



ICCAGRA Meeting 23 May 2006: Marina, CA



NOAA Aircraft Operations Center



MacDill AFB, FL





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Aircraft Operations Center





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AOC FACILITIES



MACDILL AIR FORCE BASE, FL.



HANGAR #5





HANGAR #5 MacDILL AFB



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HANGAR #5 MacDILL AFB

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UNITED STATES DEPT. OF COMMERCE



N46RF

UNITED STATES DEPT. OF COMMERCE



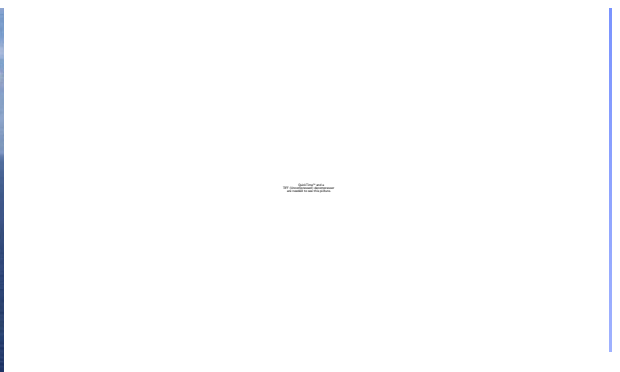
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AOC
AIRCRAFT



**AIRCRAFT OPERATIONS
CENTER AIRCRAFT 2004**



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Copyright: Baldur Sveinsson

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AIRCRAFT OPERATIONS CENTER AIRCRAFT 2006



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N44RF

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**FY05
PROGRAMS**



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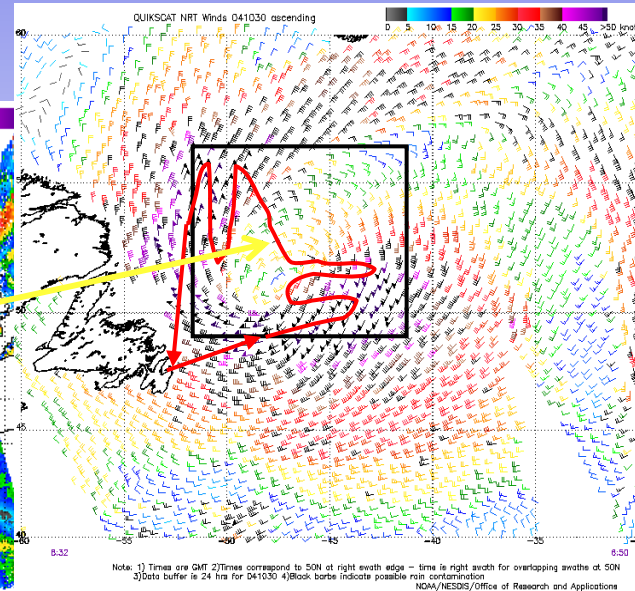
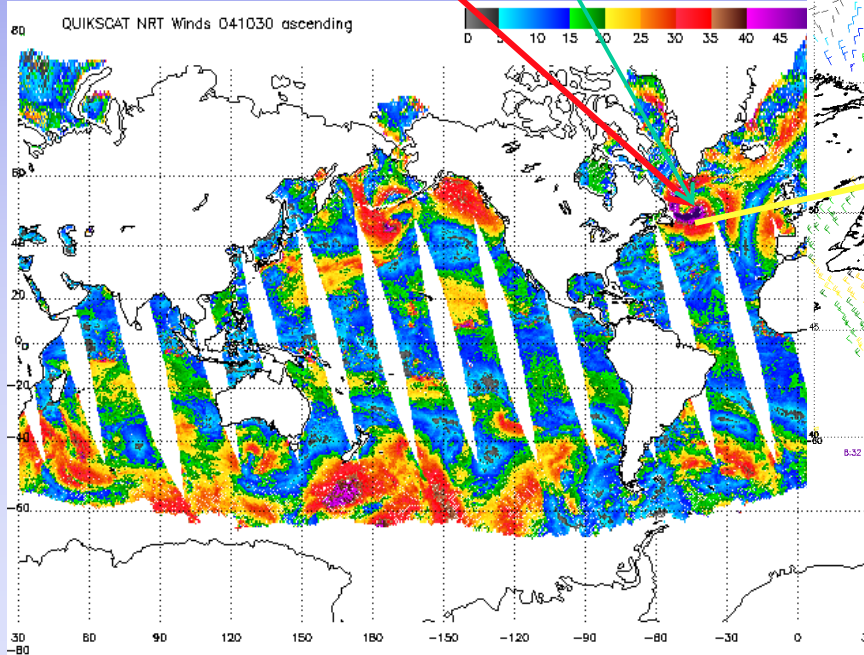
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Ocean vector winds from QuikSCAT





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OCEAN WINDS WINTER

St. John's, Newfoundland

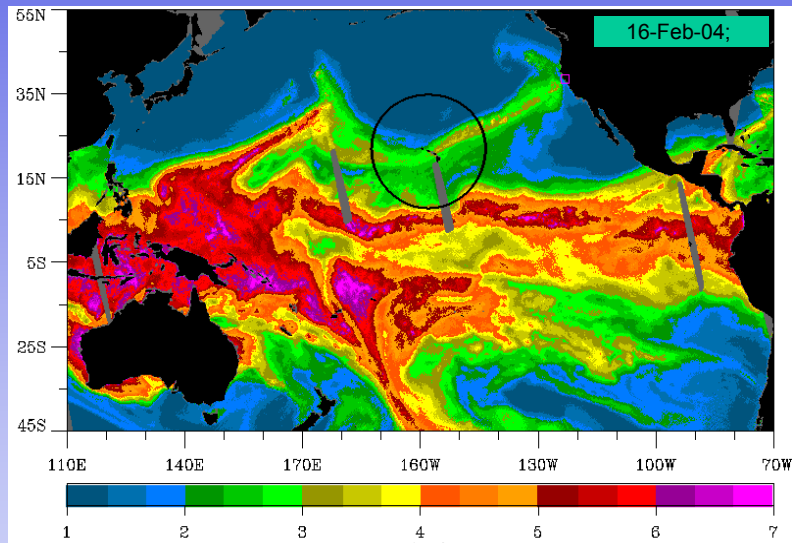




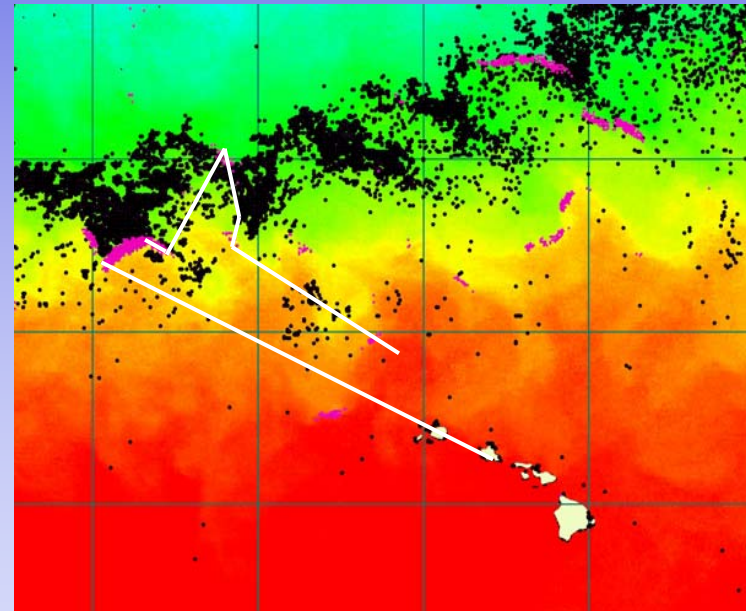
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Atmospheric Rivers



Ghostnet



FY05 Programs



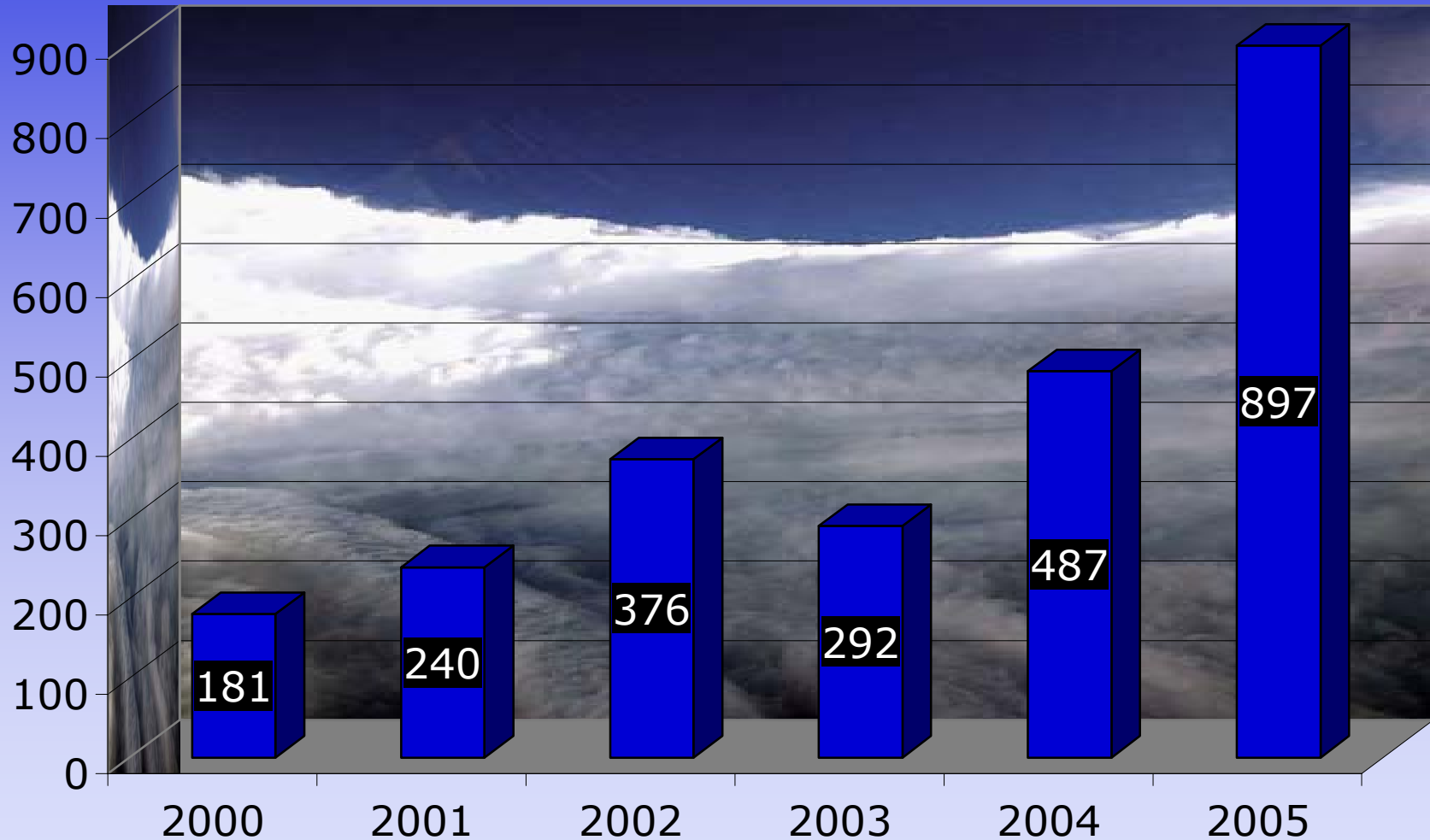
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**2005
HURRICANE
SEASON**



2000-2005 Hurricane Flight Hours - P-3 and G-IV





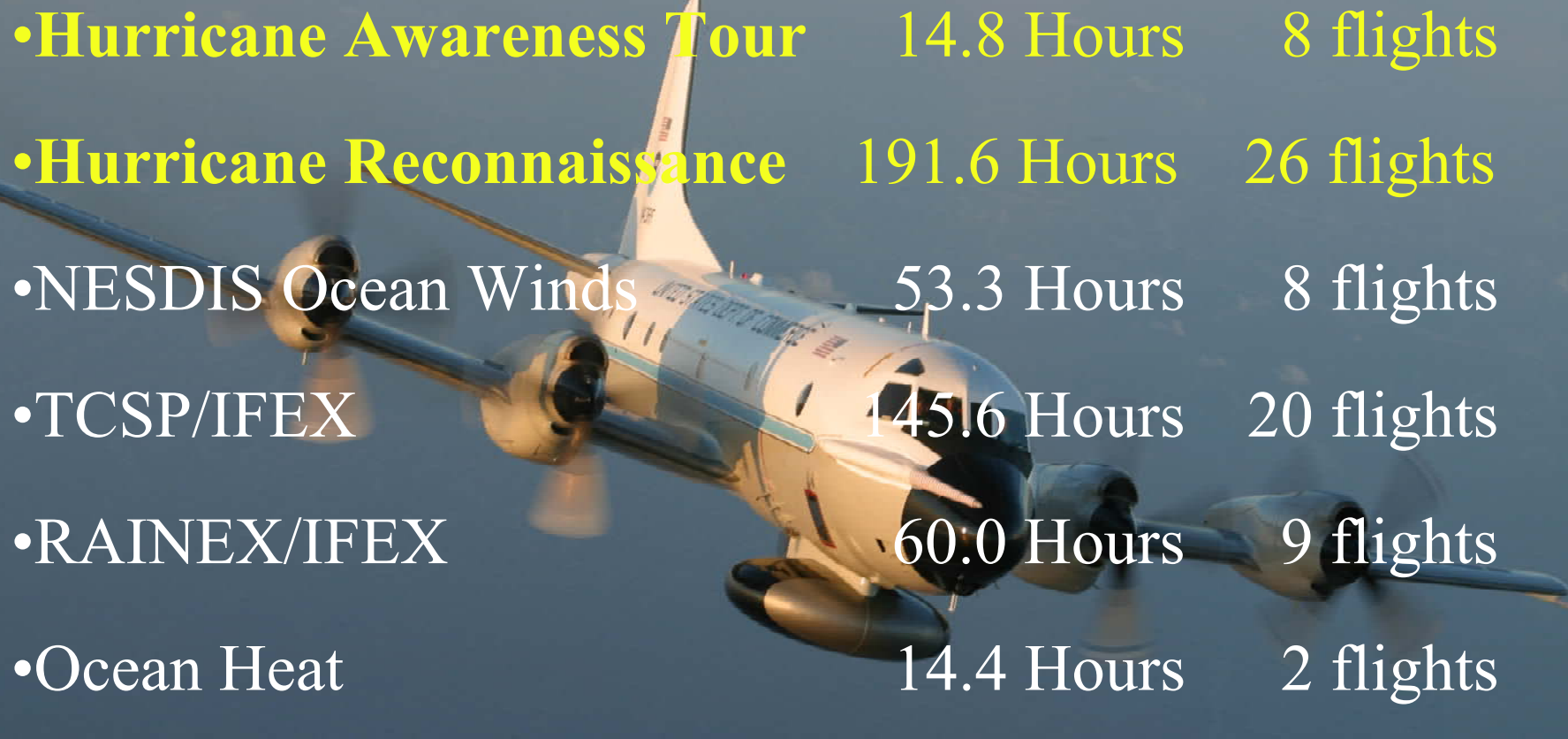
2005 Hurricane Season P-3 and G-IV



•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)

A P-3 Orion aircraft is shown in flight against a blue sky with light clouds. The aircraft is a four-engine turboprop plane, viewed from a low angle, flying towards the right. The engines and propellers are visible, and the aircraft's distinctive T-tail is prominent.

•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

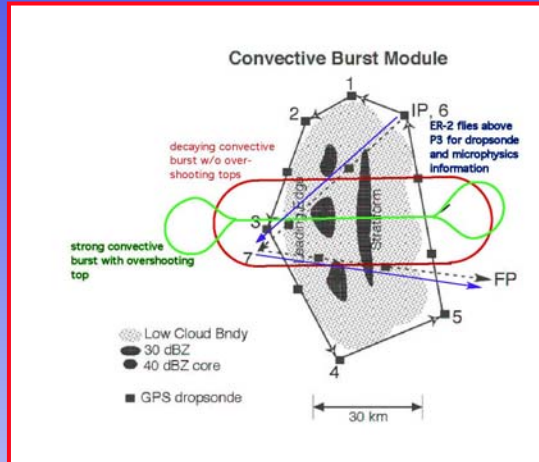


• Ocean Heat Content



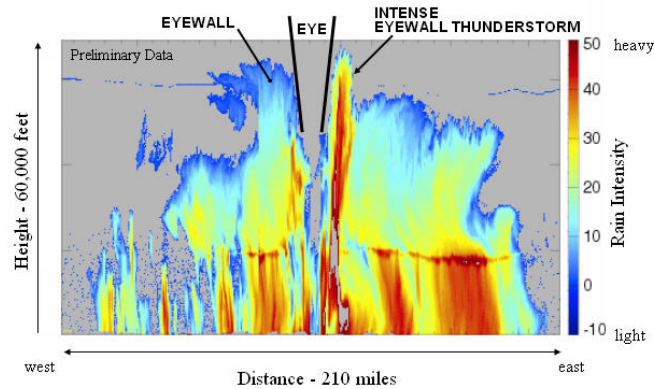
noaa research

NOAA'S OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH



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



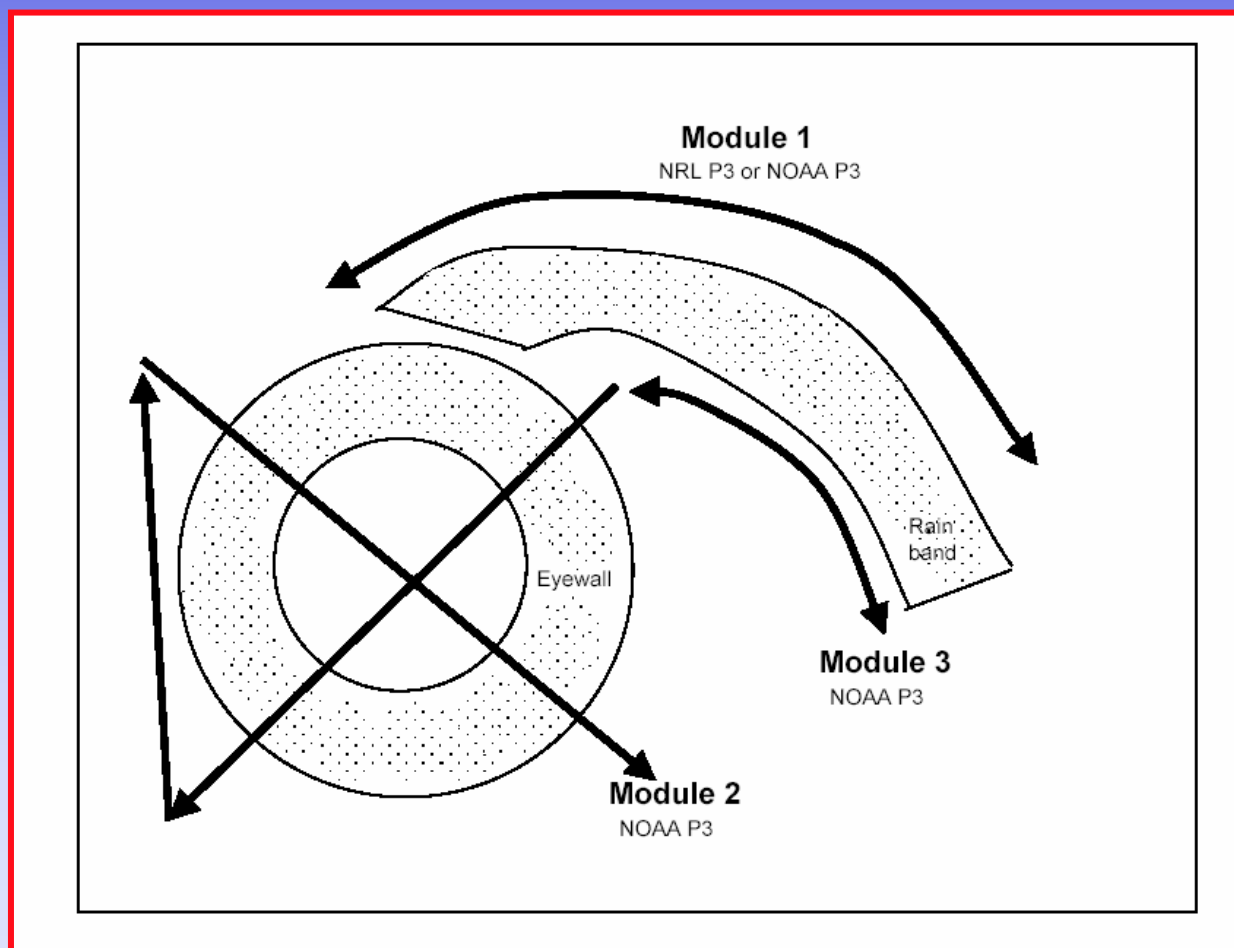
Photo Credit: O. Gomez



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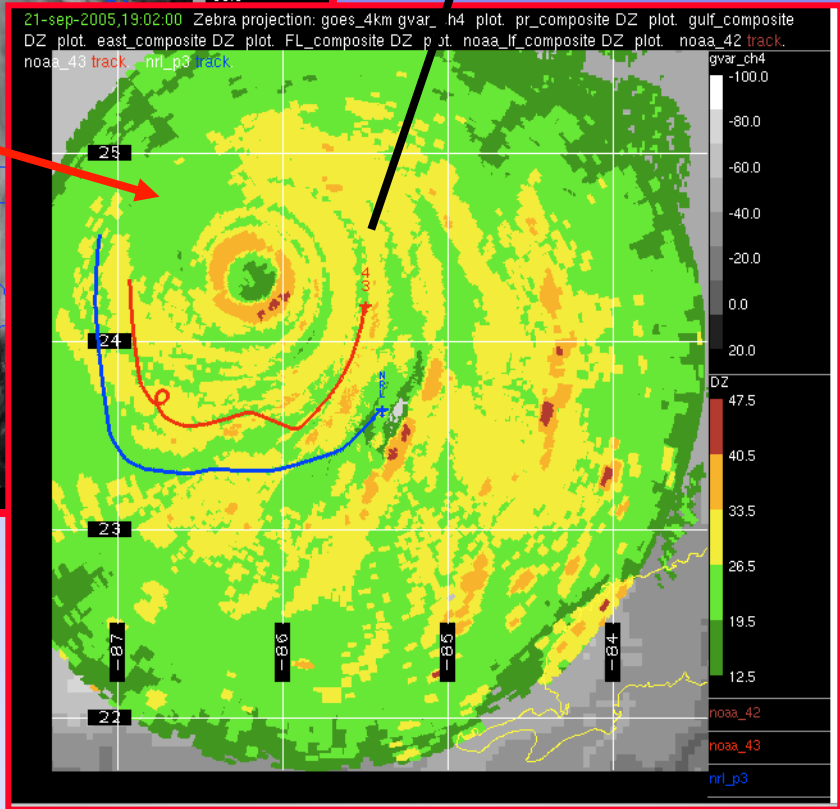
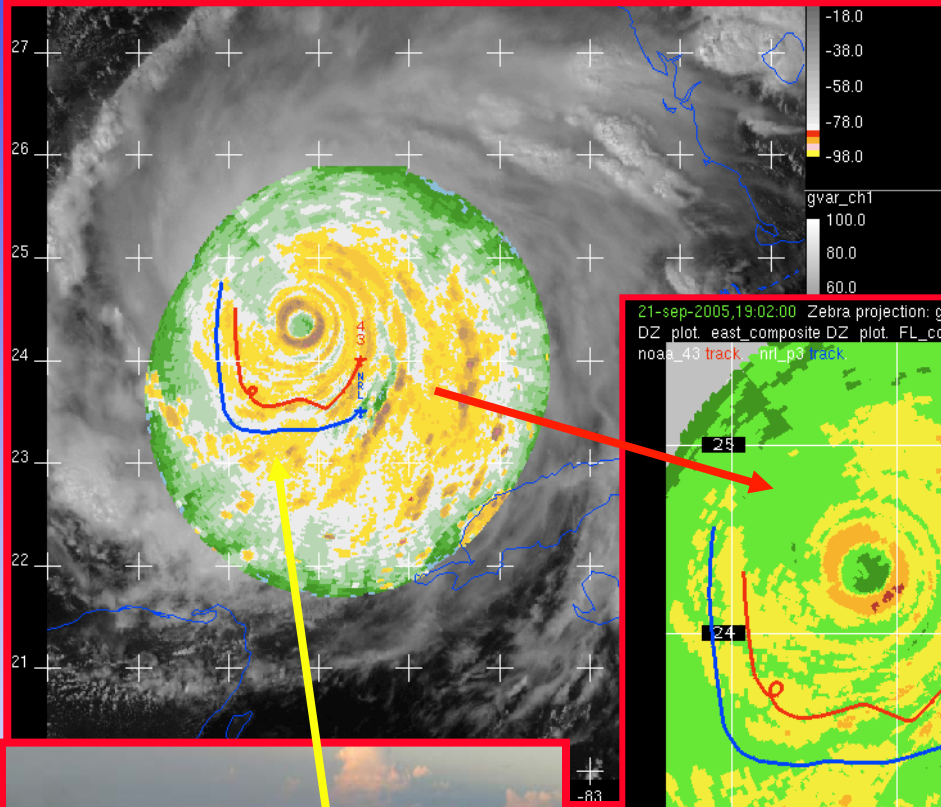


RAINEX FLIGHT TRACKS





RAINEX

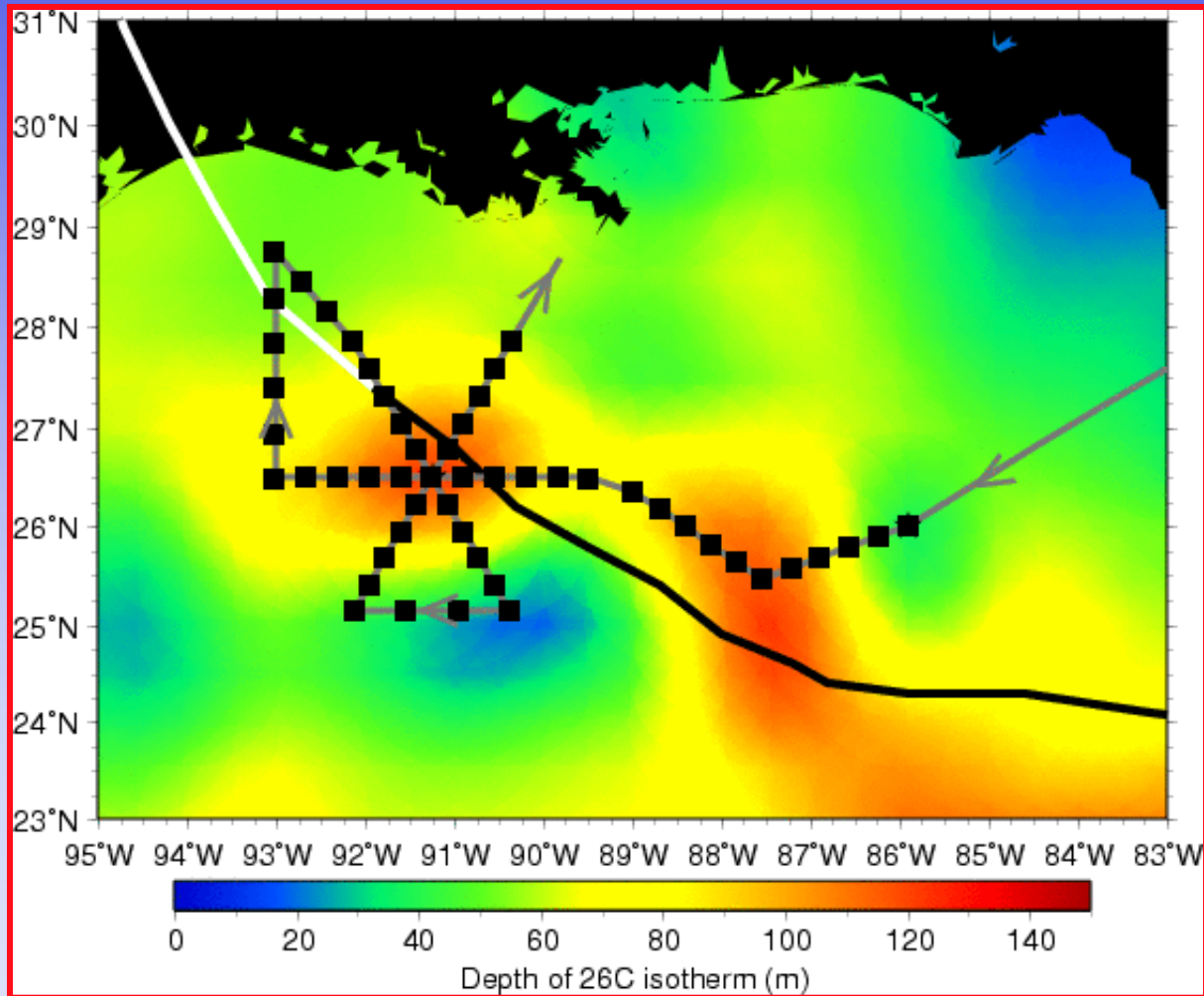




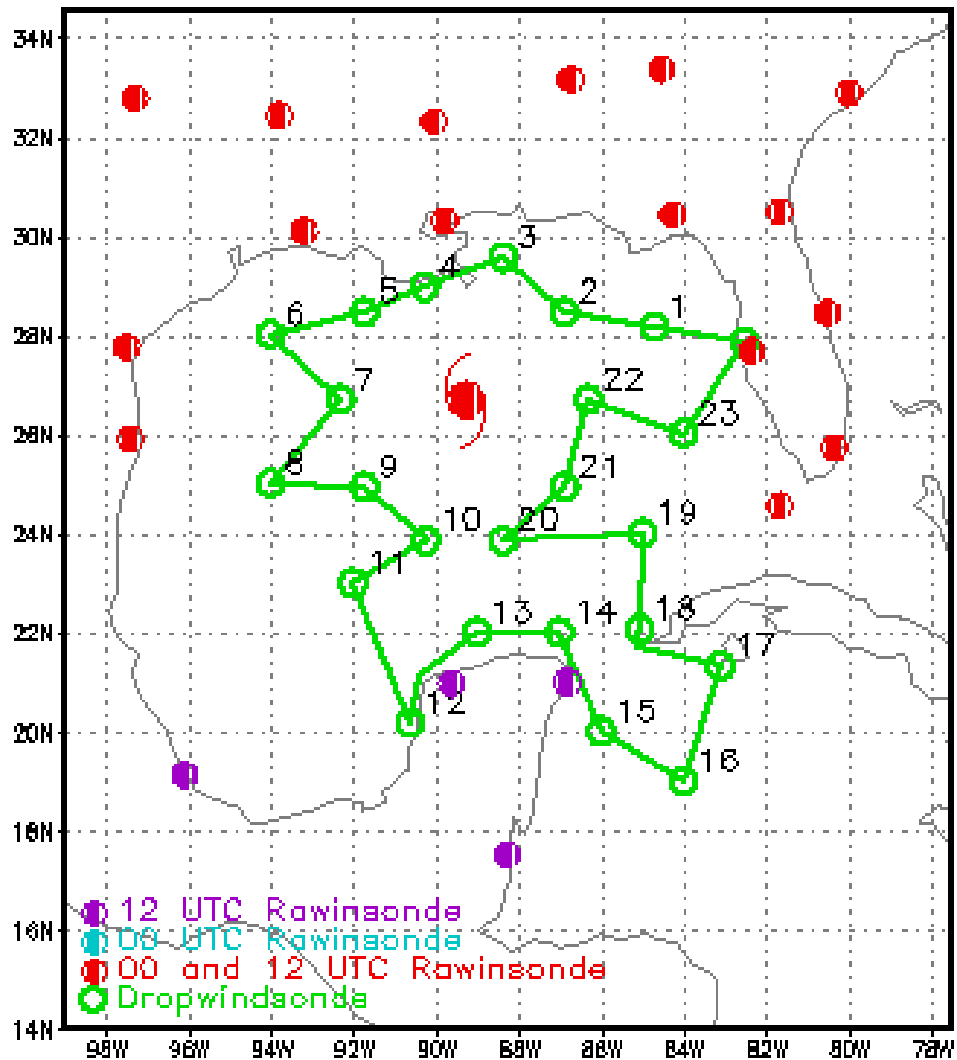
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OCEAN HEAT CONTENT



SYNOPTIC FLOW MISSION G-IV



Katrina
27 Aug



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



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KATRINA SUPPLEMENTAL

Replacement of Dropsondes	\$1,000K
Fuel costs	\$ 250K
Dropsonde and Rcvr. Upgrade	\$ 600K
Data Collection/Transmission Upgrade	\$1,900K
Cloud Physics System Upgrades	\$ 660K
Liquid and Total Sensors Upgrade	\$ 100K
Radiometric Temp. Sensor Upgrade	\$ 120K
Data System Standard. and Devel.	\$ 250K
Redesign of AVAPS	\$ 170K



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KATRINA SUPPLEMENTAL (Continued)

High-speed LAN/ SATCOM Transmission	\$ 600K
P-3 Radar Altimeter Replacement	\$ 400K
P-3 Radar and Data System Upgrade	\$2,700K
P-3 Aircraft	\$9,000K
Medium Format Airborne Digital Camera	\$ 300K
TOTAL (before taxes)	\$18,050K
(after taxes)	\$16,373K



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**FY06
PROGRAMS**



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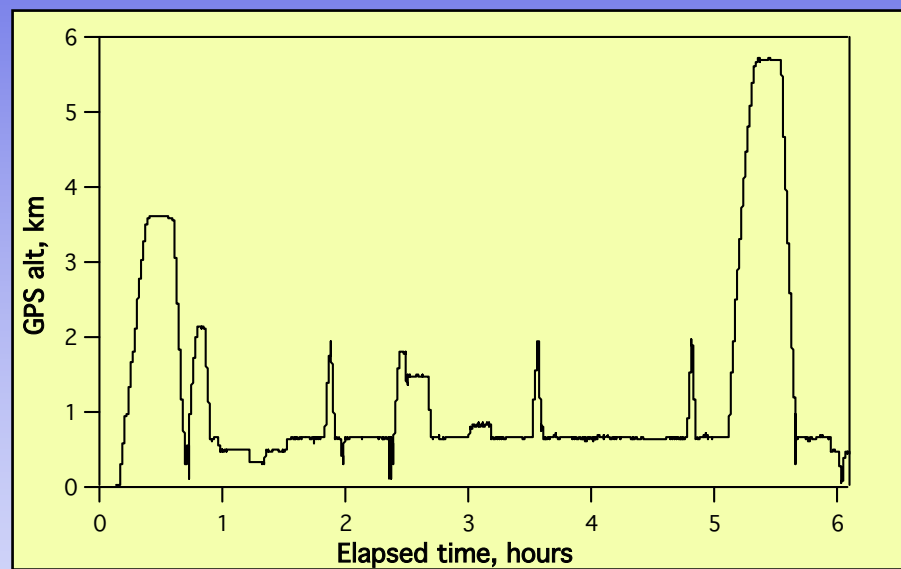
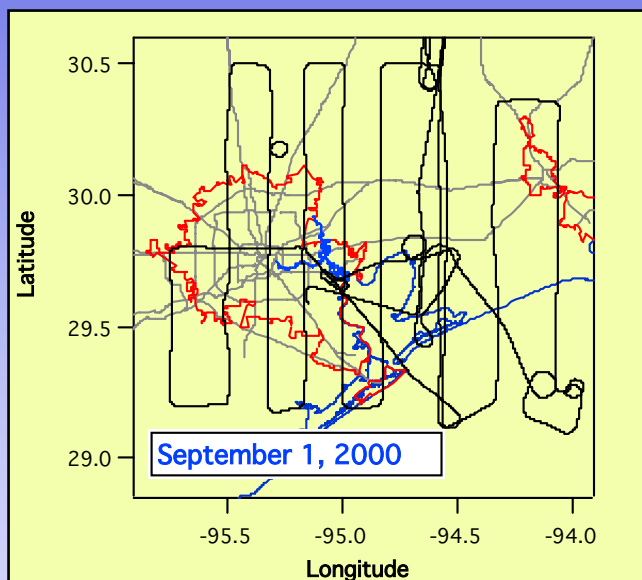
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Texas Air Quality Study



CIRPAS AND NOAA TWIN OTTERS



ICCAGRA 2006



**PROPOSED
FY07
PROGRAMS**



FY 2007 DRAFT Allocation Plan (100% Requirements) NOAA AIRCRAFT SERVICES FUNDED PROJECTS

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
WP-3D N42RF	SDLM											Ocean Winds	
								NWS			80 Hrs Hurr Rsch		
								Hurricane Awareness			100 Hrs Hurr Reconnaissance		
											75 hrs		
WP-3D N43RF	Hur Rsch 155 Hrs				Severe Wx 190 Program Funded Hrs Shared Aircraft			Maint			Hurr Rsch		
	Hur Recco 80 Hrs			Ocean Winds LFW 70 hrs							100 Hrs Hurr Reconnaissance		
											75 hrs		
G-IVSP N49RF	Hur Surv LF&W 250 Hrs		Winter Storms				Maintenance		Hurricane Research ST&I				
				160 Hrs					120 Hrs				
			WINTER STORMS Program Funded Request # 100 Program Funded Hrs								Hurr Rsch		
SHRIKE N51RF	SNOW SURVEY Hydrology										SNOW SURVEY Program Funded Request + 110 Program Funded Hrs		
				450 hrs									
Tribo Cdr N53RF	SNOW SURVEY Hydrology										SNOW SURVEY Program Funded Request + 100 Program Funded Hrs		
				200 hrs									
CITATION N52RF	RS R&D Geodesy / MTS					Remote Sensing R&D Geodesy / MTS					Hydro Testbed ST&I		
	75 hrs					75 hrs					120 hrs		
Twin Otter N48RF							Remote Sensing Aircraft Services Project Request						
							175 hrs						

* Maintenance Periods on aircraft not noted above occur at regularly scheduled flight hour levels and at periodic calendar intervals

Ecosystem
Comm/Transport
Climate
Weather/Water

Approved by: _____ Date: _____



FY07 Proposed Schedule - P-3s and G-IV



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FY07

Proposed
Schedule

Twin
Otters



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FY08 OUTLOOK



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- Installation of G-IV Tail Doppler Radar
- Introduction of N44RF into Service
- Possible construction of New AOC Facilities



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- Introduction of 4th Twin Otter
- Replacement of the Citation with a King Air