

N49RF ERROR SUMMARY
 TS FRANKLIN 0308A

Flight ID: 20230822N1

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	AccZI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2

Flight Directory acdata/2023/MET/20230822N1

Local Met Data	Takeoff KLAL (0329Z)	Landing KLAL (1024Z)
Dynamic Corrections		Yes
AttackAngleIntercept		6.4652
AttackAngleSlope		7.59375
SlipAngleIntercept	0.925	
SlipAngleSlope		6.56381
AttackAngleIntercept2		4.97461
AttackAngleSlope2	5.40351	
SlipAngleIntercept2		0.71
SlipAngleSlope2		6.22545

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	18	15	15
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Henning
 Phone #: (850) 499-0151

ACAT-4 Version = 7.4

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20230822N1	FLT #:		AC:	NARDI	Scientists: DUNION (ASPEN)	Pressure		Dropsondes		
From:	KLAL	ETD:		CP(s):	VARWIG SMITH		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:		NAV:			ASOS Takeoff		15	3	15
Block Time		Flight Time		FE(s):			A/C Land		BTs		
In:	1034	Land:	1024	FD(s):	HENNING	ASOS Land		Good	Bad	Sent	
Out:	0320	T/O:	0329	SSA:	PAUL	Visitors:	Storm Number ID:				
Total:	7.2	Total:	6.9	AVAPS:	DYKEMAN		(ie: AL072012)				
Sponsoring Org:	NHC			SEB:	WEINMANN	TCPOD/WSPOD Mission	NOAA90308A FRANKLIN				
Program:	PRX			MX:		(ie: NOAA2 2418A SANDY)					
Purpose:	TDR tasking TS FRANKLIN										

AS REQUIRED BY ORM	Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP
VOLCANIC ASH		x		1			
SCIENCE MISSION WITHIN BDRY LAYER				2			
LACK OF PRECIPITATION				3			
RELATIVE HUMIDITY ≥ 80%				4			
LARGE AIR-SEA TEMP GRADIENT							
HIGH SURFACE WINDS							
LONG FETCH / DURATION OF SFC WND							
SEA SALT ACCRETION FORECAST							
SEA SALT ACCRETION OBSERVED							

*Highlighted items must be completed before departure.

Remarks:

1 sonde NO LAUNCH DETECT
2 no PTH

W

G-IV QC Checklist

Flight ID:	20230822N1
Flight Director(s)	Henning / Dunion (ASPEN)
UWZ.d mean:	-0.06

Pressure Comparison		
	T/O	Land
Aircraft	1013.2	1011.0
Tower	1013.6	1009.7

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI.3	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI.3	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI.3			✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ AltGPS.3	✓ AltI.1 ✓ AltI.2 ✓ AltI.3	✓ AltPaADDU.1 ✓ AltPaADDU.2 x Altra.1	✓ AltBCADDU.1 ✓ AltBCADDU.2		✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	
✓ Ground Speed	✓ GsXI.1 ✓ GsXI.2 ✓ GsXI.3 ✓ GsXGPS.1 ✓ GsXGPS.2 ✓ GsXGPS.3	✓ GsYI.1 ✓ GsYI.2 ✓ GsYI.3 ✓ GsYGPS.1 ✓ GsYGPS.2 ✓ GsYGPS.3	✓ GsZI.1 ✓ GsZI.2 ✓ GsZI.3 ✓ GsZGPS.1 ✓ GsZGPS.2 ✓ GsZGPS.3	✓ GsGPS.1 ✓ GsGPS.2 ✓ GsGPS.3		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3	✓ LatI.1 ✓ LatI.2	✓ LongGPS.1 ✓ LongGPS.2 ✓ LongGPS.3	✓ LonI.1 ✓ LonI.2		✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ PDBETA.2	✓ PQALPHA.1 ✓ PQALPHA.2 ✓ PQBETA.1 ✓ PQBETA.2	✓ PQM.1 ✓ PQM.2	✓ PSM.1 ✓ PSM.2		✓ PDLAPHaref ✓ PDBETAref ✓ PQALPHaref ✓ PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1				✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 ✓ PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 ✓ PitchRateI.3	✓ Rolli.1 ✓ Rolli.2 ✓ Rolli.3	RollRateI.1 ✓ RollRateI.2 ✓ RollRateI.3		✓ PITCHref ✓ ROLLref	
x Temp / Dewpt	✓ TTM.1 ✓ TTM.2 ✓ TTM.3	✓ TTM.4	x TDM.1 x TDM.2			x TD.c x TDMref	✓ TTMref ✓ TA.d
x Misc. (Must check)						UWZ.d DPJ_WSZ x HUM	✓ WS.d ✓ WD.d

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
<input type="checkbox"/>	Miscellaneous FD Notes

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

NOTES:
<p>Radar Altitude INOP. GPS 3 (Novatel) is used for absolute altitude in calculation of all MET parameters.</p> <p>All FL humidity data is suspect above 25,000 feet. TDM2 is fairly accurate at lower altitudes</p>

Dropwindsonde Scientist Log

Storm:	Franklin	Flight ID:	20230822N1	Mission ID:	0308A	Takeoff:	0329Z	Landing:	1024Z
---------------	----------	-------------------	------------	--------------------	-------	-----------------	-------	-----------------	-------

Dropsonde Scientist(s):	Jason Dunion	AVAPS Operator:	Rocky, Brian
--------------------------------	--------------	------------------------	--------------

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: Franklin

Flight ID: 20230822N1

Mission ID: 0308A

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	221350753	053249	17.252	69.786	1007.9	120/16	10			01
Comments:										
2		0540								X
Comments: No launch detect- backed up										
3	220571002	054057	16.431	70.193	1006.1	095/18	10			02
Comments:										
4	221340037	054729	15.774	70.572	1005.9	080/18	10			03
Comments:										
5	221470657	055450	15.022	71.023	1003.9	095/23	10			04
Comments:										
6	221470775	060207	14.272	71.473	1003.7	090/16	10			05
Comments:										
7	221470111	060811	13.727	71.923	1003.9	015.13	10			06
Comments: SW WP										
8	221470622	062419	15.334	72.854	1004.8	075/16	10			07
Comments: W WP										
9	221410004	063142	15.400	71.902	1004.3	070/22	10			08
Comments:										
10	221470621	064007	15.489	70.800	1004.9	145.15	10			09
Comments: near area of "center"										

Storm: Franklin

Flight ID: 20230822N1

Mission ID: 0308A

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	221210173	064913	15.608	69.608	1005.4	105/27	10			10
Comments: deviated a bit for convection along this center-E leg										
12	220620190	065640	15.281	68.713	1006.1	105/25	10			11
Comments:										
13	221220211	071657	13.320	68.879	1004.5	100/26	10			12
Comments: Interesting T and DP near 450 mb (ice sublimation?)										
14		075641	16.250	16.250						X
Comments: No PTH- backed up										
15	221220394	075734	16.282	70.647	1005.5	095/25	10			13
Comments: Set end of file at 872.5s										
16	221220237	080450	16.570	71.480	1005.3	085/20	10			14
Comments:										
17		081151	17.295	71.920						X
Comments: No PTH- backed up										
18	221030384	081248	17.405	71.959	1005.2	080/21	10			15
Comments: LAST REPORT										
Comments:										

Storm: Franklin

Flight ID: 20230822N1

Mission ID: 0308A

Comments:

08/22/2023, 02:26:12-10:34:08

LatGPS.3 (deg)

