

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:	20190927N1	FLT #:	19-120	AC:	Twining	Scientists:	Pressure		Dropsondes		
From:	TBPB	ETD:	12:00Z	CP(s):	Waddington	Dunion, Jason	A/C Takeoff	TBPB 12:00Z 1007.8 mb	Good	Bad	Sent
To:	TBPB	ETA:	20:00Z		Norman		ASOS Takeoff		36	1	36
Block Time		Flight Time		Nav(s):					BTs		
In:	20:02	Land:	19:58	FE(s):			A/C Land		Good	Bad	Sent
Out:	12:00	T/O:	12:08	FD(s):	Carpenter	Visitors:	ASOS Land	TBPB 20:00Z 1004.8 mb	0	0	0
Total:	8.03	Total:	7.83	SEB:	Henning			Storm Number ID:		AL132019	
Sponsoring Org:	HRD			SSA:	Warnecke		(ie: AL072012)				
Program:	PHX			AVAPS:	Delgado		TCPOD/WSPOD Mission		NOAA9 WA13A LORENZO		
Purpose:	Lorenzo research mission.				Miller		(ie: NOAA2 2418A SANDY)				
					Patel		OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				X							
SCIENCE MISSION WITHIN BDRY 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:	20190927N1
Flight Director(s):	Carpenter / Henning
UWZ.d mean:	0.19

Pressure Comparison		
	T/O	Land
Aircraft	1007.7	1005.7
Tower	1007.5	1004.5

	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 x 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	☐
Valid	✓
Errors (note)	x

NOTES:
<p>Data system fail between 19:52 and 20:07</p> <p>PQBETA.1 unrepresentative</p> <p>Moisture quantities unrepresentative</p> <p>TDM.2 trending 15 degrees lower</p> <p>QC performed by Quinn Kalen</p>

AOC GPS Dropwindsonde Log (updated Mar 2018)

Flight ID: 190927N3

ASPEN Operator/Flight Director(s): JASON DUNNION

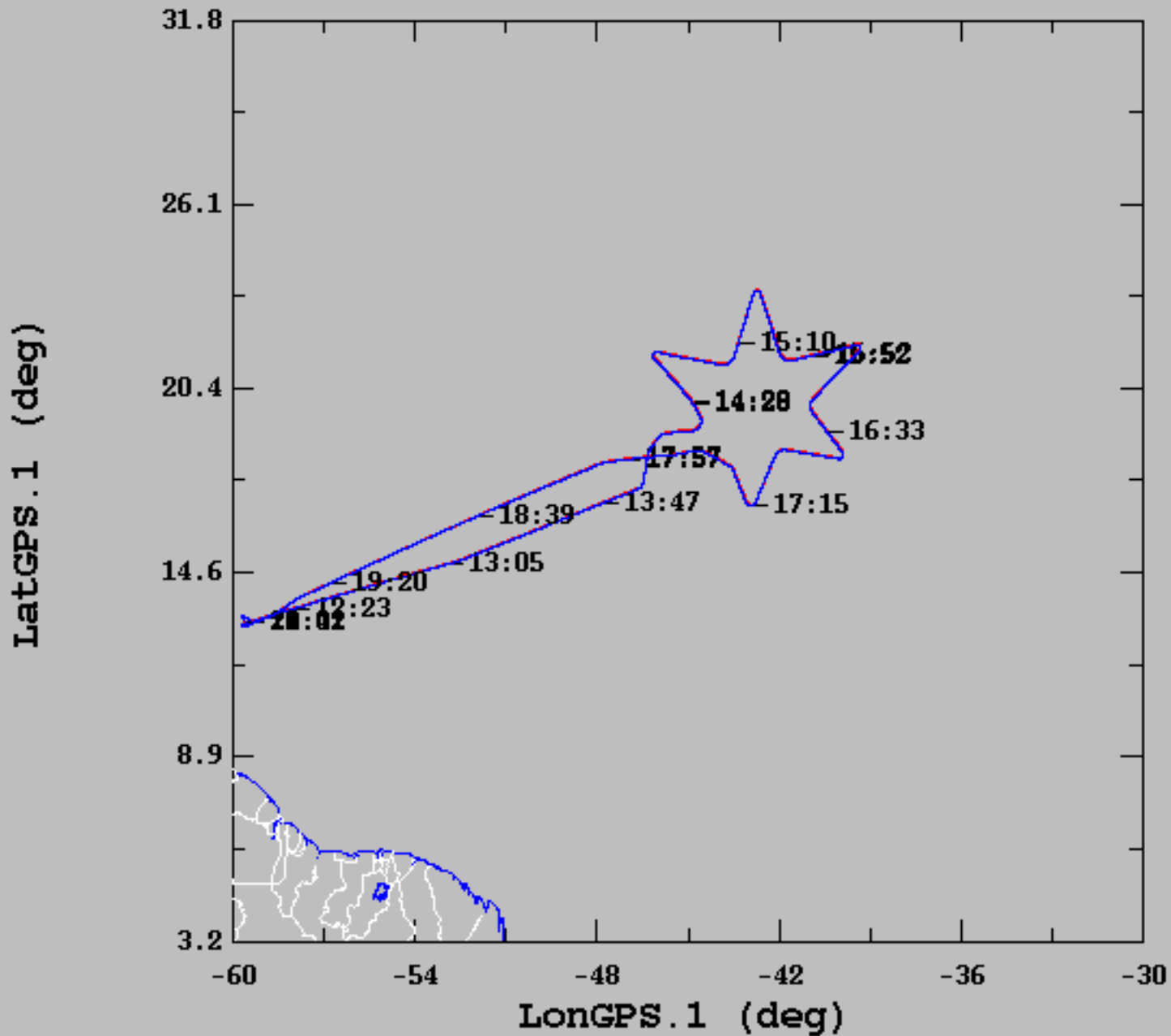
PG 1 of

Mission ID: WAISA LORENZO

Storm Name/Track: HURRIANE LORENZO

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (no. bar 0)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SPC Pw (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Bonde Issues?
1	1	130854	19172062	2	15.01	52.49	SAL-clr	1014.9	SAL drop 2790 RH @ 800mb Flagged final pt (0sats)		N
2	2	132606	191750492	2	15.81	50.36	"	1013.5	SAL		N
3	3	134310	191720575	3	16.61	48.27	"	1013.0	SAL		Y
4	X	135921	191720624	4	17.47	46.44	unbest		no PRH hooked up		N
5	4	140044	30700	1	17.63	46.41	"	1009.8	SAL, DRV adiab below 925mb		
6	5	140540	50469	2	18.23	46.30	unbest	1009.6	SAL layer thinner 550-800mb		
7	6	141953	21124	3	19.03	44.83	"	1003.4	Flagged final 2 pts - no sats, SAL hooked up	Turkey but no sats	N
8	7	142420	20336	4	19.42	44.54	"	1000.8	best (84-100% RH) 400-5FC	74 kt 880mb	N
9	8	143217	50434	1	20.22	45.08	"	1007.4	Flagged last 2 pts (no sats)		N
10	9	143933	20837		20.87	45.68	"	1010.7	Flagged 1st pt (no sats)		N
11	10	144544	50473		21.45	46.10	"	1011.2			N
12	11	145115	21105		21.36	45.39	"	1011.0	Flagged last 2 pts (no sats)		N
13	12	145816	21122		21.20	44.46	"	1007.6			N
14	13	150519	21115		21.17	43.58	"	1004.3	Flagged 1st 2 pts (0sats, bad wnds)		N
15	14	151157	30958		21.93	43.26	"	1009.2			N
16	15	151910	20864		22.79	42.98	"	1013.4	Flagged 433.5-437.25c (zero sats)		N
17	16	152448	20215		23.39	42.68	"	1014.8			N
18	17	153032	10580	2	22.79	42.41	"	1013.8	Flagged last pt (zero sats)		N
19	18	153800	20623	3	21.95	42.12	"	1010.4			N
20	19	154508	40935	4	21.25	41.74	"	NA	cut out at m9 36.75c (~985mb)		Y
21	20	155132	20869	1	21.37	40.92	"	NA	cut out at 552.75c (~572mb)		Y
22	21	155849	40765	2	21.57	39.99	"	1014.1	Flagged 1st 2 pts (zero sats)	Flagged bad RH	Y
23	22	160437	40767	3	21.63	39.29	"	1014.0	Flagged 1st 2 pts (0sats)		
24	23	161030	40936	4	21.13	39.74	"	1012.3			
25	24	161815	20335	1	20.47	40.39	"	1008.6	Flagged 1st 2 pts (0sats)		
26	25	162546	31284	2	19.80	40.93	"	1005.3	Flagged low RHs near 440mb		
27	26	163419	50480	3	18.96	40.34	"	1007.3			
28	27	164216	20795	4	18.18	39.94	"	1009.8			
29	28	164951	10071	1	18.30	40.84	"	1007.0	Flagged last pt (zero sats)		
30	29	165923	20858	2	18.40	41.97	"	1001.6			
31	30	170838	40859		17.44	42.47	"	1005.4	Flagged 1st 2 pts (0sats)		
32	31	171558	40556		16.70	42.91	"	1006.8	Flagged 1st (0sats)		
33	32	172418	40589		17.55	43.37	"	1003.7	Flagged 1st 2 pts (0/30 sats)		
34	33	173346	20530		18.25	44.18	"	999.6	Flagged last (0sats)		
35	34	173858	40668		18.41	44.76	"	1001.4			
36	35	174631	10202		18.26	45.70	"	1005.3			
37	36	175614	40738		18.16	46.91	"	1007.7			
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2019-09-27, 11:41:55-20:02:33



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	17.32	2.94	12.94	23.39
— LongGPS.1 (deg), 1 s/sec	-48.87	6.50	-59.68	-39.29
— LatI.1 (deg), 1 s/sec	17.34	2.95	12.96	23.42
— LonI.1 (deg), 1 s/sec	-48.86	6.50	-59.68	-39.27