

## **MX101-Opening a University Fiber Highway Between Mexico and US**

### **1) Southern California Wildfires: October 20 - November 3, 2003**

- **22 deaths**
- **3,600 destroyed homes**
- **Model forecast shown**

### **2) Landfall of Hurricane Marty in Baja California: September 22, 2003**

- **Maximum winds 41 m/s (92 mph)**
- **Heavy rainfall, up to 200 mm (8 inches) in 24 hours**
- **Satellite imagery and model forecast shown**

### **3) Landfall of Hurricane Rita in Gulf of Mexico coast: Sep. 24, 2005**

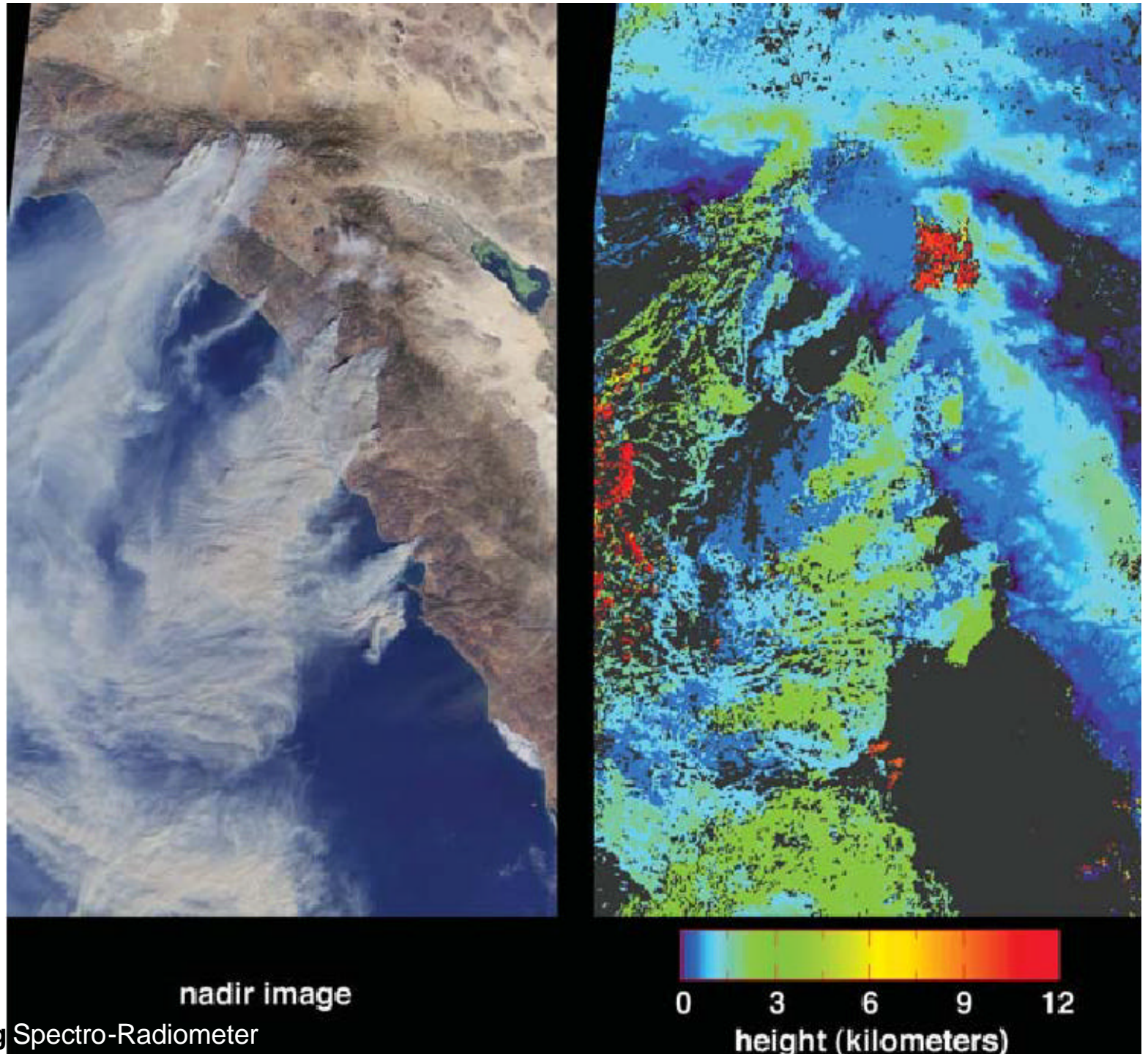
- **Maximum winds 50 m/s (120 mph)**
- **Maximum intensity (category 5) over central gulf**
- **Satellite imagery (formation, intensification, landfall) shown**

**26/Oct/2003**

•MISR\* (NASA)

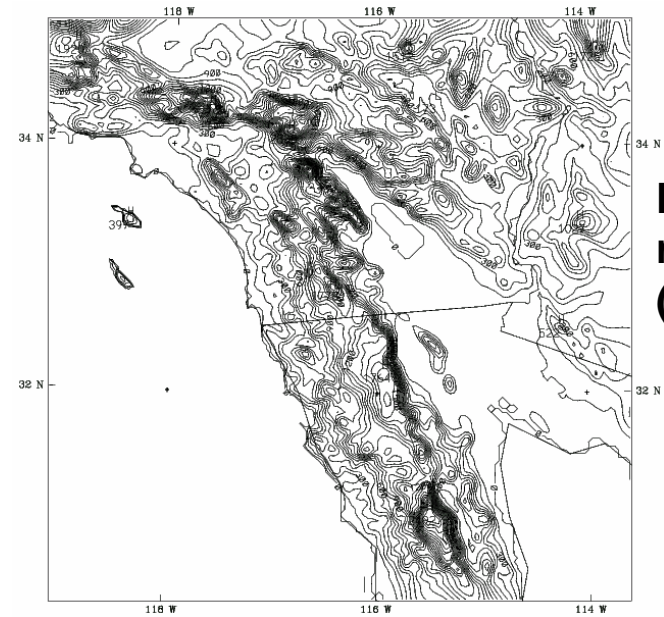
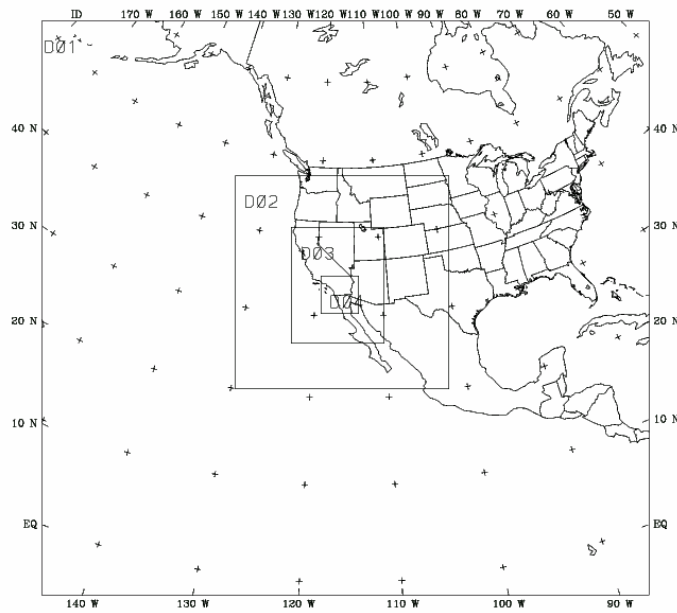
Diner, D.J. et al,  
2004:

Bulletin of the  
American  
Meteorological  
Society



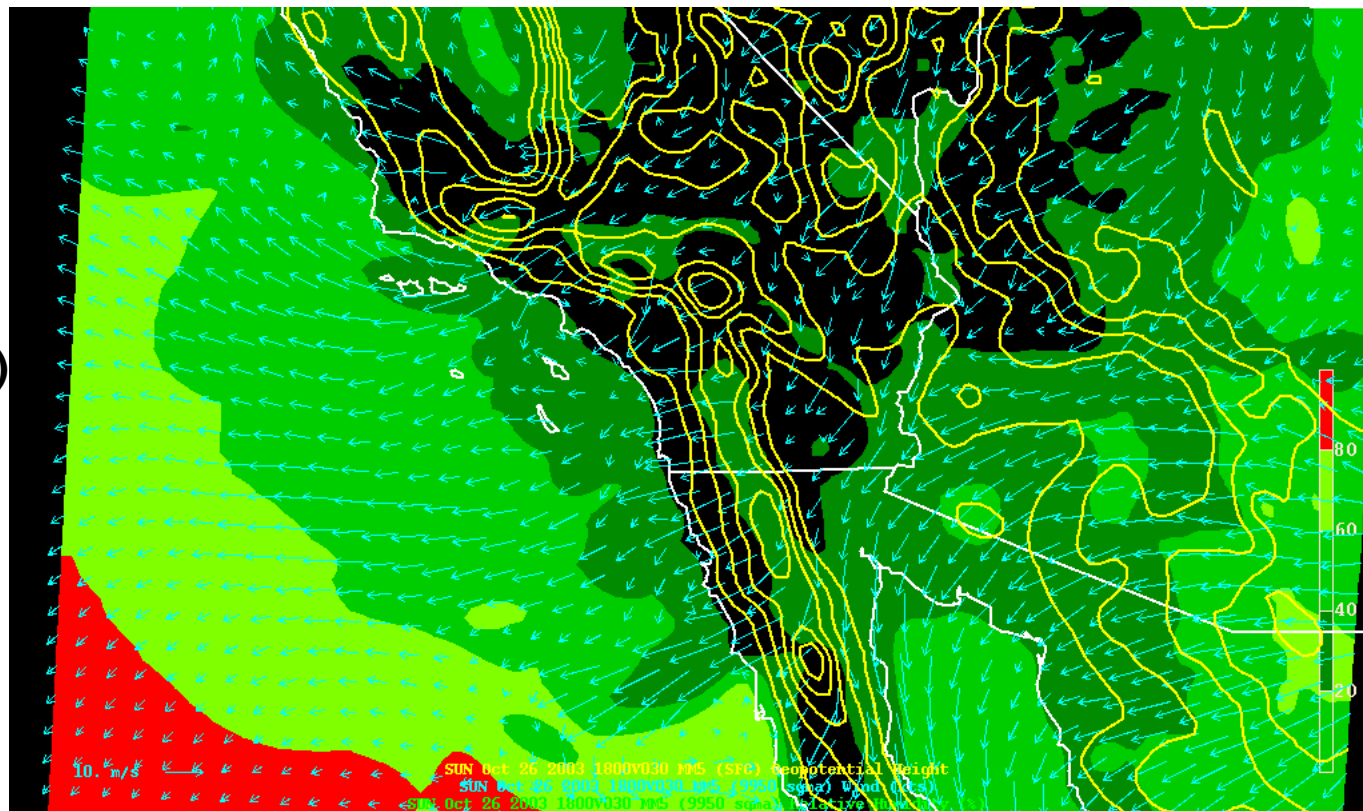
\*Multi-angle Imaging Spectro-Radiometer

## Model grids



**High  
resolution  
(4 km)**

**Winds near  
the surface  
(blue vectors)**



**Relative  
humidity (%),**

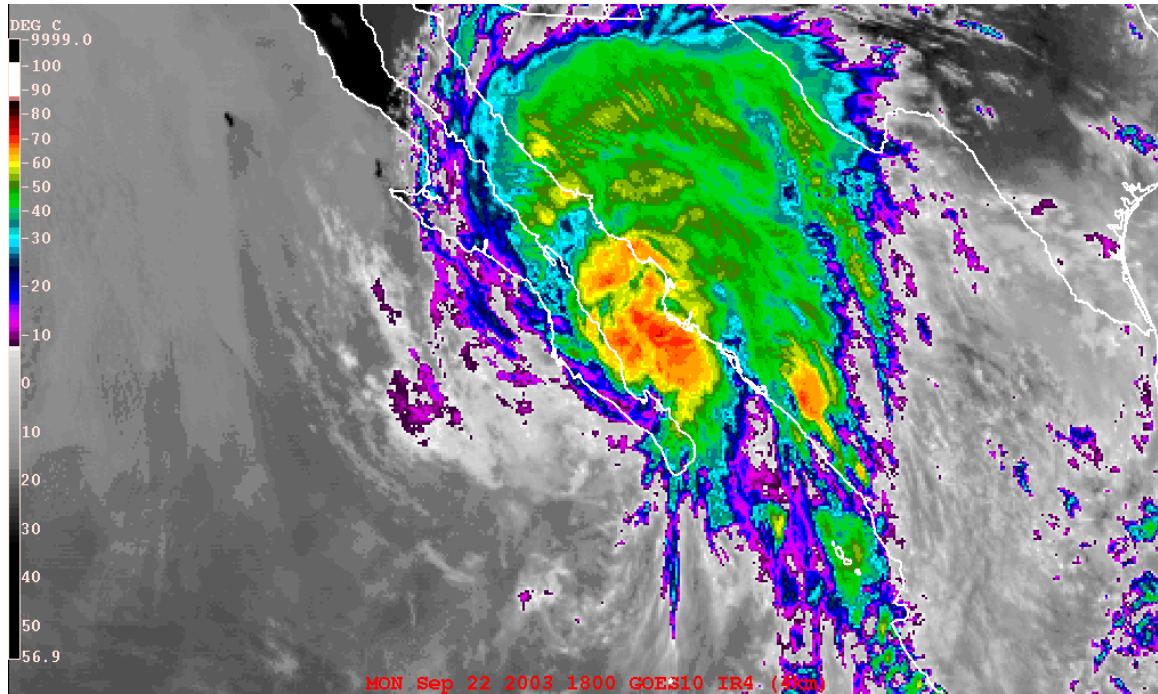
**Color filled  
areas**

**Black=dry**

**Red=humid**

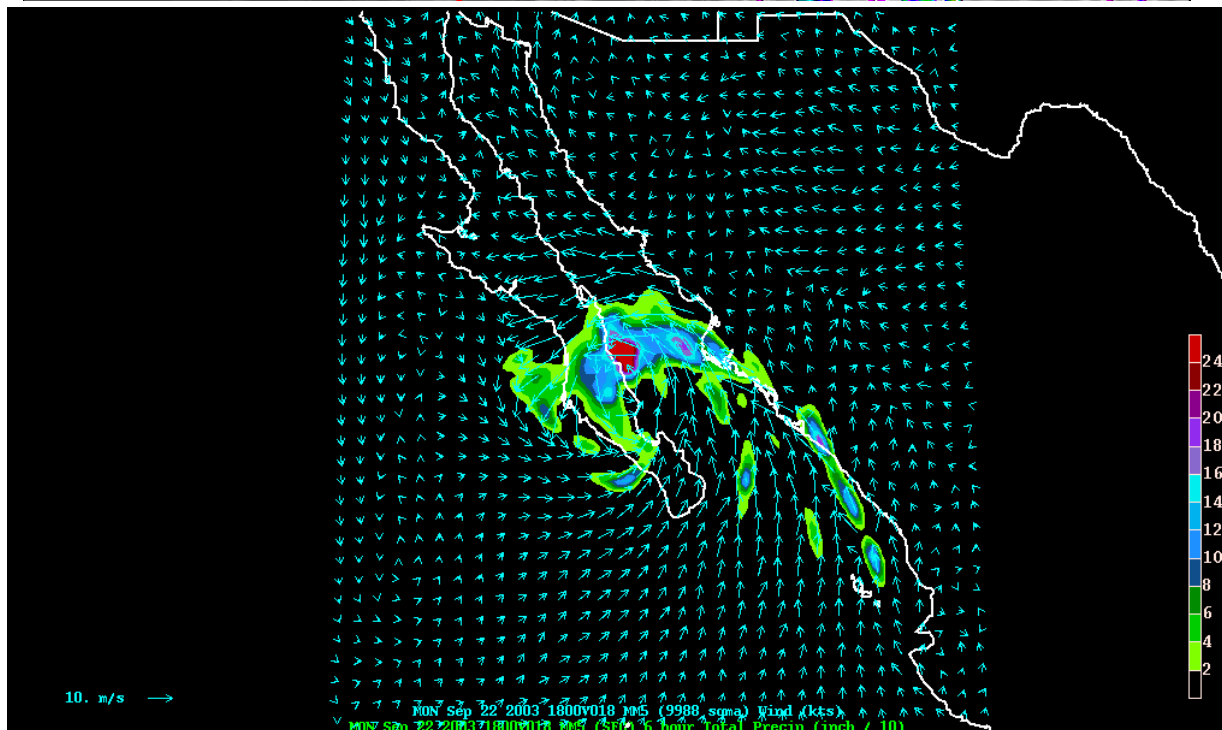


**GOES-10  
Satellite  
image**

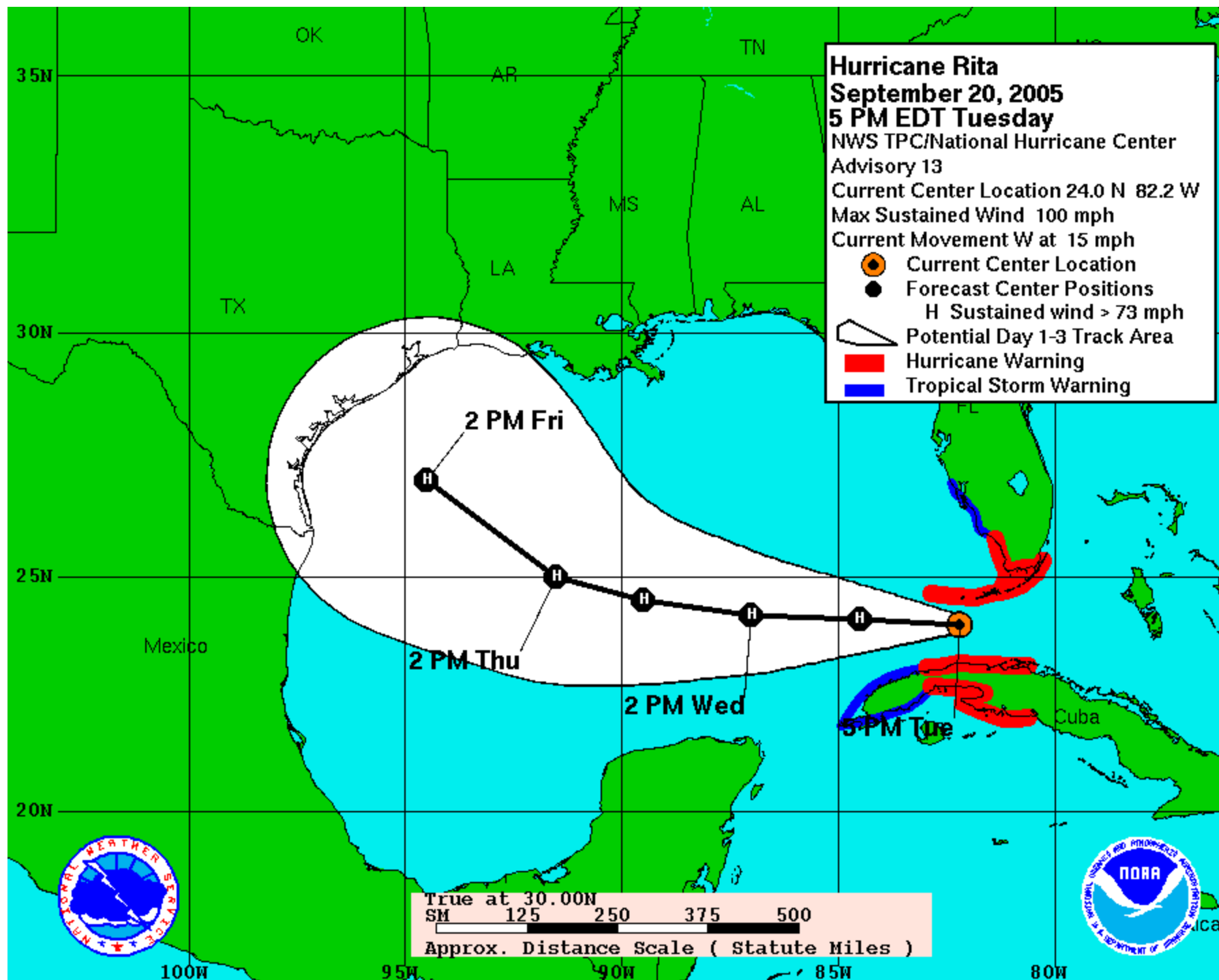


**Color indicates  
intensity of the  
convective  
systems**

**MM5  
model  
simulation**



**Winds and  
rainfall while  
moving over the  
central Gulf of  
California**



# Hurricane Marty, 22 september 2005

## GOES-12 (infrared) satellite image

