

N49RF ERROR SUMMARY
TDR Calibration / Checkout Objective #4

Flight ID: 20220630N1

Sensor or System	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.4
Dewpoint Temp. Probe	TDM.2
Vertical Accelerometer	AccZI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2

Flight Directory acdata/2022/MET/20220630N1

Local Met Data	Takeoff KLAL (1732Z)	Landing KLAL (1910Z)
Dynamic Corrections		Yes
AttackAngleIntercept		3.97801
AttackAngleSlope		3.86172
SlipAngleIntercept	1.258	
SlipAngleSlope		6.69941
AttackAngleIntercept2		5.01255
AttackAngleSlope2	5.40932	
SlipAngleIntercept2		0.72
SlipAngleSlope2		7.0494

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.

All flight level humidity data should be considered suspect as both dew point hygrometers were unreliable during the entire mission.

Expendable Type	# deployed	# good	# transmitted
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: Henning
Phone #: (863) 500-3982

ACAT-4 Version = 7.3

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20220630N1	FLT #:		AC:	MANSOUR	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1730L	CP(s):	NARD 1		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1930L						☒	☒	☒
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	1915	Land:	1910	FE(s):		Visitors:	A/C Land		Good	Bad	Sent
Out:	1723	T/O:	1732	FD(s):	HENNING CARPENTER						
Total:	1.9	Total:	1.6	SSA:	DEFE O		ASOS Land				
Sponsoring Org:		HRD		AVAPS:			Storm Number ID:				
Program:		PHX		SEB:		(ie: AL072012)					
Purpose:		TDR OBJECTIVE #4		MX:		TCPOD/WSPOD Mission		WXWXA TRAIN			
						(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							2				
LACK OF PRECIPITATION							3				
RELATIVE HUMIDITY ≥ 80%							4				
LARGE AIR-SEA TEMP GRADIENT											
HIGH SURFACE WINDS											
LONG FETCH / DURATION OF SFC WND											
SEA SALT ACCRETION FORECAST											
SEA SALT ACCRETION OBSERVED											
							Pennies:				
*Highlighted items must be completed before departure.											
Remarks: TDR INTERCOMPARISON WITH MELBOURNE, FL NWS WSR-88D											

G-IV QC Checklist

Flight ID:	20220630N1
Flight Director(s)	Henning / Carpenter
UWZ.d mean:	-0.2

Pressure Comparison		
	T/O	Land
Aircraft	1015.0	1013.0
Tower	1015.0	1013.3

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1			✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2				
	✓ AccAXI.3	✓ AccAYI.3	✓ AccAZI.3				
✓ Altitude	✓ AltGPS.1	✓ AltI.1	✓ AltPaADDU.1	✓ AltBCADDU.1		✓ ALTref	
	✓ AltGPS.2	✓ AltI.2	✓ AltPaADDU.2	✓ AltBCADDU.2		✓ ALTPA.d	
	✓ AltGPS.3	✓ AltI.3	x AltRA.1			✓ ALTGA.d	
✓ Ground Speed	✓ GsXI.1	✓ GsYI.1	✓ GsZI.1	✓ GsGPS.1		✓ GSXref	
	✓ GsXI.2	✓ GsYI.2	✓ GsZI.2	✓ GsGPS.2		✓ GSYref	
	✓ GsXI.3	✓ GsYI.3	✓ GsZI.3	✓ GsGPS.3		✓ GSZref	
	✓ GsXGPS.1	✓ GsYGPS.1	✓ GsZGPS.1				
	✓ GsXGPS.2	✓ GsYGPS.2	✓ GsZGPS.2				
	✓ GsXGPS.3	✓ GsYGPS.3	✓ GsZGPS.3				
✓ Lat / Lon	✓ LatGPS.1	✓ LatI.1	✓ LonGPS.1	✓ LonI.1		✓ LATref	
	✓ LatGPS.2	✓ LatI.2	✓ LonGPS.2	✓ LonI.2		✓ LONref	
	✓ LatGPS.3		✓ LonGPS.3				
✓ Pressure	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1		✓ PDLAPHAref	✓ PQMref
	✓ PDALPHA.2	✓ PQALPHA.2	✓ PQM.2	✓ PSM.2		✓ PDBETAref	✓ PQ.c
	✓ PDBETA.1	✓ PQBETA.1				✓ PQALPHAref	✓ PSMref
	✓ PDBETA.2	✓ PQBETA.2				✓ PQBETAref	✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1				✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRateI.1	✓ RolI.1	RollRateI.1		✓ PITCHref	
	✓ PitchI.2	✓ PitchRateI.2	✓ RolI.2	✓ RollRateI.2		✓ ROLLref	
	✓ PitchI.3	✓ PitchRateI.3	✓ RolI.3	✓ RollRateI.3			
x Temp / Dewpt	✓ TTM.1	✓ TTM.4	x TDM.1			x TD.c	✓ TTMref
	✓ TTM.2		x TDM.2			x TDMref	✓ TA.d
	✓ TTM.3						
x Misc. (Must check)						UWZ.d	✓ WS.d
						DPJ_WSZ	✓ WD.d
						x HUM	

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

QC Key	
Not checked	☐
Valid	✓
Errors (note)	x

NOTES:
Numerous Radar Altitude dropouts on climb to operational alt but stabilized during science mission Both dew point sensors unreliable. Consider all FL humidity data suspect UWZ mean -0.20 for mission

2022-06-30, 16:59:42-19:15:07

