

N42RF ERROR SUMMARY
20220920H1

Flight ID: 20220920H1

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/2022/MET/20220920H1

Local Met Data	Takeoff TNCA (0832Z)	Landing KLAL (1402Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.28765
AttackAngleSlope		6.08306
SlipAngleIntercept		0.22
SlipAngleSlope		6.59178
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.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	28	26	26
Test sondes	0	0	0
AXBTs	5	5	5
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Kalen/Holmes
Phone #: 8635003962

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20220920H1	FLT #:		AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	TNCA	ETD:	0830Z	CP(s):	Copare	Dunion	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1600Z		Wood	Rogers			26	2	18
Block Time		Flight Time		NAV:	Miller	Sellwood	ASOS Takeoff		BTs		
In:	0629Z	Land:	0621Z	FE(s):	Stokes				Good	Bad	Sent
Out:	0828Z	T/O:	0832Z	FD(s):	Gee		A/C Land	5	0	5	
Total:	8.0	Total:	7.8	SSA:	Holmes		ASOS Land				
Sponsoring Org:		NWS/EMC		AVAPS:	McAlister	Visitors:	Storm Number ID:		AL072022		
Program:		PRX		SEB:	Dykeman		(ie: AL072012)				
Purpose:		Tac Repo KLAL / TDR		MX:	Lundry / Underwood		TCPOD/WSPOD Mission		NOAA2 1807A FIONA		
					Olney		(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1	4	1027Z	962mb	
SCIENCE MISSION WITHIN BDRY LAYER					X						
LACK OF PRECIPITATION					X		2	14	1247Z	965mb	
RELATIVE HUMIDITY ≥ 80%				X							
LARGE AIR-SEA TEMP GRADIENT					X		3	20	1359Z	962mb Extrap	
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 3			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	20220920H1
Flight Director(s):	Kalen/Holmes
Mission:	Tasked/Operational
UWZ.d mean:	0.12

Pressure Comparison		
	T/O	Land
Aircraft	1007.8	N/A
Tower	1003.4 (TNCA)	1008.9 (KLAL)

	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 ✓ 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	✓ PDALPHAref ✓ PDBETAref ✓ PQALPHAref ✓ 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 <input type="checkbox"/> PitchI.3	✓ PitchRatel.1 ✓ PitchRatel.2 <input type="checkbox"/> PitchRatel.3	✓ RollI.1 ✓ RollI.2 <input type="checkbox"/> RollI.3	✓ RollRatel.1 ✓ RollRatel.2 <input type="checkbox"/> RollRatel.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 <input type="checkbox"/> TTM.3	✗ TDM.1 ✓ TDM.2 <input type="checkbox"/> TDM.3	✓ TRadD.1 ✓ TRadS.1 <input type="checkbox"/> TRadU.1		✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ ✓ 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)	✗

NOTES:

The following was noted on the 1 Hz File:

PDALPHA.1 and PDALPHA.2 differ by about 10 mb.

PDBETA.1 and PDBETA.2 differ by about 15 mb.

PQM.1 has large deviations from other PQM sensors.

TDM.1 more sensitive than TDM.2, with a large spike from 958 to 1011 Z.

Gaps in relative humidity when supersaturated.

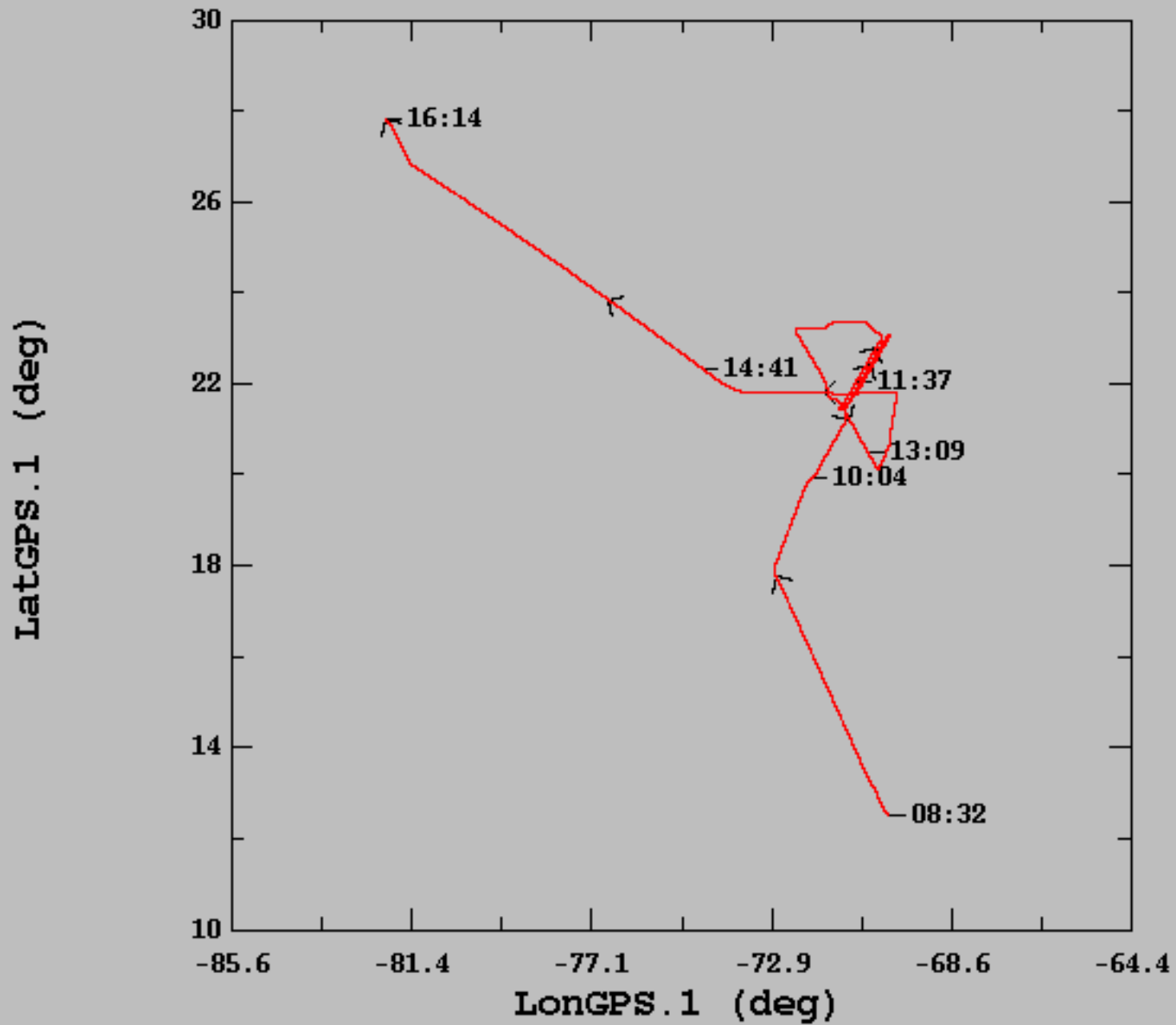
AVAPS Drop Log

Project: Hurricane 2022 Mission: Hurricane Fiona Flight ID: 2022092041
 Take Off: 0832Z Landing: 1622Z Fit Dir: @ Karlen Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?	
P1 IP	1	211440773	1	-1.8	1013	BRD	EMC	Y	
P1 CP	2	203250888	2	-1.1	1028	BRD	EMC	COMBO	Y
RMWO1	3	204050396	3	-1.5	1029	BRD	HRD	NO LAUNCH	N
RMWO2	4	203830683	4	-1.0	1029	BRD	HRD		Y
RMWO3	5	203830681	5	-1.3	1030	BRD	HRD		Y
RMWO4	6	212250265	6	-.5	1030	BRD	ONR		Y
RMWOS	7	204031073	7	-.6	1031	BRD	ONR		Y
RMWO6	8	203830722	8	-1.2	1031	BRD	ONR		Y
PLEP	9	203631622	1	-1.6	1054	BRD	EMC	COMBO	Y
FLAMES RM	10	203840125	2	-1.2	1130	BRD	ONR		Y
FLAMES MP	11	203310034	3	-1.4	1140	BRD	EMC		Y
P2 IP	12	203210175	4	-1.0	1219	BRD	EMC	COMBO	Y
P2 MP1	13	203241003	5	-1.5	1233	BRD	EMC		Y
P2 RMW1	14	204260864	6	-1.0	1242	BRD	ONR		Y
P2 CP	15	212430884	7	-.2	1247	BRD	EMC		Y
P2 RMW1	16	212430885	8	-.3	1254	BRD	ONR		Y
P2 RMW2	17	204570760	1	-1.4	1255	BRD	ONR		Y
P2 RMW3	18	203030626	2	-1.7	1255	BRD	ONR		Y
P2 MPO	19	203241004	3	-1.3	1302	BRD	EMC		Y
P2 EP	20	21410890	4	-.5	1315	BRD	EMC	COMBO	Y
P3 IP	21	204521571	5	-1.5	1339	BRD	EMC	COMBO	Y
P3 MP1	22	211921021	6	-.5	1348	BRD	EMC		Y
P3 RMW1	23	203240779	7	-.6	1352	BRD	ONR		Y
P3 RMW1	24	202620525	8	-1.4	1353	BRD	ONR		Y
P3 RMW1	25	212250273	1	-	1353	BRD	ONR		Y
P3 MPO	26	203250869	2	-1.0	1414	BRD	EMC		Y
P3 EP	27	203631640	3	-	1425	BRD	EMC	NO LAUNCH	N
P3 EP2	28	204031182	4	-1.3	1426	BRD	EMC		Y
	29								
	30								
	31								

EMC 14
 HRD 3
 ONR 11

2022-09-20, 08:32:24-16:14:22



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	21.35	3.20	12.51	27.81
LonGPS.1 (deg), 1 s/sec	-72.75	3.15	-81.99	-69.88