

AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter
Phone #: 863-500-3901

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:	20210819H1	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2000Z	CP(s):	Rannenberg	Zawislak	A/C Takeoff	1013	Good	Bad	Sent
To:	KLAL	ETA:	0400Z		Copare	Sellwood	ASOS Takeoff		KLAL 1950Z 1012.7 mb	19	0
Block Time		Flight Time		NAV:	Freeman / Hough			BTs			
In:	2:36	Land:	2:30	FE(s):	Darby		A/C Land	1010.9	Good	Bad	Sent
Out:	19:43	T/O:	19:58	FD(s):	Wysinger		ASOS Land		KLAL 0148Z 1011.9 mb	3	0
Total:	6.9	Total:	6.5	SSA:	Mascaro	Visitors:					
Sponsoring Org:		NWS / EMC		AVAPS:	Underwood		Storm Number ID:		AL072021		
Program:		PRX		SEB:			(ie: AL072012)				
Purpose:		TDR mission #3 GRACE		MX:			TCPOD/WSPOD Mission		NOAA2 1607A GRACE		
							(ie: NOAA2 2418A SANDY)				
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:	3 (Tropical Storm)			

*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:	20210819H1
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.03

Pressure Comparison		
	T/O	Land
Aircraft	1013.0	1010.9
Tower	KLAL 1950Z 1012.7 mb	KLAL 0148Z 1011.9 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 X 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			
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 X LatGPS.3 X LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 X LonGPS.3 X 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	✓ PDLAPHaref ✓ PDBETAref ✓ PQALPHaref ✓ 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)					✓ 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
X Miscellaneous FD Notes

QC Key	
Not checked	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/>

NOTES:
<p>GPS.3 and GPS.4 intermittent failures.</p> <p>Widescale outage affected all pressure transducers, temperature sensors, and TDM.1 between 1949-2002Z. This significantly affects downstream calculations, such as winds, UWZ, etc.</p> <p>TTM.3 unavailable.</p> <p>TDM.3 inoperative.</p> <p>TRadU.1 unavailable.</p>

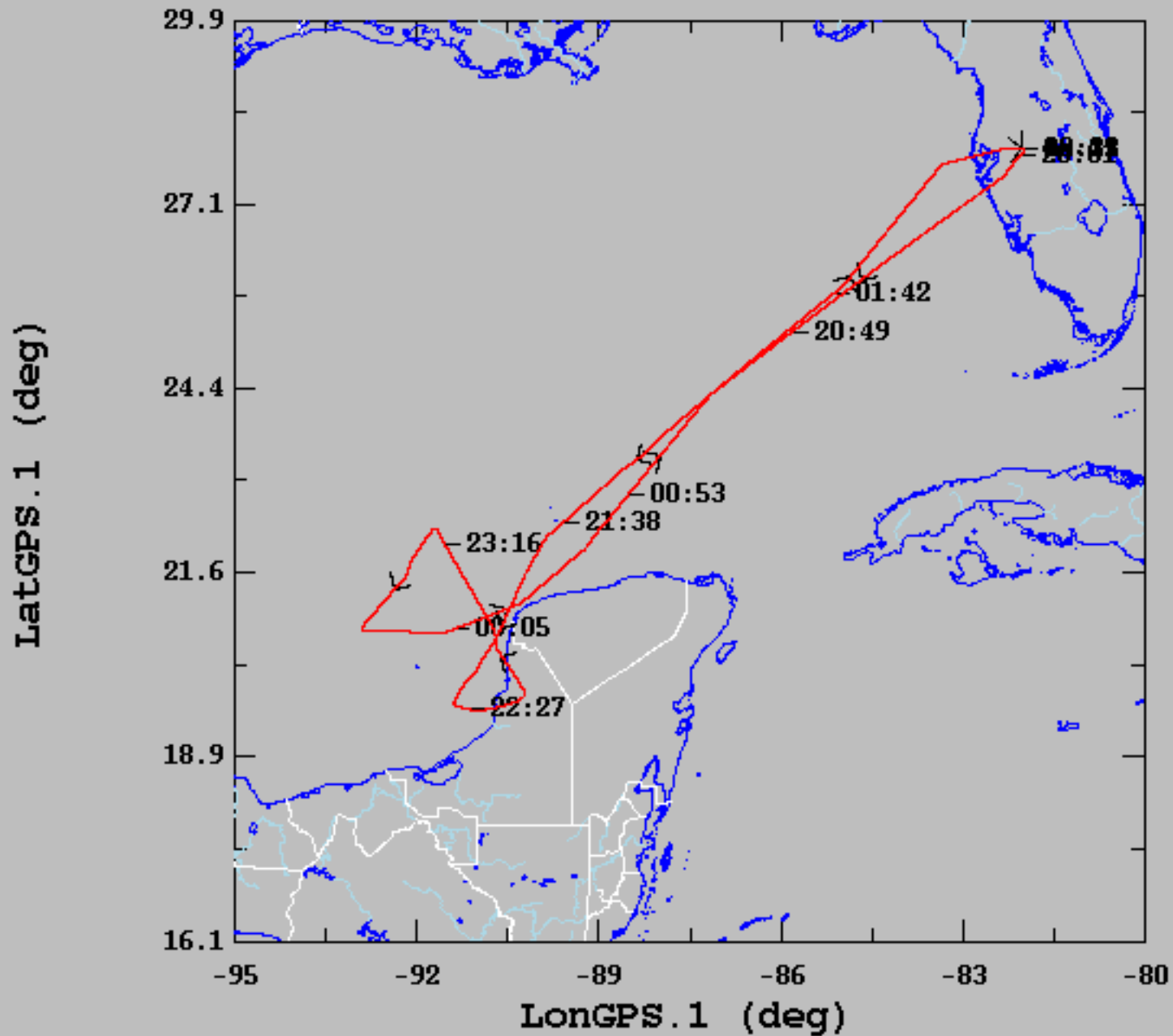
AVAPS Drop Log

Project: Hurricanes 2021 Mission: Hurricane Grace Flight ID: 20210819H1

Take Off: _____ Landing: _____ Flt Dir: Carpenter Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	192540933	1	0.0	2145Z	NGU	NWS	IP, IB, combo	✓
2	192620161	2	-0.6	2157Z		1	MP, IB	✓
3	204420099	3	-1.0	2201Z		ONR	QP, IB	✓
4	204330609	4	-0.6	2206Z		NWS	Center #1 CPA	✓
5	204270036	5	0.0	2210Z		ONR	QP, OB	✓
6	204260859	6	0.0	2219Z		NWS	MP, OB	✓
7	204521426	7	-0.5	2226Z		1	EP, OB	✓
8	204521397	8	0.0	2248Z		NWS	MP, IB	✓
9	204270034	1	-0.5	2255Z		1	Center #2 CPA	✓
10	204521387	2	-0.5	2304Z		ONR	QP, OB	✓
11	204260876	3	0.0	2308Z		NWS	MP, OB	✓
12	204241108	4	-0.7	2319Z		1	EP, OB	✓
13	192940309	5	-0.8	2343Z		1	EP, IB	✓
14	192940095	6	-1.0	2357Z		1	MP, IB	✓
15	204420100	7	-0.6	0003Z		ONR	QP, IB	✓
16	204310006	8	-0.6	0010Z		NWS	Center #3 CPA	✓
17	193120733	1	-0.9	0015Z		ONR	QP, OB	✓
18	204260887	2	0.0	0023Z		NWS	MP, OB	✓
19	204260883	3	-0.5	0037Z		1	EP, OB	✓
20		4						
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

08/19/2021, 18:23:35-26:31:26



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	24.22	2.96	19.54	27.99
— LonGPS.1 (deg), 1 s/sec	-86.95	3.74	-92.88	-81.97