

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2022051711	FLT #:	1	AC:	Doremus	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1700Z	CP(s):	Legidakes		A/C Takeoff		Good	Bad	Sent
To:	KADW	ETA:	2000Z		Kerns					1	0
Block Time		Flight Time		NAV:	Urato		ASOS Takeoff		BTs		
In:	20:02	Land:	19:56	FE(s):	Stokes		A/C Land		Good	Bad	Sent
					LaLonde						
Out:	17:23	T/O:	17:33	FD(s):	Hathaway		ASOS Land		0	0	0
Total:	2.7	Total:	2.4	SSA:	Richards, T	Visitors:					
Sponsoring Org:		AOC		AVAPS:			Storm Number ID:		N/A		
Program:		PFT					(ie: AL072012)				
Purpose:		Sci Shakedown / Exective Brief		SEB:			TCP0D/WSP0D Mission		NOAA3 WXWXA TRAIN		
							(ie: NOAA2 2418A SANDY)				
				MX:			OBSERVATIONS				
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:	N/A			

*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:	2022051711	Pressure Comparison		
Flight Director(s):	Hathaway		T/O	Land
Mission:	Ferry	Aircraft	1010.2 mb	998.7 mb
UWZ.d mean:	0.32	Tower	1011.0 mb	999.03 mb

	Raw 1Hz Mean File Parameters					C File Parameters	
☒ Accelerometer	☒ AccAXI.1	☒ AccAYI.1	☒ AccAZI.1	☒ AccZfilter-GPS.1	☒ AccZref		
	☒ AccAXI.2	☒ AccAYI.2	☒ AccAZI.2	☒ AccZfilter-GPS.2			
	☒ AccAXI-GPS.1	☒ AccAYI-GPS.1	☒ AccAZI-GPS.1				
	☒ AccAXI-GPS.2	☒ AccAYI-GPS.2	☒ AccAZI-GPS.2				
☒ Altitude	☒ AltGPS.1	☒ AltI-GPS.1	☒ AltPaADDU.1	☒ AltRA.1	☒ ALTref	☒ AltRA1.c	
	☒ AltGPS.2	☒ AltI-GPS.2	☒ AltBCADDU.1	☒ AltRA.2	☒ ALTPA.d	☒ AltRA2.c	
	☒ AltGPS.3				☒ ALTGA.d		
	☒ AltGPS.4						
☒ Ground Speed	☒ GsXI-GPS.1	☒ GsYI-GPS.1	☒ GsZI-GPS.1		☒ GSXref		
	☒ GsXI-GPS.2	☒ GsYI-GPS.2	☒ GsZI-GPS.2		☒ GSYref		
					☒ GSZref		
☒ Lat / Lon	☒ LatGPS.1	☒ LatI-GPS.1	☒ LonGPS.1	☒ LonI-GPS.1	☒ LATref		
	☒ LatGPS.2	☒ LatI-GPS.2	☒ LonGPS.2	☒ LonI-GPS.2	☒ LONref		
	☒ LatGPS.3		☒ LonGPS.3				
	☒ LatGPS.4		☒ LonGPS.4				
☒ Pressure	☒ PDALPHA.1	☒ PQALPHA.1	☒ PQM.1	☒ PSM.1	☒ PDALPHAref	☒ PQMref	
	☒ PDALPHA.2	☒ PQBETA.1	☒ PQM.2	☒ PSM.2	☒ PDBETAref	☒ PQ.c	
	☒ PDBETA.1		☒ PQM.3	☒ PTM.1	☒ PQALPHAref	☒ PSMref	
	☒ PDBETA.2		☒ PQM.4		☒ PQBETAref	☒ PS.c	
☒ Air Speed	☒ CasADDU.1	☒ TasADDU.1	☒ IasADDU.1		☒ IAS.d	☒ TAS.d	
☒ Pitch / Roll	☒ PitchI.1	☒ PitchRatel.1	☒ RollI.1	☒ RollRatel.1	☒ PITCHref		
	☒ PitchI.2	☒ PitchRatel.2	☒ RollI.2	☒ RollRatel.2	☒ ROLLref		
	☐ PitchI.3	☐ PitchRatel.3	☐ RollI.3	☐ RollRatel.3			
☒ Temp / Dewpt	☒ TTM.1	☒ TDM.1	☒ TRadD.1		☒ TD.c	☒ TTMref	
	☒ TTM.2	☒ TDM.2	☒ TRadS.1		☒ TDMref	☒ TA.d	
	☒ TTM.3	☐ TDM.3	☐ TRadU.1				
☒ Misc. (Must check)					☒ UWZ.d	☒ WS.d	
					☒ DPJ_WSZ	☒ WD.d	
					☒ HUM		

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:

- Slight oscillation apparent at finer scales in variables around 18:37 Z: PitchI.1, PitchI.2, RollI.1, RollI.2, PSM.1, PQM.1
- TTM.2, TDM.1, TD.c at take off noticed slight oscillation at finer scales. TDM.1 looks to resolve this oscillation around 18:37Z.
- AltRa2.c was zero and AltRa.2 was NaNed out for first 2.25 hours of flight
- Difference of roughly 40 mb between PDApha.1 and PDApha.2
- PQM.1 approximately 15 mb higher than rest of PQMs.

N43RF ERROR SUMMARY
20220517I1

Flight ID: 20220517I1

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/2022/MET/20220517I1

Local Met Data	Takeoff KLAL (1733Z)	Landing KADW (1955Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.131251
AttackAngleSlope		6.02327
SlipAngleIntercept		0.23
SlipAngleSlope		7.02537

Notes:

There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.

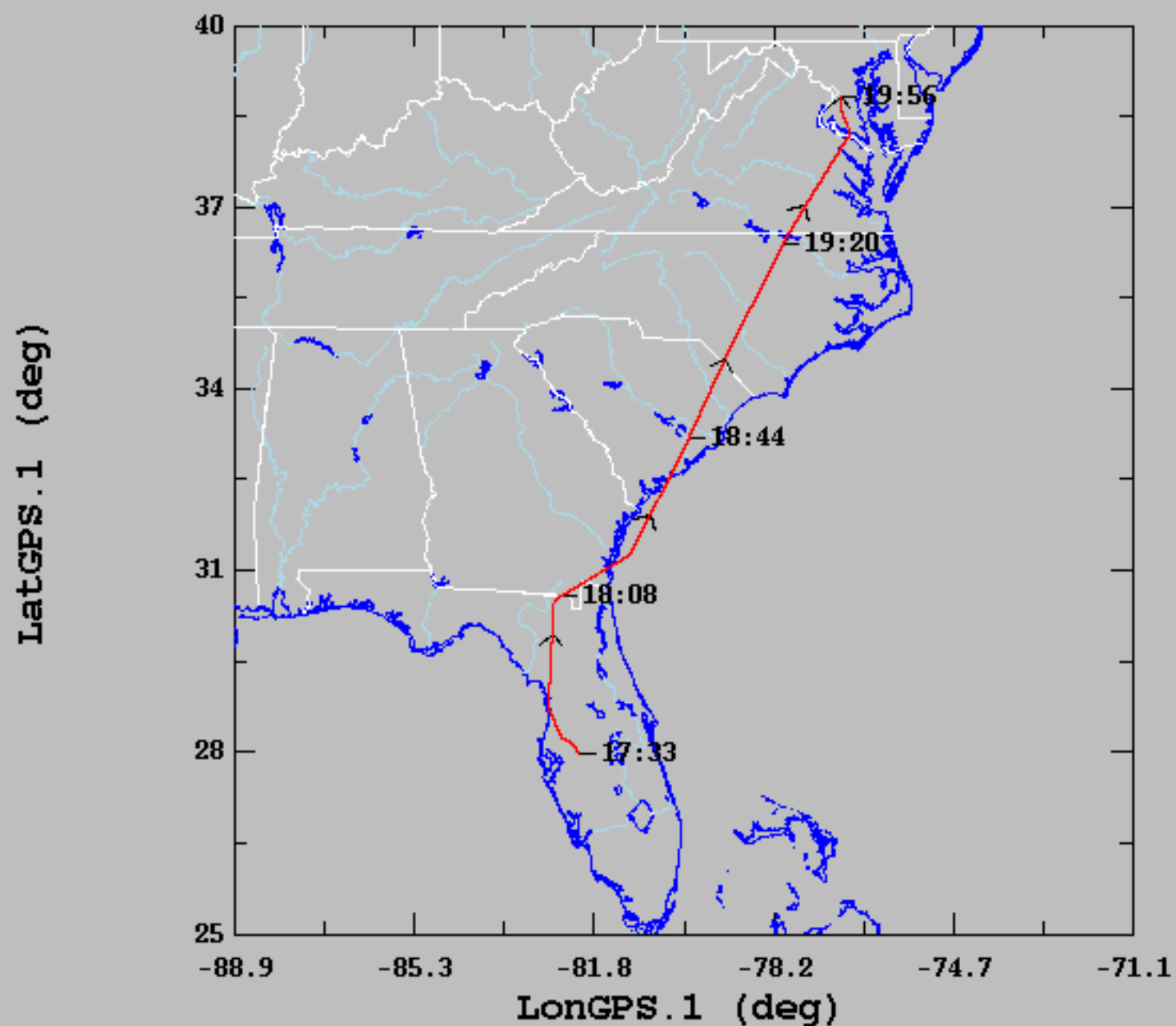
Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	1	1	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

2022-05-17, 17:33:00-19:56:57



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	33.34	3.35	27.99	38.82
LongGPS.1 (deg), 1 s/sec	-79.90	2.08	-82.66	-76.69