

N42RF ERROR SUMMARY
20190711H2

Flight ID: 20190711H2

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	AccZfilterI-
GPS.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/2019/MET/20190711H2

Local Met Data	Takeoff KLAL (2012Z)	Landing KLAL (0348Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.31252
AttackAngleSlope		6.06758
SlipAngleIntercept		0.4295
SlipAngleSlope		7.17033

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.

PDAlpha.2 inoperable. PDBeta.2 significant drop between 0020-0035Z. PQM.1 drops noted at approximately 2352 and 0159Z. PitchI.3 and RollI.3 unavailable. TTM.2 briefly diverged noticeably from TTM.1 at approximately 0022Z. TTM.3 unavailable. While TDM.1 and TDM.3 generally tracked with TDM.2, values are unrepresentative. Intermittent periods of anomalously high supersaturations noted. TRadu.1 unavailable.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	20	20	20
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0

UAS	0	0	0
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Flight Director: Holmes / Carpenter

Phone #: 863-500-3901

ACAT-4 Version = 7.2.2

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20190711H2	FLT #:	19-76	AC:	Price	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	20:00Z	CP(s):	Kahn	Rogers, Rob	A/C Takeoff	1010.5	Good	Bad	Sent
To:	KLAL	ETA:	04:00Z		Abitbol	Sellwood, Kathryn			20	0	20
Block Time		Flight Time		Nav(s):	Richards	Reasor, Paul	ASOS Takeoff	KLAL 1950Z 1010.3			
In:	3:55	Land:	3:49	FE(s)	Darby		A/C Land	1011..0	Good	Bad	Sent
Out:	20:04	T/O:	20:12		Lalonde				ASOS Land	KLAL 0355Z 1011.6	0
Total:	7.85	Total:	7.62	FD(s):	Holmes	Visitors:	Storm Number ID:				
Sponsoring Org:		EMC		SEB:	Hartberger		Mazzei, Patricia	(ie: AL072012)			
Program:		PRX		SSA:	Mascaro			TCP0D/WSP0D Mission		NOAA2 0502A BARRY	
Purpose:		TDR Mission #3 TS Barry		AVAPS:	Warnecke	(ie: NOAA2 2418A SANDY)					
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:											

P-3 QC Checklist

Flight ID:	20190711H2
Flight Director(s)	Holmes, Carpenter
UWZ.d mean:	0.05

Pressure Comparison		
	T/0	Land
Aircraft	1010.5	1011.0
Tower	KLAL 1950Z 1010.3	KLAL 0355Z 1011.6

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZfilter-GPS.1	✓ AccZref		
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZfilter-GPS.2			
	✓ AccAXI-GPS.1	✓ AccAYI-GPS.1	✓ AccAZI-GPS.1				
	✓ AccAXI-GPS.2	✓ AccAYI-GPS.2	✓ AccAZI-GPS.2				
✓ Altitude	✓ AltGPS.1	✓ AltI-GPS.1	✓ AltPaADDU.1	✓ AltRA.1	✓ ALTref	✓ AltRA1.c	
	✓ AltGPS.2	✓ AltI-GPS.2	✓ AltBCADDU.1	✓ AltRA.2	✓ ALTPA.d	✓ AltRA2.c	
	✓ AltGPS.3				✓ ALTGA.d		
	✓ AltGPS.4						
✓ Ground Speed	✓ GsXI-GPS.1	✓ GsYI-GPS.1	✓ GsZI-GPS.1		✓ GSXref		
	✓ GsXI-GPS.2	✓ GsYI-GPS.2	✓ GsZI-GPS.2		✓ GSYref		
					✓ GSZref		
✓ Lat / Lon	✓ LatGPS.1	✓ LatI-GPS.1	✓ LonGPS.1	✓ LonI-GPS.1	✓ LATref		
	✓ LatGPS.2	✓ LatI-GPS.2	✓ LonGPS.2	✓ LonI-GPS.2	✓ LONref		
	✓ LatGPS.3		✓ LonGPS.3				
	✓ LatGPS.4		✓ LonGPS.4				
✓ Pressure	✓ PDALPHA.1	✓ PQALPHA.1	X PQM.1	✓ PSM.1	✓ PDLAPHaref	✓ PQMref	
	X PDALPHA.2	✓ PQBETA.1	✓ PQM.2	✓ PSM.2	✓ PDBETAref	✓ PQ.c	
	✓ PDBETA.1		✓ PQM.3	✓ PTM.1	✓ PQALPHaref	✓ PSMref	
	X PDBETA.2		✓ PQM.4		✓ 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		
	X PitchI.3	X PitchRateI.3	X RolLI.3	X RollRateI.3			
✓ Temp / Dewpt	✓ TTM.1	X TDM.1	✓ TRadD.1		✓ TD.c	✓ TTMref	
	✓ TTM.2	✓ TDM.2	✓ TRadS.1		✓ TDMref	✓ TA.d	
	X TTM.3	X TDM.3	X TRadU.1				
✓ Misc. (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
X Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	☒
Errors (note)	X

NOTES:

PDAlpha.2 inoperable.
 PDBeta.2 significant drop between 00:20-00:35.
 PQM.1 drops noted at 23:52 and 01:59 UTC.
 PitchI.3 and RolLI.3 unavailable.
 TTM.2 briefly diverged noticeably from TTM.1 at approximately 00:22 UTC.
 TTM.3 unavailable.
 While TDM.1 and TDM.3 generally track with TDM.2, values are not representative. Periods of anomalously high supersaturations.
 TRadU.1 unavailable.

NOAA • AOC • SED N42RF AVAPS DROP LOG

Lead Tech: Mike Mascaro

Project: Hurricane 2019

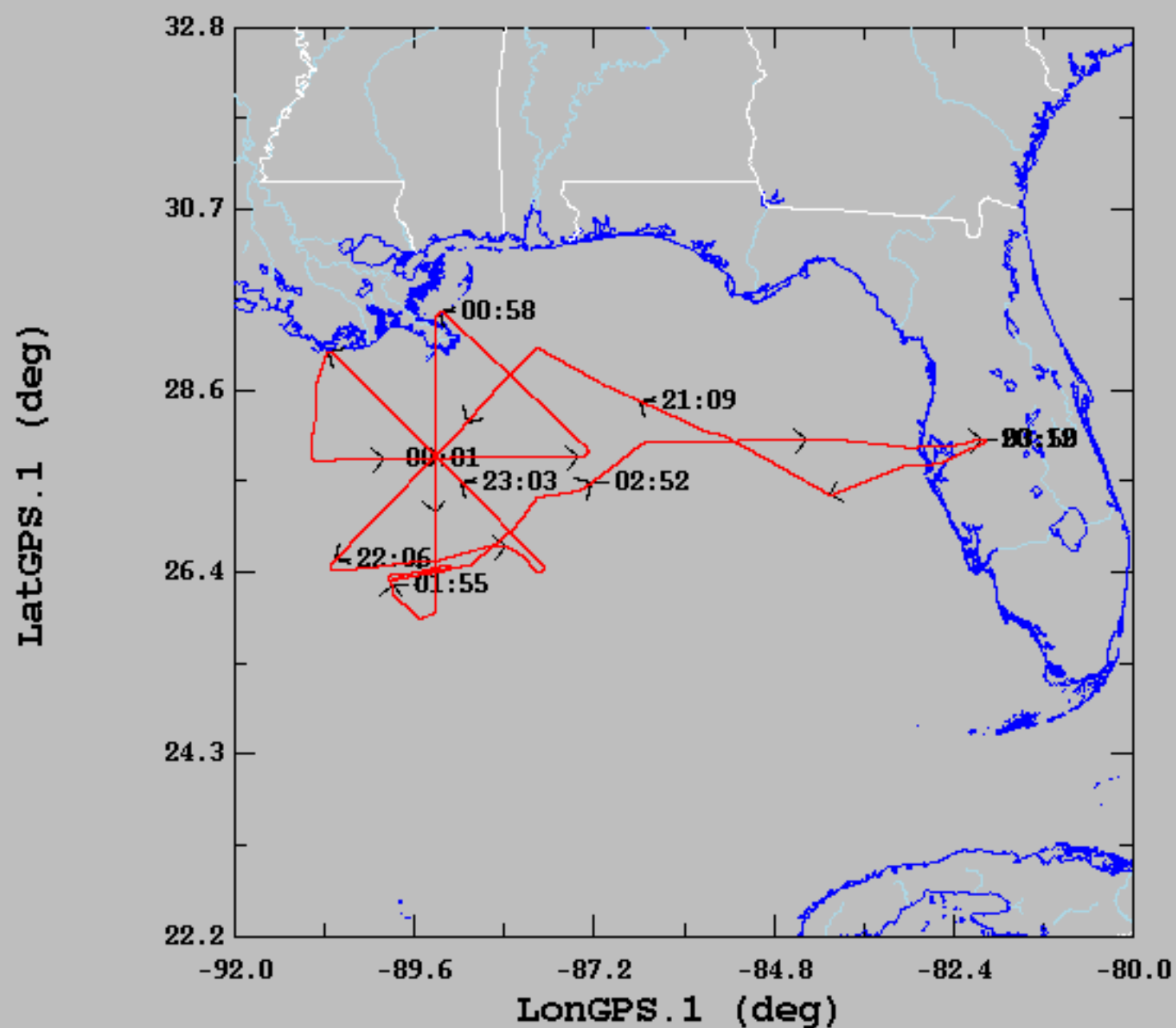
Mission: TS SunnyFlight ID: 2019-01-10-002Take Off: 2011

Landing: _____

Flt Dir: Hurricane Computer

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	182610123	1	Ø	2123	JH	NWS		✓
2	182531177	2	Ø	2136	JH			✓
3	182520046	3	Ø	2143	JH			✓
4	182621212	4	-0.6	2155	JW			✓
5	182630334	1	Ø	2208			Late launch detected	X
6	182630088	2	Ø	2207				✓
7	182940761	3	-5	2244				✓
8	182640534	4	-8	2258				✓
9	182640529	1	-4	2322				✓
10	182640455	2	Ø	2331				✓
11	182630066	3	Ø	2347				✓
12	182610179	4	-5	2357				✓
13	182640553	1	Ø	0008				✓
14	182630101	2	Ø	0020				✓
15	183110078	3	-6	0030				✓
16	182630332	4	-5	0042				✓
17	182640531	1	-4	0109				✓
18	182630087	2	-6	0118				✓
19	182630333	3	-1.1	0129				✓
20	182221123	4	-4	0142	✓	✓		✓
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34								

07/11/2019, 20:12:00-27:50:05



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	27.60	0.82	25.89	29.48
LongGPS.1 (deg), 1 s/sec	-87.91	2.40	-90.97	-81.96