

N43 Error Summary

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

Flight ID: 20210810I1 Mission ID: 0106A INVEST Mission Type: Tasked/Operational

T/O Time: 0839Z KLAL Landed: 1645Z TNCA

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

Expendable Counts

	Deployed	Good	Bad	Trasmitted
Dropsonde	3	3	0	3
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)

QC Key	Not checked	Reference	Valid	Errors(notes)
Accelerometer	/	AccAXI.1	/	AccAYI.1
	/	AccAXI.2	/	AccAYI.2
	/	AccAXI-GPS.1	/	AccAYI-GPS.1
	/	AccAXI-GPS.2	/	AccAYI-GPS.2
Altitude	/	AltGPS.1	/	AltI-GPS.1
	/	AltGPS.2	/	AltI-GPS.2
	/	AltGPS.3		
	n/a	AltGPS.4		
Ground Speed	/	GsXI-GPS.1	/	GsYI-GPS.1
	/	GsXI-GPS.2	/	GsYI-GPS.2
Lat/Lon	/	LatGPS.1	/	LatI-GPS.1
	/	LatGPS.2	/	LatI-GPS.2

	/	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.

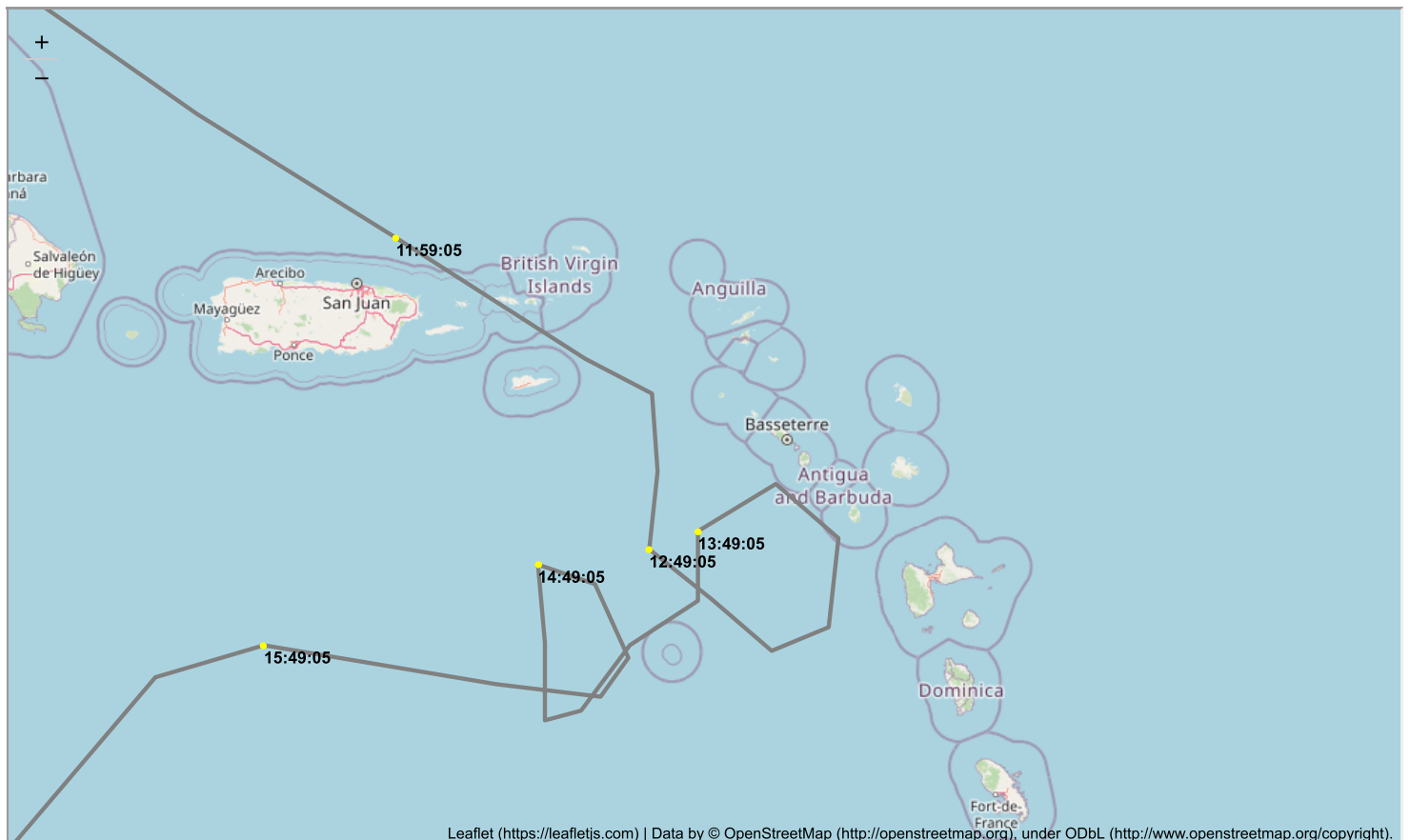
Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

PQM.1 high compared to other PQM values

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

Both TDM.1 & TDM.2 had issues at different points, TDM.2 used as reference, but not always better than TDM.1

Td.c and HUM may be off when TDM.2 not performing well



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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2021081011	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			3	0	3
<b>Block Time</b>		<b>Flight Time</b>		NAV:	Richards, Brian	Marks, Frank	ASOS Takeoff		<b>BTs</b>		
In:	1648Z	Land:	1645Z	FE(s):	Sanchez	Wadler, Josh			Good	Bad	Sent
Out:	0832Z	T/O:	0839Z	FD(s):	Stokes	Utama	A/C Land		0	0	0
Total:	<del>0.0</del> 8.3	Total:	<del>0.0</del> 8.1		SSA:						
Sponsoring Org:	NHC			AVAPS:	Warnecke		Storm Number ID:		AL062021		
Program:	PRX			SEB:			(ie: AL072012)				
Purpose:	NHC/INVEST TASKING			MX:	Kregelka	Olney	TCPOD/WSPOD Mission		0100A INVEST		
							(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		<b>Pennies:</b>				

\*Highlighted items must be completed before departure.

Remarks: