

E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

- ✓ 1. Participate in general mission briefing.
- ✓ 2. Determine specific mission and flight requirements for assigned aircraft.
- ✓N 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist and CARCAH unless briefed otherwise by field program director.
- ✓ 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Arrange ground transportation schedule when deployed.
 - c. Determine equipment status.
- ✓ 5. Meet with AOC flight crew at least 90 minutes before takeoff, provide copies of flight requirements, and provide a formal briefing for the flight director, navigator, and pilots.
- ✓ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami or FGOC at remote recovery location).

E.2.2 In-Flight

- ✓ 1. Confirm from AOC flight director that satellite data link is operative (information).
- ✓ 2. Confirm camera mode of operation.
- ✓ 3. Confirm data recording rate.
- ✓ 4. Complete Form E-2.

E.2.3 Postflight

- ✓ 1. Debrief scientific crew.
- ✓ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to the appropriate HRD operations center (MGOC or FGOC).
- ✓ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- ✓ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- ✓ 5. Determine next mission status, if any, and brief crews as necessary.
- ✓ 6. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.
- ✓ 7. Prepare written mission summary.

On-Board Lead Project Scientist Check List

Date 8-14-08 Aircraft 43RF Flight ID 080814.I
02DDA WAVE

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>JASON DUNION</u>	Flight Director	<u>Jack Parrish</u>
Cloud Physics	<u></u>	Pilots	<u>Choy / Newman</u>
Radar	<u>John Gumache / Joe C.</u>	Navigator	<u>Gallagher</u>
Workstation	<u>" / "</u>	Systems Engineer	<u>FLOYD</u>
Photographer	<u></u>	Data Technician	<u></u>
Omegasonde	<u>Joe Cione</u>	Electronics Technician	<u>Lynch</u>
AXBT/AXCP	<u>NA</u>	Other	<u></u>

Take-Off: 0258 Z Location: BG1 Landing: 1031Z Location: BG1

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

C. Mission Briefing:

D. Equipment Status

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft			
Radar/LF	✓	✓	✓
Radar/TA (Doppler)		RADAR NOT SET TO FORE-AFT UNTIL 0457 Z	
Cloud Physics			
Data System			
Omegasondes			
AXBT/AXCP	NA	NA	NA
Workstation	roller ball needs replacement		
Photography	NA	NA	NA

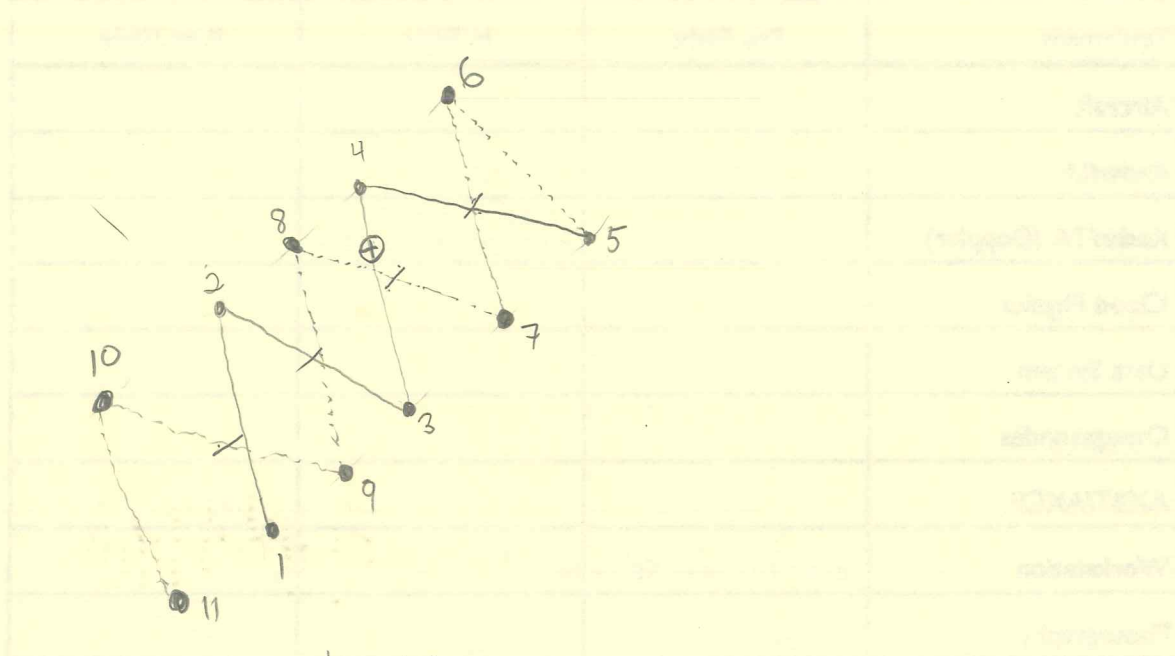
REMARKS:

Sonde accounting

HRD sondes: 7 total

NWS sondes: 10 total

E. (I) Proposed Flight Pattern (sketch or designate by number)



• drop points

⊕ NHC "center drop"

- midpoint drops (6-7, 7-8, 8-9, 9-10, 10-11)

E. (II) Actual Flight Pattern

Lead Project Scientist Event Log

Date 8-13-08

Flight 080814I

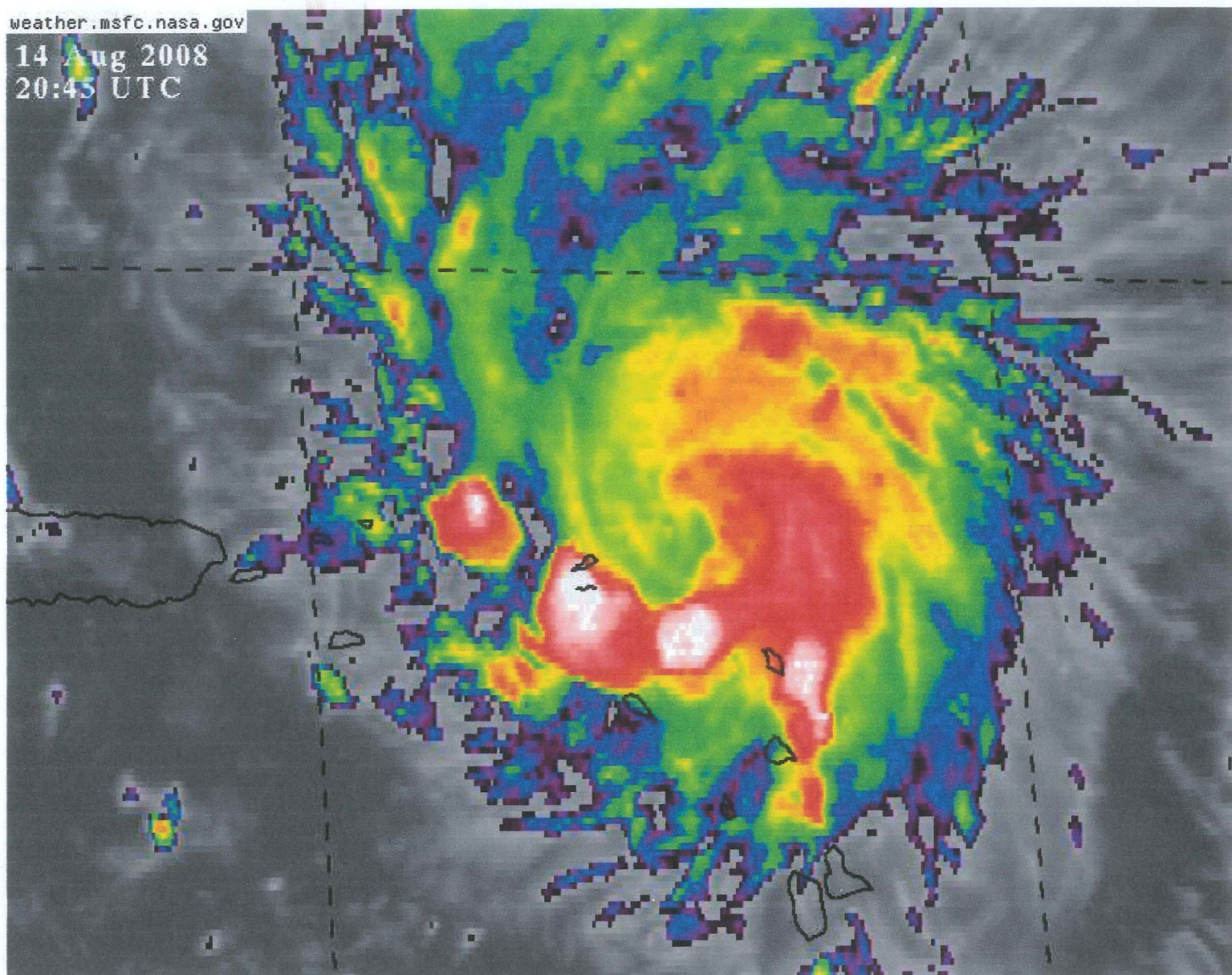
LPS JASON DUNTON

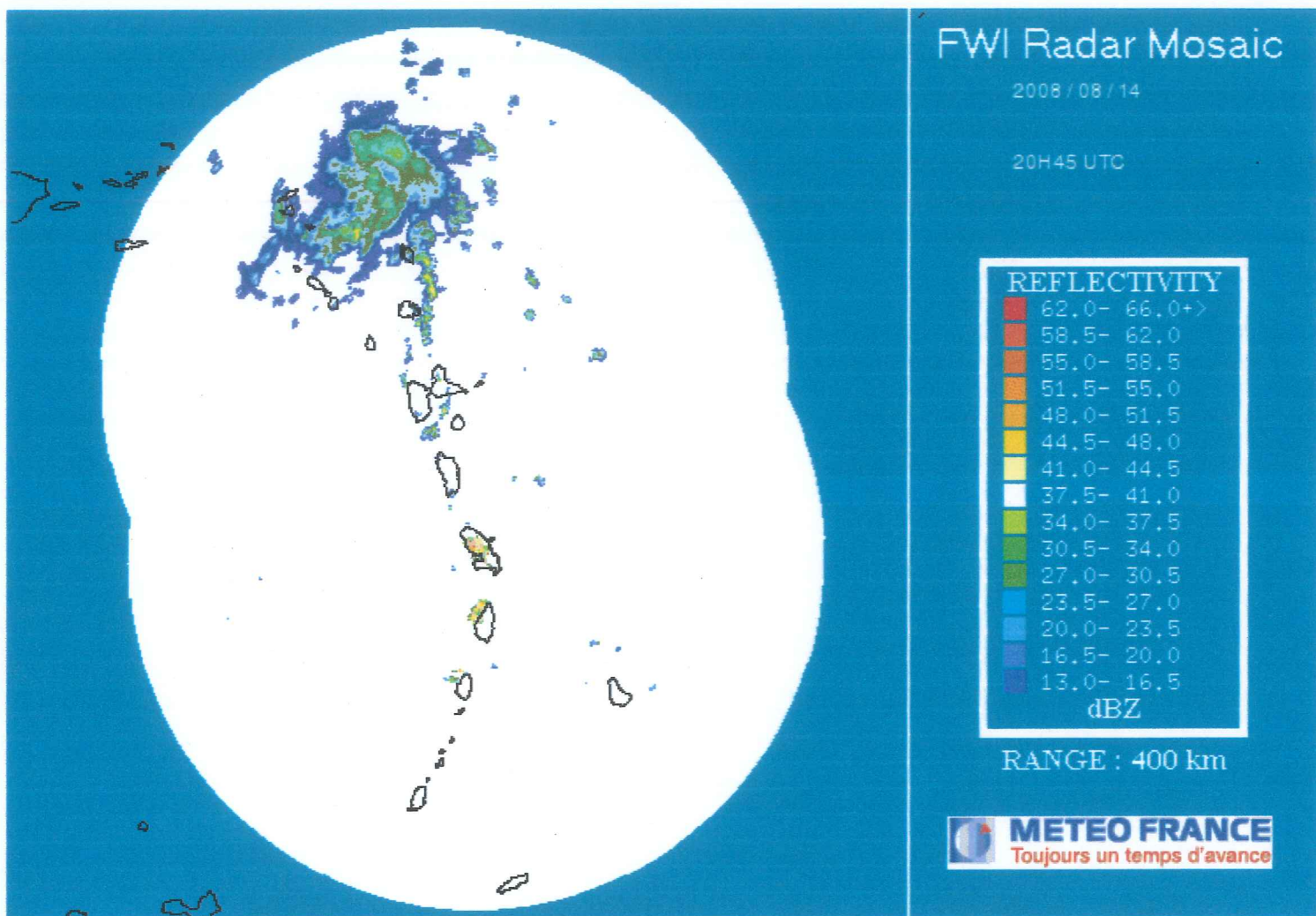
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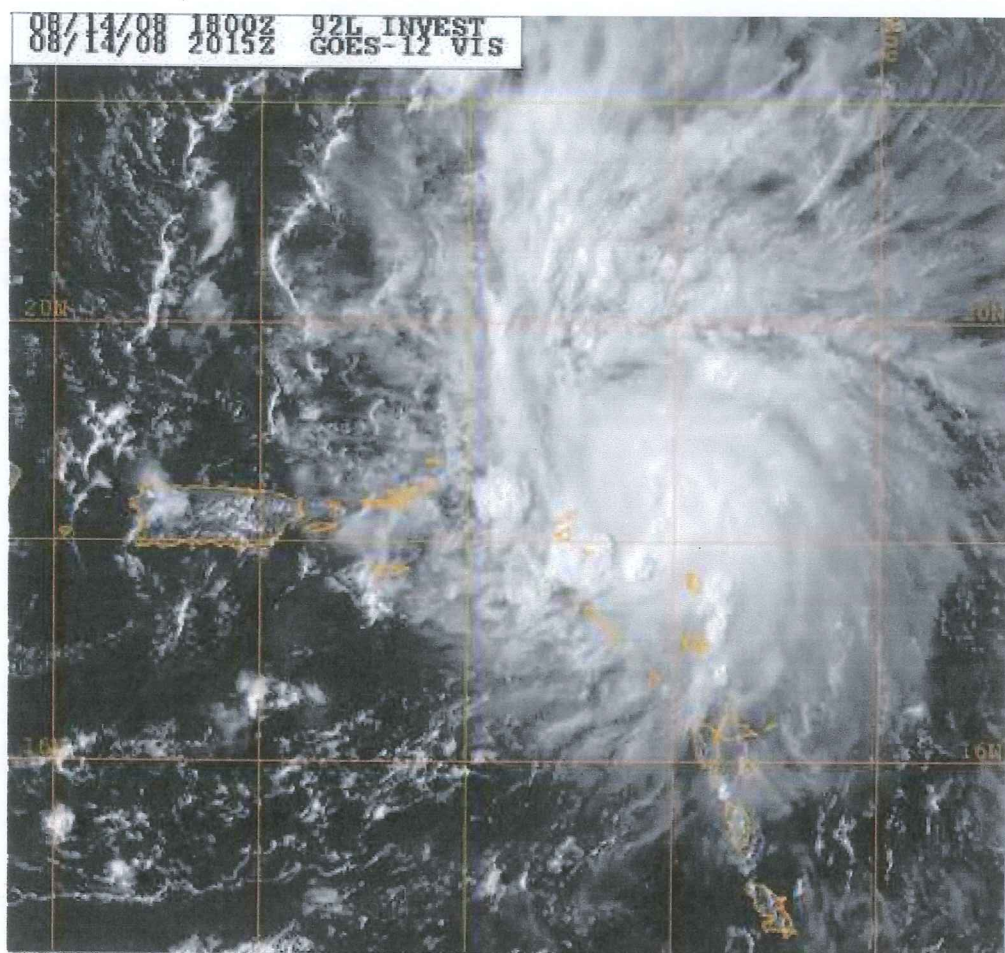
143/23 sfc

weather.msfc.nasa.gov

14 Aug 2008
20:45 UTC







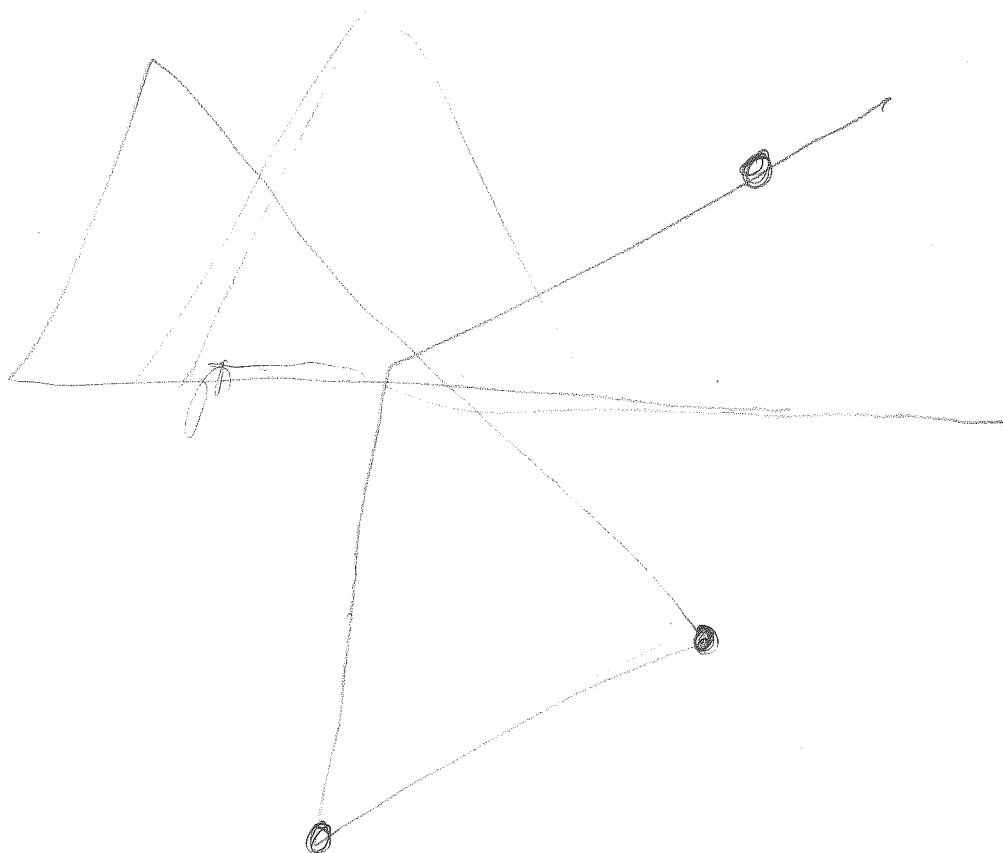


Fig 3

● - GPS drops

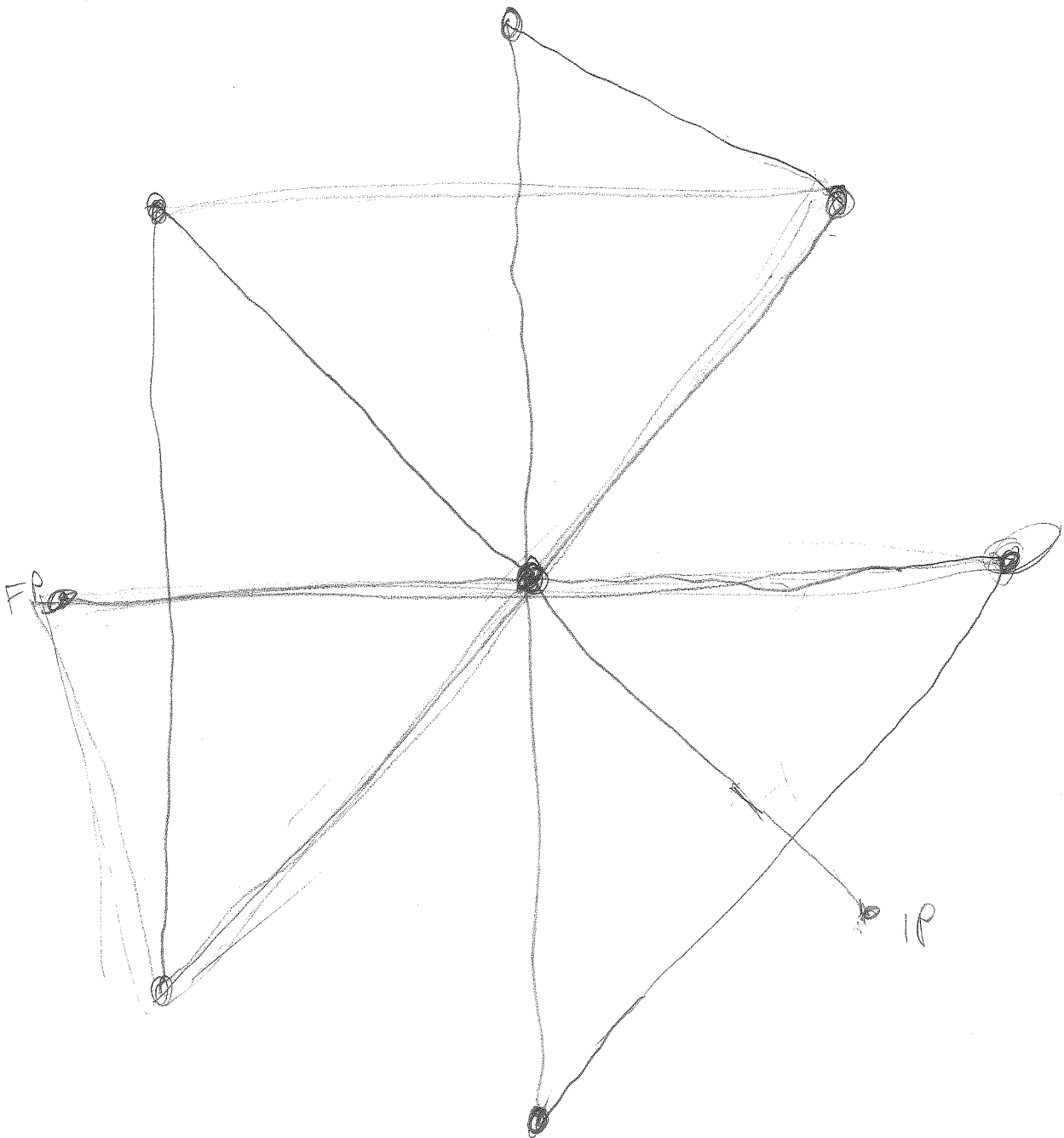


Fig. 1

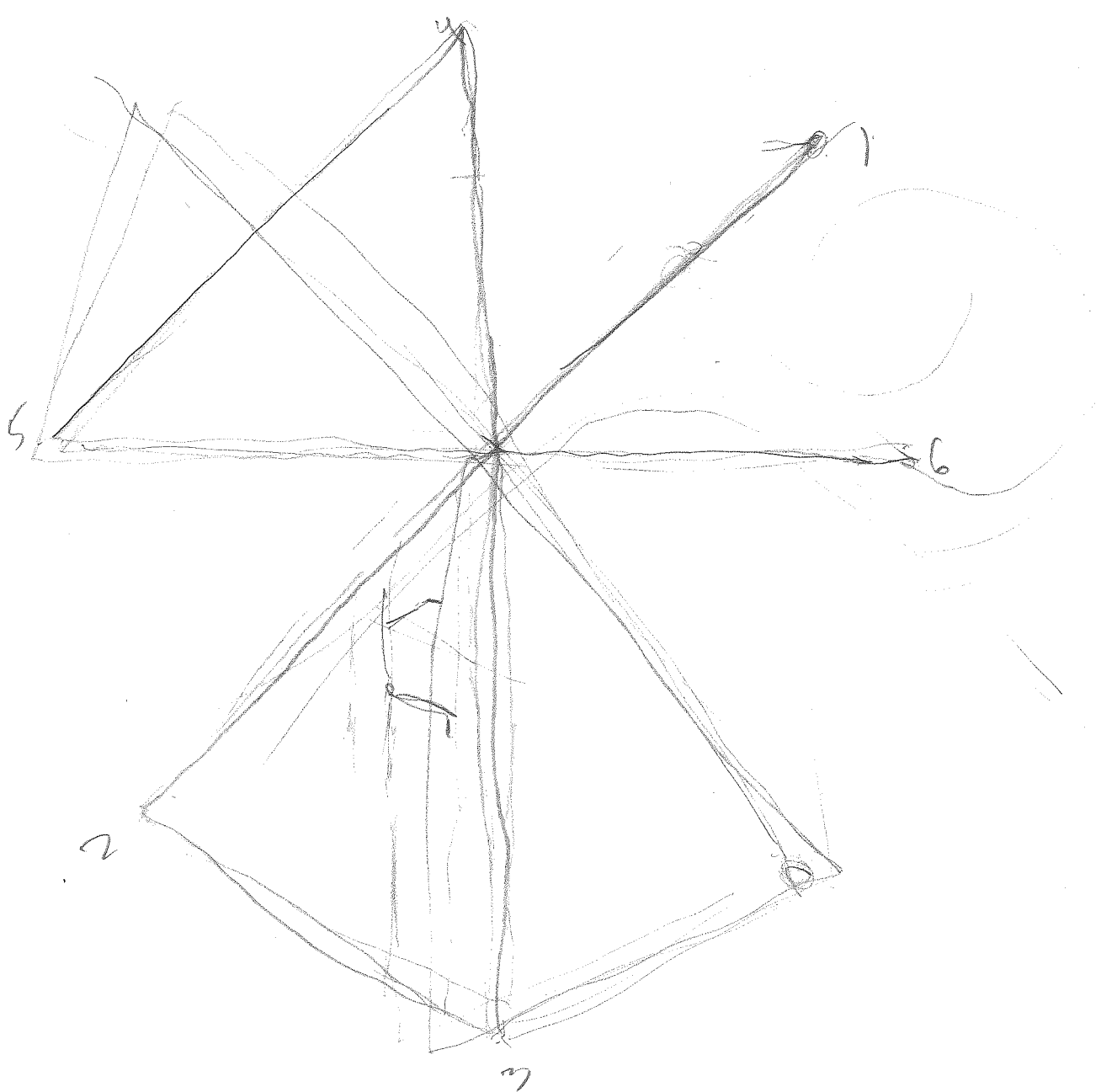
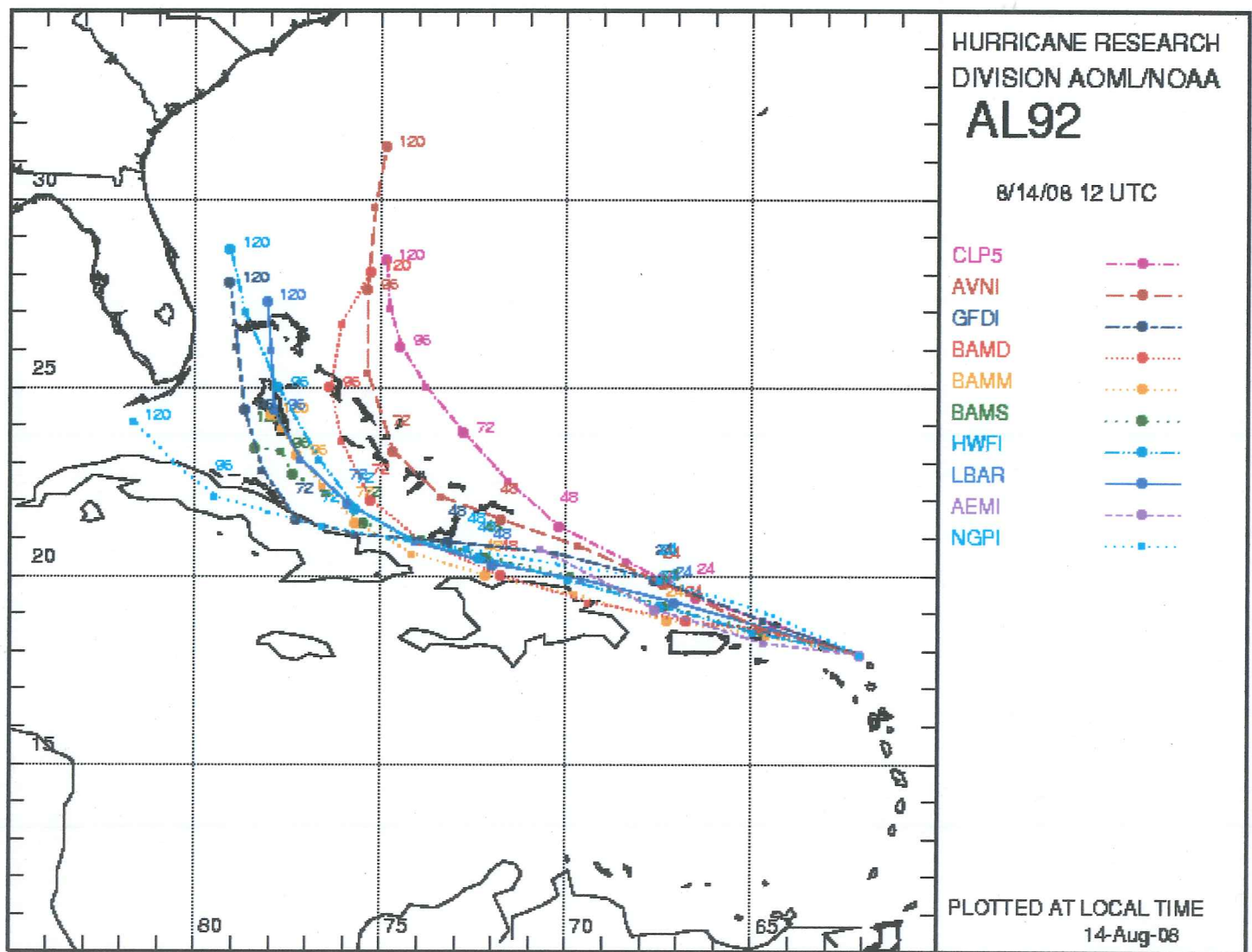
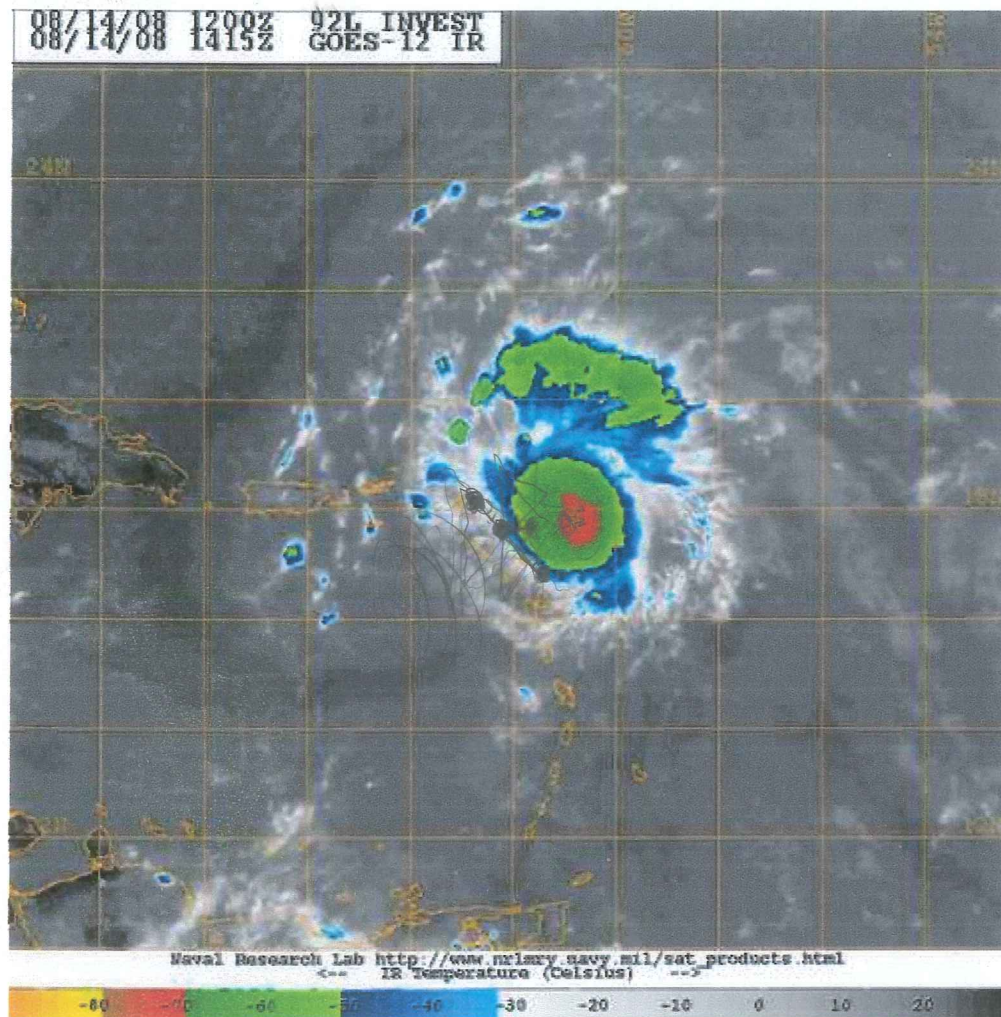


Fig. 2





16 Z

18 06'

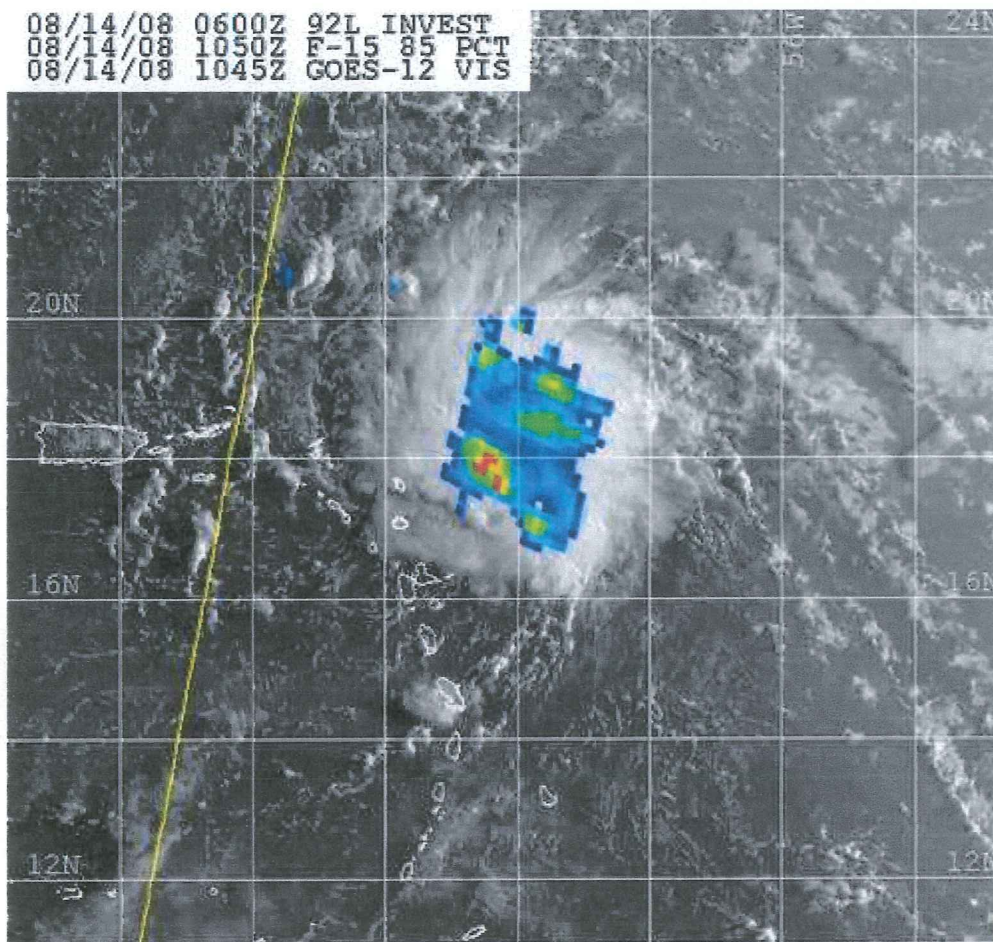
62 54'

12 Z

17 54'

62 06'

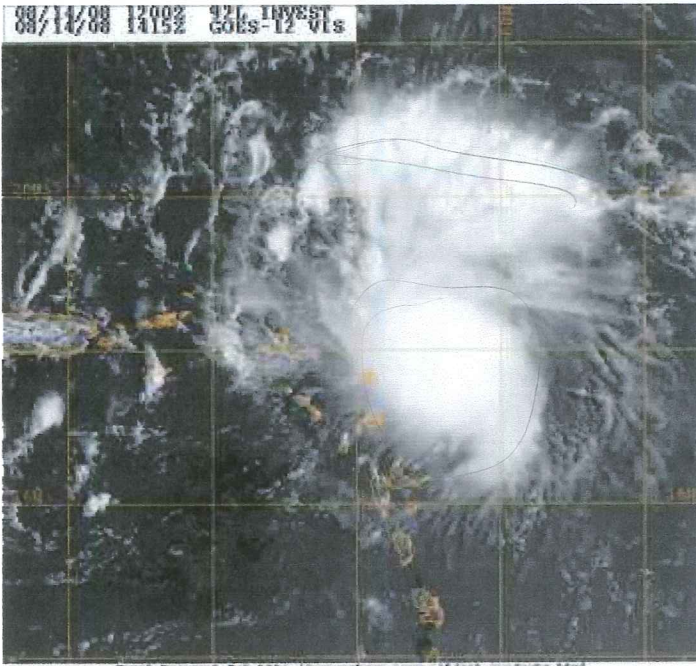
08/14/08 0600Z 92L INVEST
08/14/08 1050Z F-15 85 PCT
08/14/08 1045Z GOES-12 VIS



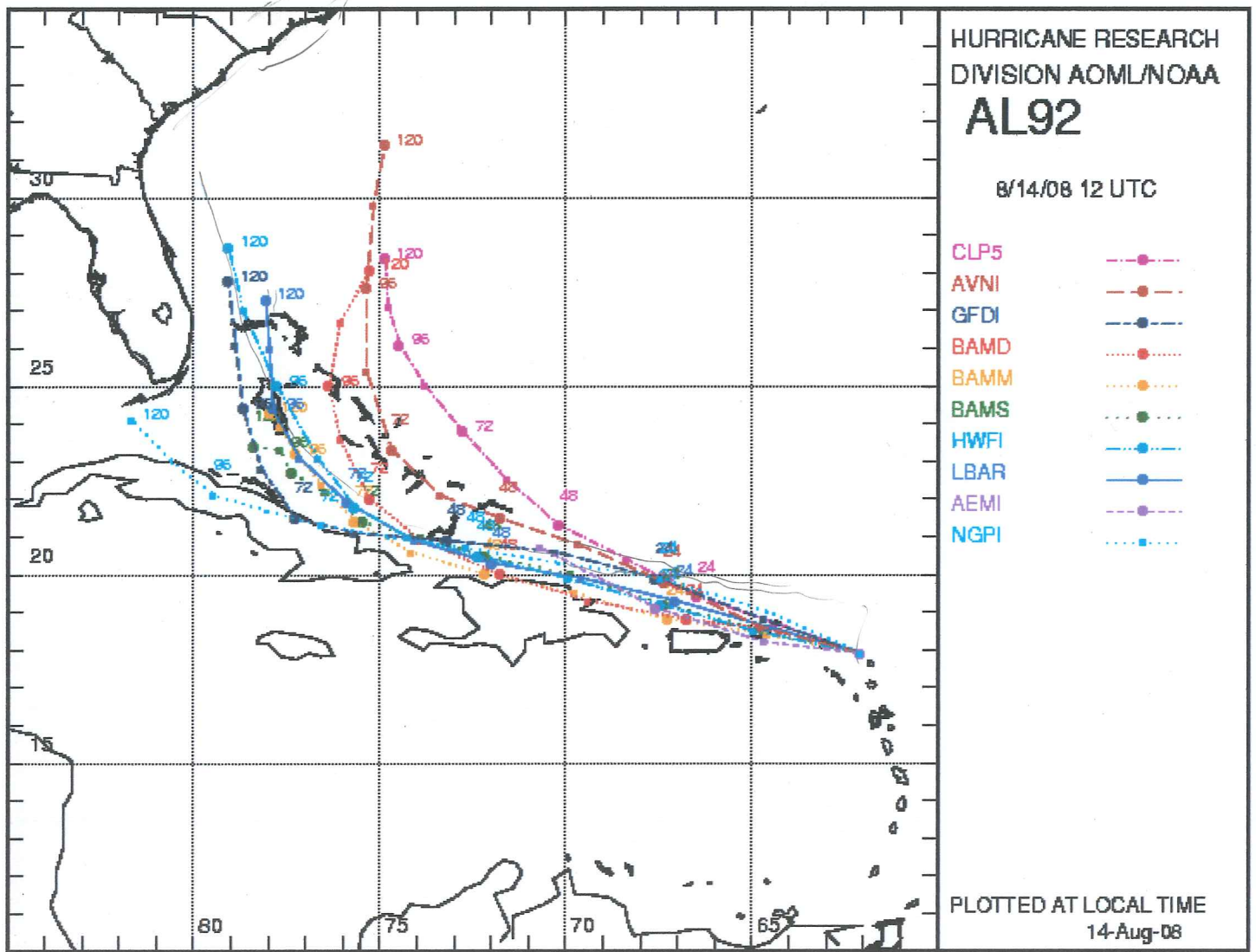
Naval Research Lab www.nrlmry.navy.mil/sat_products.html
<-- 85 GHz PCT (Kelvin) -->



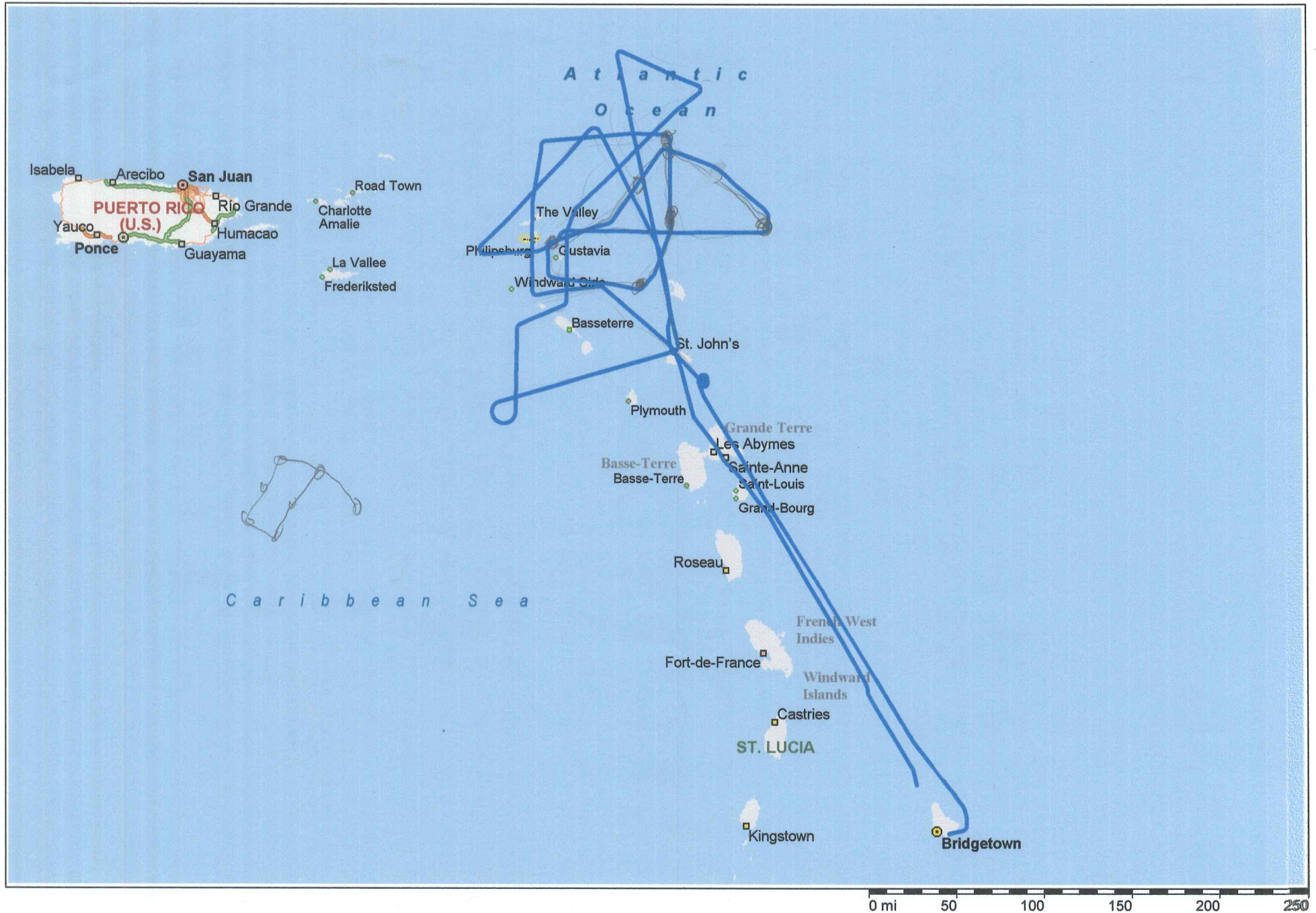
08/14/08 1200Z 92L INVEST
08/14/08 1415Z GOES-12 Vis



Naval Research Lab http://www.nrlmrv.navy.mil/nrl_products.html
Visible (Sun elevation at center is 64 degrees)



AL 92 8-14-08



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MISSION PLAN:

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N43RF Altitude: FL180-250 Proposed takeoff: 14/0300Z

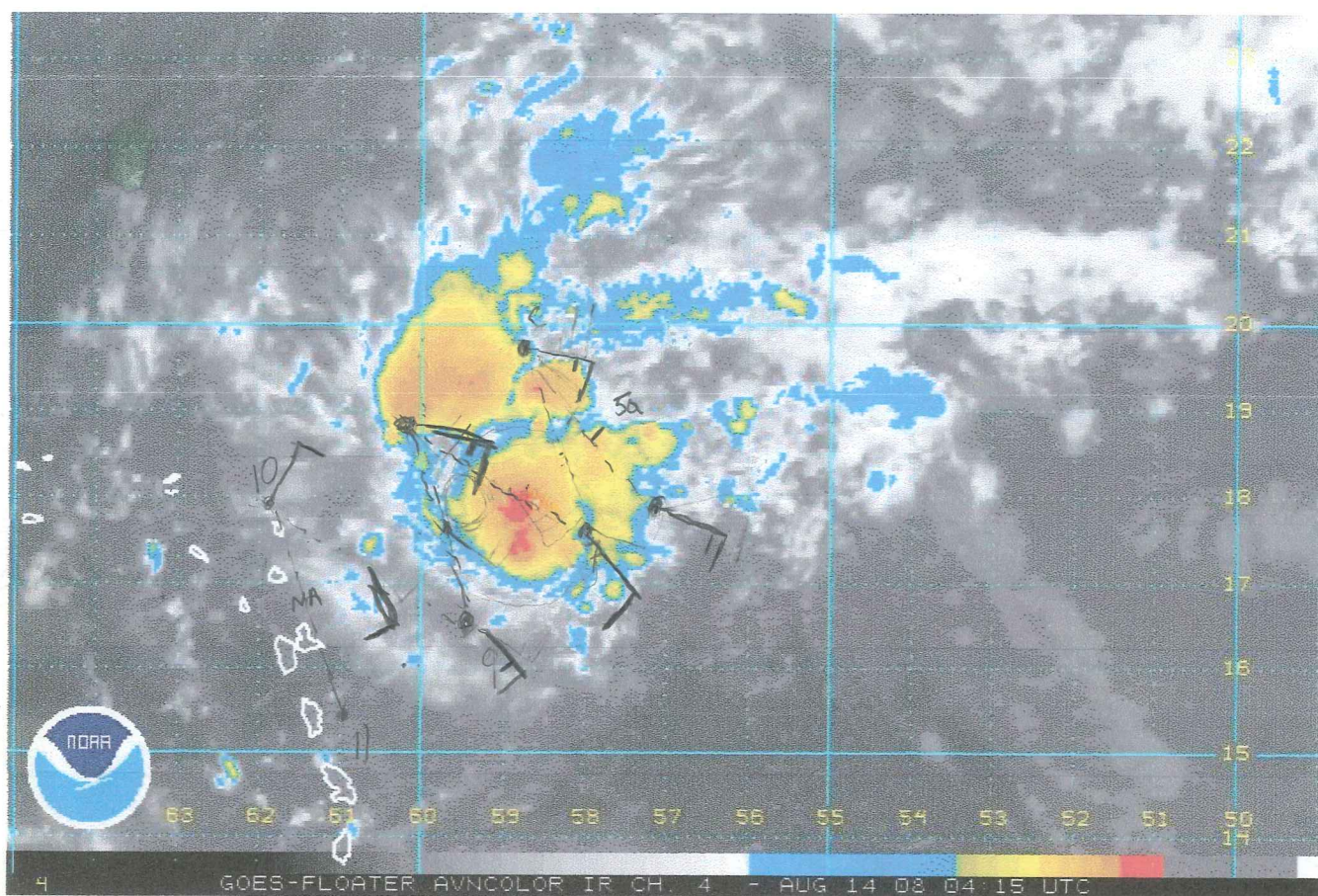
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DROP LOCATIONS

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#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	16 00	60 12		0:44
2	18 24	61 06		1:21
3	17 00	58 42		1:59
4	19 18	59 30		2:34
5	17 48	57 12		3:12
6	19 45	58 42		3:46
7	17 24	57 57		4:21
8	18 51	60 18		4:59
9	16 30	59 27		5:35
10	17 57	61 54		6:14
11	15 36	61 03		6:50

Mids



1st midpoint = 18 32 58 18

18.5N 58.3W

0743

080814I1

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MISSION PLAN:

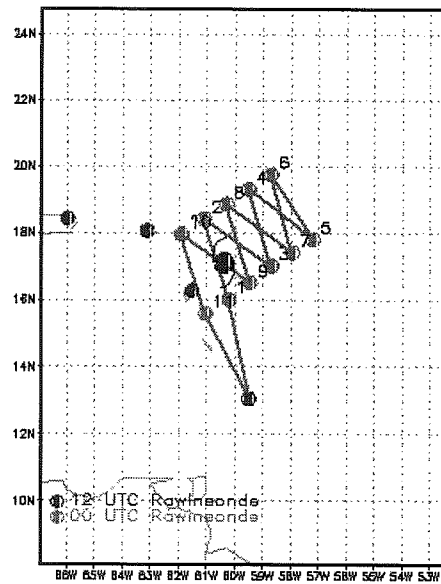
Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N43RF Altitude: FL180-250 Proposed takeoff: 14/0300Z

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TRACK DISTANCE TABLE

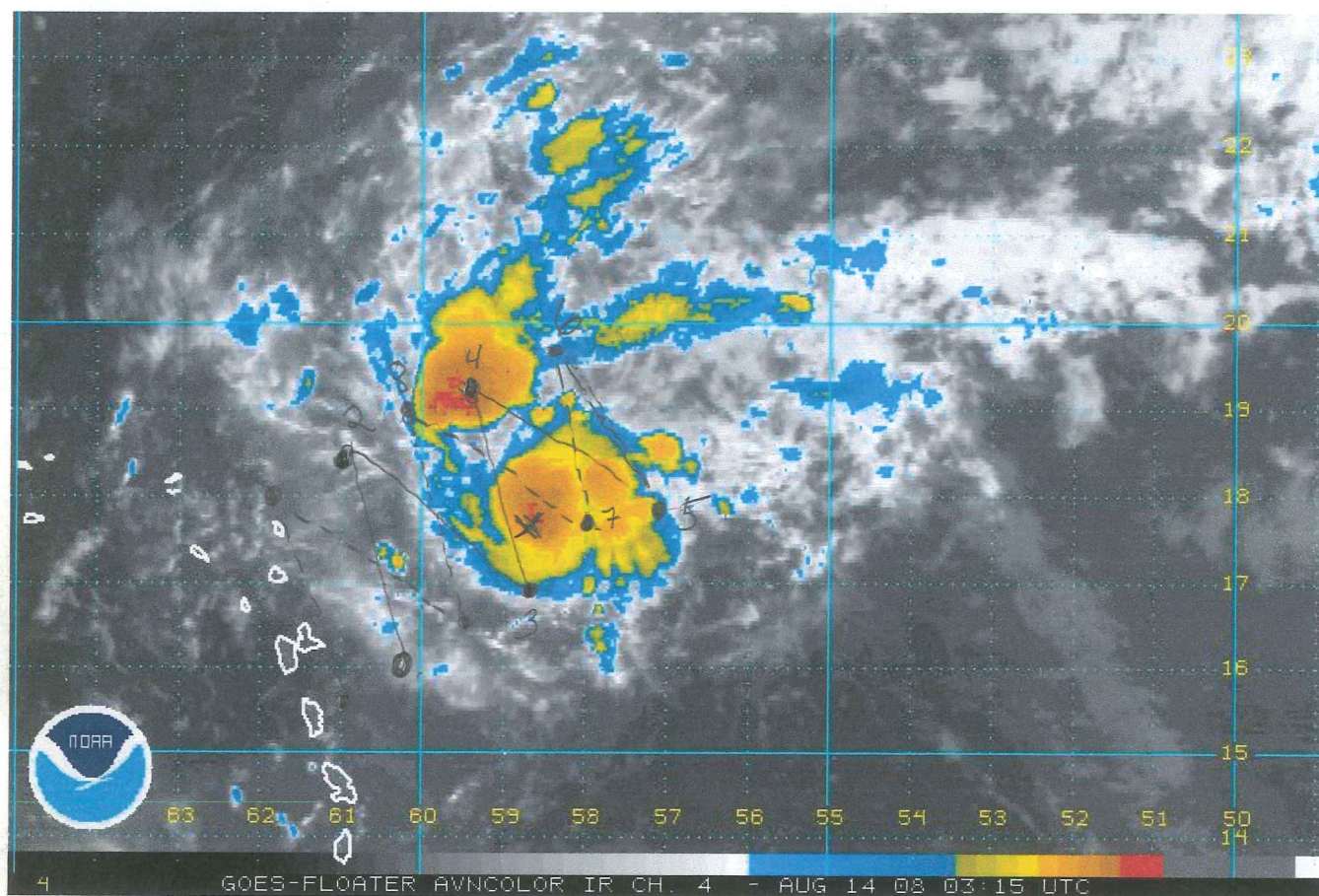
#	LAT (d m)	LON (d/m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	BARBADOS			0.	0.	0:00
1	16 00	60 12		181.	181.	0:44
2	18 24	61 06		153.	335.	1:22
3	17 00	58 42		161.	496.	2:01
4	19 18	59 30		146.	641.	2:37
5	17 48	57 12		159.	801.	3:16
6	19 45	58 42		145.	946.	3:51
7	17 24	57 57		148.	1093.	4:27
8	18 51	60 18		160.	1253.	5:06
9	16 30	59 27		149.	1403.	5:43
10	17 57	61 54		165.	1568.	6:23
11	15 36	61 03		149.	1718.	7:00
12	BARBADOS			178.	1895.	7:37



GADE COLA/18ES

File: out1.gif

2008-08-13-18:10



17.5N 58.7W NHC Ctr