

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20220502H1	FLT #:	1	AC:	Copare	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1830 Z	CP(s):	Gaston		A/C Takeoff		Good	Bad	Sent
To:	KDCA	ETA:	2130 Z		Kerns				0	0	0
Block Time		Flight Time		NAV:	Urato		ASOS Takeoff		BTs		
In:	21:43	Land:	21:32	FE(s):	Stokes		A/C Land		Good	Bad	Sent
Out:	18:35	T/O:	19:09	FD(s):	Hathaway				0	0	0
Total:	3.1	Total:	2.4	SSA:		Visitors:	ASOS Land				
Sponsoring Org:	AOC			AVAPS:	McAlister		Storm Number ID:		N/A		
Program:	PPA			SEB:	Shannon		(ie: AL072012)				
Purpose:	Transit to KDCA for HAT			MX:	Decker		TCPD/WSPD Mission		NOAA2 WXWXA TRAIN		
							(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	OBSERVATIONS					
VOLCANIC ASH					X		Fix Number	Obs Number	Fix Time	SLP	
SCIENCE MISSION WITHIN BDRY LAYER					X		1				
LACK OF PRECIPITATION					X						
RELATIVE HUMIDITY ≥ 80%				X			2				
LARGE AIR-SEA TEMP GRADIENT					X						
HIGH SURFACE WINDS					X		3				
LONG FETCH / DURATION OF SFC WND					X						
SEA SALT ACCRETION FORECAST					X		4				
SEA SALT ACCRETION OBSERVED					X						
						Pennies:					
*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:	20220502H1	Pressure Comparison		
Flight Director(s):	Hathaway		T/O	Land
Mission:	Ferry	Aircraft	1012.4 mb	1013.5 mb
UWZ.d mean:	0.21	Tower	1013.7 mb	1014.1 mb

	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 ✖ PitchI.3	✓ PitchRatel.1 ✓ PitchRatel.2 ✖ PitchRatel.3	✓ RollI.1 ✓ RollI.2 ✖ RollI.3	✓ RollRatel.1 ✓ RollRatel.2 ✖ RollRatel.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:

- Difference of roughly 40 mb between PDBeta.1 and PDBeta.2
- An unusual amount of zero "drop outs" in wind speed and wind direction
- PQM.1 approximately 5 mb lower than rest of PQMs.

N42RF ERROR SUMMARY
20220502H1

Flight ID: 20220502H1

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/20220502H1

Local Met Data	Takeoff KLAL (1909Z)	Landing KDCA (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.

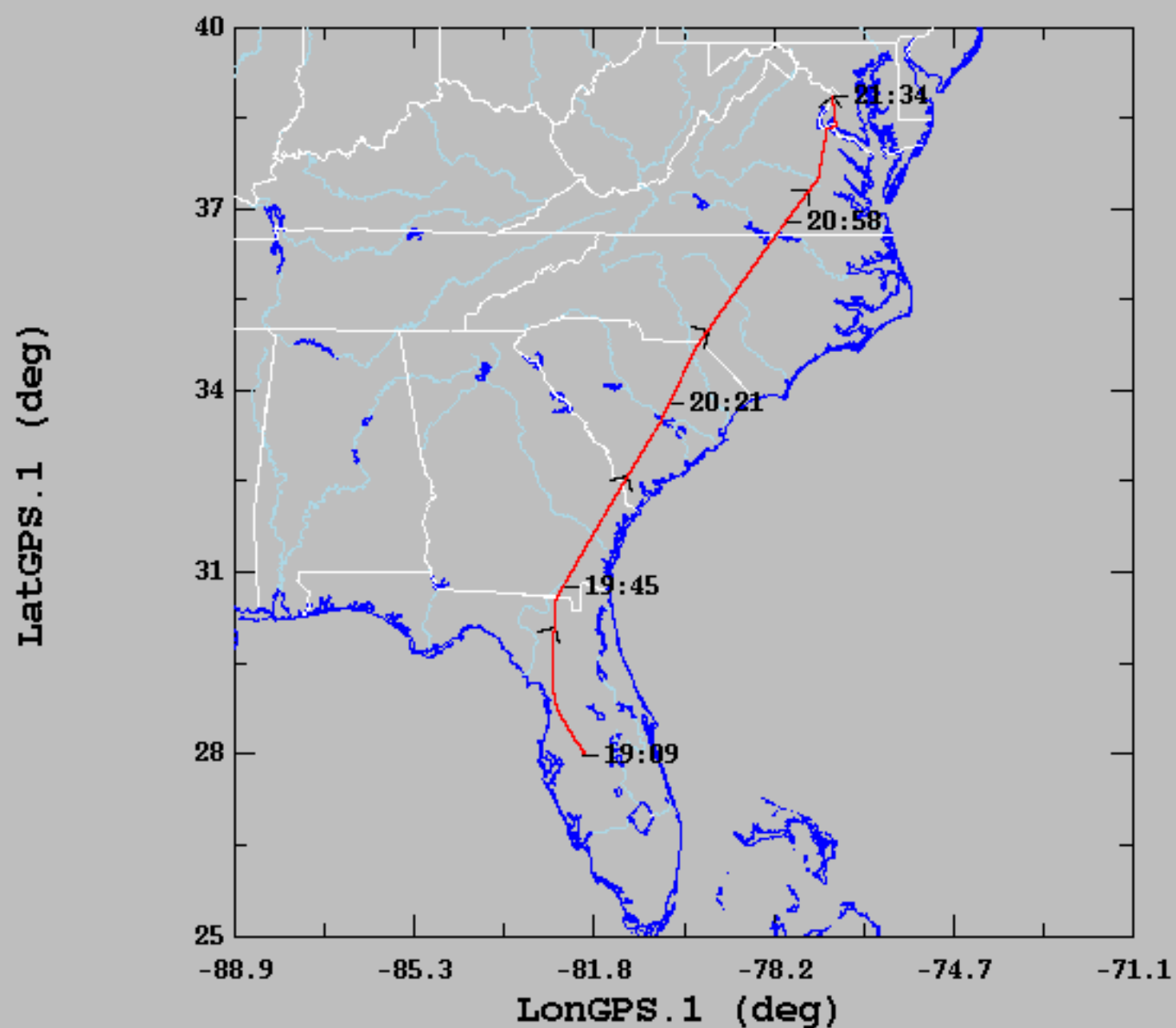
Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	0	0	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

2022-05-02, 19:09:00-21:34:27



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	33.68	3.37	27.99	38.86
LongGPS.1 (deg), 1 s/sec	-80.05	2.04	-82.56	-76.97