

HURRICANE FLOYD XCDX/AIR-SEA INTERACTION

Flight 4 I990915

DATA TYPE	SENSOR or OPTION
INE	2
Accelerometer	2
Temperature Probe	1
Altitude (for vertical wind)	RA159
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2

Notes:

There were two data/time gaps due to data system problems:

203811Z - 205150Z
000711Z - 000730Z

Several small spurious spikes in the fuselage static pressure (PSF) data occurred during the following time frames:

2031Z - 2034Z
2134Z - 2136Z

These spikes were removed and patched over.

The vertical wind had erroneous values at 2052Z due to the aforementioned data gaps.

During the penetration of the eyewall, dewpoint temperature values were greater than ambient temperature values.

Aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft static pressure	1001.0 mb	1007.3 mb
Corrected tower pressure	1001.5mb	1007.3 mb

Flight Director: A. Barry Damiano, (813) 828-3310 ext. 3073

FLT ID: <u>I990915</u>	FM: <u>KTPA</u>	TO: <u>KMCF</u>
FLT NO: <u>99-055</u>	BLK IN: <u>0518Z</u>	ATA: <u>0509Z</u>
ETD: <u>1900Z</u>	BLK OUT: <u>1940Z</u>	ATD: <u>1948Z</u>
ETE: <u>11</u>	BLK TIME: <u>9:38</u>	FLT TIME: <u>9:21</u>
SPONSOR ORG: <u>HRD</u>	PROGRAM: <u>HORR. RESEARCH</u>	PURPOSE: <u>AIR-SEA INTERACTION</u> <u>Ho FLOYD</u>

DAO PERSONNEL

AC <u>McKIM</u> ✓	SYS ENG <u>McNAMARA</u>
CP <u>KENUL</u>	DATA SYS <u>LYNCH</u>
NAV <u>RATHBUN</u> ✓	RADAR <u>DELGADO</u> ✓
FE <u>MOORE/WADE</u>	BT/ODW <u>CARPENTER</u>
RADIO <u>SANS SOUFI</u>	CLD PHYS
FD <u>DAMIANO</u> ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
MARKS ✓	PI	HRD
LANDSEA ✓	ASST PI	✓
BLACK, M. ✓	HAPS	✓
WALSH ✓	SAR	NASA
PETER DAVIES ✓	OBS	
SCHENXYDER ✓	MEDIA	CNN
BEARS TUCHMAN ✓	MEDIA	CNN
BEARS ✓	MEDIA	NEWSWEEK

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, FENET, NHOP #)

T/O delayed due to getting data/radar system ready

2058Z
 31°19' 950mb
 78°56'
 9

2223Z
 31°30' 950mb
 78°54'
 9

0343Z
 3303'
 78°18'
 953mb

2340
 32°01' 951mb
 78°41'
 9

0109Z
 32°16' 951mb
 78°34'
 9

0229Z
 32°44' 951mb
 78°29'
 9

BEACH RUN 0138Z.

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2 FILE

FLT ID: I990915 TIME OFF: 19482 TIME ON: 0509.7

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1001.0	29.59	1007.8	29.76 29.76

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

3

FAST FLT LVL TAPES

RADAR TAPES

1

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

AXBT

22

AXCP

~~GPS~~ GPS

35

30 good, 5 bad 31 x m.f.t.

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

I990915

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TIME	LAT	LONG	TRK	HD	WD	WS	TA	TD	PA	GA	SP	PS		
014615	3310	7910	180	170	51	65	14.3	14.7	2428	2277	979.3	753.9	(36) DROP	78.0
015455	3245	7951	241	249	24	52	15.0	14.3	2462	2344	982.8	749.9	(37) DROP	70.5
022125	3231	7900	82	65	349	73	15.7	13.2	2426	2180	962.5	753.9	(38) DROP	41004
022530	3235	7842	61	47	330	59	20.7	15.5	2444	2083	952.5	752.1	(39) DROP	
023453	3301	7809	47	69	137	93	16.2	16.5	2453	2143	959.5	750.6	(40) DROP	ELWALL
024509	3327	7735	49	70	151	84	14.9	14.4	2462	2326	979.5	750.2	(41) DROP	FYMAN
030605	3439	7648	220	255	145	69	14.5	10.1	2450	2435	983.2	751.2	(42) DROP	MHD
031600	3424	7734	234	219	126	71	13.2	13.0	2454	2385	981.0	751.4	(43) DROP	72.5
033648	3327	7821	181	162	81	86							(44) DROP	
035848	3319	7821			95	42							(45) DROP	
042100	3049	8012	216	225	295	34	2.6	1.0	4395	4523	995.1	585.3	—	73.5

THAL 13

PAGE _____ **OF** _____

EMERGENCY MESSAGE

- PILOT INTENTIONS
- WE HAVE _____ ENDURANCE REMAINING

2147 7240.8 7850.9

Km⁻¹x

Foehn:pub:track01.log

Wednesday, September 15, 1999

Page 2 of 2

Printed: 11:57:05 AM

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: FLOYD/XCDX

Prepared by the Hurricane Research Division at 11:34:42 AM on 09/15/99.

File: 990915ip.ftk

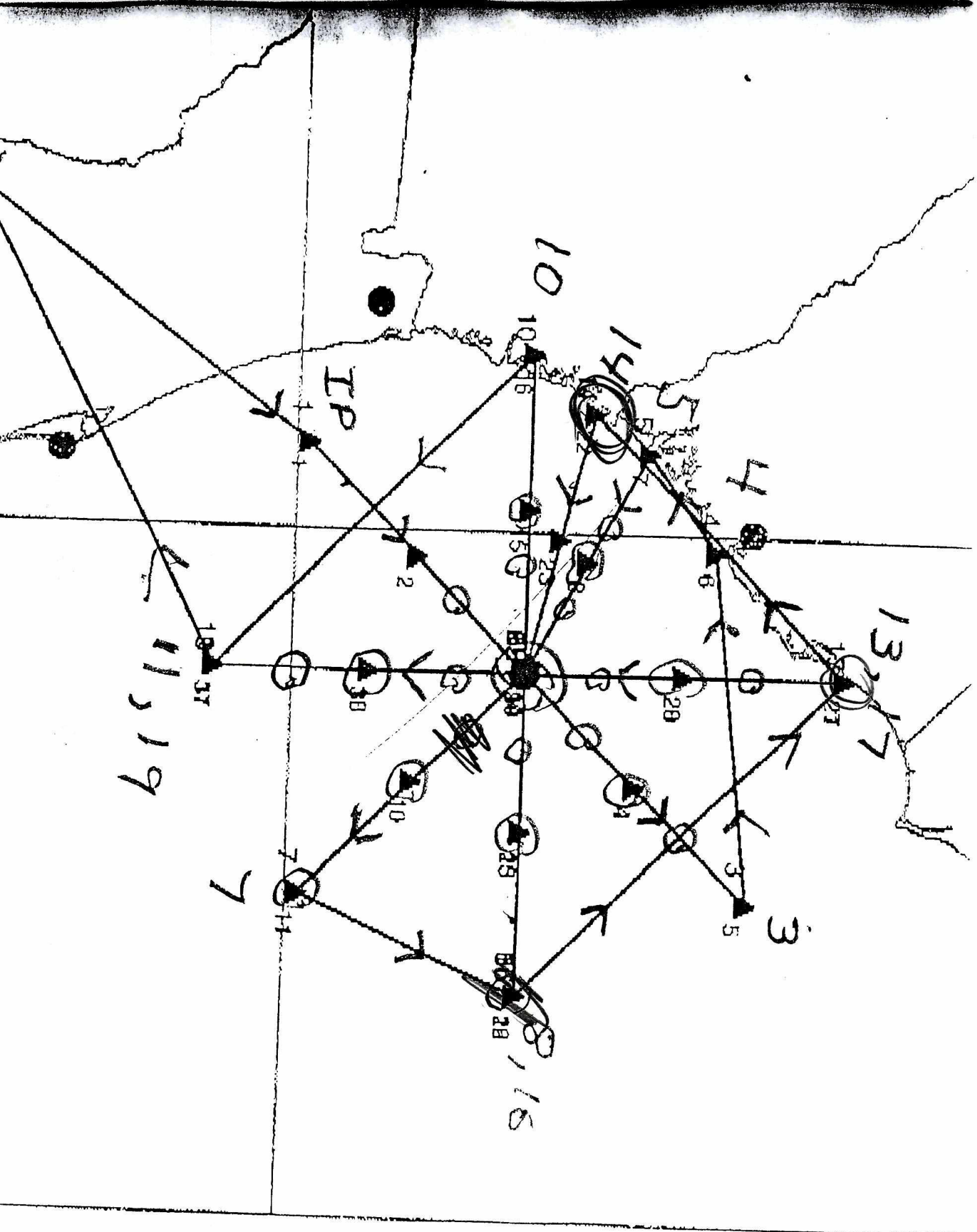
Aircraft: N43RF Altitude: FL080/120 Proposed takeoff: 15/1900Z

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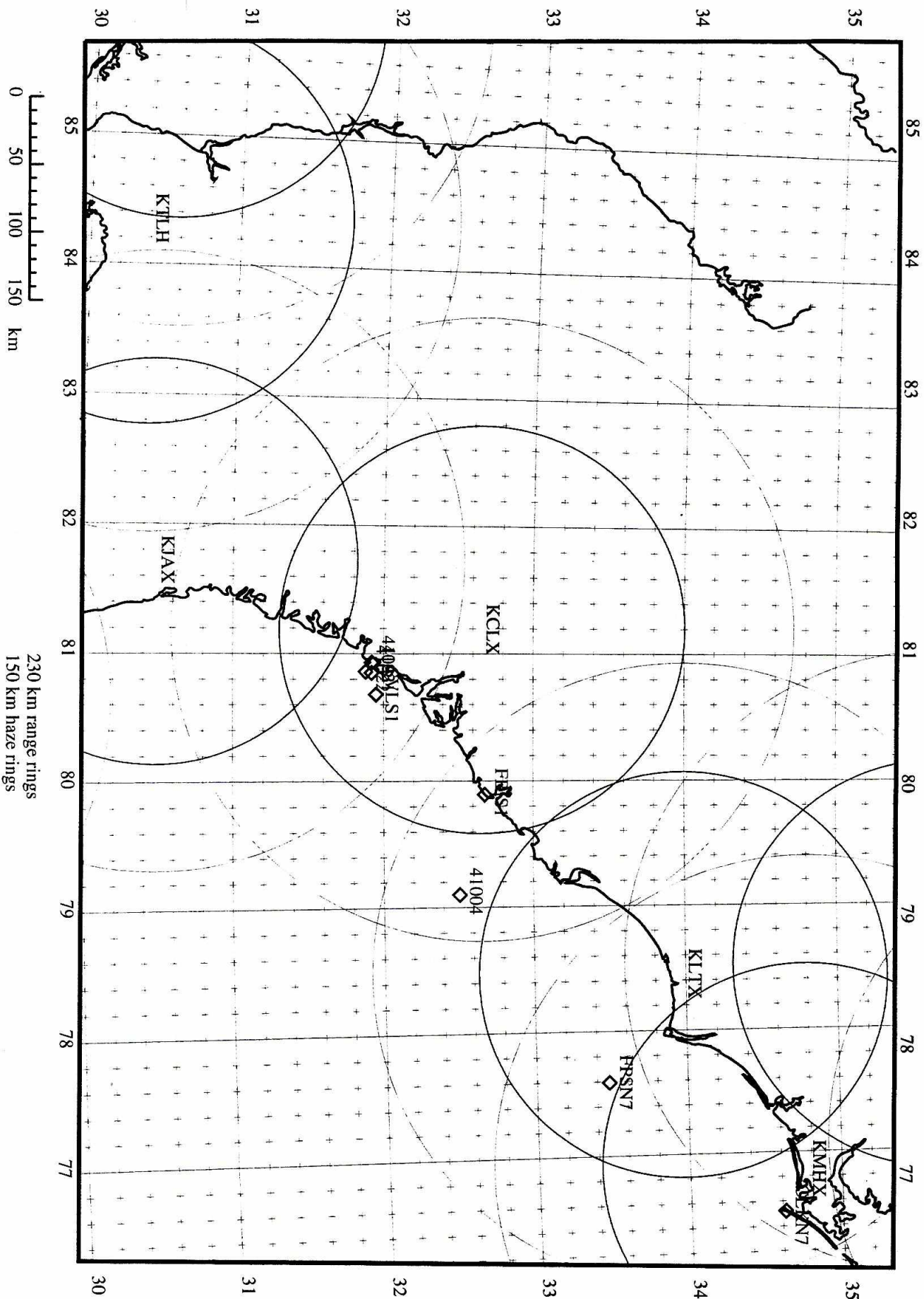
DROP LOCATIONS

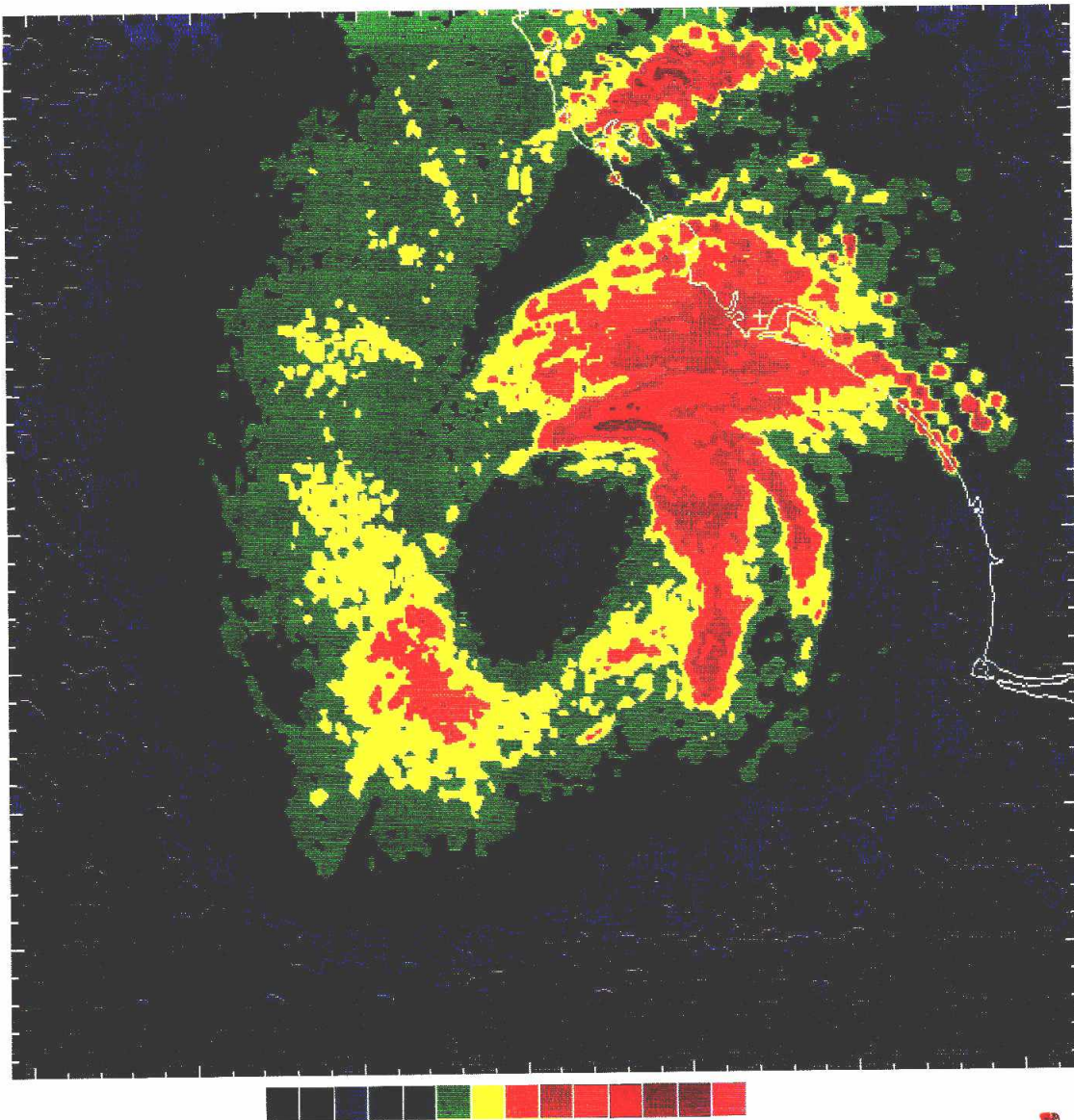
=====

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1S	30 05	80 38	120/225	0:45
2S	30 48	79 49		0:57
3S	31 30	79 00	0/000	1:09
4S	32 13	78 10		1:22
5S	32 56	77 21	120/045	1:34
6	32 41	79 53		2:01
7	32 15	80 36		2:10
8	31 53	79 48		2:20
9S	31 30	79 00	0/000	2:29
10S	30 48	78 11		2:42
11S	30 05	77 22	120/135	2:54
12S	31 30	76 40	120/090	3:13
13S	31 30	77 50		3:26
14S	31 30	79 00	0/000	3:38
15S	31 30	80 10		3:51
16S	31 30	81 20	120/270	4:03
17S	29 30	79 00	120/180	4:38
18S	30 30	79 00		4:51
19S	31 30	79 00	0/000	5:03
20	32 30	79 00		5:16
21	33 30	79 00		5:28
22	31 54	80 54		5:56
23	31 42	79 57		6:06
24S	31 30	79 00	0/000	6:17
25S	31 30	77 50		6:29
26S	31 30	76 40	120/090	6:42
27	33 30	79 00		7:17
28	32 30	79 00		7:29
29S	31 30	79 00	0/000	7:41
30S	30 30	79 00		7:54
31S	29 30	79 00	120/180	8:06



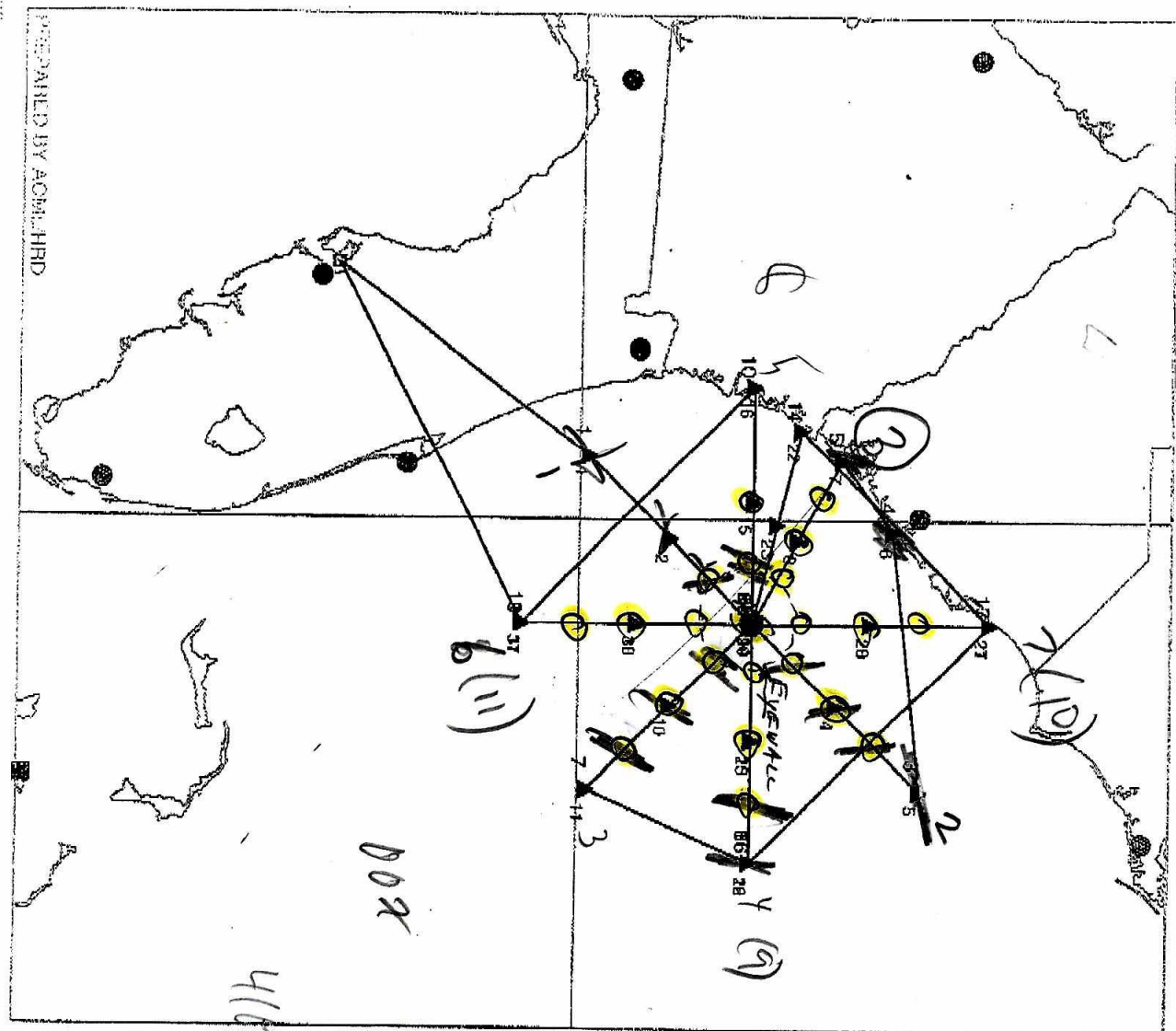
clx_maps Center Lat: 32.70 Lon: -81.00





990915

920910



FLIGHT TRACKS FLOYD/XCDX

990915ip.ttk

9-21 out of time

RAWINSONDES 9908

- Regular
- 12Z only
- 00Z only
- Infrequent
- Infrequent - 00Z
- Infrequent - 12Z

EYE WALL

AXIS

A DROP LOCATIONS

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