NOAA G-IV N49RF ERROR SUMMARY
WINTER STORMS 2011
16 Feb 2011 Modified TRACK69 (23WSW)
NCEP (PWT) RJTY →RJTY

Flight ID: 20110216N1

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	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/20110216N1

Local Met Data	Takeoff (0733z)	Landing (1539z)
Aircraft Static Pressure	1008.7 mb	1010.2 mb
Tower Pressure (corrected)	1009.5 mb	1009.8 mb

Notes:

The only data gaps were two intervals in AltRa.1 from the APN-232 radar altimeter:
07:46:57-07:47:30z (multiple gaps during this interval)
15:09:14z

The ALTPA.1 (NACA Pressure Altitude) ran 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 0.6 degrees higher than either AA.1 or AA.2, or AaADDU.2. Spike in AA.1 during takeoff roll at 7:32:31 from -118 to +23 degrees. Similar AA.1 spike during landing rollout at 15:39:15z from -234 to +56 degrees. In creation of higher MET parameters, PDAlphaF.2 was selected (under Attack Pressure Probe Selection choices) to utilize AA.2.

GDIFF check: Mean of 3031 meters of drift for INE #1 (with respect to the Novatel) 3739 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 25%).

Vertical Winds showed a small low bias during the cruise portion of flight (with a mean UWZ.1 of -0.19).

All other flight level instruments worked optimally during the flight.

- 13 drop points assigned by NCEP
- 13 AVAPS II dropsondes deployed
- All 13 were good and all 13 coded surface winds.

Flight Director: Richard Henning (813) 828-3310 ext. 3086

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

FLT ID: 20110216N1	From: RJTY	To: RJTY
FLT #: 11-33	Blk In: 1542 Z	Lnd Time(on): 1539 Z
ETD: 0730 Z	Blk Out: 0728 Z	T/O Time (off): 0733 Z
ETE: 8+00	Total Blk: 8.2	Total Flt: 8.1
Sponsoring Org: NCEP	Program: PWT (WSR11)	Purpose: TRACK69 MOD

AOC Flight Crew

Aircraft Commander: TWINING	Data System: ROLES GOLDSTEIN
Co-Pilot: TOTH /	Avaps: BOSKO GREENE
Navigator: /	System Engineer:
Flight Eng: /	AA:
Flt Director: HENNING	AA:
Avionics:	Crew Chief:

Participating Scientists, Visitors, & Add'l Aircrew on back. # of people listed on back:

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1008.7	30.29 STA 1009.5	PS 1010.2	30.30 STA 1009.8

ATIS - Takeoff	
ATIS - Land	

Data Source	Number	Data Disposition / Date / Quality / File Name(s)
Flight Level Tapes		
Radar Tapes		
Dropsondes	☺	Good: 13 Bad: Ø Sent: 13 TRANSMITTED
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: CP Drop #7 (5140N 17131E) 16/12Z

Mission ID: NOAA9 23WSW TRACK69

SAKURAJIMA yest aft. (5th at 52 up to 10K)
(yest was KIRISHIMAYAMA)
Shemya PASY
ADAK PADK
MISAWA RJSM
IWACUNI RJOI

YOKOTA WX
374oss.weather@yokota.af.mil
PMSV 344.6

N49RF AOC GPS Dropwindsonde Log

Flight ID: 20110216N1 Flight Director: HENNING

Mission ID: NOAA9 23WSWTRACK69 Storm Track: P69 MODIFIED (drops E of 152E) Pg ___ of ___

Drop #	Ob #	Sonde ID	Drop Time (UTC)	Lat (°N)	Lon (°E)	Wx Cond.	L5/R5?	SFC Prs (mb)	Last Wind Alt (m)	Comments	Ch #	SatComm failures	KWBC #
1	1	5143	090810	42.8	152		RS	1021.3	SFC	260/17	1		093408
2	2	5084	093049	44.3	156		RS	1017.4	SFC	270/29	2		095107
3	3	5091	095314	45.6	160.1		RS	1013.8	SFC	270/25	4		101704
4	4	5166	101345	46.8	164	~200m	RS	1010.2	SFC	275/38	1		104000
5	5	5062	103333	48.1	167.7	↓	RS	1003.2	SFC	250/37	2		110711
6	6	5136	105120	49.1	171.2	↓	RS	1000.5	SFC	230/44	1		112110
7	7	5134	110949	51.7	171.3	205/72	RS	986.9	SFC	200/61	2		113656
8	8	5286	112542	51.7	168.5		RS	976.6	SFC	215/50	1		115159
9	9	5139	114717	50.6	165.2		RS	992.9	SFC	280/41	2		122012
10	10	5174	120849	49.4	162.1		RS	1004.4	SFC	270/33	1		123701
11	11	5239	123406	48	158.6		RS	1007.7	SFC	285/05	2		125623
12	12	5131	130153	46.3	155		RS	1015.0	SFC	265/32	1		132225
13	13	5043	132619	44.8	152		RS	1021.2	SFC	280/32	2		135442
14													
15													
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17													
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20													
21													
22													
23													
24													
25													
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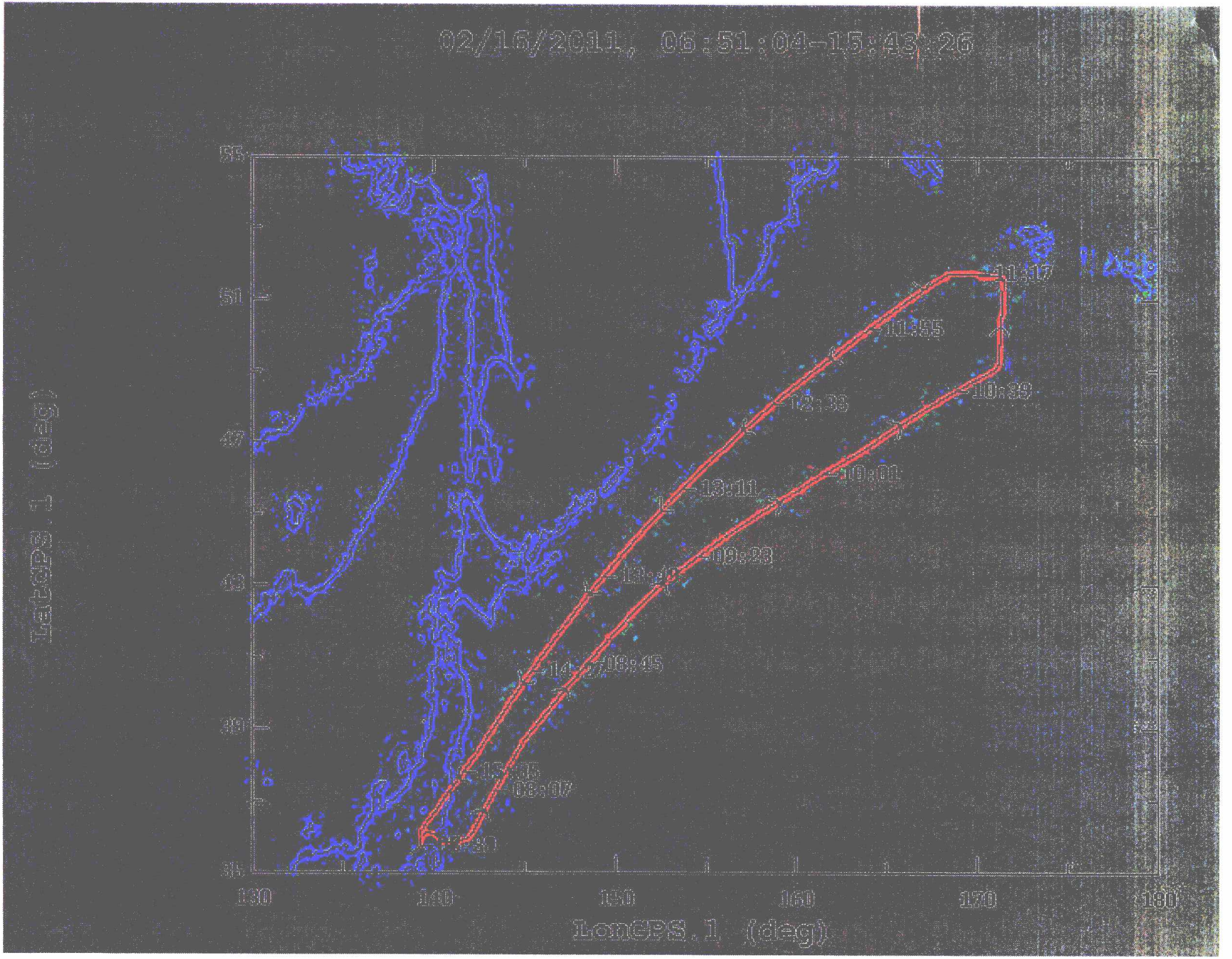
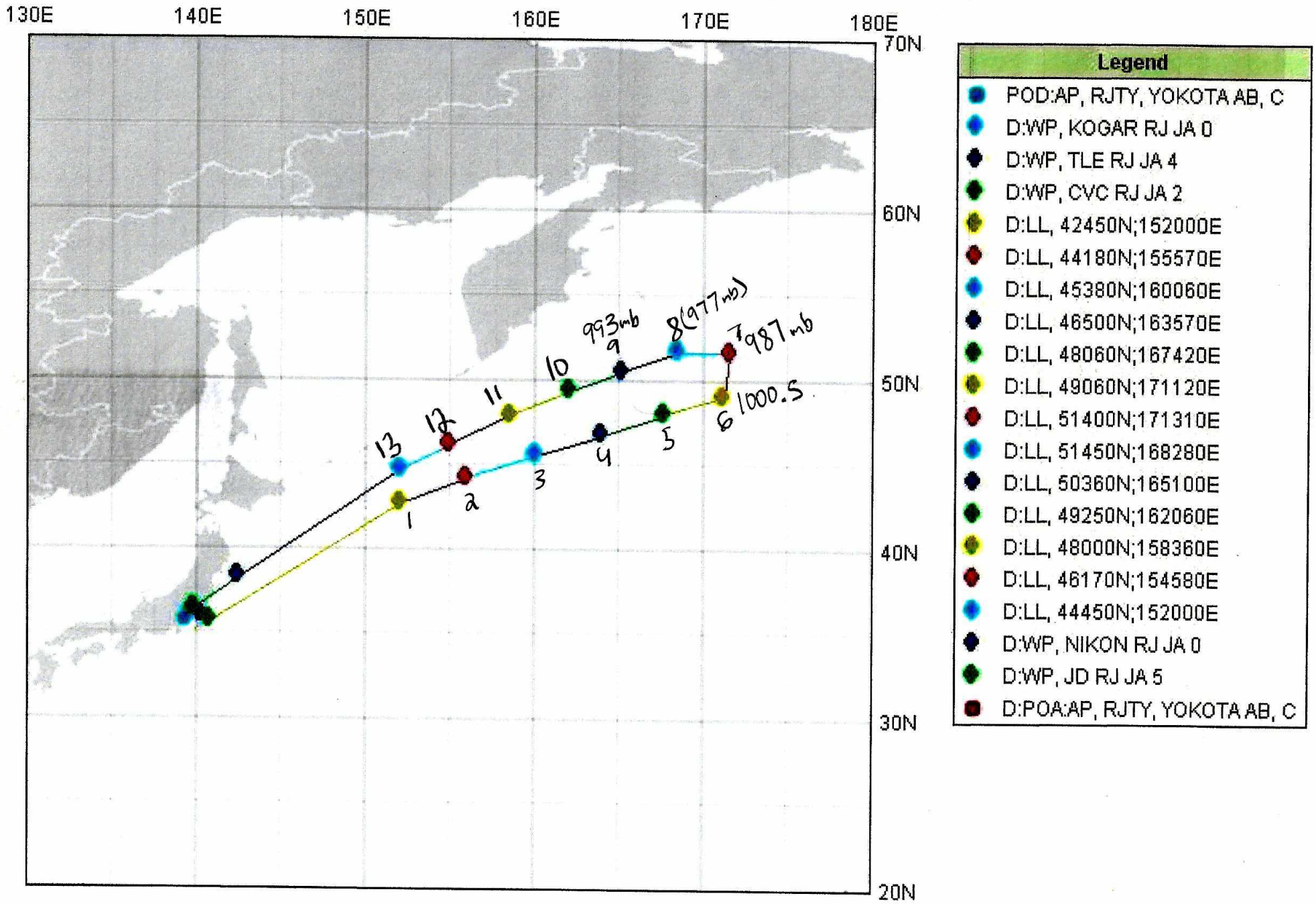
27													
28													
29													
30													

Track 69 Modified

1	42 45	152 00
2	44 18	155 57
3	45 38	160 06
4	46 50	163 57
5	48 06	167 42
6	49 06	171 12
7	51 40	171 31
8	51 45	168 28
9	50 36	165 10
10	49 25	162 06
11	48 00	158 36
12	46 17	154 58
13	44 45	152 00


02/16/2011, 06:51:04-15:43:26
55
51
47
43
39
31
LatGPS.1 (deg)
130
140
150
160
170
180
LonGPS.1 (deg)
11:17
10:55
10:39
10:01
09:23
08:45
08:07
13:11


130E
140E
150E
160E
170E
180E
70N
60N
50N
40N
30N
20N
993mb
8(977mb)
7 987 mb
6 1000.5
Legend
POD:AP, RJTY, YOKOTA AB, C
D:WP, KOGAR RJ JA 0
D:WP, TLE RJ JA 4
D:WP, CVC RJ JA 2
D:LL, 42450N;152000E
D:LL, 44180N;155570E
D:LL, 45380N;160060E
D:LL, 46500N;163570E
D:LL, 48060N;167420E
D:LL, 49060N;171120E
D:LL, 51400N;171310E
D:LL, 51450N;168280E
D:LL, 50360N;165100E
D:LL, 49250N;162060E
D:LL, 48000N;158360E
D:LL, 46170N;154580E
D:LL, 44450N;152000E
D:WP, NIKON RJ JA 0
D:WP, JD RJ JA 5
D:POA:AP, RJTY, YOKOTA AB, C