

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

FLT ID: 20121027H1	From: KMCF	To: KMCF
FLT #:	Blk In: 1601 z	Lnd Time: 1553z
ETD: 0800 z	Blk Out: 0748 z	T/O Time: 0759 z
ETE:	Total Blk: 8.2	Total Flt: 7.9
Sponsoring Org: HRD	Program: PHX	Purpose: HURR SANDY

AOC Flight Crew

Aircraft Commander: HALVERSON	Data System: BOSKO
Co-Pilot: KIBBEY, PRICE	Avaps: RICHARDS
Navigator: BRAKOB	System Engineer: CLYNCH
Flight Eng: HEYSTEK DARBY	AA: HRD: UHLHORN, BUCCI, SELLWOOD
Flt Director: HENNING/DAMIANO	AA: UMASS Joe Sapp
Avionics:	Crew Chief: RADM SCORE/LUBCHENCO

Participating Scientists, Visitors, & Add'l Aircrew on back.		Total # of people on board:	# of people listed on back:
	A/C - Takeoff	Wx Station - Takeoff	A/C - Land
Pressure	1003.0	29.64 1003.7	1005.1 29.71 (1006.1)
ATIS - Takeoff	A/D 1002.3	STA 1003.2	A/D 1005.2 STA 1005.6
ATIS - Land			

Data Source	Number	Data Disposition / Date / Quality / File Name(s)	
Flight Level Tapes			
Radar Tapes			
Dropsondes	27	Good: 25	Bad: 2 Sent: 25
AXBT	18	17 GOOD	1 BAD

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times:	Fix #:	Fix Time
Storm Name: AL182012			
Mission ID: NOAA2 1418A SANDY			

0911z  
 1637z / 1134z  
 1252z  
 1409z  
 FIX 4604z  
 TIMES

18 CADS

5 CENTER FIXES  
 2 after 12z NOT ADV.

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FLT ID:	T/O Time:	Z	Lnd Time:	Z
Name (Last, First)	Activity on Aircraft		Affiliation	

Remarks:

010/9K

Fix #1 ~~28 35~~

28 35

09:11:32Z

76 95

1585  
2856

Fix #2

28 47

10:27:20

76 40

27.2  
ctr

26.6

B

NE  
29 43  
75 16

E 28 57  
74 38

SE

NW  
30 01  
78 04

WEST  
ex+  
28 57  
78 05

27 32  
75 17

**NOAA WP-3D N42RF ERROR SUMMARY  
HURRICANE SANDY 2012  
27 Oct 2012 1418A SANDY  
HRD (PHX) KMCF →KMCF**

**Flight ID: 20121027H1**

<u>Sensor or system</u>	<u>Number or Name</u>
Altitude	AltGPS.1 (RINU)
Accelerometer	AccZfilterI-GPS.1
Dew Point Probe	TDM.2X
Dynamic Pressure	PQM.2
Inertial Selected	INE1
Static Pressure	PSM.2
Temperature Probe	TTM.1
Constants File	AAMPSConfig/core/n43.xml
Flight Directory	acdata/2012/MET/20121027H1

Local Met Data	Takeoff (0759z)	Landing (1553z)
Aircraft Static Pressure	1003.0 mb	1005.1 mb
Tower Pressure (corrected)	1003.2 mb	1005.6 mb

**Notes:**

The storm was flown at 12,000 feet PA. Leaving storm at 15:04:30z, descent to 10,000 ft after encountering graupel near freezing level in heavy precip NW quad.

The Maycomm (TDM.3) dew point sensor spiked in areas of heavy precipitation then dropped out to a sensor limit value of -60.4C from 11:37:16z to 15:31:14z then stair-stepped to -25.0C until 15:32:22z before returning to functionality. TDM.2 (Edgetech), the reference, spiked just after takeoff from 8:11:26z to 8:15:40z. TDM.1 (Buck) values were substituted during this span

Vertical Winds from 8:47z to 15:16z showed a mean UWZ of +0.06 m/s. 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.

All other flight level instruments worked optimally during the flight.

- 27 dropsondes deployed, 25 good and transmitted (#25 FF + #3 died at 850mb)
- 18 externally loaded AXBT were deployed (1 was bad)

Flight Director: Richard Henning (813) 828-3310 ext. 3086 and A Barry Damiano

Project: Hurricane 2012

Mission:

HAIR SAWYFlight ID: 20121027#2

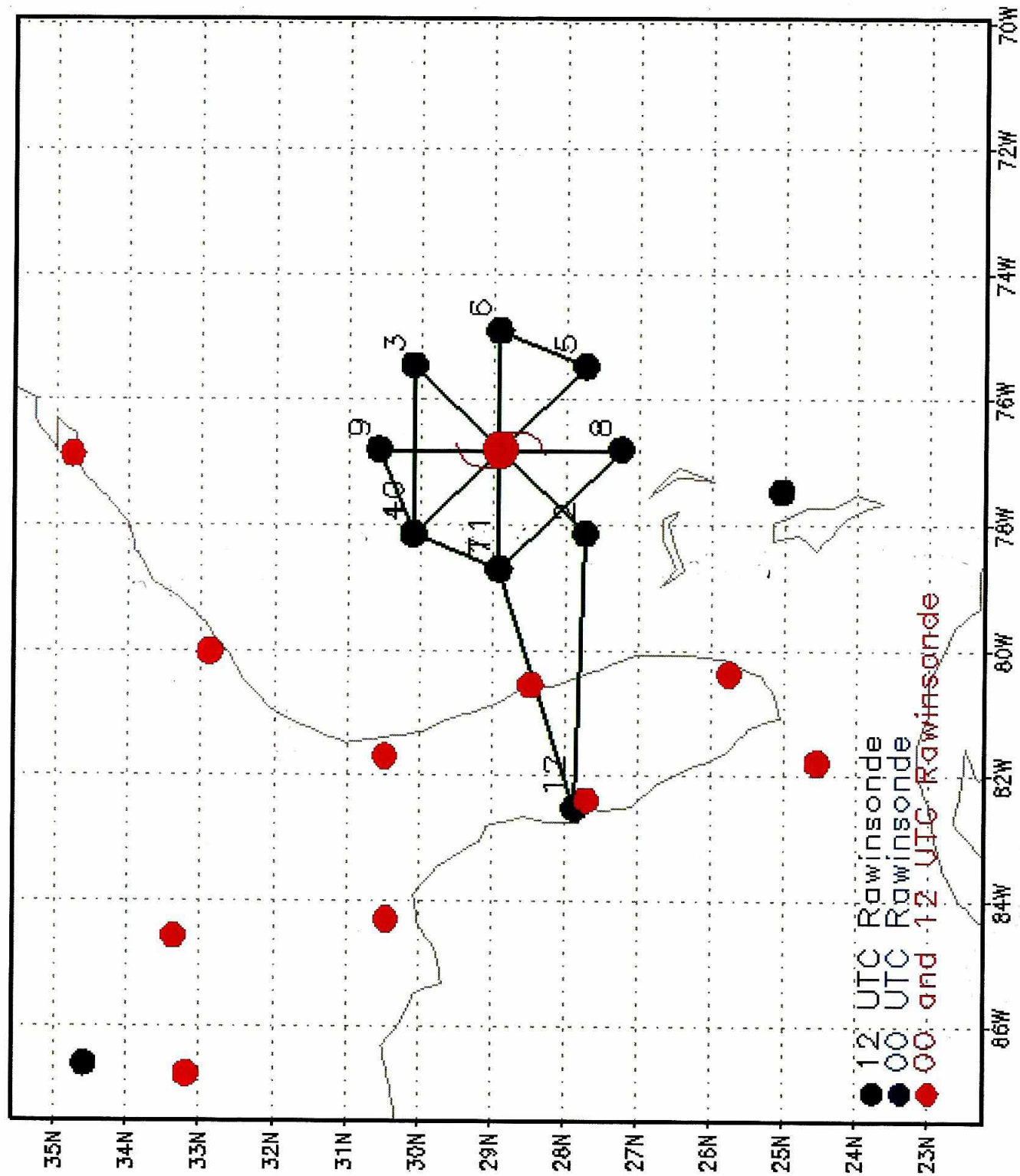
Take Off: \_\_\_\_\_

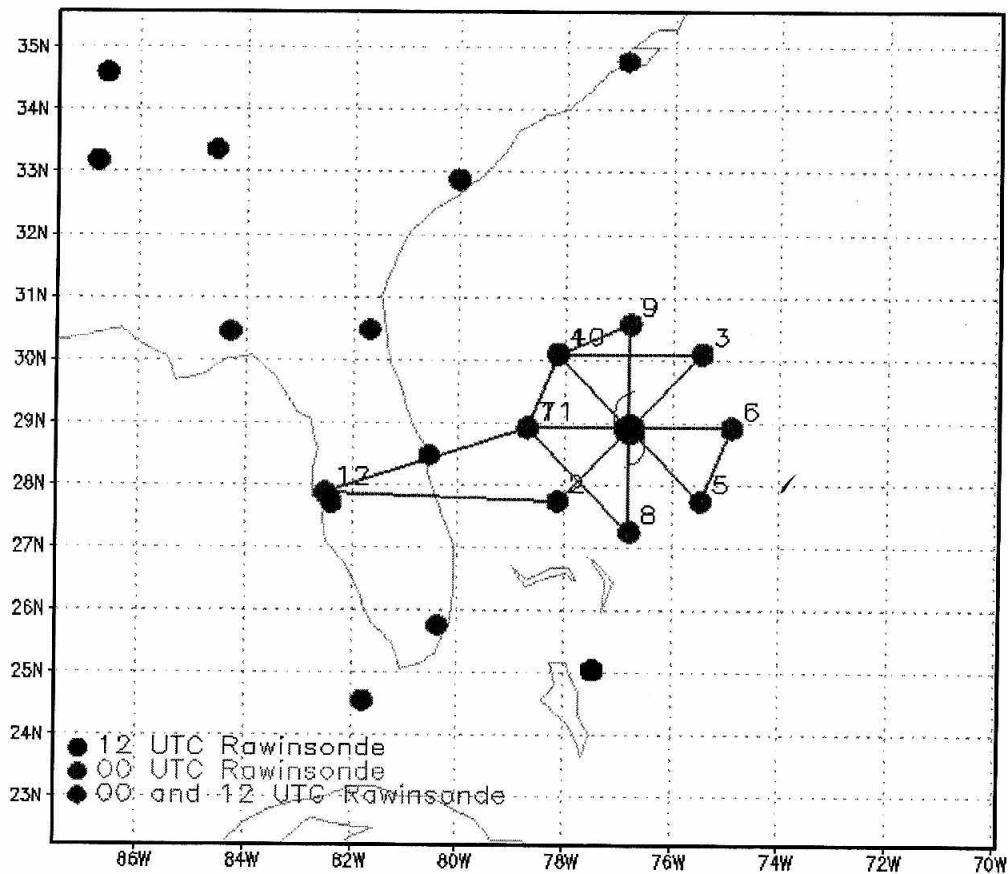
Landing: \_\_\_\_\_

Flt Dir: Dominic / Henning

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	112115391	1	0	0851	TRK	HFRP	IP combo	✓
2	103125087	2	0	0901				✓
3	112115399	3	0	0911			Died out @ 850mb	—
4	112115394	4	0	0924				✓
5	111925037	5	0	0936				✓
6	111925004	6	0	1005				✓
7	111925005	7	0	1018			Quick Fall for 250mb	—
8	111755143	8	0	1021				✓
9	111925100	1	0	1027				✓
10	111925068	2	0	1041				✓
11	111925022	3	0	1052				✓
12	111925009	4	0	1110	CFL			✓
13	111925085	5	0.5	1123				✓
14	112115402	6	0	1135				✓
15	112115116	7	0	1153				✓
16	111755089	8	0	1158				✓
17	111925078	1	0	1230				✓
18	112115249	2	0	1231				✓
19	111925024	3	0	1252			First first 100mb	—
20	111925082	4	0	1304			LATE LB (4.4sec)	✓
21	111925008	5	0	1317		HRB		✓
22	111925076	6	0	1339				✓
23	112115077	7	0	1404			Noisy 875mb to Gnd	—
24	112115293	8	0	1409				✓
25	111945121	1	0	1426			FAST / NOISY	—
26	112115254	2	0	1427			Backup to #25	✓
27	112065018	3	0	1438				✓
28								
29								
30								
31								
32								
33								
34								

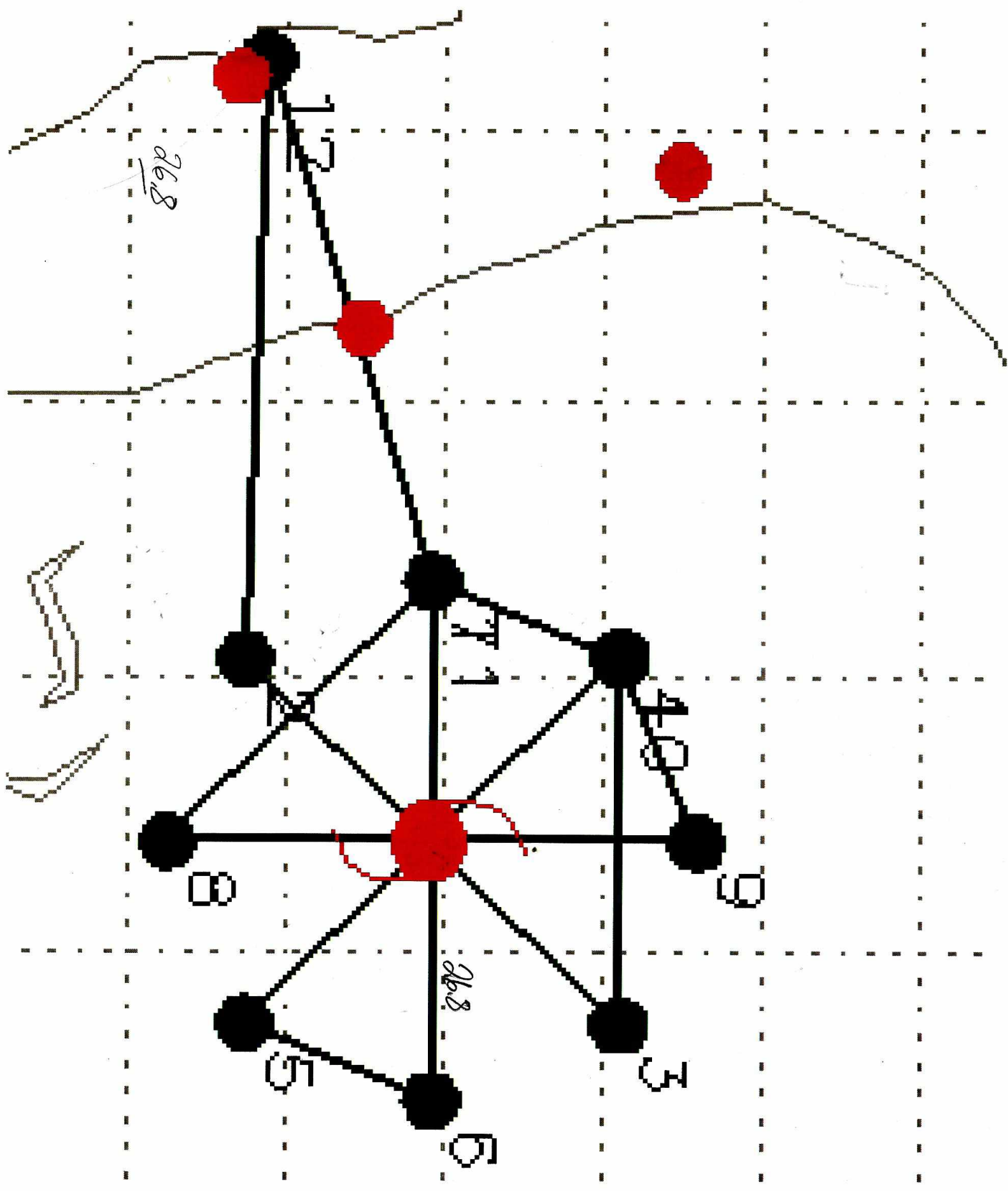
MISSION is a combined HRB / HFRP -  
 sondes changed to HFRP until supply exhausted, then HRB





GrADS: COLA/IGES

2012-10-26-15:20



3005  
200750

N

30 33  
16 28

13 3652

~~13~~  
13

11 36<sup>30</sup> 67 KTS

962  
~~025/16~~

1151 961

2847

SFC

2716

7649

35<sup>m</sup>

7843

951 mb  
771AS





MISSION LOG

PAGE \_\_\_ OF \_\_\_

FIX TYPES  
(G) - GPS (I) - INS (R) - RADIO (M) - VISUAL (C) - CELESTIAL (D) - DR

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E→	TH	DR +R→	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS	
0912	C	28-36 76-43																				
1027	C	28-47 76-41	0910	9																		Change
1137	C	28-53 76-40																				
1252	C	28-48 76-28			63576																	76-49
1410	C	29-07 76-03	28-51 75-56																			
0930	C	29-29N 075-40W	BUC 110-130	075	NORON		MYR		5550													
1030	C	28-41N 76-37W	BUC 110-130	075	NORON		MYR		6577													
1132	C	28-55N 076-30W	BUC 110-130	075	NORON		MYR		6577													
1231	C	27-25N 76-40W	110-144C 130	075	NORON		MYR		6577													
1330	C	30-25N 76-56W	110-131C 130	075	NORON		MYR		6577													
1430	C	28-55N 77-25W	110-131C 130	075	NORON		MYR		6577													
1445	C	0845-27	NYR		8846																	

0958

6577

2555

8846