

N43RF ERROR SUMMARY
20230418I1

Flight ID: 20230418I1

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/20230418I1

Local Met Data	Takeoff PANC (1818Z)	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).
TRADS.1 unrepresentative and TDM.1 unrep 0120-0208z.
PDALPHA.2 unrep.
PQM.1 trending higher than PQM.2-4 (~10mb).
GPS.3 parameters inop.

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:	20230418I1	FLT #:	FY23-	AC:	Doremus	Scientists:	Pressure		Dropsondes		
From:	PANC	ETD:	1830Z / 1030L	CP(s):	Keith	Downey	A/C Takeoff		Good	Bad	Sent
To:	PANC	ETA:	0230Z / 1830L		Palmer				0	0	0
Block Time		Flight Time		NAV:	Hough		ASOS Takeoff		BTs		
Out:	18:09	T/O:	18:18	FE(s):	Gee				A/C Land		Good
In:	2:33	Land:	2:28	FD(s):	Carpenter	ASOS Land		0			0
Total:	8.4	Total:	8.2	SSA:	Richards			Visitors:	Storm Number ID:		N/A
				AVAPS:	Waggoner	(ie: AL072012)					
Sponsoring Org:		NGS		SEB:			TCPD/WSPD Mission		NOAA3 WXWXC GRAVD07		
Program:		PGR					(ie: NOAA2 2418A SANDY)				
Purpose:		GRAV-D Science Flight #7 AS10 FP17			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	Minor instrument issue(s) - no mission impact.
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Flight ID:	2023041811	Pressure Comparison		
Flight Director(s):	CARPENTER/ZAWISLAK		T/O	Land
Mission:	Non-tasked Science Collection/Research	Aircraft	1003.7	-
UWZ.d mean:	-0.3	Tower	1002.3	-

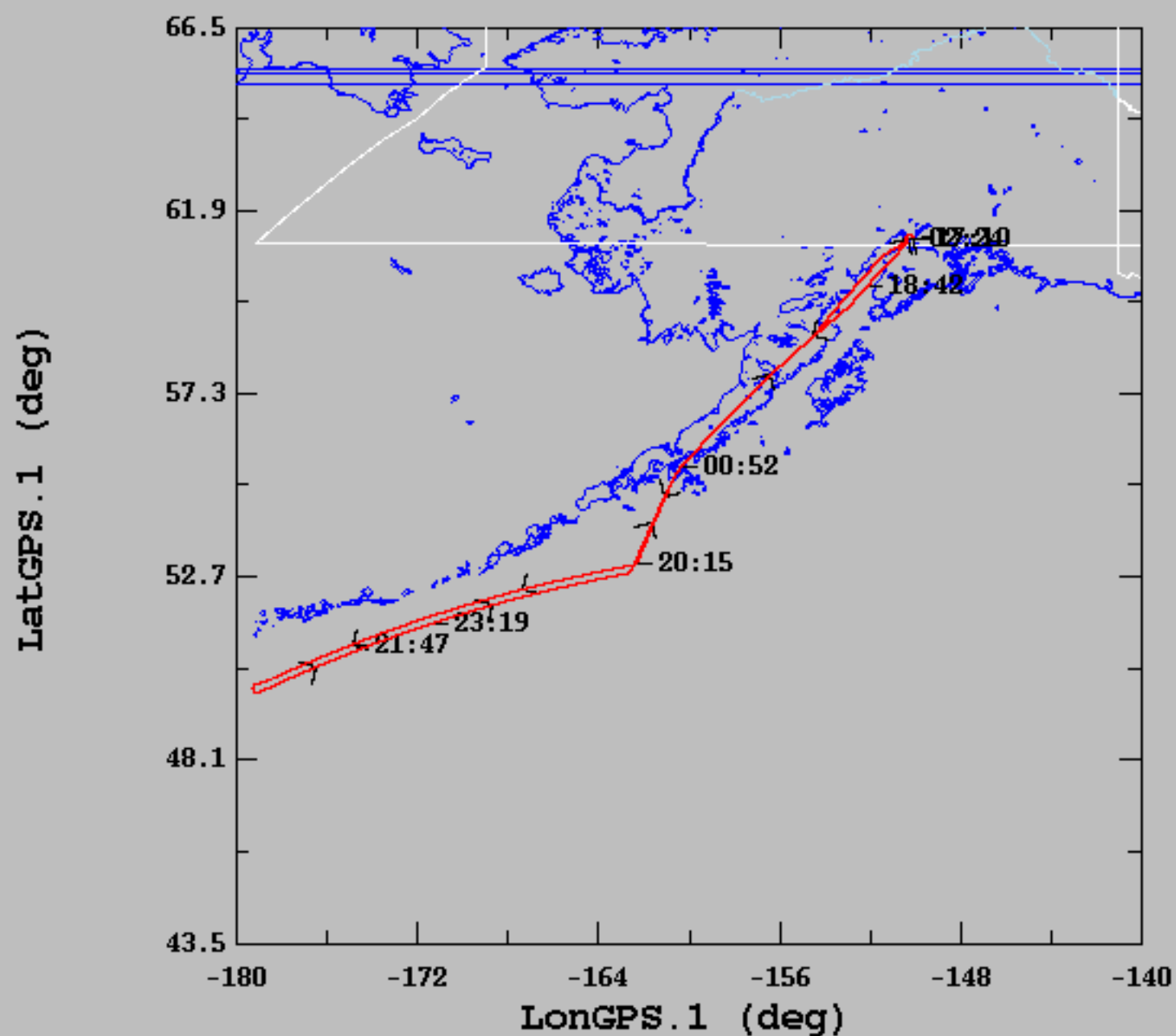
	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2		✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✗ 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:
I.3 for Pitch and Roll, TTM.3 & TDM.3 not operational. TRadS.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). TRADS.1 unrepresentative and TDM.1 unrep 0120-0208z. PDALPHA.2 unrep. PQM.1 trending higher than PQM.2-4 (~10mb). GPS.3 parameters inop.

04/18/2023, 17:10:21-26:24:41



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	55.26	3.88	49.81	61.26
LongGPS.1 (deg), 1 s/sec	-162.22	9.08	-179.24	-149.98