

N43 Error Summary

Overall Assessment: Minor instrument issue(s) - minimal mission impact

Flight ID: 20210811I1 **Mission ID:** 0306A **FRED Mission Type:** Tasked/Operational

T/O Time: 0837Z **TNCA Landed:** 1557Z **KLAL**

Flight Director(s): Lundry, Hathaway **QC performed by:** Lundry **Phone #:** 863-500-3898

Expendable Counts

	Deployed	Good	Bad	Trasmitted
Dropsonde	17	16	1	12
AXBTs	0	0	0	0
UAS	0			

Information on Meteorological Sensors

Sensor or System	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Prob	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.2
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
Dynamic Corrections	Yes
Attack Angle Intercept	0.13
Attack Angle Slope	6.02
Slip Angle Intercept	0.23
Slip Angle Slope	7.02537
Attack Angle Intercept 2	
Attack Angle Slope 2	
Slip Angle Intercept 2	
Slip Angle Slope 2	

QC Checklist

	PSM.1	PSM.2	Average PSM	Station Pressure
Takeoff	1022.96	1017.9	1020.43	
Landing	1015.14	1014.38	1014.76	1013
UWZ Mean:	-0.01			

QC Key | Not checked | Reference | Valid | Errors(notes)

Accelerometer	/	AccAXI.1	/	AccAYI.1	/	AccAZI.1	/	AccZfilter-	/	AccZref		
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							GPS.1					
	/	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		
	n/a	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						
	n/a	LatGPS.4			n/a	LonGPS.4						
Pressure	/	PDALPHA.1	/	PQALPHA.1	X	PQM.1	X	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		
Temp/Dewpt	/	TTM.1	X	TDM.1	/	TRadD.1			X	TD.c	/	TTMref
	/	TTM.2	X	TDM.2	/	TRadS.1			X	TDMref	/	TA.d
	/	TTM.3	n/a	TDM.3	/	TRadU.1						
Misc.									/	UWZ.d	/	WS.d
									/	DPJ_WSZ	/	WD.d
									X	HUM		

QC/Data Comments:

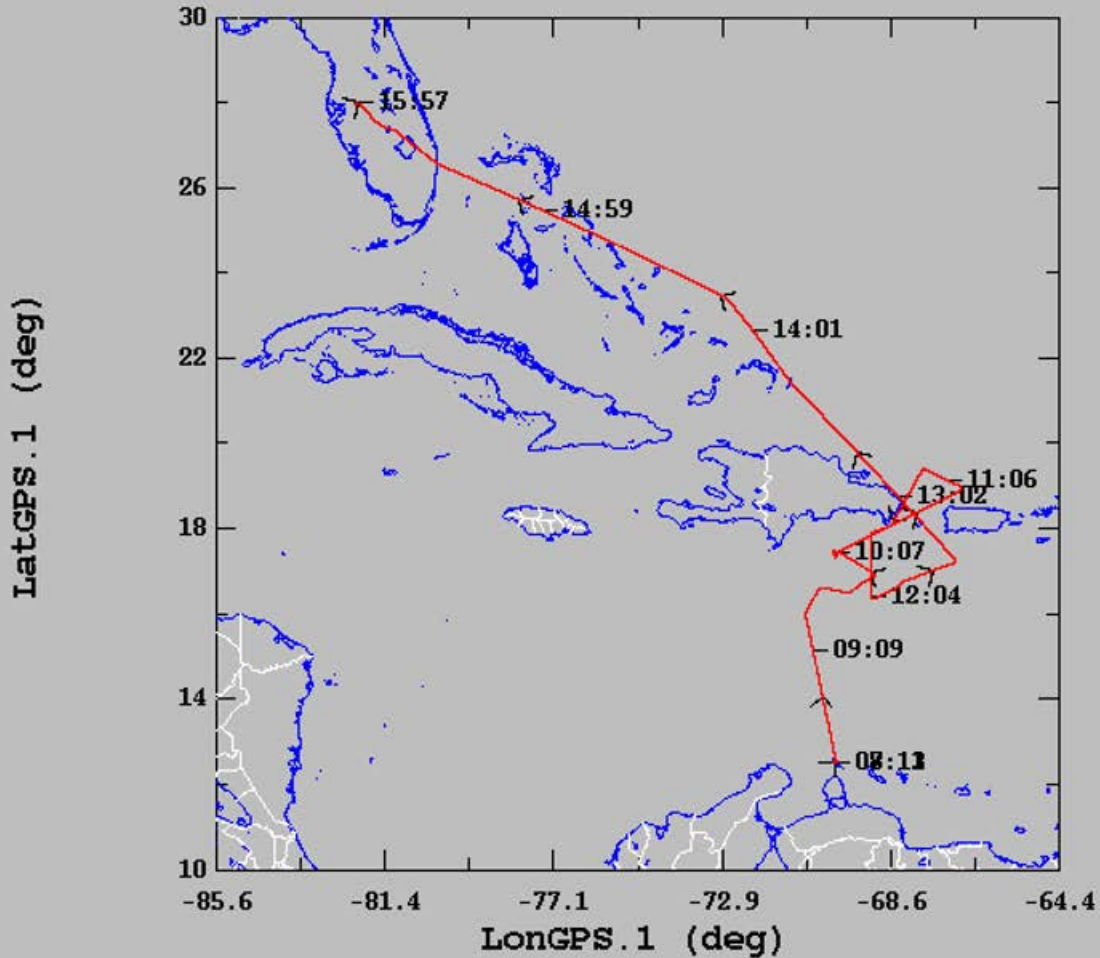
There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

PQM.1 high compared to other PQM values

Difference between PSM.1 & PSM.2, sometimes 15-20mb apart

08/11/2021, 07:13:01-15:57:35



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	18.63	4.46	12.50	27.99
— LongGPS.1 (deg), 1 s/sec	-71.07	3.81	-82.11	-66.79

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2021081111	FLT #:	1	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0430L	CP(s):	Stateler	Chang, Paul	A/C Takeoff		Good	Bad	Sent
To:	TCNA	ETA:	1230L		Shaw	Jelenak, Zorana			16	1	12
Block Time		Flight Time		NAV:	Richards, Brian	Marks, Frank	ASOS Takeoff		BTs		
In:		Land:	15:57	FE(s):	Sanchez	Wadler, Josh			Good	Bad	Sent
Out:		T/O:	8:37	FD(s):	Lundry	Utama	A/C Land		0	0	0
Total:	0.0	Total:	7.3		SSA:	Richards, T					
Sponsoring Org:	EMC			SEB:			Storm Number ID:		AL062021		
Program:	PRX						(ie: AL072012)				
Purpose:	12Z TDR Flight						TCPOD/WSPOD Mission		0306A FRED		
				MX:	Kregelka	Olney	(ie: NOAA2 2418A SANDY)				
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:
