

NOAA G-IV N49RF ERROR SUMMARY
WINTER STORMS 2011
19 Mar 2011 TRACK 46 (41WSC)
NCEP (PWT) PHNL →PHNL

Flight ID: 20110319N1

<u>Sensor or system</u>	<u>Number or Name</u>
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	INE1
Static Pressure	PSF.2
Slip Angle	SA.2
Temperature Probe	TTM.1
True Airspeed	TASF.3
Constants File	49cal102
Flight Directory	acdata/2011/MET/20110319N1

Local Met Data	Takeoff (1934z)	Landing (0347z)
Aircraft Static Pressure	1020.1 mb	1017.9 mb
Tower Pressure (corrected)	1021.9 mb	1018.5 mb

Notes:

The only data gaps were brief intervals in AltRa.1 from the APN-232 radar altimeter:
19:48:44-19:49:22z (multiple gaps during this interval during climbout)
21:00:24z (one second gap)

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

GDIFF check: Mean of 2100 meters of drift for INE #1 (with respect to the Novatel)
3111 meters for INE#2. In creation of higher MET parameters, INE #1 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 of around 0.4C whose period varied (but was generally around 2 minutes) during cruise above 41K. TTM.1 is the default.

Vertical Winds showed a low bias during the cruise portion of flight (with a mean UWZ.1 of -0.26 during a 4 hour interval beginning at 21:15z).

All other flight level instruments worked optimally during the flight.

- 16 drop points assigned by NCEP
- 17 AVAPS II dropsondes deployed, (0055z Drop Pt #13 bad temperature sensor...backup was good)
- 16 drops good and transmitted for ingestion into 20/0000z model runs

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

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FLT ID: 20110319n1	From: PHNL	To: PHNL
FLT #: 11045	Blk In: 0351 Z	Lnd Time: 0347 Z
ETD: 2000 Z	Blk Out: 1921 Z	T/O Time: 1934 Z
ETE: 8.2	Total Blk: 85	Total Flt: 8.2
Sponsoring Org: ncep	Program: WSR	Purpose: SURV

AOC Flight Crew

Aircraft Commander: Odell	Data System: Rogers
Co-Pilot: Glover,	Avaps: Paul
Navigator: /	System Engineer: Smith
Flight Eng: /	AA:
Flt Director: Ash, Parrish	AA:
Avionics:	Crew Chief:

Participating Scientists, Visitors, & Add'l Aircrew on back.

Total # of people on board: 8

of people listed on back: 1

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1020.3		1017.9	

STA

021.9

018.5

ATIS - Takeoff 191853Z 06012618KT 10SM FFW028 SCT04Z SCT070 25/18 A 3018

ATIS - Land 202532 05016621KT 10SM FEW033 26/18 A 3008

Data Source	Number	Data Disposition / Date / Quality / File Name(s)		
Flight Level Tapes				
Radar Tapes				
Dropsondes	17	Good: 16	Bad: 1	Sent: 16
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: NOAA9 41 WSC track 46

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FLT ID:	T/O Time: Z	Lnd Time: Z
Name (Last, First)	Activity on Aircraft	Affiliation
Denhison, Dan	videographer	NOAA NDS - Pope NMUS

Remarks:

CP= 3400
13245

Flight Director: Ash Parrish

Storm/Track: Track 46

Pg 1 of 1[illegible]

014243	014246
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014343

022556

20

10

track 46, 14 drops

Heavy (H) Precip 37/-122

t/o wx: wd: FM 192000 ↓ 06011KT P6sm FEW030 SCT050
06016624KT P6sm FEW030 SCT050

ws:

1930

clouds:

turb:

Outbound:

wd:

north 70kts

ws:

NW 100kts

N

clouds:

turb:

Inbound:

wd:

ws:

clouds:

turb:

landing wx:

wd:

06011KT P6sm FEW030 SCT050

ws:

0400

clouds:

turb:

local conditions:

Sea Salt:

Volcanic Ash:

none

WV = WV at 400mb

shows features such as short wave troughs + jet streams

dark = dry + downward vertical motion

white = upward vertical motion

IR = high cloud tops = strong storms, cold, bright white

gray = clouds tops lower and warmer

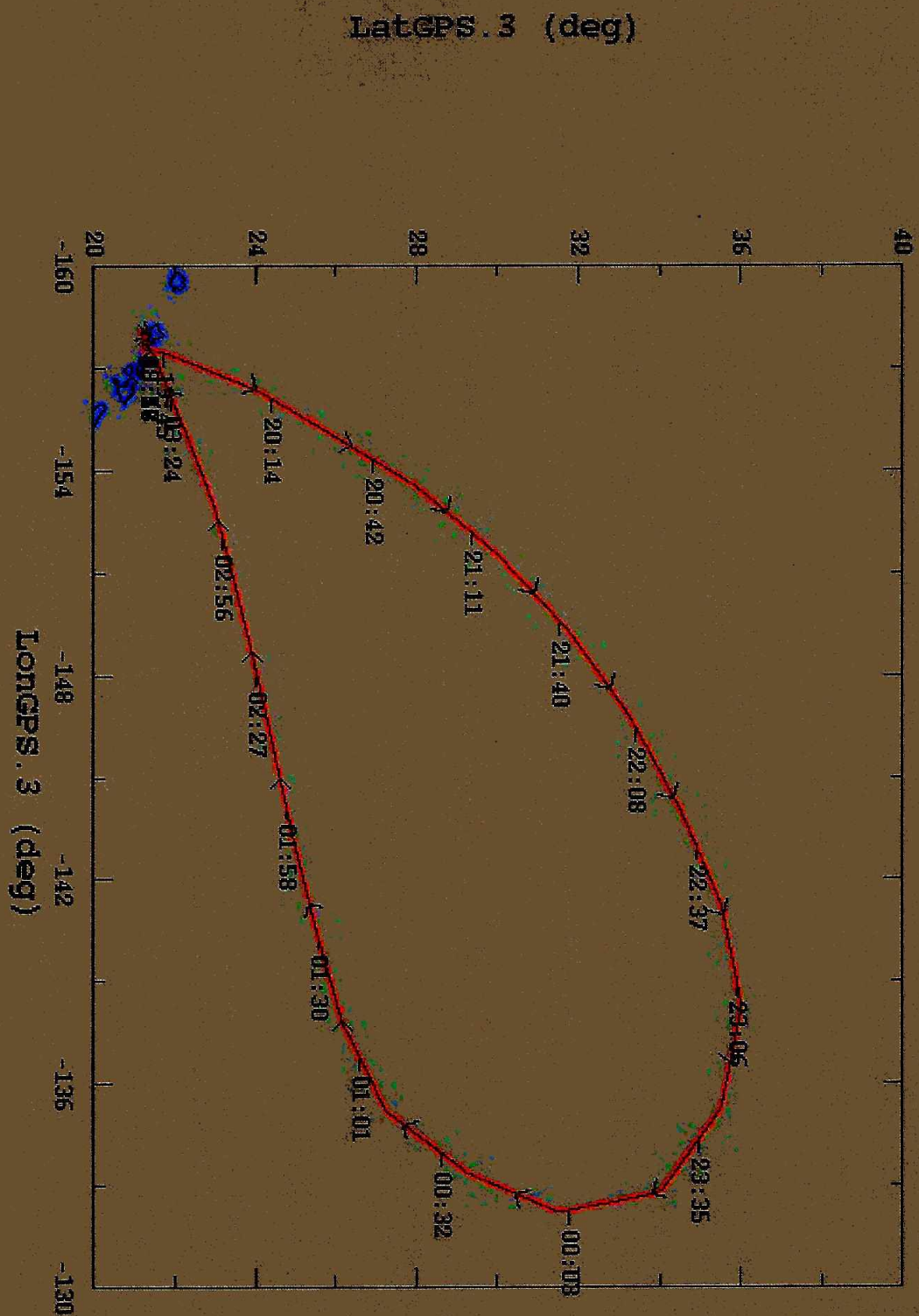
24 hrs / days w or w/out sunlight

WSRP HAWAII TRACK 46 DROP LOCATIONS

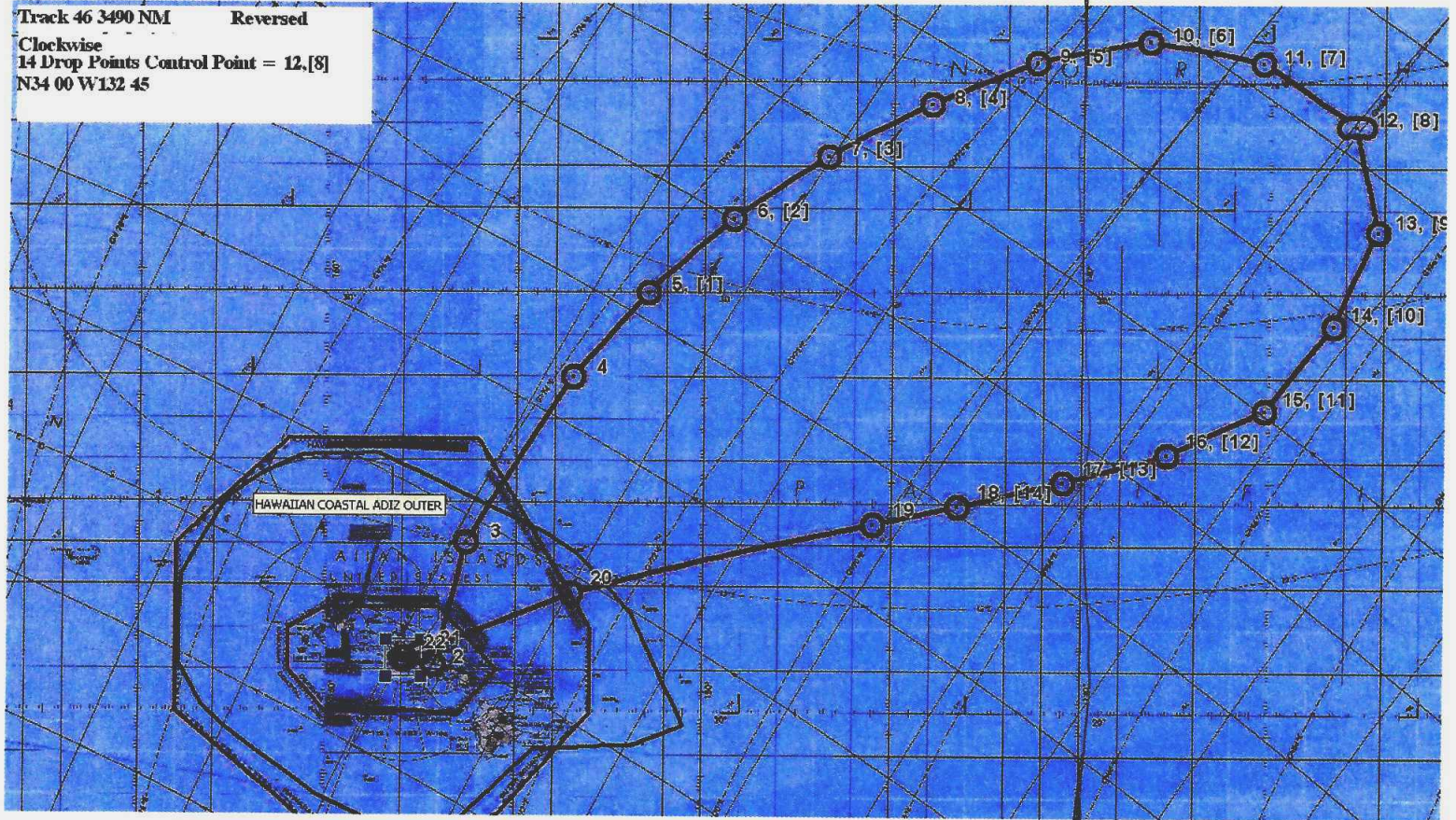
#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
14 1	24 55 25 00	-143 00	15	
13 2	25 30	-140 15	30	
12 3	26 15	-137 30	45	
11 4	27 30	-135 00	10	
10 5	29 30	-133 15	20	
9 6	31 45	-132 15	10	
8 7	34 00	-132 45	-CP	
7 8	35 30	-135 15		
6 9	36 00	-138 15		
5 10	35 30	-141 15		
4 11	34 30	-144 00		
3 12	33 15	-146 45		
2 13	31 45	-149 15		
1 14	30 00	-151 30		

clockwise

03/19/2011, 18:47:52-27:53:40



Track 46 3490 NM Reversed
Clockwise
14 Drop Points Control Point = 12,[8]
N34 00 W132 45



increase
resolution E 148
every 15'