# N49RF ERROR SUMMARY NHC Hurricane MARIA Surveillance Mission 1015A

#### Flight ID: 20170920N1

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.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1

Flight Directory

acdata/2017/MET/20170920N1

Local	Met Data	Takeoff	TBPB	(1739Z)	Landing	TBPB	(0153Z)
	Dynamic Correction	ons			Υe	s	
	AttackAngleInterd	cept			5.	1083	
	AttackAngleSlope				5.	91956	
	SlipAngleInterce	ot			1.	05	
	SlipAngleSlope				6.	80484	
	AttackAngleInterd	cept2			5.	05312	
	AttackAngleSlope2	2			5	.74156	5
	SlipAngleInterce	ot2			0.	8	
	SlipAngleSlope2				6.	89644	

### 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.

TDM.2 is too dry at low altitude but is closer to TA.d at operational altitudes. TDM.1 is more accurate at low altitudes but far too moist at FL 410-450. TDM.2 is the reference.

AltRA.1 displays an oscillation but is not used for calculation of GA

<pre># deployed</pre>	# good	<pre># transmitted</pre>
29	29	29
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Flight Director: Henning Phone #: (863) 500-3982

BARBADOS 56 meles U.S. Dep't. of Commerce / OMAO / NOAA / Aircraft Operations Center FLT ID: 201709261 From: To: FLT#: Blk In: Lnd Time: 1730 z ETD: Blk Out: T/O Time: 8+00 ETE: Total Blk: Total FIt: Sponsoring Org: Program: Purpose: AOC Flight Crew Aircraft Commander: SSA: Co-Pilot: Navigator: Scientists: Flight Eng: Scientists Flt Director: Scientists REEN Scientists: Crew Chief: Visitors: Wx Station - Takeoff
31°C 1012 mb
STA 1005.8 A/C - Takeoff A/C - Land Wx Station - Land 013 mb 1008.1 Pressure AS REQUIRED BY ORM YES / NO REMARKS **VOLCANIC ASH** SCIENCE MISSION WITHIN BOUNDARY LAYER LACK OF PRECIPITATION **RELATIVE HUMIDITY AT OR ABOVE 80%** LARGE AIR-SEA TEMPERATURE GRADIENT HIGH SURFACE WINDS LONG FETCH AND/OR DURATION OF SFC WIND SEA SALT ACCRETION FORECAST SEA SALT ACCRETION OBSERVED Good: Dropsondes Bad: Sent: **AXBT** Good: Bad: Sent: **VDM** Remarks (Storm VDM Identifier, Mission ID, Fix Times) Fix# Ob Num Fix Time / SLP Storm Number Identifier (VDM): (ie: AL072012) TCPOD/WSPOD Mission ID: (ie: NOAA2 2418A SANDY) Remarks: ES completed

## **APPENDIX 2 – GIV QC Checklist**

	/ (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		OIV Q	O Onco	Kiist						
Flight ID:			Pressure Comparison								
201	20170920N1				T/O	Land					
Flight	nning	1 Rel	5010	Aircraft	1006.8	1008.	f				
-110	V1/11/10	/ Dec	,	Tower							
UWZ.d mean:	0.10	+ (	1.27		1005.8	1006.	8				
Afile (Fix	+ Segmer	it) B	file(2.	nd segme	nt)						
	Rav	v 1Hz Mean	File Parame	ters	Ć File Pa	rameters					
Accelerometer	AccAXI.1	AccAYI.1	AccAZI.1		AccZref						
	AccAXI.2	AccAYI.2	AccAZI.2								
	AccAXI.3	AccAYI.3	AccAZI.3	-							
Altitude	AltGPS.1	AltI.1	AltPaADDU.1	AltBCADDU.1	ALTref						
	AltGPS.2	Alt1.2	AltPaADDU.2	AltBCADDU.2	ALTPA.d						
Cround Crood	AltGPS.3	AltI.3	AltRA.1		ALTGA.d	***************************************					
Ground Speed	GsXI-GPS.1	GsXI.1	GsGPS.1	Gs XGPS.1	GSXref						
	GsXI-GPS.2	GsXI.2	GsGPS.2	GsXGPS.2	GSYref						
	GsYI-GPS.1	GsXI.3	Gc7L1	Gs YGPS.1	GSZref						
	GsYI-GPS.2 GsZI-GPS.1	GsYI.1	GsZI.1	Gs YGPS.2 Gs ZGPS.1							
	GsZI-GPS.2	GsYI.3	GsZI.2	GsZGPS.1							
Lat/Lon	LatGPS.1	Latl.1	LonGPS.1	Lonl.1	LATref						
	LatGPS.2	Lati.2	LonGPS.2	Lon1.2	LONref						
	LatGPS.3	Lacinz	LonGPS.3	LOTTILE	LOWICI						
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	PQM.11	PSM.11	PQALPHAref	PSMref					
	PDBETA.2	PQBETA.2		•	PQBETAref	PS.c					
Air Speed	CasADDU.1	TasADDU.1	lasADDU.1		IAS.d	TAS.d					
Pitch/Roll	PitchI.1	PitchRateI.1	RollI.1	RollRatel.1	PITCHref						
	Pitch1.2	PitchRateI.2	RollI.2	RollRatel.2	ROLLref						
	Pitch1.3	PitchRateI.3	RollI.3	RollRate1.3		y					
Temp/Dewpt	TTM.1	TTM.11	TDM.1		TD.c	TTMref					
	TTM.2	TTM.13	TDM.2		TDMref	TA.d					
I N 4: II	TTM.3	TTM.4	TDM.11								
Miscellaneous (must sheek)					UWZ.d	WS.d					
(must check)					DPJ_WSZ	WD.d					
					HUM						
Mission Desum-4	4										
Mission Documen											
	or Summary										
	w Manifest					_					
	checklist										
	pwindsonde l		APS and FD i	f completed							
	cellaneous FI										
NOTES: UWZ	- diffe	rence	between	een t	7 file	and B	tile				
NOTES: UNZ difference between A file and B file											
TINT . I USCITATION PROVINCED											
00	AHRA.1 osallation more pronounced than on IRMA/JOSE, Missions (up to 160 m amplitude)										
Thim ?	top dry	near	Surfa	ce h	+ ho-	Her	`				
101.2	+ 003	alti	tude (	SUPERS	Satura	tion less	than TDM1				
	1	- 1 1 1 1		-1015	- 11-11	,					

### AOC GPS Dropwindsonde Log

Flight ID: 20170920N1

Flight Director: Henning / Belson

Mission ID: 05A

Storm/Track: Mana

Pg\_\_of\_\_

DUF		50,011 12	. 19137			Otolin Hack	- Touria					250	190
By th		Drop i	# Sonde ID	Drop Time (UTC)	Lat (°N	) Lon (°W)	Wx Cond.	SFC Prs (mb)	Ob#	L5/R	Last Winds R5 (ht, ws, wd)	Last Winds L5 (ht, ws, wd)	Sent Time/KWBC (UTC)
1	/	11	5017	1800	14	0 60 43	FEW	1012	1	RS	1212018		PSF
2	2	2	5148	1812	15	12 62 00	OVC	1012	2		13, 14519	101	PSF
3	3	3	5283	1826	16	23 63 10	OVC	1010	3	11/	10, 16022	160	PSF
4	14	4	5053	1839	17.2	64.5	OVC	1007.6	1.4	IY	8,18025	099	PSF
Б		5	5310	1848	162	7 65 14	OVC	1007.6	5		8,19022	099	PSF
6	12	6	5186	1858	15.	9 66.5	DVC	1007.7	6		13, 23526	099	PSF
7	3	7	5014	1909	15,	9 67.8	OVC	1006.9	7		12,26524	698	PSF
8	4	8	5082	1919	16.	5 69.0	DIC	1007.2	18		7,30518	698	PSF
9		9	5086	1944	17.	72.0	OVC	1008.3	9		8,26017	. 098	PS F
10	2	10	5009	1956	17.5	73.6	OVC	1009.1	10		9, 19006	099	PS F
11	3	11	5099	2006	17.6	74.8	OVC	1009.1	11		9, 35524	099	PS F
12	+ 4	12	5020	2026	20,0	73.9	OVC	1011.3	12		11,04517	098	PSF
13	1	13	5129	2041	22.10	74.0.	SCT	1012.4	13		12,05513	098	PSF
1 Rf	2	14	5116	2056	24.		FEW	1013.4	14		13,03511	096	PS F S
15	3	15	5179	2110	25.9	73.9	OVC	1013.6	15		14,09006	096	PS F
16	4	16	5103	2133	24. 9	71.1	BKN	1014.0	16	1	14,05517	099	PSF S
_ 17	5	17	5113	2151	23.0	71.0	CDO	10125	17		13,04516	100	PSF 3
-18	6	18	5235	2210	21. (	70.9	CDO	10/0.3	18		10,04017	100	PSF S
19	7	19	501b	2222	20.3	69.7	COO	1008.2	19	1	8,02022	1.00	PSF 5
20	4	20	5106	2232	21. 2	- 68.9	CDO	1009.2	20		13,05033	099	PSF 3
21	1:	21	5093	2242	21. 8		CDO	1009.6	21		19,06533	098	PSF 5
22		22	5648	2302	24,0	THE R. P. LEWIS CO., LANSING, MICH.	6VG	1013.0	22		13, 06518	100	TSF S
23	3	23	5 045	2317	26.0	68.8	DVC	1015.1	23	1	15,07016	100	PSF 5
24	4	24	5063	2338	25, 9	66.1	UNK	1014.8	24		15, 11015	101	PS F S
-25	ment or a company	25	5184	2354	24:0	100 to 1 100	UNK	1014.5	25	1	13,09522	101	PSF 5
26		26	5096	0014	21.17	66.3	CDO	1010.5	26		10,08532	100	PS F 5
27		27	5011	0024	21. 3		CDO	1010.2	27		10, 10529	100	PST S
28	4 -	28	5162	0036	20.1	64.4	CDO	1011.0	28	1	11, 12024	102	PST S
ST	1:	29	5100	6647	18.8	64.1	CPO	1011.1	29	Charles and the contract of th	11 13518	102	PSE S
		7											
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### NOAA . AOC . 2FD

N49RF AVAPS DROP LOG Lead Tech: Gabe Defeo

Project: Hurricane 2017 Mission: Maria Flight ID: 2017092010

Take Off: 1739 Z Launcher S/N: 150 Z

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good
41	162845017	/	-10	1759	NGU	NWS	. / /	1
2	143215148	2	-1.0	1812	1		<i>λ</i>	1
3	163 455 283	3	-0.9	1826				V
4	143955053	4	-1,4	1839			PTU vs, GPS attitude disciepancy vs coft	V
5	162715318	j	-1.5	1848		,		V
6	163845186	2	-0.8	1858			/ 1	/
7	163835014	3	-/,1	1909				V
8	163335082	4	-1.8	1919			Factory offset -0.9	0
9	.16383 5086	The same of the sa	-1,2	1944			Factory off -0.5	/
10	143 245009	2	-0.8	1956				0
11	163815699	3	-0.9	2006				V
12	163845020	4	-1,4	2026				1
13	162715129	-	1.0	2041				V
14	163845116	2	-0.8	2056				V
15	162715179	3	-1,1	2/10	V			
16	1432/5/03	4	-0.8	2133	Jan			
17	163845113	1/5	-0.7	2151				V
18	163335235	6	1 2	2210				V
19	163845016	7	-1.0	2522				V
20	163845106	8	-,6	2232				was a
21	163845093	1	-,6	2242				V
22	162715048	2	7.5	230(				N
23	16845045	3	-1.1	2317				V
24	163845063	4	- 9	2338			A	1
25	163845184		- /	2354		,	Dropped of Rs	
26	163525096	2	10	0014				
28	143525162	3	1)	0024				
29	11000000	1	-15	6036				
30	163815100	-	s 6	0047				
31	i	**						
32								
33								
34								
							4	

