

N42RF ERROR SUMMARY
20210525H1

Flight ID: 20210525H1

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/2021/MET/20210525H1

Local Met Data	Takeoff KLAL (2109Z)	Landing KLAL (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.27641
AttackAngleSlope		6.01899
SlipAngleIntercept		0.232
SlipAngleSlope		7.17429
AttackAngleIntercept2		2.06387
AttackAngleSlope2		6.01177
SlipAngleIntercept2		0.195
SlipAngleSlope2		6.67434

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.

PQM.1 failure in-flight. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.2 initially trends with TDM.1 but is unrepresentative and later fails completely in-flight. TDM.3 inoperative. TRadU.1 unavailable.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	2	2	2
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0

AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter
Phone #: 863-500-3901

ACAT-4 Version = 7.3

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20210525H1	FLT #:	21-40	AC:	Legidakes	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2130Z	CP(s):	Didier		A/C Takeoff	1015.1	Good	Bad	Sent
To:	KLAL	ETA:	0130Z								
Block Time		Flight Time		NAV:	Richards/B		ASOS Takeoff	KLAL 2050Z 1016.1 mb	2	0	2
In:	0:23	Land:	0:17	FE(s):	Heystek				BTs		
Out:	20:55	T/O:	21:10	FD(s):	Carpenter		A/C Land	1015.3	Good	Bad	Sent
Total:	3.5	Total:	3.1	SSA:	Mascaro	Visitors:	ASOS Land	KLAL 2350Z 1016.4 mb	0	0	0
Sponsoring Org:		AOC		AVAPS:	Underwood		Storm Number ID:		N/A		
Program:		PSM		SEB:			(ie: AL072012)				
Purpose:		SFMR calibration & shakedown.		MX:			TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)		NOAA2 WXWXA TRAIN		
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:	N/A			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Major instrument issue(s) - significant mission impact.
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Flight ID:	20210525H1
Flight Director(s):	Carpenter
Mission:	Equipment Checkout
UWZ.d mean:	0.15

Pressure Comparison		
	T/O	Land
Aircraft	1015.1	1015.3
Tower	KLAL 2050Z 1016.1 mb	KLAL 2350Z 1016.4 mb

	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ AltGPS.3 ✓ AltGPS.4	✓ AltI-GPS.1 ✓ AltI-GPS.2	✓ AltPaADDU.1 ✓ AltBCADDU.1	✓ AltRA.1 ✓ AltRA.2	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	✓ AltRA1.c ✓ AltRA2.c
✓ Ground Speed	✓ GsXI-GPS.1 ✓ GsXI-GPS.2	✓ GsYI-GPS.1 ✓ GsYI-GPS.2	✓ GsZI-GPS.1 ✓ GsZI-GPS.2		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3 ✓ LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3 ✓ LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ PDBETA.2	✓ PQALPHA.1 ✓ PQBETA.1	X PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4	✓ PSM.1 ✓ PSM.2 ✓ PTM.1	✓ PDLAPHaref ✓ PDBETAref ✓ PQALPHaref ✓ PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ lasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 X PitchI.3	✓ PitchRatel.1 ✓ PitchRatel.2 X PitchRatel.3	✓ RollI.1 ✓ RollI.2 X RollI.3	✓ RollRatel.1 ✓ RollRatel.2 X RollRatel.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 X TTM.3	✓ TDM.1 X TDM.2 X TDM.3	✓ TRadD.1 ✓ TRadS.1 X TRadU.1		✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ ✓ HUM	✓ WS.d ✓ WD.d

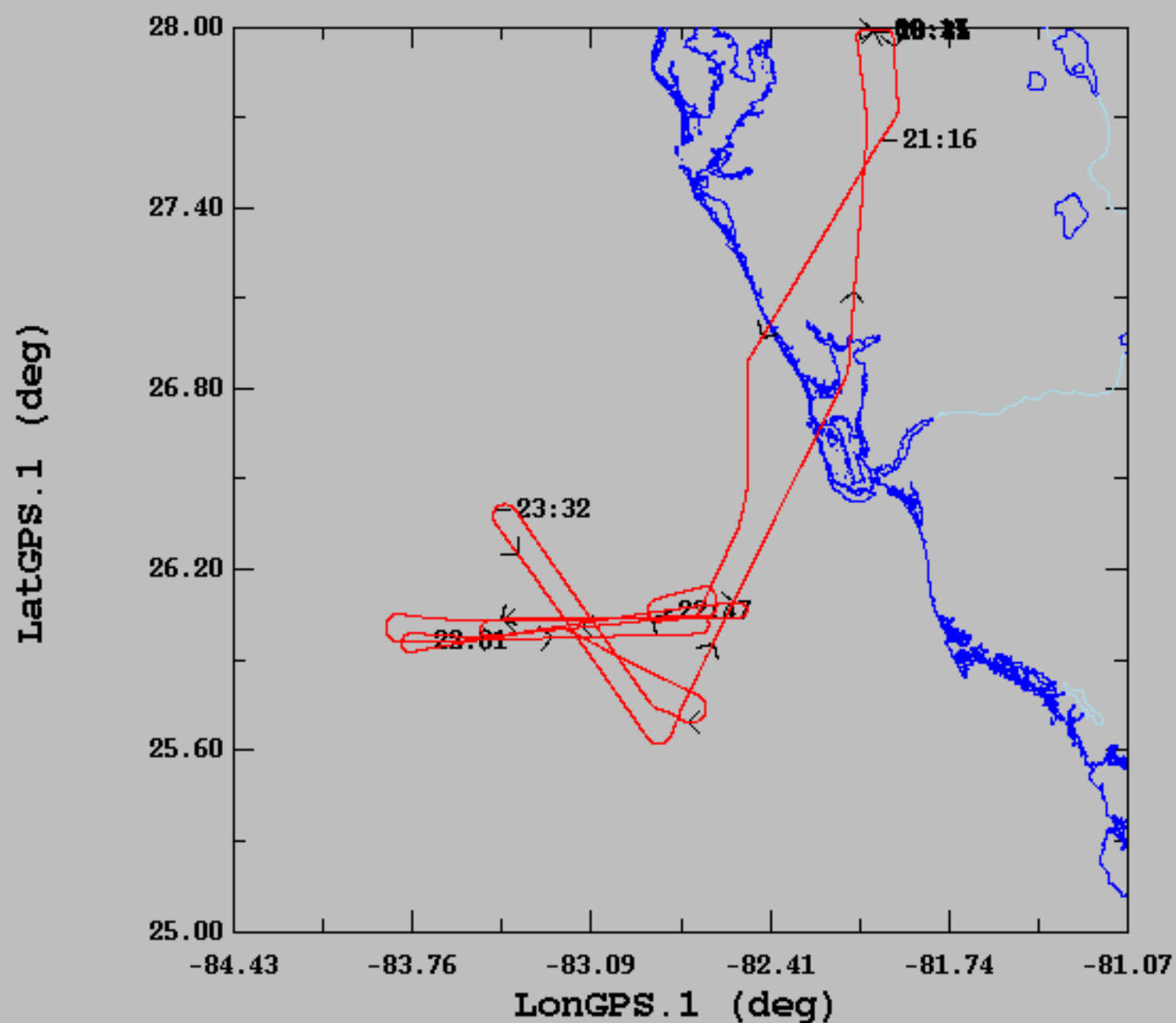
FLID_Mission_Documents.pdf:
✓ Error Summary
✓ Crew Manifest
✓ QC Checklist
X Dropwindsonde Log(s) - AVAPS and FD if completed
✓ Flight Track
X Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	☒
Errors (note)	X

NOTES:

PQM.1 failure in-flight.
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2021-05-25, 19:45:59-24:17:33



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	26.84	0.92	25.62	27.99
LongGPS.1 (deg), 1 s/sec	-82.59	0.57	-83.85	-81.93