NOAA G-IV N49RF ERROR SUMMARY
WINTER STORMS 2011
12 Mar 2011 TRACK 28 (39WSC)
NCEP (PWT) PANC →PANC

Flight ID: 20110312N1

Sensor or system	Number or Name
Accelerometer	AccZI.1
Altitude	AltGPS.3
Attack Angle	AA.2
Dew Point Probe	TD.2
Dynamic Pressure	PQF.2
Geopotential Altitude	AltGPS.3
Inertial Selected	INE2
Static Pressure	PSF.2
Slip Angle	SA.2
Temperature Probe	TTM.1
True Airspeed	TASF.3
Constants File	49cal102
Flight Directory	acdata/2011/MET/20110312N1

Local Met Data	Takeoff (1941z)	Landing (0304z)
Aircraft Static Pressure	998.0 mb	997.0 mb
Tower Pressure (corrected)	997.5 mb	995.5 mb

Notes:

There was a glitch in the AAMPS data system that caused a data gap for all analog and inertial data beginning 7 seconds after 00z that lasted 46 seconds.

Other than the interval described above: The only other data gaps were intervals in AltRa.1 from the APN-232 radar altimeter:
20:23:55-20:24:21z (multiple gaps during this interval during climbout)
There were seven additional instances of one second dropouts over the next 3.5 hours.

In creation of higher MET parameters, PDAlphaF.2 was selected (under Attack Pressure Probe Selection choices) to utilize AA.2.

GDIFF check: Mean of 5021 meters of drift for INE #1 (with respect to the Novatel)
1479 meters for INE#2. The 5000+ meters of INE drift with system #1 is much greater than normal. In creation of higher MET parameters, INE #2 selected.

The Left Dew Point sensor (TD.1) again read far too high through the entire flight. TD.2 did a reasonably good job but is also too high during the cruise portion of flight at or above 41,000 feet (where sondes suggest an RH near 5% and the dew points generated by TD.2 yield an RH around 20-25%). TdM.2 did spike well above TA.1 briefly during takeoff.

TTM.3 displayed an oscillation that varied greatly in terms of both amplitude and period during cruise above 41K. The irregular, sometimes erratic, nature of the amplitude was unusual as compared to previous WSR11 missions. TTM.1 is the default.

Vertical Winds showed a small high bias during the cruise portion of flight (with a mean UWZ.1 of +0.10 during a 5+ hour interval between 21:23z and 01:39z).

All other flight level instruments worked optimally during the flight.

- 13 drop points assigned by NCEP
- 15 AVAPS II dropsondes deployed, (2302z Drop Pt #6 no winds…backup was good, 0043z Drop Pt #12 winds lost below 35K…backup was good)
- 13 drops good and transmitted for ingestion into 09/0000z model runs

Flight Director: Jessica Williams (813) 828-3310 ext. 3140 and LCDR Nancy Ash

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID:	20110312N	From:	PANC	To:	PANC
FLT #:	11-043	Blk In:	0307 Z	Lnd Time:	0304 Z
ETD:	2000 Z	Blk Out:	1933 Z	T/O Time:	1941 Z
ETE:	7.5	Total Blk:	7.6	Total Flt:	7.4
Sponsoring Org:	NCEP	Program:	WSR	Purpose:	SURV

AOC Flight Crew

Aircraft Commander:	Odell	Data System:	Rogers
Co-Pilot:	Toth /	Avaps:	Paul
Navigator:	/	System Engineer:	Smith
Flight Eng:	/	AA:	
Flt Director:	Ash / Williams	AA:	
Avionics:		Crew Chief:	
Participating Scientists, Visitors, & Add'l Aircrew on back.		Total # of people on board: 7	# of people listed on back: 0

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	998.0			

ATIS - Takeoff 121853Z 10003KT 10SM CLR M11/M17 A2960

ATIS - Land 130153Z 00000KT 10SM CLR M02/M20 A2954

Data Source	Number	Data Disposition / Date / Quality / File Name(s)
Flight Level Tapes		
Radar Tapes		
Dropsondes	22	Good: 18 Bad: 4 Sent: 18
AXBT		

List other data sources on back in Remarks section.

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)

Recco Times: Fix # Fix Time

Storm Name: _____

Mission ID: noaa 9 39 WSC Track 28

#4 Drop 21:24:42.5
LAUNCH 21:24:48.0

AOC GPS Dropwindsonde Log

* AVAPS I Sondes

Flight ID: 20110312N1 Flight Director: Ashley Williams

Mission ID: noaa 9 39 wsc Storm/Track: track 28

Pg 1 of 1

Ch. #	Drop #	Sonde ID	Drop Time (UTC)	Lat (°N)	Lon (°W)	Wx Cond.	SFC Prs (mb)	Ob #	L5/R5	Last Winds R5 (ht, ws, wd)	Last Winds L5 (ht, ws, wd)	Sent Time/KWBC (UTC)	
1	1	09301030 8	202305	56.5	151.0	SCT CU	997.9	1	r5	add in-	13.2/029	205305	13.6/30
2	2	093010060	204250	54.0	151.5	SCT CU	997.3	2	r5	6.0/326		210141	
3	3	093010206	210304	51.5	152.8	SCT CU SC	996.4	3	r5	7.1/136		212127	
4	4	093010084	2123	~	~	SC bkn	~	~~4~~		fast fall			
1	5	093129126	212448	48.8	152.3	SC bkn	991.5	4	r5	8.9/104		221635	
2	6	093010048	214337	46.5	152.8	SC	986.0	5	r5	add in -	7.6/134	222552	7.7/131
3	7	093010209	220404	44.0	153.3	SCT CU	987.8	6	r5	add in-	19.8/305	224549	19.3/304
4	8	093089023	222814	41.7	153.7	few CU	995.1	7	r5	15.5/294		225513	
1	9	092929027	224223	39.2	154.0	few CU	1002.9	8	r5	add in	15.7/282	230557	15.7/279
2	10	093129123	230111	37.0	152.2	Sct CU	1004.7	9	r5	add in	21.1/300	232806	21.3/297
→ 3	11	093129117	231916	35.1	150.0	Sct CU	1009.0	10	r5	add in	16.4/278	234427	15.4/282
4	12	093010219	2334	~	~	~~CU~~	~	~~11~~	r5	fast fall			
1	13	093319098	233546	36.6	147.9	CU	1002.9	11	r5	add in	21.4/269	000009	19/269
2	14	093010061	2352	~	~	Sct CU	~	~~12~~	r5	fast fall			
3	15	093010053	235408	38.7	146.0	Sct CU	991.5	12	r5	add in	24.4/274	002656	21.7/280
4	16	093010207	001214	41.0	146.5	CU	986.7	13	r5	add in	15.9/273	005023	13.7/278
1	17	093010199	003318	43.8	146.8	SC	981.0	14	r5	add in	8.4/105	010221	8.5/111
2	18	093010217	0054	~	~	~	~	~~15~~	r5	fast fall			
3	19	093010059	005520	46.6	147.3	SC	987.4	15	r5	10.9/80		012021	
4	20	093010210	011534	49.3	147.7	SCT CU	992.5	16	r5	9.7/71		014313	
1	21	093010215	013526	51.8	148.0	few CU	996.0	17	r5	add in -	4.3/039	020209	4.1/035
2	22	093129006	015534	54.3	148.5	Sct CU	995.7	18	r5	5.2/222		022145	

CP= Ob 10, 35N, 150W

Track 28
19 drops

med-west coast precip 481-122
med-heavy precip PAC NW 501-122

t/o wx: wd: 01005KT P6SM SKC

2000Z ws:

couds:

turb:

Outbound: wd: in-flight winds

ws: SW → W

clouds: 40 - 110 kt

turb: some shear SW corner of track

freezing: above freezing level

Inbound: wd:

ws:

clouds:

turb:

landing wx: wd: 01011KT P6SM SKC

0400Z ws:

clouds:

turb:

local conditions: No pireps icing or turb

Kodiak (ADS)

Sea Salt: none 30006KT P6SM SCT040

Volcanic Ash: none

Alaska Track P28_3350 NM

PANC
ANC
HOM

N58 00 W15 115

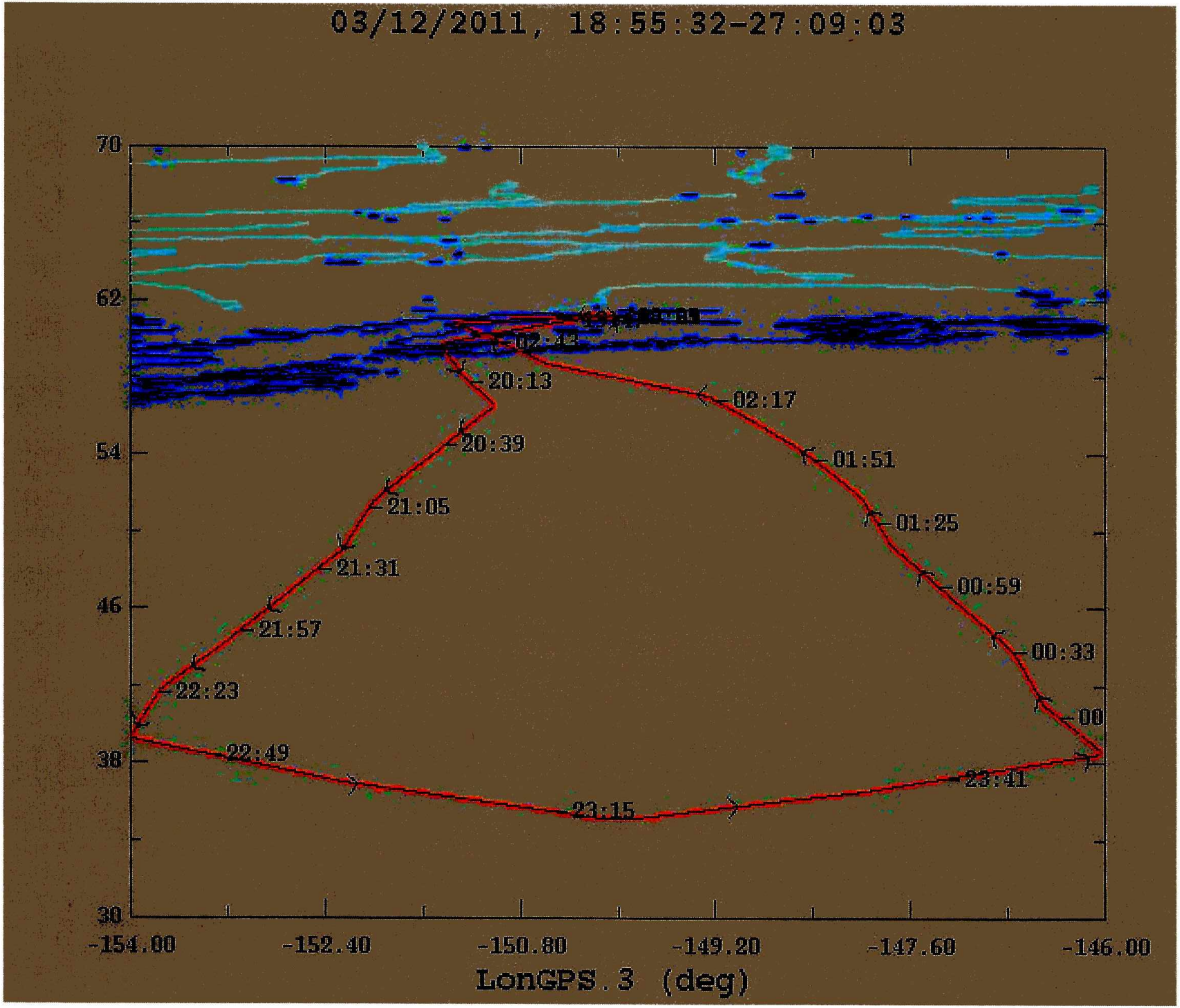
18 Drop Points

1. N56 30 W151 00
2. N54 00 W151 30
3. N51 30 W152 00
4. N49 00 W152 15
5. N46 30 W152 45
6. N44 00 W153 15
7. N41 45 W153 45
8. N39 15 W154 00
9. N37 00 W152 15
10. N35 00 W150 00-CP
11. N36 30 W148 00
12. N38 30 W146 00
13. N41 00 W146 30
14. N43 45 W146 45
15. N46 30 W147 15
16. N49 15 W147 45
17. N51 45 W148 00
18. N54 15 W148 30

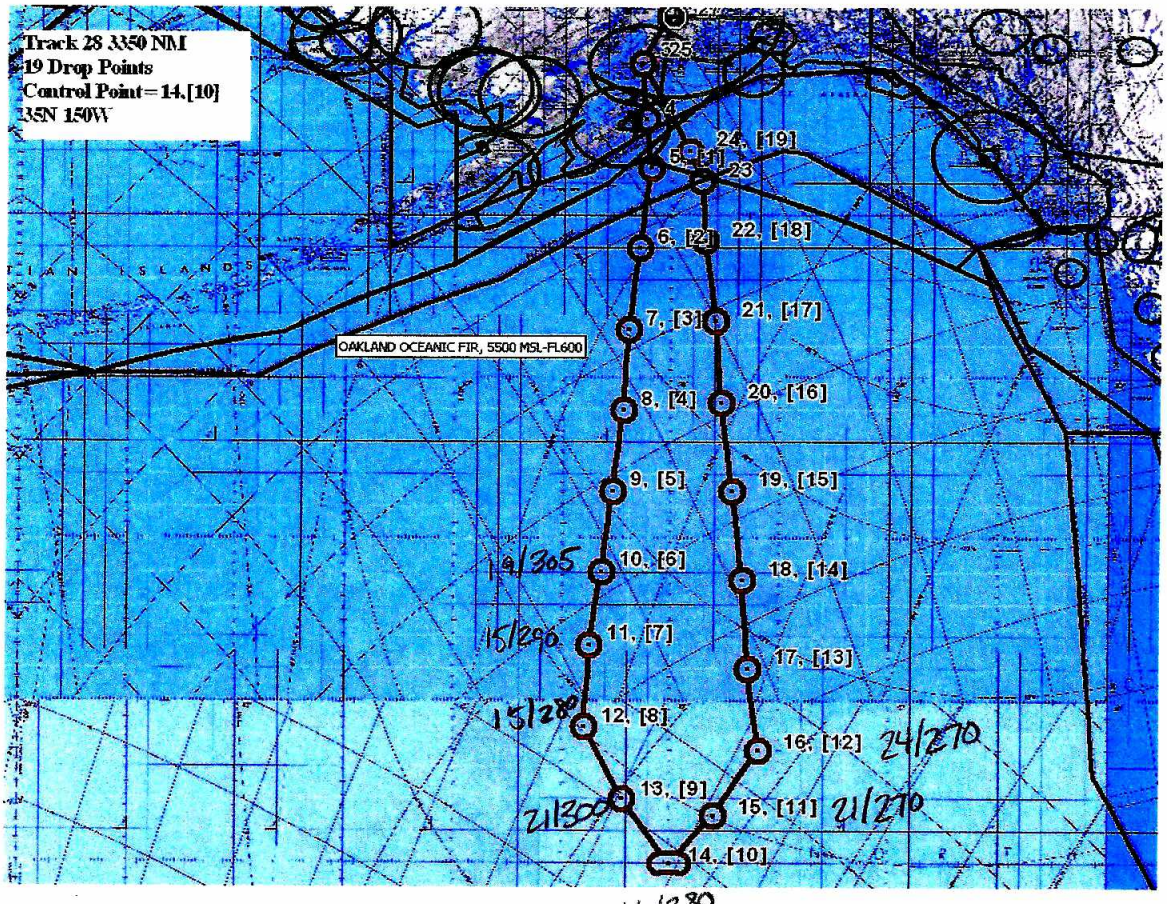
N56 05 W148 40-ADIZ/KZAK

19. N57 00 W149 15

HOM
ANC
PANC


03/12/2011, 18:55:32-27:09:03
70
62
54
46
38
30
-154.00
-152.40
-150.80
-149.20
-147.60
-146.00
LonGPS.3 (deg)
20:13
20:39
21:05
21:31
21:57
22:23
22:49
23:15
23:41
00
00:33
00:59
01:25
01:51
02:17

1



OP 35N
150W
Drop 10