

N42RF ERROR SUMMARY  
20231019H1

Flight ID: 20231019H1

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/2023/MET/20231019H1

Local Met Data	Takeoff TBPB (2111Z)	Landing TBPB (0150Z)
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

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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.

TDM.3 inop

AltGPS.4 contains several suspicious data points

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	14	14	14
Test sondes	0	0	0
AXBTs	1	1	1
AXCPs	0	0	0

AXCTDs	0	0	0
UAS	0	0	0

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

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION					
FLT ID:	20231019H1	FLT #:		AC:	COPARE	Scientists:	Pressure		Dropsondes			
From:	TBPB	ETD:	2130Z	CP(s):	GASTON	HAZELTON	A/C Takeoff		Good	Bad	Sent	
To:	TBPB	ETA:	0530Z		PALMER	SELLWOOD			<b>14</b>	<b>0</b>	<b>14</b>	
Block Time		Flight Time		NAV:	UTAMA	CHANG	ASOS Takeoff		BTs			
In:	<b>2:00</b>	Land:	<b>1:50</b>	FE(s):	STOKES	JELENAK			Good	Bad	Sent	
Out:	<b>21:05</b>	T/O:	<b>21:11</b>	FD(s):	KIDDO	SAPP	A/C Land		1	0	1	
Total:	<b>4.9</b>	Total:	<b>4.7</b>	SSA:	MCALISTER	Visitors:						ASOS Land
Sponsoring Org:	EMC			SEB:			Storm Number ID:		AL202023			
Program:	PRX						(ie: AL072012)					
Purpose:	TDR TS TAMMY				MX:			TCPOD/WSPOD Mission		NOAA2 0320A TAMMY		
							(ie: NOAA2 2418A SANDY)					
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP		
VOLCANIC ASH					X		<b>1</b>	10	2309Z	1004MB		
SCIENCE MISSION WITHIN BDRY LAYER					X		<b>2</b>					
LACK OF PRECIPITATION					X		<b>3</b>					
RELATIVE HUMIDITY ≥ 80%				X			<b>4</b>					
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							
							<b>Pennies:</b>					

\*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:	20231019H1
Flight Director(s):	KALEN / ENGLERT
Mission:	Tasked/Operational
UWZ.d mean:	0.11

Pressure Comparison		
	T/O	Land
Aircraft	1001.1	-
Tower	1002.3	-

	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 ✓ 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 ✓ LatGPS.3 ✓ LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3 ✓ 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:
<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)	<b>X</b>

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>PDLAPHaref, 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>TDM.3 inop</p> <p>AltGPS.4 contains several suspicious data points</p>

# AVAPS Drop Log

Project: Hx 23

Mission: Tammy

Flight ID: 20231019H1

Take Off: \_\_\_\_\_

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

Fit Dir: Baken

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

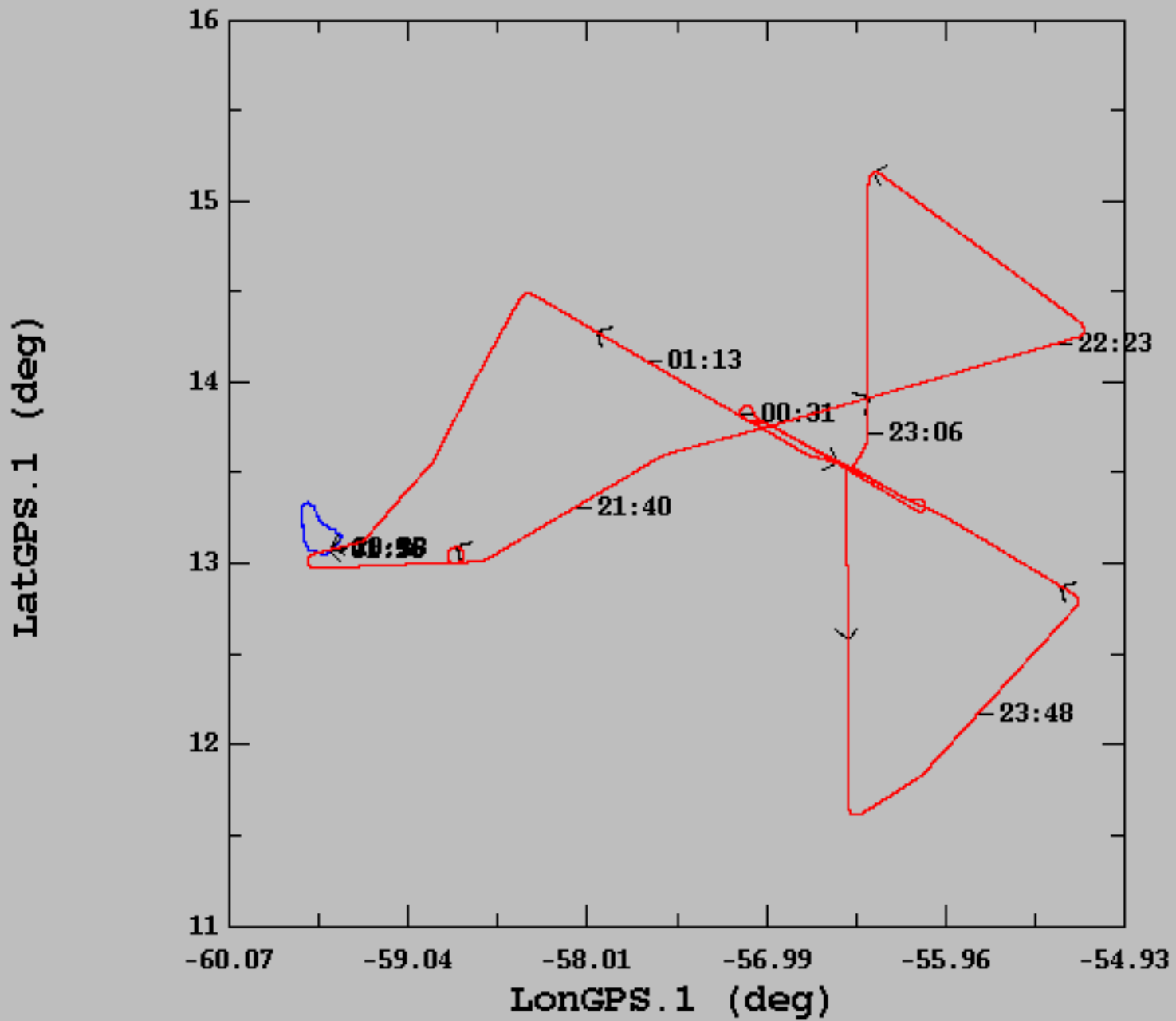
Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	222231503	1	-1.0	2133	RK	NWS	IP	✓
2	222230931	2	-1.0	2144	RK	NWS	MP	✓
3	222231039	3	-1.0	2157	RK	NWS	CP	✓
4	222230421	4	-1.9	2210	RK	NWS	MP	✓
5	222231043	1	-1.9	2224	RK	NWS	EP	✓
6	222231041	2	-1.0	2240	RK	NWS	JP 2	✓
7	222231047	3	0	2257	RK	NWS	MP	✓
8	222230297	4	-1.2	2309	RK	NWS	CP	✓
9	222231620	1	-1.0	2323	RK	NWS	MP	✓
10	222231513	2	0	2335	RK	NWS	EP 2	✓
11	222520372	3	0	0050	JGW	NWS	JP 3	✓
12	222350040	4	0	0057	JGW	NWS	CTR 3 CPA	✓
13	222334571	1	-1.9	0110	JGW	NWS	MP	✓
14	222520382	2	0	0122	JGW	NWS	EP 3	
15						NWS		
16								
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30								
31								

COMBO →

1

ANDY HRD

10/19/2023, 19:33:26-25:56:04



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	13.40	0.68	11.61	15.16
— LonGPS.1 (deg), 1 s/sec	-57.60	1.50	-59.61	-55.15