

N43RF ERROR SUMMARY
20220623I1

Flight ID: 20220623I1

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.1
Vertical Accelerometer	AccZfilterI-
GPS.1	
Altimeter	AltGPS.1
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/2022/MET/20220623I1

Local Met Data	Takeoff KLAL (1743Z)	Landing KLAL (0229Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.131251
AttackAngleSlope		6.02327
SlipAngleIntercept		0.23
SlipAngleSlope		7.02537

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.

Electrical noise apparent in many quantities. GPS.3 intermittent failures. GPS.4 inoperative. PQM.1 significantly noisier than other PQMs. PSM.1 rhythmic oscillations possibly electrical in nature. PitchI.3 and RollI.3 unavailable. TTM.2 electrical noise. TTM.3 inoperative. TDM.1 offline until ~1811Z and exhibits electrical noise afterwards. TDM.2 failure after ~2120Z. Multiple data spikes apparent in both TDM.1 and TDM.2. TDM.3 unrepresentative. TRadU.1 inoperative.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	5	5	2
Test sondes	0	0	0
AXBtS	3	2	0
AXCPs	0	0	0

AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter / Henning
Phone #: 863-500-3901

ACAT-4 Version = 7.4

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2022062311	FLT #:	22-	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1630Z	CP(s):	Wood	Joe Cione	A/C Takeoff	1007.6	Good	Bad	Sent
To:	KLAL	ETA:	2030Z			Josh Wadler	ASOS Takeoff		KLAL 1750Z 1008.0 mb	5	0
Block Time		Flight Time		NAV:	Hough	Patrick Sosa	A/C Land	N/A		BTs	
In:	23:48	Land:	23:38	FE(s):	Darby	Joshua Goates			ASOS Land	KLAL 2350Z 1006.3 mb	Good
Out:	17:36	T/O:	17:44	FD(s):	Carpenter	Visitors:	Storm Number ID: (ie: AL072012)	2	1		0
Total:	6.2	Total:	5.9	SSA:	Richards/T					Matthew Di Girolamo	
Sponsoring Org:	AOC			SEB:	Underwood	Brian Sheridan	NOAA3 WXWXA TRAIN				
Program:	POP					Karen Pinker					
Purpose:	UxS Area-I METOC Testing			MX:			OBSERVATIONS				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1				
SCIENCE MISSION WITHIN BDRY LAYER				X							
LACK OF PRECIPITATION				X			2				
RELATIVE HUMIDITY ≥ 80%				X							
LARGE AIR-SEA TEMP GRADIENT					X		3				
HIGH SURFACE WINDS					X						
LONG FETCH / DURATION OF SFC WND					X		4				
SEA SALT ACCRETION FORECAST					X						
SEA SALT ACCRETION OBSERVED					X		Pennies:	N/A			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Major instrument issue(s) - significant mission impact.
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Flight ID:	2022062311
Flight Director(s):	Carpenter / Henning
Mission:	Non-tasked Science Collection/Research
UWZ.d mean:	0.36

Pressure Comparison		
	T/O	Land
Aircraft	1007.6	N/A
Tower	KLAL 1750Z 1008.0 mb	KLAL 2350Z 1006.3 mb

	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 X AltGPS.3 X AltGPS.4	✓ AltI-GPS.1 ✓ AltI-GPS.2	✓ AltPaADDU.1 ✓ AltBCADDU.1	✓ AltRA.1 ✓ AltRA.2	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	✓ AltRA1.c ✓ AltRA2.c
✓ Ground Speed	✓ GsXI-GPS.1 ✓ GsXI-GPS.2	✓ GsYI-GPS.1 ✓ GsYI-GPS.2	✓ GsZI-GPS.1 ✓ GsZI-GPS.2			
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 X LatGPS.3 X LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 X LonGPS.3 X LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ PDBETA.2	✓ PQALPHA.1 ✓ PQBETA.1	X PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4	X PSM.1 ✓ PSM.2 ✓ PTM.1	✓ PDLAPHAref ✓ PDBETAref ✓ PQALPHAref ✓ PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ IasADDU.1	✓ IAS.d ✓ TAS.d		
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 X PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 X PitchRateI.3	✓ RollI.1 ✓ RollI.2 X RollI.3	✓ RollRateI.1 ✓ RollRateI.2 X RollRateI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 X TTM.2 X TTM.3	X TDM.1 X TDM.2 X TDM.3	✓ TRadD.1 ✓ TRadS.1 X TRadU.1	✓ TD.c ✓ TDMref ✓ TTMref ✓ TA.d		
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ ✓ HUM	✓ WS.d ✓ WD.d

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	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/>

Notes:
<p>Electrical noise apparent in many quantities.</p> <p>GPS.3 intermittent failures. GPS.4 inoperative.</p> <p>PQM.1 significantly noisier than other PQMs.</p> <p>PSM.1 significant rhythmic oscillations, appears electrical in nature.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.2 electrical noise. TTM.3 inoperative.</p> <p>TDM.1 offline until ~1811Z and exhibits electrical noise afterwards. TDM.2 failure after ~2120Z. Multiple data spikes noted both TDM.1 and TDM.2. TDM.3 unrepresentative.</p> <p>TRadU.1 inoperative.</p>

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20220623T1 ASPEN Operator/Flight Director(s): HENNING / CARPENTER
 Mission ID: WXWXA TRAIN Storm Name/Track: ALTIUS (ASPEN) (FD) PG of

CHUTE
SIZE

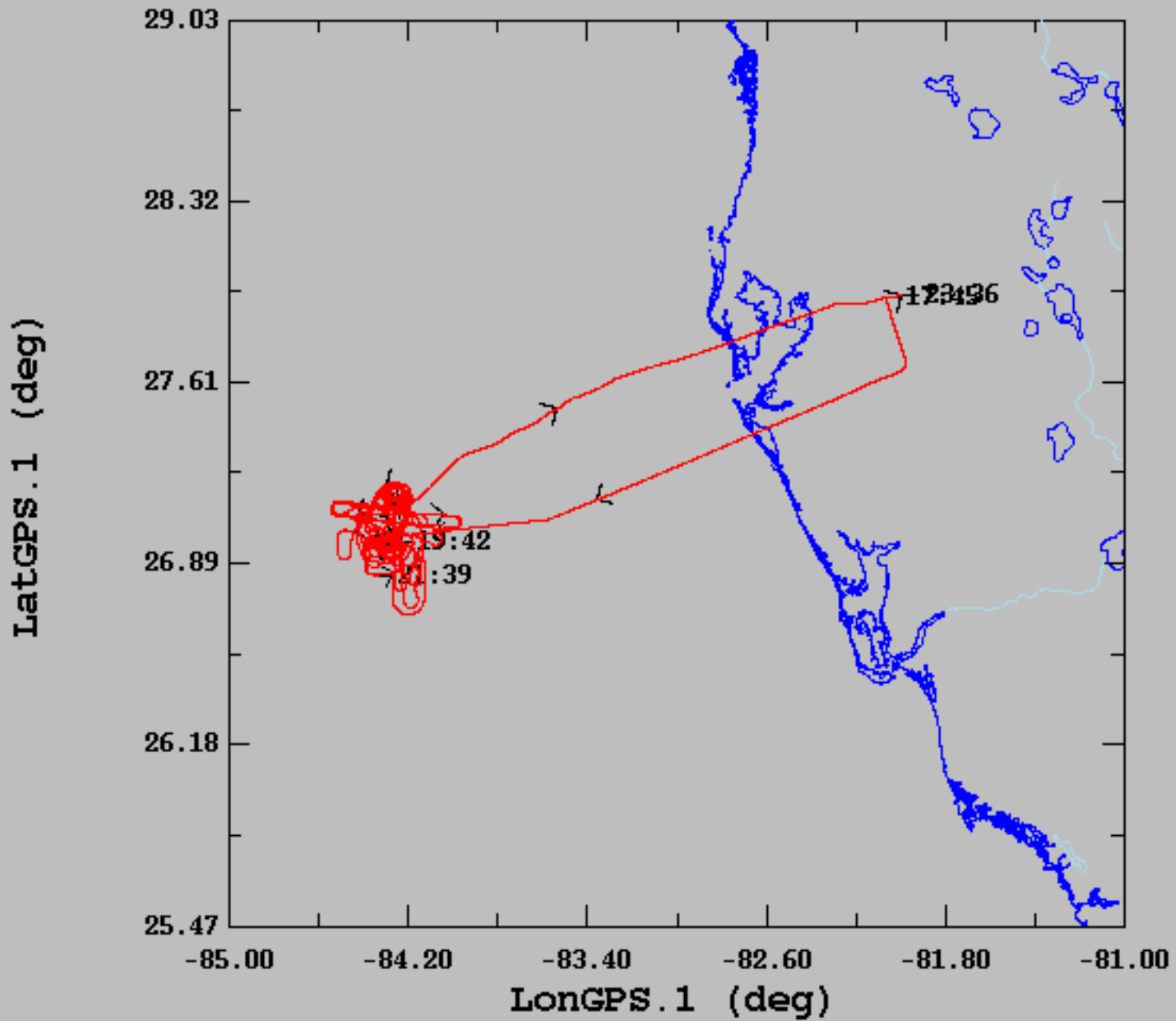
Transmit
Y/N
Y
Y
Y
Y

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	SFC WIND	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1	1	182456	20176	1	27.0843	CLR	1002.7	255/7	RD-41	18		
2	2	203819	55107	2	27.1842	CLR	1011.6	270/8	RD-94			
3	3	204258	32069	3	27.0843	CLR	1011.0	275/7	RD-94			
4	4	221105	11068	4	27.1842	CLR	1010.5	275/7	RD-41	2220		
5	5	221116	35116	5	27.1842	CLR	1011.5	275/7	RD-94			
6												
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8									UM BT SST 29.6			
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37												
38												

Large
Standard
Standard

COMMENTS: ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived
 Obs Xmitted 2 Obs Missed 0 # of sondes launched 5 # of bad sondes 0

06/23/2022, 17:45:10-23:36:44



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	27.11	0.23	26.69	27.95
— LongGPS.1 (deg), 1 s/sec	-84.05	0.57	-84.54	-81.97