

N42RF ERROR SUMMARY
20211027H1

Flight ID: 20211027H1

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/2021/MET/20211027H1

Local Met Data	Takeoff KLAL (1933Z)	Landing KLAL (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.307
AttackAngleSlope		6.07515
SlipAngleIntercept		0.237
SlipAngleSlope		7.04607
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.

7 MASED Deployed

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	4	4	0
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Hathaway
Phone #: 863-500-3911

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:	20211027H1	FLT #:	1	AC:	Legidakes	Scientists:	Pressure		Dropsondes - 4		
From:	KLAL	ETD:	1530L	CP(s):	Stateler		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1930L						4	0	0
Block Time		Flight Time		NAV:	Utama		ASOS Takeoff		BTs		
In:	22:53	Land:	22:43	FE(s):	Sanchez	Pitman			Good	Bad	Sent
Out:	19:21	T/O:	19:33	FD(s):	Gee		A/C Land				
					Hathaway						
Total:	3.5	Total:	3.2	SSA:	Richards, T.	Visitors:	ASOS Land				
Sponsoring Org:		AOC		AVAPS:	Patel		Storm Number ID:		NONE		
Program:		PSM		SEB:			(ie: AL072012)				
Purpose:		SFMR Cal & MASED Drops		MX:			TCPOD/WSPOD Mission		WXWXA TRAIN		
							(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMAR	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1				
SCIENCE MISSION WITHIN BDRY LAYER					X		2				
LACK OF PRECIPITATION					X		3				
RELATIVE HUMIDITY ≥ 80%					X		4				
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							Pennies:				
*Highlighted items must be completed before departure.											
Remarks:											

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
--------------------	---

Flight ID:	20211027H1
Flight Director(s):	Hathaway
Mission:	Equipment Checkout
UWZ.d mean:	0.18

Pressure Comparison		
	T/O	Land
Aircraft	1004.6 mb	1005.1 mb
Tower	KLAL - 1005.5 mb	KLAL - 1005.8 mb

	Raw 1Hz Mean File Parameters				C File Parameters	
☒ Accelerometer	☒ AccAXI.1 ☒ AccAXI.2 ☒ AccXI-GPS.1 ☒ AccXI-GPS.2	☒ AccAYI.1 ☒ AccAYI.2 ☒ AccYI-GPS.1 ☒ AccYI-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 ☐ PitchI.3	☒ PitchRateI.1 ☒ PitchRateI.2 ☐ PitchRateI.3	☒ RollI.1 ☒ RollI.2 ☐ RollI.3	☒ RollRateI.1 ☒ RollRateI.2 ☐ RollRateI.3	☒ PITCHref ☒ ROLLref	
☒ Temp / Dewpt	☒ TTM.1 ☒ TTM.2 ☒ TTM.3	☒ TDM.1 ☒ TDM.2 ☒ TDM.3	☒ TRadD.1 ☒ TRadS.1 ☐ 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	☐
Valid	☒
Errors (note)	☒

NOTES:

- In this case, red X are indicative of a shortened data set, or to annotate which parameters may be missing data.

-AltGPS.3, LatGPS.3, LonGPS.3, CasADDU.1, TasADDU.1, IasADDU.1 unavailable before hour 20Z.

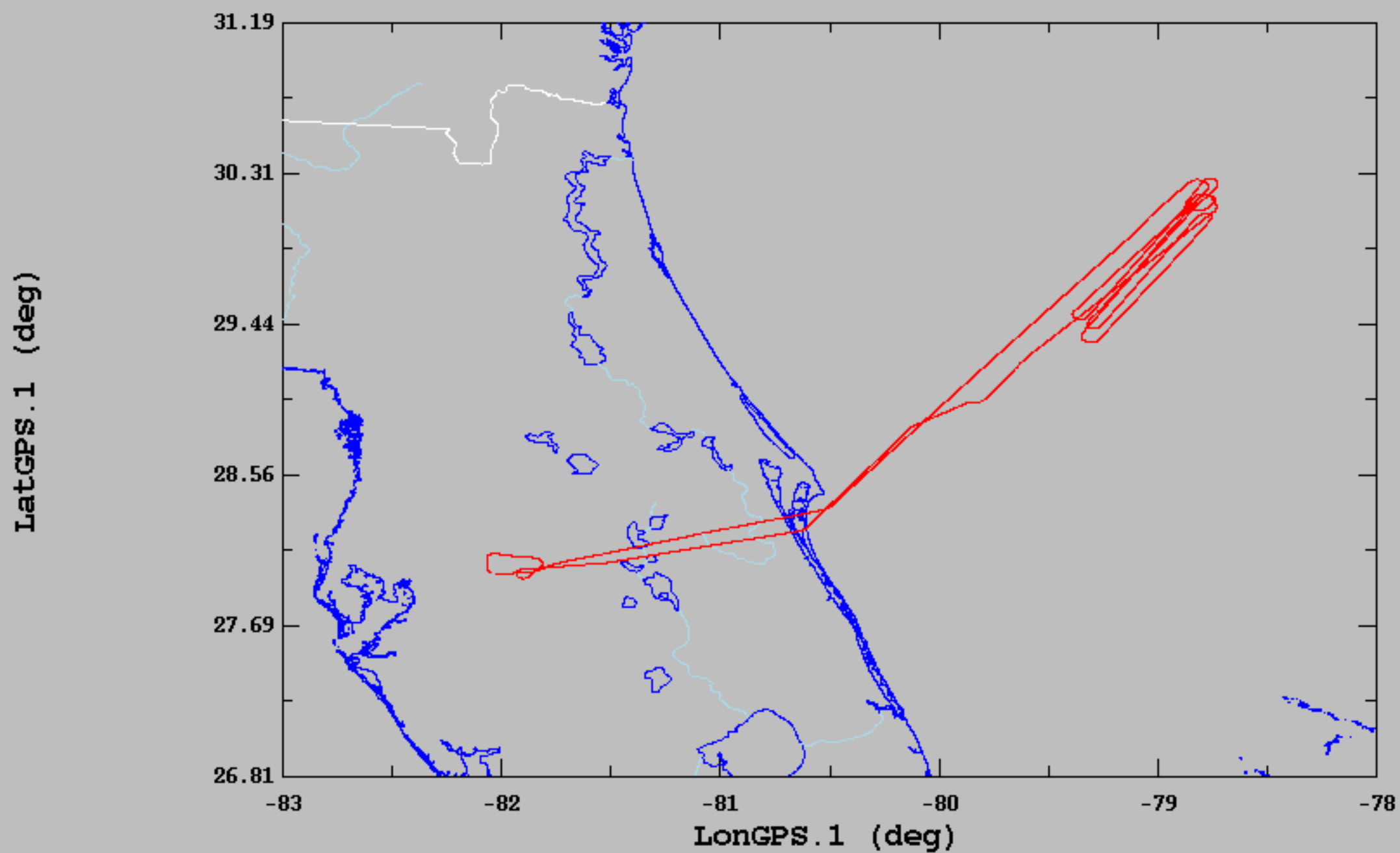
-PQM.1 does not appear to trend as similarly as PQM.2, PQM.3, PQM.4.

-TDM.2 has a large peak around hour 20Z, and lacks sensitivity following this peak through the rest of the flight.

-ACCZref, AltPA.d, AltGA.d, Gsxref, Gsyref, Gszref, LATref, LONref, PDALPHA.ref, PDBETA.ref, PQM.ref, PQ.c, PSM.ref, PS.c, IAS.d, TAS.d, PITCH.ref, ROLL.ref, TTM.ref, TA.d, HUM, WS.d, WD.d is unavailable during landing.

-ALTref, AltRa1.c, AltRa2.c, UWZ.d, DPJ_WSZ, is unavailable before hour 20Z and during landing.

2021-10-27, 19:33:17-22:50:23



mean	sigma	min	max
29.23	0.78	27.96	30.28
-79.84	1.08	-82.06	-78.72