

N49RF ERROR SUMMARY
WCWXA MAGPIE3

Flight ID: 20230807N1

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	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/2023/MET/20230807N1

Local Met Data	Takeoff TBPB (2200Z)	Landing TBPB (0551Z)
Dynamic Corrections		Yes
AttackAngleIntercept		6.4652
AttackAngleSlope		7.59375
SlipAngleIntercept	0.925	
SlipAngleSlope		6.56381
AttackAngleIntercept2		4.97461
AttackAngleSlope2	5.40351	
SlipAngleIntercept2		0.71
SlipAngleSlope2		6.22545

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	25	21	21
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 #: (850) 499-0151

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20230807N1	FLT #:		AC:	NARDI	Scientists:	Pressure		Dropsondes		
From:	TBPB	ETD:	2200	CP(s):	BHATNAGAR		A/C Takeoff	1009.0	Good	Bad	Sent
To:	TBPB	ETA:	0600	NAV:	COZART		ASOS Takeoff	1008.8	21	4	21
Block Time		Flight Time		FE(s):			A/C Land	1008.5	BTs		
In:	0555	Land:	0551	FD(s):	HENNING	Visitors:	ASOS Land	1007.8	Good	Bad	Sent
Out:	2153	T/O:	2200	SSA:	DEFED		Storm Number ID:				
Total:	8.0	Total:	7.9	AVAPS:	DYKEMAN		(ie: AL072012)				
Sponsoring Org:	HRD			SEB:	PATEL	TCPOD/WSPOD Mission		WCWXA MAGPIE 3			
Program:	PHX			MX:		(ie: NOAA2 2418A SANDY)					
Purpose:	MAGPIE Research			OBSERVATIONS							
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:											

G-IV QC Checklist

Flight ID:	20230807N1
Flight Director(s)	Henning / Timmers

UWZ.d mean:	0.01
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Pressure Comparison		
	T/O	Land
Aircraft	1009.0	1008.5
Tower	1008.8	1007.8

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

FLID_Mission_Documents.pdf:	
<input checked="" type="checkbox"/>	Error Summary
<input checked="" type="checkbox"/>	Crew Manifest
<input checked="" type="checkbox"/>	QC Checklist
<input checked="" type="checkbox"/>	Dropwindsonde Log(s) - AVAPS and FD if completed
<input checked="" type="checkbox"/>	Flight Track
<input type="checkbox"/>	Miscellaneous FD Notes

QC Key	
Not checked	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/>

NOTES:
<p>Radar Altitude INOP. GPS 3 (Novatel) is used for absolute altitude in calculation of all MET parameters.</p> <p>All FL humidity data is suspect above 25,000 feet. TDM2 is fairly accurate at lower altitudes</p> <p>UWZ mean +0.01 for mission</p>

AOC GPS Dropwindsonde Log (updated June 2023)

Flight ID: 20230807N1

ASPEN Operator/Flight Director(s): TIMMERS/HENNING

Mission ID: WCWXA MAGPIE3

Storm Name/Track: MAGPIE MISSION

PG 1 of 1

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1	1	229137	10153	1	14.3	-55.0	OVCST	1015.3	SURFACE WIND 100/09	2309	✓✓
2	2	231828	10044	2	15.5	-50.5	N/A	1016.6	070/15	2336	✓✓
3	3	233410	40293	3	15.5	-48.5	N/A	1016.7	080/19	2354	✓✓
4	4	234942	50241	4	15.5	-46.5	N/A	1017.2	090/18	0013	✓✓
5	5	0005		1			N/A		LOST PTH		
6	5	002118	20236	2	15.5	42.5	N/A	1018.2	065/18	0040	✓✓
7	6	003649	10036	3	15.4	40.6	N/A	1018.8	13m LAST WIND 080/25	0058	✓✓
8	7	005305	31233	4	13.5	40.6	N/A	1017.6	070/18 (Floater)	0111	✓✓
9	8	010812	40638	1	13.5	42.5	N/A	1016.9	065/12 (floater)	0129	✓✓
10	9	012420	10035	2	13.5	44.5	N/A	1016.8	080/13	0146	✓✓
11	10	013958	50048	3	13.4	46.4	N/A	1015.7	065/21 (656 mb 110/52)	0203	✓✓
12	11	015502	10040	4	11.5	46.4	N/A	1015.0	085/14	0215	✓✓
13	12	021038	30707	1	11.5	44.5	N/A	1016.9	135/12	0230	✓✓
14	13	022653	70922	2	11.5	42.5	N/A	1016.3	85m LAST WIND 160/7	0247	✓ WEAK TELEMETRY LOW
15	14	024257	20266	3	11.4	40.6	N/A	1016.3	210/8 (floater)	0313	✓✓
16	15	025858	10034	4	9.5	40.6	N/A	1016.2	115/8	0321	✓✓ noisy below 10K
17	16	031422	20258	1	9.5	42.5	N/A	1014.5	230/4 floater + weak data LOW WITH MISSING DATA	0341	✓✓
18	17	033043	70929	2	9.5	44.5	N/A	1015.2	160/10	0359	✓✓
19	18	034703	50217	3	9.5	46.5	N/A	1014.9	300/5 LATE GPS WINDS	0410	✓✓
20		0348		4			N/A		BAD WEAK TELEMETRY LOW		
21	19	040733	10153	1	10.4	48.8	N/A	MISSING	SET BELOW 800 MB MISSING LOUSY DATA	0431	✓✓
22		0429		3			N/A		LOST DATA LOW		
23	20	044008	50519	1	12.2	52.1	N/A	1013.3	035/18	0502	✓✓
24		0455		2					NO PTH		
25	21	045752	10148	3	12.5	54.2	N/A	1014.3	065/15	0518	✓✓
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COMMENTS: ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

Obs Missed 21 Obs Missed 1 # of sondes launched 25 # of bad sondes 4

08/07/2023, 21:10:35-29:55:25

