

**NOAA G-IV N49RF ERROR SUMMARY  
WINTER STORMS 2011**

**14 Jan 2011 Modified TRACK71-Repo (05WSC)  
NCEP (PWT) PANC →RJTY**

**Flight ID: 20110114N1**

<u>Reference 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.1
Temperature Probe	TTM.3
True Airspeed	TASF.3
Constants File	49cal102
Flight Directory	acdata/2011/MET/20110114

Local Met Data	Takeoff (0813z)	Landing (1536z)
Aircraft Static Pressure	1017.5 mb	997.6 mb
Tower Pressure (corrected)	1018.0 mb	999.6 mb

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**Notes:**

The only data gaps were in AltRa.1 from the APN-232 radar altimeter:

8:29:02- 8:33:20z (multiple gaps during this interval)

8:35:07z

9:34:20z

9:35:44z

10:46:28z

10:46:48z

15:10:23z

The ALTPA.1 (NACA Pressure Altitude) runs about 60 meters lower than a tight clustering of Air Data Computer and ADC Baro Corrected sources.

Angle of Attack sources: AaADDU.1 (from the Air Data Computer) was consistently about 0.5 degrees higher than either AA.1 or AA.2, or AaADDU.2. Spike in AA.1 on takeoff roll from 8:12:38 - 8:12:42z. Similar AA.1 spike after landing during rollout on the runway at 15:36:15z.

The GDIFF check: mean of 2185 meters of drift for INE #1 (with respect to the Novatel) 2606 meters for INE#2. In creation of higher MET parameters, INE #1 was selected.

The Left Dew Point sensor (TD.1) again read far too high through the entire flight (well above ambient temperature). TD.2 did a reasonably good job but is also too high during the cruise portion of flight at or above 41,000 feet (sondes RH near 5% and aircraft RH around 25%).

Crossing the dateline, there was a spread in times when each position reference marked the crossing with Inertial #1 sensing it first followed by a cluster of Inertial #2, the two Honeywell GPS sources and the Novatel, then a lag until it was recorded by Inertial #3.

Vertical Winds were slightly further away from a zero mean during the cruise portion of flight than in other recent missions, showing a small low bias (with a UZW.1 mean of -0.14). As expected, UWZ.1 shows a significant high bias during descent prior to landing.

All other flight level instruments worked optimally during the flight.

- 6 drop points assigned by NCEP
- 8 AVAPS I dropsondes deployed
- Of those 8 drops, 6 were good and transmitted, the first two attempts at Pt 6 failed (12:33:41 had no telemetry and 12:37:42z was a fast fall). The third attempt at Pt 6 was good.
- Of the 6 transmitted sondes, 2 coded surface winds with the other four coding 12, 13, 15 and 18 meters for a LAST WIND remark.

Flight Directors: Richard Henning and Jessica Williams (813) 828-3310 ext. 3086

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

FLT ID: 20110114N1 From: PANC 134 To: RJTY 456  
 FLT #: 11-25 Blk In: 1540 Z Lnd Time(on): 1536 Z  
 ETD: 0800Z Blk Out: 0805 Z T/O Time (off): 0813 Z  
 ETE: 8+00 Total Blk: 7.6 Total Flt: 7.4  
 Sponsoring Org: NCEP Program: PWT (WBR 11) Purpose: reposition to Yokota PARTIAL TRACK ENROUTE

## AOC Flight Crew

Aircraft Commander: GLOVER Data System: DEFEO  
 Co-Pilot: TWINING Avaps: RICHARDS MILLER  
 Navigator: / System Engineer:  
 Flight Eng: / AA:  
 Flt Director: WILLIAMS HENNING AA:  
 Avionics: Crew Chief: NEGRON

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

# of people listed on back:

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure		altim 30.19		altim 30.00

ATIS - Takeoff

ATIS - Land

Data Source	Number	Data Disposition / Date / Quality / File Name(s)
Flight Level Tapes		
Radar Tapes		
Dropsondes	8	Good: 6 Bad: 2 Sent: 6
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 05WSC TRACK 71

SAKURIJIMA / KAMCHATKA

 3545N  
 13921E

RJSM MISAWA

28022KT UNRES  
 FEW020  
 MOH/M11  
 Pt. Cloudy 20% CH  
 passing \* FL.



HENNING

Pg \_\_\_\_ of \_\_\_\_

[illegible]