

19950815I-LPS

**Mission Summary**  
950815I (NOAA-43RF)  
Operational Synoptic Flow Experiment

Scientific Crew:

Lead Project Scientist	Franklin
Cloud Physics Scientist	Goldenberg
Dropwindsonde Scientists	Kaplan, Aberson
Workstation	Griffin

Mission Briefing:

At 1200 UTC 15 August, Hurricane Felix was approaching the Outer Banks of North Carolina. The NHC official track forecast issued at 0900 UTC had Felix making landfall in 72 h. The Director of NHC requested that HRD conduct a one-aircraft synoptic flow experiment to document the environmental flow surrounding Felix. The P-3 flight track was coordinated with an Air Force ferry flight to the south of Felix.

Mission Synopsis:

N43RF picked up the HRD crew at Opa Locka and took off at 1826Z. The flight plan surveyed the environment of Felix to the southwest and north, with the release of 25 ODWs (23 primary, 2 backups). The first ODW was released from an altitude of 526 mb; by the end of the mission we had reached 375 mb. The ODWs were encoded on the airborne workstation and send via ASDL to NMC and NHC. The flight recovered in Boston, landing around 0430Z.

Mission Evaluation and Problems:

The ODWs pinpointed the location of the high pressure ridge to the north of the hurricane that was a factor in Felix's track. Although the ODWs were received at NMC, a coding error at NMC prevented the ODWs' inclusion in the 00Z Aviation run. This problem was noted and corrected in time for the 00Z MRF run. The MRF forecast for Felix was noticeably superior to that of the AVN run.

Except for a brief period of time around local sunset, the ODWs worked very well. The ODW editing code, used for the very first time on the new "Windows" environment HP workstation, bombed off while processing two drops, both without winds. The outgoing TEMP-DROP message for one of these sondes was generated manually; the other sonde's data were not sent. This problem has since been corrected.

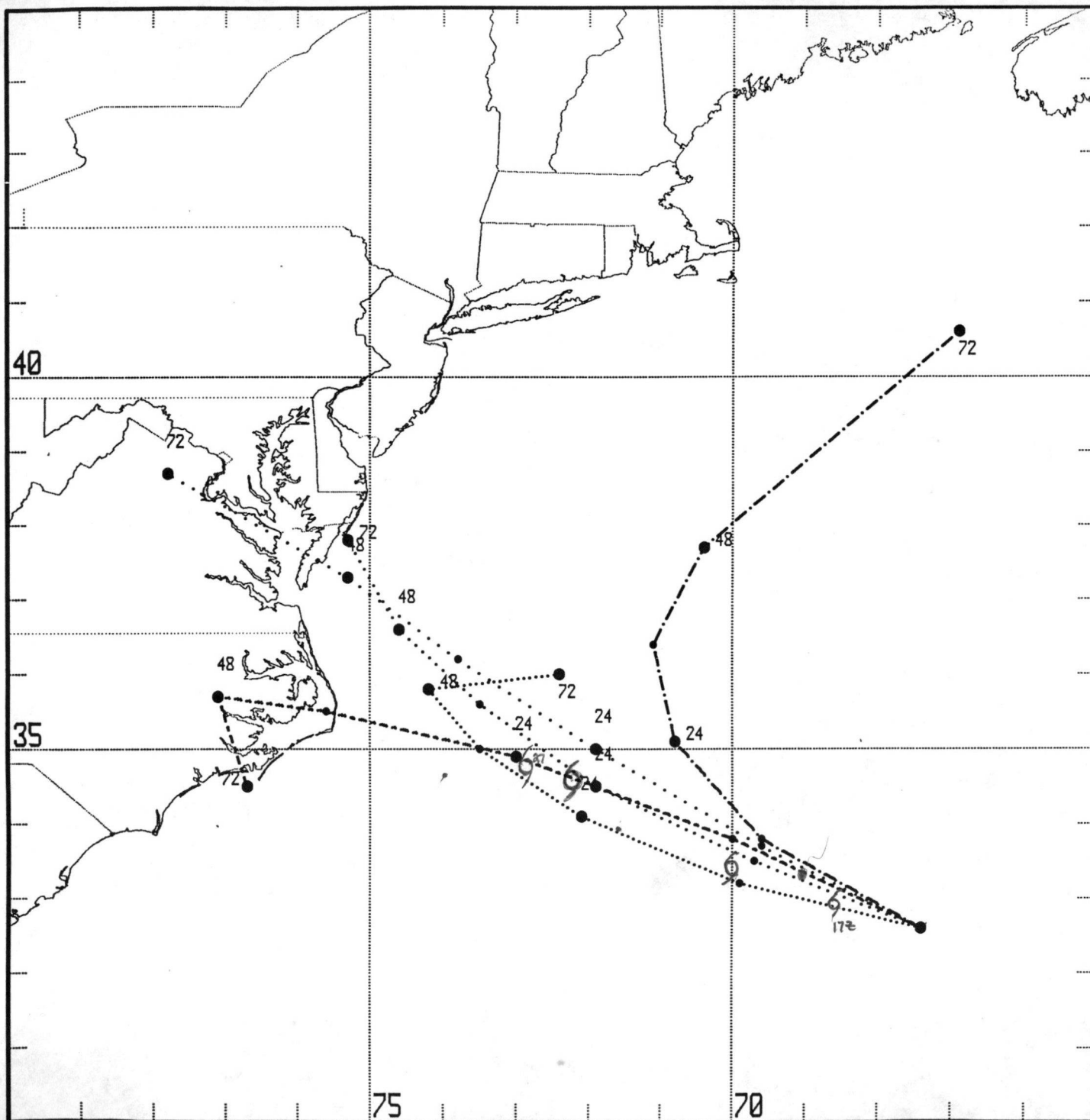
James Franklin

HURRICANE RESEARCH  
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# FELIX

8/15/95 12 UTC

BAMD	.....●.....
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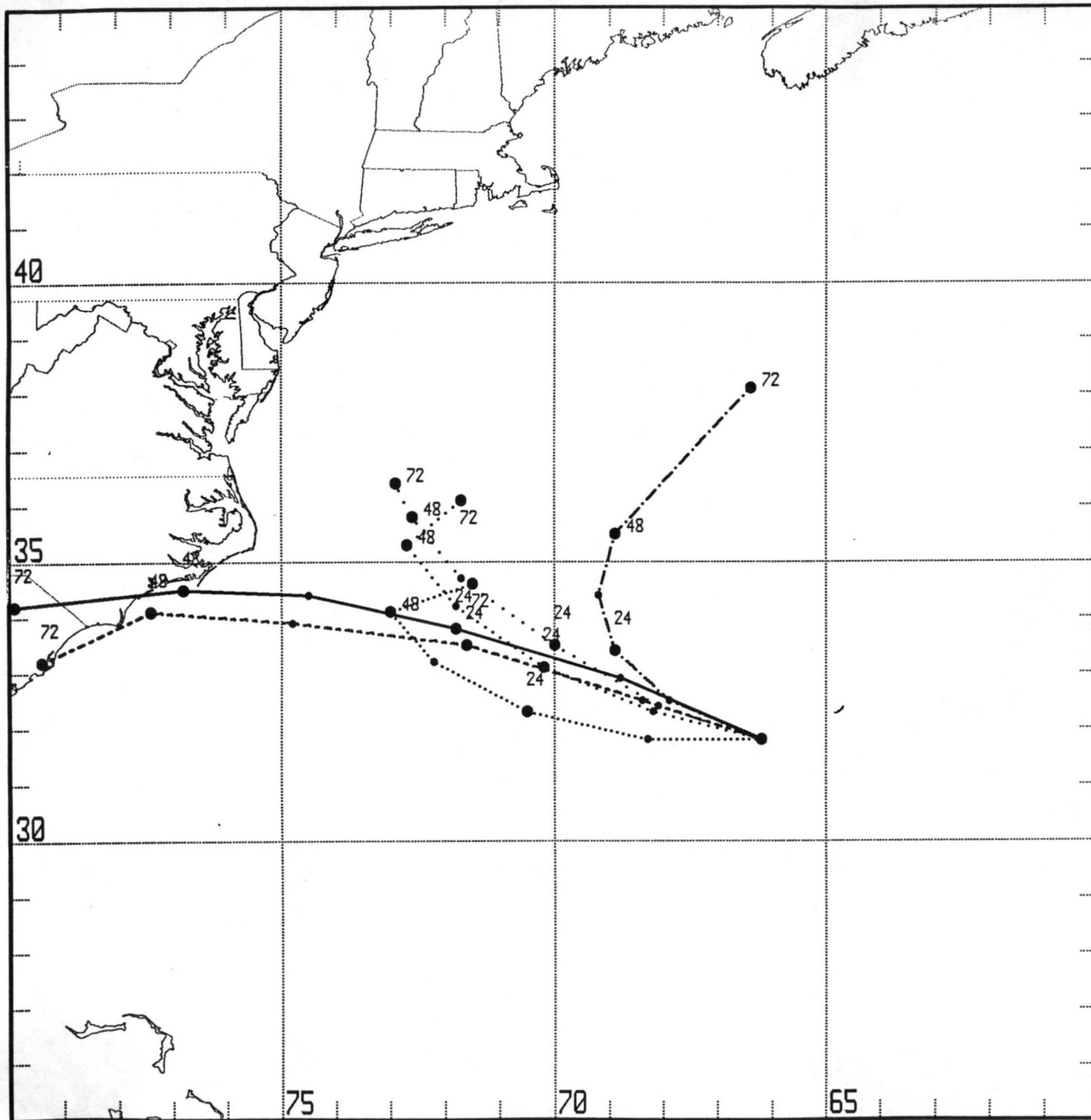
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09:48:23 15-AUG-95

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# FELIX

8/15/95 06 UTC

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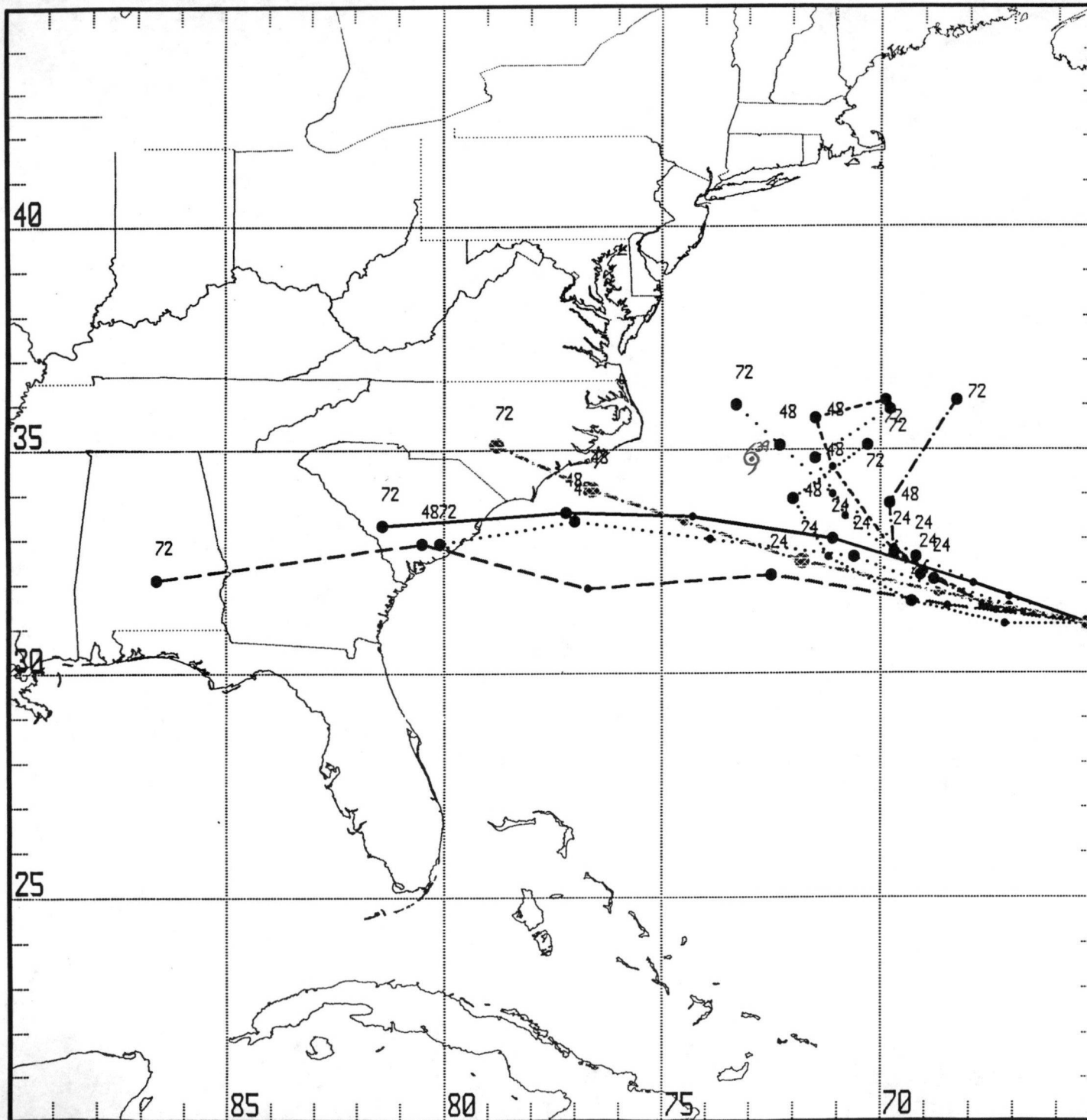
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09:47:41 15-AUG-95

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# FELIX

8/15/95 00 UTC

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09:46:56 15-AUG-95