

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 2020 824H1	From: TRPB	To: KMCF
FLT #:	Blk In: <del>0744</del> 1519	Lnd Time: 1512 Z
ETD: 0800 Z	Blk Out: 0735 Z	T/O Time: 0744 Z
ETE: 8x30	Total Blk:	Total Flt: 7.5
Sponsoring Org: HRD	Program: HFIP	Purpose: ISAAC

AOC Flight Crew

Aircraft Commander: NELSON	Data System: BOSKO
Co-Pilot: KERNS / SWEENEY	Avaps: PAUL
Navigator: KLIDETZ /	System Engineer: QUILES
Flight Eng: HEYSTER / DARBY	AA:
Flt Director: SEARS /	AA:
Avionics: LYNCH, C	Crew Chief:

Participating Scientists, Visitors, & Add'l Aircrew on back.

# of people listed on back:

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure				

ATIS - Takeoff

ATIS - Land

Data Source	Number	Data Disposition / Date / Quality
Flight Level Tapes		
Radar Tapes		2 NO LD
Dropsondes		Good: 12 Bad: 2 Sent: 10 NWS
AXBT		

List other data sources on back in Remarks section.

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times:	Fix #	Fix Time
Storm Name: ISAAC			
Mission ID: 1109A			

IP - 17 30.8 68 13  
 EP - 16 35.6 71 46

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FLT ID: \_\_\_\_\_ T/O Time: \_\_\_\_\_ Z Lnd Time: \_\_\_\_\_ Z

Name (Last, First) Activity on Aircraft Affiliation

Name (Last, First)	Activity on Aircraft	Affiliation
REASON		
DUNION		
BUCCI		
BRACOB		
KIBBEY		
HALVORSON		
KLIPPEZ		
LYNCH		

Remarks:

TBPB 240600Z 10012 SLT 014  
BKN 036

KMCF 060 6KT FEW 1000

ISAAC

VA NEG  
SEA NEG

15 06.5 29 42.1  
17 03.5 070 14.4





# N43RF ERROR SUMMARY

## TS ISAAC 24 AUG 2012

### TDR



**Flight ID: 20120824H1**

<u>Sensor or system</u>	<u>Number or Name</u>
Inertial Selected (for wind derivation)	INE 1
Accelerometer	AccZfilterI-GPS.1
Temperature Probe	TTM.1
Dew Point Probe	TDM.2X
Static Pressure	PSF.2
Dynamic Pressure	PQM.2
Altitude (for vertical wind)	AltI-GPS.1
Flight Directory	acdata/MET/2012/20120824H1
Constants File	AAMPSConfig/core/n43.xml

Local Met Data:	<u>Takeoff (0744Z) TPBP</u>	<u>Landing (1512Z) KMCF</u>
Aircraft Static Pressure	1005.8 mb	1016.9 mb
Tower Pressure (corrected)	1005.8 mb	1017.9 mb

**Notes:**

Takeoff/Landing data: Data during landing and takeoff are suspect. It is recommended that ground data not be used for scientific analysis.

**SPECIAL NOTE:** The variable names GSZ\_DPJ, ASZ\_DPJ and WSZ\_DPJ in the netCDF file represent vertical ground speeds vertical air speeds and vertical wind speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

During approach into KMCF, TDM.2 recorded erroneous data. They were directly substituted with values recorded by TDM.3 (Maycomm) using the equation  $TDM.2X = TDM.3$  during the following times

15:01:32Z – 15:03:03Z

15:04:28Z - 15:05:56Z

During heavy precipitation, TDM.2 (Buck) greatly exceeded ambient temperature values. As a result, RH values significantly rose above 100%. During these instances, TDM.2 was modified by direction substitution with values recorded by TDM.1 (Edgetech) using the equation  $TDM.2X = TDM.1$  at the following time intervals.

09:39:24Z - 09:39:38Z

10:40:56Z - 10:41:09Z

All other AOC instruments utilized in deriving higher order parameters performed optimally.

*Flight Director:*  
*Phone #:*

*Ian Sears*  
*(813) 828-3310 ext. 3039*



# N43RF ERROR SUMMARY

## TS ISAAC 24 AUG 2012

### TDR



There were 12 GPS dropsondes, deployed from the aircraft.  
2 GPS dropsondes failed.

Beginning at time 15:02:35Z and continuing until time 15:05:39Z, 1-second data gaps were observed in several derived parameter values (those with the .d extension). These occurrences were very infrequent and greatly varied among the list of derived parameter values. In other words wind direction (WD.d) may show a 1-second gap once during the flight but no other derived parameter values would exhibit a data gap for that same time. Likewise after a period of time elapsed a different derived parameter's value, say true airspeed (TAS.d), would be missing but other derived parameter outputs would be present.

Since it would be tedious and time consuming to list all the individual derived parameters values missing for a specific time, it was decided to provide the customer the beginning and end times for the time period when these data gaps occurred.

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*Phone #:*

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