



TTM.2 is suspicious between 1529 and 1541 UTC as it deviates from TTM.1, but it was during the stratiform spiral, so still checked good

Expendable Type	# deployed	# good	# transmitted
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Dropsondes	19	18	17
Test sondes	0	0	0
AXBTs	1	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	2	2	0

Flight Director: Zawislak / Lundry

Phone #: 305-707-4359

ACAT-4 Version = 7.4

**U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest**

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION					
FLT ID:	20231019I1	FLT #:	FY24-	AC:	Doremus	Scientists:	Pressure		Dropsondes			
From:	TBPB	ETD:	0500L / 0900Z	CP(s):	Wood	Frank Marks (HRD)	A/C Takeoff	1003.2	Good	Bad	Sent	
To:	TBPB	ETA:	1300L / 1700Z		Keith	Jun Zhang (HRD)			18	1	17	
Block Time		Flight Time		NAV:	Miller	Joe Cione (HRD)	ASOS Takeoff	1002.9	BTs			
Out:	8:58	T/O:	9:07	FE(s):	Tyson	Jack Elston (Blackswift)			A/C Land		Good	Bad
In:	16:57	Land:	16:52	FD(s):	Zawislak		ASOS Land	1002.9			0	1
Total:	8.0	Total:	7.8	SSA:	Richards	Visitors:			Storm Number ID:		AL202023	
Sponsoring Org:		HX - NHC/EMC			AVAPS:	Waggoner / Patel	(ie: AL072012)					
Program:		PRX			SEB:		TCPOD/WSPOD Mission		NOAA3 0120A TAMMY			
Purpose:		TDR Mission + Blackswift			MX:		(ie: NOAA2 2418A SANDY)					
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP		
VOLCANIC ASH					x	2 successful Blackswift releases	1	0B05 13.24N, 54.88W	10:19:20Z	1005 mb 225 / 09 kt		
SCIENCE MISSION WITHIN BDRY LAYER					x							
LACK OF PRECIPITATION					x		2	0B12 13.27N, 55.19W	11:30:28Z	1003 mb 240 / 07 kt		
RELATIVE HUMIDITY ≥ 80%				x								
LARGE AIR-SEA TEMP GRADIENT					x		3	0B18 13.27N, 55.38W	12:42:01Z	1005 mb 235 / 09 kt		
HIGH SURFACE WINDS					x							
LONG FETCH / DURATION OF SFC WND					x		4					
SEA SALT ACCRETION FORECAST					x							
SEA SALT ACCRETION OBSERVED					x							
							Pennies:	5 x TS				

\*Highlighted items must be completed before departure.

Remarks:	

# P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
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Flight ID:	2023101911
Flight Director(s):	Zawislak / Lundry
Mission:	Tasked/Operational
UWZ.d mean:	-0.13

Pressure Comparison		
	T/O	Land
Aircraft	1003.2	No good measurement
Tower	1002.9	1002.9

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

FLID_Mission_Documents.pdf
<ul style="list-style-type: none"> <li>✓ Error Summary</li> <li>✓ Crew Manifest</li> <li>✓ QC Checklist</li> <li>✓ Dropwindsonde Log(s) - AVAPS and FD if completed</li> <li>✓ Flight Track</li> <li>✓ Miscellaneous FD Notes</li> </ul>

QC Key	
Not checked	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	X

### NOTES:

I.3 for Pitch and Roll is not operational  
 TTM.3 is not operational  
 TRadU.1 has erroneous data throughout the flight and should not be used  
 TDM.1 spikes between 1216 and 1238 UTC, but otherwise tracks well with TDM.2; both TDM.1 and TDM.2 spikes after the stratiform spiral between 1545 and 1552 UTC; overall checked good  
 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  
 GPS.3 and GPS.4 drop out at 11:25:37 UTC for the remainder of the flight, impacts AltGPS, LatGPS, LonGPS for .3, .4; ALTref, LATref, LONref checked good, as set to GPS.1  
 PDALPHA.2 and PDBETA.2 (Radome), as well as PTM.1, dropped out between 10:00:00 and 11:44:31 UTC  
 PQM.4 (Radome) decreases at 1537 UTC, drops out entirely at 15:40:07 UTC, and returns and recovers after 15:42:10 UTC; appears to be during the spiral descent, so still checked good  
 TTM.2 is suspicious between 1529 and 1541 UTC as it deviates from TTM.1, but it was during the stratiform spiral, so still checked good

# AVAPS Drop Log

Project: AL94

Mission: 1

Flight ID: 20231019I1

Take Off: 0907 z.

Landing: \_\_\_\_\_

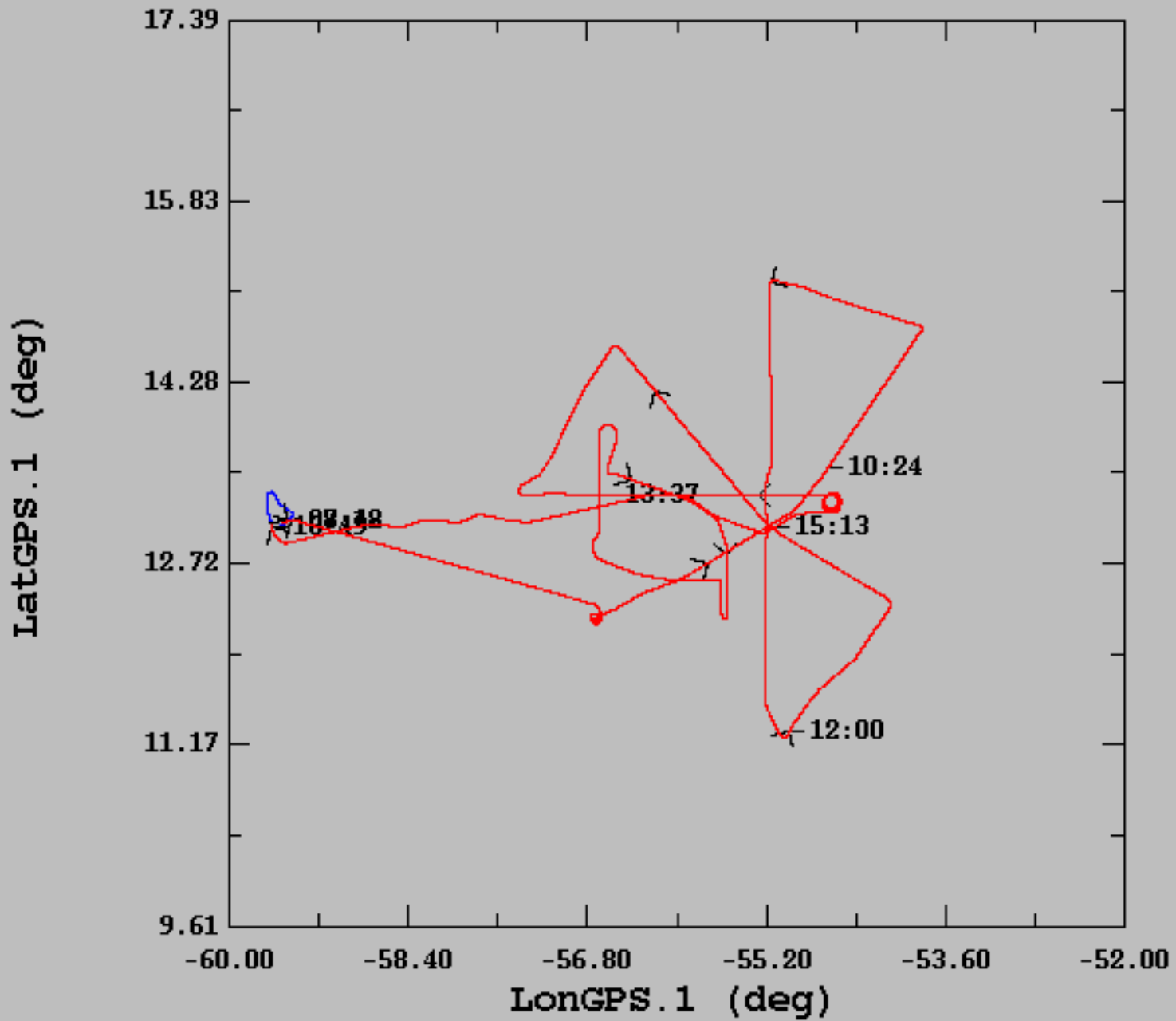
Flt Dir: JZ

Launcher S/N: \_\_\_\_\_

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	220460023	1	-1.3	0952	LW	NWS	IP1	✓
2	222230809	2	-0.9	1005	LW	NWS	MP	✓
3	2222060085	3	-0.2	1019	LW	NWS	CTR	✓
4	222220838	4	-1.9	1032	LW	NWS	MP	✓
5	220460018	5	-1.7	1045	LW	NWS	EP1	✓
6	222120715	6	-0.9	1104	LW	NWS	IP2	✓
7	222340817	7	-1.4	1114	LW	NWS	MP	✓
8	222070611	8	-1.1	1130	LW	NWS	CTR	✓
9	220570905	1	-0.9	1130	LW	IR/SST	IR CTR	✓
10	221210174	2	-1.3	1143	LW	NWS	MP	✓
11	222230474	3	-1.6	1154	LW	NWS	EP2	✓
12	222231501	4	-1.3	1220	LW	NWS	IP3 "NO WINDS"	<del>✓</del>
13	222520364	5	-1.0	1220	LW	NWS	IP3 B/M	✓
14	222330575	6	-0.9	1232	LW	NWS	MP	✓
15	222220219	7	-1.3	1242	LW	NWS	CTR	✓
16	222231504	8	-1.1	1255	LW	NWS	MP	✓
17	220750422	1	-1.3	1307	LW	NWS	EP3	✓
18	220430179	2	-1.0	1413	AJP	IR/SST	IR sonde (SO) <sup>UA3</sup>	✓
19	222010078	3	-1.2	1537	AJP	ONR	Spiral	✓
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

BAD

10/19/2023, 07:12:42-16:49:17



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	13.17	0.69	11.23	15.15
— LongGPS.1 (deg), 1 s/sec	-56.65	1.83	-59.62	-53.80