

N42RF ERROR SUMMARY
20240804H1_Error_Summary

Flight ID: 20240804H1

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.1
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/2024/MET/20240804H1

Local Met Data	Takeoff KLAL (0858Z)	Landing KLAL (1534Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.32804
AttackAngleSlope		6.09319
SlipAngleIntercept		0.25
SlipAngleSlope		6.641
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.

PitchI.3, RollI.3 not installed therefore no PitchRateI.3 / RollRateI.3 produced.

TTM.3, TDM.3, TRadU.1 inoperable.

PTM.1 drops out at 0901Z and is not regained continuously until 1343Z. Data present outside of this gap is erroneous indicating unrealistic values.

TDM.1, TDMref, TD.c, and HUM become inop at 1459Z and data should not be used from 1459Z throughout remainder of flight.

SFMR TB, WS SFMR, and RAIN RATE SFMR needs further assessment and data should be used with caution.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	21	21	21

Test sondes	0	0	0
AXBTs	3	3	3
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Zawislak/Englert
Phone #: 863-606-6847

ACAT-4 Version = 7.4

845

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20240804H1	FLT #:	FY24-	AC:	Doremus	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0500L / 0900Z	CP(s):	Mitchell	Sim Aberson	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1230L / 1630Z		Ellis / Taraboletti	Paul Chang			21	0	21
Block Time		Flight Time		NAV:	Meier / Miller		ASOS Takeoff		BTs		
Out:	8:44	T/O:	8:59	FE(s):	Tyson / Wysinger				A/C Land		Good
In:	15:41	Land:	15:34	FD(s):	Zawislak	ASOS Land		3			
Total:	7.0	Total:	6.6	SSA:	McAlister				Visitors:		
Sponsoring Org:		NHC			SEB:	Amanda Sparks	Storm Number ID:		AL042024		
Program:		PRX				Nikhil Trivedi	(ie: AL072012)				
Purpose:		TDR Mission + CHAOS (Saildrone)				MX:	TCPOD/WSPOD Mission	(ie: NOAA2 2418A SANDY)		NOAA2 0404A DEBBY	
AS REQUIRED BY ORM				Y	N	REMARKS		Fix Number	Obs Number		
VOLCANIC ASH					X	21 total sondes (1 GOMO, 20 NWS)		1	OB#	10:06:04	1003mb 090/08 kt
SCIENCE MISSION WITHIN BDRY LAYER					X	Overflow SD1057 inbound prior to IP			26.08N/84.10W		
LACK OF PRECIPITATION					X			2	OB#	11:27:10	-
RELATIVE HUMIDITY ≥ 80%				X					26.16N/83.96W		
LARGE AIR-SEA TEMP GRADIENT					X			3	OB#	12:13:09	1003mb 285/06 kt
HIGH SURFACE WINDS				X					26.16N/84.19W		
LONG FETCH / DURATION OF SFC WND				X				4	OB#	13:30:22	1002mb 295/08 kt
SEA SALT ACCRETION FORECAST					X				26.45N/84.26W		
SEA SALT ACCRETION OBSERVED					X			Pennies:	4 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:	20240804H1
Flight Director(s):	Zawislak / Englert
Mission:	Tasked/Operational
UWZ.d mean:	0.15

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1006.9	1009.3
Airfield	1007.6	1008.3

This form uses:	
_A.nc	

SFMR Serial Unit	3
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Parameters	Raw				Derived, Corrected & Reference	
<input checked="" type="checkbox"/> Acceleration	<input checked="" type="checkbox"/> AccAXI.1 <input checked="" type="checkbox"/> AccAXI.2 <input checked="" type="checkbox"/> AccAXI-GPS.1 <input checked="" type="checkbox"/> AccAXI-GPS.2	<input checked="" type="checkbox"/> AccAYI.1 <input checked="" type="checkbox"/> AccAYI.2 <input checked="" type="checkbox"/> AccAYI-GPS.1 <input checked="" type="checkbox"/> AccAYI-GPS.2	<input checked="" type="checkbox"/> AccAZI.1 <input checked="" type="checkbox"/> AccAZI.2 <input checked="" type="checkbox"/> AccAZI-GPS.1 <input checked="" type="checkbox"/> AccAZI-GPS.2	<input checked="" type="checkbox"/> AccZfilter-GPS.1 <input checked="" type="checkbox"/> AccZfilter-GPS.2	<input checked="" type="checkbox"/> AccZref	
<input checked="" type="checkbox"/> Altitude	<input checked="" type="checkbox"/> AltGPS.1 <input checked="" type="checkbox"/> AltGPS.2 <input checked="" type="checkbox"/> AltGPS.3 <input checked="" type="checkbox"/> AltGPS.4	<input checked="" type="checkbox"/> AltI-GPS.1 <input checked="" type="checkbox"/> AltI-GPS.2	<input checked="" type="checkbox"/> AltPaADDU.1 <input checked="" type="checkbox"/> AltBCADDU.1	<input checked="" type="checkbox"/> AltRA.1 <input checked="" type="checkbox"/> AltRA.2	<input checked="" type="checkbox"/> ALTref <input checked="" type="checkbox"/> ALTPA.d <input checked="" type="checkbox"/> ALTGA.d	<input checked="" type="checkbox"/> AltRA1.c <input checked="" type="checkbox"/> AltRA2.c
<input checked="" type="checkbox"/> Ground Speed	<input checked="" type="checkbox"/> GsXI-GPS.1 <input checked="" type="checkbox"/> GsXI-GPS.2	<input checked="" type="checkbox"/> GsYI-GPS.1 <input checked="" type="checkbox"/> GsYI-GPS.2	<input checked="" type="checkbox"/> GsZI-GPS.1 <input checked="" type="checkbox"/> GsZI-GPS.2	<input checked="" type="checkbox"/> GSXref <input checked="" type="checkbox"/> GSYref <input checked="" type="checkbox"/> GSZref		
<input checked="" type="checkbox"/> Location	<input checked="" type="checkbox"/> LatGPS.1 <input checked="" type="checkbox"/> LatGPS.2 <input checked="" type="checkbox"/> LatGPS.3 <input checked="" type="checkbox"/> LatGPS.4	<input checked="" type="checkbox"/> LatI-GPS.1 <input checked="" type="checkbox"/> LatI-GPS.2	<input checked="" type="checkbox"/> LonGPS.1 <input checked="" type="checkbox"/> LonGPS.2 <input checked="" type="checkbox"/> LonGPS.3 <input checked="" type="checkbox"/> LonGPS.4	<input checked="" type="checkbox"/> LonI-GPS.1 <input checked="" type="checkbox"/> LonI-GPS.2	<input checked="" type="checkbox"/> LATref <input checked="" type="checkbox"/> LONref	
<input checked="" type="checkbox"/> Pressure Sensors	<input checked="" type="checkbox"/> PDALPHA.1 <input checked="" type="checkbox"/> PDALPHA.2 <input checked="" type="checkbox"/> PDBETA.1 <input checked="" type="checkbox"/> PDBETA.2	<input checked="" type="checkbox"/> PQALPHA.1 <input checked="" type="checkbox"/> PQBETA.1	<input checked="" type="checkbox"/> PQM.1 <input checked="" type="checkbox"/> PQM.2 <input checked="" type="checkbox"/> PQM.3 <input checked="" type="checkbox"/> PQM.4	<input checked="" type="checkbox"/> PSM.1 <input checked="" type="checkbox"/> PSM.2 X PTM.1	<input checked="" type="checkbox"/> PQMref <input checked="" type="checkbox"/> PQ.c <input checked="" type="checkbox"/> PSMref <input checked="" type="checkbox"/> PS.c	
<input checked="" type="checkbox"/> Air Speed	<input checked="" type="checkbox"/> CasADDU.1	<input checked="" type="checkbox"/> TasADDU.1	<input checked="" type="checkbox"/> IasADDU.1	<input checked="" type="checkbox"/> IAS.d <input checked="" type="checkbox"/> TAS.d		
<input checked="" type="checkbox"/> Pitch / Roll	<input checked="" type="checkbox"/> PitchI.1 <input checked="" type="checkbox"/> PitchI.2 inop PitchI.3	<input checked="" type="checkbox"/> PitchRateI.1 <input checked="" type="checkbox"/> PitchRateI.2 inop PitchRateI.3	<input checked="" type="checkbox"/> RollI.1 <input checked="" type="checkbox"/> RollI.2 inop RollI.3	<input checked="" type="checkbox"/> RollRateI.1 <input checked="" type="checkbox"/> RollRateI.2 inop RollRateI.3	<input checked="" type="checkbox"/> PITCHref <input checked="" type="checkbox"/> ROLLref	
<input checked="" type="checkbox"/> Temperature, Dewpoint, Radiometers	<input checked="" type="checkbox"/> TTM.1 <input checked="" type="checkbox"/> TTM.2 inop TTM.3	X TDM.1 <input checked="" type="checkbox"/> TDM.2 inop TDM.3	<input checked="" type="checkbox"/> TRadD.1 <input checked="" type="checkbox"/> TRadS.1 inop TRadU.1	X TD.c X TDMref X HUM <input checked="" type="checkbox"/> TTMref <input checked="" type="checkbox"/> TA.d		
<input checked="" type="checkbox"/> Wind and Pressure <input checked="" type="checkbox"/> SFMR	SFMR	X CH 1 TB X CH 2 TB X CH 3 TB	X CH 4 TB X CH 5 TB X CH 6 TB	<input checked="" type="checkbox"/> UWZ.d <input checked="" type="checkbox"/> PSURF X WS SFMR <input checked="" type="checkbox"/> WS.d <input checked="" type="checkbox"/> WD.d X RAIN RATE SFMR		

FLID_Mission_Documents.pdf:
<input checked="" type="checkbox"/> Error Summary
<input checked="" type="checkbox"/> Crew Manifest
<input checked="" type="checkbox"/> QC Checklist
<input checked="" type="checkbox"/> Dropwindsonde Log(s) - AVAPS and FD, if completed
<input checked="" type="checkbox"/> Flight Track

QC Key:	
Valid	<input checked="" type="checkbox"/>
Errors (see NOTES)	X
Sensor Inoperative	inop

NOTES:

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AVAPS Drop Log

Project: HK 2024

Mission: TS DERBY

Flight ID: 20240804H7

Take Off: 0500L

Landing: 1200L

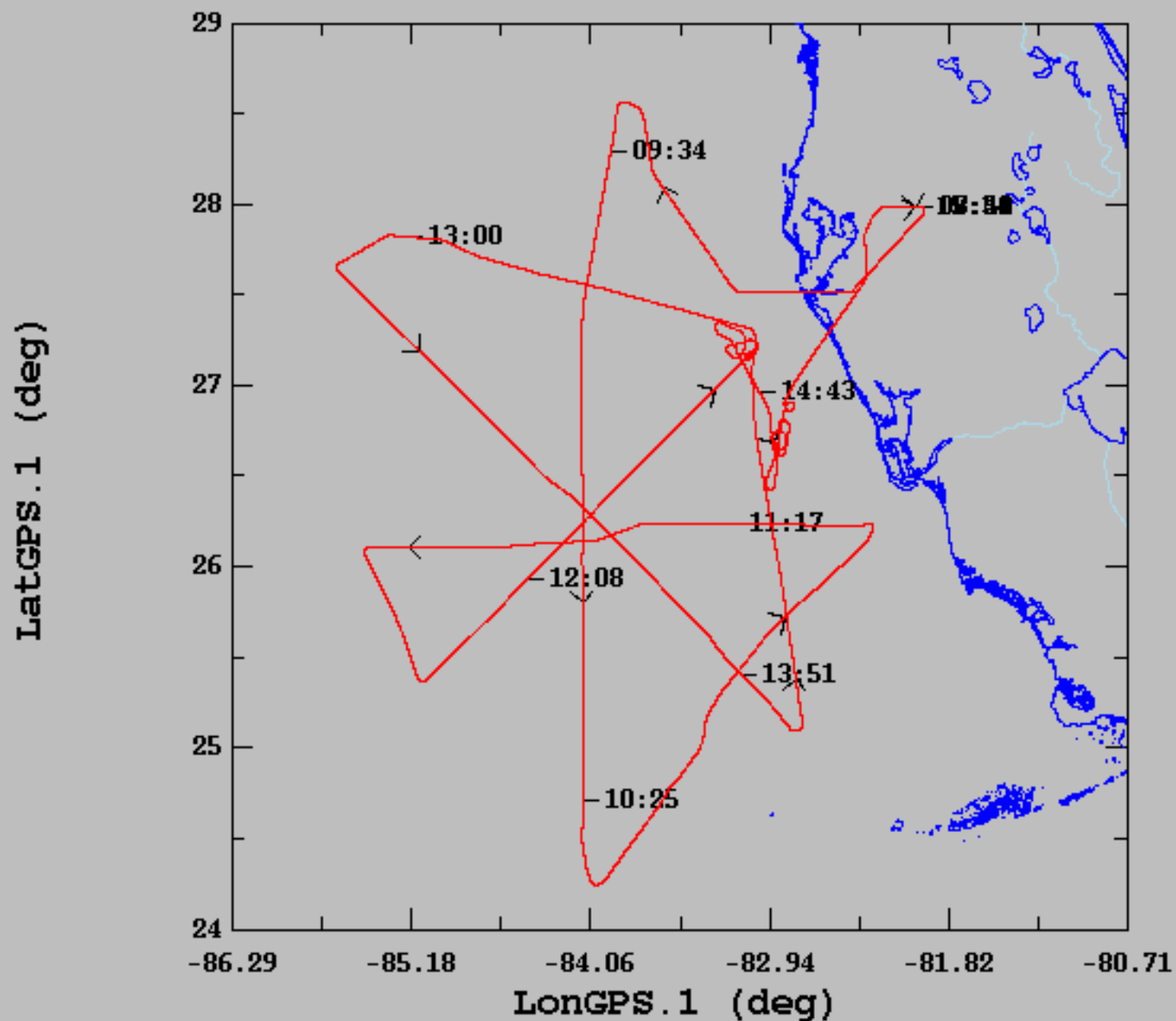
Flt Dir: DR. Jz

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	233410816	1	-1.4	0931	AS	GOND	SAIL DRONE	✓
2	233630623	2	-0.2	0947	HK	NWS	IP	✓
3	233460692	3	-0.9	0959	HK	NWS	MP	✓
4	233220184	4	-0.9	1007	HK	NWS	CNTR/ BT	✓
5	233640778	5	-0.7	1019	HK	NWS	MP	✓
6	233631991	6	-0.9	1032	HK	NWS	EP	✓
7	233220243	7	-0.9	1106	HK	NWS	IP	✓
8	233541315	8	-0.5	1118	HK	NWS	MP/ BT	✓
9	233220908	7	-0.7	1125	HK	NWS	center	✓
10	231611768	2	-1.1	1136	HK	NWS	MP	✓
11	231720819	3	-0.8	1145	HK	NWS	EP 4/ BT	✓
12	232051013	4	-1.0	1158	HK	NWS	IP	✓
13	232051009	5	-1.0	1206	HK	NWS	MP	✓
14	232150632	6	-0.9	1213	THB	NWS	center	✓
15	190150922	7	-0.7	1226	THB	NWS	MP	✓
16	232050278	8	-1.4	1233	THB	NWS	EP	✓
17	236620802	1	-1.8	1306	THB	NWS	IP	✓
18	232051008	2	-1.4	1319	THB	NWS	MP	✓
19	232020665	3	-1.3	1330	THB	NWS	center	✓
20	231611765	4	-0.8	1344	THB	NWS	MP	✓
21	230740557	5	-0.8	1356	THB	NWS	EP	✓
22	232320290	6	-0.8				No drop	
23								
24								
25								
26								
27								
28								
29								
30								
31								

THB

08/04/2024, 07:50:56-15:34:45



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	26.77	1.02	24.25	28.56
— LonGPS.1 (deg), 1 s/sec	-83.41	0.99	-85.64	-81.97