

Hurricane Activity

Part I: Sea Surface Temperatures and Hurricane Strength

This table shows satellite images of historical hurricanes. Your task is to create a similar strength hurricane on your computer screen using the Hurricane Applet <http://cimss.ssec.wisc.edu/wxfest/> then **fill in a sea surface temperatures** (several right answers) necessary to form that hurricane.

Hurricane	Satellite Image	Category Wind Speeds	Sea Surface Temperatures	Example Image from Hurricane Applet
Hurricane Noel November 2, 2007		Category 1 Winds 74-95 mph (119-153 km/hr)		
Hurricane Alex August 3, 2004		Category 2 Winds 96-110 mph (154-177 km/hr)		
Hurricane Ike September 9, 2008		Category 3 Winds 111-130 mph (178-209 km/hr)		
Hurricane Frances September 2, 2004		Category 4 Winds 131-155 mph 210-249 km/hr		
Hurricane Ivan September 15, 2004		Category 5 Winds greater than 155 mph (249 km/hr)		

What is the relationship between Sea Surface Temperatures (SST) and Hurricane Category?

Part II: Forecasting Hurricane Landfall

Your task is to predict how many hours until the eye of Hurricane Ivan passes over Jamaica using an on-line computer activity at http://www.ssec.wisc.edu/sose/pirs/pirs_m3_exercise1.html

To complete this task, you'll need to:

- 1) Compute the current average speed of Hurricane Ivan using a computer tool.
- 2) Determine the current distance the eye is from Jamaica using a computer tool.
- 3) Estimate the time in hours before the eye reaches the tip of Jamaica using the equation

T=D/S (*Time = Distance divided by Speed*)