

N43RF ERROR SUMMARY
20230920I1

Flight ID: 20230920I1

Sensor or System	Number or Name
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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/2023/MET/20230920I1

Local Met Data	Takeoff TXKF (1348Z)	Landing TXKF (0024Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.050058
AttackAngleSlope		5.32015
SlipAngleIntercept		0.165
SlipAngleSlope		6.66754

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.
TRadU.1 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.
TTM.3 and TDM.3 inop
GPS.3 & .4 parameters unrepresentative for duration of flight
PQM.1 trending ~5 mb high
Humidity parameters suspect

Expendable Type	# deployed	# good	# transmitted
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Dropsondes	34	33	22
Test sondes	0	0	0
AXBts	10	8	8
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: KALEN / LUNDRY
Phone #: 863-500-3962

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:	2023092011	FLT #:		AC:	RANNENBERG	Scientists:	Pressure		Dropsondes		
From:	TXKF	ETD:	1330Z	CP(s):	KEITH	ALAKA	A/C Takeoff		Good	Bad	Sent
To:	TXKF	ETA:	2100Z		PALMER	SIPPEL			22 (12 SKYFORA)	0	22
Block Time		Flight Time		NAV:	MILLER	CIONE	ASOS Takeoff	BTs			
In:	21:18:00	Land:	21:10:00	FE(s):	DARBY	WADLER		A/C Land	Good	Bad	Sent
Out:	13:42	T/O:	13:48	FD(s):	STOKES	KAISI	ASOS Land		8	2	8
Total:	7.6	Total:	7.4	SSA:	RICHARDS	Visitors:					
Sponsoring Org:	HRD			SEB:	UNDERWOOD	Storm Number ID:		AL152023			
Program:	PRX				KERNS (OBS)	(ie: AL072012)					
Purpose:	TDR / HRD MODULES & UAS			MX:		TCPOD/WSPOD Mission		WC15A NIGEL			
						(ie: NOAA2 2418A SANDY)					
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1				
SCIENCE MISSION WITHIN BDRY LAYER					X						
LACK OF PRECIPITATION					X		2				
RELATIVE HUMIDITY ≥ 80%				X							
LARGE AIR-SEA TEMP GRADIENT					X		3				
HIGH SURFACE WINDS				X							
LONG FETCH / DURATION OF SFC WND					X		4				
SEA SALT ACCRETION FORECAST					X						
SEA SALT ACCRETION OBSERVED					X		Pennies:	4 - CAT 1			

*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:	2023092011
Flight Director(s):	KALEN / LUNDRY
Mission:	Non-tasked Science Collection/Research
UWZ.d mean:	-0.08

Pressure Comparison		
	T/O	Land
Aircraft	1017.9	-
Tower	1017.3	-

	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 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ PDBETA.2	✓ PQALPHA.1 ✓ PQBETA.1	✓ PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4	✓ PSM.1 ✓ PSM.2 ✓ PTM.1	x PDLAPHaref x PDBETAref x PQALPHaref x PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ lasADDU.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)					x UWZ.d x DPJ_WSZ x HUM	✓ WS.d ✓ 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	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	X

NOTES:
<p>I.3 for Pitch and Roll is not operational.</p> <p>TRadU.1 has erroneous data throughout the flight and should not be used.</p> <p>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.</p> <p>TTM.3 and TDM.3 inop</p> <p>GPS.3 & .4 parameters unrepresentative for duration of flight</p> <p>PQM.1 trending ~5 mb high</p> <p>Humidity parameters suspect</p>

AVAPS Drop Log

Project: Hurr 2023

Mission: Hurr Nigel

Flight ID: 2023092011

Take Off: 1340Z

Landing: _____

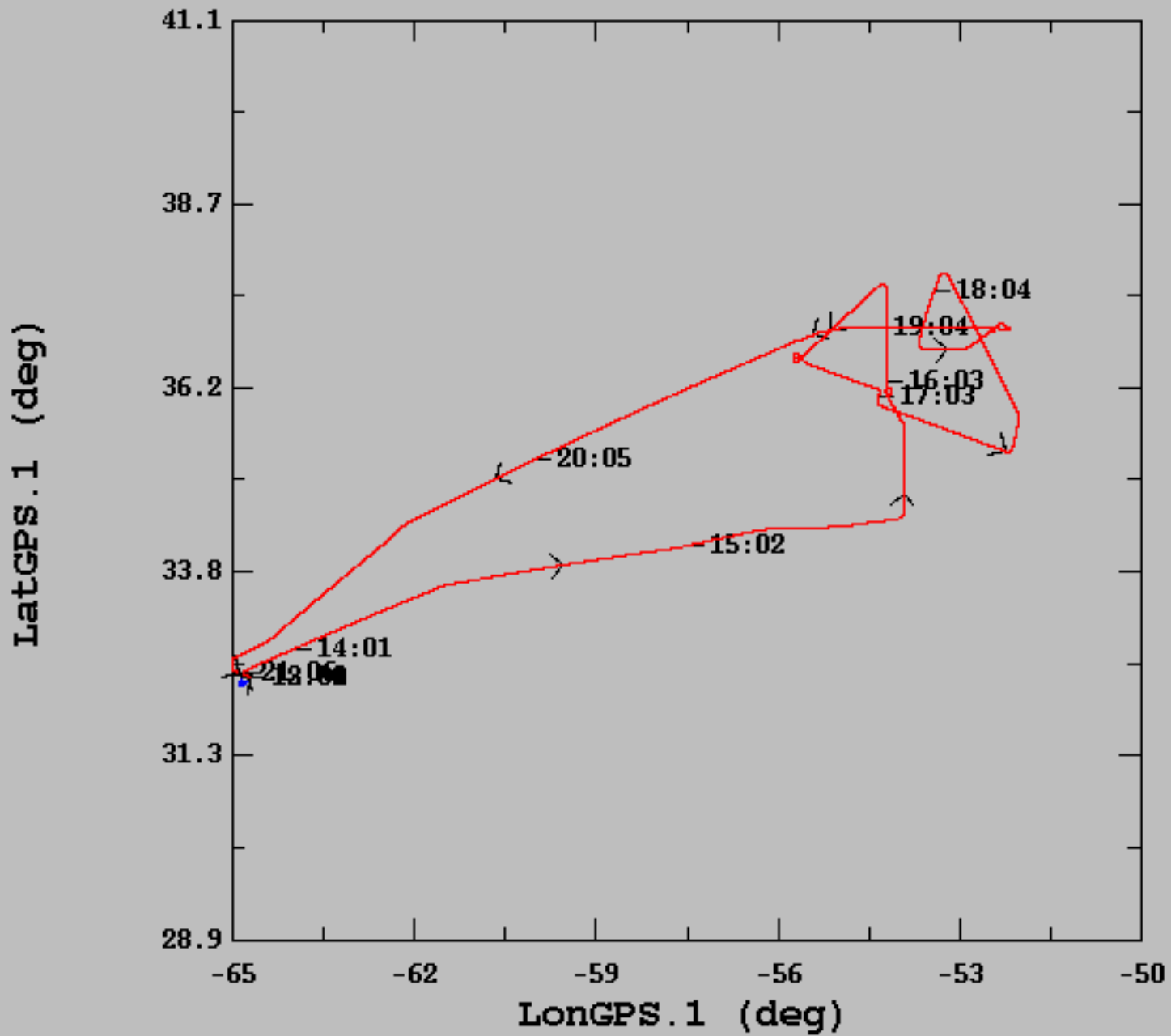
Flt Dir: Kala/Kundry

Launcher S/N: 002

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	211440429	1	-2.5	1537	JW	1000	IR	✓
2	221740855	2	0	1546		NWS		✓
3	221740861	3	-2.5	1551		NWS		✓
4	220050548	4	-2.7	1608		ONR	RMW	✓
5	211450278	5	0	1602			IR	✓
6	211440427	6	-2.5	1620		NWS	end pt	✓
7	213320910	7	0	1639		NWS	end pt.	✓
8	22200814	8	-2.9	1657			IR	✓
9	222050556	1	-2.6	1703		NWS		✓
10	213320988	2	0	1704		ONR	RMW	✓
11	222010841	3	-2.5	1713		NWS	MP	✓
12	221740862	4	-2.4	1718		NWS	end pt	✓
13	181840259	5	-2.1	1727			IR	✓
14	221750685	6	0	1809		ONR	RMW	✓
15	221740863	7	-2.9	1816		NWS	NWS-center	✓
16	182011072	8	-2.8	1816			IR	✓
17	222010846	1	-2.6	1824		ONR	RMW	✓
18	213320989	2	-2.2	1838		NWS	MP	✓
19	222050552	3	0	1844		ONR	RMW	✓
20	221740860	4	-2.8	1851		NWS	MP	✓
21	222010792	5	-2.7	1904		NWS	MP	✓
22	213810854	6	-2.4	1913			IR	✓
23	191050230	7		1800		NWS	MP	✓
24								
25								
26								
27								
28								
29								
30								
31								

↑
added

09/20/2023, 12:00:34-21:06:08



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	34.84	1.83	32.36	37.76
— LongGPS.1 (deg), 1 s/sec	-58.40	4.71	-65.00	-52.00