N43RF ERROR SUMMARY 2023101811

Flight ID: 20231018I1

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.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

Flight Directory

acdata/2023/MET/20231018I1

Met Data	Takeoff KLAL	(1232Z)	Landing TBPB (1713Z)	
Dynamic Correctio	ons		Yes	
AttackAngleInter		0.050058		
AttackAngleSlope		5.32015		
SlipAngleIntercep		0.165		
SlipAngleSlope			6.66754	
	Dynamic Correction AttackAngleInteron AttackAngleSlope SlipAngleIntercep	Dynamic Corrections AttackAngleIntercept AttackAngleSlope SlipAngleIntercept	Dynamic Corrections AttackAngleIntercept AttackAngleSlope SlipAngleIntercept	

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.

I.3 for Pitch and Roll is not operational TTM.3 is not operational TRadU.1 has erroneous data throughout the flight and should not be used TDM.2 and TD.c appears somewhat suspicious from ~1240 through 1345 UTC given that it's relatively flatlined, TDM.1 has similar values; the very low coinciding low HUM verifies suspicious After 1345 UTC, TDM.1 and TDM.2 trace similarly through the remainder of the flight; HUM good; so overall TDM.1, TDM.2, HUM checked good TDM.3 has erroneous data throughout the flight and should not be used PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ WSZ are not provided since AC file is not produced; all other 'C' file parameters checked are from the A file GPS.3 and GPS.4 drop out at 13:38:55 UTC for the remainder of the flight, impacts AltGPS, LatGPS, LonGPS for .3, .4; ALTref, LATref, LONref checked good as set to GPS.1 AltRa.1, AltRa.2, show some deviations from ATLref, but this is due to flight over islands enroute to Barbados

Expendable Type	<pre># deployed</pre>	# good	<pre># transmitted</pre>
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: Zawislak / Lundry
Phone #: 305-707-4359

ACAT-4 Version = 7.4

From: KLAL ETD: 0800L / 1200Z $CP(s)$: Wood Frank Marks (HRD) $A/C Takcoff$ 1014.5 Good Bad S To: TBPB ETA: 1300L / 1700Z $CP(s)$: Wood Frank Marks (HRD) $A/C Takcoff$ 1014.5 Good Bad S Block Time ETA: 1300L / 1700Z NAV: Miller Joe Cione (HRD) $A/C Takcoff$ 1014.5 Good Bad S Out: 12:16 T/O: Tight Time NAV: Miller Joe Cione (HRD) $ASOS Takcoff$ 1015.1 Good Bad S Out: 12:16 T/O: 12:32 FE(s): Tyson Jack Elston (Blackswift) $A/C Land$ Good Bad S In: 17/18 Iand: 17/13 FE(s): Zawislak Zawislak A/C Land A/C Land I	FLIGHT INFORMATION CREW MANIFE						ANIFEST		MISSION IN	FORMATION	1				
$ \begin transformation to the transformation term term term term term term term term$	FLT ID:	2023102	1811	FLT #:	FY24-			AC:	Doremus	Scientists:	Pres	sure		Dropsonde	s
$ \begin{tabular}{ c c c c } The biask range in the section (Reference in the section (Refe$	From:	KLAL		ETD:	0800L/12	007	7	OD(a)	Wood	Frank Marks (HRD)	A/C Talvaaff	10145	Good	Bad	Sent
	To:	TBPE	}	ETA:	1300L / 17	007	7	UP(S):	Keith	Jun Zhang (HRD)	A/C Takeon	1014.5	n	0	0
$ \ \ \ \ \ \ \ \ \ \ \ \ \$		Block Time			Flight Time			NAV:	Miller	Joe Cione (HRD)	ASOS Takaoff	1015 1	U	U	U
$ \begin{tabular}{ c $	Oute	12.1	6	т/∩∙	17.37				Tyson	Jack Elston (Blackswift)	ASUS Lakenii	1013.1		BTs	
$ \begin{tabular}{ c $	UUL.		0	1/0.	12.32			FE(S).	Wysinger	Josh Fromm (Blackswift)	A/C Land		Good	Bad	Sent
$ \begin{tabular}{ c $	ln:	17.1	Q	Lond	17.12				Zawislak		A/ C Lallu				
$ \begin{array}{c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$		L/.T	0	Lanu.	L/.L3			1 D(S).	Lundry		had 2024	100/0	0	0	0 0
Sponsoring Org:HX - NHC/EMCAVAPS:WaggonerStorm Number ID:N/AProgram:PRXPatel (IFT)(ie: AL072012)N/APurpose:Repo KLAL to BarbadosSans Souci (MX)TCPOD/WSPUD Mission (ie: NDAA2 24 A SANDY)NOAA3 WXXA TRMX:Carrion / OhsiekFix NumberObs NumberFix TimeSLPMX:Carrion / OhsiekFix NumberObs NumberFix TimeSLPVOLCANIC ASHxxImage: Carrion / OhsiekStormTimeSLPVOLCANIC ASHxxImage: Carrion / OhsiekStormObs NumberImage: Carrion / OhsiekI Lack OF PRECIPITATIONxxImage: Carrion / OhsiekXImage: Carrion / Ohsiek </td <td>Total</td> <td>5.0</td> <td></td> <td>Total</td> <td>17</td> <td></td> <td></td> <td>SSA:</td> <td>Richards</td> <td>Visitors:</td> <td>ASUS Lanu</td> <td>1004.3</td> <td></td> <td></td> <td></td>	Total	5.0		Total	17			SSA:	Richards	Visitors:	ASUS Lanu	1004.3			
Sponsoring Urg: HX - NHL/EMC Patel (IF1) Increase of the constraint of the cons	TULAI.	5.0		TULAI.	4./			AVAPS:	Waggoner		Storm Nu	rm Number ID: N/A			
NOAA3 WXWXA TR Purpose: Repo KLAL to Barbados Sans Souci (MX) (ie: NDAA2 2418A SANDY) NOAA3 WXWXA TR AS REQUIRED BY ORM Y N Carrion / Ohsiek Git is Number Obs Number Fix Time SLP VOLCANIC ASH X Carrion / Ohsiek Fix Number Obs Number Fix Time SLP VOLCANIC ASH X X Carrion / Ohsiek 1 1 Get is Number Fix Time SLP VOLCANIC ASH X X Carrion / Ohsiek Provember 1 Obs Number Fix Time SLP VOLCANIC ASH X X Carrion / Ohsiek 1 1 1 1 SLP VOLCANIC ASH X X Carrion / Ohsiek Fix Number Obs Number Fix Time SLP LACK OF PRECIPITATION X X Provember 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 4 4 4 4	Spons	oring Org:		HX -	NHC/EMC				Patel (IFT)		(ie: ALO	(ie: AL072012)			
Purpose:Repo KLAL to BarbadosSans Souci (MX)(ie: NOA2 2418A SANDY)Reference of the constraint of the co	Pro	ogram:			PRX			SEB:	Flaherty (PM)		TCPOD/WSPOD Mission				
MX:Carrion / OhsiekGarrion / OhsiekGerrion / OhsiekGerrion / OhsiekGerrion / OhsiekGerrion / OhsiekAS REQUIRED BY ORMYNNREMARKSFix NumberObs NumberFix TimeSLPVOLCANIC ASHxx111111111SCIENCE MISSION WITHIN BDRY LAYERxx-2211<	Du	rnose.		Peno Kl	AL to Barbados				Sans Souci (MX)		(ie: NOAA2 2418A SANDY)				
VOLCANIC ASH x 1 SCIENCE MISSION WITHIN BDRY LAYER x 1 LACK OF PRECIPITATION x 2 RELATIVE HUMIDITY ≥ 80% x 2 LARGE AIR-SEA TEMP GRADIENT x 3 HIGH SURFACE WINDS x 4 LONG FETCH / DURATION OF SFC WND x 4	Tu	10000.		Керокс	AL LU Daluadus			MX:	Carrion / Ohsiek			OBSERVATIONS			
SCIENCE MISSION WITHIN BDRY LAYER x 1 LACK OF PRECIPITATION x 2 RELATIVE HUMIDITY ≥ 80% x 2 LARGE AIR-SEA TEMP GRADIENT x 3 HIGH SURFACE WINDS x 4 LONG FETCH / DURATION OF SFC WND x 4		AS RE	equired	BY ORM		Y	N		REMA	RKS	Fix Number Obs Number Fix Time SLF		SLP		
SCIENCE MISSION WITHIN BDRY LAYER ×		V	OLCANIC	ASH			x				1				
RELATIVE HUMIDITY ≥ 80% x 2 LARGE AIR-SEA TEMP GRADIENT x HIGH SURFACE WINDS x LONG FETCH / DURATION OF SFC WND x							x								
RELATIVE HUMIDITY ≥ 80% x LARGE AIR-SEA TEMP GRADIENT x HIGH SURFACE WINDS x LONG FETCH / DURATION OF SFC WND x						X	<u> </u>				_ 2				
HIGH SURFACE WINDS X LONG FETCH / DURATION OF SFC WND X															
LONG FETCH / DURATION OF SFC WND x					ENT		+								
					0.14415		-								
							+								
							-								
SEA SALT ACCRETION OBSERVED x Pennies: *Highlighted items must be completed before departure. *Highlighted items must be completed before departure.		SEA SALLA	ULKEII	JN OR2EK	VED		X								

P-3 QC Checklist

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

Flight ID:	20231018 1		Pressure Comparison				
Flight Director(s):	Zawislak / Lundry		T/0	Land			
Mission:	Ferry	Aircraft	1014.5	No good measurement			
UWZ.d mean:	-0.24	Tower	1015.1	1004.9			

		Raw 1Hz	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
	X AltGPS.3				ALTGA.d	
	X 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	Latl-GPS.1	LonGPS.1	Lonl-GPS.1	LATref	
	LatGPS.2	Latl-GPS.2	LonGPS.2	Lonl-GPS.2	LONref	
	X LatGPS.3		X LonGPS.3			
	X LatGPS.4		X LonGPS.4			
Pressure	PDALPHA.1	PQALPHA.1	PQM.1	PSM.1	X PDLAPHAref	PQMref
	PDALPHA.2	PQBETA.1	PQM.2	PSM.2	X PDBETAref	PQ.c
	PDBETA.1		PQM.3	PTM.1	X PQALPHAref	PSMref
	PDBETA.2		PQM.4		X PQBETAref	PS.c
Air Speed	CasADDU.1	TasADDU.1	lasADDU.1		IAS.d	TAS.d
Pitch / Roll	Pitchl.1	PitchRatel.1	RollI.1	RollRatel.1	PITCHref	
	Pitchl.2	PitchRatel.2	Rolll.2	RollRatel.2	ROLLref	
	X Pitchl.3	X PitchRatel.3	X RollI.3	X RollRatel.3		
Temp / Dewpt	TTM.1	TDM.1	TRadD.1		TD.c	TTMref
	TTM.2	TDM.2	TRadS.1		TDMref	TA.d
	X TTM.3	X TDM.3	X TRadU.1			_
Misc. (Must check)					UWZ.d	WS.d
					X DPJ_WSZ	WD.d
					🔽 НИМ	

	FLID_Mission_Documents.pdf:	QC	Key	
ŀ	Error Summary	Not checked	d 🗌	
•	Crew Manifest	Valid		
•	QC Checklist	Errors (note) X	
	X Dropwindsonde Log(s) - AVAPS and FD if completed	-		
•	Flight Track			
•	Miscellaneous FD Notes			

NOTES:

I.3 for Pitch and Roll is not operational

TTM.3 is not operational

TRadU.1 has erroneous data throughout the flight and should not be used

TDM.2 and TD.c appears somewhat suspicious from ~1240 through 1345 UTC given that it's relatively flatlined, TDM.1 has similar values; the very low coinciding low HUM verifies suspicious

After 1345 UTC, TDM.1 and TDM.2 trace similarly through the remainder of the flight; HUM good; so overall TDM.1, TDM.2, HUM checked good

TDM.3 has erroneous data throughout the flight and should not be used

PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other 'C' file parameters checked are from the _A file

GPS.3 and GPS.4 drop out at 13:38:55 UTC for the remainder of the flight, impacts AltGPS, LatGPS, LonGPS for .3, A; ALTref, LATref, LONref checked good as set to GPS.1

AltRa.1, AltRa.2 show some deviations from ALTref, but this is due to flight over islands enroute to Barbados





LatGPS.1	(deg), (deg)	1	s/sec
LonGPS.1	(aeg),	T.	s/sec

mean	sigma	min	max
22.72	5.04	13.05	27.99
-73.98	7.61	-82.03	-59.56