

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

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

ACAT-4 Version = 7.3

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20190921N1	FLT #:	19-118	AC:	Mansour	Scientists:	Pressure		Dropsondes		
From:	TBPB	ETD:	17:30Z	CP(s):	Waddington		A/C Takeoff	1005.3	Good	Bad	Sent
To:	KLAL	ETA:	01:30Z		Nardi		ASOS Takeoff	TBPB 10:00Z 1003.8 mb	23	2	23
Block Time		Flight Time		Nav(s):				BTs			
In:	2:00	Land:	1:39	FE(s):	Negron		A/C Land	1015.7	Good	Bad	Sent
Out:	17:25	T/O:	17:44	FD(s):	Carpenter	Visitors:	ASOS Land	KLAL 01:50Z 1015.3 mb	0	0	0
Total:	8.58	Total:	7.92	SEB:	Henning			Storm Number ID:		AL102019	
Sponsoring Org:	HRD			SSA:	Miller		(ie: AL072012)		NOAA9 WE10A JERRY		
Program:	PHX			AVAPS:	Underwood		TCPOD/WSPOD Mission				
Purpose:	Research mission TS Jerry										
							OBSERVATIONS				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X						
SCIENCE MISSION WITHIN BDYR LAYER					X						
LACK OF PRECIPITATION					X						
RELATIVE HUMIDITY ≥ 80%				X							
LARGE AIR-SEA TEMP GRADIENT					X						
HIGH SURFACE WINDS					X						
LONG FETCH / DURATION OF SFC WND				X							
SEA SALT ACCRETION FORECAST					X						
SEA SALT ACCRETION OBSERVED					X						
Gmax:				Gmin:		*Highlighted items must be completed before departure.					
Remarks:											

G-IV QC Checklist

Flight ID:	20190921N1
Flight Director(s):	Henning / Carpenter
UWZ.d mean:	0.13 post-processing

Pressure Comparison		
	T/O	Land
Aircraft	1005.3	1015.7
Tower	TBPB 18:00Z 1003.8 mb	KLAL 01:50Z 1015.3 mb

	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 ✓ 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	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.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	
✓ Temp / Dewpt	✓ TTM.1 ✗ TTM.2 ✓ TTM.3	✓ TTM.4	✓ TDM.1 ✓ TDM.2		✓ 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
✗	Miscellaneous FD Notes

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

NOTES:
<p>GsGPS.3 unavailable.</p> <p>PQAlpha.1 and PQBeta.1 failure at approximately 2025Z.</p> <p>PQAlpha.2 temporary failure 0045-0100Z leads to unrealistic derived windspeeds and decreases confidence in other derived parameters over this period.</p> <p>TTM.2 unavailable.</p> <p>Suspect warm bias in TTM.4 from ~2015-2030Z.</p> <p>TDM.1 spikes in storm core and during descent create unreal supersaturations.</p> <p>TDM.2 values too low.</p>

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20190921N1

ASPEN Operator/Flight Director(s): Carpenter / Henning

Mission ID: WE10A JERRY

Storm Name/Track: Jerry (AL102619)

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits			KWBC #	Sonde Issues?
1	1	1907	40737	1	20.6	65.5		1011.4	5893	11018	200/16	1933	
2	2	1918	40934	2	22.0	65.5		1008.0	5876	11011	250/27	1938	
3	3	1924	40744	3	22.7	65.7		1004.1	5884	11021	280/13	1943	
4	4	1930	50123	4	23.3	65.5		1007.1	5893	11030	120/45	1951	
5	5	1940	40987	1	24.5	65.4		1012.1	5902	11035	095/20	2001	
6	6	2001	41015	2	22.7	63.6		1012.2	5892	11023	200/27	2021	
7	7	2011	20136	3	22.0	64.4		1012.6	5900	11042	170/26	2029	
8	-	2016	40999	4	-----			NO GPS			-----		
9	8	2017	40003	1	22.3	65.0		1011.3	5897	11043	170/40	2037	
10	9	2025	20862	2	22.7	65.9		1006.5	5894	11021	275/23	2044	
11	10	2028	40986	3	22.6	66.2		1008.3	5893	11020	285/19	2050	
12	11	2037	20137	4	22.7	67.5		1009.8	5897	11024	320/07	2100	
13	12	2049	10114	1	24.0	67.0		1011.3	5903	11033	640/14	2111	
14	13	2101	50456	2	24.6	65.5		1011.9	5899	11027	070/26	2124	
15	14	2113	20650	3	23.9	64.0		1013.6	5902	11026	145/23	2137	
16	15	2125	20873	4	22.6	63.4		1014.0	5900	11027	160/18	2146	
17	16	2138	10113	1	21.2	64.0		1013.6	5900	11027	175/20	2159	
18	17	2151	50442	2	20.6	65.5		1012.2	5901	11022	185/14	2211	
19	-	2203	30195	3	-----			NO LAUNCH DETECT			-----		
20	18	2204	50624	4	21.2	67.1		1013.2	5917	11036	///	2230	
21	19	2217	50441	1	20.9	68.8		1012.4	5911	11029	105/03	2241	
22	20	2232	40467	2	22.6	69.5		1012.5	5903	11024	325/07	2258	
23	21	2248	20921	3	24.5	68.9		1013.5	5904	11025	040/18	2308	
24	22	2303	50443	4	25.8	67.5		1014.4	5911	11038	060/22	2328	
25	23	2316	50061	1	26.3	65.8		1015.9	5918	11041	090/17	2338	
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38													

COMMENTS: ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

Obs Xmitted 23 Obs Missed 0 # of sondes launched 25 # of bad sondes 2

AVAPS Drop Log

 Project: Hurricane Research

 Mission: TS Jerry

 Flight ID: 20190921N1

Take Off: _____

Landing: _____

 Flt Dir: Herring

 Launcher S/N: 02

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	192040737	1	0.0	1907Z	NGU	HRD	Point #1	✓
2	192040934	2	0.0	1918Z			Point #2	✓
3	192040744	3	0.0	1924Z		NWS	Center	✓
4	192050123	4	0.0	1930Z		HRD	Point #3	✓
5	192040987	1	0.0	1940Z			Point #4	✓
6	192041015	2	0.0	2001Z			Point #5	✓
7	191820136	3	0.0	2011Z			Ad hoc	✓
8	192040999	4	0.0	2016Z			Point #6, late GPS	X
9	192040003	1	0.0	2017Z			Point #6 backup	✓
10	185120862	2	0.0	2025Z		NWS	Center	✓
11	192040986	3	0.0	2028Z		HRD	Point #7	✓
12	191820137	4	0.4	2037Z			Point #8	✓
13	191110114	1	0.0	2049Z			Point #9	✓
14	191050456	2	0.0	2101Z			Point #10	✓
15	185120650	3	0.0	2113Z			Point #11	✓
16	185120873	4	0.0	2125Z			Point #12	✓
17	191110113	1	0.0	2138Z			Point #13	✓
18	191050442	2	0.0	2151Z			Point #14	✓
19	185130195	3	0.0	2204Z			Point #15, no launch det	X
20	185050624	4	0.0	2204Z			Point #15 backup	✓
21	191050441	1	0.0	2217Z			Point #16	✓
22	191040467	2	0.0	2232Z			Point #17	✓
23	191020921	3	0.0	2248Z			Point #18	✓
24	191050443	4	0.0	2303Z			Point #19	✓
25	192050061	1	0.0	2316Z			Point #20	✓
26								
27								
28								
29								
30								
31								

09/21/2019, 17:03:58-26:00:03



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	22.56	4.51	13.07	27.99
LonGPS.1 (deg), 1 s/sec	-67.91	6.27	-82.24	-59.41