

N43RF ERROR SUMMARY
20230225I1

Flight ID: 20230225I1

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/2023/MET/20230225I1
Local Met Data	Takeoff PANC (1632Z) Landing PANC (0000Z)
Dynamic Corrections	Yes
AttackAngleIntercept	0.126754
AttackAngleSlope	5.36078
SlipAngleIntercept	0.2
SlipAngleSlope	6.67769

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.

GPS.3 and GPS.4 failed. PDAlpha.2 failed in-flight. PDBeta.2 intermittent failures. PQAlpha.1 failures apparent ~1925Z. Flight-level wind derivations should be considered suspect after this time. PQM.4 failure after ~2121Z. PSM.1 10-20 mb lower than PSM.2 and appears less representative. PTM.1 failed after ~2121Z. TTM.2 errant spike 2053Z. TTM.3 inoperative. Anomalous increase in TDM.2 0010-0040Z. TDM.3 inoperative.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	5	3	0
Test sondes	0	0	0
AXBTS	1	0	0
AXCPs	0	0	0
AXCTDs	0	0	0

UAS	0	0	0
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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:	20230222511	FLT #:	23-	AC:	Rannenberg	Scientists:	Pressure		Dropsondes		
From:	PANC	ETD:	1600Z (0700L)	CP(s):	Keith	Chang, Paul	A/C Takeoff	1002.1 mb	Good	Bad	Sent
To:	PANC	ETA:	2300Z (1400L)		Palmer	Jelenak, Zorana			3	2	0
Block Time		Flight Time		NAV:	Miller		ASOS Takeoff	PANC 1653Z 1001.5 mb	BTs		
In:	1:02	Land:	0:58	FE(s):	Darby		A/C Land	N/A	Good	Bad	Sent
Out:	16:24	T/O:	16:33	FD(s):	Tyson				0	1	0
Total:	8.6	Total:	8.4	SSA:	Richards	Visitors:	ASOS Land	PANC 0053Z 999.5 mb			
				AVAPS:	Mascaro	Hough (PM)	Storm Number ID:		N/A		
Sponsoring Org:		NESDIS		SEB:	Waggoner		(ie: AL072012)				
Program:		PED					TCPOD/WSP0D Mission	OCEANWINDS02			
Purpose:		OCEANWINDS02					(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:	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:	20230251I1
Flight Director(s):	Carpenter / Zawislak
Mission:	Non-tasked Science Collection/Research
UWZ.d mean:	-0.24

Pressure Comparison		
	T/O	Land
Aircraft	1002.1	N/A
Tower	PANC 1653Z 1001.5 mb	PANC 0053Z 999.5 mb

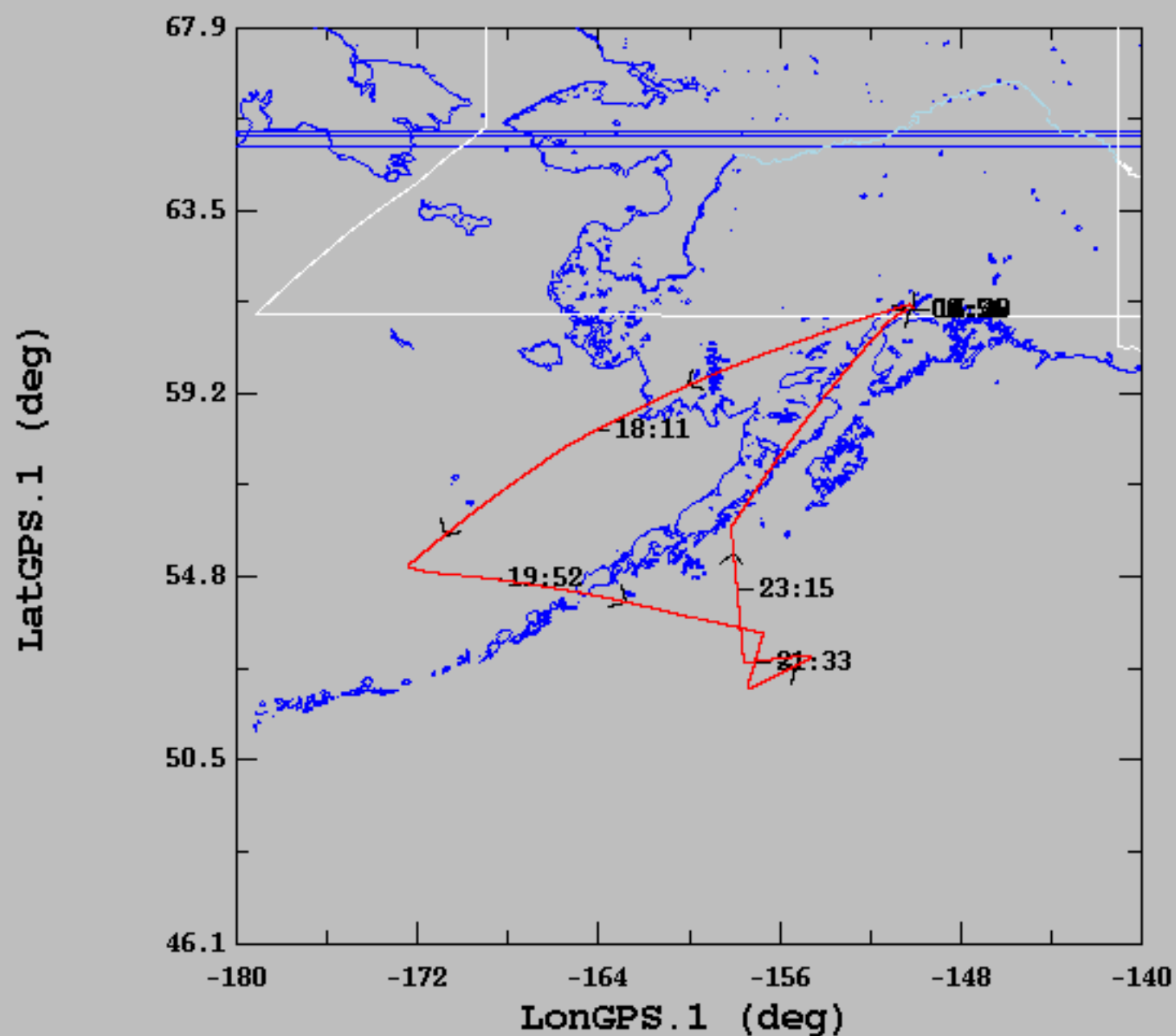
	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✗ 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	✓ PitchRateI.1 ✓ PitchRateI.2 ✗ PitchRateI.3	✓ RollI.1 ✓ RollI.2 ✗ RollI.3	✓ RollRateI.1 ✓ RollRateI.2 ✗ RollRateI.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:
GPS.3 and GPS.4 failures. PDAlpha.2 failed in-flight. PDBeta.2 appears affected by icing. PQAlpha.1 failures apparent ~1925Z. Flight-level wind derivations should not be trusted after this time. PQM.4 failure after ~2121Z. PSM.1 10-20 mb lower than PSM.2 and appears less representative. PTM.1 affected by possible icing after ~2121Z. TTM.2 errant spike 2053Z. TTM.3 inoperative. Anomalous increase TDM.2 0010-0040Z. TDM.3 inoperative.

02/25/2023, 14:49:44-24:56:07



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	57.03	3.14	52.15	61.30
LonGPS.1 (deg), 1 s/sec	-158.35	6.57	-172.34	-149.98