

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION					
FLT ID:	20241006I1	FLT #:		AC:	Rannanberg	Other Crew:		sUAS		Dropsondes		
From:	KLAL	ETD:	0400L / 0800Z	CP(s):	Palmer	Zhang, Jun (HRD)		Type	Released	Good	Bad	Sent
To:	KLAL	ETA:	1200L / 1600Z		Taraboletti	Judy, Aaron (NAVAIR)				20	0	20
Block Time		Flight Time		NAV(s):	Utama / Saunders							
Out:	07:44	T/O:	07:54	FE(s):	Ripp			Other Expendables		Dropsonde Charge Codes		
					Dittoe			Type	Released	15 NWS, 5 HRD		
In:	16:02	Land:	15:56	FD(s):	Englert					AXBTs		
					Carpenter					Good	Bad	Sent
Total:	8.3	Total:	8.0	SSA:	Richards							
					Hunsinger							
Sponsoring Org:		NHC		IFT(s):	Brannigan			Pennies		3 x TS		
Program:		PRX							Storm ID: (i.e., AL072012)		AL142024	
Purpose:		TDR +12Z Fix		MX:			Mission ID: (i.e., NOAA2 2418A SANDY)		NOAA3 0114A MILTON			
AS REQUIRED BY ORM			Y	N	REMARKS			OBSERVATIONS				
VOLCANIC ASH				X				Fix Number	Obs Number	Fix Time	SLP	
SCIENCE MISSION WITHIN BDRY LAYER				X				1	4	1101z	993	
LACK OF PRECIPITATION				X				2	9	1211z	991	
RELATIVE HUMIDITY ≥ 80%			X					3	18	1325z	991	
LARGE AIR-SEA TEMP GRADIENT				X				4				
HIGH SURFACE WINDS				X								
LONG FETCH / DURATION OF SFC WND				X								
SEA SALT ACCRETION FORECAST				X								
SEA SALT ACCRETION OBSERVED												

*Highlighted items must be completed before departure.

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	2024100611
Flight Director(s):	Englert/Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.05

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1007.6	-
Airfield	1008.2	-

This form uses:	
_A.nc	

SFMR Serial Unit	1
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Parameters	Raw				Derived, Corrected & Reference	
<input checked="" type="checkbox"/> Acceleration	<input checked="" type="checkbox"/> AccAXI.1 <input checked="" type="checkbox"/> AccAXI.2 <input checked="" type="checkbox"/> AccAXI-GPS.1 <input checked="" type="checkbox"/> AccAXI-GPS.2	<input checked="" type="checkbox"/> AccAYI.1 <input checked="" type="checkbox"/> AccAYI.2 <input checked="" type="checkbox"/> AccAYI-GPS.1 <input checked="" type="checkbox"/> AccAYI-GPS.2	<input checked="" type="checkbox"/> AccAZI.1 <input checked="" type="checkbox"/> AccAZI.2 <input checked="" type="checkbox"/> AccAZI-GPS.1 <input checked="" type="checkbox"/> AccAZI-GPS.2	<input checked="" type="checkbox"/> AccZfilter-GPS.1 <input checked="" type="checkbox"/> AccZfilter-GPS.2	<input checked="" type="checkbox"/> AccZref	
<input checked="" type="checkbox"/> Altitude	<input checked="" type="checkbox"/> AltGPS.1 <input checked="" type="checkbox"/> AltGPS.2 <input checked="" type="checkbox"/> AltGPS.3 <input checked="" type="checkbox"/> AltGPS.4	<input checked="" type="checkbox"/> AltI-GPS.1 <input checked="" type="checkbox"/> AltI-GPS.2	<input checked="" type="checkbox"/> AltPaADDU.1 <input checked="" type="checkbox"/> AltBCADDU.1	<input checked="" type="checkbox"/> AltRA.1 <input checked="" type="checkbox"/> AltRA.2	<input checked="" type="checkbox"/> ALTref <input checked="" type="checkbox"/> ALTPA.d <input checked="" type="checkbox"/> ALTGA.d	<input checked="" type="checkbox"/> AltRA1.c <input checked="" type="checkbox"/> AltRA2.c
<input checked="" type="checkbox"/> Ground Speed	<input checked="" type="checkbox"/> GsXI-GPS.1 <input checked="" type="checkbox"/> GsXI-GPS.2	<input checked="" type="checkbox"/> GsYI-GPS.1 <input checked="" type="checkbox"/> GsYI-GPS.2	<input checked="" type="checkbox"/> GsZI-GPS.1 <input checked="" type="checkbox"/> GsZI-GPS.2	<input checked="" type="checkbox"/> GSXref <input checked="" type="checkbox"/> GSYref <input checked="" type="checkbox"/> GSZref		
<input checked="" type="checkbox"/> Location	<input checked="" type="checkbox"/> LatGPS.1 <input checked="" type="checkbox"/> LatGPS.2 <input checked="" type="checkbox"/> LatGPS.3 <input checked="" type="checkbox"/> LatGPS.4	<input checked="" type="checkbox"/> LatI-GPS.1 <input checked="" type="checkbox"/> LatI-GPS.2	<input checked="" type="checkbox"/> LonGPS.1 <input checked="" type="checkbox"/> LonGPS.2 <input checked="" type="checkbox"/> LonGPS.3 <input checked="" type="checkbox"/> LonGPS.4	<input checked="" type="checkbox"/> LonI-GPS.1 <input checked="" type="checkbox"/> LonI-GPS.2	<input checked="" type="checkbox"/> LATref <input checked="" type="checkbox"/> LONref	
<input checked="" type="checkbox"/> Pressure Sensors	<input checked="" type="checkbox"/> PDALPHA.1 <input checked="" type="checkbox"/> PDALPHA.2 <input checked="" type="checkbox"/> PDBETA.1 <input checked="" type="checkbox"/> PDBETA.2	<input checked="" type="checkbox"/> PQALPHA.1 <input checked="" type="checkbox"/> PQBETA.1	<input checked="" type="checkbox"/> PQM.1 <input checked="" type="checkbox"/> PQM.2 <input checked="" type="checkbox"/> PQM.3 <input checked="" type="checkbox"/> PQM.4	<input checked="" type="checkbox"/> PSM.1 <input checked="" type="checkbox"/> PSM.2 <input checked="" type="checkbox"/> PTM.1	<input checked="" type="checkbox"/> PQMref <input checked="" type="checkbox"/> PQ.c <input checked="" type="checkbox"/> PSMref <input checked="" type="checkbox"/> PS.c	
<input checked="" type="checkbox"/> Air Speed	<input checked="" type="checkbox"/> CasADDU.1	<input checked="" type="checkbox"/> TasADDU.1	<input checked="" type="checkbox"/> IasADDU.1	<input checked="" type="checkbox"/> IAS.d <input checked="" type="checkbox"/> TAS.d		
<input checked="" type="checkbox"/> Pitch / Roll	<input checked="" type="checkbox"/> PitchI.1 <input checked="" type="checkbox"/> PitchI.2 <input style="background-color: #ccccff;" type="checkbox"/> PitchI.3	<input checked="" type="checkbox"/> PitchRatI.1 <input checked="" type="checkbox"/> PitchRatI.2 <input style="background-color: #ccccff;" type="checkbox"/> PitchRatI.3	<input checked="" type="checkbox"/> RollI.1 <input checked="" type="checkbox"/> RollI.2 <input style="background-color: #ccccff;" type="checkbox"/> RollI.3	<input checked="" type="checkbox"/> RollRatI.1 <input checked="" type="checkbox"/> RollRatI.2 <input style="background-color: #ccccff;" type="checkbox"/> RollRatI.3	<input checked="" type="checkbox"/> PITCHref <input checked="" type="checkbox"/> ROLLref	
<input checked="" type="checkbox"/> Temperature, Dewpoint, Radiometers	<input checked="" type="checkbox"/> TTM.1 <input checked="" type="checkbox"/> TTM.2 <input style="background-color: #ccccff;" type="checkbox"/> TTM.3	<input checked="" type="checkbox"/> TDM.1 <input checked="" type="checkbox"/> TDM.2 <input style="background-color: #ccccff;" type="checkbox"/> TDM.3	<input checked="" type="checkbox"/> TRadD.1 <input checked="" type="checkbox"/> TRadS.1 <input style="background-color: #ccccff;" type="checkbox"/> TRadU.1	<input checked="" type="checkbox"/> TD.c <input checked="" type="checkbox"/> TDMref <input checked="" type="checkbox"/> HUM		<input checked="" type="checkbox"/> TTMref <input checked="" type="checkbox"/> TA.d
<input checked="" type="checkbox"/> Wind and Pressure <input checked="" type="checkbox"/> SFMR	SFMR	<input checked="" type="checkbox"/> CH 1 TB <input checked="" type="checkbox"/> CH 2 TB <input checked="" type="checkbox"/> CH 3 TB	<input checked="" type="checkbox"/> CH 4 TB <input checked="" type="checkbox"/> CH 5 TB <input checked="" type="checkbox"/> CH 6 TB	<input checked="" type="checkbox"/> UWZ.d <input checked="" type="checkbox"/> PSURF <input checked="" type="checkbox"/> WS SFMR		<input checked="" type="checkbox"/> WS.d <input checked="" type="checkbox"/> WD.d <input checked="" type="checkbox"/> RAIN RATE SFMR

FLID_Mission_Documents.pdf:
<input checked="" type="checkbox"/> Error Summary
<input checked="" type="checkbox"/> Crew Manifest
<input checked="" type="checkbox"/> QC Checklist
<input checked="" type="checkbox"/> Dropwindsonde Log(s) - AVAPS and FD, if completed
<input checked="" type="checkbox"/> Flight Track

QC Key:	
Valid	<input checked="" type="checkbox"/>
Errors (see NOTES)	<input checked="" type="checkbox"/>
Sensor Inoperative	<input style="background-color: #ccccff;" type="checkbox"/>

NOTES:

Pitch and Roll I.3, TTM.3, TDM.3, and TRadU.1 not operational.

Transducers produce erroneous data (PDAlpha.1, PDBeta.2, PQBeta.1, PQM.4, TTM.2) from 0940-1011z during transit. Data stabilized prior to on station in storm environment.

SFMR data (all channel TB, WS, RAIN RATE) under assessment and should be used with caution.

Dropwindsonde Scientist Log

Storm:	Milton	Flight ID:	2024100611	Mission ID:	0114A	Takeoff:		Landing:	
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Dropsonde Scientist(s):	Kaplan	AVAPS Operator:	
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Pre-flight

- ✓ Discuss the pattern with the Lead Project Scientist (LPS) and ensure that enough dropsondes are onboard.
- ✓ Complete the appropriate pre-flight set-up of your workstation and ASPEN (see [Dropsonde Processing Guide](#)).

In-flight

- ✓ Ensure the Flight Director is aware of upcoming drops and whether a backup is requested in case of failure.
- ✓ Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal.
- ✓ Prioritize processing of center drops and report MSLP and surface wind speed and direction to the Flight Director.
- ✓ Fill in the Dropwindsonde Scientist log as drops are released and processed.
- ✓ Copy completed ASPEN files (e.g., FRD, netCDF, Skew-t, WMO txt, BUFR) into the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.

Once “science is complete”...

- ✓ Make synoptic map plots in ASPEN and copy them to the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.
- ✓ Ensure ASPEN files have been sent to the ground by locating and verifying all files in the “FLIGHTID” folder within the “FRD” folder on the workstation desktop.
- ✓ Archive ASPEN_DATA and RAW_DATA into a folder named with the FLIGHTID within the “Season Dropsonde Archive” folder on the workstation desktop and upload the same directories into StormName/FLIGHTID/Dropsonde/ folder on Drive.
- ✓ Download this Dropwindsonde Scientist Log as “PDF” and upload completed PDF and Google Doc to the StormName/FLIGHTID/Dropsonde/ folder within the “Mission Reports” directory in the HFP Google Drive.

Storm: <<Milton>>

Flight ID: <<24100611>>

Mission ID: << 0114A>>

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
1	233541332	1028	24.6	94.8	1008.	49/31	10			1
2	233550499	1042	23.86	94.74	1007.2	63/8	10			2
3	233540570	1101	22.55	94.90	993	160/19	10		center	3
4	233141079	1106	22.23	94.91	999	232/47	10		Maxwindband	5
Set end of drop at 240.5										
5	233140851	1115	21.64	94.91	1005.3	261/31	10			6
Set end of drop at 244.25										
6	232010135	1125	20.91	94.90	1008	265/30	10			7
Late launch detect. Looked ok.										
7	233341098	1149	22.53	94.75	1007.2	210/25	10			8
Data missing above 850 mb										
8	233540557	1159	22.1	94.0	1005	174/27	10			10
9	233140751	1206	22.33	94.41	1001.3	179/34	10		Maxwindband	11
10	233541317	1207	22.37	94.48	998.5	180/41	10		Maxwindband	12
11	233825134	1212	22.53	94.75	991	360/6kt	10		center	13

Storm: <<Milton>>

Flight ID: <<24100611>>

Mission ID: << 0114A>>

12	233410811	1215	22.62	94.94	998.1	17/37kt	10		Maxwindband	14
13	233560369	1226	22.96	95.61	1007	15/29	10			15
	End of drop set at 130.5									
14	233541326	1241	24.45	96.47	1008.2	23/29	10			16
15	233814634	1305	22.22	95.13	1007	314/24	10			17
16	233814595	1316	22.19	95.11	1004	315/31	10			19
17	233541324	1326	22.56	94.48	990.9	79/5kt	10		center	20
Set end of drop @221.75										
18	233410819	1329	22.76	94.32	999.5	104/38	10		Maxwindband	21
19	233410822	1340	23.18	93.63	1006.7	125/29	10			22
20	233814610	1348	23.47	93.09	1008.8	142/13	10		last report	23

Storm: <<Milton>>

Flight ID: <<24100611>>

Mission ID: << 0114A>>

AVAPS Drop Log

Project: HX 2024

Mission: Milton

Flight ID: 20241006F1

Take Off: 0800

Landing: _____

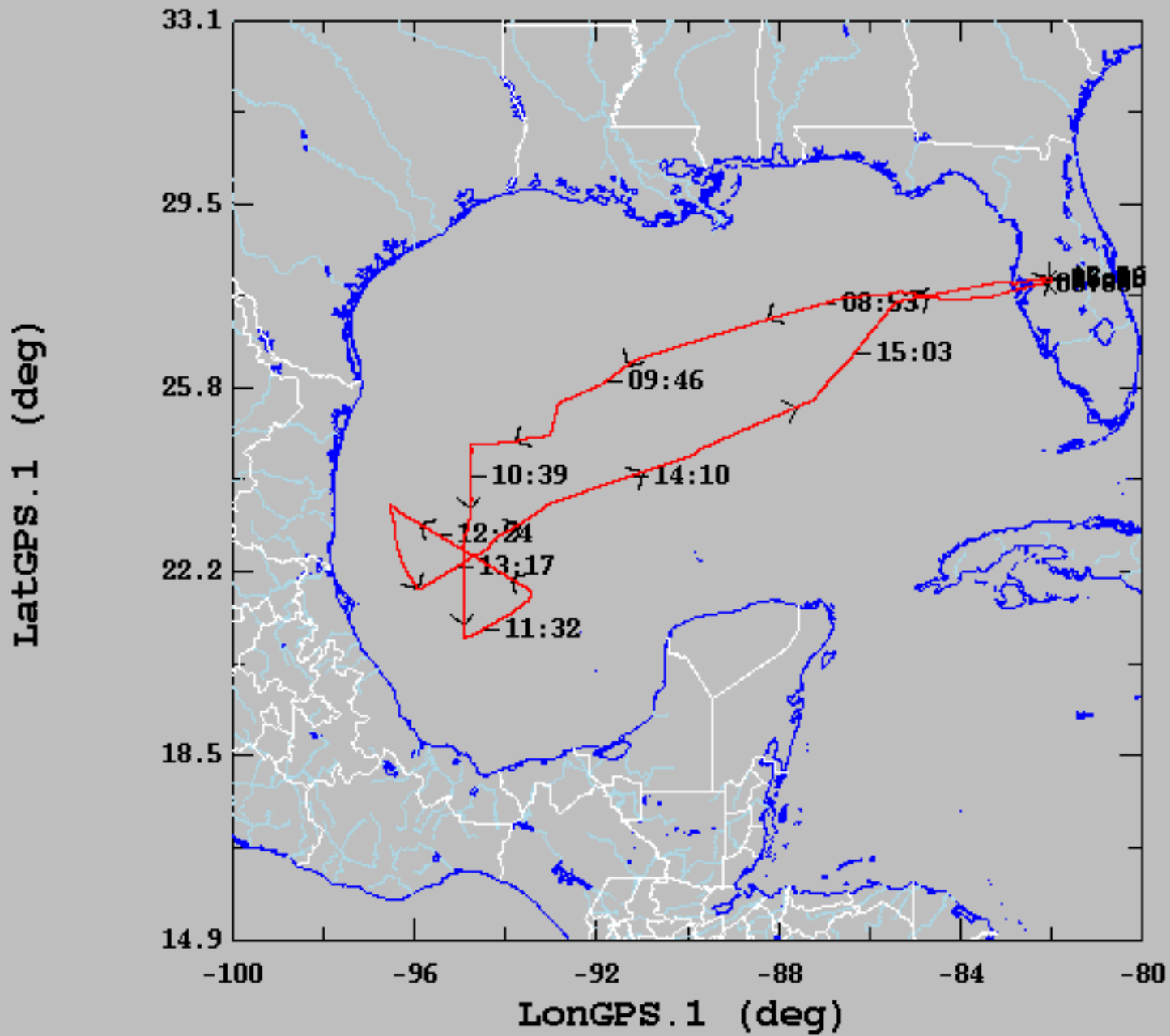
Flt Dir: Englecl

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	233541332	1	-0.2	1028	FB	NWS	FPI	✓
2	233550499	2	0	1042	FB	NWS	MP	✓
3	233540570	3	-0.4	1101	FB	NWS	CP	✓
4	233141079	4	-0.4	1106	FB	HRD	RMW	✓
5	233140851	5	-0.6	1115	FB	NWS	MP	✓
6	232610135	6	-0.3	1125	FB	NWS	EPI	✓
7	233341698	7	-0.9	1148	FB	NWS	IP2	✓
8	233540557	8	-0.6	1159	FB	NWS	MP	✓
9	233140751	1	-0.4	1206	FB	HRD	RMW	✓
10	233541317	2	-0.6	1207	FB	HRD	RMW	✓
11	233825134	3	-0.7	1212	FB	NWS	CP	✓
12	233410811	4	-0.4	1215	FB	HRD	RMW	✓
13	233560369	5	-0.8	1226	FB	NWS	MP	✓
14	233541326	6	-0.5	1241	FB	NWS	EP2	✓
15	233814634	7	-0.6	1305	FB	NWS	IP3	✓
16	233814595	8	-0.6	1316	FB	NWS	MP	✓
17	233541324	1	-1.0	1326	FB	NWS	CP	✓
18	233410819	2	-0.2	1329	FB	HRD	RMW	✓
19	233410822	3	-0.7	1340	FB	NWS	MP	✓
20	233814610	4	-0.6	1348	FB	NWS	EP3	✓
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

NFE TP

10/06/2024, 06:15:19-15:56:06



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	25.30	2.36	20.86	27.99
— LonGPS.1 (deg), 1 s/sec	-89.36	5.23	-96.53	-81.97