



# ARASF

## Atmospheric Research Airborne Support Facility

Flight Data Catalogue

### Flight A405

16 August 1995

PACE Flight

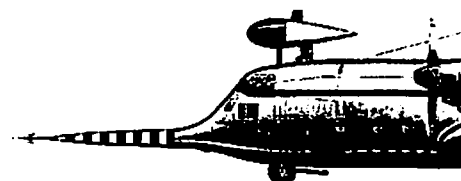
For more information contact:

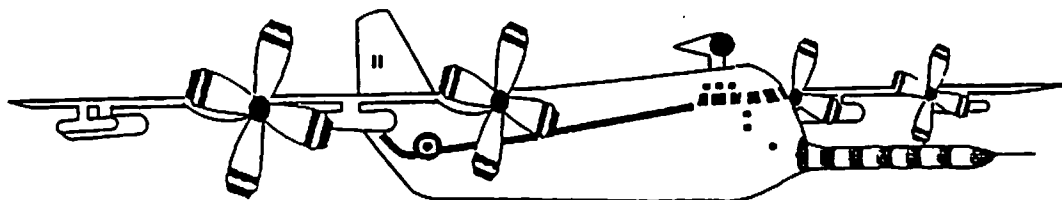
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## FLIGHT FOLDER

DATE: 16 / 8 / 95 TAKE OFF 1137 H (local time) FLIGHT NO. A405  
LANDING 1604

### PROJECT OFFICER :

AIRCRAFT SCIENTIST: K. DEWEY

FLIGHT LEADER: M. Rule

OBSERVER:

OTHERS: 2D. M. PICKERING

CAPTAIN: H. BURGOTNE  
CO-PILOT: H. HENDERSON  
NAVIGATOR: E. HENTON  
ENGINEER: J. LAW  
LOADMASTER: K. QUICK

13606

CCN: D. FINDLEY

OZONE: D. TIDDEMAN

NAVA. ) { P. HEALEY (SF26)  
          { J. REID  
          S. HUDSON (SF26)

### TRIALS INSTRUCTION (s):

OPERATING AREA:

PLYMOUTH

GENERAL SYNOPTIC SITUATION:



TIME: 00Z

From sajh@atlas.plym.ac.uk Wed May 22 15:36:13 1996  
Return-Path: <sajh@atlas.plym.ac.uk>  
Received: from atlas.plym.ac.uk by mail.nerc-swindon.ac.uk with SMTP (PP)  
id <20773-0@mail.nerc-swindon.ac.uk>; Wed, 22 May 1996 15:36:10 +0100  
Received: from triton.plymouth.ac.uk  
by atlas.plymouth.ac.uk (8.6.10/NERC-1.2(Solaris 2.x) id PAA13398;  
Wed, 22 May 1996 15:34:16 +0100  
From: Samantha Lavender <sajh@atlas.plym.ac.uk>  
Message-Id: <9605221532.ZM16996@atlas.plymouth.ac.uk>  
Date: Wed, 22 May 1996 15:32:37 +0100  
X-Mailer: Z-Mail (3.2.0 26oct94 MediaMail)  
To: A.Kaye@scientific-services.nerc.ac.uk  
Subject: Met Flight Data  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Status: R

>From our conversation my present requirements are for 1 Hz data including:

Windspeed & direction  
Altitude (pressure & radar height)  
GPS data (lat & long)  
Air Temperature (true non-deiced)  
Dew Point Temperature (total water and general eastern)  
Ozone mixing ratio  
PCASP measurements (calculated and raw)  
Uncorrected radiometric data

You can login to triton.plymouth.ac.uk (141.163.100.8) using  
account: uni  
password: University

I have created a directory called metdata.

Best Wishes,

Sam

--

\*\*\*\*\*  
Samantha Lavender  
NERC Remote Sensing & GIS Unit  
c/o Computing Service  
University Of Plymouth  
Drake Circus  
Plymouth, Devon, PL4 8AA  
\*\*\*\*\*  
Tel: (01752) 233910  
Fax: (01752) 233922  
E-mail: S.Lavender@ncs.nerc.a  
WWW: <http://www.ragu.plymouth.ac.uk/>  
\*\*\*\*\*

## INCLUDE:

1. An assessment of the flight.
2. Summary of the weather conditions.

A successful flight with all sections of the sortie brief completed. The NERC aircraft was still in area on arrival so started with FL100 level runs otherwise as sortie, with three sets of level runs at FL100 FL050 and 2000' and two complete profiles which were extended to FL120 to clear haze top at about FL100.

On leaving Plymouth area low level run from south to north coast for ozone measurements.

BBK cab at FL160 to west of Ci edge. 7 min leg box  
Wind cab accelerating up and down wind runs 150-200 KT/AS

Anticyclone over UK with slack NEly over SW England.  
Haze layers up to about FL100. Small cu developing over land. Vol tops above haze layer in North.

# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: ~~A. J. J. J.~~ K. Davern

Project: PACE Date: 16/8/95  
Flight No: A405 Page 1 of 5



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
1035							T/O BD. 5/8 C, SEVERAL HAZE LAYERS ONCLIMB	
1044			FL 100		250		LEVEL FL100 TRANSIT TO PACE AREA.	
1058	T	100	100		230	50.63	1/8 small cu to W C1 clearing to W	
						-3.60		
							Thick haze layers near this level. large variations in PEARP & O3	
1110							check on ozone pump.	
1116	T	100	100		192	50.83	2/8 small cu below 1/2 haze layer just below C1 clearing to SW	
						-3.64		
							As other a/c in area starting with FL100 run then profile AB	
113018	S	R1.1	100		192	50.38	START LEVEL RUN FL100. THICK HAZE LAYER JUST BELOW CLEAR ABOVE.	
						-4.25		
113249	E	1.1	100		183	50.1	O3 ~ 69 ppb DP -16.3 NEPA 0.04 PC ~ 70 Extend for 1 min	
						-4.27		
113624	S	1.2	100		032	50.20	Haze layers 1/8 small cu over land. C1 to E.	
						-4.29		
113940	E	1.2	100		028	50.38	extend for start of profile from 120	
						-4.15		
114249	S	1.3	100		142	50.34		
						-4.15		

# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: ~~A. Lange~~ & K. Dancy.

Project: PACE Date: 16/8/95  
Flight No: A405 Page 2 of 5



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
1143		E 1.3	100		145	50.30 -4.09	climb to FL120 for profile to clear haze layers	
114520		S P1	120		173	50.22 -4.09		
114816		HOLD P1	090					
114859		Restart P1	090		266	50.03 -4.13	HAZE layer ~ 9000' to surface - thickest ~ 4000'	
1154			Passing 3000				increase in O <sub>3</sub> slow turn.	
120002		E P1	50'		91	50.22 -4.35	increase in neph from 1158 to 1200 climb for next level 2000' starting point A	
120532		S R2.1	2000'		192	50.30 -4.25		
120750		E 2.1				50.19 -4.30	PC ~ 850 O <sub>3</sub> ~ 85 neph ~ 0.1 → 0.45 SST 18.5	
121144		S 2.2	2000'		021	50.19 -4.30	small cum overland clear over sea Haze 4/8 Ci to E.	
121540		E 2.2				50.38 -4.16	SST cal in turn.	
121808		S 2.3	2000'		136	50.37 -4.20		
121906		2.3				50.32 -4.11	climb for next level	

# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: *M. K. & K. Dewey*

Project: *RACE* Date: *96/8/95*  
Flight No: *A408* Page 3 of 5



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
122225		<i>SE P2</i>	<i>FL 50</i>			<i>50.27</i>		
						<i>-4.21</i>		
122609		<i>S 3.1</i>	<i>FL 50</i>		<i>196</i>	<i>50.31</i>	<i>in-thick haze layer 03 ~ 61 neph 04 PC ~ 500</i>	
						<i>-4.42</i>		
122842		<i>E 3.1</i>	<i>FL 50</i>			<i>50.18</i>		
						<i>-4.27</i>		
123257		<i>S 3.2</i>	<i>FL 50</i>			<i>50.21</i>	<i>Haze layer cu building overland.</i>	
						<i>-4.30</i>		
123654		<i>E 3.2</i>	<i>FL 50</i>			<i>50.39</i>	<i>1/8 Cu base 500'</i>	
						<i>-4.16</i>		
123942		<i>S 3.3</i>	<i>FL 50</i>		<i>133</i>	<i>50.36</i>	<i>DEF</i>	
						<i>-4.19</i>		
124033		<i>E 3.3</i>	<i>FL 50</i>		<i>142</i>	<i>50.33</i>	<i>end level rears climb for last profile.</i>	
						<i>-4.14</i>		
124458		<i>S P3</i>	<i>FL 120</i>		<i>276</i>	<i>50.26</i>	<i>Haze top ~ 850'</i>	
						<i>-4.44</i>		
124826		<i>HOLD P3</i>	<i>FL 80</i>		<i>←</i>	<i>50.23</i>		
						<i>-4.73</i>		
124930		<i>Restart P3</i>	<i>80</i>		<i>107</i>	<i>50.2</i>		
						<i>-4.69</i>		
130015		<i>E P3</i>	<i>50'</i>			<i>50.10</i>	<i>Neph peak 107 ENH 1024 552.</i>	
						<i>-3.91</i>		
							<i>END OF RACE MEASUREMENTS.</i>	
							<i>Position for coast in low level.</i>	

# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: *A. Kaye & K. Dancy*

Project: *PAGE* Date: *16/8/95*  
Flight No: *A405* Page 4 of



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
130232		S R4	A8L 1000		343	50.23	LOW LEVEL OZONE RUN 1/8 Small Cu MAX O <sub>3</sub> in S ~ 90 DEGR -68 - 57 N LEAST. 1310	
						-3.69		
132447		E R4			N	51.26	V LIGHT	
						-3.83		
132729		S R5.1	100'		267	51.31	SPEED RUNS WIND 090/2 VIS 4 MILES. STARTING @ 150 KTS PATCHY FOG.	
						-3.93		
133211		E R5.1	100'			51.33		
						-4.27		
133425		S 5.2	100'		086	51.34	RUN 2 STARTING 150 - 200	
						4.27		
1338		E 5.2	100			51.37		
						-3.94		
134123		S 6.1	FL 50		256	51.37	4/8 Ci above poor low level vis 150-200	
						-4.07		
134542		E 6.1	FL 50			51.29		
						-4.44		
134659		S 6.2	FL 50		075	51.34	150-200	
						-4.42		
13121		E 6.2	FL 50			51.		
						-4		



# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: *KD*

Project: *PACE*  
Flight No: *405*

Date: *16/8/95*  
Page *5* of *5*



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
<i>1358</i>							<i>over land</i> <i>1/8 mainly small cu 1501 tops above haze layer to 120</i>	
<i>140505</i>		<i>S</i> <i>7.1</i>	<i>FL</i> <i>160</i>		<i>220</i>	<i>50.64</i> <i>-4.65</i>	<i>SOLAR 215.</i> <i>7 MIN RUNS</i> <i>INTO SUN</i>	
<i>141205</i>		<i>E</i> <i>7.1</i>	<i>FL</i> <i>160</i>		<i>↗</i>	<i>50.36</i> <i>-5.15</i>		
<i>141323</i>		<i>S</i> <i>7.2</i>	<i>FL</i> <i>160</i>		<i>308</i>	<i>50.37</i> <i>-5.28</i>	<i>ACROSS SUN</i>	
<i>142023</i>		<i>E</i> <i>7.2</i>	<i>FL</i> <i>160</i>		<i>↘</i>	<i>50.70</i> <i>-5.88</i>		
<i>142126</i>		<i>S</i> <i>7.3</i>	<i>FL</i> <i>160</i>		<i>039</i>	<i>50.77</i> <i>-5.84</i>	<i>DOWN SUN</i>	
<i>142826</i>		<i>E</i> <i>7.3</i>	<i>FL</i> <i>160</i>		<i>↗</i>	<i>51.13</i> <i>5.42</i>		
<i>142928</i>		<i>S</i> <i>7.4</i>	<i>FL</i> <i>160</i>		<i>133</i>	<i>51.13</i> <i>-5.32</i>	<i>Cl edge to E parallel to track now close to track.</i>	
<i>143628</i>		<i>E</i> <i>7.4</i>	<i>FL</i> <i>160</i>			<i>50.80</i> <i>-4.77</i>	<i>END TRANSIT FL150 TO BD.</i>	
<i>15</i>							<i>LAND B/D</i>	

DATE: 16-8-95

FLIGHT NO: A405

## INCLUDE:

1. An assessment of the flight.
2. Summary of the weather conditions.

A successful flight with all sections of the sortie brief completed. The NERC aircraft was still in area on arrival. So started with FL100 level runs otherwise as sortie, with three sets of level runs at FL100 FL050 and 2000' and two complete profiles which were extended to FL120 to clear haze top at about FL100.

On leaving Plymouth area low level run from south to north coast for ozone measurements.

BBR cab at FL160 to west of CI edge. 7 min leg box wind cab accelerating up and down wind runs 150-200 KT/A

Anticyclone over UK with slack NEly over SW England. Haze layers up to about FL100. Small cu developing over land. Vol tops above haze layer in North.

16th August 1995

103642

Take Off from Boscombe

PACE

113018(2) - 113239(3)	Run 1.1, A → B	FL100	200°
113626(4) - 113940(5)	Run 1.2, B → C	FL100	035°
114249(6) - 114341(7)	Run 1.3, D → F	FL100	150°
114520(8) - 120002(13)	PROFILE P1 ↓	FL120 → 50ft	turning
120532(15) - 120756(16)	Run 2.1, A → B	2000ft	200°
121144(17) - 121540(18)	Run 2.2 B → C	2000ft	035°
121808(19) - 121906(20)	Run 2.3, D → F	2000ft	150°
121906(20) - 122225(21)	PROFILE P2 ↗	2000ft → FL50	150/015°
122609(22) - 122842(23)	Run 3.1, A → B	FL50	030°
123257(24) - 123644(25)	Run 3.2, B → C	FL50	030°
123942(26) - 124033(28)	Run 3.3, D → F	FL50	150°
124458(29) - 130015(33)	PROFILE P3 ↓	FL120 → 50ft	turning
<u>low level ozone sampling -</u> 1301 - 132447(34)	Run 4	400' agl	

Accelerating Runs

132729(37) - 133211(48)	Run 5.1	100ft	
133425(49) - 133840(60)	Run 5.2	100ft	
134123(61) - 134542(72)	Run 6.1	FL50	
134659(73) - 135121(84)	Run 6.2	FL50	
<u>Box Pattern</u> 140505(85) - 141205(86)	Run 7.1	FL160	225°
141323(87) - 142023(88)	Run 7.2	FL160	315°
142126(89) - 142826(90)	Run 7.3	FL160	050°
142928(91) - 143628(92)	Run 7.4	FL160	140°

150358

Land at Boscombe

# **MRF 01 — P.A.C.E. Experiment (SeaWiFs)**

**A405 16/8/95**

**Location:** Plymouth area as show on map and in flightline table for main experiment

**Meteorological Conditions:** Clear skies with less than 2 octas cloud cover.

## **Flight Patterns:**

1. Transit from Boscombe Down to operational area to arrive overhead at FL 100
2. Profile descent from FL 100 to minimum safe altitude (50 feet) along flight line C-B.
3. Straight and level runs along flight lines A-B, B-C and D-E-F starting at 2000ft then FL 050 and FL 100.
4. Profile descent from FL 100 to 50ft remaining within operating area.
- \* 5. Vacate Plymouth area by 1400 BST and transit as convenient for next section to allow radiometers to stabilise temperatures.
6. Calibration box pattern FL 150 when radiometer temps are reported stable.

10 min run into sun

10 min run across sun

10 min run down sun

10 min run across sun. Box pattern can be started on any leg as convenient

7. Accelerating runs from 150 kts to 200 Kt, only if low turbulence.

Accelerating by 10 Kt at intervals of 30 seconds. Race track, one run with wind and one run into wind. Minimum height (100 ft) and 5,000 ft.

8. Items 6 and 7 can be transposed if convenient.

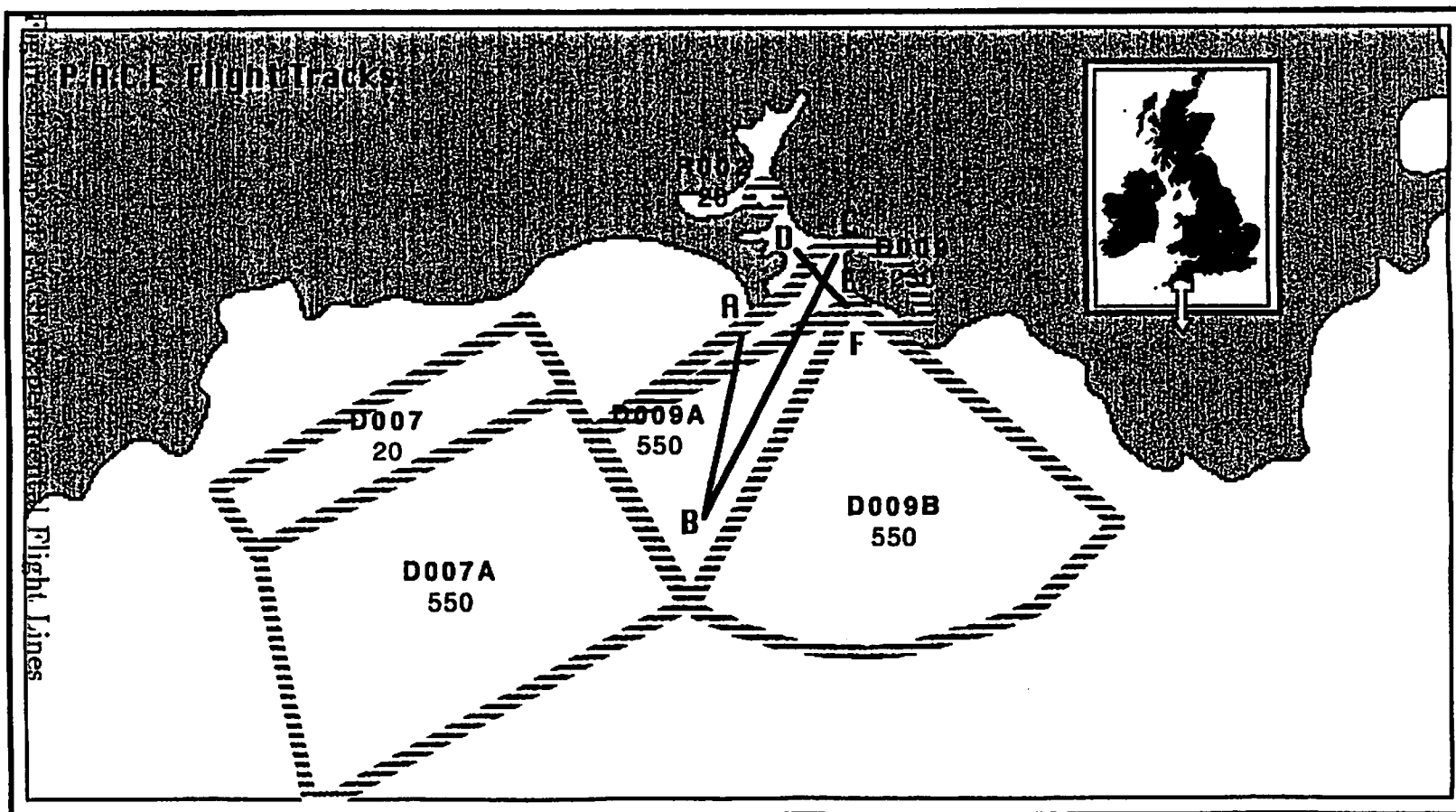
9. Return to Boscombe Down

**Special Requirements:** MRF radar operator to have control of radar as often as possible and note of radar elevation when Nav has control.

**Communications:** G-NERC a/c 130.625 MHz callsign Atlantic 31

K.J.Dewey a/s

\* low level run to N Devon.



## Run Positions

<b>A. Rame Head</b>	50° 18.60 N	04° 13.36 W
<b>B. Eddystone</b>	50° 10.80 N	04° 15.90 W
<b>B. Eddystone</b>	50° 10.80 N	04° 15.90 W
<b>C. Mount Batten</b>	50° 21.50 N	04° 07.81 W
<b>D. Mount Edgcumbe</b>	50° 21.48 N	04° 10.22 W
<b>E. East Breakwater</b>	50° 19.99 N	04° 08.12 W
<b>F. Renny Point</b>	50° 19.02 N	04° 07.34 W

# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: ~~A. J. J. J.~~ & K. Davey.

Project: PACE Date: 16/8/95  
Flight No: A405 Page 1 of 5



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
1035							T/O BD. 5/8 C, SEVERAL HAZE LAYERS ON CLIMB	
1044			FL 100		250		LEVEL FL 100 TRANSIT TO PACE AREA.	
1058		T	100		230	50.63 -3.60	1/8 small cu to W C1 clearing to W	
							Thick haze layers near this level. large variations in PCASP & O3	
1110							check on ozone pump.	
1116		T	100		192	50.83 -3.64	2/8 small cu below 1/4 haze layer just below C1 clearing to SW	
							As other a/c in area starting with FL 100 then then profile AB	
113018		S R1.1	100		192	50.38 -4.25	START LEVEL RUN FL 100. THICK HAZE LAYER JUST BELOW CLEAR ABOVE.	
113249		E 1.1	100		183	50.1 -4.27	O3 ~ 69 ppb DP -16.3 NEPH 0.04 PC ~ 70 Extend for 1 min	
113624		S 1.2	100		032	50.20 -4.29	Haze layers 1/8 small cu over land. C1 to E.	
113940		E 1.2	100		028	50.38 -4.15	extend for start of profile from L20	
114249		S 1.3	100		142	50.34 -4.15		

# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: *A. K. Dancy*

Project: *PACE* Date: *16/8/11*

Flight No: *A405* Page 2 of 5



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
1143		E 1.3	100		145	50.30 -4.09	climb to FL120 for profile to clear haze layers	
114520		S P1	120		173	50.22 -4.09		
114816		HOLD P1	090					
114859		Restart P1	090		266	50.03 -4.13	haze layer ~ 9000' to surface - thickest ~ 4000'	
1154			Passing 3000				increase in O <sub>3</sub> slow turn.	
120002		E P1	50'		91	50.22 -4.35	increase in neph from 1158 to 1200 climb for next level 2000' starting point A	
120532		S R2.1	2000'		192	50.30 -4.25		
120750		E 2.1				50.19 -4.30	PC ~ 850 O <sub>3</sub> ~ 85 neph ~ 0.1 → 0.45 SST 18.5	
121144		S 2.2	2000'		021	50.19 -4.30	small in overland clear over sea Haze 4/8 Li to E.	
121540		E 2.2				50.38 -4.16	SST cal in turn	
121808		S 2.3	2000'		136	50.37 -4.20		
121906		2.3				50.32 -4.11	climb for next level	



# AIRCRAFT SCIENTIST'S LOG

Project: RACE Date: 9/6/81



Aircraft Scientist: K. Dewey

Flight No: A405 Page 3 of 5

GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
122225		SE 3.2	FL 50			50.27 -4.21		
122609		S 3.1	FL 50		196	50.31 -4.42	in-thick haze layer 03-61 neph 04 PC ~ 500	
122842		E 3.1	FL 50			50.18 -4.27		
123257		S 3.2	FL 50			50.21 -4.30	Haze layer Cu building overland.	
123654		E 3.2	FL 50			50.39 -4.16	1/8 Cu base 500'	
123942		S 3.3	FL 50		133	50.36 -4.19	DEF	
124033		E 3.3	FL 50		142	50.33 -4.14	end level rises climb in last profile.	
124458		S P3	FL 120		276	50.26 -4.44	Haze top ~ 8500'	
124826		HOLD P3	FL 80		←	50.23 -4.73		
124930		Restart P3	80		107	50.2 -4.69		
130015		E P3	50'			50.10 -3.91	Neph peak 107 SWH 1024 SS2. END OF RACE MEASUREMENTS. Position for coast in low level.	

# AIRCRAFT SCIENTISTS LOG

Aircraft Scientist: *A. Kaye & K. Dancy*

Project: *KACE* Date: *16/8/75*

Flight No: *A405* Page *4* of



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
130232		S R4	AFL 1000		343	50.23	LOW LEVEL OZONE RUN 1/8 Small Cu	
						-3.69		
							MAX O <sub>3</sub> in S ~ 90 DEGR -68 - 57 N (EAST)	
							1310	
132447		E R4			N	51.26		
						-3.83		
132729		E RS.1	100'		267	51.31	V LIGHT SPEED RUNS. WIND 090/12 VIS 4 MILES. STARTING @ 150 KTS PATCHY FOG.	
						-3.93		
133211		E RS.1	100'			51.33		
						-4.27		
133425		S S.2	100'		086	51.34	RUN 2 STARTING 150 - 200	
						4.27		
1338		E S.2	100			51.37		
						-3.94		
134123		S 6.1	FL 50		256	51.37	4/8 Ci above poor low level vis 150-200	
						-4.07		
134542		E 6.1	FL 50			51.29		
						-4.44		
134659		S 6.2	FL 50		075	51.34	150-200	
						-4.42		
13121		E 6.2	FL 50			51.		
						-4		

# AIRCRAFT SCIENTIST'S LOG

Aircraft Scientist: *KD*

Project: *PACE*

Date: *16/8/95*

Flight No: *405*

Page *5* of *5*



GMT	Event Mark	Run No.	Height	Pres/Rad	INS Heading	Omega Pos'n	Other Info. (eg. clouds, weather, visibility, winds, sea state etc.)	Photo No.
						Latitude		
						Longitude		
1358							<i>over land</i>	
		<i>5</i>	<i>FL</i>			<i>50.64</i>	<i>1/8 mainly small cu 1501 tops above haze layer to 120</i>	
140505		<i>7.1</i>	<i>160</i>		<i>220</i>	<i>-4.65</i>	<i>SOLAR 215. 7 MIN RUNS</i>	
		<i>E</i>	<i>FL</i>			<i>50.36</i>		
141205		<i>7.1</i>	<i>160</i>		<i>220</i>	<i>-5.15</i>		
		<i>5</i>	<i>FL</i>			<i>50.37</i>		
141323		<i>7.2</i>	<i>160</i>		<i>308</i>	<i>-5.28</i>	<i>ACROSS SUN</i>	
		<i>E</i>	<i>FL</i>			<i>50.70</i>		
142023		<i>7.2</i>	<i>160</i>			<i>-5.88</i>		
		<i>5</i>	<i>FL</i>			<i>50.77</i>		
142126		<i>7.3</i>	<i>160</i>		<i>039</i>	<i>-5.84</i>	<i>DOWN SUN</i>	
		<i>E</i>	<i>FL</i>			<i>51.13</i>		
142826		<i>7.3</i>	<i>160</i>			<i>5.42</i>		
		<i>5</i>	<i>FL</i>			<i>51.13</i>		
142928		<i>7.4</i>	<i>160</i>		<i>133</i>	<i>-5.32</i>	<i>Cl edge to E parallel to track now close to track.</i>	
		<i>E</i>	<i>FL</i>			<i>50.80</i>		
143628		<i>7.4</i>	<i>160</i>			<i>-4.77</i>	<i>END TRANSIT FL 150 TO BD.</i>	
15							<i>LAND B/D</i>	

TS

Date: 6/8/95

Operator: *not*

Page 1 of 3

[illegible]

# CLOUD PHYSICS LOG

Flight No. AL05

Date: 16/8/95

Operator: MP

Page 2 of 3

G.M.T.	PCASP		FSSP			2D-C			HVPS / 2D-P			REMARKS
DRS Time	Conc/cc	Mean R	Conc/cc	Max Size	RelT	Conc/L	Max Size	Habit	Conc/m <sup>3</sup>	Max Size	Habit	
122841												end of Run Start Run 3.2 @ FL50
123257												
123300	480	0.10										
123500	570	0.11										
123644												end of Run Start Run 3.3 @ FL50
123939												
124000	580	0.10										
124103												end of Run Start P from FL180
124157	16	0.08										
124550	16	0.08										FL110
124640	100	0.13										FL100
124730	180	0.13										FL90
124802	400	0.11										FL80 2 hold
124937												out
125017	470	0.11										FL70
125115	570	0.11										FL60
125202	630	0.11										FL50
125336	430	0.11										4000'
125445	1800	0.09	0.18	5								3000'
125640	1750	0.09	0.17	10								2000'
125805	2500	0.09	0.21	10								1000'
125905	1750	0.09	0.14	10								500'
130010	2520	0.08	0.16	10								End of P @ 50'
130445												Start Run 4 @ 250'?
130445												end of Run
130725												Start Run 5.1 @ 100'
130800	1500	0.08	0.03	10								
133000	2150	0.08	0.13	10								
133210												end of Run Start Run 5.2 @ 100'
133125												
132500	2860	0.08	0.25	10								
132700	2450	0.08	0.12	10								
133540												end of Run Start Run 6.1 @ FL50
134100												
134800	535	0.12	0.01	5								
134900	457	0.11	0.01	5								

# CLOUD PHYSICS LOG

Flight No. A405

Date: 16/8/95

Operator: MF

Page 3 of 3

[illegible]

# NEPHELOMETER OPERATORS LOG

FLIGHT H405

DATE 16 108 195

PROJECT PAGE

PART 1 of 1

G.M.T.	HEIGHT	I.A.S.	RUN	Bscat	REMARKS
0845	GROUND CAL		—	3.3 / 3.4	
0855	GROUND RUN		—	6.3 / 0.4	
0955	"		—	0.5 / 0.6	
1000	GROUND CAL		—	3.6 / 3.8	
1014	GROUND RUN		—	0.6 / 0.7	
1048	AIR CAL	160	TRANSIT	3.0 3.0	
1044 30	RUN	180	"	0.1 / 0.2	
1106	10 000	180	TRANSIT	0.125.	
1121	10 000	180	TRANSIT	0.37.	
1131	10 000	180	RUN 1	0.12.	
1137	"	"	RUN 1-2	0.06	
1144	10 000	"	1.3	0.1	
1145 20	12000	180	P1	0.02	
1207	2000	180	RUN 2.1	0.27	
1212	"	"	2.2	6.35	
1424	CAL ON BOX	180	1.1	16000 IT IAS = 180	3.4 / 3.5

DATE 16/8/91 TI MRF 01 4-2 NAV HEATON 1019. J'  
 AIRFIELD Blaown AIRFIELD Blaown 126 J'  
 R/W 23 W/V 350/1 TEMP +24 QNH 1024 OFF 2482. R/W 23 W/V 320/1 TEMP +24 QNH 1022 OFF 2410  
 WX 7x3000 WX br m. B2. / L/A 31K  
 ATC CL RT 260 S+4 ATC CL S- V 1200 1+5300 3+300

T/O TIME 1035 LAND TIME 1.20 1020. W/S

TIME	HDG	DR	G/S	IAS	TAS	W/V	ALT/FL	QNH/PR	LAT/LONG	RUN
113019	192				206	141/2	FL100		N50187 W004134	ST 1.1
113238							✓	1013	N50108 W004160	END 1.1
113626						L/V	✓	✓	✓	ST 2.2
113936						L/V	✓	✓	N50215 W004078	END 1.2
114258						L/V	✓	✓	N50215 W004102	1.3
114325						L/V	✓	✓	N50193 W004067	END 1.3
114201						086/5	FL120		N50142 W004083	P1
114200						L/V	50'		N50130 W004202	END 1.1
120524	190	+	+	+	190	✓	2000'	1020	N50186 W004134	ST 2.1
120758							✓		N50108 W004169	END 2.1
121144	027					070/5	2000	1020	—	ST 2.2
121539							2000	1020	N50215 W004078	END 2.2
121809	146					✓	2000		N50215 W00410	ST 2.3
121906							2000		N5020.0 W004081	END 2.3
✓							2000		✓	STAGE P2
12226							FL250		N50150 W004122	END P2
122609							FL50		N50186 W004134	ST R3-1
122841					198	L/V	FL50		N50108 W004159	END 3-1
123256	026				198	L/V	FL50		—	S 3.2
123645					202	083/7	FL50		N50215 W004078	END 3.2
123912						✓	FL50		N50186 W004134	ST 3.3
124032							FL50		N50190 W004073	END 3
✓							FL50		—	—

DISK PROFORMA/NAVFORM

NET FL 1

(421)



TIME	HDG	DR	G/S	IAS	TAS	W/V	ALT/FL	QNH/PR	LAT / LONG	RUI.
124457							R120	2942	NS0157 W004239	B
130017	065			180	180	136/7	50'	RAA AL	NS0045 W003525	END P3
130400	355					078/8	250 AL	RAA AL	NS0132 W003385	Rui. 4
132414							✓		NS1117 W003298	Rui. 4
122724	267			150		VAP/ SPEED	100		NS1147 W003470	ST Rui. 5
122211							100'	RA	NS1126 W004156	END 1.5
132122	085			150		VAP/ SPEED	100'	RAA	NS1205 W004172	ST Rui. 5-2
133810							100		NS1221 W003570	END 6
134122				150			R250	FL	NS1221 W004037	ST R 1
134512	260					334/07	R50	2942	NS1178 W004250	END R 6.1
134700	080			150			R250		NS1201 W004265	ST R 2
135116							R250		NS12200 W004020	END 6.2
140505	220	—	—	180	242	119/12	R160	(R1342)	NS0415 W004384	ST 7.1
141205							✓		NS0244 W005089	END 1
141223	310			180	✓	120/13	R160		NS0225 W005164	ST 7.2
141923							✓		NS0414 W005164	END 2
142125	041			✓		125/12	F160		NS0454 W005516	ST 7.3
142825							✓		NS1089 W005252	END 1.3
142828	134					130/10	✓		NS1077 W005198	ST 7.4
143828									NS0480 W004466	END 7.4
							118			
							30	100	848 18	1485
							R121		34	141502
							RAA 1		3	1505
224									(27) 28	

230  
225/3.6/005/28  
1160

1438

1506

A405

16-AUG-95

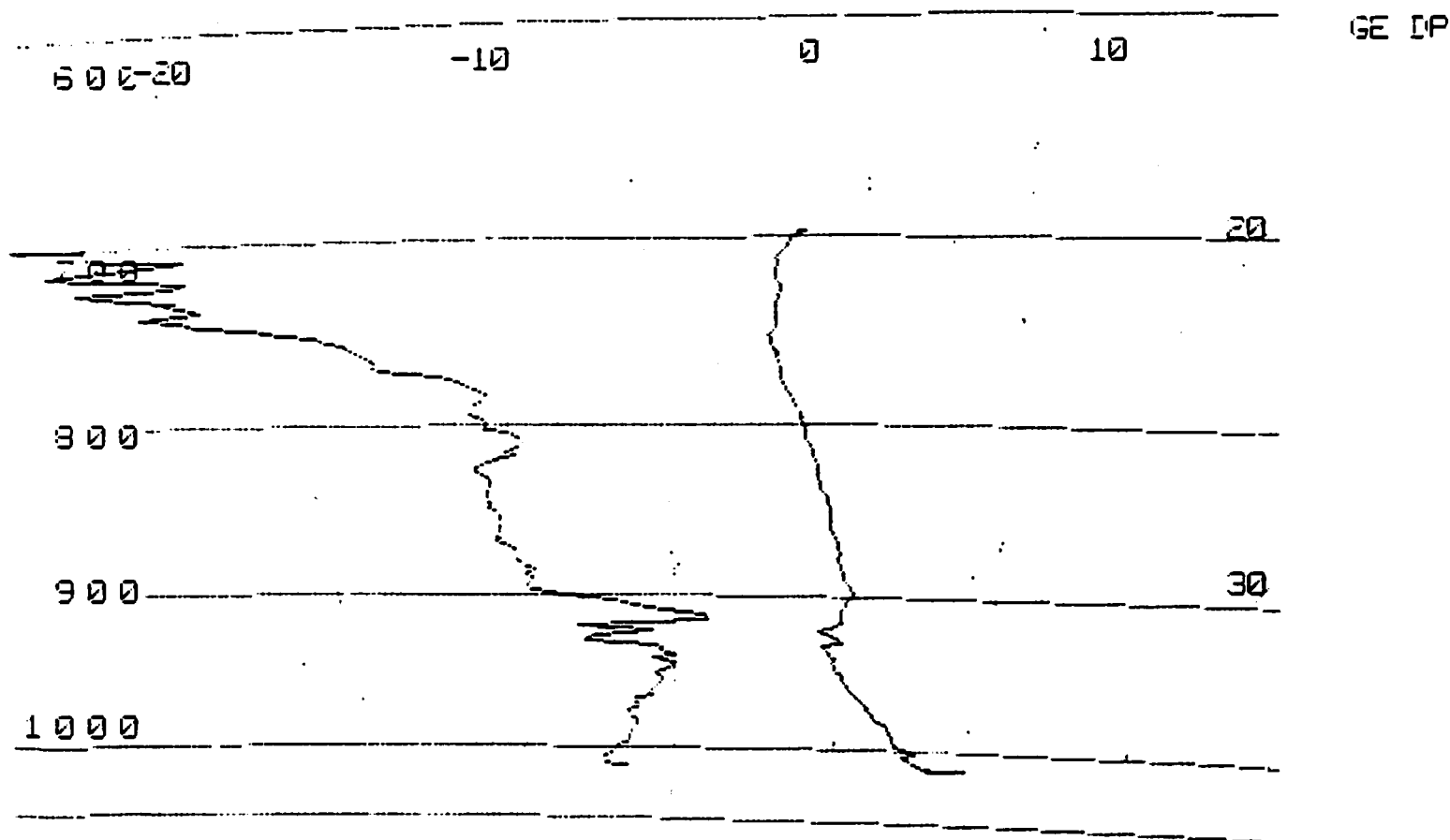
10:44:33

001 2

51.05

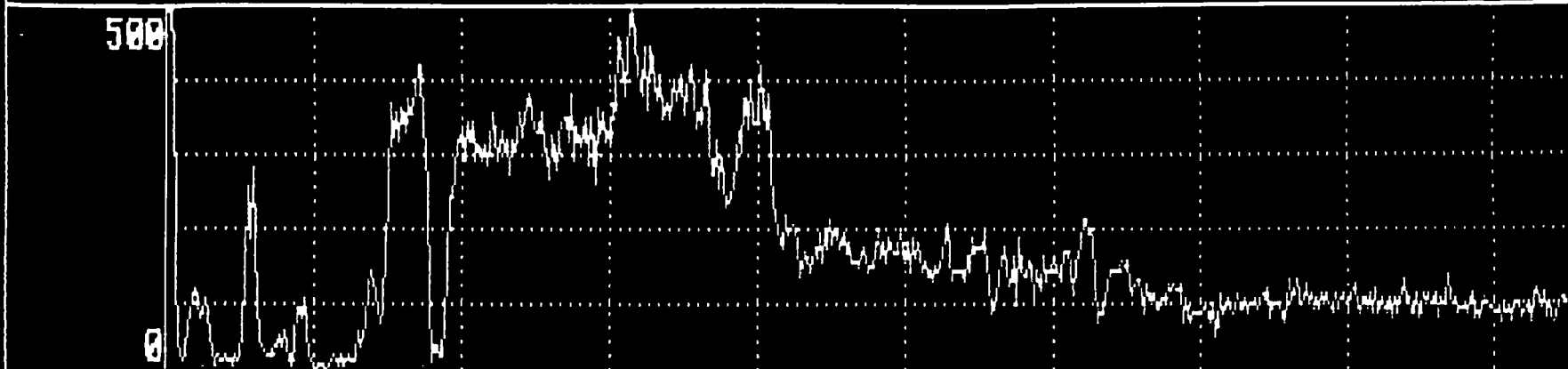
-2.30 AS P

HDG	SPR	PHGT	TAS	TAT	DEW	WIND	
degT	mb	kft	knots	C	C	deg m/s	
259.	697.	10.0	216.	4.6	-21.2	035/ 5	



A	B	C	D	E	F	G	H
SELECT	PARAS	FREQ	ZOOM			VIDEO	HELP

PCASP CONC/cc



PCASP CONC #/cc 505  
 PCASP MEAN RAD um 0.2  
 PCASP MASS ug/m3 12.49

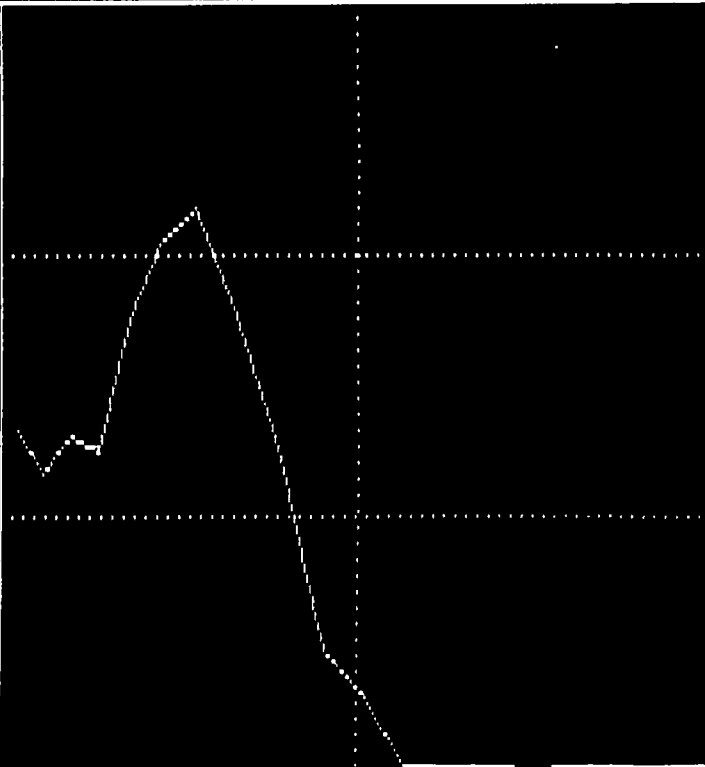
FSSP CONC #/cc 0  
 FSSP MEAN RAD u 0.0  
 FSSP LMC gm/m3 0.00

2D-C CONC #/l 0.0  
 2D-C MAX SIZE um 0  
 2D-C LMC g/m3 0.000e+000

95-08-16 11:00:08

PCASP COUNT FSSP COUNT

1000  
 1000



1  
 1

0.1  
 0.1

10  
 10

A405

16-AUG-95

11:13:30

001  $\Omega$ 

50.99

-3.68 AS P

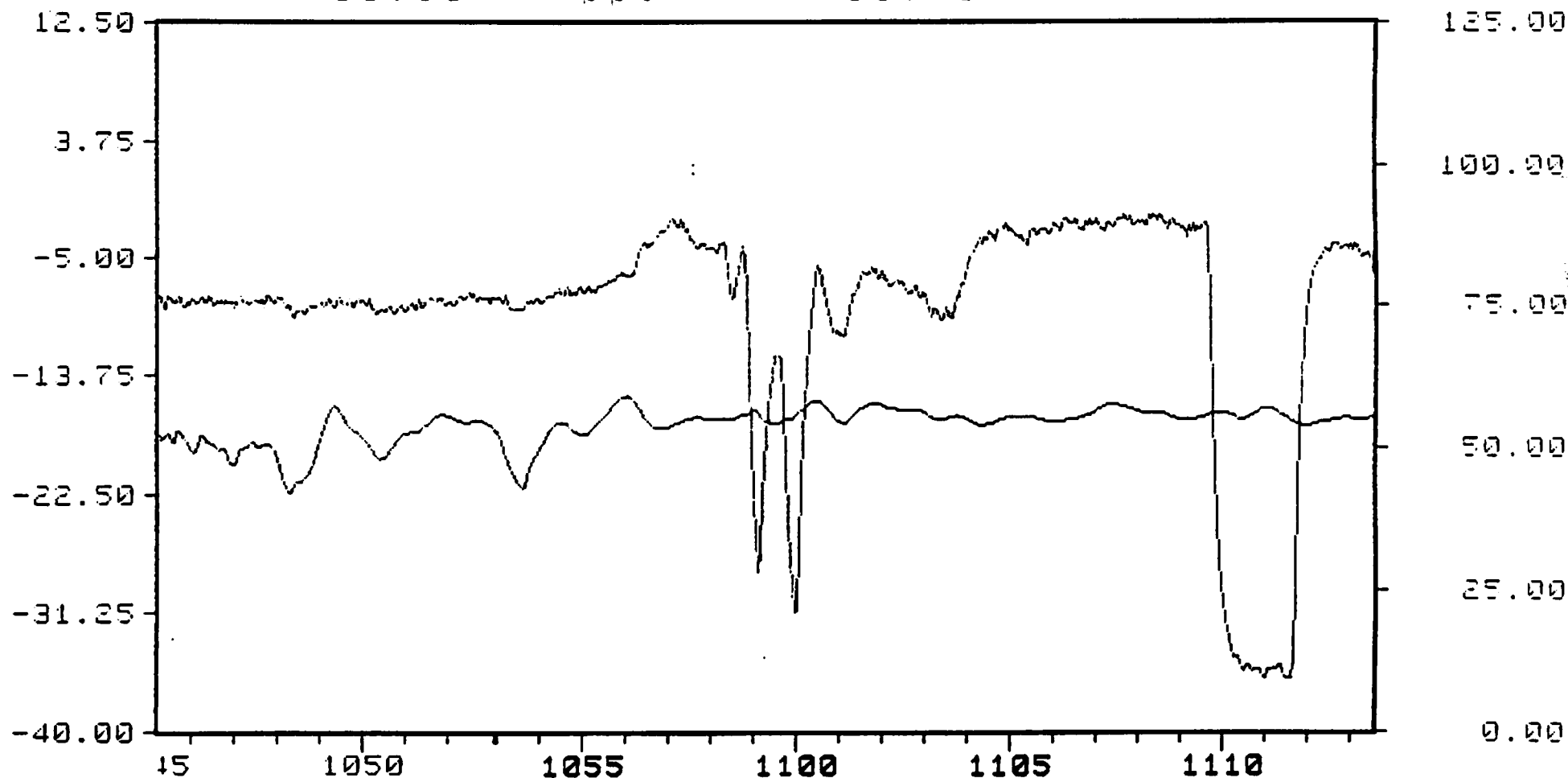
HDG	SPR	PHGT	TAS	TAT	DEW	WIND
deg T	mb	kft	knots	C	C	deg m/s
169.	699.	9.9	213.	4.6	-16.9	190/ 2

DEW  
C

-16.93

OZMR  
ppb

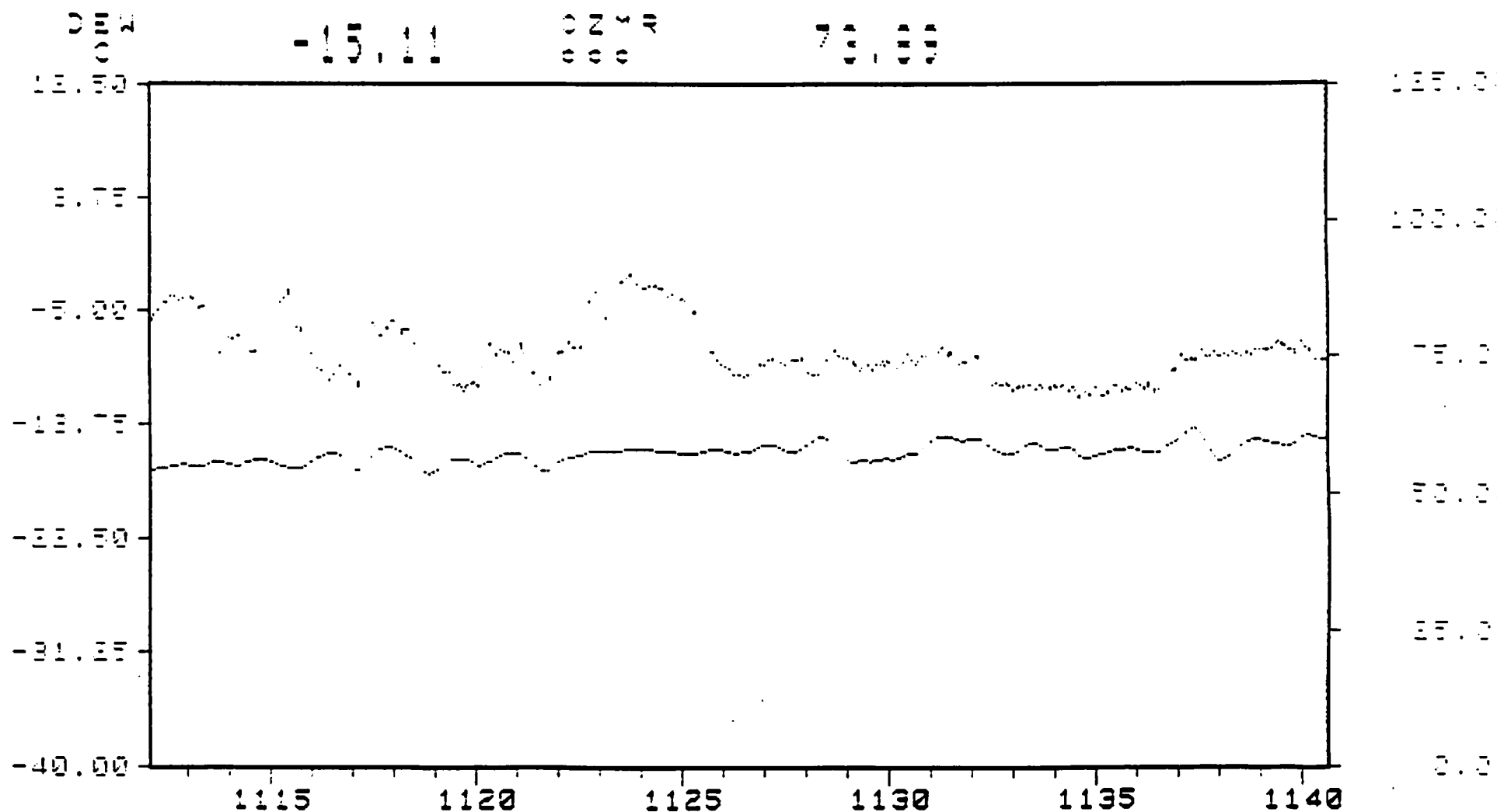
80.40



A	B	C	D	E	F	G	H
SELECT	PARAS	FREQ	ZOOM			VIDEO	HELP

A405 16-AUG-95 11:40:33 005 - 50.43 -4.13 AS P

ASL	FEET	WIND	WIND	WIND	WIND	WIND
deg	deg	deg	deg	deg	deg	deg
331.	700.	9.9	218.	4.3	-15.1	114/ 2



A	B	C	D	E	F	G	H
SELECT	PARAS	FREQ	ZOOM			VIDEO	HELP

PCASP CONC/cc

1000

0

PCASP CONC #/cc 573  
 PCASP MEAN RAD um 0.1  
 PCASP MASS ug/m3 4.85

FSSP CONC #/cc 0  
 FSSP MEAN RAD u 3.2  
 FSSP LWC gm/m3 0.00

2D-C CONC #/l 0.0  
 2D-C MAX SIZE um 0  
 2D-C LWC g/m3 0.000e+000

95-08-16 11:51:13

PCASP COUNT FSSP COUNT

1000  
 1000

1  
 1

0.1  
 0.1

10  
 10

A405

16-AUG-95

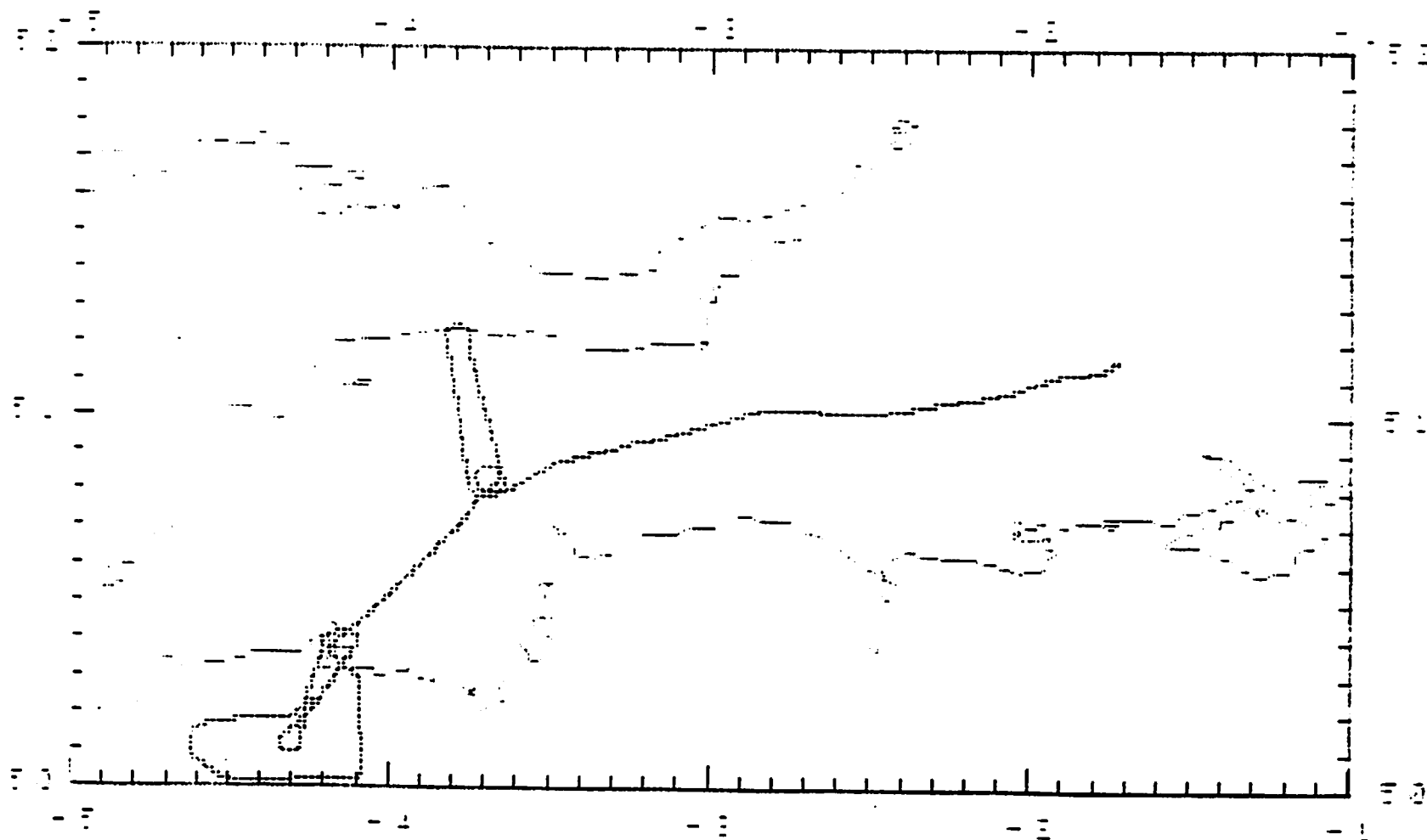
12:01:48

013 Ω

50.26

-4.24 FR P

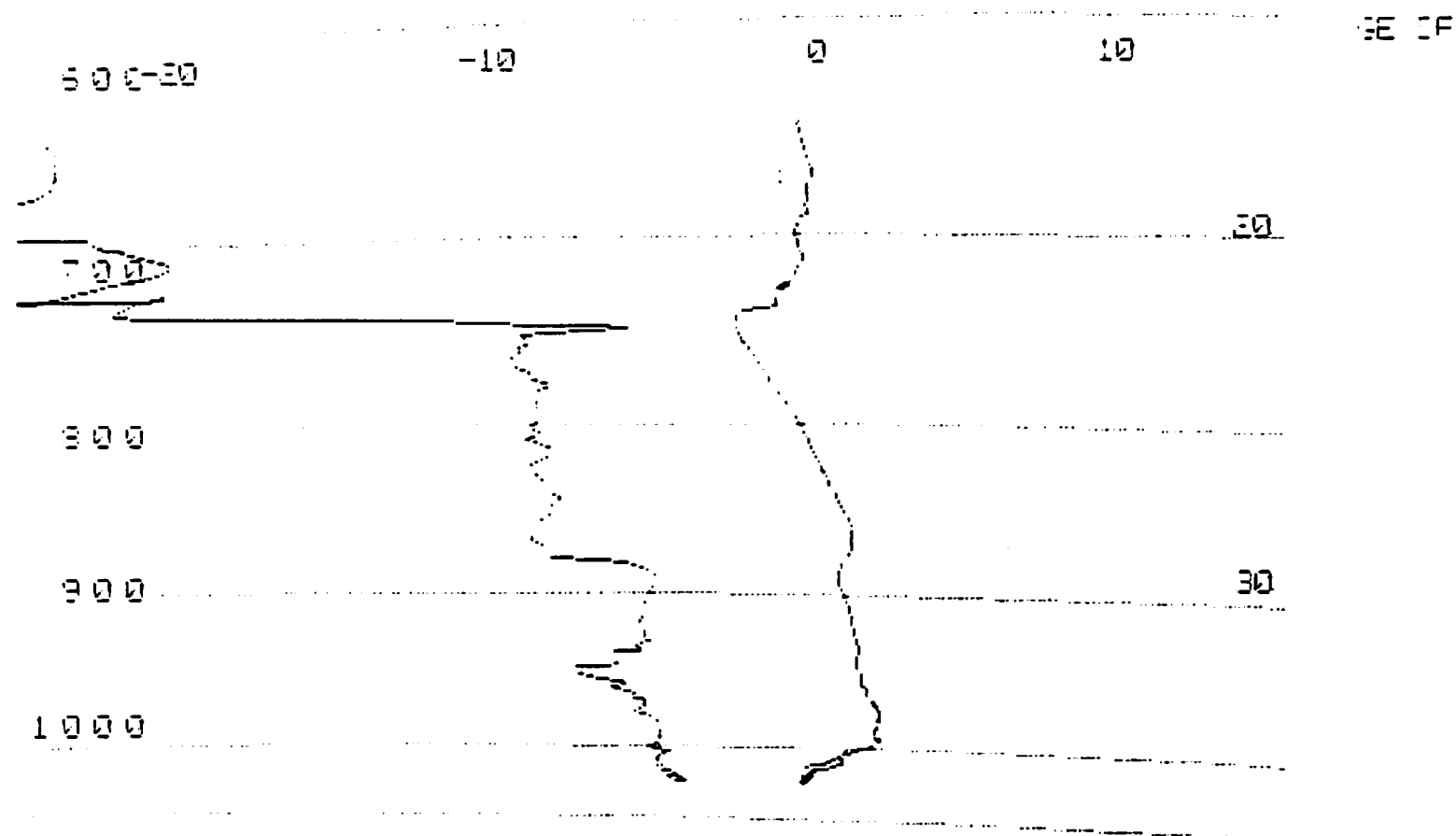
HDG deg T	SPR mb	PHGT kft	TAS knots	TAT C	DEW C	WIND deg m/s	
44.	952.	1.7	186.	19.2	13.4	059/ 3	



A	B	C	D	E	F	G	H
SELECT		FREQ	ZOOM			VIDEO	HELP

A405 16-AUG-95 12:00:39 013 50.22 -4.30 AS P

HDC	REF	PHGT	TAS	TAT	DEW	WIND
deg	ft	ft	knots	C	C	deg m/s
40.	1000.	0.4	177.	20.6	14.1	142/4



A	B	C	D	F	G	H
SELECT	PARAS	FREQ	ZOOM		VIDEO	HELP



A405

16-AUG-95

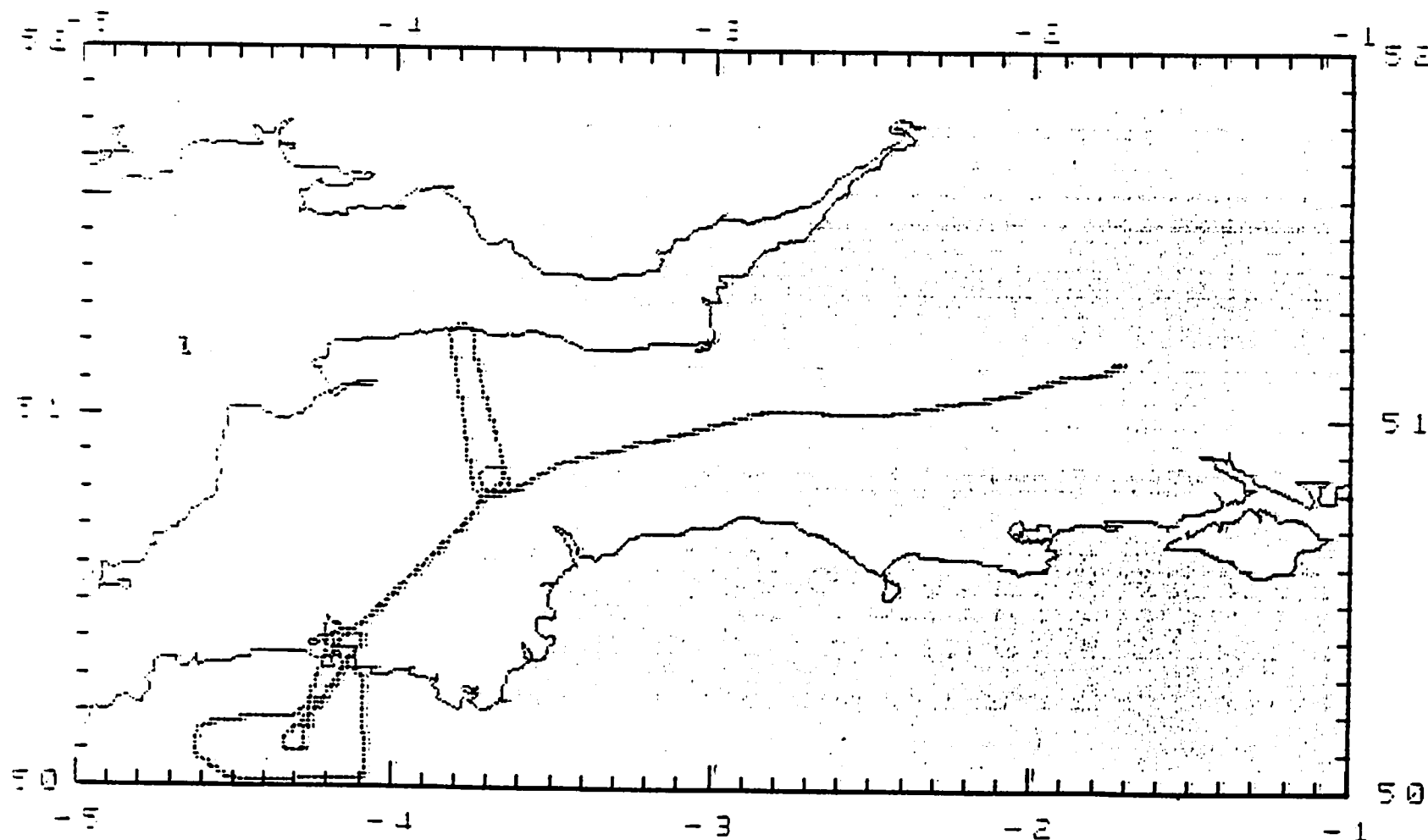
12:01:48

013 Ω

50.26

-4.24 FR P

HDG deg T	SPR mb	PHGT kft	TAS knots	TAT C	DEW C	WIND deg m/s	
44.	952.	1.7	186.	19.2	13.4	059/ 3	



A	B	C	D	E	F	G	H
SELECT		FREQ	ZOOM			VIDEO	HELP

A405

16-AUG-95

12:41:30

028

Ω

50.28

-4.10 RV P

HDG	SPR	PHGT	TAS	TAT	DEW	WIND	
deg T	mb	kft	knots	C	C	deg m/s	
182.	791.	6.7	180.	9.6	-0.3	073/ 2	

OZMR

ppb

66.73

125.00

125.00

100.00

100.00

75.00

75.00

50.00

50.00

25.00

25.00

0.00

0.00

1215

1220

1225

1230

1235

1240

A	B	C	D	E	F	G	H
SELECT	PARAS	FREQ	ZOOM			VIDEO	HELP

A405 16-AUG-95 12:42:42 028 50.26 -4.20 AS P

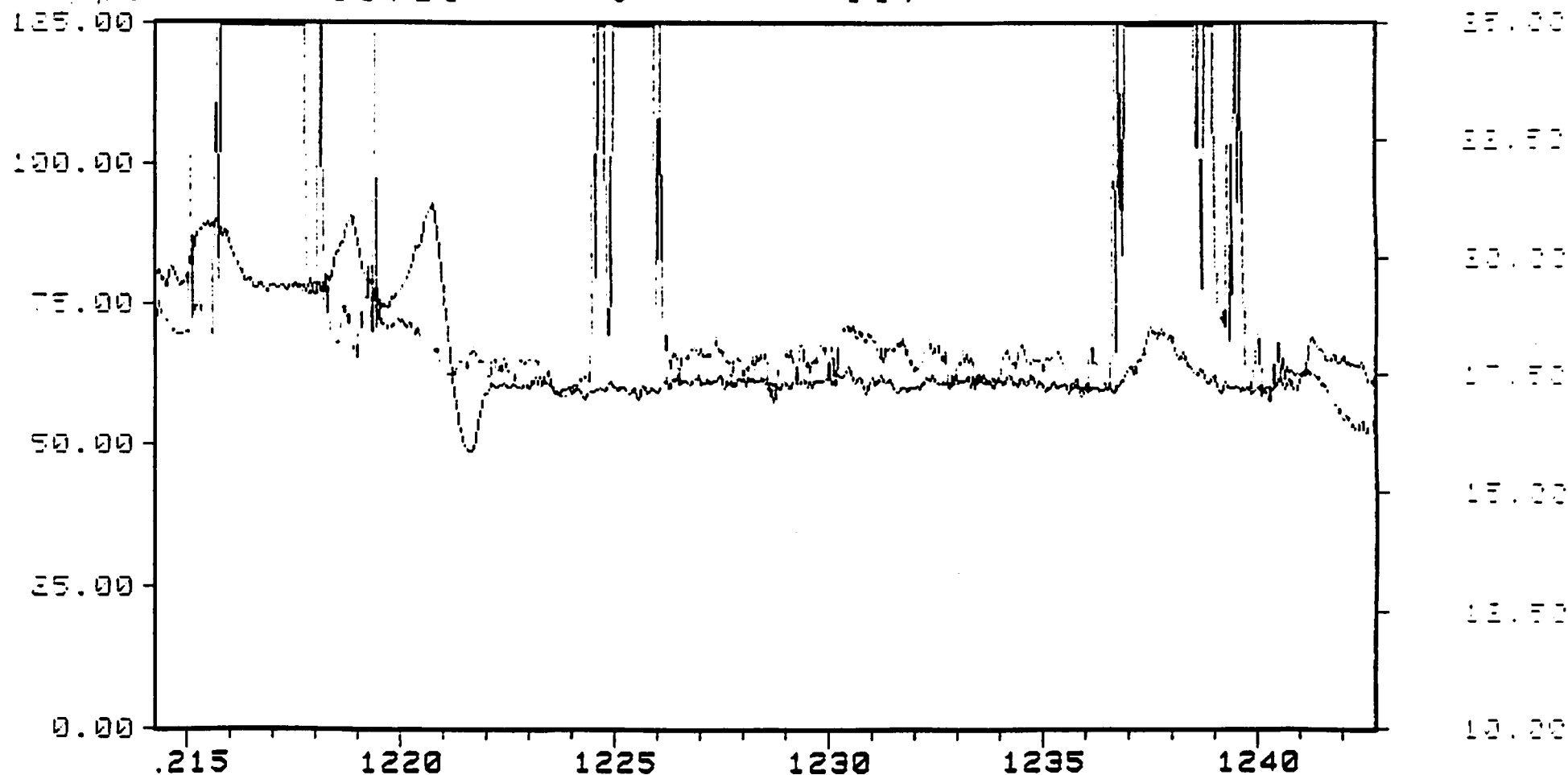
HDG	SPR	PHGT	TAS	TAT	DEW	WIND
deg	mb	kft	knots	C	C	deg m/s
270.	733.	8.7	185.	4.9	-8.2	092/ 3

OZMR  
opb

61.20

S. TEMP  
C

16.47



A	B	C	D	E	F	G	H
SELECT	PHRAS	FREQ	ZOOM			VIDEO	HELP

A405

16-AUG-95

13:00:57

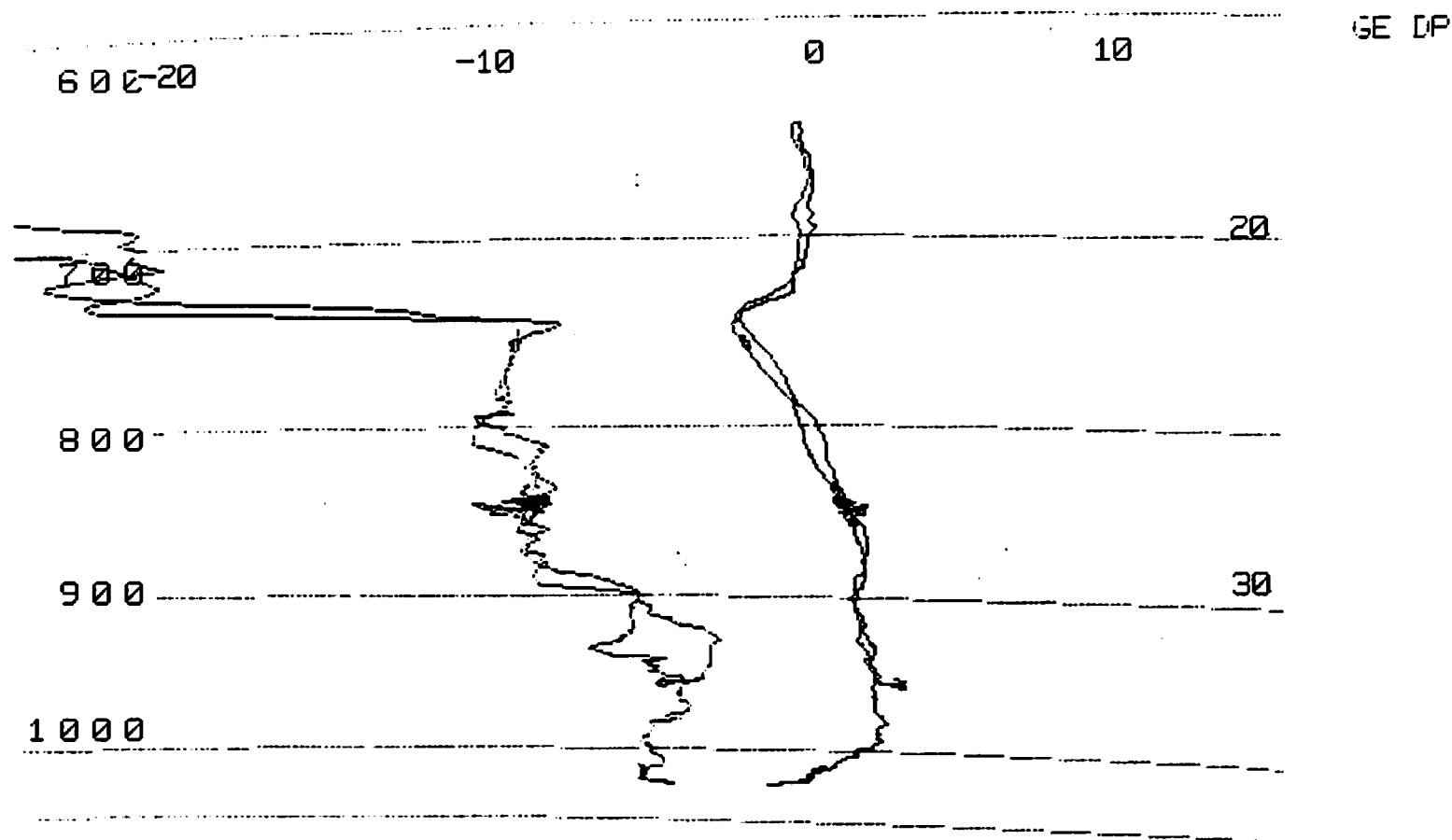
033

Ω

50.12

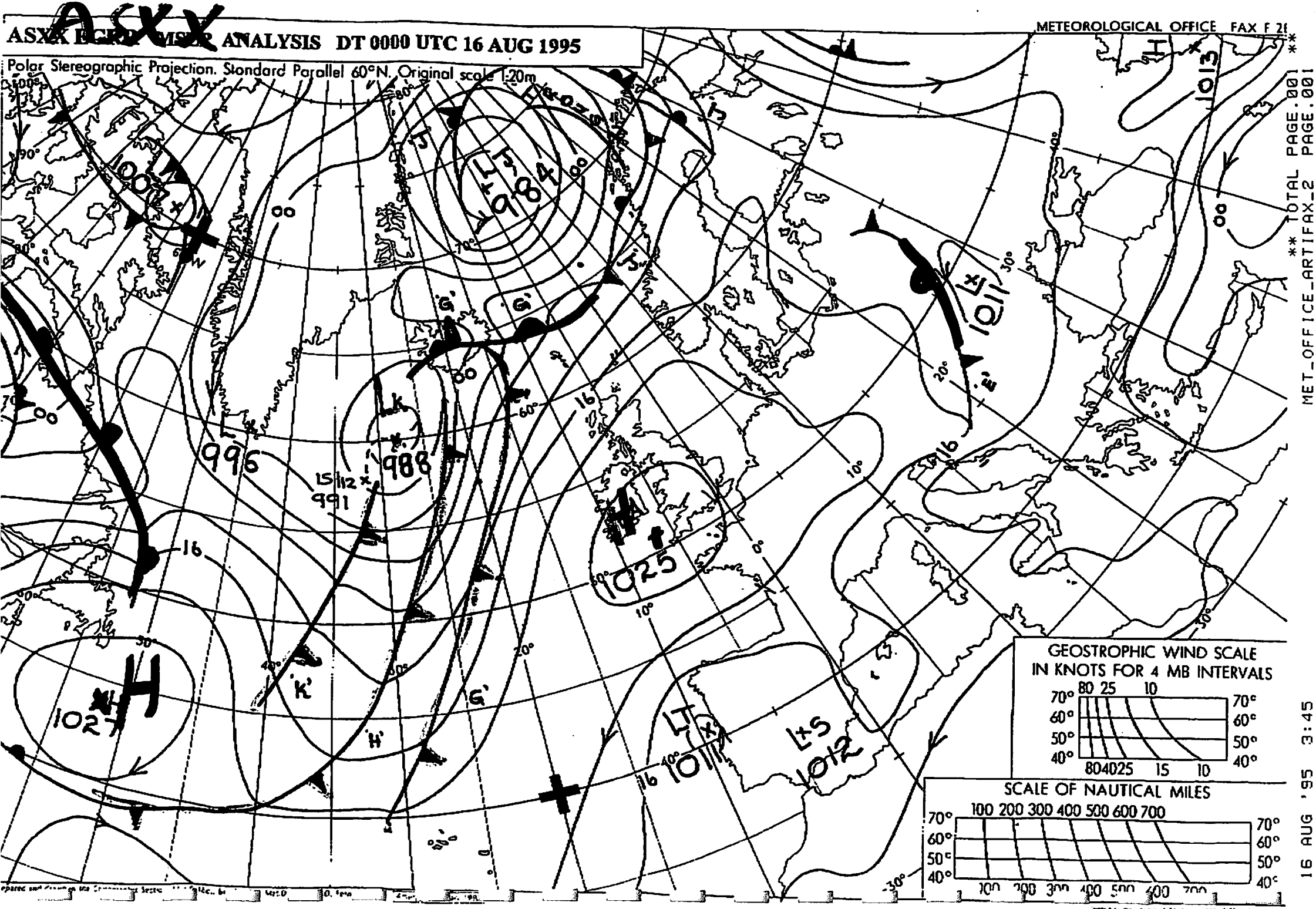
-3.86 AS

HDG	SPR	PHGT	TAS	TAT	DEW	WIND
deg T	mb	kft	knots	C	C	deg m/s
55.	1010.	0.1	195.	20.2	14.0	131 / 4

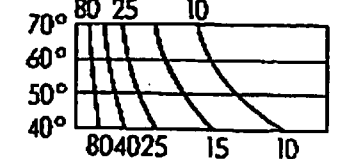


A	B	C	D	E	F	G	H
SELECT	PARAS	FREQ	ZOOM			VIDEO	HELP

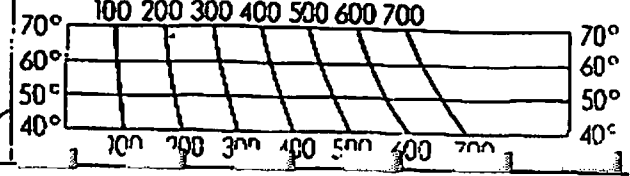
Polar Stereographic Projection, Standard Parallel 60°N, Original scale 1:20m



GEOSTROPHIC WIND SCALE  
IN KNOTS FOR 4 MB INTERVALS

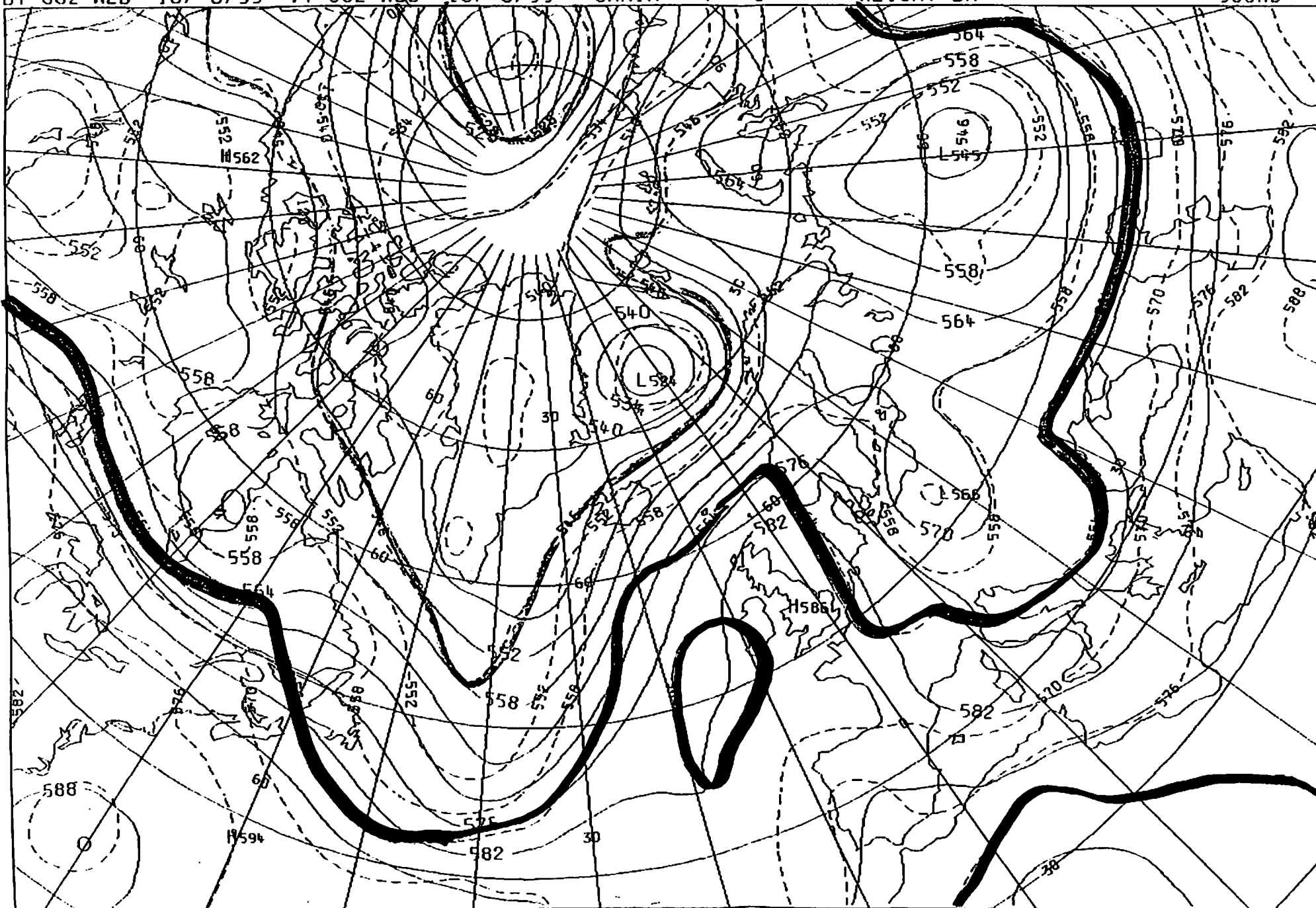


SCALE OF NAUTICAL MILES



WED 00Z

DT 00Z WED 16/ 8/95 VT 00Z WED 16/ 8/95 GMAIN T+ 0 - - - THICKNESS DM. 500-1000MB  
HEIGHT DM. 500MB



MET\_OFFICE\_ARTIFAX\_1 PAGE.001

16 AUG '95 6:32

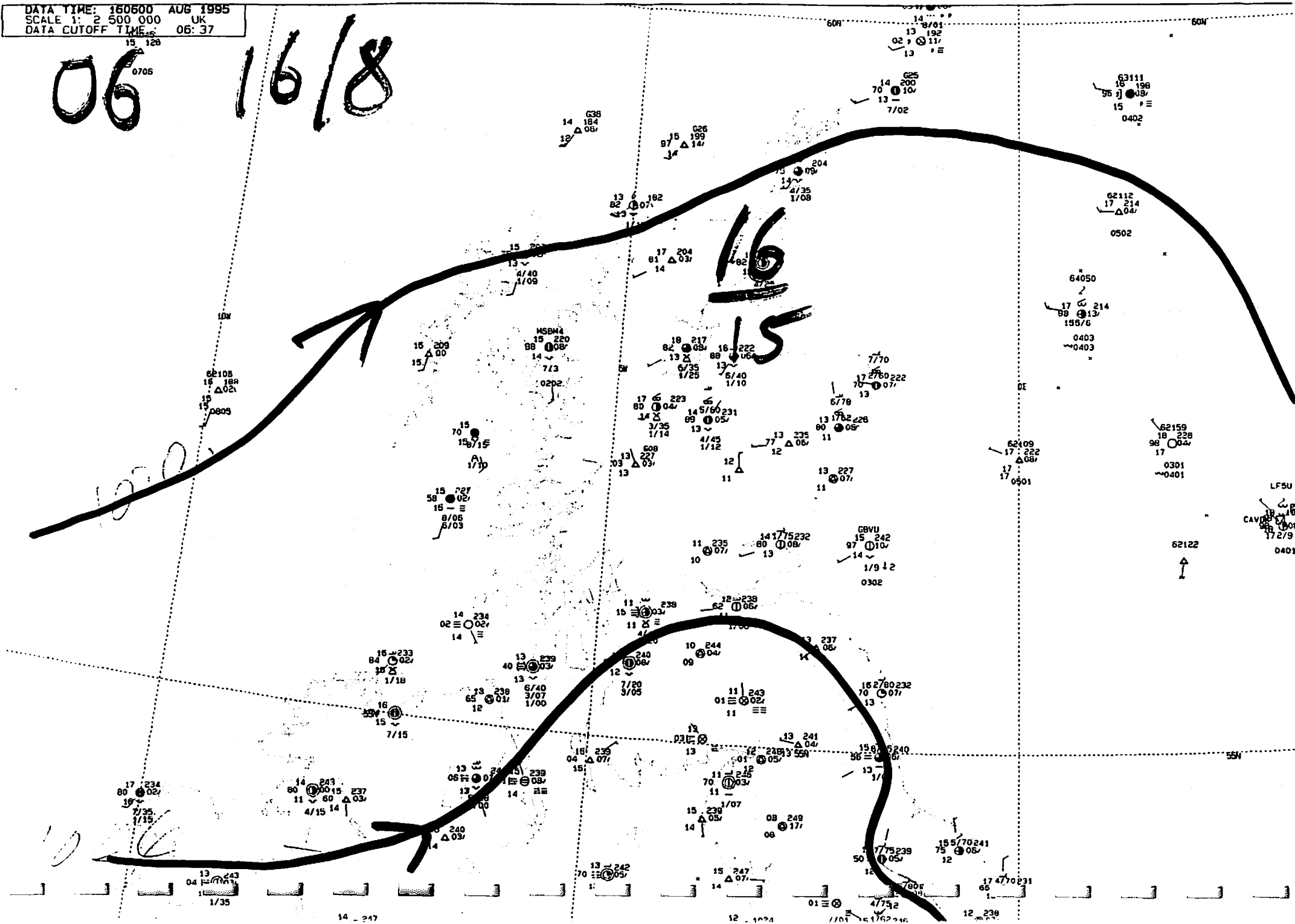
POLAR STEREOGRAPHIC PROJECTION AT 60N SCALE 1:20M RUN TIME 03.49.50

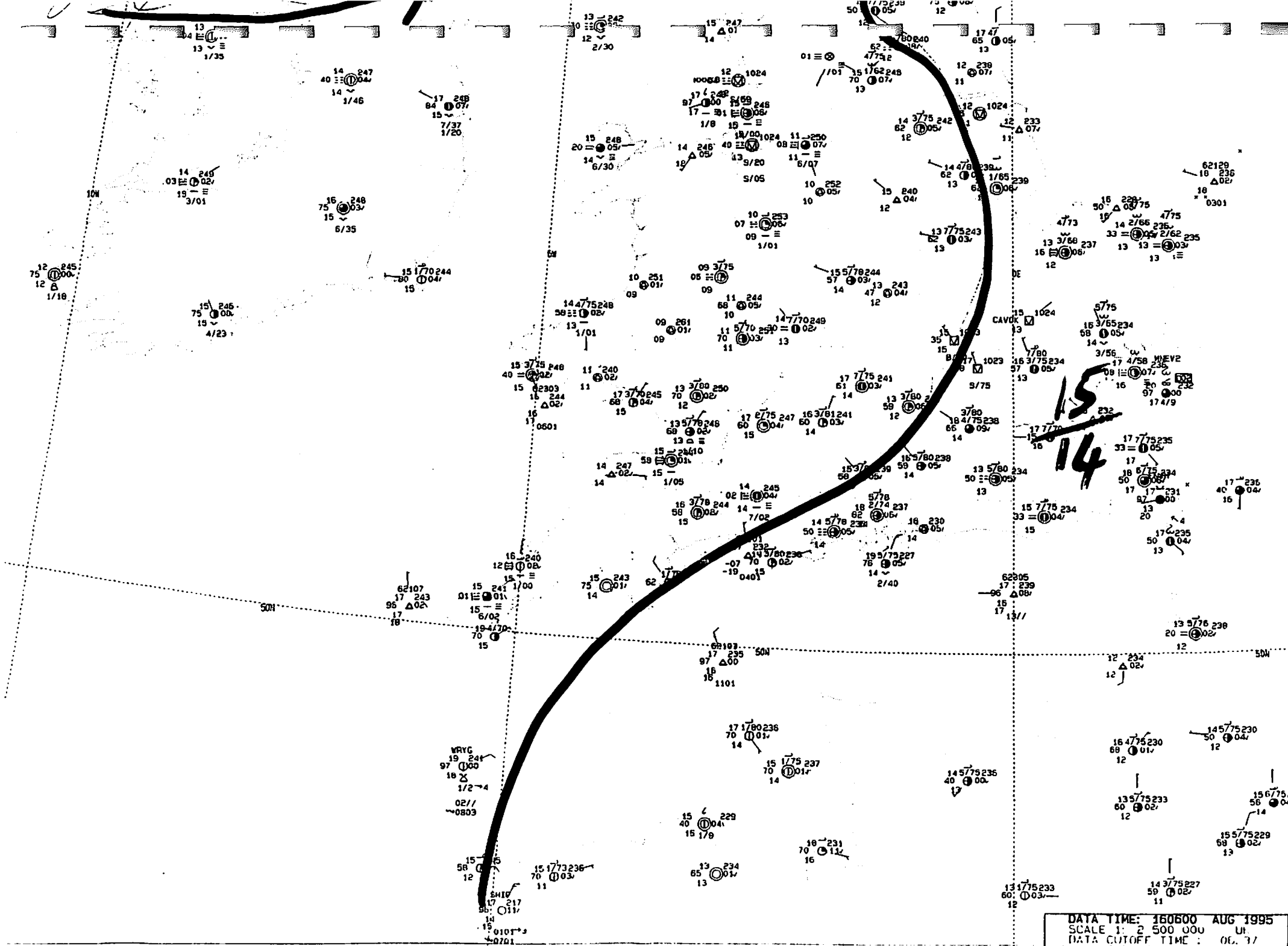
CHART 13

PHEA50 EGRR 0000Z

DATA TIME: 160500 AUG 1995  
SCALE 1: 2 500 000 UK  
DATA CUTOFF TIME: 06:37

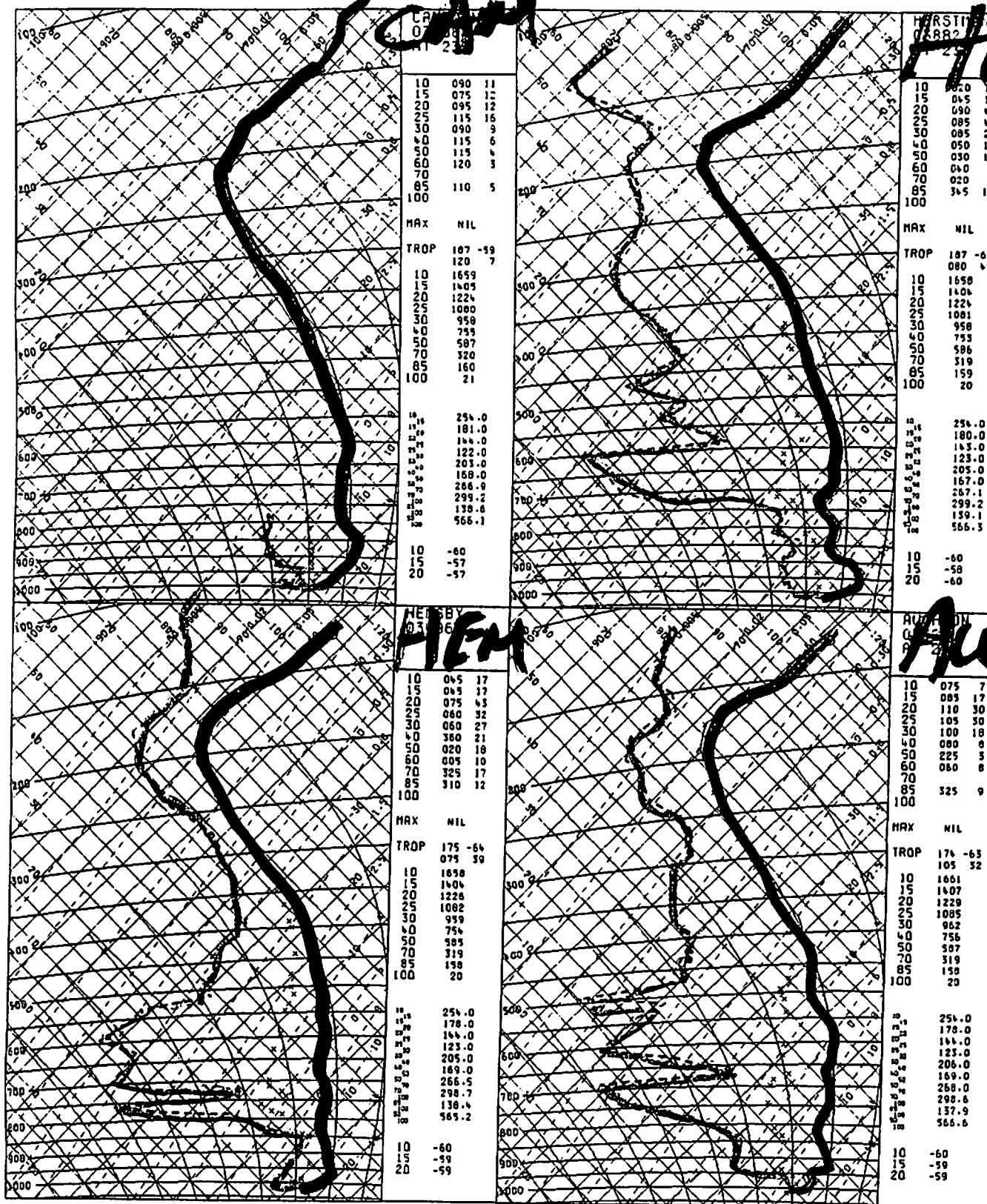
06 16/8





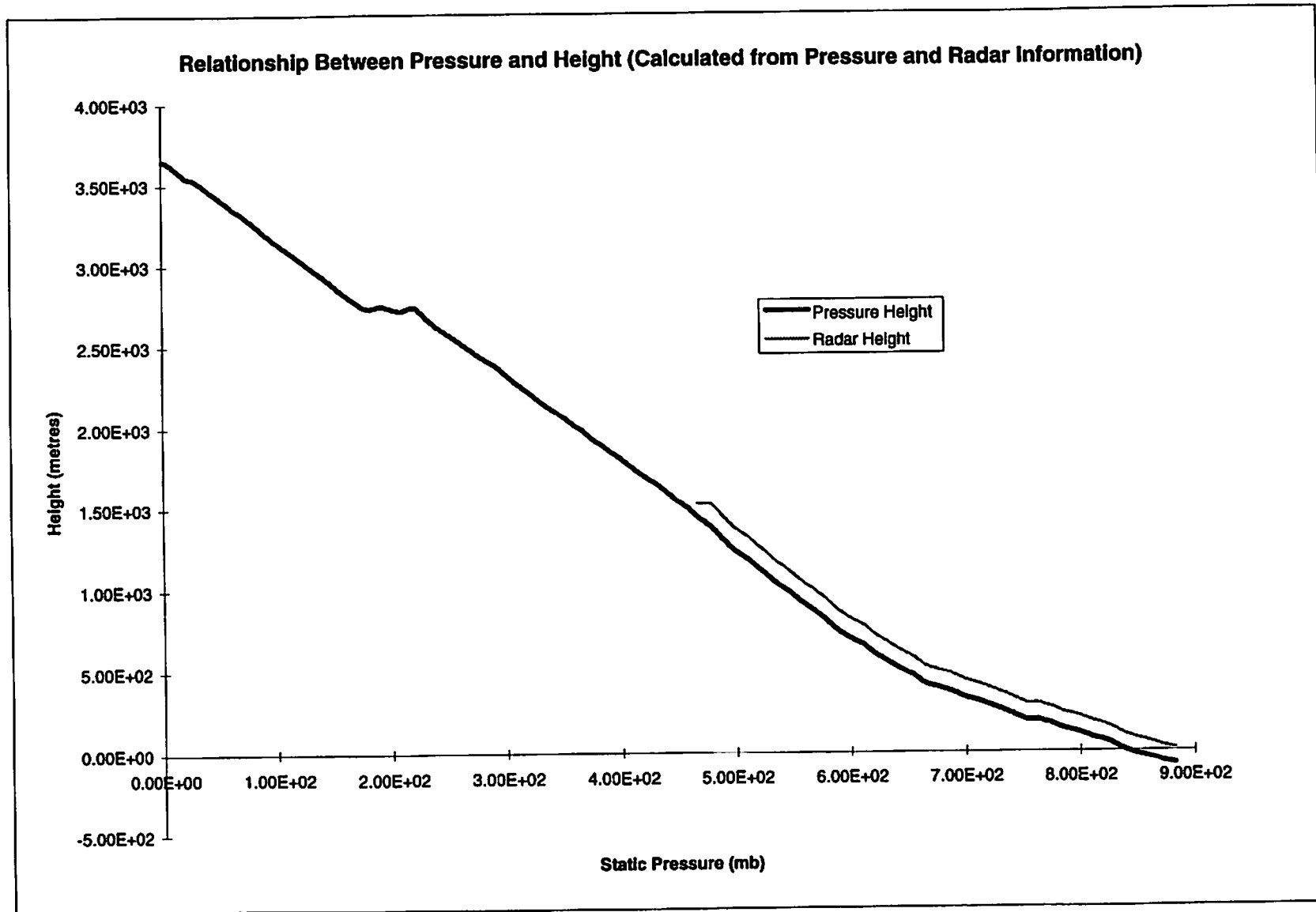
DATA TIME: 160600 AUG 1995  
SCALE 1: 2 500 000  
DATA CUTOFF TIME: 06.37





## LIST OF FORMS USED ON FLIGHT

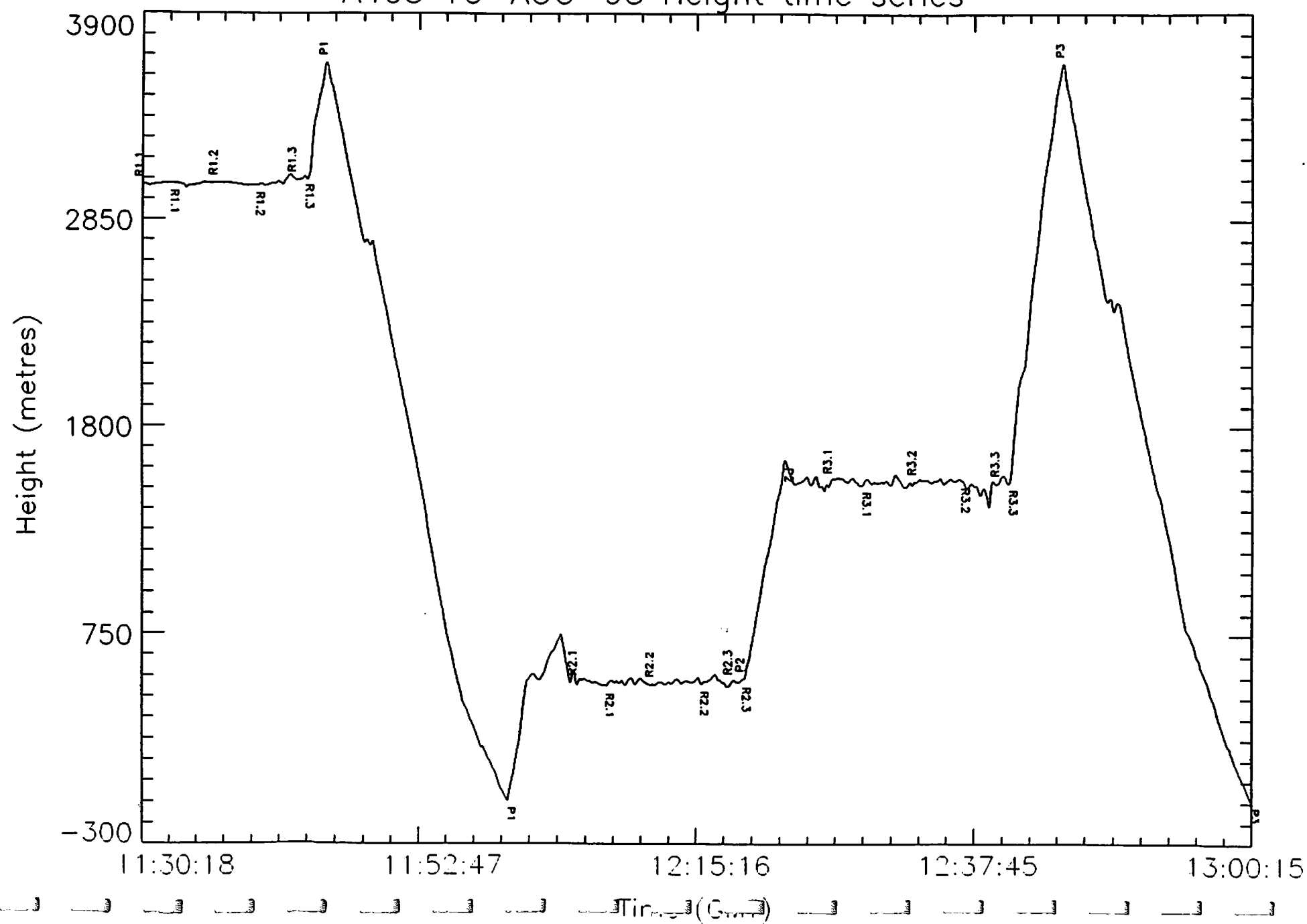
No. of forms:	Form Title
1 5 1 1	Aircraft Scientist de-briefing sheet Aircraft Scientist log Aircraft Scientist post flight requirements Interactive log
1 2 4 2	Flight Leader pre-flight check form Flight Leader in-flight check form Flight Leader in-flight log Flight Leader Video tape log (photocopy original)
1 3 1	MCR log CCN log MARSS log Chemistry log <del>Helicopter</del> Particulate/Filter boom Operator's log 2DK/FSSP/Holography Operator's log Sonde Ejector's log Navigator's log Photographic log (photocopy original)
✓ ✓ ✓ ✓	Instrument status forms RTD prints Raw data plots Signal register Weather charts Satellite pictures Omega track Electronics pre-flight Mechanical fit



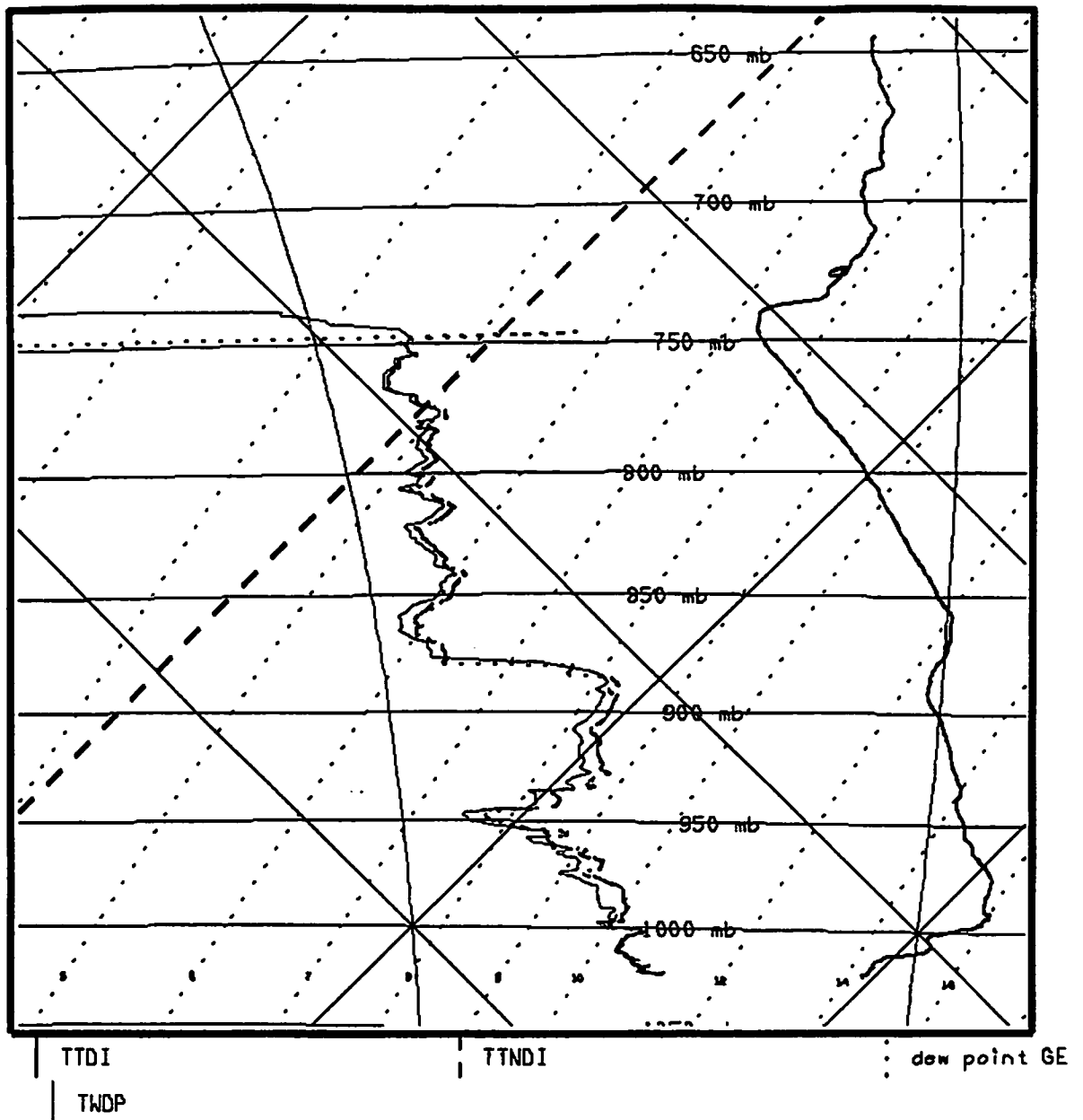
mercator projection

mercator projection

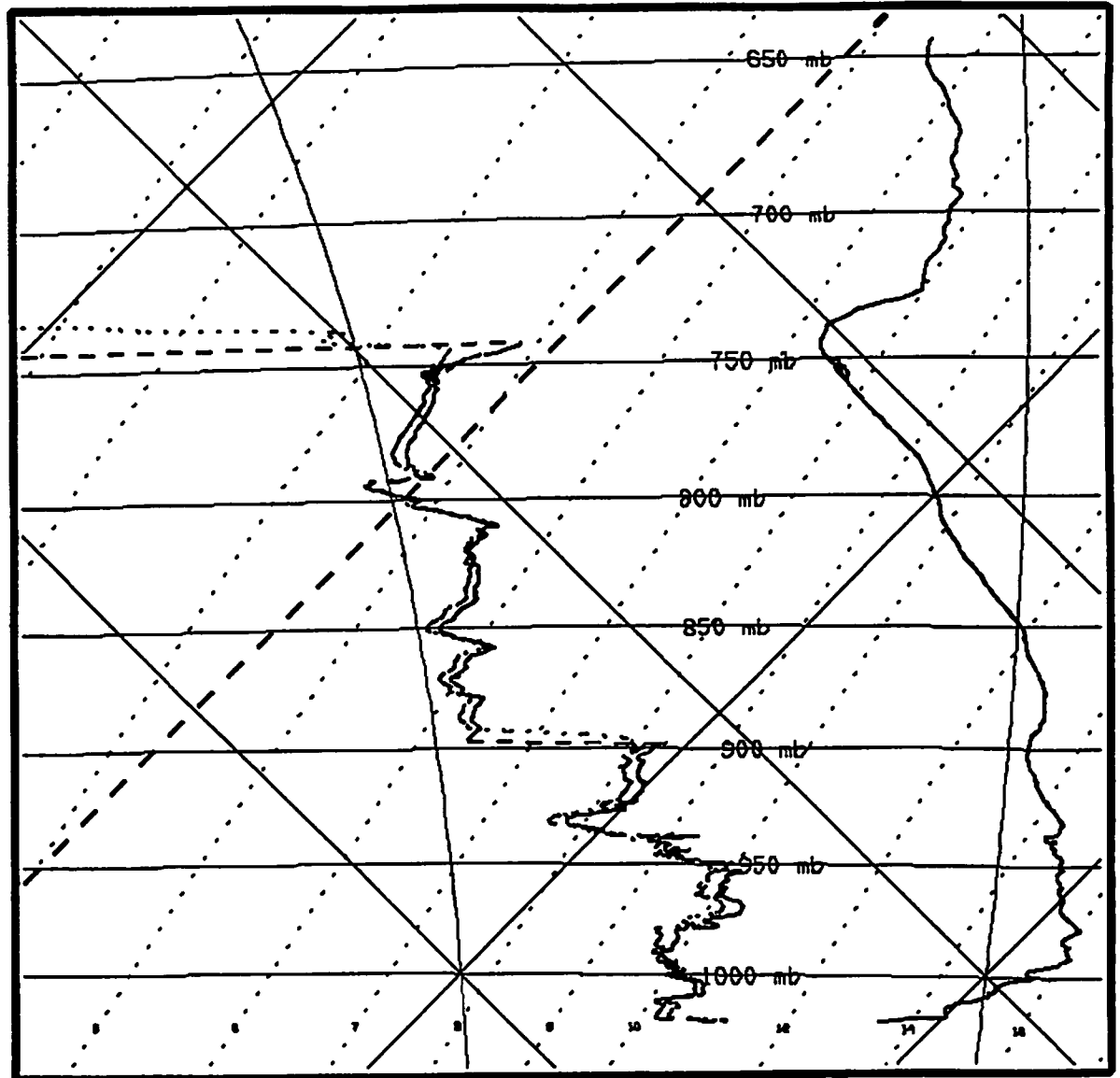
A405 16-AUG-95 Height time series



# PACE Profile 1



# PACE Profile 2



| TTDI

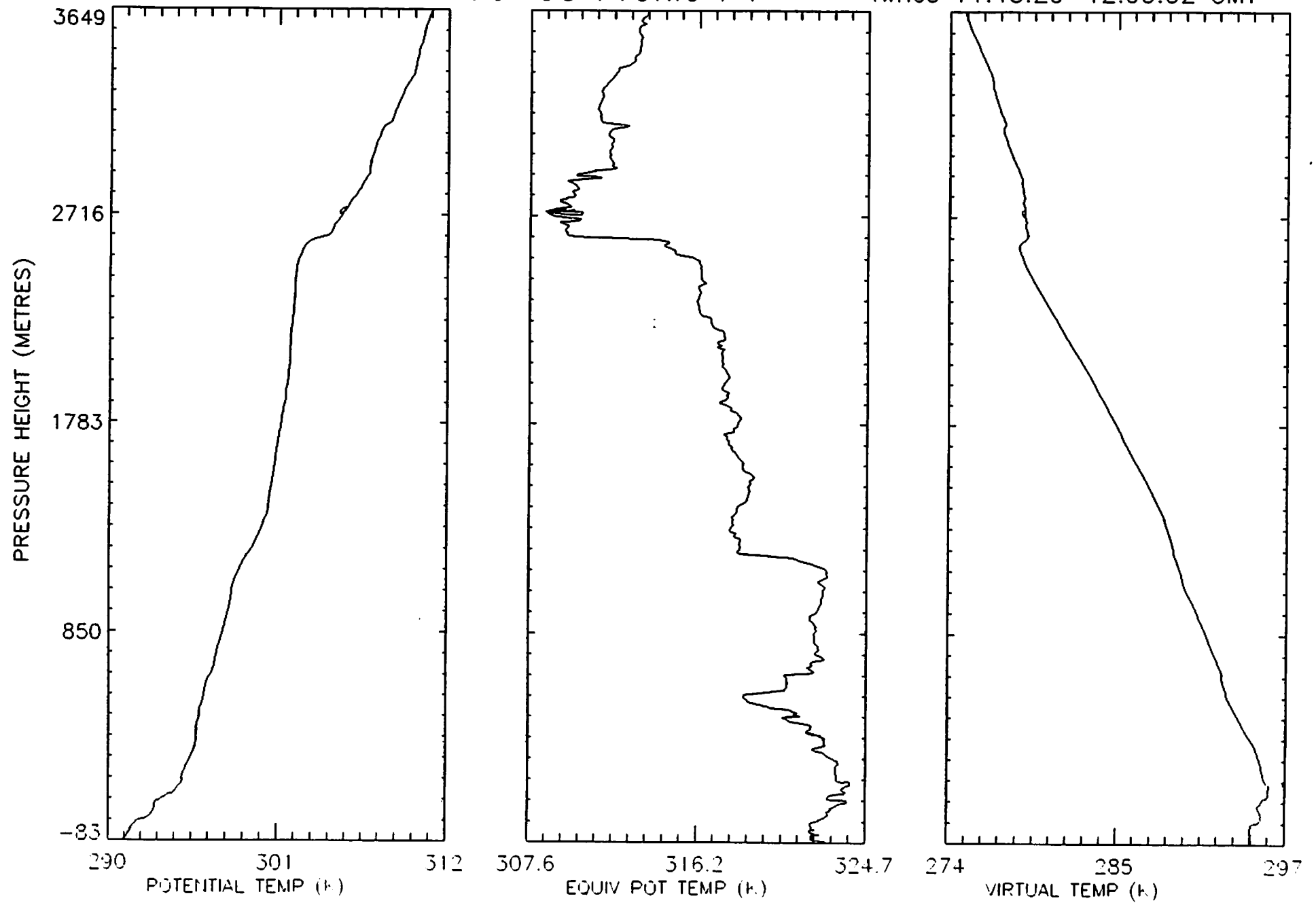
| GEDP

: TWDP

TOTAL WATER

A405 16-AUG-95 Profile P1

Times 11:45:20-12:00:02 GMT



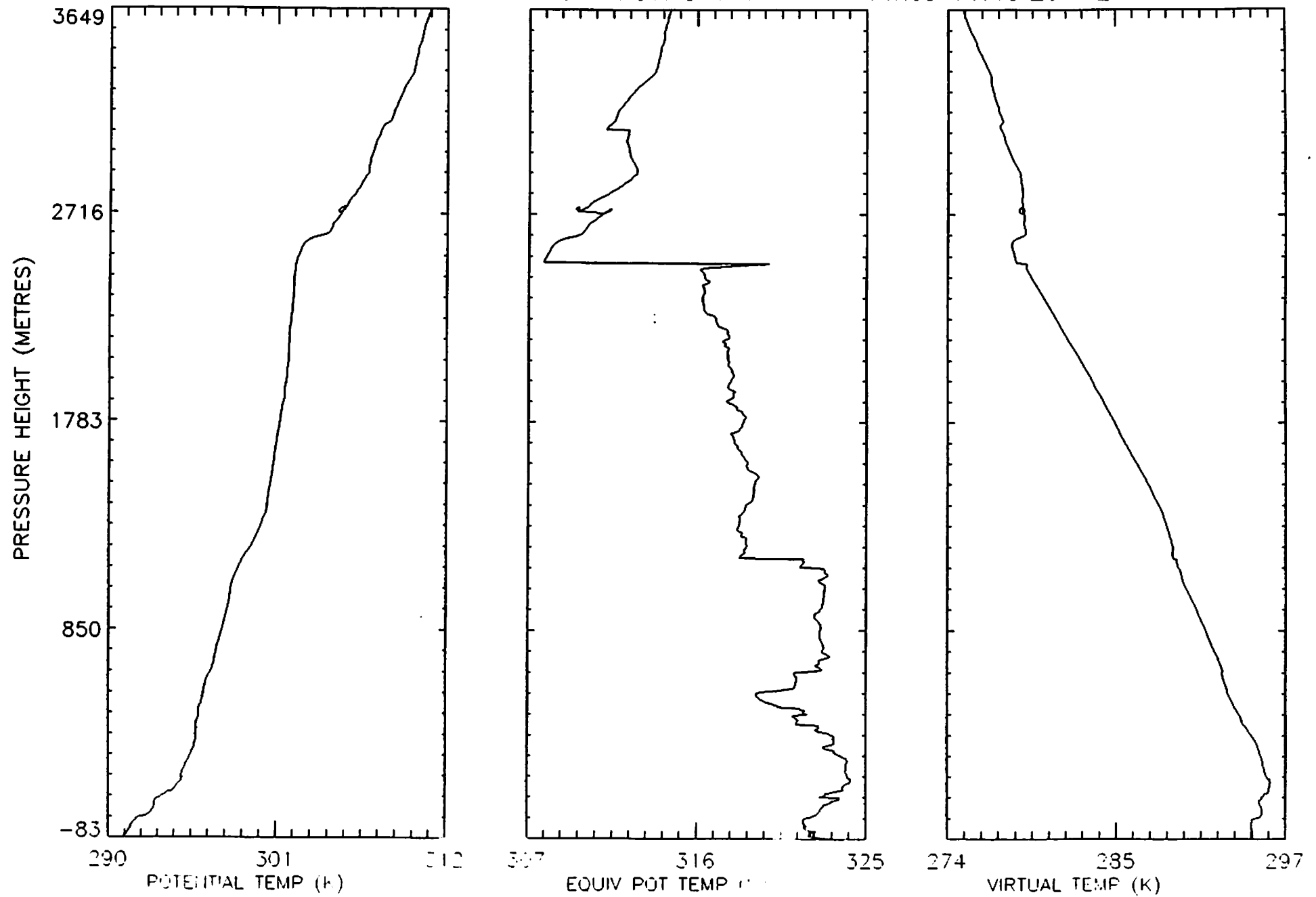
1 second averages



GENERAL EASTERN

A405 16-AUG-95 Profile P1

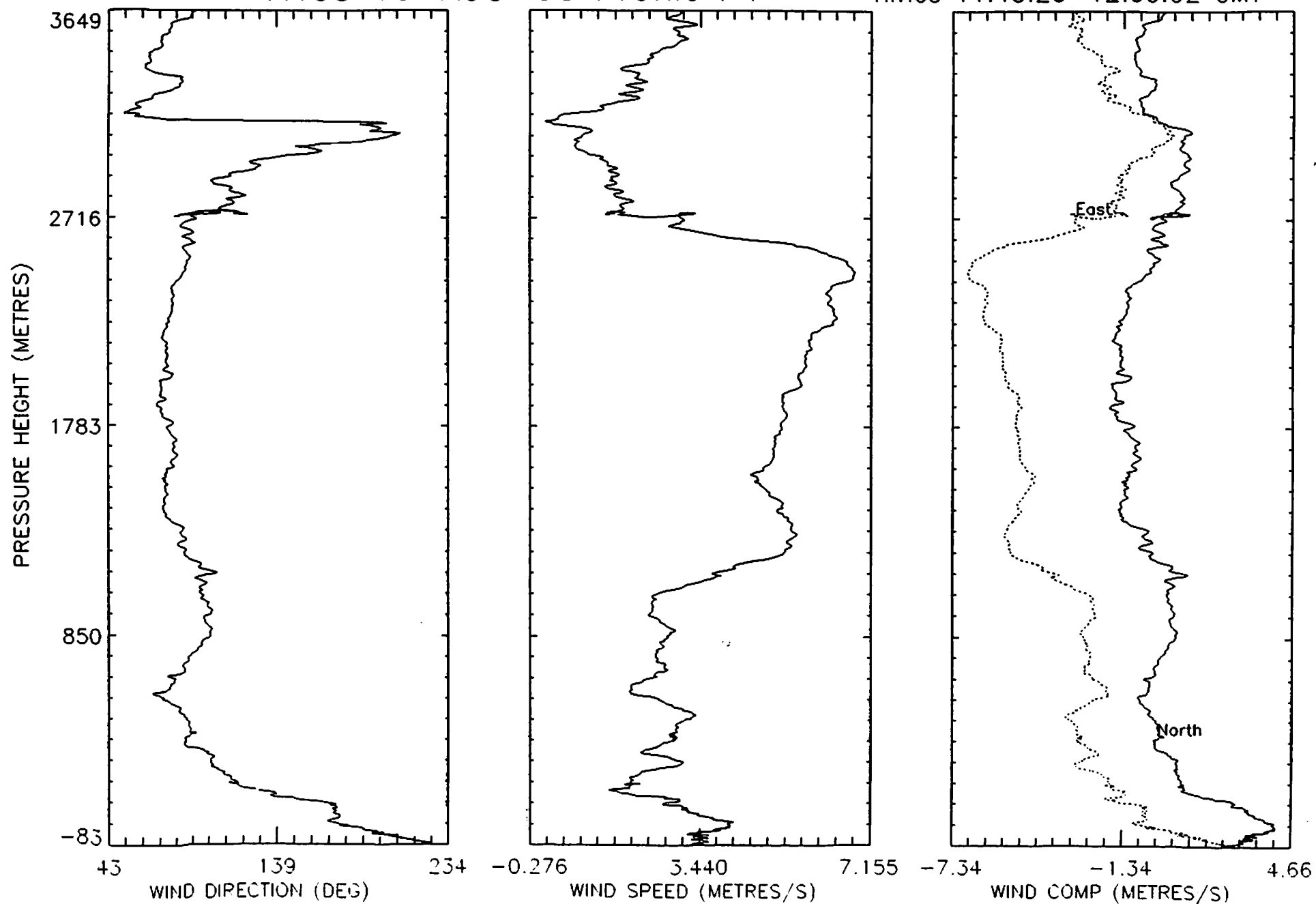
Times 11:45:20-12:00:02 GMT



1 second averages

# A405 16-AUG-95 Profile P1

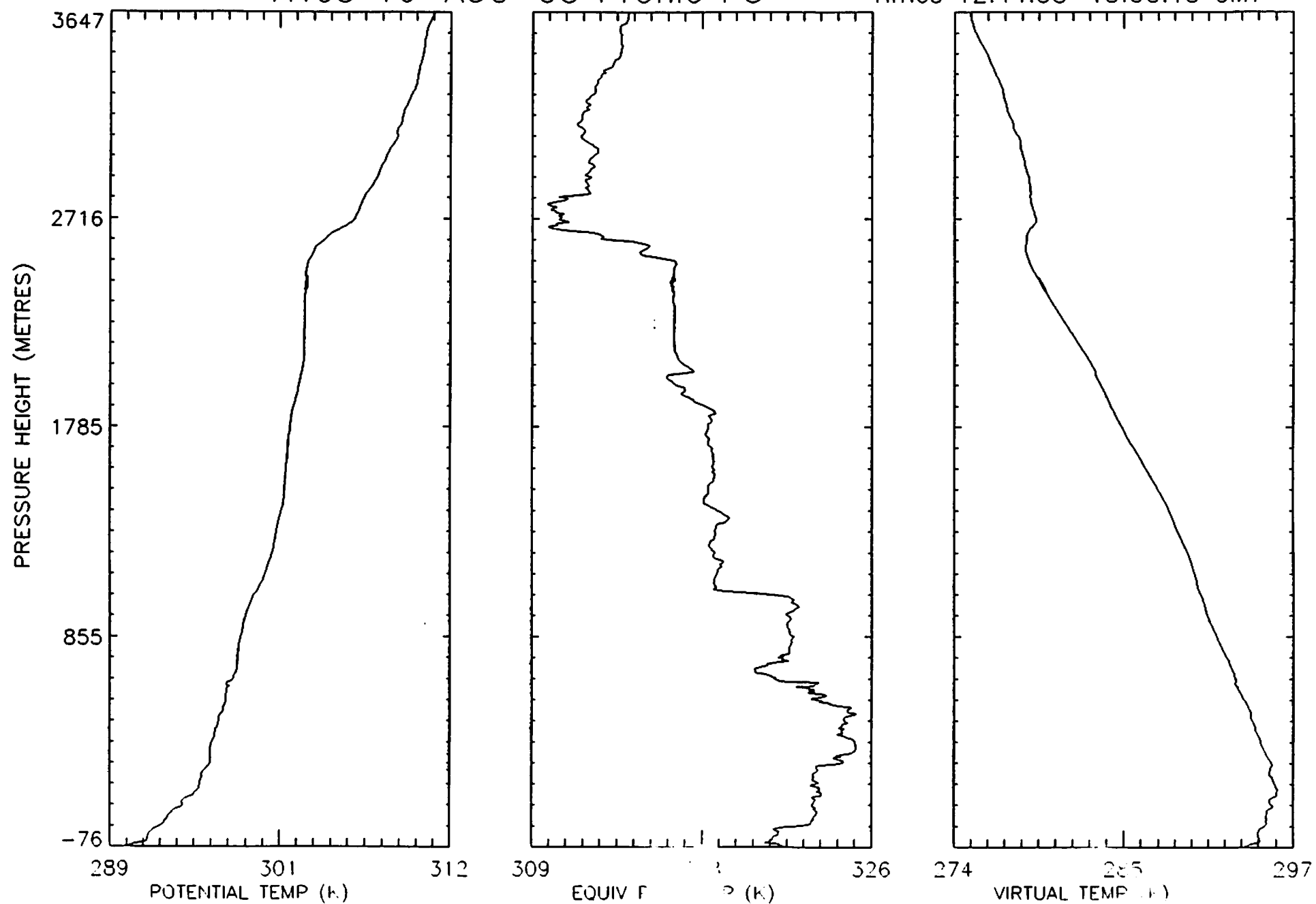
Times 11:45:20-12:00:02 GMT



# A405 16-AUG-95 Profile P3

TOTAL WATER

Times 12:44:58-13:00:15 GMT

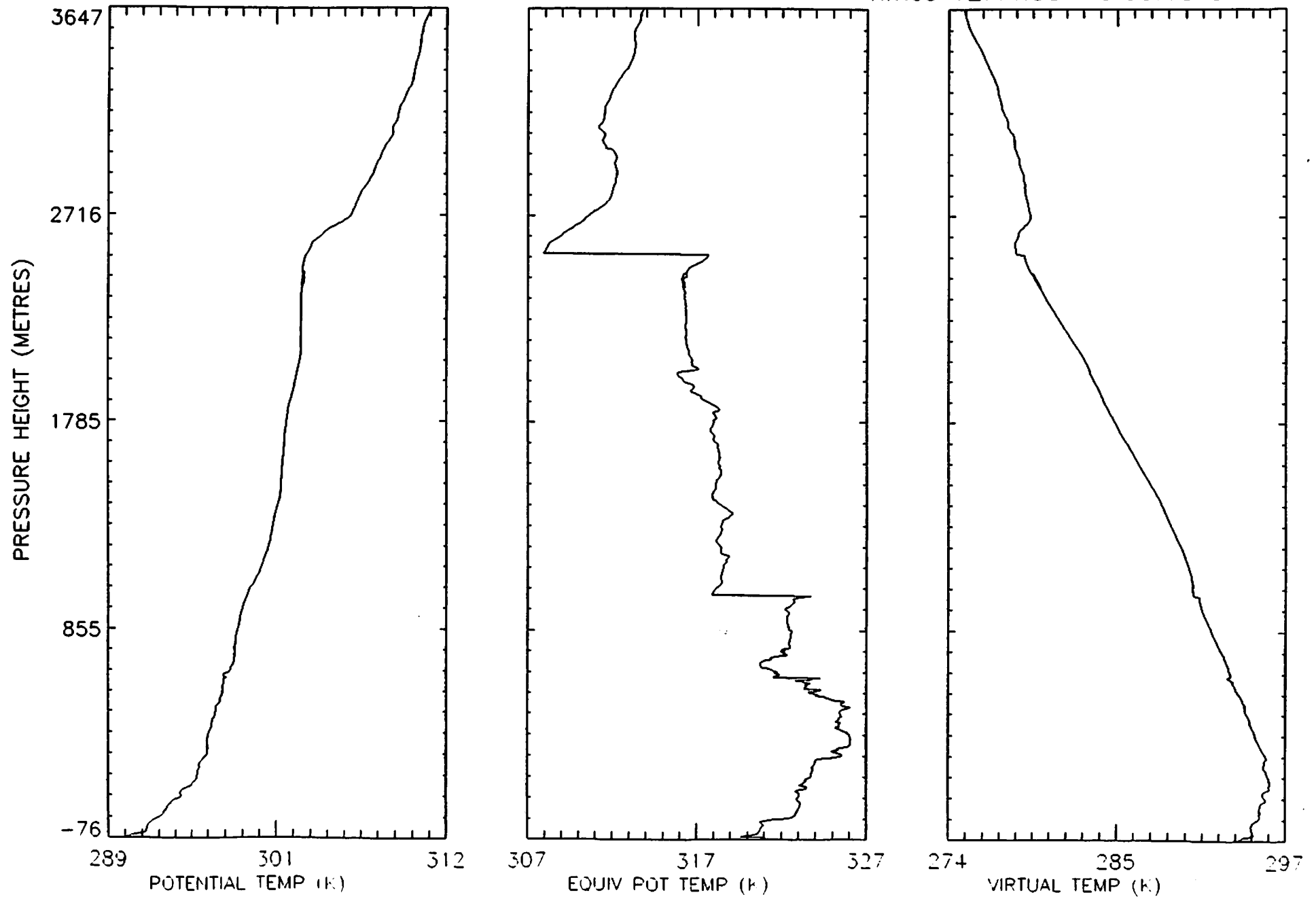


1 second averages

GENERAL EASTERN

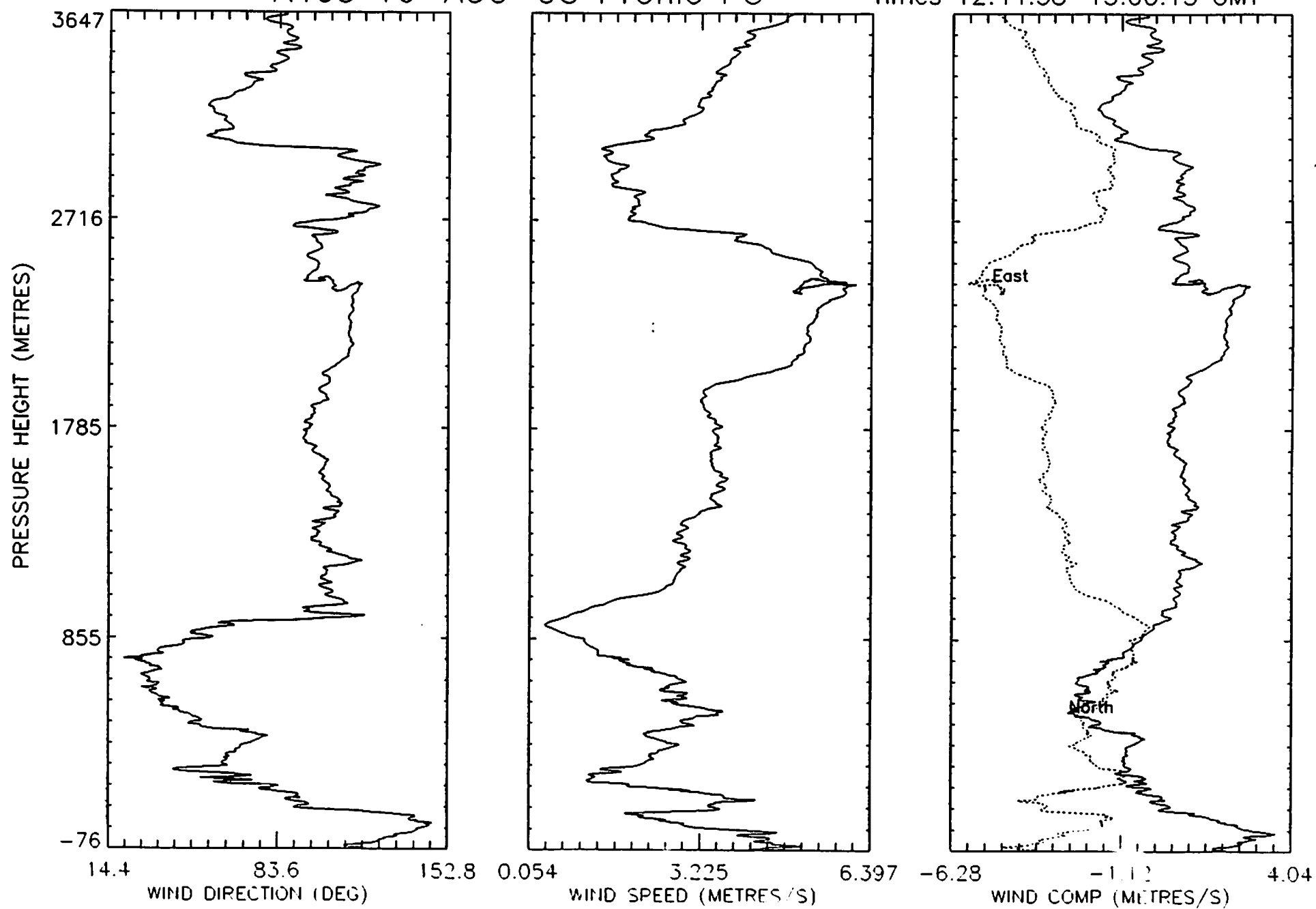
A405 16-AUG-95 Profile P3

Times 12:44:58-13:00:15 GMT



A405 16-AUG-95 Profile P3

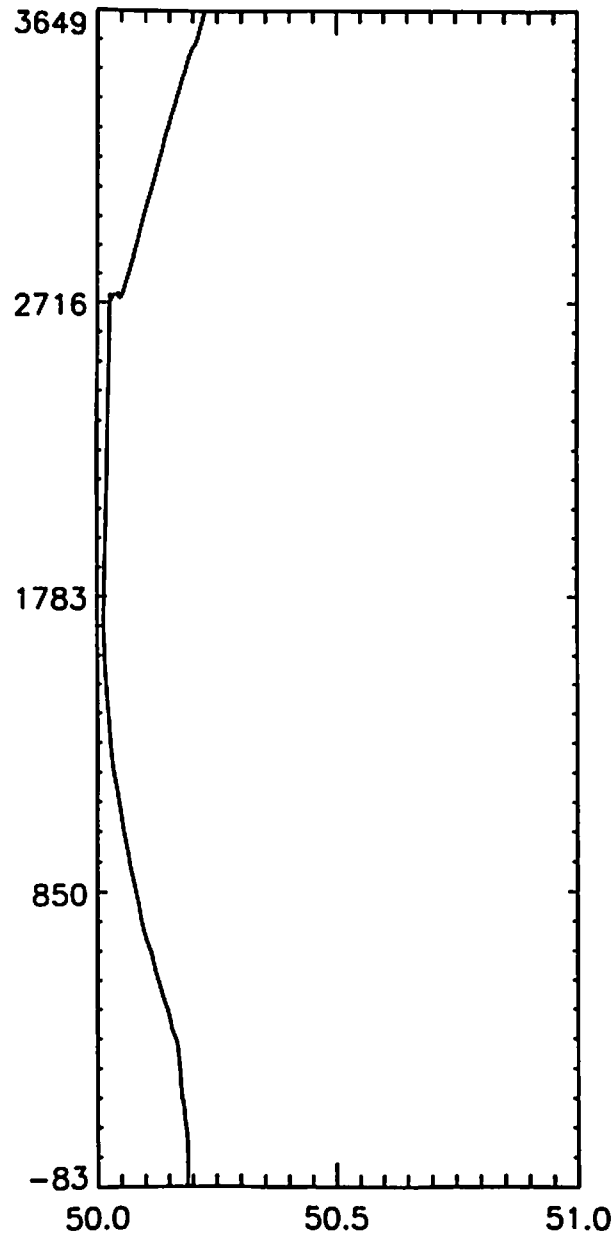
Times 12:44:58-13:00:15 GMT



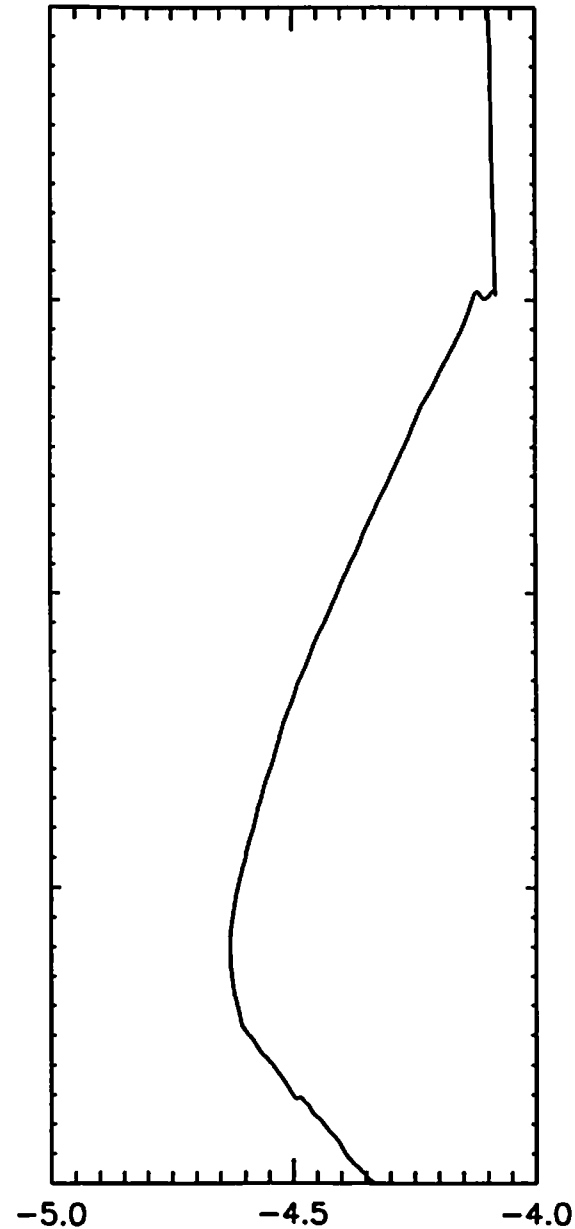
1 second averages

# A405 16-AUG-95 Profile P1

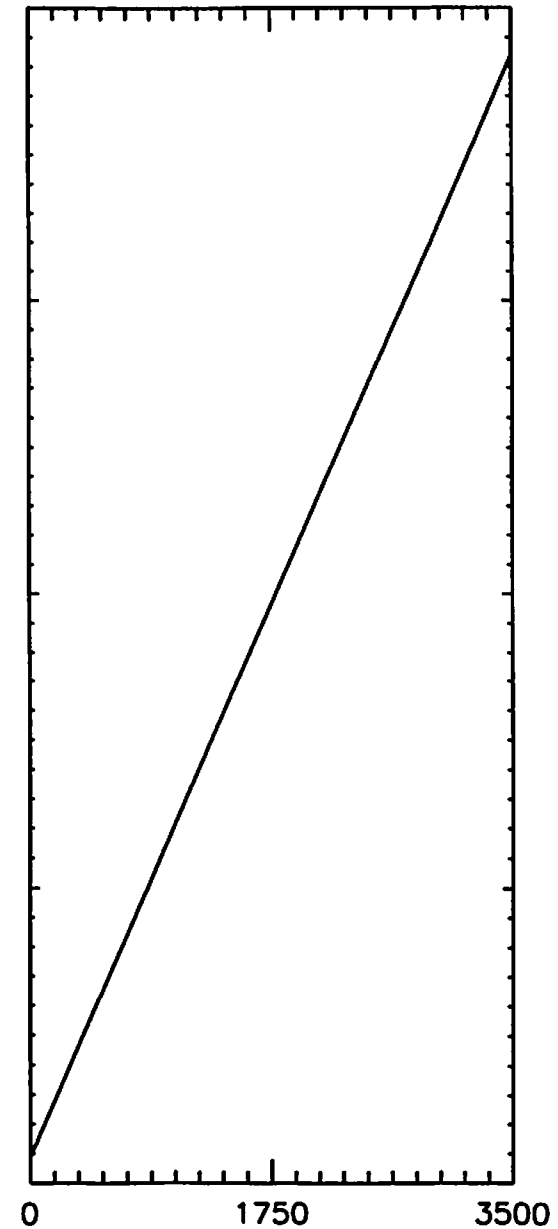
Times 11:45:20-12:00:02 GMT



Parameter no. 580



Parameter no. 581

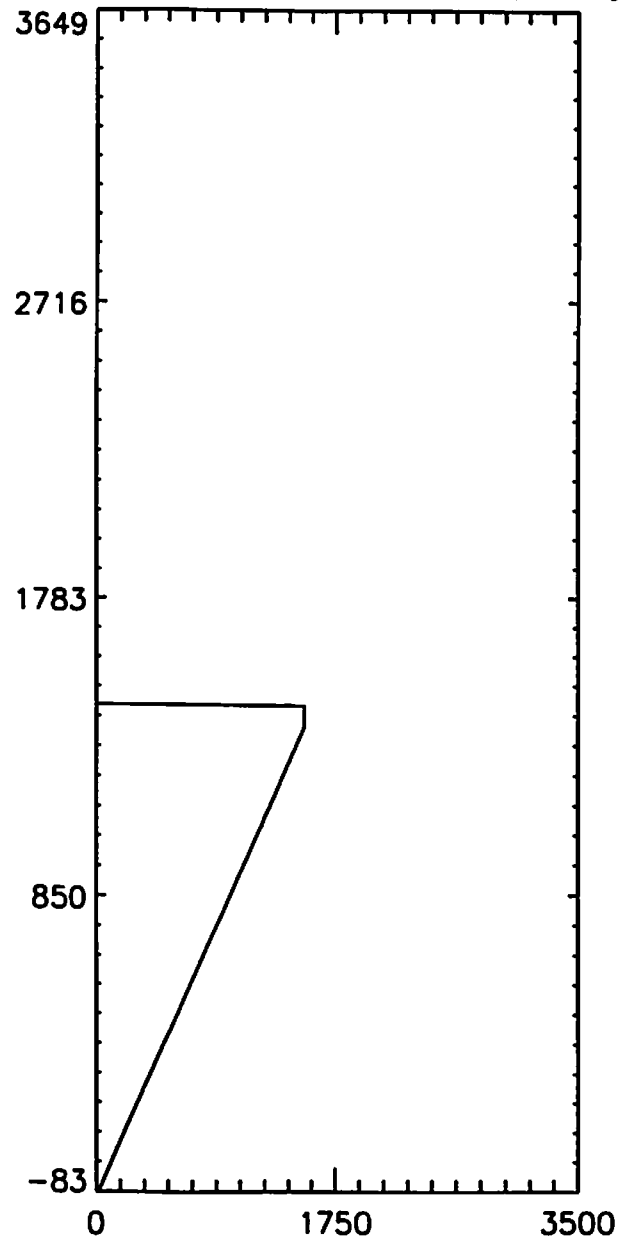


Parameter no. 578

PRESSURE HEIGHT (METRES)

# A405 16-AUG-95 Profile P1

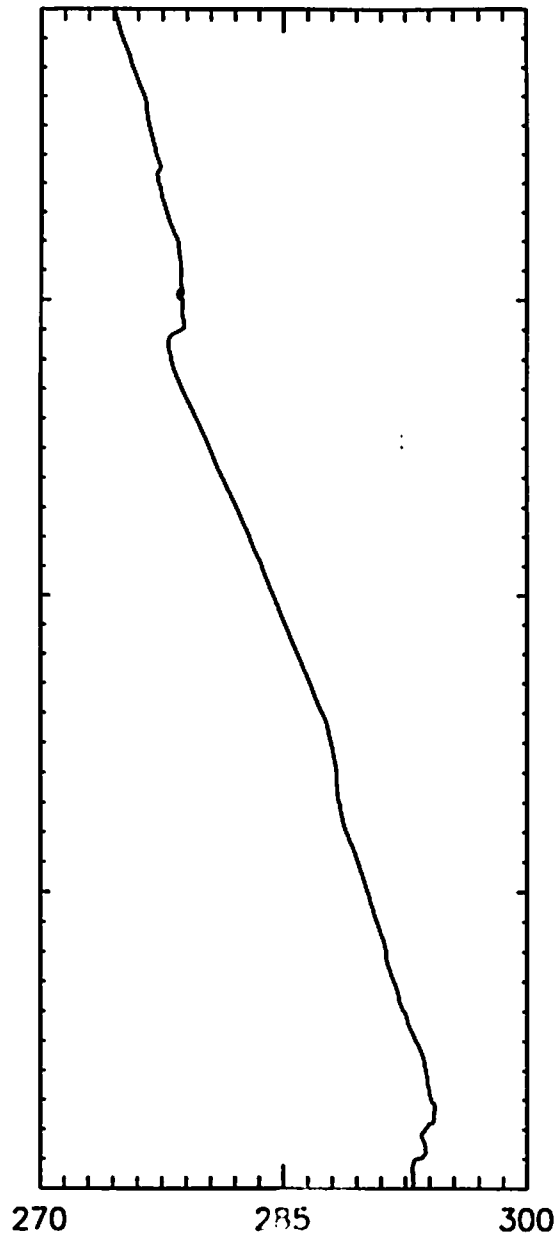
Times 11:45:20-12:00:02 GMT



RADAR HEIGHT (METRES)

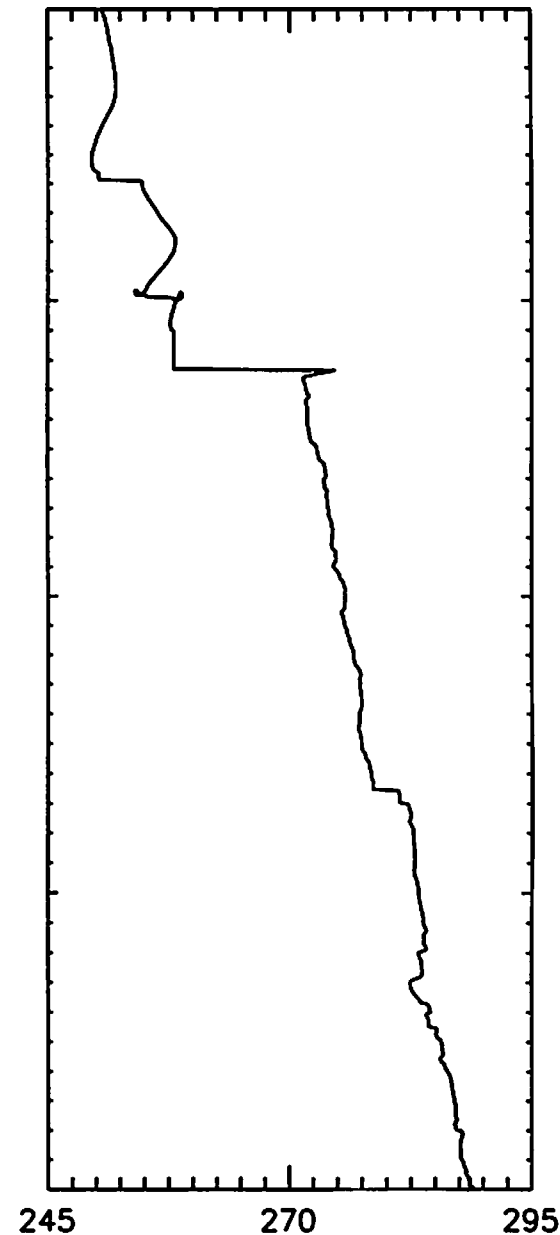
Parameter no. 575

1 second averages



DEICED TRUE TEMPERATURE (DEG K)

Parameter no. 520



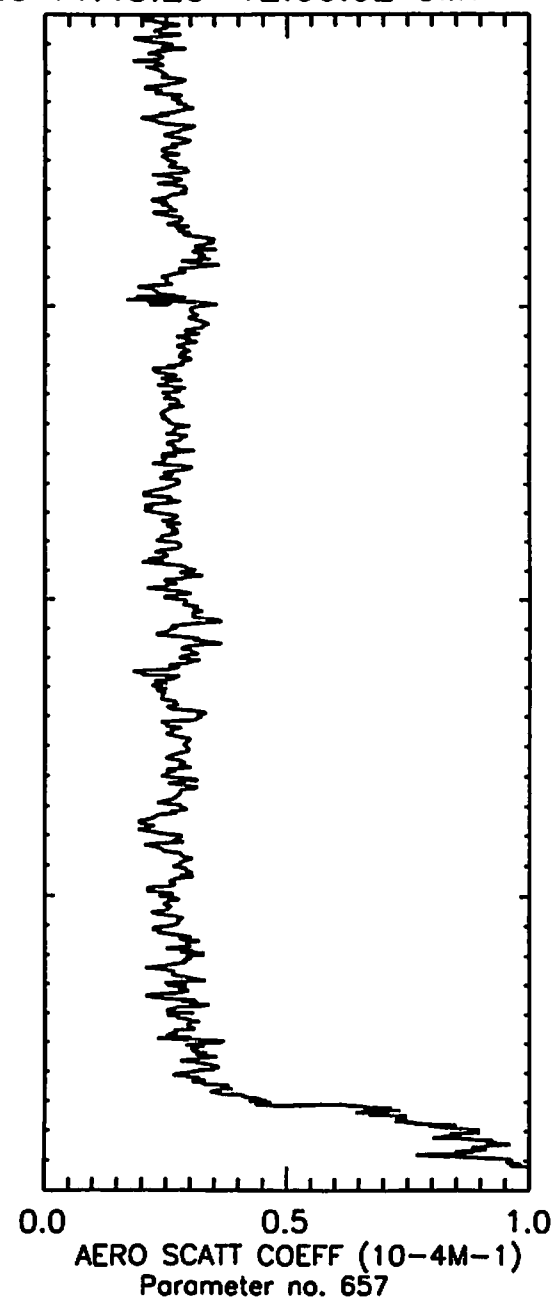
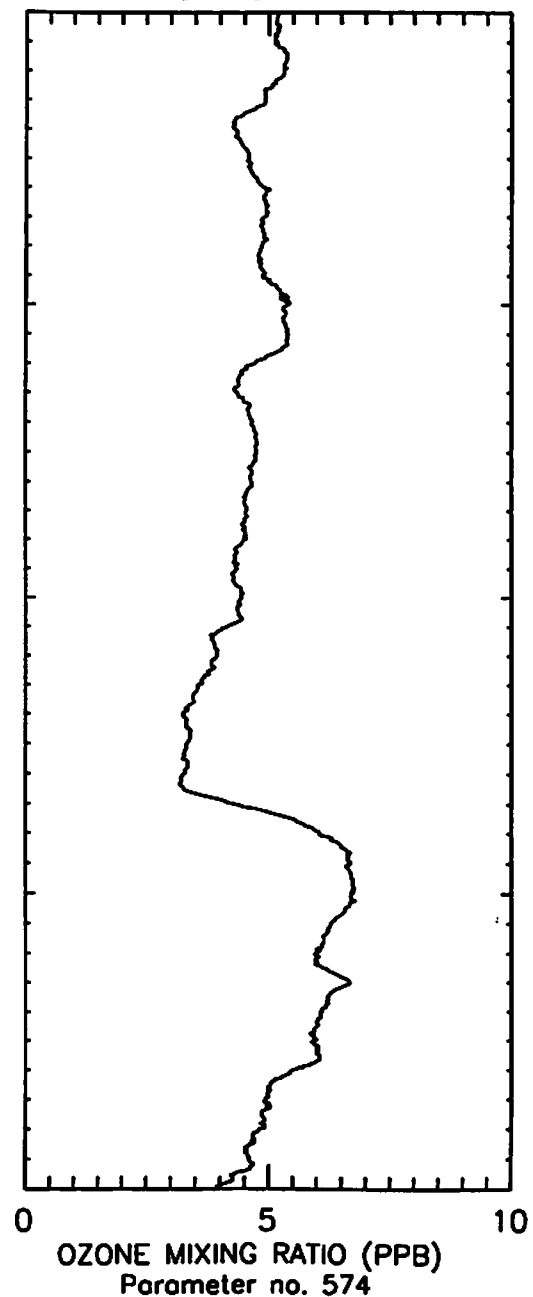
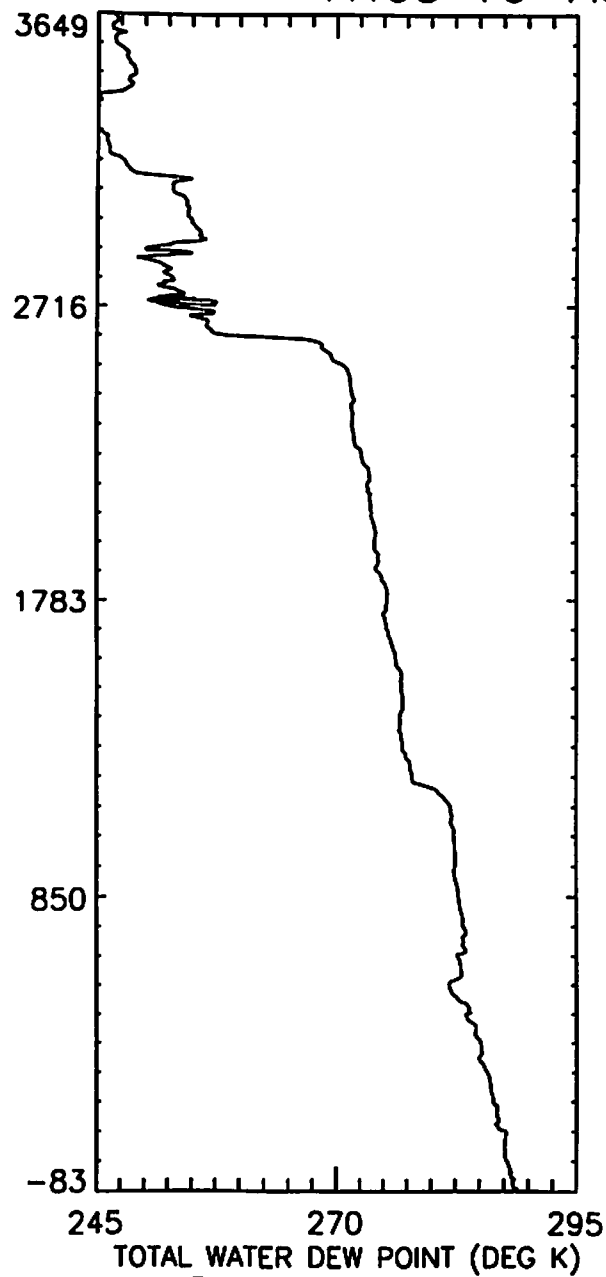
DEW POINT (DEG K)

Parameter no. 521

PRESSURE HEIGHT (METRES)

A405 16-AUG-95 Profile P1

Times 11:45:20-12:00:02 GMT



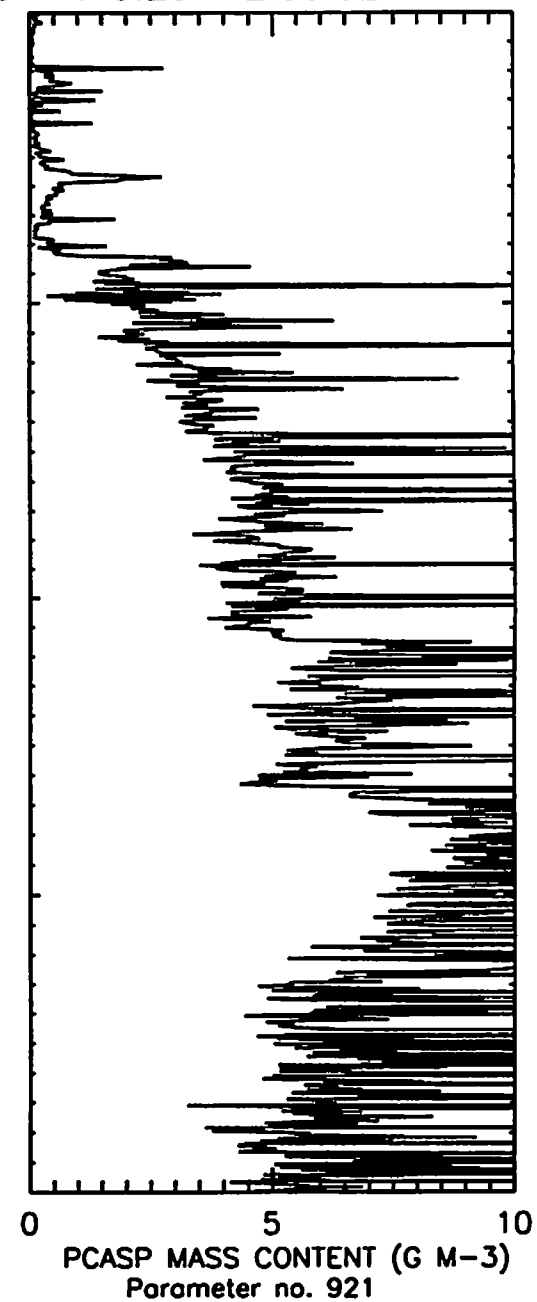
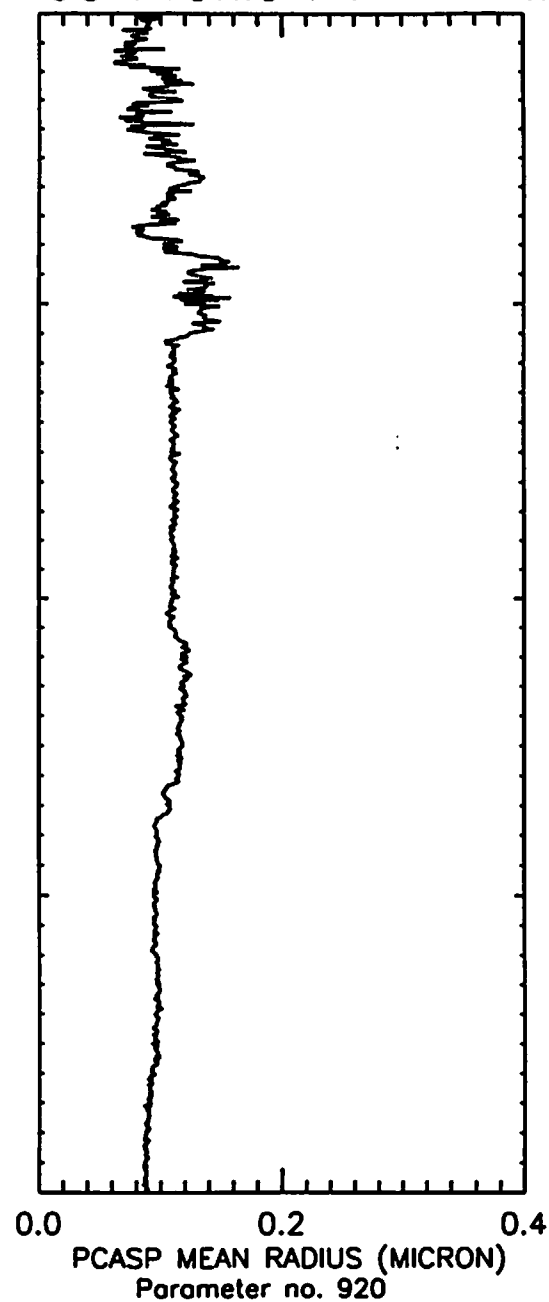
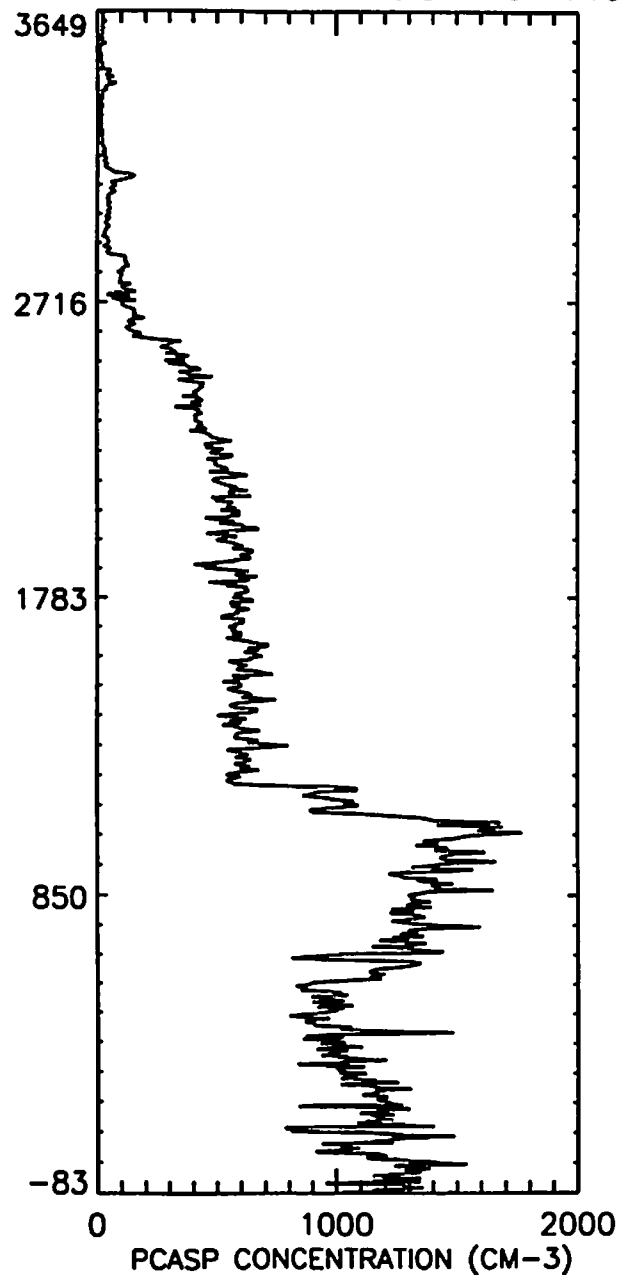
PRESSURE HEIGHT (METRES)

1 second averages



A405 16-AUG-95 Profile P1

Times 11:45:20-12:00:02 GMT

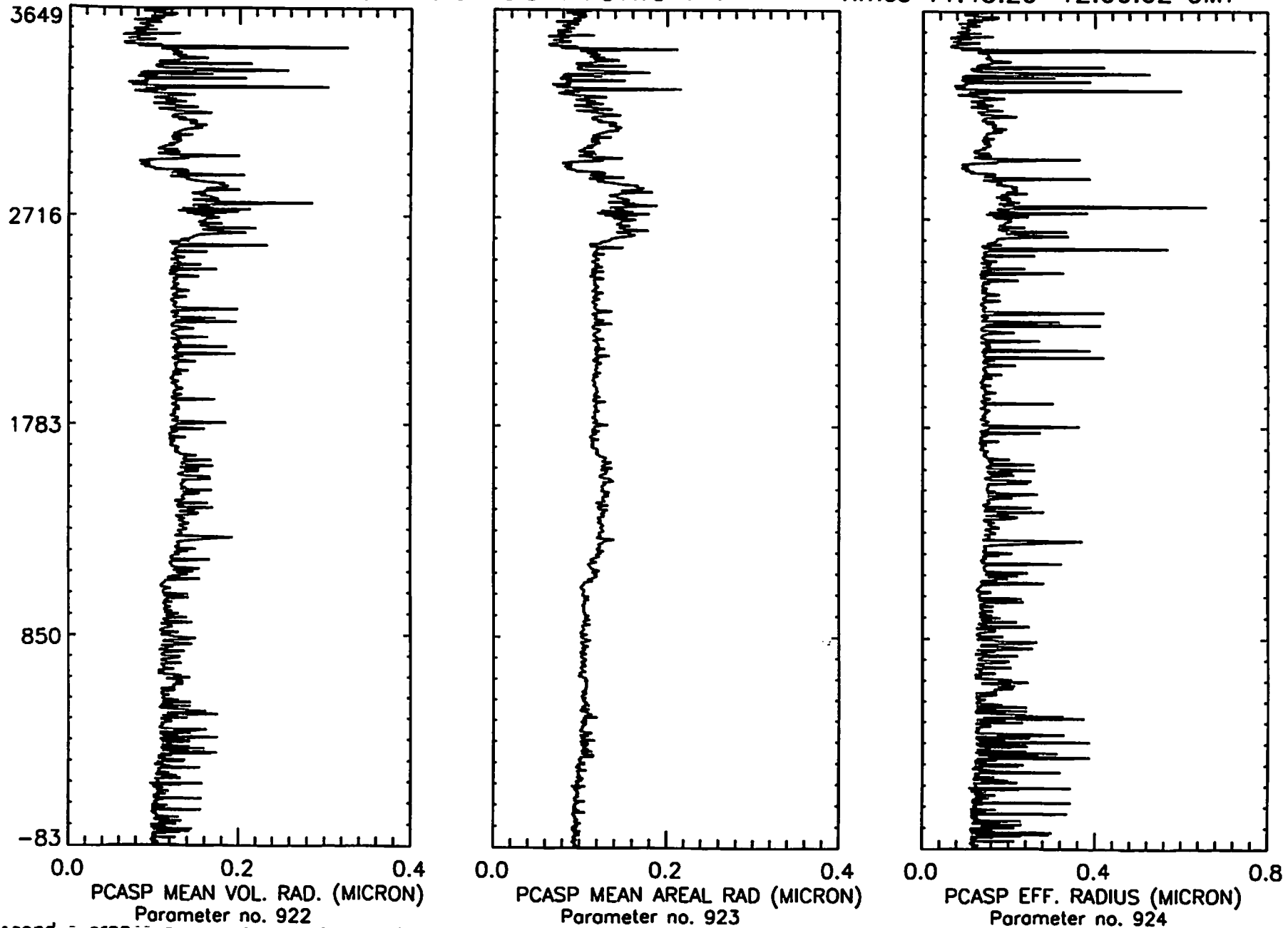


PRESSURE HEIGHT (METRES)

1 second averages

A405 16-AUG-95 Profile P1

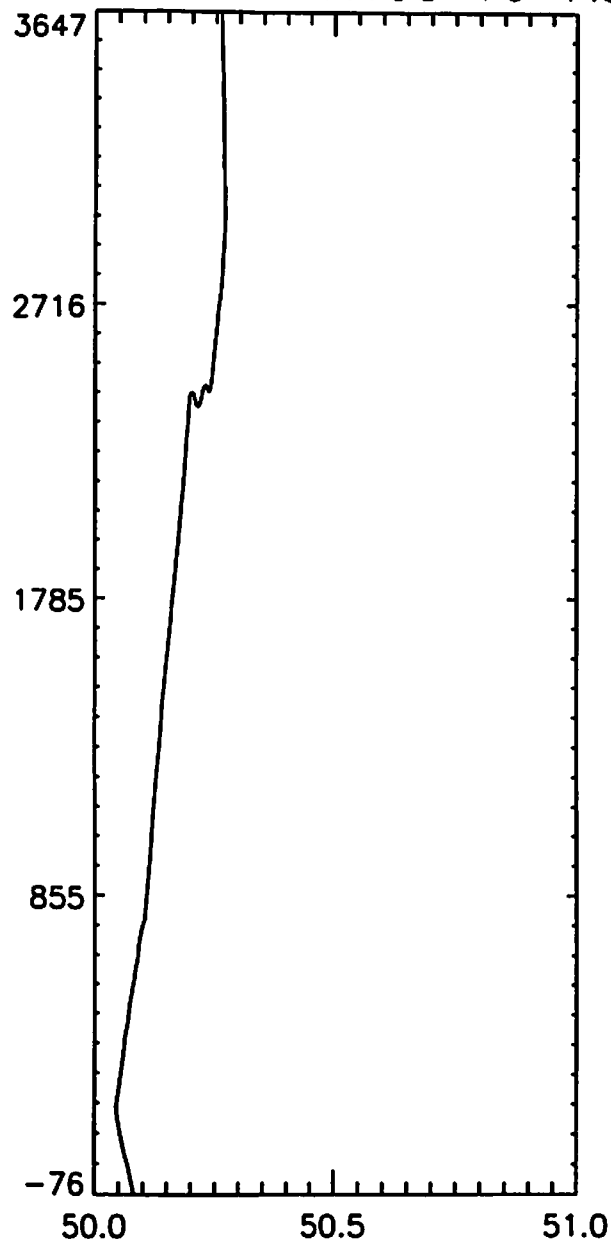
Times 11:45:20-12:00:02 GMT



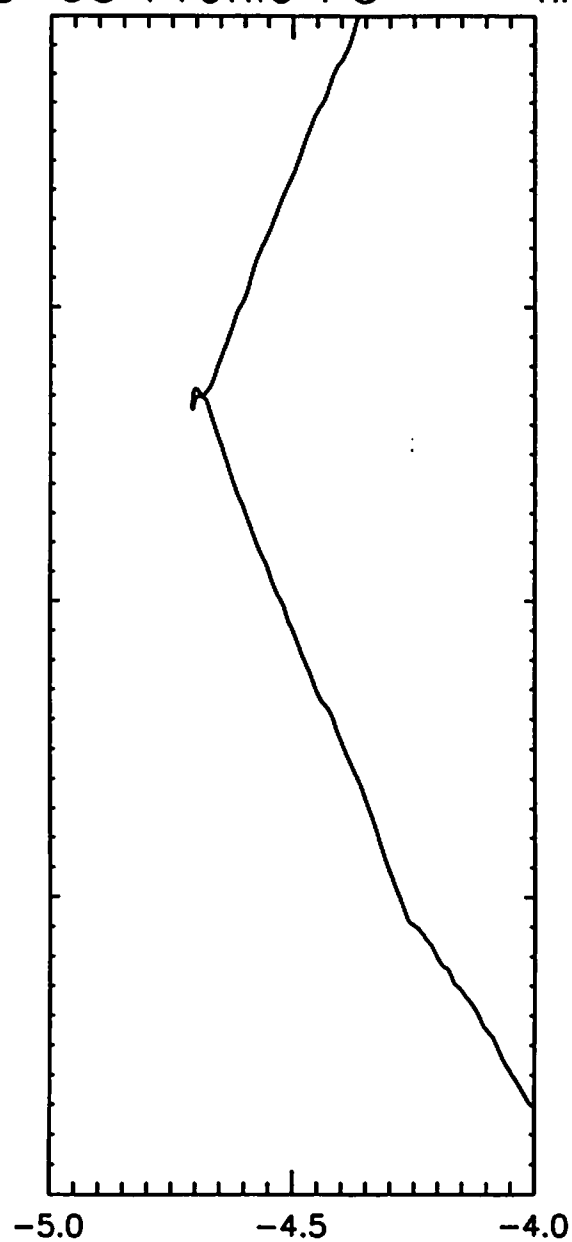
PRESSURE HEIGHT (METRES)

# A405 16-AUG-95 Profile P3

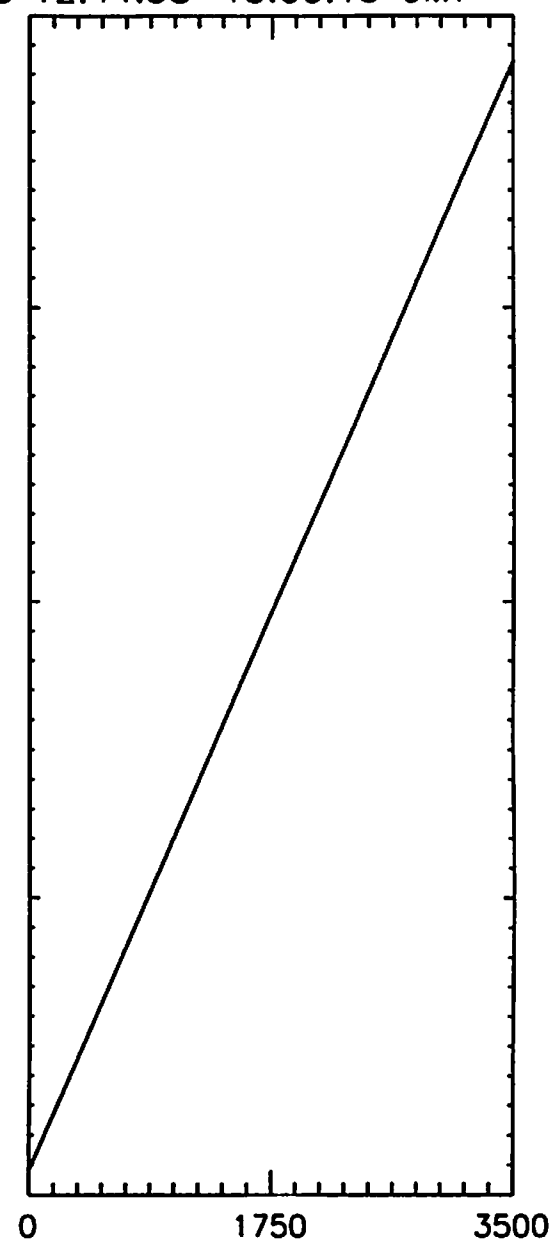
Times 12:44:58-13:00:15 GMT



GPS LATITUDE (DEGREES)  
Parameter no. 580



GPS LONGITUDE (DEGREES)  
Parameter no. 581

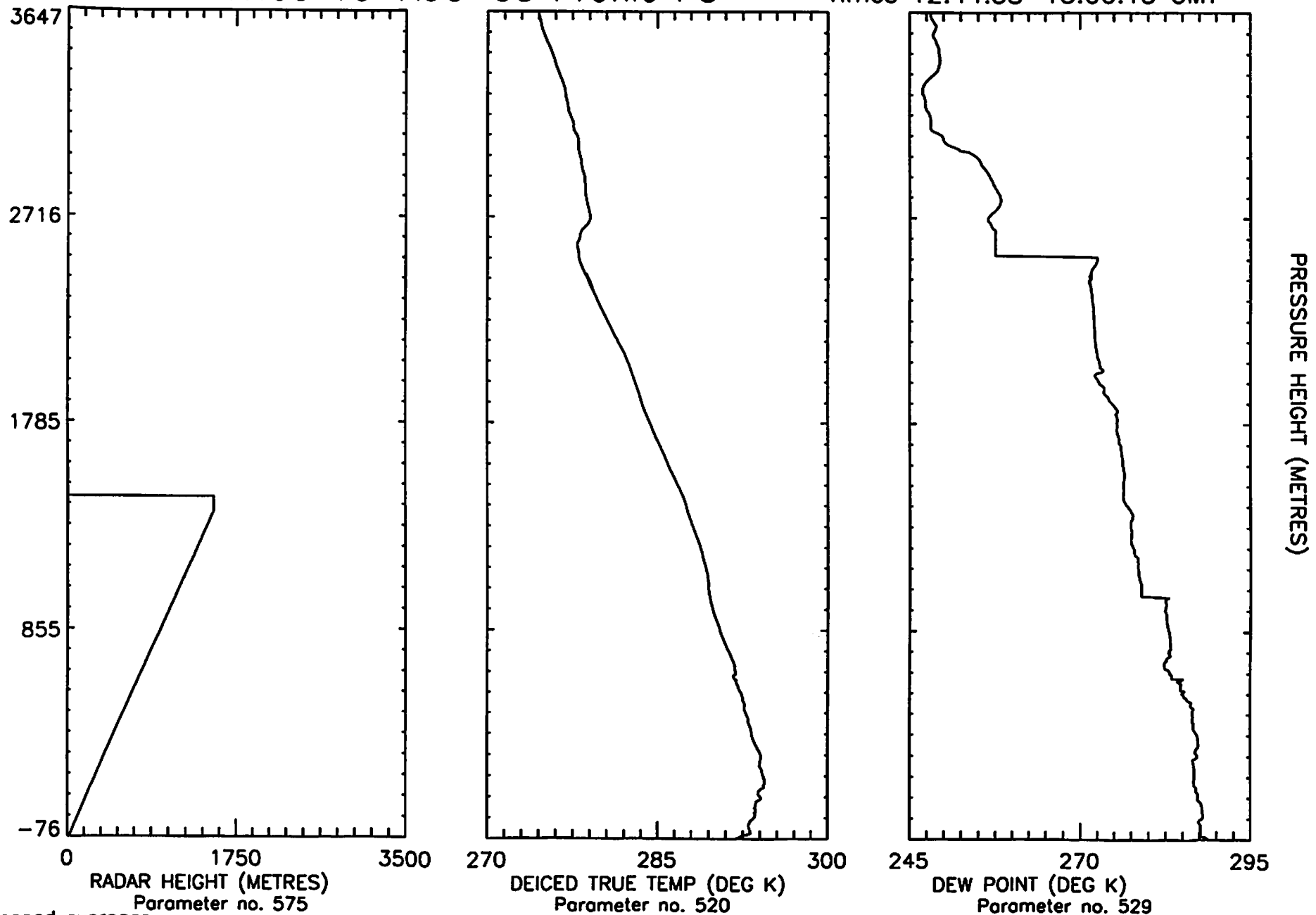


PRESSURE HEIGHT (METRES)  
Parameter no. 578

PRESSURE HEIGHT (METRES)

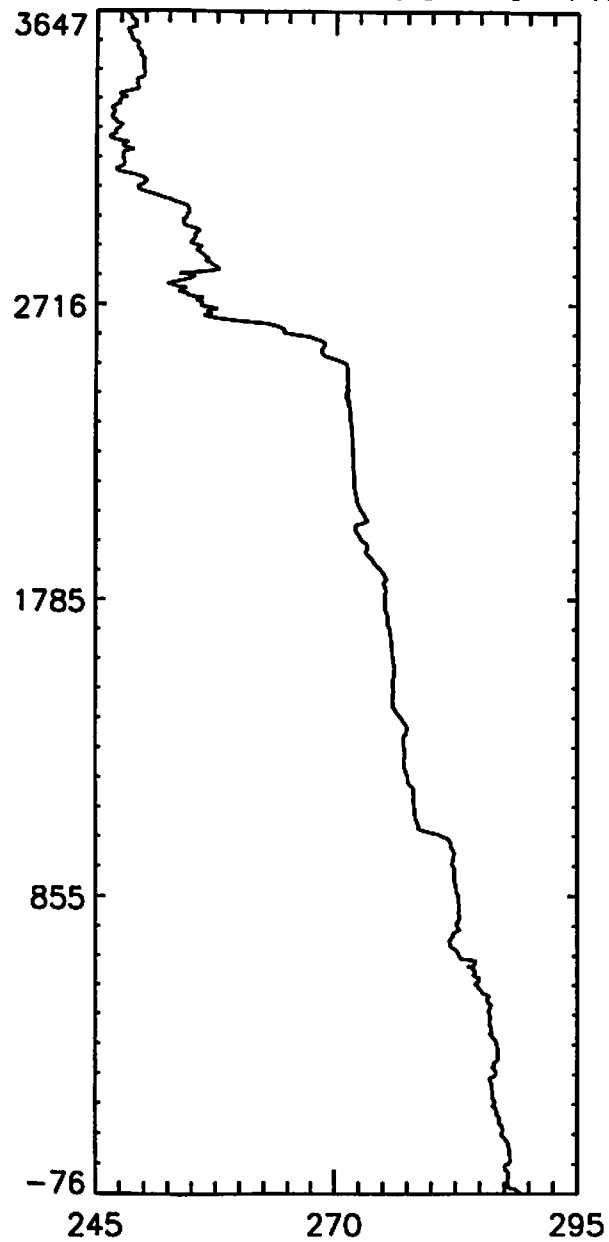
# A405 16-AUG-95 Profile P3

Times 12:44:58-13:00:15 GMT

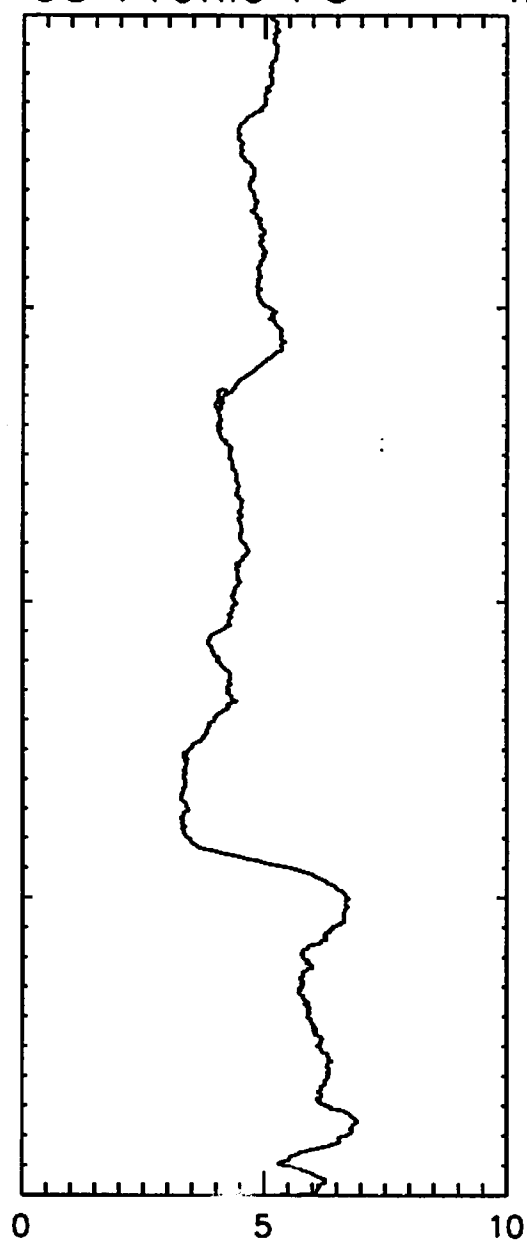


# A405 16-AUG-95 Profile P3

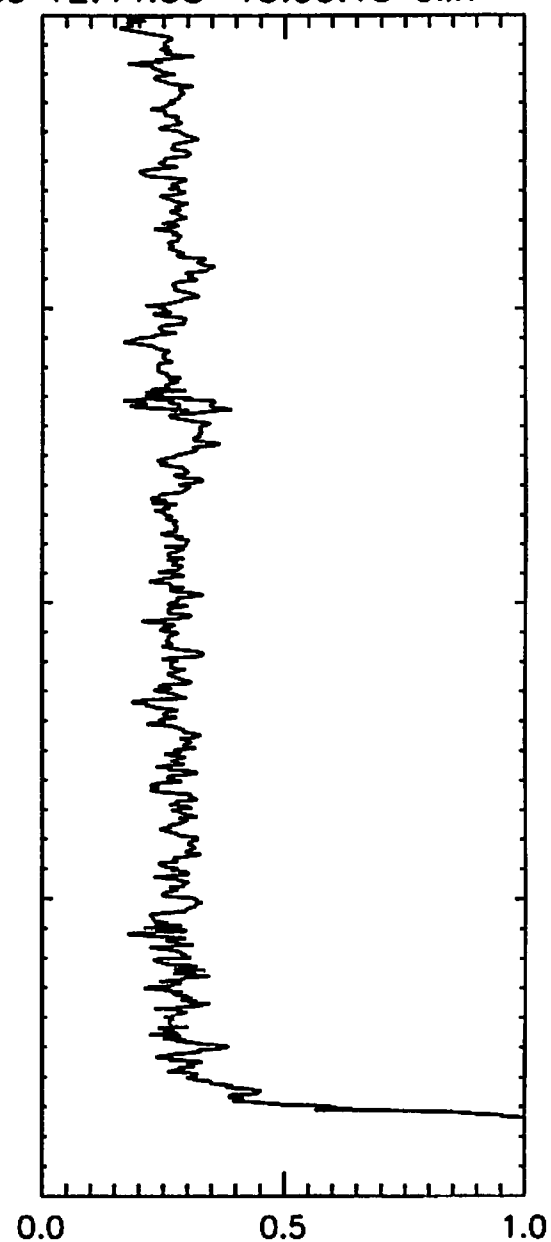
Times 12:44:58-13:00:15 GMT



Parameter no. 725



Parameter no. 515



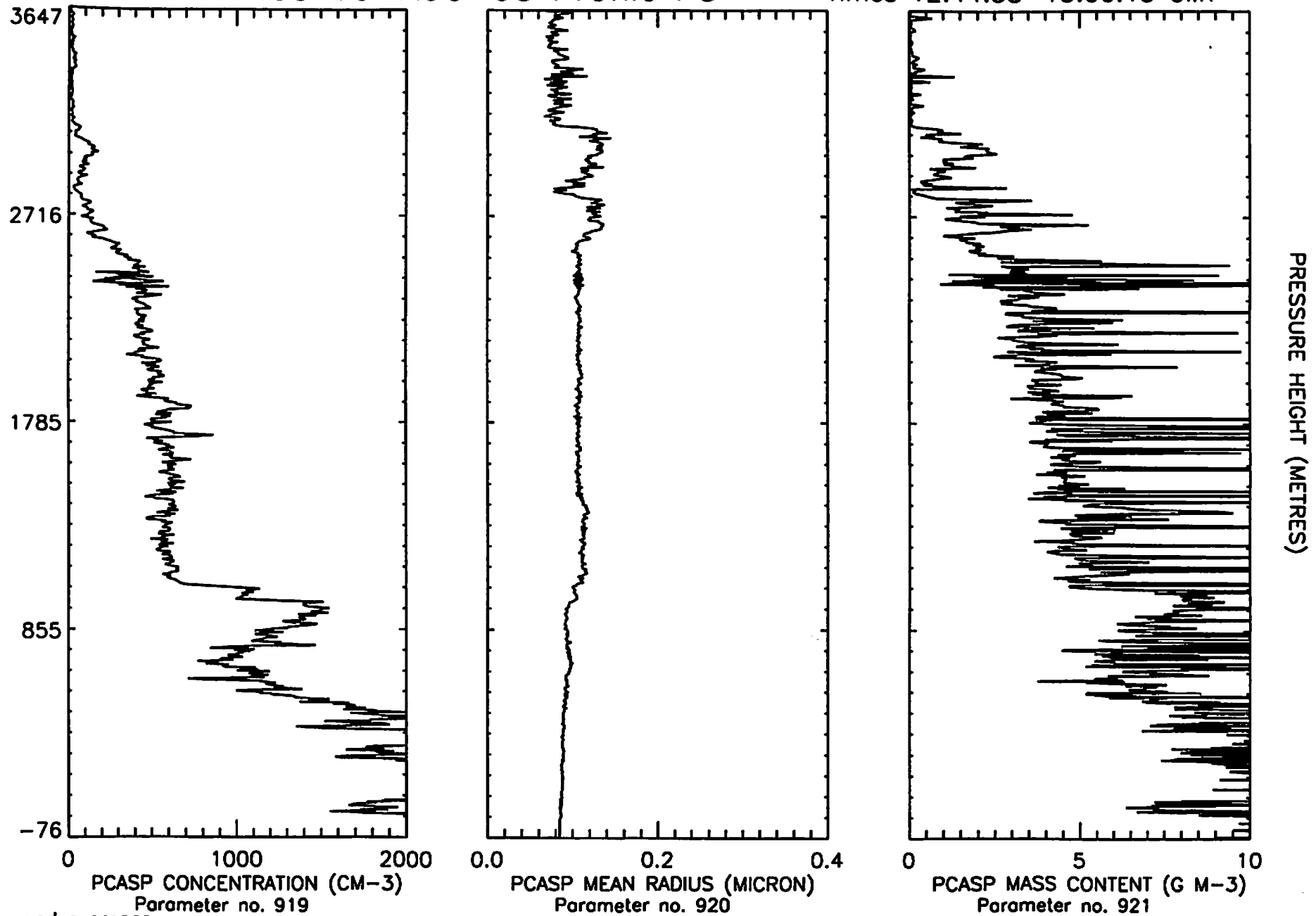
Parameter no. 657

PRESSURE HEIGHT (METRES)

1 second averages

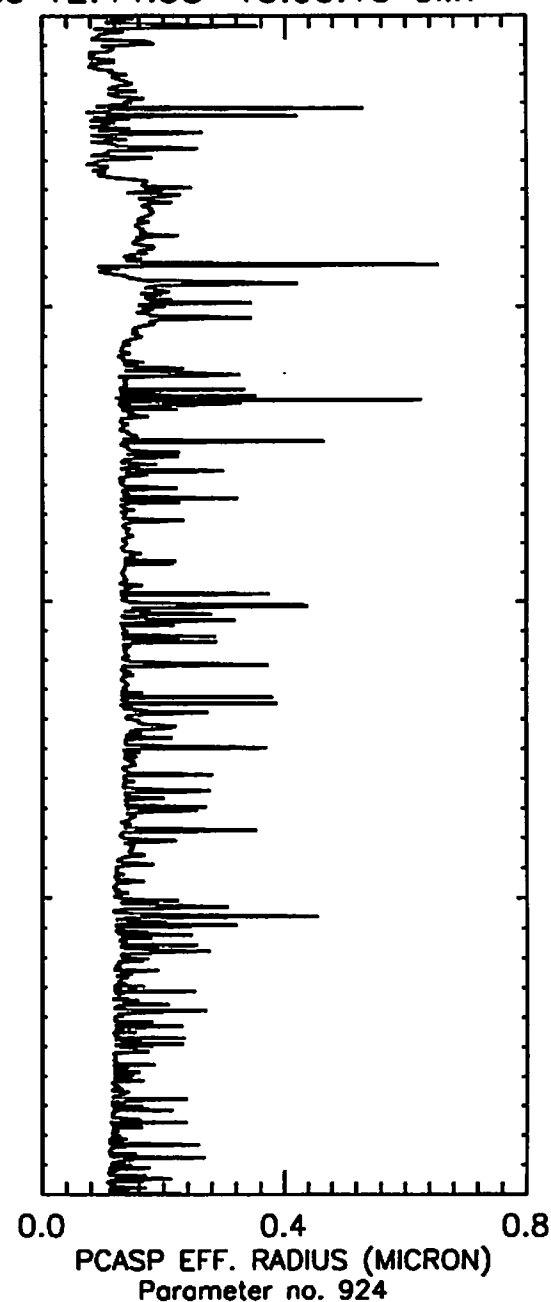
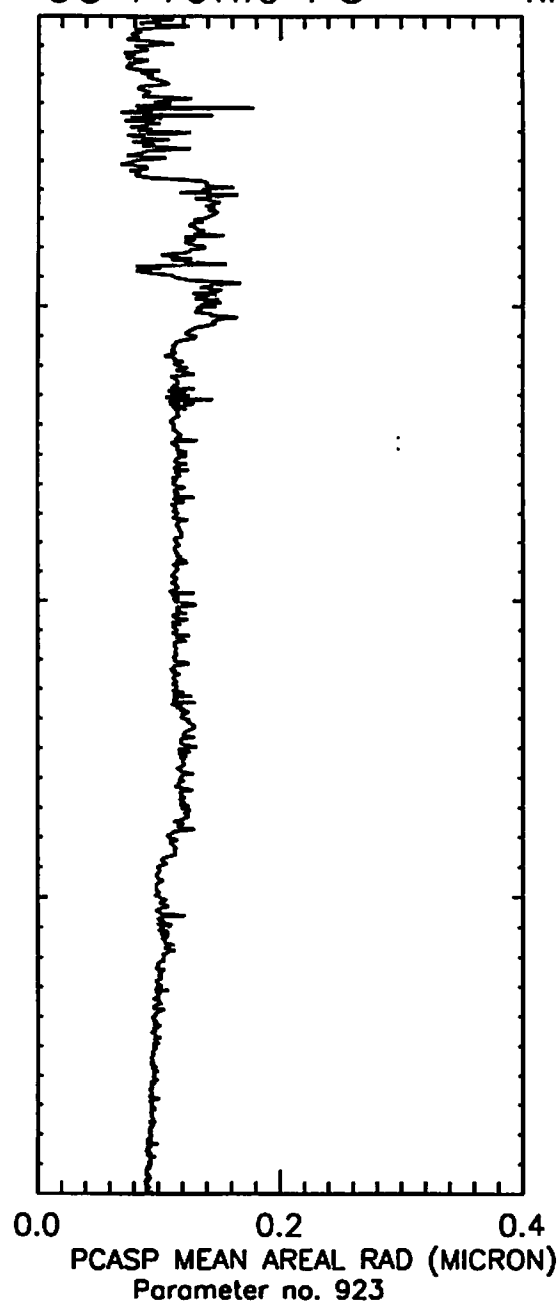
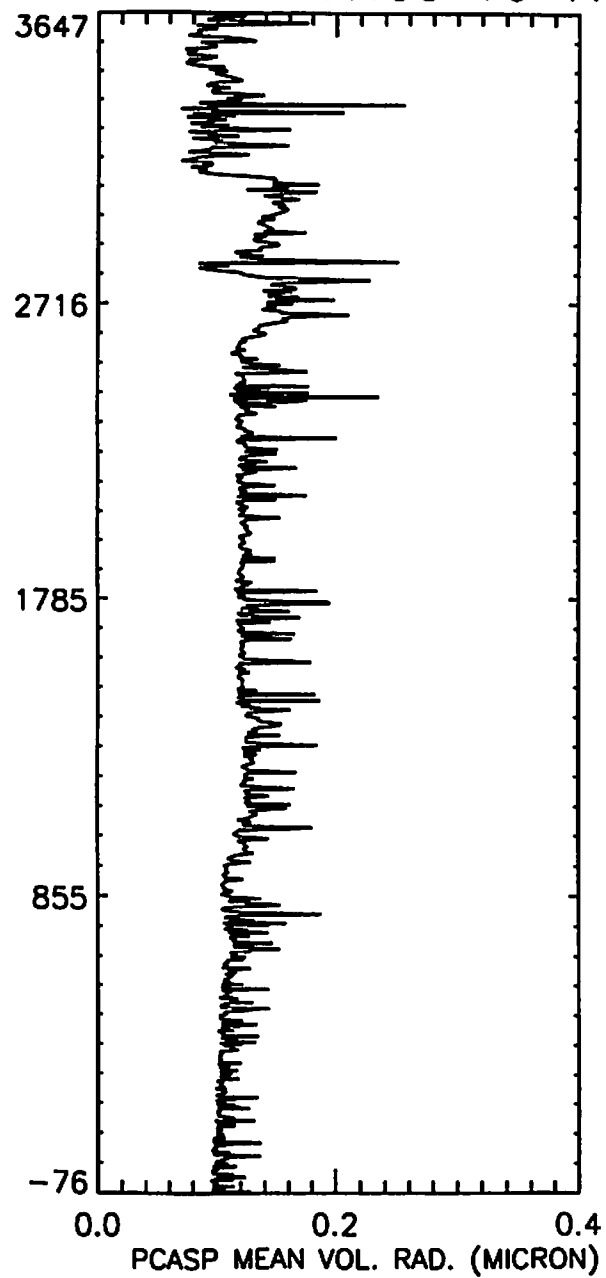
A405 16-AUG-95 Profile P3

Times 12:44:58-13:00:15 GMT



A405 16-AUG-95 Profile P3

Times 12:44:58-13:00:15 GMT



PRESSURE HEIGHT (METRES)

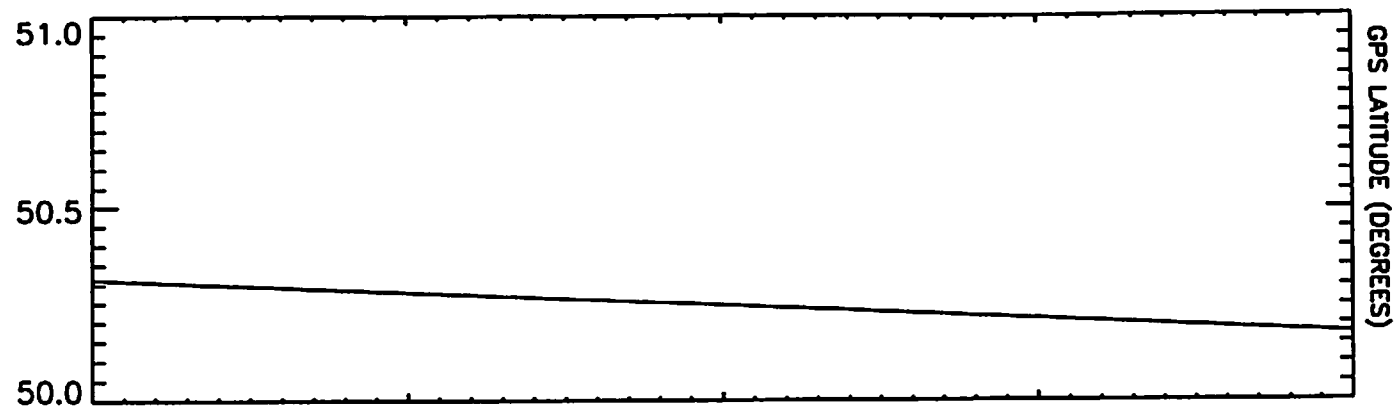
1 second averages

A405 16-AUG-95

Run no. R1.1

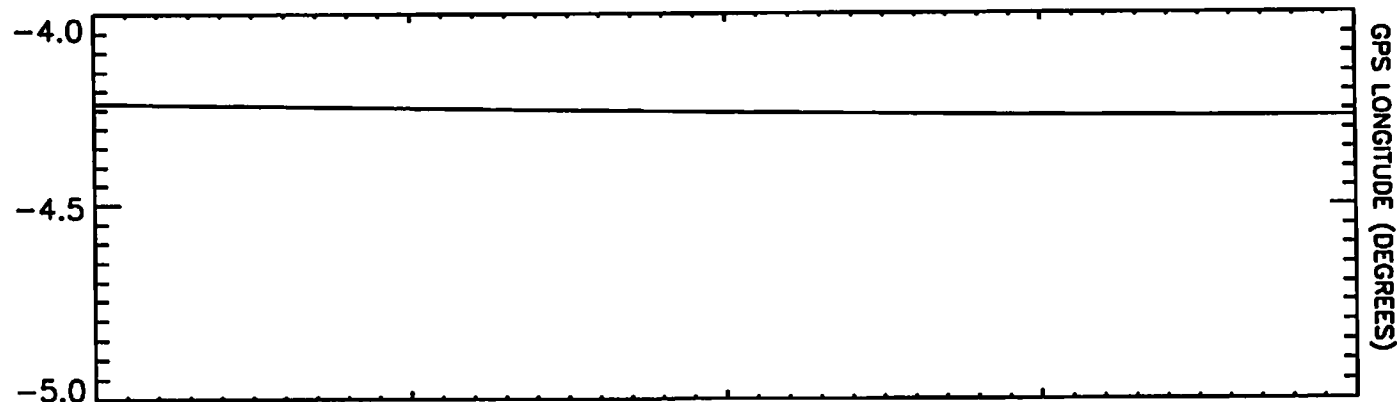
GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 142  
Mean 50.2451  
Standard dev 4.068212e-02  
Max value 50.3129  
Min value 50.1743



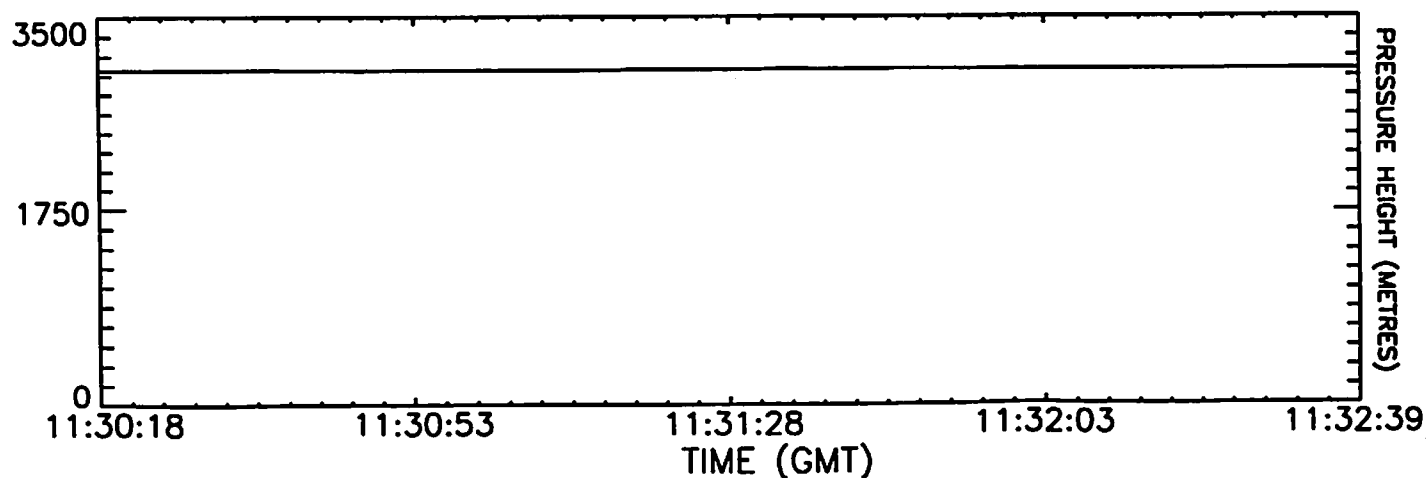
GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 142  
Mean -4.25458  
Standard dev 1.122440e-02  
Max value -4.23302  
Min value -4.26817



PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 142  
Mean 3029.19  
Standard dev 3.99088  
Max value 3035.97  
Min value 3022.25



1 second averages

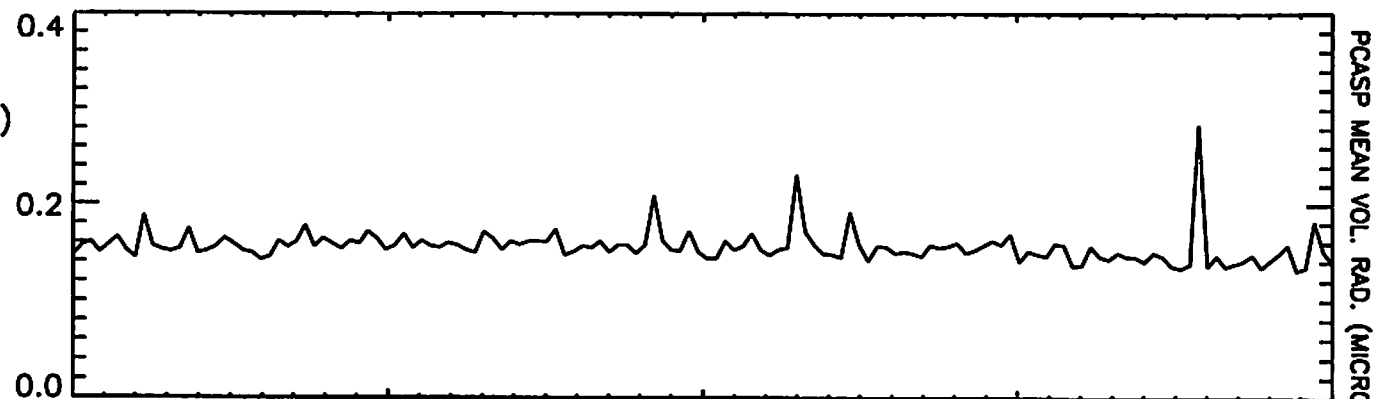


A405 16-AUG-95

Run no. R1.1

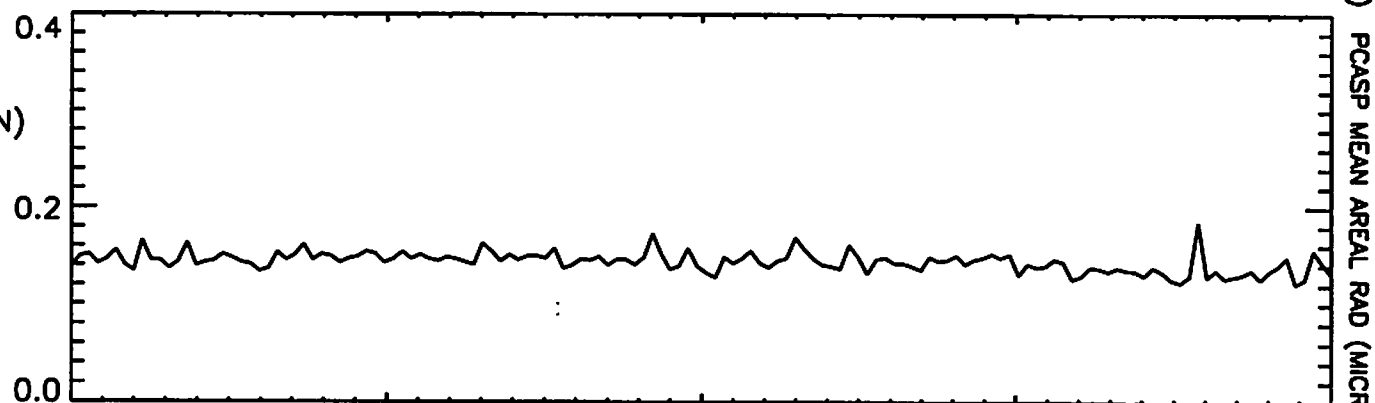
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 142  
Mean 0.155462  
Standard dev 1.699378e-02  
Max value 0.284930  
Min value 0.131408



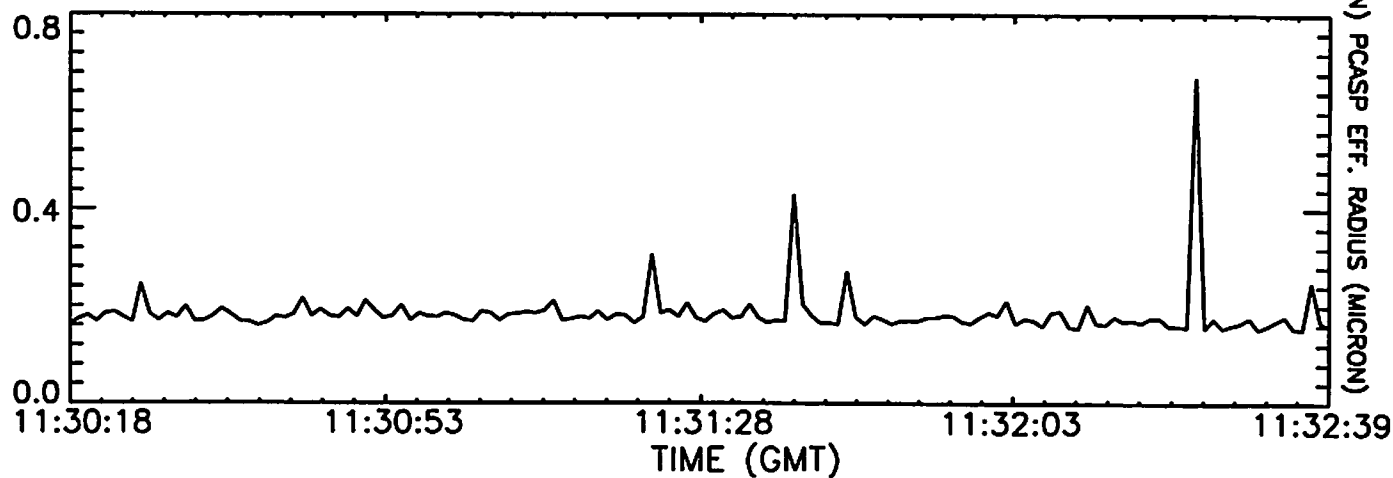
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 142  
Mean 0.143582  
Standard dev 9.921459e-03  
Max value 0.185378  
Min value 0.121281



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 142  
Mean 0.183818  
Standard dev 5.065444e-02  
Max value 0.672829  
Min value 0.152730



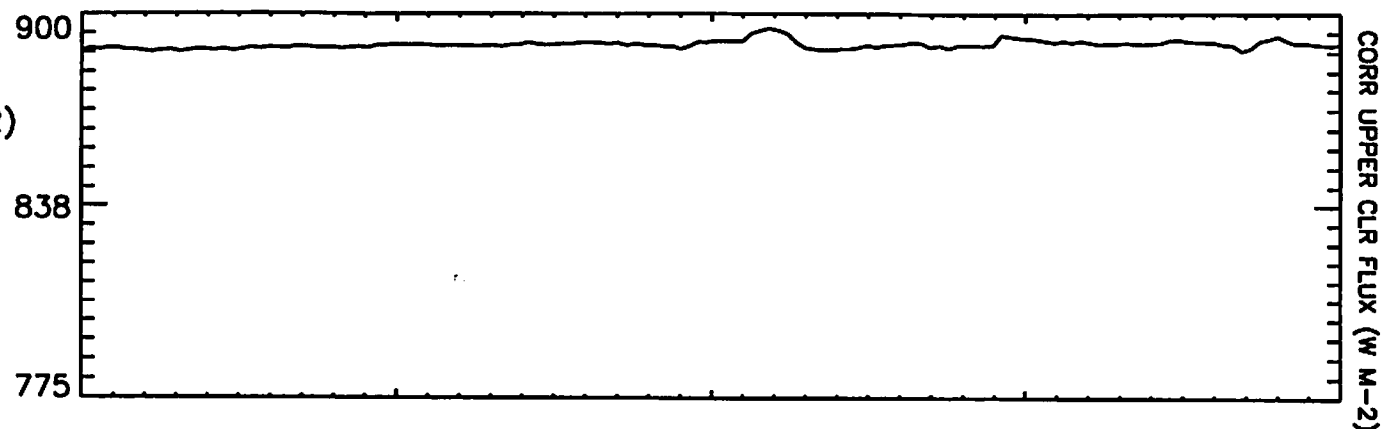
1 second averages

A405 16-AUG-95

Run no. R1.1

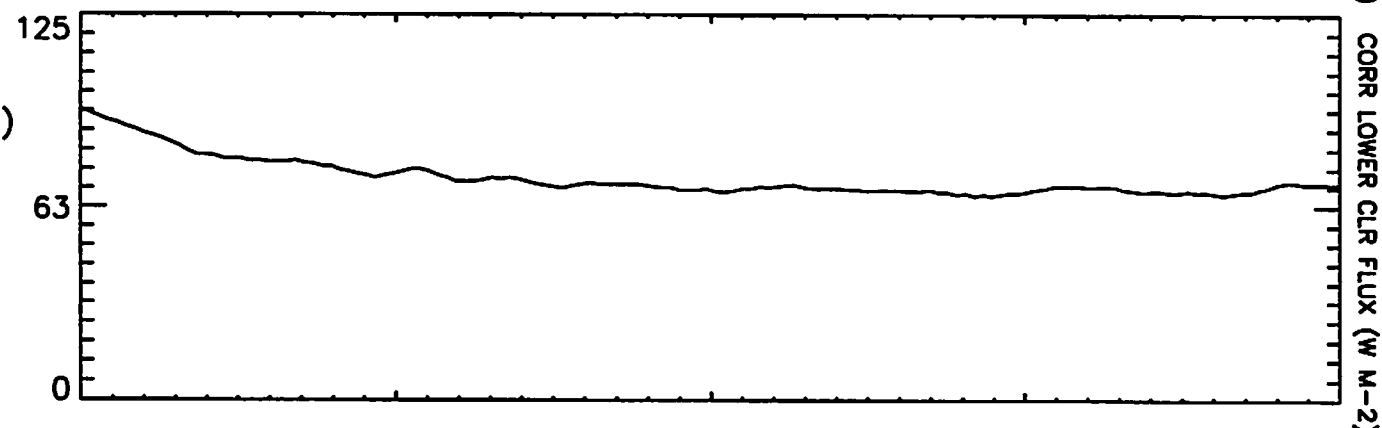
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 142  
Mean 890.008  
Standard dev 1.37420  
Max value 895.168  
Min value 887.636



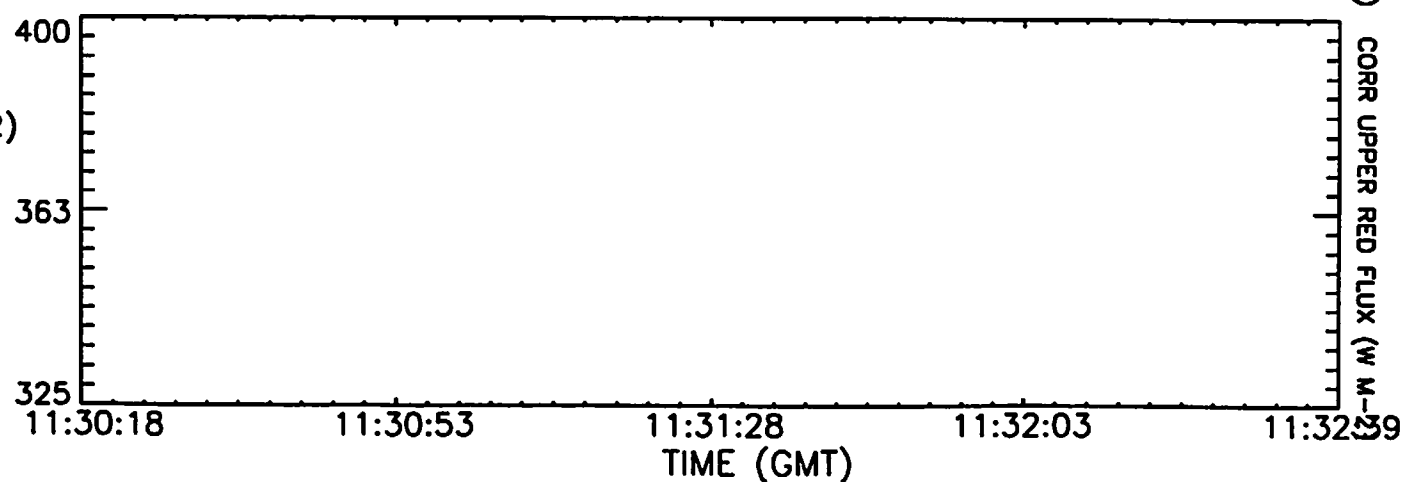
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 142  
Mean 71.9108  
Standard dev 6.14281  
Max value 94.3477  
Min value 66.0410



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 142  
Mean 438.686  
Standard dev 1.18591  
Max value 442.609  
Min value 436.800



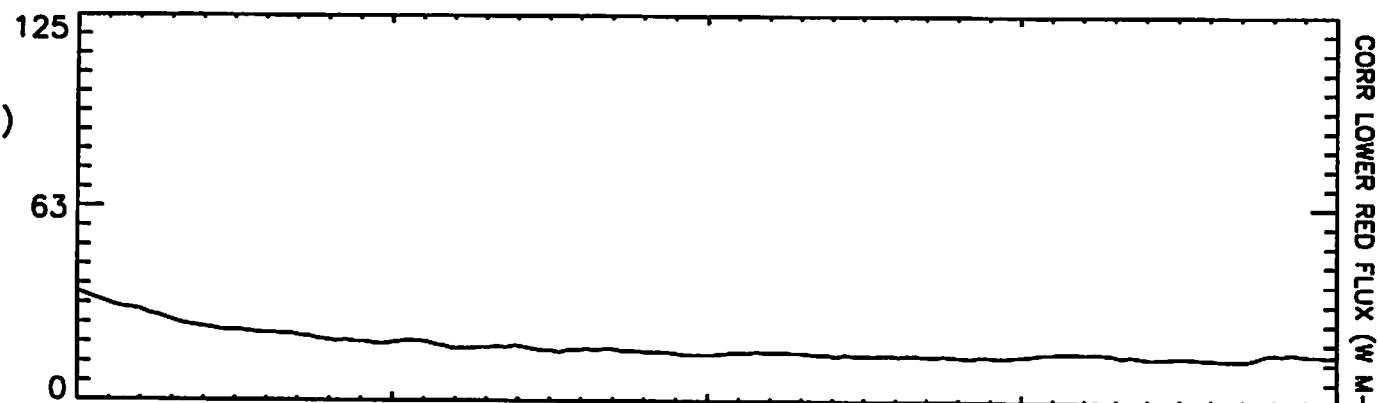
1 second averages

A405 16-AUG-95

Run no. R1.1

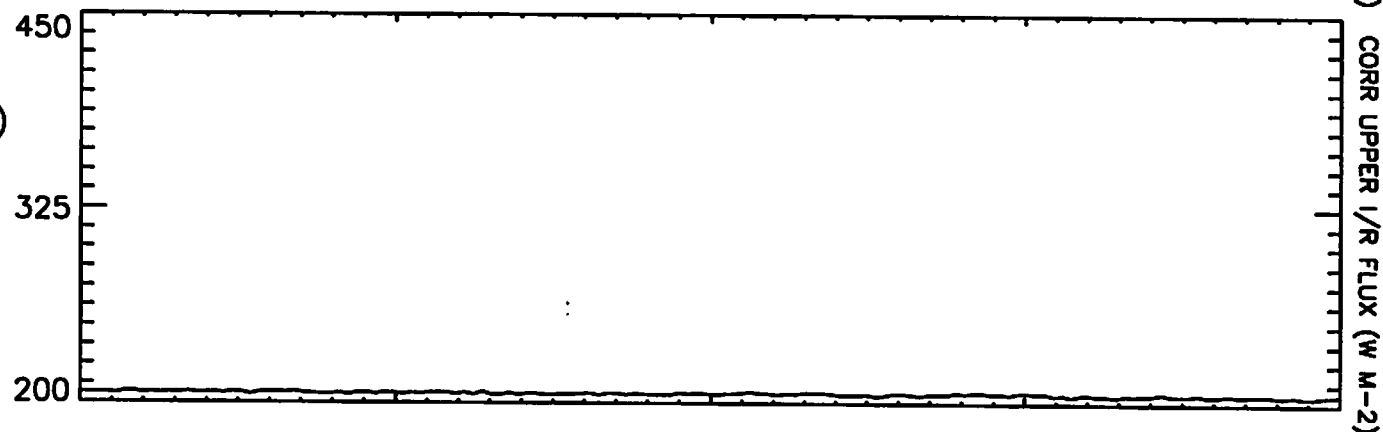
CORR LOWER RED FLUX (W M-2)

Parameter no. 1023  
No. of obs 142  
Mean 17.7188  
Standard dev 4.57570  
Max value 34.8655  
Min value 13.7181



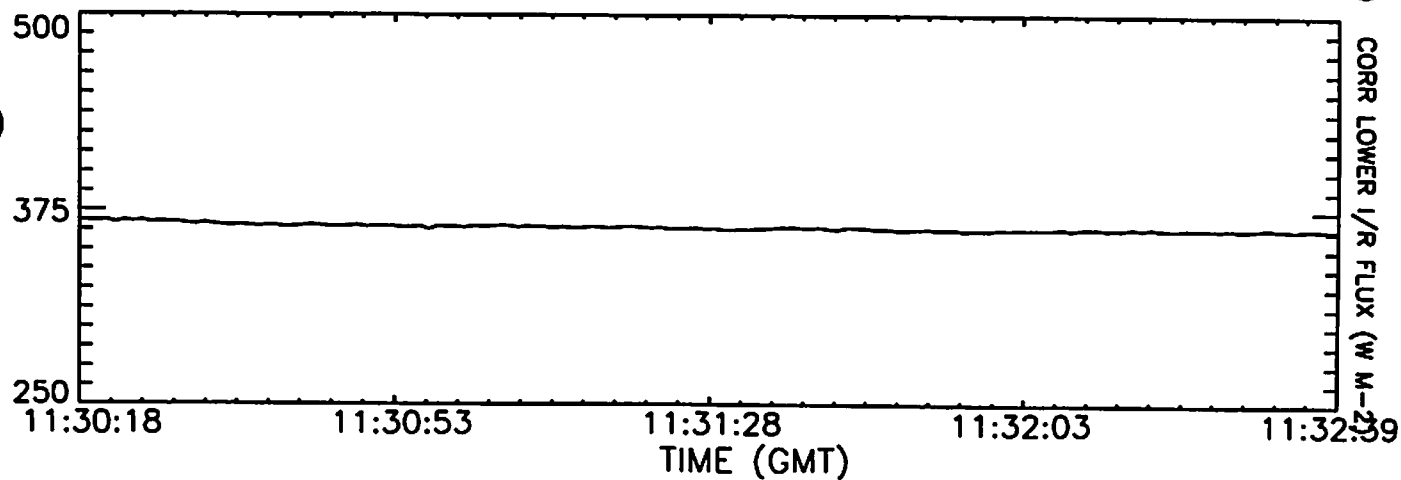
CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021  
No. of obs 142  
Mean 206.005  
Standard dev 0.648054  
Max value 207.291  
Min value 204.496



CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024  
No. of obs 142  
Mean 364.342  
Standard dev 1.38639  
Max value 368.519  
Min value 362.263



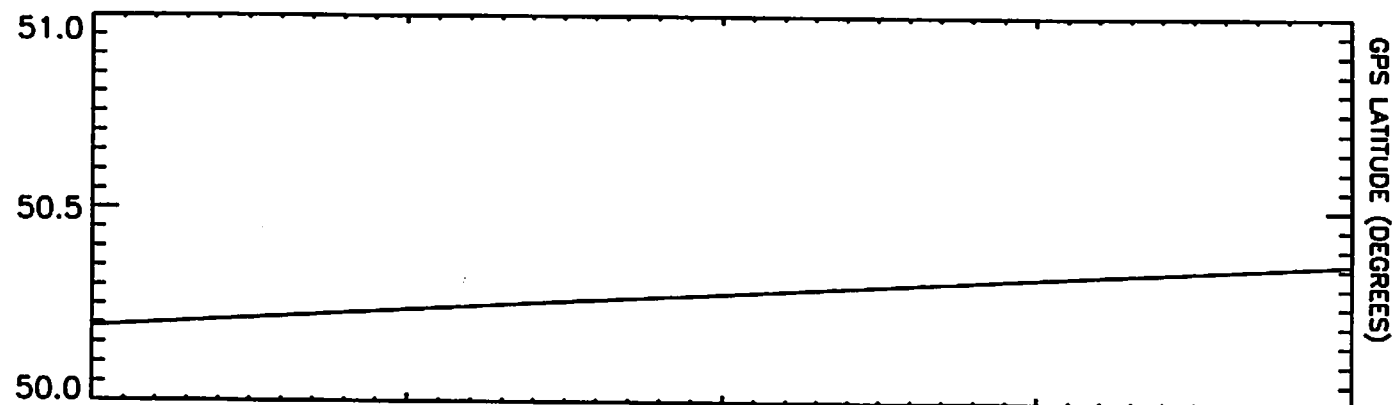
1 second averages

A405 16-AUG-95

Run no. R1.2

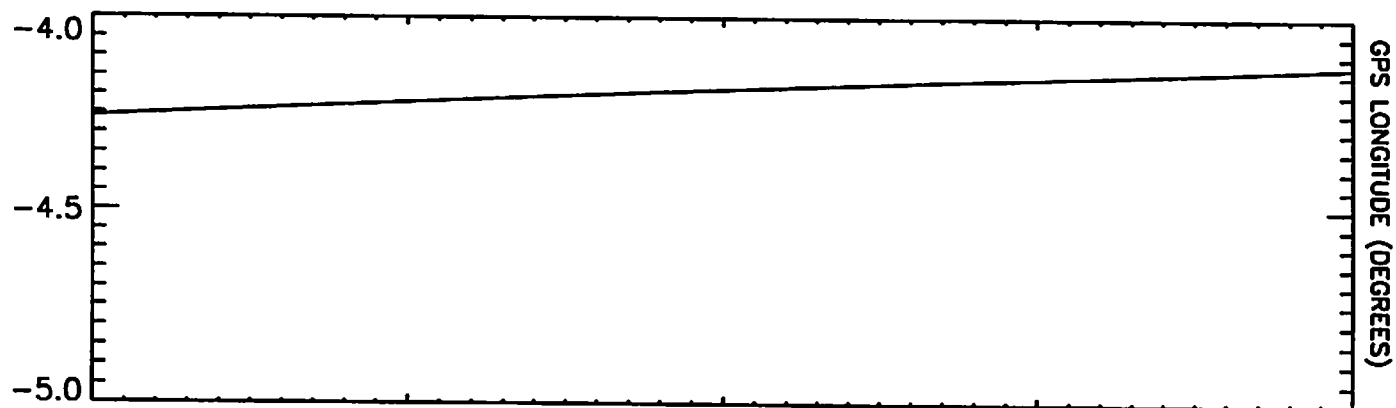
### GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 195  
Mean 50.2789  
Standard dev 4.984294e-02  
Max value 50.3628  
Min value 50.1911



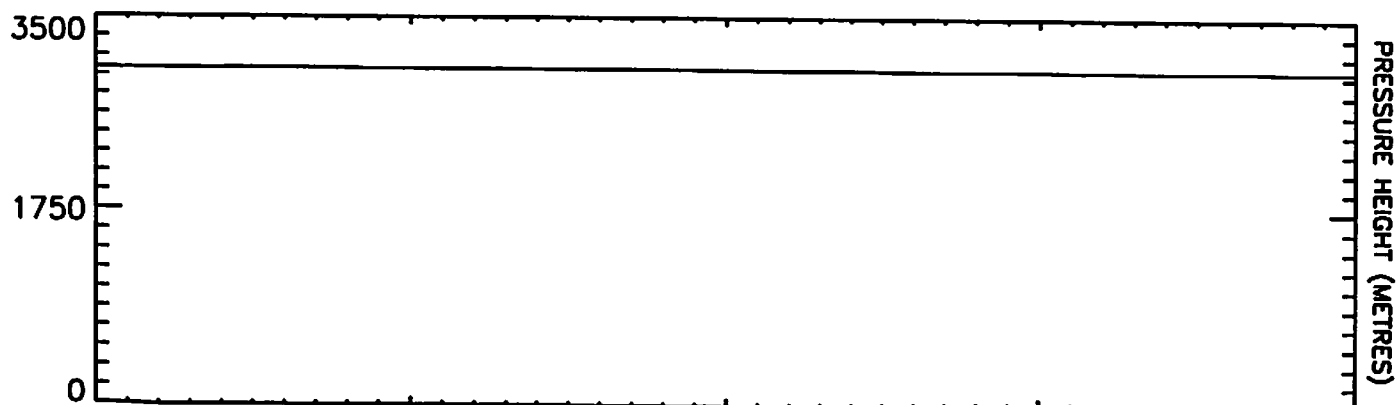
### GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 195  
Mean -4.18918  
Standard dev 3.846464e-02  
Max value -4.12487  
Min value -4.25948



### PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 195  
Mean 3029.72  
Standard dev 4.88822  
Max value 3036.70  
Min value 3022.44



1 second overages

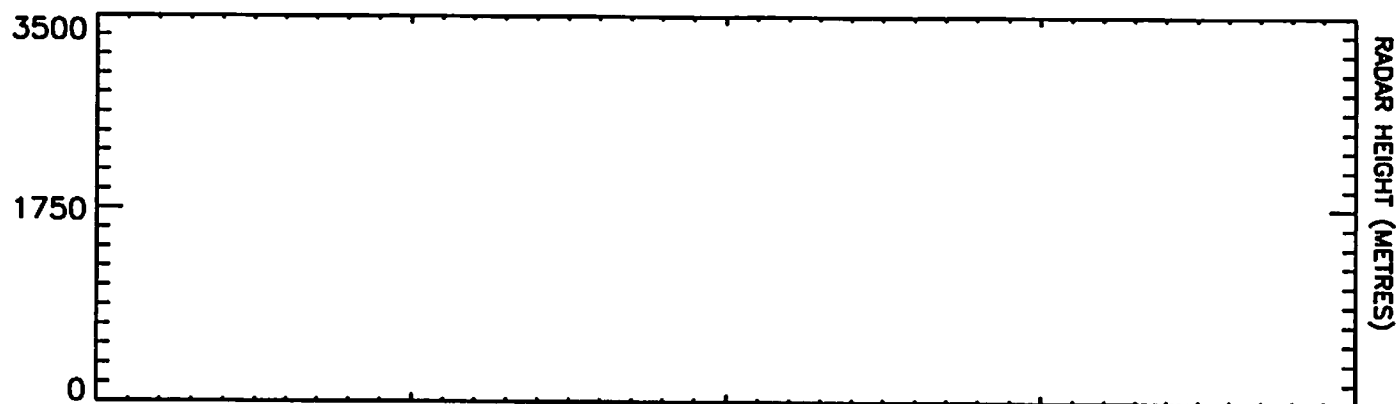
TIME (GMT)

A405 16-AUG-95

Run no. R1.2

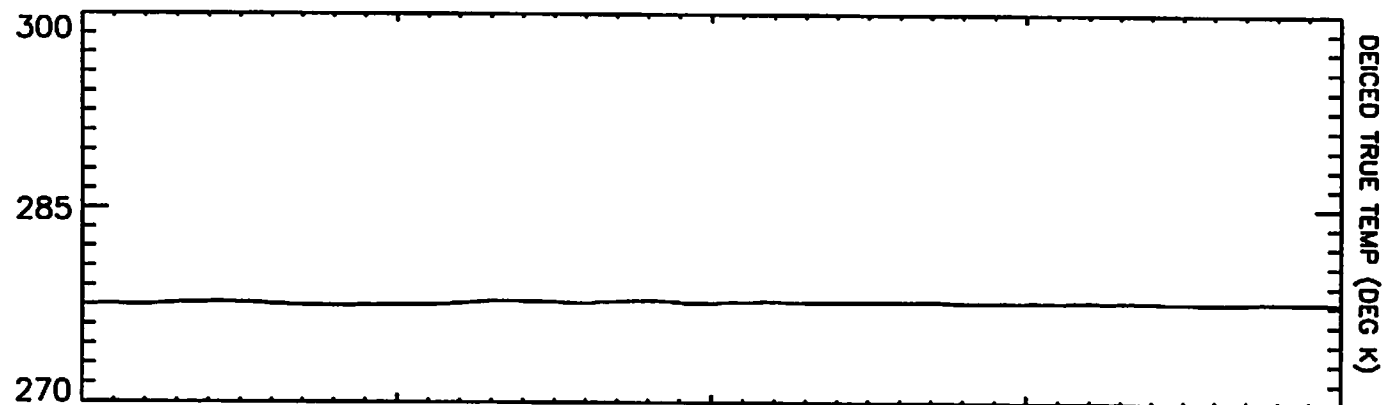
RADAR HEIGHT (METRES)

Parameter no. 575  
No. of obs 195  
Mean 0.000000  
Standard dev 0.000000  
Max value 0.000000  
Min value 0.000000



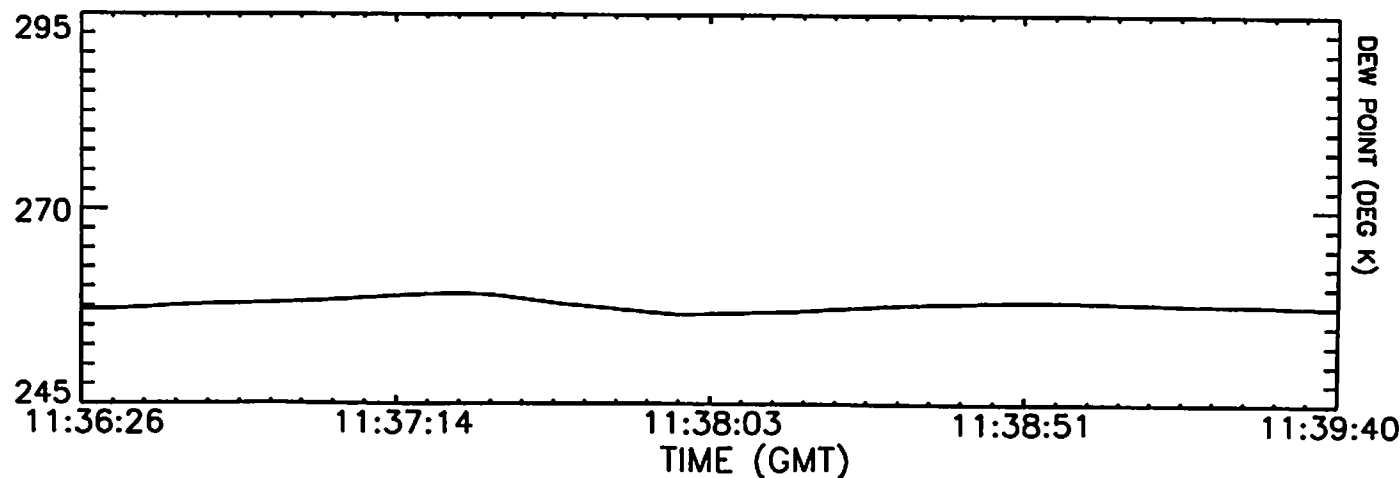
DEICED TRUE TEMP (DEG K)

Parameter no. 520  
No. of obs 195  
Mean 277.676  
Standard dev 0.104065  
Max value 277.850  
Min value 277.435



DEW POINT (DEG K)

Parameter no. 529  
No. of obs 195  
Mean 257.742  
Standard dev 0.623980  
Max value 259.033  
Min value 256.479



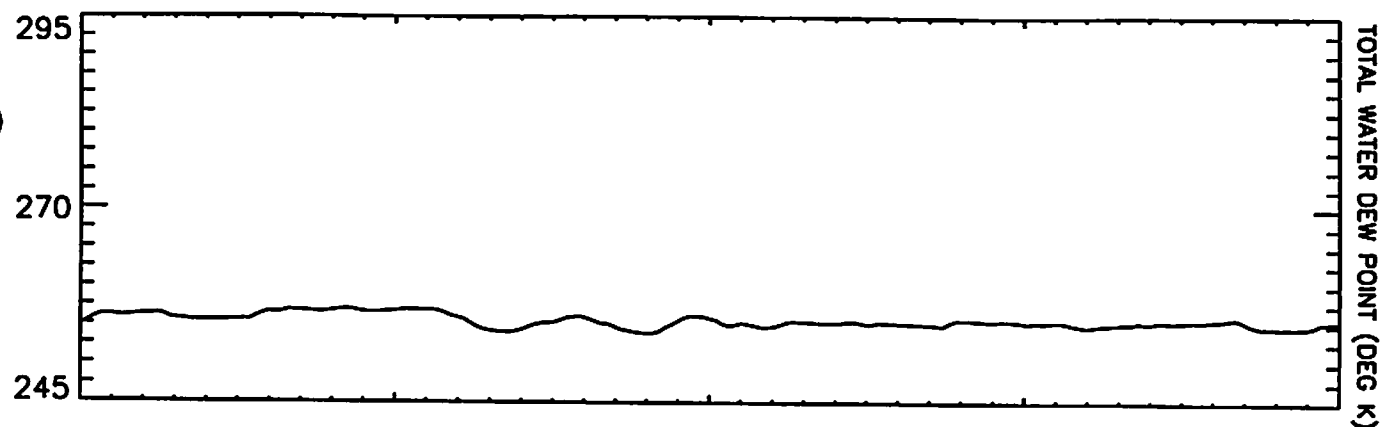
1 second averages

A405 16-AUG-95

Run no. R1.2

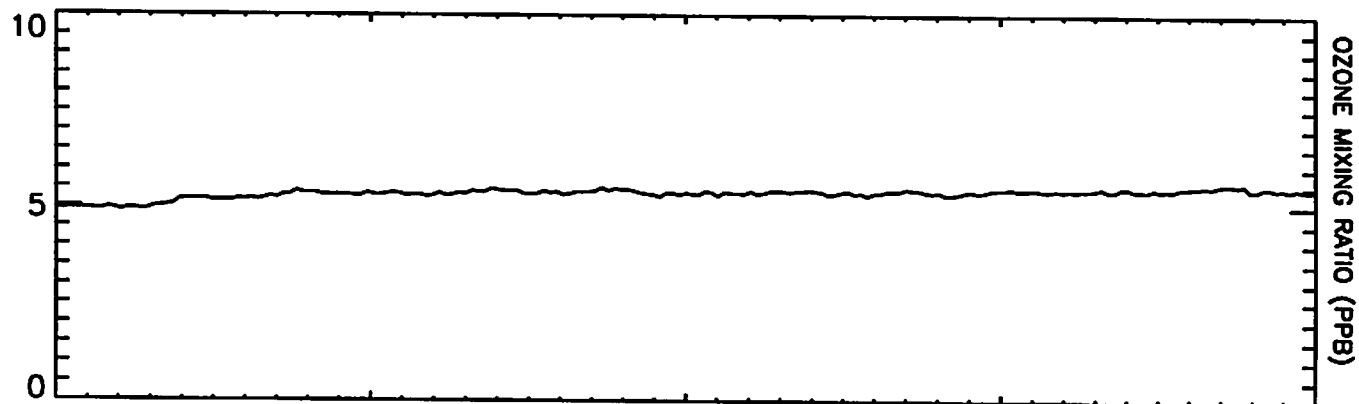
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 195  
Mean 255.451  
Standard dev 0.710169  
Max value 256.945  
Min value 253.857



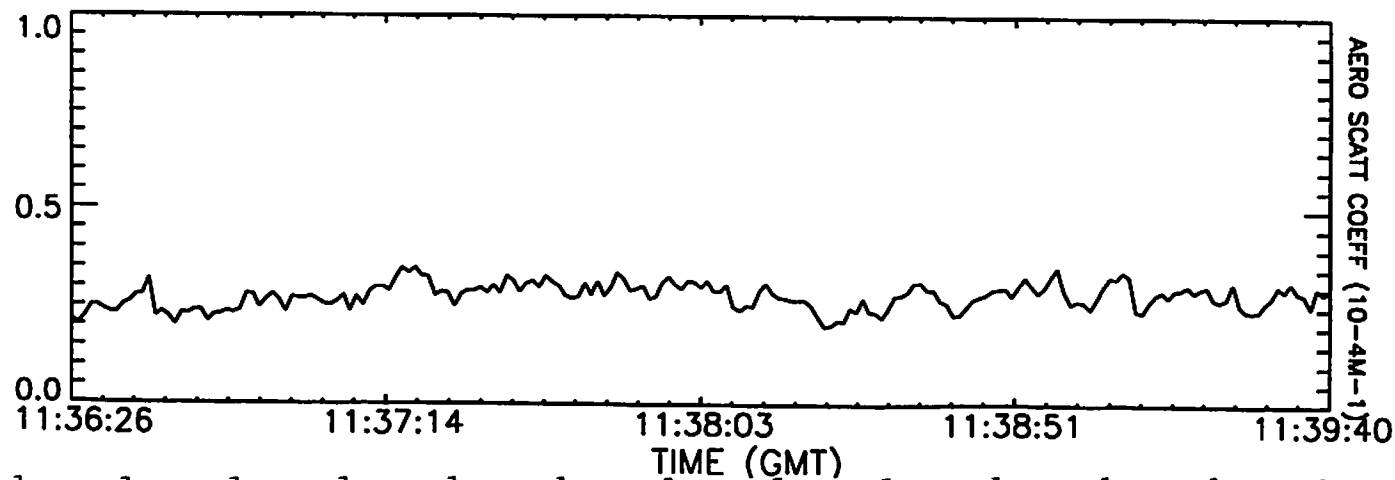
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 195  
Mean 5.33057  
Standard dev 0.154249  
Max value 5.58562  
Min value 4.88742



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 195  
Mean 0.278484  
Standard dev 3.342552e-02  
Max value 0.355003  
Min value 0.201201



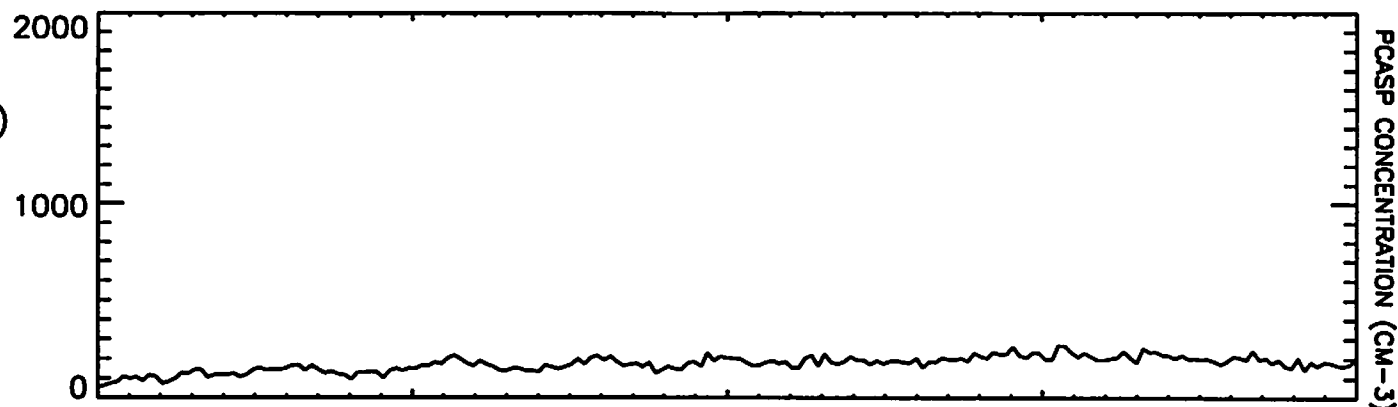
1 second overages

A405 16-AUG-95

Run no. R1.2

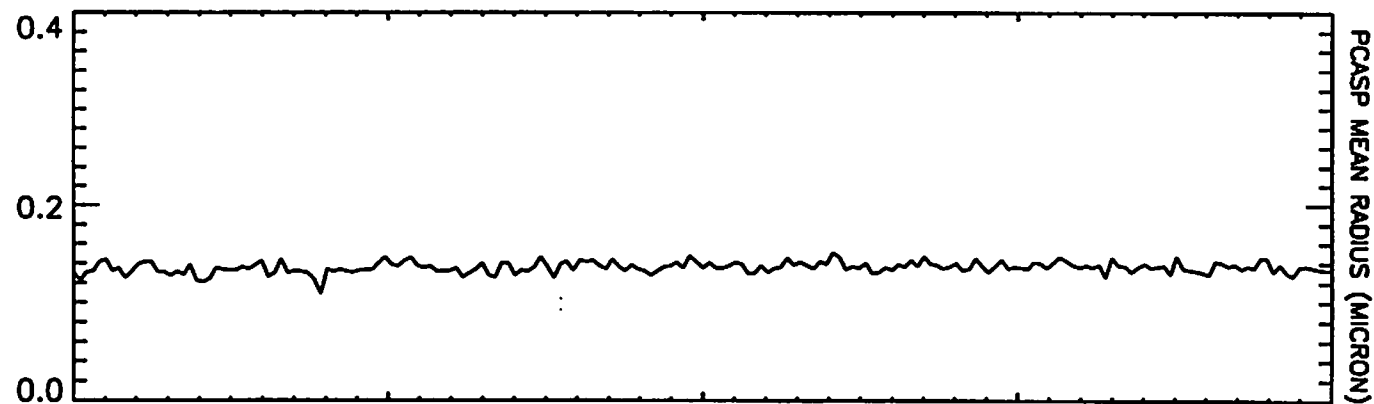
PCASP CONCENTRATION (CM-3)

Parameter no. 919  
No. of obs 195  
Mean 172.238  
Standard dev 40.6973  
Max value 268.476  
Min value 52.7266



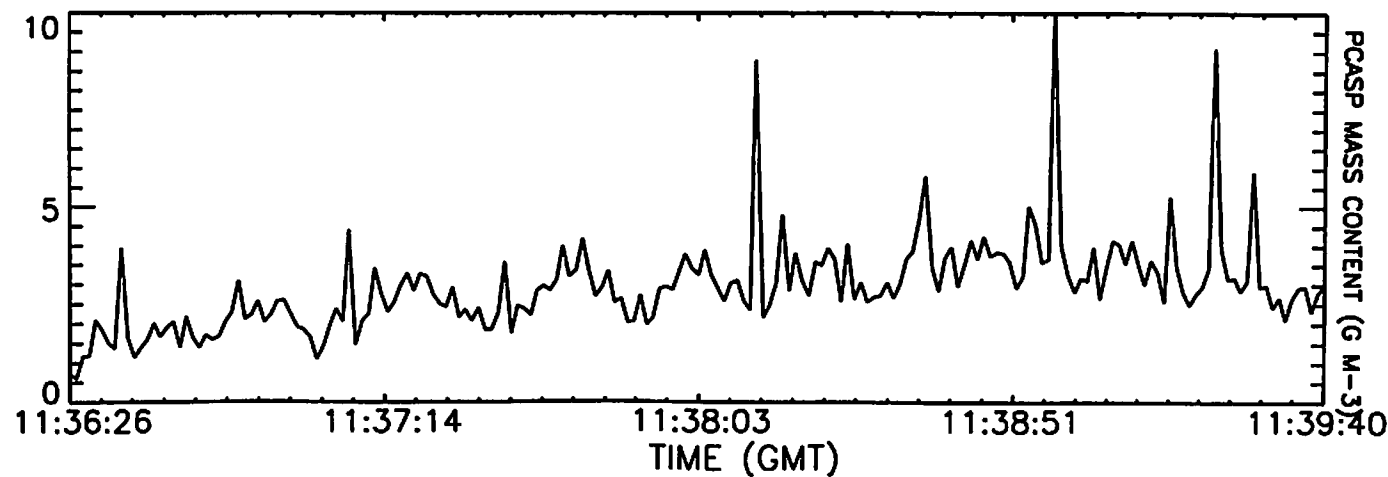
PCASP MEAN RADIUS (MICRON)

Parameter no. 920  
No. of obs 195  
Mean 0.135576  
Standard dev 5.814554e-03  
Max value 0.150734  
Min value 0.109218



PCASP MASS CONTENT (G M-3)

Parameter no. 921  
No. of obs 195  
Mean 2.94197  
Standard dev 1.18906  
Max value 9.94547  
Min value 0.607407



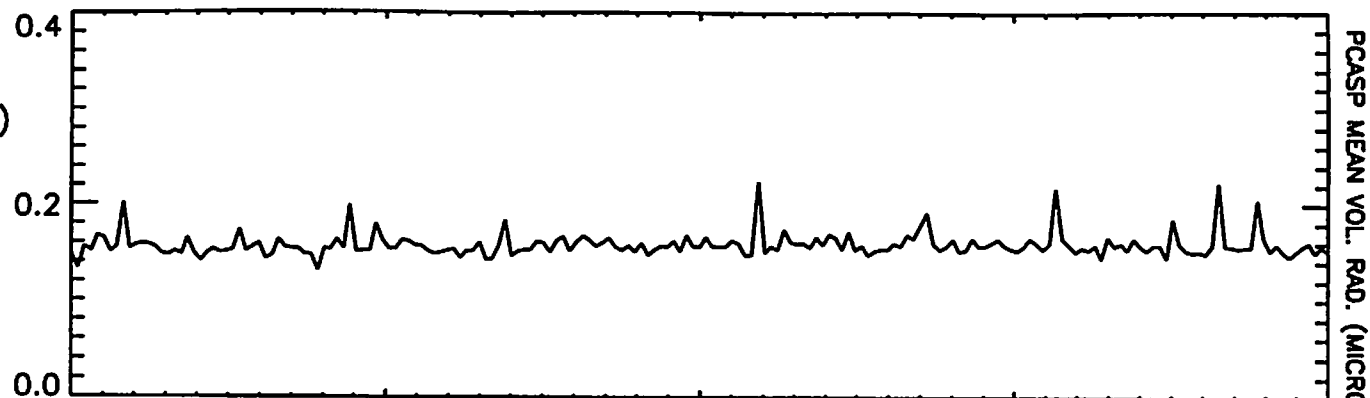
1 second averages

A405 16-AUG-95

Run no. R1.2

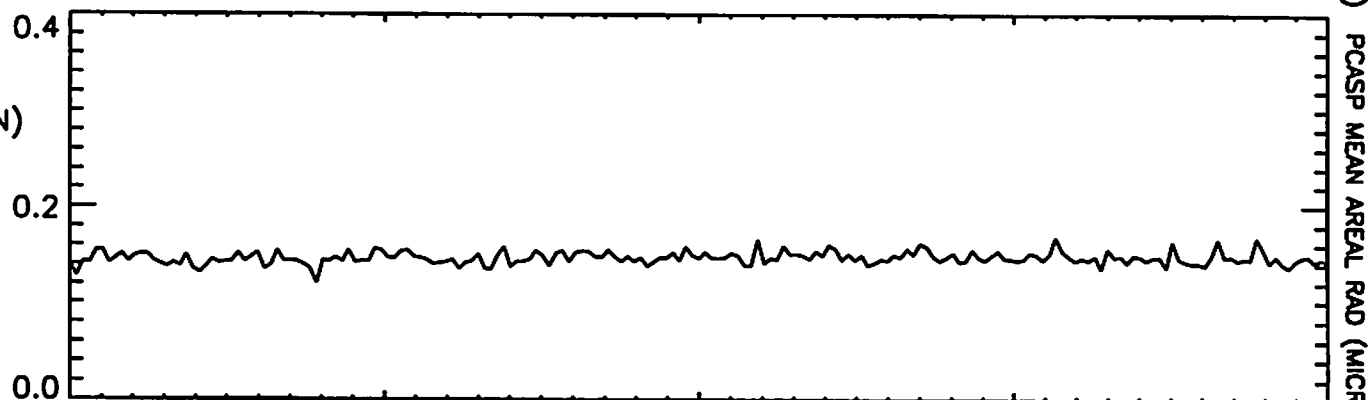
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 195  
Mean 0.158282  
Standard dev 1.252116e-02  
Max value 0.224979  
Min value 0.131583



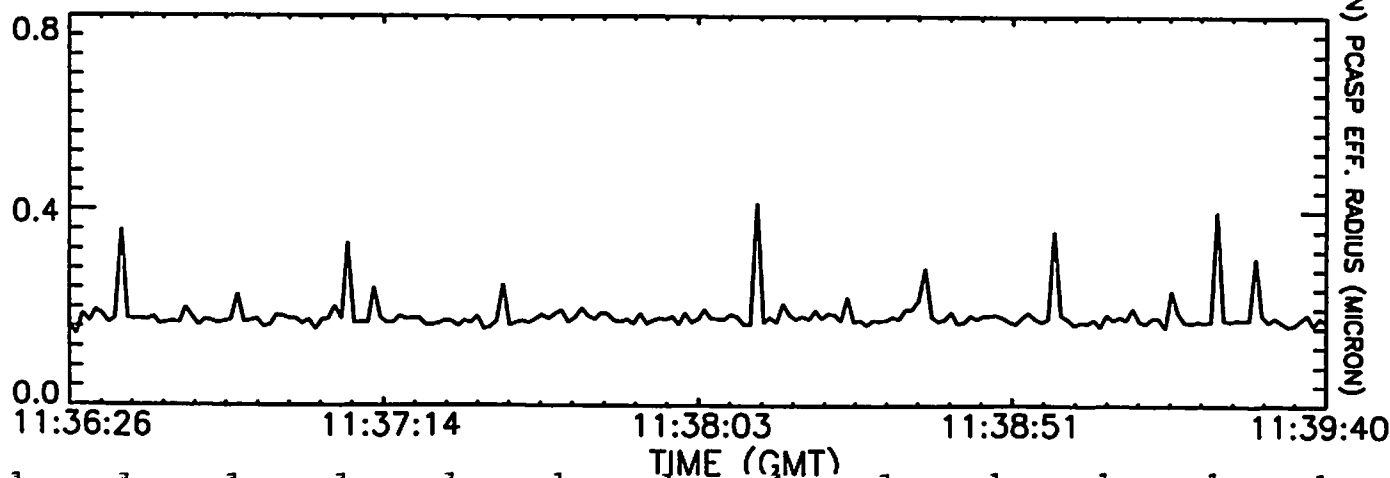
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 195  
Mean 0.146681  
Standard dev 6.787568e-03  
Max value 0.168364  
Min value 0.120188



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 195  
Mean 0.185384  
Standard dev 3.565222e-02  
Max value 0.415142  
Min value 0.144692



1 second overages

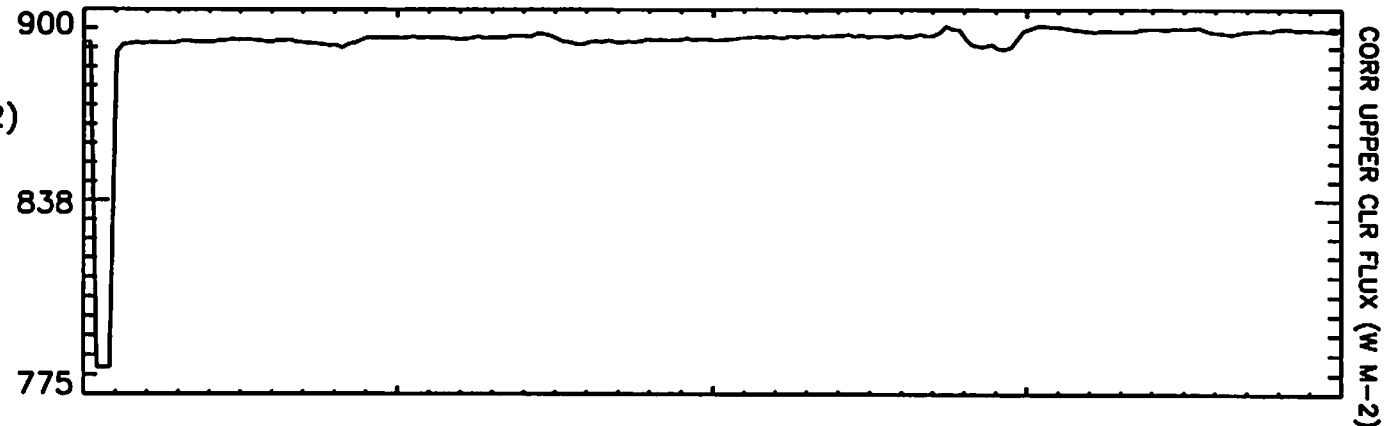


A405 16-AUG-95

Run no. R1.2

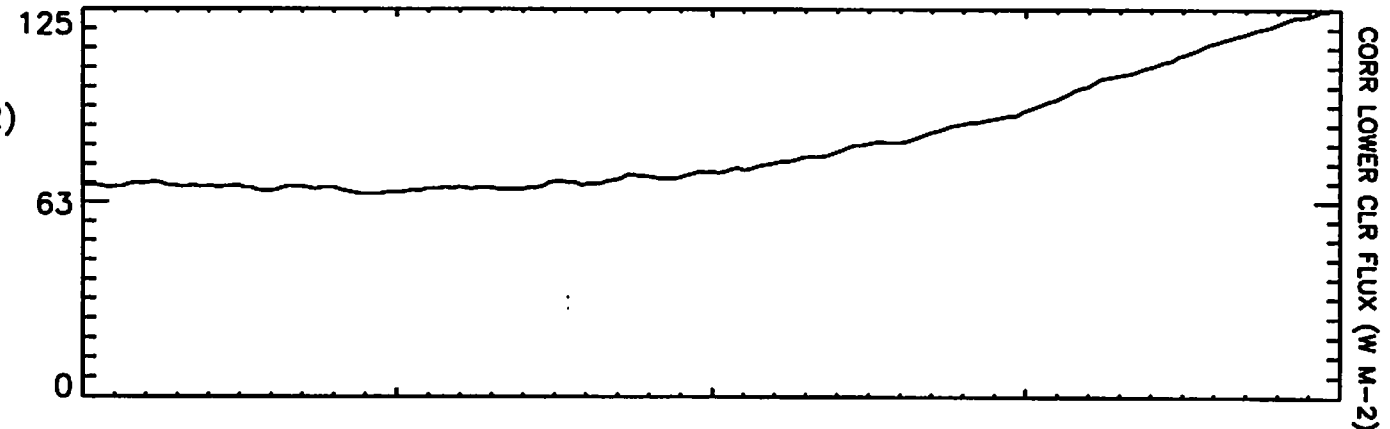
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 195  
Mean 889.373  
Standard dev 13.3625  
Max value 894.795  
Min value 783.646



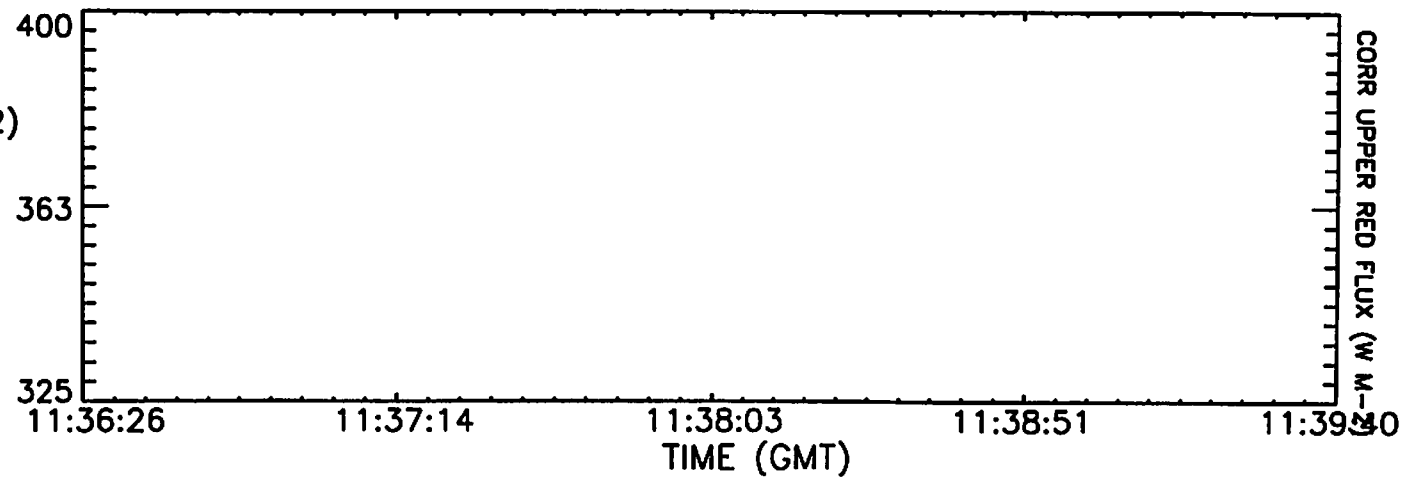
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 195  
Mean 81.9212  
Standard dev 18.3683  
Max value 125.798  
Min value 65.1936



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 195  
Mean 445.818  
Standard dev 1.16187  
Max value 450.167  
Min value 443.953



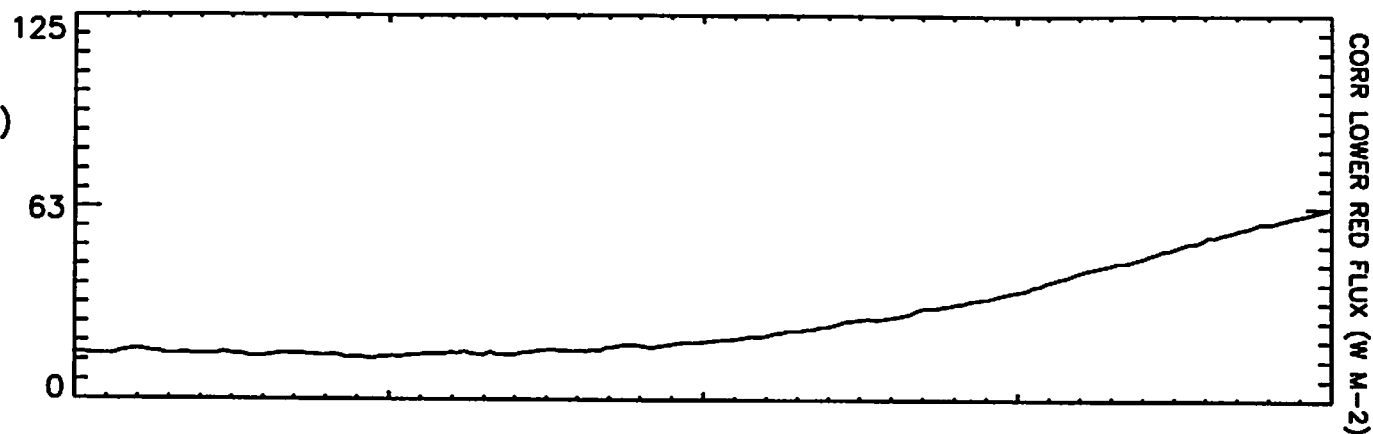
1 second averages

A405 16-AUG-95

Run no. R1.2

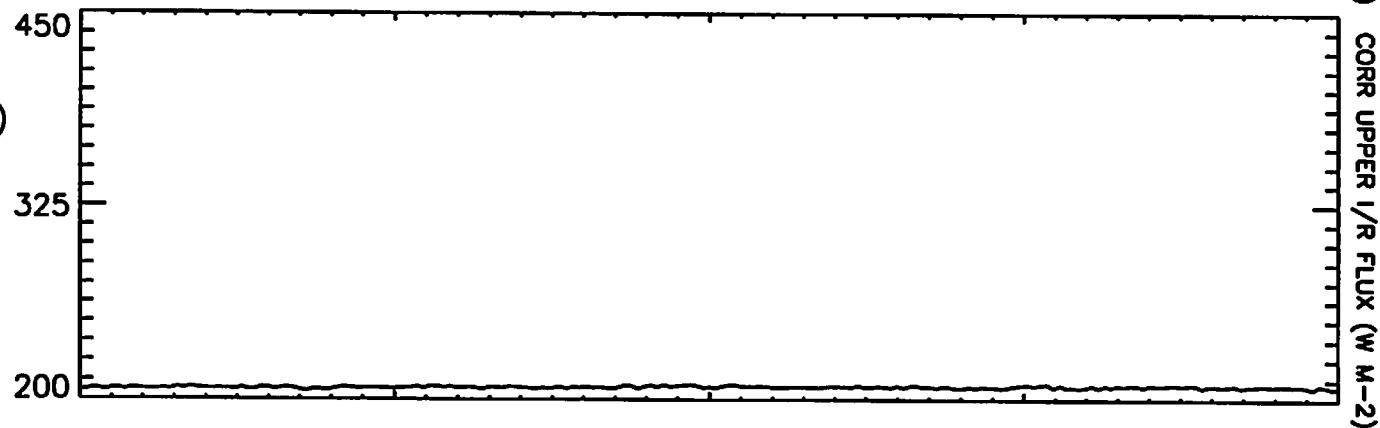
CORR LOWER RED FLUX (W M-2)

Parameter no. 1023  
No. of obs 195  
Mean 26.4236  
Standard dev 14.8616  
Max value 62.8903  
Min value 13.1294



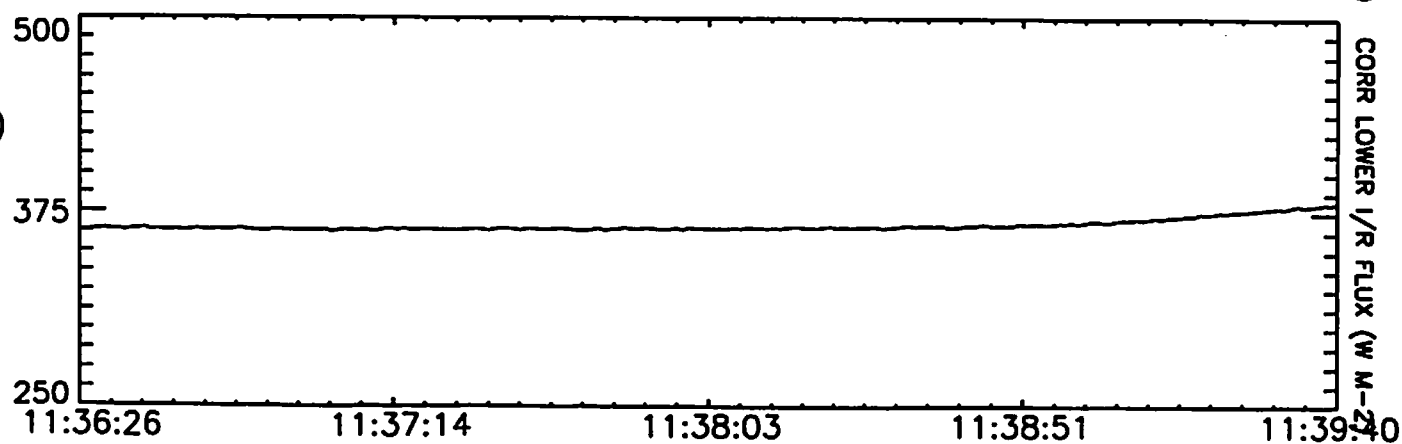
CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021  
No. of obs 195  
Mean 208.065  
Standard dev 0.962569  
Max value 210.199  
Min value 205.443



CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024  
No. of obs 195  
Mean 366.837  
Standard dev 4.69475  
Max value 381.696  
Min value 362.482



1 second overages

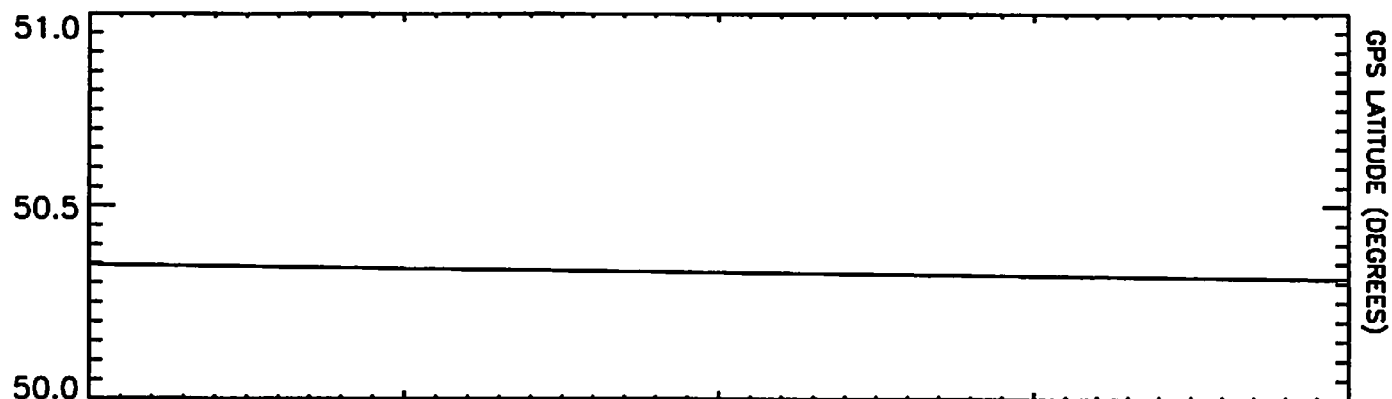
TIME (GMT)

A405 16-AUG-95

Run no. R1.3

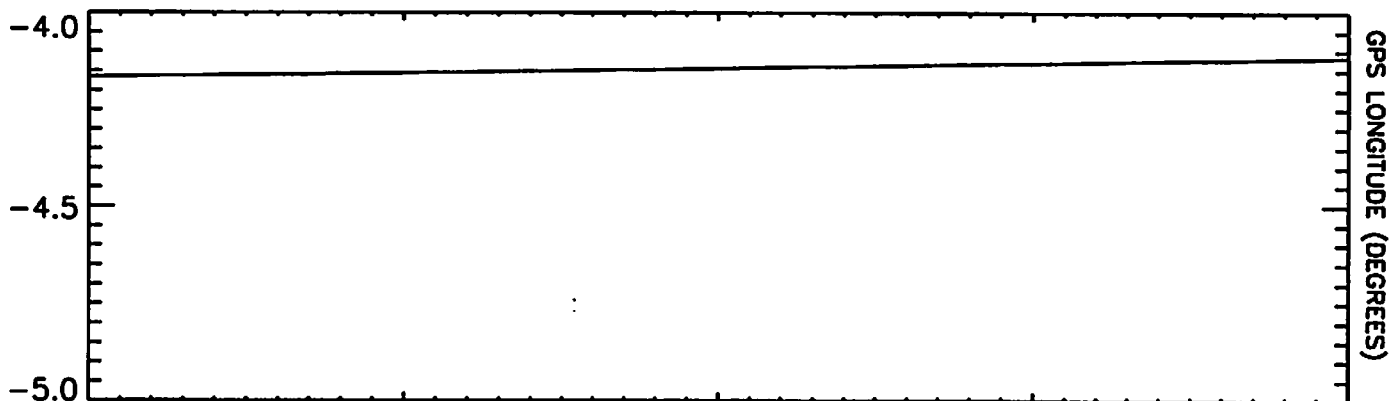
GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 53  
Mean 50.3278  
Standard dev 1.036431e-02  
Max value 50.3464  
Min value 50.3109



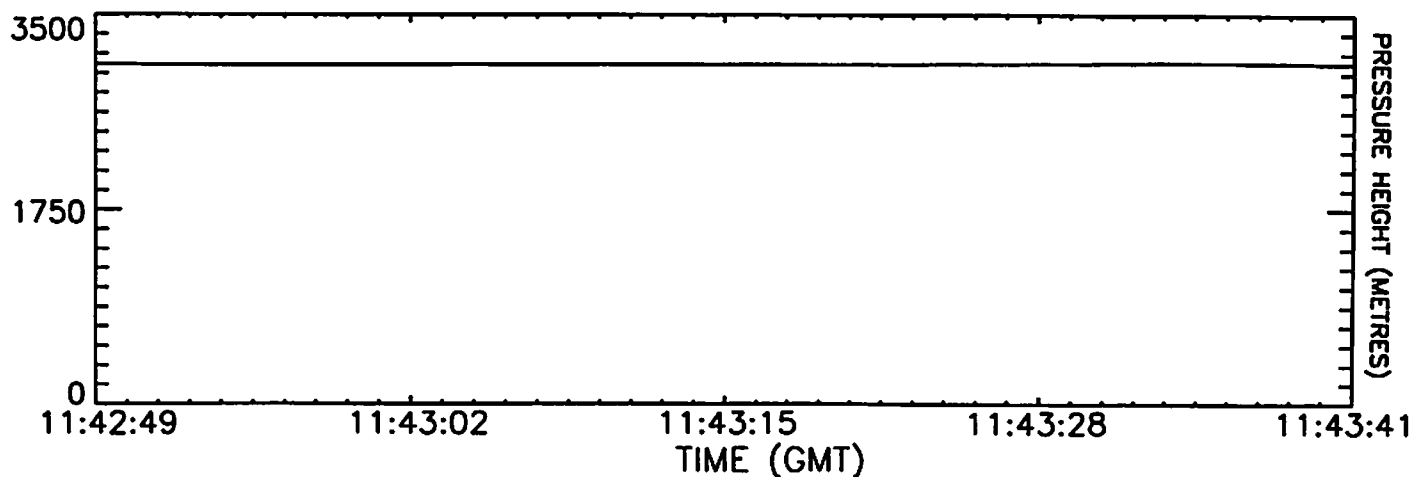
GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 53  
Mean -4.14253  
Standard dev 1.530136e-02  
Max value -4.11527  
Min value -4.16613



PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 53  
Mean 3056.57  
Standard dev 6.94280  
Max value 3071.46  
Min value 3048.34



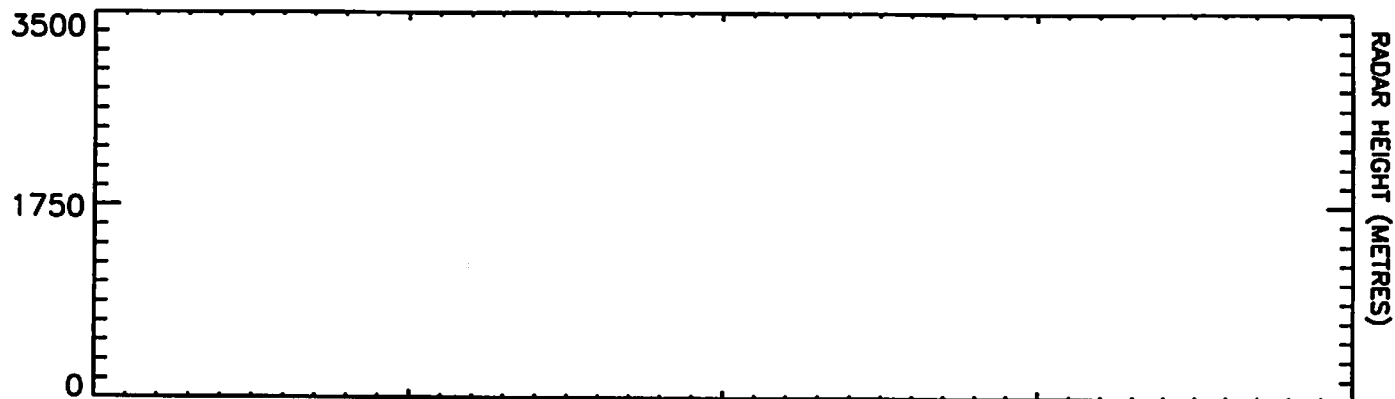
1 second averages

A405 16-AUG-95

Run no. R1.3

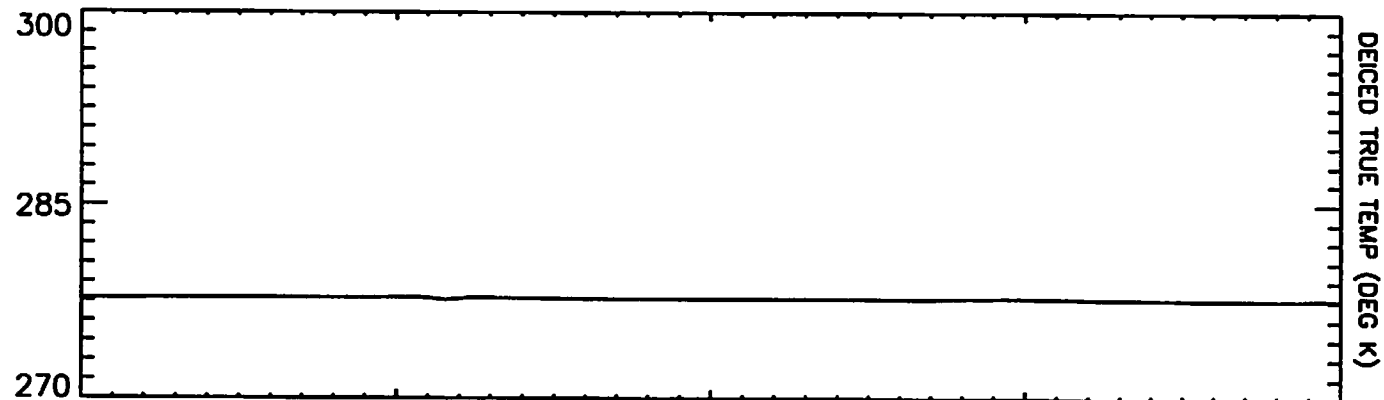
RADAR HEIGHT (METRES)

Parameter no. 575  
No. of obs 53  
Mean 0.000000  
Standard dev 0.000000  
Max value 0.000000  
Min value 0.000000



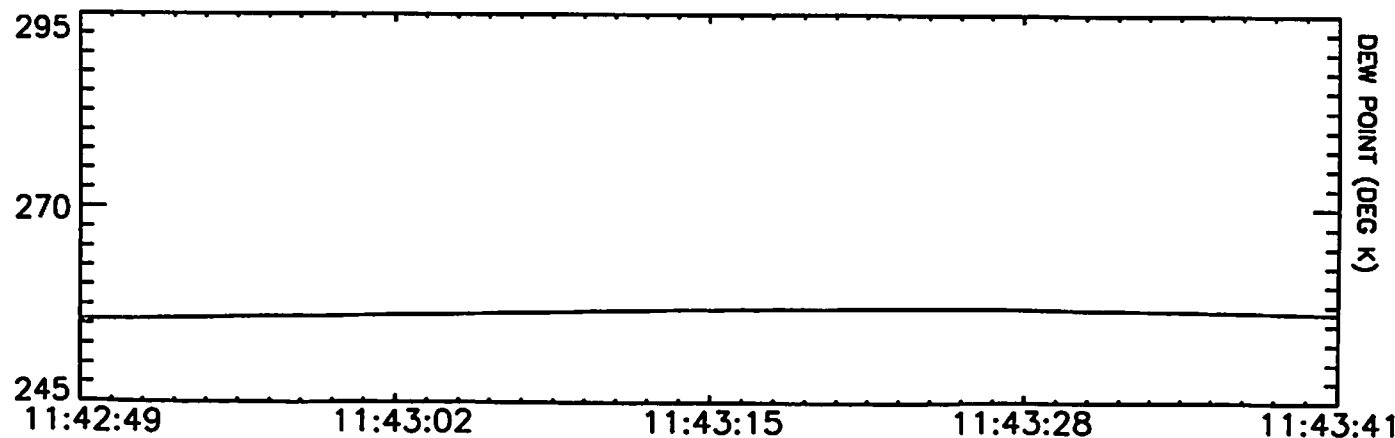
DEICED TRUE TEMP (DEG K)

Parameter no. 520  
No. of obs 53  
Mean 277.676  
Standard dev 5.118310e-02  
Max value 277.755  
Min value 277.577



DEW POINT (DEG K)

Parameter no. 529  
No. of obs 53  
Mean 256.588  
Standard dev 0.491820  
Max value 257.135  
Min value 255.518



1 second averages

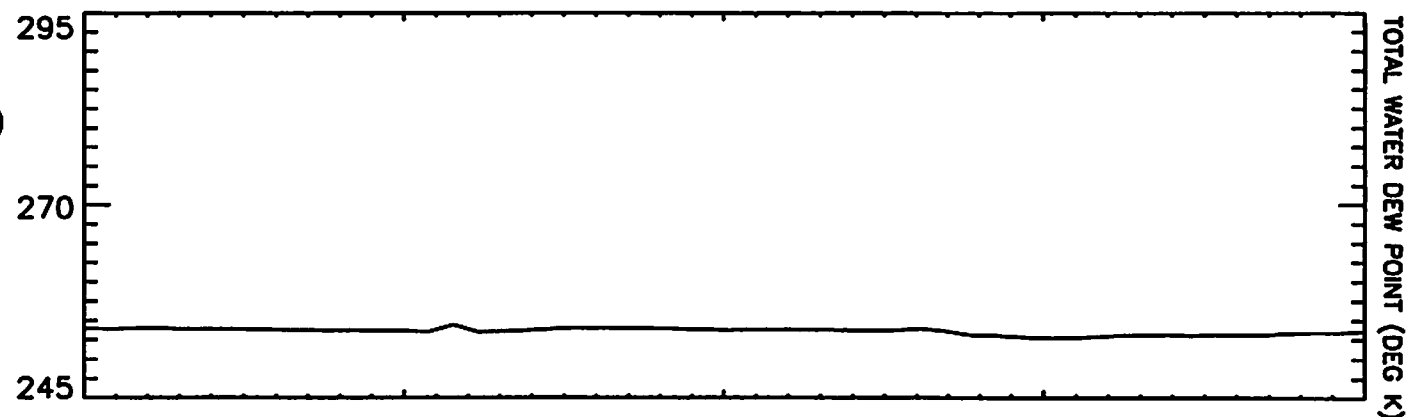
TIME (GMT)

A405 16-AUG-95

Run no. R1.3

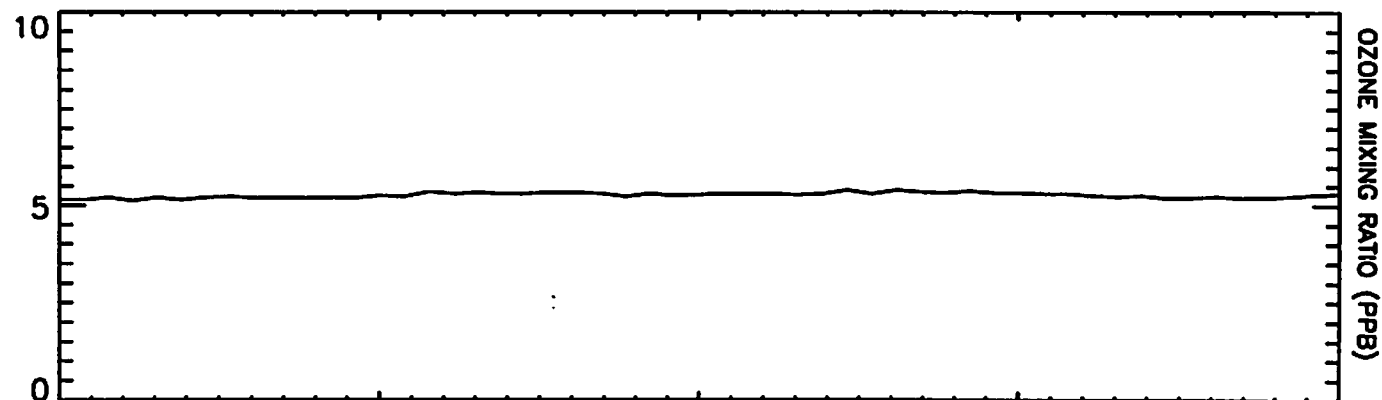
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 53  
Mean 253.621  
Standard dev 0.389735  
Max value 254.509  
Min value 252.752



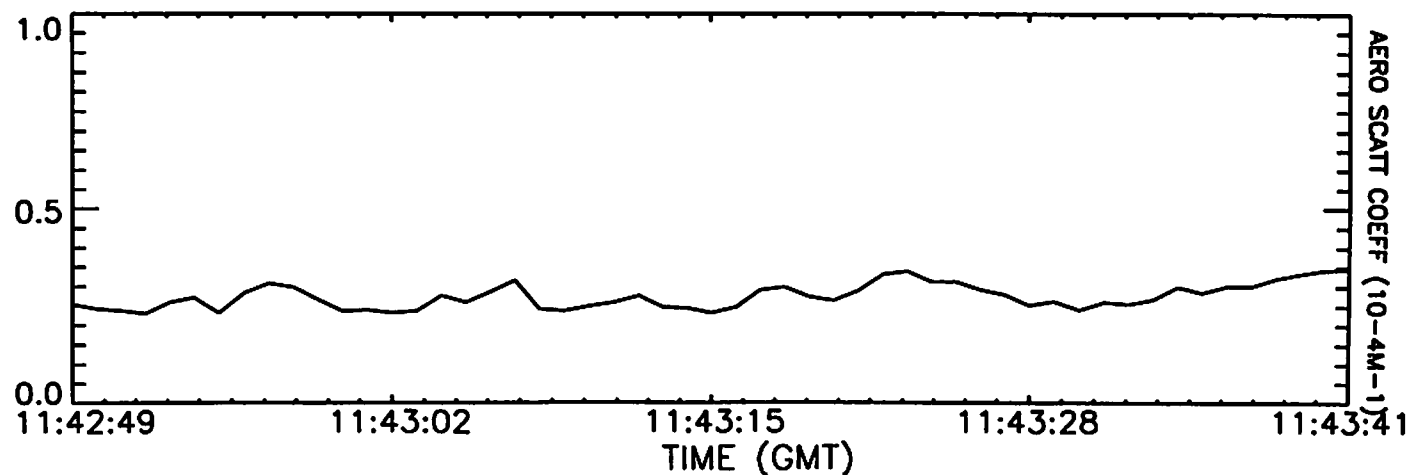
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 53  
Mean 5.26682  
Standard dev 6.639215e-02  
Max value 5.39943  
Min value 5.12015



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 53  
Mean 0.274762  
Standard dev 3.240166e-02  
Max value 0.345237  
Min value 0.230497



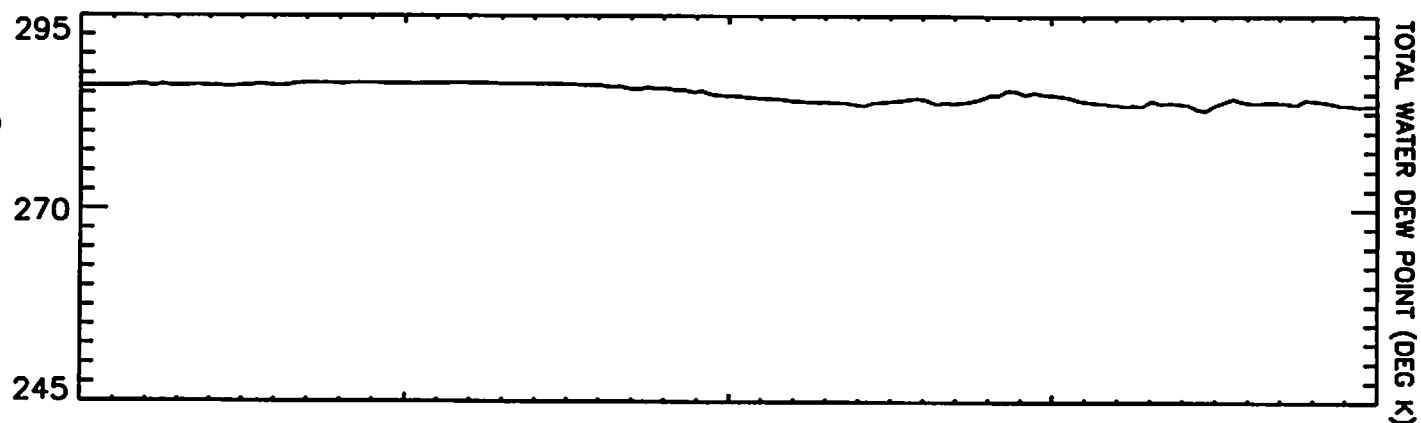
1 second averages

A405 16-AUG-95

Run no. R2.1

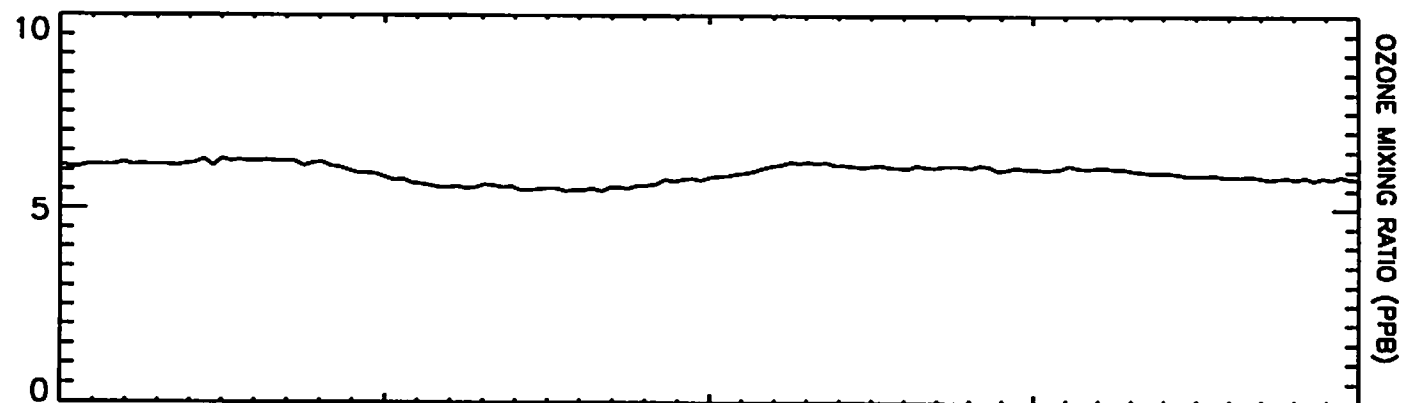
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 145  
Mean 285.020  
Standard dev 1.07640  
Max value 286.335  
Min value 282.826



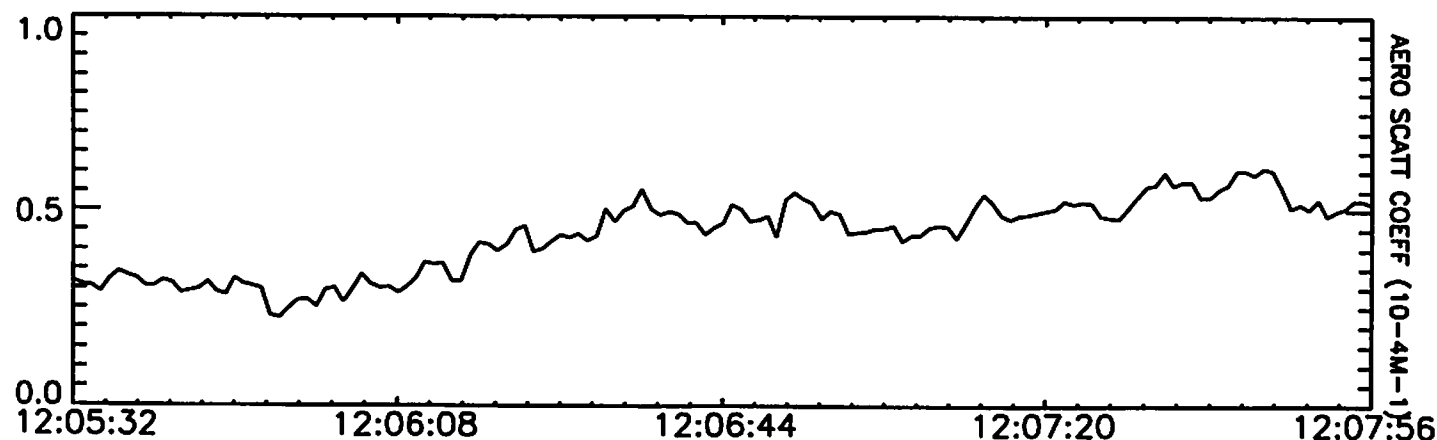
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 145  
Mean 5.94259  
Standard dev 0.231799  
Max value 6.30710  
Min value 5.46925



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 145  
Mean 0.434853  
Standard dev 9.866469e-02  
Max value 0.611333  
Min value 0.223168



1 second averages

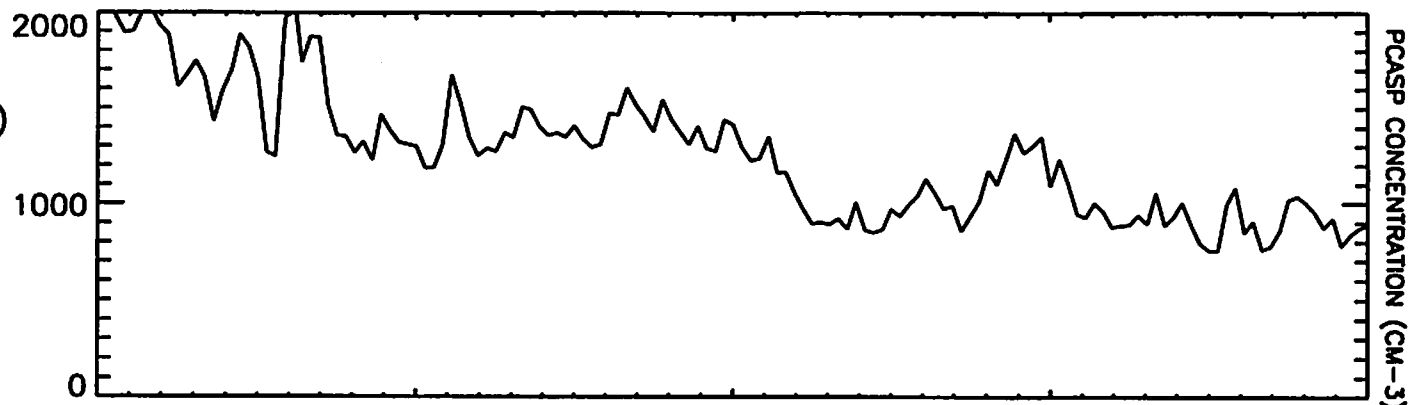
TIME (GMT)

A405 16-AUG-95

Run no. R2.1

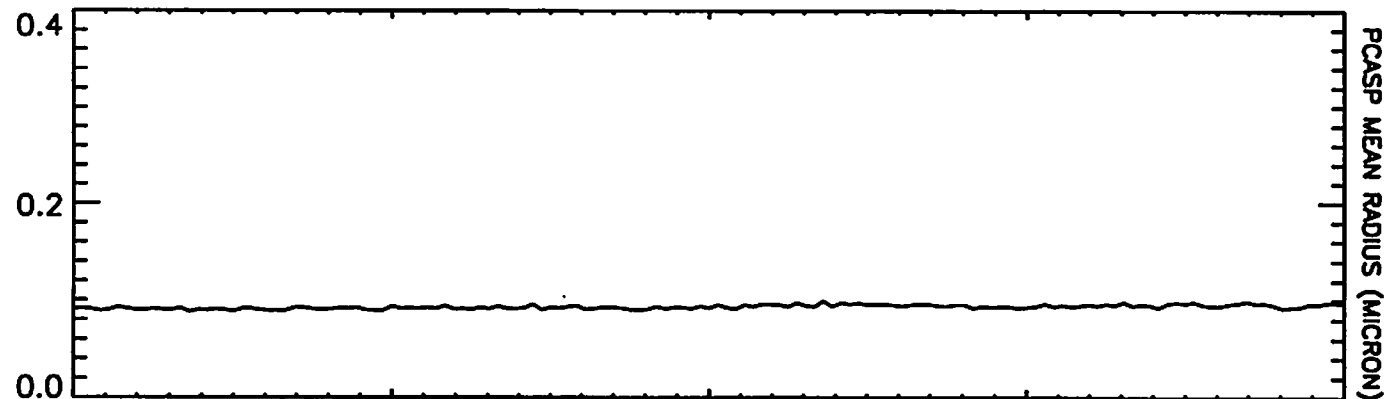
PCASP CONCENTRATION (CM-3)

Parameter no. 919  
No. of obs 145  
Mean 1262.84  
Standard dev 345.532  
Max value 2207.15  
Min value 754.503



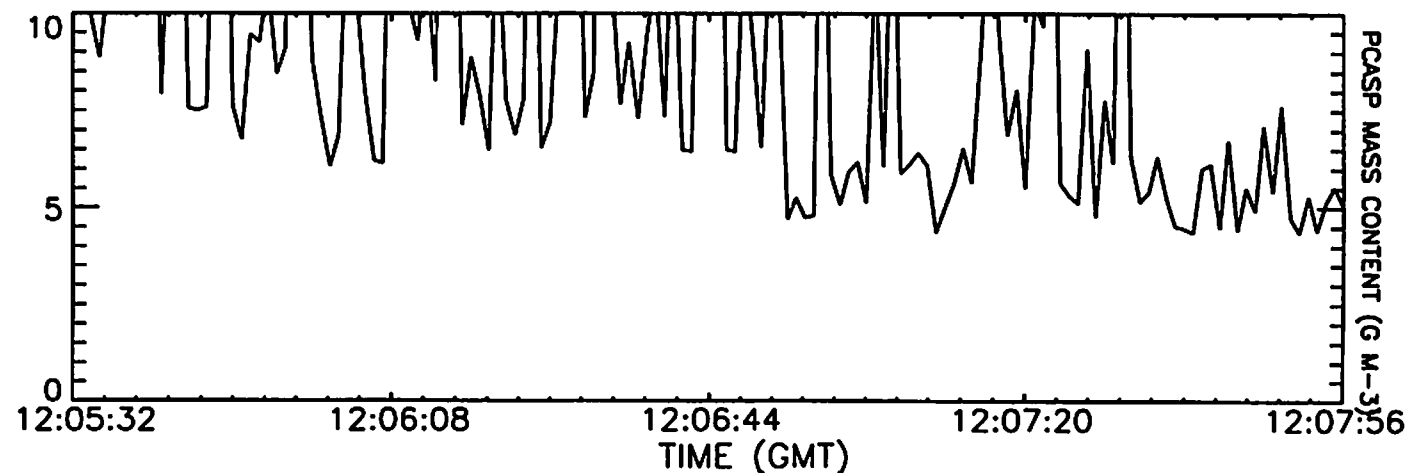
PCASP MEAN RADIUS (MICRON)

Parameter no. 920  
No. of obs 145  
Mean  $9.308641\text{e-}02$   
Standard dev  $2.522850\text{e-}03$   
Max value  $9.925622\text{e-}02$   
Min value  $8.806884\text{e-}02$



PCASP MASS CONTENT (G M-3)

Parameter no. 921  
No. of obs 145  
Mean 9.15907  
Standard dev 4.59784  
Max value 28.2679  
Min value 4.34919



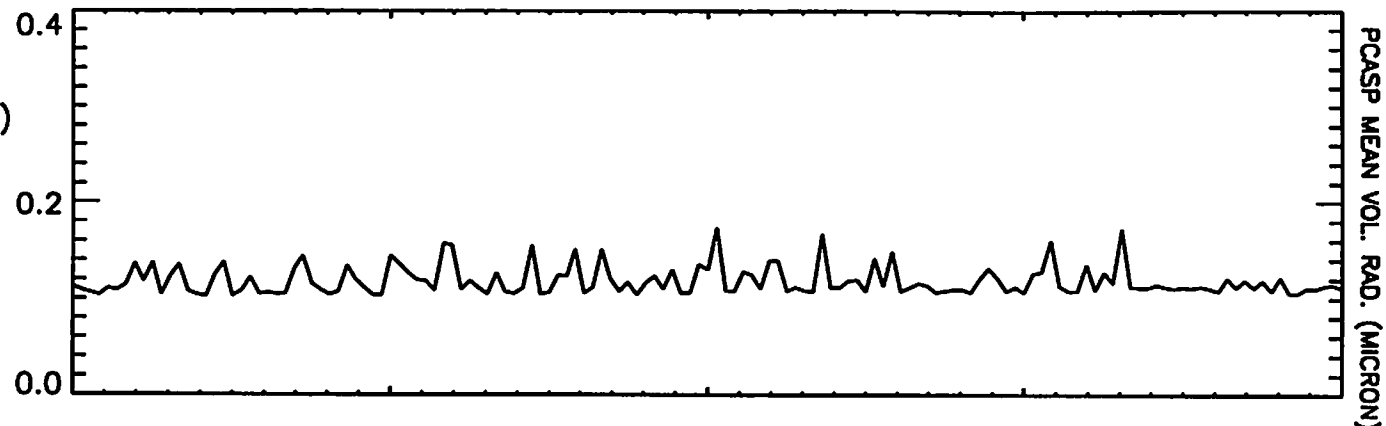
1 second averages

A405 16-AUG-95

Run no. R2.1

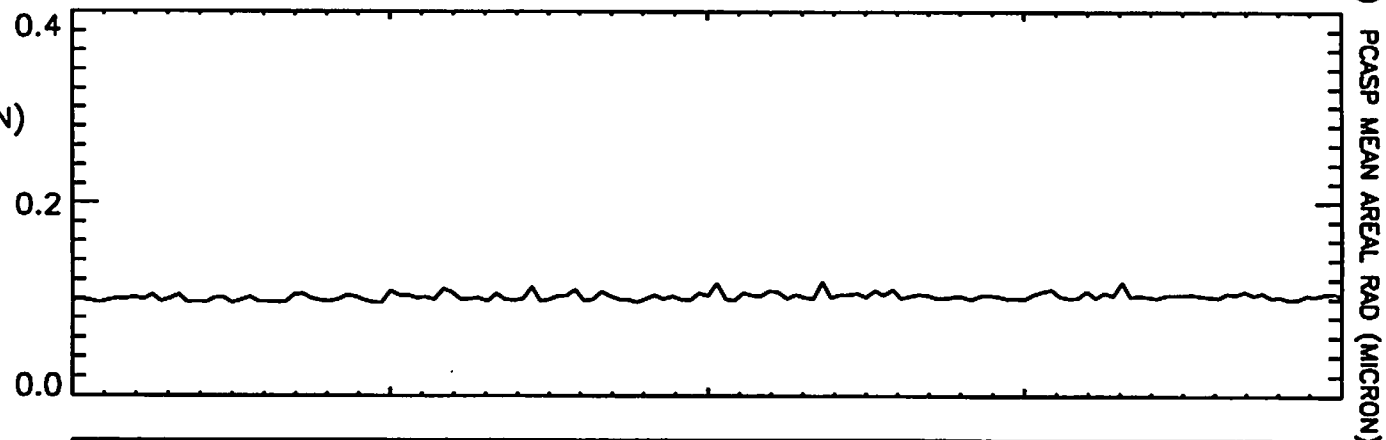
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 145  
Mean 0.118299  
Standard dev 1.502459e-02  
Max value 0.173303  
Min value 0.102161



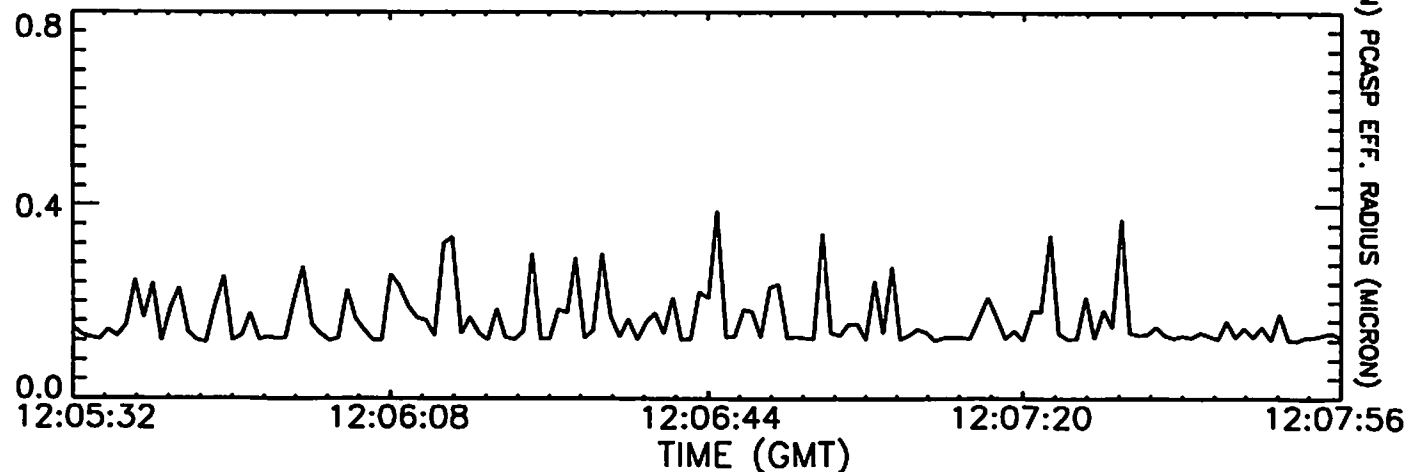
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 145  
Mean 0.102085  
Standard dev 4.030440e-03  
Max value 0.117189  
Min value 9.506121e-02



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 145  
Mean 0.163144  
Standard dev 5.736926e-02  
Max value 0.387395  
Min value 0.116894



1 second averages

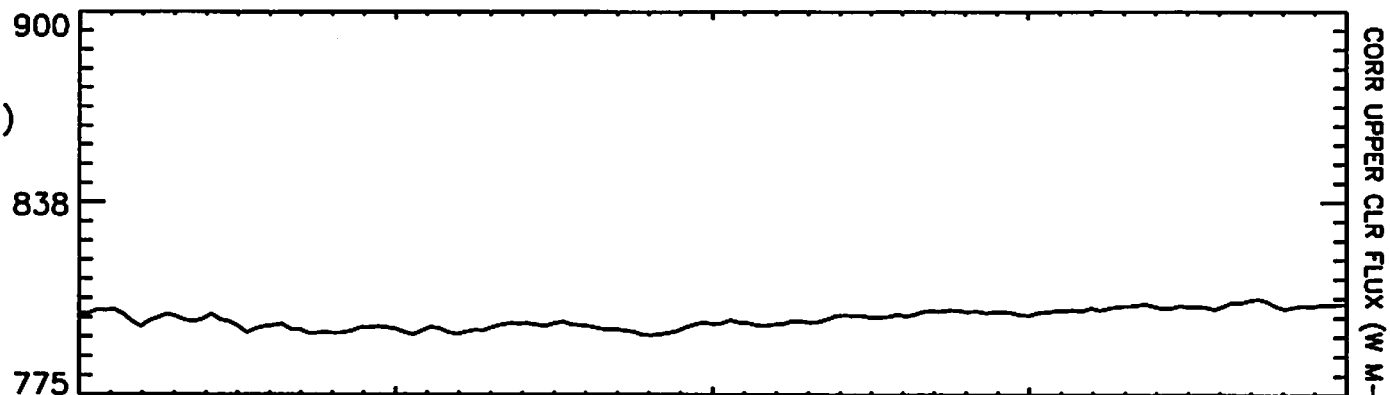


A405 16-AUG-95

Run no. R2.1

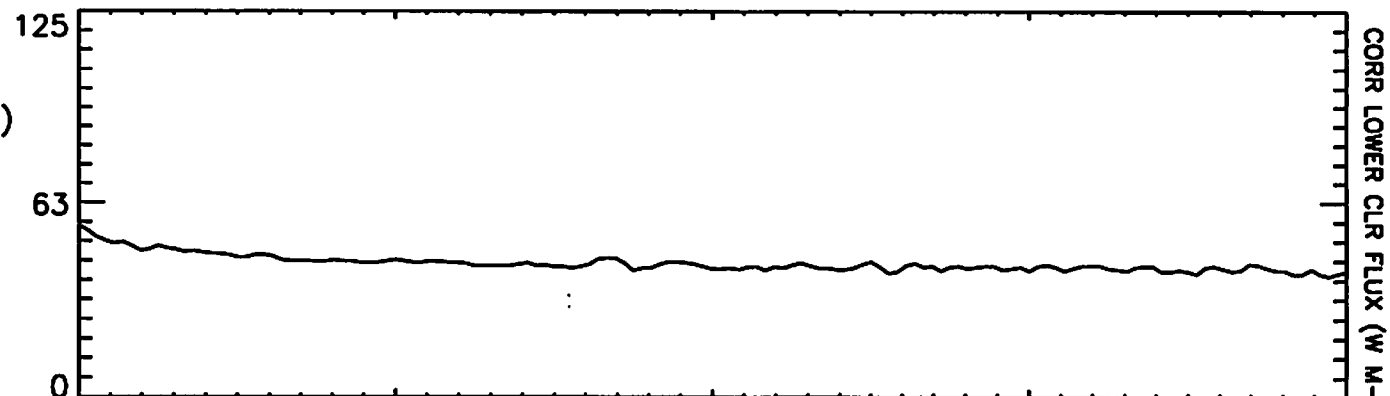
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 145  
Mean 799.555  
Standard dev 3.13404  
Max value 805.997  
Min value 794.168



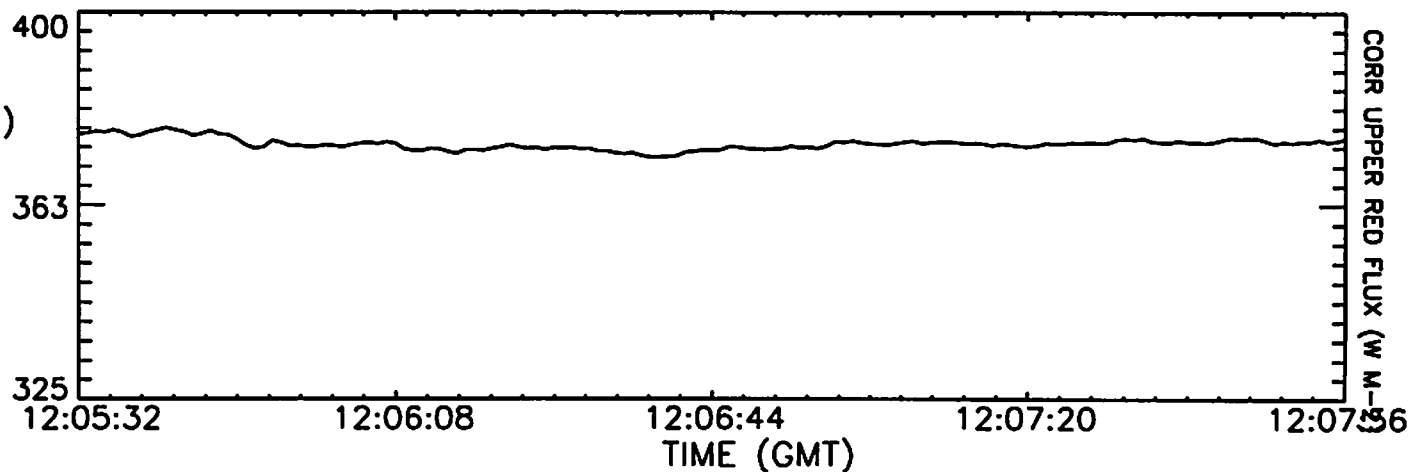
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 145  
Mean 42.7901  
Standard dev 2.65686  
Max value 55.0284  
Min value 38.7778



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 145  
Mean 374.401  
Standard dev 1.17043  
Max value 377.516  
Min value 371.844



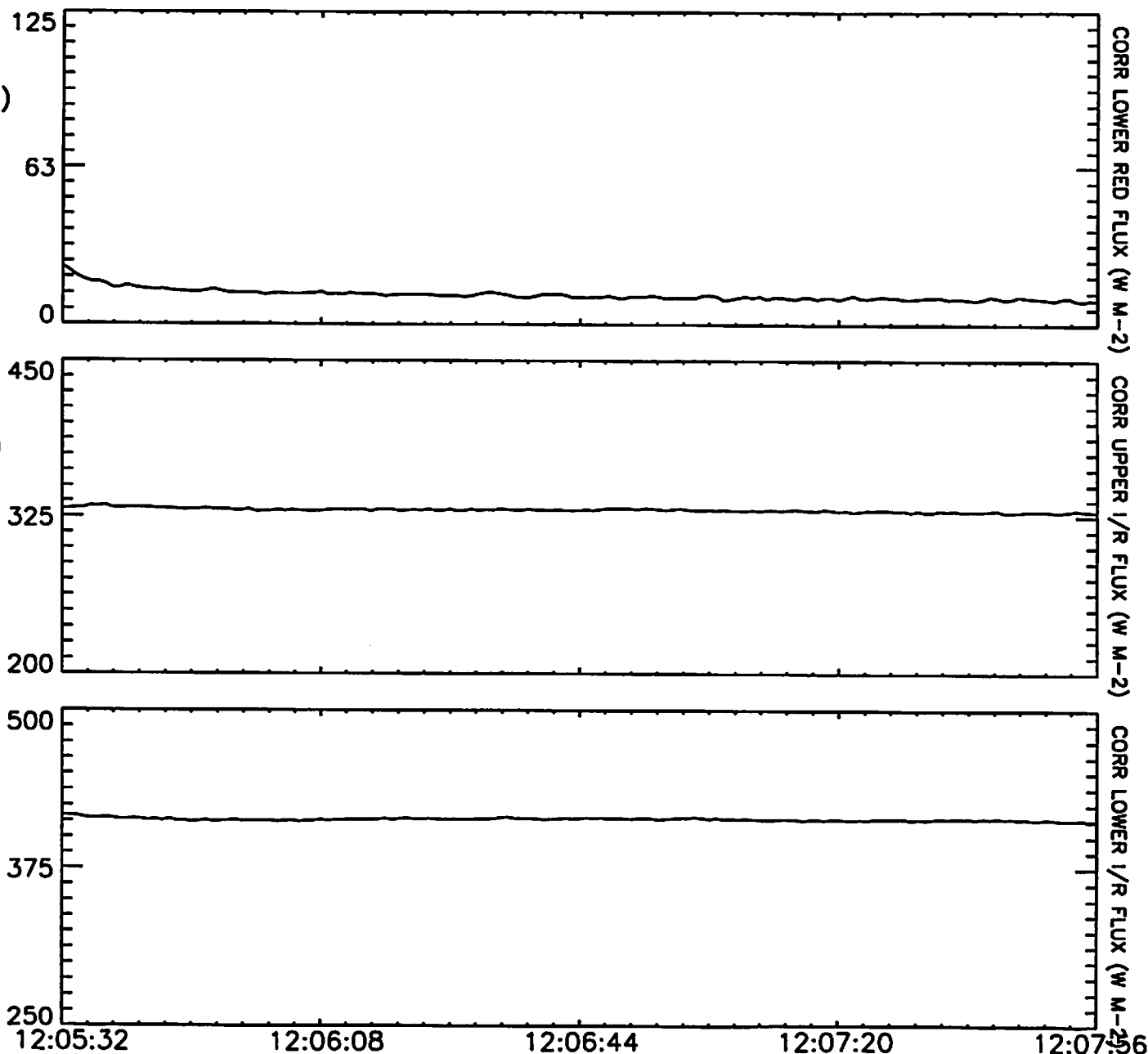
1 second averages

A405 16-AUG-95

Run no. R2.1

CORR LOWER RED FLUX (W M-2)

Parameter no. 1023  
No. of obs 145  
Mean 11.7955  
Standard dev 1.98712  
Max value 22.8948  
Min value 9.41843



CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021  
No. of obs 145  
Mean 330.239  
Standard dev 0.948221  
Max value 333.766  
Min value 328.365

CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024  
No. of obs 145  
Mean 414.018  
Standard dev 0.809987  
Max value 416.942  
Min value 412.022

1 second averages

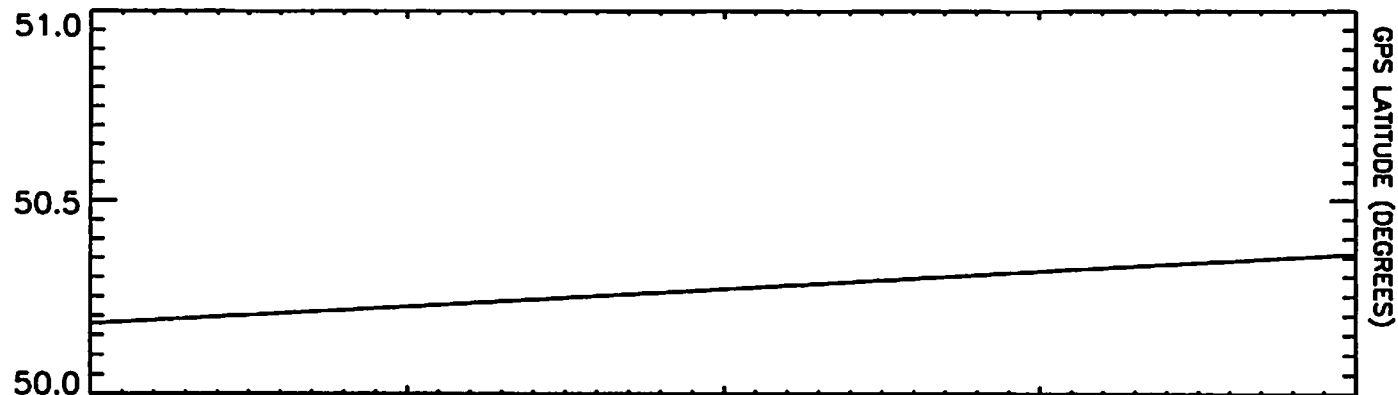
TIME (GMT)

A405 16-AUG-95

Run no. R2.2

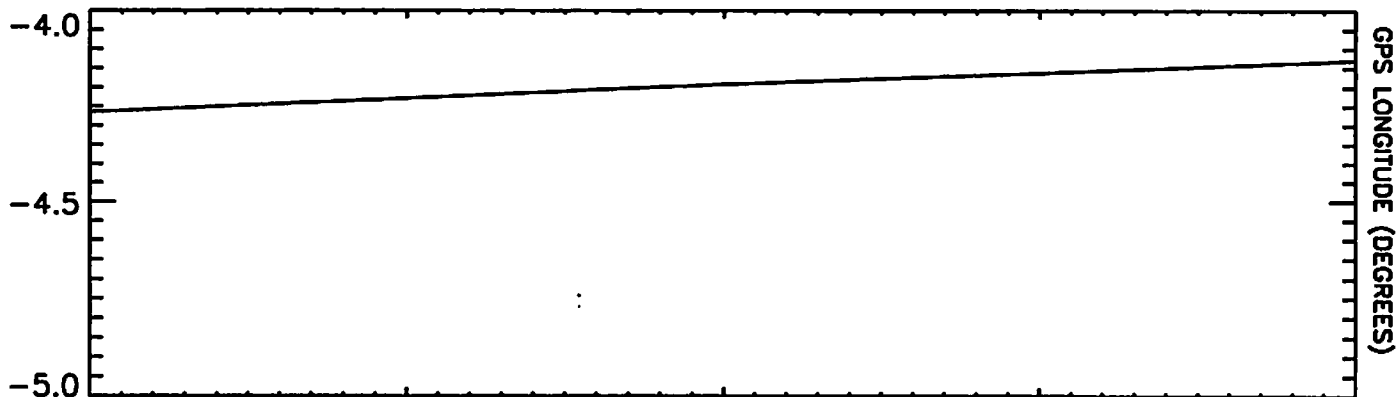
GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 237  
Mean 50.2690  
Standard dev 5.258557e-02  
Max value 50.3596  
Min value 50.1801



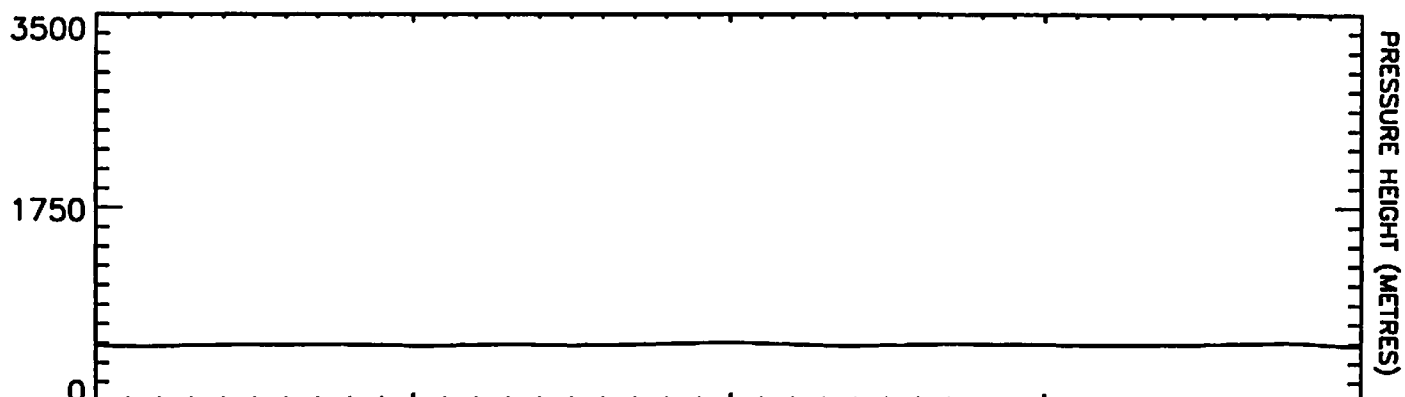
GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 237  
Mean -4.19485  
Standard dev 3.889604e-02  
Max value -4.12936  
Min value -4.26356



PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 237  
Mean 513.440  
Standard dev 8.48597  
Max value 535.891  
Min value 496.521



12:11:44 12:12:43 12:13:42 12:14:41 12:15:40  
TIME (GMT)

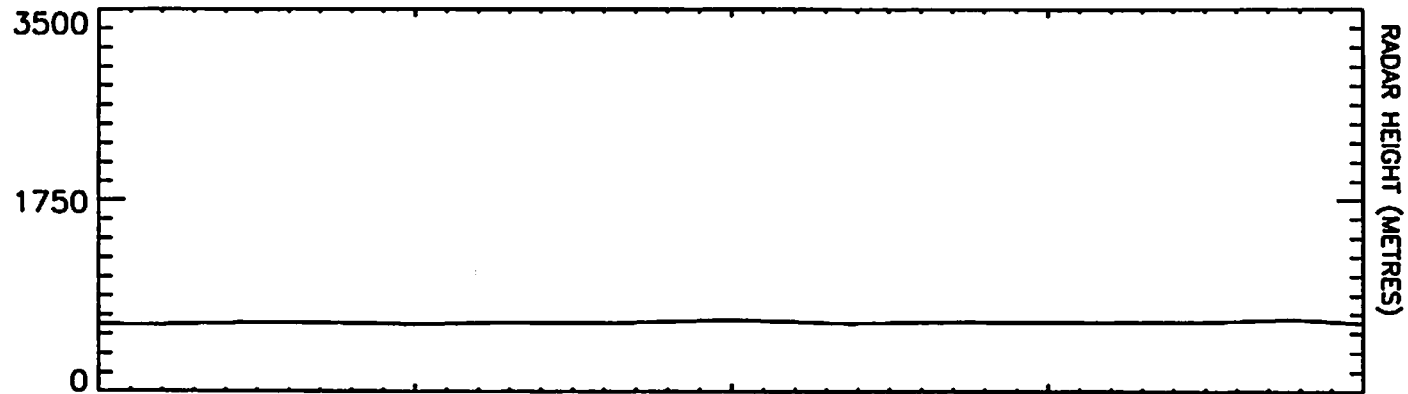
1 second averages

A405 16-AUG-95

Run no. R2.2

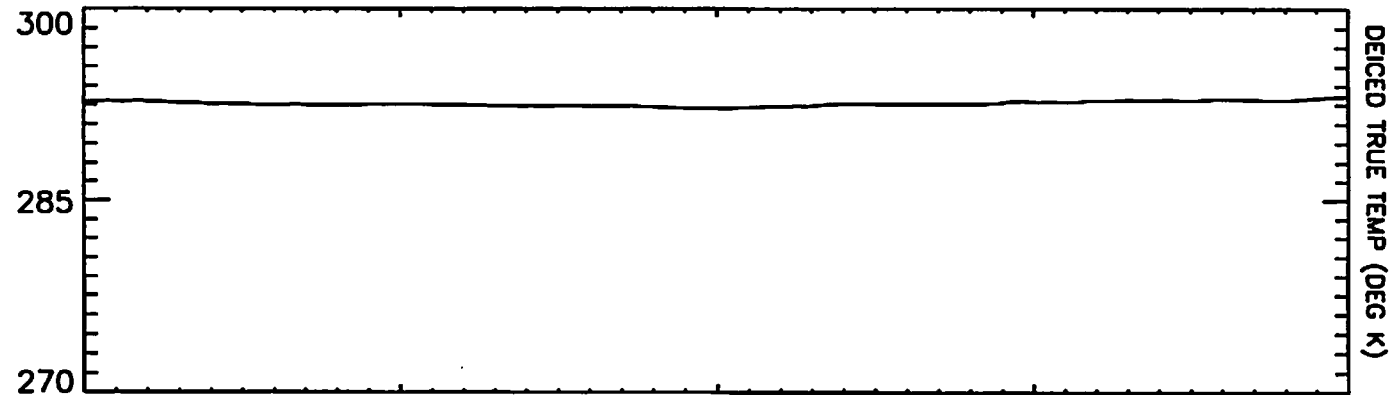
RADAR HEIGHT (METRES)

Parameter no. 575  
No. of obs 237  
Mean 626.400  
Standard dev 9.33130  
Max value 651.315  
Min value 607.280



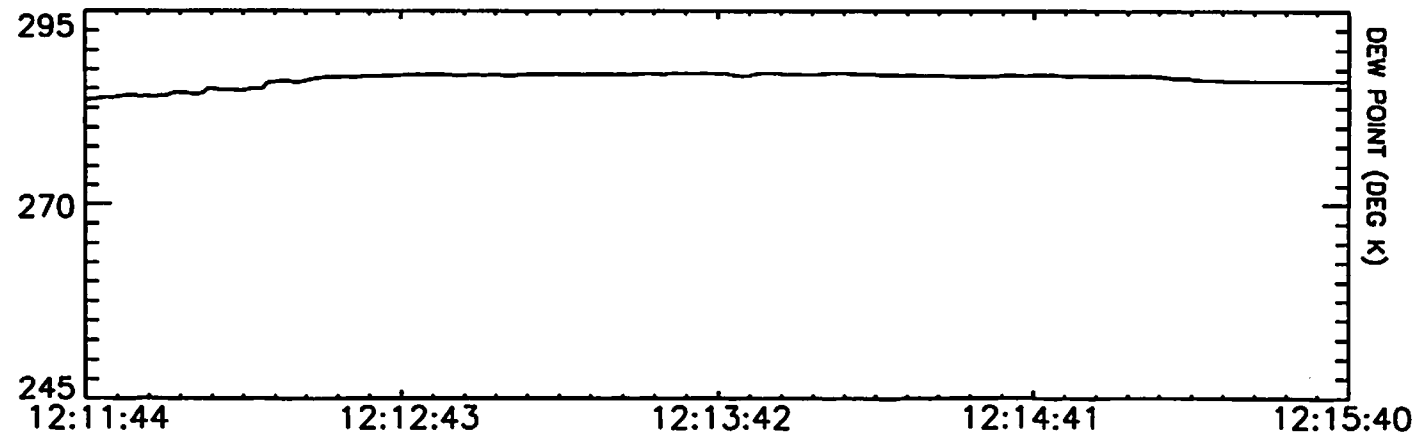
DEICED TRUE TEMP (DEG K)

Parameter no. 520  
No. of obs 237  
Mean 292.620  
Standard dev 0.212501  
Max value 293.163  
Min value 292.235



DEW POINT (DEG K)

Parameter no. 529  
No. of obs 237  
Mean 286.266  
Standard dev 0.866978  
Max value 286.974  
Min value 283.435



1 second overages

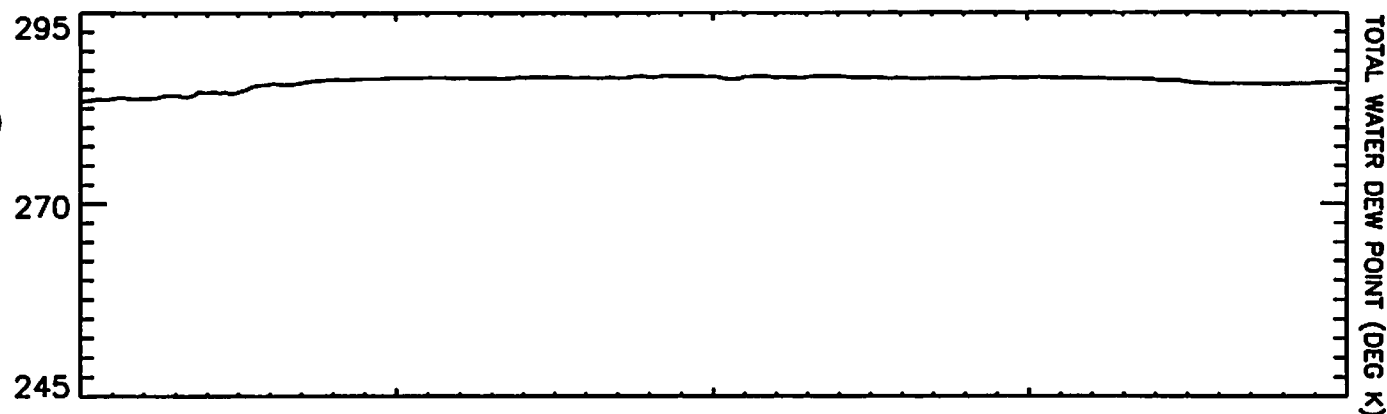
TIME (GMT)

A405 16-AUG-95

Run no. R2.2

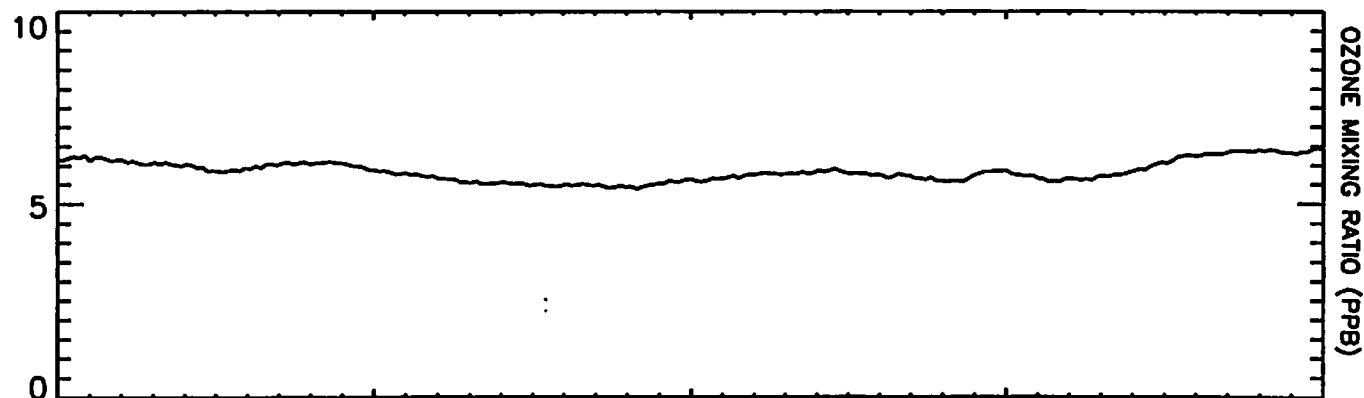
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 237  
Mean 286.030  
Standard dev 0.830237  
Max value 286.724  
Min value 283.434



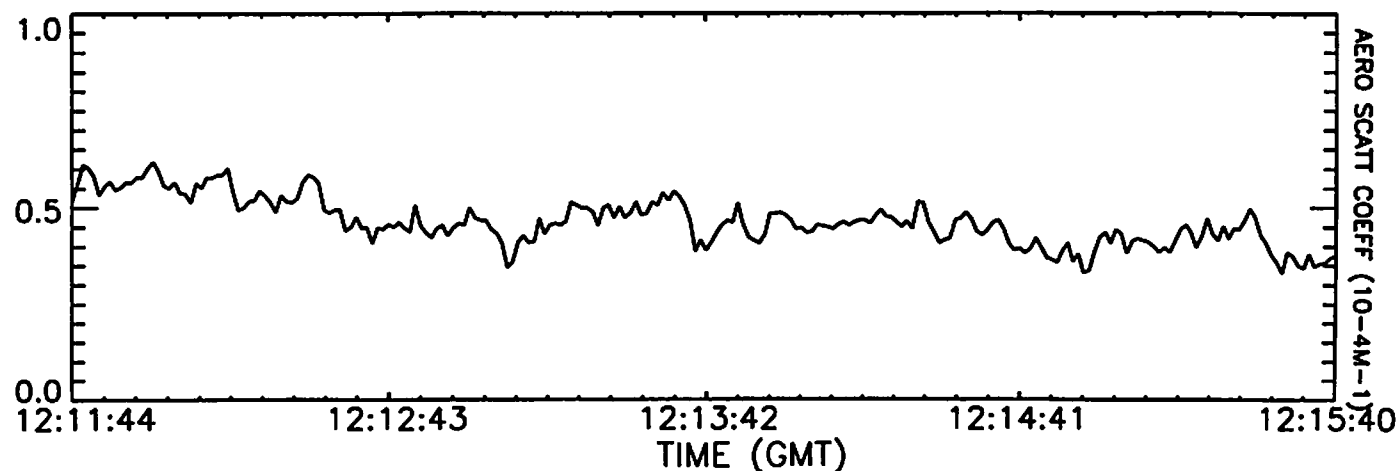
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 237  
Mean 5.84025  
Standard dev 0.271739  
Max value 6.44674  
Min value 5.37616



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 237  
Mean 0.463187  
Standard dev 6.221760e-02  
Max value 0.618657  
Min value 0.330585



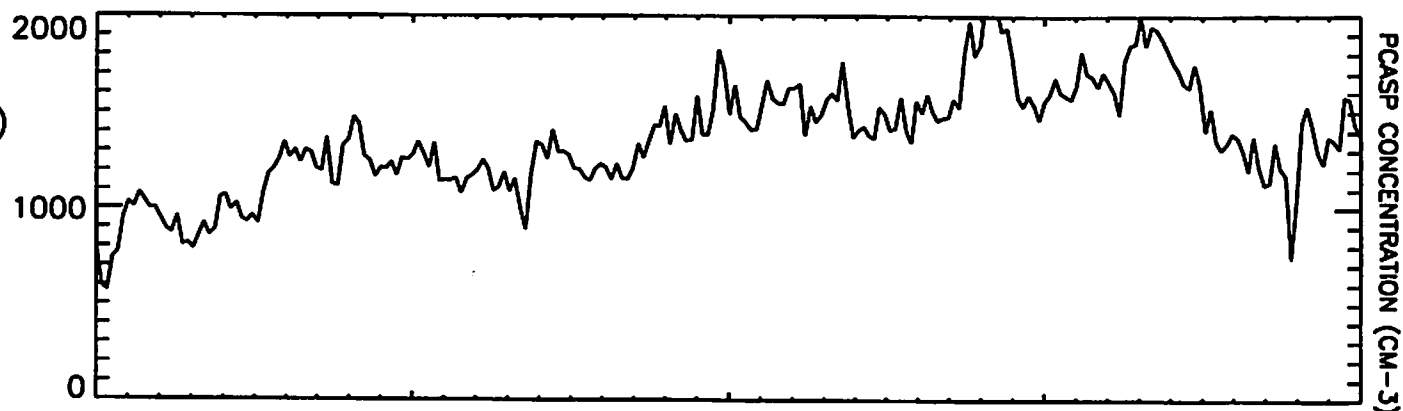
1 second overages

A405 16-AUG-95

Run no. R2.2

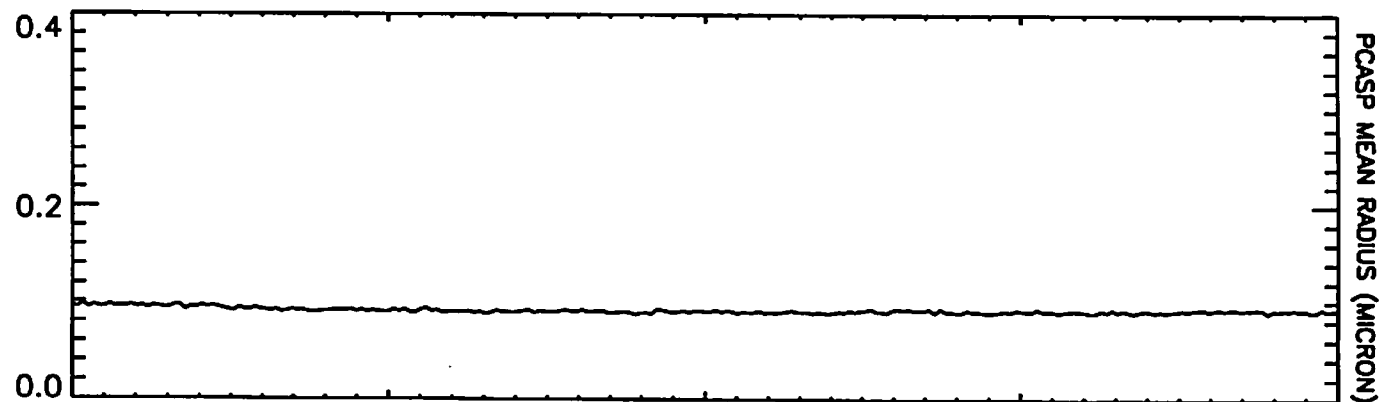
PCASP CONCENTRATION (CM-3)

Parameter no. 919  
No. of obs 237  
Mean 1362.82  
Standard dev 286.801  
Max value 2067.69  
Min value 571.797



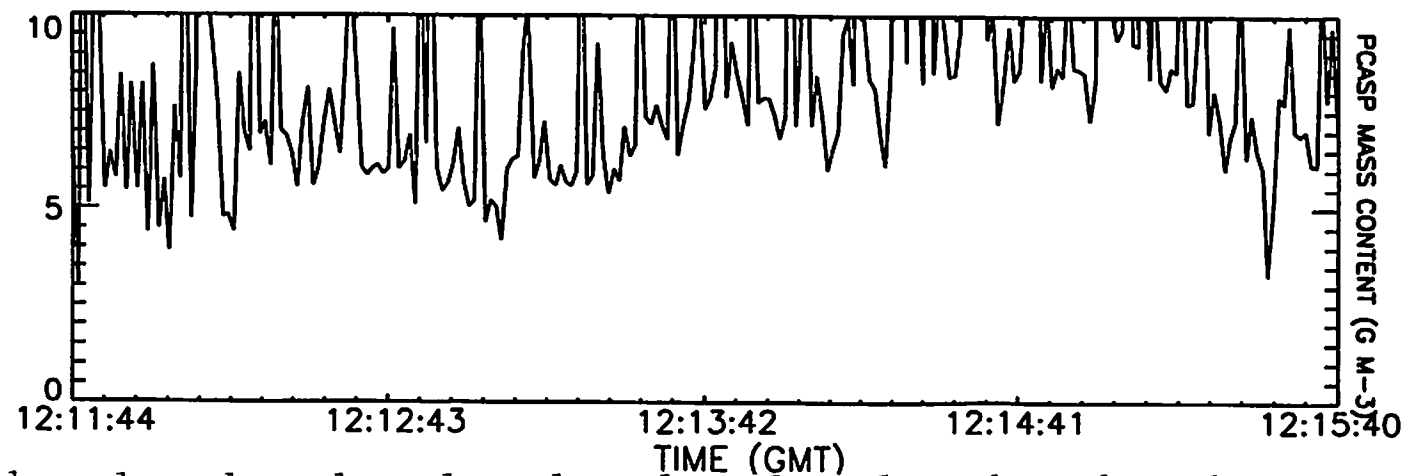
PCASP MEAN RADIUS (MICRON)

Parameter no. 920  
No. of obs 237  
Mean  $9.117957e-02$   
Standard dev  $2.023496e-03$   
Max value  $9.821540e-02$   
Min value  $8.671895e-02$



PCASP MASS CONTENT (G M-3)

Parameter no. 921  
No. of obs 237  
Mean 8.61202  
Standard dev 3.65378  
Max value 26.6474  
Min value 3.03912



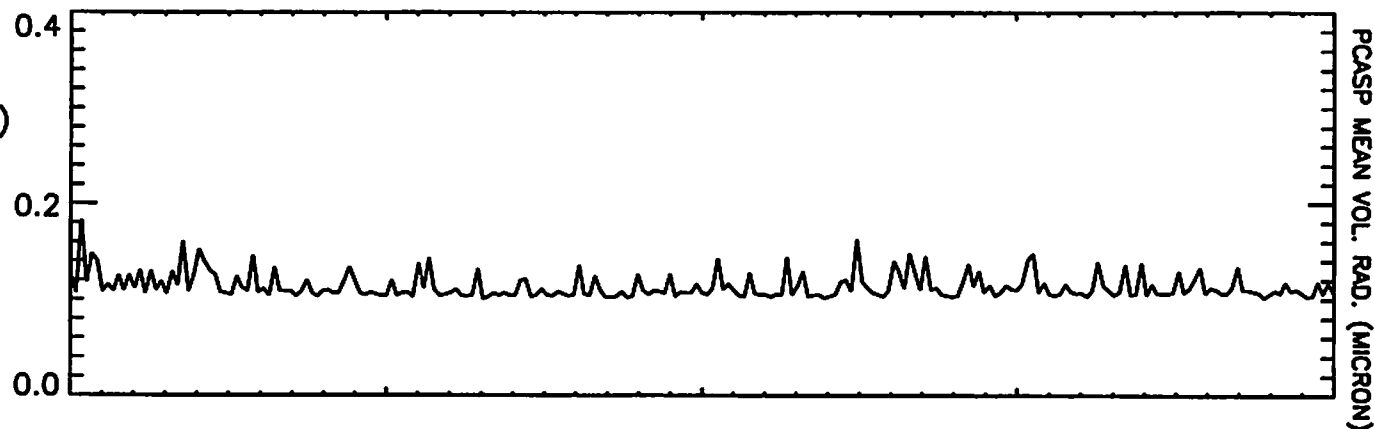
1 second averages

A405 16-AUG-95

Run no. R2.2

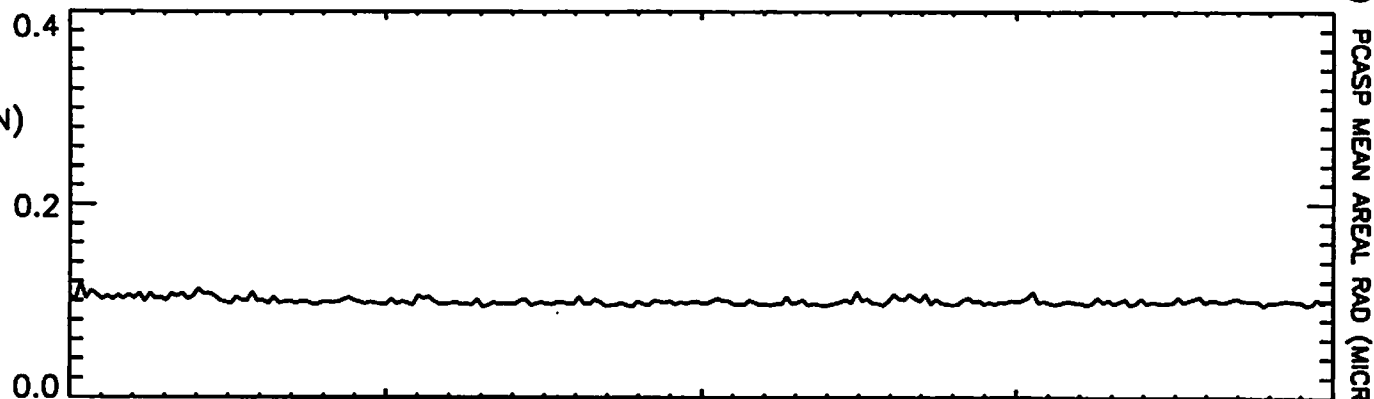
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 237  
Mean 0.113628  
Standard dev 1.306338e-02  
Max value 0.182400  
Min value 0.100510



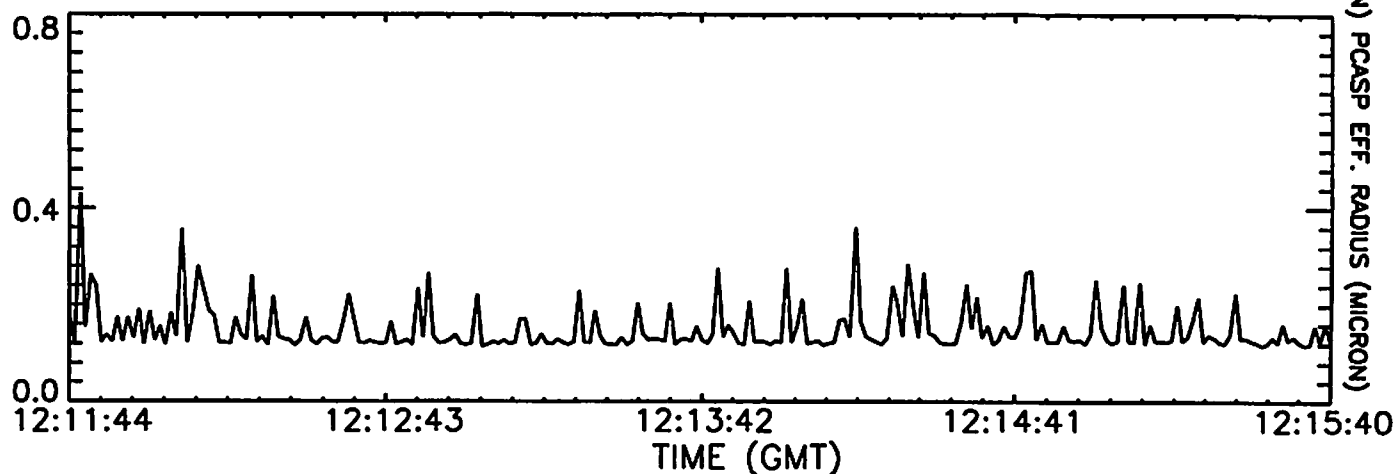
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 237  
Mean 9.950286e-02  
Standard dev 3.582523e-03  
Max value 0.118603  
Min value 9.375483e-02



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 237  
Mean 0.151289  
Standard dev 4.840545e-02  
Max value 0.431205  
Min value 0.115459



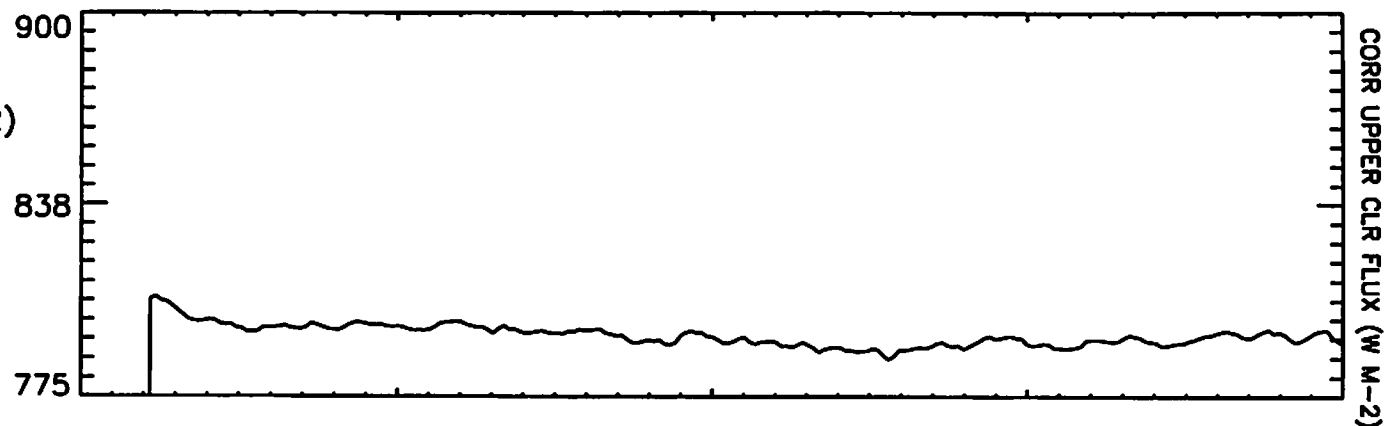
1 second averages

A405 16-AUG-95

Run no. R2.2

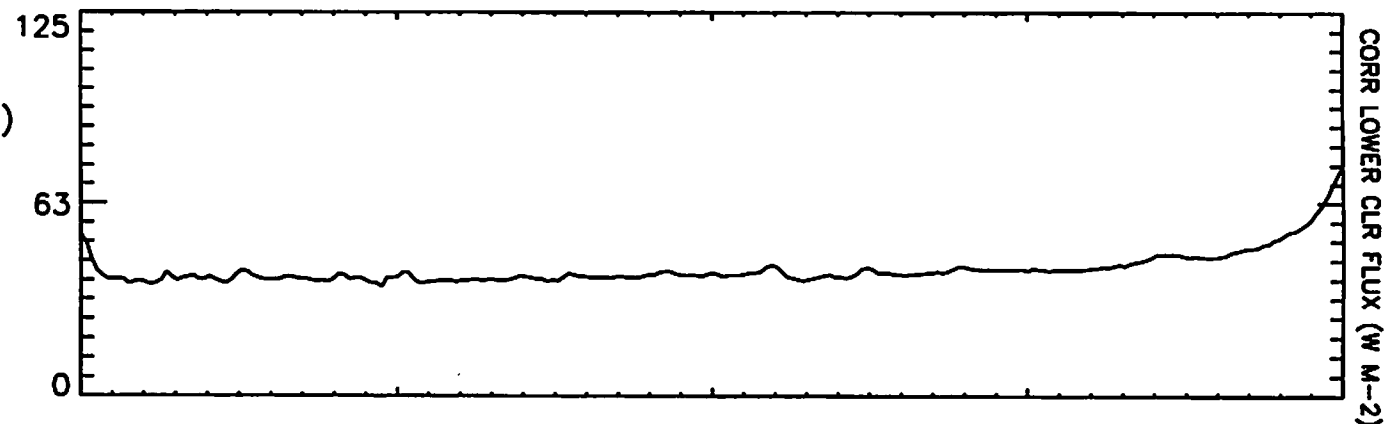
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 237  
Mean 751.205  
Standard dev 181.382  
Max value 807.510  
Min value 0.000000



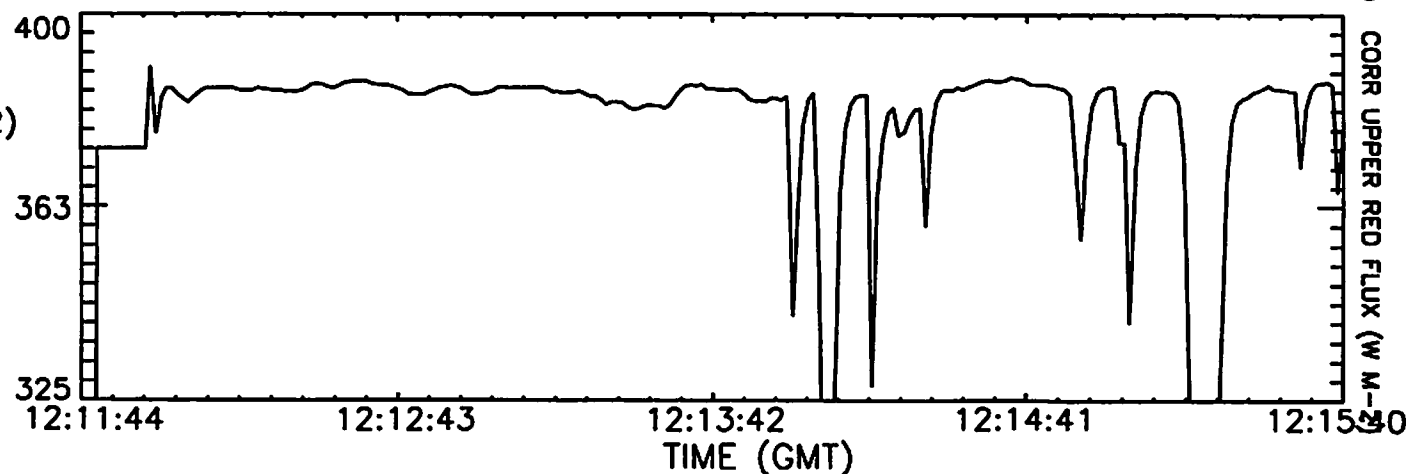
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 237  
Mean 40.9945  
Standard dev 5.67566  
Max value 75.1067  
Min value 35.3088



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 237  
Mean 374.034  
Standard dev 46.0222  
Max value 389.818  
Min value 0.000000



1 second averages

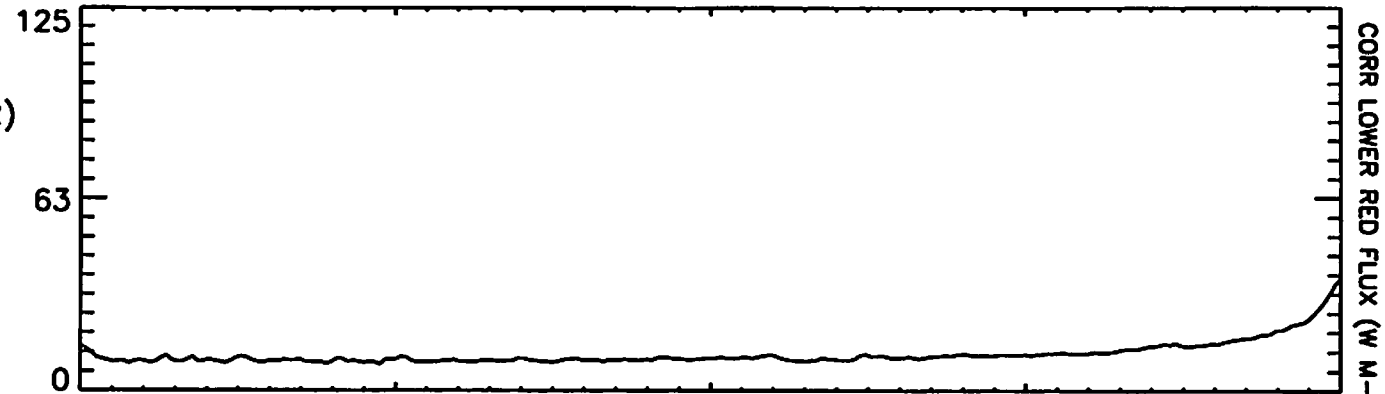


A405 16-AUG-95

Run no. R2.2

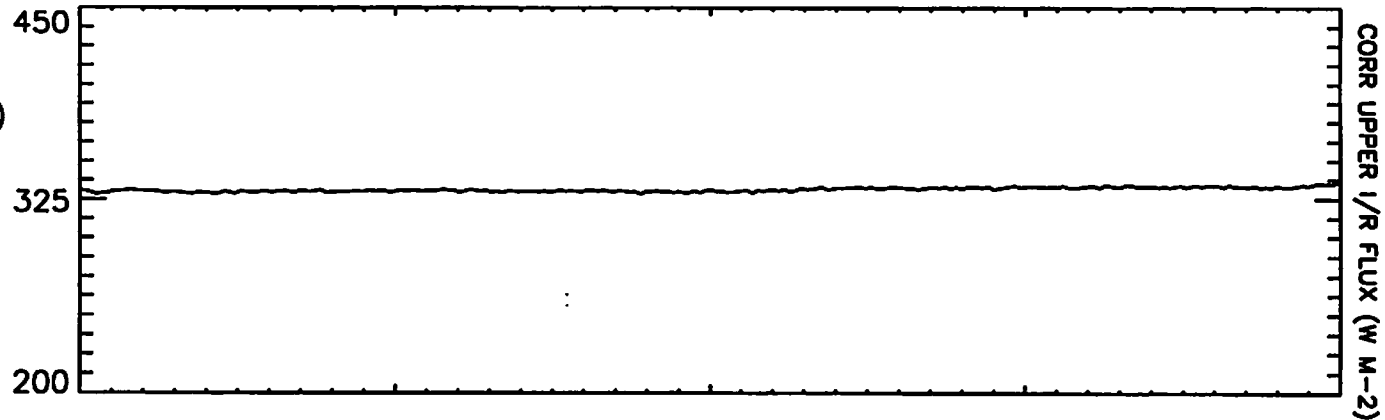
CORR LOWER RED FLUX (W M-2)

Parameter no. 1023  
No. of obs 237  
Mean 11.8033  
Standard dev 4.00242  
Max value 36.5997  
Min value 8.44615



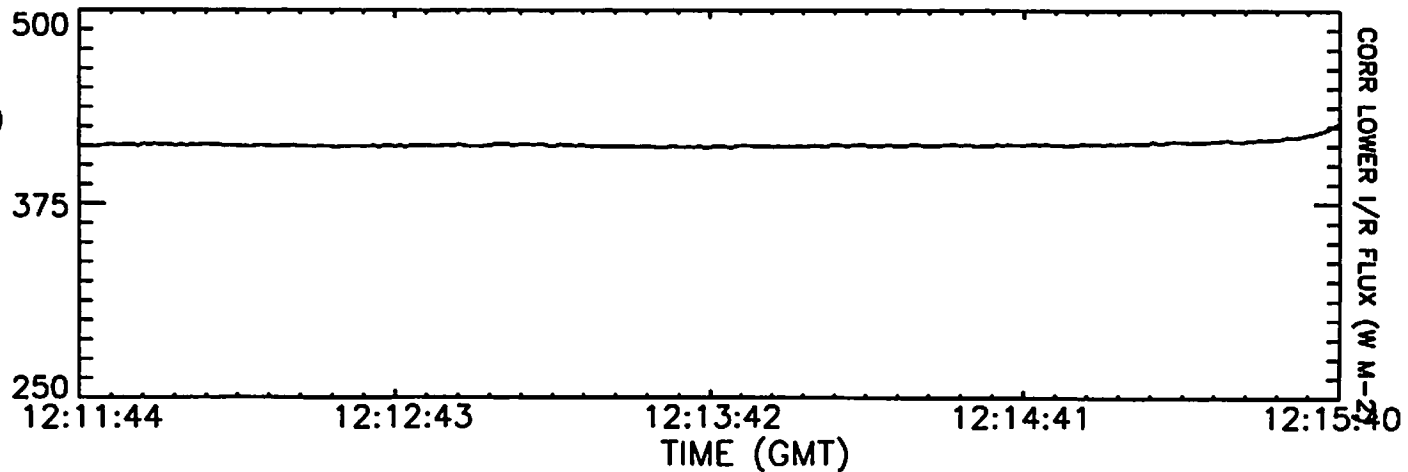
CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021  
No. of obs 237  
Mean 331.346  
Standard dev 1.62732  
Max value 336.275  
Min value 328.380



CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024  
No. of obs 237  
Mean 413.174  
Standard dev 2.14216  
Max value 427.247  
Min value 410.945



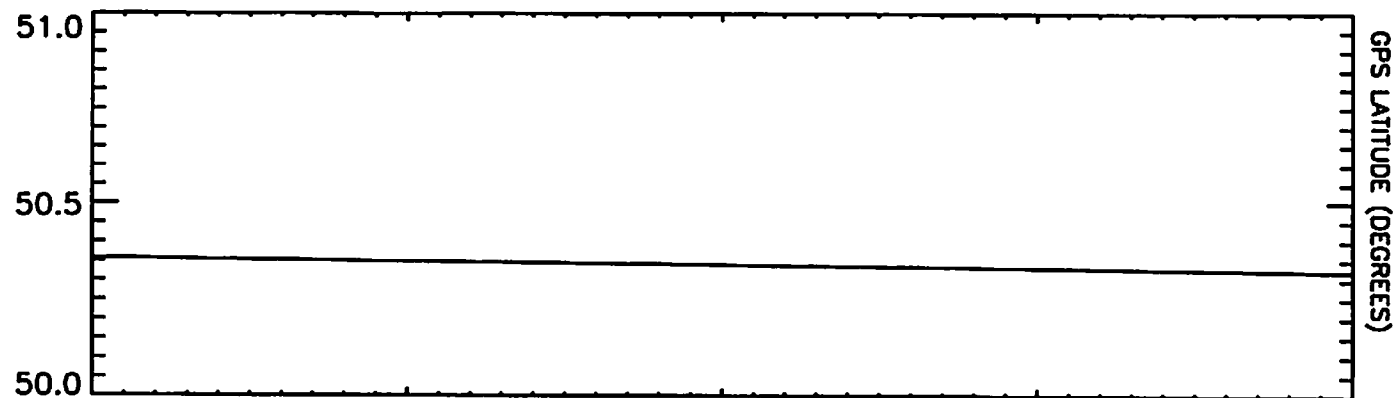
1 second averages

A405 16-AUG-95

Run no. R2.3

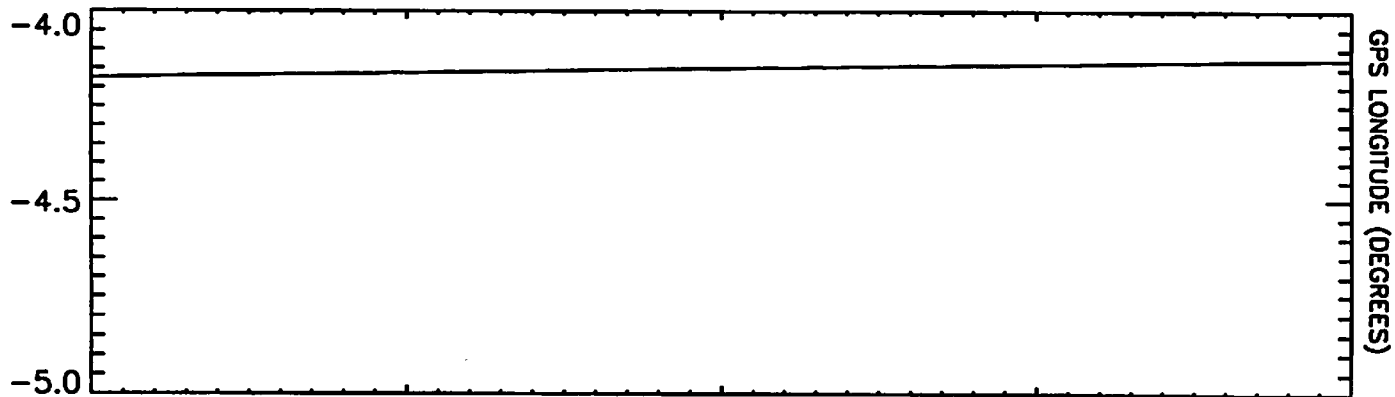
GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 55  
Mean 50.3404  
Standard dev 1.044649e-02  
Max value 50.3573  
Min value 50.3221



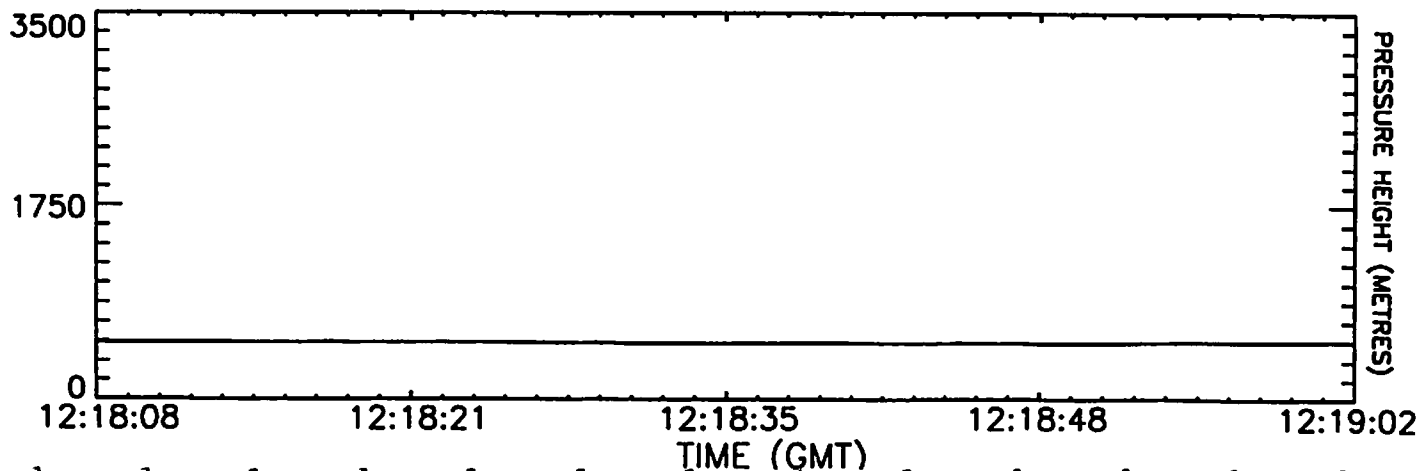
GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 55  
Mean -4.14955  
Standard dev 1.491871e-02  
Max value -4.12516  
Min value -4.17508



PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 55  
Mean 518.352  
Standard dev 4.69245  
Max value 528.403  
Min value 512.378



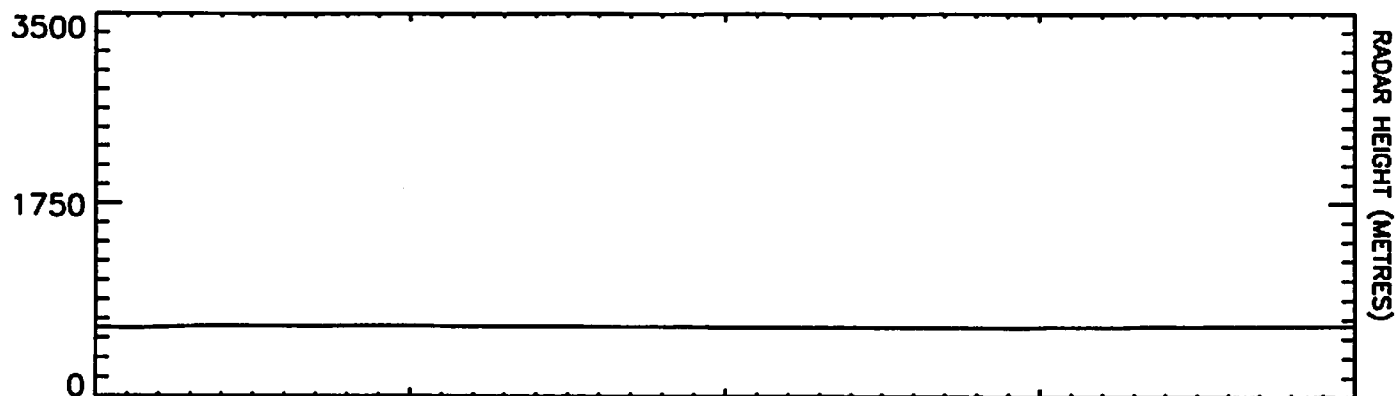
1 second averages

A405 16-AUG-95

Run no. R2.3

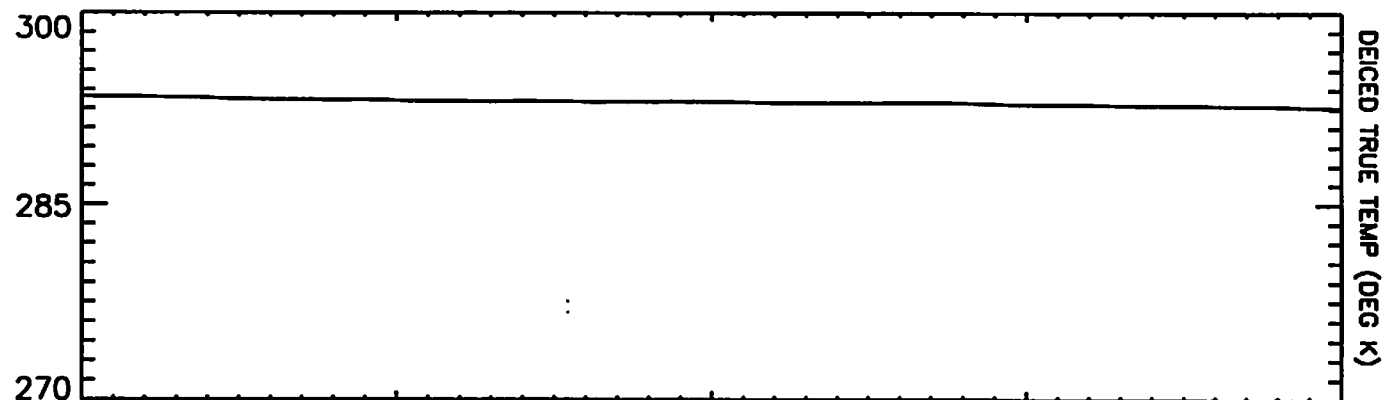
RADAR HEIGHT (METRES)

Parameter no. 575  
No. of obs 55  
Mean 630.650  
Standard dev 5.62065  
Max value 640.539  
Min value 615.455



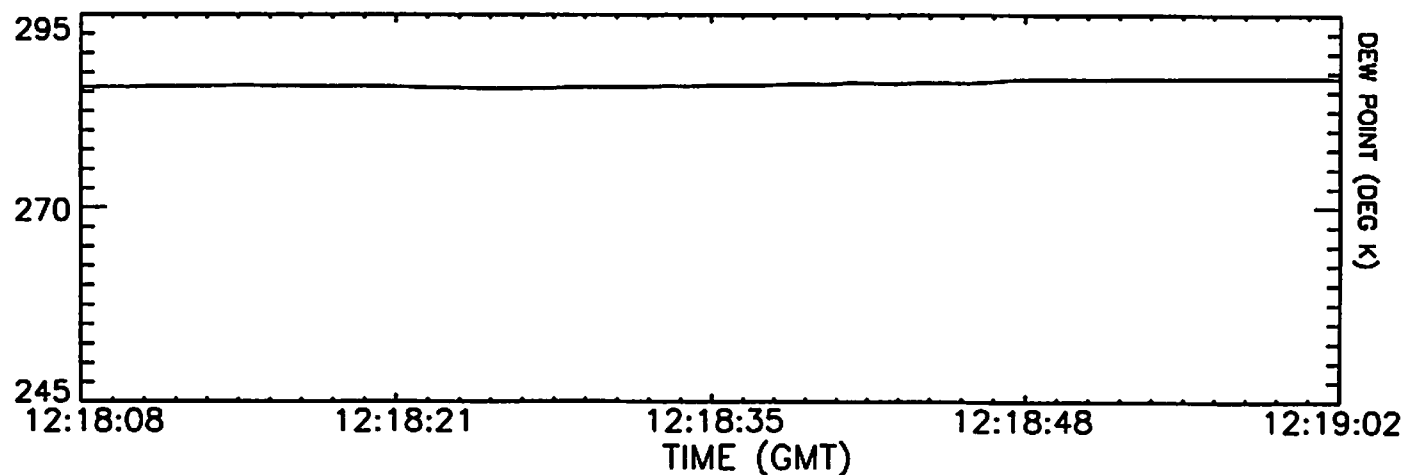
DEICED TRUE TEMP (DEG K)

Parameter no. 520  
No. of obs 55  
Mean 293.028  
Standard dev 0.213714  
Max value 293.467  
Min value 292.583



DEW POINT (DEG K)

Parameter no. 529  
No. of obs 55  
Mean 286.070  
Standard dev 0.459435  
Max value 286.838  
Min value 285.469



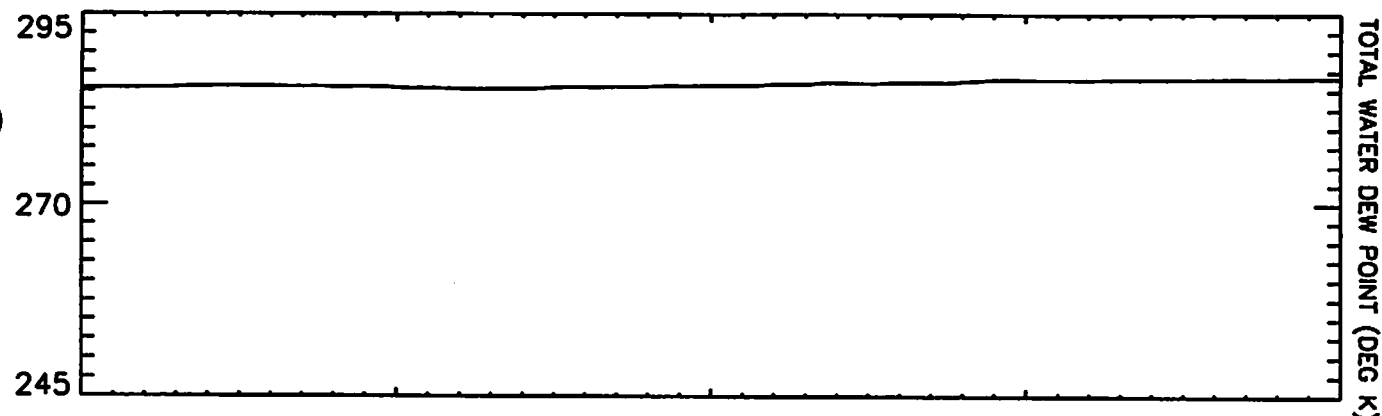
1 second averages

A405 16-AUG-95

Run no. R2.3

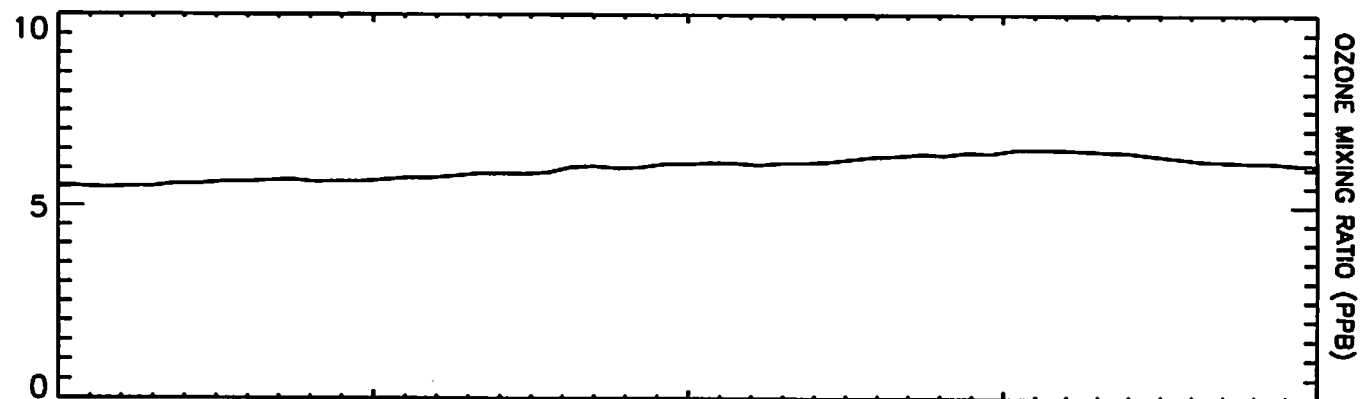
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 55  
Mean 285.906  
Standard dev 0.506725  
Max value 286.731  
Min value 285.216



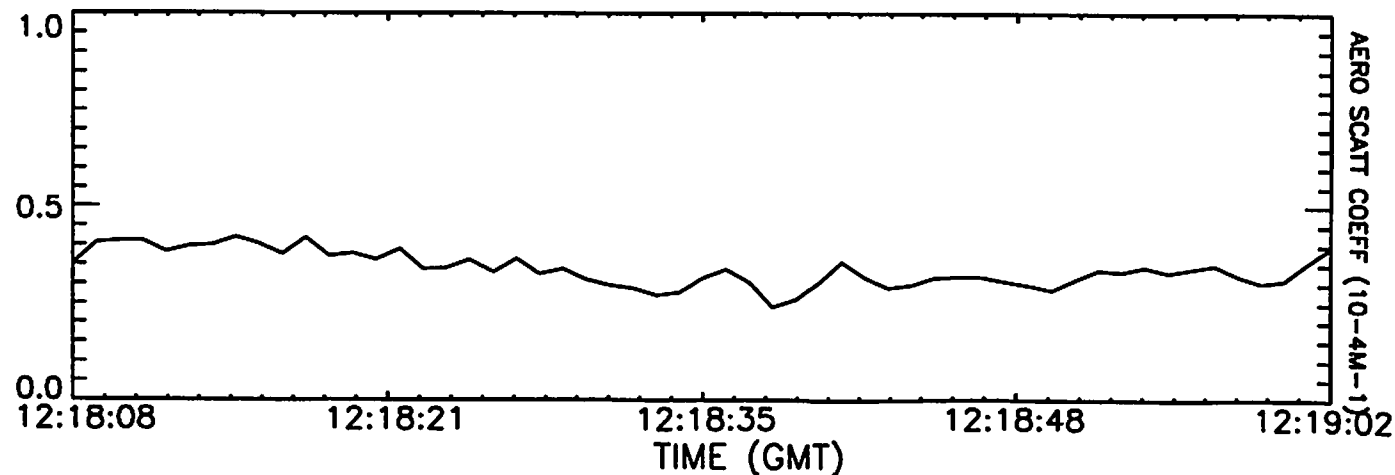
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 55  
Mean 6.01554  
Standard dev 0.315278  
Max value 6.49328  
Min value 5.49253



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 55  
Mean 0.338974  
Standard dev 4.310584e-02  
Max value 0.420913  
Min value 0.240257



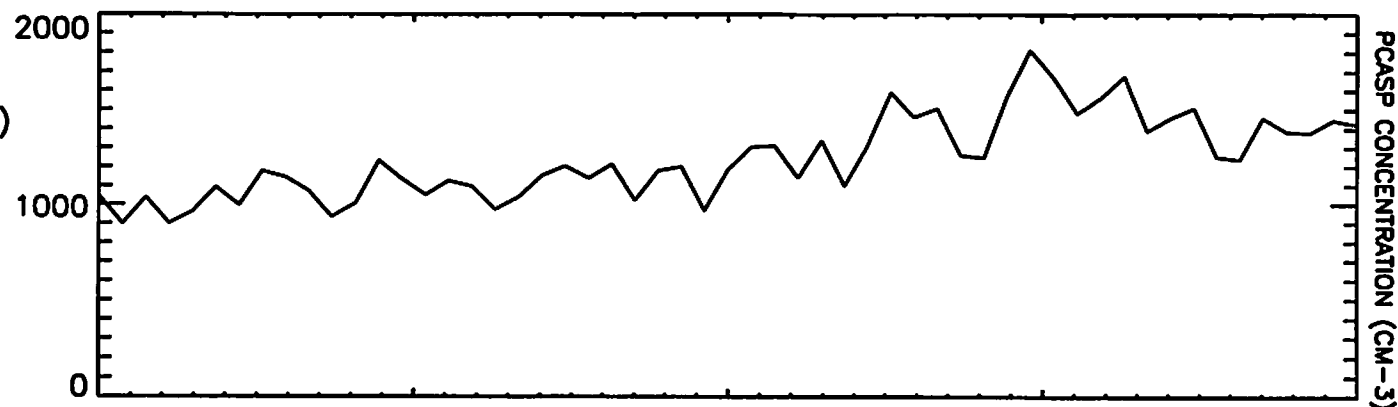
1 second averages

A405 16-AUG-95

Run no. R2.3

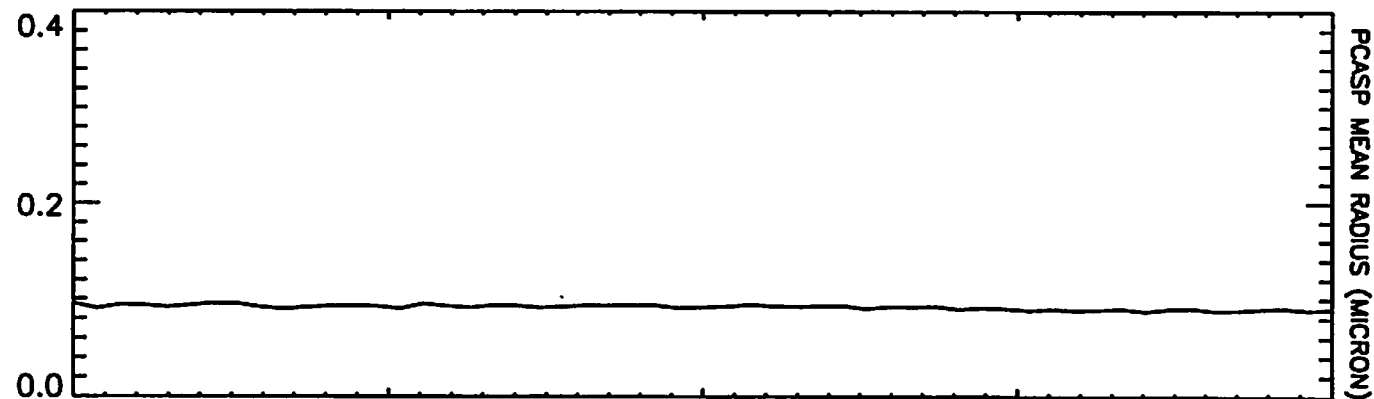
PCASP CONCENTRATION (CM-3)

Parameter no. 919  
No. of obs 55  
Mean 1245.42  
Standard dev 218.317  
Max value 1813.78  
Min value 898.883



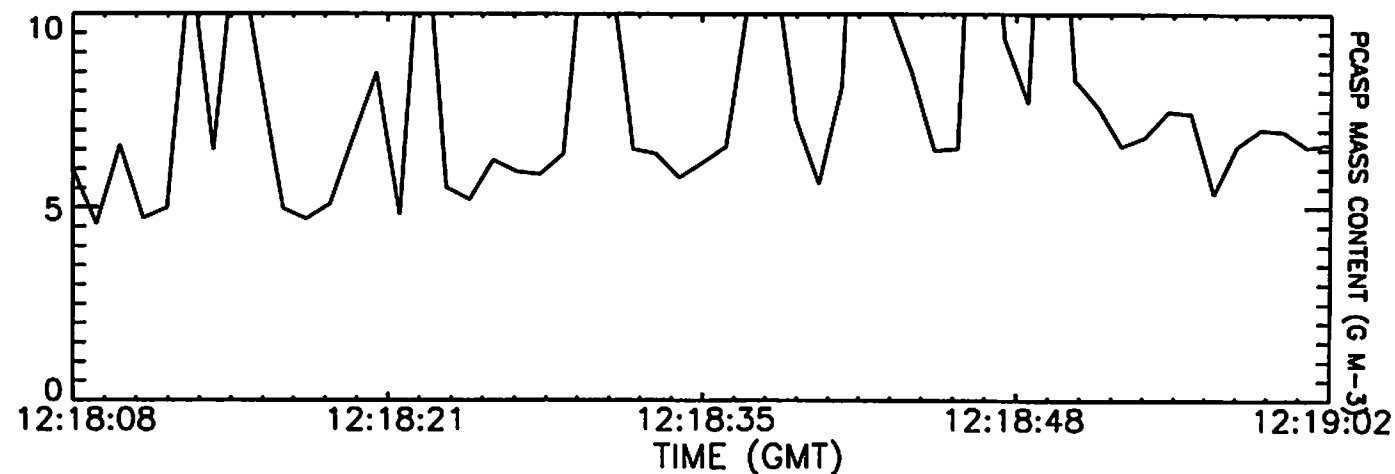
PCASP MEAN RADIUS (MICRON)

Parameter no. 920  
No. of obs 55  
Mean  $9.174769 \times 10^{-2}$   
Standard dev  $1.932569 \times 10^{-3}$   
Max value  $9.554505 \times 10^{-2}$   
Min value  $8.795798 \times 10^{-2}$



PCASP MASS CONTENT (G M-3)

Parameter no. 921  
No. of obs 55  
Mean 7.91857  
Standard dev 3.37632  
Max value 19.1186  
Min value 4.57053



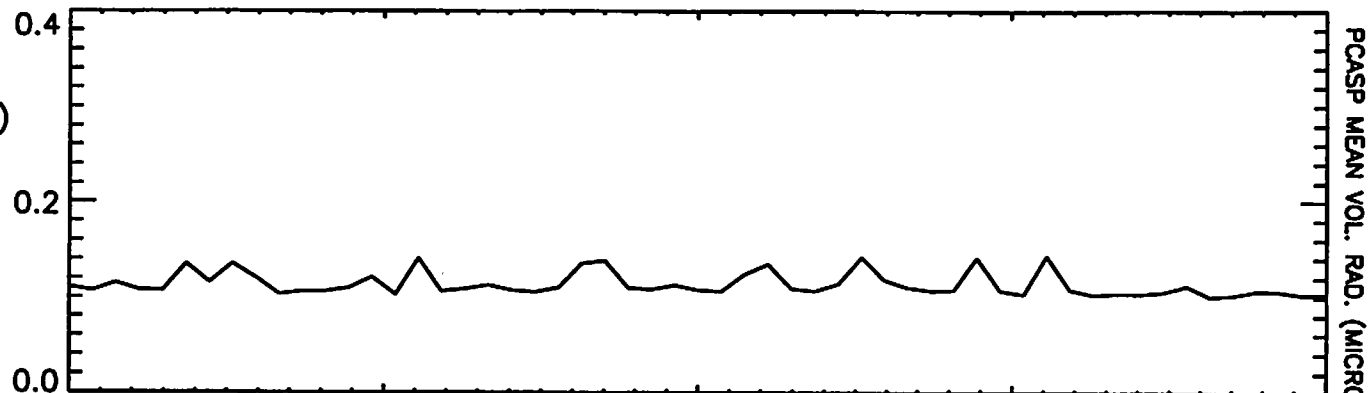
1 second averages

A405 16-AUG-95

Run no. R2.3

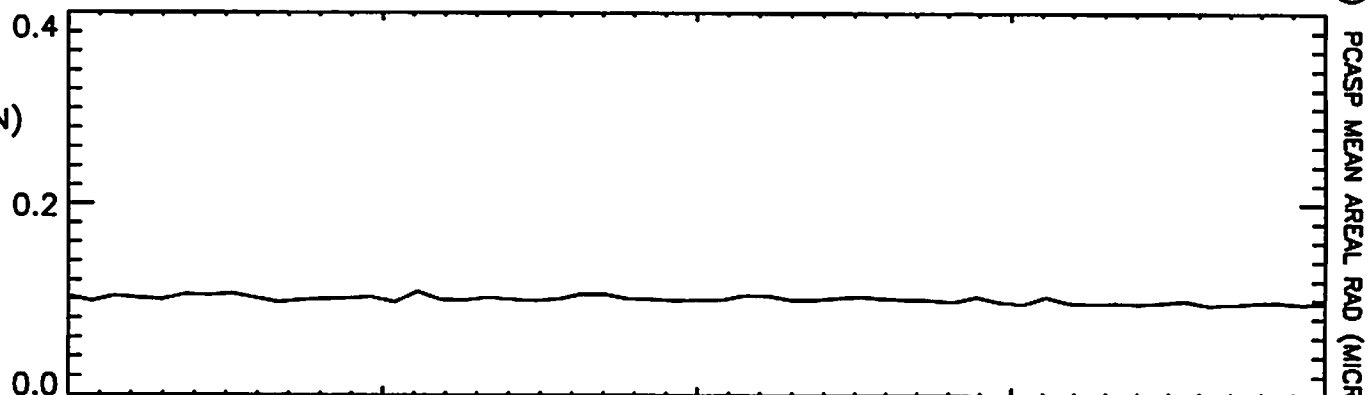
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 55  
Mean 0.113540  
Standard dev 1.221574e-02  
Max value 0.143785  
Min value 0.101001



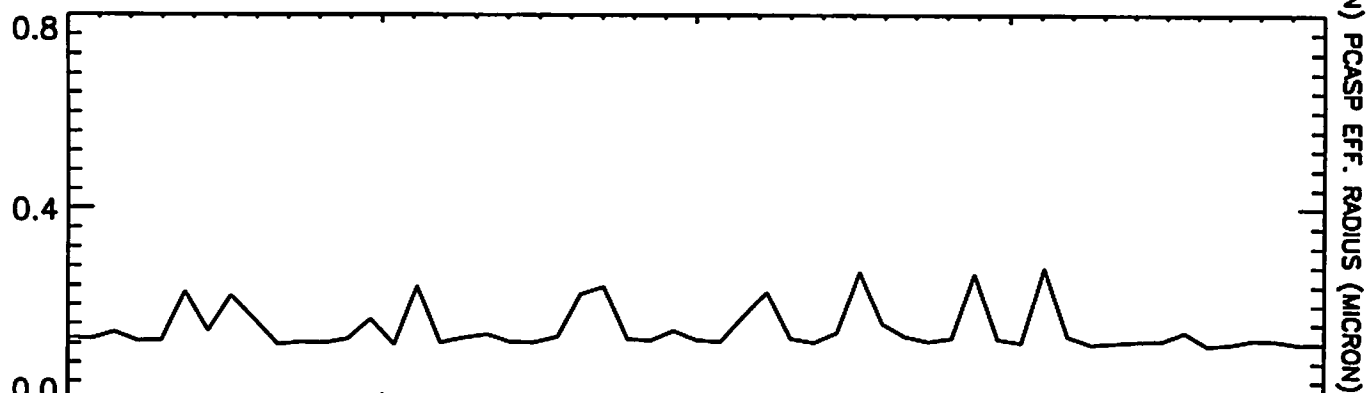
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 55  
Mean 9.987462e-02  
Standard dev 3.191831e-03  
Max value 0.107957  
Min value 9.441620e-02



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 55  
Mean 0.149611  
Standard dev 4.456176e-02  
Max value 0.279403  
Min value 0.115526



1 second averages

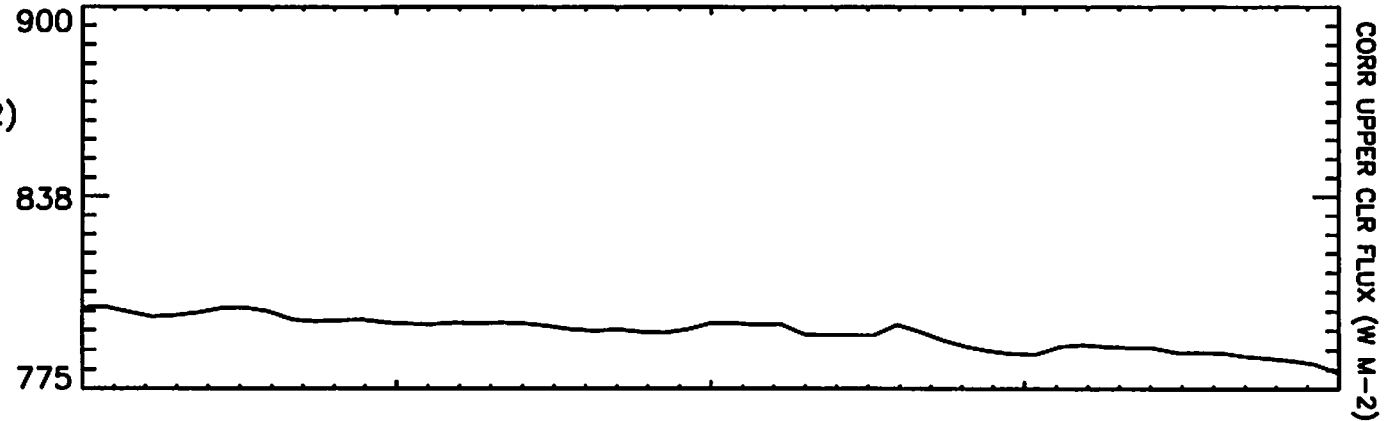
TIME (GMT)

A405 16-AUG-95

Run no. R2.3

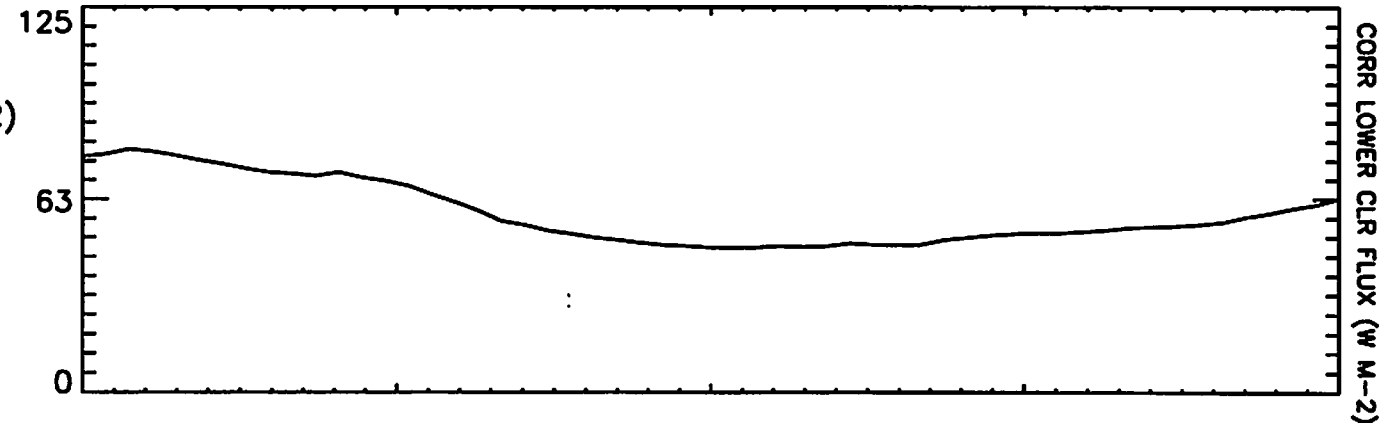
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 55  
Mean 793.042  
Standard dev 5.20699  
Max value 801.301  
Min value 780.165



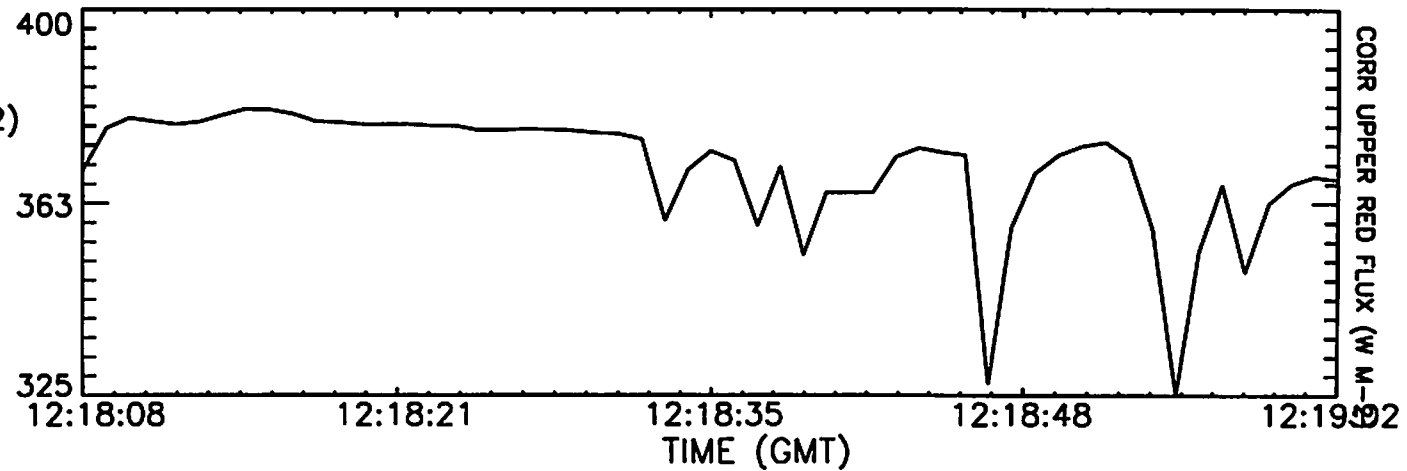
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 55  
Mean 57.8466  
Standard dev 10.5104  
Max value 78.8159  
Min value 46.5981



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 55  
Mean 369.643  
Standard dev 11.5402  
Max value 380.825  
Min value 325.105



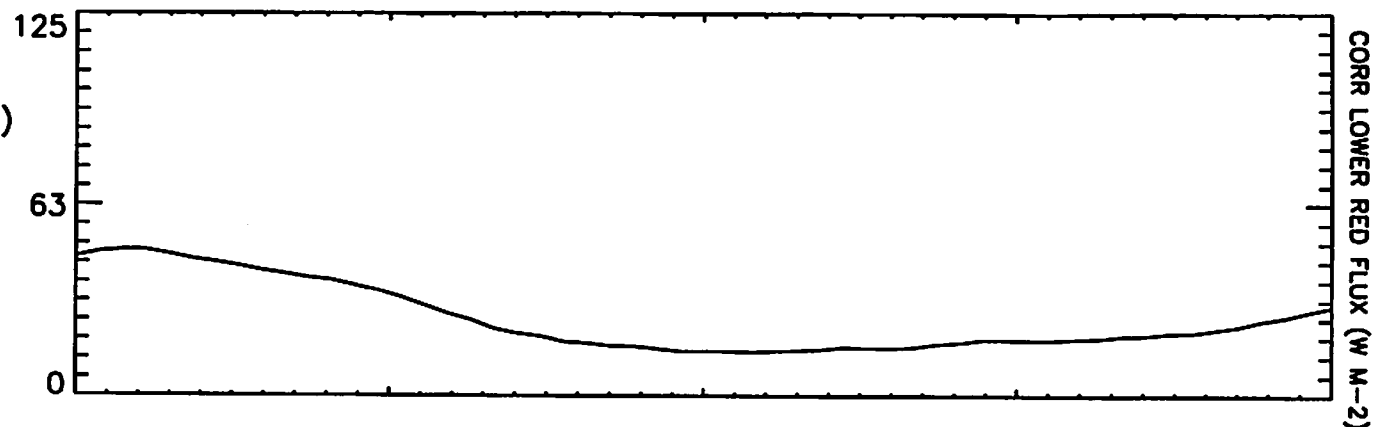
1 second averages

A405 16-AUG-95

Run no. R2.3

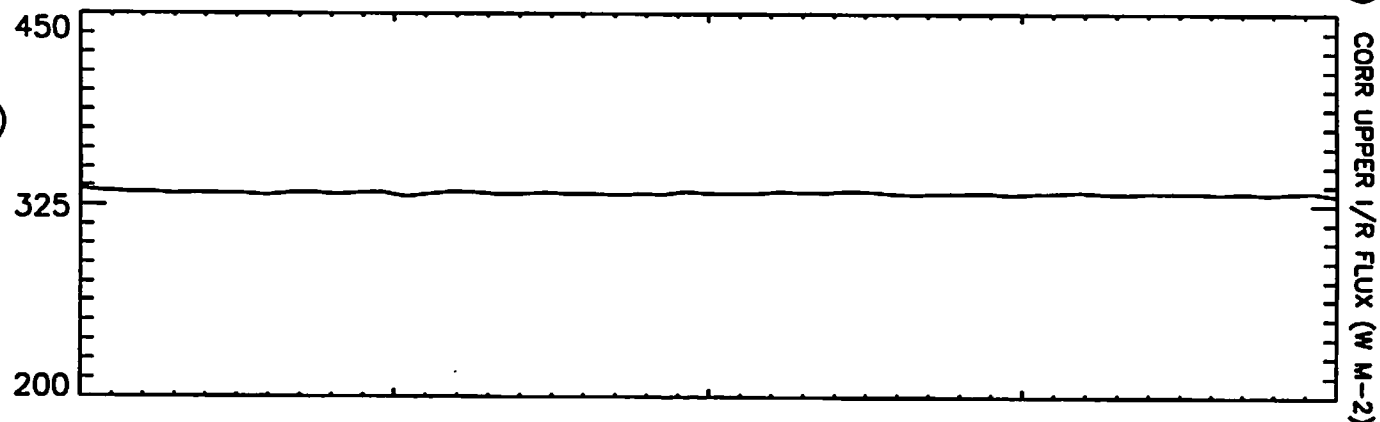
CORR LOWER RED FLUX (W M-2)

Parameter no. 1023  
No. of obs 55  
Mean 25.3976  
Standard dev 11.1089  
Max value 47.7486  
Min value 14.3017



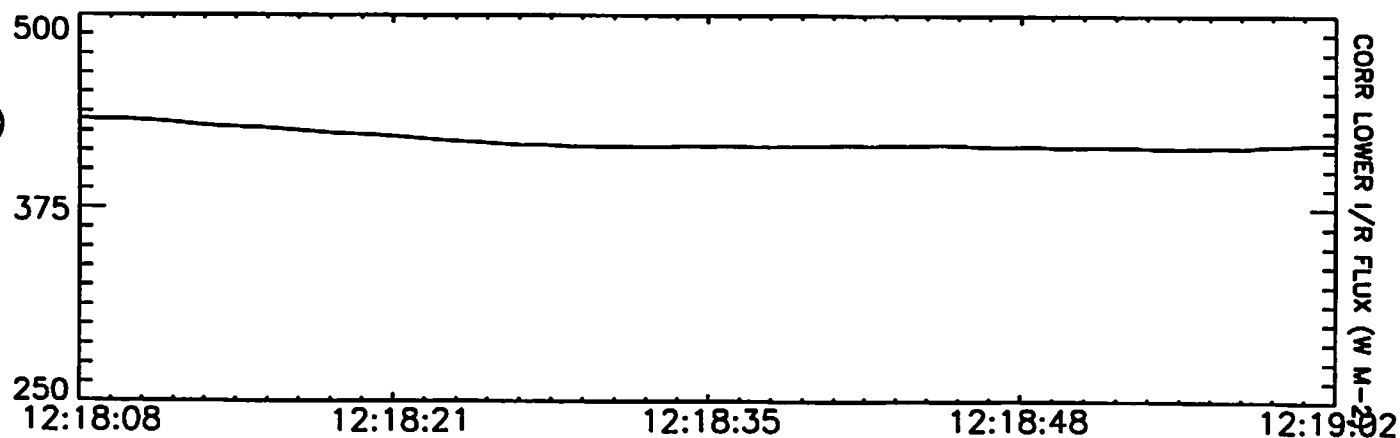
CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021  
No. of obs 55  
Mean 332.768  
Standard dev 0.798832  
Max value 335.393  
Min value 330.630



CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024  
No. of obs 55  
Mean 418.911  
Standard dev 5.70302  
Max value 432.849  
Min value 414.383



1 second averages

TIME (GMT)

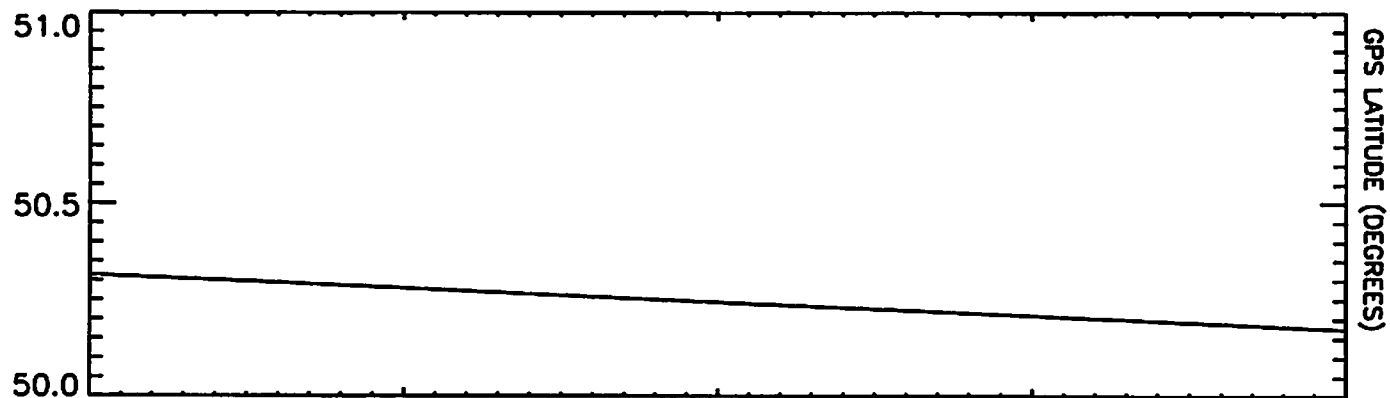


A405 16-AUG-95

Run no. R3.1

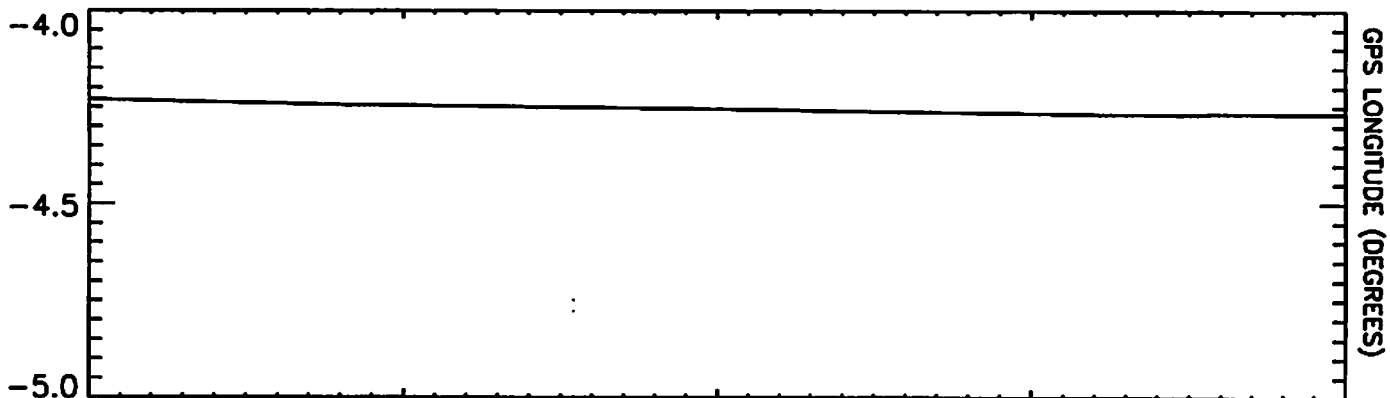
GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 154  
Mean 50.2438  
Standard dev  $4.087887e-02$   
Max value 50.3140  
Min value 50.1740



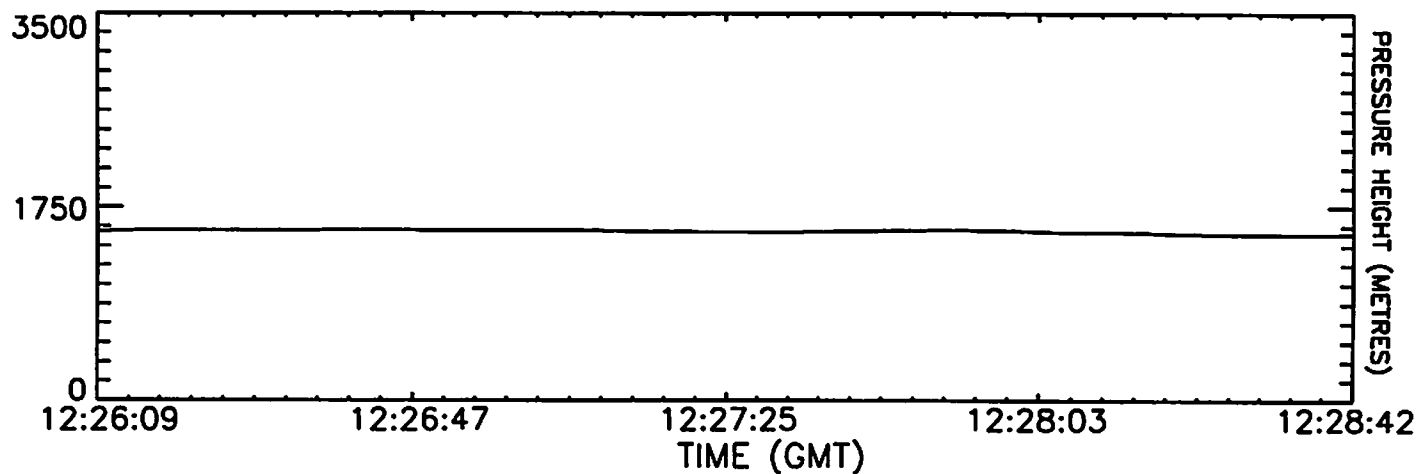
GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 154  
Mean -4.25390  
Standard dev  $1.117533e-02$   
Max value -4.23018  
Min value -4.26761



PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 154  
Mean 1530.62  
Standard dev 12.3144  
Max value 1544.77  
Min value 1504.93



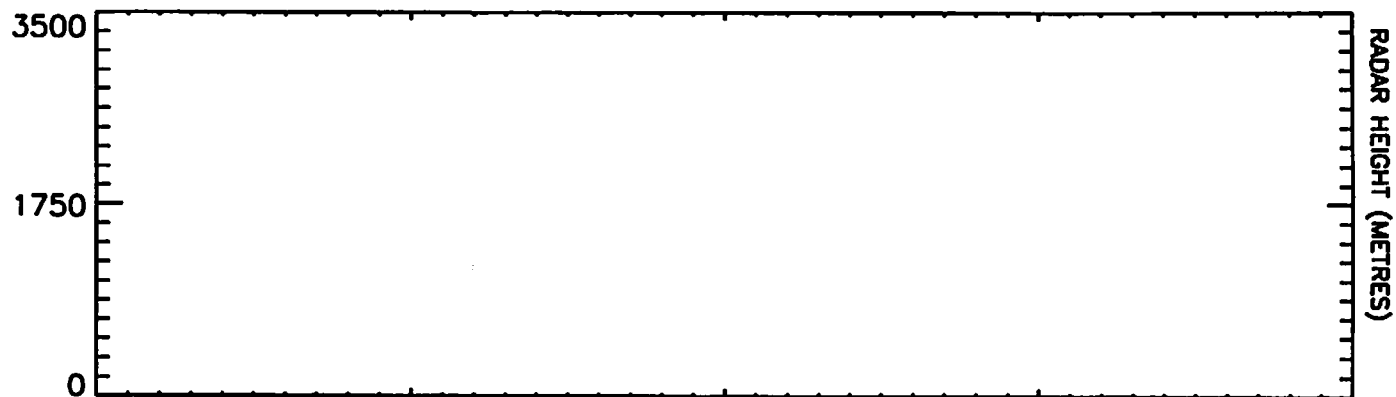
1 second averages

A405 16-AUG-95

Run no. R3.1

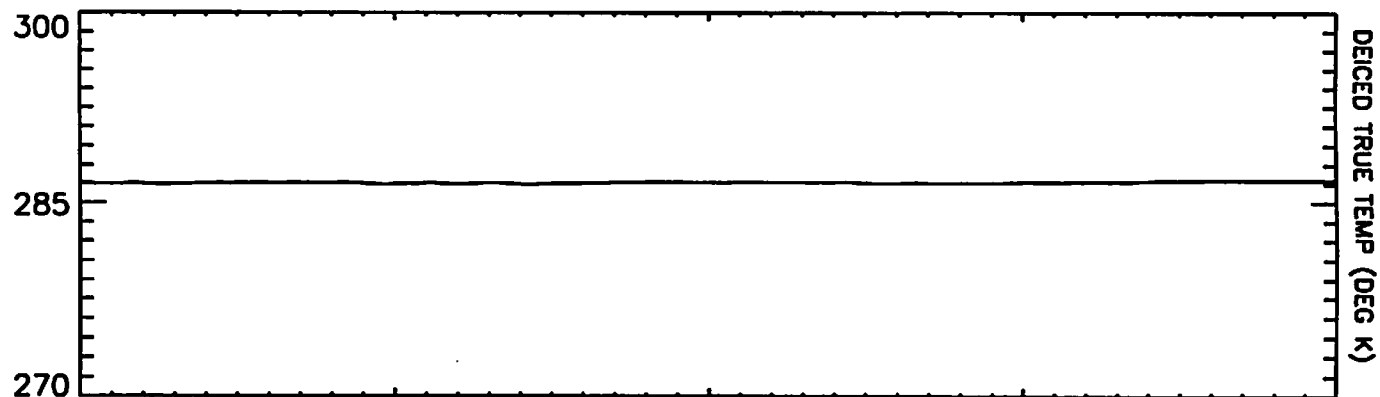
RADAR HEIGHT (METRES)

Parameter no. 575  
No. of obs 154  
Mean 0.000000  
Standard dev 0.000000  
Max value 0.000000  
Min value 0.000000



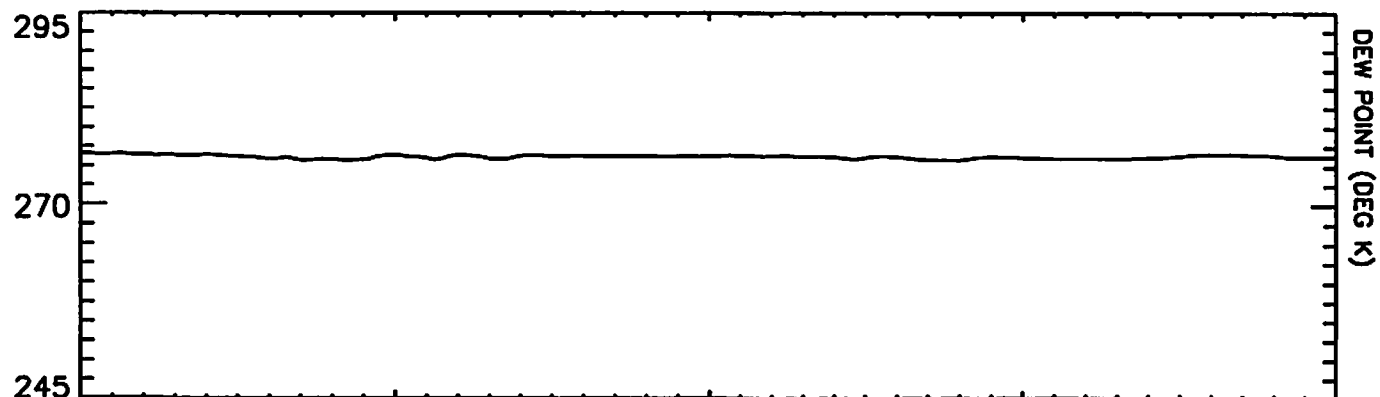
DEICED TRUE TEMP (DEG K)

Parameter no. 520  
No. of obs 154  
Mean 286.601  
Standard dev 0.105067  
Max value 286.814  
Min value 286.438



DEW POINT (DEG K)

Parameter no. 529  
No. of obs 154  
Mean 276.199  
Standard dev 0.221052  
Max value 276.614  
Min value 275.669



1 second averages

TIME (GMT)

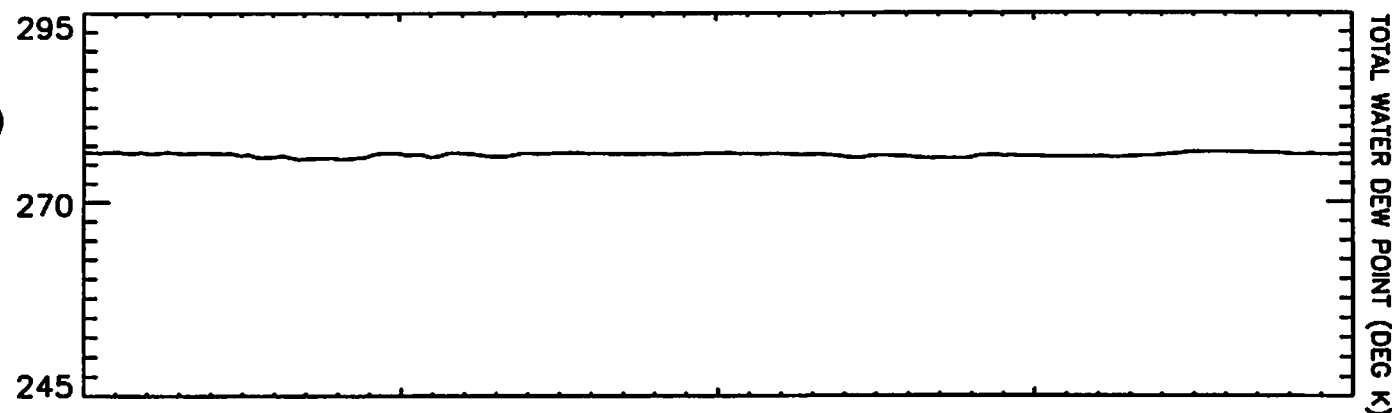
12:26:09 12:26:47 12:27:25 12:28:03 12:28:42

A405 16-AUG-95

Run no. R3.1

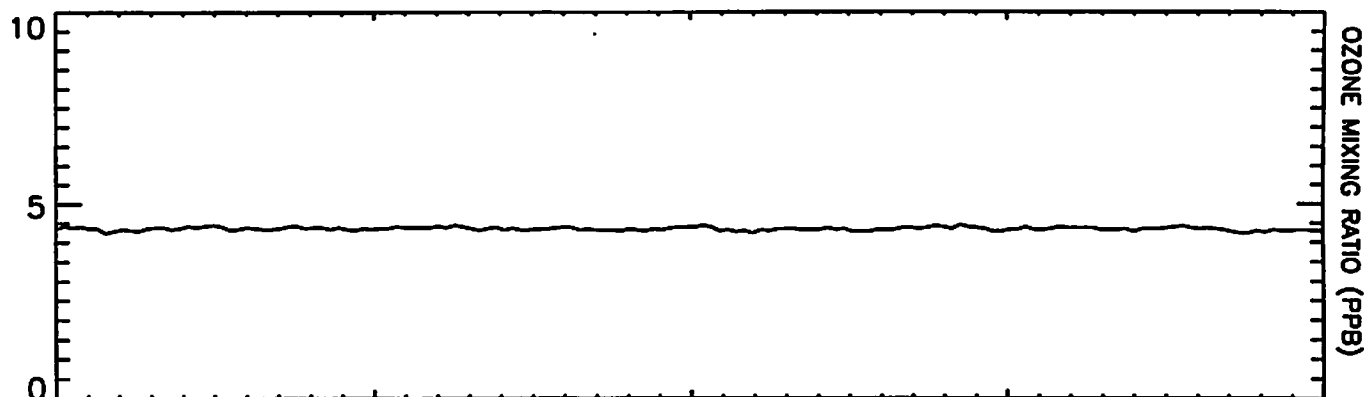
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 154  
Mean 276.247  
Standard dev 0.259334  
Max value 276.682  
Min value 275.688



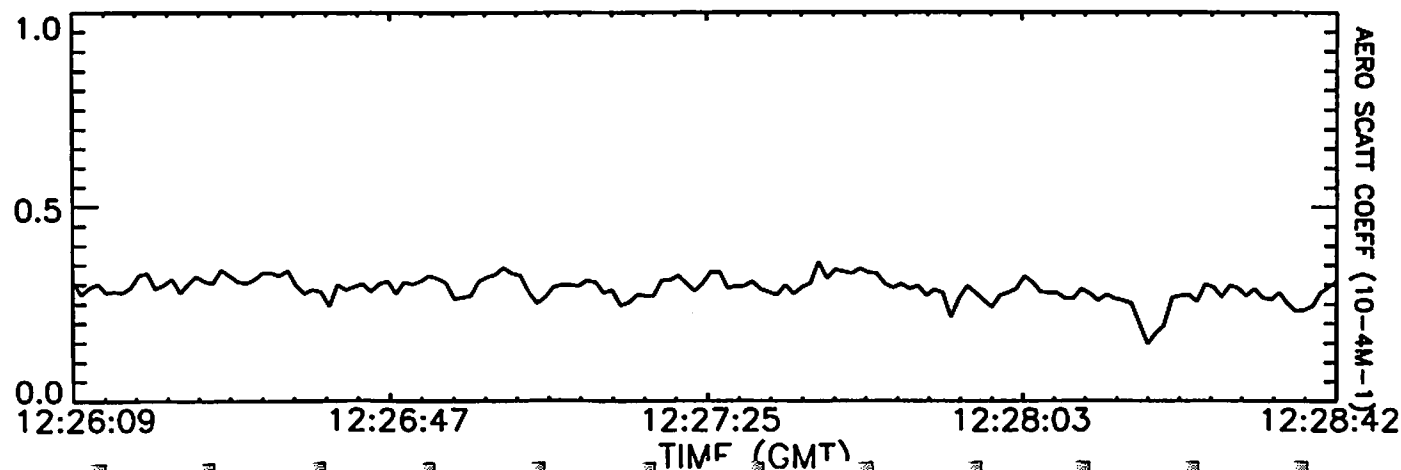
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 154  
Mean 4.34777  
Standard dev 4.369970e-02  
Max value 4.44951  
Min value 4.23197



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 154  
Mean 0.289354  
Standard dev 3.089097e-02  
Max value 0.357441  
Min value 0.147490

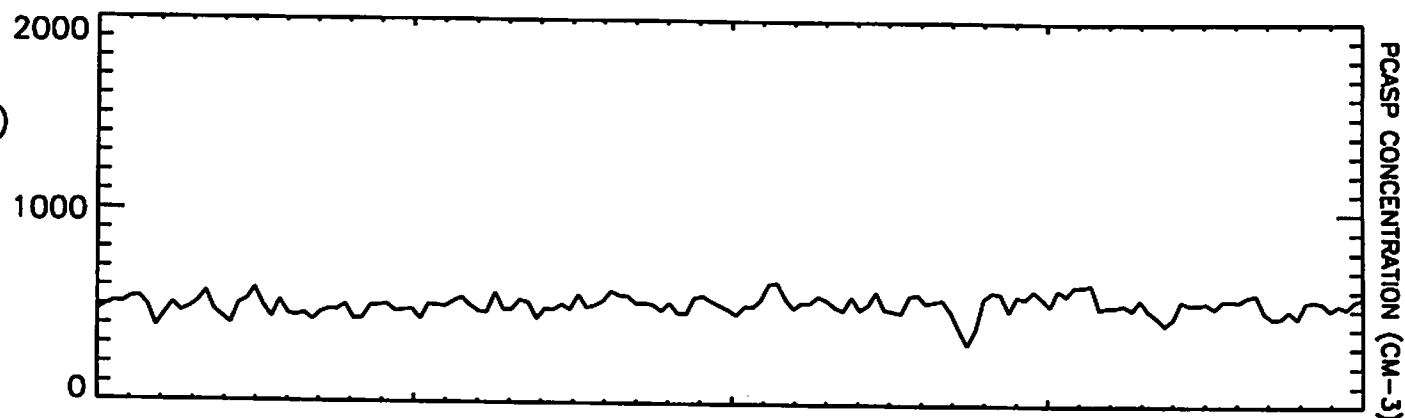


A405 16-AUG-95

Run no. R3.1

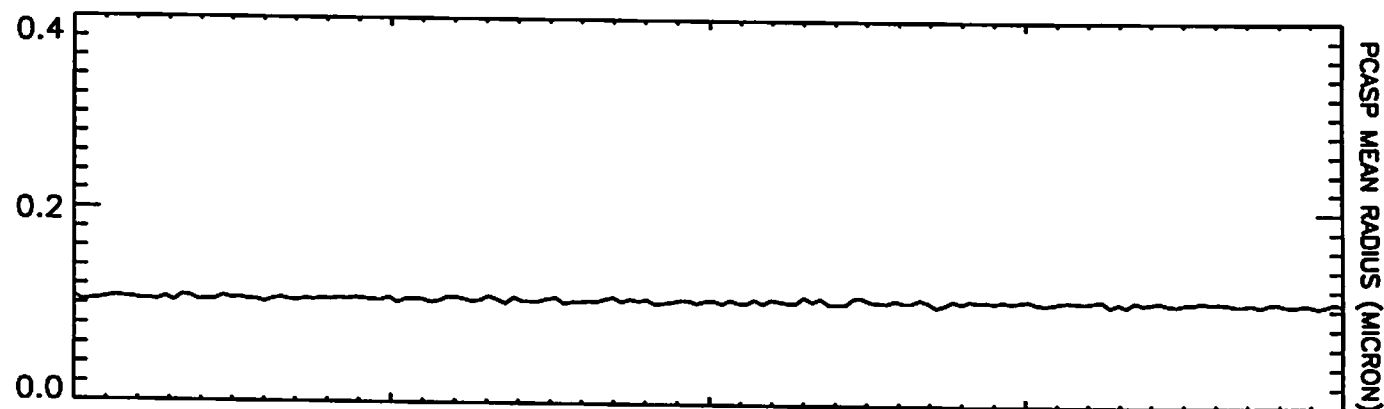
PCASP CONCENTRATION (CM-3)

Parameter no. 919  
No. of obs 154  
Mean 514.091  
Standard dev 50.6504  
Max value 635.017  
Min value 314.278



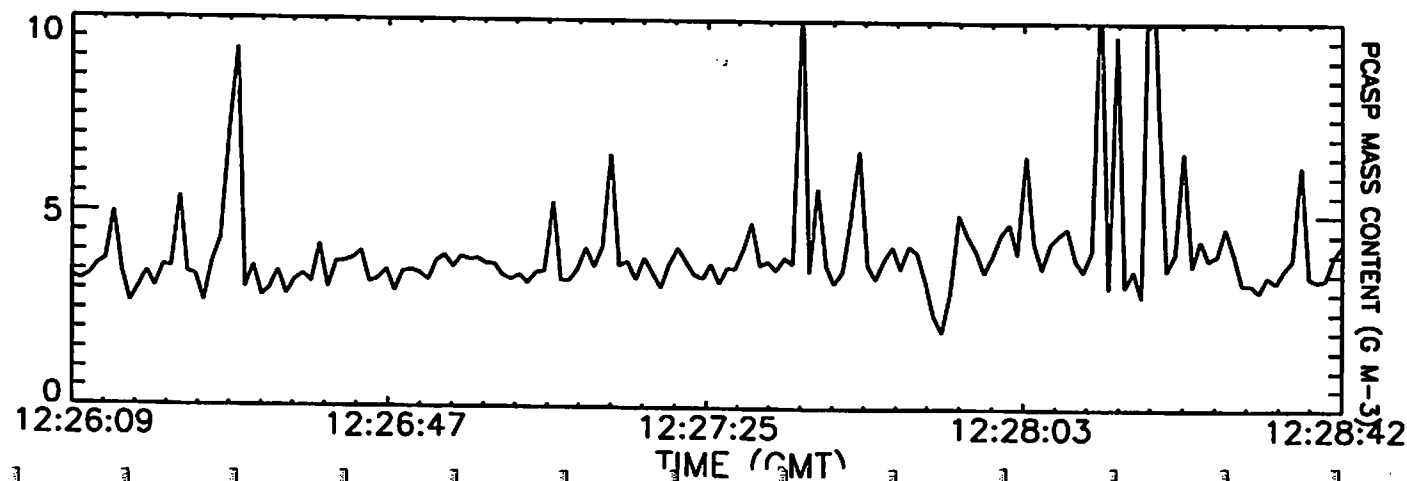
PCASP MEAN RADIUS (MICRON)

Parameter no. 920  
No. of obs 154  
Mean 0.106276  
Standard dev 1.850702e-03  
Max value 0.111481  
Min value 0.101753



PCASP MASS CONTENT (G M-3)

Parameter no. 921  
No. of obs 154  
Mean 4.06920  
Standard dev 1.53125  
Max value 13.8098  
Min value 2.01584



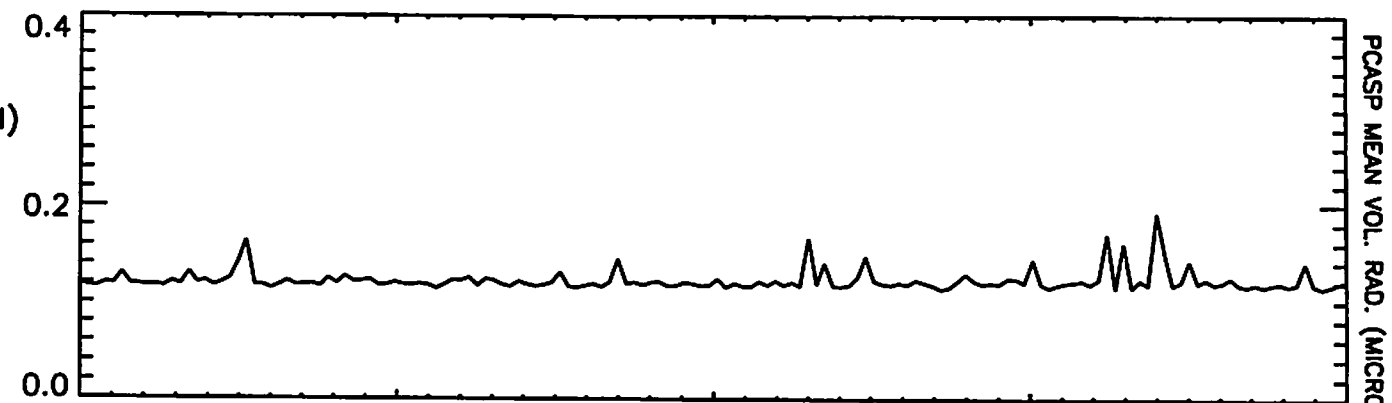
1 second averages

A405 16-AUG-95

Run no. R3.1

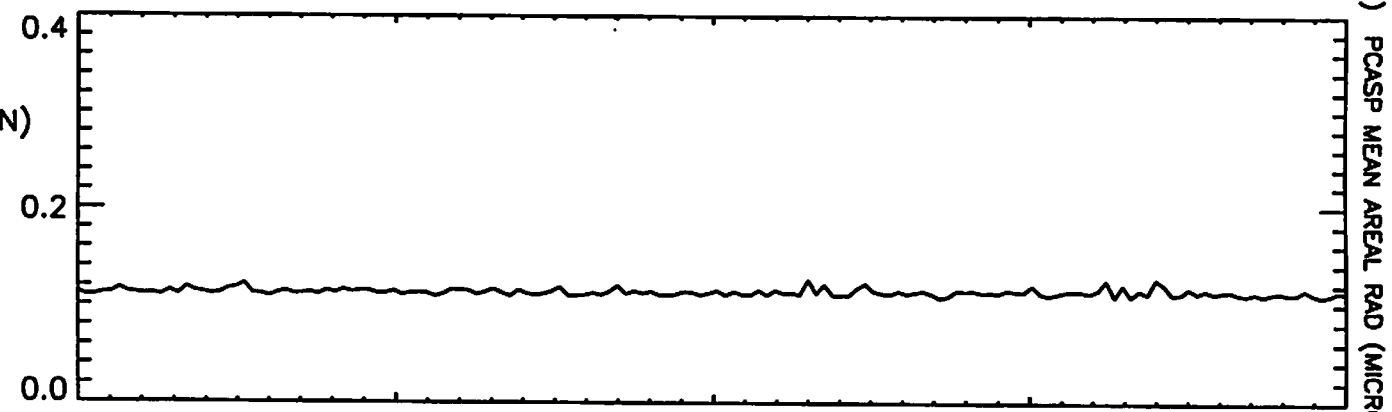
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 154  
Mean 0.122476  
Standard dev 1.113019e-02  
Max value 0.193024  
Min value 0.113561



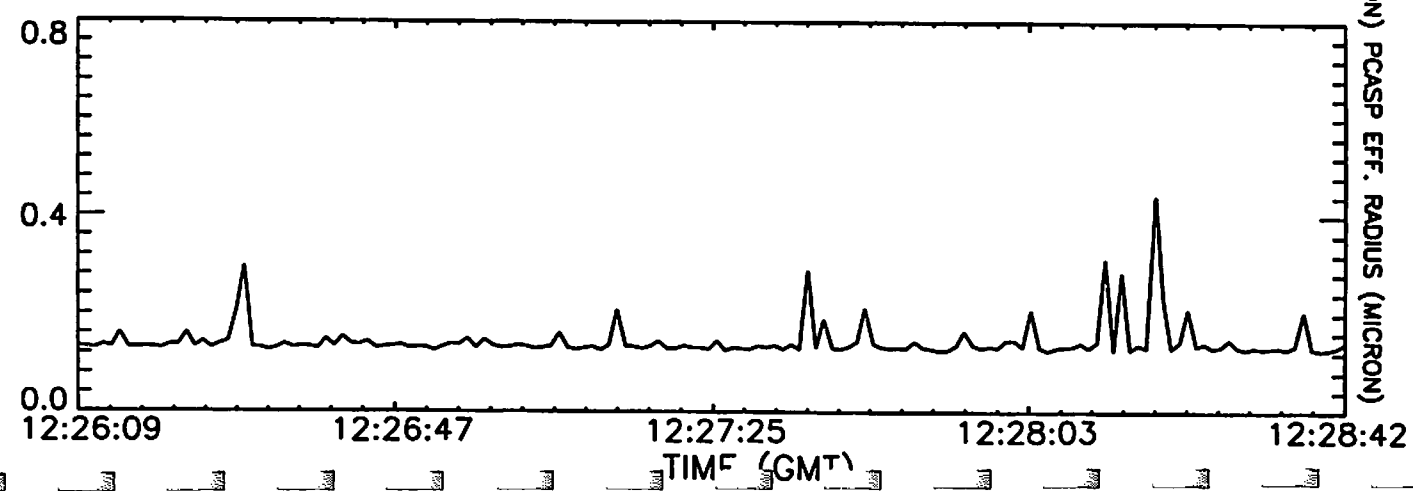
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 154  
Mean 0.113327  
Standard dev 3.321195e-03  
Max value 0.127342  
Min value 0.107676



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 154  
Mean 0.144818  
Standard dev 3.929268e-02  
Max value 0.443294  
Min value 0.125812



1 second averages

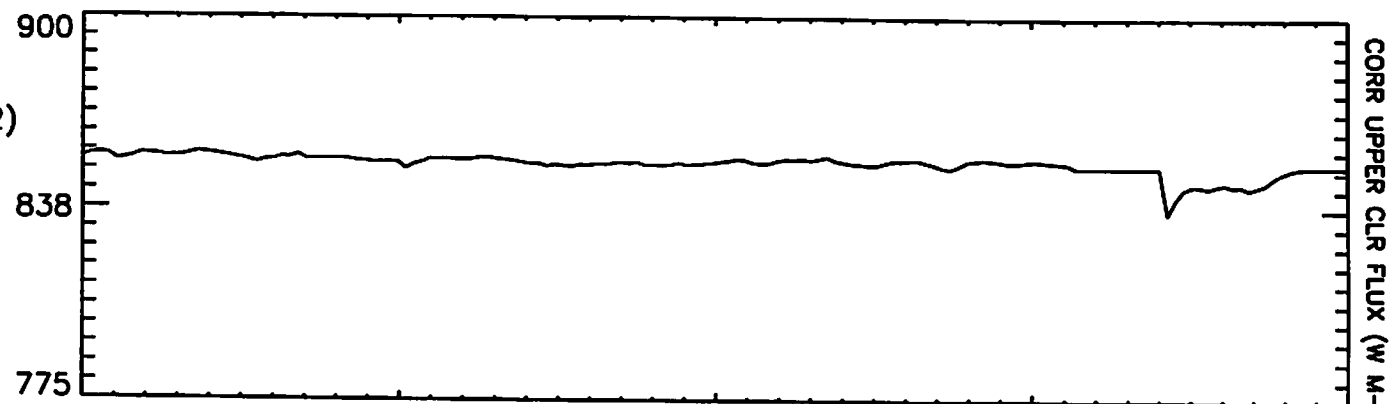
TIME (GMT)

A405 16-AUG-95

Run no. R3.1

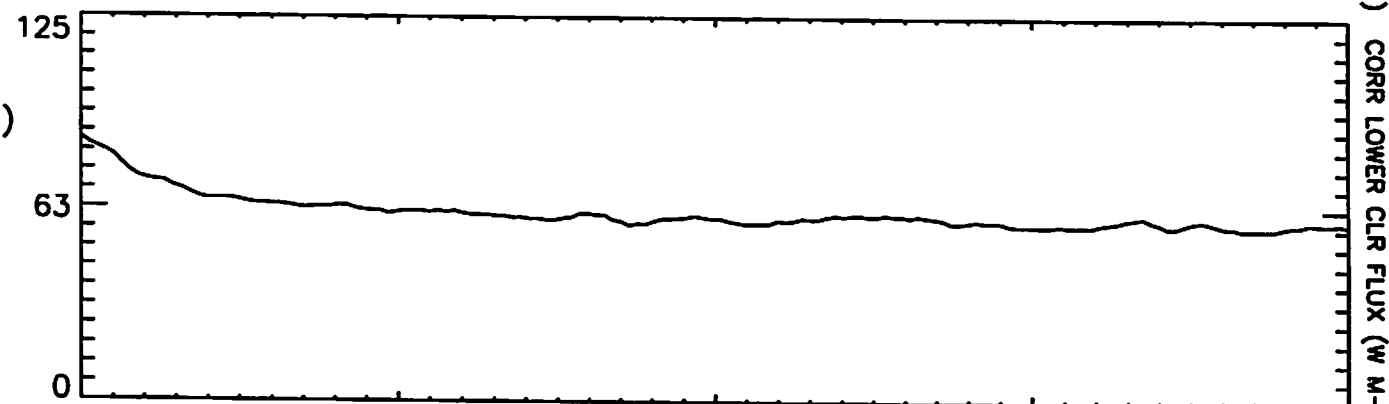
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 154  
Mean 852.218  
Standard dev 2.74772  
Max value 855.644  
Min value 836.275



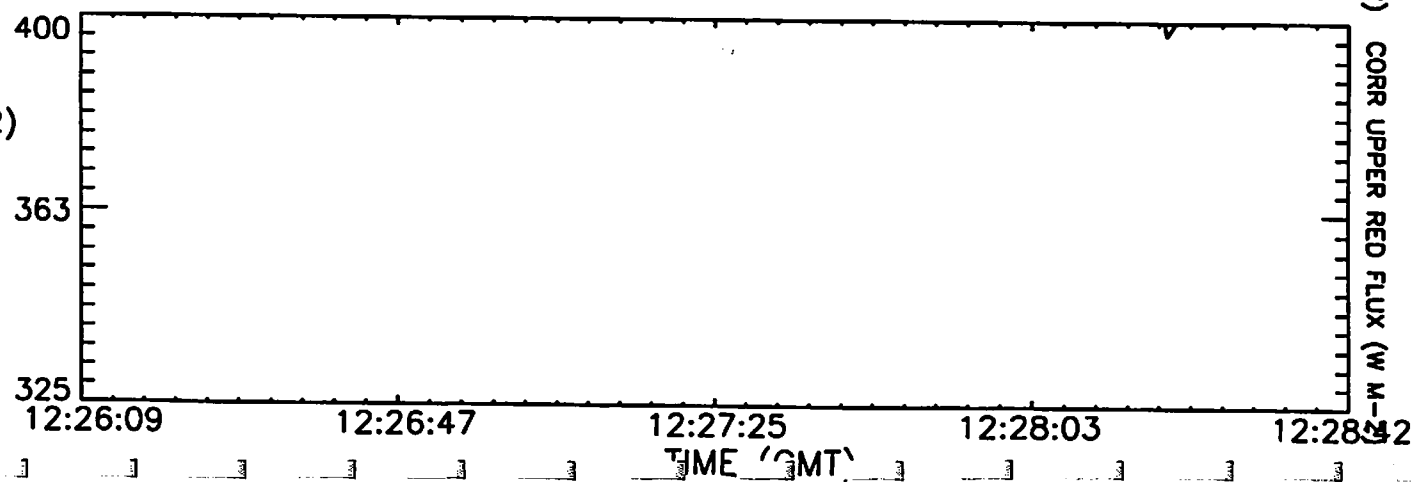
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 154  
Mean 61.1151  
Standard dev 5.28329  
Max value 85.3880  
Min value 56.3154



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 154  
Mean 406.060  
Standard dev 1.93107  
Max value 409.778  
Min value 397.338



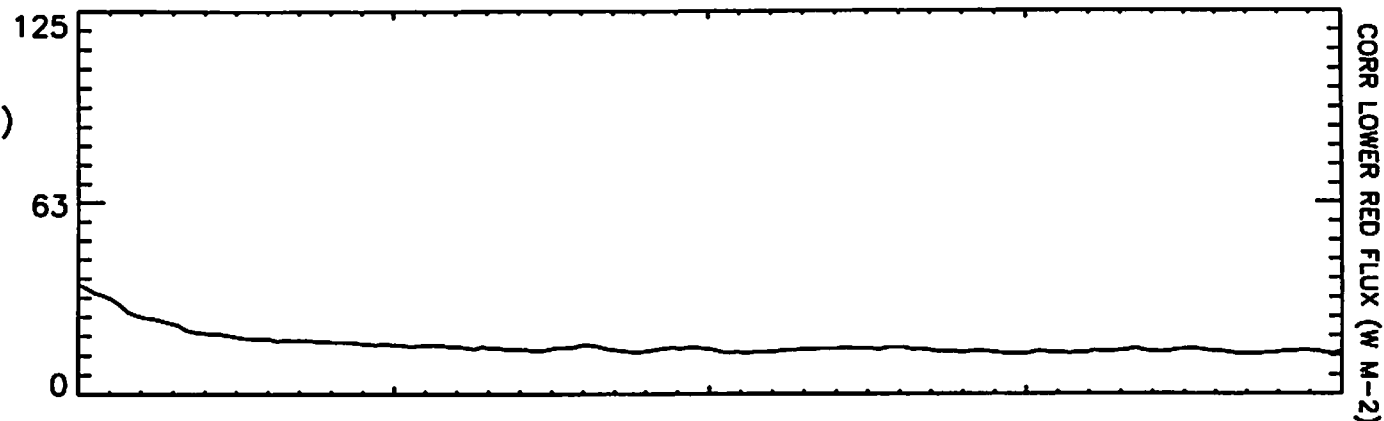
1 second averages

A405 16-AUG-95

Run no. R3.1

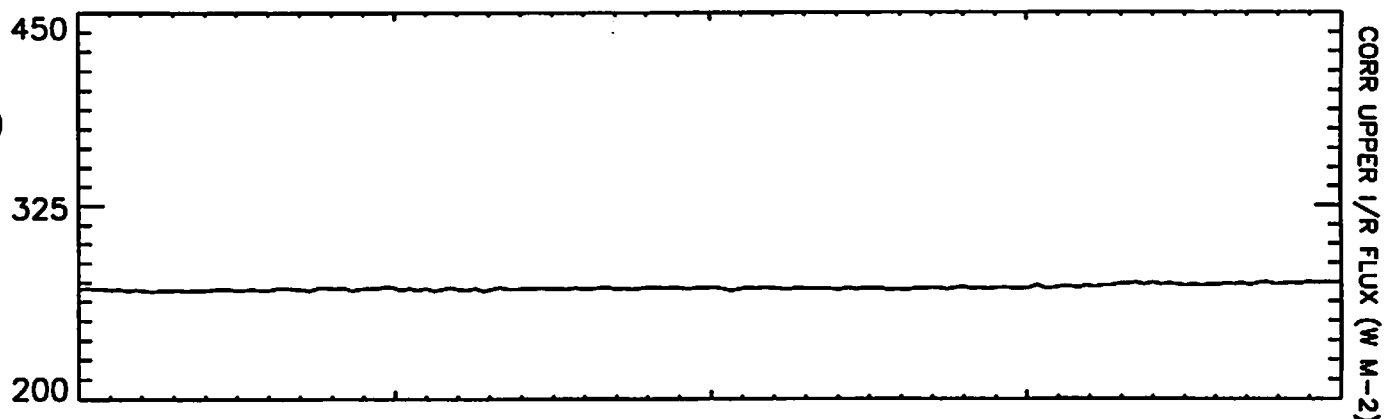
CORR LOWER RED FLUX (W M-2)

Parameter no. 1023  
No. of obs 154  
Mean 15.9027  
Standard dev 4.19340  
Max value 35.5760  
Min value 12.9964



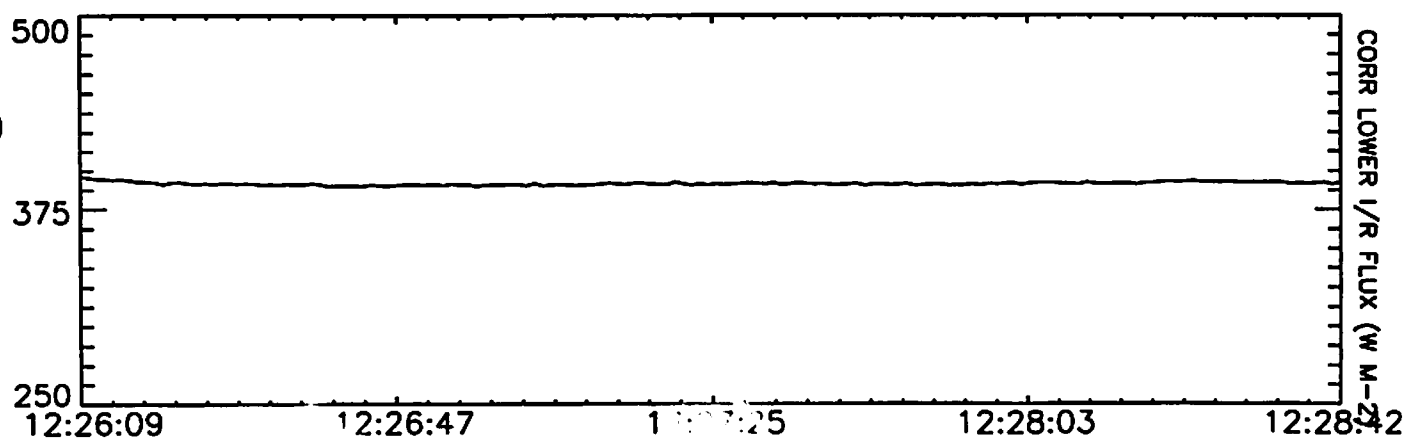
CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021  
No. of obs 154  
Mean 271.261  
Standard dev 1.50057  
Max value 275.135  
Min value 268.856



CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024  
No. of obs 154  
Mean 391.791  
Standard dev 0.986341  
Max value 396.170  
Min value 390.109



1 second averages

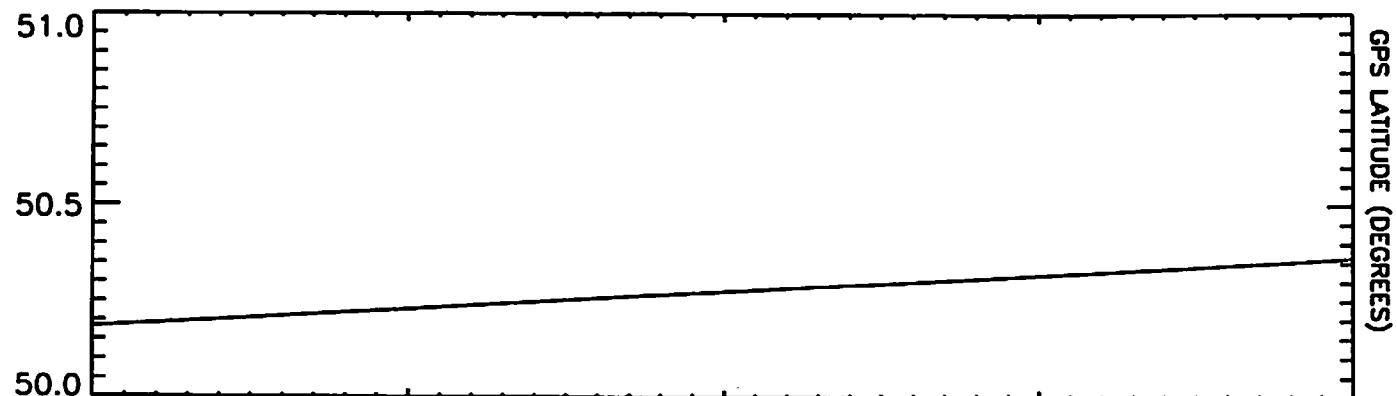
Time (GMT)

A405 16-AUG-95

Run no. R3.2

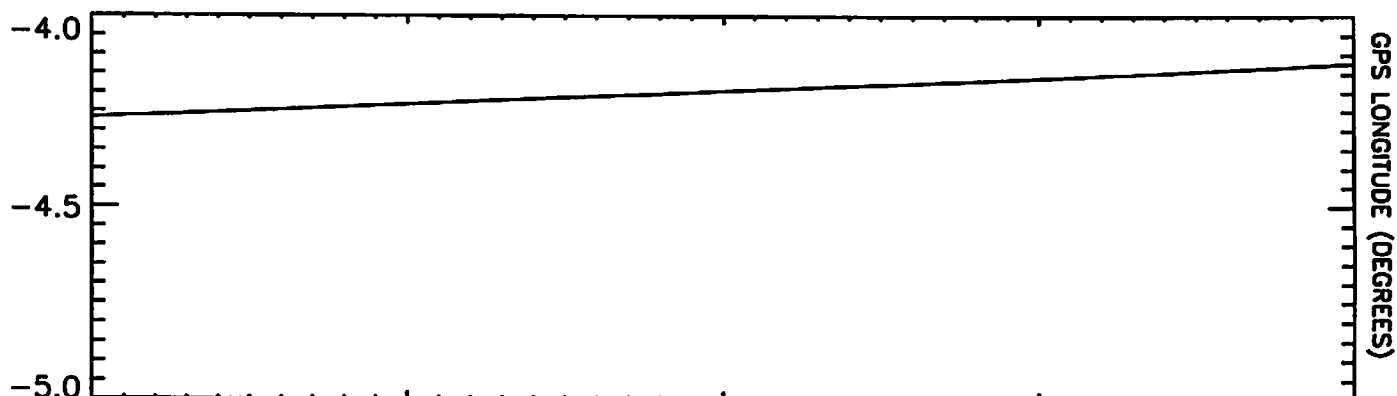
GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 228  
Mean 50.2746  
Standard dev 5.241588e-02  
Max value 50.3629  
Min value 50.1829



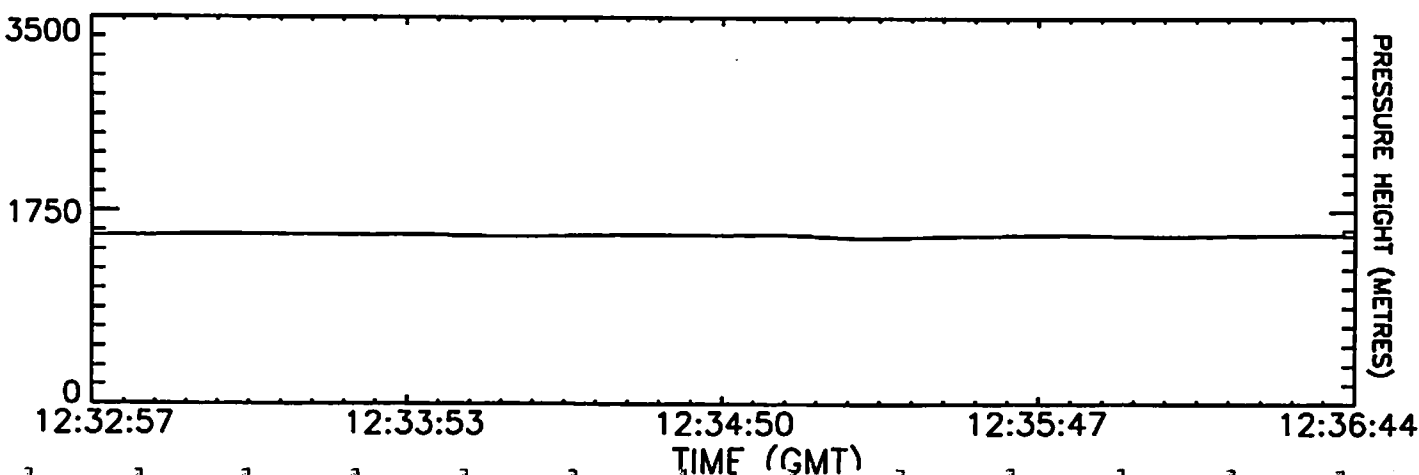
GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 228  
Mean -4.19607  
Standard dev 4.145050e-02  
Max value -4.12254  
Min value -4.26680



PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 228  
Mean 1531.99  
Standard dev 6.36973  
Max value 1545.56  
Min value 1515.91



1 second averages

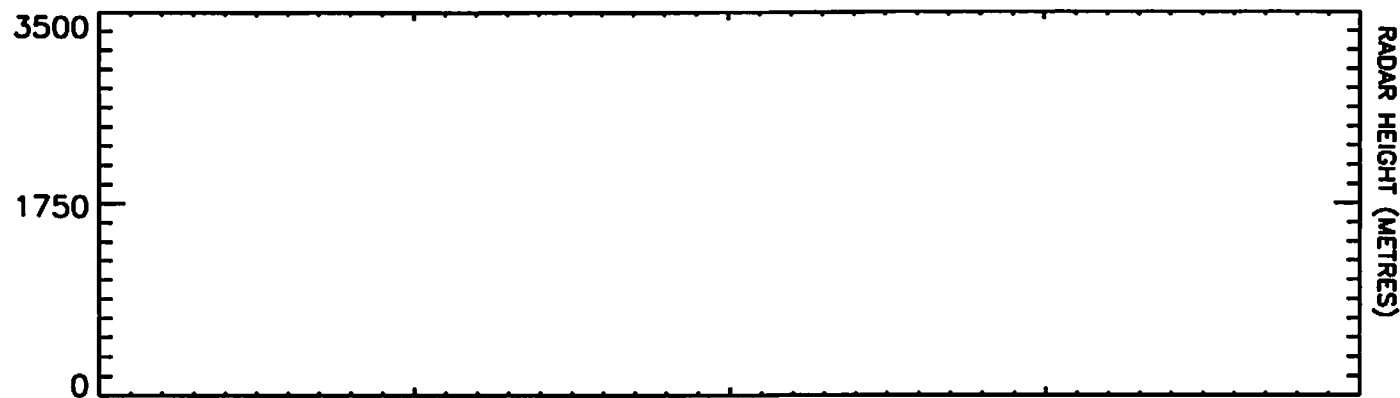


A405 16-AUG-95

Run no. R3.2

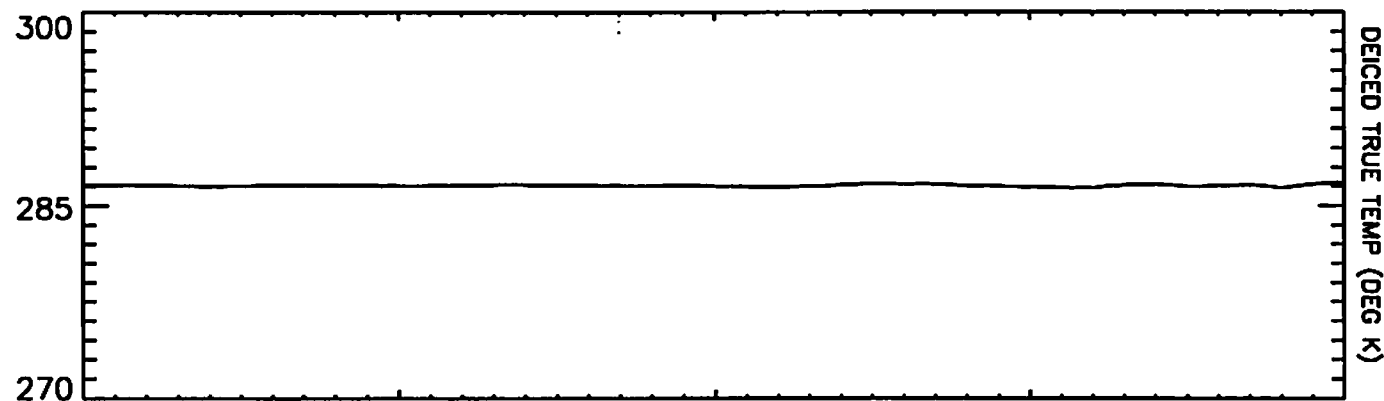
RADAR HEIGHT (METRES)

Parameter no. 575  
No. of obs 228  
Mean 0.000000  
Standard dev 0.000000  
Max value 0.000000  
Min value 0.000000



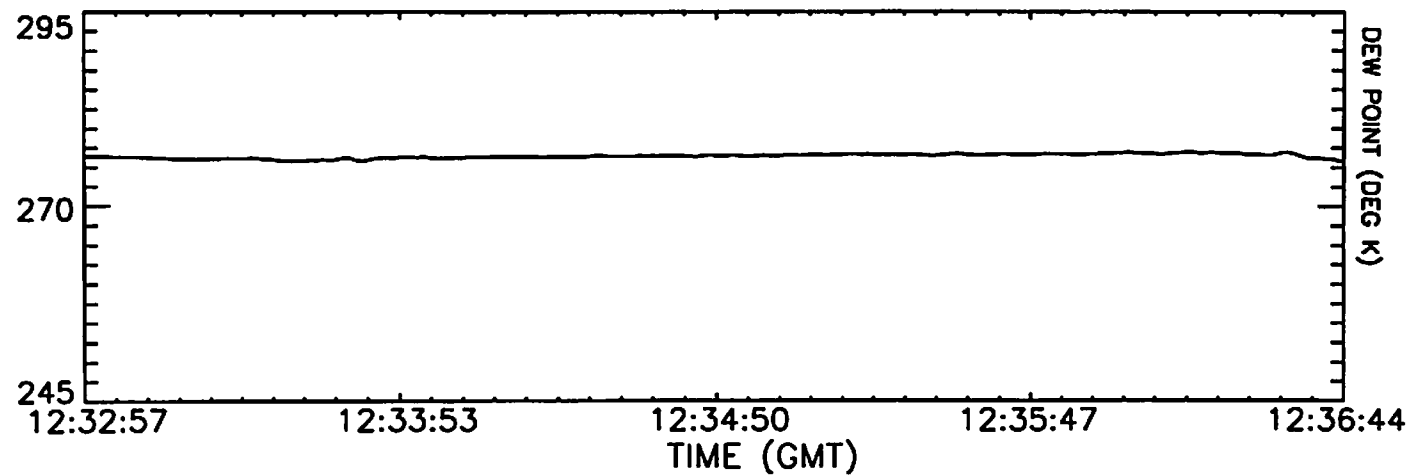
DEICED TRUE TEMP (DEG K)

Parameter no. 520  
No. of obs 228  
Mean 286.565  
Standard dev 7.726625e-02  
Max value 286.813  
Min value 286.355



DEW POINT (DEG K)

Parameter no. 529  
No. of obs 228  
Mean 276.469  
Standard dev 0.271499  
Max value 277.006  
Min value 275.806



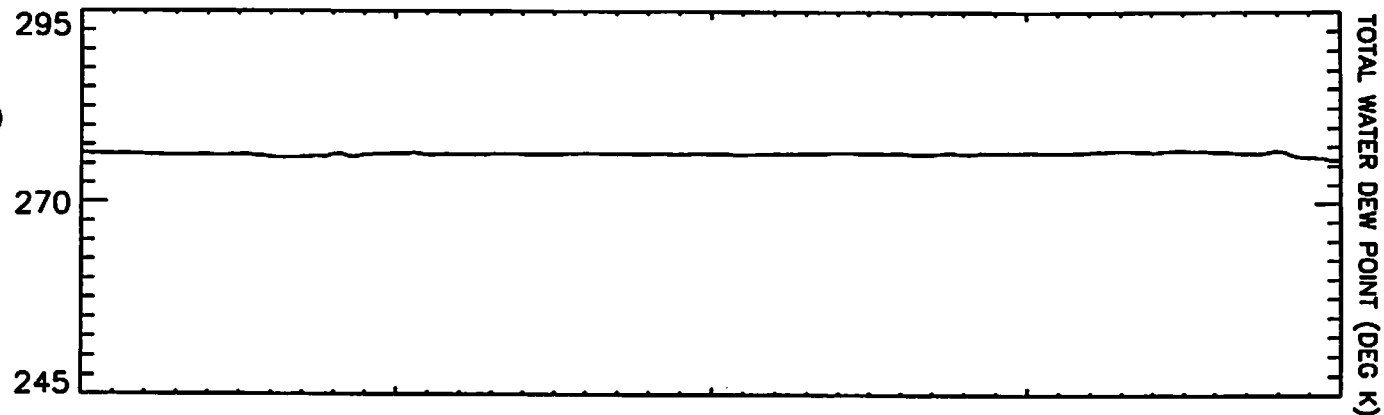
1 second averages

A405 16-AUG-95

Run no. R3.2

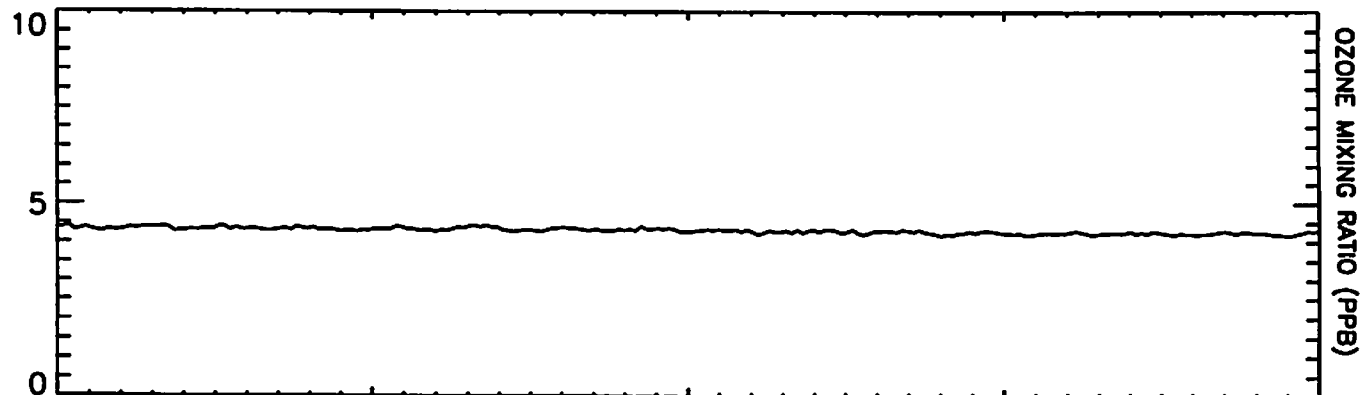
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 228  
Mean 276.490  
Standard dev 0.235076  
Max value 277.007  
Min value 275.728



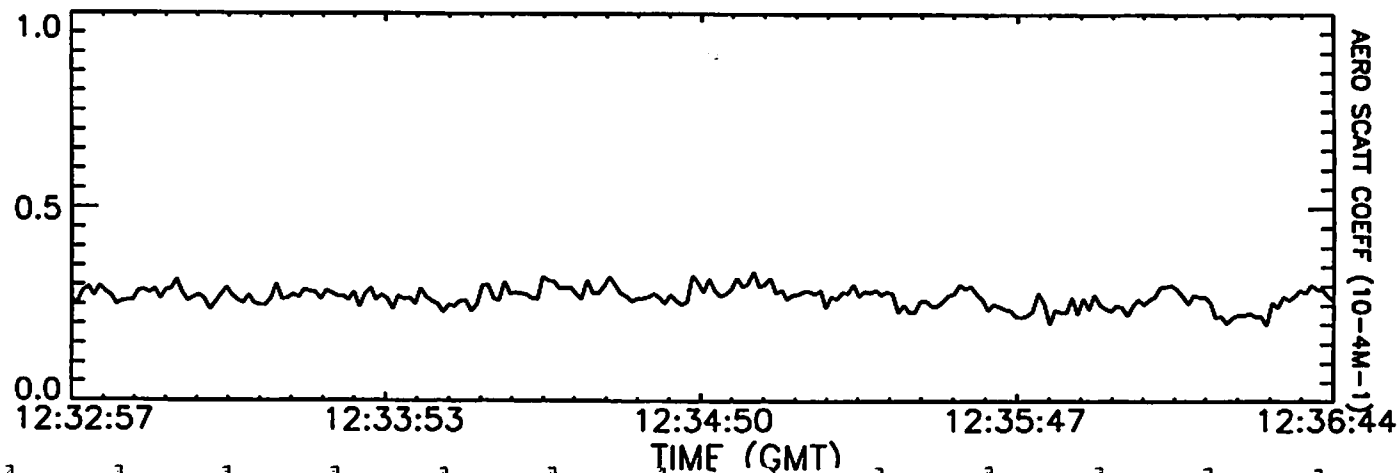
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 228  
Mean 4.30027  
Standard dev 5.622723e-02  
Max value 4.43074  
Min value 4.17689



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 228  
Mean 0.269394  
Standard dev 2.462385e-02  
Max value 0.337911  
Min value 0.198757



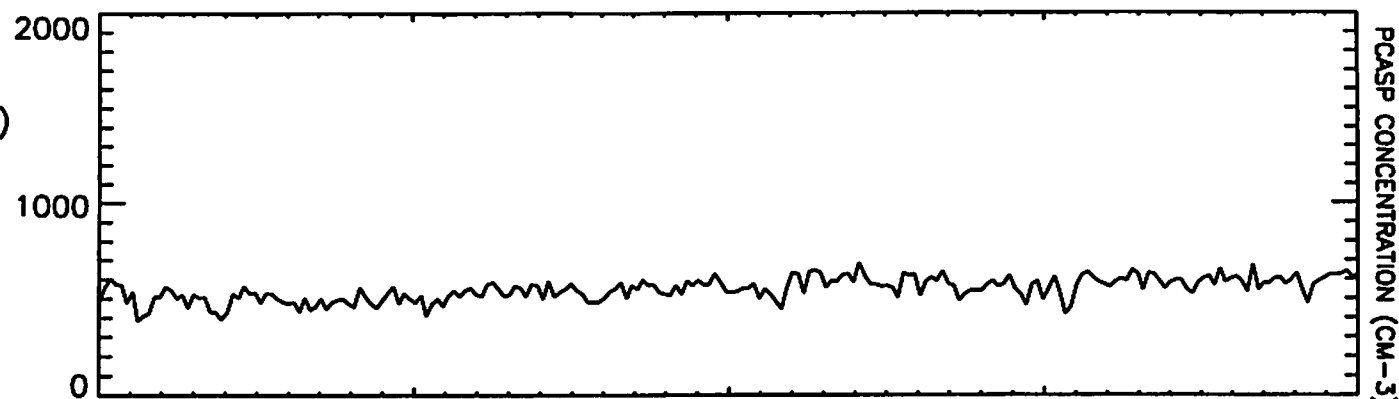
1 second averages

A405 16-AUG-95

Run no. R3.2

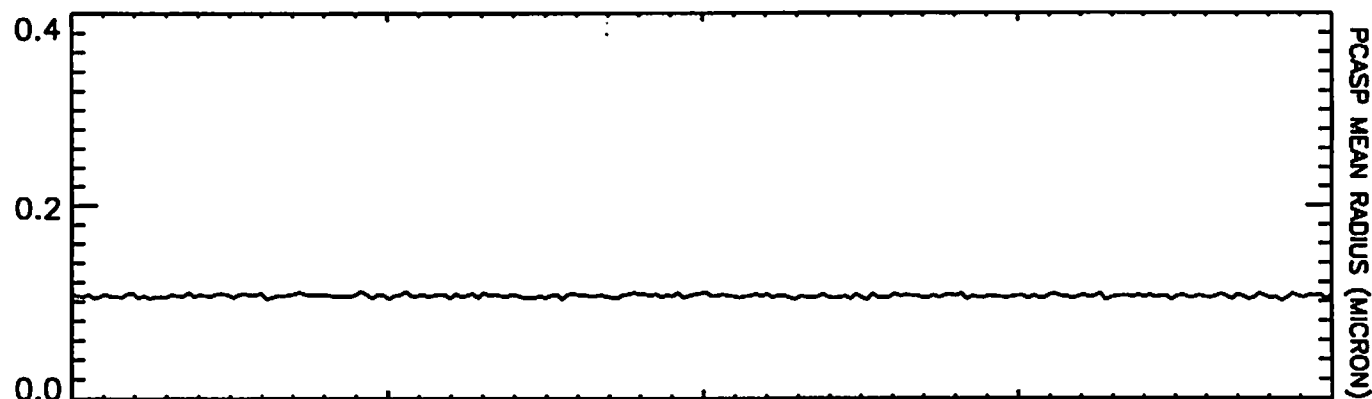
PCASP CONCENTRATION (CM-3)

Parameter no. 919  
No. of obs 228  
Mean 546.038  
Standard dev 57.8792  
Max value 683.485  
Min value 384.713



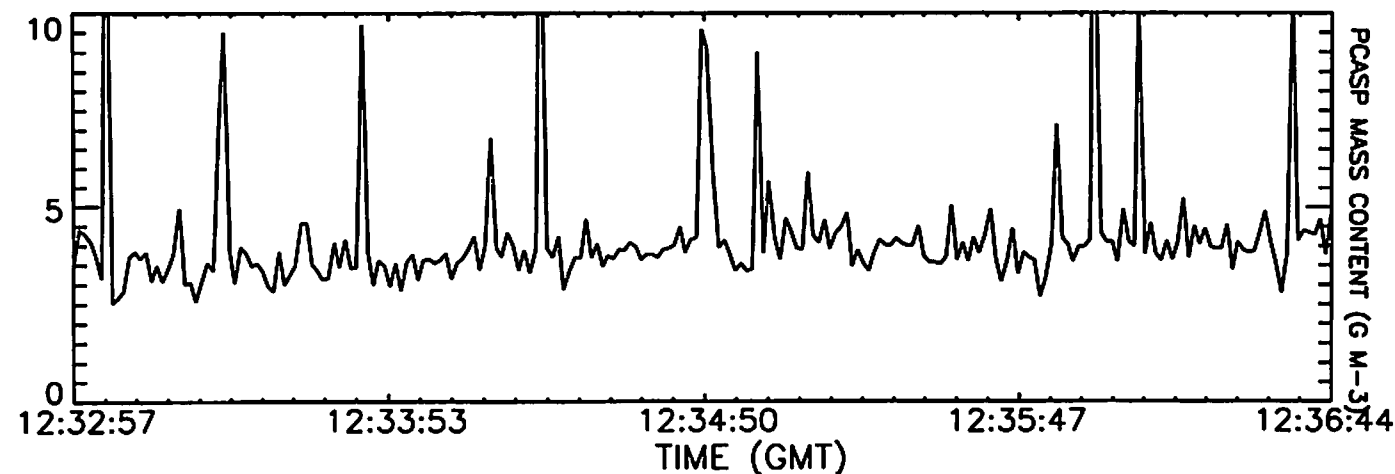
PCASP MEAN RADIUS (MICRON)

Parameter no. 920  
No. of obs 228  
Mean 0.105238  
Standard dev 1.707863e-03  
Max value 0.109842  
Min value 0.100469



PCASP MASS CONTENT (G M-3)

Parameter no. 921  
No. of obs 228  
Mean 4.19882  
Standard dev 1.69454  
Max value 14.9431  
Min value 2.53694



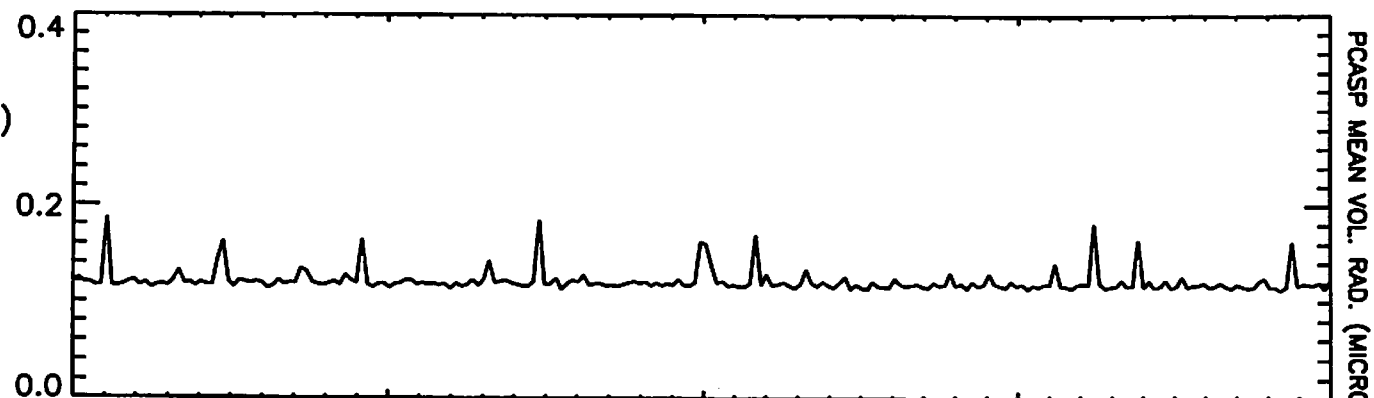
1 second averages

A405 16-AUG-95

Run no. R3.2

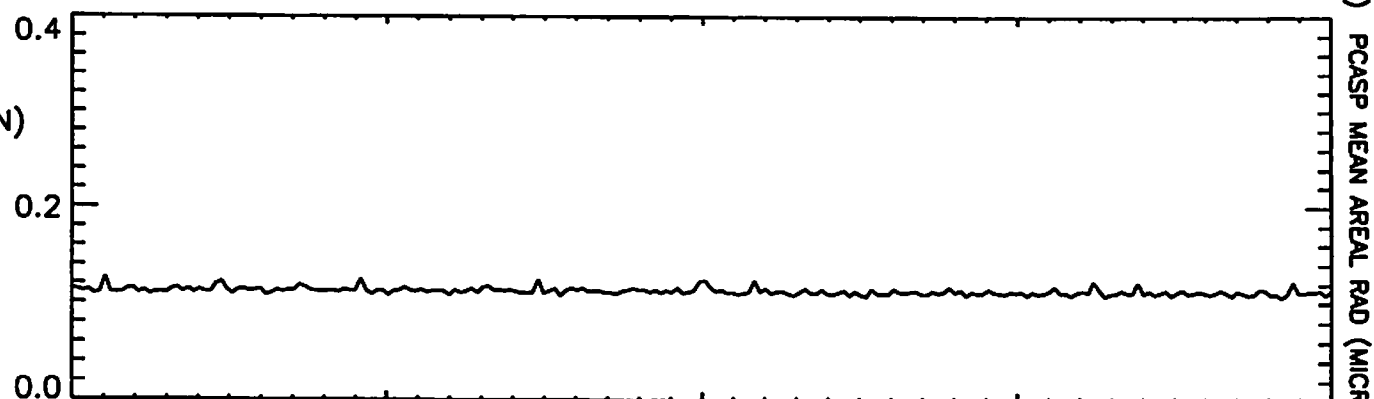
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 228  
Mean 0.121296  
Standard dev  $1.155356e-02$   
Max value 0.186559  
Min value 0.112046



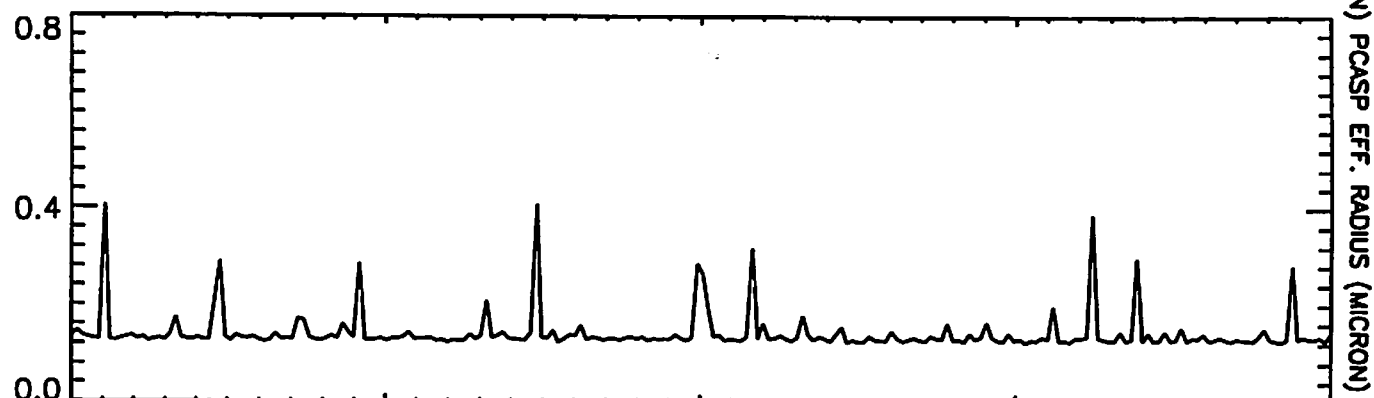
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 228  
Mean 0.112198  
Standard dev  $3.179154e-03$   
Max value 0.126228  
Min value 0.106187



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 228  
Mean 0.143803  
Standard dev  $4.214247e-02$   
Max value 0.408962  
Min value 0.124091



1 second averages

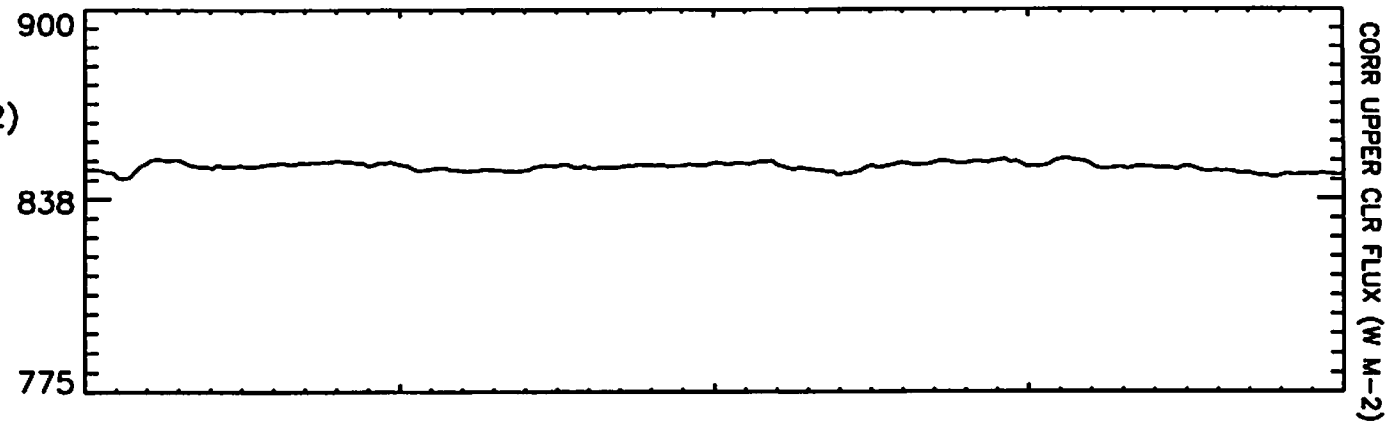
TIME (GMT)

A405 16-AUG-95

Run no. R3.2

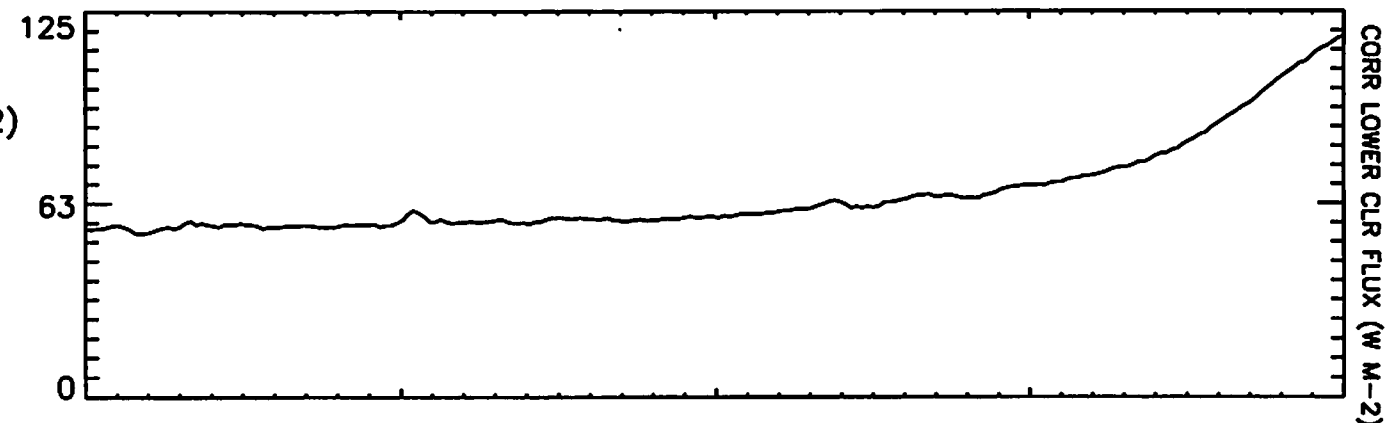
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 228  
Mean 847.990  
Standard dev 1.41726  
Max value 850.769  
Min value 844.275



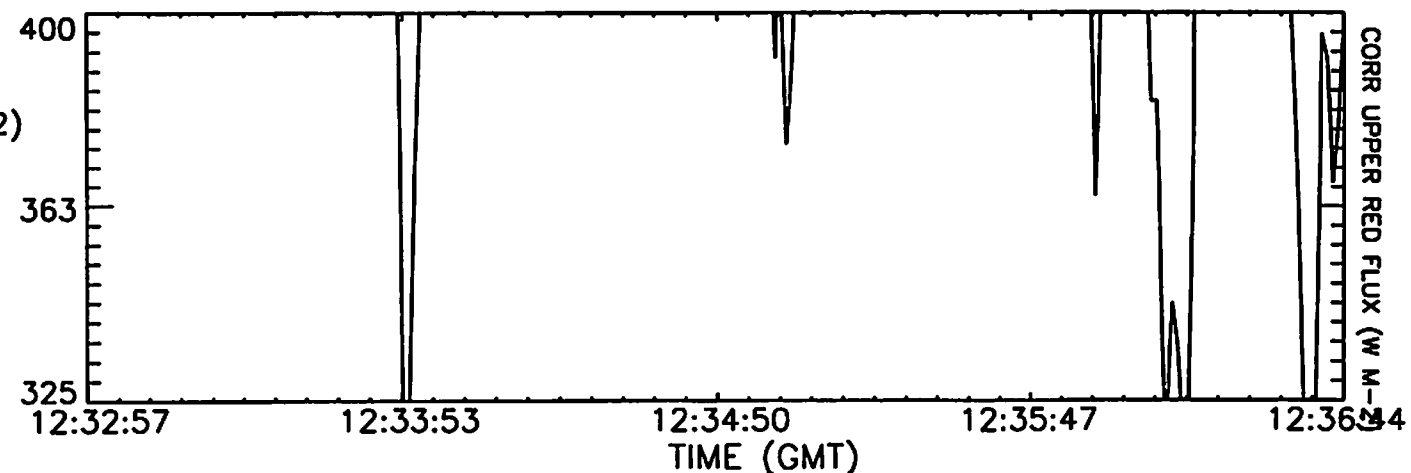
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 228  
Mean 65.4459  
Standard dev 15.0080  
Max value 117.001  
Min value 52.8073



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 228  
Mean 412.882  
Standard dev 22.6873  
Max value 422.861  
Min value 317.344



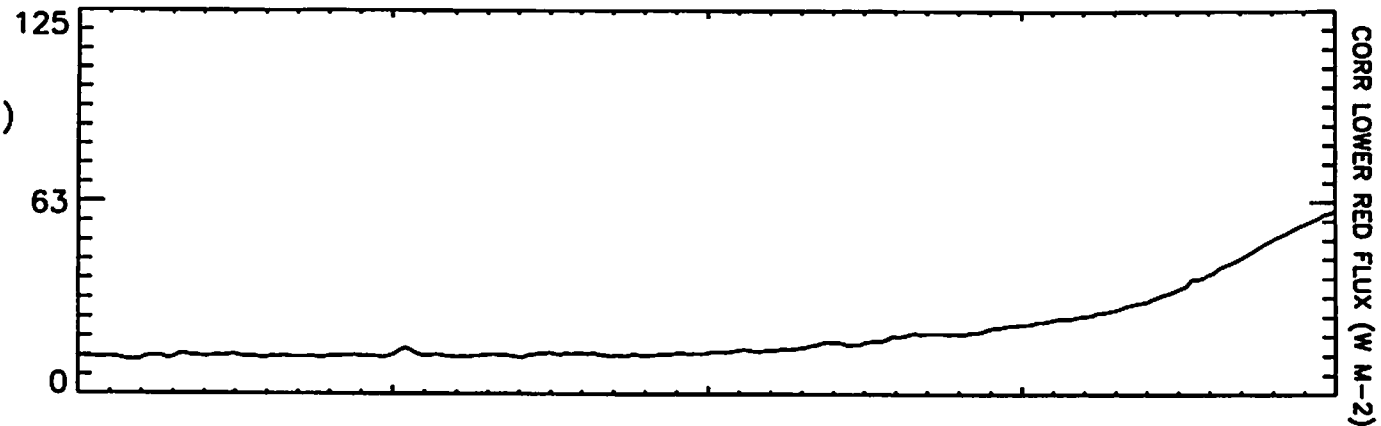
1 second averages

A405 16-AUG-95

Run no. R3.2

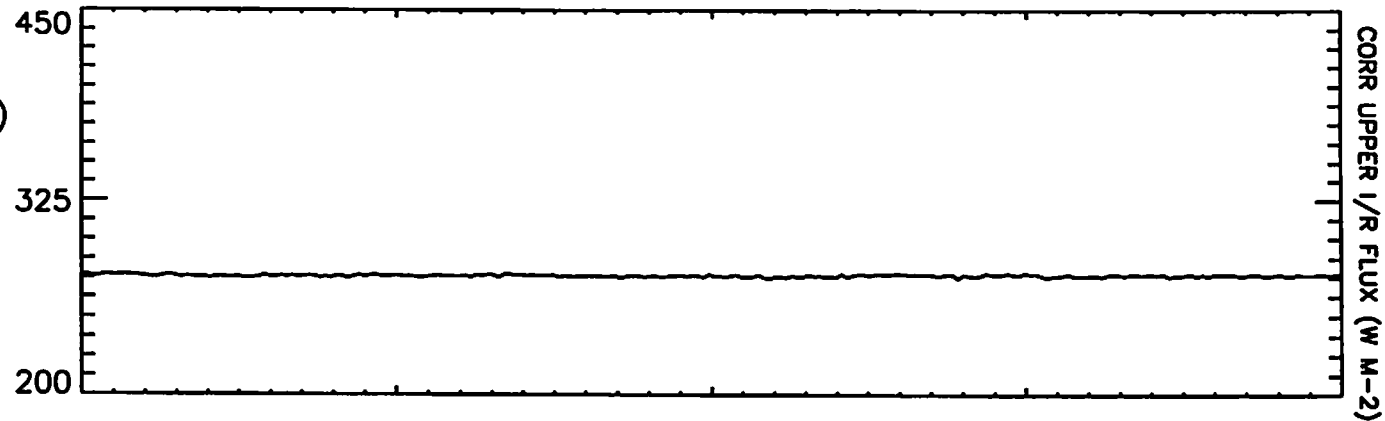
CORR LOWER RED FLUX (W M-2)

Parameter no. 1023  
No. of obs 228  
Mean 20.0336  
Standard dev 11.9121  
Max value 59.6376  
Min value 11.1806



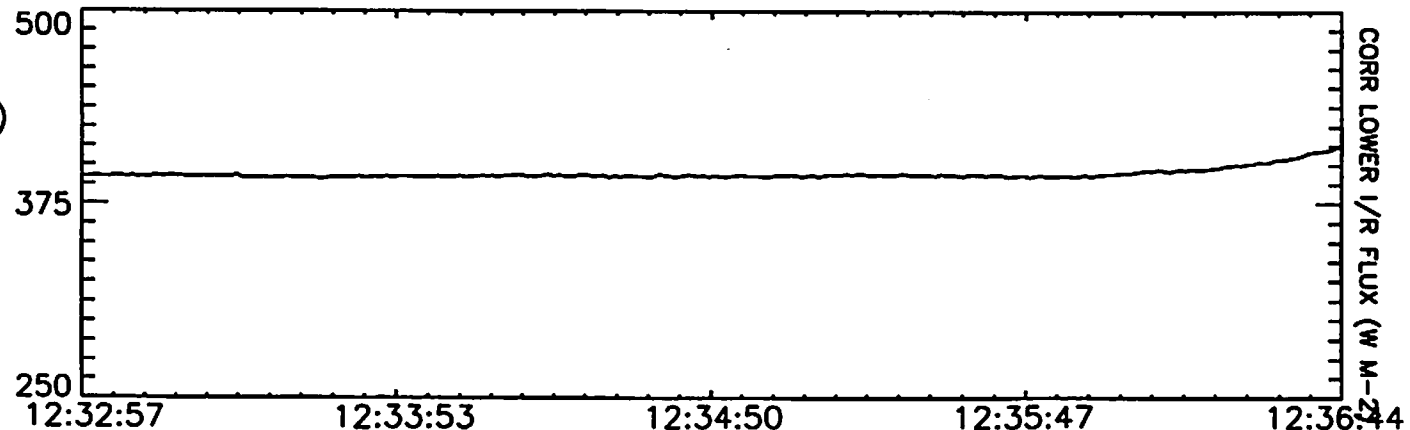
CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021  
No. of obs 228  
Mean 276.127  
Standard dev 0.717827  
Max value 277.942  
Min value 274.260



CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024  
No. of obs 228  
Mean 394.232  
Standard dev 3.90245  
Max value 412.212  
Min value 391.509



1 second average

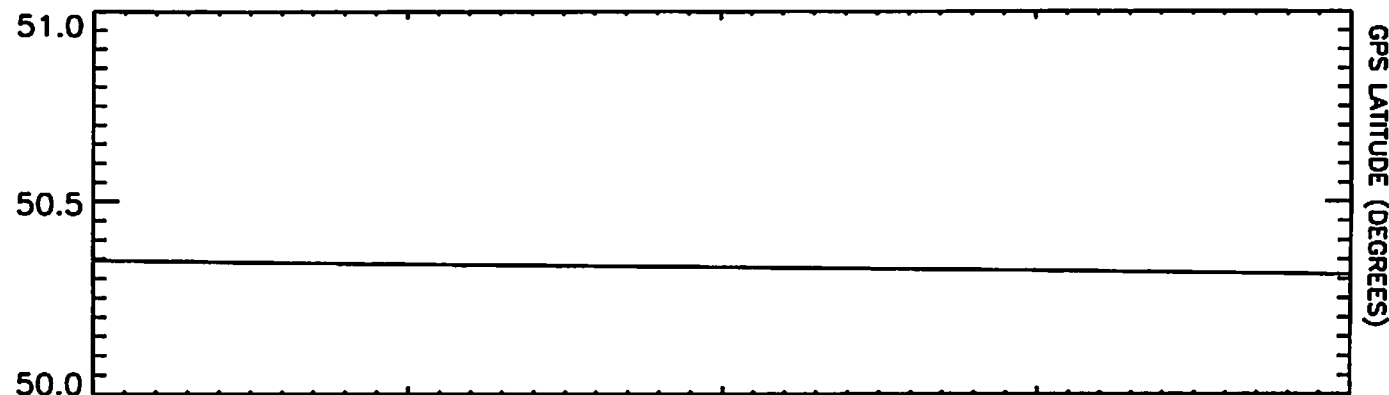
TIME (GMT)

A405 16-AUG-95

Run no. R3.3

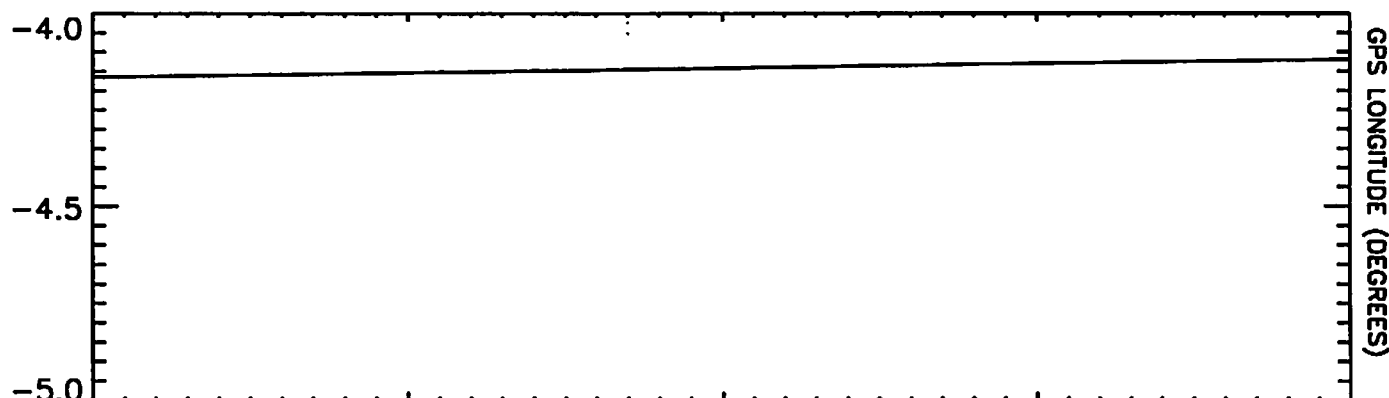
GPS LATITUDE (DEGREES)

Parameter no. 580  
No. of obs 52  
Mean 50.3291  
Standard dev 1.043552e-02  
Max value 50.3466  
Min value 50.3108



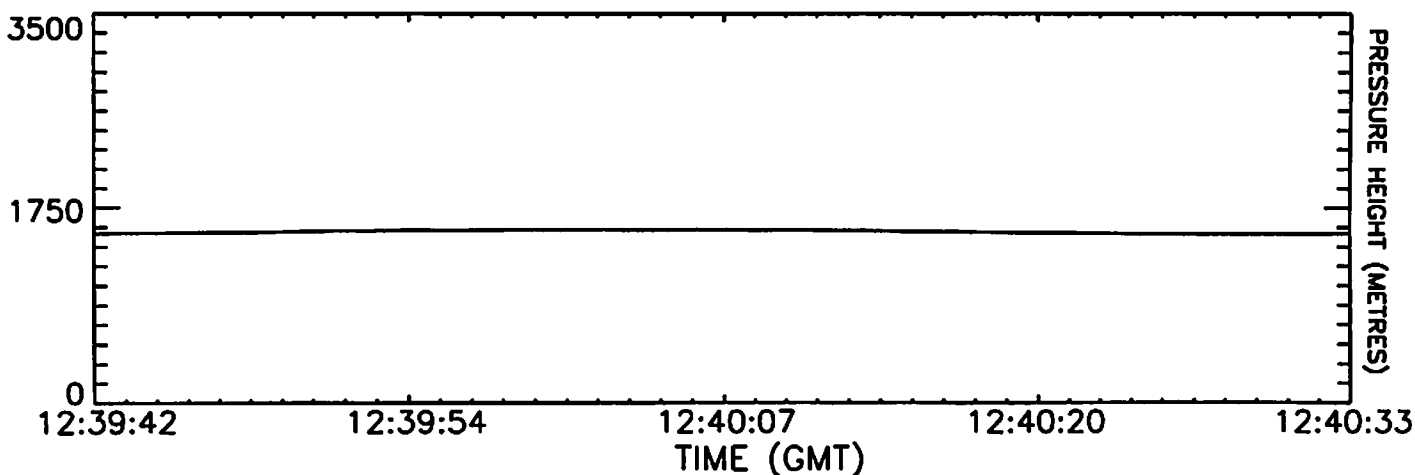
GPS LONGITUDE (DEGREES)

Parameter no. 581  
No. of obs 52  
Mean -4.14194  
Standard dev 1.376932e-02  
Max value -4.11948  
Min value -4.16492



PRESSURE HEIGHT (METRES)

Parameter no. 578  
No. of obs 52  
Mean 1538.45  
Standard dev 15.0262  
Max value 1558.48  
Min value 1516.77



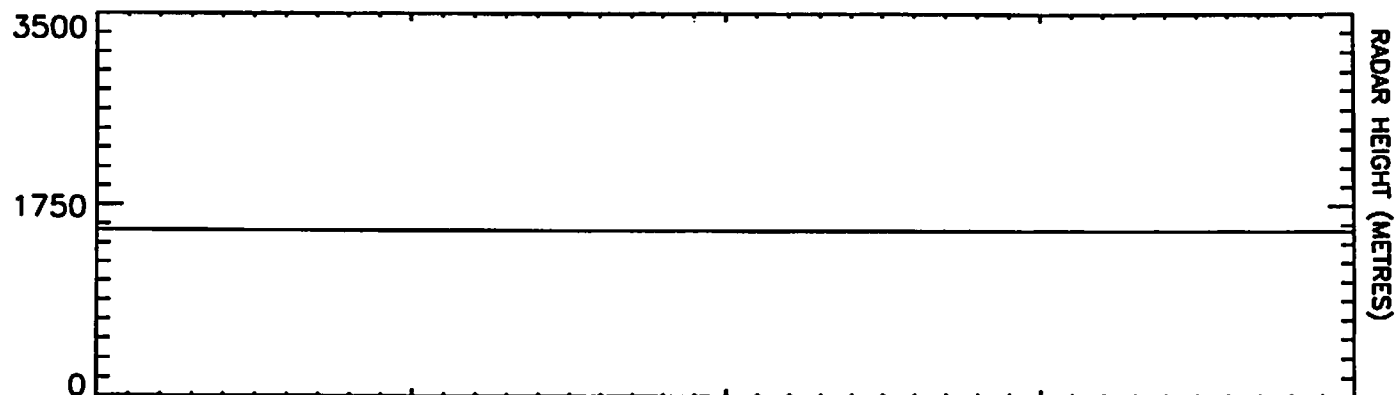
1 second averages

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Run no. R3.3

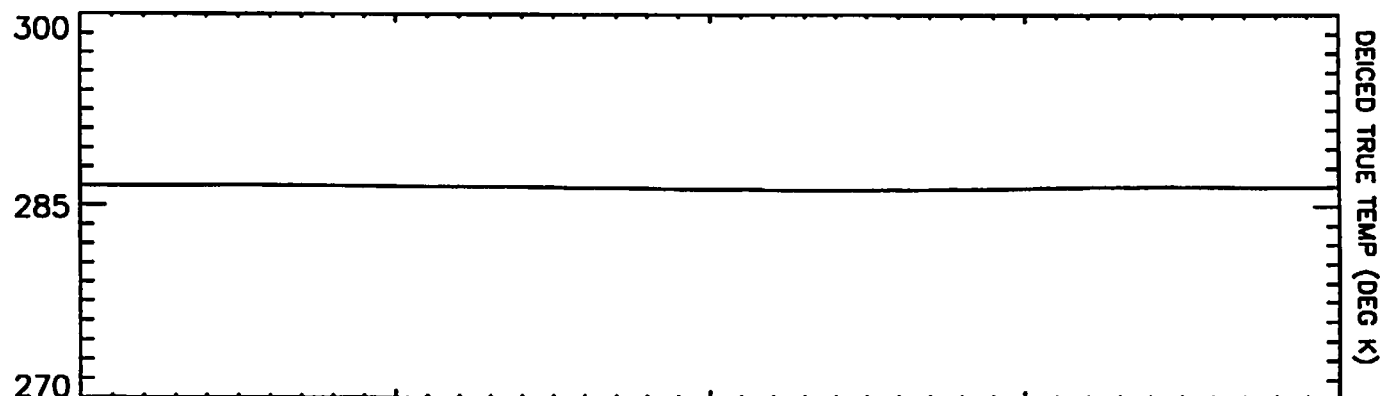
RADAR HEIGHT (METRES)

Parameter no. 575  
No. of obs 52  
Mean 1521.61  
Standard dev 0.000000  
Max value 1521.61  
Min value 1521.61



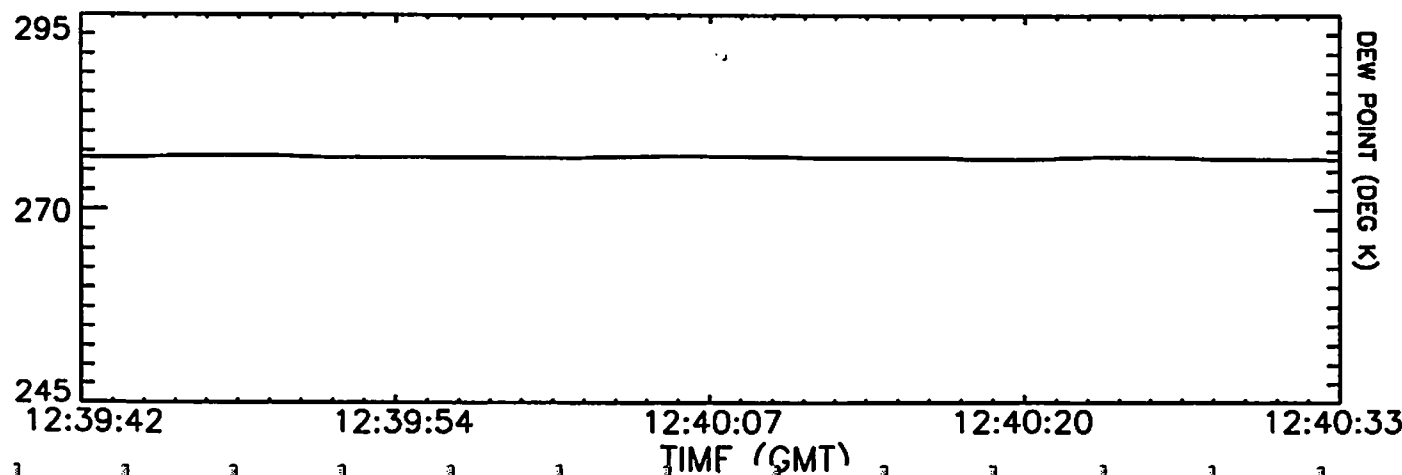
DEICED TRUE TEMP (DEG K)

Parameter no. 520  
No. of obs 52  
Mean 286.433  
Standard dev 9.935673e-02  
Max value 286.585  
Min value 286.245



DEW POINT (DEG K)

Parameter no. 529  
No. of obs 52  
Mean 276.695  
Standard dev 0.105564  
Max value 276.910  
Min value 276.478



1 second averages

TIME (GMT)

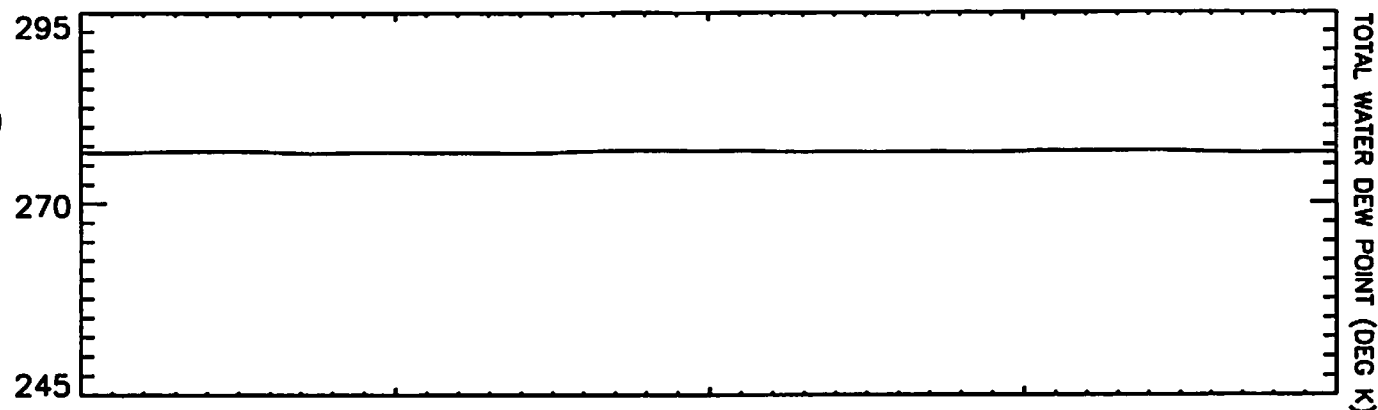


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Run no. R3.3

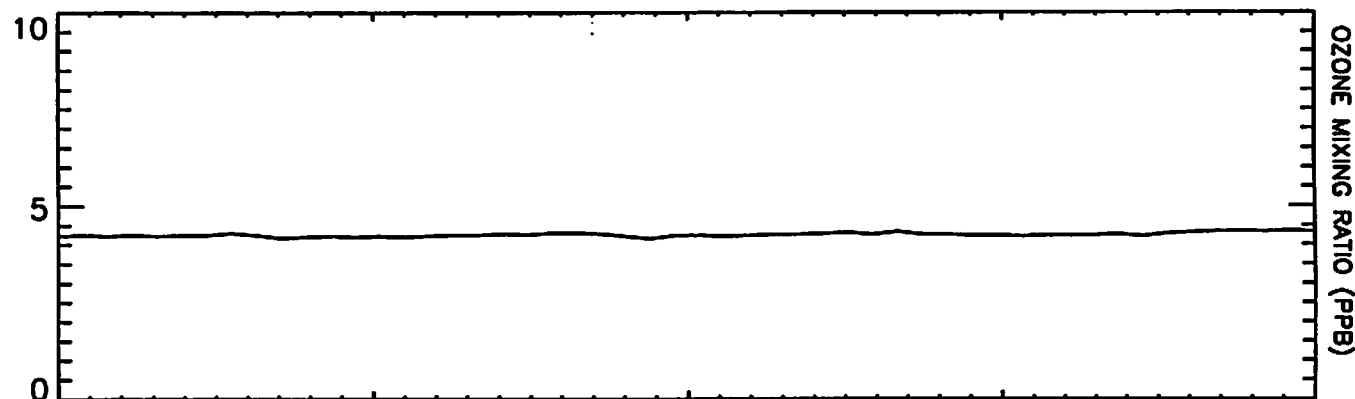
TOTAL WATER DEW POINT (DEG K)

Parameter no. 725  
No. of obs 52  
Mean 276.687  
Standard dev  $9.847645e-02$   
Max value 276.850  
Min value 276.491



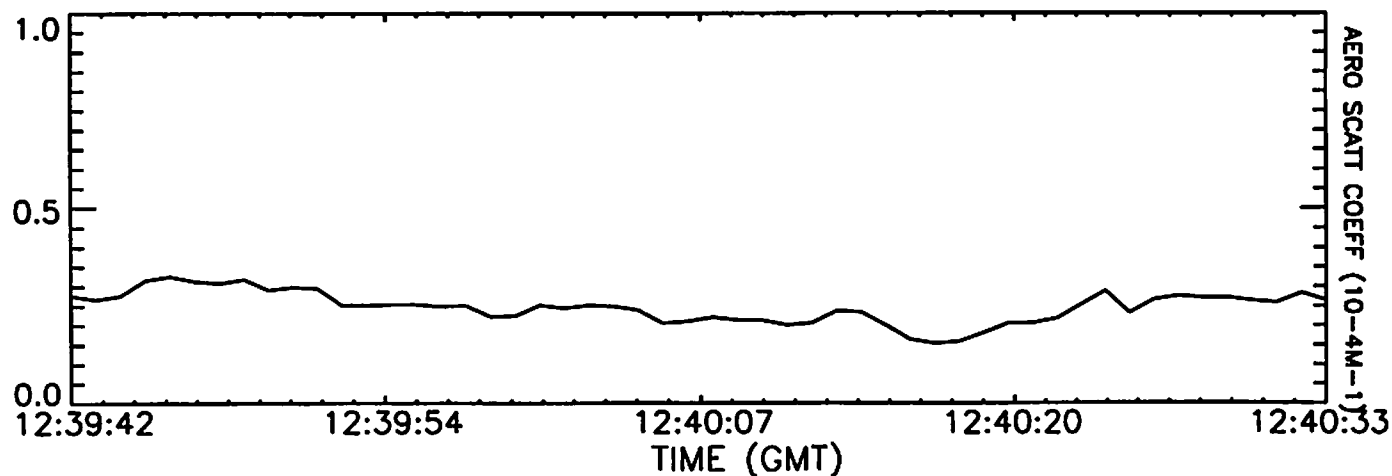
OZONE MIXING RATIO (PPB)

Parameter no. 574  
No. of obs 52  
Mean 4.25310  
Standard dev  $4.331167e-02$   
Max value 4.35234  
Min value 4.14509



AERO SCATT COEFF (10-4M-1)

Parameter no. 657  
No. of obs 52  
Mean 0.247536  
Standard dev  $4.083194e-02$   
Max value 0.325704  
Min value 0.154814



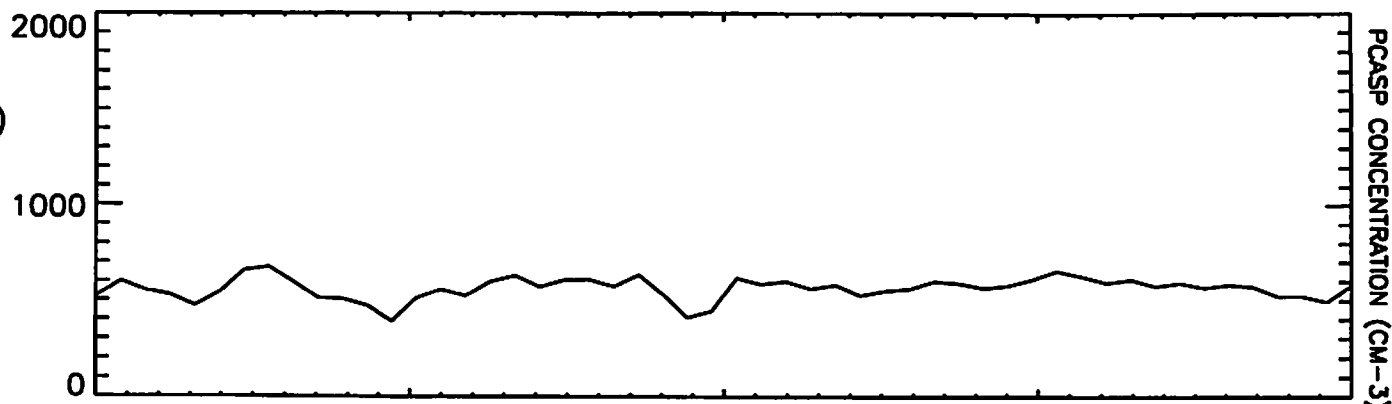
1 second averages

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Run no. R3.3

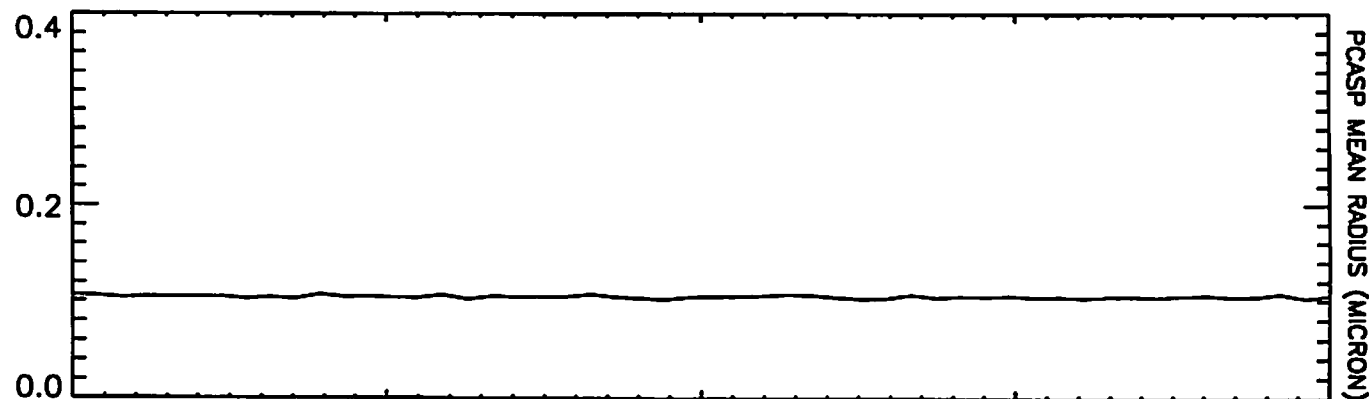
PCASP CONCENTRATION (CM-3)

Parameter no. 919  
No. of obs 52  
Mean 562.188  
Standard dev 58.9927  
Max value 673.169  
Min value 388.291



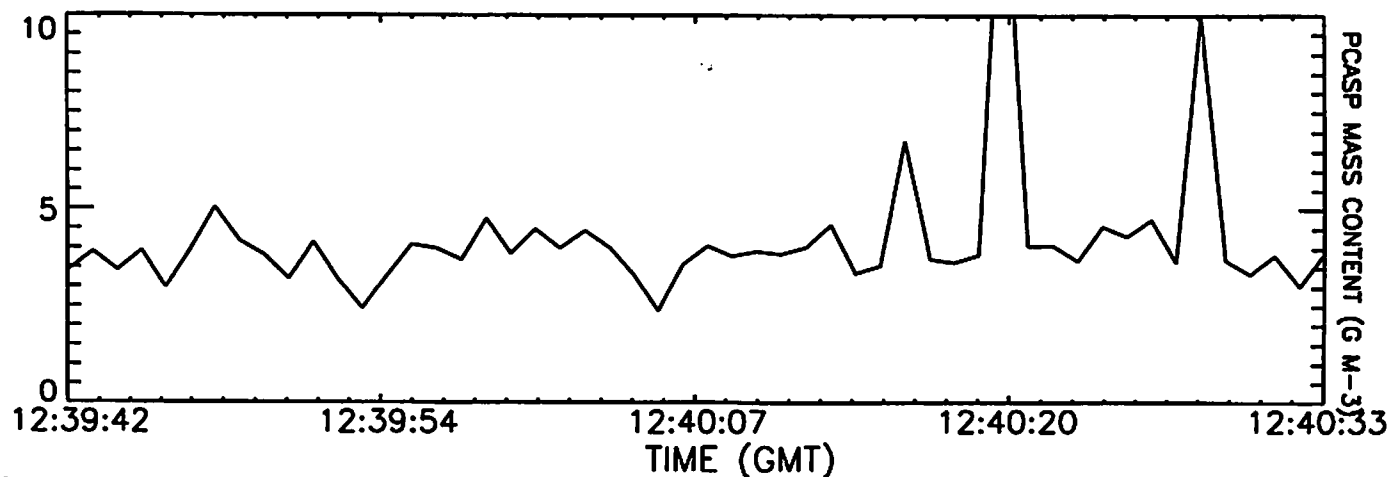
PCASP MEAN RADIUS (MICRON)

Parameter no. 920  
No. of obs 52  
Mean 0.104210  
Standard dev 1.393673e-03  
Max value 0.107543  
Min value 0.101145



PCASP MASS CONTENT (G M-3)

Parameter no. 921  
No. of obs 52  
Mean 4.19501  
Standard dev 1.83684  
Max value 14.7183  
Min value 2.36946



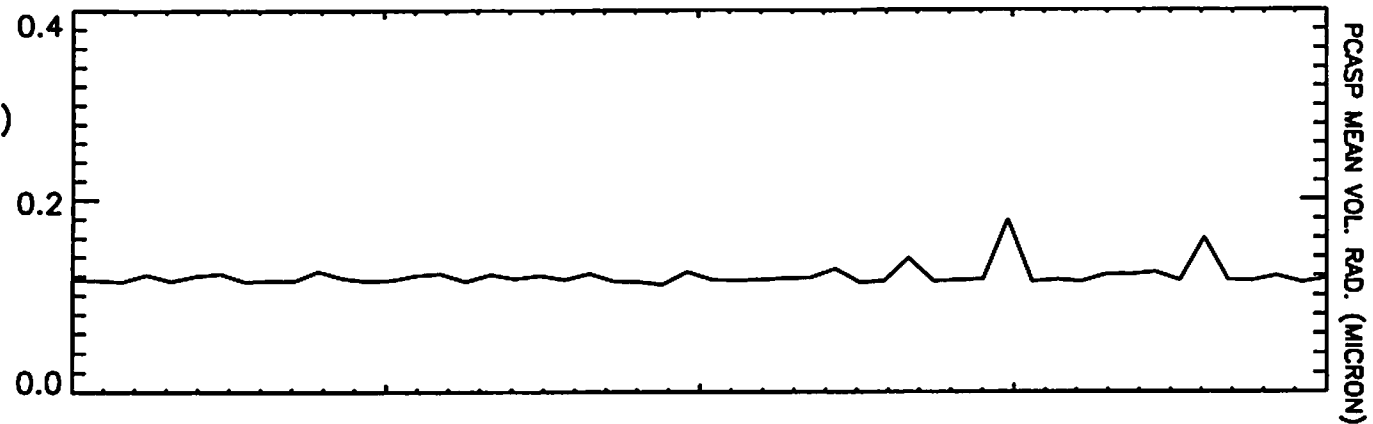
1 second overages

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Run no. R3.3

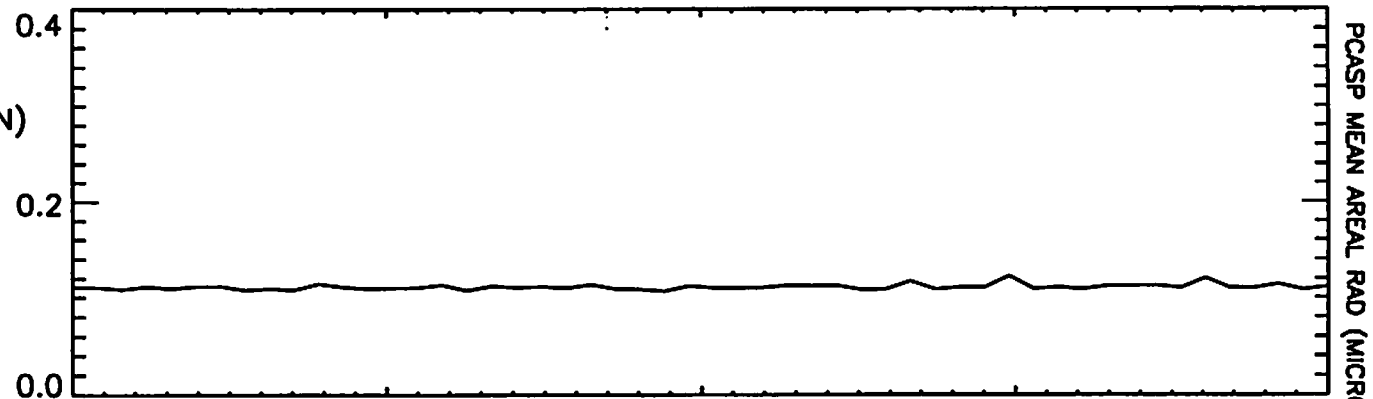
PCASP MEAN VOL. RAD. (MICRON)

Parameter no. 922  
No. of obs 52  
Mean 0.119869  
Standard dev 1.123662e-02  
Max value 0.179180  
Min value 0.111438



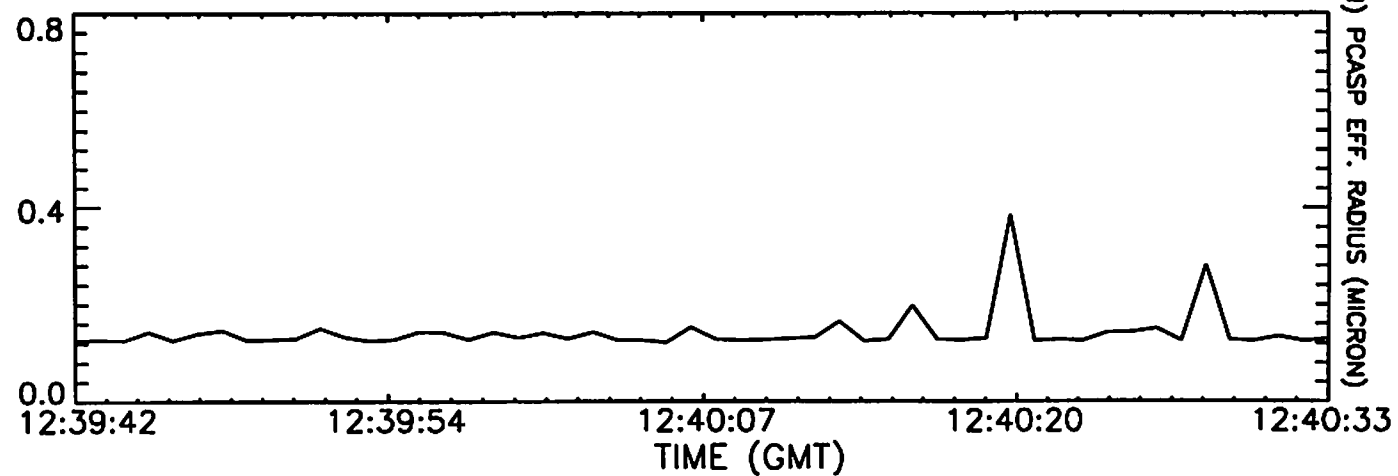
PCASP MEAN AREAL RAD (MICRON)

Parameter no. 923  
No. of obs 52  
Mean 0.110905  
Standard dev 2.838011e-03  
Max value 0.122244  
Min value 0.106278



PCASP EFF. RADIUS (MICRON)

Parameter no. 924  
No. of obs 52  
Mean 0.142048  
Standard dev 4.197121e-02  
Max value 0.384777  
Min value 0.122465



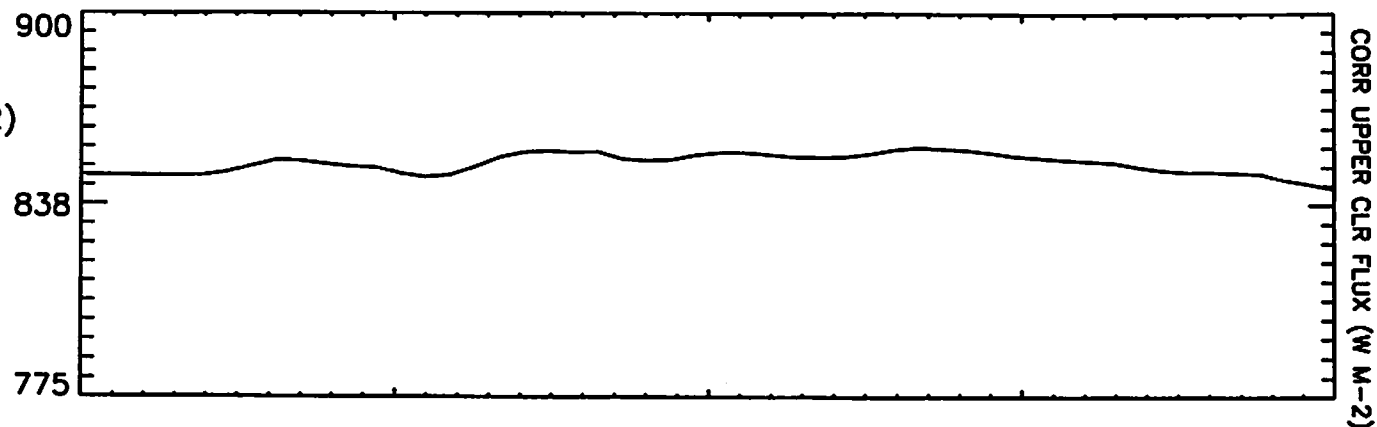
1 second averages

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Run no. R3.3

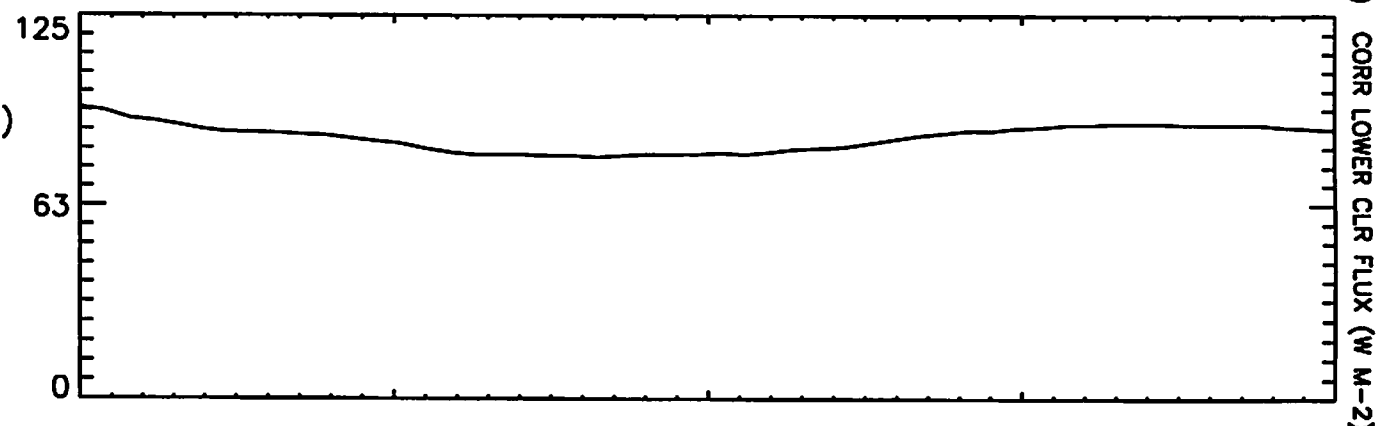
CORR UPPER CLR FLUX (W M-2)

Parameter no. 1019  
No. of obs 52  
Mean 851.011  
Standard dev 3.47607  
Max value 856.444  
Min value 842.866



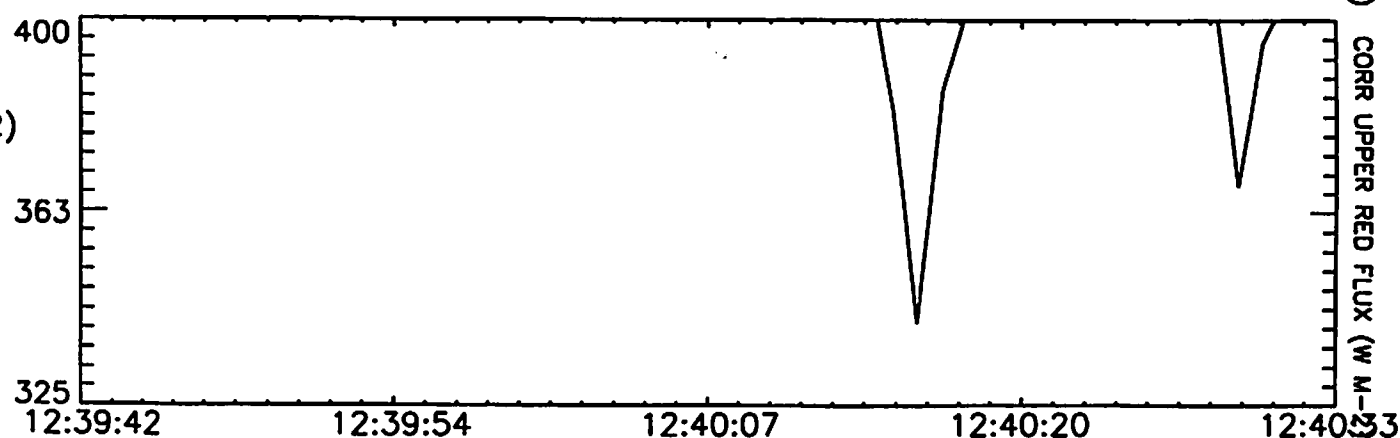
CORR LOWER CLR FLUX (W M-2)

Parameter no. 1022  
No. of obs 52  
Mean 85.0201  
Standard dev 4.42069  
Max value 94.7419  
Min value 78.4918



CORR UPPER RED FLUX (W M-2)

Parameter no. 1020  
No. of obs 52  
Mean 406.547  
Standard dev 12.4150  
Max value 416.237  
Min value 341.144



1 second averages

TIME (GMT)

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Run no. R3.3

CORR LOWER RED FLUX (W M-2)

Parameter no. 1023

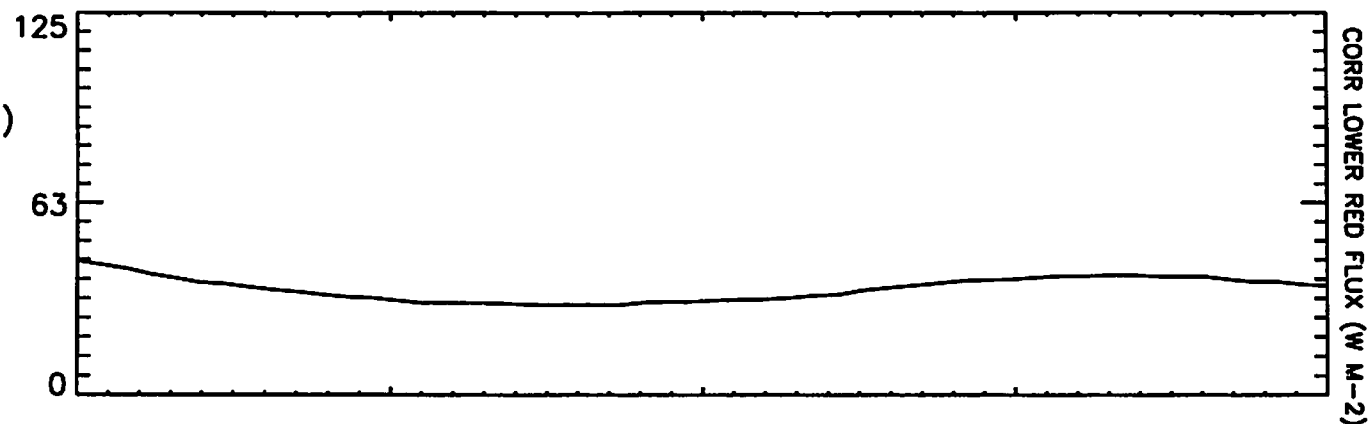
No. of obs 52

Mean 34.3936

Standard dev 3.89426

Max value 43.3744

Min value 29.0802



CORR UPPER I/R FLUX (W M-2)

Parameter no. 1021

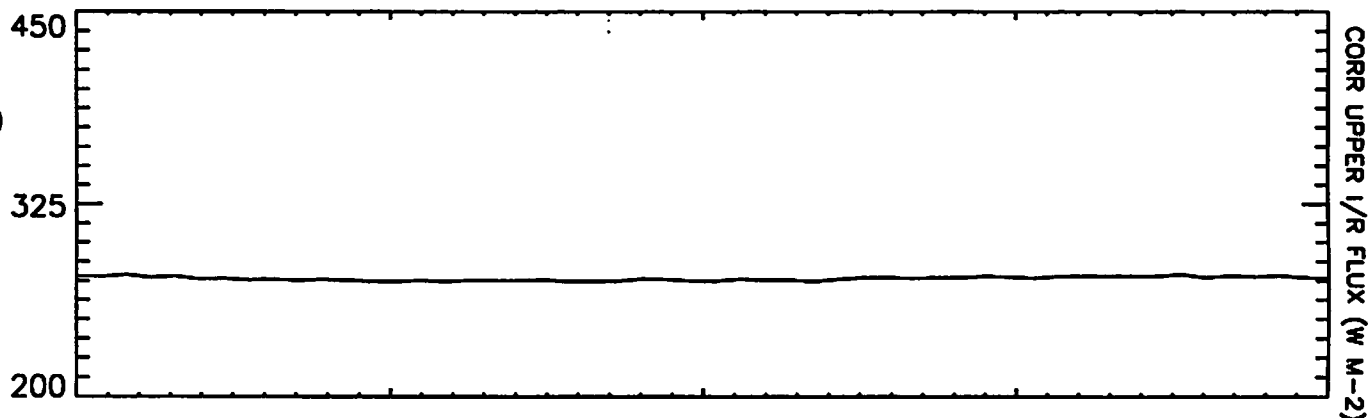
No. of obs 52

Mean 276.387

Standard dev 1.32608

Max value 279.154

Min value 274.410



CORR LOWER I/R FLUX (W M-2)

Parameter no. 1024

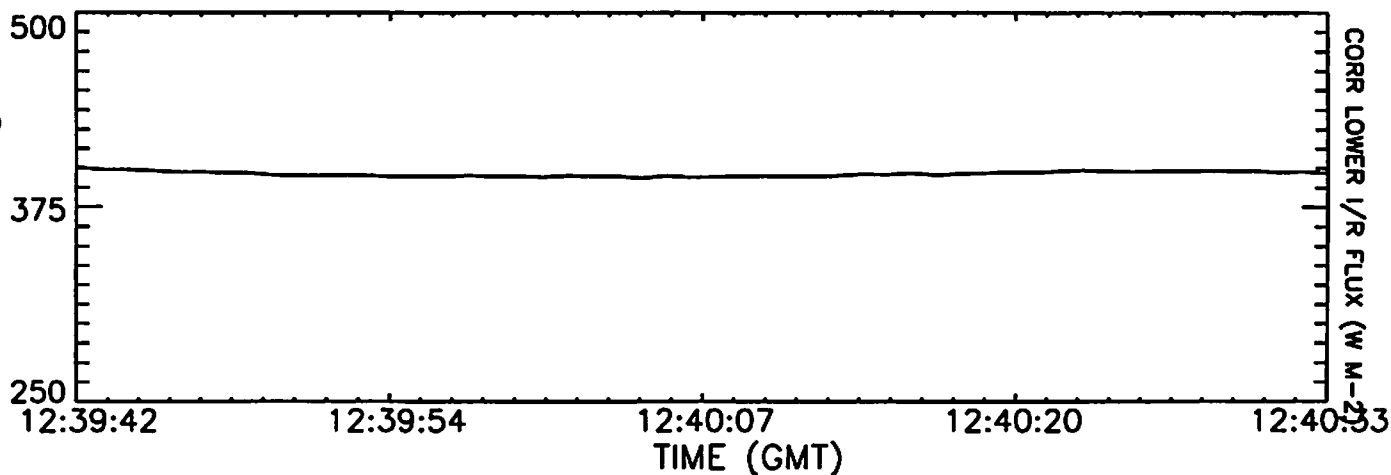
No. of obs 52

Mean 396.470

Standard dev 1.59242

Max value 400.527

Min value 393.705



1 second averages