

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

FLT ID: 201002/011	From: RJTY	To: RJTY
FLT #: 10 - 36	Blk In: 1559	Lnd Time: 1556 (8,4)
ETD: 0800 Z	Blk Out: 0722 (8,6)	T/O Time: 0732 Z
ETE: 8 @ hrs	Total Blk: 8 hrs 37 min	Total Flt: 8 hrs 24 min
Sponsoring Org: NCEP	Program: WSR 10	Purpose: Surveillance

AOC Flight Crew

Aircraft Commander: LONGENECKER	Data System: CARPENTER
Co-Pilot: GLOVER / TOTH	Avaps: SMITH
Navigator: /	System Engineer:
Flight Eng: /	AA: PAUL, STEVEN
Flt Director: ALMEIDA	AA:
AVS Avionics: KOLODY, Axel, USAF	Crew Chief:
Participating Scientists, Visitors, & Add'l Aircrew on back.	Total # of people on board: 8
	# of people listed on back:

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

Data Source	Number	Data Disposition / Date / Quality / File Name(s)		
Flight Level Tapes	1	1001rf14a.ads		
Radar Tapes				
Dropsondes	17	Good: 17	Bad: 0	Sent: 17
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: TRACK 99			
Mission ID: NOAA 9 23WSW			

CP 42.1N START: 150E
 17 4.2E STOP:



NOAA G-IV N49RF
WSR10 - Japan
02 Feb 2010



Flight ID: 20100210N

Sensor or system

Accelerometer

Altitude

Attack Angle

Dew Point Probe

Dynamic Pressure

Geopotential Altitude

Inertial Selected

Static Pressure

Slip Angle

Temperature Probe

True Air Speed

Constants File

Project Directory

Number or Name

ACINS

PALT

AKRD1

DPR

QC2M

GPGALT

VEW, VNS

PS2M

SSRD1

AT3/TT3

TAS2

49cal093

/proj/1001

Local Met Data:

Takeoff (0732Z)

Landing (1556Z)

Aircraft Static Pressure

101#.# mb

101#.# mb

Tower Pressure (corrected)

101#.# mb

101#.# mb

Notes:

All INE2 (_PITR), Honeywell GPS #2 (_SG2) variables and PCAB variable have spikes at 1000z, 1100z, 1200z, and 1300z.

INE2 has a position drift that increases to ~7000 m by the end of the flight. INE1 is used in meteorological calculations.

HGALT is noisier than GPGALT, has spikes at t/o and landing, and is up to ~100m lower than GPGALT. Thus I chose GPGALT to use in meteorological calculations.

There is about a 2mb difference between PS1M and PS2M. From test flights comparing aircraft data to dropsonde data PS2M has been closer to representing the actual atmosphere.

PS2 spikes ~0.5mb at 082051z-082108z.

PS1 spikes ~1mb from takeoff to 082418z. Used PS2 in meteorological calculations.

DPL is bad due to known problems on the aircraft. DPR is used in meteorological calculations.

There were periods where the dewpoint temperature exceeded the ambient temperature resulting in RH values > 100%. This was likely due to passing through a cloud layer, a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dewpoint sensor as it tried to burn off excess moisture. Corrections were not made to the data.

Flight Director:
Phone #:

LTJG Jackie Almeida
(813) 828-3310 ext. 3075



NOAA G-IV N49RF
WSR10 - Japan
02 Feb 2010



All other instruments worked optimally during the flight

17 dropsondes launched: 17 good, 00 bad

All 17 good drops successfully sent to NCEP and ingested into the 10/12Z model run.

Flight Director:
Phone #:

LTJG Jackie Almeida
(813) 828-3310 ext. 3075

Flight: 20100210N1

Inertial Altitude
 ALT (m)
 IRS Baro-Inertial Altitude
 ALT_PITR (m)
 IRS Baro-Inertial Altitude
 ADCBCALT (m)
DADC Baro Corrected Altitude

Radar Altitude
 HGM232 (m)
Geometric (Radar) Altitude

Pitch vs Alt
 PITCH (deg)
Aircraft Pitch Angle
 PITCH_PITR (deg)
Aircraft Pitch Angle

Heading vs Trk
 THDG (deg)
IRS1
 THDG_PITR (deg)
IRS2

GPS Altitude
 GHALT SG1 (m)
Honeywell GPS Altitude (MSL)
 GHALT SG2 (m)
Honeywell GPS Altitude (MSL)
 GPALT (m)
Collins GPS Altitude (MSL)

D-Value
 GPG DVALU (m)
D-VALUE
Geopotential Alt Source - PALT

Roll vs Hdg
 ROLL (deg)
Aircraft Roll Angle
 ROLL_PITR (deg)
Aircraft Roll Angle

Drift Angles
 AOCD A (deg)
Computed Drift Angle
 AOCD A (deg)
Computed Drift Angle
 DRFTA (deg)
IRS1 Drift Angle
 DRFTA_PITR (deg)
IRS2 Drift Angle

Pressure Altitude
 PALT (m)
NACA Pressure Altitude
 PALTF (feet)
NACA Pressure Altitude
 ADCPALT (m)
DADC Pressure Altitude

Geopotential Altitude
 GPGALT (m)
Collins GPS
Geopotential Altitude
 HGALT (m)
APN-232 Radar
Geopotential Altitude

Noisy Sprites to Land

Track vs DA
 AOCTK (deg)
Computed Aircraft Track
Angle from IRS1
 AOCTK_PITR (deg)
Computed Aircraft Track
Angle from IRS2
 TKAT (deg)
IRS1 Track Angle
 TKAT_PITR (deg)
IRS2 Track Angle

TKAR (deg/s)
IRS1 Aircraft Track
Angle Rate
 TKAR_PITR (deg/s)
IRS2 Aircraft Track
Angle Rate

Select the following variable references:

<input checked="" type="checkbox"/> ATTACK	AKRD(1, 2)	<input checked="" type="checkbox"/> QCX	QC(1, 2)M
<input checked="" type="checkbox"/> ATX	AT(1, 2, 3, 4)	<input checked="" type="checkbox"/> QCXC	QC(1, 2)C
<input checked="" type="checkbox"/> DPX	DP(L, R)	<input checked="" type="checkbox"/> SSLIP	SSRD(1, 2)
<input checked="" type="checkbox"/> DPXC	DP(L, R)C	<input checked="" type="checkbox"/> TASX	TAS(1, 2)
<input checked="" type="checkbox"/> GPG	DVALU (HG, GPG)ALT	<input checked="" type="checkbox"/> TTX	TT(1, 2, 3, 4)
<input checked="" type="checkbox"/> PSX	PS(1, 2)M	<input checked="" type="checkbox"/> WI	IRS 1 or 2
<input checked="" type="checkbox"/> PSXC	PS(1, 2)C	<input checked="" type="checkbox"/> XLATC	IRS 1 or 2

- Print Trackline
 Print FD Log
 Print Calibration Worksheet
 Print Error Summary

Color Code
Red = Reference Variable
Blue = Inertial Variable
Green = Default Variable used in Reference Variable

Note: IRS = Inertial Reference System.

Equivalent to INS on P-3's. _PITR denotes IRS#2.

Pg.1 - Alt, Pitch, Roll, Hdg, Trk, DA
Pg.2 - Lat, Lon, GPS...
Pg.3 - Temps, DP, Humidity...
Pg.4 - PQ, PS, Attack, SSIP, Winds...
Pg.5 - GS, Vert Velocity, TAS, Mach

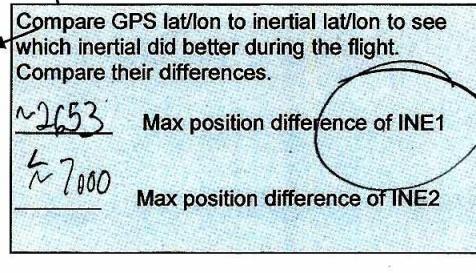
Flight: 20100210N1

Latitudes	
<input checked="" type="checkbox"/>	GHLATF_SG1 (deg) Honeywell GPS
<input checked="" type="checkbox"/>	Latitude, Fine GHLATF_SG2 (deg) Honeywell GPS
<input checked="" type="checkbox"/>	Latitude, Fine GHLAT_SG1 (deg) Honeywell GPS Latitude
<input checked="" type="checkbox"/>	GHLAT_SG2 (deg) Honeywell GPS Latitude
<input checked="" type="checkbox"/>	GPLAT (deg) Collins GPS Latitude
<input checked="" type="checkbox"/>	LAT (deg) IRS1 Latitude
<input checked="" type="checkbox"/>	LAT_PITR (deg) IRS2 Latitude
<input type="checkbox"/>	XLATC (deg) GPS-Corrected Inertial Latitude

GPS Differences	
<input checked="" type="checkbox"/>	GDIF1
<input checked="" type="checkbox"/>	Position Difference (Collins - IRS1)
<input checked="" type="checkbox"/>	GDIF2
<input checked="" type="checkbox"/>	Position Difference (Collins - IRS2)

Difference Utilities	
<input type="checkbox"/>	DIFF1
<input type="checkbox"/>	Difference Utility 1 (AT3 - ADCSAT)
<input type="checkbox"/>	DIFF2
<input type="checkbox"/>	Difference Utility 2 (PS2M - PS1M)
<input type="checkbox"/>	DIFF3
<input type="checkbox"/>	Difference Utility 3 (QC1M - QC2M)

Longitudes	
<input checked="" type="checkbox"/>	GHLONF_SG1 (deg) Honeywell GPS
<input checked="" type="checkbox"/>	Longitude, Fine GHLONF_SG2 (deg) Honeywell GPS
<input checked="" type="checkbox"/>	Longitude, Fine GHLON_SG1 (deg) Honeywell GPS
<input checked="" type="checkbox"/>	Longitude GHLON_SG2 (deg) Honeywell GPS
<input checked="" type="checkbox"/>	GPLON (deg) Collins GPS Longitude
<input checked="" type="checkbox"/>	LON (deg) IRS1 Longitude
<input checked="" type="checkbox"/>	LON_PITR (deg) IRS2 Longitude
<input checked="" type="checkbox"/>	XLONGC (deg) GPS-Corrected Inertial Longitude



HDOP	
<input type="checkbox"/>	GHHDOP_SG1 (none) Honeywell GPS Horiz.
<input type="checkbox"/>	Dilution of Precision
<input type="checkbox"/>	GHHDOP_SG2 (none) Honeywell GPS Horiz.
<input type="checkbox"/>	Dilution of Precision
VDOP	
<input type="checkbox"/>	GHVDOP_SG1 (none) Honeywell GPS Vertical
<input type="checkbox"/>	Dilution of Precision
<input type="checkbox"/>	GHVDOP_SG2 (none) Honeywell GPS Vertical
<input type="checkbox"/>	Dilution of Precision
HFOM	
<input type="checkbox"/>	GHHFOM_SG1 (m) Honeywell GPS Horiz.
<input type="checkbox"/>	Figure of Merit
<input type="checkbox"/>	GHHFOM_SG2 (m) Honeywell GPS Horiz.
<input type="checkbox"/>	Figure of Merit
VFOM	
<input type="checkbox"/>	GHVFOM_SG1 (m) Honeywell GPS Vertical
<input type="checkbox"/>	Figure of Merit
<input type="checkbox"/>	GHVFOM_SG2 (m) Honeywell GPS Vertical
<input type="checkbox"/>	Figure of Merit

You can use the difference utilities for comparing the difference between any 2 quantities. Just change the inputs in NIMBUS and re-run to create a new NetCDF file. The difference is calculated by subtracting the second variable from the first

Hourly spikes
10z, 11z, 12z, 13z

Pg.1 - Alt, Pitch, Roll, Hdg, Trk, DA
Pg.2 - Lat, Lon, GPS...
Pg.3 - Temps, DP, Humidity...
Pg.4 - PQ, PS, Attack, SSlip, Winds...
Pg.5 - GS, Vert Velocity, TAS, Mach

Flight: 20100210N1

Temperatures

Ambient Temperature
 AT1 (degC)
Ambient Temperature, Top Left
N/A AT2 (degC)
Ambient Temperature, Bottom Right
 AT3 (degC)
Ambient Temperature, Top Right
 AT4 (degC)
Ambient Temperature, Bottom Left
3 ATX (degC)
Ambient Temperature, Reference

Total Temperature
 TT1 (degC)
Total Temperature, Left
N/A Top TT2 (degC)
Total Temperature, Right Bottom
TT3 (degC)
Total Temperature, Left Bottom
TT4 (degC)
Total Temperature, Right Top
3 TTX (degC)
Total Temperature Reference

Dewpoint Temperature
 DPLC (degC)
Dew Point Temperature, Left
 DPRC (degC)
Dew Point Temperature, Right
R DPXC (degC)
Dew Point Temperature, Reference
 DPL (degC)
Left Dew/Frost Point Temperature
 DPR (degC)
Right Dew/Frost Point Temperature
R DPX (degC)
Dew/Frost Point Temperature, Reference

DPL
BAD

Air Temperature
 ADCSAT (degC)
DADC Static Air Temperature
 ADCTAT (degC)
DADC Total Air Temperature

Potential Temperature
 THETA (K)
Potential Temperature
 THETAE (K)
Equivalent Potential Temperature
 THETAV (K)
Virtual Potential Temperature

Hygrometers
 BCRYO (volts)
 CR-2 Hygrometer Balance
 CRYO (degC)
 CR-2 Hygrometer
 CRYOC (degC)
CR-2 Hygrometer, corrected
 PCRYO (mb)
CR-2 Hygrometer Pressure

Humidity
 RHODL (g/m3)
Absolute Humidity, T-Electric Left
 RHODR (g/m3)
Absolute Humidity, T-Electric Right
 RHUM (%)
Relative Humidity

Mixing Ratio
 MR (g/kg)
Mixing Ratio, T-Electric
 EDPC (mb)
Ambient Water Vapor Pressure, Reference

2/100

PS1 spike beg - 082418

PS2 - 082056 - 082108

Flight: 20100210N1

Pressures
 $Q_{CC} = Q_{CM}$

- Dynamic Pressure
- QC1C (mb)
- Corrected Dynamic Pressure, Left
- QC1M (mb)
- Left Raw Dynamic Pressure
- QC2C (mb)
- Corrected Dynamic Pressure, Right
- QC2M (mb)
- Right Raw Dynamic Pressure
- 2 QCX (mb)
- 2 Raw Dynamic Pressure, Reference
- 2 QCXC (mb)
- Corrected Dynamic Pressure, Reference

- Attack (compare to pitch)
- AP1 (mb)
- Left Vertical Differential Pressure
- AP2 (mb)
- Right Vertical Differential Pressure
- DAP1 (mb)
- Left Raw Dynamic Attack Pressure
- DAP2 (mb)
- Right Raw Dynamic Attack Pressure
- ADCAOA (deg)
- Air Data Computer Attack Angle
- AKRD1 (deg)
- Attack Angle, Left Side
- AKRD2 (deg)
- Attack Angle, Right Side
- 1 **ATTACK (deg)**
- Attack Angle, Reference

Note: Attack and Sideslip often CORRELATE with each other, so it's sometimes helpful to compare

$P_{SC} = P_{SM}$

- Static Pressures
- PS1C (mb)
- Corrected Static Pressure, Top Fuselage
- PS1M (mb)
- Raw Static Pressure, Top Fuselage
- PS2C (mb)
- Crrtd Static Pressure, Bottom Fuselage
- PS2M (mb)
- Raw Static Pressure, Bottom Fuselage
- 2 PSX (mb)
- 2 Raw Static Pressure, Reference
- 2 PSXC (mb)
- Corrected Static Pressure, Reference

- Sideslip (compare to roll)
- BP1 (mb)
- Top Horizontal Differential Pressure
- BP2 (mb)
- Bottom Horizontal Differential Pressure
- DBP1 (mb)
- Top Raw Dynamic Slip Pressure
- DBP2 (mb)
- Bottom Raw Dynamic Slip Pressure
- SSDF1 (deg)
- Sideslip Angle, Diff. Pressure, Top
- SSDF2 (deg)
- Sideslip Angle, Diff. Pressure, Bottom
- SSRD1 (deg) ~ 0, 10
- Sideslip Angle, Top
- SSRD2 (deg) ~ 1, 11
- Sideslip Angle, Bottom
- SSLIP (deg)
- Sideslip Angle, Reference

- Surface Pressure
- PSURF (mb)
- Calculated Surface Pressure

- Cabin Pressure
- PCAB (mb)
- Cabin Pressure

- Horizontal Wind Direction
- IWD (deg)
- Horizontal Wind Direction (IRS)
- IWD_PITR (deg)
- Horizontal Wind Direction (IRS)
- WD (deg)
- Horizontal Wind Direction

- | |
|--|
| <input checked="" type="checkbox"/> Horizontal Wind Speed |
| <input checked="" type="checkbox"/> IWS (m/s) |
| <input checked="" type="checkbox"/> Horizontal Wind Speed (IRS) |
| <input checked="" type="checkbox"/> IWS_PITR (m/s) |
| <input checked="" type="checkbox"/> Horizontal Wind Speed (IRS) |
| <input checked="" type="checkbox"/> WS (m/s) |
| Horizontal Wind Speed |
| <input checked="" type="checkbox"/> North/South Component |
| <input checked="" type="checkbox"/> VI (m/s) |
| <input checked="" type="checkbox"/> Wind Vector, North Component |
| <input checked="" type="checkbox"/> East/West Component |
| <input checked="" type="checkbox"/> UI (m/s) |
| <input checked="" type="checkbox"/> Wind Vector, East Component |

- Vertical Winds
- WI (m/s)
- Wind Vector, Vertical Gust Component

- UTAN/URAD Winds
- UX (m/s)
- Wind Vector, UTAN Longitudinal Component
- VY (m/s)
- Wind Vector, Lateral Component URAD

Flight: 20100210N1

Groundspeeds
 GHGSF_SG1 (m/s)
Honeywell GPS Ground Speed
 GHGSF_SG2 (m/s)
Honeywell GPS Ground Speed
 GPGSPD (m/s)
Collins GPS Ground Speed
 GSF (m/s)
Inertial Ground Speed
 GSF_PITR (m/s)
Inertial Ground Speed

East/West Component
 GHVEW_SG1 (m/s)
HoneyWell GPS Ground Speed Vector E/W
 GHVEW_SG2 (m/s)
HoneyWell GPS Ground Speed Vector E/W
 GPVEW (m/s)
Collins GPS Ground Speed Vector E/W
 VEW (m/s)
Inertial Ground Speed Vector E/W
 VEW_PITR (m/s)
Inertial Ground Speed Vector E/W
 XVEWC (m/s)
GPS-Corrc'td Inertial Ground Spd Vector E/W

North/South Component
 GHVNS_SG1 (m/s)
HnyWll GPS Grnd Spd Vector, Nrh/Stth Component
 GHVNS_SG2 (m/s)
Hnywll GPS Grnd Spd Vector, Nrh/Stth Component
 XVNSC (m/s)
GPS-Corrc'td Inertial Ground Spd Vector, North Component

Vertical Acceleration
 ACINS (m/s2)
Aircraft Vertical Acceleration
 ACINS_PITR (m/s2)
Aircraft Vertical Acceleration

Vertical Velocity
 GHVZI_SG1 (m/s)
Hnywll GPS Comp'd aircraft Vert. Velocity
 GHVZI_SG2 (m/s)
Hnywll GPS Comp'd aircraft Vert. Velocity
 GPVSPD (m/s)
Cllns GPS Comp'd Aircraft Vertical Velocity
 VSPD (m/s)
IRS-Computed Aircraft Vertical Velocity
 VSPD_PITR (m/s)
IRS-Computed Aircraft Vertical Velocity
 WP3 (m/s)
Damped Aircraft Vertical Velocity
 WP3_PITR (m/s)
Damped Aircraft Vertical Velocity

GPVNS (m/s)
Cllns GPS Grnd Spd Vector, Nrh/Stth Component
 VNS (m/s)
Inertial Ground Speed Vector, North/South Component
 VNS_PITR (m/s)
Inertial Ground Speed Vector, North/South Component

Airspeeds
 ADCCAS (m/s)
DADC Computed Airspeed
 IAS (Kts)
Aircraft Indicated Airspeed
 ADCTAS (m/s)
DADC True Airspeed
 TAS1 (m/s)
Aircraft True Airspeed
 #1
TAS2 (m/s)
Aircraft True Airspeed
 #2
TASHC (m/s)
Aircraft True Airspeed, Humidity Corrected
 TASX (m/s)
Aircraft True Airspeed, Reference

Mach
 ADCMACH (none)
DADC Mach Number
 MACH (none)
Aircraft Mach Number
 XMACH2 (none)
Aircraft Mach Number Squared

DSM	CHAN	U P D A T	DESCRIPTION	MANUF.	MODEL	SERIAL NUMBER	RANGE (V)	Update of Calibration 05 Aug 2009					
								C1	C2	G	Vos	C1'	C2'
FWD	00		Left AOA AP (AP1)	Rosemount	1221F2VL7B1B	2299	+/- 10	0.0021	6.8842	1	10	0.0021	6.8842
FWD	01		Left AOA DAPM (DAP1)	Rosemount	1221F2AF8B1B	2312	0 - 10	0.9327	34.4761	2	10	173.3132	17.2381
FWD	02		Right AOA AP (AP2)	Rosemount	1221F2VL7B1B	2309	+/- 10	-0.067	6.8901	1	0	-0.0670	6.8901
FWD	03		Right AOA DAPM (DAP2)	Rosemount	1221F2AF8B1B	2313	0 - 10	-1.2127	34.4983	2	10	171.2788	17.2492
FWD	04		Top Slip BP (BP1)	Rosemount	1221F2VL7B1B	2300	+/- 10	-0.1618	6.8935	1	0	-0.1618	6.8935
FWD	05		Top Slip DBPM (DBP1) (DBPM2)	Rosemount	1221F2AF8B1B	2319	0 - 10	-0.3527	34.4729	2	10	172.0118	17.2365
FWD	06		Bottom Slip BP (BP2)	Rosemount	1221F2VL7B1B	2310	+/- 10	0.0028	6.8869	1	0	0.0028	6.8869
FWD	07		Bottom Slip DBPM	Rosemount	1221F2AF8B1B	2318	0 - 10	-1.9627	34.4847	2	10	170.4608	17.2424
FWD	08		Left Dewpoint (DPL)	EdgeTech	137-C3 Ext. Range	1635 / 018269	0 - 5	-100.24	30.074	4	10	-25.055	7.5185
FWD	09		Right Dewpoint (DPR)	EdgeTech	137-C3 Ext. Range	1686 / 018268	0 - 5	-100.37	30.041	4	10	-25.2675	7.5103
FWD	0a		Total Temp #3 (TT3)	Rosemount	102LJ2AG w/ 510G341E	A32555/0202	+/- 10	-0.1575	6.9931	1	0	-0.1575	6.9931
FWD	0b		Total Temp #2 (TT2)	Rosemount	102CP2AF w/ 510G343E	A20245 / 0199	+/- 10			1	0	0.0000	0.0000
FWD	0c		Total Temp #4 (TT4)	Rosemount	102CP2AF w/ 510G341E	A6786 / 0141	+/- 10	0.0542	7.0261	1	0	0.0542	7.0261
FWD	0d		Total Temp #1 (TT1)	Rosemount	102CP2AF w/ 510G341E	A18367/0140	+/- 10	0.2124	7.0005	1	0	0.2124	7.0005
FWD	0e		Static Pressure #1 (PS1M)	Rosemount	1281AF2B1B	588	0 - 10	-0.5869	108.3262	2	10	541.0441	54.1631
FWD	0f		Dynamic Pressure #1 (QC1M)	Rosemount	1281AF2B1B	588	0 - 10	-0.0815	33.8826	2	10	169.3315	16.9413
FWD	10		Static Pressure #2 (PS2M)	Rosemount	1281AF2B1B	826	0 - 10	-2.4031	108.3794	2	10	5339.4939	54.1897
FWD	11		Dynamic Pressure #2 (QC2M)	Rosemount	1281AF2B1B	826	0 - 10	-0.3861	33.8788	2	10	169.0079	16.9394
FWD	12		Cr-2 Hygrometer	Buck	CR-2	207	0 - 10	-1.50	20	2	10	-50	10
FWD	13		Cr-2 Hygrometer Pressure	Buck	CR-2	207	0 - 10	100	100	2	10	600	50
FWD	14		Cr-2 Hygrometer Balance	Buck	CR-2	207	0 - 10	0	1	1	0	0.0000	1.0000
AFT	0		Cabin Pressure (PCAB)	Vaisala	PTB220	W3120002	0 - 5	500	120	4	10	800	30

*Note: This table has been modified from the official assignment sheet.

If the numbers contained in columns C1' and C2' are green, then they are actually C1 & C2 and are not calculations of C1' or C2'. They were copied over to make it easier to read when checking the calibration coefficients in Nimbus.

$$\begin{aligned} C1' &= (C2' \times V_{os}) + C1 \\ C2' &= C2 / G \\ \text{Units} &= C1 + C2 * V_{adc} \end{aligned}$$

AOC GPS Dropwindsonde Log

Flight ID: 20100210a1Flight Director: AL MEIDAMission ID: N00A9 23WSWStorm/Track: TRACK 99

Fall (sec)	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/KMBC (UTC)
											1	3	
926	1	30544174	084006	37 41 148 59	DARK	1015.6	01	L5	10 6.9	014	092027		
898	2	09373605	09000938	29 152 28		1011.3	02	L5	10 8.3	301	092924		
957	3	09373605	09200239	05 156 08	✓	1009.3	03	L5	10 14.2	297	094605		
934	2	093736162	094006	39 34 159 51		1007.3	04	L5	10 13.7	295	100530		
967	1	093736160	100004	39 56 163 35		1005.3	05	L5	10 13.1	292	102544		
919	2	094120122	102004	40 35 167 13		1002.7	06	L5	10 18.1	286	104904		
941	1	094120128	104004	41 28 170 49		998.1	07	L5	10 15.0	286	110716		
930	2	093736054	160006	42 32 173 58		995.4	08	L5					
918	1	093736034	120006	43 59 171 59		992.9	09	L5	10 5.1	063	115244		
893	2	093736051	114006	45 08 169 34		999.7	10	L5	10 7.9	063	120627		
919	1	094120134	120006	45 13 166 34		998.8	11	L5	10 3.4	069	122651		
891	2	094355022	122007	44 36 163 44		998.7	12	L5	10 10.7	077	124930		
930	1	093736047	124010	43 50 161 03		1001.4	13	L5	10 12.2	067	130432		
956	2	093736325	130005	43 03 158 34		1001.7	14	L5	10 13.6	282	132504		
938	1	094355045	132006	42 20 156 05		1005.5	15	L5	10 14.5	304	134440		
955	2	094120114	134005	41 45 153 36		1009.4	16	L5	10 13.1	285	140347		
937	1	093736159	140005	41 08 151 14		1011.6	17	L5	10 8.5	301	142200		

10	30	1	50	10
6	34	54	14	
3	37	57	17	
	Pg 39	of 39		19

NOTES ON BACK

Drop 1 - Missing PTU data $\sim 280\text{mb} \rightarrow \sim 324\text{mb}$
 $(t = 16.5\text{ sec})$ $(t = 22.2\text{ sec})$

- wind spike @ 338mb from 37.6744, 149.0979
to 13.1448, 8.9734

Drop 7 - wind spike @ 465mb from 41.4064, 171.1562
to 14.1084, 02.5220

Drop 8 - wind spike @ 300mb from 42.3473, 174.0846 (removed bad data from D)
to 14.6243, 1.6977 (file + saved as Pb.6 file)

Drop 12 - wind spike @ 385.8mb from 44.5796, 163.9751
to 14.6143, 4.2069

t/o wx: wd: E → VRB

~0800Z ws: 5-10 kts

clouds: OVC021-7025 POSS BKN005

turb: light ice from 500 ft - 79500 ft AGL

Outbound: wd: W/WNW

ws: 100-130 kts

clouds: BLOW FC.

turb: POSS. LT

ice:

Inbound: wd: W

ws: 100-130 kts

clouds:

turb:

ice:

landing wx: wd: NE

~1500Z ws: 10

clouds: BKN005

turb:

local conditions: ~~ice 500-9500 ft~~
3 nm Vis - SHRA

Sea Salt:

Volcanic Ash:

NOAA G-IV flight request for Wednesday 02/10/2010

Radio Call Sign: NOAA49

Planned take off: 02/10/2010 0800Z

Planned landing time: 02/10/2010 1600Z

Route of flight

1 RJTY 35.75 139.35 ①

KOGAR

TLE

CVC
ACQ

2 38 01N 150 00E 38.02 150.0 ②

3 39 35N 160 00E 39.58 160.0

4 40 03N 165 14E 40.03 165.23

5 41 17N 170 00E 41.28 170.0

6 42 10N 174 12E 42.17 174.2 ③

7 45 06N 170 30E 45.10 170.5

8 45 13N 166 07E 45.22 166.12

9 42 34N 157 09E 42.57 157.15

Stop → 10 40 48N 150 00E 40.80 150.0 ④

NIKON

JD

HATAR

RJTY 35.75 139.35

Planned Altitudes: FL390-450

