Flight ID: 20231108H1

Sensor or System	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.2
Vertical Accelerometer	AccZfilterI-GPS.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/2023/MET/20231108H1

Local Met Data	Takeoff KLAL (0948Z)	Landing KLAL (1329Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.305
AttackAngleSlope		6.07576
SlipAngleIntercept		0.235
SlipAngleSlope		7.01112
AttackAngleIntercept2		2.06219
AttackAngleSlope2	5.99068	
SlipAngleIntercept2		0.125
SlipAngleSlope2		6.9873

_____

Notes:
There were no edits made in the measured parameters used to calculate
meteorological and navigational parameters.

Takeoff/Landing data: Data during landing and takeoff are potentially
suspect. It is recommended that ground data not be used for scientific
analysis.

I.3 for Pitch and Roll is not operational
TTM.3 is not operational
TRadU.1 is not operational
TDM.1 deviates from TDM.2 several degrees lower frequently during the
legs at 10 kft and above, and then reports erroneously beginning at 1225
UTC for the remainder of the flight
TDM.2, TD.c, and HUM values from takeoff through the 10 kft legs until
1051 UTC should be used with caution; appears erroneously low
Overall, TDM.2 is the better (consistently) behaving sensor and TDMref is
set to TDM.2; TDM.3 has erroneous data throughout the flight and should
not be used
PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not
provided since _AC file is not produced; all other 'C' file parameters
checked are from the _A file

```
Expendable Type          # deployed        # good      # transmitted
---------------          ----------        ------      -------------
Dropsondes               3                 3           0
Test sondes              0                 0           0
AXBTs                    0                 0           0
AXCPs                    0                 0           0
AXCTDs                   0                 0           0
UAS                      0                 0           0

Flight Director: Zawislak / Englert
Phone #: 305-707-4359
                            ACAT-4 Version = 7.4
```

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION

FLT ID:	20231108H1	FLT #:	FY24-
From:	KLAL	ETD:	0500L / 1000Z
To:	KLAL	ETA:	0900L / 1400Z

Block Time		Flight Time	
Out:	9:41	T/O:	9:49
In:	13:35	Land:	13:29
Total:	3.9	Total:	3.7

Sponsoring Org:	AOC
Program:	PSM
Purpose:	SFMR Calibration

CREW MANIFEST

Role	Name		
AC:	Doremus	Scientists:	
CP(s):	Keith		
CP(s):			
NAV:			
FE(s):	Wysinger		
FE(s):			
FD(s):	Zawislak		
FD(s):	Englert		
SSA:	McAlister	Visitors:	
AVAPS:	Waggoner		
SEB:			
SEB:			
SEB:			
MX:			

MISSION INFORMATION

Pressure

A/C Takeoff	1012.9
ASOS Takeoff	1012.8
A/C Land	
ASOS Land	1014.8

Dropsondes

Good	Bad	Sent
3	0	0

BTs

Good	Bad	Sent
0	0	0

Storm Number ID: (ie: AL072012)	N/A
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA2 WXWXA TRAIN

AS REQUIRED BY ORM

	Y	N
VOLCANIC ASH		x
SCIENCE MISSION WITHIN BDRY LAYER		x
LACK OF PRECIPITATION	x	
RELATIVE HUMIDITY ≥ 80%		x
LARGE AIR-SEA TEMP GRADIENT		x
HIGH SURFACE WINDS		x
LONG FETCH / DURATION OF SFC WND		x
SEA SALT ACCRETION FORECAST		x
SEA SALT ACCRETION OBSERVED		x

REMARKS

10000 ft -- 4 (5 min legs)
5000 ft -- 2 (5 min legs)
1500 ft -- 2 (5 min legs)
20000 ft -- 3 (5 min legs)
15000 ft -- 2 (5 min legs)
10000 ft -- 2 (5 min legs)

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1			
2			
3			
4			
Pennies:			

*Highlighted items must be completed before departure.

Remarks:	Shallow scattered cloud layer below aircraft for 10 kft legs for first 4 legs, so repeated 10 kft at end of cal flight with clear below
	Some RFI during 20 kft legs (3rd leg had less RFI), with also a few potential RFI spikes during the 15 kft legs
	Surface winds in sondes were ~5-9 kt

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.

Flight ID:	20231108H1
Flight Director(s):	Zawislak / Englert
Mission:	Equipment Checkout
UWZ.d mean:	0.04

Pressure Comparison		
	T/O	Land
Aircraft	1012.9	No good measurement
Tower	1012.8	1014.8

		Raw 1Hz Mean File Parameters			C File Parameters	
☑ Accelerometer	☑ AccAXI.1	☑ AccAYI.1	☑ AccAZI.1	☑ AccZfilter-GPS.1	☑ AccZref	
	☑ AccAXI.2	☑ AccAYI.2	☑ AccAZI.2	☑ AccZfilter-GPS.2		
	☑ AccAXI-GPS.1	☑ AccAYI-GPS.1	☑ AccAZI-GPS.1			
	☑ AccAXI-GPS.2	☑ AccAYI-GPS.2	☑ AccAZI-GPS.2			
☑ Altitude	☑ AltGPS.1	☑ AltI-GPS.1	☑ AltPaADDU.1	☑ AltRA.1	☑ ALTref	☑ AltRA1.c
	☑ AltGPS.2	☑ AltI-GPS.2	☑ AltBCADDU.1	☑ AltRA.2	☑ ALTPA.d	☑ AltRA2.c
	☑ AltGPS.3				☑ ALTGA.d	
	☑ AltGPS.4					
☑ Ground Speed	☑ GsXI-GPS.1	☑ GsYI-GPS.1	☑ GsZI-GPS.1		☑ GSXref	
	☑ GsXI-GPS.2	☑ GsYI-GPS.2	☑ GsZI-GPS.2		☑ GSYref	
					☑ GSZref	
☑ Lat / Lon	☑ LatGPS.1	☑ LatI-GPS.1	☑ LonGPS.1	☑ LonI-GPS.1	☑ LATref	
	☑ LatGPS.2	☑ LatI-GPS.2	☑ LonGPS.2	☑ LonI-GPS.2	☑ LONref	
	☑ LatGPS.3		☑ LonGPS.3			
	☑ LatGPS.4		☑ LonGPS.4			
☑ Pressure	☑ PDALPHA.1	☑ PQALPHA.1	☑ PQM.1	☑ PSM.1	X PDLAPHAref	☑ PQMref
	☑ PDALPHA.2	☑ PQBETA.1	☑ PQM.2	☑ PSM.2	X PDBETAref	☑ PQ.c
	☑ PDBETA.1		☑ PQM.3	☑ PTM.1	X PQALPHAref	☑ PSMref
	☑ PDBETA.2		☑ PQM.4		X PQBETAref	☑ PS.c
☑ Air Speed	☑ CasADDU.1	☑ TasADDU.1	☑ IasADDU.1		☑ IAS.d	☑ TAS.d
☑ Pitch / Roll	☑ PitchI.1	☑ PitchRateI.1	☑ RollI.1	☑ RollRateI.1	☑ PITCHref	
	☑ PitchI.2	☑ PitchRateI.2	☑ RollI.2	☑ RollRateI.2	☑ ROLLref	
	X PitchI.3	X PitchRateI.3	X RollI.3	X RollRateI.3		
☑ Temp / Dewpt	☑ TTM.1	X TDM.1	☑ TRadD.1		☑ TD.c	☑ TTMref
	☑ TTM.2	☑ TDM.2	☑ TRadS.1		☑ TDMref	☑ TA.d
	X TTM.3	X TDM.3	X TRadU.1			
☑ Misc. (Must check)					☑ UWZ.d	☑ WS.d
					X DPJ_WSZ	☑ WD.d
					☑ HUM	

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

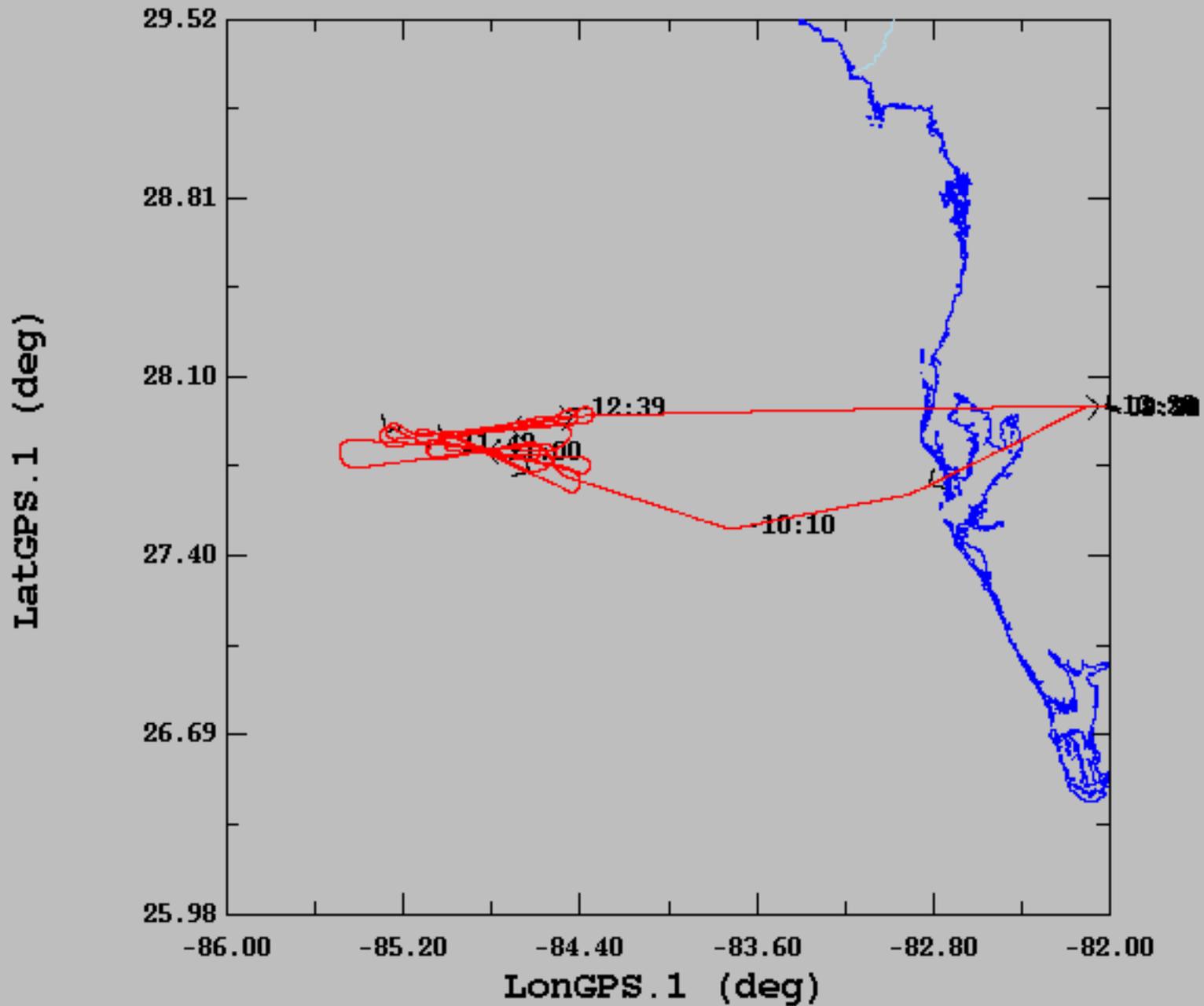| NOTES: |
|---|
| I.3 for Pitch and Roll is not operational |
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AVAPS Drop Log

Project: _SFMR CAL_   Mission: _____   Flight ID: _20231108H1_

Take Off: _0949z._   Landing: _____   Flt Dir: _JZ_   Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge $$ To	Comments	Good ?
1	221950518	1	-1.2	1025	LW	AOC		✓
2	220950327	2	-1.8	1151	LW	AOC		✓
3	220910353	3	-1.5	1245	LW	AOC		✓
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
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19								
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21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

11/08/2023, 08:31:06−13:28:55

LatGPS.1 (deg)

LonGPS.1 (deg)

12:39

11:42 9:00

10:10

	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	27.87	0.11	27.50	27.99
LonGPS.1 (deg), 1 s/sec	-83.75	1.26	-85.49	-82.01