



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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2024091011	FLT #:	FY24-	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1600L / 2000Z	CP(s):	Copare	Aberson (HRD)	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	0015L / 0415Z		Keith/Reeves	Naeher (UAS)			<b>15</b>	<b>0</b>	<b>15</b>
Block Time		Flight Time		NAV:	Utama/Meier	Fromm (UAS)	ASOS Takeoff		BTs		
In:	<b>3:34</b>	Land:	<b>3:28</b>	FE(s):	Wysinger	Cione (UAS)			Good	Bad	Sent
Out:	<b>19:59</b>	T/O:	<b>20:11</b>	FD(s):	Ripp		A/C Land		<b>0</b>	<b>0</b>	<b>0</b>
Total:	<b>7.6</b>	Total:	<b>7.3</b>	SSA:	Richards	Visitors:	ASOS Land		Storm Number ID: (ie: AL072012)	AL062024	
Sponsoring Org:	NHC			AVAPS:	Paul/Hunsinger	Goodstein (NCAR)				NOAA3 1006A FRANCINE	
Program:	PRX			SEB:		Hollingshed (AOML)	TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)				
Purpose:	TDR Mission / sUAS Blackswift			MX:			OBSERVATIONS				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X	Successfull launches:	1	25.80N/94.85W	2258z	983 mb	
SCIENCE MISSION WITHIN BDRY LAYER					X	15 sondes					
LACK OF PRECIPITATION					X	7 Skyfora stream sondes	2	25.93N/94.81W	2345z	983 mb	
RELATIVE HUMIDITY ≥ 80%				X		2 Microswift wave buoys					
LARGE AIR-SEA TEMP GRADIENT					X	1 sUAS Blackswift (launch: 2346z / splash: 0120z)	3	26.06N/94.71W	0101z	982 mb	
HIGH SURFACE WINDS				X							
LONG FETCH / DURATION OF SFC WND					X		4				
SEA SALT ACCRETION FORECAST					X						
SEA SALT ACCRETION OBSERVED					X		Pennies:	3x HURR (Cat 1)			
						*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:	2024091011
Flight Director(s):	Englert/Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.02

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1007.2	1010.9
Airfield	1007.6	1008.5

This form uses:	
_A.nc	

SFMR Serial Unit	3
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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"/> ALTPA.d <input checked="" type="checkbox"/> ALTGA.d	<input checked="" type="checkbox"/> ALTref <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 checked="" type="checkbox"/> PitchI.3	<input checked="" type="checkbox"/> PitchRatI.1 <input checked="" type="checkbox"/> PitchRatI.2 <input checked="" type="checkbox"/> PitchRatI.3	<input checked="" type="checkbox"/> RollI.1 <input checked="" type="checkbox"/> RollI.2 <input checked="" type="checkbox"/> RollI.3	<input checked="" type="checkbox"/> RollRatI.1 <input checked="" type="checkbox"/> RollRatI.2 <input checked="" 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 checked="" type="checkbox"/> TTM.3	<input checked="" type="checkbox"/> TDM.1 <input checked="" type="checkbox"/> TDM.2 <input checked="" type="checkbox"/> TDM.3	<input checked="" type="checkbox"/> TRadD.1 <input checked="" type="checkbox"/> TRadS.1 <input checked="" 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 type="checkbox"/> inop

### NOTES:

Pitch and Roll I.3, TTM.3, TDM.3, and TRadU.1 not operational.  
 PQM.4 negative spikes between 2133-2138z and 0215-0232z.  
 SFMR data (all channel TB, WS, RAIN RATE) under assessment and should be used with caution.

# AVAPS Drop Log

Project: HX24

Mission: FRANCINE

Flight ID: 20240910I1

Take Off: \_\_\_\_\_

Landing: \_\_\_\_\_

Flt Dir: ENGLEZ / CARPONE Launcher S/N: \_\_\_\_\_

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	232 240101	1	-0.3	2230	SCP	NWS	IP1-SS.MS.ACS	✓
2	233 140637	2	+0.4	2243	SCP	NWS	MP ACS	✓
3	233 630621	3	-0.6	2258	SCP	NWS	CP1	✓
4	233 221012	4	-0.5	2307	SCP	NWS	MP	✓
5	233 640796	1	-0.4	2313	SCP	NWS	EP1-SS <del>ACS</del>	✓
6	231 931572	2	-0.3	2329	SCP	NWS	IP2-SS ACS	✓
7	233 220913	3	+0.4	2335	SCP	NWS	MP ACS	✓
8	233 241059	4	+0.8	2345	SCP	NWS	CP2-50 ACS	✓
9	232 320778	1	-0.6	2359	SCP	NWS	MP ACS	✓
10	232 320777	2	-0.2	0012	SCP	NWS	EP2-SS.MS	✓
11	233 150161	3	0	0035	JH	NWS	IP3 ACS	✓
12	231 821695	4	+0.7	0049	JH	NWS	MP ACS	✓
13	233 141076	1	-0.2	0101	JH	NWS	CP ACS	✓
14	233141025	2	-0.4	0114	JH	NWS	MP	✓
15	233331474	-3	-0.7	0128	JH	NWS	EP3	✓
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\* ACS SDR no Antenna / GPS

## Dropwindsonde Scientist Log

<b>Storm:</b>	FRANCINE	<b>Flight ID:</b>	2024091011	<b>Mission ID:</b>	1006A	<b>Takeoff:</b>	2010 z	<b>Landing:</b>	Z
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<b>Dropsonde Scientist(s):</b>	Kaplan	<b>AVAPS Operator:</b>	
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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: <<FRANCINE>>

Flight ID: <<24091011>>

Mission ID: << 1006A>>

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	232240101	2230	26.78	93.15	1005.1	93/14	10			1
2	233140637	2243	26.36	93.97	1002.2	125/32	10			2
3	233630621	2258	25.80	94.86	983.4	207/11	10		Center	3
4	233221012	2307	25.50	95.39	994.6	329/44	10			4
Set end of drop at 211.0										
5	233640796	2313	25.28	95.82	1000.2	343/26	10			5
6	231931572	2329	24.81	94.78	1000.2	225/30	10			7
Set End of drop at 198.										
7	233220913	2335	25.24	94.74	994.6	235/44	10			8

Storm: &lt;&lt;FRANCINE&gt;&gt;

Flight ID: &lt;&lt;24091011&gt;&gt;

Mission ID: &lt;&lt;1006A&gt;&gt;

8	233241059	2345	25.94	94.81	983.	134/17	10		Center	9
Set end of drop at 187.										
9	232320778	2359	26.85	94.86	1001.1	47/30	10			10
Set end of drop at 197.75										
10	232320777	0012	27.73	94.86	1002.4	78/23	10			12
Set end of drop at 197.75										

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 #
11	233150161	0035	26.84	96.42	1003.7	04/24	10			13
12	231821695	0049	26.39	95.45	999.0	18/46	10			14
13	233141076	0101	26.05	94.70	982.1	131/9	10		Center	15

Storm: <<FRANCINE>>

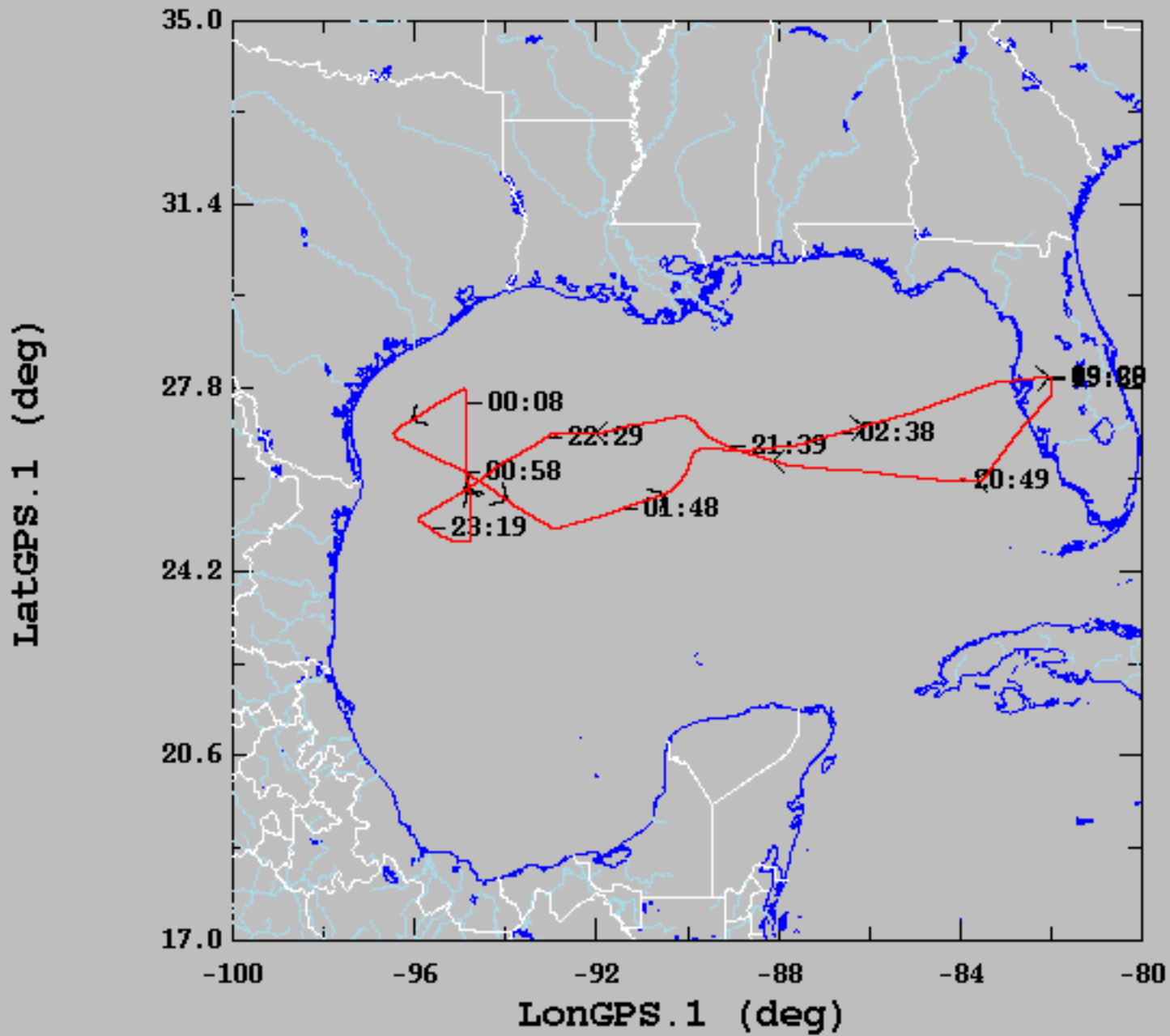
Flight ID: <<24091011>>

Mission ID: << 1006A>>

14	233141025	0014	25.56	93.89	997.3	185/47	10			16
Set end of drop at 202.										
15	233331474	0128	25.12	93.07	1004.6	179/29	10			18
Set end of drop at 199.75            Marked as   LAST REPORT										
General comment: When opening several of the drops near the end of the mission the message sonde may contain post-splash pressure was seen though this did not appear to be the case.										



09/10/2024, 19:59:34-27:28:29



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	26.50	0.83	24.80	27.99
— LongGPS.1 (deg), 1 s/sec	-90.22	4.71	-96.44	-81.96