

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

FLT ID: 20140219N1	From: PHNL	To: PHNL
FLT #:	Blk In: 0234 z	Lnd Time: 0229z
ETD: 2030 z	Blk Out: 1950 z	T/O Time: 1959 z
ETE: 330z 7+00	Total Blk: 6.7	Total Flt: 6.5
Sponsoring Org: ESRL	Program: PAR	Purpose: INT/ITCZ

AOC Flight Crew

Aircraft Commander: MOYERS	SSA: DEFEO
Co-Pilot: MANSOUR MacINTYRE	AVAPS: RICHARDS SMITH
Navigator: /	Scientists: - Andre PATTANTYUS (Univ. Hawai)
Flight Eng: /	Scientists: - David HITZLER
Flt Director: HENNING	Scientists: - Brandon BUKUNT (")
SEB: GOLDSTEIN /	Scientists:

Crew Chief:	Visitors: STA 1016.1	1013.4
-------------	----------------------	--------

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	#2 1014.7	1958 30.1 1953 30.01	1010.7	0158 30.11 0258 30.11 1013.4

AS REQUIRED BY ORM	YES / NO	REMARKS
VOLCANIC ASH		
SCIENCE MISSION WITHIN BOUNDARY LAYER		
LACK OF PRECIPITATION		
RELATIVE HUMIDITY AT OR ABOVE 80%		
LARGE AIR-SEA TEMPERATURE GRADIENT		
HIGH SURFACE WINDS		
LONG FETCH AND/OR DURATION OF SFC WIND		
SEA SALT ACCRETION FORECAST		
SEA SALT ACCRETION OBSERVED		

Dropsondes	13	Good: 12	Bad: 1 (NLD)	Sent: 12
AXBT		Good:	Bad:	Sent:

List other data sources in Remarks section

Remarks (Storm VDM Identifier, Mission ID, Fix Times)	Fix #	VDM Ob Num	Fix Time / SLP
Storm Number Identifier (VDM): (ie: AL072012)			
TCPOD/WSPOD Mission ID: WXWXC ATMO SRIVERI (ie: NOAA2 2418A SANDY)			

Remarks:

PHL1

FAX
(813) 828-4529



N49RF ERROR SUMMARY

Atmos Rivers #9

PHNL > PHNL 19 Feb 2014



Flight ID: 20140219N1

<u>Sensor or system</u>	<u>Number or Name</u>
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.4
Dewpoint Temp. Probe	TDM.2
Vertical Accelerometer	AccZI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2
Constants File	49cal102
Flight Directory	acdata/MET/2014/20140219N1

Notes:

TDM.1 and TDM.2 are both not rated for use under -50 deg C and cannot be considered reliable for dew points colder than -50C. TDM.1 exceeded the ambient temperature for nearly the entire mission during cruise above 41,000 feet. TDM.2 was used for post processing.

TTM.3 continues to display an oscillation with a magnitude of about 0.6 to 0.8 degrees C and a period of about 120 seconds. TTM.4 was selected for Total Temperature in post processing. TTM.4 displays a much smaller oscillation (less than 0.1 deg C) with a much smaller period (about 10 to 20 seconds). This TTM.4 oscillation is only seen at high altitude. TTM.1 is about a degree colder than the other total temps at cruise altitude.

	Takeoff (1959Z)	Landing (0229Z)
Aircraft Static Pressure	1014.7 mb	1010.7 mb
Corrected Tower Pressure	1016.1 mb	1013.4 mb

13 Dropsondes deployed. 12 were good and transmitted. Sonde released at 2146z had no launch detect. Backup was good.

Flight ID: 20140219N1

Flight ID: 2014021901

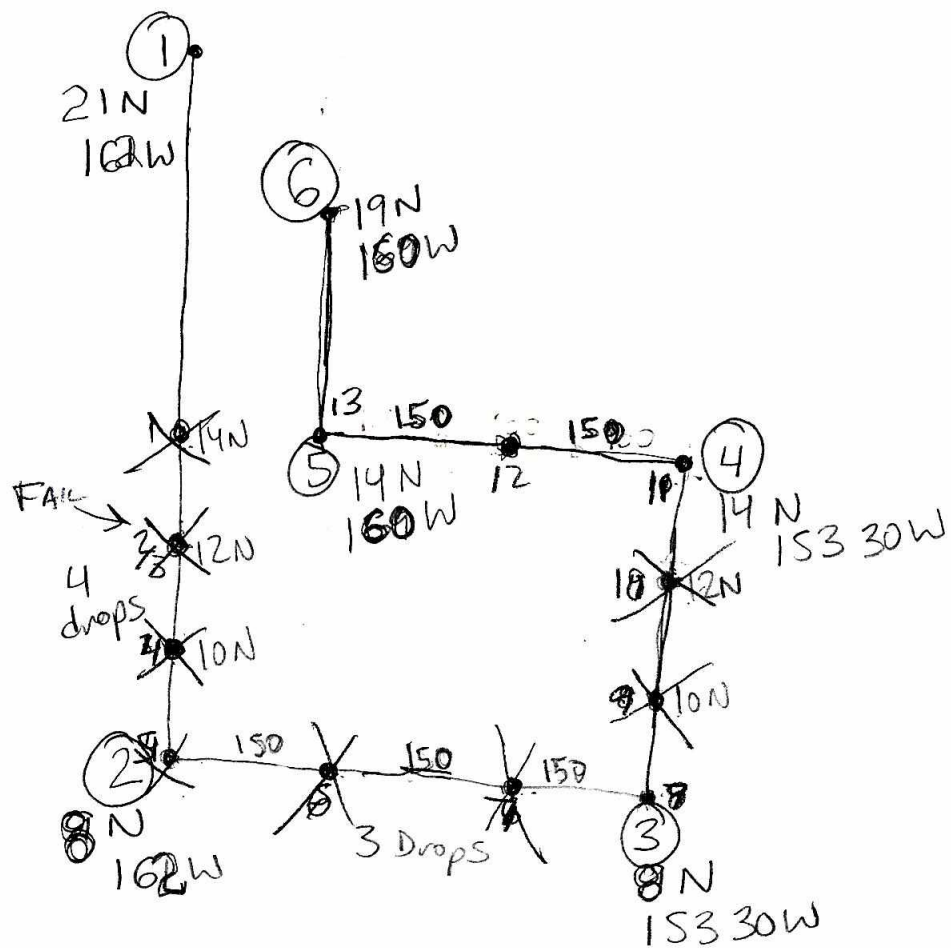
Flight Director:

Pg ____ of ____

Mission ID: WXXC ATMOSPHERIC I Storm/Track:

Ch. #	Drop #	Sonde ID	Drop Time (UTC)	Lat (°N)	Lon (°W)	Wx Cond.	SFC Prs (mb)	Ob #	L5/R5 (ht, ws, wd)	Last Winds L5 (ht, ws, wd)	Sent Time/KWBC (UTC)
1	1	5011	2130+					①			✓
2	2	5086	2146								✓
3	3	5087	2148								✓
4	4	5034	2202								✓
5	5	5025	2218-								✓
6	6	5181	2239								✓
7	7	5175	2259+								✓
8	8	5167	2326+								✓
9	9	5038	2344+								✓
10	10	5168	0001								✓
11	11	5133	0018								✓
12	12	5014	0046+								✓
13	13	5175	0113+								✓

355



~~drops~~
sondes

90
21
69

120
260
380
~~190~~
190

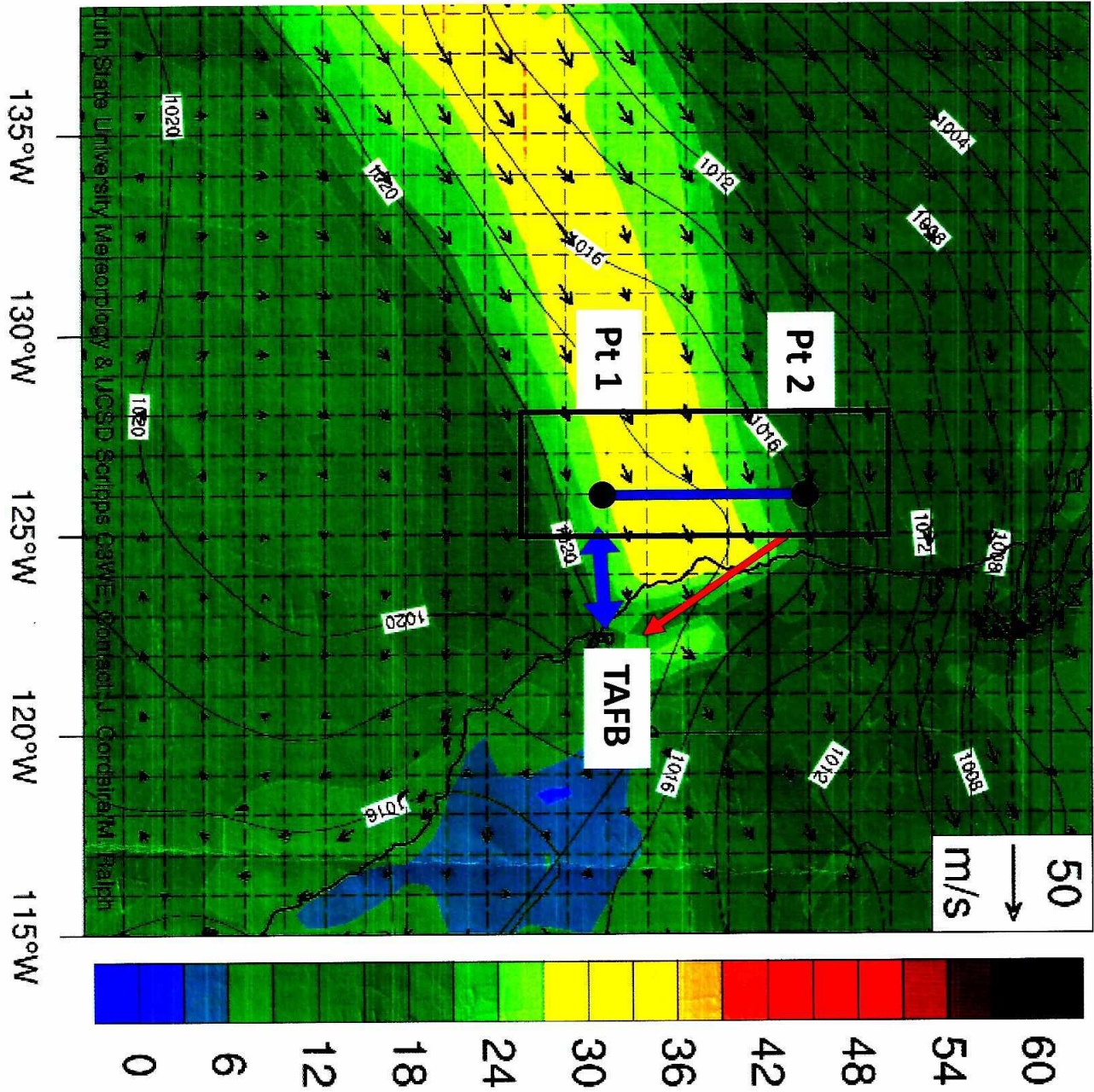
6 3 ↓
48 169 183 190

6 3 1 ↓
250 276 290 300

6 3 1
100 129 143 150

P GFS IWV (mm), 850-hPa Wind, and SLP (hPa)
zed 12Z Thu 02/13/14; Valid 21Z Fri 02/14/14

F+33h



IOP-6 Stacked TDR F
TO 930 AM
Fri 14 Feb
4 drops

TDR Track	Flight Level	Lat
Pt 1	380	38.0
Pt 2	380	43.0
Pt 2	060*	43.0
Pt 1	060*	38.0
Pt 1	170*	38.0
Pt 2	170*	43.0

*Flight level on mid and low legs determine
dropsondes from high leg. Decision on flight
lower leg is decided based on Drops 3 and 4
during descent at Pt 2

NOAA • AOC • SED

N49RF AVAPS DROP LOG

Lead Tech: Gabe Defeo

Project: Atmospheric Rivers 2014Mission: AR-9Flight ID: 20140219N1Take Off: 1959Z Landing: 0229ZFlt Dir: HemmingLauncher S/N:

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	134255011	1	0	2130	TMR	PAR	FAILED ON LAUNCH	✓
2	134255086	2	-4	2146			No Launch Defect	—
3	134255087	3	0	2148				✓
4	134325034	4	0	2202				✓
5	134255025	1	0	2218				✓
6	134735181	2	0	2239			Lost GPS @ $\approx 80m$	✓
7	134735175	3	0	2259			Lost GPS @ $\approx 5000m$	—
8	112815167	4	0	2327				✓
9	112815038	1	0	2344				✓
10	112815168	2	0	0001				✓
11	112825133	3	0	0018				✓
12	114425014	4	0	0046				✓
13	112815175	1	0	0113				
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								

02/19/2014, 19:31:30-26:35:00

