

N43 Error Summary

Overall Assessment: Minor instrument issue(s)- no mission impact

Flight ID: 20210818I1 **Mission ID:** 1207A GRACE **Mission Type:** Tasked/Operational

T/O Time: 0813Z KLAL **Landed:** 1525Z KLAL

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

Expendable Counts

	Deployed	Good	Bad	Trasmitted
Dropsonde	17	16	1	13
AXBTs	5	5	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.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
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	1013.14	1014.29	1013.71	
Landing	1017.86	1017.86	1017.86	
UWZ Mean:	0.02			

QC Key

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	/	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	/	TDM.1	/	TRadD.1				TD.c	/	TTMref
	/	TTM.2	/	TDM.2	/	TRadS.1				TDMref	/	TA.d
	n/a	TTM.3	n/a	TDM.3	n/a	TRadU.1						
Misc.										UWZ.d	/	WS.d
										DPJ_WSZ	/	WD.d
										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.

PSM.1 and PSM.2 20-30mb off at times

PQM.1 offset from rest of values



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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2021081811	FLT #:	1	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0800Z	CP(s):	Stateler	Aberson	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1600Z		Shaw	Chang			ASOS Takeoff		16
Block Time		Flight Time		NAV:	Utama	Greene	ASOS Takeoff				BTs
In:		Land:	15:25	FE(s):	Sanchez				A/C Land		Good
Out:		T/O:	8:12	FD(s):	Lundry	ASOS Land		5			0
Total:	0.0	Total:	7.2	SSA:	Richards, Todd			Visitors:	Storm Number ID:		AL072021
Sponsoring Org:	EMC/TDR			AVAPS:	Warnecke	(ie: AL072012)					
Program:	PRX			SEB:		TCPOD/WSPOD Mission		1207A GRACE			
Purpose:	TDR			MX:		(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		2				
LACK OF PRECIPITATION					x		3				
RELATIVE HUMIDITY ≥ 80%				x			4				
LARGE AIR-SEA TEMP GRADIENT					x						
HIGH SURFACE WINDS				x							
LONG FETCH / DURATION OF SFC WND					x						
SEA SALT ACCRETION FORECAST					x						
SEA SALT ACCRETION OBSERVED					x		Pennies:	1 HURR PEN			
							*Highlighted items must be completed before departure.				
Remarks:											