

N43RF ERROR SUMMARY
20230323I1

Flight ID: 20230323I1

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.2
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/20230323I1

Local Met Data	Takeoff KLAL (1707Z)	Landing KLAL (1604Z)
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.

All GPS.3 parameters not representative; ALTGA.d also impacted
Several parameters have multiple oscillations for 2-3 minutes at a time
(all PQMs, PDALPHA, WS.d, WD.d, and DPJ_ASZ)
PQM.1 trending ~10mb high
TTM.3 & TDM.3 inop

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	3	0	1
Test sondes	0	0	0
AXBTs	1	1	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	1	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 - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20230323I1	FLT #:		AC:	Gaston	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1600Z	CP(s):	Wood	Cione	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	2000Z			Wadler				0	3
Block Time		Flight Time		NAV:	Hough/Freeman/Richards, B	Villafane	ASOS Takeoff		BTs		
In:	19:51	Land:	19:43	FE(s):	Stokes	Elston					
Out:	16:54	T/O:	17:07	FD(s):	Kalen	Fromm	A/C Land		Good	Bad	Sent
						Zawislak			Hollingshead	1	0
Total:	3.0	Total:	2.6	SSA:	Richards, T	Visitors:	ASOS Land		Storm Number ID: (ie: AL072012)	N/A	
Sponsoring Org:	HRD			AVAPS:	Dykeman						
Program:	PR4			SEB:	Underwood		TCP0D/WSP0D Mission (ie: NOAA2 2418A SANDY)		WXWXA TRAIN		
Purpose:	UAS Testing					Clifford					
				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

Flight ID:	20230323I1
Flight Director(s)	Kalen / Zawislak
UWZ.d mean:	-0.05

Pressure Comparison		
	T/O	Land
Aircraft	1019.5	-
Tower	1020.0	1017.1

	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	
	x AltGPS.3				x 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		
	x LatGPS.3		x LonGPS.3				
	✓ LatGPS.4		✓ LonGPS.4				
✓ Pressure	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PDLAPHaref	✓ PQMref	
	✓ PDALPHA.2	✓ PQBETA.1	✓ PQM.2	✓ PSM.2	✓ PDBETAref	✓ PQ.c	
	✓ PDBETA.1		✓ PQM.3	✓ PTM.1	✓ PQALPHaref	✓ PSMref	
	✓ 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		
	□ PitchI.3	□ PitchRateI.3	□ RolLI.3	□ RollRateI.3			
✓ Temp / Dewpt	✓ TTM.1	✓ TDM.1	✓ TRadD.1		✓ TD.c	✓ TTMref	
	✓ TTM.2	✓ TDM.2	✓ TRadS.1		✓ TDMref	✓ TA.d	
	x TTM.3	x TDM.3	□ TRadU.1				
✓ Misc. (Must check)					✓ UWZ.d	✓ WS.d	
					x DPJ_WSZ	✓ WD.d	
					✓ HUM		

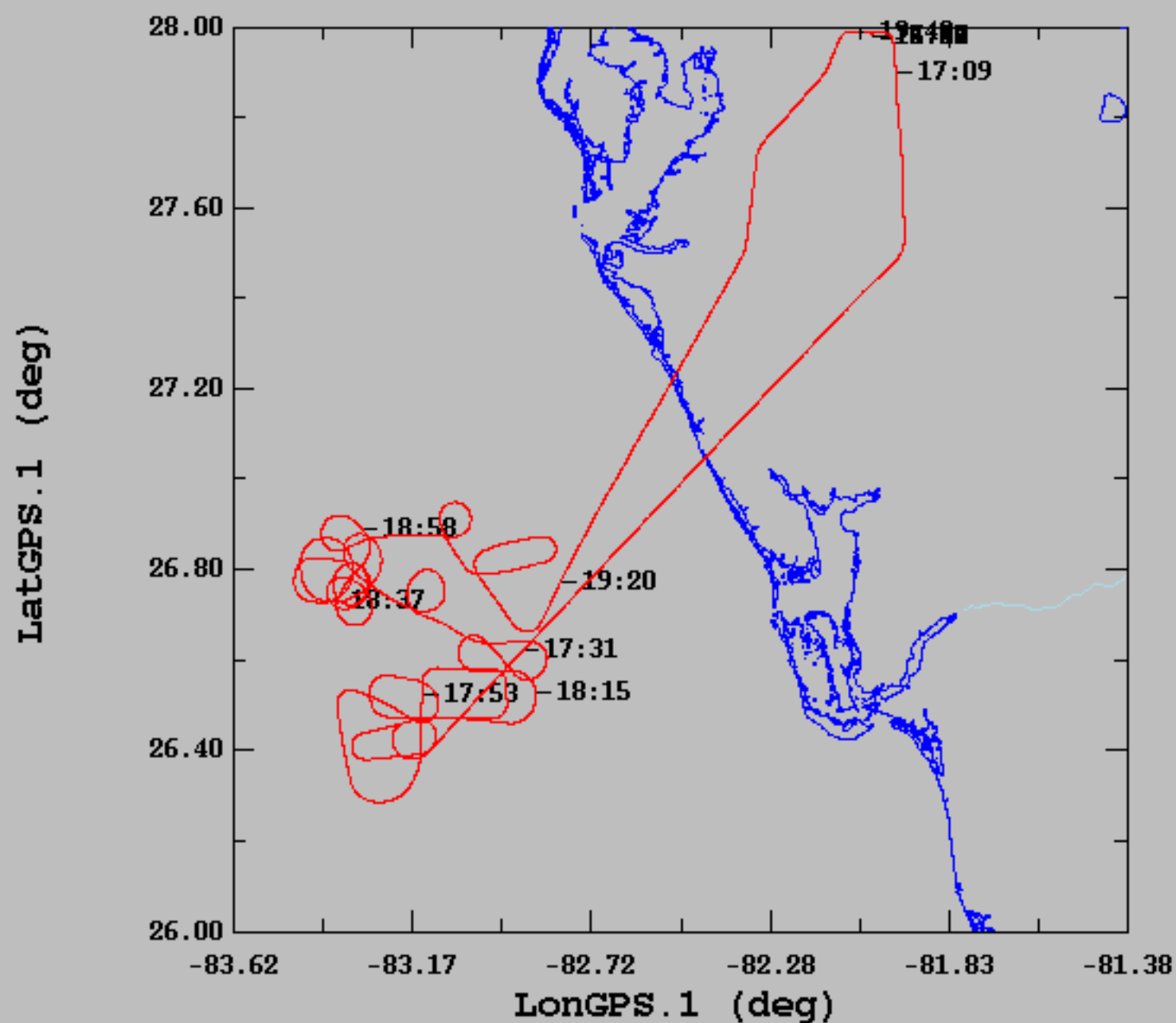
FLID_Mission_Documents.pdf:
✓ Error Summary
✓ Crew Manifest
✓ QC Checklist
□ Dropwindsonde Log(s) - AVAPS and FD if completed
✓ Flight Track
✓ Miscellaneous FD Notes

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

NOTES:

All GPS.3 parameters not representative; ALTGA.d also impacted
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 PQM.1 trending ~10mb high
 TTM.3 & TDM.3 inop

03/23/2023, 14:37:14-19:42:30



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	27.41	0.63	26.29	27.99
LongGPS.1 (deg), 1 s/sec	-82.47	0.54	-83.47	-81.94