

AXCTDs	0	0	0
UAS	0	0	0

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

ACAT-4 Version = 7.3

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20210704H1	FLT #:	21-	AC:	Didier	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0830Z	CP(s):	Legidakes / Copare		A/C Takeoff	1009.7 (.2)	Good	Bad	Sent
To:	KLAL	ETA:	1630Z		Rannenberg		ASOS Takeoff		KLAL 0835Z 1010.2 mb	13	1
Block Time		Flight Time		NAV:	Freeman		A/C Land	--	Good	Bad	Sent
In:	16:31	Land:	16:23	FE(s):	Sanchez		ASOS Land	KLAL 1650Z 1011.0 mb	0	0	0
Out:	8:20	T/O:	8:28	FD(s):	Carpenter	Visitors:	Storm Number ID:		AL052021		
Total:	8.2	Total:	7.9	SSA:	Richards/T		(ie: AL072012)				
Sponsoring Org:	NWS / NHC			SEB:	Knebel	TCPOD/WSPOD Mission		NOAA2 0905A ELSA			
Program:	PRX			MX:		(ie: NOAA2 2418A SANDY)					
Purpose:	TS Elsa 12Z fix #1.			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:	3 TS 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:	20210704H1
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.11

Pressure Comparison		
	T/O	Land
Aircraft	1009.7 (.2)	--
Tower	KLAL 0835Z 1010.2 mb	KLAL 1650Z 1011.0 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			
✓ 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	X 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			
✓ 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	X TDM.1 ✓ TDM.2 ✓ 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

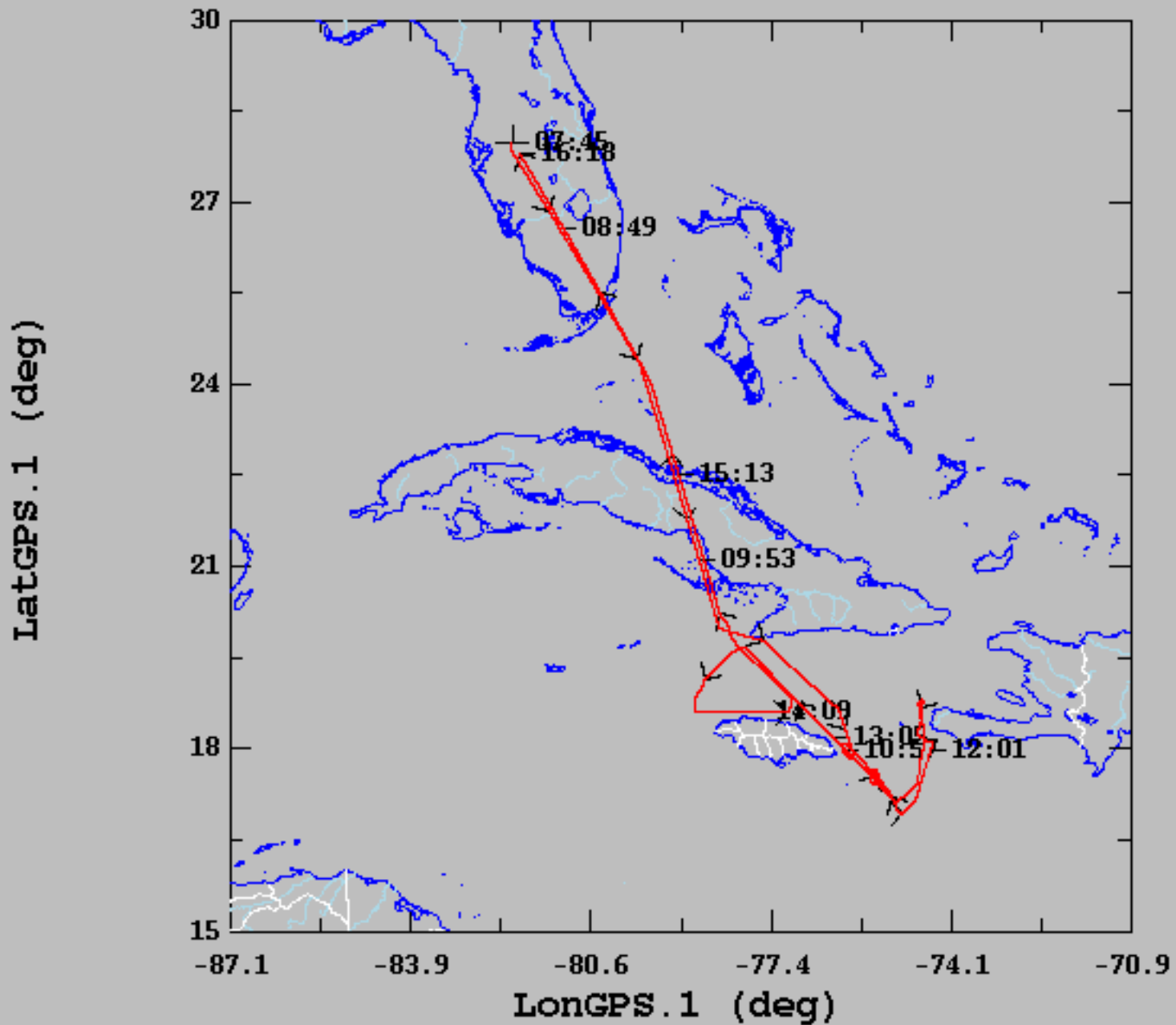
QC Key	
Not checked	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/>

NOTES:
<p>False spike in PQM.1 at ~1320Z.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 unavailable.</p> <p>TDM.1, .2, and .3 trend with each other, but TDM.1 lacks sensitivity.</p> <p>Unrealistic spike in TDM.2 at ~0845Z.</p> <p>TRadU.1 unavailable.</p>

DROPSONDE LOG 20210704H1

Storm:	Elsa	Flight ID:	20210704H1		Flight Director:	Carpenter	Dropsonde Scientist:	Aberson/ Sellwood AVAPS: Lynch10583		
Mission ID:	0905A ELSA		Take Off: 0828 from Lakeland							
Drop #	Ob#	Launch Time	Channel	Sonde ID	Lat/Lon		Surface Pressure	Lowest Wind	Environment	
1	1	1016	1	203310032	19.75	77.43	1011.2	085/17	endpoint NW	
Set end of drop 306.25 s										
2	2	1031	2	203310166	19.06	76.65	1009.9	035/11	midpoint NW	
good sonde										
3	3	1058	3	200650646	18.05	76.07	1010.6	170/27	center-ish	
Set end of drop 274.5 s, did not report as CENTER										
4	4	1135	4	203540094	17.51	75.41	1012.5	170/15	midpoint SE	
Set end of drop 291.75 s										
5		1147	5						endpoint SE	
Very early launch detect of 1039Z, sonde files e-mailed but crashes ASPEN										
6	6	1204	6	203240788	18.16	74.61	1012.4	120/32	endpoint NE	
good sonde										
7	7	1245	7	203540067	17.14	75.08	1013.7	130/28	endpoint SE inbound	
Set end of drop 282.25 s										
8	8	1256	8	203431767	17.75	75.7673	1012.6	140/27	midpoint SE	
good sonde										
9	9	1312	1	203240120	18.52	76.621	1011.2	325/07	center	
Set end of drop 289.25 s										
10	11	1321	2	203310165	18.96	77.09	1011.7	100/12	midpoint NW	
Set end of drop 280.75										
11	12	1334	3	203440009	19.63	77.78	1012.3	095/29	endpoint NW	
good sonde										
12	13	1354	4	203240092	18.63	78.73	1011.8	090/12	endpoint W	
good sonde										
13	14	1407	5	203240112	18.61	77.8	1012.2	150/07	midpoint W	
good sonde										
14		1420	6	203150672	18.8	76.99	1012.2	065/11	center	
good sonde										

2021-07-04, 07:45:00-16:18:01



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	21.34	3.69	16.93	27.99
— LongGPS.1 (deg), 1 s/sec	-78.14	2.36	-82.06	-74.45