

APPENDIX 2 – GIV QC Checklist

Flight ID:	20170904N1
Flight Director(s):	Henning / Williams

Pressure Comparison		
	T/O 1720	Land 0116
Aircraft	1004	1004
Tower		

UWZ.d mean: 0.16

	Raw 1Hz Mean File Parameters				C File Parameters	
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	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	PQM.11	PSM.11	PQALPHaref	PSMref
	PDBETA.2	PQBETA.2			PQBETAref	PS.c
Air Speed	CasADDU.1	TasADDU.1	IasADDU.1		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.11	TDM.1		TD.c	TTMref
	TTM.2	TTM.13	TDM.2		TDMref	TA.d
	TTM.3	TTM.4	TDM.11			
Miscellaneous (must check)					UWZ.d	WS.d
					DPJ_WSZ	WD.d
					HUM	

Mission Documents:

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

NOTES: tdm.2 is too cold on the ground but more representative at altitude, whereas tdm.1 is accurate on the ground but 15C or more too warm at altitude. Tdm.2 is ref.

U.S. Dep't. of Commerce / OMAO / NOAA / Aircraft Operations Center

FLT ID: 20170904N1	From: TBPB	To: TBPB
FLT #: 1730 Z	Blk In: 0123 Z	Lnd Time: 0116 Z
ETD: 1730 Z	Blk Out: 1710 Z	T/O Time: 1720 Z
ETE: 8	Total Blk: 8.2	Total Flt: 7.9
Sponsoring Org: NHC	Program: Surveillance	Purpose: Irma

AOC Flight Crew

Aircraft Commander: Twining	SSA: Defeo
Co-Pilot: Fritzier / Sims	AVAPS: Delgado / Patel
Navigator: /	Scientists:
Flight Eng: /	Scientists
Flt Director: Henning / Williams	Scientists
SEB: / Greene /	Scientists:
Crew Chief: Visitors: / /	

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
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			

Dropsondes	Good: Bad: Sent:
AXBT	Good: Bad: Sent:

<small>List other data sources in Remarks section</small>		
Remarks (Storm VDM Identifier, Mission ID, Fix Times)	Fix #	VDM Ob Num Fix Time / SLP
Storm Number Identifier (VDM): _____ (ie: AL072012)		
TCPOD/WSPOD Mission ID: NOAA9 0411A IRMA (ie: NOAA2 2418A SANDY)		

Remarks:

Project: Hurricane 2017

Mission: Hurricane IRMAFlight ID: 20170904N1

Take Off: _____

Landing: _____

Flt Dir: Less/Beh Launcher S/N: 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	163025101	1	-0.2	1744	VED PHS			✓
2	163313157	2	0	1753	↑	NWS		✓
3	163313017	3	-0.2	1804				✓
4	163325053	4	-0.1	1819				✓
5	162835063	1	-0.0	1850			Stuck in tube cleared in a few mins	✓
6	163313152	2	-2.0	1853				✓
7	163025083	3	0	1906				✓
8	163025096	4	+0.1	1922				✓
9	163313164	1	-0.6	1941				✓
10	163313156	2	+0.2	1957			No winds	✗
11	162835001	3	-0.2	1958				✓
12	162845015	4	+0.3	2011				✓
13	162835026	1	-0.2	2025				✓
14	162835018	2	-0.7	2042				✓
15	143335013	3	-1.1	2100				✓
16	142615083	4	-1.2	2118				✓
17	143415072	1	-1.0	2134				✓
18	141235002	2	-1.3	2149				✓
19	142625010	3	-2.1	2213				✓
20	141225053	4	-1.2	2223				✓
21	143335016	1	-1.0	2235				✓
22	162845007	2	-0.3	2245				✓
23	142755084	3	-1.2	2256				✓
24	162835009	4	0	2306				✓
25	163325065	1	0	2317				✓
26	143335033	2	-1.3	2329			No launch Det. No Geo Alt.	✗
27	143335039	3	-1.0	2330				✓
28	162845013	4	+0.4	2339				✓
29	142755094	1	-1.4	2350				✓
30	143315062	2	-1.3	0001				✓
31	143255572	3	-1.0	0011				✓
32	162835029	4	+0.1	0022			Lost telemetry last 1/3 before splash	0.5
33	162825061	1	0	0032	↓	↓	680MB 401.7	✓
34	162835029	2	-0.2	0042	VED PHS			✓

AOC GPS Dropwindsonde Log

0411A IRMA

Flight ID: 20170904N1

Flight Director: WILLIAMS/HENNING

Mission ID: 0411A IRMA

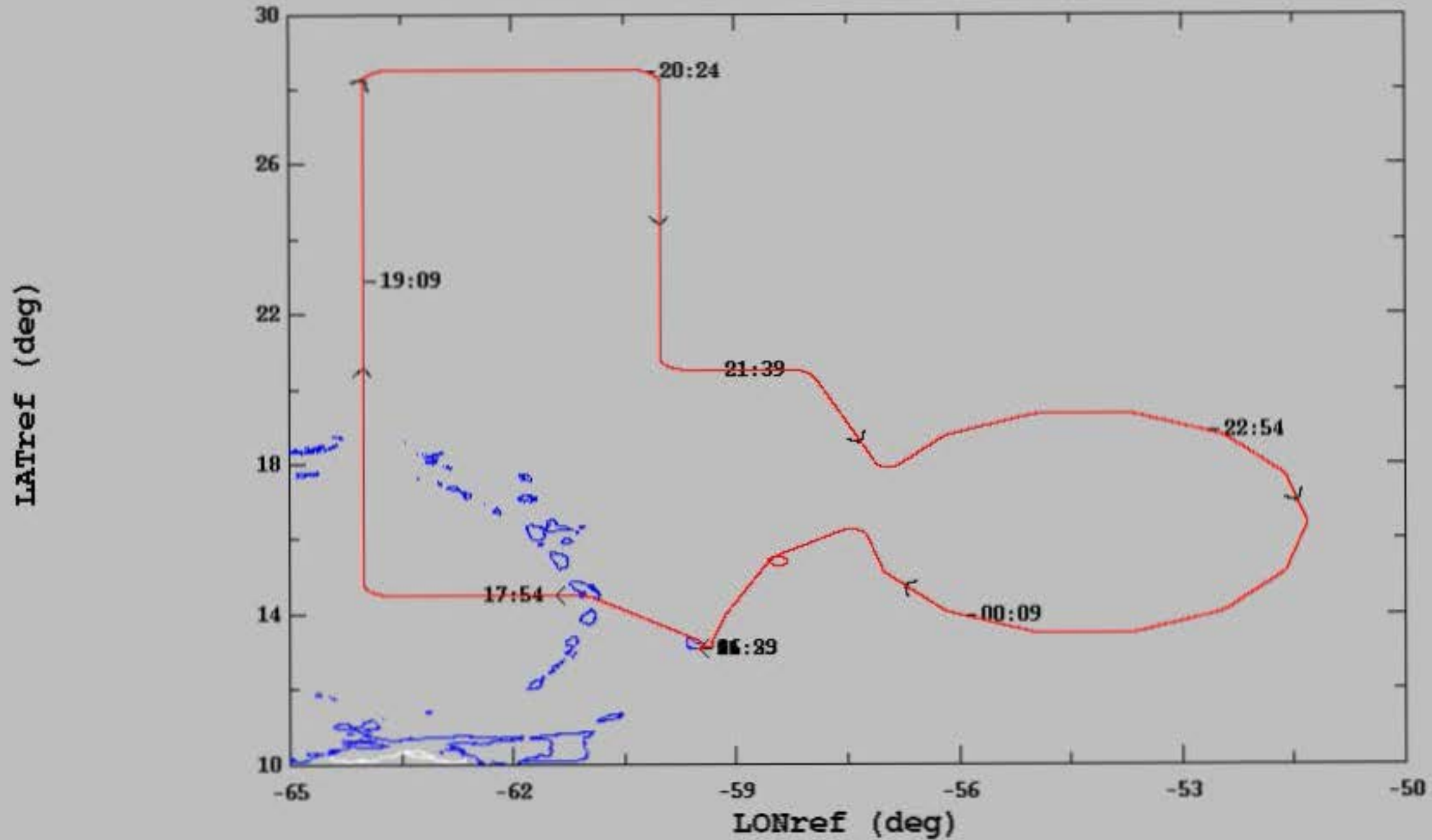
Start Time: _____

Pg. # _____

Ch #	Drop #	Serial ID	Drop Time (UTC)	Lat (°N)	Lon (°W)	Wx Cond	SFC Prc (psi)	Ch #	LSRS	Last Wind Rt (ft vs. wt)	Last Wind LS (ft vs. wt)	Last Temp (°C)	Alt (ft)
	1	5101	1744	14.5	61.1	SCT	1011.4	1	R	315/8	250/099	PSF	588
	2	3157	1753	14.5	62.5	FEW	1011.0	2	R	010/16	250/097	PSF	588
BAD GEO	3	3017	1804	14.5	64.0	FEW	1011.1	3	R	045/3	097	PSF	588
	4	5053	1818	16.5	64.0	FEW	1012.2	4	R	020/5	098	PSF	588
	5	BAD	1849	20.5	64.0	SCT							
	6	3152	1852	20.7	64.0	SCT	1012.5	5		050/13	096	PSF	588
bad FLW	7	5083	1905	22.5	64.0	FEW	1013.7	6		070/13	097	PSF	590
	8	5096	1922	24.5	64.0	VCST	015.7	7		075/13	095	PSF	590
	9	3164	1940	26.5	64.0	VCST	015.6	8		075/12	093	PSF	588
NO GPS	10	BAD	1956	28.5	64.0								
	11	5001	1958	28.5	64.0	VCST	1017.5	9		200/1	095	PSF	589
	12	5015	2011	28.5	62.0	VCST	1018.2	10		165/1	095	PSF	590
	13	5226	2025	28.5	60.0	FEW	1017.7	11		100/11	095	PSF	591
	14	5018	2042	26.5	60.0	FEW	1016.9	12		080/12	095	PSF	591
	15	5013	2100	24.5	60.0	FEW	1015.4	13		055/16	097	PSF	591
	16	5083	2118	22.5	60.0	FEW	1013.2	14		065/13	098	PSF	591
	17	5072	2134	20.5	60.0	FEW	1012.1	15		050/19	099	PSF	591
	18	5002	2149	20.5	58.0	FEW	1011.3	16		065/12	097	PSF	589
	19	5010	2213	17.7	57.0	CDD	1007.0	17		035/37	097	PSF	586
	20	5053	2223	16.7	56.2	CDD	1008.0	18		055/33	097	PSF	587
	21	5016	2234	14.3	55.0	CDD	1008.2	19		075/25	097	PSF	587
	22	5007	2249	19.8	53.6	CDD	1010.3	20		100/43	098	PSF	588
	23	5084	2255	18.7	52.9	CDD	1011.2	21		140/10/20	099	PSF	588
bad FLW	24	5009	2306	17.6	51.6	CDD	1012.0	22		120/12/7	099	PSF	584
BAD GEO	25	5065	2317	16.4	51.3	CDD	1011.0	23		35/21	099	PSF	588
	26	BAD	2329	15.1	51.6	CDD							
	27	5039	2330	15.0	51.7	CDD	1010.3	24		160/16	097	PSF	587
	28	5013	2339	14.0	52.4	CDD	1010.3	25		190/16	098	PSF	588
	29	5094	2350	13.5	53.6	CDD	1009.2	26		220/16	097	PSF	587
	30	5062	0001	13.5	55.7	CDD	1007.6	27		235/12	097	PSF	586
	31	5572	0011	14.0	56.2	CDD	006.9	28		245/16	098	PSF	586
	32	5027	0022	15.1	57.0	CDD	DIED	29		DIED AT 810 MIB			
	33	5061	0032	16.4	57.3	CDD	1006.5	30		350/21	097	PSF	586
LAST 2	34		0042	15.5	58.3		1009.1	31					

NHC Surveillance Hurricane Irma

09/04/2017, 16:39:15-25:23:58



	mean	sigma	min	max
— LATref (deg), 1 s/sec	18.85	4.97	13.07	28.50
— LONref (deg), 1 s/sec	-59.20	3.78	-64.00	-51.31