

N42RF ERROR SUMMARY
TORUS #2

Flight ID: 20190516H1

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/20190516H1

Local Met Data	Takeoff (1942Z)	Landing (0000Z)
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.

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

38 45
99 55

1853Z T.O. Mktw 2353Z Mktw
200/25632 180/13 29/17
32/17 29.70
29.75

NOAA Aircraft Operations Center - NOAA 42 Flight Manifest

FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION				
FLT ID:	2019051611	FLT #:	1	AC:	Kibbey	Scientists:		Pressure		Dropsondes		
From:	KSLD	ETD:	20Z	CP(s):	Didier	Ziegler Cheng Elmore Stechman		A/C Takeoff	961.6 2/1002.8	Good	Bad	Sent
To:	KSLD	ETA:	5+	Nav(s):	Richards			Wx Station Takeoff	1953Z 200/26637 33/15 29.74	BTs		
Block Time		Flight Time		FE(s):	Darby Sanchez			A/C Land	34/16 190/200F	Good	Bad	Sent
In:	0102	Out:	0058	FD(s):	Parrish Lundry			Wx Station Land	0053Z 180/1624 27/16 29.70			
Total:	5:27(5.5)	Total:	5:16(5.3)	SEB:	Mascaro	Visitors:		Storm Number ID:				
Sponsoring Org:		JSSC		SSA:	Peck			(ie: AL072012)				
Program:		TORUS		AVAPS:	Patel			TCPOD/WSPOD Mission				
Purpose:		UAV Test 161 WX						(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM			Y	N	REMARKS			OBSERVATIONS				
VOLCANIC ASH				✓				Fix Number	Obs Number	Fix Time	SLP	
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: 1.9

Gmin: -0.3

*Highlighted items must be completed before departure.

Flew many racetracks for UAV work. Then 4 radar legs.

14.D. Flight near severe WX.

P-3 QC Checklist

Flight ID:	20190516H1
Flight Director(s)	Parrish, Lundry
UWZ.d mean:	0.06

Pressure Comparison		
	T/O	Land
Aircraft	962.0	958.0
Tower	961.1	959.8

	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)	☒

NOTES:

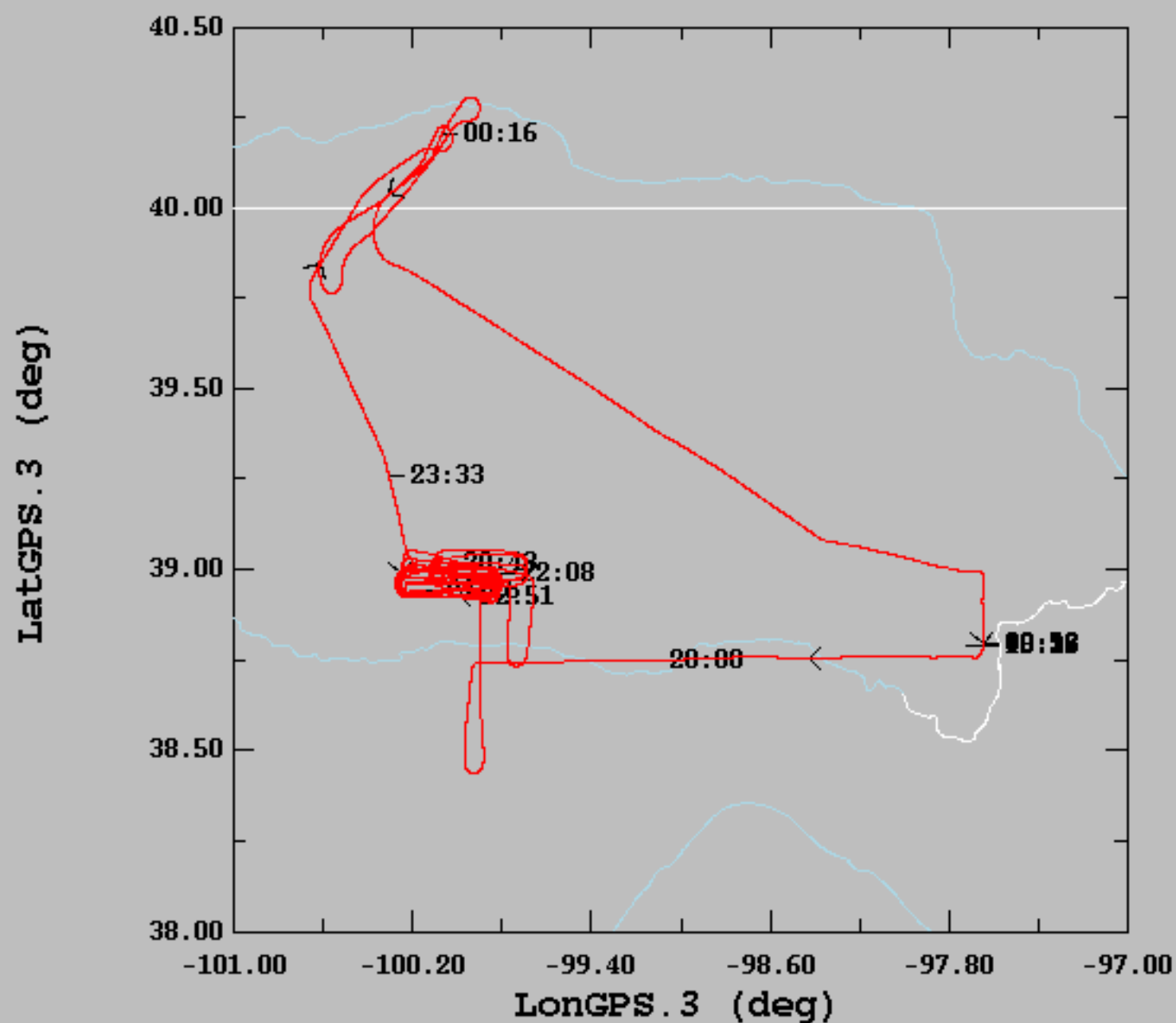
TORUS #2

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

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

2019-05-16, 18:35:19-24:58:55



	mean	sigma	min	max
— LatGPS.3 (deg), 1 s/sec	39.07	0.40	38.44	40.31
— LongGPS.3 (deg), 1 s/sec	-99.42	1.01	-100.66	-97.64