# N49RF ERROR SUMMARY NHC Hurricane JOSE Surveillance Mission 0812A

#### Flight ID: 20170917N1

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/20170917N1

Local	Met Data	Takeoff	KLAL	(1732Z)	Landing	KSAV	(0056Z)	
I	Dynamic Corrections				Yes			
Ā	AttackAngleInterd	ept			5.	1083		
Ā	AttackAngleSlope				5.	91956		
(	SlipAngleIntercep	ot			1.	05		
(	SlipAngleSlope				6.80484			
Ā	AttackAngleInterd	ept2			5.	05312		
Ā	AttackAngleSlope2				5.74156			
(	SlipAngleIntercep	t2			0.	8		
C k	SlipAngleSlope2				6.	89644		
	<del>_</del>							

### 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.

Science mission was aborted at drop point #21 due to cabin door seal pressurization problem and mission terminated with unscheduled stop at Savannah GA Gulfstream maintenance facility.

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

Expendable Type	# deployed	# good	<pre># transmitted</pre>		
Dropsondes	21	21	21		
Test sondes	0	0	0		
AXBTs	0	0	0		
AXCPs	0	0	0		
AXCTDs	0	0	0		
UAS	0	0	0		

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

SAV eleu DBIRA JOSE 4U22017 50 A. 232-037 AP 2130-22302 MYR

	Ommerce / NMAC	NOAA / Airomet	Operations Center
FLT ID: 20170917N /			
Flt No:			To: OCH KSAV
ETD: 1730 Z	In: 6/03 Z		On: 0056 Z
ETE: 8 + 00	Out: 17 <b>3</b> 3		Off: 1732
	Blk Time: 7,7	Hrs	Flt Time: 7.+4 Hrs
Sponsoring Org: NHC	Program: PH	5	Purpose: Jase SS
	AOC FI	ight Crew	
ircraft Commander: MacInt	we	Data System:	EFE 0
o-Pilot: Fritzler	SIMS	i contract of the contract of	. 15 1
avigator: /		System Engineer:	
ight Eng: /		AA:	Greene
ight Director: Henning / Be	elson	AA:	
rionics:	01201	Crew Chief:	
	Participation 6		
Name (Last, First)		entists / Visitors	
	A ofurity -		
	Activity o		Affiliation
LAL	alt to	30.01	SAV land 30.00
	alt t/o	30.01 TA 1011.3	
	Activity of Activi	30.01 TA 1011.3	SAV land 30.00
	alt t/o	30.01 TA 1011.3	SAV land 30.00 STA 1014.2
	alt t/o	30.01 TA 1011.3	SAV land 30.00 STA 1014.2
	alt t/o	30.01 TA 1011.3	SAV land 30.00 STA 1014.2
	alt t/o	30.01 TA 1011.3	SAV land 30.00 STA 1014.2
LAL	alt t/o Si PSM:	30.01 TA 1011.3	SAV land 30.00 STA 1014.2
arks (Storm Name, Mission ID, Reco	alt t/o Si PSM:	30.01 TA 1011.3 #2 1011.9	SAV land 30.00 STA 1014.2 PSM#2 1014.1
arks (Storm Name, Mission ID, Reco	PSM:	30.01 TA 1011.3 #2 1011.9	SAV land 30.00 STA 1014.2 PSM#2 1014.1
arks (Storm Name, Mission ID, Reco	PSM:	30.01 TA 1011.3 #2 1011.9	SAV land 30.00 STA 1014.2 PSM#2 1014.1 Fix# Fix Time

## APPENDIX 2 - GIV QC Checklist

Flight ID:	2017091711
Flight Director(s):	Henning / Belson

Pressure Comparison

T/O Land

Aircraft | 011.9 | 014.1

Tower | 011.3 | 014.2

PSM #2

UWZ.d mean: \_ 4 0.04

	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	Altı.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	
	GsYl-GPS.1	GsXI.3		GsYGPS.1	GSZref	
	GsYl-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	Latl.1	LonGPS.1	Lonl.1	LATref	
_	LatGPS.2	Latl.2	LonGPS.2	Lonl.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	Cas ADDU.1	TasADDU.1	las ADDU.1		IAS.d	TAS.d
Pitch/Roll	PitchI.1	PitchRateI.1	RollI.1	RollRatel.1	PITCHref	
	PitchI.2	PitchRateI.2	Rolli.2	RollRatel.2	ROLLref	
	Pitch1.3	PitchRateI.3	RollI.3	RollRatel.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					UWZ.d	WS.d
(must check)					DPJ_WSZ	WD.d
					HUM	

<i>I</i> lission Dod	cur	nents:
	V	Error Summary
	V	Crew Manifest
	1/	QC checklist
	V	Dropwindsonde Log(s) – AVAPS and FD if completed
		Misselleneous ED notes

NOTES:

AltRa. 2 oscillation at cruise alt.
(approx 50 meters amplitude)

TDM. 2 toodry near sufface but better at altitude (supersaturation less than TDM.1)

AOC GPS Dropwindsonde Log 250 1102 Plight ID: 20170917N1 BELSON / HERNING Flight Director: 3184 Mission ID: Storm/Track: 500mb Drop Time Ch. # Drop# Sonde ID Lat (°N) Lon (°W) Wx Cond. Last Winds R5 (UTC) SFC Prs (mb) Ob# Last Winds L5 L5/R5 Sent Time/KWBC (ht, ws, wd) 5558 (ht, ws, wd) (UTC) 160 3m 3301Z 02 PSF 590 5055 18 010.5 27515 589 0 PS 5024 908 1.0 SCT NA (ged NIA NA 5040 NA 73.0 FEW 100811 27520 098 P5 5097 587 1937 75.0 FEW 009,4 29511 0.99 5037 1952 588 SCT 36012 010.7 098 589 5227 2011 29 REU 012.2 33011 093 P5 5014 588 2024 FEW 010 00515 094 PSF 587 5072 2034 76.0 SCT 35518 5126 586 2048 31. EEW 36029 584 2058 SCT 585 2108 584 29.5 003. 584 001.9 584 00 1003.9 030 70 70 29



