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(6) # Data Compendium for Atmospheric Laser Propagation Studies Conducted at Cape Canaveral, Florida, February–May 1977,

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(10) A. GUTTMAN, Editor.

T. H. COSDEN, J. A. CURCIO, J. A. DOWLING D. H. GARCIA,
C. O. GOTT, A. GUTTMAN, S. T. HANLEY, K. M. HAUGHT,
R. F. HORTON, G. L. TRUSTY, and W. L. AGAMBAR

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Atmospheric transmission measurements were carried out at the Cape Canaveral Air Force Station during the spring of 1977 by means of the NRL Infrared Mobile Optical Radiation Laboratory (IMORL). Reduced data resulting from this effort are presented in this report for five laser wavelength regions (HeNe, Nd-YAG, DF, CO, CO_2). Typical high-resolution ($\Delta\omega$ ~ .08 cm^{-1}) transmission spectra included in this report were derived on the basis of Fourier transform spectroscopy. An extensive set of aerosol scattering coefficient data is reported for 15 visible wavelengths and is based

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20 Abstract (Continued)

on Koschmieder type measurements of the contrast of distant targets. Results of extensive monitoring of the HDO path concentration with a Gas Filter Correlation Spectrometer (GFCS) show an abundance ratio significantly lower than the literature value of 0.03%.

Results of in-situ meteorological measurements and aerosol particle size distribution samplings are also reported.

FOREWORD

The data contained in this report are preliminary and presented here in the interest of rapid dissemination. Further refinements in data processing may lead to minor revisions.

For detailed discussion on particular aspects of the material contained herein the following personnel may be consulted:

Laser Extinction Measurements	R. F. Horton
Aerosol Extinction Measurements	A. Guttman, J. A. Curcio
Fourier Transform Spectroscopy	K. M. Haught, S. T. Hanley
Gas Filter Correlation Spectrometry	S. T. Hanley
Basic Meteorological Data	D. H. Garcia
Aerosol Particle Spectrometry	G. L. Trusty

Dr. J. A. Dowling was Project Officer and responsible for overall coordination of this project.

ABSTRACT

Atmospheric transmission measurements were carried out at Cape Canaveral Air Force Station during the spring of 1977 by means of the NRL Infrared Mobile Optical Radiation Laboratory (IMORL). Reduced data resulting from this effort are presented in this report for five laser wavelength regions (HeNe, Nd-YAG, DF, CO, CO_2). Typical high-resolution ($\Delta\omega$ =.08 cm^{-1}) transmission spectra included in this report were derived on the basis of Fourier transform spectroscopy. An extensive set of aerosol scattering coefficient data is reported for 15 visible wavelengths and is based on Koschmieder type measurements of contrast of distant targets. Results of extensive monitoring of HDO path concentration with a Gas Filter Correlation Spectrometer (GFCS) show an abundance ratio significantly lower than is commonly reported in the literature. Results of in-situ meteorological measurements and aerosol particle size distribution samplings are also reported.

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DATA COMPENDIUM FOR ATMOSPHERIC LASER PROPAGATION STUDIES CONDUCTED AT CAPE CANAVERAL, FLORIDA, FEBRUARY-MAY 1977

1. INTRODUCTION

During the months of February through May 1977, the Infrared Mobile Optical Radiation Lab (IMORL) of NRL was operated at the Cape Canaveral Air Force Station (CCAFS) in Florida to conduct an extensive series of atmospheric transmission experiments. A principal objective of these experiments was to obtain precisely calibrated high-resolution atmospheric transmission spectra in the 3-5 μm and 8-14 μm atmospheric windows suitable for rigorous comparisons to computer models. Absolute transmission calibration of the FTS spectra is obtained by means of extinction measurements at several laser frequencies performed with minimal time offset from the FTS measurements. Emission spectra of the laser sources operated multi-line is used to generate accurate frequency calibrations of the atmospheric transmission spectra using the well known positions of the several laser lines used in the experiments.

A secondary objective of the CCAFS experiments was the evaluation of the effects of absolute humidity variations and the influence of aerosol scattering on the atmospheric extinction of several infrared laser lines in the above spectral regions.

A detailed description of the IMORL instrumentation may be found in Ref. 1. Experiments were conducted over a 5.1-km. overwater path, shown in Fig. 3.1 as Path 3. Atmospheric extinction and spectroscopic data were collected with the following apparatus:

(1) HeNe, Nd-YAG, DF, CO, and CO_2 lasers

(2) Fourier Transform Spectrometer (FTS)

(3) Gas Filter Correlation Spectrometer (GFCS)

(4) Bandpass filtered telephotometer operating at 14 wavelengths and optical pyrometer at two wavelengths

(5) Aerosol particle spectrometer

(6) Nephelometer operating at three wavelengths

(7) Basic meteorological measurement apparatus

New additions to the IMORL system which were used extensively for the first time include a short wavelength CO laser, the FTS, the GFCS and the filtered telephotometer.

Presented in this report are the data gathered during the three month period with all the above instrumentation except the nephelometer. Data processing for the latter was not completed in time to be included here. A summary of laser extinction, FTS, GFCS, absolute humidity and visibility data is given in Table 1.1.

Note: Manuscript submitted September 8, 1977.

The laser beam extinction data are presented in Section 2. Section 3 contains a complete listing of all visible extinction data derived on the basis of telephotometric and pyrometric contrast measurements. Samples of the high resolution atmospheric absorption spectra obtained with the SMI are shown graphically in Section 4. Results of the GFCS measurement yielding HDO/H_2O abundance ratios are contained in Section 5, while Section 6 includes selected data from the on-site meteorological stations, including aerosol spectrometer measurements.

It should be noted that all times, unless otherwise noted, refer to local civil time, which was EST for the months of Feb-April and EDT for May.

2. LASER EXTINCTION MEASUREMENT DATA

This section contains data from line-by-line laser extinction measurements made at Cape Canaveral Air Force Station in the spring of 1977. Transmissions were measured for helium-neon, neodymium-YAG, deuterium fluoride, carbon monoxide, and carbon dioxide laser sources along a 5.1-km overwater path from February through May of 1977. An elaborate scheme has been worked out to correct for short- and long-term drifts to achieve overall accuracies which are typically better than 5%. A detailed discussion of the measurement procedure can be found in the paper by Dowling et al[1].

The columns appearing in Tables 2.0 to 2.4 include data given as day, month, and year. The months are designated by a single letter with F, M, A, and Y corresponding to February, March, April and May respectively. The time is given on a 24-hour clock. "Run Code" denotes short-path normalization measurements by 0, 1, 2, 7, 8, or 9, long-path transmission by 3, 4, 5, or 6. The short-path normalizations are used for computer reduction and do not appear on the final tables. Line ID denotes a particular line of given laser source. A six digit alpha numeric code for line ID was used to designate a particular laser operating line and in some cases the detector used for the measurements according to the following scheme:

LASER CODE	LINE ID	LASER/LINE	(μm)	DETECTOR
0	P00-SI	HeNe	0.6328	Si diode
1	P11-SI	Nd-YAG	1.06	Si diode
1	P11-IN	Nd-YAG	1.06	InSb diode (77K)
3	P02-08	DF/(2→1 P_8 line)	3.8007	InSb diode (77K)
4	P05-09	CO/(5→4 P_9 line)	4.9923	InSb diode (77K)
5	P10-20	$CO_2/00^01 \rightarrow 10^00$ band (P_{20} line)	10.5910	GeAu PC (77K)
5	R02-20	$CO_2/00^01 \rightarrow 02^00$ band (R_{20} line)	9.2714	GeAu PC (77K)

"Mob" and "Stat Gain" refer to precision gain settings used on detector preamplifiers for a single measurement. "Trans" is the actual transmission over the 5.1-km path corrected for detector efficiency and optical-train transmission. "Ex Coef." is the corresponding extinction coefficient for the measured transmission at a single line and is expressed in units of km^{-1}. The optical-train efficiency is treated as a linear variable between two bracketing zero-path calibrations. For He-Ne and Nd-YAG, a single table summarizes all measurements in each case.

For DF, CO, and CO_2, one table per day is used due to the large number of individual lines involved.

3. AEROSOL EXCTINCTION MEASUREMENTS

3.1 SPECTROPHOTOMETRIC DATA

Contrast reduction experiments based on the Koschmieder theory were performed along the three paths shown in Fig. 3.1. Path 3, which is identical with that used for the laser beam experiments. Path 2, with a range of 2.57km, is nearly parallel to the beach with a portion of it running over water but displaced not more than about 100 m from the shore. The short path, No. 1, has a length of 1.28 km and runs entirely over land, with a maximum perpendicular distance of about 100 m inland from the shore. As may be seen from the geometry these three paths represent a convenient means for probing gradients perpendicular to the shore. The light-measuring apparatus was placed at the convergence of the three paths, in close proximity to the laser receiving station situated on the beach in a large semitrailer van. Passive "black" targets defined the termination points at the far ends of the paths.

For any particular path, of length R, an apparent contrast ratio, C_R, is defined such that

$$C_R = \frac{N_h - N_b}{N_h} = 1 - \frac{\int_0^R N(r)\, dr}{\int_0^\infty N(r)\, dr}, \qquad (3\text{-}1)$$

where N_b and N_h represent the apparent radiance of the black target at the end of the path, and the radiance of the horizon sky adjacent to the target, respectively. For daylight operation in the visible region of the spectrum these radiances represent predominantly scattered solar radiation. Thus the radiance integrand, N(r), in Eq. (3.1) refers to the total volume scattering by atmospheric particles into the observation direction resulting from illumination of the volume in all directions.

If one neglects the effects of earth's curvature and assumes homogeneity of scatterers and uniformity of illumination along the effective range of the path, the well-known Koschmieder analysis predicts an exponential decay of C_R with range, i.e.,

$$C_R(\lambda) = e^{-\sigma_\lambda R}, \qquad (2)$$

where σ_λ refers to the monochromatic scattering coefficient at wavelength λ, and the contrast ratio appears as a wavelength dependent function.

The quantity C_R was measured with a spectrally filtered telephotometer. Fourteen wavelengths were defined by bandpass interference filters which were used in sequence to observe black targets along the three paths shown in Fig. 3.1.

The resulting data are presented in Table 3.1 and shown graphically in Figs. 3.2, 3.3 and 3.4.

Fig. 3.5 shows the effect of wind speed on the nature of the spectra and on the gradients across the shore line.

3.2 PYROMETRIC DATA

The attenuation coefficient at 0.5568 and 0.6500 μm was determined visually by means of a telepyrometer. This is an optical pyrometer which has been modified by the addition of a telephoto lens. The attenuation coefficient was determined by measuring the radiance of a suitable black target and also the radiance of the adjacent horizon sky. These radiances are then applied to the Koschmieder relationship, which relates luminance to attenuation (see Sec. 3.1). In this simplified form the target is black and the measurement is made in a spectral region of minimal absorption, so that the observed attenuation is caused by molecular and aerosol scattering. In practice the apparent spectral brightness temperature of the target and horizon sky is determined by the optical pyrometer. From the known blackbody spectral radiance as a function of temperature, the attenuation coefficient is determined from the Koschmieder relationship, Equation (3-1). Four optical path lengths, of 3.10, 4.61, 5.08 and 7.47 km were used for these measurements. A small structure located near the laser transmitter site, Figure 3.1, was used for the 3.1 and 5.08 km paths with the pyrometer located near the aerosol sampling station and receiver site respectively. For the 4.61 and 7.47 km paths tree lines located near the shore line served as black targets with the pyrometer located at the laser transmitter site.

Table 3.2 gives the complete set of data in terms of three basic parameters, namely, path transmittance, extinction coefficient, and meteorological range (VIS.).

4. HIGH-RESOLUTION FTS MEASUREMENTS

The high-resolution atmospheric transmission measurements were made with an IDAC Model 1000 Fourier transform interferometer spectrometer (FTS) system. A description of the FTS system and of its installation in the IMORL receiver trailer appears elsewhere[1] and will not be repeated here.

For the 1977 Cape Canaveral experiments the interferometer was operated in two distinct modes, depending upon the spectral region being investigated.

For work in the 3 μm to 5 μm atmospheric window, the interferometer was configured with a CaF_2 beamsplitter and an InSb detector. Inteferograms of a graybody source in the IMORL transmitter trailer (5 km distant) were sampled at 128 K equally spaced points over a total optical retardation of 8 cm. To reduce noise levels in the resulting computed spectra, 100 interferometer scans were typically co-added prior to calculating the Fourier transform. The sampling process generally required about fifteen minutes.

For work in the 10 μm region, the FTS system was used with a KBr beamsplitter and a HgCdTe detector. The 8 cm optical retardation was retained, but the sampling was reduced to 64 K (equally spaced) points. Because the background radiation in this region is proportionately larger, separate "no-source" scans were also recorded. These reference interferograms provide data on the spectral distribution of the atmospheric background radiation, which must be separated from the graybody spectra before attempting an absolute transmission normalization. (To date, initial efforts to affect this separation by simply differencing the two types of interferogram prior to computing the Fourier transform have not proved satisfactory.)

Examples of spectra obtained with the FTS system are presented in Figures 4.1, 4.2, and 4.3. These spectra (chosen to cover a wide range of water vapor pressures) also incorporate preliminary transmission normalizations, based on the laser absolute transmission measurements. Care must be exercised when interpreting the "flat top" features seen in these spectra in regions of low transmission. The current software used by the FTS system does not correctly compute the ratio of a long-path spectrum to a short-path background spectrum when both the numerator and the denominator are small. In such cases, however, the atmospheric transmission at five kilometers is small (less than 5%). A description of the laser measurements is presented in Section 2 of this report, and the techniques used to obtain a preliminary normalization have been presented in several earlier reports[2,3,4].

Finally, development is currently nearing completion of a new series of computer programs designed to standardize the transmission normalization of sampled atmospheric spectra. These programs directly process spectra from the magnetic tapes written by the FTS data aystem, and produce both graphical and digital magnetic tape output. It is expected the remainder of the high-resolution, laser-calibrated spectra from the Florida experiments should be available within two months.

5. GAS FILTER CORRELATION SPECTROMETER MEASUREMENTS

The atmospheric abundance of the molecular species HDO was measured with a gas filter correlation spectrometer (GFCS) during field measurements at the Patuxent Naval Air Station in November of 1976 and at Cape Canaveral Air Force Station (CCAFS) in the spring of 1977. This device is described in detail in reference (1). Data taken during the CCAFS experiment are plotted in Figures 5.1-5.23. Each plot presents a complete set of data taken during one day. HDO abundances determined by the GFCS are indicated by the symbol G. Also shown in Figures 5.1-5.23 are HDO abundances determined from local dew-point measurements using the widely accepted value of 0.03% for the HDO/H_2O abundance ratio and the measured air temperature. Dew-point measurements were performed at the transmitter, receiver and mid-point locations along the measurement path shown in Figure 3.1. The HDO abundances (expressed as molecules/cm/cm) derived from them are indicated by the symbols T, R, and M respectively in Figures 5.1-5.23.

Earlier GFCS data taken during the Patuxent NAS experiment are plotted in Figure 5.24 as water vapor partial pressure (using the 0.03% abundance ratio) against local time for several days.

6. METEOROLOGICAL MEASUREMENTS

6.1 BASIC METEOROLOGICAL DATA

Three independent systems were used during the atmospheric transmission experiments to monitor and record the meteorological conditions at the two ends of the 5.1-km path and at a point approximately midway. One system was located in the office trailer van next to the transmitter van; another identical system was located in the mobile receiver trailer van and was operational during long-path measurements. A third, similar system was situated in the mobile meteorological van at the path halfway point.

These systems include the following meteorological sensors: an automatically balancing EG&G Model 110S-M dew-point hygrometer to measure atmospheric temperature and dew point; a Yellow Springs Instruments Company Model 2014 barometric-pressure transducer; an Eppley Laboratory No. 8-48 Black and White Pyranometer to measure global (total sun and sky) radiation; a Thornthwaite Associates Model 912 sensitive-cup anemometer to measure wind speed at the path ends; a Young Gill Model 35003 propeller vane to measure wind speed and horizontal wind direction at the midpoint; and a Young bivane to measure horizontal and vertical wind direction at each path end.

Analog voltages from each meteorological sensor are processed by a Monitor Labs 7200 data-acquisition system at each path end and by a Particle Measuring Systems data-acquisition system at the midpoint location. The outputs are digitally recorded on magnetic tape for subsequent reduction at NRL.

Table 6.1.1 lists the available meteorological data for the period 23 February through 25 May 1977 at the three monitoring sites: transmitter T, mobile met van M, and receiver/spectrometer, S. Air temperature AT is in degrees Celsius; the partial pressure of water vapor PPH_2O is in torr; barometeric pressure BP is in millibars; global/solar radiation SR is in watts per square meter; wind speed WS is in meters per second; and horizontal wind direction WDH is in degrees clockwise from magnetic north. Blank spaces in this table indicate unavailability of data for that time for a particular sensor due to operational difficulties in the field; lack of an entry for any system at the approximate half-hour mark indicates nonexistence of data at that time or failure in processing system tape for that day or time of day. Each entry in this table is a 6-minute average terminating at the time indicated.

Figure 6.1.1 shows an example of the variation in air temperature and partial pressure of water vapor observed at the three monitoring sites during a particular day (15 March 1977).

6.2 PARTICLE SPECTROMETRY

The Laser/Aerosol Interaction Section of the Optical Radiation Branch provided, for the first three months of the 1977 Florida experiment, measurements of aerosol distributions and readings from one set of meteorological instruments. The data from the aerosol measurements are provided here in Table 6.2.1. The meteorological measurements were presented above in Section 6.1 (location M).

The equipment used for obtaining the aerosol size distributions included two optical particle spectrometer probes and a buffer memory manufactured by Particle Measuring Systems. The Active Scattering Aerosol Spectrometer Probe (ASASP) monitors particles from 0.1 μm radius to 2.0 μm radius with a sample volume flow rate of 0.11 cm^3/sec. The High Volume Classical Aerosol Spectrometer Probe (HVCASP) monitors particles from 1.0 μm to 15 μm radius with a sample volume flow rate of 49 cm^3/sec.

Sampling occurs on a one-second basis in the system as configured. These data are recorded on a 9-track computer compatible magnetic tape which is later reduced to the desired averaging times. For the work in Florida six-minute averages were chosen as giving acceptable counting statistics while minimizing the time-slew which might degrade the resolution of any major, abrupt aerosol density fluctuations.

For the purposes of this compendium, the resultant six-minute averages are given only on the half hour as shown in Table 6.2.1. Presented there are aerosol size distributions in the form of particle density ($\Delta N/\Delta R$) as a function of particle radius (R). The density is found from the average number of counts per second in a bin divided by the sample volume flow rate divided by the width of the sampling bin (ΔR) which has its center at radius R. The entries for the first seven bin locations are obtained from the ASASP; the remaining fifteen are obtained from the HVCASP.

The relatively large gap between the bins with centers at 0.33 μm and 1.22 μm is the result of an inherent double-valued response function in the ASASP which arises because a single frequency light (a HeNe laser) is used as the illuminating source. Because the simple approach as described above for obtaining $\Delta N/\Delta R$ gives structure which is nonexistant in the actual distribution in that particular region, the results obtained from those bins have been omitted.

The extinction coefficients which are calculated from these distributions will be presented in a later report with a detailed analysis.

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1. J. A. Dowling, R. F. Horton, G. L. Trusty, T. H. Cosden, K. M. Haught, J. A. Curcio, C. O. Gott, S. T. Hanley, and P. B. Ulrich, "Atmospheric Transmission Measurement and Field Test Plan," NRL Report 8059, **(September 77).**

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3. K. M. Haught and J. A. Dowling, "Laser-Calibrated High-Resolution Atmospheric Transmission Measurements," OSA/IEEE Conference on Laser Engineering and Applications, Washington, D. C. (June 1977).

4. K. M. Haught and J. A. Dowling, "High-Resolution Atmospheric Absorption Spectra from 3 μm to 5 μm," Thirty-Second Symposium on Molecular Spectroscopy, Columbus, Ohio (June 1977).

TABLE 1.1. 1977 CCAFS EXPERIMENT SUMMARY

		LASER			FTS			GFCS	MFT	
Date	Pathlength (m)	Time	Lasers	# Lines Measured	Time	FTS Spectral Interval (cm^{-1})	Code*	GFCS	ppH_2O (Torr)	visibility (km)
2-23	50	1430-1610	CO_2	50	--	--	--	--	13.6	24.3
25	"	1420-1830	HeNe, DF, CO_2	65	1530	0-7800	211	--	12.8	11.9
"	"	--	--	--	1840	1800-3200	111	--	"	"
26	"	1030-1615	"	75	--	--	--	--	14.6	19.0
28	"	1530-1800	"	77	1610	1600-3200	211	--	5.8	42.9
"	"	--	--	--	1700	1800-3200	111	--	"	"
"	"	--	--	--	1820	1800-3200	111	--	"	"
3-2	5080	0950-1450	HeNe, CO_2	49	1240	1800-3200	111	X	7 0	35.0
3	"	1130-1430	DF	44	1250	1800-3200	111	X	13.1	20.0
	"	--	--	--	1250	0-7800	111	X	"	"
7	"	1045-1250	HeNe, CO_2	21	--	--	--	X	16.0	20.0
8	"	0930-1600	"	89	1210	800-3200	112	X	9.2	19.5
	"		--	--	1225	800-3200	"	X	"	"
	"		--	--	1300	0-7600	"	X	"	"
9	"	1000-1618	HeNe, DF, CO_2	76	1310	1800-3200	111	X	11.7	14.0
	"	--	--	--	1335	1800-3200	111	X	"	"
10	"	1150-1540	HeNe, CO_2	87	1050	1800-3200	111	X	15.0	10.0
11	"	1125-1700	"	81	1300	0-3900	132	X	16.0	18.0
12	"	1025-1530	"	70	1155-1600	+	132	X	16.5	21.0

TABLE 1.1 . 1977 CCAFS EXPERIMENT SUMMARY

		LASER			FTS			GFCS	MET	
Date	Pathlength (m)	Time	Lasers	# Lines Measured	Time	FTS Spectral Interval (cm^{-1})	Code*	GFCS	ppH_2O (Torr)	visibility (km)
3-14	"	1000-1715	"	156	1320-1415	+	132	X	7.0	24.5
3-15	"	0830-1430	"	70	1110-140	+	032 132	X	12.5	25.0
3-16	50	1340-1450	"	41	1520	+	232	--	16.6	19.0
3-17	"	1020-1450	"	73	--	--	--	--	--	--
2ND SESSION										
3-29	"	--	--	--	1545	800-3200	132	--	15.0	30.5
	"	--	--	--	1545	0-3900	132	--	"	"
	"	--	--	--	1545	0-7900	132	--	"	"
30	"	1000-1630	HeNe, DF, CO_2	138	1305	1800-3200	111	--	17.5	25.0
	"		--		1320	1800-6600	111	--	"	"
31	5080	1400-1600	HeNe, DF	27	1245	1800-6600	111	X	18.0	30.0
	"	--	--	--	1245	0-7800	111	X	"	"
4-1	"	1000-1600	HeNe, DF, CO, CO_2	88	1310	1800-3200	111	X	18.0	20.0
	"			--	1330	1800-3200	111	X	"	"
	"				1635	800-3200	132	X	"	"
2	"	0950-1645	HeNe, YAG, DF, CO_2	138	1345	800-3200	132	X	18.5	29.8

TABLE 1.1. 1977 CCAFS EXPERIMENT SUMMARY

		LASER			FTS			GFCS	MET	
Date	Pathlength (m)	Time	Lasers	# Lines Measured	Time	FTS Spectral Interval (cm^{-1})	Code*	GFCS	ppH_2O (Torr)	visibility (km)
4-2	"	--	--	--	1345	0-3900	132	X	"	"
	5080	--	--	--	1400	800-3200	132	X	18.5	29.8
	"	--	--	---	1400	0-3900	132	X	"	"
4-4	"	0915-1630	HeNe, YAG, DF, CO_2	180	1235	800-3200	132	X	18.0	21.0
	"	--	--	--	1255	800-1400	132	X	"	"
		--	--	--	1310	800-1600	032	X	"	"
		--	--	--	1310	0-3900	032	X	"	"
4-5	"	1045-1545	HeNe, YAG, DF, CO_2	72	1350-1425	+	132	X	10.5	50.0
4-6	50	0930-1650	"	129	1230	800-3200	132	--	7.0	60.0
	"	--	--	--	1245	800-3200	132	--	"	"
4-7	"	0940-1430	HeNe, YAG, DF, CO_2	99	1245	1800-3700	111	--	6.8	53.0
		--		--					"	"
3RD SESSION										
5-13	50	1500-1700	DF, CO	9	--	--	--	--	--	--
14	"	1030-1745	HeNe, YAG, DF, CO, CO_2	130	1140	1800-3200	311	--	12.8	--
	"	--	--	--	1240	1800-6600	311	--	12.4	--
	"	--	--	--	1300	1800-3200	311	--	"	--

TABLE 1.1. 1977 CCAFS EXPERIMENT SUMMARY

		LASER			FTS			GFCS	MET		COMMENTS
Date	Pathlength (m)	Time	Lasers	# Lines Measured	Time	FTS Spectral Interval (cm^{-1})	Code*	GFCS	ppH_2O (Torr)	visibility (km)	
5-16	5080	0950-1715	HeNe, YAG, CO, CO_2	244	--	--	--	X	15.0	26.0	
17	"	1000-1500	"	123	--	--	--	X	14.5	25.0	
20	"	1100-1545	HeNe, YAG, DF	26	1120	1800-6600	311	X	14.0	28.0	
	"	--	--	--	1350	1800-6600	311	X	14.5	"	
	"	--	--	--	1415	1800-6600	311	X	14.5	"	
21	"	0930-1410	HeNe, YAG DF	42	1015	1800-3200	311	X	16.5	18.0	
	"	--	--	--	1245	1800-3200	311	X	"	"	
	"	--	--	--	1300	1800-3200	311	X	"	"	
	"	--	--	--	1420	1800-3200	311	X	"	"	
23	"	0900-1615	HeNe, YAG DF, CO, CO_2	84	0910	1800-6600	311	X	18.0	46.0	
	"	--	--	--	1115	2000-2050	911	X	18.0	"	CO laser scans on FTS
	"	--	--	--	1215	2000-2050	911	X	18.0	"	
	"	--	--	--	1310	800-3200	311	X	17.0	"	
	"			--	1330	1800-6600	311	X	17.0	"	
	"	--	--	--	1645	1800-6600	311	X	18.0	"	
24	"	0845-1515	HeNe, YAG DF, CO_2	80	0900	1800-3200	311	X	20.0	32.0	
	"	--	--	--	1145	1800-3200	311	X	"	"	
	"	--	--	--	1210	1800-3200	311	X	"	"	
	"	--	--	--	1535	1800-3200	311	X	"	"	

TABLE 1.1. 1977 CCAFS EXPERIMENT SUMMARY

		LASER			FTS			GFCS	MET		COMMENTS
Date	Pathlength (m)	Time	Lasers	# Lines Measured	Time	FTS Spectral Interval (cm^{-1})	Code*	GFCS	ppH_2O (Torr)	visibility (km)	
5-25	5080	0845-1345	HeNe, YAG DF, CO_2	51	0955	1800-6600	311	X	20.0	27.0	
	"	--	--	--	1155	1800-6600	311	X	"	"	
	"	--	--	--	1215	1800-6600	311	X	20.0	"	
26	50	0950-1500	HeNe, YAG DF, CO_2	109	1050	1800-3200	911	--	--	--	multi-line DF laser on FTS
	"	--	--	--	1430	1800-6600	311	--	--	--	
	"	--	--	--	1445	1800-3200	311	--	--	--	

NOTES:

+ several interferrograms recorded and stored but not yet transformed

* FTS measurement code

1st digit: source

0 = no source
1 = transmitter greybody
2 = receiver greybody
3 = globar (transmitter)
9 = as specified in comments

2nd digit: beamsplitter

1 = CaF_2
2 = Quartz
3 = KBr

3rd digit: detector

1 = InSb (SBRC)
2 = HgCdTe (ADL)
3 = HgCdTe (TI)

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TABLE 2.0 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR HE NE LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
02M77	953	3	0	P00-SI	0	0	0.747	0.057
02M77	954	3	0	P00-SI	0	0	0.757	0.054
02M77	1111	3	0	P00-SI	0	0	0.718	0.065
02M77	1216	3	0	P00-SI	0	0	0.646	0.085
08M77	937	3	0	P00-SI	1	0	0.534	0.123
08M77	939	3	0	P00-SI	1	0	0.529	0.124
08M77	941	3	0	P00-SI	1	0	0.526	0.126
08M77	943	3	0	P00-SI	1	0	0.539	0.121
08M77	945	3	0	P00-SI	1	0	0.521	0.127
08M77	947	3	0	P00-SI	1	0	0.533	0.123
08M77	1356	4	0	P00-SI	0	0	0.597	0.101
08M77	1358	4	0	P00-SI	0	0	0.579	0.107
04M77	1446	3	0	P00-SI	0	0	0.456	0.153
10M77	1155	3	0	P00-SI	2	2	0.154	0.365
11M77	1356	3	0	P00-SI	2	2	0.314	λ.226
11M77	1449	3	0	P00-SI	2	2	0.282	0.247
12M77	1407	3	0	P00-SI	2	2	0.429	0.165
12M77	1505	3	0	P00-SI	2	2	0.430	0.165
15M77	837	3	0	P00-SI	2	2	0.509	0.132
31M77	1511	3	0	P00-SI	2	2	0.562	0.113
01A77	1438	4	0	P00-SI	2	2	0.383	0.188
02A77	1151	3	0	P00-SI	2	2	0.516	0.129
02A77	1235	4	0	P00-SI	2	2	0.513	0.128
02A77	1314	5	0	P00-SI	2	2	0.546	0.118
0[illegible]77	1420	6	0	P00-SI	2	2	0.565	0.111
02A77	1502	6	0	P00-SI	2	2	0.581	0.106
04A77	1052	3	0	P00-SI	2	2	0.512	0.131
04A77	1133	4	0	P00-SI	2	2	0.548	0.117
04A77	1451	5	0	P00-SI	2	2	0.407	0.175
04A77	1538	4	0	P00-SI	2	2	0.384	0.187
04A77	1617	4	0	P00-SI	2	2	0.341	0.210
05A77	1456	3	0	P00-SI	2	2	0.678	0.076
05A77	1527	4	0	P00-SI	2	2	0.730	0.061
16Y77	1243	3	0	P00-SI	2	2	0.678	0.076
16Y77	1444	4	0	P00-SI	1	1	0.557	0.114
16Y77	1530	5	0	P00-SI	1	1	0.559	0.114
17Y77	1233	3	0	P00-SI	2	2	0.497	0.137
20Y77	1438	3	0	P00-SI	2	2	0.582	0.107
21Y77	1130	3	0	P00-SI	2	2	0.428	0.166
21Y77	1207	4	0	P00-SI	2	2	0.436	0.162
21Y77	1329	5	0	P00-SI	2	2	0.420	0.169
21Y77	1359	6	0	P00-SI	2	2	0.409	0.175
23Y77	1236	4	0	P00-SI	2	2	0.840	0.034
23Y77	1435	5	0	P00-SI	2	2	0.728	0.062
23Y77	1602	6	0	P00-SI	2	2	0.790	0.046
24Y77	1039	3	0	P00-SI	2	2	0.716	0.065
24Y77	1110	4	0	P00-SI	2	2	0.730	0.062
24Y77	1328	5	0	P00-SI	2	2	0.661	0.081
24Y77	1409	6	0	P00-SI	2	2	0.730	0.062
24Y77	1503	6	0	P00-SI	2	2	0.720	0.064
25Y77	847	3	0	P00-SI	2	2	0.526	0.125
25Y77	930	4	0	P00-SI	2	2	0.642	0.086
25Y77	1006	5	0	P00-SI	2	2	0.654	0.083
25Y77	1143	6	0	P00-SI	2	2	0.615	0.095

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TABLE 2.1 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR ND YG LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
02A77	1154	3	1	P11-SI	2	2	0.683	0.075
02A77	1238	5	1	P11-SI	2	2	0.662	0.081
02A77	1315	6	1	P11-SI	2	2	0.677	0.076
02A77	1422	6	1	P11-SI	2	2	0.671	0.078
02A77	1505	6	1	P11-SI	2	2	0.639	0.087
02A77	1517	6	1	P11-IN	9	9	0.631	0.090
02A77	1545	6	1	P11-IN	9	9	0.637	0.088
04A77	1054	3	1	P11-SI	2	2	0.584	0.105
04A77	1134	4	1	P11-SI	2	2	0.577	0.107
04A77	1453	6	1	P11-SI	2	2	0.440	0.160
04A77	1539	4	1	P11-SI	2	2	0.418	0.171
04A77	1618	4	1	P11-SI	2	2	0.369	0.195
05A77	1450	3	1	P11-SI	2	2	0.747	0.057
05A77	1528	4	1	P11-SI	2	2	0.799	0.044
05A77	1537	5	1	P11-IN	2	2	0.830	0.036
16Y77	1246	3	1	P11-SI	2	2	0.896	0.021
16Y77	1447	4	1	P11-SI	1	1	0.793	0.045
16Y77	1533	5	1	P11-SI	1	1	0.773	0.050
17Y77	1235	3	1	P11-SI	2	2	0.658	0.082
20Y77	1440	3	1	P11-SI	2	2	0.764	0.053
20Y77	1530	3	1	P11-SI	2	2	0.790	0.049
21Y77	1133	3	1	P11-SI	2	2	0.710	0.067
21Y77	1200	4	1	P11-SI	2	2	0.696	0.071
21Y77	1331	5	1	P11-SI	2	2	0.693	0.072
21Y77	1401	6	1	P11-SI	2	2	0.641	0.087
23Y77	1139	3	1	P11-SI	2	2	0.781	0.048
23Y77	1232	4	1	P11-SI	2	2	0.759	0.054
23Y77	1453	5	1	P11-SI	2	2	0.723	0.063
23Y77	1604	6	1	P11-SI	2	2	0.731	0.061
24Y77	1036	3	1	P11-SI	2	2	0.755	0.055
24Y77	1113	4	1	P11-SI	2	2	0.745	0.057
24Y77	1331	5	1	P11-SI	2	2	0.734	0.060
24Y77	1412	6	1	P11-SI	2	2	0.745	0.058
24Y77	1504	6	1	P11-SI	2	2	0.716	0.065
25Y77	848	3	1	P11-SI	2	2	0.615	0.095
25Y77	937	4	1	P11-SI	2	2	0.731	0.061
25Y77	1010	5	1	P11-SI	2	2	0.731	0.061

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TABLE 2.2 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR DF LASER SOURCE

DATE	TIME	FUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
03M77	1429	3	3	P02-08	4	3	0.478	0.144
03M77	1431	3	3	P02-07	4	3	0.323	0.221
03M77	1433	3	3	P02-05	5	4	0.468	0.148
03M77	1435	3	3	P01-08	5	4	0.262	0.262
03M77	1436	3	3	P01-07	5	4	0.477	0.145
03M77	1437	3	3	P01-06	5	4	0.375	0.191
03M77	1439	3	3	P01-07	5	4	0.472	0.147
03M77	1440	3	3	P01-08	5	4	0.259	0.264
03M77	1441	3	3	P02-05	5	4	0.461	0.151
03M77	1443	3	3	P02-07	5	3	0.315	0.226
03M77	1444	3	3	P02-08	4	3	0.459	0.152
03M77	1445	3	3	P02-10	4	3	0.347	0.207
03M77	1447	3	3	P02-12	6	5	0.440	0.160
03M77	1448	3	3	P02-10	5	4	0.338	0.212
03M77	1450	3	3	P02-08	5	4	0.439	0.161
03M77	1452	3	3	P02-07	6	4	0.318	0.224
03M77	1454	3	3	P02-05	5	4	0.454	0.154
03M77	1455	3	3	P01-08	6	4	0.256	0.266
03M77	1456	3	3	P01-07	5	4	0.453	0.154
03M77	1458	3	3	P01-06	6	5	0.360	0.200
03M77	1459	3	3	P01-07	5	4	0.460	0.152
03M77	1500	3	3	P01-08	6	4	0.246	0.274
03M77	1501	3	3	P02-05	5	4	0.431	0.164
03M77	1503	3	3	P02-07	5	3	0.302	0.234
03M77	1504	3	3	P02-08	4	3	0.431	0.165
03M77	1505	3	3	P02-10	4	3	0.327	0.218
03M77	1506	3	3	P02-12	6	5	0.404	0.177
03M77	1508	3	3	P02-10	4	3	0.303	0.233
03M77	1509	3	3	P02-08	4	3	0.379	0.190
08M77	1132	3	3	P02-08	3	3	0.627	0.091
08M77	1134	3	3	P02-07	4	3	0.475	0.145
08M77	1136	3	3	P02-05	4	3	0.615	0.095
08M77	1138	3	3	P01-08	5	4	0.438	0.161
08M77	1140	3	3	P01-07	4	4	0.623	0.092
08M77	1141	3	3	P01-06	6	5	0.536	0.122
08M77	1143	3	3	P01-07	5	5	0.616	0.094
08M77	1145	3	3	P01-08	6	5	0.418	0.170
08M77	1146	3	3	P02-05	5	5	0.627	0.091
08M77	1147	3	3	P02-07	5	4	0.487	0.140
08M77	1149	3	3	P02-08	4	4	0.619	0.094
08M77	1150	3	3	P02-10	4	3	0.460	0.152
08M77	1152	3	3	P02-12	4	4	0.581	0.106
08M77	1153	3	3	P02-10	4	3	0.459	0.152
08M77	1154	3	3	P02-08	3	3	0.618	0.094
08M77	1431	4	3	P02-08	3	3	0.642	0.086
08M77	1434	4	3	P02-07	4	3	0.510	0.132
08M77	1435	4	3	P02-05	3	3	0.652	0.084
08M77	1437	4	3	P01-08	5	4	0.471	0.147
08M77	1439	4	3	P01-07	4	4	0.655	0.083
08M77	1440	4	3	P01-06	5	4	0.582	0.106
08M77	1441	4	3	P01-07	5	4	0.640	0.087
08M77	1442	4	3	P01-08	5	4	0.457	0.153
08M77	1443	4	3	P02-05	4	4	0.623	0.092
08M77	1444	4	3	P02-07	4	3	0.517	0.129
08M77	1446	4	3	P02-08	3	3	0.609	0.097
08M77	1447	4	3	P02-10	4	3	0.452	0.155
08M77	1448	4	3	P02-12	4	4	0.595	0.102
08M77	1449	4	3	P02-10	4	3	0.433	0.164
08M77	1450	4	3	P02-08	3	3	0.614	0.095

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TABLE 2.2 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR DF LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
09M77	1618	3	3	P02-08	5	4	0.540	0.119
09M77	1620	3	3	P02-07	5	4	0.385	0.187
09M77	1621	3	3	P02-05	6	5	0.537	0.121
09M77	1623	3	3	P01-05	6	5	0.357	0.201
09M77	1624	3	3	P01-07	6	5	0.585	0.105
09M77	1625	3	3	P01-06	6	5	0.486	0.141
09M77	1626	3	3	P01-07	6	5	0.585	0.105
09M77	1627	3	3	P01-08	6	5	0.371	0.194
09M77	1628	3	3	P02-05	6	5	0.576	0.108
09M77	1629	3	3	P02-07	5	4	0.418	0.171
09M77	1630	3	3	P02-08	5	4	0.593	0.102
09M77	1631	3	3	P02-10	5	4	0.446	0.158
09M77	16[illegible]	3	3	P02-12	6	5	0.551	0.117
09M77	1634	3	3	P02-10	5	4	0.439	0.161
09M77	1675	3	3	P02-08	4	3	0.591	0.103
11M77	1125	3	3	P02-08	4	3	0.358	0.201
11M77	1129	3	3	P02-07	4	3	0.438	0.161
11M77	1131	3	3	P02-05	4	3	0.390	0.184
11M77	1133	3	3	P01-08	7	5	0.175	0.340
11M77	1137	3	3	P01-07	6	5	0.382	0.189
11M77	1139	3	3	P01-06	7	6	0.329	0.217
11M77	1141	3	3	P01-07	7	6	0.474	0.146
11M77	1142	3	3	P01-08	8	6	0.235	0.283
11M77	1146	3	3	P02-07	4	3	0.306	0.235
11M77	1151	3	3	P02-08	4	3	0.433	0.163
11M77	1153	3	3	P02-10	4	3	0.312	0.227
11M77	1154	3	3	P02-12	6	5	0.437	0.162
11M77	1156	3	3	P02-10	4	3	0.343	0.209
11M77	1159	3	3	P02-07	4	3	0.400	0.179
11M77	1507	4	3	P02-08	4	3	0.499	0.136
11M77	1510	4	3	P02-07	4	3	0.316	0.225
11M77	1511	4	3	P02-05	4	4	0.482	0.143
11M77	1513	4	3	P01-08	8	6	0.228	0.289
11M77	1514	4	3	P01-07	7	6	0.449	0.156
11M77	1516	4	3	P01-06	8	7	0.345	0.208
11M77	1517	4	3	P02-08	5	3	0.272	0.254
11M77	1519	4	3	P02-10	5	3	0.206	0.309
11M77	1520	4	3	P02-12	6	5	0.475	0.145
11M77	1521	4	3	P02-08	4	3	0.485	0.141
12M77	1520	3	3	P02-09	4	4	0.525	0.126
12M77	1521	3	3	P02-07	4	3	0.327	0.219
12M77	1522	3	3	P02-05	4	3	0.497	0.137
12M77	1524	3	3	P01-08	7	5	0.249	0.272
12M77	1525	3	3	P01-07	6	5	0.532	0.123
12M77	1526	3	3	P01-06	7	6	0.359	0.180
12M77	1529	3	3	P01-07	6	5	0.541	0.126
12M77	1530	3	3	P01-08	7	5	0.248	0.272
12M77	1531	3	3	P02-05	5	5	0.519	0.128
12M77	1533	3	3	P02-07	4	3	0.323	0.221
12M77	1535	3	3	P02-08	3	3	0.518	0.128
12M77	1536	3	3	P02-10	4	3	0.398	0.180
12M77	1537	3	3	P02-12	4	3	0.593	0.134
12M77	1538	3	3	P02-10	4	3	0.401	0.179
12M77	1540	3	3	P02-08	3	3	0.506	0.133

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TABLE 2.2 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR DF LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
14M77	1110	3	3	P02-08	3	3	0.693	0 072
14M77	1111	3	3	P02-07	3	3	0.594	0.102
14M77	1112	3	3	P02-05	4	4	0.662	0.080
14M77	1114	3	3	P01-08	6	5	0.541	0.120
14M77	1115	3	3	P01-07	6	5	0.666	0.079
14M77	1116	3	3	P01-06	6	6	0.604	0.098
14M77	1118	3	3	P01-07	6	6	0.661	0.081
14M77	1119	3	3	P01-08	7	6	0.527	0.125
14M77	1121	3	3	P02-05	5	5	0.674	0.077
14M77	1122	3	3	P02-07	4	4	0.566	0.111
14M77	1123	3	3	P02-08	3	3	0.712	0.066
14M77	1125	3	3	P02-10	4	3	0.507	0.133
14M77	1126	3	3	P02-12	5	5	0.641	0.087
14M77	1127	3	3	P02-10	5	4	0.507	0.133
14M77	1128	3	3	P02-08	4	4	0.702	0.069
15M77	1011	3	3	P02-08	3	3	0.710	0.067
15M77	1013	3	3	P02-07	3	3	0.536	0.122
15M77	1014	3	3	P02-05	3	3	0.678	0.076
15M77	1015	3	3	P01-08	6	5	0.475	0.146
15M77	1016	3	3	P01-07	6	5	0.688	0.073
15M77	1017	3	3	P01-06	6	5	0.582	0.106
15M77	1018	3	3	P01-07	6	5	0.672	0.078
15M77	1019	3	3	P01-08	6	5	0.475	0.146
15M77	1021	3	3	P02-05	4	4	0.663	0.080
15M77	1022	3	3	P02-07	4	3	0.542	0.120
15M77	1023	3	3	P02-08	3	3	0.682	0.075
15M77	1025	3	3	P02-10	4	3	0.516	0.129
15M77	1026	3	3	P02-12	6	5	0.627	0.091
15M77	1028	3	3	P02-10	5	4	0.517	0.129
15M77	1029	3	3	P02-08	3	-	0.647	0.065
31M77	1404	3	3	P02-08	4	3	0.634	0.089
31M77	1412	3	3	P02-07	5	3	0.399	0.180
31M77	1414	3	3	P02-05	5	4	0.640	0.087
31M77	1415	3	3	P01-08	7	5	0.286	0.245
31M77	1416	3	3	P01-07	6	5	0.622	0.093
31M77	1417	3	3	P01-06	7	6	0.480	0.143
31M77	1418	3	3	P01-07	7	6	0.617	0.094
31M77	1419	3	3	P01-08	8	6	0.288	0.243
31M77	1422	3	3	P02-05	5	4	0.635	0.089
31M77	1423	3	3	P02-07	5	3	0.393	0.183
31M77	1424	3	3	P02-08	4	3	0.636	0.088
31M77	1425	3	3	P02-10	4	3	0.485	0.141
31M77	1426	3	3	P02-12	6	5	0.607	0.098
31M77	1427	3	3	P02-10	4	3	0.492	0.137
31M77	1428	3	3	P02-08	4	3	0.644	0.085

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TABLE 2.2 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR DF LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EK COEF
01A77	1213	3	3	P02-08	5	4	0.672	0.078
01A77	1214	3	3	P02-07	6	4	0.416	0.171
01A77	1215	3	3	P02-05	6	5	0.666	0.080
01A77	1218	3	3	P01-08	7	5	0.307	0.231
01A77	1220	3	3	P01-07	6	5	0.651	0.084
01A77	1221	3	3	P01-06	7	6	0.512	0.131
01A77	1223	3	3	P02-08	4	3	0.661	0.081
01A77	1224	3	3	P02-10	5	4	0.534	0.123
01A77	1225	3	3	P02-12	5	4	0.550	0.084
01A77	1226	3	3	P02-08	5	4	0.661	0.081
01A77	1227	3	3	P02-12	5	4	0.643	0.086
01A77	1231	3	3	P02-08	4	3	0.669	0.078
01A77	1238	3	3	P01-06	7	6	0.519	0.128
01A77	1355	4	3	P02-08	4	3	0.667	0.079
01A77	1356	4	3	P02-07	4	3	0.423	0.108
01A77	1358	5	3	P02-05	5	4	0.676	0.077
01A77	1400	4	3	P01-08	7	5	0.308	0.230
01A77	1401	4	3	P01-07	6	5	0.666	0.079
01A77	1403	4	3	P01-06	7	6	0.510	0.132
01A77	1404	4	3	P01-07	7	6	0.664	0.080
01A77	1406	4	3	P01-08	8	6	0.303	0.233
01A77	1408	4	3	P02-05	5	4	0.691	0.072
01A77	1410	4	3	P02-07	5	4	0.744	0.058
01A77	1411	4	3	P02-08	4	3	0.677	0.076
01A77	1415	4	3	P02-10	5	4	0.585	0.134
01A77	1417	4	3	P02-12	7	6	0.625	0.092
01A77	1418	4	3	P02-08	4	3	0.653	0.083
01A77	1420	4	3	P01-06	8	6	0.493	0.138
01A77	1421	4	3	P02-08	4	3	0.636	0.088
02A77	1208	3	3	P02-08	4	3	0.736	0.060
02A77	1209	3	3	P02-07	4	3	0.456	6.153
02A77	1210	3	3	P02-05	4	3	0.749	0.056
02A77	1211	3	3	P01-08	8	6	0.345	0.208
02A77	1212	3	3	P01-07	7	6	0.669	0.078
02A77	1214	3	3	P01-06	8	7	0.570	0.110
02A77	1215	3	3	P02-12	7	6	0.720	0.064
02A77	1216	3	3	P01-07	7	6	0.752	0.056
02A77	1217	3	3	P01-08	8	6	0.339	0.211
02A77	1218	3	3	P02-05	5	4	0.733	0.061
02A77	1220	3	3	P02-08	5	4	0.741	0.058
02A77	1221	3	3	P02-10	5	4	0.578	0.107
02A77	1222	3	3	P02-12	7	6	0.728	0.062
02A77	1223	3	3	P01-06	7	6	0.587	0.104
02A77	1224	3	3	P02-10	5	4	0.583	0.106
02A77	1225	3	3	P02-08	4	3	0.747	0.057
02A77	1521	4	3	P02-08	5	4	0.670	0.078
02A77	1523	4	3	P02-07	6	4	0.397	0.180
02A77	1525	4	3	P02-05	5	4	0.661	0.081
02A77	1526	4	3	P01-08	9	7	0.300	0.235
02A77	1528	4	3	P01-07	8	7	0.662	0.081
02A77	1529	4	3	P01-06	8	7	0.499	0.136
02A77	1530	4	3	P02-12	8	7	0.625	0.092
02A77	1531	4	3	P01-07	8	7	0.652	0.084
02A77	1533	4	3	P01-08	9	7	0.299	0.236
02A77	1534	4	3	P02-05	5	4	0.658	0.082
02A77	1535	4	3	P02-07	6	4	0.396	0.181
02A77	1536	4	3	P02-08	5	4	0.657	0.082
02A77	1537	4	3	P02-10	5	4	0.505	0.134
02A77	1539	4	3	P02-12	7	6	0.635	0.089
02A77	1541	4	3	P01-06	7	6	0.498	0.136
02A77	1542	4	3	P02-10	4	3	0.515	0.129
02A77	1543	4	3	P02-08	4	3	0.668	0.079

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TABLE 2.2 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR DF LASER SOURCE

DATE	TIMF	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
04A77	1151	3	3	P02-08	4	3	0.602	0.099
04A77	1153	3	3	P02-07	4	3	0.372	0.193
04A77	1153	3	3	P02-05	4	3	0.606	0.098
04A77	1155	3	3	P01-08	7	5	0.288	0.243
04A77	1156	3	3	P01-07	6	5	0.574	0.108
04A77	1157	3	3	P01-06	6	5	0.447	0.157
04A77	1158	3	3	P02-08	4	3	0.590	0.103
04A77	1159	3	3	P02-10	6	5	0.456	0.153
04A77	1201	3	3	P02-12	8	7	0.561	0.113
04A77	1202	3	3	P02-08	4	3	0.577	0.107
04A77	1204	3	3	P01-06	7	6	0.438	0.161
04A77	1206	3	3	P02-12	8	7	0.556	0.115
04A77	1207	3	3	P02-08	4	3	0.576	0.108
04A77	1404	4	3	P02-08	5	4	0.524	0.126
04A77	1405	4	3	P02-07	5	4	0.572	0.109
04A77	1407	4	3	P02-05	6	5	0.524	0.126
04A77	1408	4	3	P01-08	9	7	0.246	0.274
04A77	1410	4	3	P01-07	8	7	0.519	0.128
04A77	1412	4	3	P01-06	8	7	0.398	0.180
04A77	1413	4	3	P02-12	9	8	0.508	0.132
04A77	1416	4	3	P01-07	8	7	0.497	0.136
04A77	1418	4	3	P01-08	9	7	0.243	0.276
04A77	1419	4	3	P02-05	5	4	0.521	0.127
04A77	1421	4	3	P02-07	6	4	0.310	0.229
04A77	1423	4	3	P02-08	5	4	0.506	0.132
04A77	1424	4	3	P02-10	5	4	0.400	0.179
04A77	1425	4	3	P02-12	10	9	0.501	0.135
04A77	1427	4	3	P01-06	9	7	0.377	0.191
04A77	1429	4	3	P02-10	5	4	0.397	0.180
04A77	1430	4	3	P02-08	5	4	0.504	0.134
05A77	1540	3	3	P02-08	5	4	0.834	0.036
05A77	1541	3	3	P02-07	5	4	0.613	0.096
05A77	1543	3	3	P02-05	7	6	0.819	0.039
05A77	1544	3	3	P01-08	7	6	0.546	0.118
05A77	1545	3	3	P01-07	7	6	0.784	0.047
05A77	1546	3	3	P01-06	7	6	0.685	0.074
05A77	1548	3	3	P02-08	5	4	0.831	0.036
05A77	1549	3	3	P02-10	5	4	0.617	0.094
05A77	1550	3	3	P02-12	7	6	0.757	0.054
05A77	1551	3	3	P02-38	5	4	0.814	0.040
20Y77	1502	3	3	P02-08	3	2	0.558	0.114
20Y77	1504	3	3	P02-07	3	2	0.388	0.185
20Y77	1506	3	3	P02-05	3	3	0.540	0.120
20Y77	1508	3	3	P01-08	7	5	0.296	0.238
20Y77	1509	3	3	P01-07	6	5	0.539	0.121
20Y77	1512	3	3	P01-06	9	8	0.441	0.160
20Y77	1514	3	3	P02-08	3	2	0.549	0.117
20Y77	1516	3	3	P02-10	4	3	0.425	0.167
20Y77	1518	3	3	P02-12	8	7	0.558	0.114
20Y77	1520	3	3	P02-08	3	2	0.545	0.118

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TABLE 2.2 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR DF LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
21Y77	1146	3	3	P02-08	5	3	0.382	0.188
21Y77	1147	3	3	P02-07	5	3	0.260	0.263
21Y77	1149	3	3	P02-05	5	3	0.385	0.186
21Y77	1151	3	3	P01-08	7	5	0.342	0.209
21Y77	1153	3	3	P01-07	6	5	0.689	0.073
21Y77	1156	3	3	P02-08	4	3	0.691	0.072
21Y77	1158	3	3	P02-07	4	5	0.466	0.149
21Y77	1159	3	3	P02-05	4	5	0.695	0.071
21Y77	1200	3	3	P02-10	4	3	0.529	0.124
21Y77	1201	3	3	P02-12	6	5	0.670	0.078
21Y77	1203	3	3	P02-08	4	3	0.684	0.074
21Y77	1339	4	3	P02-08	4	3	0.665	0.080
21Y77	1341	4	3	P02-07	4	3	0.438	0.161
21Y77	1342	4	3	P02-05	4	3	0.658	0.082
21Y77	1343	4	3	P01-08	6	4	0.329	0.217
21Y77	1344	4	3	P01-07	5	5	0.664	0.020
21Y77	1347	3	3	P02-08	4	3	0.600	0.100
21Y77	1350	4	3	P02-10	4	5	0.462	0.151
21Y77	1352	4	3	P02-12	6	5	0.592	0.105
21Y77	1354	4	3	P02-08	4	3	0.616	0.095
23Y77	1221	3	3	P02-08	4	3	0.673	0.077
23Y77	1222	3	3	P02-07	4	3	0.439	0.161
23Y77	1223	3	3	P02-05	4	3	0.679	0.076
23Y77	1225	3	3	P01-08	7	5	0.327	0.218
23Y77	1226	3	3	P01-07	6	5	0.656	0.084
23Y77	1227	3	3	P01-06	7	6	0.434	0.138
23Y77	1229	3	3	P02-08	4	3	0.667	0.079
23Y77	1229	3	3	P02-10	4	3	0.507	0.133
23Y77	1230	3	3	P02-12	6	5	0.631	0.090
23Y77	1231	3	3	P02-08	4	3	0.667	0.079
23Y77	1443	5	3	P02-08	4	3	0.658	0.082
23Y77	1445	5	3	P02-07	4	3	0.416	0.171
23Y77	1446	5	3	P02-05	5	4	0.667	0.079
23Y77	1448	5	3	P01-08	7	5	0.317	0.224
23Y77	1449	5	3	P01-07	6	5	0.682	0.075
23Y77	1451	5	3	P01-06	7	6	0.513	0.130
23Y77	1452	5	3	P02-08	4	3	0.634	0.089
23Y77	1455	5	3	P02-10	4	3	0.495	0.137
23Y77	1456	5	3	P02-12	6	5	0.645	0.086
23Y77	1457	5	3	P02-08	4	3	0.626	0.092
24Y77	1047	3	3	P02-08	4	3	0.557	0.114
24Y77	1052	3	3	P02-07	4	3	0.333	0.215
24Y77	1053	3	3	P02-05	5	4	0.558	0.114
24Y77	1054	3	3	P01-08	10	7	0.221	0.294
24Y77	1057	3	3	P01-07	9	8	0.559	0.114
24Y77	1059	3	3	P01-06	9	7	0.405	0.177
24Y77	1000	3	3	P02-08	4	3	0.556	0.115
24Y77	1102	3	3	P02-10	6	5	0.429	0.166
24Y77	1103	3	3	P02-12	10	9	0.537	0.122
24Y77	1105	3	3	P02-08	4	3	0.554	0.115
24Y77	1341	4	3	P02-08	5	4	0.583	0.105
24Y77	1342	4	3	P02-07	5	4	0.350	0.205
24Y77	1343	4	3	P02-05	5	4	0.596	0.104
24Y77	1345	4	3	P01-08	11	8	0.238	0.280
24Y77	1346	4	3	P01-07	9	8	0.582	0.106
24Y77	1348	4	3	P01-06	9	8	0.437	0.162
24Y77	1350	4	3	P02-08	5	4	0.596	0.101
24Y77	1352	4	3	P02-10	8	5	0.459	0.152
24Y77	1354	4	3	P02-12	9	8	0.598	0.100
24Y77	1355	4	3	P02-08	5	4	0.581	0.106

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TABLE 2.2 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR DF LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
25Y77	1036	3	3	P02-08	5	4	0.590	0.103
25Y77	1035	3	3	P02-07	5	4	0.370	0.194
25Y77	1036	3	3	P02-05	6	4	0.339	0.211
25Y77	1133	3	3	P01-06	5	4	0.448	0.157
25Y77	1134	3	3	P02-08	5	4	0.536	0.104
25Y77	1136	3	3	P02-12	7	6	0.589	0.103
25Y77	1139	3	3	P02-10	5	4	0.468	0.148
25Y77	1140	3	3	P02-08	5	4	0.587	0.104

TABLE 2.3 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR CO LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
16Y77	1620	3	4	P05-09	2	0	0.035	0.654
16Y77	1631	3	4	P04-10	12	9	0.046	0.601
16Y77	1636	3	4	P04-09	12	9	0.191	0.323
16Y77	1640	3	4	P04-08	2	1	0.156	0.319
17Y77	1247	3	4	P04-09	8	2	0.004	1.091
17Y77	1250	3	4	P04-11	8	2	0.007	0.957
17Y77	1254	3	4	P05-11	8	2	0.004	1.078
17Y77	1259	3	4	P04-10	8	2	0.010	0.899
17Y77	1301	3	4	P04-10	8	2	0.010	0.899
17Y77	1302	3	4	P04-09	8	2	0.047	0.597
17Y77	1303	3	4	P04-08	8	2	0.048	0.593
23Y77	1148	3	4	P04-09	12	9	0.113	0.425
23Y77	1150	3	4	P04-08	12	9	0.121	0.413
23Y77	1156	3	4	P04-10	12	9	0.021	0.759
23Y77	1200	3	4	P05-09	12	8	0.015	0.818

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TABLE 2.4 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR CO2 LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
02M77	1118	3	5	P10-20	3	2	0.567	0.111
02M77	1120	3	5	P10-26	3	2	0.613	0.096
02M77	1121	3	5	P10-30	3	2	0.664	0.080
02M77	1123	3	5	P10-38	4	3	0.705	0.068
02M77	1125	3	5	P10-14	3	2	0.535	0.122
02M77	1127	3	5	P10-10	3	2	0.531	0.106
02M77	1128	3	5	P10-06	3	2	0.662	9.081
02M77	1130	3	5	R10-34	3	2	0.619	0.094
02M77	1134	3	5	R10-20	5	1	0.057	0.558
02M77	1136	3	5	R10-28	2	1	0.641	0.087
02M77	1138	3	5	R10-12	2	1	0.425	0.167
02M77	1139	3	5	R10-06	2	1	0.630	0.090
02M77	1142	3	5	P02-20	2	1	0.397	0.181
02M77	1143	3	5	P02-26	2	1	0.444	0.159
02M77	1145	3	5	P02-32	2	1	0.593	0.102
02M77	1146	3	5	P02-14	2	1	0.537	0.121
02M77	1151	3	5	P02-08	3	1	0.356	0.202
02M77	1157	3	5	R02-20	2	1	0.436	0.162
02M77	1158	3	5	R02-28	2	1	0.518	0.129
02M77	1203	3	5	R02-14	3	1	0.236	0.282
02M77	1204	3	5	R02-08	2	1	0.496	0.137
02M77	1227	3	5	R02-08	2	1	0.539	0.121
08M77	1018	3	5	P10-20	7	6	0.389	0.184
06M77	1019	3	5	P10-26	7	5	0.417	0.171
08M77	1020	3	5	P10-30	7	6	0.437	0.162
08M77	1022	3	5	P10-38	8	6	0.251	0.270
08M77	1024	3	5	P10-14	6	5	0.374	0.192
08M77	1025	3	5	P10-10	6	5	0.393	0.182
08M77	1026	3	5	P10-06	6	5	0.445	0.158
08M77	1028	3	5	R10-34	6	5	0.480	0.144
08M77	1031	3	5	R10-20	8	4	0.113	0.426
08M77	1034	3	5	R10-28	6	5	0.444	0.159
08M77	1035	3	5	R10-12	6	4	0.241	0.278
08M77	1036	3	5	R10-06	6	5	0.438	0.161
08M77	1039	3	5	P02-20	4	3	0.316	0.225
08M77	1040	3	5	P02-26	4	3	0.340	0.211
08M77	1041	3	5	P02-32	4	3	0.404	0.177
08M77	1043	3	5	P02-14	5	3	0.246	0.274
08M77	1044	3	5	P02-08	5	3	0.284	0.246
08M77	1046	3	5	R02-20	4	2	0.350	0.205
08M77	1047	3	5	R02-28	3	2	0.397	0.180
08M77	1048	3	5	R02-14	5	2	0.112	0.428
08M77	1050	3	5	R02-08	5	3	0.402	0.178
09M77	1512	3	5	P10-20	7	5	0.313	0.227
09M77	1513	3	5	P10-26	7	5	0.343	0.209
09M77	1515	3	5	P10-30	7	5	0.357	0.201
09M77	1517	3	5	P10-38	9	7	0.364	0.197
09M77	1519	3	5	P10-14	8	6	0.311	0.228
09M77	1520	3	5	P10-10	8	6	0.325	0.219
09M77	1521	3	5	P10-06	8	6	0.359	0.200
09M77	1522	3	5	R10-34	7	6	0.413	0.173
09M77	1524	3	5	R10-20	10	4	0.004	1.087
09M77	1525	3	5	R10-28	5	4	0.375	0.191
09M77	1526	3	5	R10-12	7	4	0.192	0.322
09M77	1527	3	5	R10-06	6	5	0.644	0.086
09M77	1535	3	5	P02-20	5	3	0.265	0.259
09M77	1536	3	5	P02-26	5	3	0.287	0.244
09M77	1537	3	5	P02-32	5	3	0.339	0.211
09M77	1538	3	5	P02-14	5	3	0.203	0.312
09M77	1541	3	5	P02-08	5	3	0.240	0.278
09M77	1552	3	5	R02-20	5	3	0.274	0.253
09M77	1553	3	5	R02-28	5	3	0.335	0.214
09M77	1554	3	5	R02-14	7	3	0.073	0.510
09M77	1556	3	5	R02-08	5	3	0.320	0.223

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TABLE 2.4 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR CO2 LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
10M77	1340	3	5	P10-20	9	6	0.188	0.326
10M77	1349	3	5	P10-38	10	7	0.214	0.301
10M77	1352	3	5	P10-30	10	7	0.208	0.307
10M77	1354	3	5	P10-26	10	7	0.203	0.311
10M77	1356	3	5	P10-20	9	6	0.076	0.503
10M77	1359	3	5	P10-14	9	6	0.169	0.347
10M77	1400	3	5	P10-10	9	6	0.189	0.325
10M77	1401	3	5	P10-06	10	7	0.206	0.309
10M77	1406	3	5	R10-06	9	6	0.206	0.308
10M77	1413	3	5	R10-12	10	6	0.105	0.440
10M77	1417	3	5	R10-20	12	3	0.000	1.496
10M77	1424	3	5	R10-28	7	5	0.234	0.284
10M77	1426	3	5	R10-34	7	5	0.236	0.282
10M77	1432	3	5	P02-32	7	5	0.211	0.304
10M77	1336	3	5	P02-26	6	4	0.178	0.337
10M77	1439	3	5	P02-20	6	4	0.168	0.348
10M77	1441	3	5	P02-14	6	3	0.142	0.382
10M77	1448	3	5	P02-14	9	3	0.032	0.670
10M77	1450	3	5	P02-20	6	3	0.170	0.346
10M77	1452	3	5	P02-26	6	3	0.186	0.329
10M77	1456	3	5	P10-20	9	6	0.143	0.380
11M77	1406	3	5	P10-20	11	9	0.142	0.381
11M77	1412	3	5	P10-20	8	5	0.147	0.374
11M77	1414	3	5	P10-26	8	5	0.158	0.360
11M77	1415	3	5	P10-30	8	5	0.167	0.350
11M77	1416	3	5	P10-38	9	6	0.161	0.356
11M77	1418	3	5	P10-14	8	5	0.144	0.379
11M77	1419	3	5	P10-10	8	5	0.152	0.368
11M77	1421	3	5	P10-06	8	5	0.176	0.339
11M77	1426	3	5	R10-28	6	5	0.375	0.192
11M77	1427	3	5	R10-12	8	4	0.072	0.515
11M77	1428	3	5	R10-06	7	5	0.183	0.332
11M77	1430	3	5	P02-20	6	3	0.189	0.325
11M77	1431	3	5	P02-26	5	3	0.208	0.307
11M77	1433	3	5	P02-32	5	3	0.245	0.274
11M77	1434	3	5	P02-14	6	3	0.162	0.356
11M77	1435	3	5	P02-08	6	3	0.207	0.308
11M77	1442	3	5	R02-20	4	2	0.210	0.305
11M77	1444	3	5	R02-28	4	2	0.250	0.271
11M77	1445	3	5	R02-14	8	2	0.029	0.688
11M77	1446	3	5	R02-08	4	2	0.239	0.279
12M77	1428	3	5	P10-20	8	5	0.482	0.142
12M77	1429	3	5	P10-26	8	5	0.514	0.130
12M77	1431	3	5	P10-30	8	5	0.543	0.119
12M77	1432	3	5	P10-38	8	5	0.524	0.126
12M77	1433	3	5	P10-14	8	5	0.474	0.146
12M77	1434	3	5	P10-06	8	5	0.574	0.109
12M77	1436	3	5	R10-34	6	4	0.725	0.063
12M77	1443	3	5	R10-28	6	4	0.681	0.075
12M77	1444	3	5	R10-12	8	4	0.217	0.298
12M77	1446	3	5	R10-06	7	4	0.590	0.103
12M77	1449	3	5	P02-20	5	3	0.649	0.085
12M77	1451	3	5	P02-32	5	3	0.822	0.038
12M77	1452	3	5	P02-14	5	3	0.596	0.101
12M77	1453	3	5	P02-08	5	3	0.727	0.062
12M77	1454	3	5	R02-20	5	3	0.698	0.070
12M77	1455	3	5	R02-28	5	3	0.848	0.032
12M77	1457	3	5	R02-14	7	2	0.103	0.444
12M77	1458	3	5	R02-08	5	3	0.799	0.044
12M77	1500	3	5	P10-26	8	5	0.527	0.125

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TABLE 2.4 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR CO_2 LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
14M77	1150	3	5	P10-20	6	5	0.499	0.136
14M77	1151	3	5	P10-26	6	5	0.545	0.119
14M77	1152	3	5	P10-30	6	5	0.603	0.099
14M77	1153	3	5	P10-38	8	7	0.599	0.100
14M77	1155	3	5	P10-14	6	5	0.457	0.153
14M77	1156	3	5	P10-10	6	5	0.466	0.149
14M77	1157	3	5	P10-06	6	5	0.532	0.123
14M77	1158	3	5	R10-34	6	5	0.523	0.127
14M77	1200	3	5	R10-20	11	5	0.025	0.720
14M77	1201	3	5	R10-28	6	5	0.484	0.142
14M77	1202	3	5	R10-12	6	5	0.302	0.234
14M77	1203	3	5	R10-06	6	5	0.513	0.131
14M77	1204	3	5	P02-20	6	4	0.285	0.245
14M77	1206	3	5	P02-26	5	3	0.320	0.223
14M77	1207	3	5	P02-32	4	3	0.383	0.184
14M77	1208	3	5	P02-14	5	3	0.223	0.293
14M77	1209	3	5	P02-08	5	3	0.262	0.247
14M77	1211	3	5	R02-20	5	3	0.341	0.210
14M77	1212	3	5	R02-28	4	3	0.330	0.184
14M77	1213	3	5	R02-14	6	3	0.164	0.354
14M77	1214	3	5	R02-03	4	3	0.408	0.175
14M77	1438	4	5	P10-20	5	4	0.455	0.154
14M77	1444	4	5	P10-38	8	7	0.544	0.119
14M77	1448	4	5	P10-30	7	6	0.547	0.118
14M77	1449	4	5	P10-26	7	6	0.496	0.137
14M77	1451	4	5	P10-20	6	5	0.457	0.153
14M77	1453	4	5	P10-14	6	5	0.423	0.165
14M77	1454	4	5	P10-10	6	5	0.448	0.157
14M77	1455	4	5	P10-06	6	5	0.501	0.135
14M77	1458	4	5	R10-06	6	5	0.433	0.139
14M77	1500	4	5	R10-12	5	4	0.285	0.245
14M77	1503	4	5	R10-20	11	4	0.016	0.811
14M77	1505	4	5	R10-28	5	4	0.487	0.141
14M77	1509	4	5	R10-34	5	4	0.512	0.131
14M77	1527	4	5	P02-32	5	4	0.369	0.194
14M77	1529	4	5	P02-26	5	3	0.308	0.230
14M77	1531	4	5	P02-20	5	3	0.285	0.245
14M77	1533	4	5	P02-20	5	3	0.260	0.263
14M77	1535	4	5	P02-20	5	3	0.285	0.245
14M77	1537	4	5	P02-26	5	3	0.303	0.233
14M77	1538	4	5	P02-14	5	3	0.279	0.305
14M77	1540	4	5	P02-08	5	3	0.264	0.260
14M77	1547	4	5	R02-08	4	3	0.391	0.183
14M77	1550	4	5	R02-14	5	2	0.143	0.380
14M77	1552	4	5	R02-20	4	2	0.336	0.213
14M77	1555	4	5	R02-28	3	2	0.426	0.167
14M77	1609	4	5	P10-20	5	4	0.456	0.153
15M77	906	3	5	P10-20	8	6	0.373	0.193
15M77	907	3	5	P10-26	7	6	0.405	0.177
15M77	908	3	5	P10-30	7	6	0.439	0.161
15M77	909	3	5	P10-38	7	6	0.445	0.158
15M77	910	3	5	P10-14	6	5	0.334	0.214
15M77	911	3	5	P10-10	6	5	0.394	0.187
15M77	912	3	5	P10-06	6	5	0.410	0.174
15M77	914	3	5	R10-34	6	5	0.460	0.152
15M77	914	3	5	R10-20	12	4	0.008	1.006
15M77	917	3	5	R10-28	5	4	0.428	0.166
15M77	919	3	5	R10-12	6	4	0.222	0.294
15M77	920	3	5	R10-06	5	4	0.427	0.166
15M77	922	3	5	P02-20	5	3	0.276	0.251
15M77	924	3	5	P02-26	5	3	0.298	0.236
15M77	926	3	5	P02-14	5	3	0.216	0.299
15M77	928	3	5	P02-08	5	3	0.269	0.256
15M77	930	3	5	R02-20	5	3	0.304	0.233
15M77	931	3	5	R02-28	5	3	0.372	0.193
15M77	932	3	5	R02-14	6	2	0.185	0.440
15M77	934	3	5	R02-08	4	2	0.359	0.208

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TABLE 2.4 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR CO2 LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
01A77	1449	4	5	P10-20	10	6	0.121	0.412
01A77	1450	4	5	P10-26	10	6	0.136	0.390
01A77	1451	4	5	P10-30	9	6	0.138	0.387
01A77	1452	4	5	P10-38	9	6	0.146	0.376
01A77	1453	4	5	P10-14	9	5	0.121	0.413
01A77	1454	4	5	P10-10	8	5	0.134	0.393
01A77	1455	4	5	P10-06	8	5	0.160	0.358
01A77	1455	4	5	R10-34	8	5	0.194	0.320
01A77	1459	4	5	R10-26	7	4	0.175	0.340
01A77	1501	4	5	R10-12	9	4	0.047	0.598
01A77	1502	4	5	R10-06	7	4	0.154	0.365
01A77	1503	4	5	P02-20	7	4	0.154	0.366
01A77	1504	4	5	P02-26	6	3	0.160	0.357
01A77	1505	4	5	P02-32	6	3	0.178	0.337
01A77	1506	4	5	P02-14	6	3	0.109	0.433
01A77	1506	4	5	P02-08	6	3	0.133	0.394
01A77	1507	4	5	R02-20	6	3	0.179	0.336
01A77	1508	4	5	R02-28	6	3	0.219	0.296
01A77	1509	4	5	R02-14	10	3	0.017	0.794
01A77	1511	4	5	R02-08	6	3	0.202	0.312
02A77	1247	3	5	P10-20	9	5	0.126	0.405
02A77	1249	3	5	P10-26	8	5	0.139	0.386
02A77	1250	3	5	P10-30	8	5	0.264	0.260
02A77	1251	3	5	P10-38	8	5	0.148	0.373
02A77	1252	3	5	P10-14	8	5	0.127	0.402
02A77	1252	3	5	P10-10	8	5	0.136	0.386
02A77	1253	3	5	P10-06	8	5	0.165	0.352
02A77	1254	3	5	R10-34	8	5	0.209	0.306
02A77	1255	3	5	R10-20	12	2	0.000	1.742
02A77	1255	3	5	R10-20	12	1	0.000	1.788
02A77	1300	3	5	R10-28	8	5	0.190	0.324
02A77	1301	3	5	R10-12	9	4	0.055	0.565
02A77	1302	3	5	R10-06	8	5	0.168	0.349
02A77	1303	3	5	P02-20	7	4	0.197	0.318
02A77	1306	3	5	P02-26	7	4	0.201	0.313
02A77	1306	3	5	P02-32	7	4	0.220	0.295
02A77	1307	3	5	P02-14	7	4	0.156	0.362
02A77	1308	3	5	P02-08	7	4	0.192	0.322
02A77	1309	3	5	R02-20	6	3	0.216	0.299
02A77	1310	3	5	R02-28	5	3	0.247	0.273
02A77	1311	3	5	R02-14	9	3	0.022	0.741
02A77	1312	3	5	R02-08	5	3	0.239	0.280
02A77	1433	4	5	P10-20	8	5	0.129	0.400
02A77	1435	4	5	P10-26	8	5	0.144	0.379
02A77	1436	4	5	P10-30	8	5	0.262	0.262
02A77	1437	4	5	P10-38	8	5	0.153	0.367
02A77	1438	4	5	P10-14	8	5	0.131	0.397
02A77	1438	4	5	P10-10	8	5	0.145	0.377
02A77	1439	4	5	P10-06	8	5	0.174	0.342
02A77	1440	4	5	R10-34	8	5	0.219	0.297
02A77	1443	4	5	R10-28	6	4	0.203	6.311
02A77	1444	4	5	R10-12	9	4	0.054	0.568
02A77	1445	4	5	R10-06	8	5	0.176	0.340
02A77	1447	4	5	P02-20	6	3	0.205	0.310
02A77	1449	4	5	P02-26	6	3	0.215	0.300
02A77	1450	4	5	P02-32	6	4	0.232	0.286
02A77	1451	4	5	P02-14	6	3	0.170	0.346
02A77	1452	4	5	P02-08	6	3	0.208	0.307
02A77	1452	4	5	R02-20	5	2	0.228	[illegible]
02A77	1454	4	5	R02-28	5	3	0.275	[illegible]
02A77	1455	4	5	R02-14	9	3	0.023	0.733
02A77	1456	4	5	R02-08	5	3	0.252	0.269

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TABLE 2.4 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR CO_2 LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
04A77	1107	3	5	P10-20	8	5	0.131	0.397
04A77	1108	3	5	P10-26	8	5	0.146	0.375
04A77	1109	3	5	P10-30	8	5	0.152	0.368
04A77	1110	3	5	P10-38	8	5	0.154	0.365
04A77	1110	3	5	P10-14	8	5	0.132	0.395
04A77	1111	3	5	P10-10	8	5	0.148	0.373
04A77	1113	3	5	P10-06	8	5	0.175	0.341
04A77	1113	3	5	R10-34	6	4	0.222	0.294
04A77	1113	3	5	R10-20	12	1	0.000	1.792
04A77	1118	3	5	R10-28	6	4	0.201	0.313
04A77	1119	3	5	R10-12	8	4	0.056	0.563
04A77	1120	3	5	R10-06	8	5	0.173	0.343
04A77	1122	3	5	P02-20	5	2	0.198	0.316
04A77	1123	3	5	P02-26	5	2	0.210	0.305
04A77	1124	3	5	P02-32	5	2	0.228	0.289
04A77	1125	3	5	P02-14	5	2	0.161	0.357
04A77	1126	3	5	P02-08	5	2	0.198	0.316
04A77	1127	3	5	R02-20	5	2	0.224	0.292
04A77	1129	3	5	R02-28	4	2	0.261	0.262
04A77	1130	3	5	R02-14	8	2	0.024	0.725
04A77	1131	3	5	R02-08	4	2	0.250	0.271
04A77	1502	4	5	P10-38	10	7	0.143	0.379
04A77	1506	4	5	P10-30	9	6	0.142	0.381
04A77	1508	4	5	P10-26	9	6	0.137	0.388
04A77	1509	4	5	P10-20	9	6	0.120	0.413
04A77	1512	4	5	P10-14	9	5	0.123	0.409
04A77	1514	4	5	P10-10	8	5	0.136	0.390
04A77	1516	4	5	P10-06	8	5	0.164	0.353
04A77	1517	4	5	P10-20	8	5	0.121	0.413
04A77	1519	4	5	R10-06	8	5	0.162	0.355
04A77	1521	4	5	R10-12	10	5	0.052	0.578
04A77	1528	4	5	R10-28	7	4	0.186	0.328
04A77	1530	4	5	R10-34	7	4	0.197	0.318
04A77	1534	4	5	P10-20	8	5	0.120	0.414
04A77	1547	4	5	P02-32	7	4	0.203	0.311
04A77	1549	4	5	P02-26	6	3	0.185	0.330
04A77	1551	4	5	P02-20	6	3	0.172	0.344
04A77	1552	4	5	P02-14	6	3	0.145	0.377
04A77	1555	4	5	P02-08	6	3	0.183	0.332
04A77	1558	4	5	R02-08	6	3	0.212	0.303
04A77	1600	4	5	P10-20	8	5	0.110	0.431
04A77	1602	4	5	R02-08	6	3	0.204	0.310
04A77	1605	4	5	R02-14	9	3	0.019	0.771
04A77	1608	4	5	R02-20	5	2	0.191	0.323
04A77	1610	4	5	R02-28	5	2	0.230	0.287
04A77	1615	4	5	P10-20	8	5	0.110	0.431
05A77	1502	3	5	P10-20	8	6	0.387	0.185
05A77	1503	3	5	P10-26	8	6	0.456	0.154
05A77	1504	3	5	P10-30	8	6	0.491	0.143
05A77	1505	3	5	P10-38	8	7	0.517	0.129
05A77	1506	3	5	P10-14	7	6	0.413	0.173
05A77	1507	3	5	P10-10	7	6	0.441	0.160
05A77	1508	3	5	P10-06	7	6	0.510	0.132
05A77	1509	3	5	R10-34	7	6	0.554	0.115
05A77	1510	3	5	R10-20	12	4	0.006	0.998
05A77	1512	3	5	R10-28	6	5	0.508	0.132
05A77	1514	3	5	R10-12	7	5	0.253	0.268
05A77	1515	3	5	R10-06	7	6	0.485	0.141
05A77	1516	3	5	P02-20	5	3	0.367	0.196
05A77	1517	3	5	P02-26	5	3	0.391	0.183
05A77	1510	3	5	P02-32	5	4	0.435	0.163
05A77	1519	3	5	P02-14	6	4	0.290	0.242
05A77	1520	3	5	P02-08	6	4	0.336	0.213
05A77	1521	3	5	R02-20	5	3	0.391	0.184
05A77	1523	3	5	R02-28	4	3	0.457	0.153
05A77	1524	3	5	R02-14	6	3	0.125	0.406
05A77	1525	3	5	R02-08	5	4	0.440	0.161

TABLE 2.4 OF LINE BY LINE LASER EXTINCTION MEASUREMENTS FOR CO2 LASER SOURCE

DATE	TIME	RUN CODE	LASER	LINE ID	MOB GAIN	STAT GAIN	TRANS	EX COEF
16Y77	1458	3	5	P10-20	7	6	0.213	0.302
16Y77	1500	3	5	P10-30	8	6	0.253	0.269
16Y77	1501	3	5	P10-38	8	6	0.259	0.264
16Y77	1504	3	5	P10-10	8	5	0.230	0.287
16Y77	1506	3	5	R10-34	7	5	0.297	0.237
16Y77	1510	3	5	R10-12	9	5	0.096	0.458
16Y77	1515	3	5	P02-32	5	3	0.266	0.259
16Y77	1516	3	5	P02-14	5	3	0.160	0.358
16Y77	1517	3	5	P02-08	6	3	0.183	0.331
16Y77	1518	3	5	R02-20	4	2	0.258	0.264
16Y77	1520	3	5	R02-28	4	2	0.308	0.230
16Y77	1521	3	5	R02-14	8	2	0.042	0.618
16Y77	1522	3	5	R02-08	4	2	0.301	0.235
16Y77	1525	3	5	P10-20	8	6	0.211	0.304
17Y77	1451	3	5	P10-20	8	5	0.208	0.307
17Y77	1501	3	5	P10-38	10	8	0.259	0.264
17Y77	1504	3	5	P10-30	9	7	0.248	0.272
17Y77	1508	3	5	P10-20	8	6	0.210	0.305
17Y77	1513	3	5	P10-10	7	5	0.229	0.288
17Y77	1525	3	5	R10-12	7	5	0.175	0.341
17Y77	1529	3	5	R10-20	12	4	0.000	1.491
17Y77	1535	3	5	R10-34	7	5	0.305	0.232
17Y77	1552	3	5	P02-32	6	4	0.273	0.253
17Y77	1559	3	5	P02-14	5	3	0.163	0.355
17Y77	1607	3	5	P02-08	5	3	0.196	0.319
17Y77	1611	3	5	R02-08	5	3	0.308	0.230
17Y77	1612	3	5	R02-14	8	3	0.045	0.605
17Y77	1614	3	5	R02-20	5	3	0.271	0.255
17Y77	1620	3	5	R02-28	4	2	0.320	0.222
17Y77	1627	3	5	P10-20	7	5	0.219	0.297
24Y77	1429	3	5	P10-20	9	5	0.084	0.483
24Y77	1434	3	5	P10-30	9	5	0.098	0.453
24Y77	1434	3	5	P10-38	9	5	0.100	0.449
24Y77	1435	3	5	P10-20	9	5	0.084	0.485
24Y77	1437	3	5	P10-10	9	5	0.091	0.467
24Y77	1438	3	5	R10-34	8	5	0.142	0.381
24Y77	1440	3	5	R10-22	8	4	0.071	0.517
24Y77	1449	3	5	R10-12	10	4	0.030	0.687
24Y77	1454	3	5	P02-32	6	3	0.160	0.358
24Y77	1455	3	5	P02-14	6	3	0.117	0.418
24Y77	1456	3	5	P02-08	6	3	0.137	0.389
24Y77	1457	3	5	R02-20	5	2	0.151	0.369
24Y77	1458	3	5	R02-28	5	2	0.188	0.326
24Y77	1458	3	5	R02-14	5	2	0.194	0.321
24Y77	1459	3	5	R02-08	5	2	0.178	0.338
25Y77	857	3	5	P10-20	10	6	0.063	0.539
25Y77	859	3	5	P10-30	10	6	0.071	0.515
25Y77	900	3	5	P10-38	12	8	0.077	0.501
25Y77	906	3	5	P10-20	8	4	0.099	0.451
25Y77	909	3	5	P10-30	8	4	0.115	0.422
25Y77	910	3	5	P10-38	9	5	0.117	0.419
25Y77	911	3	5	P10-10	9	5	0.108	0.435
25Y77	914	3	5	R10-34	8	5	0.176	0.339
25Y77	917	3	5	R10-12	9	4	0.037	0.642
25Y77	922	3	5	P02-32	6	3	0.196	0.318
25Y77	922	3	5	P02-14	6	3	0.140	0.384
25Y77	923	3	5	P02-08	6	[illegible]	0.167	0.350
25Y77	924	3	5	R02-20	5	2	0.181	0.334
25Y77	925	3	5	R02-28	4	2	0.237	0.281
25Y77	926	3	5	R02-14	9	2	0.015	0.826
25Y77	927	3	5	R02-08	4	2	0.228	0.289

Table 3.1. Aerosol extinction coefficients derived on the basis of contrast attenuation measurements at the Cape Canaveral shore (see Fig. 3.1 for path definition).

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
11 MAR 77	1500	5.08	0.4050	0.149
11 MAR 77	1550	5.08	0.4050	0.138
11 MAR 77	1517	5.08	0.4358	0.117
11 MAR 77	1540	5.08	0.4500	0.118
11 MAR 77	1504	5.08	0.4880	0.107
11 MAR 77	1520	5.08	0.5050	0.298
11 MAR 77	1542	5.08	0.5145	0.289
11 MAR 77	1507	5.08	0.5200	0.289
11 MAR 77	1524	5.08	0.5461	0.281
11 MAR 77	1544	5.08	0.5770	0.281
11 MAR 77	1510	5.08	0.5896	0.338
11 MAR 77	1529	5.08	0.6000	0.273
11 MAR 77	1538	5.08	0.6200	0.161
11 MAR 77	1514	5.08	0.6328	0.107
11 MAR 77	1559	5.08	0.6328	0.281
11 MAR 77	1548	5.08	0.6941	0.171
11 MAR 77	1500	2.57	0.4050	0.433
11 MAR 77	1517	2.57	0.4358	0.411
11 MAR 77	1540	2.57	0.4500	0.420
11 MAR 77	1504	2.57	0.4880	0.398
11 MAR 77	1520	2.57	0.5050	0.408
11 MAR 77	1542	2.57	0.5145	0.376
11 MAR 77	1507	2.57	0.5200	0.376
11 MAR 77	1524	2.57	0.5461	0.398
11 MAR 77	1544	2.57	0.5770	0.398
11 MAR 77	1510	2.57	0.5896	0.398
11 MAR 77	1529	2.57	0.6000	0.509
11 MAR 77	1538	2.57	0.6200	0.420
11 MAR 77	1514	2.57	0.6328	0.398
11 MAR 77	1559	2.57	0.6328	0.431
11 MAR 77	1548	2.57	0.6941	0.626
11 MAR 77	1500	1.28	0.4050	0.659
11 MAR 77	1551	1.28	0.4050	0.697
11 MAR 77	1517	1.28	0.4358	0.659
11 MAR 77	1540	1.28	0.4500	0.641
11 MAR 77	1504	1.28	0.4880	0.607
11 MAR 77	1520	1.28	0.5050	0.678
11 MAR 77	1542	1.28	0.5145	0.678
11 MAR 77	1507	1.28	0.5200	0.624
11 MAR 77	1524	1.28	0.5461	0.641
11 MAR 77	1544	1.28	0.5770	0.697
11 MAR 77	1510	1.28	0.5896	0.624
11 MAR 77	1529	1.28	0.6000	0.607
11 MAR 77	1538	1.28	0.6200	0.697
11 MAR 77	1514	1.28	0.6328	0.641
11 MAR 77	1558	1.28	0.6328	0.798
11 MAR 77	1548	1.28	0.6941	0.081

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
12 MAR 77	1007	5.08	0.4050	0.176
12 MAR 77	1101	5.08	0.4050	0.180
12 MAR 77	1031	5.08	0.4358	0.166
12 MAR 77	1048	5.08	0.4500	0.171
12 MAR 77	1010	5.08	0.4880	0.107
12 MAR 77	1036	5.08	0.5050	0.157
12 MAR 77	1052	5.08	0.5145	0.182
12 MAR 77	1015	5.08	0.5200	0.149
12 MAR 77	1039	5.08	0.5461	0.157
12 MAR 77	1055	5.08	0.5770	0.166
12 MAR 77	1017	5.08	0.5896	0.166
12 MAR 77	1041	5.08	0.6000	0.162
12 MAR 77	1045	5.08	0.6200	0.166
12 MAR 77	1020	5.08	0.6328	0.144
12 MAR 77	1107	5.08	0.6328	0.180
12 MAR 77	1057	5.08	0.6941	0.196
12 MAR 77	1109	5.08	0.6941	0.196
12 MAR 77	1007	2.57	0.4050	0.219
12 MAR 77	1102	2.57	0.4050	0.226
12 MAR 77	1031	2.57	0.4358	0.219
12 MAR 77	1048	2.57	0.4500	0.212
12 MAR 77	1010	2.57	0.4880	0.196
12 MAR 77	1036	2.57	0.5050	0.205
12 MAR 77	1052	2.57	0.5145	0.205
12 MAR 77	1015	2.57	0.5200	0.194
12 MAR 77	1039	2.57	0.5461	0.219
12 MAR 77	1055	2.57	0.5770	0.247
12 MAR 77	1011	2.57	0.5896	0.233
12 MAR 77	1041	2.57	0.6000	0.233
12 MAR 77	1045	2.57	0.6200	0.240
12 MAR 77	1020	2.57	0.6328	0.212
12 MAR 77	1106	2.57	0.6328	0.247
12 MAR 77	1057	2.57	0.6941	[illegible]
12 MAR 77	1110	2.57	0.6941	0.102
12 MAR 77	1007	1.28	0.4050	0.268
12 MAR 77	1101	1.28	0.4050	0.279
12 MAR 77	1031	1.28	0.4358	0.279
12 MAR 77	1048	1.28	0.4500	0.246
12 MAR 77	1010	1.28	0.4880	0.235
12 MAR 77	1036	1.28	0.5050	0.235
12 MAR 77	1052	1.28	0.5145	0.[illegible]57
12 MAR 77	1015	1.28	0.5200	0.[illegible]68
12 MAR 77	1039	1.28	0.5461	0.257
12 MAR 77	1055	1.28	0.5770	0.290
12 MAR 77	1017	1.28	0.5896	0.279
12 MAR 77	1041	1.28	0.6000	0.268
12 MAR 77	1045	1.28	0.6200	0.246
12 MAR 77	1020	1.28	0.6328	0.246
12 MAR 77	1105	1.28	0.6328	0.246
12 MAR 77	1057	1.28	0.6941	0.101
12 MAR 77	1111	1.28	0.6941	0.290

Table 3.1 (continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
14 MAR 77	847	5.08	0.4050	0.144
14 MAR 77	931	5.08	0.4050	0.149
14 MAR 77	907	5.08	0.4358	0.136
14 MAR 77	920	5.08	0.4500	0.140
14 MAR 77	852	5.08	0.4880	0.114
14 MAR 77	910	5.08	0.5050	0.121
14 MAR 77	922	5.08	0.5145	0.125
14 MAR 77	856	5.08	0.5200	0.114
14 MAR 77	912	5.08	0.5461	0.121
14 MAR 77	925	5.08	0.5770	0.133
14 MAR 77	900	5.08	0.5896	0.129
14 MAR 77	915	5.08	0.6000	0.136
14 MAR 77	917	5.08	0.6200	0.125
14 MAR 77	903	5.08	0.6328	0.121
14 MAR 77	933	5.08	0.6328	0.140
14 MAR 77	928	5.08	0.6943	0.155
14 MAR 77	938	5.08	0.6943	0.157
14 MAR 77	847	2.57	0.4050	0.150
14 MAR 77	930	2.57	0.4050	0.162
14 MAR 77	907	2.57	0.4358	0.150
14 MAR 77	920	2.57	0.4500	0.156
14 MAR 77	852	2.57	0.4880	0.133
14 MAR 77	910	2.57	0.5050	0.150
14 MAR 77	922	2.57	0.5145	0.150
14 MAR 77	856	2.57	0.5200	0.139
14 MAR 77	912	2.57	0.5461	0.150
14 MAR 77	925	2.57	0.5770	0.174
14 MAR 77	900	2.57	0.5896	0.156
14 MAR 77	915	2.57	0.6000	0.180
14 MAR 77	917	2.57	0.6200	0.168
14 MAR 77	903	2.57	0.6328	0.162
14 MAR 77	934	2.57	0.6329	0.174
14 MAR 77	928	2.57	0.6943	0.205
14 MAR 77	937	2.57	0.6943	0.212
14 MAR 77	847	1.28	0.4050	0.174
14 MAR 77	930	1.28	0.4050	0.174
14 MAR 77	907	1.28	0.4358	0.165
14 MAR 77	920	1.28	0.4500	0.165
14 MAR 77	852	1.28	0.4880	0.136
14 MAR 77	910	1.28	0.5050	0.146
14 MAR 77	922	1.28	0.5145	0.146
14 MAR 77	856	1.28	0.5200	0.127
14 MAR 77	912	1.28	0.5461	0.136
14 MAR 77	925	1.28	0.5770	0.150
14 MAR 77	900	1.28	0.5996	0.136
14 MAR 77	915	1.28	0.6000	0.146
14 MAR 77	917	1.28	0.6200	0.136
14 MAR 77	903	1.28	0.6329	0.174
14 MAR 77	935	1.28	0.6329	0.174
14 MAR 77	928	1.28	0.6943	0.155
14 MAR 77	936	1.28	0.6943	0.165

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
14 MAR 77	1525	5.08	0.4050	0.157
14 MAR 77	1602	5.08	0.4050	0.153
14 MAR 77	1540	5.08	0.4358	0.149
14 MAR 77	1552	5.08	0.4500	0.14[illegible]
14 MAR 77	1529	5.08	0.4880	0.125
14 MAR 77	1542	5.08	0.5050	0.118
14 MAR 77	1555	5.08	0.5145	0.118
14 MAR 77	1532	5.08	0.5200	0.118
14 MAR 77	1545	5.08	0.5461	0.175
14 MAR 77	1557	5.08	0.5770	0.125
14 MAR 77	1534	5.08	0.5896	0.162
14 MAR 77	1604	5.08	0.5896	0.162
14 MAR 77	1547	5.08	0.6000	0.153
14 MAR 77	1548	5.08	0.6200	0.149
14 MAR 77	1537	5.08	0.6328	0.162
14 MAR 77	1400	5.08	0.6943	0.176
14 MAR 77	1608	5.08	0.6943	0.207
14 MAR 77	1525	2.57	0.4050	0.192
14 MAR 77	1602	2.57	0.4050	0.186
14 MAR 77	1540	2.57	0.4358	0.192
14 MAR 77	1552	2.57	0.4500	0.192
14 MAR 77	1529	2.57	0.4880	0.212
14 MAR 77	1542	2.57	0.5050	0.128
14 MAR 77	1555	2.57	0.5145	0.112
14 MAR 77	1532	2.57	0.5200	0.150
14 MAR 77	1545	2.57	0.5461	0.150
14 MAR 77	1557	2.57	0.5770	0.156
14 MAR 77	1534	2.57	0.5896	0.199
14 MAR 77	1605	2.57	0.5896	0.192
14 MAR 77	1547	2.57	0.6000	0.205
14 MAR 77	1548	2.57	0.6200	0.199
14 MAR 77	1537	2.57	0.6328	0.226
14 MAR 77	1600	2.57	0.6943	0.186
14 MAR 77	1607	2.57	0.6943	0.247
14 MAR 77	1525	1.28	0.4050	0.279
14 MAR 77	1601	1.28	0.4050	0.312
14 MAR 77	1540	1.28	0.4358	0.302
14 MAR 77	1552	1.29	0.4500	0.373
14 MAR 77	1529	1.28	0.4880	0.214
14 MAR 77	1542	1.28	0.5050	0.214
14 MAR 77	1555	1.28	0.5145	0.165
14 MAR 77	1532	1.28	0.5200	0.155
14 MAR 77	1545	1.28	0.5461	0.214
14 MAR 77	1557	1.28	0.5770	0.225
14 MAR 77	1534	1.28	0.5896	0.267
14 MAR 77	1547	1.28	0.6000	0.279
14 MAR 77	1548	1.28	0.6200	0.325
14 MAR 77	1537	1.28	0.6328	0.279
14 MAR 77	1606	1.28	0.6328	0.267
14 MAR 77	1600	1.28	0.6943	0.214
14 MAR 77	1606	1.28	0.6943	0.257

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Table 3.1.(continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
1 APR 77	948	5.08	0.4050	0.373
1 APR 77	1031	5.08	0.4050	0.361
1 APR 77	1005	5.08	0.4358	0.327
1 APR 77	1018	5.08	0.4500	0.307
1 APR 77	953	5.08	0.4880	0.255
1 APR 77	1008	5.08	0.5050	0.273
1 APR 77	1021	5.08	0.5145	0.265
1 APR 77	955	5.08	0.5200	0.281
1 APR 77	1010	5.08	0.5461	0.237
1 APR 77	1023	5.08	0.5770	0.237
1 APR 77	959	5.08	0.5896	0.231
1 APR 77	1013	5.08	0.6000	0.244
1 APR 77	1015	5.08	0.6200	0.207
1 APR 77	1002	5.08	0.6328	0.201
1 APR 77	1036	5.08	0.6328	0.218
1 APR 77	1027	5.08	0.6943	0.218
1 APR 77	1037	5.08	0.6943	0.218
1 APR 77	948	2.57	0.4050	0.408
1 APR 77	1032	2.57	0.4050	0.408
1 APR 77	1005	2.57	0.4358	0.398
1 APR 77	1018	2.57	0.4500	0.357
1 APR 77	953	2.57	0.4880	0.328
1 APR 77	1008	2.57	0.5050	0.311
1 APR 77	1021	2.57	0.5145	0.328
1 APR 77	955	2.57	0.5200	0.302
1 APR 77	1010	2.57	0.5461	0.311
1 APR 77	1023	2.57	0.5770	0.319
1 APR 77	959	2.57	0.5896	0.328
1 APR 77	1013	2.57	0.6000	0.311
1 APR 77	1015	2.57	0.6200	0.286
1 APR 77	1002	2.57	0.6328	0.302
1 APR 77	1035	2.57	0.6328	0.311
1 APR 77	1027	2.57	0.6943	0.311
1 APR 77	1038	2.57	0.6943	0.328
1 APR 77	948	1.28	0.4050	0.511
1 APR 77	1032	1.28	0.4050	0.526
1 APR 77	1005	1.28	0.4358	0.496
1 APR 77	1018	1.28	0.4500	0.453
1 APR 77	953	1.28	0.4880	0.373
1 APR 77	1008	1.28	0.5050	0.399
1 APR 77	1021	1.28	0.5145	0.399
1 APR 77	955	1.28	0.5200	0.361
1 APR 77	1010	1.28	0.5461	0.373
1 APR 77	1023	1.28	0.5770	0.386
1 APR 77	959	1.28	0.5896	0.399
1 APR 77	1013	1.28	0.6000	0.399
1 APR 77	1015	1.28	0.6200	0.399
1 APR 77	1002	1.28	0.6328	0.399
1 APR 77	1034	1.28	0.6328	0.386
1 APR 77	1027	1.28	0.6943	0.399
1 APR 77	1039	1.28	0.6943	0.412

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
2 APR 77	839	5.08	0.4050	0.214
2 APR 77	924	5.08	0.4050	0.214
2 APR 77	858	5.08	0.4358	0.192
2 APR 77	914	5.08	0.4500	0.192
2 APR 77	843	5.08	0.4880	0.158
2 APR 77	900	5.08	0.5050	0.163
2 APR 77	917	5.08	0.5145	0.158
2 APR 77	846	5.08	0.5200	0.146
2 APR 77	904	5.08	0.5461	0.146
2 APR 77	919	5.08	0.5770	0.146
2 APR 77	850	5.08	0.5896	0.138
2 APR 77	907	5.08	0.6000	0.134
2 APR 77	911	5.08	0.6200	0.134
2 APR 77	854	5.08	0.6328	0.123
2 APR 77	928	5.08	0.6328	0.130
2 APR 77	922	5.08	0.6943	0.134
2 APR 77	930	5.08	0.6943	0.138
2 APR 77	839	2.57	0.4050	0.254
2 APR 77	924	2.57	0.4050	0.254
2 APR 77	858	2.57	0.4358	0.233
2 APR 77	914	2.57	0.4500	0.240
2 APR 77	843	2.57	0.4880	0.199
2 APR 77	900	2.57	0.5050	0.212
2 APR 77	917	2.57	0.5145	0.205
2 APR 77	846	2.57	0.5200	0.199
2 APR 77	904	2.57	0.5461	0.212
2 APR 77	919	2.57	0.5770	0.212
2 APR 77	850	2.57	0.5896	0.205
2 APR 77	907	2.57	0.6000	0.219
2 APR 77	911	2.57	0.6200	0.199
2 APR 77	854	2.57	0.6328	0.199
2 APR 77	928	2.57	0.6328	0.219
2 APR 77	922	2.57	0.6943	0.219
2 APR 77	930	2.57	0.6943	0.219
2 APR 77	839	1.28	0.4050	0.313
2 APR 77	858	1.28	0.4358	0.268
2 APR 77	914	1.28	0.4500	0.290
2 APR 77	843	1.28	0.4880	0.225
2 APR 77	900	1.28	0.5050	0.235
2 APR 77	917	1.28	0.5145	0.246
2 APR 77	846	1.28	0.5200	0.225
2 APR 77	904	1.28	0.5461	0.246
2 APR 77	919	1.28	0.5770	0.246
2 APR 77	850	1.28	0.5896	0.246
2 APR 77	907	1.28	0.6000	0.246
2 APR 77	911	1.28	0.6200	0.225
2 APR 77	854	1.28	0.6328	0.235
2 APR 77	922	1.28	0.6943	0.257

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Table 3.1.(continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
4 APR 77	846	5.08	0.4050	0.265
4 APR 77	927	5.08	0.4050	0.258
4 APR 77	905	5.08	0.4358	0.224
4 APR 77	918	5.08	0.4500	0.224
4 APR 77	849	5.08	0.4880	0.190
4 APR 77	907	5.08	0.5050	0.190
4 APR 77	920	5.08	0.5145	0.190
4 APR 77	856	5.08	0.5200	0.190
4 APR 77	909	5.08	0.5461	0.176
4 APR 77	922	5.08	0.5770	0.190
4 APR 77	900	5.08	0.5896	0.180
4 APR 77	912	5.08	0.6000	0.196
4 APR 77	916	5.08	0.6200	0.171
4 APR 77	903	5.08	0.6328	0.166
4 APR 77	934	5.08	0.6328	0.176
4 APR 77	926	5.08	0.6943	0.171
4 APR 77	935	5.08	0.6943	0.176
4 APR 77	846	2.57	0.4050	0.296
4 APR 77	928	2.57	0.4050	0.286
4 APR 77	905	2.57	0.4358	0.286
4 APR 77	918	2.57	0.4500	0.270
4 APR 77	849	2.57	0.4880	0.233
4 APR 77	907	2.57	0.5050	0.247
4 APR 77	920	2.57	0.5145	0.233
4 APR 77	856	2.57	0.5200	0.219
4 APR 77	909	2.57	0.5461	0.240
4 APR 77	922	2.57	0.5770	0.247
4 APR 77	900	2.57	0.5896	0.240
4 APR 77	912	2.57	0.6000	0.240
4 APR 77	916	2.57	0.6200	0.233
4 APR 77	903	2.57	0.6328	0.233
4 APR 77	928	2.57	0.6328	0.240
4 APR 77	926	2.57	0.6943	0.247
4 APR 77	936	2.57	0.6943	0.270
4 APR 77	846	1.28	0.4050	0.399
4 APR 77	905	1.28	0.4358	0.373
4 APR 77	849	1.28	0.4880	0.313
4 APR 77	918	1.28	0.4500	0.361
4 APR 77	907	1.28	0.5050	0.337
4 APR 77	920	1.28	0.5145	0.301
4 APR 77	856	1.28	0.5200	0.279
4 APR 77	909	1.28	0.5461	0.301
4 APR 77	922	1.28	0.5770	0.325
4 APR 77	900	1.28	0.5896	0.313
4 APR 77	912	1.28	0.6000	0.337
4 APR 77	916	1.28	0.6200	0.325
4 APR 77	903	1.28	0.6328	0.313
4 APR 77	926	1.28	0.6943	0.361

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
5 APR 77	950	5.08	0.4050	0.209
5 APR 77	1029	5.08	0.4050	0.212
5 APR 77	1010	5.08	0.4358	0.185
5 APR 77	1020	5.08	0.4500	0.196
5 APR 77	958	5.08	0.4880	0.185
5 APR 77	1012	5.08	0.5050	0.176
5 APR 77	1022	5.08	0.5145	0.196
5 APR 77	1000	5.08	0.5200	0.162
5 APR 77	1014	5.08	0.5461	0.176
5 APR 77	1024	5.08	0.5770	0.196
5 APR 77	1003	5.08	0.589	0.185
5 APR 77	1016	5.08	0.6000	0.207
5 APR 77	1017	5.08	0.6200	0.185
5 APR 77	1006	5.08	0.6328	0.190
5 APR 77	1034	5.08	0.6328	0.190
5 APR 77	1026	5.08	0.6943	0.212
5 APR 77	950	2.57	0.4050	0.352
5 APR 77	1028	2.57	0.4050	0.366
5 APR 77	1010	2.57	0.4358	0.357
5 APR 77	1020	2.57	0.4500	0.347
5 APR 77	958	2.57	0.4880	0.328
5 APR 77	1012	2.57	0.5050	0.338
5 APR 77	1022	2.57	0.5145	0.408
5 APR 77	1000	2.57	0.5200	0.357
5 APR 77	1014	2.57	0.5461	0.408
5 APR 77	1024	2.57	0.5770	0.431
5 APR 77	1003	2.57	0.5896	0.387
5 APR 77	1016	2.57	0.6000	0.456
5 APR 77	1017	2.57	0.6200	0.495
5 APR 77	1006	2.57	0.6328	0.431
5 APR 77	1026	2.57	0.6943	0.495
5 APR 77	950	1.28	0.4050	0.412
5 APR 77	1010	1.28	0.4358	0.325
5 APR 77	1020	1.28	0.4500	0.257
5 APR 77	958	1.28	0.4880	0.247
5 APR 77	1012	1.28	0.5050	0.412
5 APR 77	1022	1.28	0.5145	0.337
5 APR 77	1000	1.28	0.5200	0.399
5 APR 77	1014	1.28	0.5461	0.386
5 APR 77	1024	1.28	0.5770	0.279
5 APR 77	1003	1.28	0.5896	0.439
5 APR 77	1016	1.28	0.6000	0.481
5 APR 77	1017	1.28	0.6200	0.361
5 APR 77	1006	1.28	0.6328	0.349
5 APR 77	1026	1.28	0.6943	0.439

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Table 3.1.(continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
6 APR 77	750	5.08	0.4050	0.162
6 APR 77	835	5.08	0.4050	0.162
6 APR 77	812	5.08	0.4358	0.121
6 APR 77	824	5.08	0.4500	0.125
6 APR 77	753	5.08	0.4880	0.114
6 APR 77	808	5.08	0.5050	0.101
6 APR 77	828	5.08	0.5145	0.107
6 APR 77	758	5.08	0.5200	0.101
6 APR 77	815	5.08	0.5461	0.114
6 APR 77	830	5.08	0.5770	0.101
6 APR 77	800	5.08	0.5996	0.101
6 APR 77	819	5.08	0.6000	0.111
6 APR 77	821	5.08	0.6200	0.104
6 APR 77	804	5.08	0.6328	0.091
6 APR 77	833	5.08	0.6943	0.104
6 APR 77	750	2.57	0.4050	0.162
6 APR 77	[illegible]	2.57	0.4050	0.156
6 APR 77	812	2.57	0.4358	0.144
6 APR 77	824	2.57	0.4500	0.139
6 APR 77	753	2.57	0.4880	0.128
6 APR 77	808	2.57	0.5050	0.128
6 APR 77	828	2.57	0.5145	0.117
6 APR 77	758	2.57	0.5200	0.117
6 APR 77	815	2.57	0.5461	0.133
6 APR 77	830	2.57	0.5770	0.128
6 APR 77	800	2.57	0.5896	0.128
6 APR 77	819	2.57	0.6000	0.139
6 APR 77	821	2.57	0.6200	0.117
6 APR 77	804	2.57	0.6328	0.128
6 APR 77	833	2.57	0.6943	0.144
6 APR 77	750	1.28	0.4050	0.290
6 APR 77	835	1.28	0.4050	0.279
6 APR 77	812	1.28	0.4358	0.214
6 APR 77	824	1.28	0.4500	0.204
6 APR 77	753	1.28	0.4880	0.174
6 APR 77	808	1.28	0.5050	0.174
6 APR 77	828	1.28	0.5145	0.165
6 APR 77	758	1.28	0.5200	0.155
6 APR 77	815	1.28	0.5461	0.165
6 APR 77	830	1.28	0.5770	0.184
6 APR 77	800	1.28	0.5896	0.194
6 APR 77	819	1.28	0.6000	0.174
6 APR 77	821	1.28	0.6200	0.174
6 APR 77	804	1.28	0.6328	0.174
6 APR 77	833	1.28	0.6943	0.246

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
13 MAY 77	917	5.08	0.4050	0.207
13 MAY 77	1023	5.08	0.4050	0.231
13 MAY 77	1001	5.08	0.4500	0.190
13 MAY 77	922	5.08	0.4880	0.136
13 MAY 77	1024	5.08	0.4880	0.166
13 MAY 77	946	5.08	0.5050	0.153
13 MAY 77	1005	5.08	0.5145	0.144
13 MAY 77	930	5.08	0.5200	0.121
13 MAY 77	951	5.08	0.5461	0.133
13 MAY 77	1012	5.08	0.5770	0.125
13 MAY 77	935	5.08	0.5896	0.125
13 MAY 77	954	5.08	0.6000	0.133
13 MAY 77	958	5.08	0.6200	0.125
13 MAY 77	938	5.08	0.6328	0.107
13 MAY 77	943	5.08	0.4358	0.190
13 MAY 77	1014	5.08	0.6500	0.125
13 MAY 77	1012	5.08	0.6943	0.121
13 MAY 77	917	2.57	0.4050	0.286
13 MAY 77	1022	2.57	0.4050	0.286
13 MAY 77	943	2.57	0.4358	0.212
13 MAY 77	1001	2.57	0.4500	0.240
13 MAY 77	922	2.57	0.4880	0.212
13 MAY 77	1026	2.57	0.4880	0.226
13 MAY 77	946	2.57	0.5050	0.212
13 MAY 77	1005	2.57	0.5145	0.212
13 MAY 77	930	2.57	0.5200	0.247
13 MAY 77	951	2.57	0.5461	0.174
13 MAY 77	1008	2.57	0.5770	0.174
13 MAY 77	935	2.57	0.5896	0.162
13 MAY 77	954	2.57	0.6000	0.186
13 MAY 77	958	2.57	0.6200	0.168
13 MAY 77	938	2.57	(: 28	0.156
13 MAY 77	1014	2.57	(.,00	0.192
13 MAY 77	1012	2.57	0.6943	0.199
13 MAY 77	917	1.28	0.4050	0.349
13 MAY 77	1020	1.28	0.4050	C.399
13 MAY 77	943	1.28	0.4358	0.214
13 MAY 77	1001	1.28	0.4500	0.349
13 MAY 77	922	1.28	0.4880	0.279
13 MAY 77	1026	1.28	0.4880	0.325
13 MAY 77	946	1.28	0.5050	0.225
13 MAY 77	1005	1.28	0.5145	0.268
13 MAY 77	930	1.28	0.5200	0.246
13 MAY 77	951	1.28	0.5461	0.214
13 MAY 77	935	1.28	0.5996	0.204
13 MAY 77	1008	1.28	0.5770	0.194
13 MAY 77	954	1.28	0.6000	0.225
13 MAY 77	958	1.28	0.6200	0.184
13 MAY 77	938	1.28	0.6328	0.165
13 MAY 77	1014	1.28	0.6500	0.301
13 MAY 77	1012	1.28	0.6943	0.313

Table 3.1.(continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
14 MAY 77	752	5.08	0.4050	0.523
14 MAY 77	805	5.08	0.4050	0.453
14 MAY 77	830	5.08	0.4050	0.417
14 MAY 77	842	5.08	0.4050	0.402
14 MAY 77	915	5.08	0.4050	0.361
14 MAY 77	853	5.08	0.4358	0.338
14 MAY 77	904	5.08	0.4500	0.298
14 MAY 77	844	5.08	0.4880	0.298
14 MAY 77	752	5.08	0.5050	0.402
14 MAY 77	805	5.08	0.5050	0.338
14 MAY 77	830	5.08	0.5050	0.298
14 MAY 77	855	5.08	0.5050	0.265
14 MAY 77	906	5.08	0.5145	0.237
14 MAY 77	846	5.08	0.5200	0.265
14 MAY 77	858	5.08	0.5461	0.212
14 MAY 77	908	5.08	0.5770	0.190
14 MAY 77	848	5.08	0.5896	0.218
14 MAY 77	900	5.08	0.6000	0.185
14 MAY 77	902	5.08	0.6200	0.166
14 MAY 77	758	5.08	0.6328	0.251
14 MAY 77	811	5.08	0.6328	0.274
14 MAY 77	836	5.08	0.6328	0.196
14 MAY 77	851	5.08	0.6328	0.180
14 MAY 77	916	5.08	0.6328	0.166
14 MAY 77	803	5.08	0.6500	0.244
14 MAY 77	811	5.08	0.6500	0.224
14 MAY 77	838	5.08	0.6500	0.190
14 MAY 77	913	5.08	0.6500	0.157
14 MAY 77	911	5.08	0.6943	0.162
14 MAY 77	752	2.57	0.4050	0.5[illegible]5
14 MAY 77	805	2.57	0.4050	0.49
14 MAY 77	830	2.57	0.4050	0.44
14 MAY 77	842	2.57	0.4050	0.431
14 MAY 77	914	2.57	0.4050	0.357
14 MAY 77	1853	2.57	0.4358	0.357
14 MAY 77	904	2.57	0.4500	0.319
14 MAY 77	844	2.57	0.4880	0.302
14 MAY 77	752	2.57	0.5050	0.376
14 MAY 77	805	2.57	0.5050	0.338
14 MAY 77	834	2.57	0.5050	0.302
14 MAY 77	855	2.57	0.5050	0.270
14 MAY 77	906	2.57	0.5145	0.226
14 MAY 77	846	2.57	0.5200	0.270
14 MAY 77	858	2.57	0.5461	0.233
14 MAY 77	908	2.57	0.5770	0.199
14 MAY 77	848	2.57	0.5896	0.233
14 MAY 77	900	2.57	0.6000	0.199
14 MAY 77	902	2.57	0.6200	0.192
14 MAY 77	758	2.57	0.6328	0.262
14 MAY 77	811	2.57	0.6328	0.226
14 MAY 77	836	2.57	0.6328	0.219
14 MAY 77	851	2.57	0.6328	0.199
14 MAY 77	916	2.57	0.6328	0.186
14 MAY 77	803	2.57	0.6500	0.247
14 MAY 77	811	2.57	0.6500	0.219
14 MAY 77	838	2.57	0.6500	0.205
14 MAY 77	913	2.57	0.6500	0.168
14 MAY 77	911	2.57	0.6943	0.174
14 MAY 77	752	1.28	0.4050	0.697
14 MAY 77	805	1.28	0.4050	0.557
14 MAY 77	830	1.28	0.4050	0.526
14 MAY 77	842	1.28	0.4050	0.511
14 MAY 77	913	1.28	0.4050	0.424
14 MAY 77	853	1.28	0.4358	0.424
14 MAY 77	904	1.28	0.4500	0.361
14 MAY 77	844	1.28	0.4880	0.361
14 MAY 77	752	1.28	0.5050	0.467
14 MAY 77	805	1.28	0.5050	0.373
14 MAY 77	834	1.28	0.5050	0.349
14 MAY 77	855	1.28	0.5050	0.301
14 MAY 77	906	1.28	0.5145	0.467
14 MAY 77	846	1.28	0.5200	0.325
14 MAY 77	858	1.28	0.5461	0.257
14 MAY 77	908	1.28	0.5770	0.235
14 MAY 77	848	1.28	0.5896	0.279
14 MAY 77	900	1.28	0.6000	0.235
14 MAY 77	902	1.28	0.6200	0.279
14 MAY 77	758	1.28	0.6328	0.313
14 MAY 77	811	1.28	0.6328	0.279
14 MAY 77	836	1.28	0.6328	0.260
14 MAY 77	851	1.28	0.6328	0.257
14 MAY 77	917	1.28	0.6328	0.214
14 MAY 77	803	1.28	0.6500	0.313
14 MAY 77	811	1.28	0.6500	0.260
14 MAY 77	838	1.28	0.6500	0.260
14 MAY 77	913	1.28	0.6500	0.214
14 MAY 77	911	1.28	0.6943	0.235

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Table 3.1.(continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
14 MAY 77	933	5.08	0.4050	0.338
14 MAY 77	1000	5.08	0.4050	0.317
14 MAY 77	944	5.08	0.4358	0.207
14 MAY 77	952	5.08	0.4500	0.265
14 MAY 77	936	5.08	0.4880	0.196
14 MAY 77	945	5.08	0.5050	0.218
14 MAY 77	954	5.08	0.5145	0.212
14 MAY 77	938	5.08	0.5200	0.207
14 MAY 77	947	5.08	0.5461	0.185
14 MAY 77	956	5.08	0.5770	0.180
14 MAY 77	940	5.08	0.5896	0.166
14 MAY 77	949	5.08	0.6000	0.162
14 MAY 77	951	5.08	0.6200	0.153
14 MAY 77	942	5.08	0.6328	0.153
14 MAY 77	1005	5.08	0.6329	0.153
14 MAY 77	1000	5.08	0.6500	0.153
14 MAY 77	958	5.08	0.6943	0.144
14 MAY 77	933	2.57	0.4050	0.607
14 MAY 77	1002	2.57	0.4050	0.386
14 MAY 77	944	2.57	0.4358	0.311
14 MAY 77	952	2.57	0.4500	0.328
14 MAY 77	936	2.57	0.4980	0.247
14 MAY 77	945	2.57	0.5050	0.270
14 MAY 77	954	2.57	0.5145	0.247
14 MAY 77	938	2.57	0.5200	0.226
14 MAY 77	947	2.57	0.5461	0.226
14 MAY 77	956	2.57	0.5770	0.240
14 MAY 77	940	2.57	0.5896	0.199
14 MAY 77	949	2.57	0.6000	0.219
14 MAY 77	951	2.57	0.6200	0.219
14 MAY 77	942	2.57	0.6328	0.174
14 MAY 77	1004	2.57	0.6329	0.229
14 MAY 77	1000	2.57	0.6500	0.212
14 MAY 77	958	2.57	0.6943	0.233
14 MAY 77	933	1.28	0.4050	0.399
14 MAY 77	1002	1.28	0.4050	0.439
14 MAY 77	944	1.28	0.4358	0.337
14 MAY 77	952	1.28	0.4500	0.325
14 MAY 77	936	1.28	0.4880	0.279
14 MAY 77	945	1.28	0.5050	0.301
14 MAY 77	954	1.28	0.5145	0.246
14 MAY 77	938	1.28	0.5200	0.246
14 MAY 77	947	1.28	0.5461	0.235
14 MAY 77	956	1.28	0.5770	0.235
14 MAY 77	940	1.28	0.5896	0.225
14 MAY 77	949	1.28	0.6000	0.225
14 MAY 77	951	1.28	0.6200	0.214
14 MAY 77	942	1.28	0.6328	0.204
14 MAY 77	1005	1.28	0.6328	0.325
14 MAY 77	1000	1.28	0.6500	0.268
14 MAY 77	958	1.28	0.6943	0.268

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
16 MAY 77	1041	5.08	0.4050	0.258
16 MAY 77	1055	5.08	0.4358	0.231
16 MAY 77	1107	5.08	0.4500	0.231
16 MAY 77	1044	5.08	0.4881	0.201
16 MAY 77	1058	5.08	0.5050	0.185
16 MAY 77	1110	5.08	0.5145	0.190
16 MAY 77	1046	5.08	0.5200	0.166
16 MAY 77	1100	5.08	0.5461	0.171
16 MAY 77	1112	5.08	0.5770	0.165
16 MAY 77	1049	5.08	0.5896	0.162
16 MAY 77	1103	5.08	0.6000	0.153
16 MAY 77	1105	5.08	0.6200	0.144
16 MAY 77	1052	5.08	0.6328	0.136
16 MAY 77	1117	5.08	0.6500	0.149
16 MAY 77	1115	5.08	0.6943	0.153
16 MAY 77	1041	2.57	0.4050	0.311
16 MAY 77	1121	2.57	0.4050	0.311
16 MAY 77	1055	2.57	0.4358	0.278
16 MAY 77	1107	2.57	0.4500	0.278
16 MAY 77	1044	2.57	0.4880	0.240
16 MAY 77	1058	2.57	0.5050	0.240
16 MAY 77	1110	2.57	0.5145	0.233
16 MAY 77	1046	2.57	0.5200	0.219
16 MAY 77	1100	2.57	0.5461	0.226
16 MAY 77	1112	2.57	0.5770	0.226
16 MAY 77	1049	2.57	0.5896	0.219
16 MAY 77	1103	2.57	0.6000	0.226
16 MAY 77	1105	2.57	0.6200	0.199
16 MAY 77	1052	2.57	0.6328	0.199
16 MAY 77	1117	2.57	0.6500	0.212
16 MAY 77	1115	2.57	0.6943	0.212
16 MAY 77	1124	2.57	0.6943	0.219
16 MAY 77	1041	1.28	0.4050	0.386
16 MAY 77	1121	1.28	0.4050	0.399
16 MAY 77	1055	1.28	0.4358	0.349
16 MAY 77	1107	1.28	0.4500	0.349
16 MAY 77	1044	1.28	0.4880	0.301
16 MAY 77	1058	1.28	0.5050	0.301
16 MAY 77	1110	1.28	0.5145	0.279
16 MAY 77	1046	1.28	0.5200	0.290
16 MAY 77	1100	1.28	0.5461	0.268
16 MAY 77	1112	1.28	0.5770	0.268
16 MAY 77	1049	1.28	0.5896	0.257
16 MAY 77	1103	1.28	0.6000	0.257
16 MAY 77	1105	1.28	0.6200	0.246
16 MAY 77	1052	1.28	0.6329	0.257
16 MAY 77	1117	1.28	0.6500	0.268
16 MAY 77	1115	1.28	0.6943	0.301
16 MAY 77	1125	1.28	0.6943	0.301

BEST AVAILABLE COPY

Table 3.1.(continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
16 MAY 77	1210	5.08	0.4050	0.273
16 MAY 77	1247	5.08	0.4050	0.258
16 MAY 77	1221	5.08	0.4358	0.244
16 MAY 77	1232	5.08	0.4500	0.231
16 MAY 77	1212	5.08	0.4880	0.201
16 MAY 77	1223	5.08	0.5050	0.196
16 MAY 77	1235	5.08	0.5145	0.190
16 MAY 77	1214	5.08	0.5200	0.196
16 MAY 77	1226	5.08	0.5461	0.180
16 MAY 77	1237	5.08	0.5770	0.196
16 MAY 77	1216	5.08	0.5896	0.176
16 MAY 77	1228	5.08	0.6000	0.180
16 MAY 77	1230	5.08	0.6200	0.176
16 MAY 77	1218	5.08	0.6328	0.176
16 MAY 77	1247	5.08	0.6328	0.180
16 MAY 77	1242	5.08	0.6500	0.176
16 MAY 77	1240	5.08	0.6943	0.196
16 MAY 77	1210	2.57	0.4050	0.328
16 MAY 77	1246	2.57	0.4050	0.311
16 MAY 77	1221	2.57	0.4358	0.311
16 MAY 77	1232	2.57	0.4500	0.302
16 MAY 77	1212	2.57	0.4880	0.262
16 MAY 77	1223	2.57	0.5050	0.270
16 MAY 77	1235	2.57	0.5145	0.270
16 MAY 77	1214	2.57	0.5200	0.254
16 MAY 77	1226	2.57	0.5461	0.278
16 MAY 77	1237	2.57	0.5770	0.270
16 MAY 77	1216	2.57	0.5896	0.262
16 MAY 77	1228	2.57	0.6000	0.270
16 MAY 77	1230	2.57	0.6200	0.247
16 MAY 77	1218	2.57	0.6328	0.247
16 MAY 77	1248	2.57	0.6328	0.262
16 MAY 77	1242	2.57	0.6943	0.270
16 MAY 77	1210	1.28	0.4050	0.399
16 MAY 77	1245	1.28	0.4050	0.412
16 MAY 77	1221	1.28	0.4358	0.386
16 MAY 77	1212	1.28	0.4880	0.325
16 MAY 77	1232	1.28	0.4500	0.386
16 MAY 77	1223	1.28	0.5050	0.337
16 MAY 77	1235	1.28	0.5145	0.313
16 MAY 77	1214	1.28	0.5200	0.301
16 MAY 77	1226	1.28	0.5461	0.325
16 MAY 77	1237	1.28	0.5770	0.325
16 MAY 77	1216	1.28	0.5996	0.313
16 MAY 77	1228	1.28	0.6000	0.325
16 MAY 77	1230	1.28	0.6200	0.325
16 MAY 77	1218	1.28	0.6328	0.301
16 MAY 77	1249	1.28	0.6328	0.313
16 MAY 77	1242	1.28	0.6500	0.301
16 MAY 77	1240	1.28	0.6943	0.349

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
17 MAY 77	1221	5.08	0.4050	0.417
17 MAY 77	1255	5.08	0.4050	0.402
17 MAY 77	1232	5.08	0.4358	0.361
17 MAY 77	1243	5.08	0.4500	0.361
17 MAY 77	1023	5.08	0.4880	0.327
17 MAY 77	1234	5.08	0.5050	0.327
17 MAY 77	1245	5.08	0.5145	0.307
17 MAY 77	1025	5.08	0.5200	0.317
17 MAY 77	1236	5.08	0.5461	0.298
17 MAY 77	1248	5.08	0.5770	0.289
17 MAY 77	1027	5.08	0.5896	0.289
17 MAY 77	1238	5.08	0.6000	0.289
17 MAY 77	1241	5.08	0.6200	0.265
17 MAY 77	1229	5.08	0.6328	0.265
17 MAY 77	1252	5.08	0.6500	0.273
17 MAY 77	1250	5.08	0.6943	0.289
17 MAY 77	1221	2.57	0.4050	0.524
17 MAY 77	1255	2.57	0.4050	0.468
17 MAY 77	1232	2.57	0.4358	0.468
17 MAY 77	1243	2.57	0.4500	0.450
17 MAY 77	1223	2.57	0.4880	0.420
17 MAY 77	1234	2.57	0.5050	0.420
17 MAY 77	1245	2.57	0.5145	0.408
17 MAY 77	1225	2.57	0.5200	0.431
17 MAY 77	1236	2.57	0.5461	0.420
17 MAY 77	1248	2.57	0.5770	0.398
17 MAY 77	1227	2.57	0.5896	0.431
17 MAY 77	1238	2.57	0.6000	0.420
17 MAY 77	1241	2.57	0.6200	0.387
17 MAY 77	1229	2.57	0.6328	0.408
17 MAY 77	1252	2.57	0.6500	0.387
17 MAY 77	1250	2.57	0.6943	0.398
17 MAY 77	1221	1.28	0.4050	0.659
17 MAY 77	1254	1.28	0.4050	0.641
17 MAY 77	1232	1.28	0.4358	0.641
17 MAY 77	1243	1.28	0.4500	0.557
17 MAY 77	1223	1.28	0.4880	0.573
17 MAY 77	1234	1.28	0.5050	0.526
17 MAY 77	1245	1.28	0.5145	0.511
17 MAY 77	1225	1.28	0.5200	0.526
17 MAY 77	1236	1.28	0.5461	0.511
17 MAY 77	1248	1.28	0.5770	0.496
17 MAY 77	1227	1.28	0.5896	0.557
17 MAY 77	1238	1.28	0.6000	0.511
17 MAY 77	1241	1.28	0.6200	0.496
17 MAY 77	1229	1.28	0.6328	0.511
17 MAY 77	1250	1.28	0.6943	0.496
17 MAY 77	1252	1.28	0.6500	0.467

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Table 3.1. (continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
18 MAY 77	1000	5.08	0.4050	0.361
18 MAY 77	1040	5.08	0.4050	0.361
18 MAY 77	1003	5.08	0.4358	0.327
18 MAY 77	1005	5.08	0.4500	0.317
18 MAY 77	1007	5.08	0.4880	0.273
18 MAY 77	1010	5.08	0.5000	0.273
18 MAY 77	1012	5.08	0.5145	0.251
18 MAY 77	1013	5.08	0.5200	0.237
18 MAY 77	1016	5.08	0.5461	0.231
18 MAY 77	1018	5.08	0.5770	0.196
18 MAY 77	1026	5.08	0.5896	0.196
18 MAY 77	1030	5.08	0.6000	0.185
18 MAY 77	1032	5.08	0.6200	0.190
18 MAY 77	1034	5.08	0.6328	0.196
18 MAY 77	1036	5.08	0.6500	0.190
18 MAY 77	1038	5.08	0.6943	0.180
18 MAY 77	1000	2.57	0.4050	0.408
18 MAY 77	1040	2.57	0.4050	0.431
18 MAY 77	1003	2.57	0.4358	0.398
18 MAY 77	1005	2.57	0.4500	0.376
18 MAY 77	1007	2.57	0.4880	0.338
18 MAY 77	1010	2.57	0.5050	0.319
18 MAY 77	1012	2.57	0.5145	0.311
18 MAY 77	1013	2.57	0.5200	0.302
18 MAY 77	1016	2.57	0.5461	0.311
18 MAY 77	1018	2.57	0.5770	0.270
18 MAY 77	1026	2.57	0.5896	0.233
18 MAY 77	1030	2.57	0.6000	0.226
18 MAY 77	1032	2.57	0.6200	0.254
18 MAY 77	1034	2.57	0.6328	0.262
18 MAY 77	1036	2.57	0.6500	0.262
18 MAY 77	1038	2.57	0.6943	0.262
18 MAY 77	1000	1.28	0.4050	0.481
18 MAY 77	1040	1.28	0.4050	0.467
18 MAY 77	1003	1.28	0.4358	0.481
18 MAY 77	1005	1.28	0.4500	0.439
18 MAY 77	1007	1.28	0.4880	0.399
18 MAY 77	1010	1.28	0.5050	0.412
18 MAY 77	1012	1.28	0.5145	0.386
18 MAY 77	1013	1.28	0.5200	0.439
18 MAY 77	1016	1.28	0.5461	0.439
18 MAY 77	1018	1.28	0.5770	0.349
18 MAY 77	1026	1.28	0.5896	0.337
18 MAY 77	1030	1.28	0.6000	0.279
18 MAY 77	1032	1.28	0.6200	0.325
18 MAY 77	1034	1.28	0.6328	0.349
18 MAY 77	1036	1.28	0.6500	0.349
18 MAY 77	1038	1.28	0.6943	0.394

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
19 MAY 77	1122	5.08	0.4050	0.417
19 MAY 77	1220	5.08	0.4050	0.417
19 MAY 77	1139	5.08	0.4358	0.373
19 MAY 77	1207	5.08	0.4500	0.338
19 MAY 77	1125	5.08	0.4880	0.317
19 MAY 77	1141	5.08	0.5050	0.291
19 MAY 77	1218	5.08	0.5145	0.289
19 MAY 77	1130	5.08	0.5200	0.273
19 MAY 77	1144	5.08	0.5461	0.265
19 MAY 77	1216	5.08	0.5770	0.265
19 MAY 77	1132	5.08	0.5896	0.237
19 MAY 77	1148	5.08	0.6000	0.251
19 MAY 77	1151	5.08	0.6200	0.224
19 MAY 77	1135	5.08	0.6328	0.212
19 MAY 77	1215	5.08	0.6500	0.224
19 MAY 77	1212	5.08	0.6943	0.231
19 MAY 77	1122	2.57	0.4050	0.468
19 MAY 77	1220	2.57	0.4050	0.468
19 MAY 77	1139	2.57	0.4358	0.420
19 MAY 77	1207	2.57	0.4500	0.468
19 MAY 77	1125	2.57	0.4880	0.386
19 MAY 77	1141	2.57	0.5050	0.376
19 MAY 77	1218	2.57	0.5145	0.376
19 MAY 77	1130	2.57	0.5200	0.357
19 MAY 77	1144	2.57	0.5461	0.357
19 MAY 77	1216	2.57	0.5770	0.357
19 MAY 77	1132	2.57	0.5896	0.338
19 MAY 77	1148	2.57	0.6000	0.338
19 MAY 77	1151	2.57	0.6200	0.302
19 MAY 77	1135	2.57	0.6328	0.286
19 MAY 77	1215	2.57	0.6500	0.328
19 MAY 77	1212	2.57	0.6943	0.378
19 MAY 77	1122	1.28	0.4050	0.607
19 MAY 77	1220	1.28	0.4050	0.641
19 MAY 77	1139	1.28	0.4358	0.526
19 MAY 77	1207	1.28	0.4500	0.557
19 MAY 77	1125	1.28	0.4880	0.467
19 MAY 77	1141	1.28	0.5050	0.453
19 MAY 77	1218	1.28	0.5145	0.496
19 MAY 77	1130	1.28	0.5200	0.439
19 MAY 77	1144	1.28	0.5461	0.439
19 MAY 77	1216	1.28	0.5770	0.467
19 MAY 77	1132	1.28	0.5896	0.399
19 MAY 77	1148	1.28	0.6000	0.426
19 MAY 77	1151	1.28	0.6200	0.386
19 MAY 77	1135	1.28	0.6328	0.373
19 MAY 77	1215	1.28	0.6500	0.439
19 MAY 77	1212	1.28	0.6943	0.481

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Table 3.1.(continued)

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
20 MAY 77	843	5.08	0.4050	0.349
20 MAY 77	929	5.08	0.4050	0.273
20 MAY 77	901	5.08	0.4358	0.265
20 MAY 77	915	5.08	0.4500	0.237
20 MAY 77	847	5.08	0.4880	0.244
20 MAY 77	930	5.08	0.4880	0.207
20 MAY 77	904	5.08	0.5050	0.218
20 MAY 77	916	5.09	0.5145	0.190
20 MAY 77	852	5.08	0.5200	0.219
20 MAY 77	907	5.08	0.5461	0.185
20 MAY 77	970	5.08	0.5770	0.171
20 MAY 77	855	5.08	0.5896	0.185
20 MAY 77	910	5.08	0.6000	0.171
20 MAY 77	911	5.08	0.6200	0.149
20 MAY 77	858	5.08	0.6329	0.166
20 MAY 77	858	5.09	0.6329	0.144
20 MAY 77	976	5.08	0.6500	0.140
20 MAY 77	921	[illegible]	0.6943	0.149
20 MAY 77	843	[illegible]	0.4050	0.371
20 MAY 77	928	2.57	0.4050	0.347
20 MAY 77	901	2.57	0.4358	0.366
20 MAY 77	915	2.57	0.4500	0.347
20 MAY 77	947	2.57	0.4880	0.366
20 MAY 77	931	2.57	0.4880	0.302
20 MAY 77	904	2.57	0.5050	0.347
20 MAY 77	916	2.57	0.5145	0.262
20 MAY 77	852	2.57	0.5200	0.311
20 MAY 77	907	2.57	0.5461	0.328
20 MAY 77	920	2.57	0.5770	0.262
20 MAY 77	855	2.57	0.5896	0.294
20 MAY 77	910	2.57	0.6000	0.294
20 MAY 77	911	2.57	0.6200	0.247
20 MAY 77	858	2.57	0.6328	0.254
20 MAY 77	935	2.57	0.6328	0.219
20 MAY 77	926	2.57	0.6500	0.240
20 MAY 77	921	2.57	0.6943	0.212
20 MAY 77	843	1.28	0.4050	0.467
20 MAY 77	927	1.28	0.4050	0.526
20 MAY 77	901	1.28	0.4358	0.542
20 MAY 77	915	1.28	0.4500	0.481
20 MAY 77	847	1.28	0.4880	0.313
20 MAY 77	933	1.28	0.4880	0.439
20 MAY 77	904	1.28	0.5050	0.511
20 MAY 77	916	1.28	0.5145	0.426
20 MAY 77	852	1.28	0.5200	0.467
20 MAY 77	907	1.28	0.5461	0.49,
20 MAY 77	920	1.28	0.5770	0.412
20 MAY 77	855	1.28	0.5996	0.4 6
20 MAY 77	910	1.28	0.6000	0.496
20 MAY 77	911	1.28	0.6200	0.439
20 MAY 77	858	1.28	0.6328	0.453
20 MAY 77	934	1.28	0.6328	0.396
20 MAY 77	926	1.28	0.6500	0.396
20 MAY 77	921	1.28	0.6943	0.386

DATE	LOCAL TIME	PATH LENGTH (KM)	WAVE LENGTH (MICRON)	EXTINCTION COEFF. (/KM)
20 MAY 77	1322	5.08	0.4050	0.291
20 MAY 77	1355	5.08	0.4050	0.265
20 MAY 77	1335	5.08	0.4358	0.258
20 MAY 77	1346	5.08	0.4500	0.265
20 MAY 77	1326	5.08	0.4880	0.237
20 MAY 77	13[illegible]	5.08	0.5050	0.244
20 MAY 77	1348	5.08	0.5145	0.237
20 MAY 77	1328	5.08	0.5200	0.224
20 MAY 77	1339	5.09	0.5461	0.244
20 MAY 77	1350	5.08	0.5770	0.251
20 MAY 77	1330	5.08	0.5996	0.218
20 MAY 77	1341	5.08	0.6000	0.231
20 MAY 77	1343	5.08	0.6200	0.231
20 MAY 77	1332	5.08	0.6328	0.224
20 MAY 77	1400	5.08	0.6328	0.231
20 MAY 77	13[illegible]1	5.08	0.6943	0.273
20 MAY 77	1322	2.57	0.4050	0.338
20 MAY 77	1356	2.57	0.4050	0.347
20 MAY 77	1335	2.57	0.4359	0.338
20 MAY 77	1346	2.57	0.4500	0.338
20 MAY 77	1326	2.57	0.4880	0.319
20 MAY 77	1337	2.57	0.5050	0.311
20 MAY 77	1348	2.57	0.5145	0.311
20 MAY 77	1328	2.57	0.5200	0.311
20 MAY 77	1339	2.57	0.5461	0.319
20 MAY 77	1350	2.57	0.5770	0.319
20 MAY 77	1330	2.57	0.5896	0.319
20 MAY 77	1341	2.57	0.6000	0.338
20 MAY 77	1343	2.57	0.6200	0.311
20 MAY 77	1332	2.57	0.6328	0.319
20 MAY 77	1359	2.57	0.6329	0.319
20 MAY 77	1351	2.57	0.6943	[illegible]
20 MAY 77	1322	1.28	0.4050	0.453
20 MAY 77	1357	1.28	0.4050	0.481
20 MAY 77	1335	1.28	0.4358	0.453
20 MAY 77	1346	1.28	0.4500	0.467
20 MAY 77	1326	1.28	0.4880	0.412
20 MAY 77	1337	1.28	0.5050	0.426
20 MAY 77	1348	1.28	0.5145	0.453
20 MAY 77	1328	1.28	0.5200	0.399
20 MAY 77	1339	1.28	0.5461	0.399
20 MAY 77	1350	1.28	0.5770	0.453
20 MAY 77	1330	1.28	0.5896	0.467
20 MAY 77	1341	1.28	0.6000	0.467
20 MAY 77	1343	1.28	0.6200	0.453
20 MAY 77	1332	1.28	0.6328	0.439
20 MAY 77	1358	1.28	0.6328	0.453
20 MAY 77	[illegible]51	1.28	0.6943	0.526

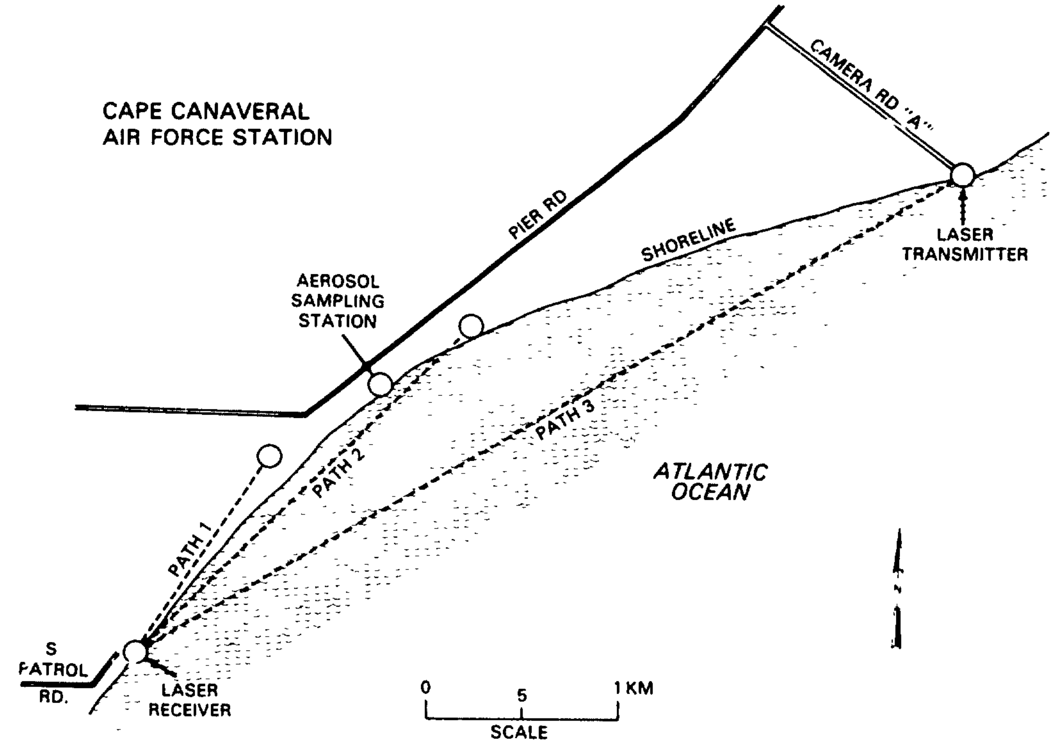
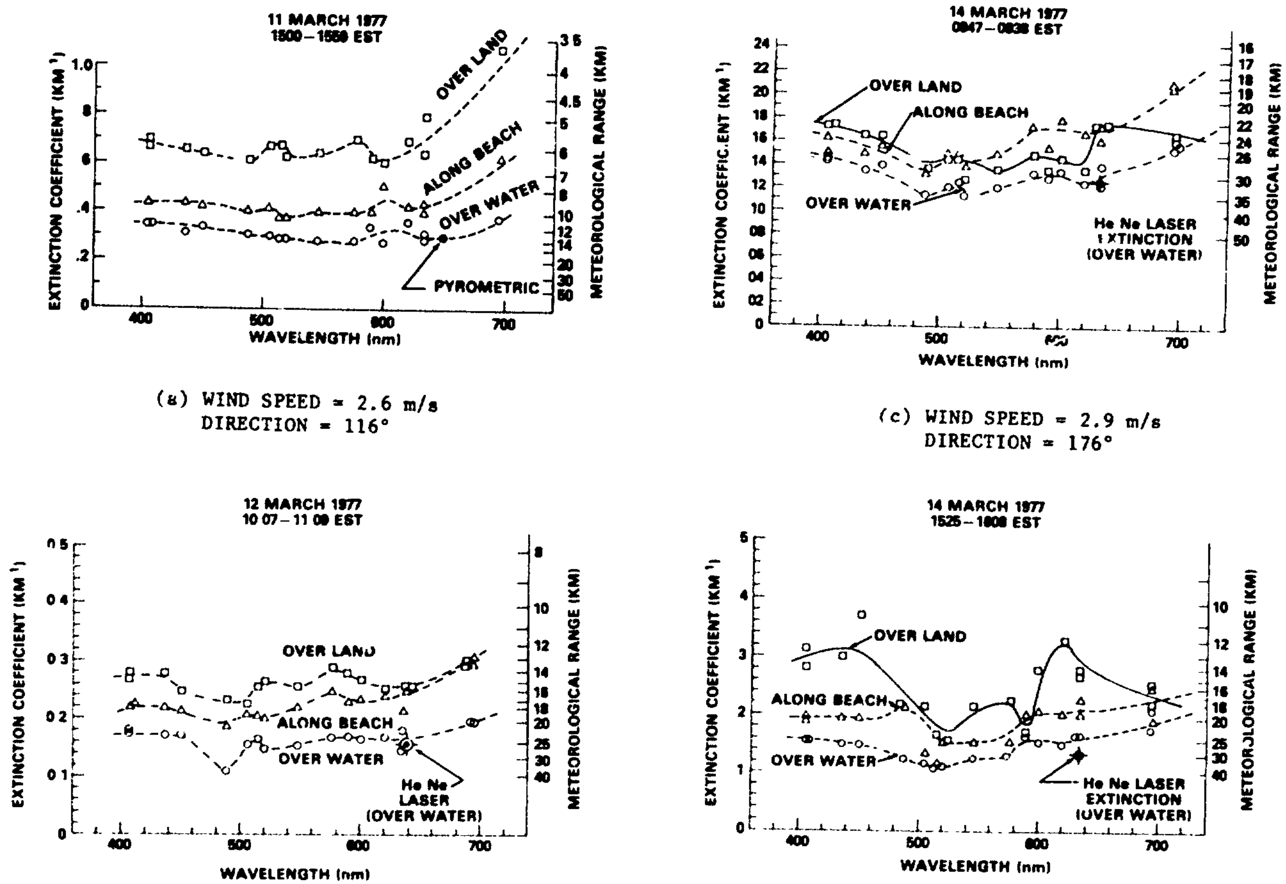


Fig. 3.1. Map of the Cape Canaveral test site showing the three paths utilized for aerosol scattering experiments.



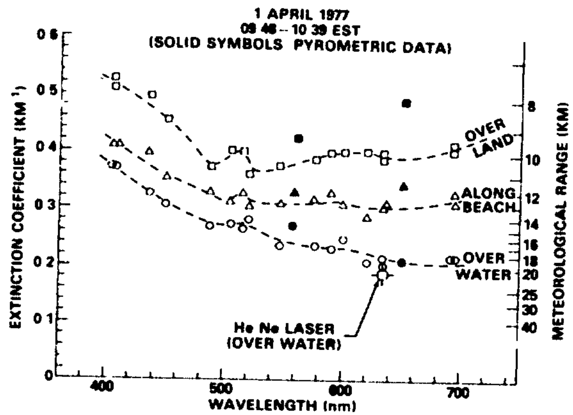
(a) WIND SPEED = 2.6 m/s
DIRECTION = 116°

(c) WIND SPEED = 2.9 m/s
DIRECTION = 176°

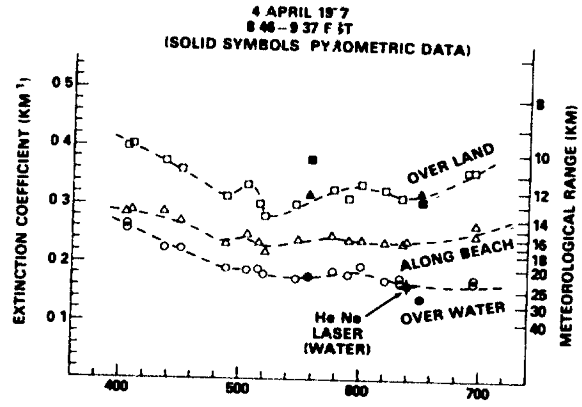
(b) WIND SPEED = 2.6 m/s
DIRECTION = 116°

(d) WIND SPEED = 2.4 m/s
DIRECTION = 36°

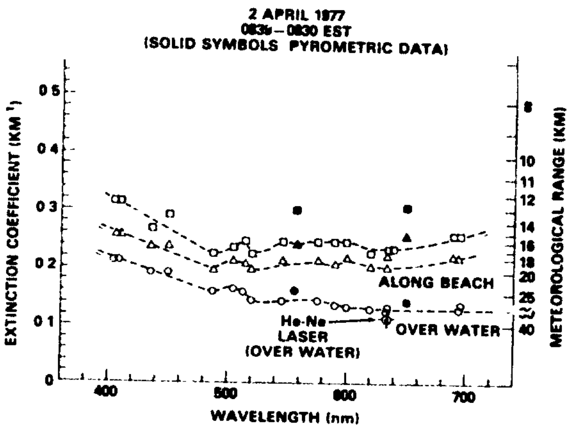
Fig. 3.2. AEROSOL EXTINCTION COEFFICIENTS BASED ON CONTRAST MEASUREMENTS ON DISTANT TARGETS AT CAPE CANAVERAL, FLA DURING MARCH 1977. LASER DATA ARE DERIVED FROM ATTENUATION MEASUREMENTS



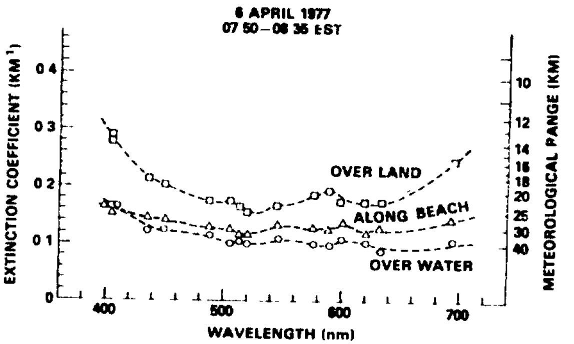
(a) WIND SPEED = 2.3 m/s
DIRECTION = 151°



(c) WIND SPEED = 7 m/s
DIRECTION = 161°

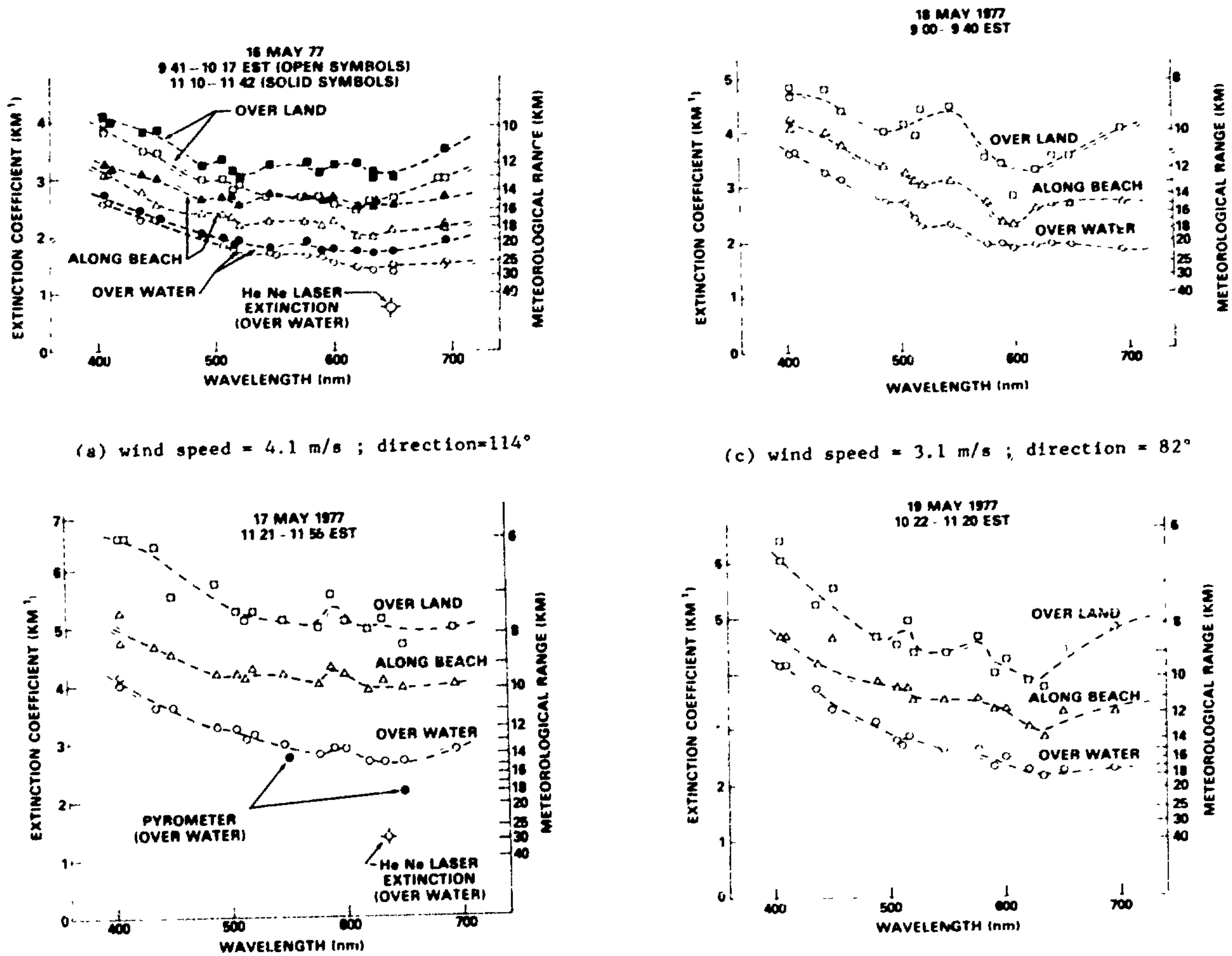


(b) WIND SPEED = 3.2 m/s
DIRECTION = 154°



(d) WIND CONDITION N.A.

Fig. 3.3. AEROSOL EXTINCTION COEFFICIENTS BASED ON CONTRAST MEASUREMENTS AT CAPE CANAVERAL, FLORIDA DURING APRIL 1977. LASER POINTS ARE FROM ATTENUATION DATA.



(a) wind speed = 4.1 m/s ; direction=114°

(c) wind speed = 3.1 m/s ; direction = 82°

(b) wind speed = 6 m/s ; direction= 60°

(d) wind speed not available

Fig. 3.4. AEROSOL EXTINCTION COEFFICIENTS BASED ON CONTRAST MEASUREMENTS ON DISTANT TARGET AT CAPE CANAVERAL, FLORIDA DURING MAY 1977. LASER DATA ARE DERIVED FROM ATTENUATION MEASUREMENTS.

(a) WIND SPEED = 0.0 m/s

(b) WIND SPEED = 6.6 m/s

(c) WIND SPEED = 12.0 m/s

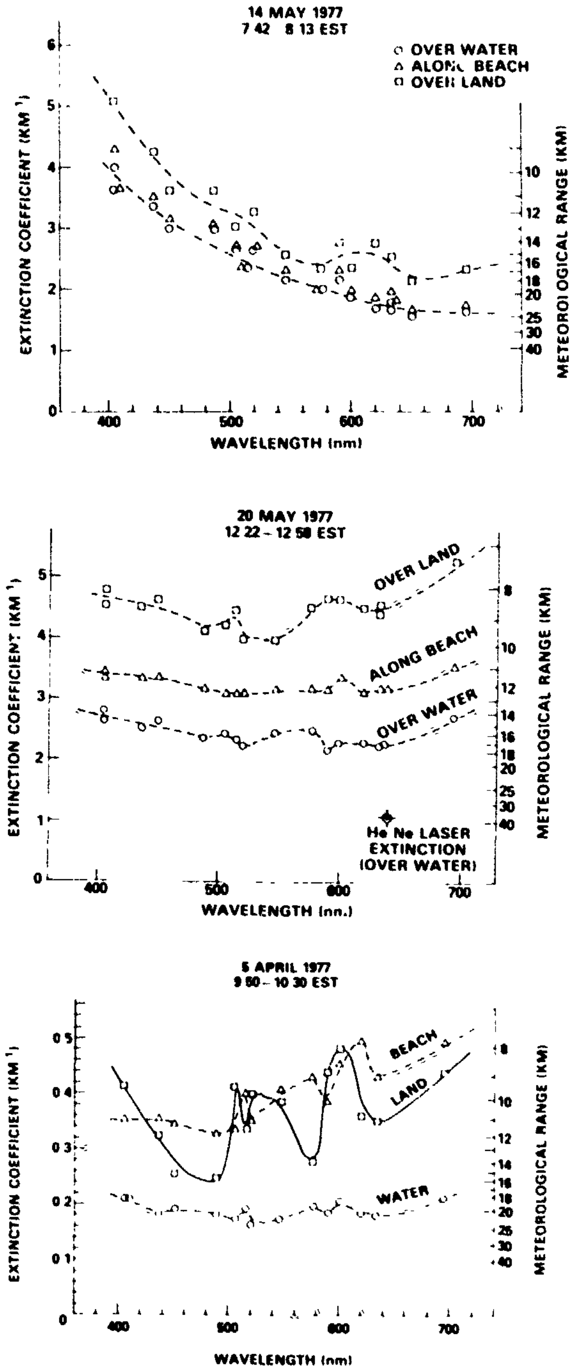


Fig. 3.5. EFFECT OF WIND SPEED ON EXTINCTION COEFFICIENT SPECTRA NEAR THE CAPE CANAVERAL, FLORIDA SHORELINE.

Table 3.2. Aerosol extinction coefficients and visibility derived from pyrometer measurements.

DATE (y.m.d)	LOCAL TIME	RANGE (km)	λ (μ)	TRANS-MITTANCE	EXTINC. (km^{-1})	VIS. (km)
770218	1100	7.47	0.5568	0.337	0.146	26.9
770219	1000	7.47	0.5568	0.385	0.129	30.4
770219	1100	4.61	0.5568	0.475	0.162	24.3
770219	1100	3.10	0.5568	0.442	0.263	14.9
770219	1115	7.47	0.5568	0.357	0.139	28.1
770221	930	7.47	0.5568	0.597	0.070	56.2
770221	950	4.61	0.5568	0.643	0.096	40.9
770221	1415	7.47	0.5568	0.464	0.104	37.8
770221	1430	4.61	0.5568	0.552	0.129	30.4
770221	1605	7.47	0.5568	0.457	0.106	37.0
770221	1625	4.61	0.5568	0.707	0.075	52.1
770222	830	4.61	0.5568	0.557	0.127	30.9
770222	845	7.47	0.5568	0.387	0.128	30.6
770222	1157	7.47	0.5568	0.441	0.111	35.4
770222	1210	4.61	0.5568	0.549	0.130	30.2
770222	1610	7.47	0.5568	0.452	0.107	36.5
770222	1637	4.61	0.5568	0.625	0.102	38.5
770223	905	7.47	0.5568	0.520	0.088	44.4
770223	945	4.61	0.5568	0.622	0.103	38.1
770223	1210	4.61	0.5568	0.625	0.102	38.5
770223	1210	3.10	0.5568	0.607	0.161	24.3
770224	1445	7.47	0.5568	0.222	0.203	19.3
770224	1504	4.61	0.5568	0.466	0.165	23.7
770224	1507	3.10	0.5568	0.432	0.271	14.5
770224	1704	7.47	0.5568	0.458	0.106	37.1
770224	1714	3.10	0.5568	0.528	0.206	19.0
770224	1716	4.61	0.5568	0.571	0.121	32.3
770225	1100	4.61	0.5568	0.145	0.419	9.4
770225	1103	3.10	0.5568	0.124	0.674	5.8
770225	1350	4.61	0.5568	0.157	0.402	9.7
770225	1702	3.10	0.5568	0.231	0.473	8.3
770225	1655	4.61	0.5568	0.218	0.330	11.9
770226	900	7.47	0.5568	0.091	0.323	12.1
770226	915	4.61	0.5568	0.265	0.288	13.6
770226	917	3.10	0.5568	0.360	0.330	11.9
770226	1115	7.47	0.5568	0.244	0.191	20.5
770226	1400	7.47	0.5568	0.353	0.139	28.1
770226	1425	4.61	0.5568	0.400	0.199	19.7
770226	1426	3.10	0.5568	0.437	0.267	14.7
770226	1710	7.47	0.5568	0.254	0.185	21.2
770226	1725	4.61	0.5568	0.391	0.204	19.2
770226	1725	3.10	0.5568	0.486	0.233	16.8
770228	1500	7.47	0.5568	0.591	0.071	55.9
770228	1520	4.61	0.5568	0.656	0.091	42.9
770228	1525	3.10	0.5568	0.681	0.124	31.7
770228	900	7.47	0.5568	0.630	0.063	62.7
770301	928	4.61	0.5568	0.584	0.117	33.6
770301	930	3.10	0.5568	0.672	0.129	30.6
770301	1130	5.08	0.5568	0.543	0.120	32.6
770301	1340	4.61	0.5568	0.745	0.064	61.3
770301	1345	3.10	0.5568	0.639	0.145	27.1
770301	1355	7.47	0.5568	0.645	0.059	66.2
770301	1615	5.08	0.5568	0.990	0.705	55.7
770301	1630	4.61	0.5568	0.791	0.051	77.1
770301	1632	3.10	0.5568	0.748	0.094	41.5
770301	1645	7.47	0.5568	0.610	0.067	58.6
770302	840	7.47	0.5568	0.529	0.086	45.5
770302	855	4.61	0.5568	0.673	0.086	45.6
770302	857	3.10	0.5568	0.728	0.102	38.5
770302	915	5.08	0.5568	0.627	0.092	42.6

Table 3.2 (Continued)

DATE (y.m.d)	LOCAL TIME	RANGE (km)	λ (μ)	TRANS-MITTANCE	EXTINC. (km^{-1})	VIS. (km)
770302	1040	5.08	0.5568	0.685	0.074	52.7
770302	1136	5.08	0.5568	0.543	0.120	32.6
770302	1150	4.61	0.5568	0.581	0.118	33.2
770302	1152	3.10	0.5568	0.570	0.182	21.6
770302	1200	7.47	0.5568	0.457	0.106	37.0
770302	1600	5.08	0.5568	0.332	0.217	18.0
770302	1610	4.61	0.5568	0.680	0.084	46.9
770302	1612	3.10	0.5568	0.564	0.185	21.2
770302	1630	7.47	0.5568	0.575	0.075	52.5
770303	835	7.47	0.5568	0.495	0.095	41.2
770303	850	4.61	0.5568	0.518	0.143	27.5
770303	852	3.10	0.5568	0.552	0.192	20.4
770303	911	5.08	0.5568	0.460	0.153	25.7
770303	1325	5.08	0.5568	0.280	0.250	15.7
770303	1350	4.61	0.5568	0.424	0.186	21.1
770303	1352	3.10	0.5568	0.299	0.389	10.1
770303	1405	7.47	0.5568	0.243	0.191	20.5
770303	1527	7.47	0.5568	0.249	0.188	20.8
770304	915	4.61	0.5568	0.110	0.479	8.2
770304	917	3.10	0.5568	0.174	0.565	6.9
770403	1000	5.08	0.5568	0.136	0.393	10.0
770304	1225	7.47	0.5568	0.120	0.287	13.7
770304	1500	7.47	0.5568	0.110	0.298	13.1
770304	1650	5.08	0.5568	0.696	0.071	55.0
770307	948	5.08	0.5568	0.171	0.348	11.3
770307	1030	7.47	0.5568	0.370	0.134	29.2
770307	1115	7.47	0.5568	0.330	0.150	26.2
770308	845	5.08	0.5568	0.334	0.216	18.2
770308	945	7.47	0.5568	0.338	0.147	26.7
770308	1045	7.47	0.5568	0.310	0.158	24.8
770308	1201	7.47	0.5568	0.415	0.119	33.0
770308	1400	5.08	0.5568	0.359	0.202	19.4
770308	1400	5.08	0.5568	0.340	0.212	18.5
770308	1400	5.08	0.5568	0.350	0.207	18.9
770308	1530	5.08	0.5568	0.332	0.217	18.1
770309	1415	7.47	0.5568	0.118	0.289	13.6
770309	1507	5.08	0.5568	0.195	0.322	12.2
770309	1640	7.47	0.5568	0.190	0.225	17.5
770310	1000	5.08	0.5568	0.286	0.247	15.9
770310	1012	3.10	0.5568	0.309	0.379	10.3
770310	1015	4.61	0.5568	0.106	0.487	8.1
770310	1030	7.47	0.5568	0.059	0.382	10.3
770310	1145	5.08	0.5568	0.074	0.512	7.7
770310	1216	5.08	0.5568	0.103	0.448	8.7
770310	1210	5.08	0.5568	0.209	0.308	12.7
770311	830	5.08	0.5568	0.170	0.348	11.3
770311	940	3.10	0.5568	0.487	0.232	16.9
770311	943	4.61	0.5568	0.343	0.232	16.9
770311	951	7.47	0.5568	0.188	0.226	17.3
770311	1118	5.08	0.5568	0.242	0.279	14.0
770311	1132	3.10	0.5568	0.298	0.391	10.0
770311	1134	4.61	0.5568	0.386	0.206	19.0
770311	1145	7.47	0.5568	0.439	0.111	35.2
770311	1319	7.47	0.5568	0.115	0.292	13.4
770312	830	5.08	0.5568	0.448	0.158	24.8
770312	920	7.47	0.5568	0.339	0.146	26.8
770312	954	4.61	0.5568	0.411	0.193	20.4
770312	956	3.10	0.5568	0.486	0.233	16.8
770312	1023	7.47	0.5568	0.286	0.169	23.2
770312	1300	5.08	0.5568	0.384	0.188	20.8

Table 3.2 (Continued)

DATE (y.m.d)	LOCAL TIME	RANGE (km)	λ (μ)	TRANS-MITTANCE	EXTINC. (km^{-1})	VIS. (km)
770312	1355	7.47	0.5568	0.321	0.153	25.5
770312	1450	7.47	0.5568	0.251	0.187	21.0
770312	1500	4.61	0.5568	0.460	0.168	23.3
770312	1504	3.10	0.5568	0.390	0.304	12.9
770312	1520	5.08	0.5568	0.289	0.244	16.0
770314	830	7.47	0.5568	0.372	0.134	29.3
770314	1000	4.61	0.5568	0.494	0.153	25.6
770314	1012	3.10	0.5568	0.564	0.185	21.2
770314	1040	5.08	0.5568	0.449	0.157	24.9
770314	1050	5.08	0.6500	0.508	0.133	29.4
770314	1100	5.08	0.5568	0.420	0.171	22.9
770314	1500	5.08	0.5568	0.374	0.194	20.2
770314	1500	5.08	0.6500	0.584	0.106	37.1
770314	1610	5.08	0.6500	0.545	0.119	32.8
770314	1610	5.08	0.6500	0.478	0.145	27.0
770314	1800	5.08	0.6500	0.447	0.158	24.8
770315	835	5.08	0.6500	0.479	0.145	27.0
770315	835	5.08	0.6500	0.529	0.126	31.2
770315	1320	5.08	0.6500	0.546	0.119	33.0
770315	1320	5.08	0.6500	0.468	0.149	26.2
770315	1320	2.00	0.6500	0.525	0.322	12.2
770315	1320	1.00	0.6500	0.571	0.561	7.0
770315	1320	5.08	0.6500	0.601	0.100	39.1
770315	1320	2.00	0.6500	0.633	0.228	17.2
770315	1320	1.00	0.6500	0.625	0.470	8.3
770315	1355	5.08	0.6500	0.431	0.165	23.7
770315	1355	5.08	0.6500	0.479	0.145	27.1
770315	1355	2.00	0.6500	0.603	0.253	15.5
770315	1355	1.00	0.6500	0.629	0.464	8.5
770315	1355	5.08	0.6500	0.512	0.132	25.8
770315	1355	2.00	0.6500	0.569	0.282	13.9
770315	1355	1.00	0.6500	0.602	0.507	7.7
770316	1400	5.08	0.6500	0.400	0.180	21.8
770316	1400	2.00	0.6500	0.682	0.192	20.5
770316	1400	1.00	0.6500	0.739	0.303	12.9
770316	1400	5.08	0.5568	0.330	0.218	18.0
770316	1400	2.00	0.5568	0.576	0.276	14.2
770316	1400	1.00	0.5568	0.679	0.387	10.1
770329	1130	7.47	0.5568	0.350	0.140	27.9
770329	1130	7.47	0.6500	0.406	0.121	32.5
770329	1500	7.47	0.6500	0.437	0.111	35.4
770329	1500	7.47	0.6500	0.382	0.129	30.4
770330	900	5.08	0.6500	0.297	0.239	16.4
770330	900	5.08	0.5568	0.287	0.247	15.8
770330	1350	7.47	0.5568	0.314	0.115	25.3
770330	1350	7.47	0.6500	0.343	0.143	27.4
770330	1430	5.08	0.6500	0.371	0.195	20.1
770330	1500	7.47	0.6500	0.414	0.118	33.2
770331	1100	5.08	0.6500	0.435	.164	23.9
770331	1125	3.10	0.6500	0.397	0.298	13.2
770331	1125	4.61	0.6500	0.459	0.169	23.2
770331	1145	7.47	0.6500	0.350	0.140	27.9
770331	1350	7.47	0.6500	0.352	0.140	28.0
770331	1400	7.47	0.5568	0.304	0.159	24.6
770331	1530	7.47	0.5568	0.409	0.120	32.7
770331	1530	7.47	0.6500	0.589	0.071	55.3
770331	1600	7.47	0.6500	0.539	0.083	47.4
770331	1600	7.47	0.5568	0.320	0.153	25.7
770401	930	7.47	0.5568	0.130	0.273	14.3
770401	930	7.47	0.6500	0.247	0.187	21.0

Table 3.2 (Continued)

DATE (y.m.d)	LOCAL TIME	RANGE (km)	λ (μ)	TRANS-MITTANCE	EXTINC. (km-1)	VIS. (km)
770401	950	4.61	0.6500	0.200	0.349	11.2
770401	950	3.10	0.6500	0.445	0.261	15.0
770401	950	3.10	0.5568	0.325	0.363	10.8
770401	950	4.61	0.5568	0.369	0.216	18.1
770401	1055	5.08	0.6500	0.342	0.211	18.6
770401	1055	5.08	0.5568	0.243	0.278	14.1
770401	1345	7.47	0.6500	0.297	0.163	24.1
770401	1345	7.47	0.5568	0.269	0.176	22.3
770401	1515	7.47	0.5568	0.172	0.236	16.6
770401	1515	7.47	0.6500	0.245	0.188	20.8
770402	945	5.08	0.6500	0.419	0.171	22.9
770402	945	5.08	0.5568	0.450	0.157	24.9
770402	1045	4.61	0.5568	0.415	0.191	20.6
770402	1045	3.10	0.5568	0.570	0.181	21.6
770402	1045	3.10	0.6500	0.559	0.187	20.9
770402	1045	4.61	0.6500	0.483	0.158	24.8
770402	1100	7.47	0.6500	0.427	0.114	34.4
770402	1100	7.47	0.5568	0.307	0.158	24.8
770402	1200	7.47	0.5568	0.282	0.169	23.1
770402	1200	7.47	0.6500	0.413	0.118	33.1
770402	1230	7.47	0.6500	0.456	0.105	37.3
770402	1430	7.47	0.6500	0.514	0.089	44.0
770402	1430	7.47	0.5568	0.417	0.117	33.5
770402	1525	7.47	0.5568	0.429	0.113	34.6
770402	1525	7.47	0.6500	0.470	0.101	38.7
770404	950	5.08	0.6500	0.485	0.142	27.5
770404	950	5.08	0.5568	0.406	0.177	22.1
770404	1035	4.61	0.5568	0.431	0.183	21.5
770404	1035	3.10	0.5568	0.419	0.280	14.0
770404	1035	4.61	0.6500	0.484	0.157	24.9
770404	1035	3.10	0.6500	0.364	0.326	12.0
770404	1105	7.47	0.6500	0.361	0.136	28.7
770404	1105	7.47	0.5568	0.330	0.148	26.4
770404	1205	7.47	0.5568	0.350	0.140	27.9
770404	1205	7.47	0.6500	0.434	0.112	35.1
770404	1440	7.47	0.6500	0.274	0.173	22.6
770404	1410	7.47	0.5568	0.226	0.199	19.7
770404	1550	7.47	0.5568	0.036	0.447	8.8
770404	1550	7.47	0.6500	0.234	0.197	20.1
770404	1630	7.47	0.6500	0.243	0.189	20.7
770404	1630	7.47	0.5568	0.199	0.216	18.1
770405	1100	3.10	0.5568	0.380	0.312	12.6
770405	1100	3.10	0.6500	0.452	0.256	15.3
770405	1445	7.47	0.6500	0.446	0.108	36.3
770405	1445	7.47	0.5568	0.335	0.146	26.8
770405	1525	7.47	0.6500	0.656	0.056	69.4
770405	1525	7.47	0.6500	0.661	0.056	70.6
770405	1530	7.47	0.5568	0.544	0.082	48.1
770405	1530	7.47	0.5568	0.546	0.081	48.4
770405	1600	7.47	0.6500	0.610	0.066	59.2
770405	1600	7.47	0.5568	0.509	0.090	43.4
770406	1400	7.47	0.5568	0.586	0.072	54.8
770406	1400	7.47	0.6500	0.646	0.059	66.9
770406	1600	7.47	0.6500	0.674	0.053	74.3
770406	1600	7.47	0.5568	0.615	0.065	60.2
770407	930	3.10	0.5568	0.755	0.091	43.1
770407	930	3.10	0.6500	0.786	0.078	50.4
770407	1200	7.47	0.5568	0.581	0.073	53.9
770407	1200	7.47	0.6500	0.646	0.059	67.0
770516	1520	7.47	0.5568	0.298	0.162	24.2

Table 3.2 (Continued)

DATE (y.m.d)	LOCAL TIME	RANGE (km)	λ (μ)	TRANS. MITTANCE	EXTINC. (km^{-1})	VIS. (km)
770516	1520	7.47	0.6500	0.359	0.137	28.6
770516	1620	7.47	0.6500	0.370	0.133	29.5
770516	1620	7.47	0.5568	0.278	0.172	22.9
770516	1711	7.47	0.5568	0.340	0.144	27.2
770516	1711	7.47	0.6500	0.370	0.133	29.4
770517	1137	7.47	0.6500	0.206	0.212	18.5
770517	1138	7.47	0.5568	0.127	0.276	14.2
770517	1340	7.47	0.5568	0.183	0.228	17.2
770517	1345	7.47	0.6500	0.334	0.147	26.7
770517	1450	7.47	0.6500	0.368	0.134	29.3
770517	1455	7.47	0.5568	0.257	0.182	21.6
770517	1545	7.47	0.5568	0.309	0.157	24.9
770517	1550	7.47	0.6500	0.418	0.117	33.5
770517	1630	7.47	0.6500	0.407	0.120	32.6
770517	1635	7.47	0.5568	0.314	0.155	25.3
770520	1050	7.47	0.5568	0.293	0.164	23.8
770520	1055	7.47	0.6500	0.351	0.140	28.0
770520	1225	7.47	0.6500	0.361	0.136	28.7
770520	1230	7.47	0.5568	0.237	0.193	20.3
770520	1420	7.47	0.5568	0.322	0.152	25.8
770520	1425	7.47	0.6500	0.398	0.123	31.8
770520	1450	7.47	0.6500	0.401	0.122	32.1
770520	1520	7.47	0.6500	0.438	0.111	35.4
770520	1525	7.47	0.5568	0.316	0.154	25.4
770520	1620	7.47	0.5568	0.323	0.151	25.9
770520	1625	7.47	0.6500	0.428	0.114	34.5
770521	1015	7.47	0.6500	0.178	0.231	17.0
770521	1020	7.47	0.5568	0.152	0.252	15.5
770521	1130	7.47	0.5568	0.160	0.245	16.0
770521	1135	7.47	0.6500	0.222	0.201	19.5
770521	1200	7.47	0.6500	0.201	0.215	18.3
770521	1205	7.47	0.5568	0.124	0.280	14.0
770521	1325	7.47	0.5568	0.132	0.271	14.5
770521	1400	7.47	0.5568	0.125	0.278	14.1
770521	1405	7.47	0.6500	0.222	0.202	19.4
770521	1500	7.47	0.6500	0.252	0.185	21.2
770521	1505	7.47	0.5568	0.212	0.208	18.9
770523	910	7.47	0.5568	0.389	0.127	31.0
770523	915	7.47	0.6500	0.455	0.106	37.2
770523	1135	7.47	0.6500	0.507	0.091	43.1
770523	1140	7.47	0.5568	0.457	0.105	37.4
770523	1430	7.47	0.5568	0.588	0.071	55.2
770523	1435	7.47	0.6500	0.623	0.063	61.8
770523	1505	7.47	0.6500	0.624	0.063	62.2
770523	1510	7.47	0.5568	0.552	0.080	49.2
770523	1540	7.47	0.5568	0.530	0.085	46.1
770523	1545	7.47	0.6500	0.603	0.068	57.8
770523	1635	7.47	0.6500	0.578	0.073	53.4
770523	1640	7.47	0.5568	0.540	0.082	47.6
770524	1030	7.47	0.5568	0.315	0.154	25.4
770524	1035	7.47	0.6500	0.402	0.122	32.1
770524	1050	7.47	0.6500	0.384	0.128	30.6
770524	1055	7.47	0.5568	0.371	0.133	29.5
770524	1320	7.47	0.5568	0.396	0.124	31.6
770524	1325	7.47	0.6500	0.501	0.092	42.4
770524	1350	7.47	0.6500	0.482	0.098	40.1
770524	1355	7.47	0.5568	0.411	0.119	32.9
770524	1440	7.47	0.5568	0.381	0.129	30.3
770524	1445	7.47	0.6500	0.457	0.105	37.4
770524	1535	7.47	0.6500	0.372	0.132	29.6

Table 3.2 (Continued)

DATE (y.m.d)	LOCAL TIME	RANGE (km)	λ (μ)	TRANS-MITTANCE	EXTINC. (km^{-1})	VIS. (km)
770524	1540	7.47	0.5568	0.415	0.118	33.3
770525	900	7.47	0.5568	0.131	0.272	14.4
770525	905	7.47	0.6500	0.170	0.238	16.5
770525	930	7.47	0.6500	0.357	0.138	28.4
770525	935	7.47	0.5568	0.235	0.194	20.2
770525	1011	7.47	0.5568	0.303	0.160	24.5
770525	1017	7.47	0.6500	0.444	0.109	36.1
770525	1058	7.47	0.6500	0.470	0.101	38.8
770525	1105	7.47	0.5568	0.357	0.135	28.9
770525	1140	7.47	0.5568	0.299	0.161	24.3
770525	1145	7.47	0.6500	0.375	0.131	29.8
770525	1345	7.47	0.6500	0.399	0.123	31.9
770525	1350	7.47	0.5568	0.338	0.145	27.0

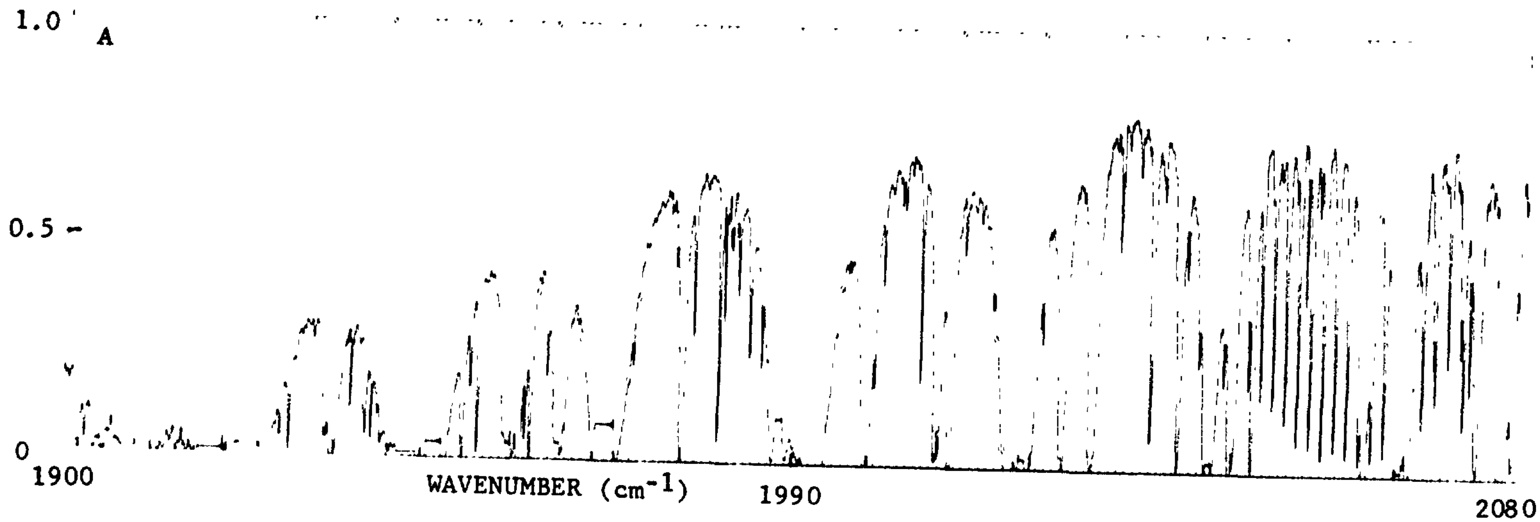
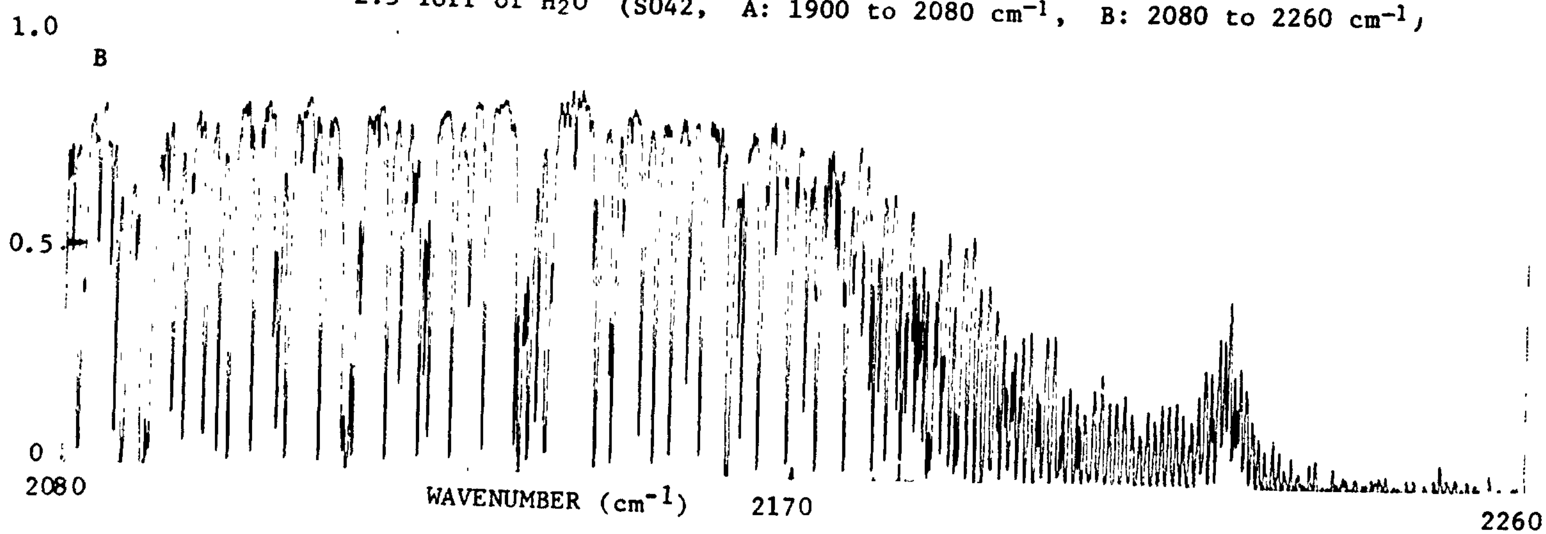


Figure 4.1a Measured high-resolution spectrum of a 5.1-km atmospheric path containing 2.5 Torr of H_2O (S042, A: 1900 to 2080 cm^{-1}, B: 2080 to 2260 cm^{-1},



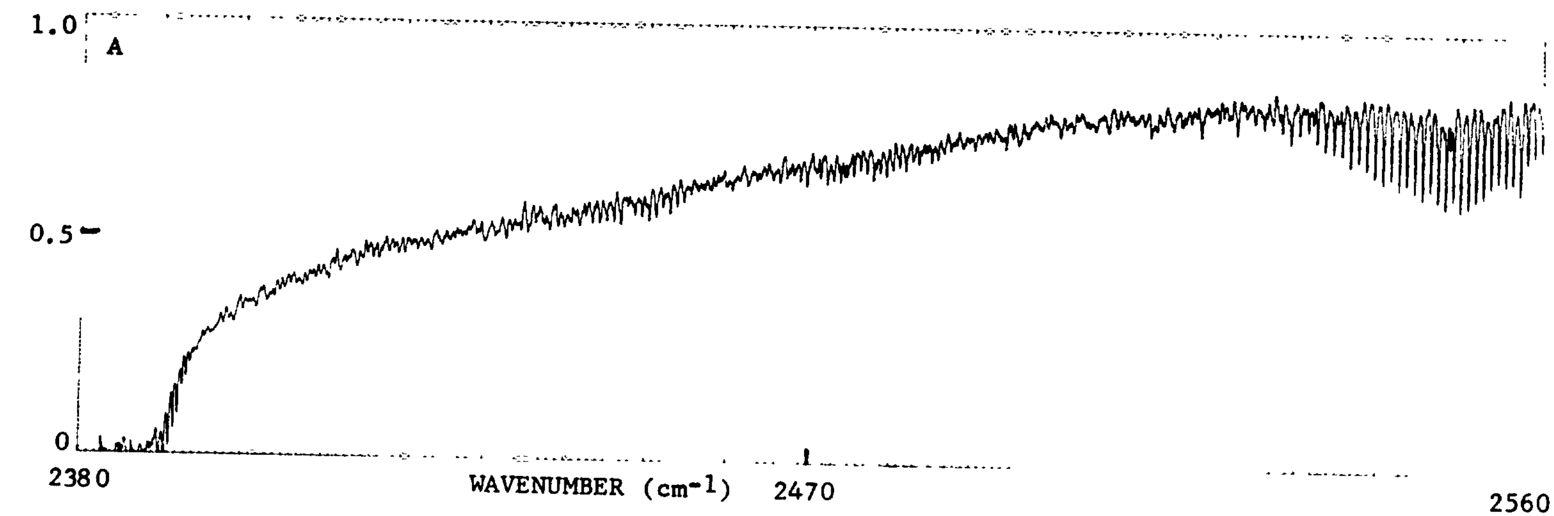
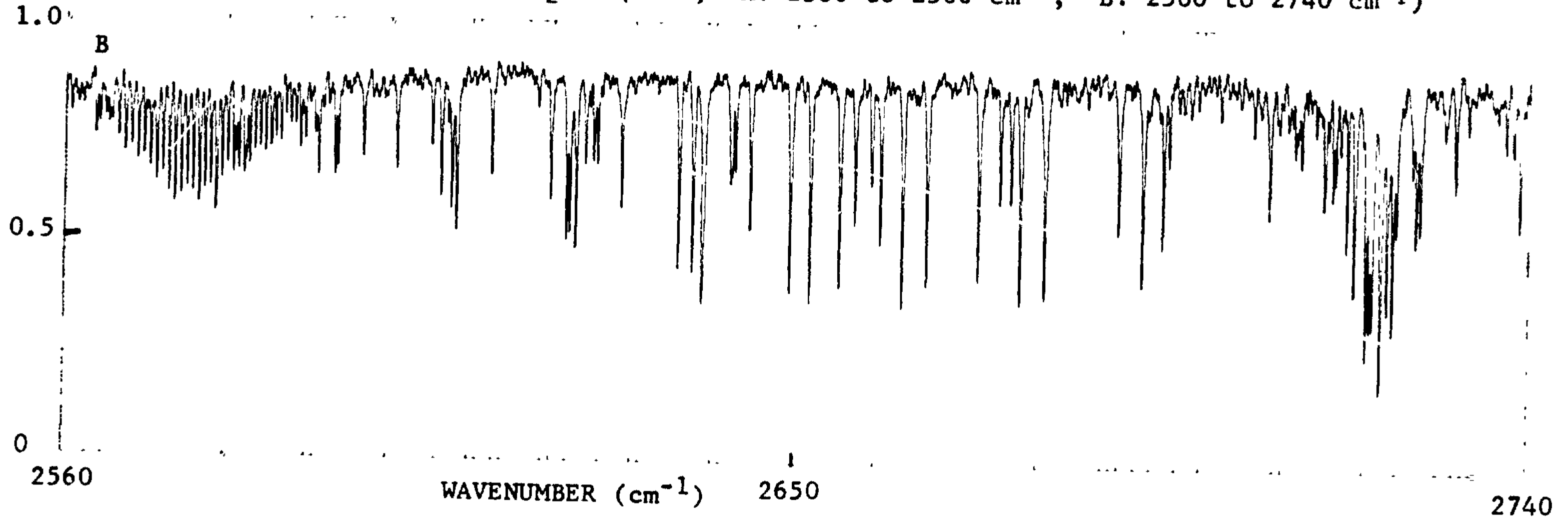


Figure 4.1b Measured high-resolution spectrum of a 5.1-km atmospheric path containing 2.5 Torr of H_2O (S042, A: 2380 to 2560 cm^{-1}, B: 2560 to 2740 cm^{-1})



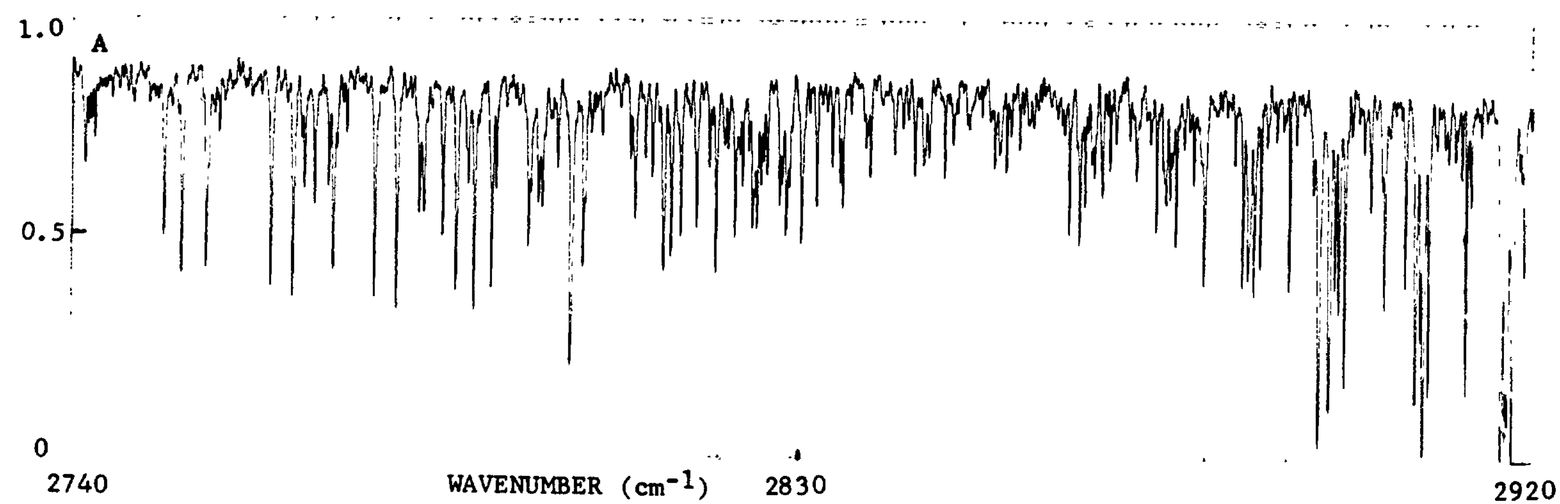
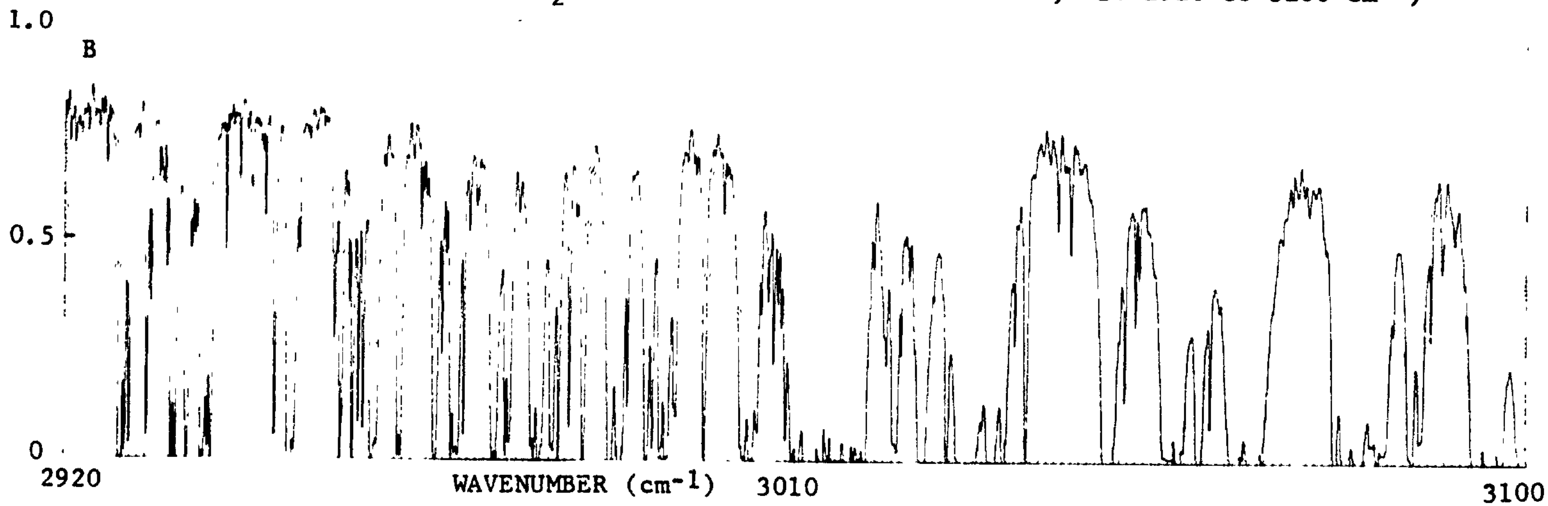


Figure 4.1c Measured high-resolution spectrum of a 5.1-km atmospheric path containing 2.5 Torr of H_2O (S042, A: 2740 to 2920 cm^{-1}, B: 2920 to 3100 cm^{-1})



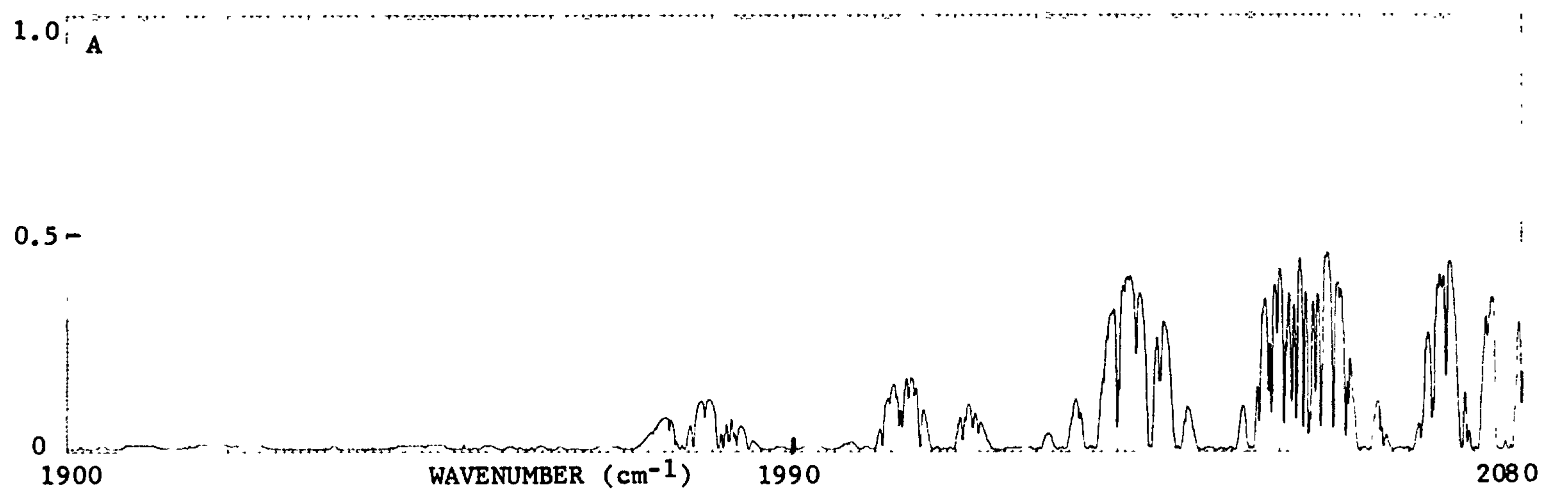
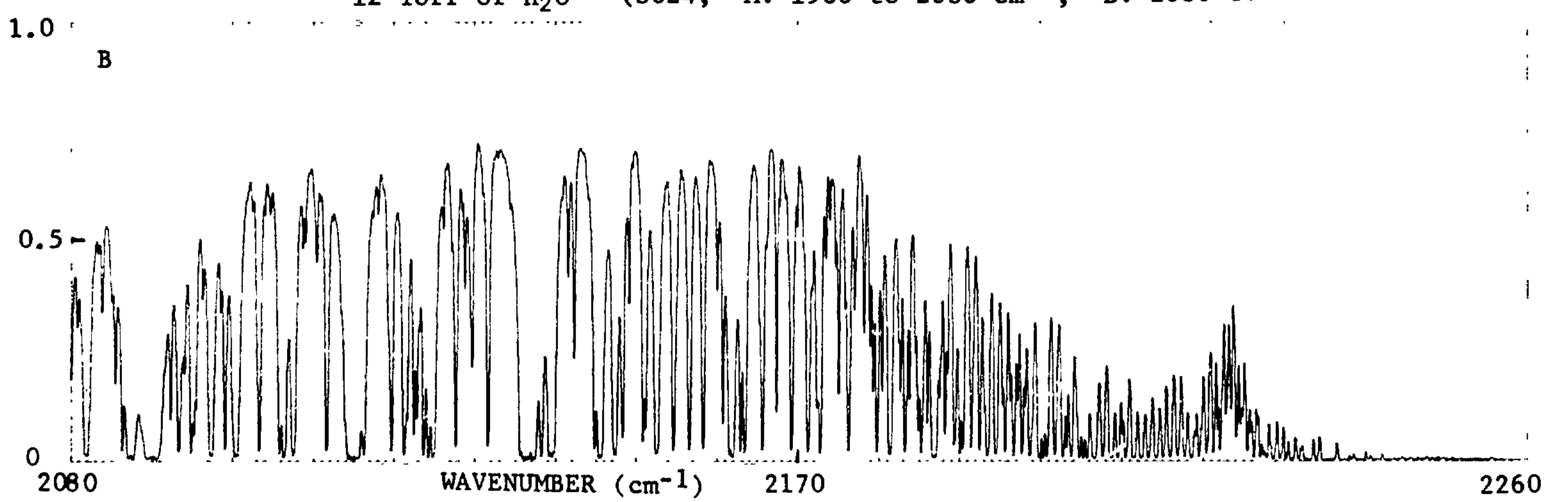


Figure 4.2a Measured high-resolution spectrum of a 5.1-km atmospheric path containing 12 Torr of H_2O (S024, A: 1900 to 2080 cm^{-1}, B: 2080 to 2260 cm^{-1})



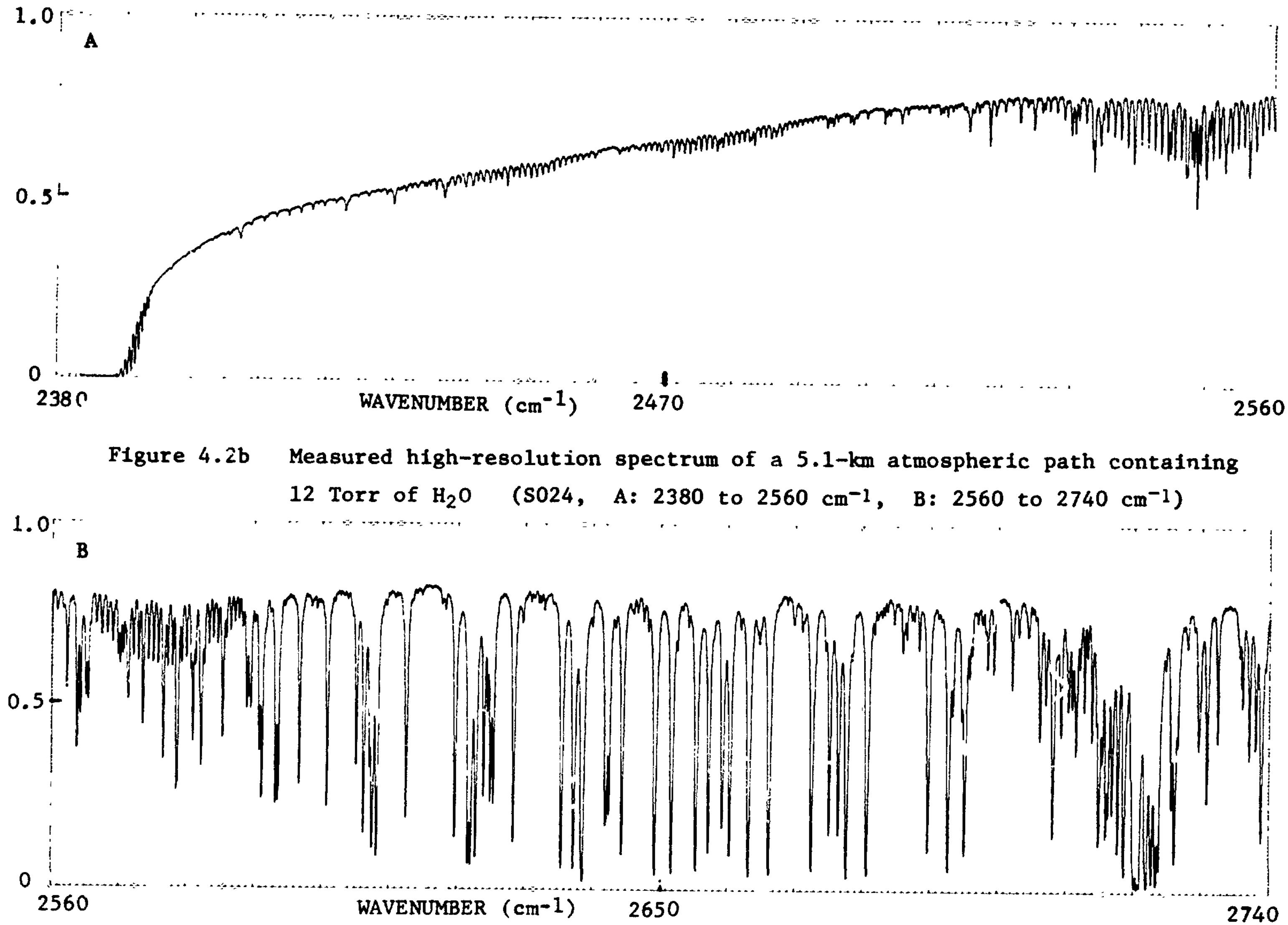


Figure 4.2b Measured high-resolution spectrum of a 5.1-km atmospheric path containing 12 Torr of H_2O (S024, A: 2380 to 2560 cm^{-1}, B: 2560 to 2740 cm^{-1})

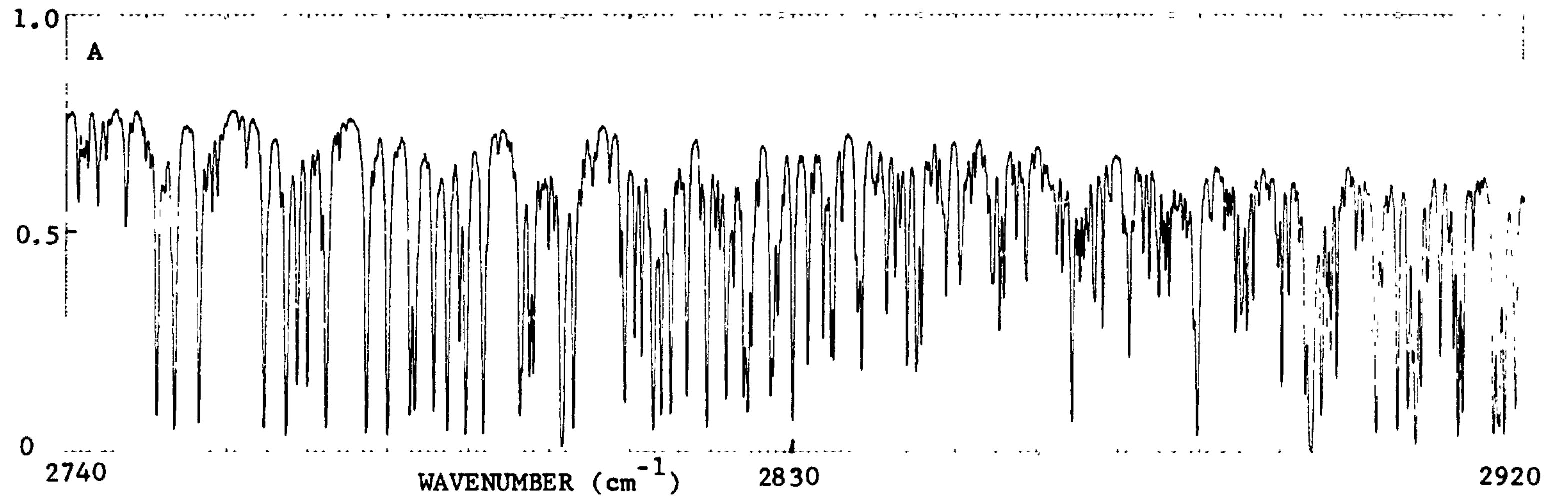
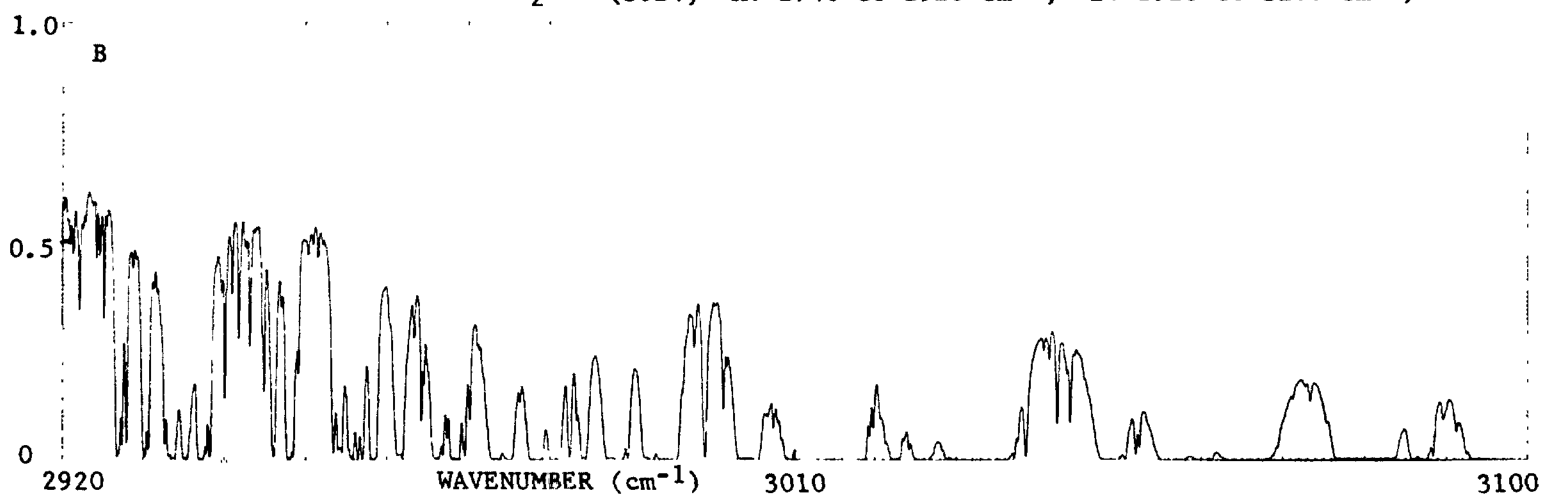


Figure 4.2c Measured high-resolution spectrum of a 5.1-km atmospheric path containing 12 Torr of H_2O (S024, A: 2740 to 2920 cm^{-1}, B: 2920 to 3100 cm^{-1})



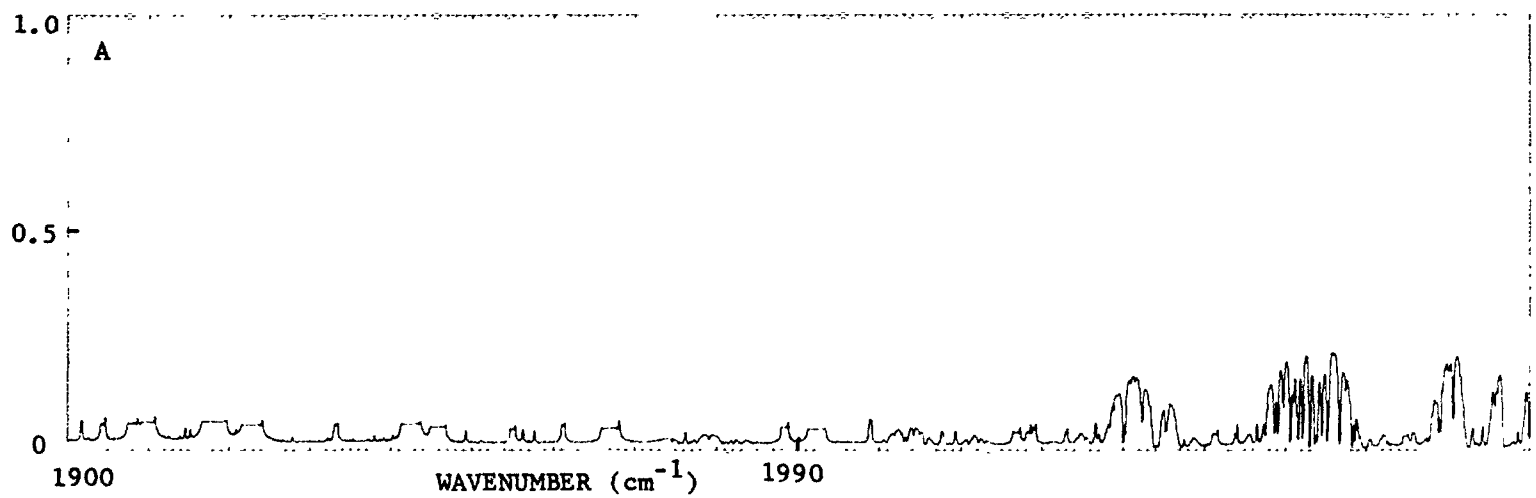
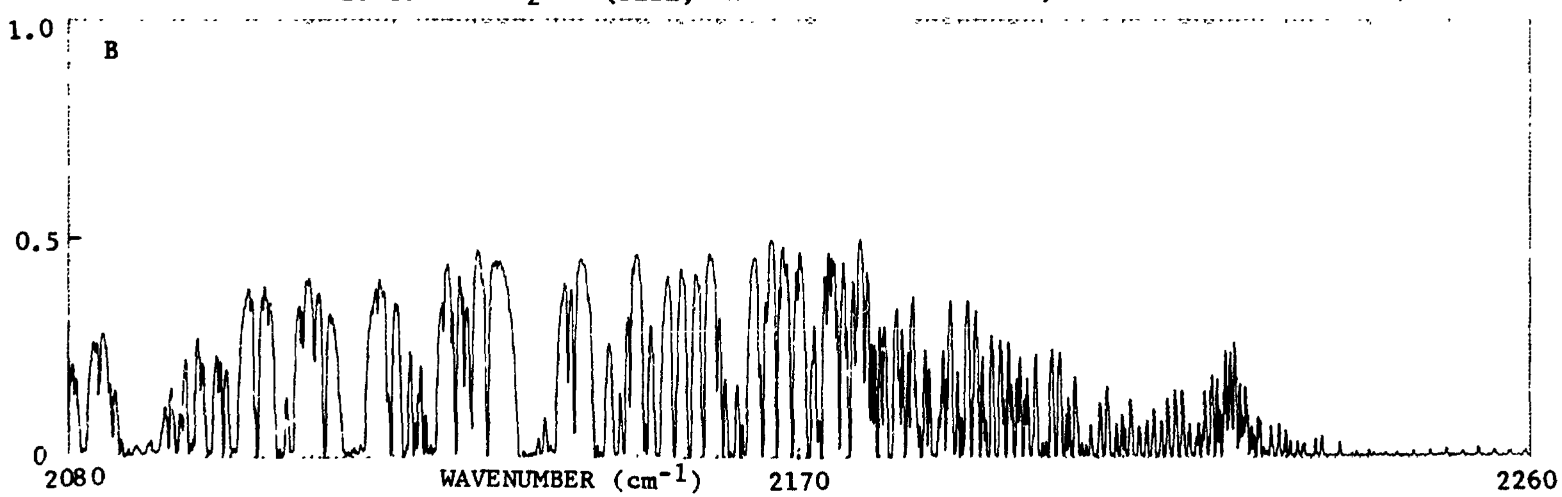


Figure 4.3a Measured high-resolution spectrum of a 5.1-km atmospheric path containing 18 Torr of H_2O (S121, A: 1900 to 2080 cm^{-1}, B: 2080 to 2260 cm^{-1})



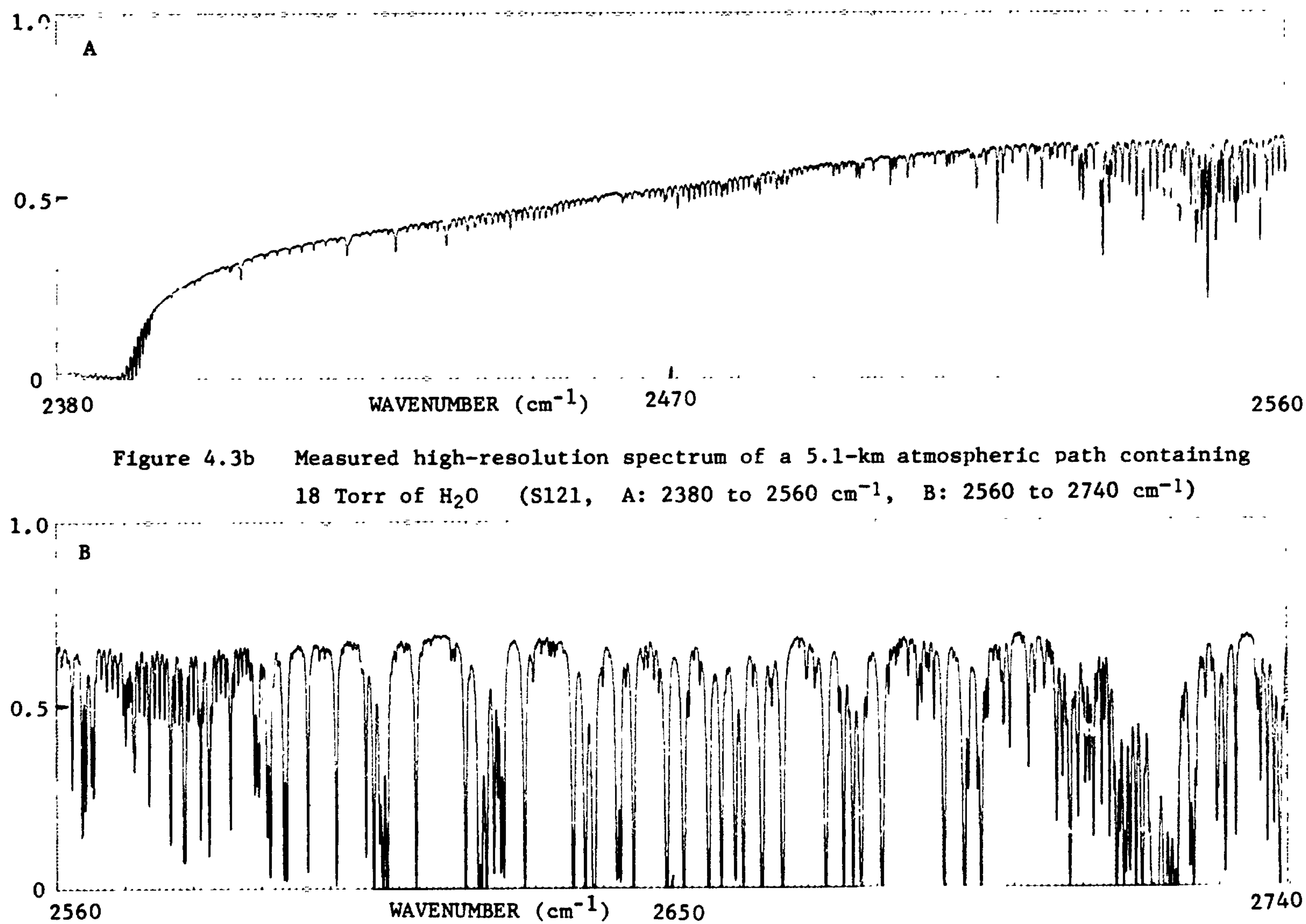


Figure 4.3b Measured high-resolution spectrum of a 5.1-km atmospheric path containing 18 Torr of H_2O (S121, A: 2380 to 2560 cm^{-1}, B: 2560 to 2740 cm^{-1})

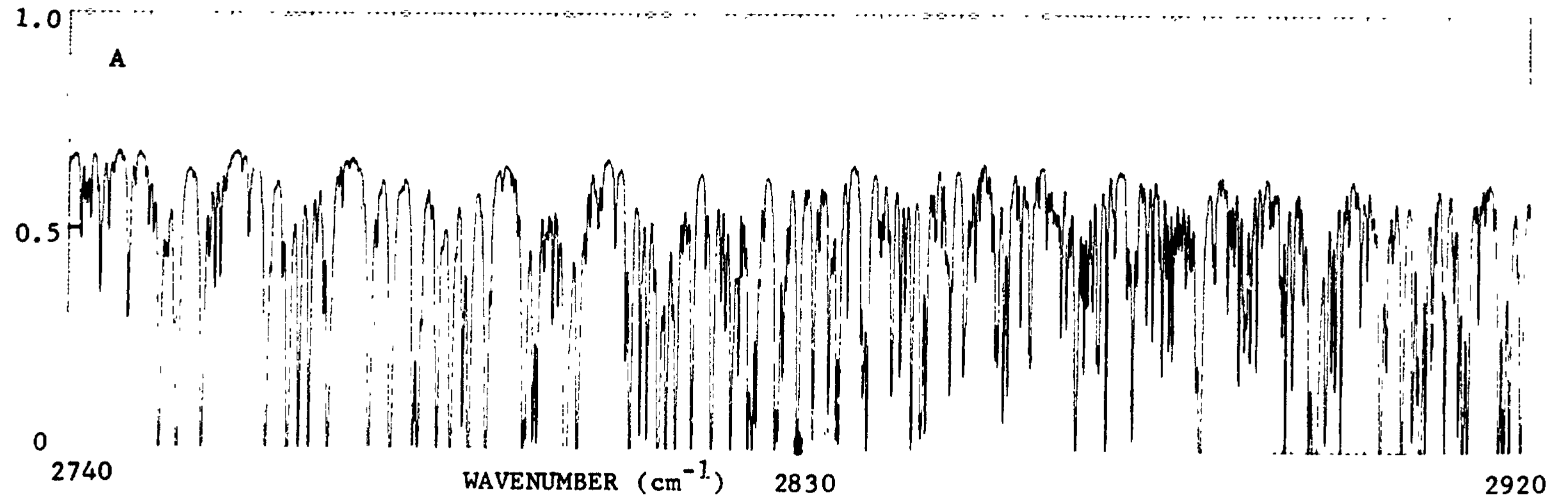


Figure 4.3c Measured high-resolution spectrum of a 5.1-km atmospheric path containing 18 Torr of H_2O (S121, A: 2740 to 2920 cm^{-1}, B: 2920 to 3100 cm^{-1})

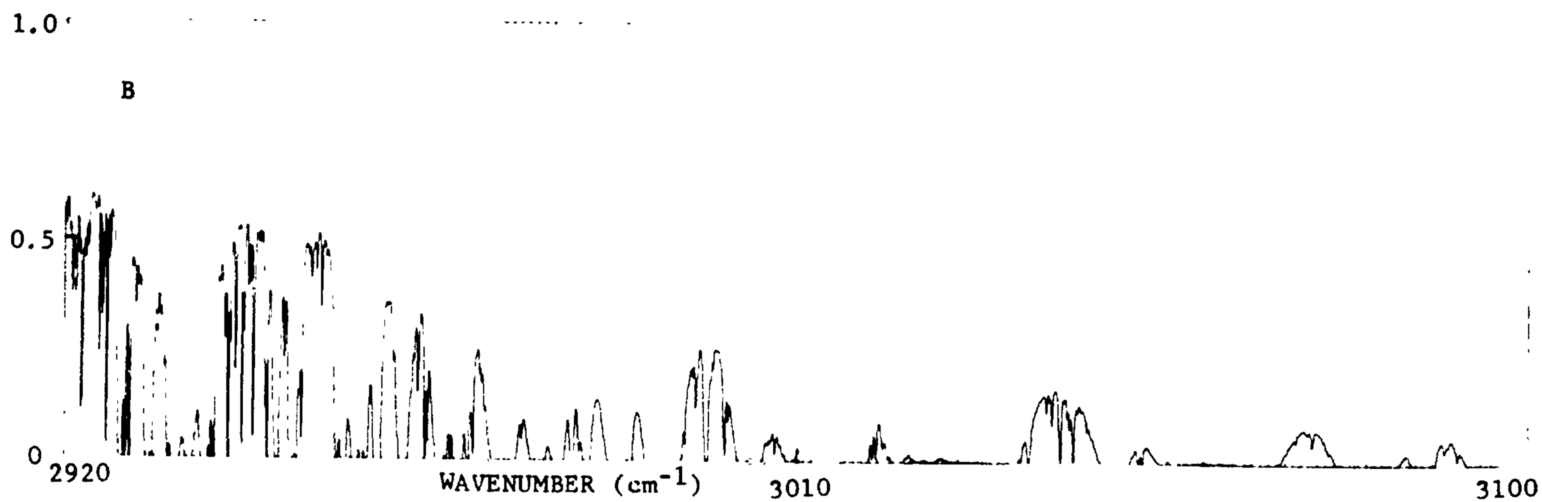


Fig. 5.1 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 3-MAR-77, CCAFS
PATH TEMP. 15 DEG C. M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET,G-GFCS

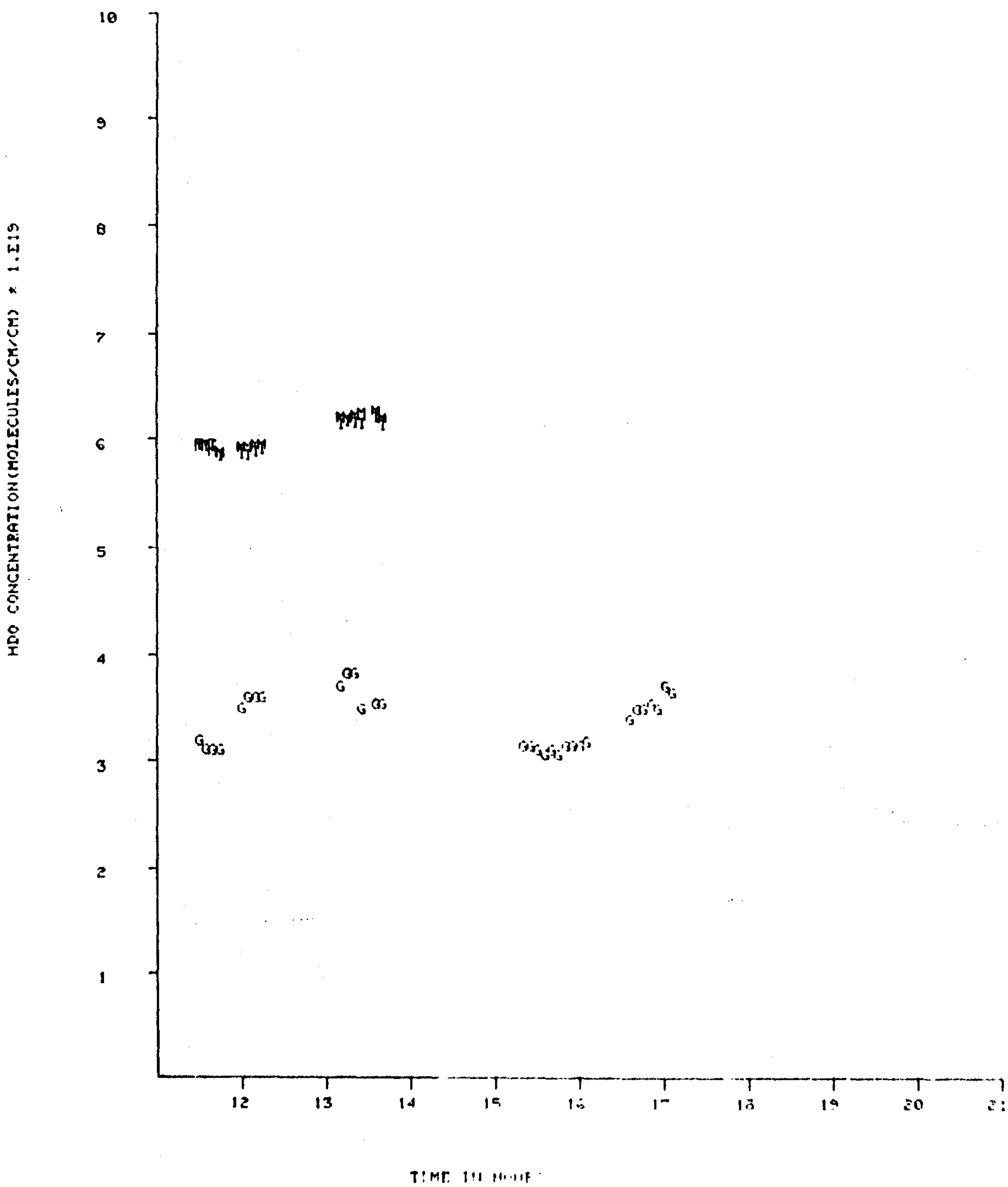


Fig. 5.2 INTEGRATED HDO CONCENTRATION(MOLECULES CM CM) FOR 5.12 KM PATH, 4-MAR-77, CCAFS PATH TEMP. 19 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GPCS

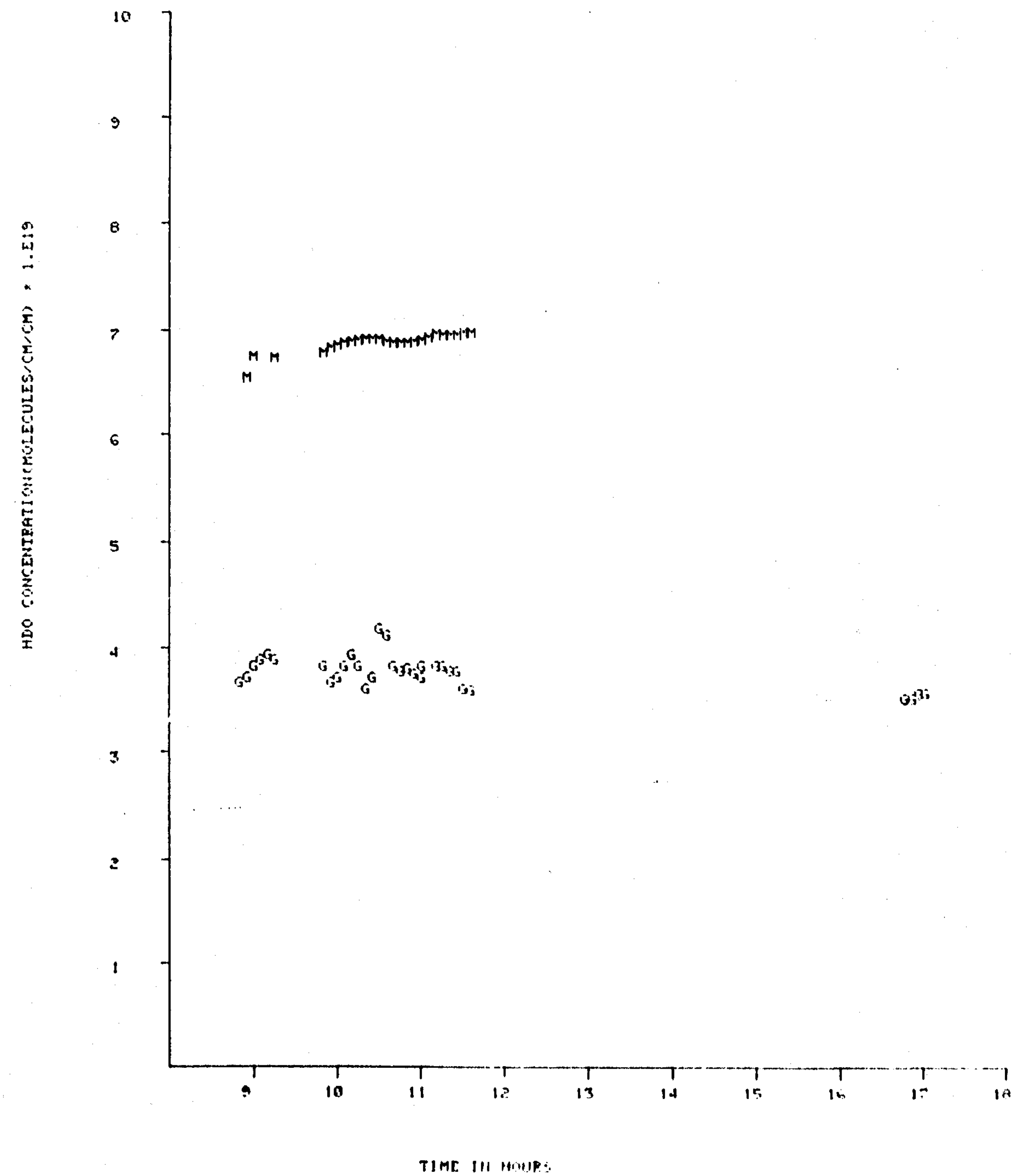


Fig. 5.3 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 7-MAR-77, CCAFS
PATH TEMP. 24 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GFCS

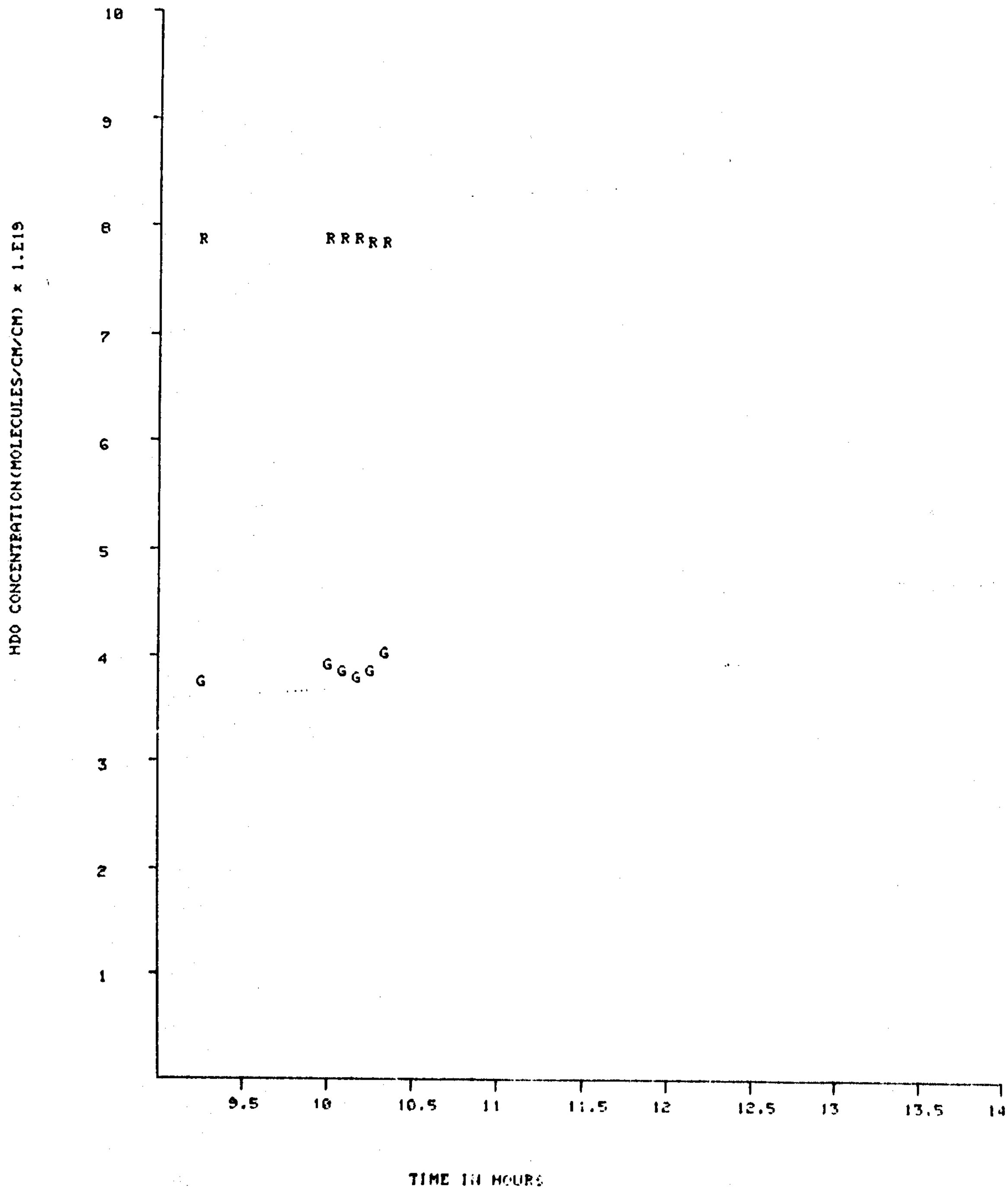


Fig. 5.4 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH. 8-MAR-77. CCAFS
PATH TEMP. 21 DEG C. M-MOBILE MET STATION.T-TRANSMITTER MET.R-RECEIVER MET.G-GFCS

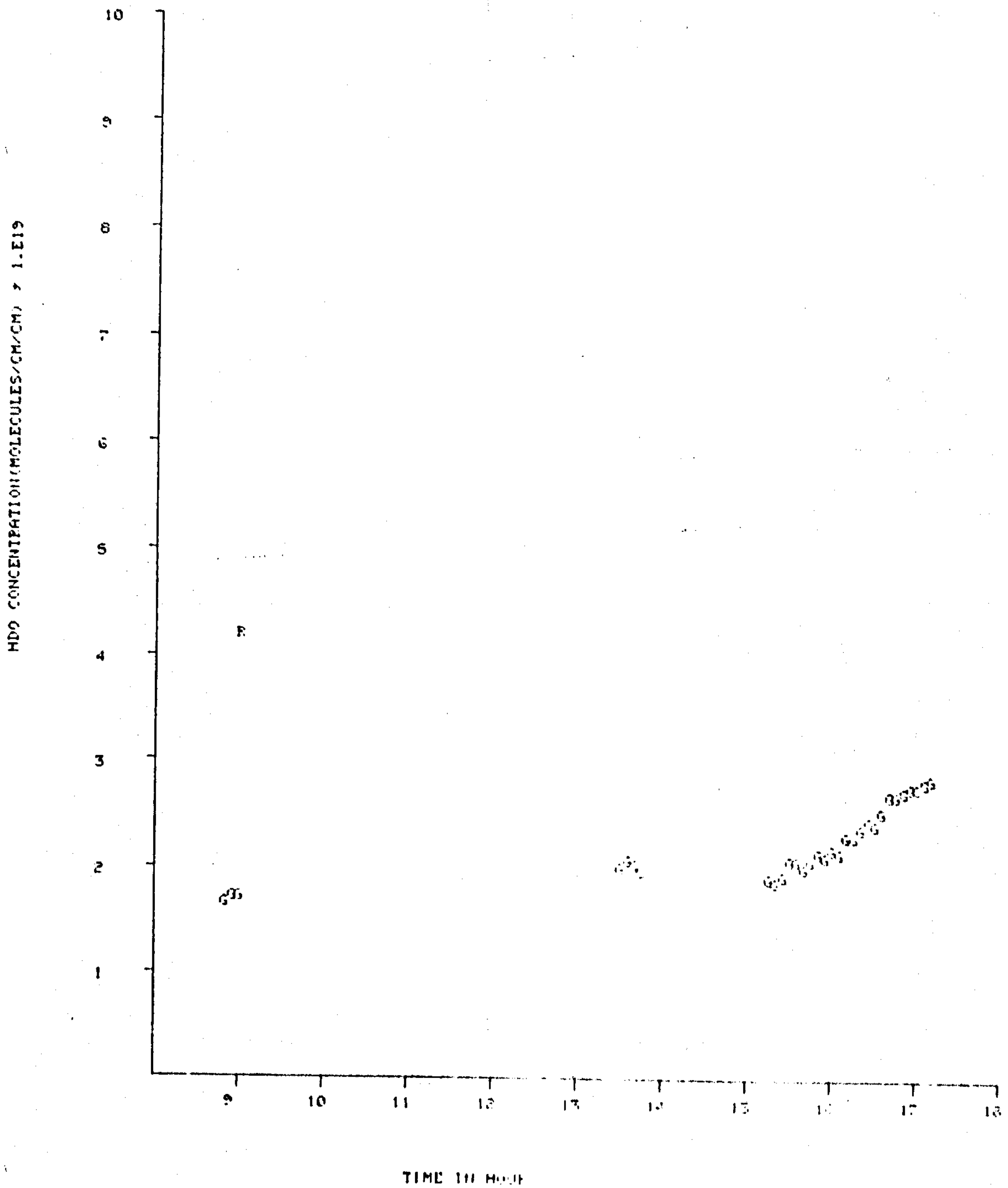


Fig. 5.5 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 9-MAR-77, CCHI[illegible]
PATH TEMP. 19 DEG C, M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET,G-GF[illegible]

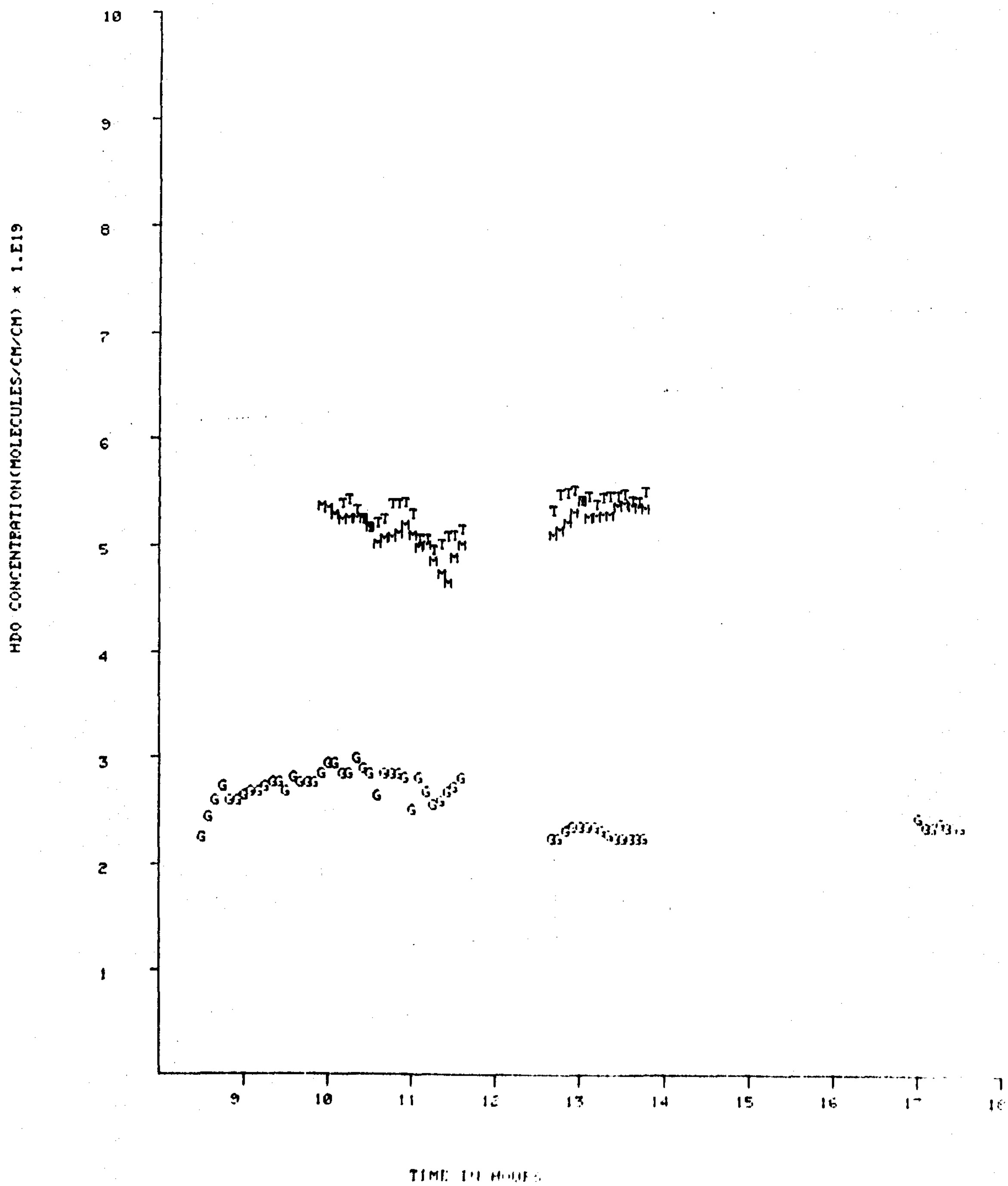


Fig. 5.6 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 10-MAR-77, CCAFS
PATH TEMP. 18 DEG C, M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET,G-GFCS

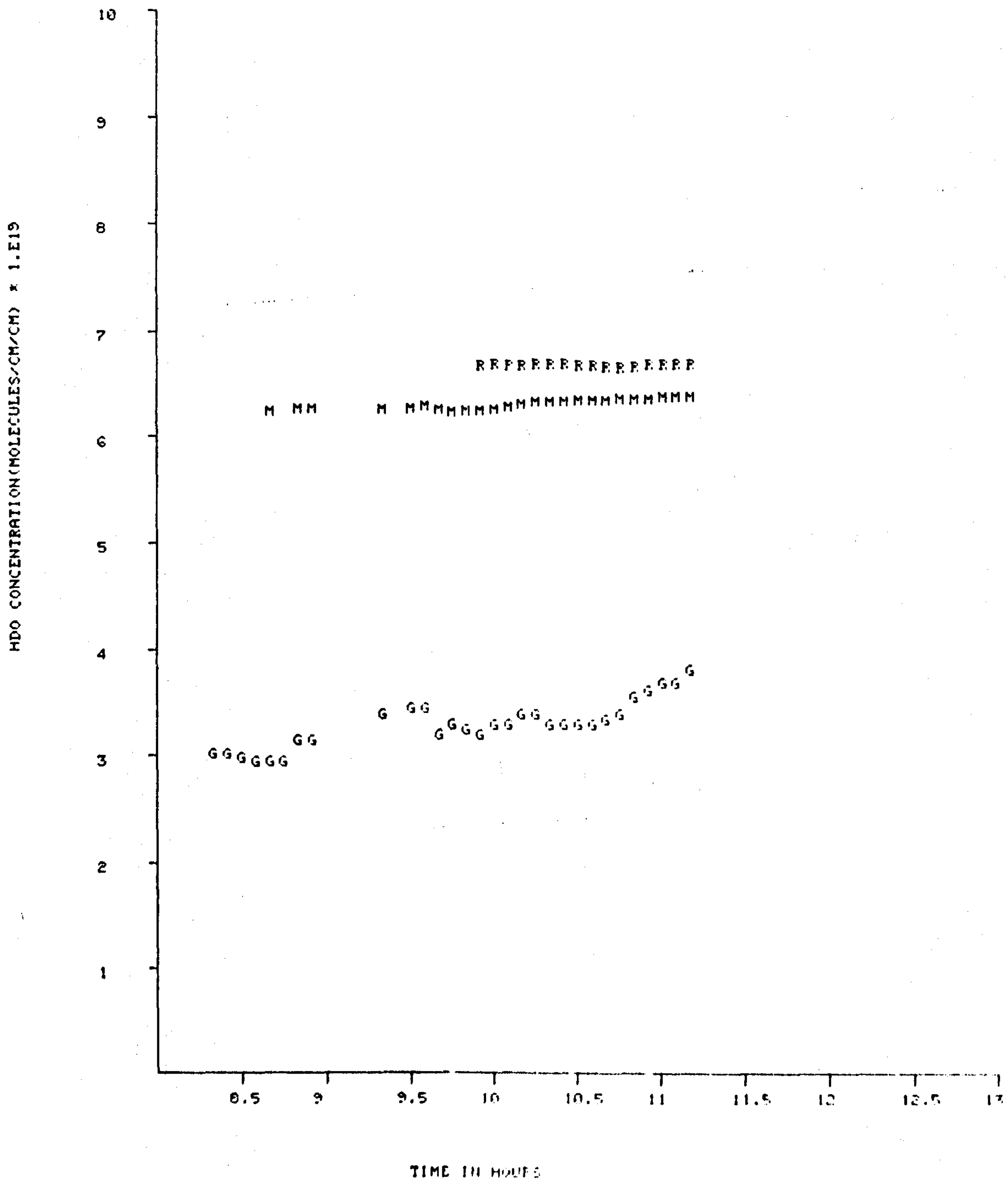


Fig. 5.7 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 11-MAR-77, CCAFS PATH TEMP. 19 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GFCS

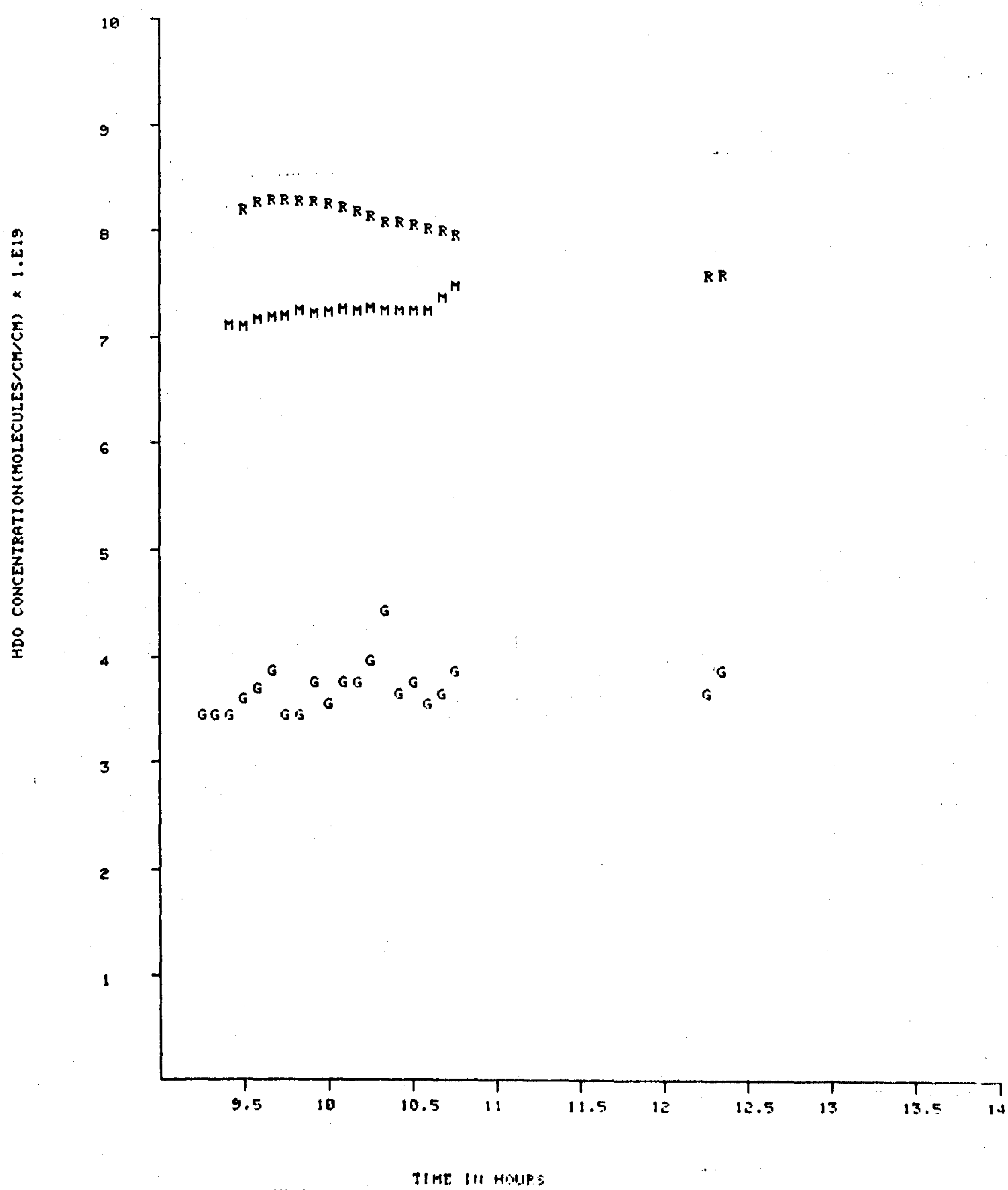


Fig. 5.8 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 12-MAR-77, CCAFS PATH TEMP. 20 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GFCS

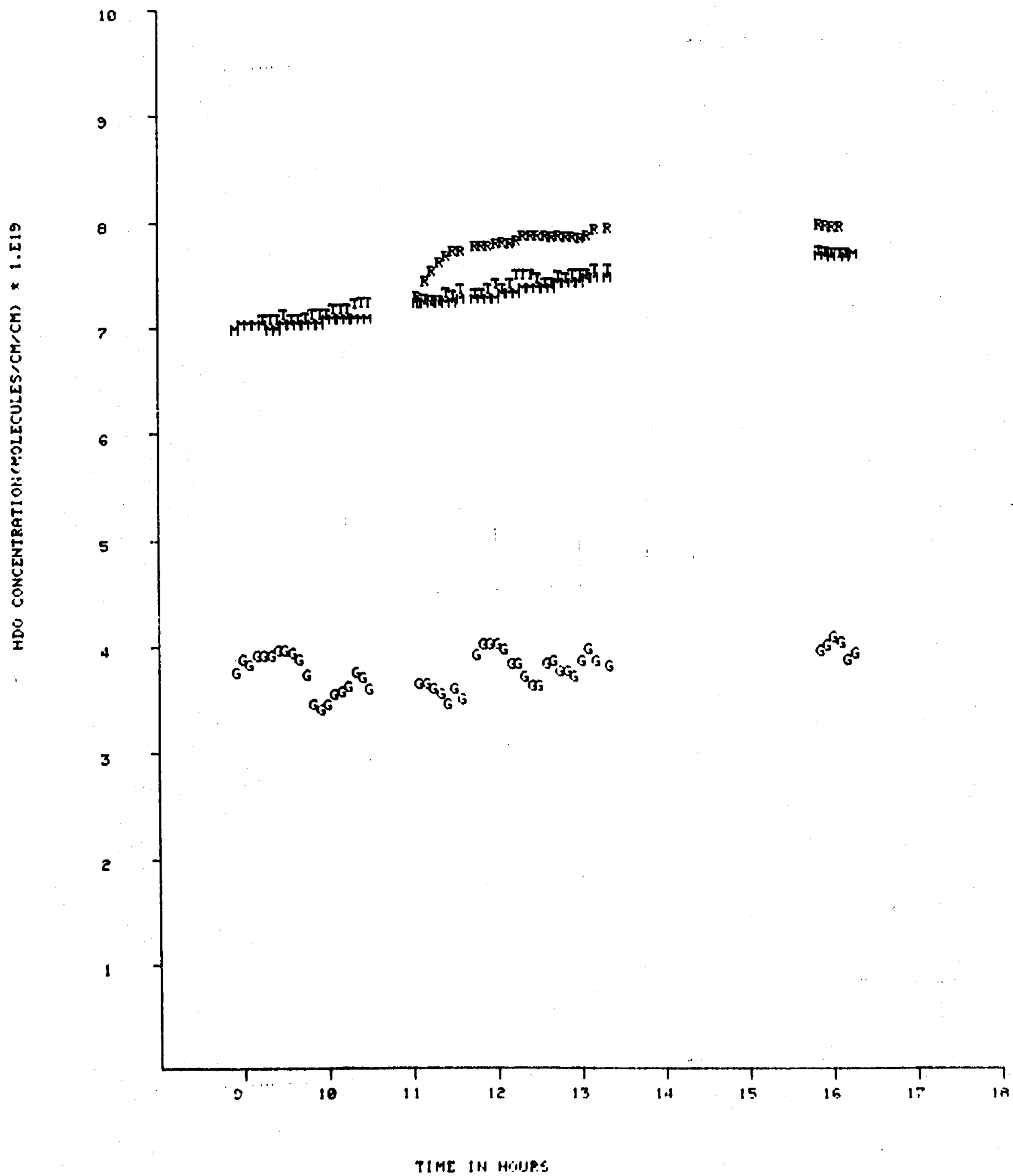


Fig. 5.9 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 14-MAR-77, CCAFS PATH TEMP. 23 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GFCS

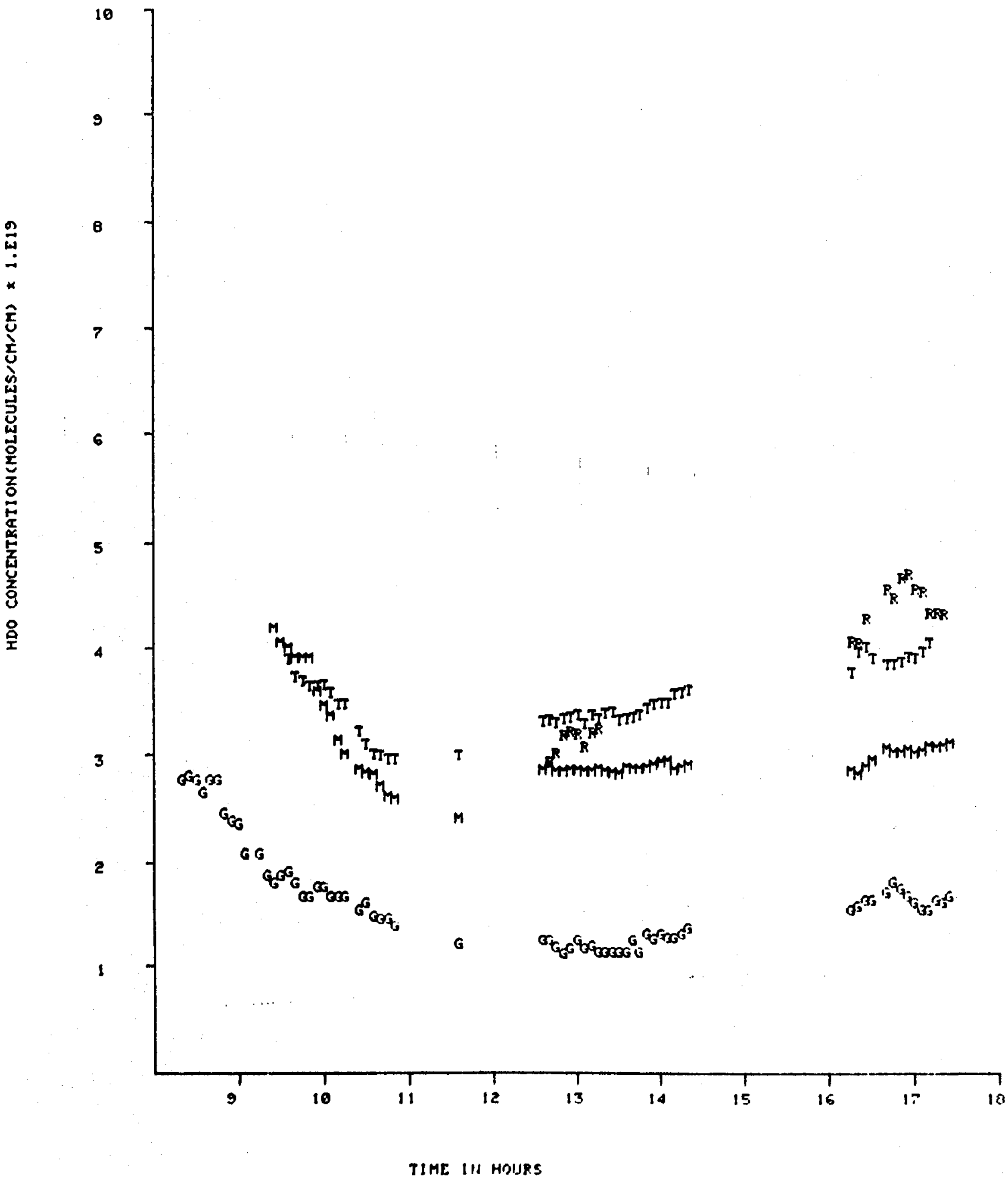


Fig. 5.10 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 15-MAR-77, CCAFS PATH TEMP. 28 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GFCS

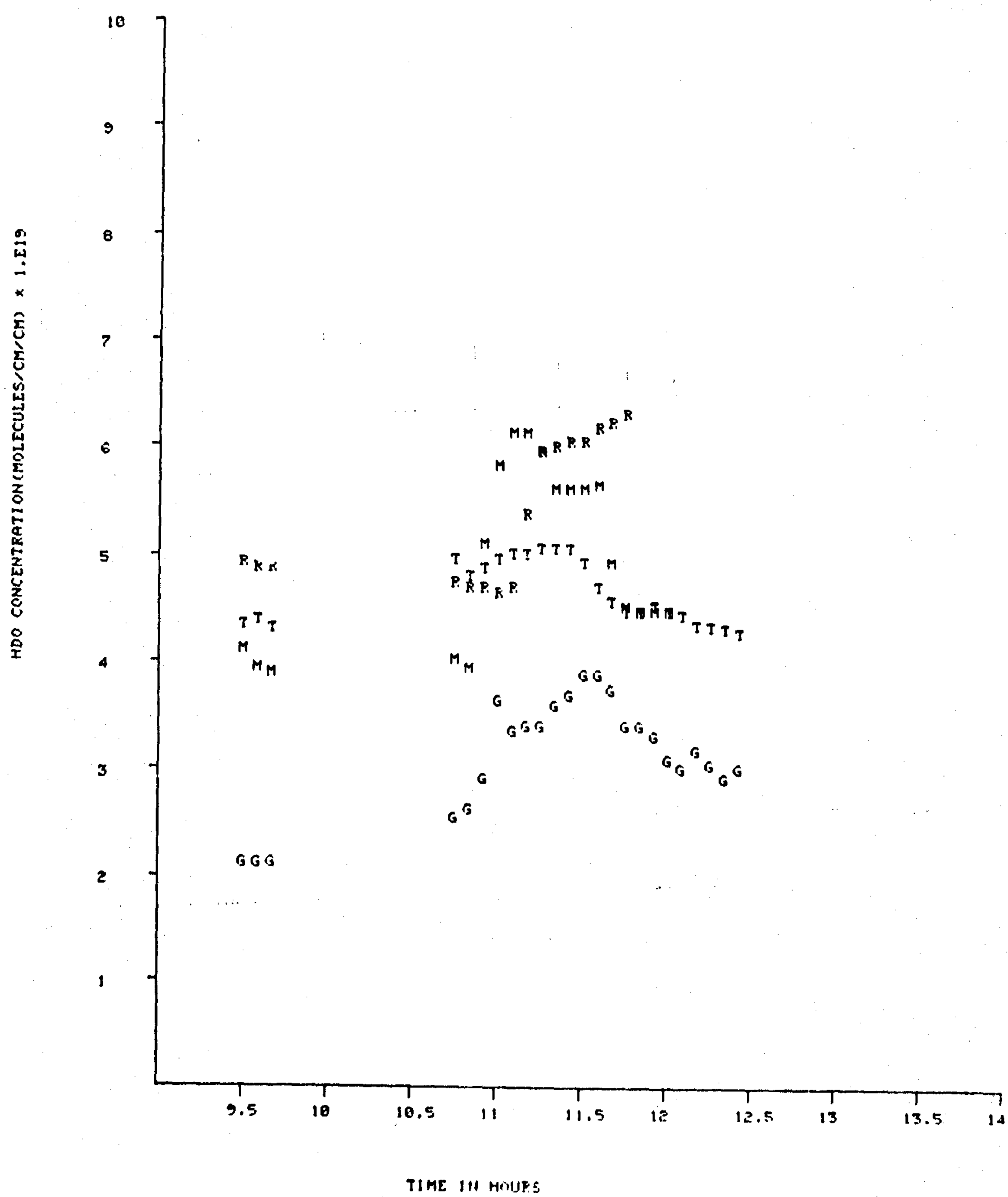


Fig. 5.11 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH. 31-MAR-77. CCAFS
PATH TEMP. 27 DEG C. M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GFCS

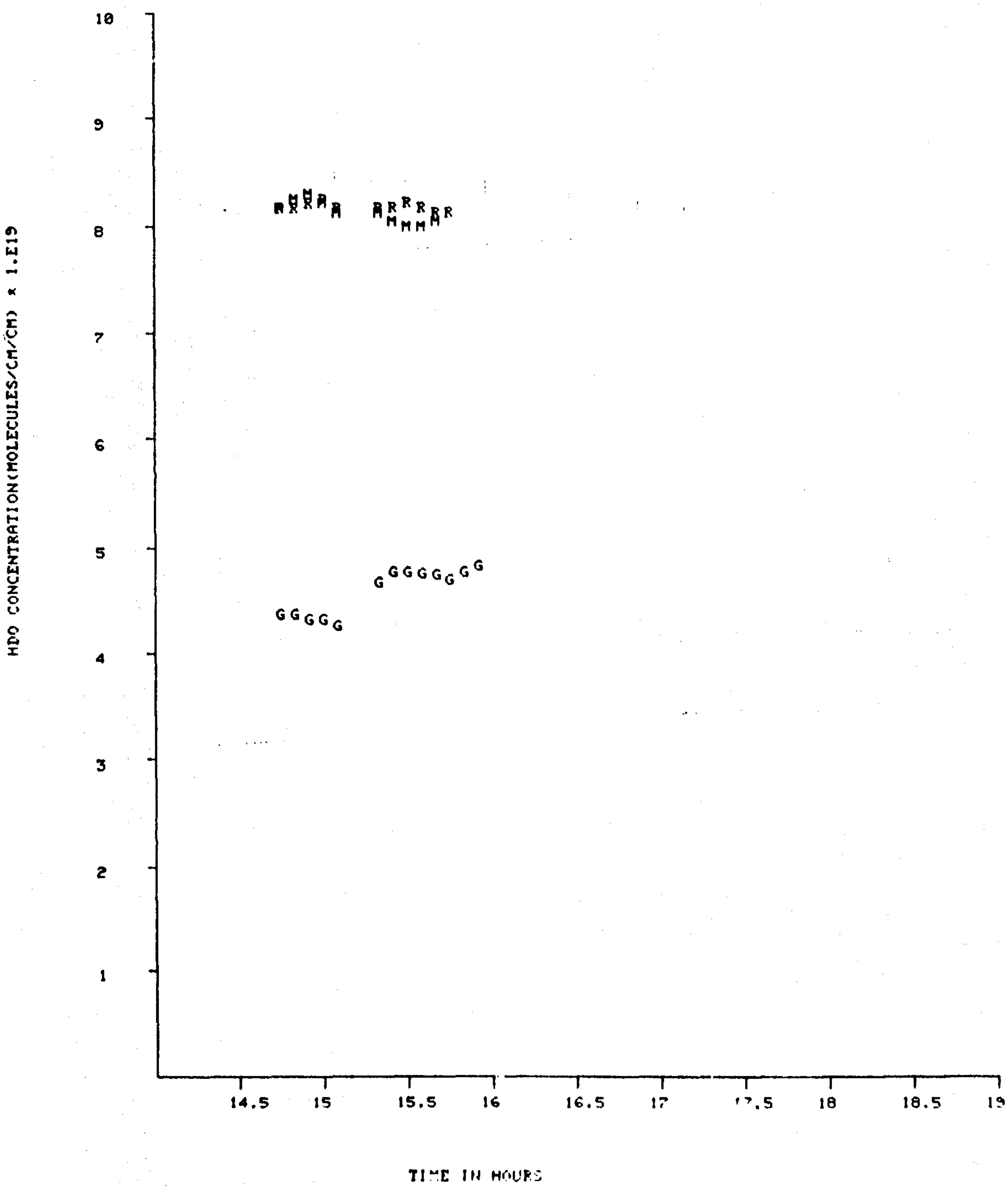


Fig. 5.12 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 1-APR-77, CCAFS
PATH TEMP. 23 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GFCS

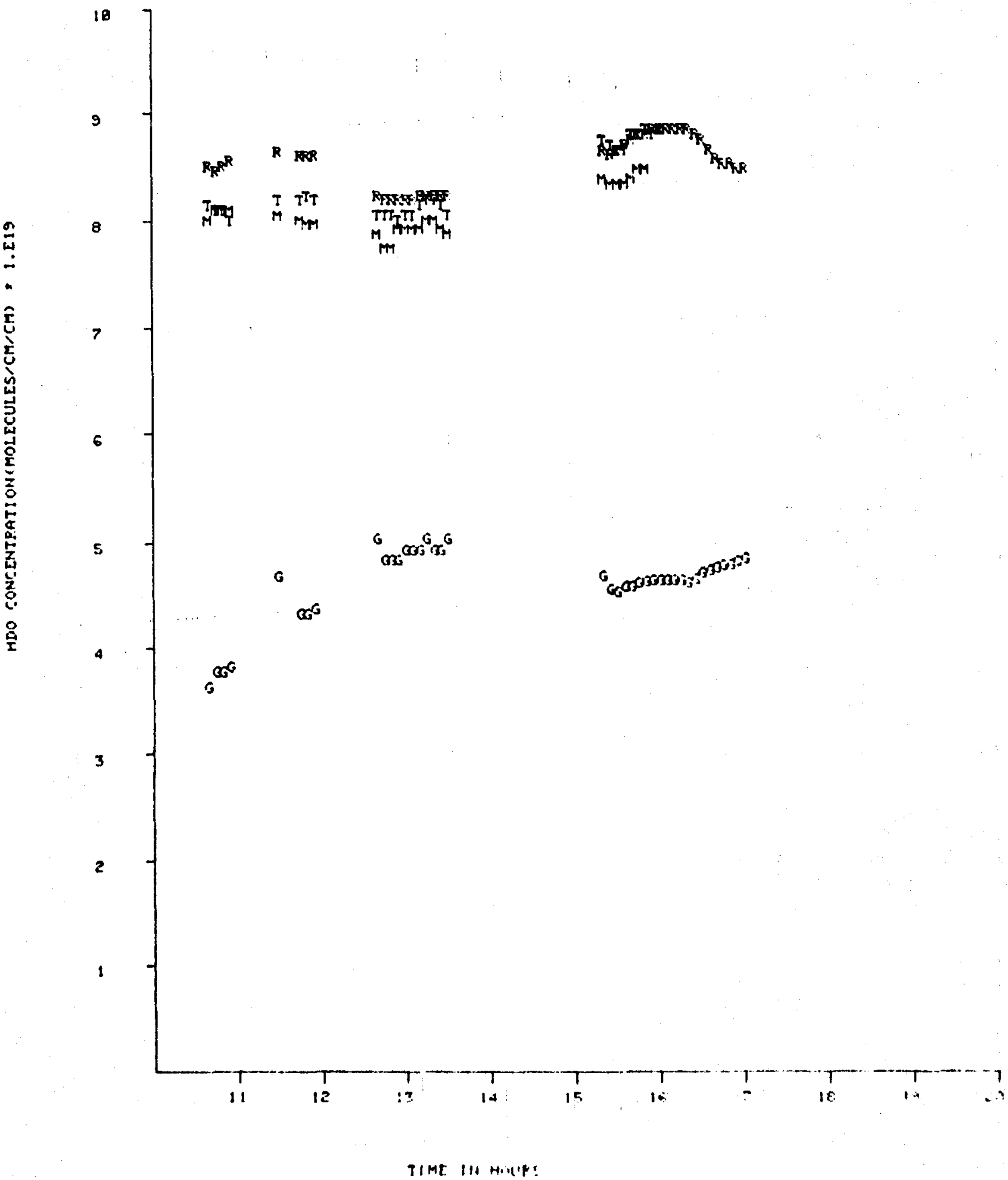


Fig. 5.13 INTEGRATED HDO CONCENTRATION(MOLECULES/CM.CM) FOR 5.12 KM PATH, 2-APR [illegible], COMP PATH TEMP. 24 DEG C. M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET,G-[illegible]

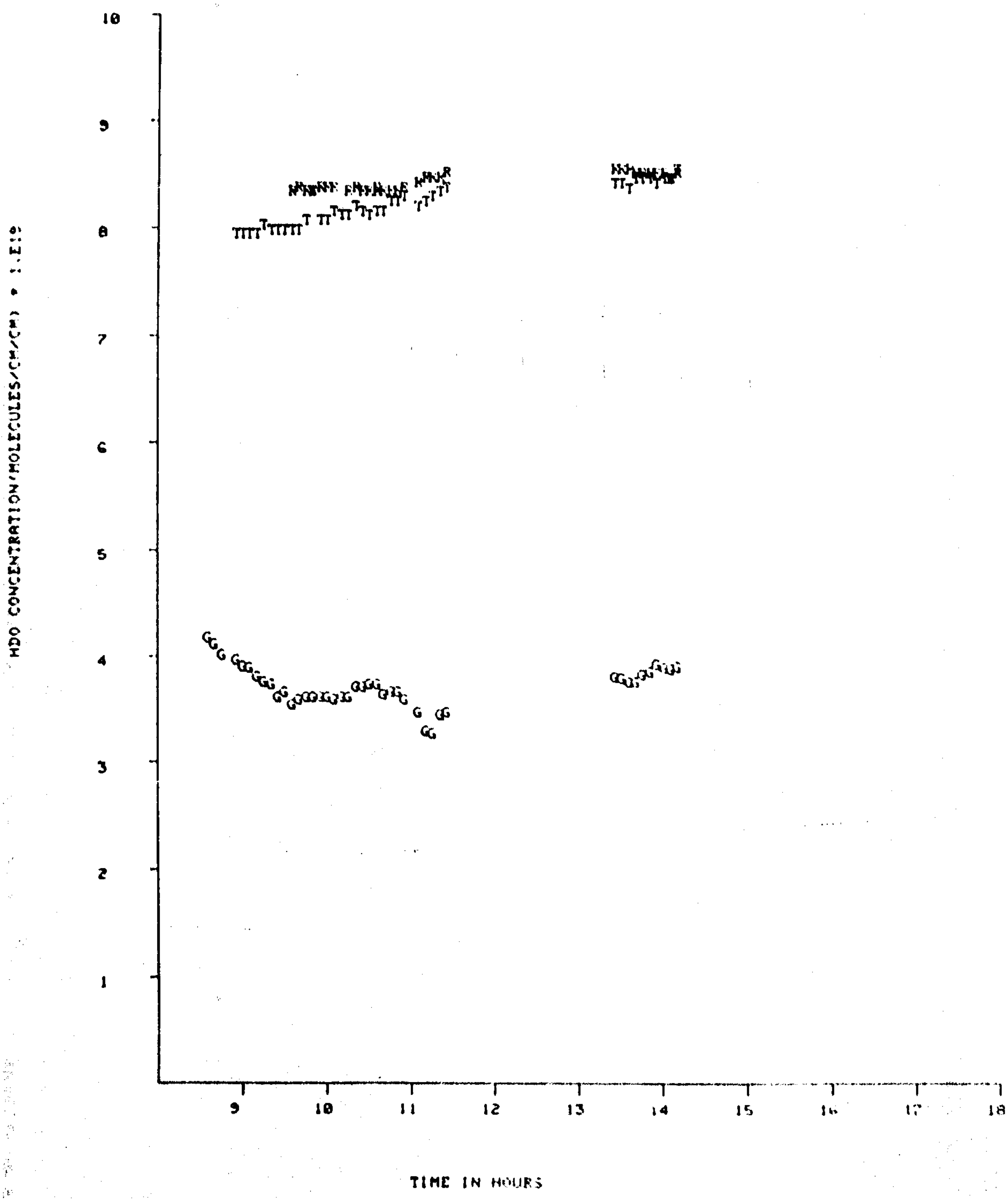


Fig. 5.14 INTEGRATED HDO CONCENTRATION(MOLECULES/CM CM) FOR 5.12 KM PATH 4-APR-77 [illegible]
PATH TEMP. 24 DEG C. M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET, G-GFCS

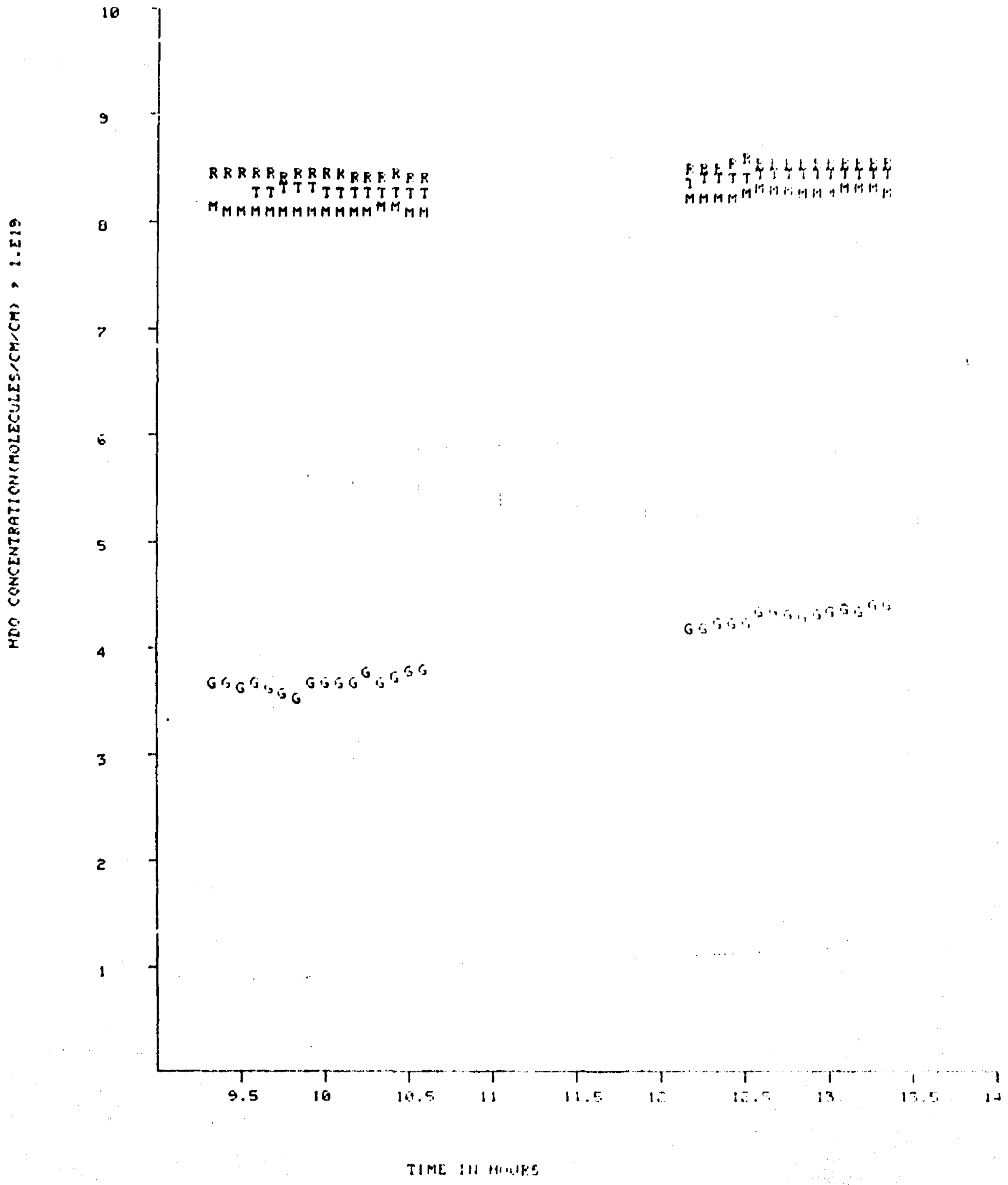


Fig. 5.15 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 5-APR-77 CCHFS
PATH TEMP. 24 DEG C, M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET,G-GPCS

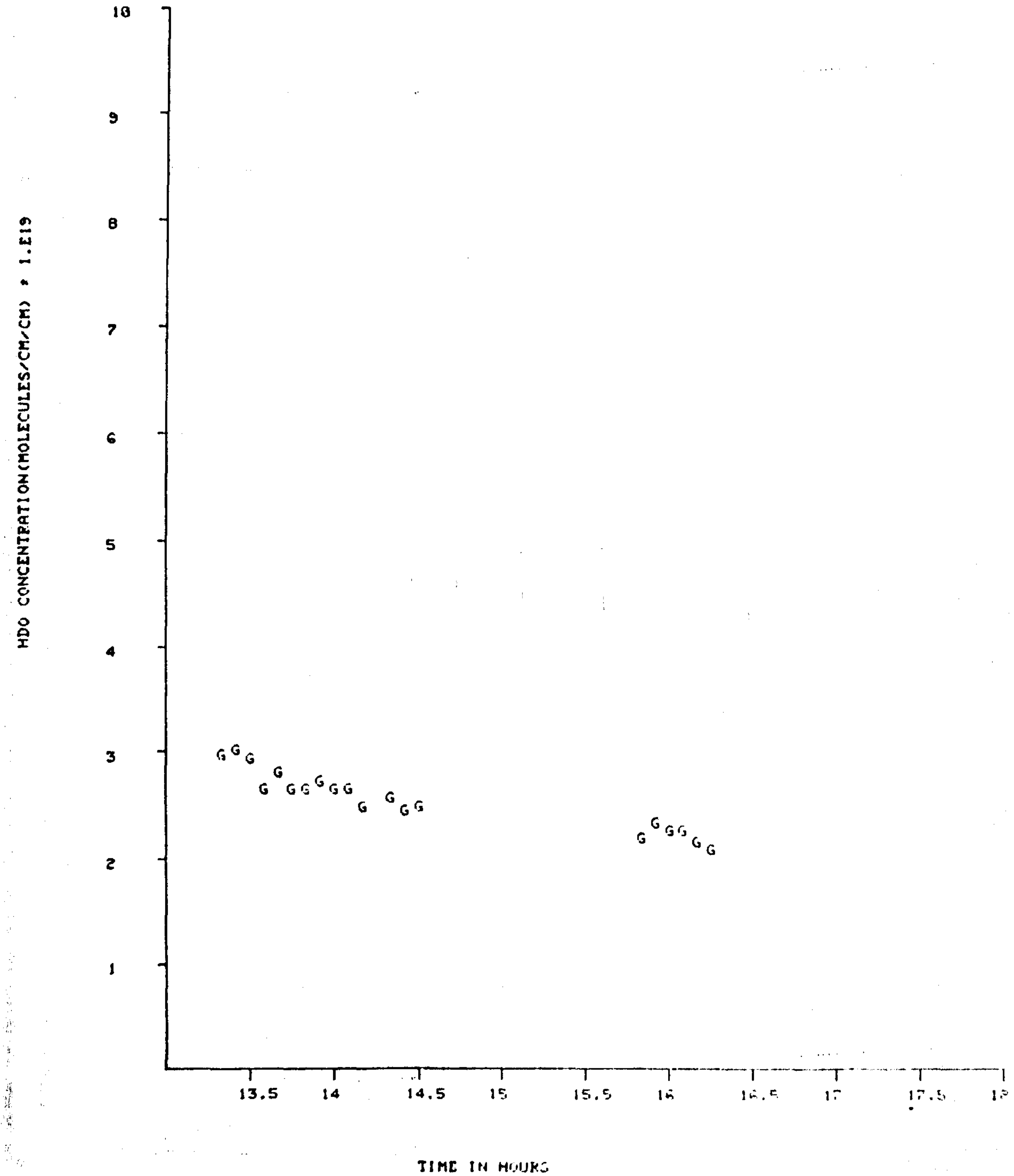


Fig. 5.16 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 16-MAY-77, CONST PATH TEMP. 25 DEG C. M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET,G-GPC

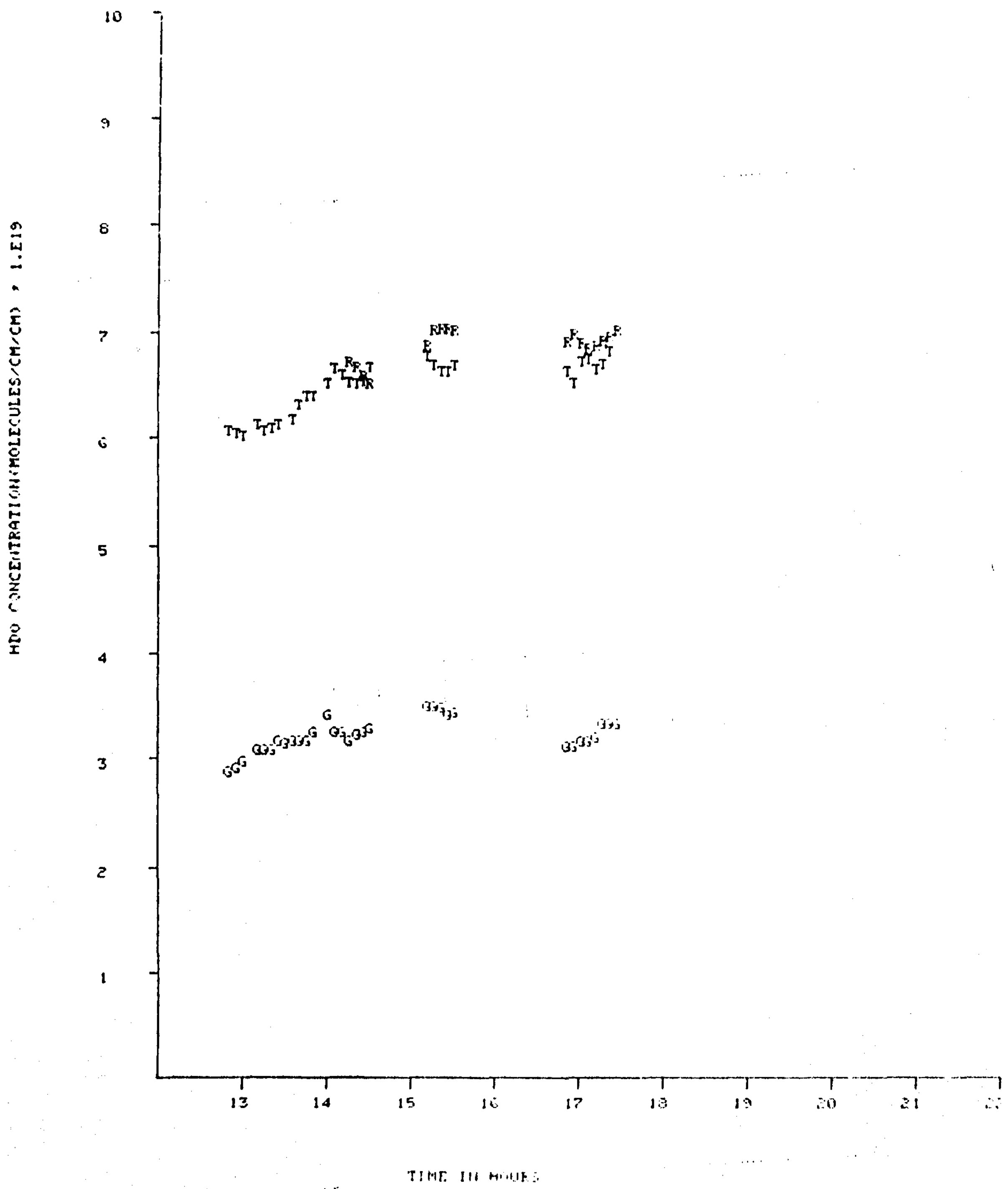


Fig. 5.17 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.12 KM PATH, 17-MAY-77, 0CHFS PATH TEMP. 25 DEG C, M-MOBILE MET STATION T-TRANSMITTER MET, R-RECEIVER MET G-GFCS

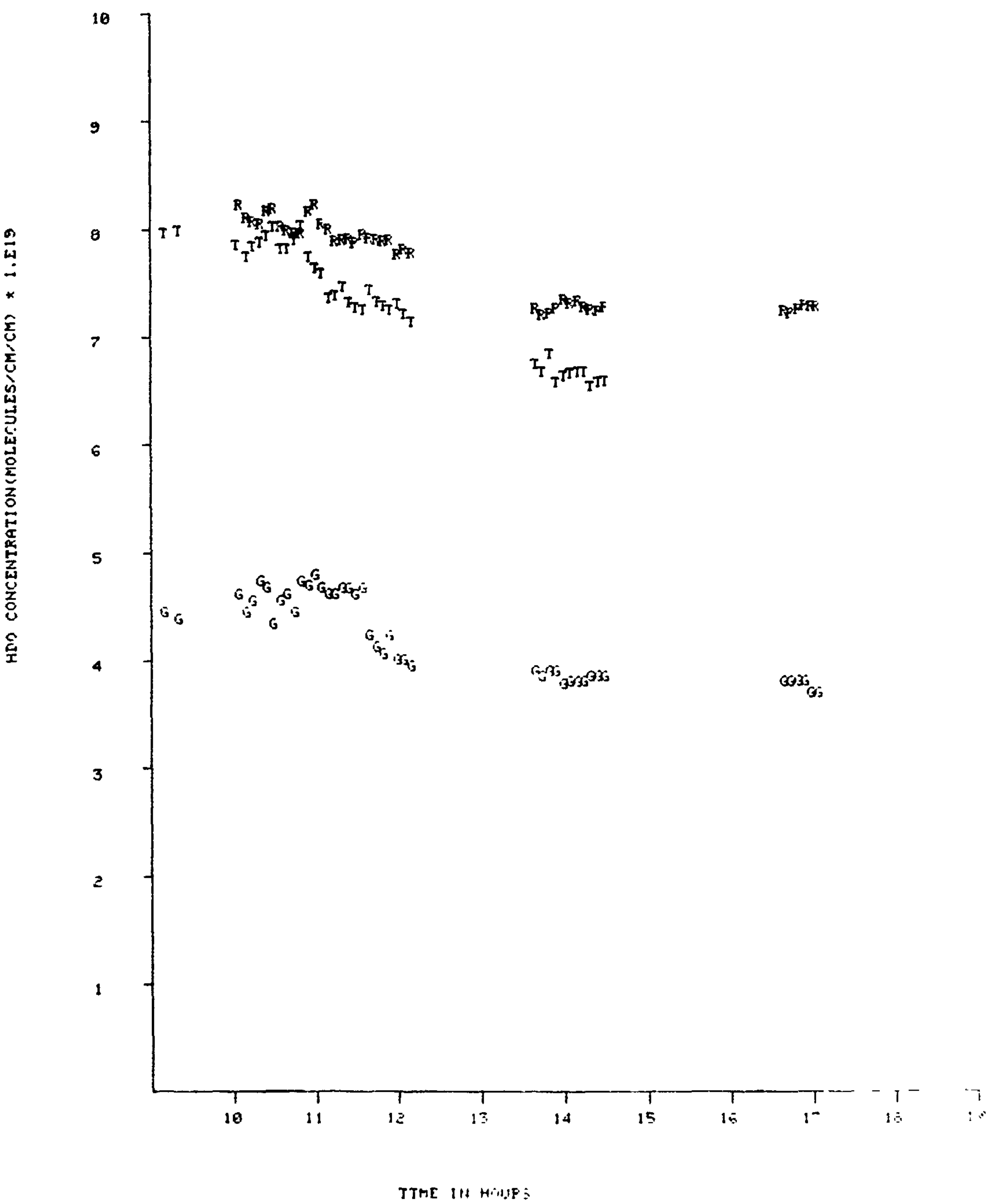


Fig. 5.18 INTEGRATED H CONCENTRATION(MOLECULES/CM/CM) FOR 5.1 KM PATH 16-MA - (HF)
PATH TIME ... DEG C. M-MOBILE MET STATION T-TRANSMITTER MET R-RECEIVER MET G-GR

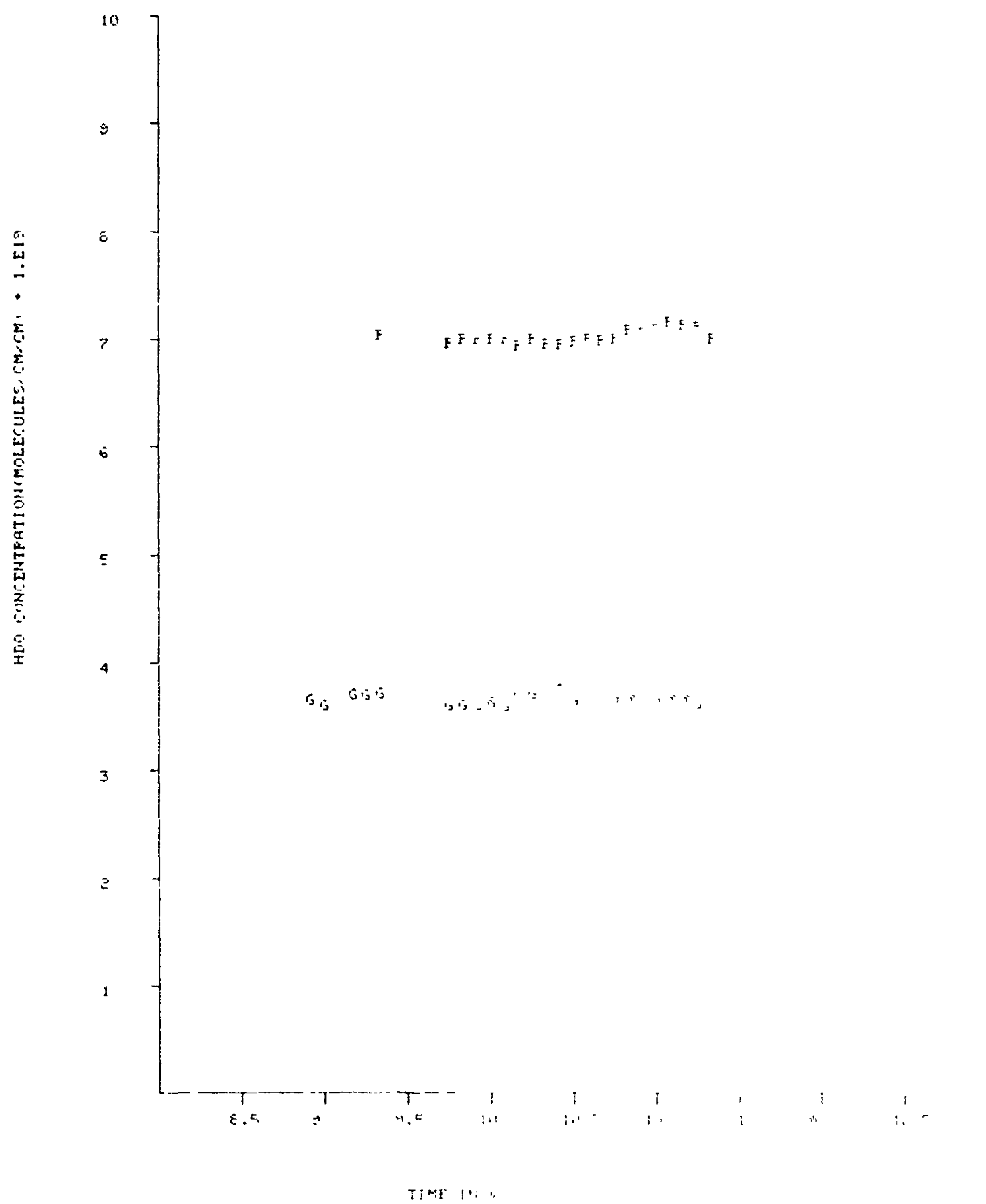


Fig. 5.19 INTEGRATED HDO CONCENTRATION(MOLECULES CM CM) FOR 5.12 KM PATH, 20-MAY-77, CCHFS PATH TEMP. 28 DEG C, M-MOBILE MET STATION, T-TRANSMITTER MET, R-RECEIVER MET, G-GPCS

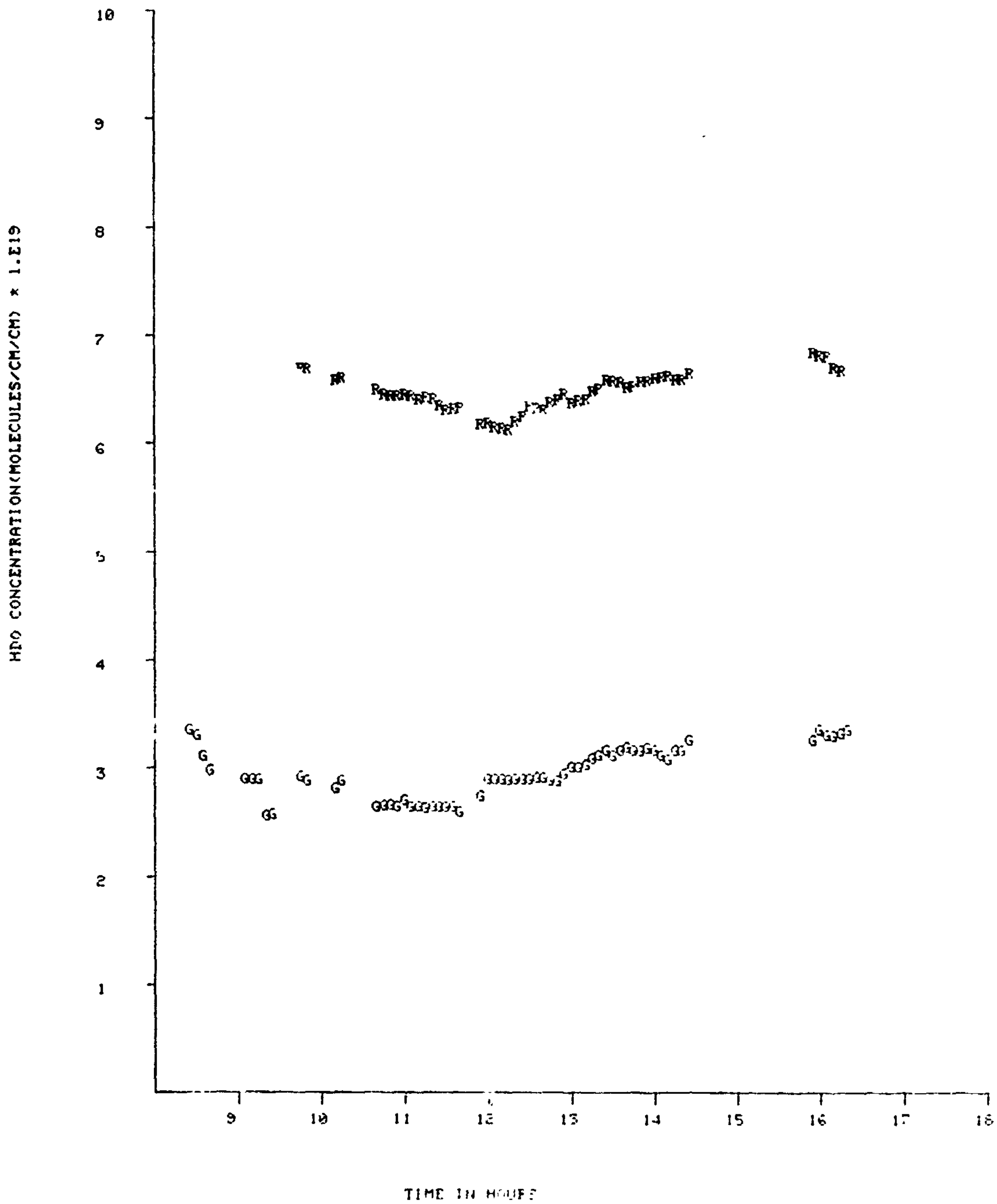


Fig. 5.20 INTEGRATED HDO CONCENTRATION(MOLECULES/CM/CM) FOR 5.[illegible] KM PATH 21-MAY-77, [illegible]
PATH TEMP. 26 DEG C M-MOBILE MET STATION T-TRANSMITTER MET R RECEIVER MET

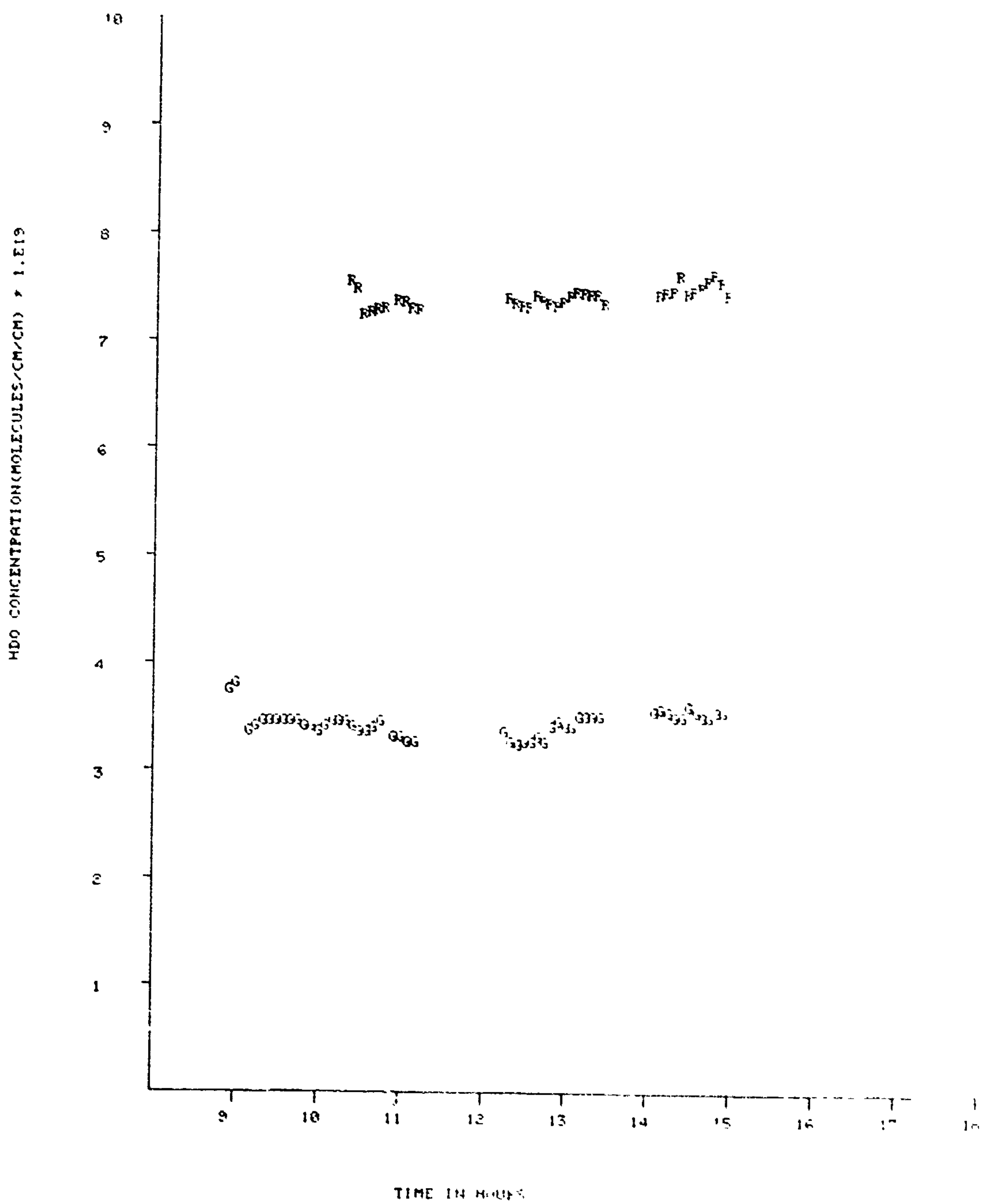


Fig. 5.21 INTEGRATED HDO CONCENTRATION(MOLECULES CM CM) FOR 5.12 KM PATH 23-MAY-77 CCAF
PATH TEMP. 26 DEG C M-MOBILE MET STATION T-TRANSMITTER MET R-RECEIVER MET G-GFCI

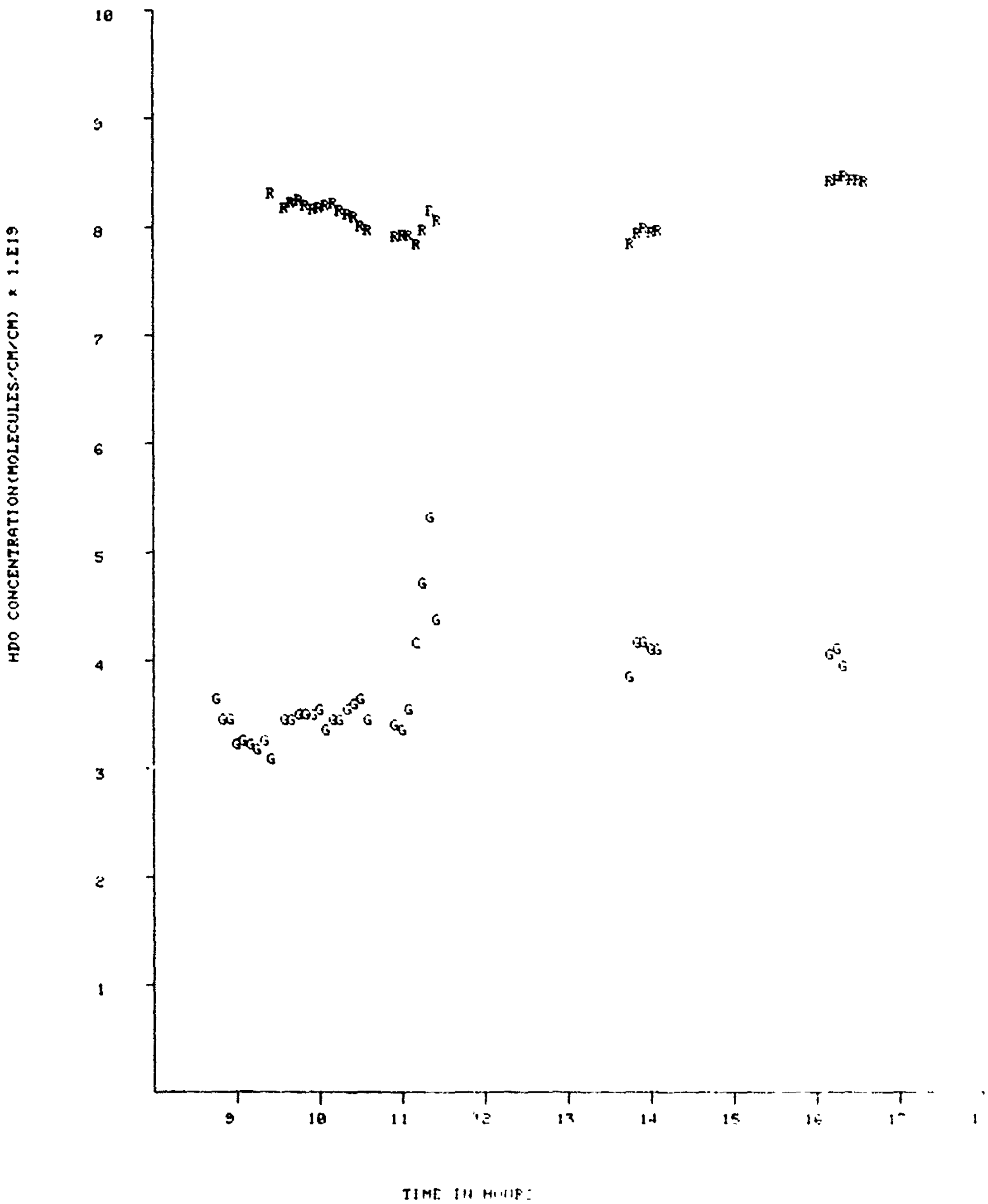


Fig. 5.22 INTEGRATED HDO CONCENTRATION(MOLECULES/CM ... FOR 13 KM PATH, 24-MAY-77 ...
PATH TEMP., 28 DEG C M-MOBILE MET STATION T-TRANSMITTER MET R-RECEIVER MET G-GF...

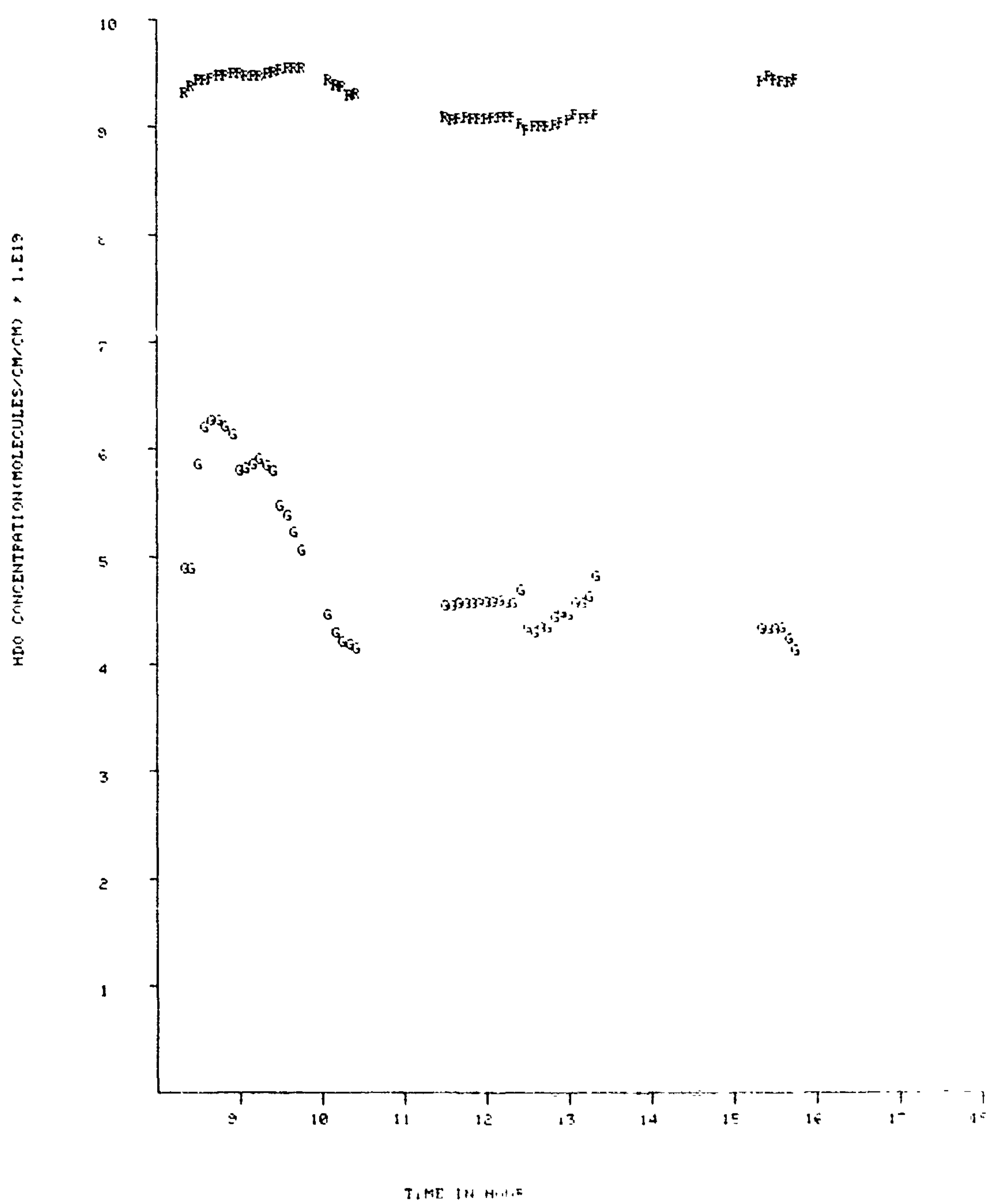
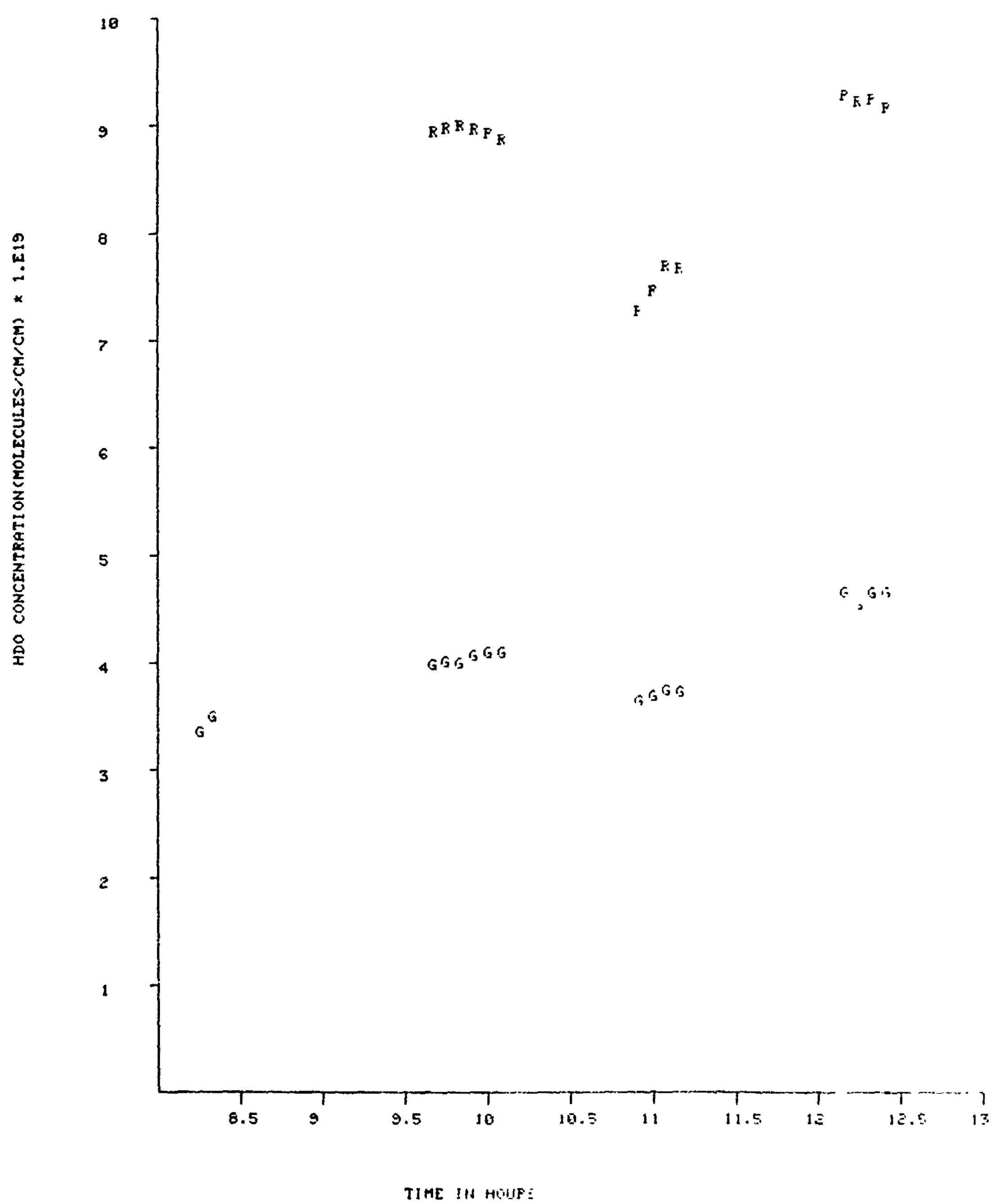


Fig. 5.23 INTEGRATED HDO CONCENTRATION(MOLECULES/CM CM) FOR 5.12 KM PATH. 25-MAY-7. CCHFS
PATH TEMP. 30 DEG C M-MOBILE MET STATION,T-TRANSMITTER MET,R-RECEIVER MET,G-GFCS



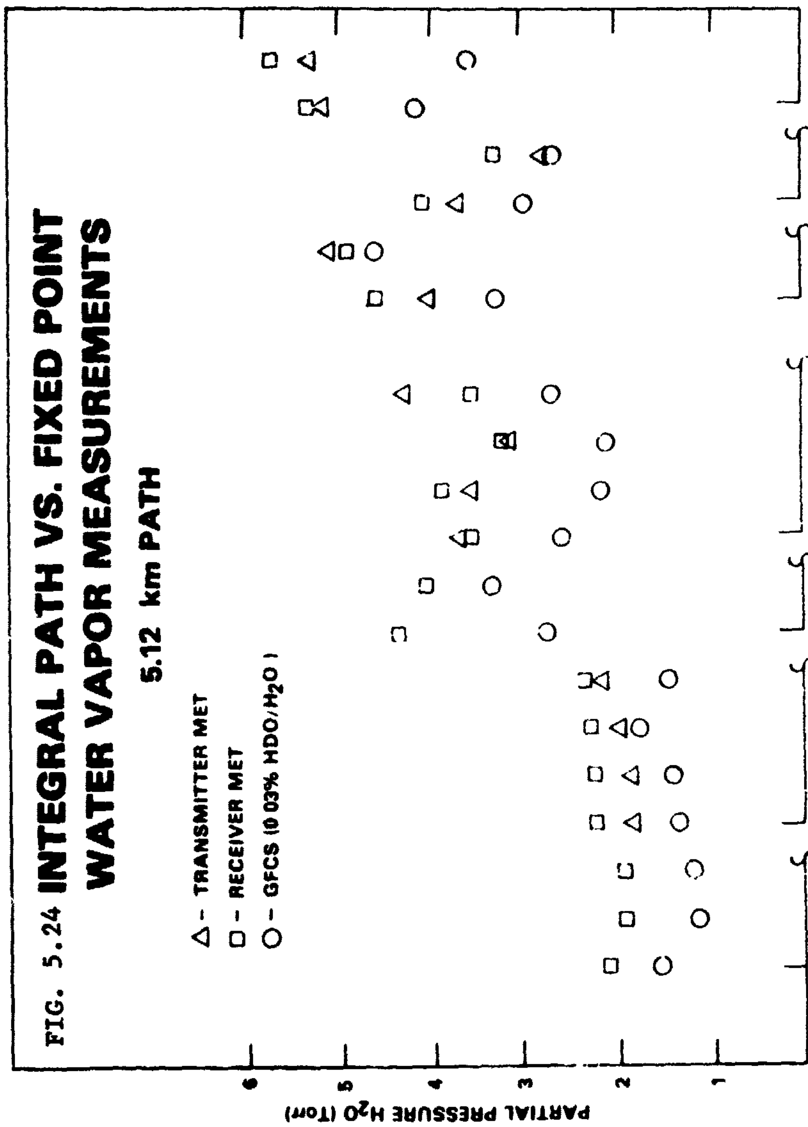


FIG. 5.24 INTEGRAL PATH VS. FIXED POINT WATER VAPOR MEASUREMENTS

5.12 km PATH

Table 6.1.1. Basic meteorological data for the period 23 February through 25 May 1977 as measured at the Cape Canaveral laser test site (see Section 6.1 for definitions).

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
23	FEB	77	1430	T	18.2	13.29	84.9	1018.1	0.37	4.2	
23	FEB	77	1500	T	19.1	13.46	81.4	1017.9	0.37	3.7	
23	FEB	77	1530	T	18.6	13.53	84.4	1017.6	0.37	4.9	
23	FEB	77	1600	T	18.4	13.49	85.2	1017.3	0.37	5.6	
23	FEB	77	1630	T	17.8	13.29	87.2	1016.9	0.37	8.2	
23	FEB	77	1700	T	17.5	13.15	87.6	1016.8	0.37	8.2	
23	FEB	77	1730	T	17.5	13.14	87.7	1016.7	0.37	7.4	
25	FEB	77	1100	T	18.0	9.38	60.6	1019.4	0.36	2.1	179
25	FEB	77	1130	T	16.7	10.07	70.6	1019.6	0.36	1.6	211
25	FEB	77	1200	T	16.3	10.24	74.0	1019.4	0.36	5.5	105
25	FEB	77	1230	T	17.4	10.33	69.4	1019.1	0.36	0.7	148
25	FEB	77	1300	T	17.3	10.30	69.5	1018.6	0.36	1.4	130
25	FEB	77	1330	T	17.4	10.59	71.1	1018.3	0.36	1.7	129
25	FEB	77	1400	T	17.5	10.81	72.3	1018.1	0.36	2.2	142
25	FEB	77	1430	T	17.6	11.39	75.5	1017.9	0.65	1.9	153
25	FEB	77	1500	T	17.7	11.66	77.1	1017.8	0.91	2.1	163
25	FEB	77	1530	T	17.9	11.84	77.3	1017.5	0.81	2.1	162
25	FEB	77	1600	T	17.9	12.39	80.7	1017.4	0.68	1.6	185
25	FEB	77	1630	T	17.8	12.51	82.0	1017.3	0.53	1.7	189
25	FEB	77	1700	T	17.9	12.61	81.9	1017.3	0.38	1.3	209
25	FEB	77	1730	T	17.7	12.86	84.6	1017.2	0.22	1.1	222
25	FEB	77	1800	T	17.6	12.61	83.5	1017.4	0.07	1.0	235
26	FEB	77	1030	T	18.5	14.16	88.9	1017.9	0.94	1.7	121
26	FEB	77	1100	T	18.5	14.15	88.5	1017.9	1.02	1.5	98
26	FEB	77	1130	T	20.0	14.71	83.7	1017.9	1.07	1.5	114
26	FEB	77	1200	T	18.9	14.61	89.5	1017.6	1.11	1.8	97
26	FEB	77	1230	T	19.4	14.92	88.6	1017.2	1.13	1.8	92
26	FEB	77	1300	T	19.2	14.89	89.2	1016.7	1.12	2.3	89
26	FEB	77	1330	T	19.6	15.11	88.7	1016.3	1.08	3.0	106

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
26	FEB	77	1400	T	20.0	14.92	85.0	1016.1	1.03	3.4	118
26	FEB	77	1430	T	19.9	14.94	85.6	1015.7	0.95	4.1	114
26	FEB	77	1500	T	19.8	15.18	87.7	1015.3	0.86	4.2	115
26	FEB	77	1530	T	19.8	15.35	88.8	1015.3	0.74	4.5	116
26	FEB	77	1600	T	19.6	15.45	90.3	1015.3	0.61	4.6	116
26	FEB	77	1630	T	19.5	15.51	91.3	1015.3	0.44	3.8	113
26	FEB	77	1700	T	19.4	15.56	92.4	1015.2	0.28	4.3	114
28	FEB	77	1203	T	13.8	8.97	76.0	1018.2	0.55	4.4	315
28	FEB	77	1233	T	14.1	8.04	66.7	1018.0	0.45	3.7	258
28	FEB	77	1303	T	13.3	7.17	62.9	1017.4	0.25	3.9	283
28	FEB	77	1333	T	13.1	7.00	62.1	1016.8	0.20	4.3	288
28	FEB	77	1400	M	14.0	5.91	49.4	1020.8	0.29	0.9	43
28	FEB	77	1407	T	14.1	7.06	58.6	1016.5	0.55	4.1	241
28	FEB	77	1430	M	14.0	6.07	50.9	1020.8	0.22	0.9	76
28	FEB	77	1431	T	13.6	6.77	58.2	1016.2	0.28	3.4	165
28	FEB	77	1501	T	13.9	6.27	52.8	1016.6	0.32	3.0	187
28	FEB	77	1531	T	14.2	7.38	60.7	1016.6	0.29	3.2	227
28	FEB	77	1601	T	14.4	6.22	50.7	1016.6	0.31	2.9	172
28	FEB	77	1631	T	14.3	6.33	51.8	1016.9	0.26	3.3	213
28	FEB	77	1701	T	14.1	6.46	53.7	1017.0	0.08	2.7	247
28	FEB	77	1731	T	14.2	5.96	49.2	1017.1	0.03	2.4	215
28	FEB	77	1801	T	14.4	6.27	51.1	1017.6	0.01	2.4	256
1	MAR	77	1100	M	15.1	4.61	35.9	1027.3	1.07	1.3	259
1	MAR	77	1102	T	15.1	4.86	37.9	1022.8	1.06	5.5	141
1	MAR	77	1130	M	15.1	4.73	37.0	1027.3	1.14	1.3	275
1	MAR	77	1200	M	15.1	4.58	35.6	1027.3	1.19	1.3	272
1	MAR	77	1230	M	15.5	4.42	33.6	1027.2	1.21	1.1	261
1	MAR	77	1300	T	14.8	4.48	35.6	1021.8	1.18	5.8	194
1	MAR	77	1330	T	14.7	4.26	34.1	1021.6	1.16	5.8	144

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
1	MAR	77	1400	T	14.6	4.21	33.9	1021.3	1.10	5.3	104
1	MAR	77	1430	T	14.7	4.44	35.5	1021.1	1.03	5.5	207
1	MAR	77	1500	T	14.8	4.72	37.4	1020.9	0.94	4.9	176
1	MAR	77	1530	T	14.6	4.81	38.7	1020.7	0.82	4.6	83
1	MAR	77	1600	T	14.6	4.21	33.9	1020.7	0.69	4.5	75
1	MAR	77	1630	T	14.6	4.41	35.5	1020.7	0.54	4.1	51
2	MAR	77	900	M	13.9	6.09	51.2	1027.8	0.60	0.5	323
2	MAR	77	930	T	15.8	5.49	40.9	1023.4	0.73	2.8	270
2	MAR	77	930	M	16.0	5.28	38.7	1027.8	0.74	0.6	126
2	MAR	77	1000	T	16.6	4.97	35.1	1023.5	0.85	3.6	67
2	MAR	77	1000	M	16.9	5.35	37.2	1028.5	0.85	0.5	256
2	MAR	77	1030	T	16.8	4.64	32.5	1023.7	0.95	3.7	117
2	MAR	77	1030	M	18.1	5.28	34.0	1028.5	0.96	0.7	44
2	MAR	77	1100	T	17.2	5.22	35.4	1023.6	1.03	3.5	87
2	MAR	77	1100	M	18.2	5.45	34.8	1028.5	1.05	0.8	31
2	MAR	77	1130	T	16.9	4.85	33.6	1023.7	1.09	4.0	131
2	MAR	77	1130	M	18.3	5.42	34.5	1028.5	1.11	0.9	31
2	MAR	77	1200	T	16.9	5.55	33.5	1023.6	1.12	4.6	70
2	MAR	77	1200	M	18.1	5.90	37.8	1028.5	0.98	0.9	24
2	MAR	77	1230	T	[illegible]	6.61	47.1	1023.3	1.18	5.1	79
2	MAR	77	1230	M				1028.5	1.19	1.0	23
2	MAR	77	1300	T	16.4	6.80	48.7	1022.9	1.01	3.9	173
2	MAR	77	1300	M	17.4	6.08	40.8	1028.2	0.99	0.9	36
2	MAR	77	1330	T	16.7	7.61	53.4	1022.7	1.10	3.7	36
2	MAR	77	1330	M	18.2	6.76	43.2	1027.9	1.13	0.9	35
2	MAR	77	1400	T	17.0	7.92	54.8	1022.2	1.06	3.8	99
2	MAR	77	1400	M	17.6	7.31	48.4	1027.3	1.08	0.8	40
2	MAR	77	1430	T	16.7	7.99	56.0	1022.0	0.99	3.9	43
2	MAR	77	1430	M	17.9	7.55	49.1	1027.0	1.01	0.8	29

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
2	MAR	77	1500	M				1027.0	0.91	0.8	37
2	MAR	77	1530	M	17.8	7.92	52.0	1026.4	0.79	0.7	32
3	MAR	77	1000	T	17.7	11.67	77.2	1020.8	0.49	4.5	90
3	MAR	77	1000	M	17.5	11.73	78.4	1025.0	0.62	0.8	109
3	MAR	77	1030	T	17.8	11.83	77.4	1020.9	0.88	3.9	99
3	MAR	77	1030	M	14.1	9.01	74.6	1025.1	0.70	0.7	112
3	MAR	77	1100	T	17.5	12.45	82.9	1021.1	0.69	2.5	100
3	MAR	77	1100	M	17.6	12.36	82.0	1025.3	0.51	0.4	126
3	MAR	77	1130	T	18.2	12.74	81.6	1020.9	0.89	2.3	81
3	MAR	77	1130	M	17.9	12.73	83.0	1025.1	0.73	0.4	100
3	MAR	77	1200	T	18.0	12.57	81.3	1020.3	0.79	4.2	92
3	MAR	77	1200	M	17.8	12.68	83.2	1024.5	0.69	0.5	107
3	MAR	77	1230	T	17.9	12.79	83.3	1020.0	1.09	3.6	96
3	MAR	77	1230	M	17.9	12.77	83.3	1024.5	0.68	0.7	117
3	MAR	77	1300	T	17.9	13.17	85.9	1019.4	1.07	2.7	89
3	MAR	77	1300	M	17.7	13.11	86.6	1023.9	0.45	0.5	115
3	MAR	77	1330	T	19.0	13.39	81.1	1019.2	1.10	1.8	104
3	MAR	77	1330	M	18.5	13.40	83.8	1023.1	1.17	0.4	105
3	MAR	77	1400	T	18.6	13.23	82.2	1019.1	1.04	1.6	94
3	MAR	77	1430	T	18.6	13.47	84.0	1018.4	0.97	3.2	103
3	MAR	77	1500	T	18.3	13.24	84.1	1018.3	0.88	3.8	94
4	MAR	77	900	M	18.0	14.62	94.7	1019.7	0.59	0.9	169
4	MAR	77	930	M	18.1	14.61	93.9	1019.8	0.72	1.0	165
4	MAR	77	1000	M	18.6	14.86	92.7	1019.8	0.85	1.2	159
4	MAR	77	1100	M	18.8	14.96	91.8	1020.6	0.67	1.0	158
4	MAR	77	1130	M	19.2	15.10	90.5	1020.7	1.04	1.0	155
4	MAR	77	1200	M	19.3	15.21	90.7	1020.4	0.80	1.2	150
4	MAR	77	1230	M	19.3	15.42	92.0	1020.6	0.57	1.3	149
4	MAR	77	1300	M	19.5	15.50	91.1	1020.1	1.07	1.3	148

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
4	MAR	77	1330	M	19.6	15.59	91.0	1019.7	1.13	1.4	150
4	MAR	77	1400	M	19.8	15.58	90.0	1019.6	1.02	1.4	155
4	MAR	77	1430	M	19.8	15.59	90.3	1019.4	0.94	1.3	151
4	MAR	77	1500	M	19.9	15.67	90.1	1018.7	0.86	1.5	151
4	MAR	77	1530	M	19.9	15.72	90.5	1018.4	0.77	1.5	153
7	MAR	77	900	S	22.3	17.24	85.4	1017.9	2.47		221
7	MAR	77	930	S	23.5	17.35	79.8	1018.0	2.19		228
7	MAR	77	1000	S	24.5	17.35	75.4	1018.0	2.19		212
7	MAR	77	1030	S	25.4	17.30	71.1	1018.0	2.19		226
7	MAR	77	1100	S	26.6	17.20	65.9	1018.0	2.19		248
7	MAR	77	1130	S	27.6	16.94	61.0	1018.0	2.19		247
7	MAR	77	1200	S	27.9	16.62	59.1	1017.8	2.19		266
7	MAR	77	1230	S	28.1	16.69	58.6	1017.6	2.19		267
7	MAR	77	1300	S	28.0	16.36	57.6	1017.3	2.19		278
7	MAR	77	1330	S	19.8	13.21	76.4	1017.8	2.19		18
7	MAR	77	1400	S	18.2	13.06	83.4	1017.8	2.19		21
7	MAR	77	1430	S	17.2	12.56	85.6	1017.9	2.19		34
7	MAR	77	1500	S	16.4	12.26	87.6	1019.1	2.19		98
7	MAR	77	1530	S	16.1	11.90	86.8	1018.3	2.19		94
7	MAR	77	1600	S	15.9	11.79	87.2	1018.4	2.19		23
7	MAR	77	1630	S	15.6	11.84	89.0	1018.6	2.19		23
7	MAR	77	1700	S	15.3	11.70	90.2	1019.5	2.19		21
8	MAR	77	900	S	18.2	9.17	58.6				
8	MAR	77	930	S	20.0	9.84	56.2				
8	MAR	77	1000	T	19.8	9.99	57.7	1021.9	0.85	3.3	27
9	MAR	77	1000	M	17.0	11.60	80.0	1028.1	0.25	0.5	70
8	MAR	77	1000	S	20.5	9.54	52.7				
9	MAR	77	1030	T	18.4	11.20	70.8	1024.3	0.25	4.4	60
9	MAR	77	1030	M	17.5	11.21	75.1	1028.4	0.63	1.0	77

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
8	MAR	77	1030	S	20.7	9.36	51.0				
9	MAR	77	1100	T	18.5	11.50	72.0	1024.0	0.72	4.4	64
9	MAR	77	1100	M	17.6	11.05	73.3	1028.7	0.60	1.1	78
9	MAR	77	1130	T	19.1	11.06	66.9	1023.7	0.50	4.0	55
9	MAR	77	1130	M	19.0	10.59	64.5	1028.3	0.71	1.3	69
9	MAR	77	1200	T	19.8	11.13	64.3	1023.5	0.89	4.4	57
9	MAR	77	1200	M	18.7	10.68	66.3	1028.3	1.26	1.2	77
9	MAR	77	1230	T	20.2	11.00	62.2	1023.3	1.24	4.0	52
9	MAR	77	1230	M	19.2	10.51	63.0	1027.9	1.21	1.3	76
9	MAR	77	1300	T	20.5	11.77	65.1	1022.7	1.18	5.0	63
9	MAR	77	1300	M	18.8	11.45	70.5	1027.2	1.19	1.1	75
9	MAR	77	1330	T	19.2	11.92	71.4	1022.3	1.00	4.4	67
9	MAR	77	1330	M	18.5	11.69	73.1	1027.0	1.10	0.8	81
9	MAR	77	1400	T	18.7	11.96	74.2	1022.0	1.01	3.8	72
9	MAR	77	1430	T	19.6	11.93	70.0	1021.8	0.92	4.3	66
9	MAR	77	1500	T	20.0	11.14	63.7	1021.3	0.75	3.5	57
9	MAR	77	1530	T	19.4	11.45	67.8	1021.2	0.66	3.3	68
9	MAR	77	1600	T	19.6	10.98	64.2	1021.0	0.49	3.4	63
9	MAR	77	1757	S	18.8	12.21	75.1	1024.0	0.10	0.0	59
10	MAR	77	900	M	17.5	13.51	90.3	1021.7	0.27	0.6	94
10	MAR	77	930	M	17.9	13.58	88.4	1021.5	0.67	0.7	96
10	MAR	77	1000	M	18.1	13.50	87.1	1021.7	0.34	0.8	110
10	MAR	77	1003	S	18.9	14.43	88.0	1020.9	0.31	3.7	112
10	MAR	77	1030	M	18.1	13.68	87.8	1022.0	0.27	1.0	104
10	MAR	77	1033	S	19.2	14.41	86.5	1020.9	0.27	4.4	104
10	MAR	77	1100	M	18.1	13.75	88.5	1021.8	0.29	0.8	111
10	MAR	77	1103	S	19.1	14.43	87.1	1020.9	0.40	4.0	112
10	MAR	77	1130	M	17.9	13.73	89.3	1021.8	0.51	0.6	113
10	MAR	77	1133	S	19.4	14.62	86.8	1020.8	0.66	2.3	118

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
10	MAR	77	1200	M	18.1	13.76	88.2	1021.4	0.51	0.4	108
10	MAR	77	1203	S	19.9	14.75	84.8	1020.7	0.66	1.9	111
10	MAR	77	1230	M	18.1	13.76	88.5	1021.2	0.39	0.3	104
10	MAR	77	1233	S	19.7	14.67	85.1	1020.4	0.46	1.5	104
10	MAR	77	1303	S	20.5	14.58	80.6	1020.0	0.62	1.8	93
10	MAR	77	1333	S	20.3	14.39	80.5	1019.8	0.43	2.0	82
10	MAR	77	1400	T	18.9	14.45	88.4	1016.5	0.15	2.5	65
10	MAR	77	1403	S	19.9	14.27	82.1	1019.3	0.35	2.2	80
10	MAR	77	1430	T	19.9	14.64	83.8	1016.3	0.12	2.4	61
10	MAR	77	1433	S	20.0	14.36	82.1	1019.2	0.34	2.2	62
10	MAR	77	1503	S	20.4	14.65	81.8	1019.3	0.19	1.0	49
10	MAR	77	1533	S	20.6	15.03	82.6	1019.4	0.31	1.0	58
11	MAR	77	930	M	18.6	15.41	96.3	1021.3	0.32	0.1	156
11	MAR	77	1000	M	19.0	15.68	95.2	1021.6	0.35	0.1	112
11	MAR	77	1030	M	19.1	15.71	95.1	1021.8	0.54	0.3	87
11	MAR	77	1100	M	19.5	16.03	94.1	1022.1	1.07	0.3	117
11	MAR	77	1133	S	22.3	15.85	78.3	1020.9	0.71	3.5	0
11	MAR	77	1203	S	22.1	16.29	81.5	1020.9	0.61	0.1	0
11	MAR	77	1233	S	21.7	16.42	84.5	1020.4	1.04	0.1	0
11	MAR	77	1303	S	22.9	16.52	78.8	1020.0	1.03	0.1	97
11	MAR	77	1333	S	22.9	16.73	80.0	1019.7	0.74	0.1	98
11	MAR	77	1403	S	22.9	16.69	79.7	1019.6	0.96	0.1	102
11	MAR	77	1433	S	22.2	16.83	83.8	1019.1	0.90	0.1	118
11	MAR	77	1503	S	23.2	16.92	79.5	1019.0	0.96	0.1	101
11	MAR	77	1533	S	23.3	16.83	78.6	1018.8	0.69	0.1	98
11	MAR	77	1603	S	23.5	16.83	77.3	1019.0	0.65	0.1	78
11	MAR	77	1633	S	22.8	16.60	79.8	1018.9	0.22	0.0	92
12	MAR	77	900	M	19.1	15.26	92.3	1021.1	0.52	0.6	120
12	MAR	77	930	T	19.3	15.46	92.2	1017.7	0.61	2.8	108

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
12	MAR	77	930	M	19.2	15.29	91.6	1021.4	0.58	0.6	125
12	MAR	77	1000	T	19.4	15.53	91.9	1017.8	0.71	2.6	115
12	MAR	77	1000	M	19.4	15.36	91.2	1021.4	0.73	0.6	138
12	MAR	77	1030	T	19.8	15.75	91.2	1017.8	0.86	2.5	113
12	MAR	77	1030	M	19.5	15.43	91.0	1021.4	0.80	0.5	141
12	MAR	77	1100	M	19.8	15.64	90.3	1021.4	1.06	0.4	149
12	MAR	77	1129	S	23.6	16.67	76.3	1020.4	1.14		145
12	MAR	77	1130	T	19.8	15.88	91.8	1017.7	1.05	1.8	121
12	MAR	77	1130	M	20.0	15.72	89.9	1021.2	1.06	0.4	147
12	MAR	77	1159	S	24.1	16.94	75.4	1020.1	1.16		147
12	MAR	77	1200	T	20.3	16.11	90.5	1017.2	1.06	1.7	119
12	MAR	77	1200	M	0.1	15.82	89.9	1021.1	1.08	0.4	147
12	MAR	77	1229	S	24.5	17.09	74.2	1019.9	1.25		149
12	MAR	77	1230	T	20.5	16.15	89.4	1017.0	1.17	1.7	119
12	MAR	77	1230	M	20.5	15.98	88.5	1020.6	0.99	0.4	154
12	MAR	77	1259	S	24.1	17.05	75.5	1019.3	1.13		140
12	MAR	77	1300	T	20.3	16.31	91.4	1016.7	1.10	1.7	130
12	MAR	77	1300	M	20.6	16.13	88.8	1020.3	1.12	0.3	148
12	MAR	77	1329	S	24.3	17.20	75.4	1019.0	1.08		140
12	MAR	77	1330	T	20.3	16.44	91.9	1016.4	1.01	1.6	127
12	MAR	77	1330	M	20.7	16.26	88.7	1020.0	0.88	0.3	137
12	MAR	77	1359	S	23.7	17.07	77.8	1018.2	1.16	0.0	135
12	MAR	77	1400	T	20.3	16.58	92.7	1015.6	1.04	3.1	127
12	MAR	77	1400	M	20.5	16.42	90.8	1019.5	1.08	0.7	133
12	MAR	77	1429	S	24.4	17.30	75.5	1017.8	1.07		141
12	MAR	77	1430	T	20.5	16.88	93.2	1015.2	1.01	3.2	136
12	MAR	77	1430	M	20.6	16.65	91.4	1019.1	1.06	0.6	141
12	MAR	77	1459	S	24.4	17.33	75.4	1017.6	0.93		149
12	MAR	77	1500	T	20.4	16.77	93.2	1015.0	0.90	3.1	138

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
12	MAR	77	1500	M	20.7	16.70	91.3	1018.6	0.91	0.7	151
12	MAR	77	1529	S	24.4	17.39	75.7	1017.6	0.86		145
12	MAR	77	1530	M	20.6	16.66	91.4	1018.6	0.81	0.6	143
12	MAR	77	1559	S	23.6	17.28	79.3	1017.2	0.73		133
12	MAR	77	1600	M	20.5	16.62	92.1	1018.2	0.70	0.7	136
12	MAR	77	1630	M	20.5	16.67	91.9	1018.0	0.53	0.7	126
12	MAR	77	1700	M	20.5	16.65	92.0	1018.0	0.41	0.8	133
14	MAR	77	930	M	22.9	8.92	42.6	1019.2	0.75	0.5	201
14	MAR	77	1000	T	23.0	8.03	38.2	1015.6	0.93	2.7	70
14	MAR	77	1000	M	23.4	7.58	35.1	1019.2	0.89	0.7	44
14	MAR	77	1028	S	26.5	9.62	37.1	1018.4	1.01		49
14	MAR	77	1030	T	23.4	6.83	31.5	1015.7	1.02	2.8	25
14	MAR	77	1030	M	23.9	6.24	28.0	1019.3	0.99	0.5	50
14	MAR	77	1100	T	23.6	6.66	30.4	1015.7	1.10	2.8	28
14	MAR	77	1100	M	24.4	5.67	24.7	1019.2	1.07	0.7	45
14	MAR	77	1130	T	23.7	6.50	29.6	1015.7	1.17	3.6	42
14	MAR	77	1130	M	24.4	5.30	23.1	1019.2	1.14	1.0	28
14	MAR	77	1200	T	23.3	6.59	30.6	1015.4	1.21	4.2	19
14	MAR	77	1200	M	24.6	5.49	23.7	1019.2	1.19	1.0	40
14	MAR	77	1230	T	23.6	7.16	32.8	1015.2	1.23	3.3	50
14	MAR	77	1230	M	24.4	6.06	26.4	1019.0	1.21	0.9	27
14	MAR	77	1258	S	26.0	7.06	27.9	1017.6	1.26		42
14	MAR	77	1300	T	23.1	7.39	34.8	1015.0	1.23	3.9	111
14	MAR	77	1300	M	24.3	6.27	27.5	1018.9	1.20	1.0	30
14	MAR	77	1330	T	23.4	7.29	33.9	1014.7	1.20	3.9	61
14	MAR	77	1330	M	24.3	6.19	27.1	1018.4	1.17	0.9	66
14	MAR	77	1400	T	23.4	7.63	35.3	1014.4	1.14	3.5	55
14	MAR	77	1400	M	24.7	6.43	27.5	1018.1	1.12	0.8	50
14	MAR	77	1430	T	23.5	8.12	37.4	1014.1	1.06	3.3	44

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
14	MAR	77	1430	M	24.2	6.45	28.4	1017.6	1.05	0.9	24
14	MAR	77	1458	S	26.5	6.93	26.7	1016.7	1.11		39
14	MAR	77	1500	T	22.8	8.28	39.9	1014.0	0.98	3.4	30
14	MAR	77	1500	M	24.2	6.18	27.3	1017.6	0.95	0.8	56
14	MAR	77	1530	T	22.4	8.15	40.1	1014.1	0.87	3.0	31
14	MAR	77	1530	M	23.8	6.07	27.5	1017.5	0.83	0.8	33
14	MAR	77	1558	S	24.8	9.13	39.0	1016.1	0.74		58
14	MAR	77	1600	T	22.6	8.02	39.0	1013.8	0.74	2.6	28
14	MAR	77	1600	M	23.5	6.29	29.0	1017.2	0.69	0.9	46
14	MAR	77	1628	S	23.7	9.34	42.4	1016.0	0.52		66
14	MAR	77	1630	T	22.2	8.54	42.4	1013.5	0.60	2.4	34
14	MAR	77	1630	M	23.0	6.44	30.6	1016.8	0.55	0.9	51
14	MAR	77	1658	S	23.1	10.29	48.4	1016.0	0.43		66
14	MAR	77	1700	T	21.9	8.53	43.2	1013.4	0.45	2.4	74
14	MAR	77	1700	M	22.6	6.59	32.0	1016.7	0.40	0.8	46
14	MAR	77	1730	M	21.9	6.71	34.0	1016.7	0.23	0.8	
15	MAR	77	859	S	23.5	11.96	55.0	1018.3	0.37		306
15	MAR	77	900	M	21.4	9.48	49.6	1019.2	0.67	0.6	308
15	MAR	77	929	S	24.8	10.95	46.7	1018.6	0.64	0.1	311
15	MAR	77	930	T	22.8	9.66	46.5	1015.7	0.84	2.4	306
15	MAR	77	930	M	22.5	9.18	44.8	1019.5	0.80	0.5	303
15	MAR	77	959	S	25.8	10.92	43.9	1018.7	0.87	0.1	282
15	MAR	77	1000	T	23.5	8.91	41.1	1015.7	0.96	2.6	279
15	MAR	77	1000	M	23.6	8.50	38.9	1019.4	0.92	0.3	296
15	MAR	77	1029	S	27.2	10.67	39.4	1018.7	1.01	0.1	270
15	MAR	77	1030	T	21.8	11.82	60.4	1015.8	1.06	1.3	133
15	MAR	77	1030	M	24.4	8.98	39.3	1019.5	1.03	0.3	293
15	MAR	77	1059	S	28.2	10.36	36.2	1018.6	1.13	0.2	119
15	MAR	77	1100	T	23.2	11.06	51.8	1015.7	1.14	2.8	20

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
15	MAR	77	1100	M	20.9	12.95	70.0	1019.5	1.12	0.7	128
15	MAR	77	1129	S	22.4	13.52	66.5	1019.6	1.22	0.2	107
15	MAR	77	1130	T	23.1	11.06	52.1	1015.7	1.21	3.3	26
15	MAR	77	1130	M	21.7	12.51	64.3	1019.5	1.18	0.8	128
15	MAR	77	1200	T	23.5	10.01	46.0	1015.7	1.24	3.2	73
15	MAR	77	1200	M	26.1	10.05	39.7	1019.5	1.21	0.7	37
15	MAR	77	1230	T	24.2	9.44	41.6	1015.6	1.24	3.3	68
15	MAR	77	1300	T	23.9	8.75	39.2	1015.3	1.23	3.5	42
15	MAR	77	1330	T	23.8	8.66	39.2	1014.9	1.19	3.5	27
15	MAR	77	1430	T	23.4	8.70	40.3	1014.4	1.05	3.0	33
15	MAR	77	1500	T	23.7	8.81	40.0	1014.1	0.95	2.1	42
16	MAR	77	1000	T	21.3	16.58	87.5	1015.2	0.93	2.0	218
16	MAR	77	1030	T	23.8	16.88	76.2	1015.3	1.04	2.4	283
16	MAR	77	1100	T	24.7	16.91	72.6	1015.1	0.70	2.4	236
16	MAR	77	1130	T	21.3	16.79	88.3	1014.9	1.22	3.3	78
16	MAR	77	1200	T	21.8	17.17	87.9	1014.9	0.96	3.5	74
16	MAR	77	1230	T	22.2	17.02	84.6	1014.7	1.04	3.0	75
16	MAR	77	1300	T	23.5	16.69	77.0	1014.2	0.71	2.5	38
16	MAR	77	1330	T	23.6	16.78	76.6	1014.2	1.00	2.6	45
30	MAR	77	930	T	21.9	17.61	89.2	1020.0	0.96	2.0	143
30	MAR	77	1000	T	21.7	17.27	88.9	1020.1	1.04	2.4	161
30	MAR	77	1030	T	21.9	17.19	87.3	1020.3	1.02	2.0	157
30	MAR	77	1100	T	22.3	17.37	86.1	1019.9	1.07	2.6	126
30	MAR	77	1130	T	22.8	17.09	82.0	1019.6	1.25	2.6	120
30	MAR	77	1200	T	23.0	17.39	82.5	1019.4	1.28	3.0	120
30	MAR	77	1230	T	22.7	17.26	83.2	1018.9	1.36	4.4	131
30	MAR	77	1300	T	22.6	17.59	85.3	1018.3	1.19	5.8	132
30	MAR	77	1330	T	22.7	17.55	84.9	1018.1	1.01	5.4	133
31	MAR	77	900	M	22.6	16.46	79.8	1023.1	0.43		

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
31	MAR	77	930	M	23.8	16.07	72.6	1023.3	0.92		
31	MAR	77	1000	M	24.9	15.57	66.0	1023.3	0.81	0.5	152
31	MAR	77	1030	M	25.0	15.12	63.7	1023.8	0.32	0.9	239
31	MAR	77	1100	M	25.5	15.62	64.0	1023.7	1.20	0.7	280
31	MAR	77	1130	M	26.1	15.35	60.6	1023.2	1.24	0.5	259
31	MAR	77	1200	M	25.4	16.19	66.4	1023.0	1.17	0.7	183
31	MAR	77	1229	S	29.8	17.28	54.9	1021.3	1.16	2.8	188
31	MAR	77	1230	M	24.2	17.49	77.1	1022.6	1.31	0.7	166
31	MAR	77	1259	S	28.0	18.50	65.1	1020.5	1.19	3.7	147
31	MAR	77	1300	M	23.8	18.09	81.7	1022.0	1.35	1.0	154
31	MAR	77	1329	S	26.9	18.37	69.1	1019.8	0.84	4.1	159
31	MAR	77	1330	M	23.5	18.20	83.8	1021.5	1.00	0.9	158
31	MAR	77	1359	S	27.0	18.34	68.4	1019.6	1.01	3.7	152
31	MAR	77	1400	M	23.6	18.02	82.6	1021.0	0.92	0.9	159
31	MAR	77	1429	S	26.5	18.34	70.5	1019.1	0.95	4.6	154
31	MAR	77	1430	T	23.7	18.44	83.9	1015.1	0.77	4.8	128
31	MAR	77	1430	M	23.5	18.29	84.0	1020.3	0.97	1.0	150
31	MAR	77	1459	S	26.3	18.37	71.4	1018.1	1.05	4.8	155
31	MAR	77	1500	T	23.6	18.60	84.8	1015.7	0.92	5.0	129
31	MAR	77	1500	M	23.4	18.33	84.9	1019.5	0.89	1.0	153
31	MAR	77	1529	S	26.0	18.28	72.6	1017.9	0.50	4.7	155
31	MAR	77	1530	T	23.0	18.61	88.2	1015.3	0.55	4.8	124
31	MAR	77	1530	M	23.3	17.79	82.9	1019.3	0.44	1.1	162
31	MAR	77	1600	T	23.3	18.52	86.2	1014.9	0.59	4.8	130
1	APR	77	900	M	21.4	17.26	90.4	1020.8	0.57	0.4	178
1	APR	77	930	M	22.0	17.34	87.6	1021.4	0.73	0.4	178
1	APR	77	1000	M	22.4	17.59	86.7	1021.4	1.04	0.6	168
1	APR	77	1029	S	26.4	18.85	73.1	1020.3	0.65	3.0	153
1	APR	77	1030	T	22.6	17.98	87.6	1017.8	1.04	2.8	131

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
1	APR	77	1030	M	22.6	17.64	85.9	1021.3	0.97	0.6	157
1	APR	77	1059	S	26.1	18.76	73.8	1020.2	1.00	3.4	161
1	APR	77	1100	T	22.7	17.41	84.0	1017.6	1.08	3.0	128
1	APR	77	1100	M	22.6	17.80	86.6	1021.2	1.13	0.7	152
1	APR	77	1129	S	26.0	19.01	75.2	1020.4	0.94	2.1	142
1	APR	77	1130	T	22.3	18.00	89.4	1017.6	1.10	2.4	156
1	APR	77	1130	M	22.7	17.68	85.3	1021.2	1.24	0.6	152
1	APR	77	1159	S	25.0	18.92	79.5	1020.1	1.15	2.3	113
1	APR	77	1200	T	23.1	17.93	84.8	1017.5	1.15	2.4	120
1	APR	77	1200	M	23.0	17.55	83.3	1021.2	1.24	0.5	134
1	APR	77	1229	S	24.6	18.14	78.4	1019.8	1.17	2.8	110
1	APR	77	1230	T	23.6	17.74	81.0	1017.1	1.17	2.5	93
1	APR	77	1230	M	23.2	17.13	80.2	1020.9	1.25	0.6	111
1	APR	77	1259	S	24.8	17.98	76.7	1019.4	1.19	3.1	98
1	APR	77	1300	T	23.4	17.70	81.9	1016.6	1.20	3.1	92
1	APR	77	1300	M	23.5	17.44	80.4	1020.5	1.23	0.6	100
1	APR	77	1329	S	24.5	18.10	78.4	1018.8	1.10	3.5	102
1	APR	77	1330	T	23.6	17.67	80.6	1016.0	1.09	3.2	93
1	APR	77	1330	M	23.5	17.32	80.0	1020.0	1.19	0.6	103
1	APR	77	1359	S	24.5	18.25	79.1	1018.2	1.07	3.7	123
1	APR	77	1400	T	24.4	18.39	80.1	1015.5	1.06	4.2	111
1	APR	77	1400	M	23.5	17.92	82.4	1019.4	1.13	0.7	124
1	APR	77	1429	S	24.7	18.92	80.9	1017.9	0.97	3.6	118
1	APR	77	1430	T	23.8	18.90	85.7	1015.2	0.99	4.0	121
1	APR	77	1430	M	23.2	18.17	85.1	1019.1	1.06	0.8	131
1	APR	77	1459	S	26.0	18.87	74.7	1017.5	0.89	4.1	140
1	APR	77	1500	T	23.9	19.09	85.7	1014.9	0.85	4.6	124
1	APR	77	1500	M	23.3	18.31	85.3	1018.5	0.99	0.9	144
1	APR	77	1529	S	25.8	18.99	76.3	1017.3	0.79	4.3	138

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
1	APR	77	1530	T	23.8	18.97	85.8	1014.8	0.77	4.8	132
1	APR	77	1530	M	23.4	18.34	85.0	1018.1	0.83	0.8	136
1	APR	77	1559	S	26.3	19.37	75.5	1017.2	0.67	4.4	147
1	APR	77	1600	T	23.7	19.42	88.4	1014.7	0.66	4.4	127
2	APR	77	930	T	22.2	17.58	87.5	1018.4	0.77	3.4	152
2	APR	77	933	S	25.4	18.44	75.6	1021.3	0.75	3.2	149
2	APR	77	1000	T	22.3	17.79	87.9	1018.4	0.97	3.1	159
2	APR	77	1003	S	25.7	18.46	74.3	1021.3	0.89	3.2	149
2	APR	77	1030	T	22.5	17.87	87.4	1018.4	1.03	3.9	160
2	APR	77	1033	S	25.8	18.44	74.0	1021.3	1.02	3.7	160
2	APR	77	1100	T	22.7	18.26	88.2	1018.4	1.10	3.7	150
2	APR	77	1103	S	25.8	18.64	74.6	1021.3	1.09	3.6	149
2	APR	77	1130	T	23.0	18.53	88.1	1018.1	1.16	3.6	143
2	APR	77	1133	S	26.0	18.90	75.0	1020.9	1.12	3.3	152
2	APR	77	1200	T	23.4	18.45	85.6	1018.0	1.19	4.7	142
2	APR	77	1203	S	26.1	18.80	74.2	1020.7	1.19	3.8	148
2	APR	77	1230	T	23.7	18.62	84.5	1017.8	1.21	4.8	136
2	APR	77	1233	S	26.1	18.87	74.3	1020.4	1.19	4.2	149
2	APR	77	1300	T	23.7	18.57	84.4	1017.3	1.19	5.1	123
2	APR	77	1303	S	25.8	18.83	75.7	1020.1	1.21	4.6	138
2	APR	77	1330	T	23.9	18.62	83.6	1016.9	1.11	5.2	122
2	APR	77	1333	S	26.3	18.90	73.7	1019.7	1.17	4.4	147
2	APR	77	1400	T	23.9	18.67	83.8	1016.6	1.06	4.9	124
2	APR	77	1403	S	26.2	18.73	73.2	1019.3	1.09	4.8	142
2	APR	77	1430	T	24.2	19.12	84.6	1016.3	0.94	4.9	120
2	APR	77	1433	S	26.1	18.94	74.6	1018.8	0.98	4.9	139
2	APR	77	1500	T	24.0	18.77	84.0	1015.8	0.87	6.2	131
2	APR	77	1503	S	26.3	18.73	72.9	1018.5	0.93	5.8	149
2	APR	77	1530	T	24.0	18.80	83.9	1015.7	0.78	6.2	135

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
2	APR	77	1533	S	26.2	18.60	72.8	1018.3	0.83	5.9	150
2	APR	77	1600	T	24.0	18.84	84.0	1015.7	0.66	6.2	135
2	APR	77	1630	T	23.9	18.96	85.0	1015.6	0.51	6.4	136
4	APR	77	929	S	24.6	18.57	79.9	1016.0	0.78	6.1	169
4	APR	77	930	M	22.2	17.80	88.5	1016.8	0.91	1.3	169
4	APR	77	959	S	24.8	18.62	79.1	1016.0	0.96	6.1	166
4	APR	77	1000	T	22.9	18.19	87.0	1013.4	1.01	7.4	156
4	APR	77	1000	M	22.5	17.79	8[illegible].0	1016.8	1.02	1.3	167
4	APR	77	1029	S	24.8	18.55	78.9	1015.9	1.04	6.9	164
4	APR	77	1030	T	23.1	18.24	86.1	1013.2	1.10	7.3	154
4	APR	77	1030	M	22.7	17.82	86.3	1016.6	1.12	1.4	163
4	APR	77	1059	S	24.9	18.55	78.4	1015.5	1.11	6.8	160
4	APR	77	1100	T	23.2	18.30	85.8	1013.0	1.17	7.2	147
4	APR	77	1100	M	22.9	17.96	85.8	1016.3	1.18	1.3	160
4	APR	77	1129	S	25.0	18.41	77.7	1015.2	1.17	7.0	161
4	APR	77	1130	T	23.3	18.18	84.6	1012.7	1.22	7.7	148
4	APR	77	1130	M	23.0	17.80	84.6	1016.1	1.23	1.4	162
4	APR	77	1159	S	25.1	18.50	77.2	1014.8	1.16	7.3	159
4	APR	77	1200	T	23.5	18.30	84.1	1012.4	1.26	8.2	148
4	APR	77	1200	M	23.2	17.91	84.1	1015.8	1.28	1.6	159
4	APR	77	1229	S	25.0	18.78	78.9	1014.3	1.24	8.1	161
4	APR	77	1230	T	23.5	18.53	85.1	1011.9	1.24	9.4	147
4	APR	77	1230	M	23.3	18.23	84.9	1015.1	0.30	1.7	159
4	APR	77	1259	S	25.0	18.80	79.0	1013.8	1.23	7.7	161
4	APR	77	1300	T	23.6	18.56	85.1	1011.4	1.24	9.1	148
4	APR	77	1300	M	23.3	18.21	85.0	1014.6	1.25	1.6	163
4	APR	77	1329	S	25.0	18.78	78.8	1013.1	1.19	9.3	162
4	APR	77	1330	T	23.7	18.59	84.8	1010.9	1.21	10.1	149
4	APR	77	1330	M	23.3	18.24	84.8	1013.9	1.21	1.8	162

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
4	APR	77	1359	S	25.3	18.85	78.1	1012.7	1.08	8.9	164
4	APR	77	1400	T	23.7	18.54	84.4	1010.4	1.15	9.9	151
4	APR	77	1400	M	23.4	18.20	84.4	1013.4	1.16	1.8	162
4	APR	77	1429	S	25.5	18.80	76.7	1012.2	1.07	8.2	165
4	APR	77	1430	T	23.8	18.45	83.6	1009.9	1.05	9.6	149
4	APR	77	1430	M	23.4	13.06	83.7	1013.1	1.08	1.7	163
4	APR	77	1459	S	25.4	18.67	76.5	1011.7	0.97	8.7	164
4	APR	77	1500	T	23.8	18.51	83.8	1009.5	0.90	9.8	153
4	APR	77	1500	M	23.4	18.04	83.5	1012.8	1.01	1.8	164
4	APR	77	1529	S	25.2	18.67	77.4	1011.5	0.77	9.2	162
4	APR	77	1530	M	23.4	18.18	83.9	1012.3	0.84	1.9	162
5	APR	77	930	T	24.4	17.85	78.0	1009.7	0.84	12.1	184
5	APR	77	1003	S	28.2	17.51	61.0			9.3	
5	APR	77	1033	S	29.6	17.01	54.6			8.4	
5	APR	77	1103	S	30.3	15.94	49.3			8.3	
5	APR	77	1133	S	31.5	16.00	46.2	1013.0	1.00	9.3	233
5	APR	77	1203	S	31.1	15.17	44.8	1013.0	0.46	10.4	237
5	APR	77	1233	S	30.8	15.01	45.1	1012.9	0.50	9.2	275
5	APR	77	1303	S	25.7	14.40	58.1	1013.8	1.06	7.5	293
5	APR	77	1333	S	24.9	13.88	58.9	1014.3	0.36	5.3	292
5	APR	77	1403	S	24.2	12.33	54.3	1014.2	0.81	6.8	296
5	APR	77	1433	S	25.4	12.21	50.3	1014.1	0.92	5.6	281
5	APR	77	1503	S	25.2	10.83	44.9	1013.8	0.43	6.3	260
5	APR	77	1533	S	24.9	9.91	41.9	1013.7	0.52	4.9	267
6	APR	77	1100	T	18.3	7.14	45.4	1023.2	0.95	5.0	230
6	APR	77	1130	T	18.0	6.95	45.0	1023.1	0.97	4.8	193
6	APR	77	1200	T	17.9	6.96	45.2	1023.0	1.23	5.3	145
6	APR	77	1230	T	18.0	7.03	45.4	1022.8	0.98	5.2	276
6	APR	77	1400	T	18.0	7.01	45.2	1022.4	1.15	5.2	90

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
6	APR	77	1430	T	17.9	6.97	45.4	1022.1	1.02	4.5	153
6	APR	77	1500	T	18.0	7.07	45.7	1021.9	0.99	4.8	66
6	APR	77	1530	T	18.0	6.97	45.2	1021.7	0.87	4.2	52
6	APR	77	1600	T	17.8	6.84	44.7	1021.6	0.76	4.0	97
6	APR	77	1630	T	17.6	7.20	47.9	1021.6	0.59	4.1	62
7	APR	77	1000	T	21.4	6.51	34.2		0.89		
7	APR	77	1030	T	21.2	7.16	37.9		1.00		
7	APR	77	1100	T					1.08		
7	APR	77	1130	T					1.13		
7	APR	77	1200	T					1.17		
7	APR	77	1230	T					1.20		
7	AI	77	1300	T					1.19		
7	APR	77	1330	T					1.15		
7	APR	77	1400	T					1.10		
7	APR	77	1430	T					1.01		
16	MAY	77	1429	S	25.4	14.47	59.4	982.1	1.26	4.5	123
16	MAY	77	1459	S	25.3	15.36	63.3	981.1	1.20	5.5	104
16	MAY	77	1529	S	25.4	15.57	64.1	978.4	1.10	5.4	104
16	MAY	77	1559	S	25.4	15.47	63.5	976.4	1.04	5.0	106
16	MAY	77	1629	S	25.5	15.32	62.6	976.3	0.92	5.2	104
16	MAY	77	1659	S	25.6	15.32	62.3	974.3	0.80	4.8	104
17	MAY	77	1000	S	25.6	18.01	73.1	1024.7	0.81	4.3	76
17	MAY	77	1030	S	25.6	18.16	73.9	1024.9	0.65	5.0	80
17	MAY	77	1100	S	25.7	18.25	73.7	984.5	1.07	5.2	73
17	MAY	77	1130	S	25.5	17.46	71.4	979.5	1.15	6.0	71
17	MAY	77	1200	S	25.4	17.22	70.6	978.4	1.22	5.7	75
17	MAY	77	1230	S	25.4	17.03	69.9	978.8	1.27	6.1	71
17	MAY	77	1300	S	25.5	16.79	68.7	976.7	1.31	5.4	68
17	MAY	77	1330	S	25.4	16.23	66.6	974.9	1.32	5.1	75

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
17	MAY	77	1400	S	25.7	16.29	65.9	974.2	1.31	5.0	70
17	MAY	77	1430	S	25.5	16.13	65.7	973.1	1.30	5.3	76
17	MAY	77	1500	S	25.6	16.13	65.4	972.9	1.24	5.2	75
17	MAY	77	1530	S	25.7	15.71	63.4	973.1	1.18	4.8	72
17	MAY	77	1600	S	25.9	15.40	61.6	973.4	1.07	4.5	75
17	MAY	77	1630	S	26.1	15.51	61.1	971.7	0.93	4.7	61
17	MAY	77	1700	S	26.1	15.89	62.5	973.6	0.80	4.5	61
18	MAY	77	928	S	25.8	15.53	62.3	1022.7	0.69	2.4	78
18	MAY	77	958	S	26.0	15.55	61.6	1022.9	0.89	2.7	88
18	MAY	77	1028	S	26.0	15.45	61.2	1023.1	0.71	3.3	79
18	MAY	77	1058	S	26.2	15.69	61.6	1023.2	1.11	3.2	88
18	MAY	77	1128	S	26.3	15.53	60.4	1023.3	1.18	3.0	93
20	MAY	77	1003	S	27.0	14.71	55.0	1019.5	0.82	2.8	106
20	MAY	77	1033	S	27.1	14.65	54.4	1019.6	0.96	3.5	97
20	MAY	77	1103	S	27.4	14.43	52.7	1019.8	1.06	2.7	104
20	MAY	77	1133	S	27.6	14.10	50.8	1019.9	1.16	3.0	98
20	MAY	77	1203	S	27.5	13.82	50.1	1019.9	1.24	4.7	92
20	MAY	77	1233	S	[illegible]	14.18	52.6	1019.8	1.28	5.3	83
20	MAY	77	1303	S	26.9	14.23	53.6	1019.8	1.31	6.4	93
20	MAY	77	1333	S	26.7	14.67	55.9	1019.5	1.33	6.2	90
20	MAY	77	1403	S	26.7	14.78	56.1	1019.7	1.29	3.1	84
20	MAY	77	1433	S	26.6	14.86	56.9	1019.5	1.22	3.5	79
20	MAY	77	1503	S	26.8	14.90	56.4	1019.6	1.18	3.2	87
20	MAY	77	1533	S	26.8	14.92	56.6	1019.4	1.09	3.5	89
20	MAY	77	1603	S	26.8	15.20	57.6	1019.0	1.03	3.8	88
21	MAY	77	1031	S	26.0	16.11	63.7	1019.4	0.98	5.2	96
21	MAY	77	1101	S	26.2	16.36	64.2	1019.6	1.07	4.7	94
21	MAY	77	1131	S	26.2	16.17	63.3	1020.1	1.16	5.2	86
21	MAY	77	1201	S	26.3	16.38	63.9	1020.2	1.22	5.0	95

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
21	MAY	77	1231	S	26.3	16.27	63.5	960.8	1.28	4.3	106
21	MAY	77	1301	S	26.2	16.50	64.7	1019.9	1.20	4.4	108
21	MAY	77	1331	S	26.3	16.48	64.1	1019.9	1.48	4.6	104
21	MAY	77	1401	S	25.8	16.77	67.4	1019.9	0.58	3.8	69
21	MAY	77	1431	S	26.2	16.62	65.2	1019.8	0.91	3.2	62
21	MAY	77	1501	S	26.7	16.75	63.7	1019.5	1.29	3.0	80
23	MAY	77	933	S	26.6	18.16	69.4	1016.5	0.66	3.3	201
23	MAY	77	1003	S	27.7	18.21	65.5	1016.1	0.84	2.0	231
23	MAY	77	1033	S	27.3	17.72	65.2	1016.1	0.35	1.7	22
23	MAY	77	1103	S	28.1	17.61	61.9	1015.9	0.31	1.6	168
23	MAY	77	1133	S	25.5	17.70	72.4	1016.4	1.02	4.4	79
23	MAY	77	1203	S	25.9	17.94	71.6	1016.4	1.48	4.3	83
23	MAY	77	1233	S	25.7	17.96	72.3	1016.1	0.44	1.5	125
23	MAY	77	1303	S	26.9	17.41	65.6	1015.6	0.46	1.7	132
23	MAY	77	1333	S	26.6	17.54	67.3	1015.5	1.10	2.6	113
23	MAY	77	1403	S	26.4	17.61	68.2	1015.5	1.46	3.4	87
23	MAY	77	1433	S	26.1	17.96	70.8	968.1	1.38	4.8	80
23	MAY	77	1503	S	26.1	18.28	72.2	967.7	1.39	4.6	75
23	MAY	77	1533	S	26.0	18.39	73.0	971.3	0.67	4.0	82
23	MAY	77	1603	S	26.2	18.55	72.8	971.1	1.13	3.5	83
23	MAY	77	1633	S	26.3	18.71	72.9	1014.7	1.05	3.8	90
24	MAY	77	831	S	26.3	21.10	82.1	1016.8	0.21	2.2	188
24	MAY	77	901	S	27.3	21.25	77.9	1016.8	0.55	2.4	168
24	MAY	77	931	S	28.1	21.33	75.0	1016.9	0.78	1.7	168
24	MAY	77	1101	S	27.2	20.52	76.0	960.9	1.16	3.3	127
24	MAY	77	1131	S	26.9	20.32	76.5	1017.1	1.29	3.8	125
24	MAY	77	1201	S	26.8	20.29	76.8	1017.2	1.37	3.1	124
24	MAY	77	1231	S	26.7	20.07	76.5	1017.2	1.42	4.3	122
24	MAY	77	1301	S	26.5	20.27	78.1	960.3	1.45	4.3	119

Table 6.1.1 (continued)

DAY	MONTH	YEAR	TIME	SITE	AT (DEG)	PPH2O (TORR)	RH (%)	BP (MBAR)	SR (W/SQ M)	WS (M/S)	WDH (DEG)
24	MAY	77	1331	S	26.4	20.57	79.8	962.4	1.42	5.0	114
24	MAY	77	1401	S	26.4	20.59	79.6	1016.9	1.39	5.5	114
24	MAY	77	1431	S	26.5	20.89	80.5	1016.6	1.39	5.7	115
24	MAY	77	1501	S	26.8	20.94	79.1	1016.0	1.46	6.7	123
24	MAY	77	1532	S	26.7	21.10	80.2	1015.9	1.19	5.9	118
25	MAY	77	903	S	27.8	20.89	74.7	1015.1	0.54	2.6	212
25	MAY	77	933	S	28.9	20.12	67.4	1015.1	0.73	2.1	228
25	MAY	77	1003	S	30.0	19.97	62.8	1015.2	0.90	2.6	247
25	MAY	77	1033	S	31.5	18.57	53.7	1014.9	1.00	1.5	238
25	MAY	77	1103	S	32.4	17.30	47.6	1015.0	1.12	1.7	219
25	MAY	77	1133	S	30.5	20.07	61.2	1015.0	1.24	3.3	145
25	MAY	77	1203	S	29.9	20.77	65.8	1014.8	1.33	3.9	152

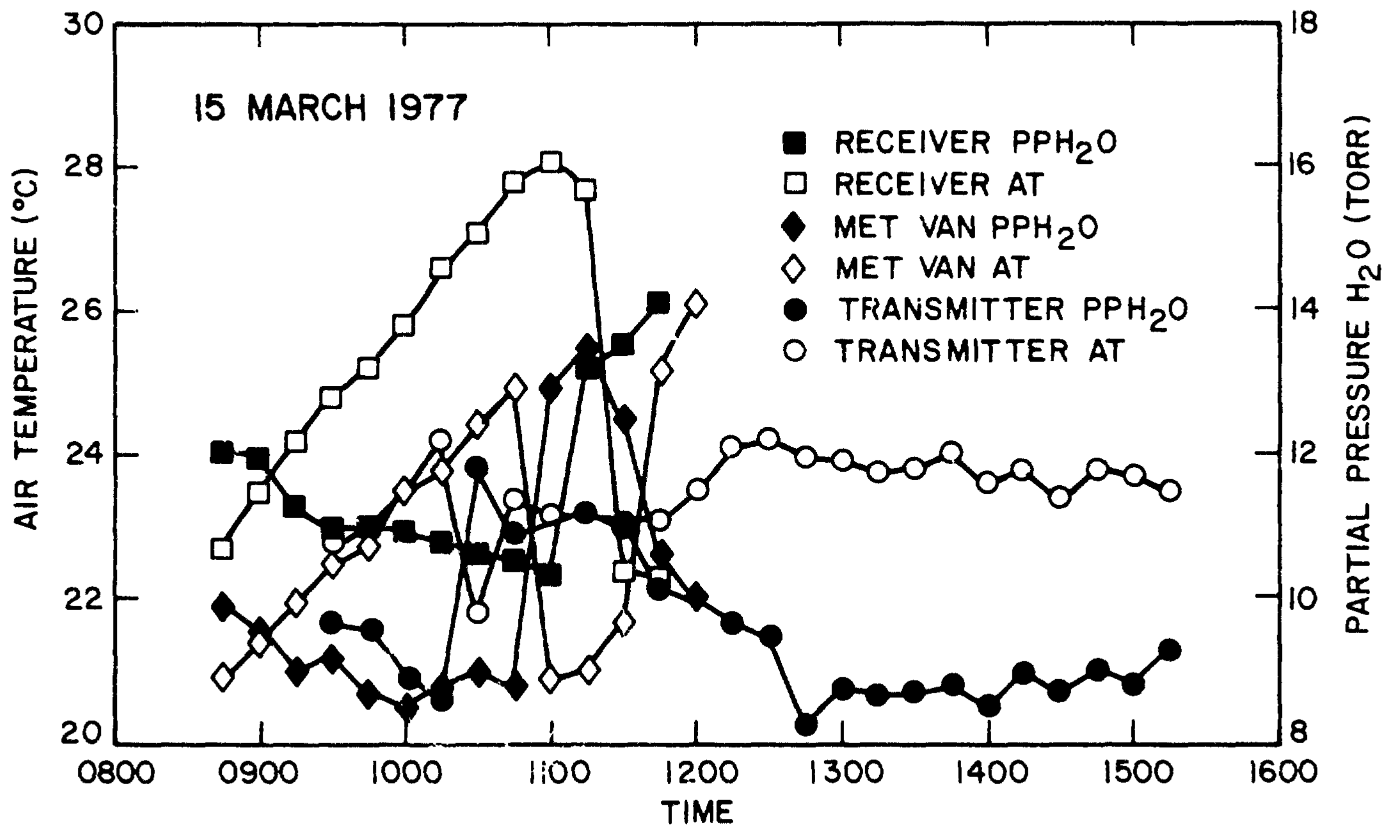


FIG. 6.1.1. AIR TEMPERATURE AND PARTIAL PRESSURE OF WATER VAPOR MEASURED AT THE THREE SITE LOCATIONS ON 15 MARCH 1977.

Table 6.2.1
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/μm) vs. Particle Radius (μm)

RADIUS --->		0.12	0.15	0.19	0.22	0.26	0.29	0.33	1.22	2.17	3.12	4.07
28 FEB 77	1400	1.08E 03	3.97E 02	2.67E 02	5.46E 01	3.43E 01	1.72E 01	1.50E 01	3.08E-01	1.07E-01	1.94E-02	2.93E-03
	1430	1.19E 03	4.00E 02	2.59E 02	5.46E 01	4.03E 01	9.60E 00	1.00E 01	3.41E-01	1.17E-01	2.22E-02	3.11E-03
1 MAR 77	1100	7.66E 02	4.49E 02	4.34E 02	7.63E 01	3.51E 01	1.47E 01	1.28E 01	2.96E-01	6.23E-02	6.98E-03	1.79E-03
	1130	1.37E 03	5.89E 02	3.51E 02	9.26E 01	1.49E 01	3.09E 01	9.82E 00	3.02E-01	7.69E-02	7.94E-03	1.79E-03
	1200	1.94E 03	4.94E 02	3.60E 02	7.91E 01	2.64E 01	8.80E 00	7.57E 00	2.81E-01	6.72E-02	8.47E-03	1.19E-03
	1230	8.54E 02	4.43E 02	2.86E 02	8.43E 01	4.20E 01	1.12E 01	7.37E 00	2.52E-01	6.11E-02	8.54E-03	1.43E-03
2 MAR 77	900	1.09E 03	4.34E 02	2.73E 02	5.29E 01	4.11E 01	1.76E 01	7.70E 00	1.13E-01	3.32E-02	5.37E-03	1.01E-03
	930	1.13E 03	4.77E 02	3.37E 02	7.57E 01	6.17E 01	1.96E 01	1.47E 01	1.04E-01	2.34E-02	2.73E-03	5.37E-04
	1000	1.07E 03	4.46E 02	2.94E 02	6.46E 01	4.97E 01	1.17E 01	1.28E 01	9.78E-02	1.64E-02	1.25E-03	3.58E-04
	1030	8.94E 02	3.11E 02	2.22E 02	5.60E 01	3.09E 01	9.43E 00	9.82E 00	1.48E-01	3.60E-02	2.93E-03	3.58E-04
	1100	1.36E 03	4.43E 02	2.67E 02	7.63E 01	5.29E 01	2.05E 01	1.54E 01	1.24E-01	2.68E-02	2.44E-03	2.98E-04
	1130	1.20E 03	5.23E 02	3.17E 02	8.97E 01	5.60E 01	1.96E 01	9.37E 00	1.22E-01	2.52E-02	1.97E-03	3.58E-04
	1200	1.53E 03	5.26E 02	3.74E 02	1.11E 02	5.00E 01	3.23E 01	1.24E 01	1.49E-01	3.46E-02	3.69E-03	5.97E-04
	1230	1.30E 03	5.43E 02	3.94E 02	8.31E 01	6.37E 01	2.55E 01	1.95E 01	1.99E-01	6.15E-02	4.78E-03	9.55E-04
	1300	1.41E 03	5.66E 02	3.40E 02	9.37E 01	1.17E 01	3.80E 01	1.03E 01	2.02E-01	5.13E-02	6.08E-03	7.76E-04
	1330	1.28E 03	4.54E 02	3.63E 02	7.57E 01	5.34E 01	2.01E 01	4.90E 00	2.21E-01	5.16E-02	6.26E-03	1.14E-03
	1400	1.21E 03	4.51E 02	3.40E 02	6.74E 01	2.64E 01	2.55E 01	1.03E 01	2.29E-01	6.35E-02	7.38E-03	1.79E-03
	1430	1.39E 03	4.89E 02	3.11E 02	5.89E 01	5.60E 01	1.12E 01	4.90E 00	2.05E-01	6.53E-02	9.37E-03	1.31E-03
	1500	4.31E 03	1.01E 03	3.54E 02	4.14E 01	4.14E 01	3.20E 01	0.00E 00	2.14E-01	7.60E-02	1.06E-02	1.97E-03
	1530	1.74E 03	5.29E 02	3.26E 02	7.57E 01	2.83E 01	1.96E 01	4.90E 00	2.15E-01	5.57E-[illegible]	1.00E-02	1.07E-03
3 MAR 77	1000	2.76E 03	1.06E 03	9.91E 02	3.63E 02	1.63E 02	8.97E 01	6.87E 01	3.52E 00	1.29E 00	5.28E-01	1.57E-01
	1030	2.71E 03	1.19E 03	1.09E 03	3.80E 02	2.05E 02	7.46E 01	7.62E 01	4.47E 00	1.64E 00	6.46E-01	1.86E-01
	1100	2.61E 03	1.08E 03	1.12E 03	3.54E 02	1.65E 02	7.57E 01	6.42E 01	4.00E 00	1.35E 00	5.37E-01	1.34E-01
	1130	3.60E 03	1.41E 03	1.34E 03	5.06E 02	2.41E 02	1.53E 02	7.17E 01	7.19E 00	2.42E 00	9.17E-01	2.44E-01
	1200	3.53E 03	1.36E 03	1.45E 03	5.60E 02	2.64E 02	1.32E 02	9.92E 01	6.09E 00	2.19E 00	8.38E-01	2.31E-01
	1230	3.29E 03	1.60E 03	1.55E 03	5.97E 02	2.64E 02	1.20E 02	8.20E 01	4.63E 00	1.57E 00	6.02E-01	1.73E-01
	1300	4.31E 03	1.73E 03	1.83E 03	7.37E 02	3.29E 02	2.05E 02	1.50E 02	6.04E 00	1.93E 00	8.42E-01	2.38E-01
	1330	4.71E 03	1.74E 03	1.61E 03	5.94E 02	3.29E 02	2.23E 02	1.62E 02	9.05E 00	2.85E 00	1.46E 00	2.85E-01
4 MAR 77	900	1.12E 04	3.46E 03	2.94E 03	1.12E 03	5.54E 02	3.57E 02	2.92E 02	1.72E 01	4.39E 00	1.59E 00	3.77E-01
	930	1.06E 04	3.64E 03	2.97E 03	1.04E 03	7.14E 02	4.40E 02	3.47E 02	1.65E 01	4.54E 00	1.73E 00	4.15E-01
	1000	[illegible]	2.65E 03	2.13 03	8.17E 02	5.23E 02	2.94E 02	2.67E 02	1.61E 01	3.92E 00	1.32E 00	3.14E-01
	1030	5.80E 03	1.63E 03	1.44E 03	4.83E 02	2.86E 02	2.30E 02	1.45E 02	1.45E 01	3.49E 00	1.13E 00	2.73E-01
	1100	5.03E 03	1.61E 03	1.26E 03	4.60E 02	2.58E 02	1.85E 02	1.38E 02	1.39E 01	3.47E 00	1.25E 00	3.24E-01
	1130	4.69E 03	1.55E 03	1.20E 03	4.11E 02	3.29E 02	1.91E 02	1.52E 02	1.28E 01	3.19E 00	1.01E 00	2.54E-01
	1200	4.93E 03	1.44E 03	1.07E 03	4.29E 02	2.58E 02	1.44E 02	1.44E 02	1.20E 01	2.87E 00	8.41E-01	2.16E-01
	1230	4.71E 03	1.38E 03	1.17E 03	4.97E 02	2.19E 02	1.65E 02	1.57E 02	1.27E 01	2.98E 00	8.93E-01	2.26E-01
	1300	3.71E 03	1.26E 03	1.07E 03	4.37E 02	2.11E 02	1.53E 02	1.26E 02	1.17E 01	2.62E 00	7.32E-01	1.60E-01
	1330	4.11E 03	1.37E 03	1.06E 03	3.89E 02	2.47E 02	1.37E 02	1.37E 02	1.17E 01	2.56E 00	6.87E-01	1.67E-01
	1400	4.14E 03	1.25E 03	1.15E 03	3.46E 02	2.43E 02	1.55E 02	1.46E 02	1.29E 01	2.67E 00	7.72E-01	2.05E-01
	1430	4.29E 03	1.37E 03	1.17E 03	3.89E 02	2.41E 02	1.26E 02	1.20E 02	1.29E 01	2.65E 00	7.45E-01	1.95E-01
	1500	3.80E 03	1.03E 03	1.03E 03	3.69E 02	2.23E 02	1.35E 02	1.62E 02	1.25E 01	2.66E 00	7.25E-01	1.83E-01
	1530	4.40E 03	1.26E 03	1.01E 03	3.71E 02	2.53E 02	1.71E 02	2.56E 02	1.34E 01	2.73E 00	7.61E-01	1.87E-01
5 MAR 77	1000	5.51E 03	2.33E 03	2.35E 03	9.36E 02	3.89E 02	2.19E 02	1.52E 02	1.03E 01	2.84E 00	9.57E-01	2.68E-01
	1030	4.94E 03	1.99E 03	[illegible]	5.54E 02	2.43E 02	1.50E 02	7.95E 01	4.82E 00	1.53E 00	5.26E-01	1.54E-01
	1100	5.09E 03	2.09E 03	1.91E 03	5.64E 02	2.91E 02	1.65E 02	1.28E 02	5.56E 00	1.79E 00	6.34E-01	1.83E-01

Table 6.2.1 (Continued)
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/μm) vs. Particle Radius (μm)

RADIUS --->		5.02	5.97	6.92	7.87	8.82	9.77	10.72	11.67	12.62	13.57	14.52
28 FEB 77	1400	1.01E-03	4.78E-04	1.14E-03	4.78E-04	5.37E-04	1.19E-04	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00
	1430	1.14E-03	1.07E-03	7.76E-04	7.76E-04	1.79E-04	2.39E-04	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00
1 MAR 77	1100	5.97E-04	6.57E-04	6.57E-04	2.93E-04	1.19E-04	5.97E-05	0.00E 00	1.79E-04	1.19E-04	0.00E 00	0.00E 00
	1130	7.16E-04	5.37E-04	3.58E-04	1.19E-04	4.18E-04	5.97E-05	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00
	1200	4.78E-04	1.79E-04	2.98E-04	1.19E-04	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1230	4.78E-04	1.79E-04	5.97E-05	1.79E-04	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
2 MAR 77	900	4.78E-04	1.19E-04	5.97E-05	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00	1.19E-04	0.00E 00
	930	0.00E 00	5.97E-05	2.98E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00
	1000	1.79E-04	2.39E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1030	1.79E-04	0.00E 00	5.97E-05	0.00E 00	0.00E 00	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1100	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1130	0.00E 00	5.97E-05	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1200	2.98E-04	1.19E-04	2.39E-04	5.97E-05	0.00E 00	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1230	4.18E-04	1.79E-04	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1300	2.39E-04	5.97E-05	5.97E-05	1.19E-04	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	5.97E-05
	1330	1.79E-04	1.19E-04	5.97E-05	1.79E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1400	5.97E-04	2.98E-04	1.79E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1430	7.76E-04	[illegible]	2.39E-04	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1500	8.36E-04	7.16E-04	2.39E-04	0.00E 00	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1530	8.95E-04	4.78E-04	2.39E-04	0.00E 00	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
3 MAR 77	1000	7.31E-02	3.86E-02	1.75E-02	5.97E-03	3.34E-03	1.67E-03	1.19E-04	2.39E-04	2.98E-04	1.79E-04	0.00E 00
	1030	8.88E-02	4.40E-02	1.89E-02	8.05E-03	2.44E-03	1.25E-03	8.95E-04	4.78E-04	1.19E-04	1.19E-04	0.00E 00
	1100	5.74E-02	2.77E-02	1.26E-02	4.89E-03	1.67E-03	1.07E-03	4.78E-04	2.98E-04	1.79E-04	0.00E 00	5.97E-05
	1130	1.08E-01	5.71E-02	2.25E-02	9.91E-03	3.40E-03	1.37E-03	5.37E-04	2.98E-04	1.19E-04	2.98E-04	5.97E-05
	1200	1.07E-01	5.79E-02	2.33E-02	9.66E-03	3.64E-03	2.26E-03	9.55E-04	5.97E-04	4.18E-04	2.98E-04	1.19E-04
	1230	8.59E-02	4.44E-02	2.17E-02	9.37E-03	4.19E-03	1.85E-03	1.32E-03	2.39E-04	6.57E-04	5.97E-05	0.00E 00
	1300	1.12E-01	5.81E-02	2.71E-02	1.02E-02	4.29E-03	2.69E-03	1.25E-03	7.16E-04	4.18E-04	1.79E-04	1.19E-04
	1330	1.39E-01	6.97E-02	3.15E-02	1.23E-02	5.85E-03	2.44E-03	1.07E-03	7.76E-04	5.97E-05	5.97E-05	5.97E-05
4 MAR 77	900	2.07E-01	1.51E-01	1.15E-01	7.02E-02	4.47E-02	3.14E-02	2.18E-02	1.49E-02	1.08E-02	7.46E-03	5.85E-03
	930	2.25E-01	1.54E-01	1.12E-01	6.82E-02	4.72E-02	3.32E-02	2.08E-02	1.60E-02	1.13E-02	8.29E-03	5.73E-03
	1000	1.81E-01	1.24E-01	8.66E-02	5.48E-02	3.49E-02	2.62E-02	1.56E-02	1.21E-02	8.72E-03	7.34E-03	4.96E-03
	1030	1.59E-01	1.04E-01	6.95E-02	3.98E-02	2.63E-02	1.60E-02	9.31E-03	5.85E-03	4.60E-03	3.22E-03	2.51E-03
	1100	1.85E-01	1.22E-01	8.24E-02	4.45E-02	2.74E-02	1.58E-02	9.37E-03	7.34E-03	3.34E-03	2.68E-03	1.55E-03
	1130	1.54E-01	1.01E-01	5.82E-02	3.73E-02	2.06E-02	1.11E-02	8.05E-03	5.37E-03	2.80E-03	2.86E-03	1.73E-03
	1200	1.39E-01	8.99E-02	5.69E-02	3.58E-02	2.12E-02	1.33E-02	8.36E-03	5.43E-03	3.58E-03	2.57E-03	1.37E-03
	1230	1.39E-01	9.42E-02	6.38E-02	4.01E-02	2.43E-02	1.67E-02	9.91E-03	6.68E-03	4.18E-03	3.11E-03	1.67E-03
	1300	1.30E-01	6.66E-02	4.47E-02	2.61E-02	1.77E-02	9.54E-03	6.57E-03	4.47E-03	2.68E-03	2.44E-03	1.49E-03
	1330	9.54E-02	6.63E-02	4.80E-02	2.89E-02	1.94E-02	1.34E-02	9.37E-03	5.79E-03	4.00E-03	2.98E-03	2.03E-03
	1400	1.79E-01	8.33E-02	6.06E-02	3.56E-02	2.57E-02	1.53E-02	1.11E-02	7.58E-03	5.43E-03	4.23E-03	2.44E-03
	1430	1.20E-01	8.28E-02	5.66E-02	3.55E-02	2.39E-02	1.44E-02	1.06E-02	6.98E-03	4.47E-03	4.18E-03	2.39E-03
	1500	1.14E-01	7.79E-02	5.45E-02	3.56E-02	2.52E-02	1.95E-02	1.31E-02	8.89E-03	6.21E-03	5.55E-03	4.42E-03
	1530	1.16E-01	8.07E-02	5.82E-02	3.99E-02	2.94E-02	2.04E-02	1.72E-02	1.14E-02	7.82E-03	6.08E-03	5.32E-03
9 MAR 77	1000	1.41E-01	7.58E-02	3.87E-02	1.41E-02	6.86E-03	4.00E-03	2.33E-03	1.37E-03	8.36E-04	2.39E-04	1.19E-04
	1030	7.18E-02	4.23E-02	1.95E-02	9.73E-03	5.32E-03	2.26E-03	2.26E-03	1.25E-03	2.39E-04	2.98E-04	1.79E-04
	1100	8.40E-02	5.29E-02	2.71E-02	1.20E-02	5.37E-03	2.86E-03	2.39E-03	1.37E-03	5.97E-04	7.76E-04	1.79E-04

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Table 6.2.1 (Continued)
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/µm) vs. Particle Radius (µm)

RADIUS --->		0.12	0.15	0.19	0.22	0.26	0.29	0.33	1.22	2.17	3.12	4.07
9 MAR 77	1130	4.37E 03	1.64E 03	1.41E 03	4.20E 02	2.29E 02	9.39E 01	9.25E 01	5.19E 00	1.79E 00	5.76E-01	1.52E-01
	1200	4.74E 03	1.73E 03	1.70E 03	4.49E 02	2.64E 02	1.23E 02	8.82E 01	4.52E 00	1.58E 00	5.52E-01	1.55E-01
	1230	4.29E 03	1.56E 03	1.44E 03	4.71E 02	2.29E 02	7.34E 01	8.97E 01	4.11E 00	1.62E 00	5.85E-01	1.58E-01
	1300	5.20E 03	2.21E 03	1.86E 03	5.89E 02	3.77E 02	1.60E 02	8.60E 01	5.02E 00	1.95E 00	7.51E-01	2.16E-01
	1330	5.49E 03	2.16E 03	2.23E 03	6.97E 02	3.63E 02	1.58E 02	1.10E 02	5.20E 00	2.00E 00	8.76E-01	2.56E-01
10 MAR 77	900	1.26E 04	5.20E 03	5.37E 03	2.45E 03	1.21E 03	7.40E 02	4.42E 02	1.08E 01	2.22E 00	8.22E-01	2.43E-01
	930	9.90E 03	4.26E 03	4.49E 03	1.82E 03	1.11E 03	6.20E 02	4.15E 02	9.74E 00	2.38E 00	8.56E-01	2.65E-01
	1000	8.17E 03	3.69E 03	3.94E 03	1.51E 03	8.46E 02	5.06E 02	3.32E 02	6.26E 00	1.36E 00	4.59E-01	1.31E-01
	1030	1.01E 04	4.37E 03	4.63E 03	1.37E 03	1.07E 03	5.63E 02	4.15E 02	9.25E 00	2.16E 00	7.91E-01	2.32E-01
	1100	3.54E 03	4.00E 03	4.17E 03	1.53E 03	8.69E 02	6.00E 02	3.35E 02	8.04E 00	1.78E 00	5.63E-01	1.55E-01
	1130	8.09E 03	3.49E 03	3.97E 03	1.57E 03	9.40E 02	4.43E 02	4.02E 02	9.42E 00	1.98E 00	6.58E-01	1.83E-01
	1200	1.51E 04	4.11E 03	4.26E 03	1.70E 03	1.33E 03	6.37E 02	4.37E 02	1.29E 01	2.51E 00	8.39E-01	2.32E-01
	1230	9.90E 03	3.71E 03	3.97E 03	1.61E 03	8.74E 02	6.14E 02	4.10E 02	1.29E 01	2.66E 00	9.43E-01	2.72E-01
11 MAR 77	930	1.01E 04	2.91E 03	2.34E 03	9.17E 02	5.17E 02	3.51E 02	2.18E 02	2.29E 01	6.93E 00	3.02E 00	8.17E-01
	1000	1.47E 04	5.69E 03	4.31E 03	1.35E 03	8.40E 02	4.54E 02	3.90E 02	3.01E 01	8.54E 00	3.46E 00	9.04E-01
	1030	8.31E 03	2.65E 03	2.07E 03	7.80E 02	4.69E 02	2.55E 02	2.65E 02	1.97E 01	5.33E 00	1.94E 00	5.40E-01
	1100	4.85E 03	2.05E 03	1.90E 03	7.51E 02	3.94E 02	2.33E 02	1.91E 02	1.35E 01	3.34E 00	1.18E 00	3.24E-01
12 MAR 77	900	1.59E 03	6.34E 02	6.71E 02	2.03E 02	6.97E 01	4.06E 01	3.55E 01	5.09E 00	1.63E 00	7.32E-01	2.52E-01
	930	1.25E 03	5.49E 02	6.97E 02	2.67E 02	7.09E 01	4.93E 01	3.22E 01	4.69E 00	1.27E 00	5.42E-01	1.63E-01
	1000	1.35E 03	5.74E 02	5.34E 02	1.45E 02	1.13E 02	5.80E 01	4.05E 01	5.20E 00	1.35E 00	5.39E-01	1.71E-01
	1030	1.06E 03	3.94E 02	3.77E 02	1.50E 02	1.05E 02	3.69E 01	4.47E 01	5.07E 00	1.33E 00	4.96E-01	1.59E-01
	1100	1.42E 03	5.23E 02	5.17E 02	1.54E 02	7.83E 01	7.83E 01	2.28E 01	6.02E 00	1.55E 00	5.58E-01	1.83E-01
	1130	1.17E 03	5.86E 02	4.94E 02	1.42E 02	7.09E 01	3.97E 01	4.47E 01	5.43E 00	1.33E 00	4.65E-01	1.52E-01
	1200	1.57E 03	5.57E 02	5.26E 02	1.33E 02	1.04E 02	5.51E 01	5.07E 01	6.14E 00	1.52E 00	6.27E-01	2.21E-01
	1230	1.14E 03	4.37E 02	4.00E 02	1.31E 02	6.80E 01	5.94E 01	3.97E 01	5.82E 00	1.31E 00	4.76E-01	1.62E-01
	1300	1.09E 03	5.26E 02	3.91E 02	9.57E 01	9.00E 01	4.34E 01	3.30E 01	5.12E 00	9.94E-01	3.01E-01	9.11E-02
	1330	1.59E 03	6.29E 02	6.49E 02	1.62E 02	1.13E 02	5.94E 01	5.70E 01	6.31E 00	1.29E 00	4.20E-01	1.24E-01
	1400	1.55E 03	7.14E 02	7.86E 02	2.09E 02	1.33E 02	4.63E 01	3.05E 01	4.51E 00	1.00E 00	3.43E-01	1.14E-01
	1430	1.61E 03	8.49E 02	9.54E 02	2.64E 02	1.25E 02	6.80E 01	5.20E 01	4.74E 00	1.13E 00	3.55E-01	1.18E-01
	1500	1.76E 03	7.71E 02	8.17E 02	2.99E 02	1.01E 02	4.63E 01	3.05E 01	4.37E 00	1.06E 00	3.40E-01	1.09E-01
	1530	2.19E 03	1.03E 03	9.54E 02	3.40E 02	1.76E 02	9.09E 01	3.72E 01	4.55E 00	1.13E 00	3.63E-01	1.19E-01
	1600	2.05E 03	1.14E 03	1.47E 03	4.94E 02	2.67E 02	1.48E 02	7.35E 01	4.92E 00	1.36E 00	4.98E-01	1.51E-01
	1630	2.21E 03	1.16E 03	1.36E 03	5.03E 02	2.84E 02	1.16E 02	6.95E 01	4.88E 00	1.35E 00	5.13E-01	1.65E-01
	1700	2.74E 03	1.25E 03	1.26E 03	4.69E 02	2.35E 02	1.01E 02	8.62E 01	4.73E 00	1.33E 00	5.00E-01	1.46E-01
14 MAR 77	930	3.97E 02	1.04E 02	[illegible]	4.63E 01	1.74E 01	1.16E 01	1.77E 01	1.86E 00	2.83E-01	1.79E-02	2.44E-03
	1000	3.71E 02	1.19E 02	1.19E 02	3.40E 01	2.55E 01	1.70E 01	3.97E 01	2.36E 00	3.49E-01	2.22E-02	2.57E-03
	1030	2.78E 02	1.04E 02	6.65E 01	4.34E 01	4.06E 01	2.03E 01	1.77E 01	2.51E 00	4.19E-01	3.29E-02	3.64E-03
	1100	3.17E 02	8.80E 01	5.94E 01	3.69E 01	3.11E 01	1.42E 01	1.49E 01	2.57E 00	3.89E-01	2.75E-02	2.13E-03
	1130	3.31E 02	9.29E 01	5.23E 01	4.94E 01	2.61E 01	2.03E 01	3.05E 01	2.40E 00	3.02E-01	1.88E-02	1.85E-03
	1200	4.26E 02	9.66E 01	6.51E 01	3.59E 01	1.70E 01	2.27E 01	1.24E 01	2.23E 00	2.99E-01	1.77E-02	2.21E-03
	1230	2.23E 02	6.37E 01	5.80E 01	3.49E 01	4.06E 01	1.74E 01	1.77E 01	2.37E 00	3.41E-01	2.18E-02	2.26E-03
	1300	2.67E 02	5.40E 01	9.91E 01	1.99E 01	3.69E 01	2.27E 01	1.24E 01	2.34E 00	2.74E-01	1.49E-02	2.26E-03
	1330	[illegible]	7.54E 01	7.54E 01	2.61E 01	2.03E 01	1.45E 01	1.77E 01	2.39E 00	3.01E-01	1.65E-02	2.21E-03
	1400	2.81E 02	6.51E 01	4.80E 01	3.11E 01	1.13E 01	1.70E 01	1.98E 01	2.51E 00	3.86E-01	3.11E-02	3.16E-03
	1430	2.99E 02	9.00E 01	7.83E 01	5.23E 01	1.45E 01	1.74E 01	2.28E 01	2.57E 00	3.59E-01	2.13E-02	2.57E-03
	1500	3.40E 02	5.94E 01	5.11E 01	2.27E 01	3.11E 01	2.27E 01	1.49E 01	2.67E 00	4.57E-01	4.00E-02	4.78E-03

Table 6.2.1 (Continued)
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/μm) vs. Particle Radius (μm)

RADIUS --->		5.02	5.97	6.92	7.87	8.82	9.77	10.72	11.7	12.62	13.57	14.52
9 MAR 77	1130	6.55E-02	3.76E-02	1.79E-02	8.77E-03	3.94E-03	2.80E-03	1.91E-03	6.57E-04	8.95E-04	3.58E-04	2.98E-04
	1200	7.17E-02	3.89E-02	1.89E-02	8.00E-03	4.23E-03	2.93E-03	1.37E-03	6.57E-04	2.39E-04	1.79E-04	2.39E-04
	1230	6.75E-02	4.04E-02	1.73E-02	7.76E-03	5.49E-03	2.26E-03	9.55E-04	4.78E-04	4.78E-04	3.58E-04	5.97E-05
	1300	9.69E-02	5.11E-02	2.38E-02	1.14E-02	4.89E-03	2.80E-03	1.01E-03	1.14E-03	5.37E-04	2.39E-04	0.00E 00
	1330	1.14E-01	5.78E-02	2.39E-02	8.89E-03	4.42E-03	2.21E-03	8.95E-04	4.78E-04	2.98E-04	1.19E-04	1.19E-04
10 MAR 77	900	1.40E-01	8.23E-02	4.86E-02	2.58E-02	1.32E-02	7.16E-03	4.36E-03	2.03E-03	8.95E-04	7.76E-04	4.18E-04
	930	1.5[illegible]E-01	9.12E-02	4.79E-02	2.22E-02	1.11E-02	6.26E-03	3.34E-03	1.97E-03	1.61E-03	7.76E-04	5.97E-04
	1000	6.94E-02	4.12E-02	2.41E-02	1.20E-02	6.57E-03	4.18E-03	1.67E-03	1.19E-03	5.37E-04	3.58E-04	1.79E-04
	1030	1.40E-01	8.49E-02	5.13E-02	2.75E-02	1.43E-02	7.64E-03	3.40E-03	2.44E-03	1.19E-03	8.36E-04	7.16E-04
	1100	8.31E-02	5.87E-02	3.31E-02	1.86E-02	7.76E-03	5.19E-03	3.34E-03	1.32E-03	7.76E-04	3.58E-04	1.19E-04
	1130	9.81E-02	6.29E-02	3.52E-02	1.99E-02	1.04E-02	4.78E-03	2.98E-03	2.03E-03	1.37E-03	1.19E-03	7.76E-04
	1200	1.29E-01	8.53E-02	4.72E-02	2.54E-02	1.42E-02	8.95E-03	6.33E-03	3.64E-03	1.85E-03	1.43E-03	7.16E-04
	1230	1.55E-01	9.74E-02	6.08E-02	2.81E-02	1.58E-02	8.89E-03	6.21E-03	3.34E-03	2.21E-03	1.37E-03	9.55E-04
11 MAR 77	930	4.60E-01	3.18E-01	2.29E-01	1.26E-01	7.77E-02	4.39E-02	2.79E-02	1.68E-02	7.87E-03	5.43E-03	4.23E-03
	1000	5.05E-01	3.40E-01	2.45E-01	1.42E-01	8.17E-02	4.96E-02	2.65E-02	1.84E-02	9.31E-03	7.58E-03	4.23E-03
	1030	3.18E-01	2.03E-01	1.29E-01	7.06E-02	3.86E-02	2.39E-02	1.44E-02	8.54E-03	3.87E-03	3.11E-03	2.33E-03
	1100	1.88E-01	1.20E-01	7.89E-02	3.61E-02	2.39E-02	1.25E-02	9.12E-03	4.72E-03	3.11E-03	1.67E-03	1.25E-03
12 MAR 77	900	1.46E-01	8.91E-02	4.87E-02	2.29E-02	1.08E-02	5.91E-03	3.34E-03	1.49E-03	4.78E-04	1.19E-04	2.98E-04
	930	8.73E-02	5.60E-02	3.24E-02	1.58E-02	8.36E-03	3.52E-03	1.97E-03	5.97E-04	5.37E-04	4.78E-04	1.79E-04
	1000	9.99E-02	5.95E-02	3.41E-02	1.79E-02	8.72E-03	4.36E-03	2.75E-03	1.57E-03	5.37E-04	4.18E-04	4.78E-04
	1030	9.59E-02	5.40E-02	3.00E-02	1.34E-02	5.79E-03	4.00E-03	2.26E-03	7.76E-04	5.97E-04	5.97E-05	1.19E-04
	1100	1.06E-01	6.35E-02	3.55E-02	1.84E-02	8.89E-03	4.47E-03	2.44E-03	2.03E-03	7.16E-04	5.97E-04	1.79E-04
	1130	8.99E-02	5.20E-02	2.92E-02	1.51E-02	6.75E-03	4.77E-03	1.85E-03	1.25E-03	9.55E-04	2.98E-04	4.18E-04
	1200	1.32E-01	7.92E-02	5.11E-02	2.42E-02	1.33E-02	6.44E-03	5.43E-03	2.21E-03	2.15E-03	9.55E-04	8.36E-04
	1230	9.20E-02	5.61E-02	3.36E-02	1.64E-02	9.01E-03	4.29E-03	3.04E-03	1.85E-03	1.01E-03	5.97E-04	4.78E-04
	1300	5.27E-02	3.37E-02	1.97E-02	8.54E-03	5.19E-03	3.22E-03	1.37E-03	1.25E-03	7.76E-04	5.37E-04	2.98E-04
	1330	7.37E-02	4.59E-02	2.97E-02	1.20E-02	8.12E-03	4.72E-03	2.44E-03	1.55E-03	1.01E-03	7.16E-04	2.98E-04
	1400	7.12E-02	4.56E-02	2.59E-02	1.31E-02	8.59E-03	5.25E-03	3.40E-03	1.49E-03	1.07E-03	8.95E-04	6.57E-04
	1430	7.20E-02	4.57E-02	2.98E-02	1.68E-02	8.47E-03	4.23E-03	3.11E-03	1.85E-03	1.32E-03	8.36E-04	1.79E-04
	1500	5.46E-02	4.34E-02	2.56E-02	1.24E-02	6.93E-03	3.11E-03	1.61E-03	1.01E-03	4.78E-04	2.98E-04	1.19E-04
	1530	7.42E-02	4.73E-02	2.84E-02	1.35E-02	8.72E-03	4.29E-03	2.39E-03	1.14E-03	8.95E-04	6.57E-04	4.18E-04
	1600	9.51E-02	5.83E-02	3.92E-02	1.80E-02	1.08E-02	5.85E-03	3.94E-03	2.03E-03	1.61E-03	1.07E-03	4.18E-04
	1630	9.54E-02	6.18E-02	3.59E-02	1.86E-02	1.02E-02	4.83E-03	3.52E-03	1.79E-03	1.14E-03	4.78E-04	6.57E-04
	1700	8.85E-02	5.95E-02	3.67E-02	2.09E-02	1.15E-02	7.52E-03	5.25E-03	2.86E-03	2.08E-03	1.19E-03	6.57E-04
14 MAR 77	930	2.80E-03	3.94E-03	3.94E-03	4.42E-03	3.11E-03	1.37E-03	7.76E-04	2.98E-04	0.00E 00	0.00E 00	0.00E 00
	1000	1.32E-03	1.67E-03	3.34E-03	3.04E-03	1.14E-03	1.14E-03	4.18E-04	2.98E-04	0.00E 00	1.19E-04	0.00E 00
	1030	1.25E-03	1.01E-03	1.91E-03	1.49E-03	5.97E-04	4.18E-04	5.97E-05	0.00E 00	5.97E-05	0.00E 00	0.00E 00
	1100	5.37E-04	8.95E-04	2.39E-04	3.58E-04	2.39E-04	5.97E-05	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00
	1130	4.78E-04	4.78E-04	7.76E-04	2.98E-04	2.39E-04	1.19E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1200	2.98E-04	5.97E-04	2.98E-04	2.98E-04	2.39E-04	1.79E-04	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00
	1230	4.18E-04	1.79E-04	3.58E-04	3.58E-04	1.79E-04	1.79E-04	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1300	2.98E-04	1.79E-04	1.79E-04	7.16E-04	1.79E-04	5.97E-05	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00
	1330	4.78E-04	2.39E-04	2.98E-04	2.39E-04	2.39E-04	1.79E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1400	6.57E-04	4.18E-04	1.19E-04	5.97E-05	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1430	7.16E-04	4.78E-04	4.78E-04	0.00E 00	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1500	7.16E-04	2.98E-04	2.98E-04	2.39E-04	0.00E 00	5.97E-05	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00

Table 6.2.1 (Continued)
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/μm) vs. Particle Radius (μm)

RADIUS --->		0.12	0.15	0.19	0.22	0.26	0.29	0.33	1.22	2.17	3.12	4.07
14 MAR 77	1530	3.31E 02	8.11E 01	5.80E 01	2.89E 01	3.20E 01	1.45E 01	2.80E 01	2.78E 00	4.66E-01	4.03E-02	4.54E-03
	1600	3.77E 02	9.09E 01	7.37E 01	4.26E 01	2.84E 01	2.84E 01	7.45E 00	2.72E 00	4.40E-01	3.29E-02	3.46E-03
	1630	4.29E 02	1.07E 02	7.26E 01	2.32E 01	2.89E 01	1.74E 01	1.52E 01	2.79E 00	4.59E-01	3.58E-02	3.94E-03
	1700	3.60E 02	9.09E 01	9.66E 01	2.55E 01	2.27E 01	3.69E 01	2.48E 01	2.79E 00	4.33E-01	3.84E-02	4.23E-03
	1730	4.31E 02	9.86E 01	8.11E 01	2.89E 01	4.34E 01	1.16E 01	2.03E 01	2.79E 00	4.16E-01	3.03E-02	2.68E-03
15 MAR 77	900	6.51E 02	1.97E 02	1.25E 02	6.09E 01	3.20E 01	2.61E 01	1.52E 01	1.94E 00	2.92E-01	1.49E-02	1.55E-03
	930	8.26E 02	2.07E 02	1.19E 02	4.54E 01	2.27E 01	2.55E 01	2.48E 01	1.88E 00	2.81E-01	1.77E-02	1.55E-03
	1000	8.20E 02	2.41E 02	1.19E 02	7.26E 01	2.32E 01	2.61E 01	1.27E 01	1.87E 00	2.78E-01	1.89E-02	2.39E-03
	1030	1.03E 03	2.50E 02	1.79E 02	6.80E 01	4.54E 01	3.11E 01	2.97E 01	1.95E 00	2.83E-01	1.73E-02	2.03E-03
	1100	1.03E 03	2.86E 02	1.65E 02	4.63E 01	4.34E 01	1.74E 01	1.27E 01	2.79E 00	7.44E-01	1.56E-01	3.66E-02
	1130	1.11E 03	3.57E 02	1.53E 02	6.80E 01	6.23E 01	3.69E 01	1.98E 01	3.00E 00	7.97E-01	1.75E-01	4.63E-02
	1200	5.06E 02	1.54E 02	1.07E 02	2.03E 01	3.77E 01	2.89E 01	5.07E 00	1.99E 00	2.74E-01	1.72E-02	1.25E-03
31 MAR 77	900	2.11E 03	9.06E 02	6.00E 02	1.71E 02	8.40E 01	2.89E 01	2.80E 01	1.73E 00	3.28E-01	4.19E-02	6.03E-03
	930	1.93E 03	6.69E 02	5.89E 02	1.08E 02	4.26E 01	3.11E 01	2.72E 01	1.53E 00	3.12E-01	3.18E-02	5.43E-03
	1000	1.61E 03	5.49E 02	4.49E 02	8.69E 01	5.80E 01	1.16E 01	1.27E 01	1.33E 00	2.23E-01	1.79E-02	3.11E-03
	1030	1.83E 03	7.03E 02	5.23E 02	1.16E 02	6.80E 01	1.70E 01	1.98E 01	1.22E 00	1.73E-01	1.15E-02	2.39E-03
	1100	2.01E 03	7.51E 02	5.60E 02	1.48E 02	5.51E 01	4.34E 01	3.05E 01	1.15E 00	1.80E-01	1.06E-02	1.79E-03
	1130	2.26[illegible] 03	6.94E 02	6.03E 02	1.53E 02	8.80E 01	4.26E 01	1.24E 01	1.16E 00	2.17E-01	2.33E-02	5.67E-03
	1200	2.43E 03	1.01E 03	8.29E 02	1.59E 02	9.57E 01	5.51E 01	3.80E 01	1.84E 00	5.[illegible]E-01	1.23E-01	3.16E-02
	1230	3.40E 03	1.41E 03	1.08E 03	3.06E 02	1.19E 02	6.23E 01	4.22E 01	2.17E 00	5.54E-01	1.33E-01	3.89E-02
	1300	3.51E 03	1.65E 03	1.25E 03	3.29E 02	1.65E 02	4.94E 01	5.07E 01	2.39E 00	5.72E-01	1.44E-01	4.14E-02
	1330	3.31E 03	1.44E 03	1.24E 03	3.60E 02	1.47E 02	7.94E 01	5.45E 01	2.54E 00	6.02E-01	1.55E-01	4.76E-02
	1400	3.37E 03	1.45E 03	1.18E 03	3.54E 02	1.54E 02	8.11E 01	4.82E 01	2.59E 00	5.89E-01	1.53E-01	4.56E-02
	1430	3.83E 03	1.61E 03	1.33E 03	3.77E 02	1.62E 02	8.80E 01	4.22E 01	2.68E 00	6.78E-01	1.79E-01	5.85E-02
	1500	3.69E 03	1.65E 03	1.34E 03	4.00E 02	2.00E 02	9.00E 01	5.82E 01	2.67E 00	6.52E-01	1.49E-01	4.69E-02
	1530	3.49E 03	1.67E 03	1.19E 03	3.31E 02	1.81E 02	9.66E 01	5.20E 01	2.75E 00	7.18E-01	1.65E-01	5.02E-02
1 APR 77	900	4.51E 03	2.57E 03	2.73E 03	8.23E 02	3.60E 02	2.29E 02	1.30E 02	3.44E 00	9.22E-01	3.28E-01	8.86E-02
	930	3.97E 03	2.35E 03	2.32E 03	6.94E 02	3.29E 02	1.72E 02	7.27E 01	3.01E 00	8.33E-01	2.74E-01	7.77E-02
	1000	4.49E 03	2.79E 03	2.72E 03	7.40E 02	3.23E 02	2.01E 02	1.18E 02	2.98E 00	7.45E-01	2.32E 01	7.28E-02
	1030	4.63E 03	2.81E 03	2.80E 03	8.11E 02	3.43E 02	1.61E 02	1.08E 02	2.84E 00	7.44E-01	2.[illegible]E-01	6.35E-02
	1100	4.80E 03	3.37E 03	2.94E 03	9.60E 02	4.74E 02	1.66E 02	1.38E 02	2.73E 00	6.74E-01	1.97E-01	5.64E-02
	1130	4.89E 03	3.14E 03	3.26E 03	1.03E 03	5.34E 02	1.98E 02	1.20E 02	2.79E 00	6.34E-01	1.92E-01	5.28E-02
	1200	4.74E 03	2.73E 03	2.65E 03	7.69E 02	3.26E 02	1.78E 02	1.03E 02	2.33E 00	5.45E-01	1.41E-01	3.86E-02
	1230	4.14E 03	1.92E 03	1.53E 03	3.97E 02	1.89E 02	7.46E 01	4.77E 01	2.15E 00	5.38E-01	1.29E-01	3.27E-02
	1300	4.31E 03	2.18E 03	1.57E 03	3.97E 02	1.98E 02	7.46E 01	4.52E 01	2.16E 00	5.21E-01	1.19E-01	3.09E-02
	1330	4.20E 03	2.02E 03	1.47E 03	3.40E 02	1.43E 02	8.60E 01	3.25E 01	1.92E 00	4.42E-01	8.86E-02	2.16E-02
	1400	5.00E 03	2.69E 03	2.05E 03	5.29E 02	2.12E 02	1.29E 02	6.52E 01	2.[illegible]E 00	5.78E-01	1.67E-01	4.85E-02
	1430	5.37E 03	3.14E 03	2.76E 03	8.03E 02	3.97E 02	1.38E 02	1.00E 02	2.[illegible]8E 00	4.69E-01	1.05E-01	3.04E-02
	1500	5.94E 03	3.69E 03	3.40E 03	[illegible].00E 03	3.54E 02	1.66E 02	1.00E 02	2.34E 00	5.08E-01	1.21E-01	3.53E-02
	1530	6.77E 03	3.94E 03	3.63E 03	1.11E 03	5.31E 02	2.58E 02	1.25E 02	2.49E 00	5.97E-01	1.53E-01	4.75E-02
2 APR 77	1700	1.99E 03	7.71E 02	4.71E 02	1.12E 02	5.77E 01	3.71E 01	3.10E 01	2.97E 00	7.98E-01	2.08E-01	6.33E-02
4 APR 77	930	3.57E 03	1.85E 03	1.39E 03	3.4[illegible]E 02	1.75E 02	6.03E 01	7.02E 01	3.60E 00	9.34E-01	2.71E-01	7.55E-02
	1000	3.09E 03	1.50E 03	1.07E 03	2.38E 02	1.55E 02	9.17E 01	5.02E 01	3.89E 00	1.02E 00	2.76E-01	8.15E-02
	1030	3.06E 03	1.36E 03	9.91E 02	2.47E 02	1.26E 02	7.46E 01	1.50E 01	3.89E 00	9.42E-01	2.54E-01	8.15E-02
	1100	3.20E 03	1.36E 03	9.91E 02	2.15E 02	1.26E 02	7.74E 01	5.02E 01	4.63E 00	1.33E 00	4.15E-01	1.40E-01

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Table 6.2.1 (Continued)
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/μm) vs. Particle Radius (μm)

RADIUS --->		5.02	5.97	6.92	7.87	8.82	9.77	10.72	11.67	12.62	13.57	14.52
14 MAR 77	1530	8.36E-04	4.18E-04	1.79E-04	2.39E-04	1.19E-04	5.97E-05	0.00E 00	5.97E-05	5.97E-05	0.00E 00	0.00E 00
	1600	1.07E-03	5.37E-04	2.39E-04	0.00E 00	3.58E-04	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00
	1630	5.97E-04	2.39E-04	4.78E-04	3.58E-04	1.19E-04	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1700	9.55E-04	4.18E-04	2.98E-04	5.97E-05	1.19E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1730	6.57E-04	5.97E-04	5.97E-05	3.58E-04	5.97E-05	5.97E-05	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00
15 MAR 77	900	1.01E-03	1.67E-03	1.37E-03	1.73E-03	7.76E-04	8.36E-04	5.97E-04	2.39E-04	0.00E 00	0.00E 00	0.00E 00
	930	1.07E-03	1.43E-03	2.33E-03	2.39E-03	8.95E-04	1.25E-03	2.98E-04	1.19E-04	5.97E-05	0.00E 00	0.00E 00
	1000	8.36E-04	1.19E-03	1.25E-03	8.36E-04	5.37E-04	5.37E-04	2.98E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00
	1030	4.18E-04	8.36E-04	1.43E-03	1.14E-03	5.37E-04	4.18E-04	1.79E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1100	1.57E-02	7.16E-03	3.58E-03	1.25E-03	8.95E-04	4.78E-04	2.98E-04	5.97E-05	0.00E 00	0.00E 00	0.00E 00
	1130	2.21E-02	1.26E-02	6.44E-03	3.76E-03	2.08E-03	1.25E-03	4.18E-04	2.98E-04	1.79E-04	1.19E-04	0.00E 00
	1200	7.76E-04	1.32E-03	1.97E-03	1.49E-03	7.16E-04	2.98E-04	1.79E-04	1.19E-04	1.19E-04	0.00E 00	5.97E-05
31 MAR 77	900	3.49E-03	1.19E-03	7.76E-04	2.98E-04	5.97E-05	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	930	2.03E-03	8.36E-04	1.79E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1000	7.76E-04	5.37E-04	2.39E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1030	5.97E-04	3.58E-04	2.39E-04	2.39E-04	0.00E 00	5.97E-05	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1100	4.18E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00	5.97E-05	0.00E 00	0.00E 00
	1130	1.85E-03	5.37E-04	4.18E-04	1.19E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1200	1.38E-02	7.76E-03	2.83E-03	1.31E-03	4.18E-04	1.79E-04	1.79E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1230	2.11E-02	1.25E-02	5.55E-03	2.09E-03	7.76E-04	7.76E-04	4.18E-04	1.19E-04	1.19E-04	5.97E-05	0.00E 00
	1300	2.20E-02	1.17E-02	5.32E-03	3.52E-03	1.55E-03	9.55E-04	2.39E-04	2.39E-04	5.97E-05	4.78E-04	0.00E 00
	1330	2.74E-02	1.71E-02	8.29E-03	4.00E-03	2.51E-03	1.01E-03	6.57E-04	1.19E-04	1.79E-04	2.39E-04	5.97E-05
	1400	2.62E-02	1.78E-02	9.84E-03	4.05E-03	2.26E-03	1.01E-03	4.18E-04	1.79E-04	1.19E-04	5.97E-05	5.97E-05
	1430	3.21E-02	2.31E-02	9.55E-03	4.29E-03	1.79E-03	1.01E-03	6.57E-04	1.19E-04	1.79E-04	2.98E-04	0.00E 00
	1500	2.79E-02	1.88E-02	8.83E-03	4.60E-03	2.26E-03	1.43E-03	7.16E-04	1.79E-04	1.19E-04	1.19E-04	5.97E-05
	1530	2.72E-02	1.71E-02	9.61E-03	4.93E-03	1.91E-03	1.32E-03	7.76E-04	6.57E-04	7.16E-04	1.79E-04	5.97E-05
1 APR 77	900	4.65E-02	2.74E-02	1.39E-02	7.52E-03	2.75E-03	1.55E-03	6.57E-04	3.58E-04	1.79E-04	2.39E-04	5.97E-05
	930	4.63E-02	2.59E-02	1.15E-02	5.14E-03	2.03E-03	1.49E-03	4.78E-04	3.58E-04	1.79E-04	5.97E-05	1.19E-04
	1000	4.11E-02	2.43E-02	1.31E-02	4.23E-03	1.85E-03	1.79E-03	8.36E-04	3.58E-04	2.39E-04	1.19E-04	1.19E-04
	1030	3.63E-02	2.17E-02	9.97E-03	4.83E-03	2.03E-03	1.43E-03	2.39E-04	4.18E-04	2.39E-04	5.97E-05	1.19E-04
	1100	3.06E-02	1.99E-02	1.01E-02	4.78E-03	2.57E-03	1.07E-03	7.76E-04	4.78E-04	0.00E 00	1.19E-04	5.97E-05
	1130	2.76E-02	1.96E-02	1.09E-02	5.01E-03	1.91E-03	1.14E-03	4.18E-04	1.19E-04	1.79E-04	5.97E-05	0.00E 00
	1200	2.34E-02	1.02E-02	5.37E-03	2.33E-03	1.55E-03	4.78E-04	1.79E-04	5.97E-05	5.97E-05	0.00E 00	0.00E 00
	1230	1.69E-02	9.01E-03	5.01E-03	1.61E-03	8.95E-04	5.37E-04	5.97E-05	0.00E 00	5.97E-05	0.00E 00	0.00E 00
	1300	1.41E-02	6.62E-03	2.33E-03	1.07E-03	2.39E-04	2.39E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1330	1.04E-02	5.73E-03	2.51E-03	1.19E-03	5.37E-04	1.79E-04	0.00E 00	0.00E 00	0.00E 00	0.00E 00	0.00E 00
	1400	2.78E-02	1.45E-02	7.82E-03	2.80E-03	1.79E-03	6.57E-04	5.97E-04	5.97E-05	1.19E-04	0.00E 00	0.00E 00
	1430	1.84E-02	9.66E-03	5.14E-03	2.62E-03	8.36E-04	5.37E-04	6.57E-04	1.19E-04	1.79E-04	5.97E-05	5.97E-05
	1500	2.17E-02	1.40E-02	8.18E-03	4.05E-03	2.39E-03	1.07E-03	4.78E-04	4.18E-04	1.79E-04	2.98E-04	1.79E-04
	1530	2.75E-02	1.86E-02	6.77E-03	6.33E-03	2.51E-03	1.49E-03	8.36E-04	1.79E-04	4.18E-04	1.19E-04	5.97E-05
2 APR 77	1700	3.77E-02	2.46E-02	1.40E-02	7.35E-03	4.01E-03	2.12E-03	1.37E-03	8.36E-04	5.37E-04	3.94E-04	3.58E-04
4 APR 77	930	4.45E-02	3.07E-02	1.93E-02	9.97E-03	5.61E-03	2.80E-03	2.98E-03	1.49E-03	8.95E-04	2.98E-04	5.97E-04
	1000	4.86E-02	3.00E-02	2.18E-02	1.05E-02	5.55E-03	3.64E-03	2.26E-03	1.79E-03	1.37E-03	5.37E-04	7.76E-04
	1030	5.01E-02	3.13E-02	2.00E-02	1.11E-02	7.22E-03	4.29E-03	2.93E-03	1.43E-03	5.97E-04	9.55E-04	7.16E-04
	1100	7.84E-02	5.29E-02	3.43E-02	1.84E-02	9.43E-03	6.08E-03	3.76E-03	2.26E-03	1.91E-03	1.07E-03	1.25E-03

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Table 6.2.1 (Continued)
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/μm) vs. Particle Radius (μm)

RADIUS --->		0.12	0.15	0.19	0.22	0.26	0.29	0.33	1.22	2.17	3.12	4.07
4 APR 77	1130	2.65E 03	1.13E 03	7.43E 02	2.18E 02	1.00E 02	6.31E 01	4.77E 01	4.56E 00	1.16E 00	3.28E-01	1.08E-01
	1200	2.94E 03	1.22E 03	9.06E 02	2.15E 02	9.17E 01	6.03E 01	5.52E 01	4.93E 00	1.29E 00	3.60E-01	1.19E-01
	1230	2.71E 03	1.19E 03	7.86E 02	2.78E 02	1.46E 02	8.60E 01	8.52E 01	5.89E 00	1.23E 00	2.76E-01	8.55E-02
	1300	2.23E 03	8.94E 02	6.86E 02	1.95E 02	1.18E 02	6.60E 01	4.52E 01	5.53E 00	1.24E 00	4.82E-01	8.63E-02
	1330	2.84E 03	1.17E 03	8.14E 02	2.67E 02	1.38E 02	8.60E 01	7.27E 01	6.74E 00	1.32E 00	2.59E-01	7.82E-02
	1400	3.23E 03	1.24E 03	8.69E 02	3.00E 02	1.55E 02	1.15E 02	1.00E 02	6.97E 00	1.44E 00	3.06E-01	9.25E-02
	1430	3.29E 03	1.14E 03	8.37E 02	2.81E 02	1.72E 02	1.03E 02	7.77E 01	6.95E 00	1.44E 00	3.15E-01	9.46E-02
	1500	3.23E 03	1.13E 03	9.17E 02	3.03E 02	1.41E 02	1.15E 02	9.02E 01	7.87E 00	1.55E 00	3.07E-01	9.42E-02
	1530	3.66E 03	1.41E 03	1.13E 03	3.00E 02	2.07E 02	9.46E 01	6.77E 01	8.38E 00	1.74E 00	3.84E-01	1.25E-01
	1600	4.60E 03	1.60E 03	1.18E 03	3.66E 02	2.35E 02	1.21E 02	1.18E 02	9.25E 00	1.81E 00	3.79E-01	1.25E-01
	1630	4.94E 03	1.54E 03	1.12E 03	3.97E 02	2.21E 02	1.46E 02	1.10E 02	1.06E 01	2.18E 00	5.40E-01	1.73E-01
	1700	4.74E 03	1.57E 03	1.16E 03	3.89E 02	2.86E 02	1.75E 02	1.18E 02	1.04E 01	1.67E 00	3.33E-01	1.15E-01
5 APR 77	1000	2.65E 03	8.86E 02	7.86E 02	3.40E 02	2.19E 02	1.54E 02	1.84E 02	2.75E 00	5.44E-01	1.92E-01	5.29E-02
	1030	2.78E 03	8.37E 02	6.34E 02	3.49E 02	1.94E 02	1.76E 02	1.36E 02	2.57E 00	4.95E-01	1.72E-01	4.58E-02
	1100	1.30E 03	2.86E 02	2.19E 02	1.07E 02	1.07E 02	6.17E 01	6.37E 01	7.39E-01	1.74E-01	4.76E-02	1.31E-02

Table 6.2.1 (Continued)
NRL Aerosol Size Distribution Measurements
Particle Density (1/cc/um) vs. Particle Radius (um)

RADIUS --->		5.02	5.97	6.92	7.87	8.82	9.77
4 APR 77	1135	6.32E-02	4.97E-02	2.97E-02	1.46E-02	1.84E-02	7.14E-03
	1200	7.67E-02	5.12E-02	3.22E-02	1.75E-02	1.33E-02	7.11E-03
	1230	5.56E-02	4.17E-02	3.56E-02	1.83E-02	1.19E-02	6.72E-03
	1300	5.42E-02	3.75E-02	4.34E-02	1.57E-02	9.37E-03	6.39E-03
	1330	5.75E-02	3.51E-02	4.43E-02	1.79E-02	1.41E-02	6.77E-03
	1400	5.65E-02	4.77E-02	3.51E-02	1.55E-02	1.57E-02	1.31E-02
	1430	6.21E-02	4.73E-02	3.22E-02	2.16E-02	1.48E-02	8.42E-03
	1500	6.46E-02	5.27E-02	3.73E-02	2.95E-02	2.53E-02	1.17E-02
	1530	8.36E-02	6.25E-02	4.39E-02	3.15E-02	2.84E-02	1.55E-02
	1600	8.29E-02	6.68E-02	4.74E-02	3.29E-02	2.13E-02	1.89E-02
	1630	1.24E-01	3.78E-02	5.73E-02	4.17E-02	3.14E-02	2.07E-02
	1700	8.34E-02	6.92E-02	5.57E-02	3.62E-02	2.44E-02	1.94E-02
5 APR 77	1500	2.75E-02	1.32E-02	1.27E-02	7.22E-03	5.49E-03	4.42E-03
	1030	1.94E-02	1.18E-02	1.18E-03	1.61E-03	3.34E-03	2.56E-03
	1103	3.82E-03	2.84E-03	1.67E-03	1.79E-03	1.43E-03	1.37E-03

RADIUS --->		10.72	11.67	12.62	13.57	14.52
4 APR 77	1135	3.64E-03	1.79E-03	1.19E-03	1.21E-03	7.76E-04
	1200	5.43E-03	3.16E-03	2.15E-03	1.14E-03	1.25E-03
	1230	5.42E-03	3.52E-03	2.26E-03	1.91E-03	2.03E-03
	1300	4.83E-03	2.51E-03	1.32E-03	1.67E-03	1.19E-03
	1330	8.15E-03	4.18E-03	2.80E-03	2.58E-03	1.91E-03
	1400	6.52E-03	4.65E-03	3.22E-03	2.33E-03	1.37E-03
	1430	6.93E-03	3.34E-03	2.98E-03	2.26E-03	1.61E-03
	1500	7.34E-03	4.95E-03	3.58E-03	2.21E-03	1.61E-03
	1530	1.19E-02	6.46E-03	5.95E-03	4.42E-03	3.22E-03
	1600	1.23E-02	7.64E-03	6.60E-03	5.49E-03	3.87E-03
	1630	1.53E-02	1.88E-02	6.98E-03	5.73E-03	4.68E-03
	1700	1.31E-02	1.54E-02	7.04E-03	6.83E-03	4.36E-03
5 APR 77	1500	2.62E-03	1.43E-03	1.32E-03	9.55E-04	2.98E-04
	1030	1.49E-03	1.55E-03	1.25E-03	5.37E-04	2.39E-04
	1103	1.32E-03	4.78E-04	8.35E-04	3.58E-04	4.10E-04

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