NOAA Aircraft Operations Center
Flight Activities - 2005 Hurricane Season

60th Interdepartmental Hurricane Conference

Mar 21, 2006
2000-2005 Hurricane Flight Hours - P-3 and G-IV
2005 Hurricane Season
P-3 and G-IV

- Hurricane Reconnaissance: 191.6 Hours, 26 flights
- Hurricane Surveillance: 388.3 Hours, 50 flights
- Hurricane Research: 263.9 Hours, 39 flights
- NESDIS Ocean Winds: 53.3 Hours, 8 flights

• Total: 897.1 Hours, 123 flights
2005 Hurricane Season P-3
(Operational/Research Missions)

• Hurricane Awareness Tour  14.8 Hours  8 flights
• Hurricane Reconnaissance  191.6 Hours  26 flights
• NESDIS Ocean Winds       53.3 Hours  8 flights
• TCSP/IFEX                145.6 Hours  20 flights
• RAINEX/IFEX              60.0 Hours  9 flights
• Ocean Heat               14.4 Hours  2 flights
• Total                    479.7 Hours  73 flights
2005 Hurricane Research

- TCSP/IFEX
- RAINEX/IFEX
- Ocean Winds
- Ocean Heat Content
2005 MISSISSIPPI & EAST COAST HURRICANE AWARENESS TOUR

April 29, 2005 and May 15, 2005

Stennis International
East Coast HAT 2005
1 - 6 May
2005 Hurricane Research

Tropical Cloud Systems and Processes Mission

ER-2 Doppler Radar (EDOP) Views Detailed Super-Anatomy Of Intense Hurricane Emily During NASA's TCSP Experiment

Principal Investigator: Dr. Gerald Heymsfield, NASA GSFC

Vertical slice showing rain structure across the entire storm - 1:30 - 2:00 AM CST July 17, 2005
Real Time Flight Tracks
And Lower Fuselage Radar Data

• Katrina
• Ophelia
• Rita
Ocean Vector Winds from QuikSCAT
Ocean Heat Content
NOAA G-IV
Hurricane Missions
(Operational / Research)

• Hurricane Surveillance
  50 Flights
  388.3 Hours
  1225 Dropwindsondes
  162,740 Miles Flown

• SALEX (Saharan Air Layer Experiment)
  8 Flights
  43.9 Hours
  115 Dropwindsondes
2005 NOAA G-IV Hurricane Season
Flight Hour Summary (SALEX)

- 2 Deployments
- 4 Missions
- 44 Hours
- 115 Dropwindsondes
NOAA Citation Damage Photography

7000 Photos taken in 7 days -- Images available within 24 Hours

5 Million Photos (27 TBs) Downloaded Daily by the Public!
AOC Helicopter Support After Katrina Landfall

33 Flights
84 Hours
Less than 21 days!

Missions Flown:

- Humanitarian Relief
- Damage Assessment
- Hazmat Support
- Tide Gauge Repair
Thank you