

N43RF ERROR SUMMARY
20230531I1

Flight ID: 20230531I1

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.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/2023/MET/20230531I1

Local Met Data	Takeoff KLAL (1814Z)	Landing KLAL (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.050058
AttackAngleSlope		5.32015
SlipAngleIntercept		0.165
SlipAngleSlope		6.66754

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.

I.3 for Pitch and Roll is not operational.
TRadU.1 has erroneous data throughout the flight and should not be used.
PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other "C" file parameters checked are from the _A file.
PSM.2 has one large negative spike during climbout at 18:18 - effects PSMref and PS.c.
AltGPS.4, LatGPS.4, and LongGPS.4 inop/unrepresentative.
ALTPA.d, HUM_SPEC.d, and WS.d have one large positive spike during climbout at 18:18.
PQM.1 trending ~10mb high.
TDM.1 has large positive spike at 19:28.
TTM.3 & TDM.3 inop.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Drosondes	0	0	0
Test sondes	0	0	0

AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: KALEN / ZAWISLAK

Phone #: 863-500-3962

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:	2023053111	FLT #:		AC:	RANNENBERG	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1800Z	CP(s):	KEITH		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	2000Z						0	0	0
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	20:11	Land:	20:01	FE(s):	STOKES		A/C Land		Good	Bad	Sent
					WYSINGER						
Out:	17:59	T/O:	18:15	FD(s):	KALEN		ASOS Land		0	0	0
					ZAWISLAK						
Total:	2.2	Total:	1.8	SSA:	RICHARDS	Visitors:					
				AVAPS:			Storm Number ID:		N/A		
Sponsoring Org:	HRD						(ie: AL072012)				
Program:	PRX			SEB:			TCPD/WSPD Mission		WXWXA TRAIN		
Purpose:	INST CAL							(ie: NOAA2 2418A SANDY)			
				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:				

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
--------------------	--

Flight ID:	20230531I1
Flight Director(s):	KALEN / ZAWISLAK
Mission:	Equipment Checkout
UWZ.d mean:	-0.07

Pressure Comparison		
	T/O	Land
Aircraft	1008.7	-
Tower	1008.0	-

	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 ✓ 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		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3 x LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ 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	✓ PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4	✓ PSM.1 ✓ PSM.2 ✓ PTM.1	x PDLAPHAref x PDBETAref x PQALPHAref x 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	✓ PitchRatI.1 ✓ PitchRatI.2 x PitchRatI.3	✓ RollI.1 ✓ RollI.2 x RollI.3	✓ RollRatI.1 ✓ RollRatI.2 x RollRatI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 x TTM.3	✓ TDM.1 ✓ TDM.2 x TDM.3	✓ TRadD.1 ✓ TRadS.1 x TRadU.1		✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)					✓ UWZ.d x 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
✓	Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	✓
Errors (note)	x

NOTES:

I.3 for Pitch and Roll is not operational.

TRadU.1 has erroneous data throughout the flight and should not be used.

PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other

PSM.2 has one large negative spike during climbout at 18:18 - effects PSMref and PS.c.

AltGPS.4, LatGPS.4, and LonGPS.4 inop/unrepresentative.

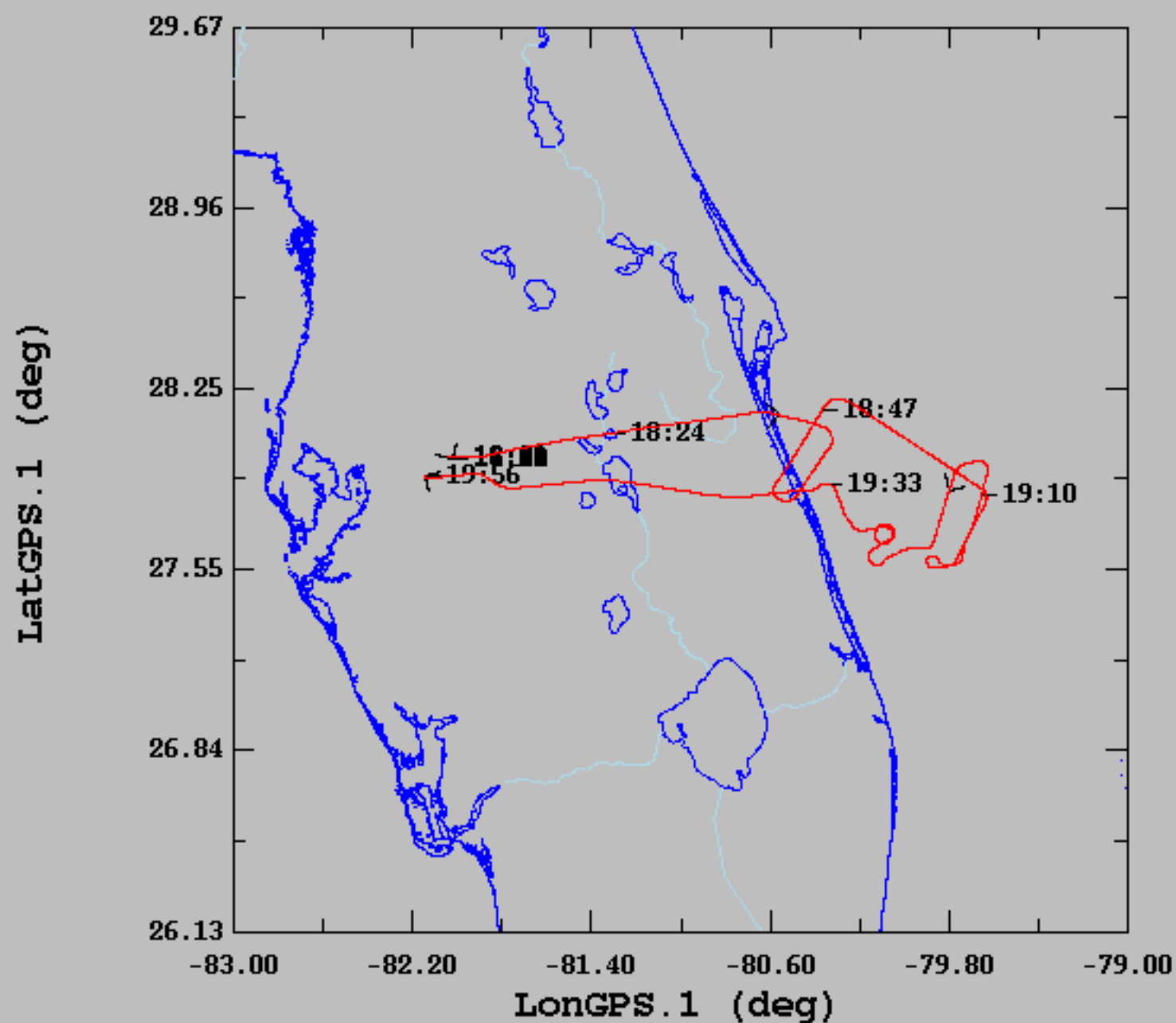
ALTPA.d, HUM_SPEC.d, and WS.d have one large positive spike during climbout at 18:18.

PQM.1 trending ~10mb high.

TDM.1 has large positive spike at 19:28.

TTM.3 & TDM.3 inop.

05/31/2023, 16:29:58-19:56:53



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	27.94	0.13	27.55	28.21
LongGPS.1 (deg), 1 s/sec	-81.29	0.89	-82.14	-79.62