	467.3	0.382E-01
473.3	0.369E-01	481.3	0.354E-01	487.1	0.333E-01	489.7	0.308E-01	490.2	0.299E-01
494.0	0.285E-01	498.7	0.248E-01	501.9	0.217E-01	507.7	0.179E-01	510.6	0.167E-01
514.9	0.129E-01	519.2	0.106E-01	527.4	0.988E-02	535.5	0.898E-02	537.6	0.890E-02
555.5	0.521E-02	563.8	0.470E-02	585.2	0.200E-02	593.8	0.941E-03	610.7	0.

STATION 19 EXP 9 PROF 10

MAXIMUM A LAMDA= 446.3 AVEC ECLAIREMENT SPECTRAL= 0.03533 WATT/M2/NM

ENTRE 401.0 NM ET 605.6 NM , ECLAIREMENT 3.716 WATT/M2 8.785E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.0	0.186E-01	402.7	0.210E-01	404.9	0.237E-01	408.0	0.255E-01	410.7	0.272E-01
412.2	0.280E-01	414.9	0.297E-01	416.4	0.313E-01	420.3	0.319E-01	422.3	0.326E-01
423.8	0.325E-01	428.2	0.316E-01	430.6	0.309E-01	433.2	0.308E-01	437.1	0.324E-01
441.3	0.342E-01	443.0	0.348E-01	446.3	0.353E-01	451.2	0.349E-01	456.7	0.342E-01
461.3	0.346E-01	465.9	0.349E-01	477.2	0.332E-01	484.8	0.312E-01	487.8	0.298E-01
489.6	0.277E-01	492.2	0.260E-01	497.6	0.235E-01	501.9	0.195E-01	504.4	0.172E-01
509.8	0.147E-01	513.2	0.122E-01	516.3	0.996E-02	517.8	0.908E-02	521.2	0.855E-02
538.5	0.738E-02	555.2	0.449E-02	572.2	0.300E-02	590.8	0.954E-03	605.6	0.

STATION 19 EXP 9 PROF 20

MAXIMUM A LAMDA= 465.0 AVEC ECLAIREMENT SPECTRAL= 0.02503 WATT/M2/NM

ENTRE 400.8 NM ET 601.8 NM , ECLAIREMENT 2.614 WATT/M2 6.188E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.109E-01	404.1	0.140E-01	407.1	0.168E-01	410.2	0.179E-01	413.5	0.186E-01
416.3	0.205E-01	418.7	0.214E-01	423.6	0.220E-01	425.7	0.220E-01	430.2	0.217E-01
431.7	0.214E-01	437.5	0.225E-01	443.2	0.243E-01	447.7	0.247E-01	455.3	0.244E-01
460.2	0.245E-01	465.0	0.250E-01	476.8	0.244E-01	485.0	0.232E-01	487.9	0.219E-01
489.9	0.207E-01	493.3	0.194E-01	499.9	0.159E-01	506.0	0.122E-01	510.4	0.107E-01
515.1	0.756E-02	517.2	0.653E-02	524.5	0.593E-02	537.4	0.503E-02	554.9	0.285E-02
571.2	0.200E-02	589.0	0.851E-03	601.8	0.				



STATION 21 EXP 9 PROF 1

MAXIMUM A LAMDA= 421.2 AVEC ECLAIREMENT SPECTRAL= 0.09400 WATT/M2/NM

ENTRE 402.5 NM ET 605.9 NM , ECLAIREMENT 8.808 WATT/M2 20.650E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.5	0.637E-01	406.2	0.752E-01	409.8	0.822E-01	413.5	0.864E-01	416.3	0.912E-01
418.7	0.938E-01	421.2	0.940E-01	424.2	0.934E-01	427.9	0.892E-01	429.7	0.871E-01
433.1	0.844E-01	439.8	0.884E-01	443.1	0.879E-01	446.8	0.866E-01	452.9	0.804E-01
456.0	0.776E-01	458.9	0.768E-01	462.2	0.770E-01	472.2	0.716E-01	480.6	0.659E-01
485.5	0.616E-01	490.5	0.540E-01	493.7	0.509E-01	500.1	0.406E-01	506.7	0.310E-01
509.4	0.298E-01	517.5	0.195E-01	521.5	0.186E-01	539.1	0.152E-01	555.3	0.996E-02
580.1	0.573E-02	595.8	0.301E-02	605.9	0.				

STATION 21 EXP 9 PROF 4

MAXIMUM A LAMDA= 420.7 AVEC ECLAIREMENT SPECTRAL= 0.09158 WATT/M2/NM

ENTRE 401.9 NM ET 603.5 NM , ECLAIREMENT 8.250 WATT/M2 19.204E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.563E-01	403.6	0.674E-01	407.4	0.755E-01	409.5	0.789E-01	413.7	0.841E-01
415.9	0.894E-01	418.6	0.911E-01	420.7	0.916E-01	422.0	0.914E-01	424.7	0.901E-01
427.8	0.865E-01	429.9	0.843E-01	431.8	0.832E-01	433.3	0.832E-01	437.5	0.851E-01
439.7	0.863E-01	444.5	0.856E-01	450.3	0.798E-01	455.5	0.755E-01	458.0	0.746E-01
461.7	0.745E-01	469.6	0.695E-01	481.9	0.611E-01	486.3	0.578E-01	490.6	0.504E-01
493.5	0.469E-01	498.6	0.379E-01	504.4	0.289E-01	509.4	0.247E-01	515.8	0.159E-01
523.6	0.146E-01	537.8	0.121E-01	555.9	0.714E-02	589.7	0.238E-02	603.5	0.

STATION 21 EXP 9 PROF 9

MAXIMUM A LAMDA= 419.8 AVEC ECLAIREMENT SPECTRAL= 0.08144 WATT/M2/NM

ENTRE 401.2 NM ET 602.5 NM , ECLAIREMENT 7.219 WATT/M2 16.726E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.504E-01	403.3	0.603E-01	406.7	0.665E-01	408.6	0.704E-01	412.3	0.742E-01
415.5	0.786E-01	417.3	0.811E-01	419.8	0.814E-01	422.7	0.814E-01	425.8	0.794E-01
429.6	0.757E-01	431.7	0.743E-01	434.2	0.740E-01	437.4	0.754E-01	441.2	0.768E-01
445.0	0.754E-01	451.1	0.699E-01	457.0	0.660E-01	462.7	0.656E-01	471.5	0.600E-01
480.6	0.541E-01	486.0	0.506E-01	489.2	0.440E-01	494.1	0.392E-01	501.7	0.287E-01
506.1	0.236E-01	509.2	0.208E-01	516.9	0.129E-01	527.1	0.109E-01	537.8	0.880E-02
559.2	0.448E-02	581.5	0.179E-02	602.5	0.				

STATION 21 EXP 9 PROF 18

MAXIMUM A LAMDA= 418.2 AVEC ECLAIREMENT SPECTRAL= 0.06651 WATT/M2/NM

ENTRE 402.5 NM ET 582.4 NM , ECLAIREMENT 5.723 WATT/M2 13.216E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.5	0.446E-01	404.3	0.515E-01	407.3	0.559E-01	411.8	0.595E-01	413.1	0.633E-01
415.0	0.658E-01	418.2	0.665E-01	422.1	0.662E-01	426.3	0.640E-01	430.4	0.612E-01
433.9	0.613E-01	440.3	0.633E-01	443.0	0.629E-01	445.2	0.625E-01	452.4	0.561E-01
455.8	0.541E-01	461.2	0.538E-01	467.1	0.523E-01	479.4	0.452E-01	487.1	0.411E-01
490.3	0.353E-01	496.6	0.287E-01	504.5	0.175E-01	509.5	0.138E-01	515.7	0.885E-02
525.8	0.652E-02	549.4	0.452E-02	559.0	0.279E-02	573.3	0.193E-02	582.4	0.

STATION 21 EXP 9 PROF 25

MAXIMUM A LAMDA= 420.3 AVEC ECLAIREMENT SPECTRAL= 0.05460 WATT/M2/NM

ENTRE 401.9 NM ET 580.8 NM , ECLAIREMENT 4.741 WATT/M2 10.944E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.9	0.376E-01	405.6	0.445E-01	409.3	0.465E-01	412.8	0.493E-01	415.7	0.524E-01
417.1	0.542E-01	420.3	0.546E-01	423.1	0.544E-01	426.7	0.532E-01	430.3	0.511E-01
432.4	0.501E-01	435.4	0.508E-01	438.3	0.518E-01	441.2	0.524E-01	444.6	0.521E-01
450.4	0.482E-01	454.8	0.451E-01	457.8	0.448E-01	462.6	0.443E-01	476.7	0.389E-01
486.5	0.342E-01	490.3	0.295E-01	496.7	0.240E-01	502.2	0.171E-01	507.1	0.134E-01
510.5	0.118E-01	516.1	0.704E-02	520.6	0.573E-02	533.7	0.513E-02	549.4	0.306E-02
572.5	0.147E-02	580.8	0.						

STATION 21 EXP 9 PROF 37

MAXIMUM A LAMDA= 420.6 AVEC ECLAIREMENT SPECTRAL= 0.04593 WATT/M2/NM

ENTRE 403.0 NM ET 580.4 NM , ECLAIREMENT 3.857 WATT/M2 8.879E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.0	0.310E-01	405.3	0.359E-01	407.3	0.387E-01	411.9	0.400E-01	414.0	0.434E-01
416.8	0.451E-01	420.6	0.459E-01	422.0	0.458E-01	424.7	0.450E-01	429.8	0.426E-01
433.8	0.429E-01	439.0	0.444E-01	441.9	0.446E-01	445.4	0.437E-01	451.3	0.391E-01
456.1	0.373E-01	461.6	0.374E-01	465.4	0.364E-01	479.7	0.317E-01	487.0	0.283E-01
489.7	0.246E-01	496.3	0.201E-01	500.1	0.151E-01	504.8	0.109E-01	510.0	0.873E-02
516.6	0.491E-02	521.9	0.381E-02	539.3	0.266E-02	557.8	0.110E-02	580.4	0.

STATION 21 EXP 9 PROF 44

MAXIMUM A LAMDA= 423.4 AVEC ECLAIREMENT SPECTRAL= 0.03464 WATT/M2/NM

ENTRE 403.0 NM ET 583.4 NM , ECLAIREMENT 2.959 WATT/M2 6.814E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.0	0.227E-01	406.1	0.267E-01	407.4	0.281E-01	411.5	0.297E-01	414.5	0.322E-01
417.6	0.339E-01	421.0	0.345E-01	423.4	0.346E-01	426.1	0.344E-01	430.2	0.333E-01
431.3	0.328E-01	433.6	0.324E-01	438.9	0.340E-01	441.4	0.344E-01	445.7	0.344E-01
449.5	0.319E-01	453.9	0.297E-01	455.8	0.292E-01	461.8	0.292E-01	465.9	0.285E-01
476.9	0.253E-01	483.1	0.237E-01	486.4	0.222E-01	490.1	0.190E-01	496.3	0.152E-01
503.3	0.897E-02	511.2	0.572E-02	515.9	0.353E-02	520.1	0.281E-02	555.6	0.114E-02
583.4	0.								

STATION 21 EXP 9 PROF 53

MAXIMUM A LAMDA= 442.7 AVEC ECLAIREMENT SPECTRAL= 0.02535 WATT/M2/NM

ENTRE 402.4 NM ET 576.6 NM , ECLAIREMENT 2.154 WATT/M2 4.956E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.4	0.151E-01	406.1	0.187E-01	408.4	0.200E-01	411.8	0.211E-01	414.5	0.227E-01
416.9	0.241E-01	420.6	0.247E-01	422.3	0.249E-01	426.8	0.244E-01	428.2	0.241E-01
431.3	0.237E-01	435.9	0.245E-01	440.1	0.254E-01	442.7	0.254E-01	445.9	0.250E-01
450.2	0.231E-01	454.4	0.220E-01	457.7	0.217E-01	463.0	0.217E-01	474.0	0.198E-01
485.4	0.170E-01	488.9	0.147E-01	494.2	0.124E-01	501.2	0.748E-02	509.6	0.474E-02
512.6	0.345E-02	515.7	0.246E-02	522.2	0.175E-02	555.0	0.482E-03	576.6	0.

STATION 21 EXP 9 PROF 72

MAXIMUM A LAMDA= 443.4 AVEC ECLAIREMENT SPECTRAL= 0.01266 WATT/M2/NM

ENTRE 401.2 NM ET 576.6 NM , ECLAIREMENT 1.074 WATT/M2 2.478E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
401.2	0.598E-02	405.8	0.777E-02	407.8	0.834E-02	411.9	0.932E-02	414.4	0.101E-01
418.9	0.111E-01	423.8	0.116E-01	425.5	0.116E-01	429.3	0.116E-01	431.7	0.115E-01
436.5	0.121E-01	439.7	0.125E-01	443.4	0.127E-01	445.6	0.126E-01	449.3	0.119E-01
453.4	0.112E-01	456.5	0.110E-01	462.4	0.112E-01	464.8	0.112E-01	473.3	0.106E-01
486.5	0.894E-02	489.7	0.793E-02	493.8	0.674E-02	500.4	0.419E-02	504.7	0.285E-02
509.2	0.195E-02	515.2	0.104E-02	520.9	0.886E-03	543.1	0.519E-03	559.8	0.304E-03
576.6	0.								

STATION 21 EXP 9 PROF 89

MAXIMUM A LAMDA= 443.6 AVEC ECLAIREMENT SPECTRAL= 0.00608 WATT/M2/NM

ENTRE 403.2 NM ET 586.3 NM , ECLAIREMENT 0.508 WATT/M2 1.177E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.2	0.279E-02	408.4	0.361E-02	412.4	0.394E-02	415.1	0.451E-02	420.2	0.499E-02
423.5	0.524E-02	426.6	0.528E-02	428.6	0.524E-02	431.0	0.530E-02	433.7	0.547E-02
439.5	0.586E-02	443.6	0.608E-02	447.4	0.593E-02	453.9	0.544E-02	455.6	0.539E-02
461.1	0.547E-02	465.6	0.558E-02	467.6	0.560E-02	476.5	0.524E-02	485.6	0.467E-02
489.0	0.426E-02	490.1	0.394E-02	495.3	0.328E-02	500.4	0.218E-02	506.9	0.128E-02
510.6	0.936E-03	516.2	0.480E-03	524.9	0.346E-03	562.3	0.729E-04	586.3	0.

STATION 23 EXP 9 PROF 0

MAXIMUM A LAMDA= 417.3 AVEC ECLAIREMENT SPECTRAL= 0.09888 WATT/M2/NM

ENTRE 400.8 NM ET 600.3 NM , ECLAIREMENT 9.362 WATT/M2 21.88CE14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.8	0.597E-01	402.6	0.711E-01	404.7	0.780E-01	406.7	0.843E-01	408.6	0.883E-01
411.5	0.905E-01	412.6	0.938E-01	415.4	0.966E-01	417.3	0.989E-01	419.7	0.988E-01
421.6	0.987E-01	423.7	0.979E-01	427.9	0.927E-01	430.9	0.894E-01	432.2	0.889E-01
435.8	0.892E-01	439.4	0.912E-01	443.0	0.917E-01	447.6	0.903E-01	455.9	0.826E-01
460.7	0.814E-01	464.7	0.811E-01	478.3	0.719E-01	485.3	0.659E-01	490.6	0.562E-01
492.8	0.547E-01	498.7	0.439E-01	504.6	0.338E-01	510.2	0.295E-01	514.1	0.228E-01
518.0	0.194E-01	529.2	0.168E-01	539.9	0.152E-01	556.2	0.132E-01	572.8	0.742E-02
589.5	0.445E-02	600.3	0.						

STATION 23 EXP 9 PROF 4

MAXIMUM A LAMDA= 417.1 AVEC ECLAIREMENT SPECTRAL= 0.09718 WATT/M2/NM

ENTRE 400.5 NM ET 595.5 NM , ECLAIREMENT 8.898 WATT/M2 20.677E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.5	0.610E-01	402.8	0.721E-01	405.4	0.822E-01	408.7	0.870E-01	412.0	0.905E-01
414.0	0.942E-01	417.1	0.972E-01	420.1	0.969E-01	423.2	0.960E-01	425.5	0.923E-01
429.1	0.881E-01	431.0	0.873E-01	431.0	0.867E-01	432.7	0.864E-01	437.1	0.883E-01
441.0	0.891E-01	444.9	0.891E-01	449.5	0.844E-01	453.4	0.809E-01	456.7	0.791E-01
463.2	0.784E-01	476.2	0.705E-01	487.1	0.610E-01	489.9	0.551E-01	492.9	0.518E-01
496.8	0.456E-01	503.2	0.331E-01	510.7	0.266E-01	517.6	0.177E-01	522.7	0.152E-01
537.4	0.132E-01	552.1	0.845E-02	569.7	0.525E-02	588.3	0.185E-02	595.5	0.

STATION 23 EXP 5 PROF 9

MAXIMUM A LAMDA= 421.1 AVEC ECLAIREMENT SPECTRAL= 0.08886 WATT/M2/NM

ENTRE 400.5 NM ET 593.1 NM , ECLAIREMENT 8.201 WATT/M2 19.036E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.5	0.558E-01	403.1	0.671E-01	405.5	0.722E-01	408.5	0.789E-01	412.7	0.828E-01
415.0	0.859E-01	418.1	0.889E-01	421.1	0.889E-01	424.5	0.885E-01	428.4	0.839E-01
431.5	0.809E-01	434.2	0.801E-01	440.1	0.826E-01	444.7	0.829E-01	448.4	0.805E-01
455.3	0.742E-01	459.9	0.737E-01	465.4	0.726E-01	480.3	0.633E-01	486.0	0.581E-01
489.8	0.514E-01	497.5	0.420E-01	502.4	0.326E-01	506.3	0.275E-01	509.7	0.250E-01
518.3	0.151E-01	535.5	0.117E-01	554.0	0.684E-02	583.2	0.187E-02	593.1	0.

STATION 23 EXP 5 PROF 18

MAXIMUM A LAMDA= 419.6 AVEC ECLAIREMENT SPECTRAL= 0.07473 WATT/M2/NM

ENTRE 402.0 NM ET 597.5 NM , ECLAIREMENT 6.788 WATT/M2 15.754E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.0	0.504E-01	404.6	0.593E-01	406.7	0.647E-01	411.6	0.689E-01	414.1	0.728E-01
417.3	0.744E-01	419.6	0.747E-01	423.0	0.737E-01	426.1	0.705E-01	428.7	0.682E-01
431.0	0.672E-01	435.8	0.685E-01	440.3	0.704E-01	445.6	0.703E-01	449.5	0.675E-01
455.3	0.632E-01	459.7	0.625E-01	464.6	0.628E-01	475.7	0.565E-01	486.5	0.505E-01
490.1	0.436E-01	493.6	0.408E-01	500.0	0.302E-01	506.9	0.220E-01	509.1	0.206E-01
516.6	0.123E-01	529.5	0.934E-02	549.9	0.560E-02	575.4	0.277E-02	587.5	0.

STATION 23 EXP 9 PROF 36

MAXIMUM A LAMDA= 447.2 AVEC ECLAIREMENT SPECTRAL= 0.04123 WATT/M2/NM

ENTRE 402.0 NM ET 584.1 NM , ECLAIREMENT 3.957 WATT/M2 9.190E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
402.0	0.284E-01	406.0	0.323E-01	408.9	0.355E-01	412.5	0.374E-01	414.9	0.393E-01
417.4	0.408E-01	447.2	0.412E-01	453.6	0.386E-01	456.5	0.381E-01	464.7	0.382E-01
477.1	0.345E-01	485.3	0.315E-01	490.2	0.274E-01	494.0	0.250E-01	502.2	0.168E-01
506.3	0.133E-01	510.0	0.117E-01	516.9	0.660E-02	531.4	0.466E-02	549.2	0.289E-02
565.7	0.190E-02	584.1	0.						

STATION 23 EXP 9 PROF 55

MAXIMUM A LAMDA= 447.1 AVEC ECLAIREMENT SPECTRAL= 0.01856 WATT/M2/NM

ENTRE 403.4 NM ET 594.3 NM , ECLAIREMENT 1.686 WATT/M2 3.938E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
403.4	0.922E-02	405.9	0.111E-01	410.5	0.120E-01	413.7	0.127E-01	416.0	0.143E-01
419.8	0.153E-01	424.4	0.160E-01	426.7	0.160E-01	430.9	0.158E-01	432.4	0.158E-01
435.9	0.164E-01	440.3	0.176E-01	442.2	0.181E-01	444.6	0.185E-01	447.1	0.186E-01
451.4	0.180E-01	455.1	0.178E-01	458.4	0.177E-01	465.4	0.183E-01	472.9	0.179E-01
482.1	0.167E-01	487.0	0.155E-01	490.6	0.139E-01	494.7	0.124E-01	497.5	0.104E-01
501.5	0.792E-02	506.1	0.601E-02	510.9	0.484E-02	514.0	0.325E-02	517.5	0.234E-02
520.1	0.208E-02	537.8	0.147E-02	559.7	0.538E-03	594.3	0.		



STATION 23 EXP 9 PROF 80

MAXIMUM A LAMDA= 474.9 AVEC ECLAIREMENT SPECTRAL= 0.00546 WATT/M2/NM

ENTRE 400.1 NM ET 597.2 NM , ECLAIREMENT 0.445 WATT/M2 1.050E14 QUANTA/SEC/CM2

LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM	LAMDA	W/M2/NM
400.1	0.115E-02	403.7	0.156E-02	407.8	0.190E-02	412.3	0.216E-02	415.9	0.247E-02
419.6	0.281E-02	423.5	0.378E-02	427.3	0.320E-02	432.1	0.335E-02	437.0	0.372E-02
440.9	0.409E-02	445.5	0.449E-02	446.9	0.458E-02	449.7	0.458E-02	452.2	0.460E-02
455.6	0.468E-02	461.0	0.497E-02	463.1	0.509E-02	467.4	0.531E-02	471.3	0.540E-02
474.9	0.546E-02	479.5	0.537E-02	481.3	0.541E-02	485.3	0.526E-02	489.2	0.484E-02
491.7	0.454E-02	493.9	0.432E-02	497.0	0.374E-02	500.4	0.306E-02	503.3	0.231E-02
510.1	0.157E-02	512.9	0.109E-02	516.4	0.699E-03	519.3	0.562E-03	519.3	0.562E-03
533.0	0.448E-03	543.0	0.295E-03	560.4	0.153E-03	597.2	0.		

