

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20210821N1	FLT #:		AC:	Nardi	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:		CP(s):	Varwig		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:			34				1	34	
Block Time		Flight Time		NAV:		ASOS Takeoff		BTs			
In:	1305z	Land:	1302z	FE(s):				Good	Bad	Sent	
Out:	0517z	T/O:	0523z	FD(s):	Holmes	ASOS Land					
Total:	7.8	Total:	7.4	SSA:	Lynch						Visitors:
				Sponsoring Org:	NWS		AVAPS:	Hartberger	Storm Number ID:		AL082021
Program:	PHS		SEB:		(ie: AL072012)		TCPOD/WSPOD Mission				
Purpose:	Surveillance		MX:		(ie: NOAA2 2418A SANDY)		0808A HENRI				
AS REQUIRED BY ORM				Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP
VOLCANIC ASH					x		1				
SCIENCE MISSION WITHIN BDRY LAYER					x		2				
LACK OF PRECIPITATION					x		3				
RELATIVE HUMIDITY ≥ 80%					x		4				
LONG FETCH / DURATION OF SFC WND					x						
SEA SALT ACCRETION FORECAST					x						
SEA SALT ACCRETION OBSERVED					x						
							Pennies:				

*Highlighted items must be completed before departure.

Remarks:

G-IV QC Checklist

Flight ID:	20210821N1
Flight Director(s)	Holmes / Parrish
UWZ.d mean:	0.01

Pressure Comparison		
	T/O	Land
Aircraft	1010.5	1011.4
Tower	1008.3	1010.7

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI.3	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI.3	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI.3			✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ AltGPS.3	✓ AltI.1 ✓ AltI.2 ✓ AltI.3	✓ AltPaADDU.1 ✓ AltPaADDU.2 ✓ AlTRA.1	✓ AltBCADDU.1 ✓ AltBCADDU.2		✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	
✓ Ground Speed	✓ GsXI.1 ✓ GsXI.2 ✓ GsXI.3 ✓ GsXGPS.1 ✓ GsXGPS.2 ✓ GsXGPS.3	✓ GsYI.1 ✓ GsYI.2 ✓ GsYI.3 ✓ GsYGPS.1 ✓ GsYGPS.2 ✓ GsYGPS.3	✓ GsZI.1 ✓ GsZI.2 ✓ GsZI.3 ✓ GsZGPS.1 ✓ GsZGPS.2 ✓ GsZGPS.3	✓ GsGPS.1 ✓ GsGPS.2 ✓ GsGPS.3		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3	✓ LatI.1 ✓ LatI.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3	✓ LonI.1 ✓ LonI.2		✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 x PDBETA.1 x PDBETA.2	✓ PQALPHA.1 ✓ PQALPHA.2 x PQBETA.1 x PQBETA.2	✓ PQM.1 ✓ PQM.2	✓ PSM.1 ✓ PSM.2		✓ PDLAPHaref x PDBETAref ✓ PQALPHaref x PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1				✓ IAS.d ✓ TAS.d	
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 ✓ PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 ✓ PitchRateI.3	✓ RolLI.1 ✓ RolLI.2 ✓ RolLI.3	✓ RollRateI.1 ✓ RollRateI.2 ✓ RollRateI.3		✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 □ TTM.2 ✓ TTM.3	✓ TTM.4	✓ TDM.1 ✓ TDM.2			✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)						✓ UWZ.d ✓ DPJ_WSZ ✓ HUM	x WS.d x WD.d

FLID_Mission_Documents.pdf:	
✓	Error Summary
✓	Crew Manifest
✓	QC Checklist
✓	Dropwindsonde Log(s) - AVAPS and FD if completed
✓	Flight Track
✓	Miscellaneous FD Notes

QC Key	
Not checked	□
Valid	✓
Errors (note)	x

NOTES:

.1 and .2 GPS parameters data "stair steps"
PDBETA.1 & PDBETA.2 unrepresentative due to spare radome
PQBETA.1 & PQBETA.2 unrepresentative due to spare radome
All flight level wind speed and direction suspected errors due to spare radome
TTM.3 oscillates
TDM.1 unrepresentative

AVAPS Drop Log

Project: _____

Mission: Henri

Flight ID: 20210821N1

Take Off: _____

Landing: _____

Flt Dir: Holmes

Launcher S/N: 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	204 650 042	1	0	0626	JFK	NWS		✓
2	204 850 209	2	0	0633			Medium fall	✓
3	204 521 409	3	0	0643				✓
4	204 250 136	4	0	0654				✓
5	204 650 368	1	0	0707				✓
6	204 650 041	2	0	0721				✓
7	204 650 402	3	0	0728				✓
8	204 640 098	4	0	0734				✓
9	205 050 300	1	0	0745				✓
10	204 521 391	2	0	0757			Late LD	✓
11	205 050 260	3	0	0818	CFL			✓
12	204 770 385	4	0	0835				✓
13	204 260 905	1	0	0845				✓
14	204 260 894	2	0	0902				✓
15	205 050 270	3	0	0926				✓
16	204 850 547	4	0	0937				✓
17	205 050 248	1	0	0947				✓
18	204 850 207	2	0	0956				✓
19	205 050 259	3	0	1004				✓
20	205 050 237	4	0	1015				✓
21	204 840 590	1	0	1028				✓
22	204 850 210	2	0	1036				✓
23	204 521 369	3	0	1045				✓
24	204 640 095	4	0	1052				✓
25	204 530 490	1	0	1100				✓
26	204 521 420	2	0	1109				✓
27	204 521 287	3	0	1119				✓
28	204 650 379	4	0	1129				✓
29	204 521 422	1	0	1139				✓
30	204 650 039	2	0	1151				✓
31	204 650 371	3	0	1159				✓

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
32	205 050 264	4	0	1207	CFL	NWS		L
33	204 840 555	1	0	1215				L
34	204 120 632	2	Ø	1222			Late GPS	
35	204 530 812	3	Ø	1224			back up	L
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								

Drop Station Operator Notes

Charge \$\$ To Options (DO NOT USE FUNDING CODES):

AOC, NWS, HRD, NESDIS, IR/SST, AR, STAN (Stanford), SAT (JPSS/NESDIS/HRD)

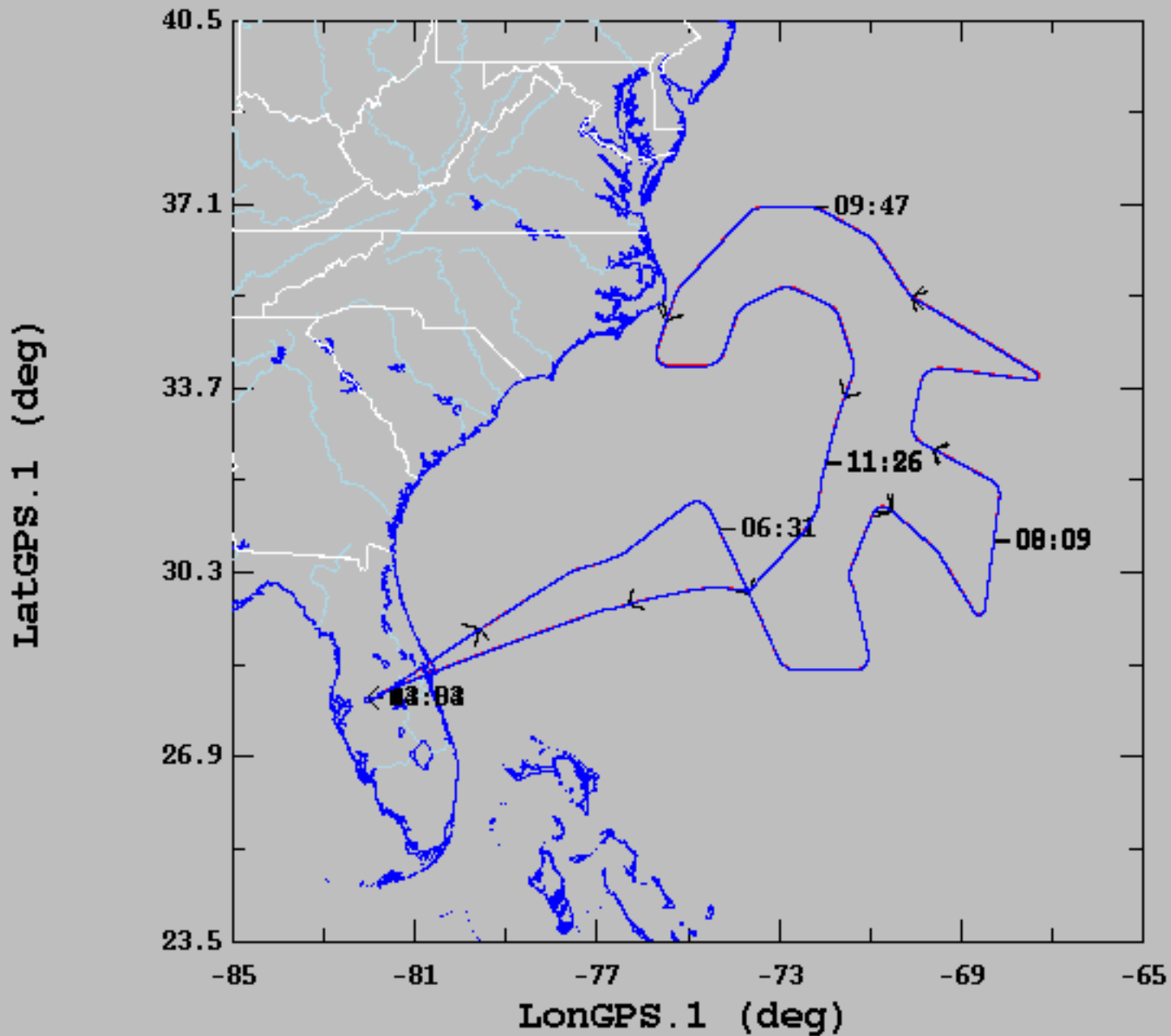
AVAPS Pre-Flight Check:

- If time-permits, verify cabin pressure sensor w/ lab standard
- Start AVAPS., then start Soundings and set the Project Name and Full Flight ID (example: 20120823N2).
- Verify the Frequency band allocation as required:
Band A: 53rd WRS - Band B: N42RF - Band C: N43RF - Band D: N49RF - Band E: Unallocated
- Select the **GPS Reference** tab from the **Soundings Displays** page and verify good GPS data
- Perform a prelaunch check on each channel, look for reasonable data and no CRC error status lights.
- Verify data is available on Remote AVAPS, then terminate the sonde.
- Verify the AVAPS Data mission folder has been created
- **Verify AVAPS PC Time is correct – if time is off by >4sec, no data will display**
- **Early launch detects are caused usually by remanufactured sondes with the chute riser line not properly coiled below the PCB ear. This may also cause fast falls. If this is suspected, repack the riser line as time permits**
- **Perform RH Regeneration on all sondes – Multiple RD41 sondes may be processed at once**

AVAPS Launch:

- Select a sonde frequency in the Green band and away from other sondes
- Enter sonde pressure error offset if 0.4mB or greater using cabin pressure sensor – warning, this can not be used during a climb
- **If the Cal lab pressure standard and the cabin pressure standard match, apply pressure offset +/- 0.1 mB**
- **Wait until GPS available (green) on the pre-launch screen before continuing.**
- Select “begin data collection” and verify good data with winds prior to putting sonde in launch tube
- On N42 & N43, remove about ½ of the ribbon. Do not shorten the ribbon on N49. Loosen ribbon and extend end of ribbon to near, but not over, the sensor end of the sonde. Place excess orange tape on end of ribbon to form a pocket.
- Place the sonde in the launch tube, sensor arm up, with the power pin socket facing right
- Verify the sonde is actively tracking GPS data prior to launch and **no early launch detect**

2021-08-21, 04:53:47-13:04:05



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	31.58	2.76	27.91	37.02
— LongGPS.1 (deg), 1 s/sec	-74.02	4.32	-82.07	-67.28
— LatI.1 (deg), 1 s/sec	31.60	2.76	27.91	37.03
— LonI.1 (deg), 1 s/sec	-74.01	4.31	-82.07	-67.28