

19990913HI. LBS

Floyd

Syn. Flow / Fig 4.

**E.2 Lead Project Scientist**

**E.2.1 Preflight**

MB

1. Participate in general mission briefing.

MB

2. Determine specific mission and flight requirements for assigned aircraft.

MB

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.

MB

4. Contact HRD members of crew to:

- a. Assure availability for mission.
- b. Arrange ground transportation schedule when deployed.
- c. Determine equipment status.

MB

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.

MB

6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOOC in Miami).

**E.2.2**

**In-Flight**

\_\_\_\_\_

1. Confirm from AOC flight director that satellite data link is operative (information).

\_\_\_\_\_

2. Confirm camera mode of operation.

*- real time in eye*

\_\_\_\_\_

3. Confirm data recording rate.

\_\_\_\_\_

4. Complete Form E-2.

**E.2.3**

**Post flight**

\_\_\_\_\_

1. Debrief scientific crew.

\_\_\_\_\_

2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOOC.

\_\_\_\_\_

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 MGOOC as to where you can be contacted and arrange for any further coordination required.

\_\_\_\_\_

7. Prepare written mission summary using form E-2 p.3 (due to Field Program Director 1 week after the flight).

*21 755-10*

Floyd Syn. Flow/Fri. 4

Lead Project Scientist Check List

Date 9/13/99 Aircraft 42 Flight ID 990913H

A. —Participants:

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HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>M. Black</u>	Flight Director	<u>Stan Czayka</u>
Cloud Physics	<u>Bob Black</u>	Pilots	<u>Taggart, Tenney, Omeaver</u>
Radar	<u>P. Dodge</u>	Navigator	<u>Carl Newman</u>
Workstation	<u>P. Dodge</u>	Systems Engineer	<u>Rock, Greg Best</u>
Photographer/Observer	<u>Eric Withorn</u>	Data Technician	<u>Sean McMillan</u>
Dropwindsonde	<u>B. Black / m Black</u>	Electronics Technician	<u>Tim Roles</u>
AXBT/AXCP/Guest	<u>Jim Carswell</u>	Other	<u>GPS - AVAFS - Carlos Gonzalez</u>

SFMR, SCATr

Take-Off: 1730 Location: St. Croix Landing: \_\_\_\_\_ Location: \_\_\_\_\_

Number of Eye Penetrations: \_\_\_\_\_

B. —Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>13/1500</u>	<u>24.1</u>	<u>72.1</u>	<u>921</u>	<u>135 kts</u>
<u>14/0000</u>	<u>24.5</u>	<u>74.0</u>	<u>?</u>	<u>135 kts</u>
<u>13/1942</u>	<u>24°08'</u>	<u>73°14'</u>	<u>924</u>	<u>130 kts</u>

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C. —Mission Briefing:

Syn. Flow at Max. Altitude, west from St. Croix south of Hispanola, NE thru Mona Passage east of Floyd, descend to 14kft for 50 nm legs - Figure 4 starting north, south, east, exit to west, direct to Tampa International. 16 planned drops plus eyewall, probably not eye. 43 will depart Mia. at 1730 - XCDX with 150 mi legs. 49 will cover north of Floyd - land in Savannah

D. —Equipment Status (Up ↑, Down ↓, Not Available —, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	# of DATs or Expendables
Aircraft	Up	Up		
Radar/LF	Up	Up		
Radar/TA (Doppler)	Up	Up		
Cloud Physics	Up	Up		
Data System	Up	Up		
Dropwindsondes	Up	Up		
AXBT/AXCP	not used	—		
Workstation	Up	Up		
Videography	Up	Up		

SFMR up - SCAT up

REMARKS:

**Mission Summary**  
**Storm name**  
**YYMMDDA# Aircraft 4\_RF**

**Scientific Crew (4 RF)**

Lead Project Scientist	_____
Radar Scientist	_____
Cloud Physics Scientist	_____
Dropwindsonde Scientist	_____
Boundary-Layer Scientist	_____
Workstation Scientist	_____
Observers	_____

*Mission Briefing: (include sketch of proposed flight track or page #)*

*Mission Synopsis: (include plot of actual flight track)*

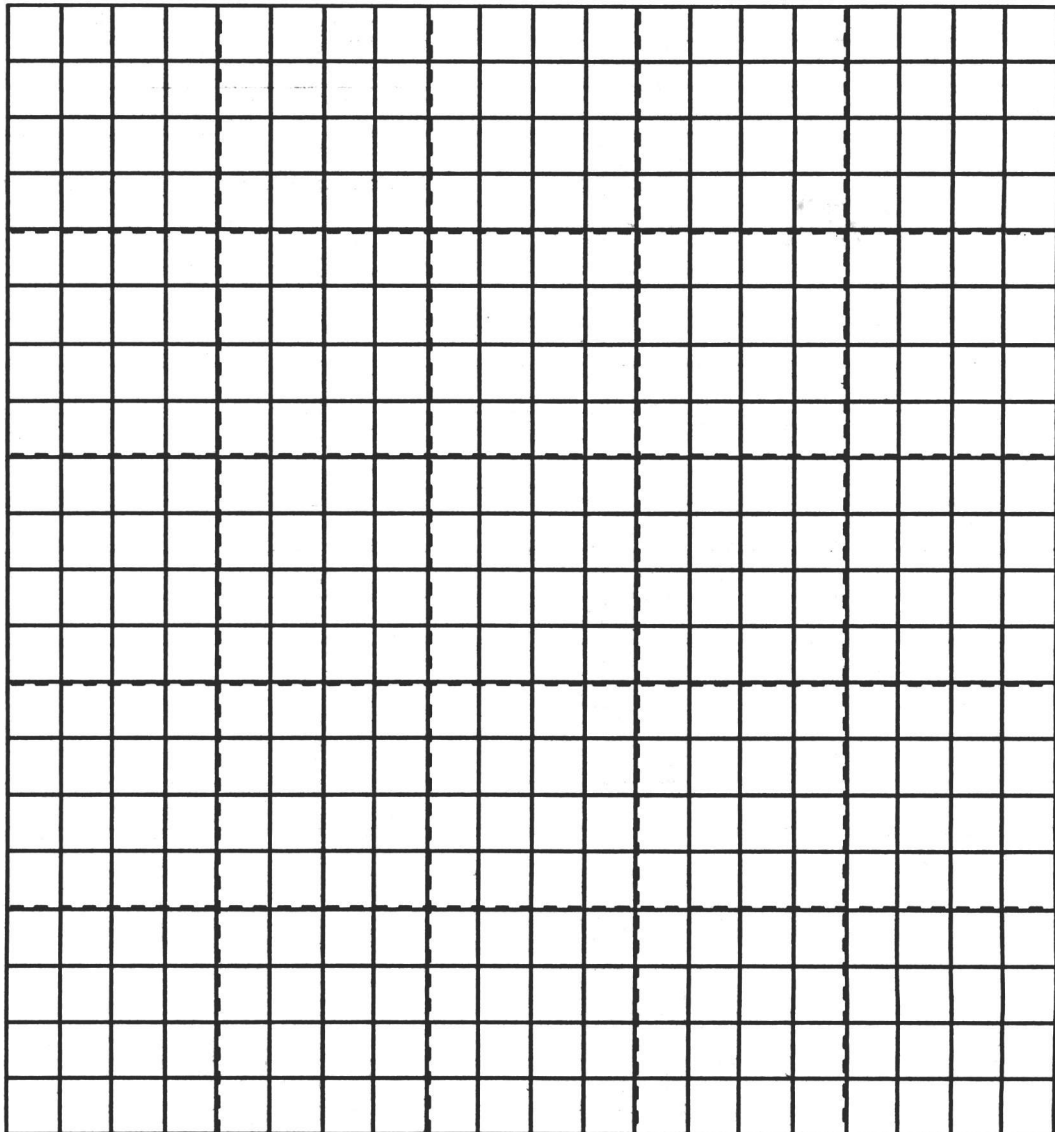
*Evaluation: (did the experiment meet the proposed objectives?)*

*Problems:(list all problems)*

### Observer's Flight Track Worksheet

Date \_\_\_\_\_ Flight \_\_\_\_\_ Observer \_\_\_\_\_

Latitude (°)



Longitude (°)

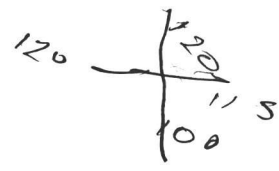
5pm  
 13/21 24.2 72.7 15/06 28.4 7  
 14/1  
 130  
 65 mte

Form E-2  
 Page 5 of 5

Floyd Syn. Flow / Ray

Lead Project Scientist Event Log

Date 9/13/99 Flight 990913H LPS M. Black



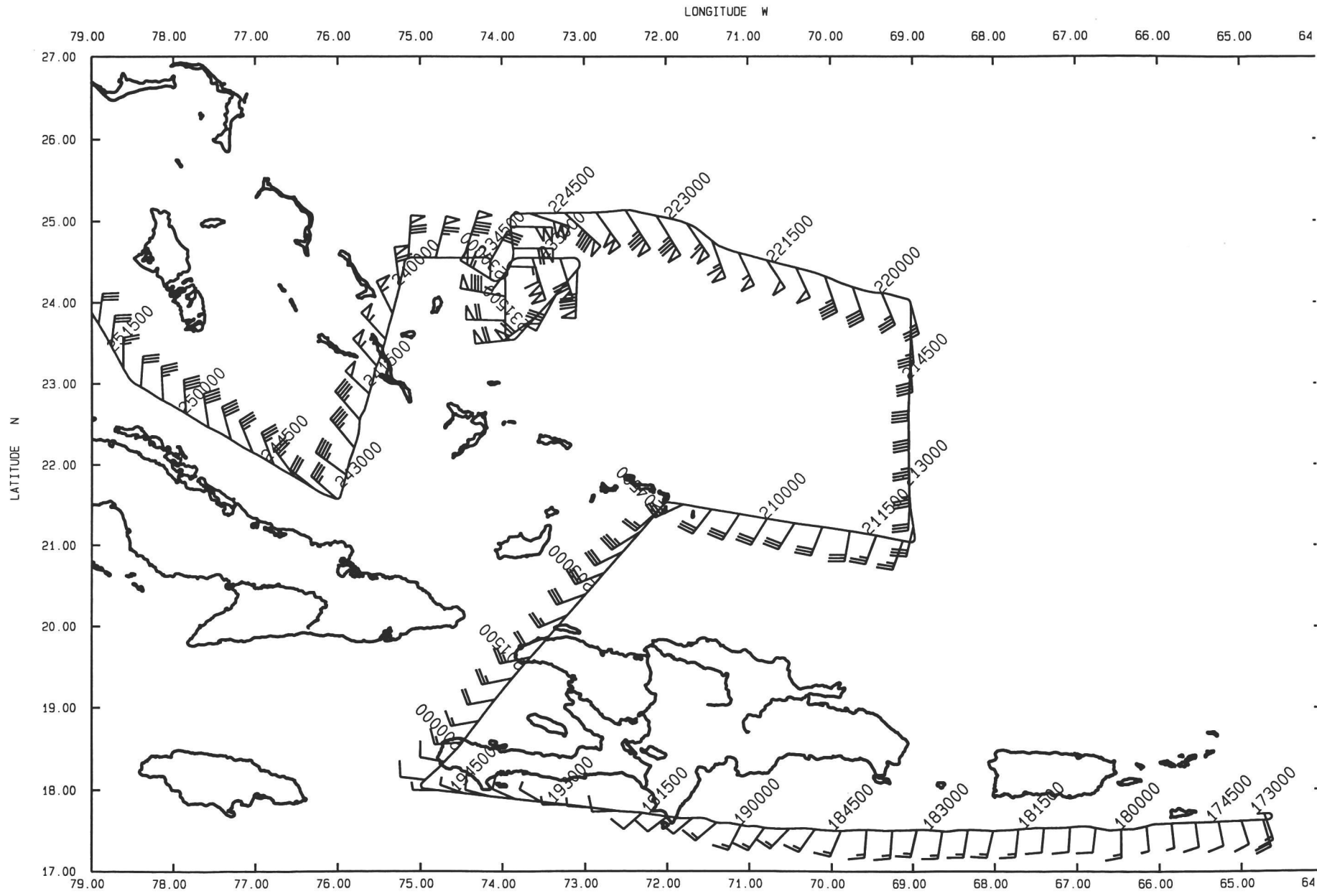
Time	Event	Position	Comments
1730	Takeoff	St. Croix	
181947	Drop #1	17.5 68.00	
185159	Drop #2	17.51 70.53	South of Hispanola
192139	Drop 3	17.76 72.75	South of Haiti.
204551	Drop	21.5 71.95	In deep cloud
204745	Drop Backup	21.5 71.79	In cloud
212136	Drop	21.13 69.97	
2200	Turn to west-northwest		
2210	Descending to 14,000 radar		
222359	Drop 2/25 miles east of storm	24.79, 71.49	50 kts SW
2232	Eye 100 miles to SW - concentric eyewall		
2237	Crossing outer eyewall		
224142	Drop in outer eyewall NE quad		
2248	classic concentric eyewalls		
2249	Turn to south into eyewall - 40 miles out		
225530	Drop in inner eyewall		
225550	Drop in inner eyewall		
230236	South eyewall		
	South eyewall		
	South eyewall		
2300	22/23 73.56		
2315	Turn in to eye		

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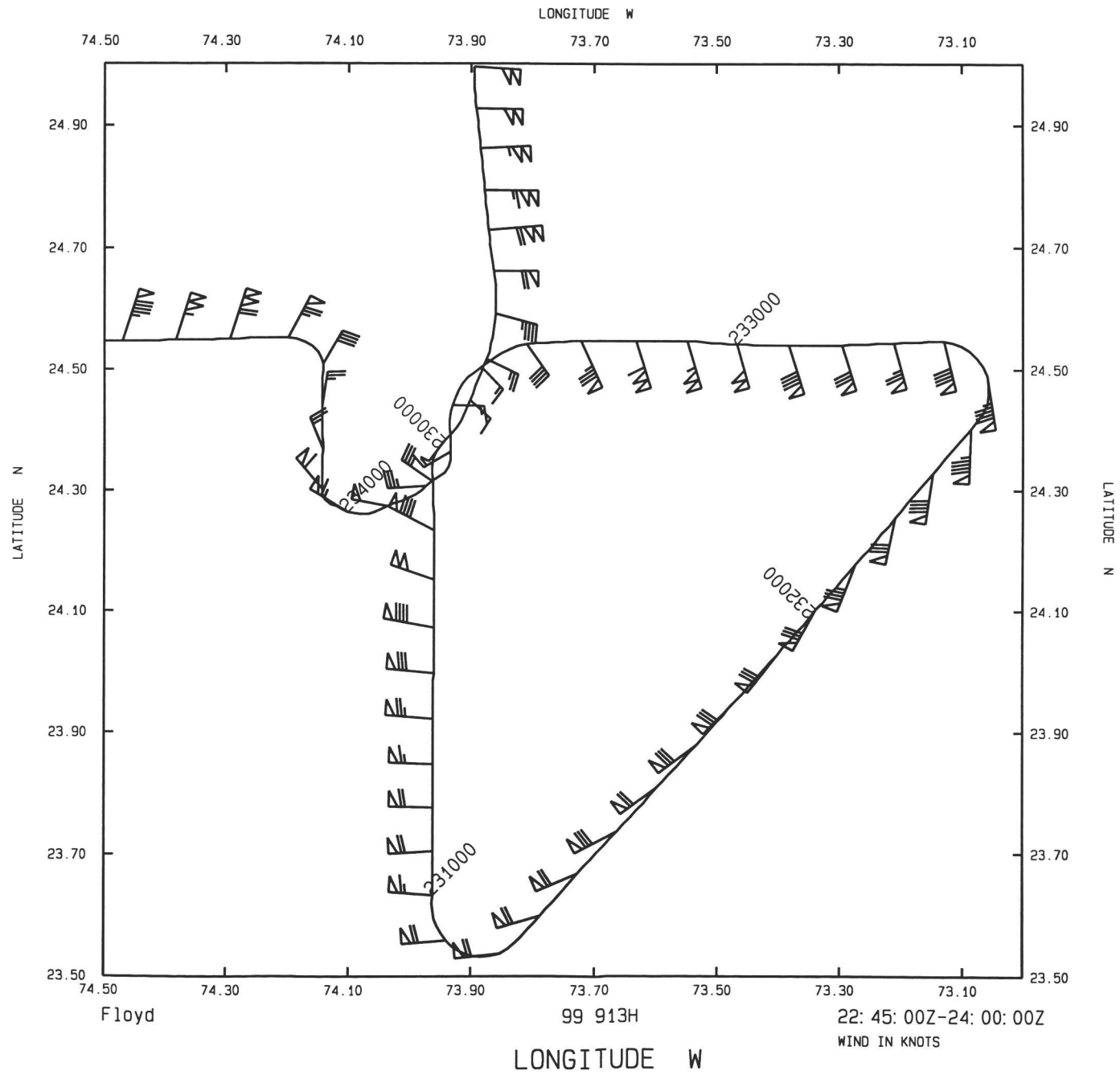
Floyd

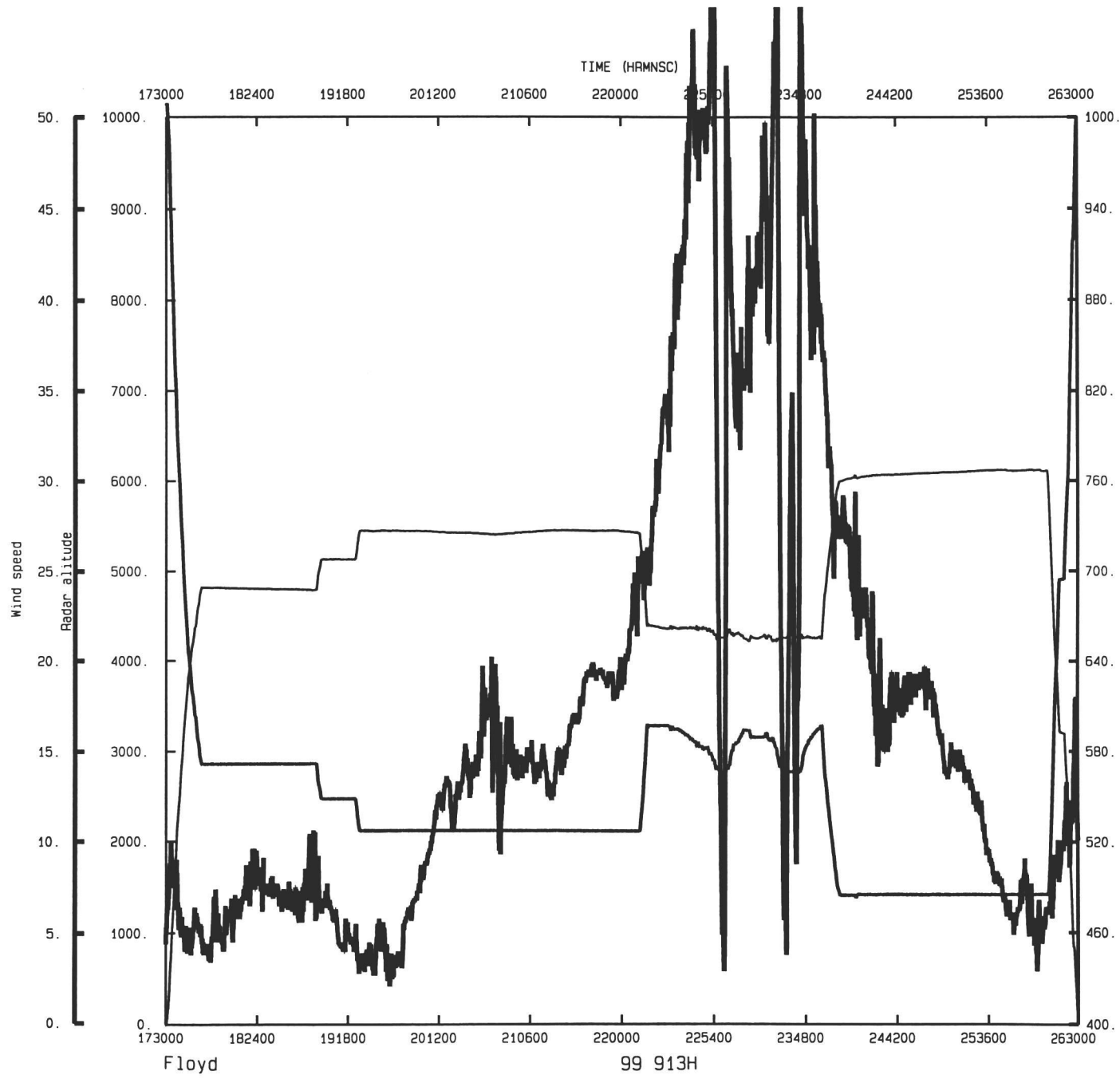
99 913H

17: 30: 00Z-26: 30: 00Z

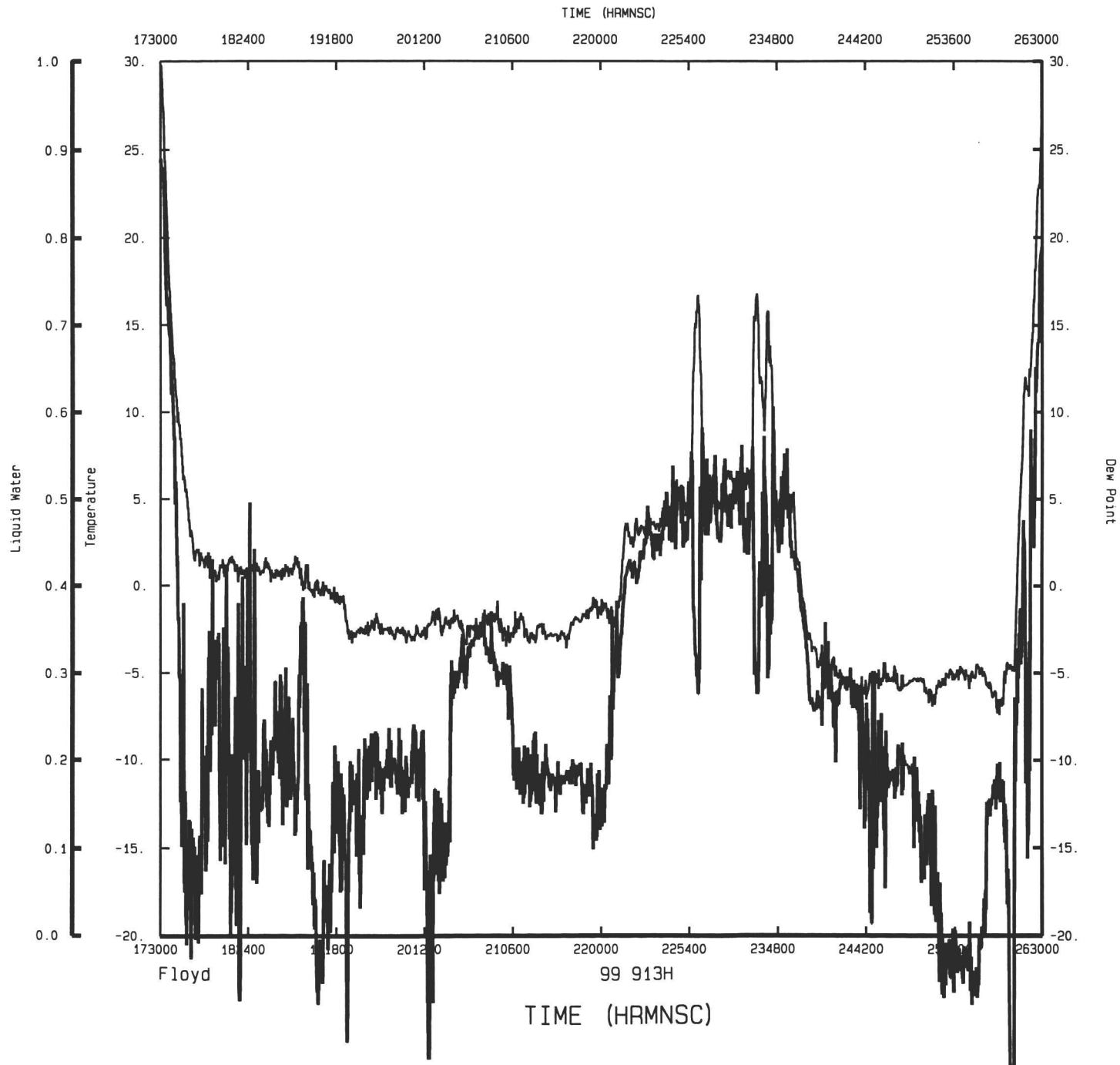
WIND IN KNOTS

LONGITUDE W





NOAA/HRD



NOAA/HRD