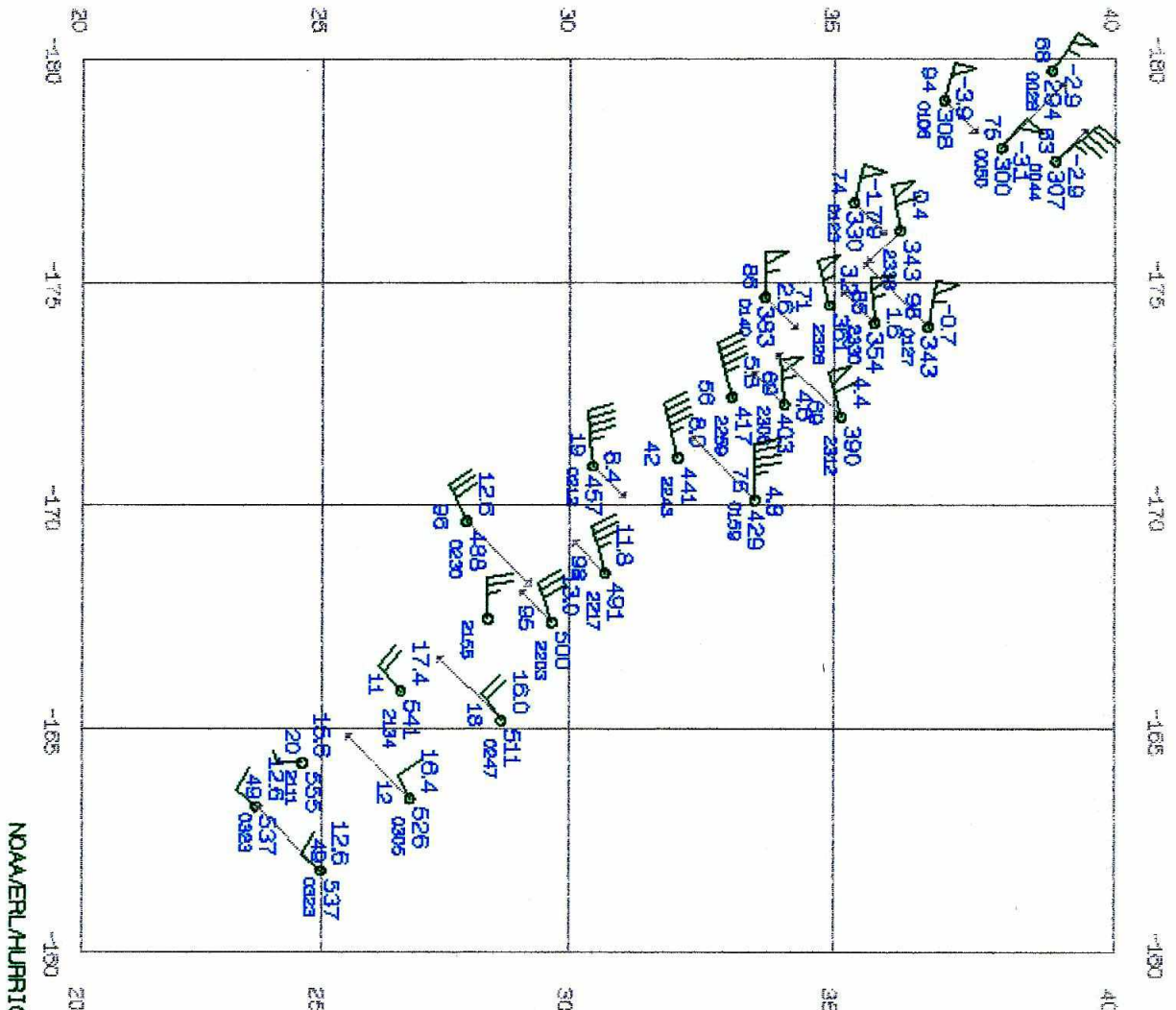


990118I WSA #2

BLOCK IN



WSR HI N49

850 mb

Date: 990118
Time: 19-31 UTC

EARTH RELATIVE
NOAA/ERL/HURRICANE RESEARCH DIVISION

NOAA G-IV

POC: Sean White - 813.833.3275

DEPARTURE

CALL SIGN NOAA49

DATE 18 JAN 99

TAIL NUMBER N49RF

TIME 1900Z

ALTITUDE FL410-450

AIRSPEED Mach 0.72 (450KTAS)

NCEP DROP LOCATIONS indicated by an ASTERISK drop number.

#	LAT(N)/LONG(W) (degrees and minutes)	DIST(NM)	ETE	ETA Date/Zulu Time
	Honolulu (PHNL)	---	---	18/1900 Takeoff time
	22 48/162 37(CANON)	270	0+50	18/1950
1*	24 36/164 20	145	0+22	18/2012
2*	26 36/166 00	145	0+22	18/2034
3*	28 20/167 42	145	0+22	18/2056
4*	30 00/169 25 169 30.5	145	0+22	18/2118
5*	31 30 54/171 20	145	0+22	18/2140
6	33 00/172 52	72	0+11	18/2151
7*	33 25/173 24	36	0+05	18/2156
8	33 50/173 56	36	0+05	18/2201
9	34 40/175 00 175 10.4	72	0+11	18/2212
10*	35 05/175 32 175 17.5	36	0+05	18/2217
11	35 30/176 04	36	0+05	18/2222
12	36 20/177 08	72	0+11	18/2233
13*	36 45/177 40	36	0+05	18/2238
14	37 10/178 12	36	0+05	18/2243
15	38 00/179 16	72	0+11	18/2254
missed 16*	38 25/179 48	36	0+05	18/2259
missed 17*	38 50/179 40E	36	0+05	18/2304
Got it 18	39 40/178 30E	72	0+11	18/2315
19*	40 00/178 00E	36	0+05	18/2320
20	39 40/178 30E	36	0+08	18/2328
21*	39 15/179 08E	36	0+04	18/2332
22	38 50/179 40E	36	0+04	18/2336
23	38 00/179 16	72	0+10	18/2346
24*	37 35/178 44	36	0+04	18/2350
25	36 45/177 40	36	0+04	18/2354
26	36 20/177 08	72	0+10	19/0004
27*	35 55/176 36	36	0+04	19/0008
28	35 30/176 04	36	0+04	19/0012
29	34 40/175 00	72	0+10	19/0022
30*	34 15/174 28	36	0+04	19/0026

31	33 50/173 56	36	0+04	19/0030
32	33 00/172 52	72	0+10	19/0040
33*	32 35/172 20	36	0+04	19/0044
34*	31 00/170 30	145	0+18	19/0102
35*	29 10/168 30	145	0+18	19/0120
36*	27 20/166 50	145	0+18	19/0138
37*	25 30/165 00	145	0+18	19/0156
38*	23 40/163 20	145	0+18	19/0214

22 48/162 37(CANON)	145	0+18	19/0232
Honolulu	270	0+41	19/0313

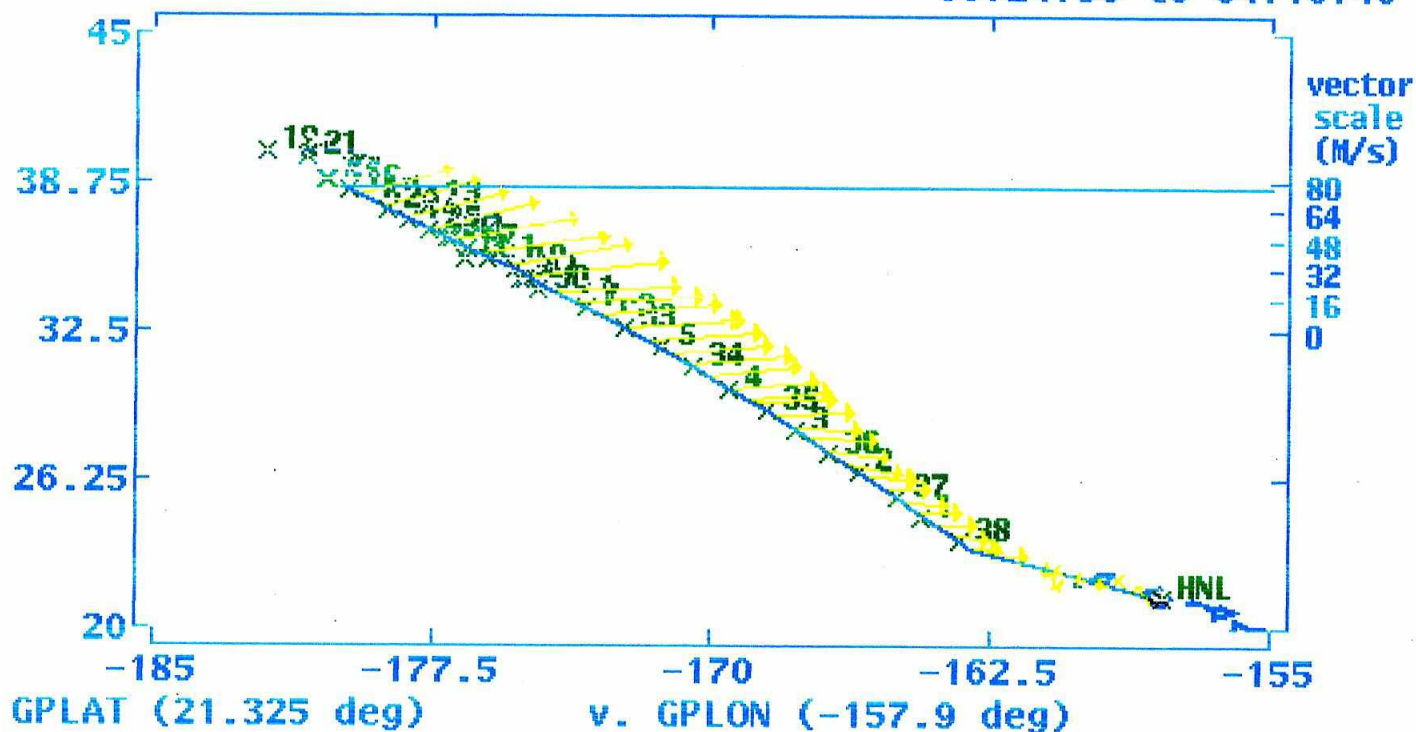
Cumulative	3395	8+13	
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1PM 7+09 7700
 HCS 7+15
 19 DEEP PTS
 ① 23 55 165 30
 24 50 167 40
 25 40 170 00
 26 30 172 20
 ⑤ 27 10 174 50
 27 50 177 10
 28 30 179 45
 29 00 178 00E
 30 40 178 50E
 ⑩ 32 10 179 55E
 34 00 179 00W
 32 50 177 00
 31 40 175 00
 30 30 173 00
 29 20 171 05
 ⑬ 28 00 169 20
 26 40 167 30
 25 20 165 40
 ⑭ 24 00 164 00
 CANON

1/19 FLIGHT

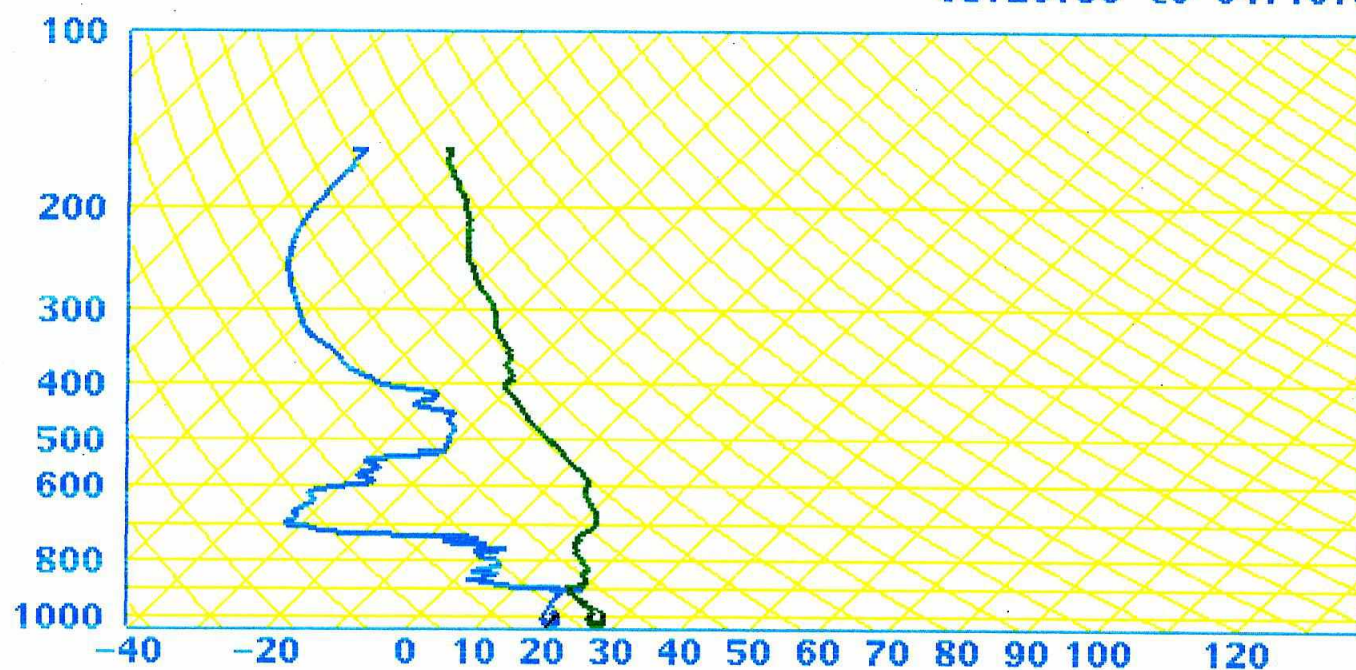
'Hawaii' (winds@k2) Proj. 425 Flt 01/19/99 04:16:46

00:24:50 to 04:16:46



'Std-Skew-T' (winds@k2) Proj. 425 Flt 01/19/99 04:16:50

03:20:50 to 04:16:50



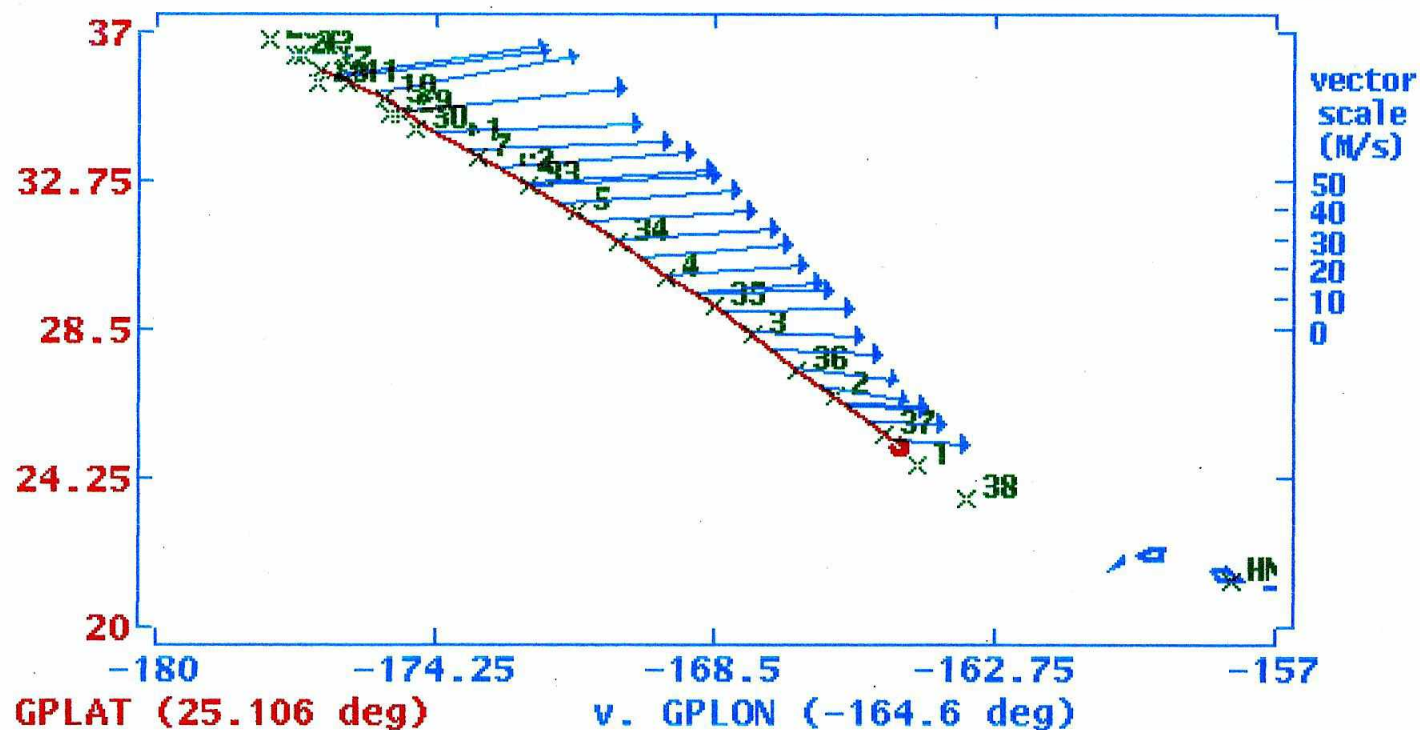
DPXC (18.008 C)

v. PSXC (1015.5 mbar)

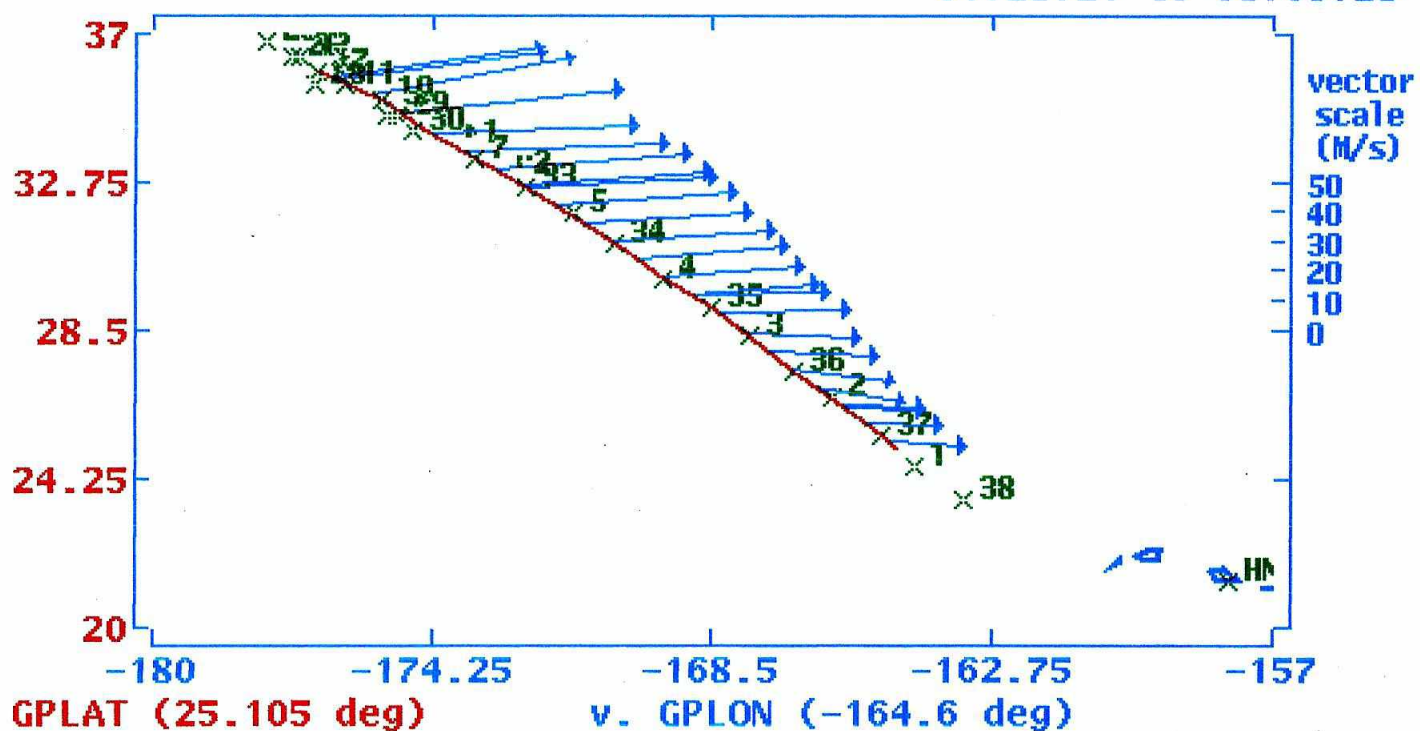
ATX (24.452 C)

v. PSXC (1015.5 mbar)

'wint strm ftrk' (winds@eider) Proj. 425 Flt 01/19/99 03:09:2
01:23:21 to 03:09:27

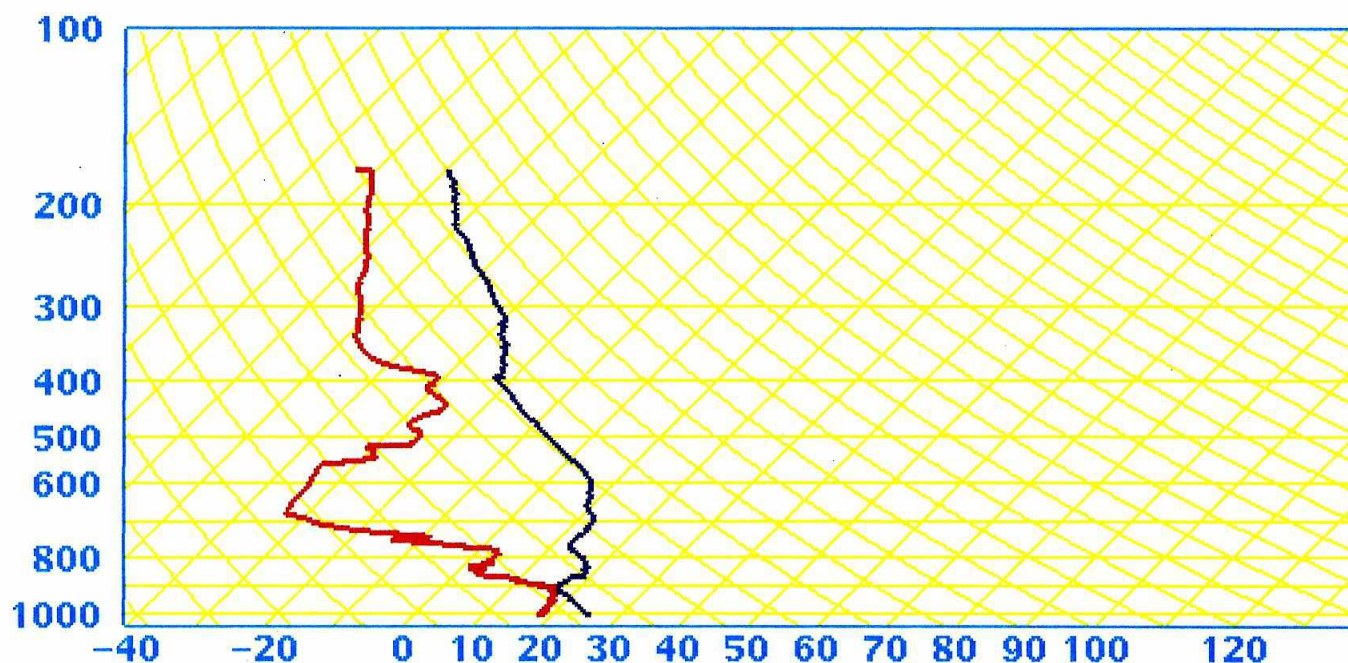


'wint strm ftrk' (winds@eider) Proj. 425 Flt 01/19/99 03:09:2
01:23:21 to 03:09:28



'Std-Skew-T' (winds@k2) Proj. 425 Flt 3 01/18/99 20:41:03

20:04:21 to 20:41:03



DPXC (-70.99 C)

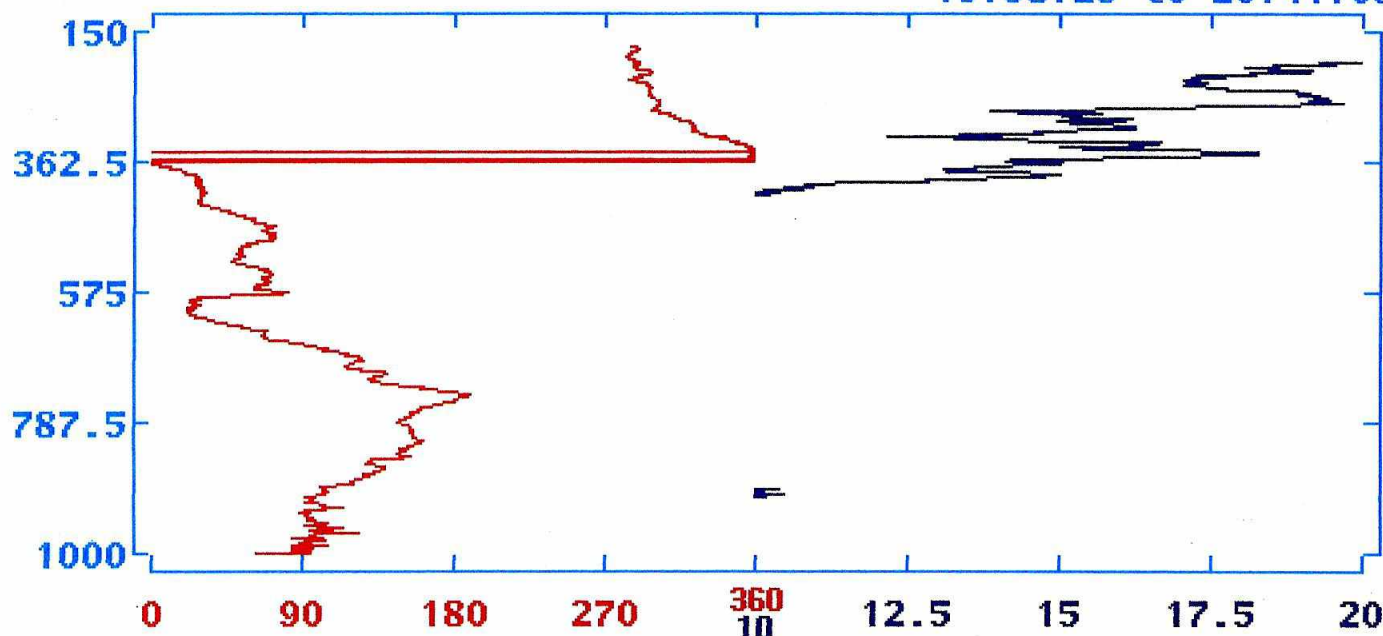
v. PSXC (175.33 mbar)

ATX (-58.33 C)

v. PSXC (175.33 mbar)

'windprofile' (winds@k2) Proj. 425 Flt 3 01/18/99 20:41:08

19:58:29 to 20:41:08



WD (285.67 deg)

v. PS1M (175.33 mbar)

WS (25.851 M/s)

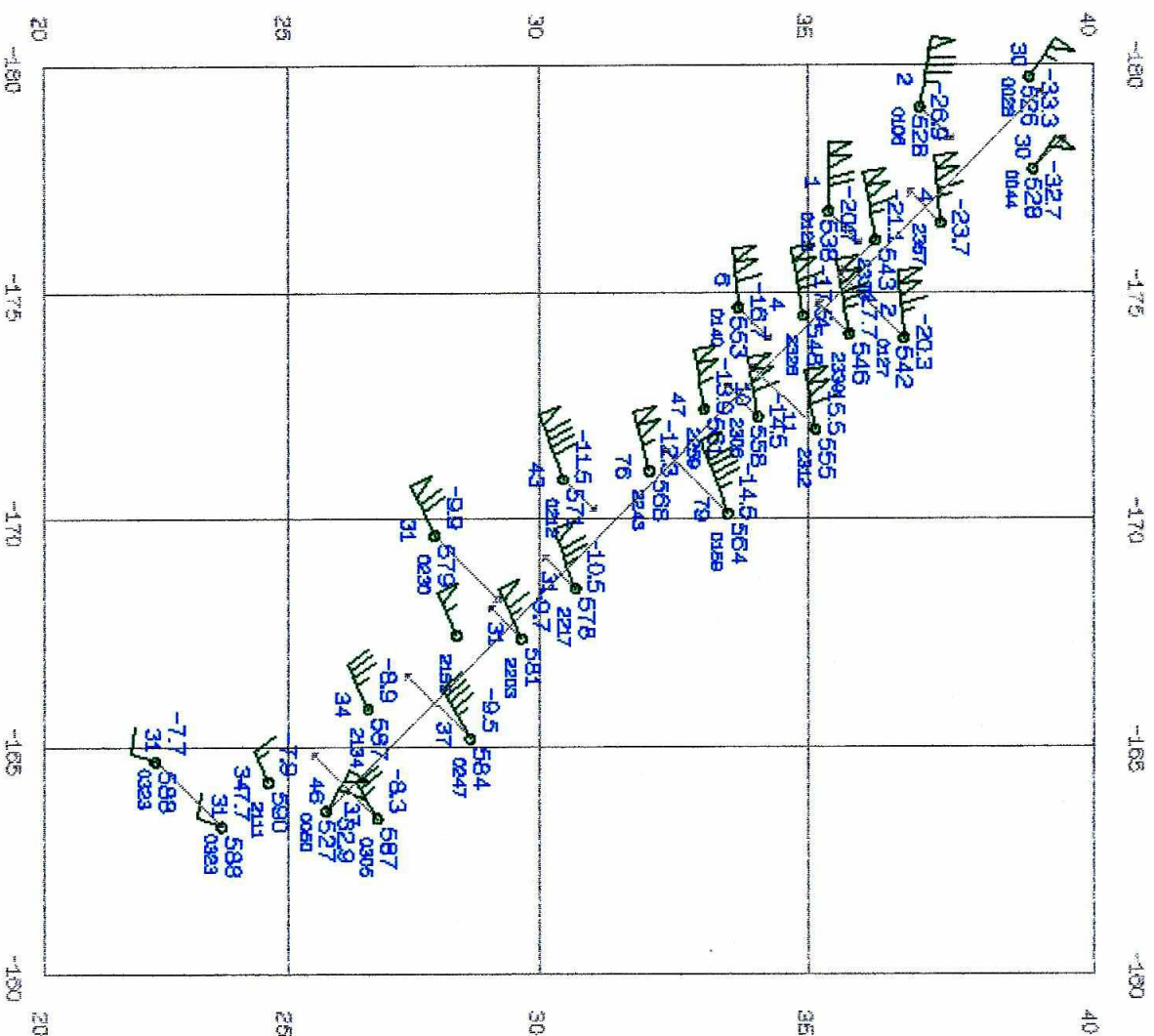
v. PS1M (175.33 mbar)

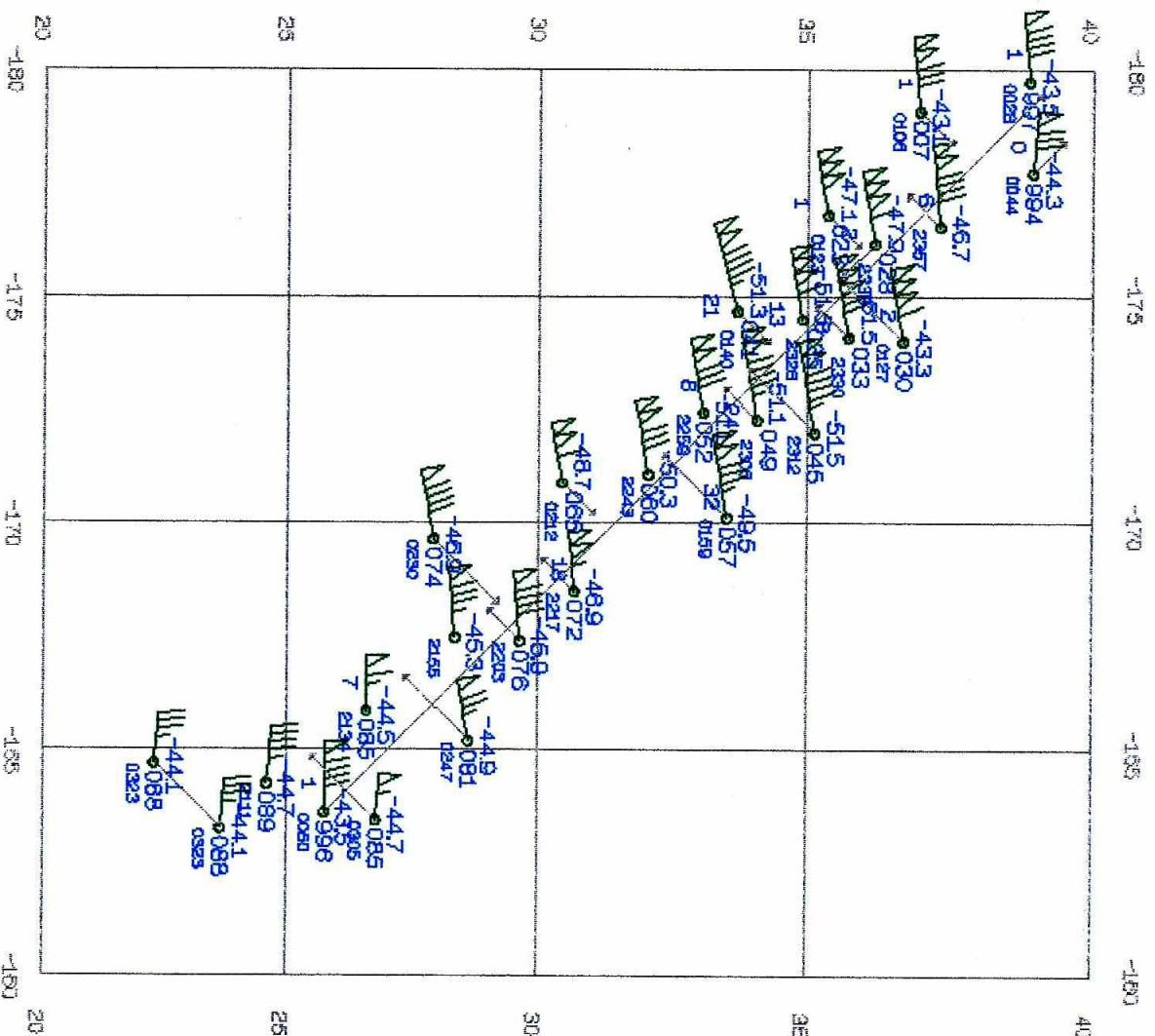
500 mb

Date: 990118
Time: 19-31 UTC

EARTH RELATIVE

NOAA/ERL/HURRICANE RESEARCH DIVISION





WSR HI N49

250 mb

Date: 990118
Time: 19-31 UTC

EARTH RELATIVE
NOAA/ERL/HURRICANE RESEARCH DIVISION

N49RF Winter Storms 99 / AVAPS DropSonde Log

N49RF Project: SCATCAT

Flight ID: 990118N

Mission: 2

Flight #: 3

System Status: ✓ JAS

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status / Failure Reason	GOOD ☒
N 1	983-440-645	5	2111	0	33	DWC		✓
N 2	983-410-108	6	2134	.5	24	DWC / CFH		✓
N 3	984-325-206	7	2155	0	50		Lost PTH	
N 4	984-325-213	5	2203	.5	31		Backup for #3	✓
N 5	983-340-105	6	2217	.6	52			✓
N 6	984-325-471	7	2241	.8			No winds / Fast Fall	
N 7	983-620-714	5	2243	.6	55		Backup for 6	✓
8	983 310 021	6	2259	0	28			✓
N 9	984 325 522	7	2306	0	21			✓
10	983 340 116	5	2312	0	40			✓
11	983 620 664	6	2326	.4	23			✓
N 12	984 325 389	7	2330	.4	43			✓
13	984 325 472	5	2338	.3	49			✓
14	983 340 086	6	2351	0	27			✓
N 15	984 715 110	7	2357	0	28			✓
16	984 325 207	5	0003	0	38			✓
17	984 325 211	1	0009	.3	62			✓
18	984 325 566	6	0015	.8	?		Good winds	✓
19	984 325 216	7	0028	.5	23			✓
20	984 325 470	5	0038	.4	17			✓
N 21	983 720 817	6	0044	.5	15			✓
N 22	984 325 405	7	0050	.2	58			✓
23	984 325 392	1	0054	.2	36			✓
N 24	984 325 473	5	0106	.2	22			✓
25	984 325 273	6	0115	0	36			✓
26	984 325 425	1	0119	0	55			✓
N 27	984 325 455	7	0123	.3	30			✓
28	984 325 271	2	0127	.3	25			✓
29	984 325 469	5	0132	0			No winds no sats acquired	
30	983 620 638	3	0132	.3	90	(1805)	Big chute / slow Fall AOC Page	
31	984 325 302	6	0136	0	66			✓
N 32	984 325 394	1	0140	.4	24			✓
33	983 720 797	7	0144	.2	21			✓

1 AOC 23 NWS 16 MEL

Drop #	Sonde Serial Number	Chn #	Time (Z)	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD ☒
N 34	983 620 620	2	0156	.3	25	CFH	Lost PTH, Then Recovered	✓
N 35	983 310 052	5	0159	.4	21	—	Backup of ↑ Above	✓
N 36	983 340 092	6	0212	.8	25	—		✓
N 37	983 620 588	1	0230	.5	32	—		✓
N 38	984 325 308	2	0247	.2	26	—		✓
N 39	984 325 480	3	0305	0	27	—		✓
N 40	984 325 275	1	0324	.3	15	✓		✓
41	984 325 513	2		.5			Not used	
42								
43								
44								
45								
46								
47								
48								
49								
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52								
53								
54								
55								
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57								
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59								
60								

06/16/98

AVAPS PRE-FLIGHT CHECK:

- (1) Apply power to computer, VAPS fan and VAPS chassis
- (2) Verify no **ER** status lights on the four MWG cards
- (3) Set the computer time to GPS time
- (4) Start AVAPS and run the hardware checks via the **Utility** function
- (5) Start **Soundings** and set the **Project Name** and **Flight ID** (6) Perform a prelaunch check using all four channels simultaneously reading one sonde, look for reasonable data and no CRC error status lights, winds data is not expected. All AVAPS chassis status lights should be green.

NORMAL LAUNCH NOTES:

- ☐ When selecting a sonde frequency, select a frequency other than the default (if there is a default), and away from other sondes in use.
- ☐ Do not pull the Power Enable Pin during pre-launch setup until after the Umbilical is attached.
- ☐ If pre-launch is complete, and more than 5 minutes remain prior to launch, replace the power Enable pin until 5 minutes prior to launch.
- ☐ Don't put the sonde in the launch tube until you have removed the ribbon retaining tape.
- ☐ Don't put the sonde in the tube until you have selected **Begin Data Collection**, and verified good data (good winds data is not expected).

The Power Enable Pin must be removed for at least two minutes prior to launch to allow for the Sonde GPS Oscillator to warm up.

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Winter Storms 99 Project No. 425 Flight No. 3 Flight ID: 990118N
 SED Crew: Pradas, Smith, Hornbrook, Carpenter Mission: #2
 Pre-Flight: 1830 Z Take-Off: 2004 Z Landing: 0416 Z

SYSTEM				Pre-Flight Check	In-Flight	Post-Flight	
N	IRS #1			✓ JAS			
	IRS #2			✓			
	IRS #3			✓			
V	GPS Honeywell #1			✓			
	GPS Honeywell #2			✓			
	GPS Collins			✓ FMG JAS			Off? ☐
	Nose Radar -Collins			DWC			Off? ☒
		Time	Temp °C			Time	Temp °C
	Temp #1	1916	24.1	JAS			
T	Temp #2	↓	27	↓			
E	Temp #3	↓	24.5	↓			
M	Temp #4	↓	29.1	↓			
P	DP Left	1913	118.9	JAS	Cal. Time:		
	DP Right	1913	119.6	JAS	Cal. Time:		
P	Attack Angle (ADCAOA)			✓ JAS			
R	Slip Angle (BP/DBP)			✓ JAS			
E	Differential (PQ1/PQ2)			✓ JAS			
S	Absolute (PS1/PS2)			✓ JAS			
S	Check Radome Press. Lines ☒			Date: 990114			
S	DOWN PRT-5 ⇨ Open? ☐			N/I			Closed? ☒
Y	MADS (WINDS/DISCWIN)			JAS	①		# DATs: 2
S	MADS Printer ⇨ Paper? ☒			DWC			Printer Power off? ☒
T	MADS Cal. Date: 990115			QC time: 1934			QC time: 0418
E	WINDS ⇨ NET BCAST ☒			JAS			
M	HAPS System / Time set? ☒			MB/HRD			# Msg.: 21 # Fail: 0
S	AVAPS System / Time set? ☒			JAS			
	AVAPS Printer ⇨ Paper? ☒			DWC			
	Exterior Walk Around ☒			DWC			
	Inspect DropSonde Chute Bolts			DWC			
	Satcom (Flight Phone) ☒			DWC			Off CB? ☐
	Call COMSAT? ☒ (*292#)			DWC			
M	FCU/UPS/CB			CB's Checked? ☒ JAS			UPS off? ☐
I	AVAPS Sondes			# On Board: 42 67	# Dropped: 40	# Good: 36	
S	AXBT			# On Board: 0	# Dropped: N/A	# Good:	
C	APN-232			✓ JAS			
	Modem Power On? ☒			DWC			

1	DAT Tape #1	On: 1933	Type: V60	Off: 0008
2	DAT Tape #2	On: 0026	Type: V60	Off: 0422
Comments:				

Problem Description & Observations

N49RF ୧୫୫୫୫୫୫୫ N49RF