

N42RF ERROR SUMMARY
20220212H1

Flight ID: 20220212H1

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/2022/MET/20220212H1
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Local Met Data	Takeoff PANC	Landing PANC
Dynamic Corrections		Yes
AttackAngleIntercept		2.307
AttackAngleSlope		6.07515
SlipAngleIntercept		0.237
SlipAngleSlope		7.04607
AttackAngleIntercept2		2.06219
AttackAngleSlope2		5.99068
SlipAngleIntercept2		0.125
SlipAngleSlope2		6.9873

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.

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: Hathaway / Holmes
Phone #: 863-500-3911

ACAT-4 Version = 7.4

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	202202212H1	Pressure Comparison		
Flight Director(s):	Hathaway / Holmes		T/O	Land
Mission:	Non-tasked Science Collection/Research	Aircraft	1008.5 mb	N/A
UWZ.d mean:	N/A	Tower	1006.7 mb	1012.1 mb

	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	
	✓ AltGPS.3				✓ 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		
	✓ LatGPS.3		✓ LonGPS.3				
	✓ LatGPS.4		✓ LonGPS.4				
✓ Pressure	✓ PDALPHA.1	✓ PQALPHA.1	✗ PQM.1	✓ PSM.1	✓ PDALPHAref	✓ 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	
	✗ TTM.3	✗ TDM.3	✗ TRadU.1				
✓ Misc. (Must check)					✓ UWZ.d	✓ WS.d	
					✓ 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)	✗

NOTES:

- Data system was restarted twice throughout flight around 1910Z and 2028Z, so occasional drop outs visible across most parameters.
- PQM.1 is erroneous and unrepresentative throughout the whole flight.
- PTM.1 is unrepresentative and erroneous.
- TDM.3 is unusual warm throughout the majority of flight.
- TDM.2 is overly smoothed out throughout majority of flight. TDM.1 was chosen as reference.

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20220212H1	FLT #:	OWW 4	AC:	Doremus	Scientists:	Pressure		Dropsondes		
From:	PANC	ETD:	0900L	CP(s):	Shaw	Chang	A/C Takeoff		Good	Bad	Sent
To:	PANC	ETA:	1600L		Keith	Jelenak			0	0	0
Block Time		Flight Time		NAV:	Miller	Vilardell Sanchez	ASOS Takeoff		BTs		
In:	1:15	Land:	1:10	FE(s):	Darby	FE: Gee			A/C Land		Good
Out:	17:37	T/O:	18:17	FD(s):	Pitmann	Nav: Richards	ASOS Land				0
Total:	7.6	Total:	6.9		SSA:	Hathaway			SSA:Mascaro	0	
				MX:	McAlister	Visitors:					
Sponsoring Org:		AOC		SEB:	Warnecke		Storm Number ID:		N/A		
Program:		PED					(ie: AL072012)				
Purpose:		OWW Mission #4						TCPD/WSPD Mission		WXWXC OCEANWINDS04	
							(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMAR	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1				
SCIENCE MISSION WITHIN BDY 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:											

