

U.S. Dept. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 20170925N1	From: KLAL	To: KLAL
Flt No: —	In: 1328 Z	On: 1325 Z
ETD: 0530 Z	Out: 0527	Off: 0536
ETE: 8 +	Blk Time: 8:01 (8.0) Hrs	Flt Time: 7:44(7.8) Hrs
Sponsoring Org: ONC	Program: Surveillance	Purpose: N. Maria 122 flt

AOC Flight Crew

Aircraft Commander: Twining	Data System:
Co-Pilot: Cowan / Sims	AVAPS: Miller
Navigator: /	System Engineer: Roles / Goldstein
Flight Eng: /	AA: Hasan
Flight Director: Parrish / Flaherty	AA:
avionics:	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times	Fix #	Fix Time
Storm Name: Maria	PT 19 - FF backed up		
NOAA 2215A Maria	PT 20 - Sonda wings became unstable below 400mb		
31 dropped	PT 24 - FF - ^{not backed up} backed up. FF sonda recovered b/w 500 mb.		
27 good	PT 28 - FF - backed up		
Missed PT 20			

(See reverse for additional remarks)

AOC Dropsonde Log (updated 9/2017)

Flight ID: 20170925 N1

Flight Director(s): FLAHERTY / PARRIS H

Mission ID: 2215 A MVA4

Storm Name/Track: HURRICANE MARIA

PG ___ of ___

Sonde #	Obs #	Sonde ID (Last 5)	Drop Time (UTC)	Ch #	Lat (°N)	Lon (°E)	Wx Cond.	SFC Prs (mb)	Comments / Issues / ASPEN Edits	KWBC #	Bad Sonde?
1	1	25056	0608	1	29	-78	DRCK	1008.4		0627	
2	2	15122	0624	2	29.4	-77.8	"	1008.4	NO SFC WIND	0642	
3	3	25047	0634	3	28.4	-74.8	"	1001.9		0655	
4	4	35831	0644	1	27.9	-73.6	"	1001.8		0708	
5	5	45225	0653	2	27.9	-72.3	"	1002.9		0712	
6	6	15107	0702	4	28.5	-71.1	"	1003.0		0726	
7	7	35840	0713	3	29.5	-70.3	"	1003.5		0732	
8	8	45135	0722	1	30.6	-70.0	"	1004.2	KP SFC WINDS 11.2/149	0753	
9	9	35045	0735	2	30.6	-68.1	"	1010.3		0757	
10	10	45116	0755	3	32.3	-68.1	"	1012.1	KP SFC WINDS ^{12.2} 12.2/140	0819	
11	11	35048	0811	1	32.2	-70.3	"	1004.9		0830	
12	12	25064	0821	3	33.1	-71.1	"	1006.6		0840	
13	13	35057	0830	2	33.7	-72.1	"	1006.1		0853	
14	14	35025	0848	4	34.0	-70.0	"	1011.4		0907	
15	15	15821	0907	1	35.0	-67.2	"	1019.8		0925	
16	16	35015	0924	2	37.0	-67.0	"	1016.7		0946	
17	17	55098	0942	3	39.0	-67.0	BKN BLW	1017.1		1001	
18	18	35065	0959	1	40.8	-67.1	"	1017.3	KP SFC WINDS 2.3/125.9	1017	
19	19	---	---	2	---	---	"	---	FAST FALL		✓
20	19	35034	1021	3	39.3	-70.0	"	1016.8	(BACK-UP)	1040	
21	21	35029	1037	4	---	---	"	---	SEMI-FAST-FALL		✓
22	20	35003	1100	2	37.8	-73.0	STBLW	1017.0		1122	
23	21	35061	1115	3	36.0	-73.0	STBLW	1013.9		1135	
24	22	35024	1135	1	38.7	-73.7	"	1006.1		1153	
25	25	---	---	2	---	---	"	---	FAST FALL UL		✓
26	23	15073	1145	3	33.0	-75.0	"	1005.0	(BACK-UP)	1206	
27	24	35038	1154	4	32.1	-75.7	BKN BLW	1003.3		1214	
28	25	25019	1204	1	31.0	-76.0	BKN BLW	1003.3		1224	
29	26	35034	1224	2	32.3	-78.2	"	1010.4		1247	
30	30	---	---	3	---	---	---	---	UMAT FAST FALL		✓
31	27	25062	1243	1	30.7	-79.8	STBLW	1011.7	LAST REPORT	1301	
32											
33											
34											
35											

COMMENTS: 27/31, 1 MISSED OB

N49RF AVAPS DROP LOG

Lead Tech: Gabe Defeo

Project : Hurricane 2017

Mission : MARITA

Flight ID : 20170925N1

Roles/Hosson

Take Off : 0534Z

Landing : 01324Z

Fit Dir : Paraná

Launcher S/N: 002

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	1225056 ^{AG} _{July 2014}	1	-1.3	0608	Roles	PHS		✓
2	142615192	2	-0.5	0624	"	"		✓
3	141225047 ^{AG} _{July 14}	3	-1.1	0634	"	"		✓
4	141235031	1	-1.5	0644	"	"		✓
5	141145225	2	-1.5	0653	"	"		✓
6	142615107	4	-0.8	0702	"	"		✓
7	141235040	3	-1.5	0713	"	"		✓
8	143245135	1	-0.8	0722	"	"		✓
9	141235045	2	-1.3	0735	"	"		✓
10	141145116	3	-1.2	0755	"	"		✓
11	163335148	1	0.0	0811	"	"		✓
12	141225055	2	-0.9	No drop			Launch Point No Prop	No Drop
13	141225064	3	-0.9	0821	"	"		✓
14	141235057	2	-1.3	0830	"	"		✓
15	141235025	4	-1.2	0848	"	"		✓
16	163615021 ^{Oct 2016}	1	0.0	0907	"	"		✓
17	162735015 ^{Nov 2016}	2	-0.1	0924	"	"		✓
18	162655098 ^{Oct 2016}	3	-0.1	0942	"	"		✓
19	162735065 ^{Nov 2016}	1	0.0	0959	"	"		✓
20	163935020 ^{Oct 2016}	2	-0.4	1020	"	"	Fast Fall	Bad
21	141235034 ^{July 2014}	3	-1.1	1021	"	"		✓
22	141235029 ^{July 2014}	4	-1.3	1039	"	"	Wind direction All over	? Bad
23	141235032	1	-1.1	---			No Prop Launch Delay	No Drop
24	162735033	2	-0.2	11:00	"	"		✓
25	162735061	3	-0.1	11:45	"	"	Drop Band 92	✓
26	141235024	1	-1.4	11:35	"	"		✓
27	162735063 ^{Oct 2016}	2	-0.3	1144	"	"	Winds messy Fall rate all over	? Same Back
28	162715073 ^{Oct 2016}	3		1145	"	"		✓
29	162735038	4	-0.1	1154	"	"		✓
30	163625019	1	-0.2	1204	"	"		✓
31	162735034 ^{Oct 2016}	2	-0.2	1224	"	"		✓
32	163615082 ^{Oct 2016}	3	-0.8	1241	"	"	Fast Fall	✓
33	141225062	1	-1.0	1243	"	"		
34	31 drops 2-3 bad							

400.7

403.7

401.7

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APPENDIX 2 – GIV QC Checklist

Flight ID:	20170925N1
Flight Director(s):	Parrish / Flaherty

Pressure Comparison		
	T/O	Land
Aircraft	1007.2	1008.5
Tower	1007.1	1009.2

UWZ.d mean: .213

	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1		✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2		-0.007	
	✓ AccAXI.3	✓ AccAYI.3	✓ AccAZI.3			
✓ Altitude	✓ AltGPS.1	✓ AltI.1	✓ AltPaADDU.1	✓ AltBCADDU.1	✓ ALTref	
	✓ AltGPS.2	✓ AltI.2	✓ AltPaADDU.2	✓ AltBCADDU.2	✓ ALTPA.d	
	✓ AltGPS.3	✓ AltI.3	✓ AltRA.1		✓ ALTGA.d	
✓ Ground Speed	✓ GsXI-GPS.1	✓ GsXI.1	✓ GsGPS.1	✓ GsXGPS.1	✓ GSXref	
	✓ GsXI-GPS.2	✓ GsXI.2	✓ GsGPS.2	✓ GsXGPS.2	✓ GSYref	
	✓ GsYI-GPS.1	✓ GsXI.3		✓ GsYGPS.1	✓ GSZref	
	✓ GsYI-GPS.2	✓ GsYI.1	✓ GsZI.1	✓ GsYGPS.2		
	✓ GsZI-GPS.1	✓ GsYI.2	✓ GsZI.2	✓ GsZGPS.1		
	✓ GsZI-GPS.2	✓ GsYI.3	✓ GsZI.3	✓ GsZGPS.2		
✓ Lat/Lon	✓ LatGPS.1	✓ LatI.1	✓ LonGPS.1	✓ LonI.1	✓ LATref	
	✓ LatGPS.2	✓ LatI.2	✓ LonGPS.2	✓ LonI.2	✓ LONref	
	✓ LatGPS.3		✓ LonGPS.3			
✓ Pressure	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PDALPHaref	✓ PQMref
	✓ PDALPHA.2	✓ PQALPHA.2	✓ PQM.2	✓ PSM.2	✓ PDBETaref	✓ PQ.c
	✓ PDBETA.1	✓ PQBETA.1			✓ PQALPHaref	✓ PSMref
	✓ PDBETA.2	✓ PQBETA.2			✓ PQBETaref	✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ IasADDU.1	✓ MachRef	✓ IAS.d	✓ TAS.d
Pitch/Roll	✓ PitchI.1	✓ PitchRateI.1	✓ RollI.1	✓ RollRateI.1	✓ PITCHref	
	✓ PitchI.2	✓ PitchRateI.2	✓ RollI.2	✓ RollRateI.2	✓ ROLLref	
	✓ PitchI.3	✓ PitchRateI.3	✓ RollI.3	✓ RollRateI.3		
✓ Temp/Dewpt	✓ TTM.1	✓ TTM.4	✓ TDM.1	Too Warm	✓ TD.c	✓ TTMref
	✓ TTM.2	Warmer	✓ TDM.2		✓ TDMref	✓ TA.d
	✓ TTM.3					
✓ Miscellaneous (must check)					✓ UWZ.d	✓ WS.d
					✓ DPJ_WSZ	✓ WD.d
					✓ HUM	

FLID_Mission_Documents.pdf:

Error Summary
Crew Manifest
QC checklist
Dropwindsonde Log(s) – AVAPS and FD if completed
Flight Track
Miscellaneous FD notes

NOTES: *ALTRA 1 - Dropouts at TOC.*

NOAA G-IV Flight Track Drop Locations for MARIA (ALT 52017)

On 2017092600 the storm was centered at 31.9N ; 73.3W

