

N43RF ERROR SUMMARY
20230411I1

Flight ID: 20230411I1

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/20230411I1

Local Met Data	Takeoff PANC (1953Z)	Landing PANC (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, TTM.3 & TDM.3 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.

TD.c trending low (~5 degree C).
TDM.1 up to 10 degree C deviations from TDM.2,3 parameters.
PQM.1 trending significant higher than PQM.2-4 (~20mb).
TRADS.1 unrepresentative.
GPS.4 parameters inop for duration of flight.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	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: Carpenter/Zawislak
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:	2023041111	FLT #:	FY23-	AC:	Doremus	Scientists:	Pressure		Dropsondes			
From:	PANC	ETD:	2000Z / 1200L	CP(s):	Keith	Downey	A/C Takeoff		Good	Bad	Sent	
To:	PANC	ETA:	0400Z / 2000L		Palmer	Dahlberg			0	0	0	
Block Time		Flight Time		NAV:	Hough		ASOS Takeoff		BTs			
Out:	19:45	T/O:	19:54	FE(s):	Gee		A/C Land			Good	Bad	Sent
In:	3:45	Land:	3:41	FD(s):	Tyson					0	0	0
Total:	8.0	Total:	7.8	SSA:	Richards	Visitors:	ASOS Land		0			
Sponsoring Org:		NGS		AVAPS:	Waggoner		Storm Number ID:		N/A			
Program:		PGR		SEB:			(ie: AL072012)		NOAA3 WXWXC GRAVD02			
Purpose:		GRAV-D Science Flight #2 AS10 FP12						TCP0D/WSP0D Mission (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								
RELATIVE HUMIDITY ≥ 80%			X				2					
LARGE AIR-SEA TEMP GRADIENT				X								
HIGH SURFACE WINDS				X								
LONG FETCH / DURATION OF SFC WND				X			3					
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	Minor instrument issue(s) - no mission impact.
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Flight ID:	20230411I1	Pressure Comparison		
Flight Director(s):	CARPENTER/ZAWISLAK		T/O	Land
Mission:	Non-tasked Science Collection/Research	Aircraft	1007.6	-
UWZ.d mean:	-0.32	Tower	1006.6	-

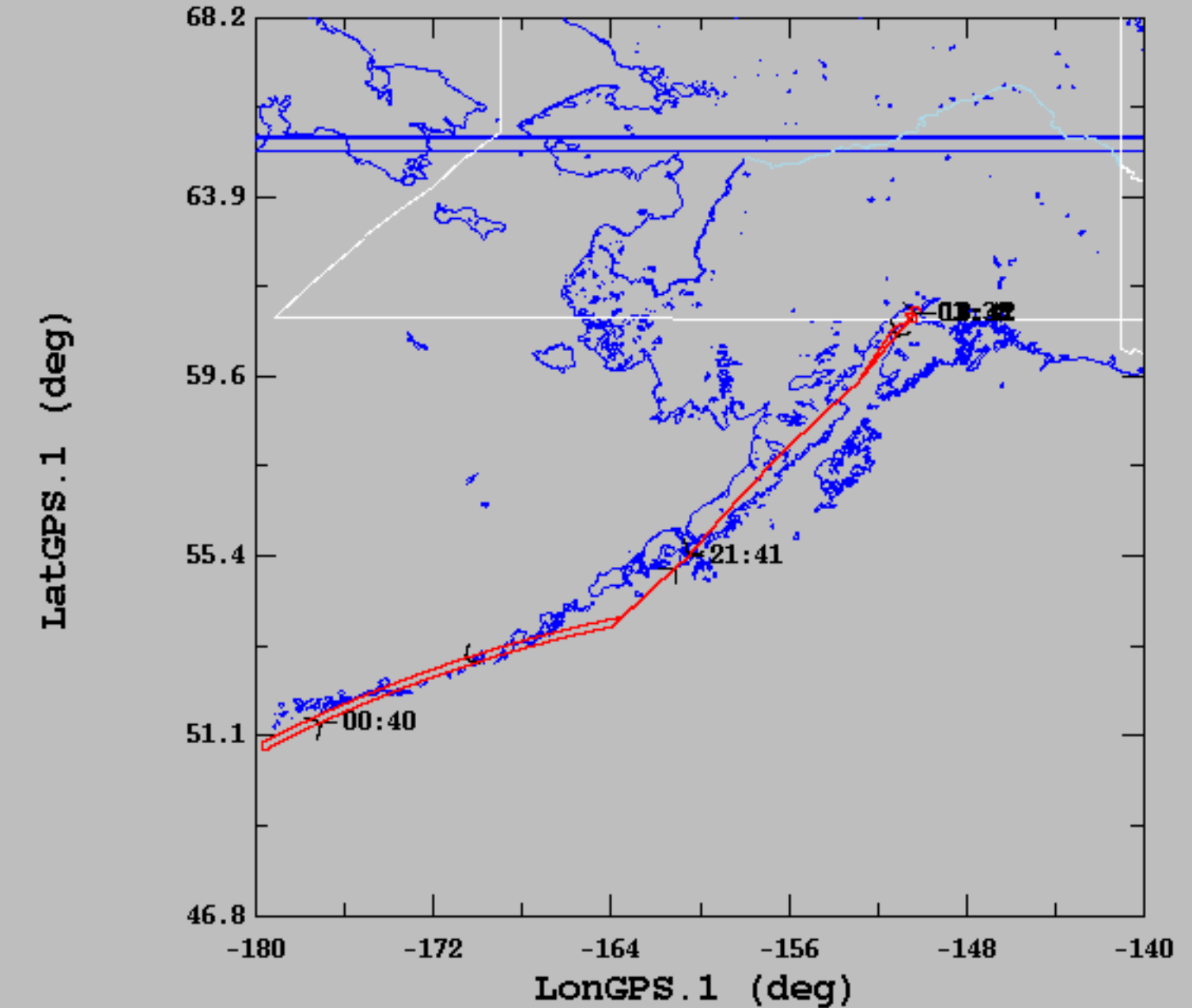
	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ AltGPS.3 ✗ 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 ✗ LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3 ✗ 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	✗ 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 ✗ PitchI.3	✓ PitchRatel.1 ✓ PitchRatel.2 ✗ PitchRatel.3	✓ RollI.1 ✓ RollI.2 ✗ RollI.3	✓ RollRatel.1 ✓ RollRatel.2 ✗ RollRatel.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 ✗ TTM.3	✓ TDM.1 ✓ TDM.2 ✗ TDM.3	✓ TRadD.1 ✗ TRadS.1 ✗ 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
✓ Miscellaneous FD Notes

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

NOTES:
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04/11/2023, 18:42:35-27:38:48



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	56.02	3.55	50.72	61.30
LonGPS.1 (deg), 1 s/sec	-161.87	9.45	-179.71	-149.98