

N42RF ERROR SUMMARY
TORUS #6

Flight ID: 20190522H1

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/2019/MET/20190522H1

Local Met Data	Takeoff (1941Z)	Landing (2106Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.31252
AttackAngleSlope		6.06758
SlipAngleIntercept		0.4295
SlipAngleSlope		7.17033

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.

Returned home early for MX problem before reaching science objective

TDM.1, TDM.2 and TDM.3 all about 3-4 degrees apart from each other

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: Parrish, Lundry

Phone #: 8635003898

ACAT-4 Version = 7.2.2

1953Z
180/4
19/08
22.78
Land

NOAA Aircraft Operations Center - NOAA 42 Flight Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20190522H1	FLT #:	1	AC:	Kibbey	Scientists:	Pressure		Dropsondes		
From:	KSLN	ETD:	2000Z		Rossi	Ziegler			Good	Bad	Sent
To:	KSLN	ETA:	0300Z	CP(s):	Didier	Wang	A/C Takeoff				
Block Time		Flight Time			Richards	Elmore					
In:	2109	On:	2106	Nav(s):			x Station Take	1953Z 260/7 19/08 29.78	963.0	BTs	
Out:	1935	Off:	1942	FE(s):	Darby		A/C Land		Good	Bad	Sent
Total:	1:34 (1.6)	Total:	1:24 (1.4)	FD(s):	Sanchez						
					Parrish	Visitors:	Vx Station Lan	2053Z 200/3 21/09 29.80	963.9		
Sponsoring Org:				SEB:	Lundry		Storm Number ID:				
Program:					Mascaro		(ie: AL072012)				
Purpose:				SSA:	Peek		TCPOD/WSPOD Mission		TORUS #6		
				AVAPS:	Patel		(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH											
SCIENCE MISSION WITHIN BDRY LAYER											
LACK OF PRECIPITATION											
RELATIVE HUMIDITY ≥ 80%											
LARGE AIR-SEA TEMP GRADIENT											
HIGH SURFACE WINDS											
LONG FETCH / DURATION OF SFC WND											
SEA SALT ACCRETION FORECAST											
SEA SALT ACCRETION OBSERVED											

Additional Remarks:

Cockpit Gmax:

Gmin:

*Highlighted items must be completed before departure.

Hydraulic prob/leak at Condition 4. RTB after fuel dump.

P-3 QC Checklist

Flight ID:	20190522H1
Flight Director(s)	Parrish, Lundry
UWZ.d mean:	0.12

Pressure Comparison		
	T/O	Land
Aircraft	963.0	964.0
Tower	962.4	963.0

	Raw 1Hz Mean File Parameters					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	
	✓ AltGPS.3				✓ ALTGA.d		
	✓ 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	✓ LatI-GPS.1	✓ LonGPS.1	✓ LonI-GPS.1	✓ LATref		
	✓ LatGPS.2	✓ LatI-GPS.2	✓ LonGPS.2	✓ LonI-GPS.2	✓ LONref		
	✓ LatGPS.3		✓ LonGPS.3				
	✓ LatGPS.4		✓ LonGPS.4				
✓ Pressure	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PDLAPHaref	✓ PQMref	
	x 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		
	x PitchI.3	x PitchRateI.3	x RolLI.3	x RollRateI.3			
✓ Temp / Dewpt	✓ TTM.1	✓ TDM.1	✓ TRadD.1		✓ TD.c	✓ TTMref	
	✓ TTM.2	✓ TDM.2	✓ TRadS.1		✓ TDMref	✓ TA.d	
	✓ TTM.3	✓ TDM.3	x TRadU.1				
✓ Misc. (Must check)					✓ UWZ.d	✓ WS.d	
					✓ DPJ_WSZ	✓ WD.d	
					✓ HUM		

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

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

NOTES:

TORUS #6

WD.d seems to be slightly influenced by heading

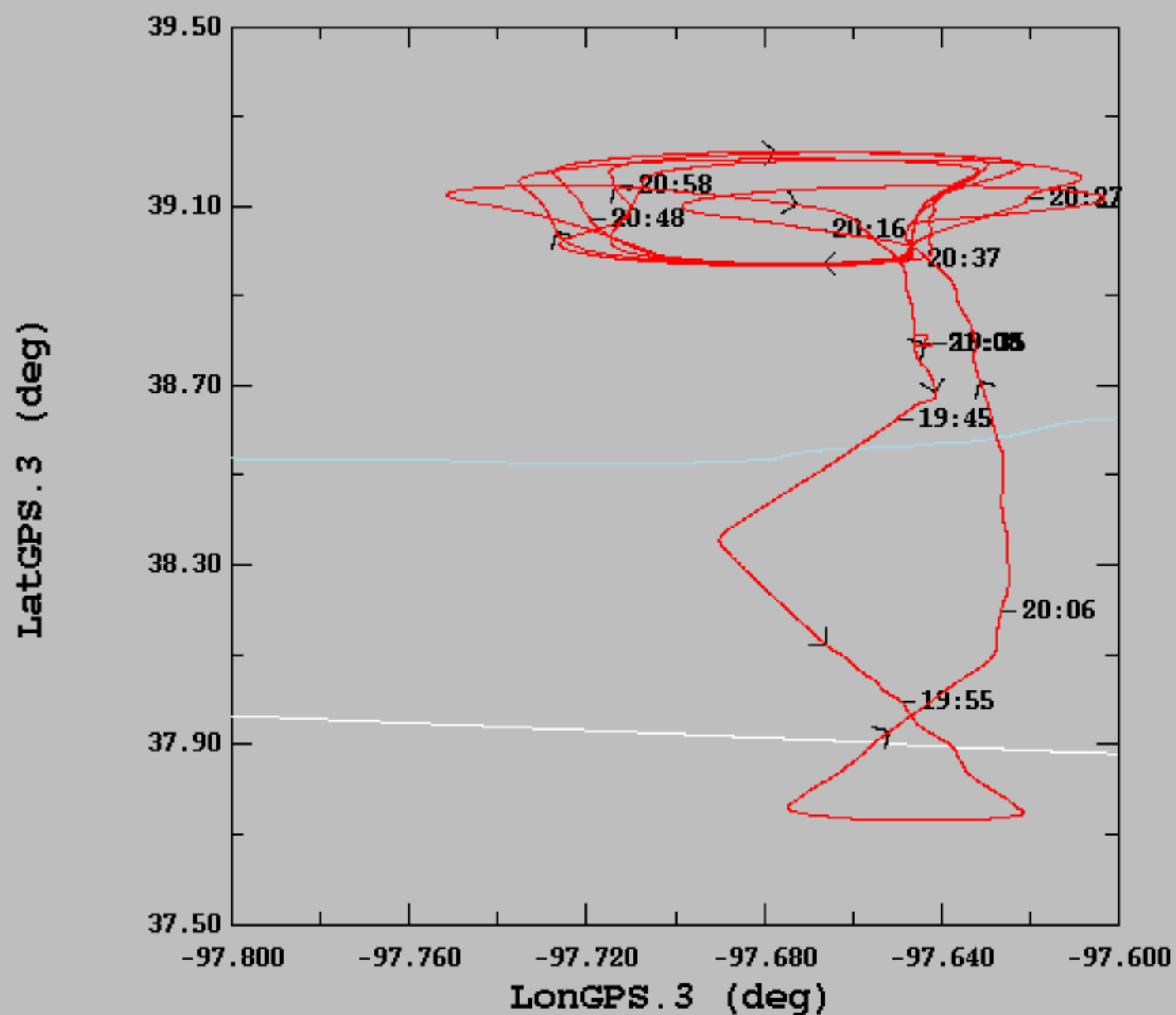
TDM.1 running warmer than TDM.2 and TDM.3 - also TDM.3 warmer at higher altitude and cooler and lower altitude

TDM.1, TDM.2 and TDM.3 all about 3-4 degrees apart from each other

No PDALPHA.2, PitchI.3, PitchRateI.3, RolLI.3, RollRateI.3, TRadU.1

Returned home before reaching science objective due to hyd fluid leak

2019-05-22, 19:35:00-21:08:58



	mean	sigma	min	max
LatGPS.3 (deg), 1 s/sec	38.77	0.41	37.73	39.22
LongGPS.3 (deg), 1 s/sec	-97.66	0.03	-97.75	-97.60