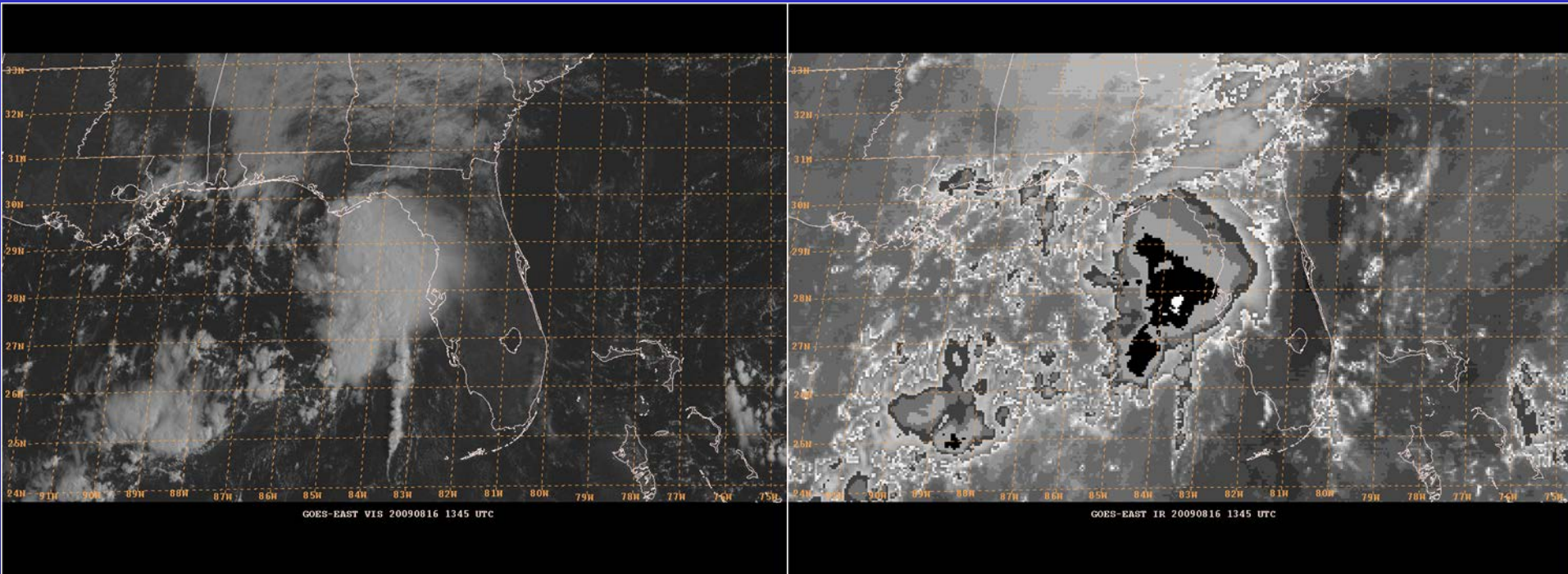
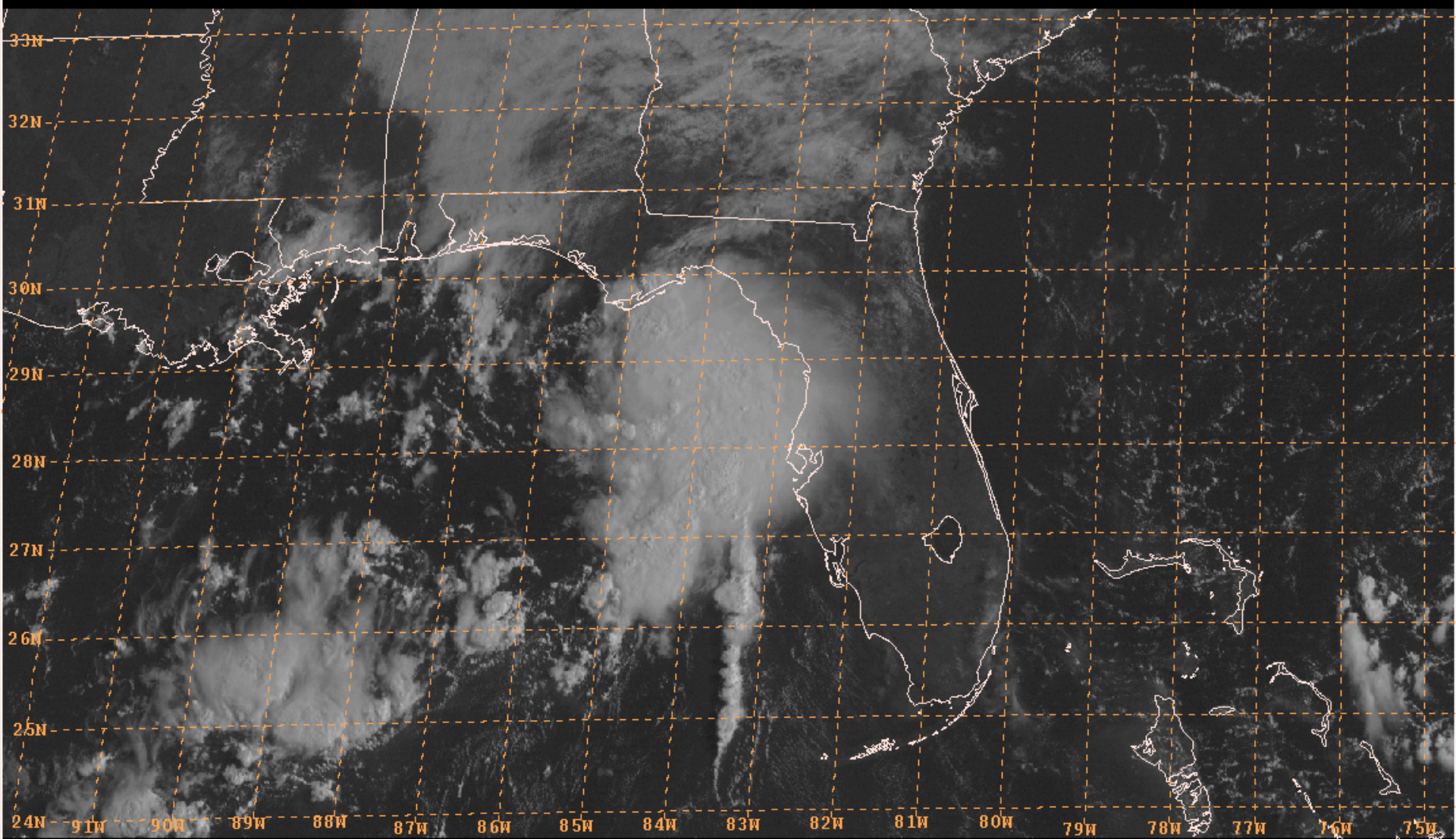


# **Dvorak Center Location Exercises**

**Objective: To locate the cloud system centers (CSCs) of the following examples of tropical weather systems.**

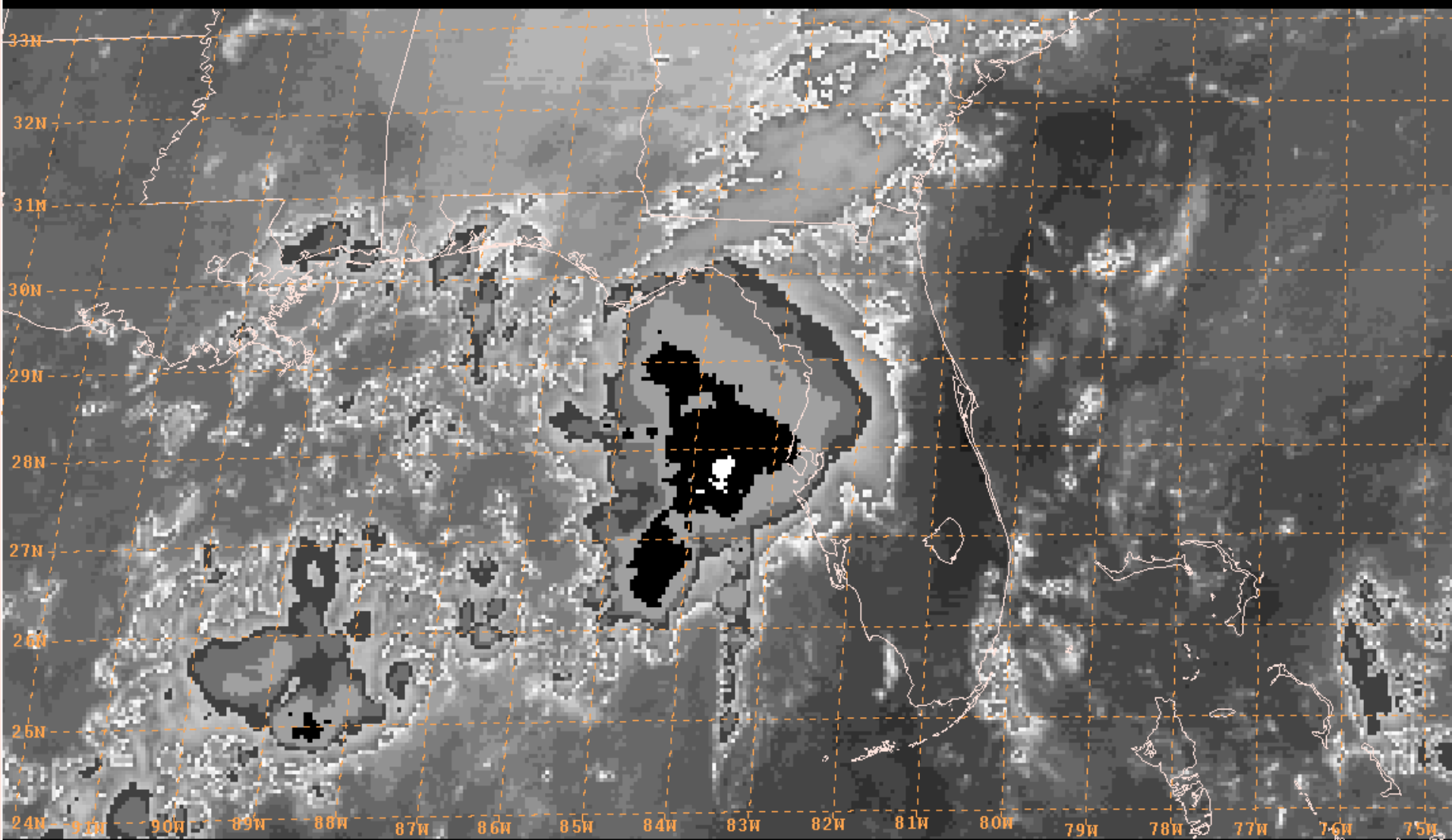
# Center Location Exercise 1





GOES-EAST VIS 20090816 1345 UTC

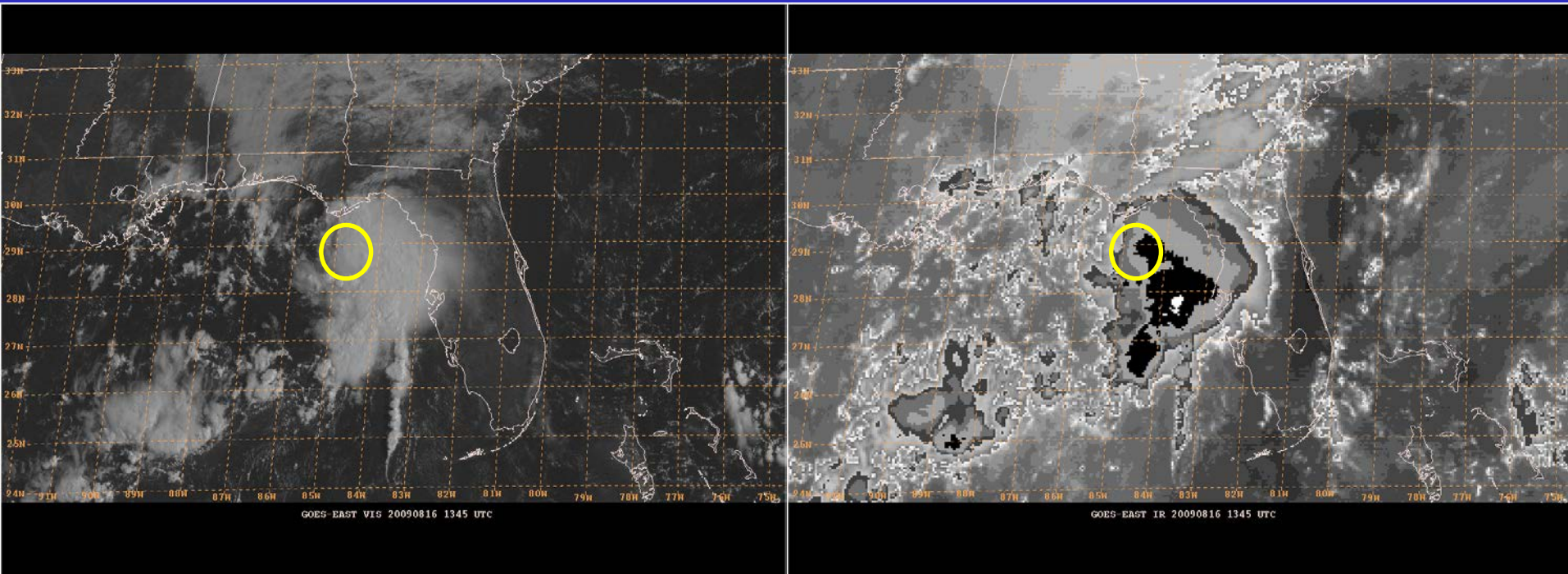




GOES-EAST IR 20090816 1345 UTC

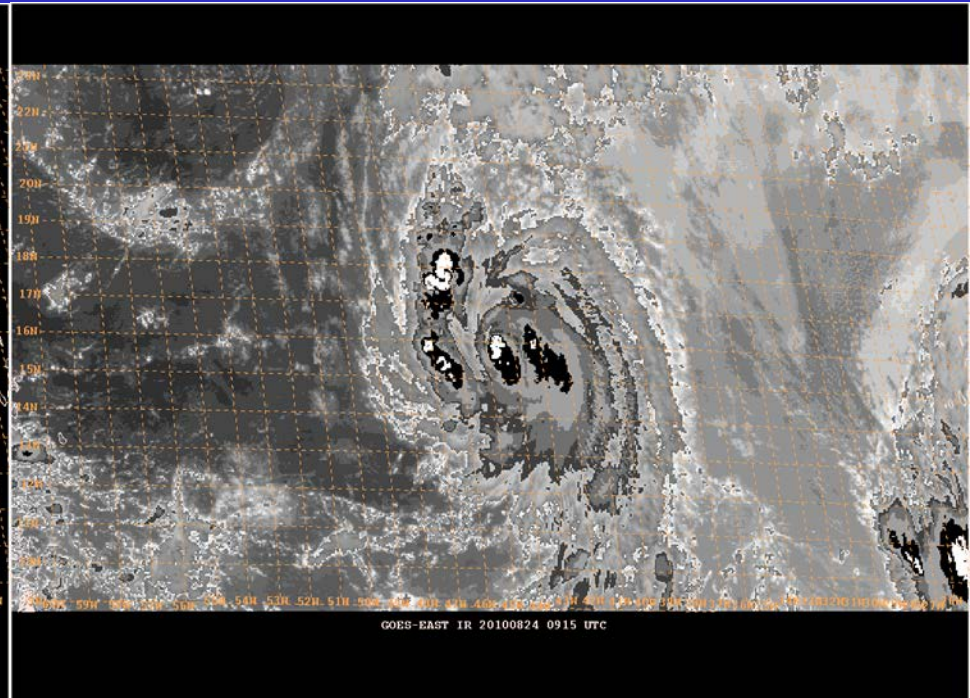
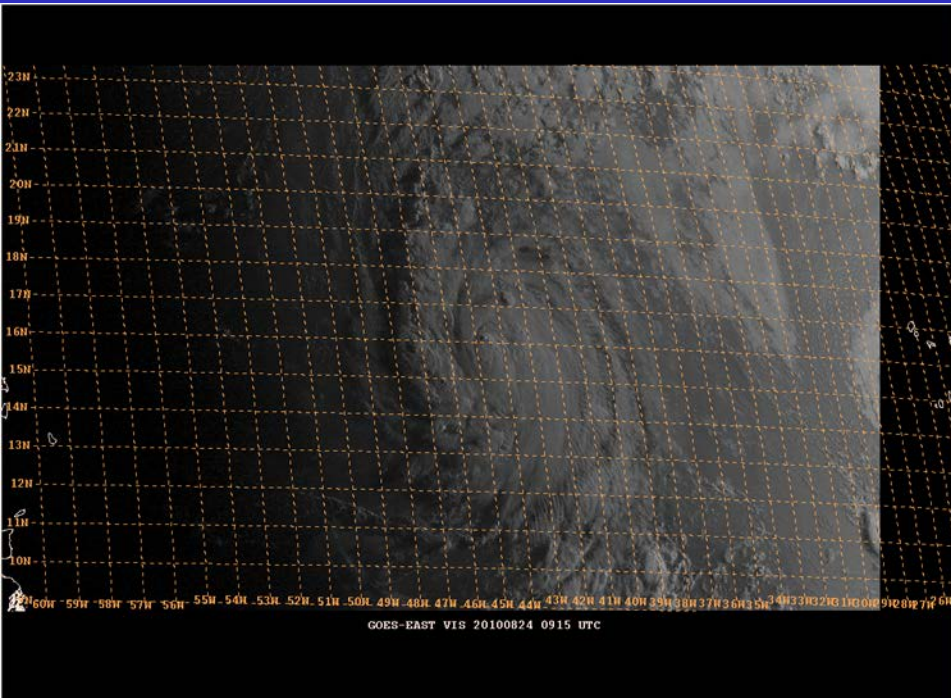


# Center Location Exercise 1

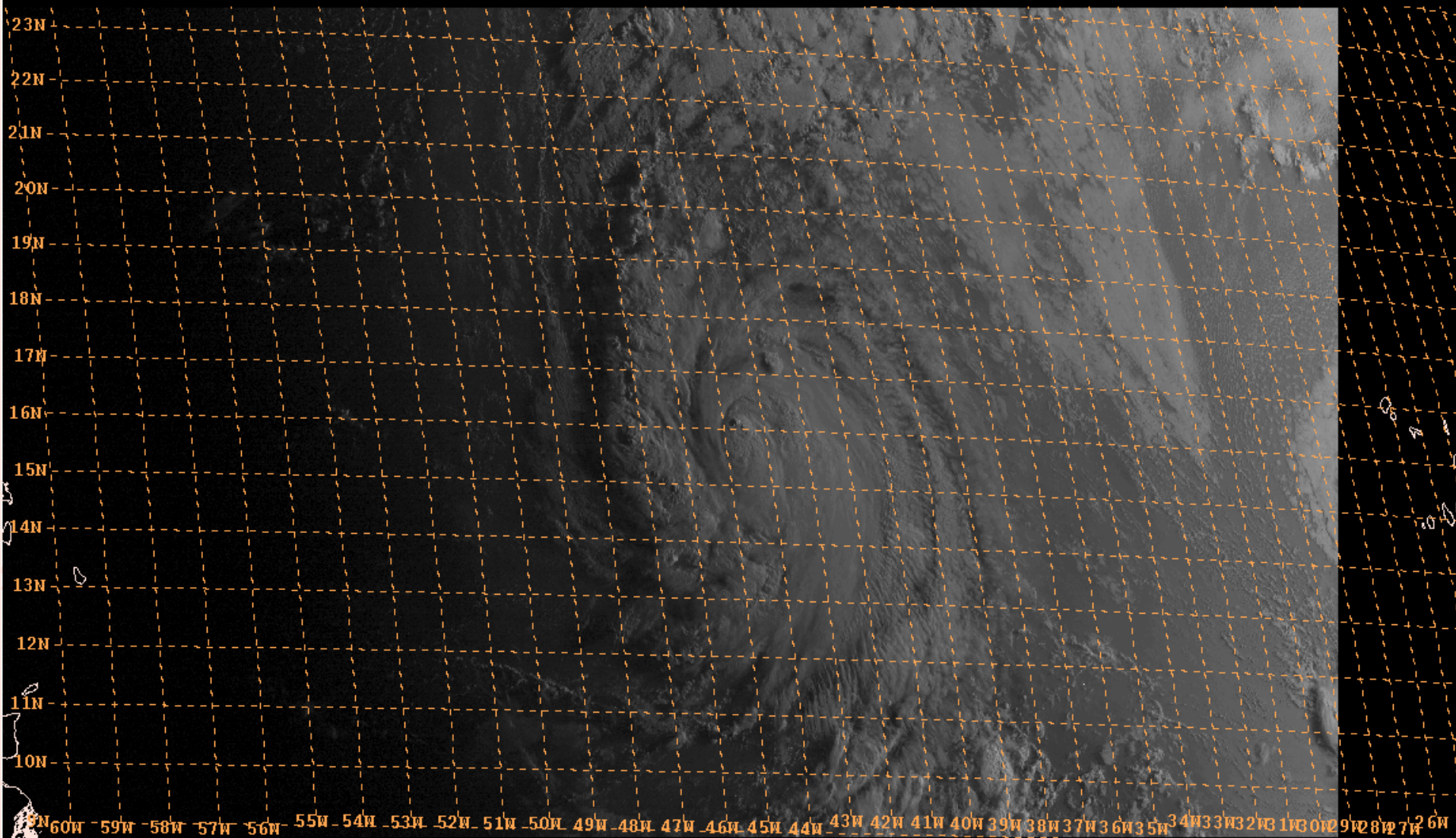


**Interpolated Best Track Position: 16/1500Z 28.7N 84.7W**  
**Tropical Storm Claudette August 2009**

# Center Location Exercise 2

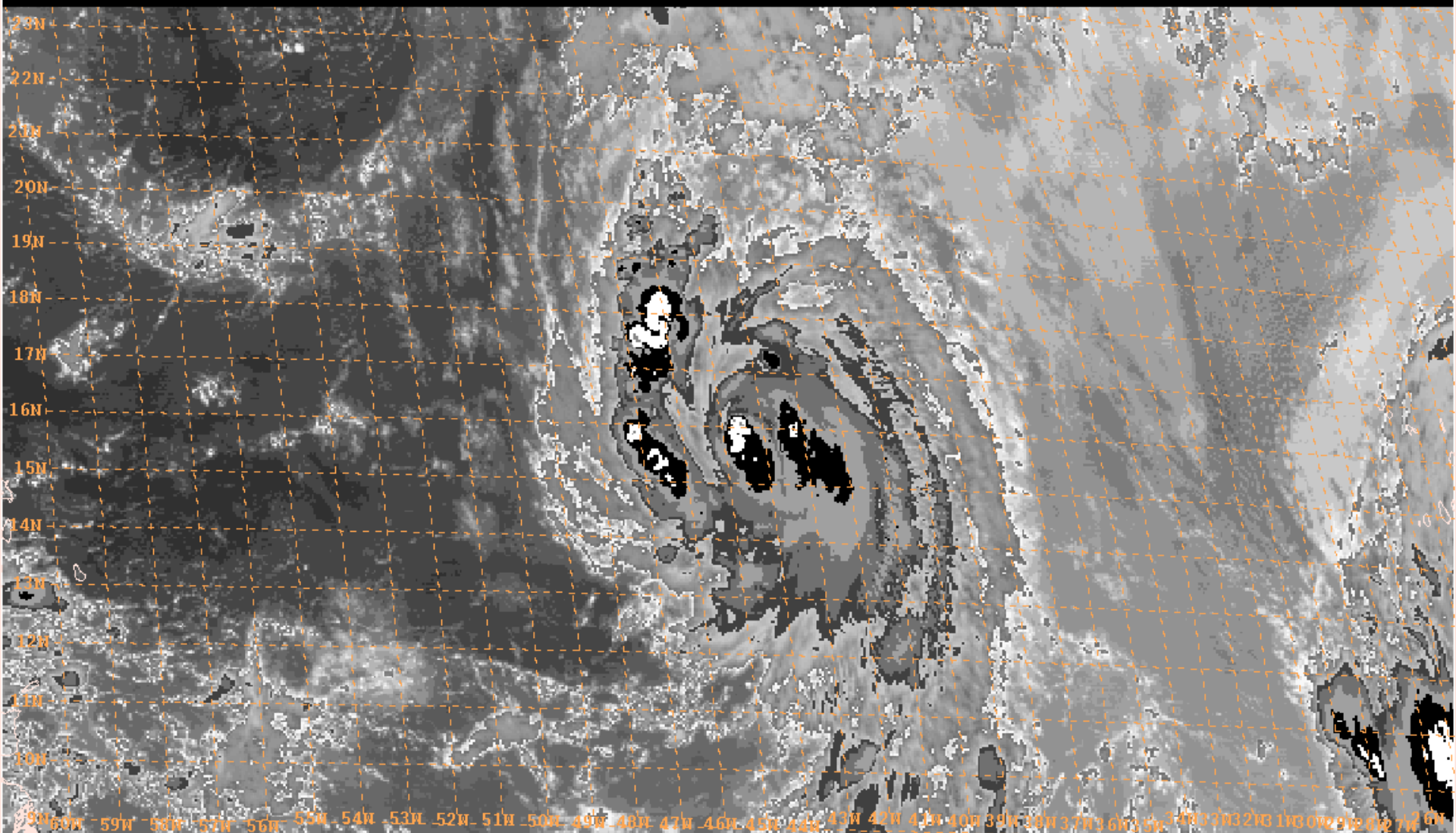






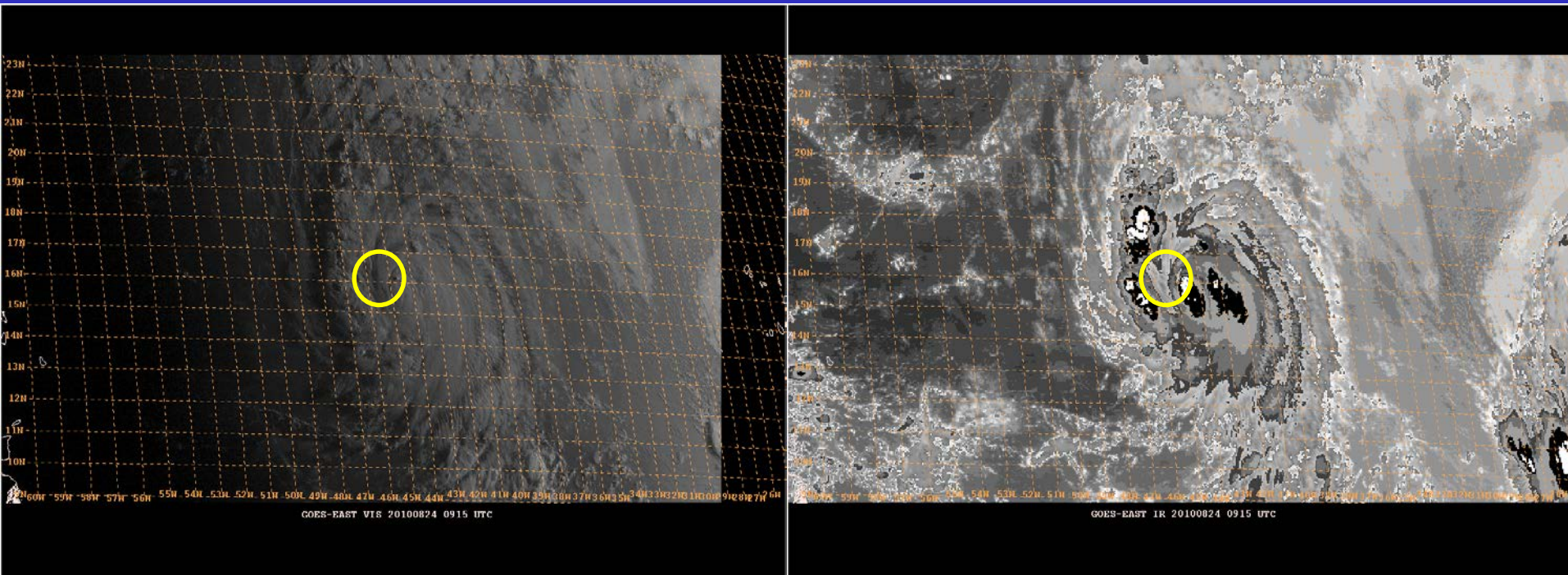
GOES-EAST VIS 20100824 0915 UTC





GOES-EAST IR 20100824 0915 UTC

# Center Location Exercise 2

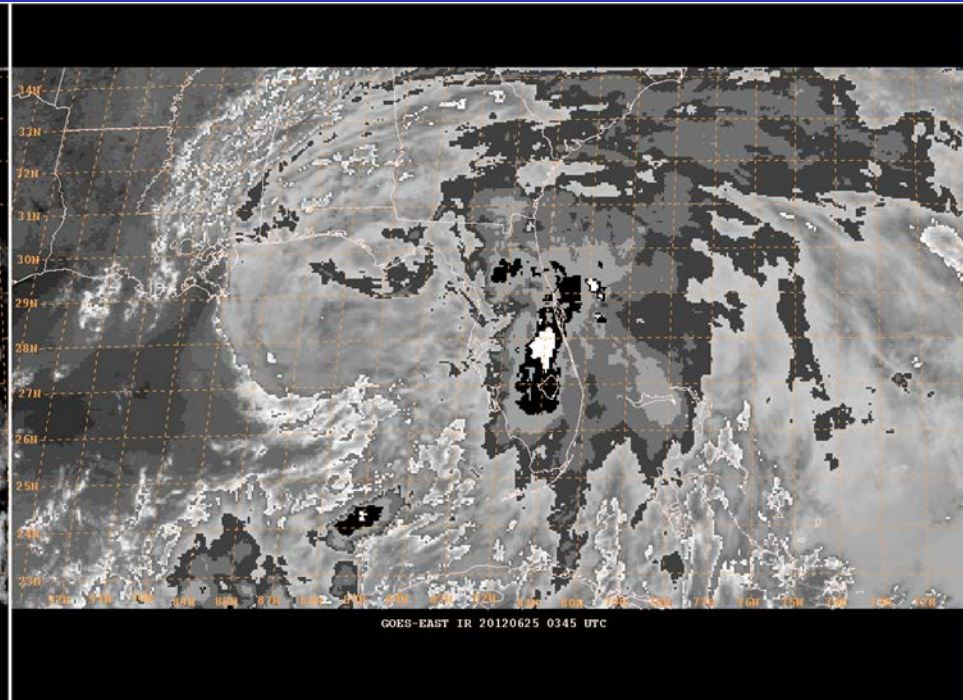
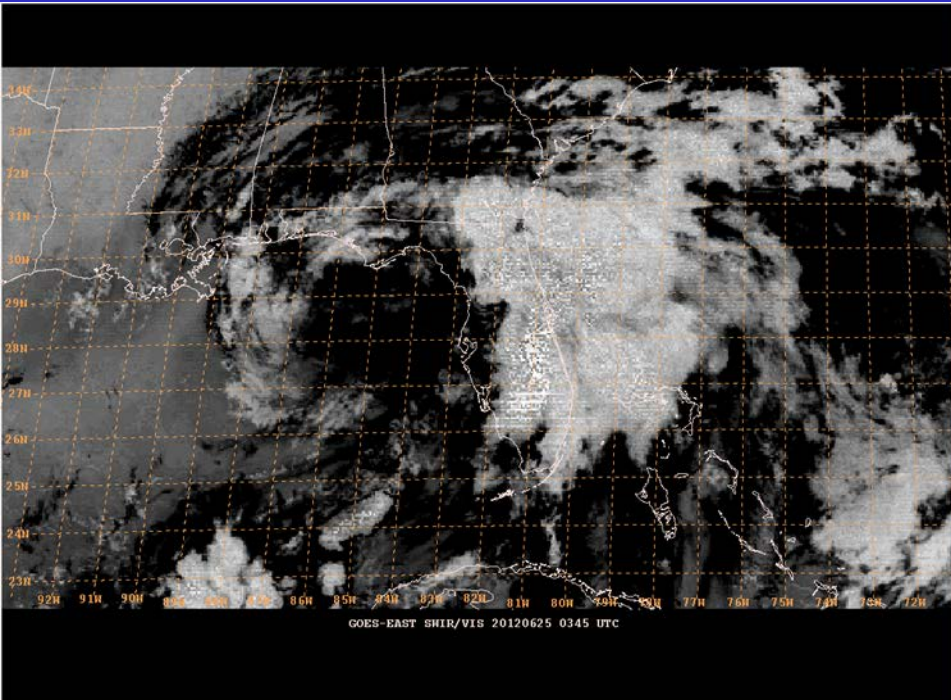


**Best Track Position: 24/1200Z 16.2N 45.8W**

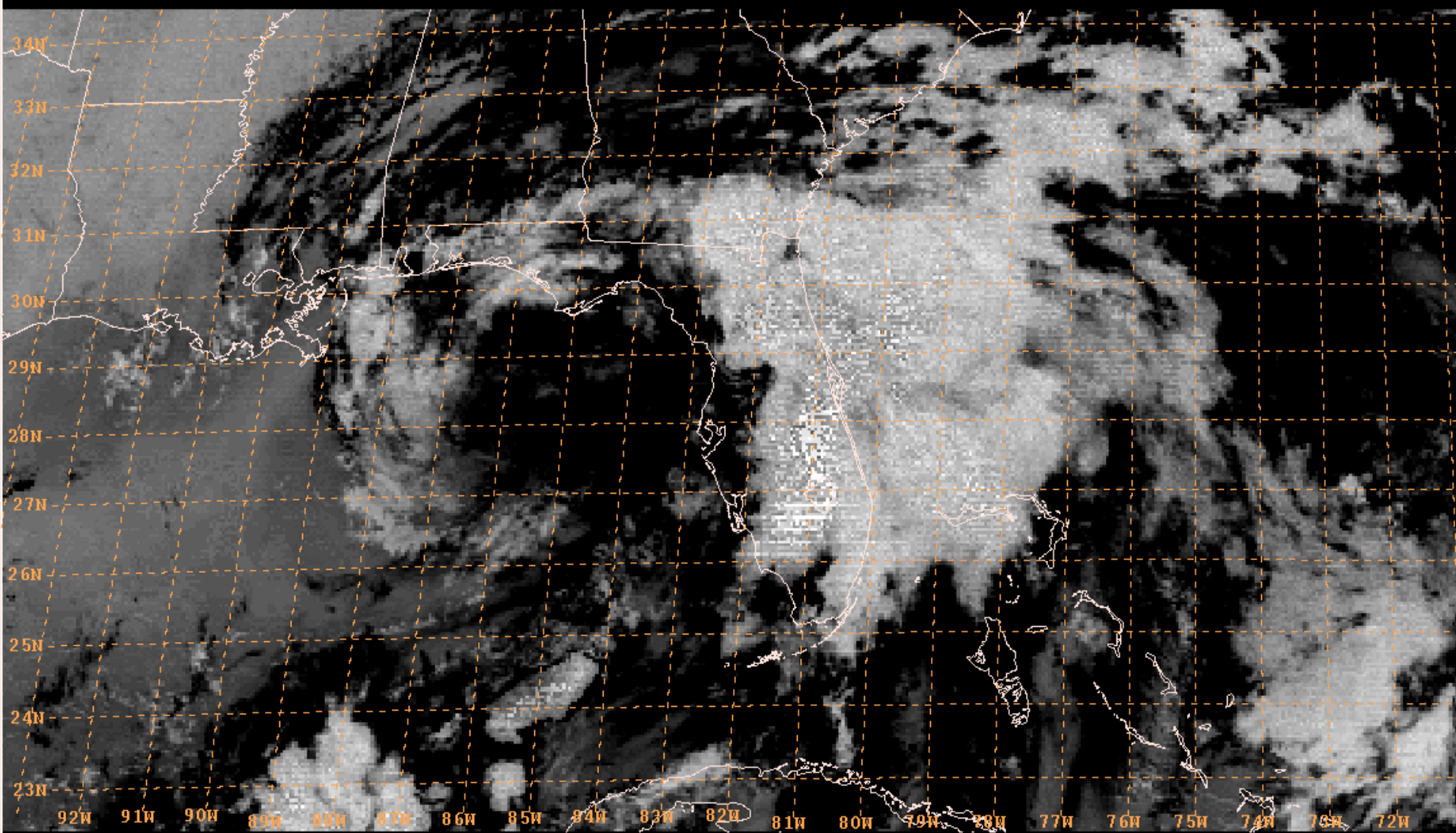
**Hurricane Danielle August 2010**



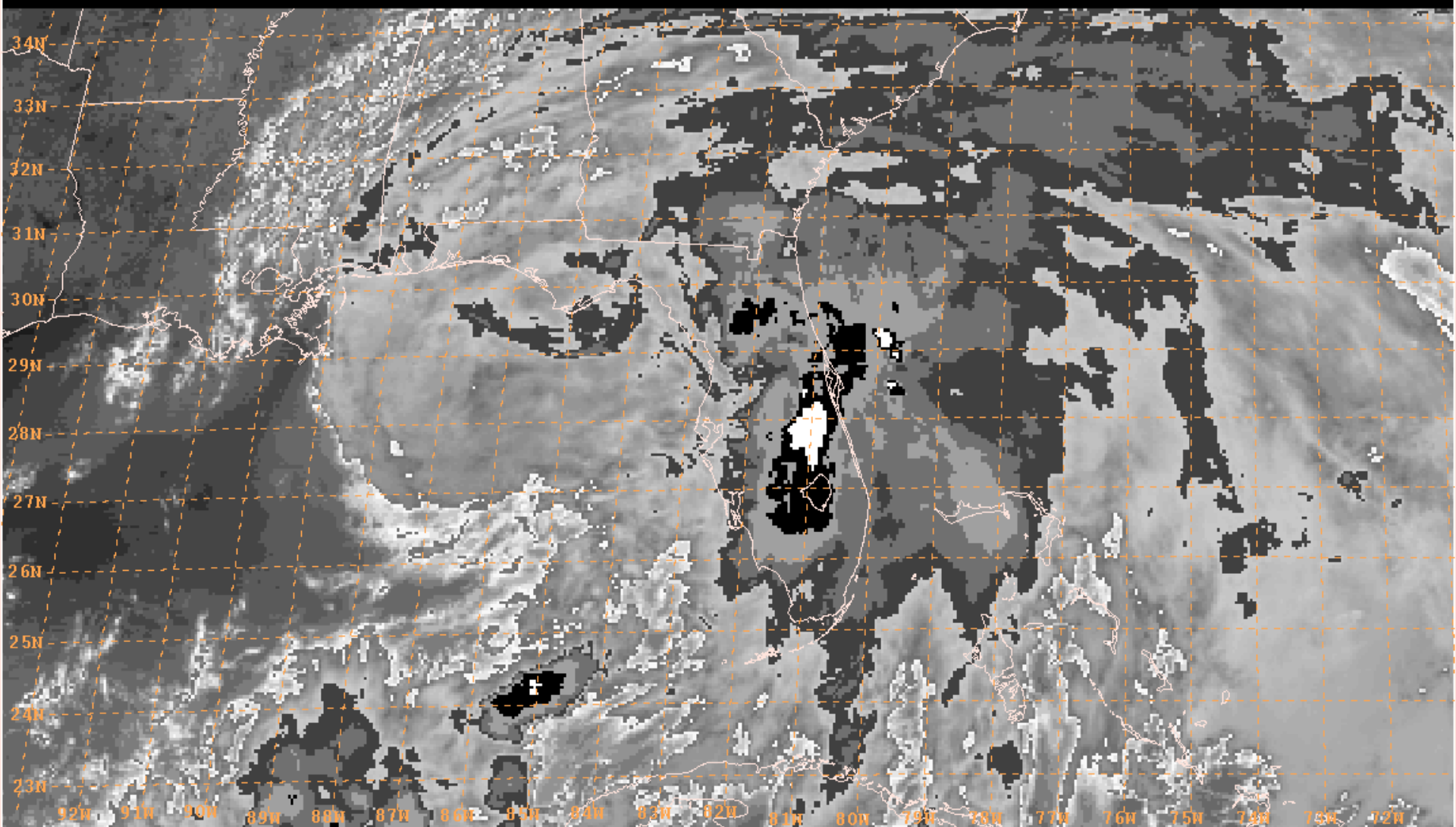
# Center Location Exercise 3





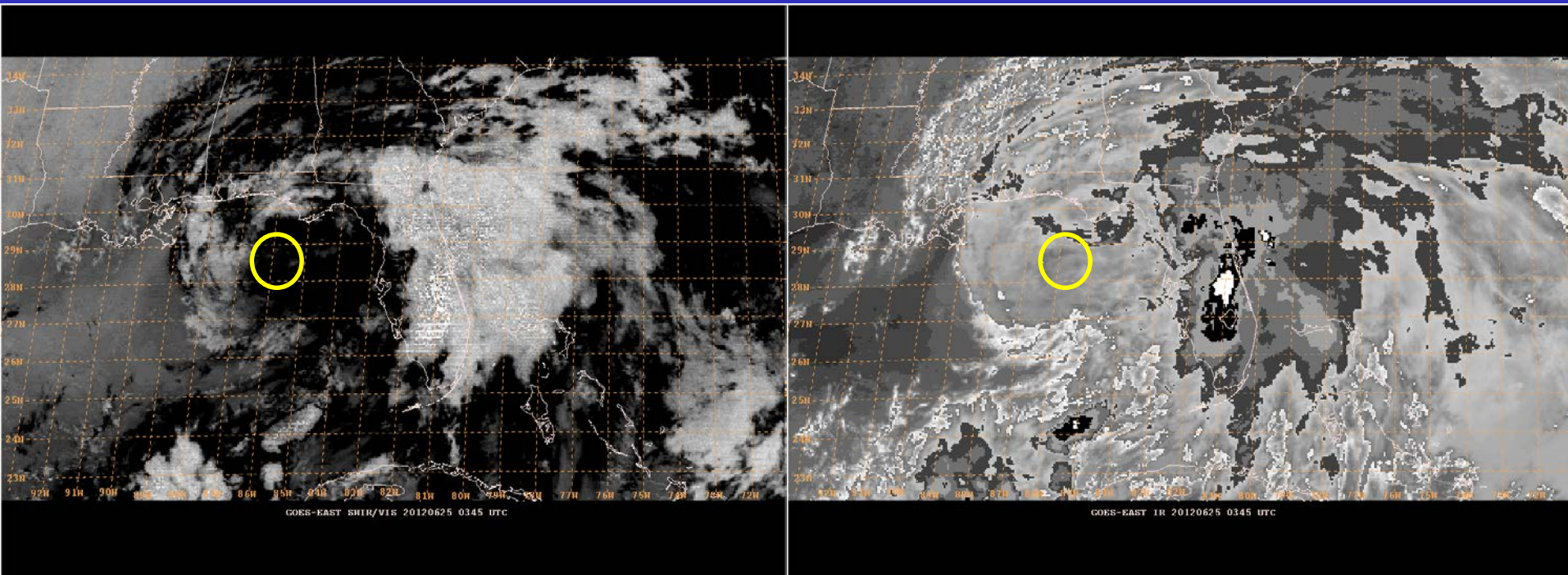


GOES-EAST SWIR/VIS 20120625 0345 UTC



GOES-EAST IR 20120625 0345 UTC

# Center Location Exercise 3

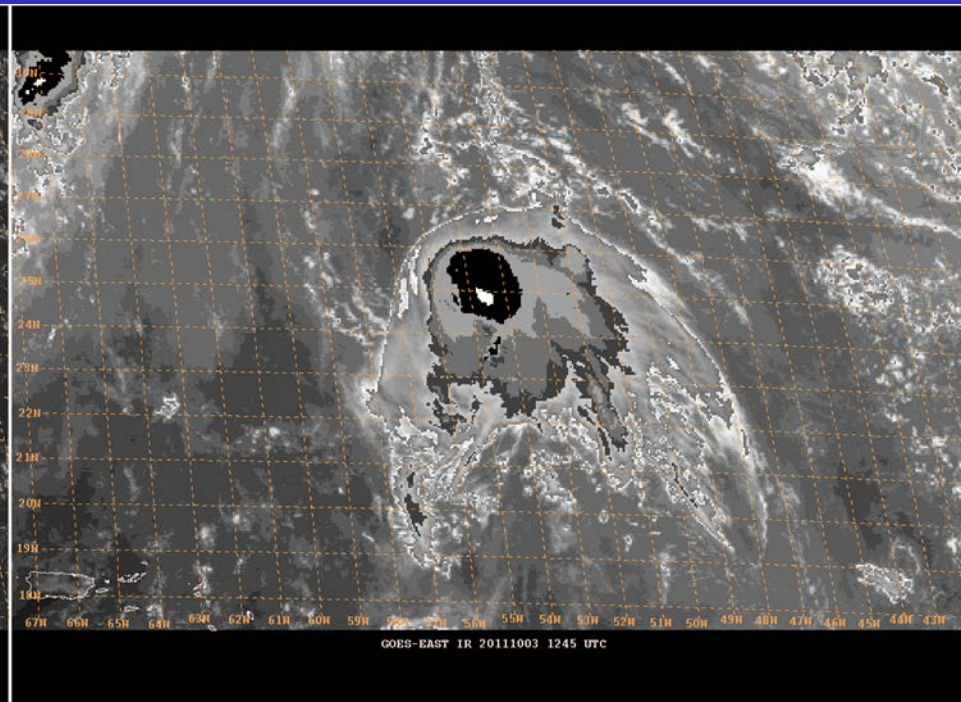
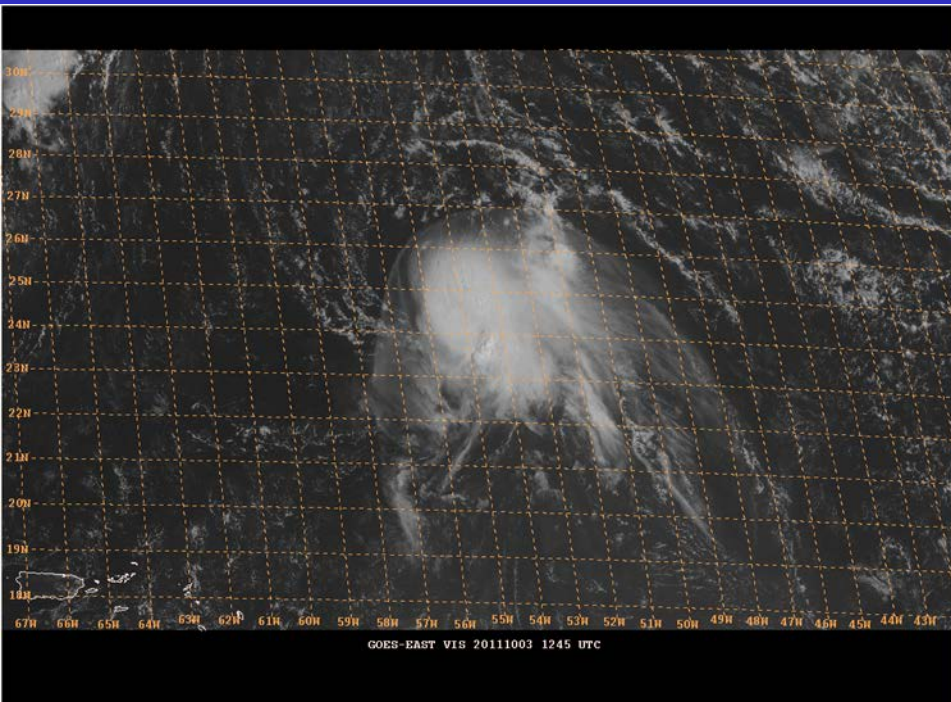


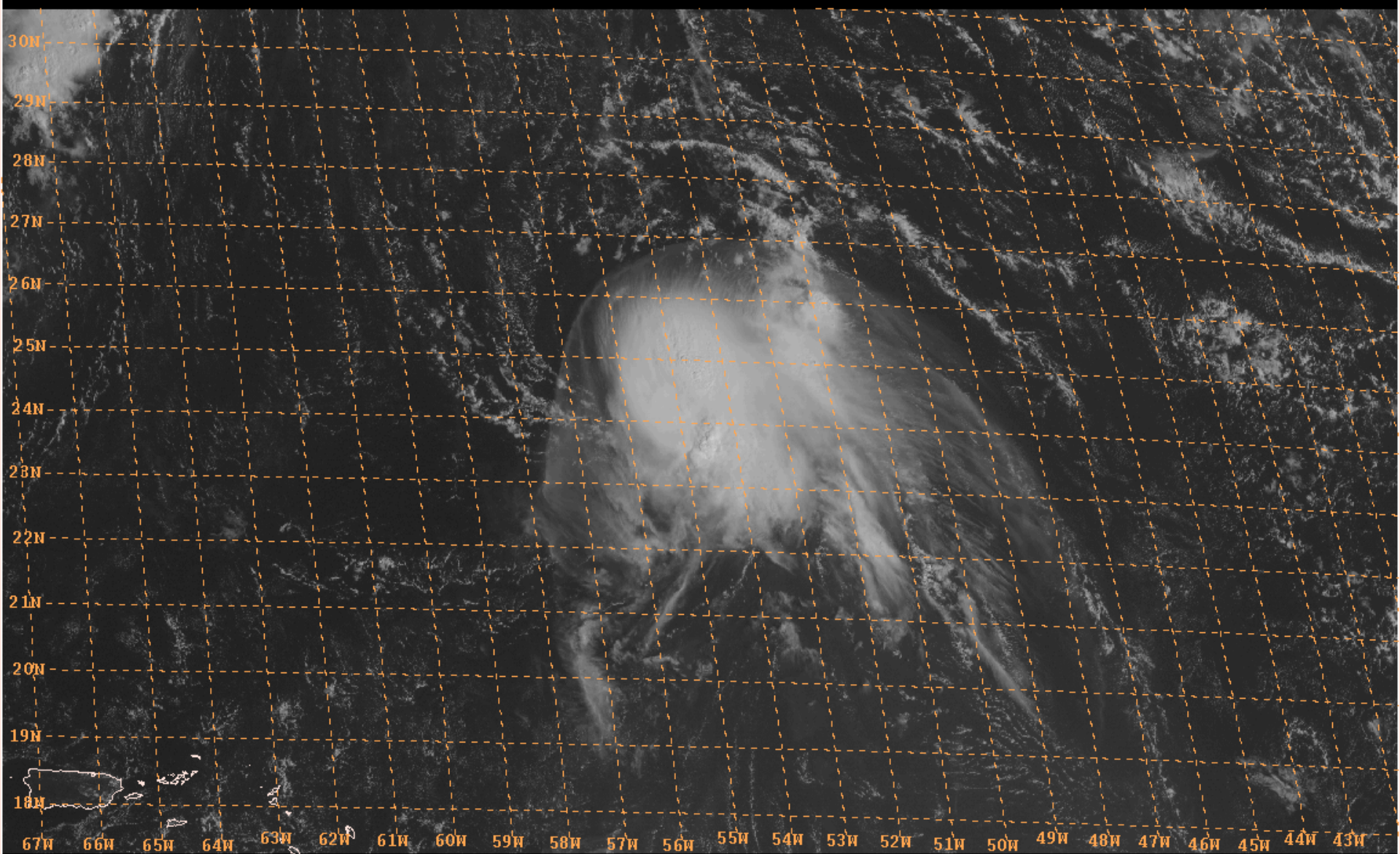
**Best Track Position: 25/0600Z 28.6N 85.8W**

**Tropical Storm Debby June 2012**



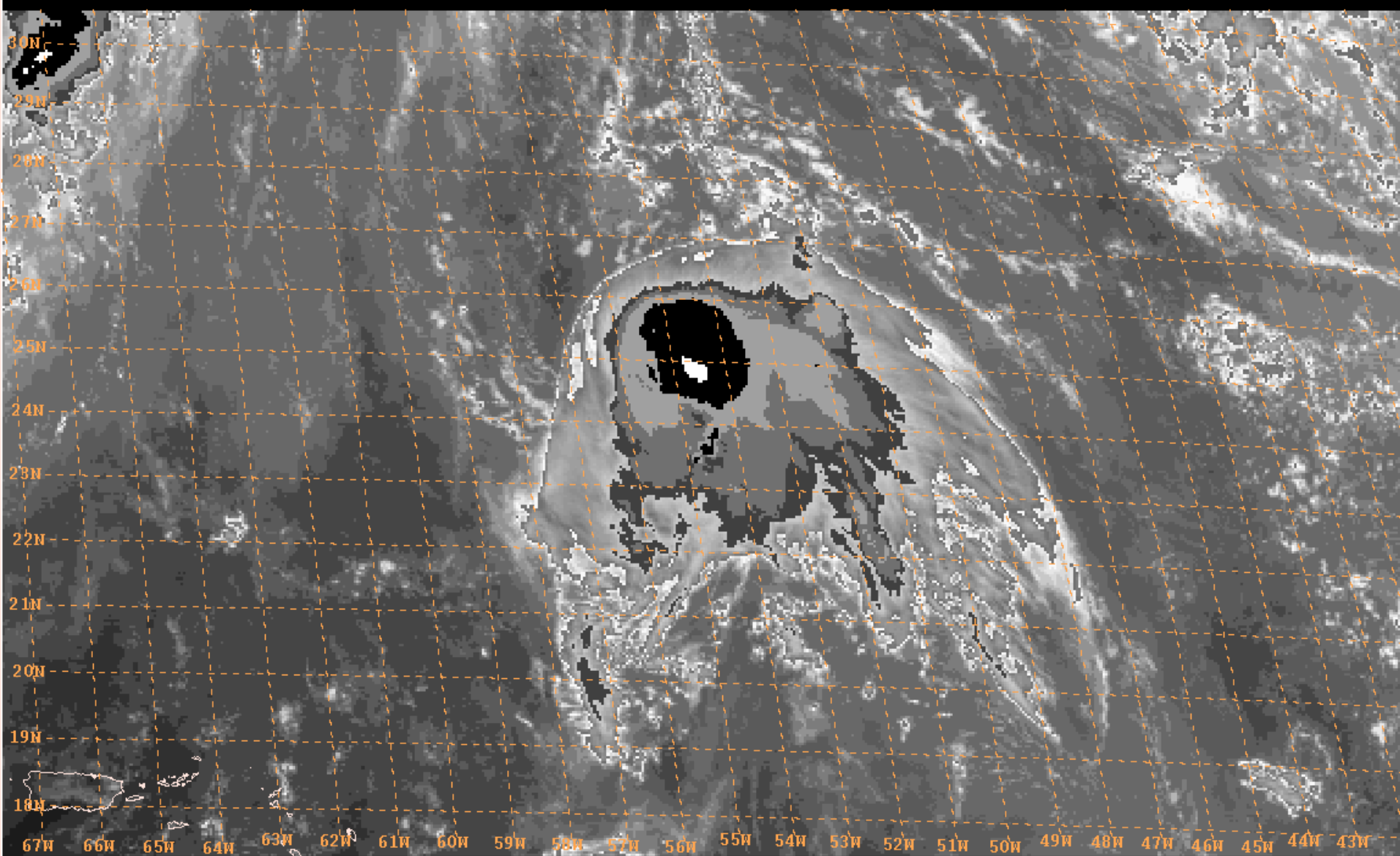
# Center Location Exercise 4





GOES-EAST VIS 20111003 1245 UTC

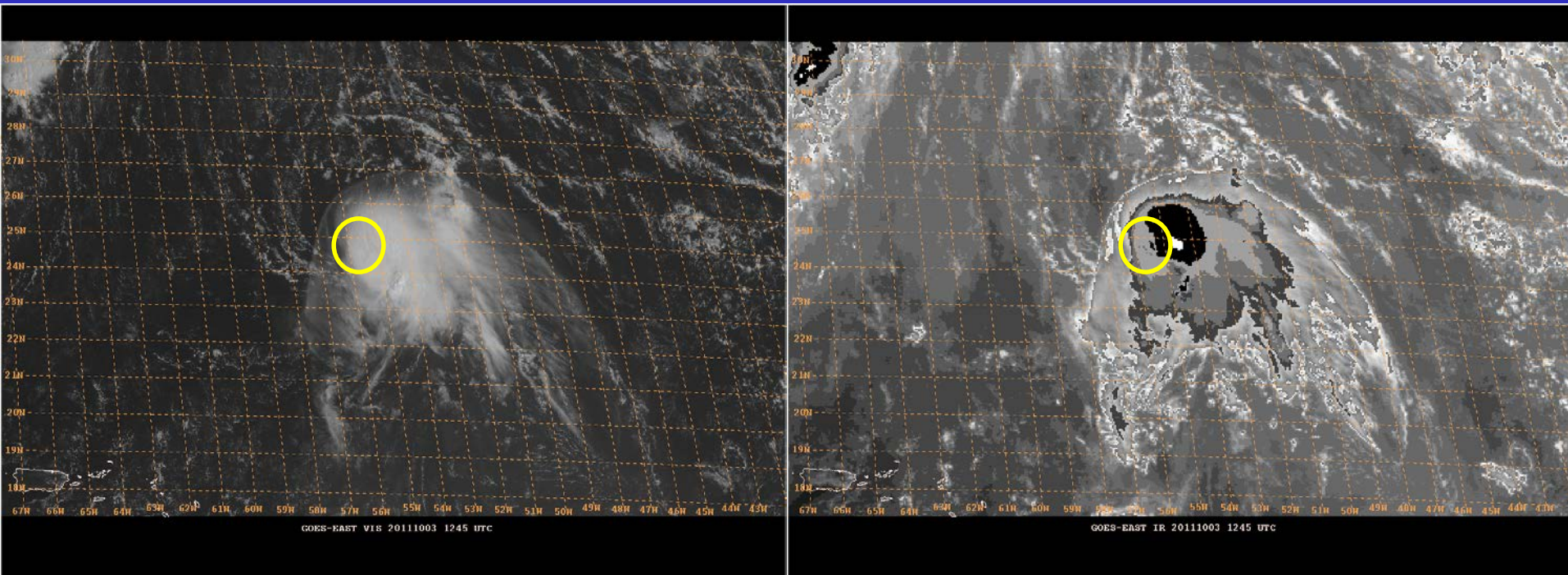




GOES-EAST IR 20111003 1245 UTC



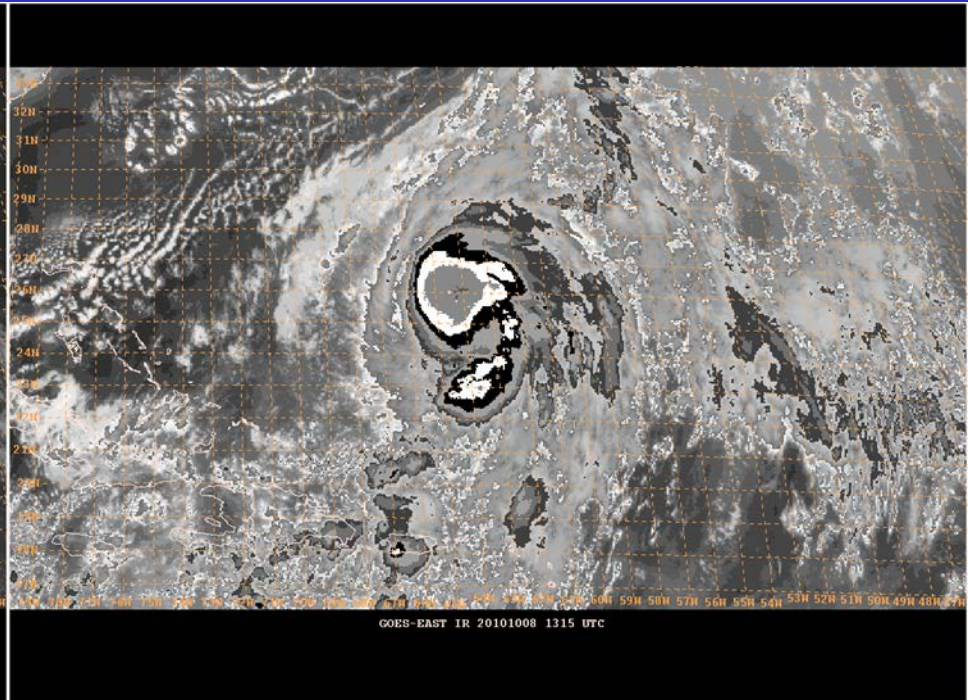
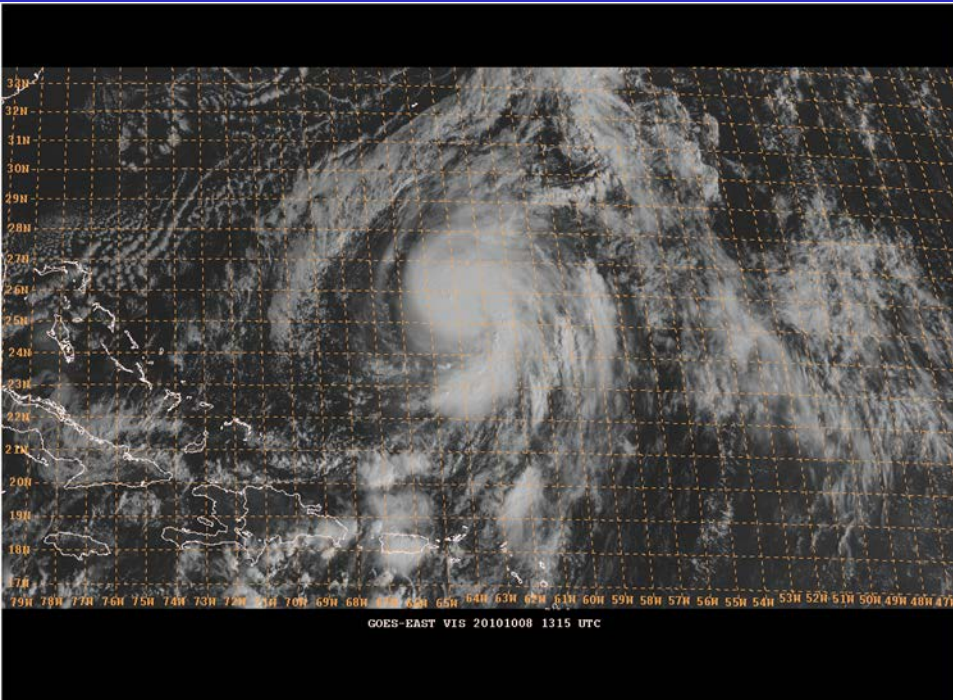
# Center Location Exercise 4



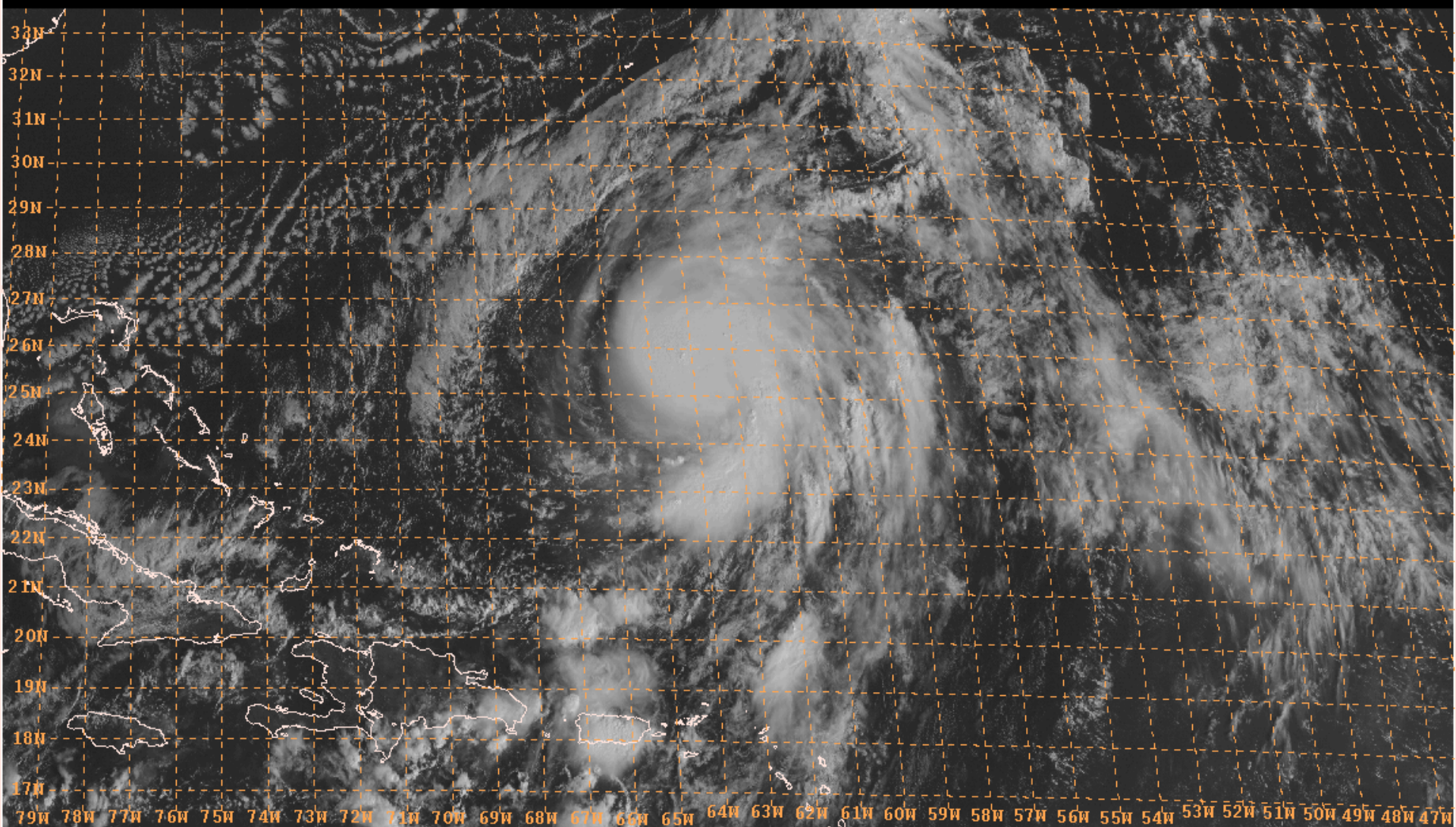
**Interpolated Best Track Position: 03/1500Z 24.6N 55.2W**  
**Tropical Storm Philippe October 2011**



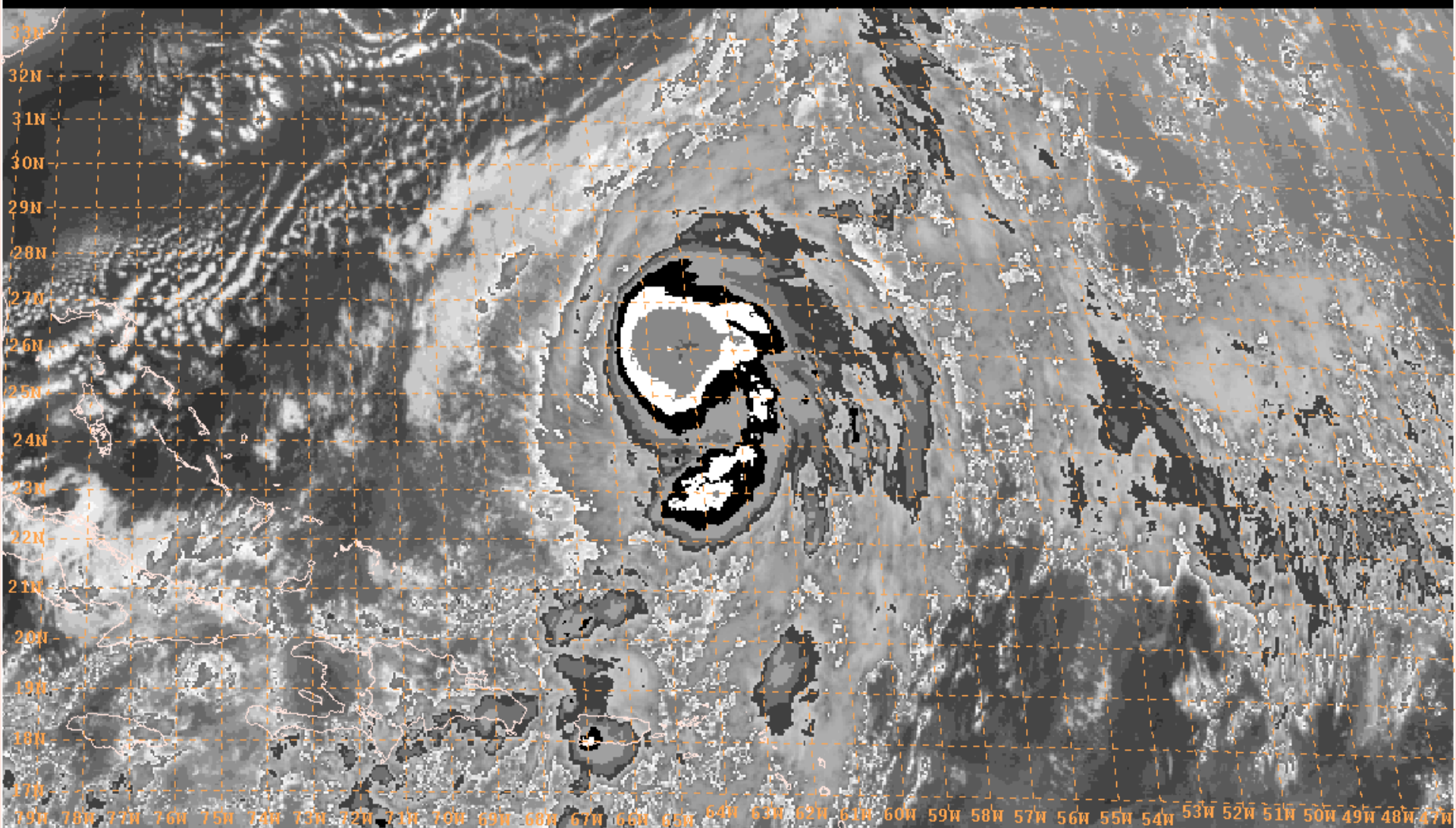
# Center Location Exercise 5







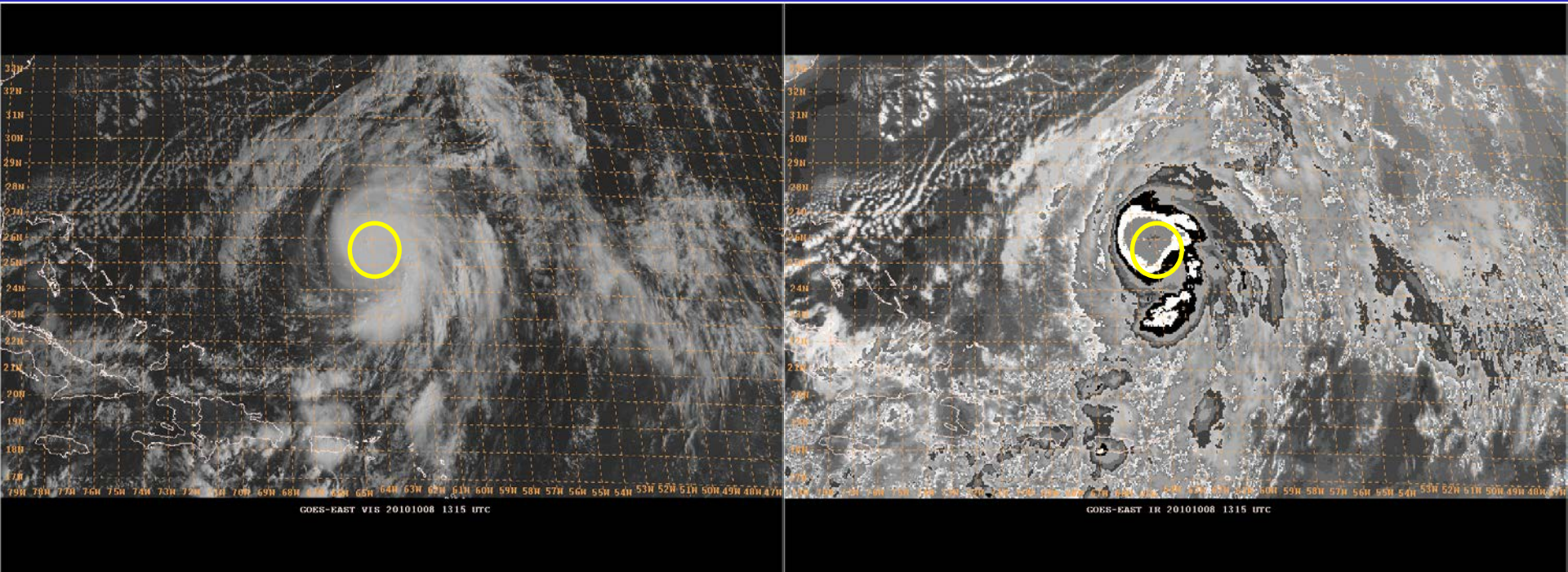
GOES-EAST VIS 20101008 1315 UTC



GOES-EAST IR 20101008 1315 UTC



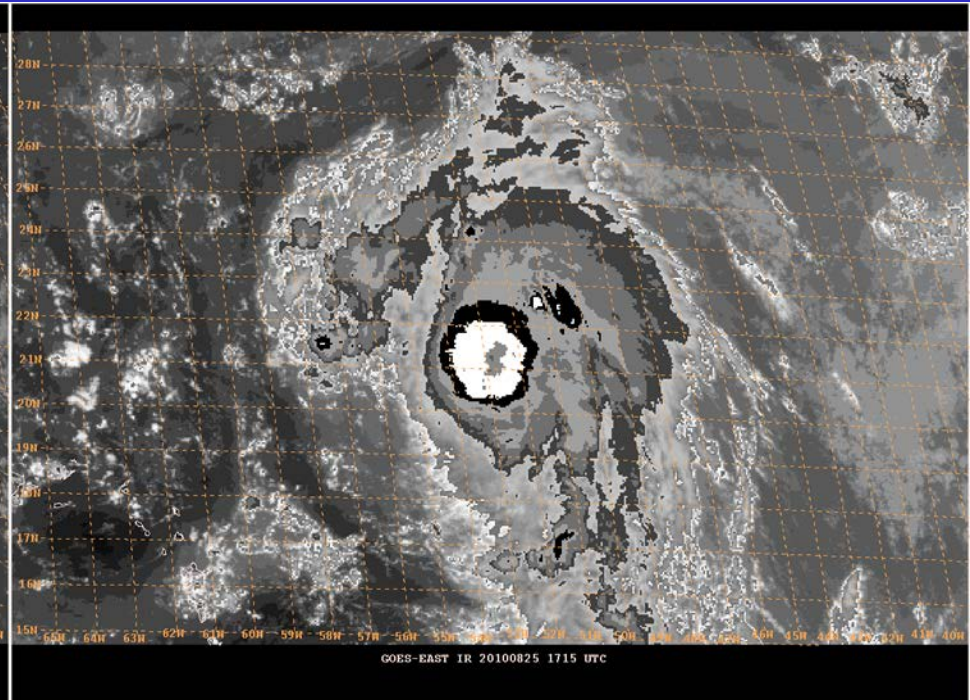
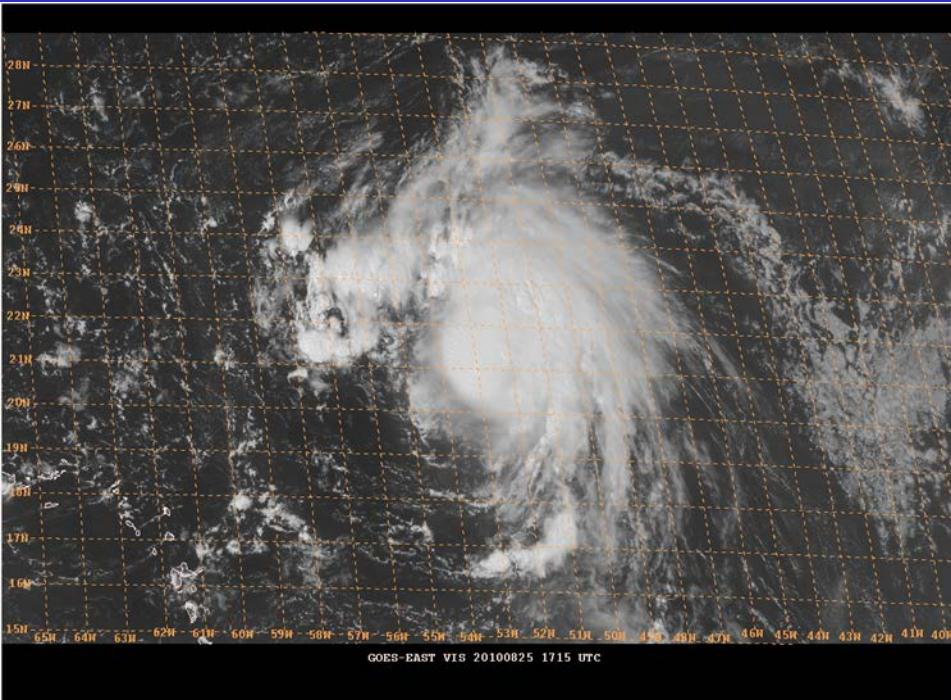
# Center Location Exercise 5



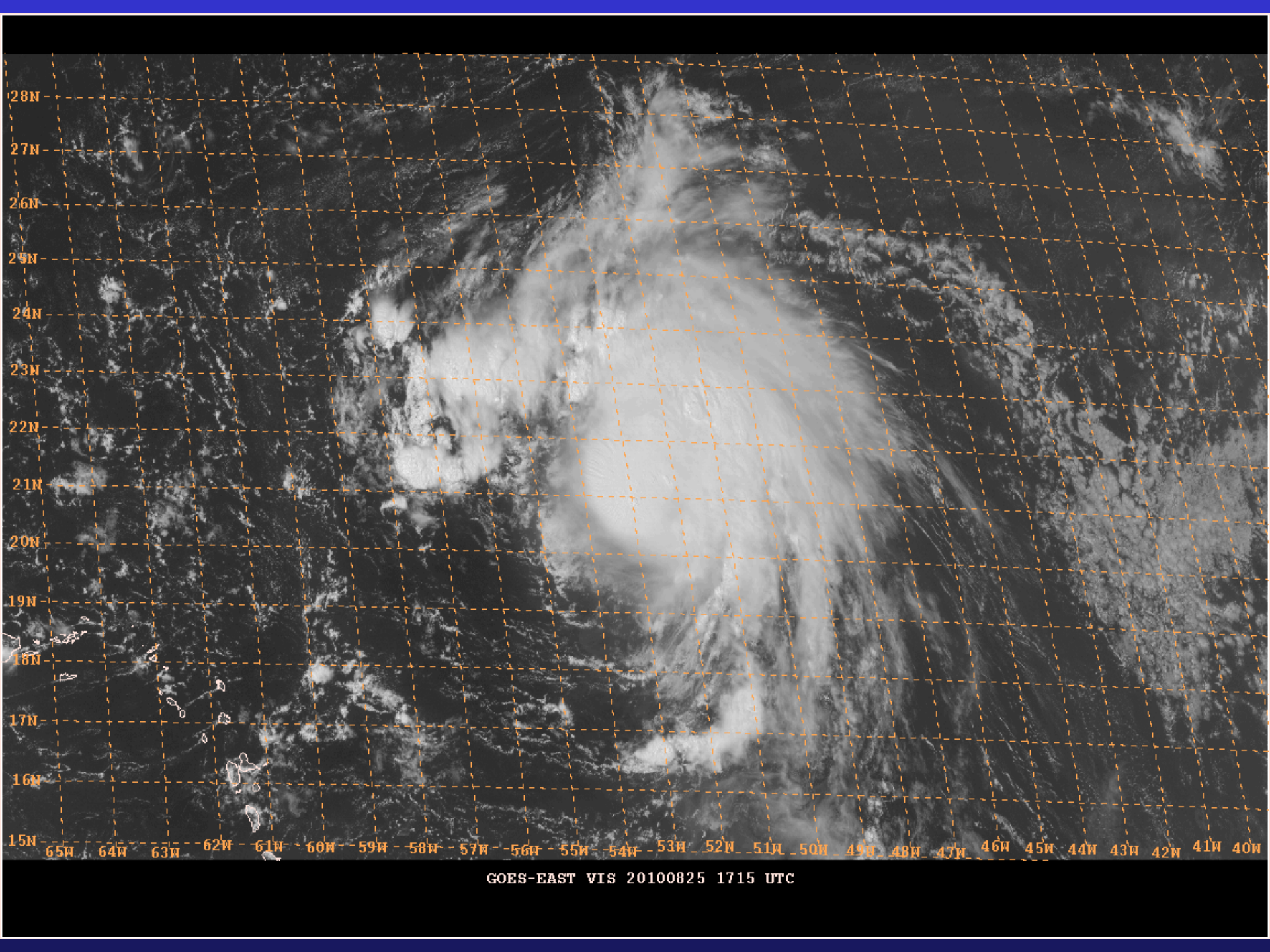
**Interpolated Best Track Position: 08/1500Z 25.7N 64.0W**  
**Hurricane Otto October 2010**

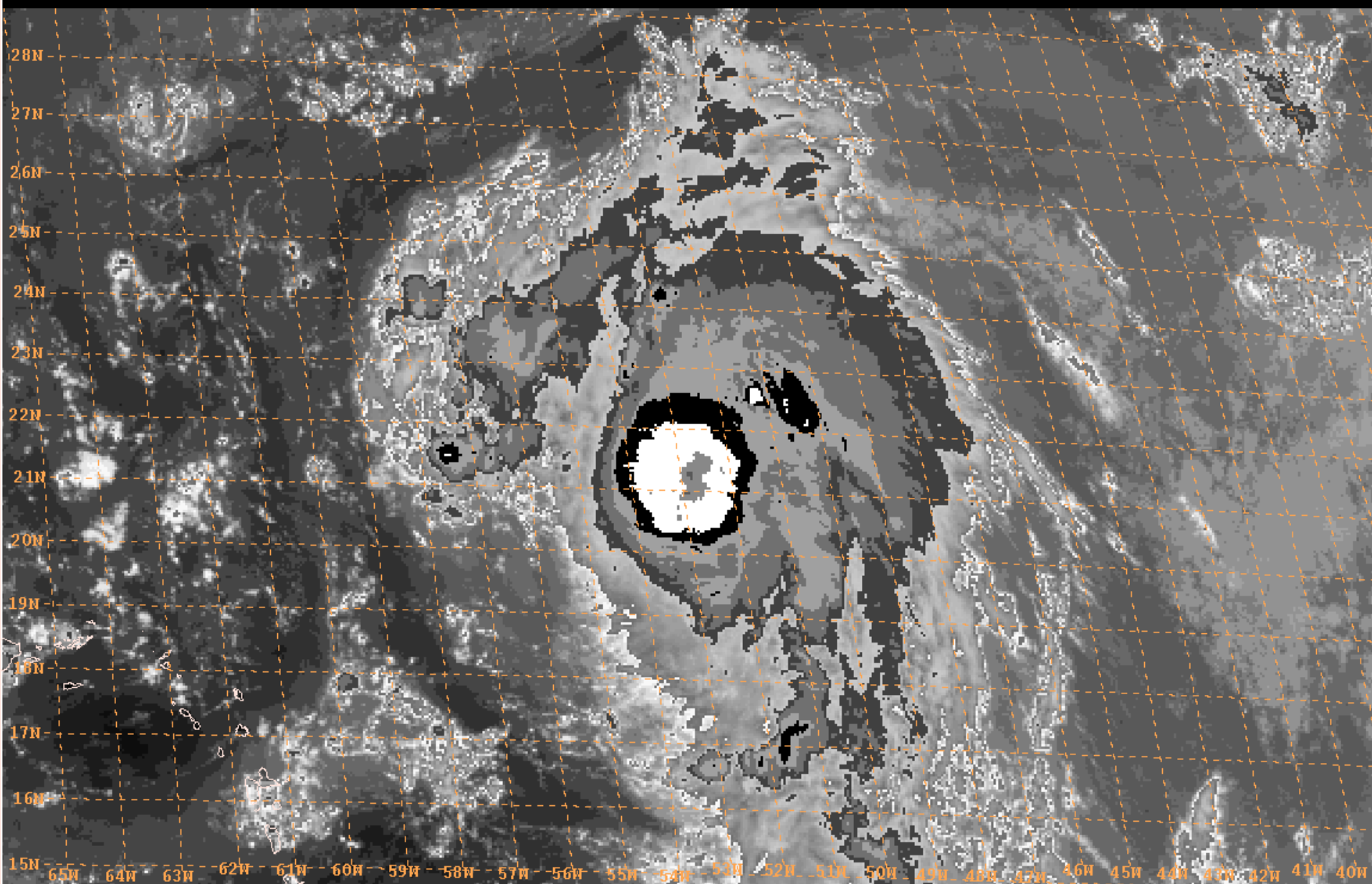


# Center Location Exercise 6





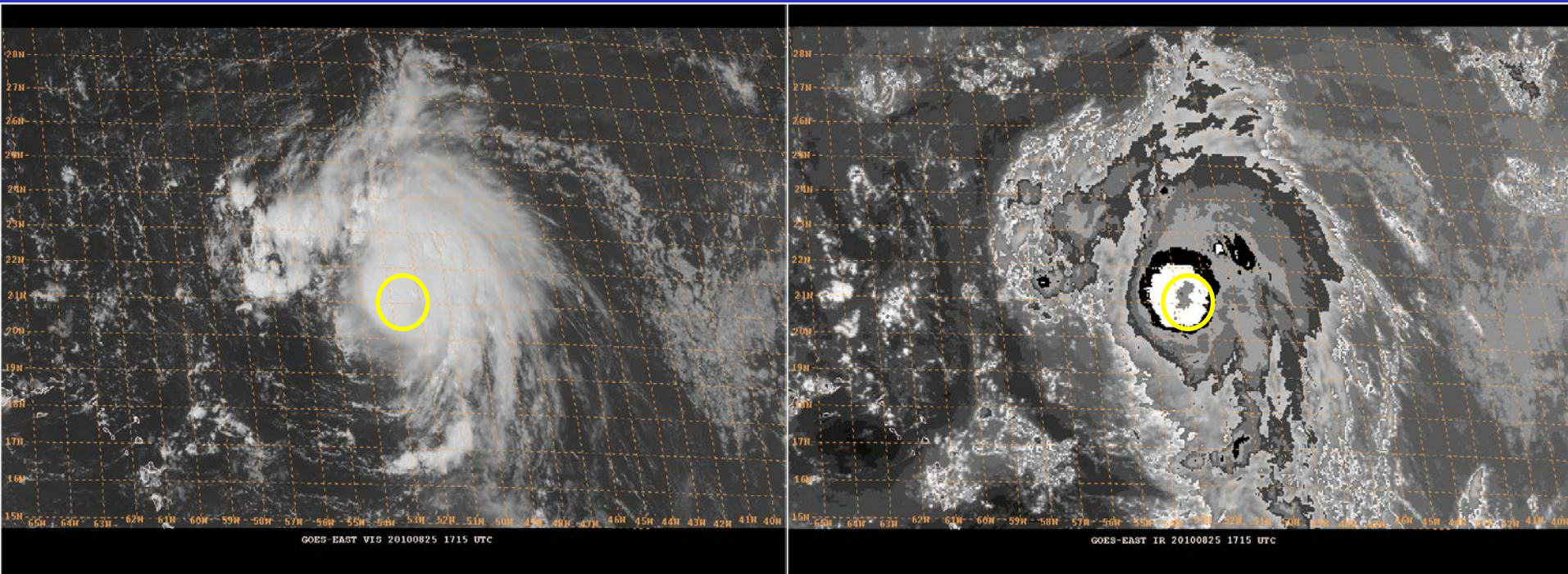




GOES-EAST IR 20100825 1715 UTC



# Center Location Exercise 6

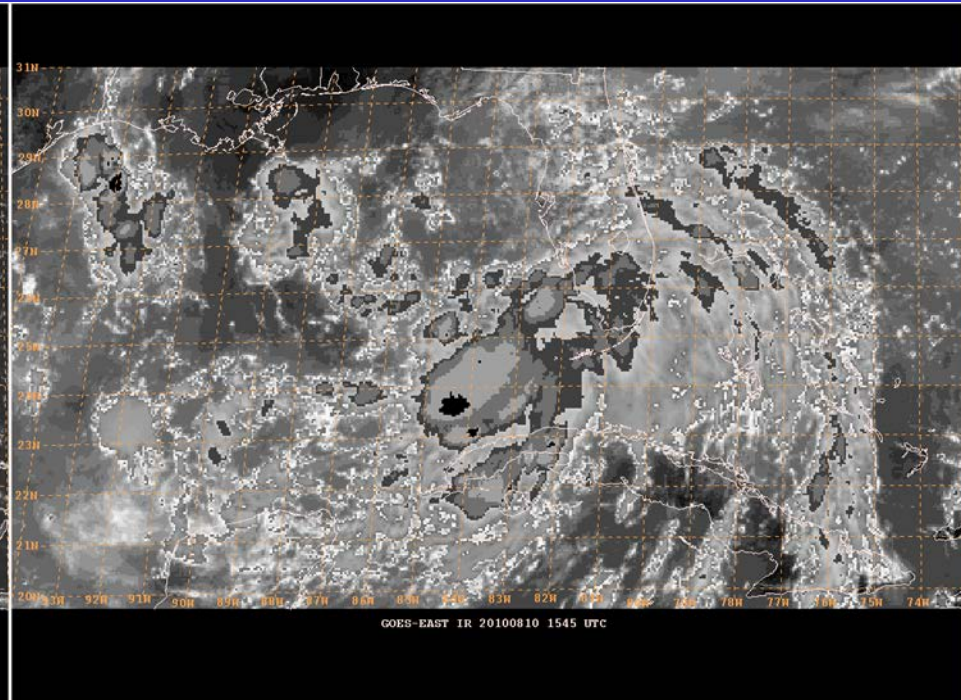
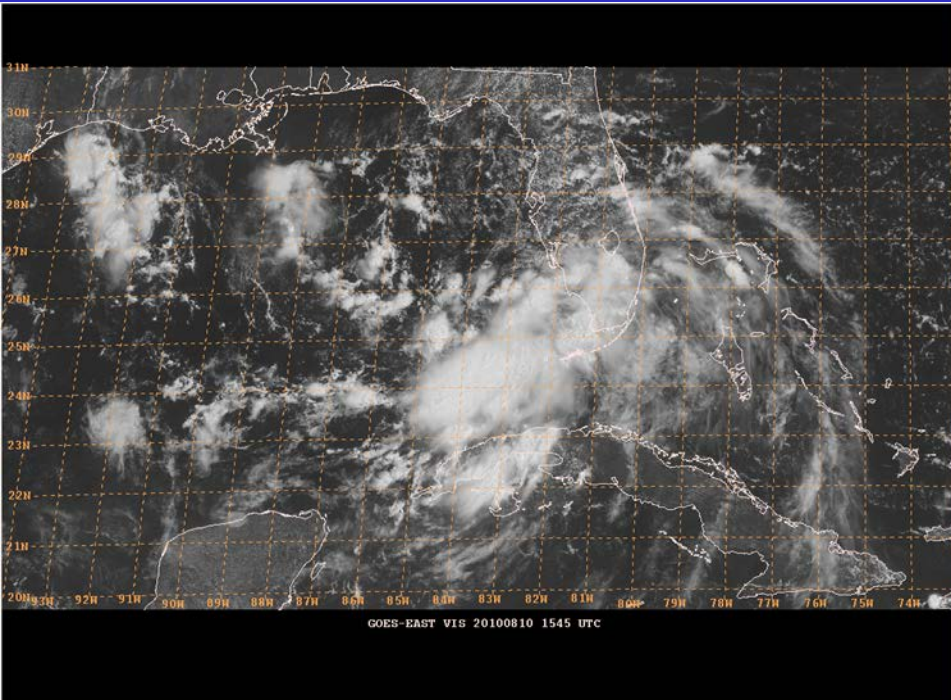


**Best Track Position: 25/1800Z 20.7N 52.6W**

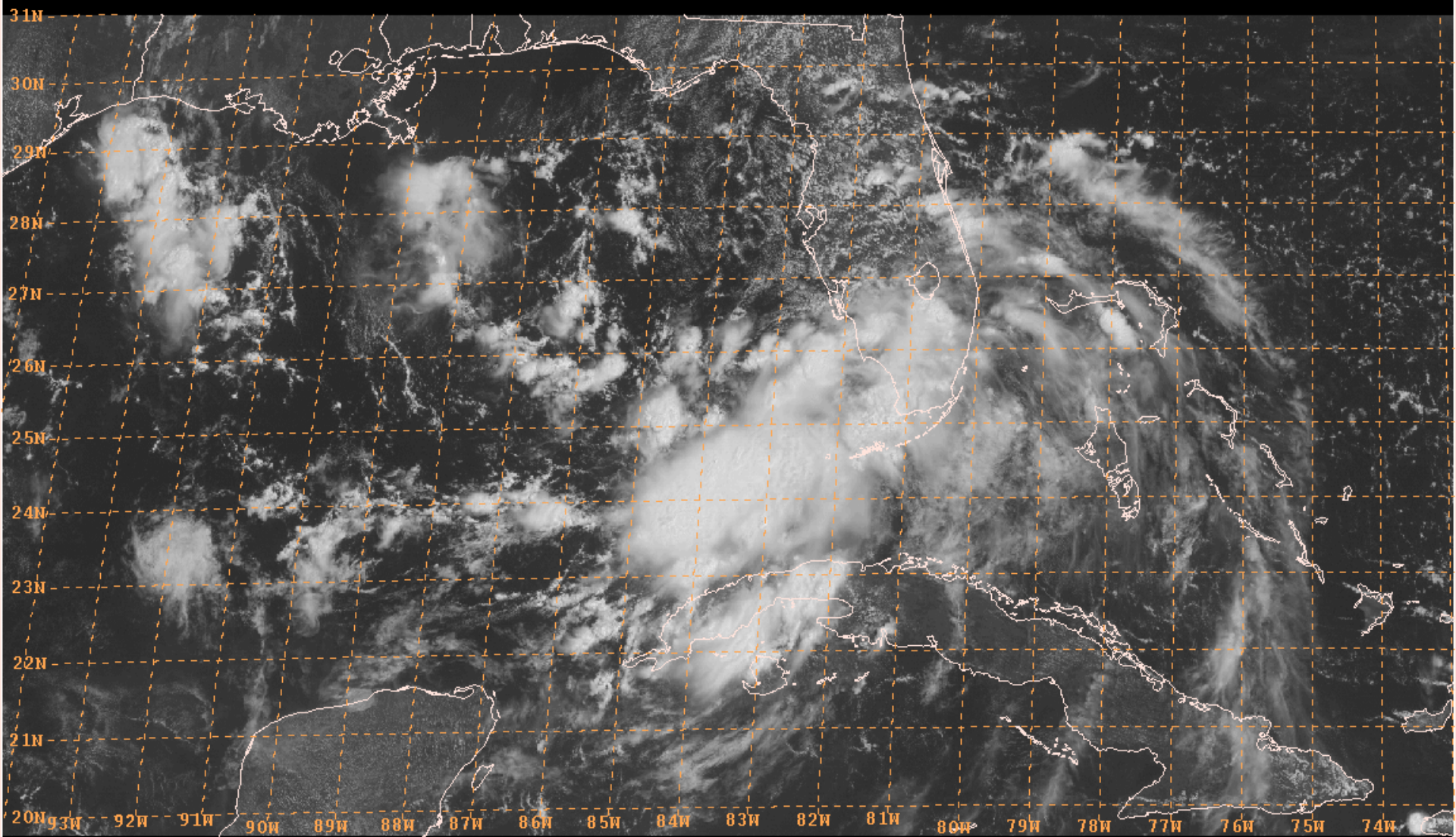
**Hurricane Danielle August 2010**



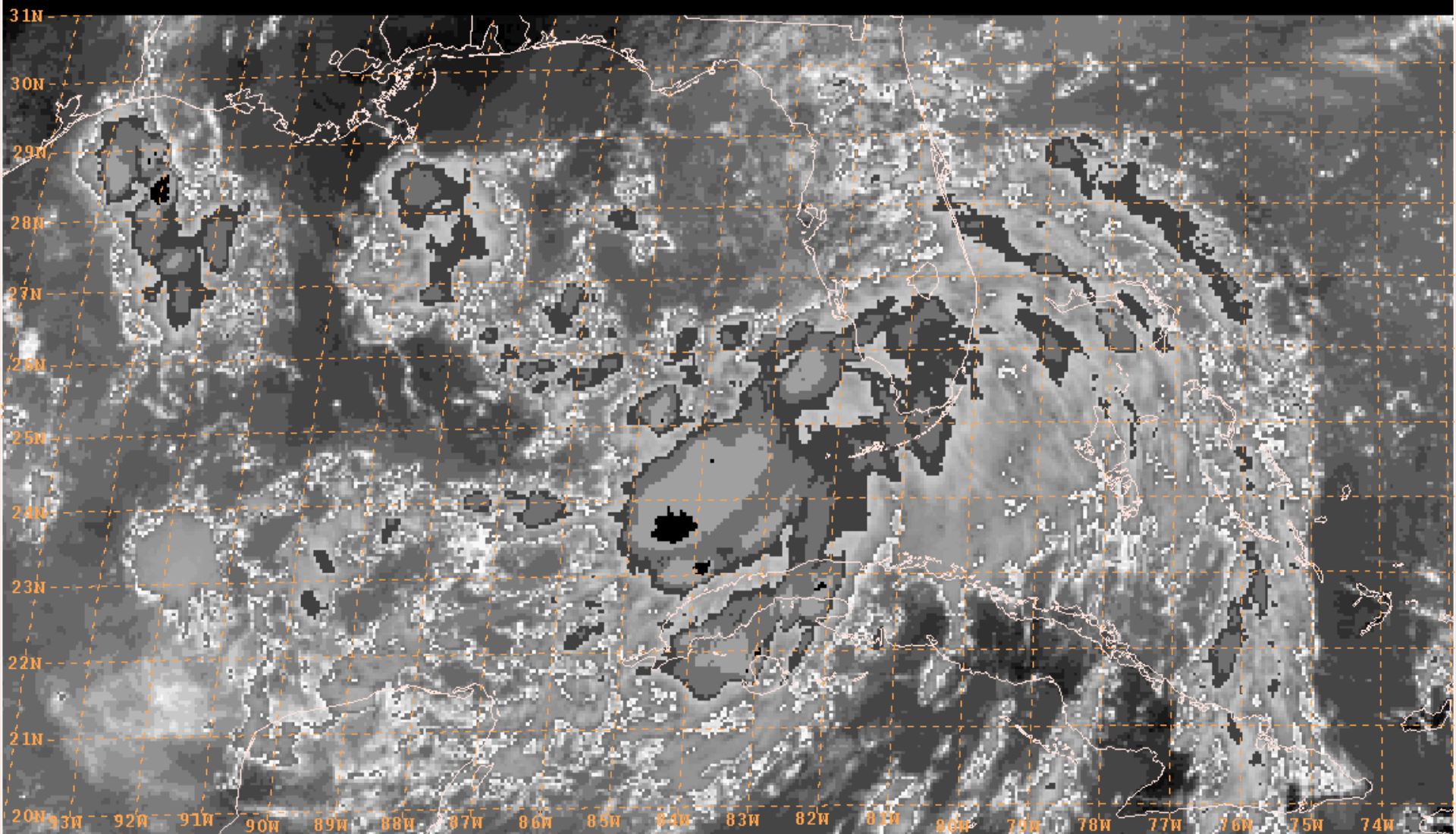
# Center Location Exercise 7







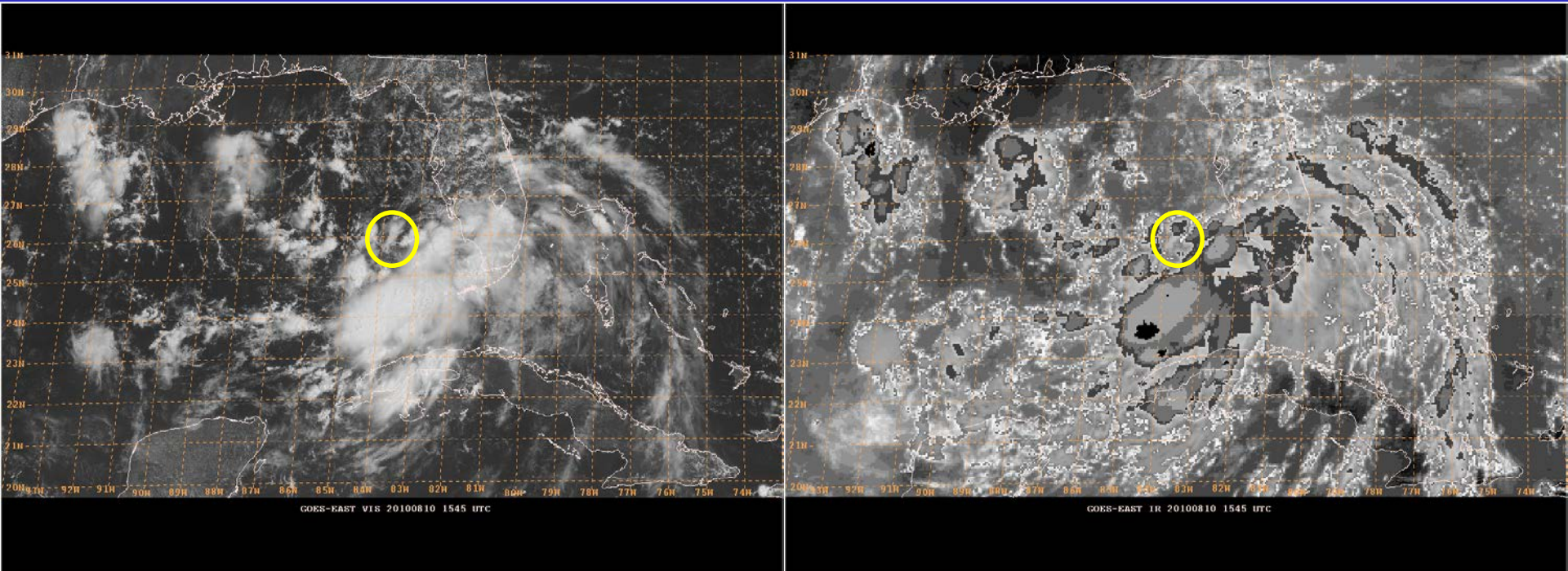
GOES-EAST VIS 20100810 1545 UTC



GOES-EAST IR 20100810 1545 UTC



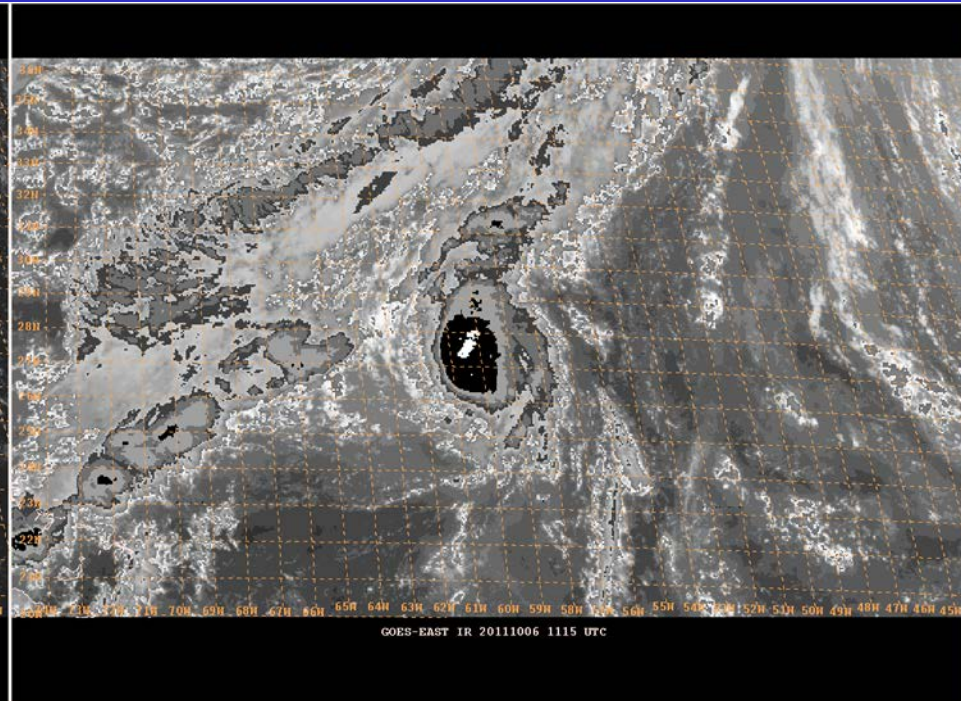
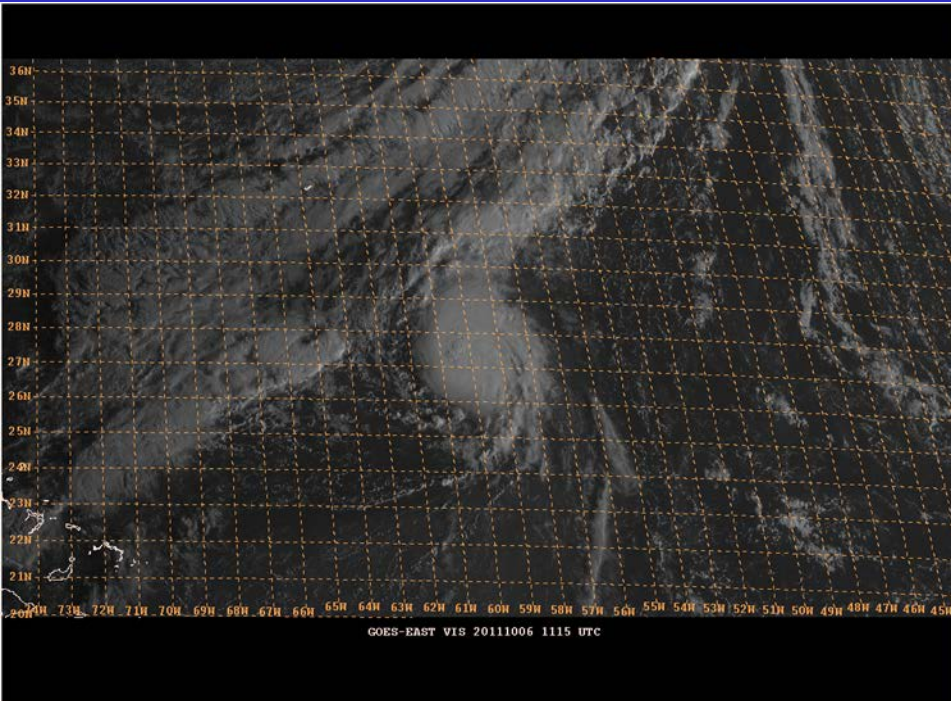
# Center Location Exercise 7



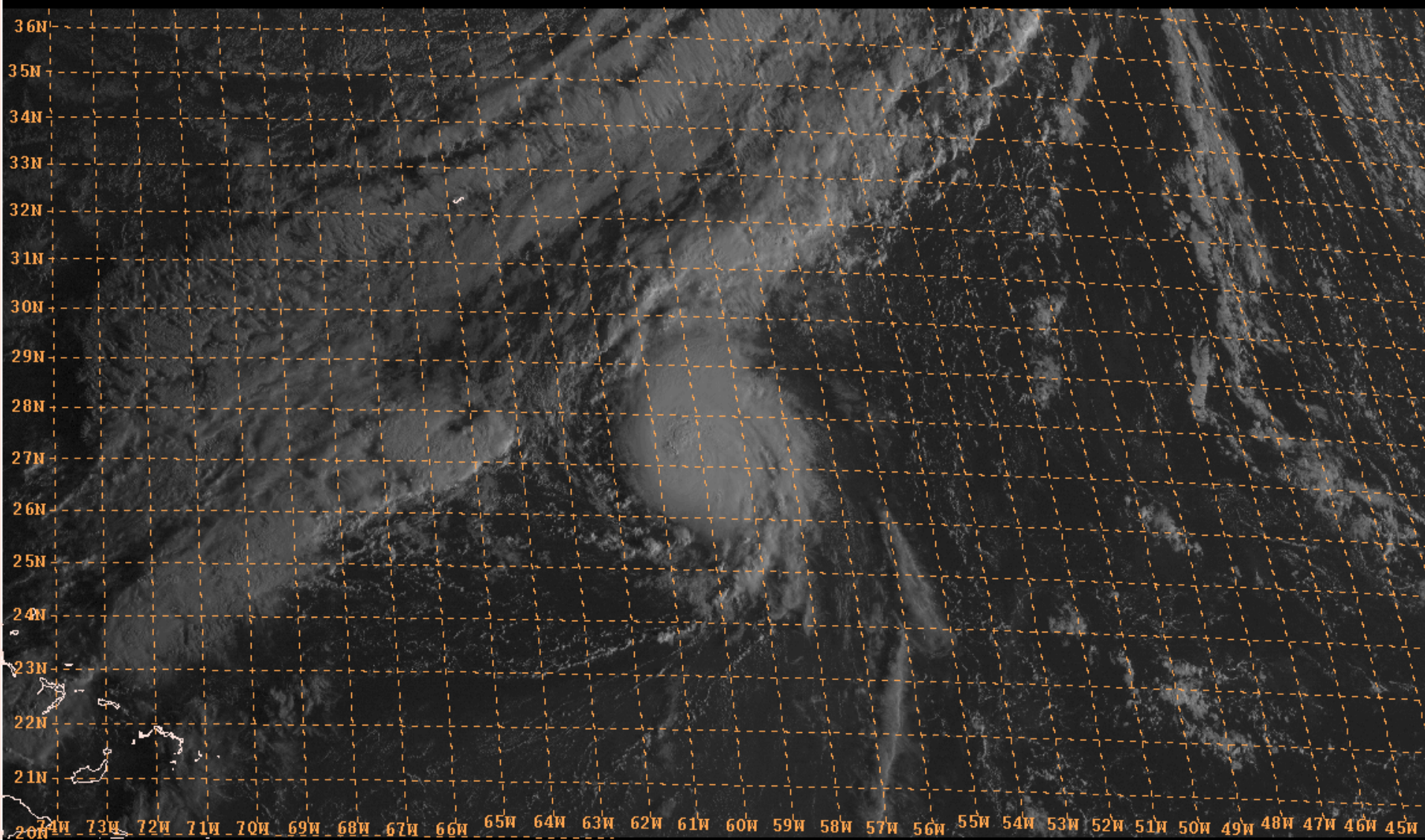
**Best Track Position: 10/1800Z 25.9N 83.7W**

**Tropical Depression Five August 2010**

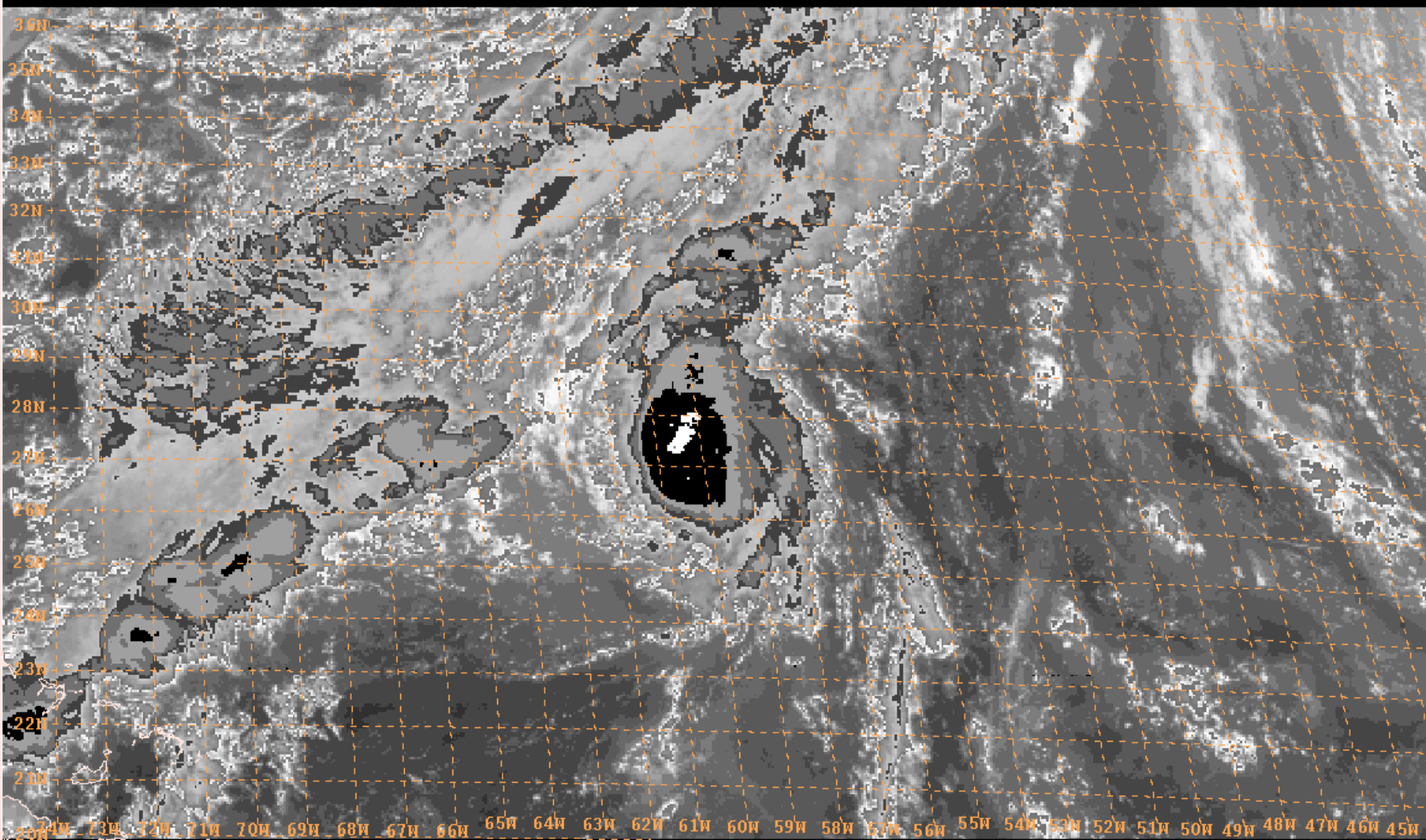
# Center Location Exercise 8







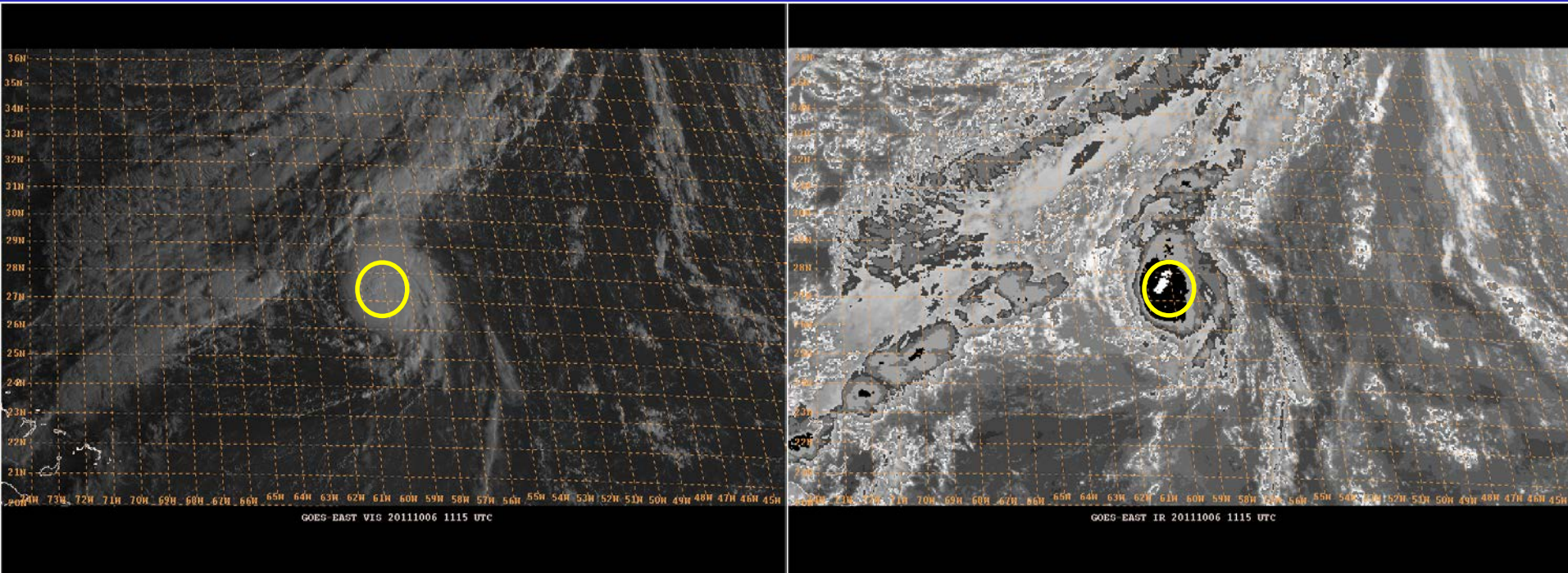
GOES-EAST VIS 20111006 1115 UTC



GOES-EAST IR 20111006 1115 UTC



# Center Location Exercise 8

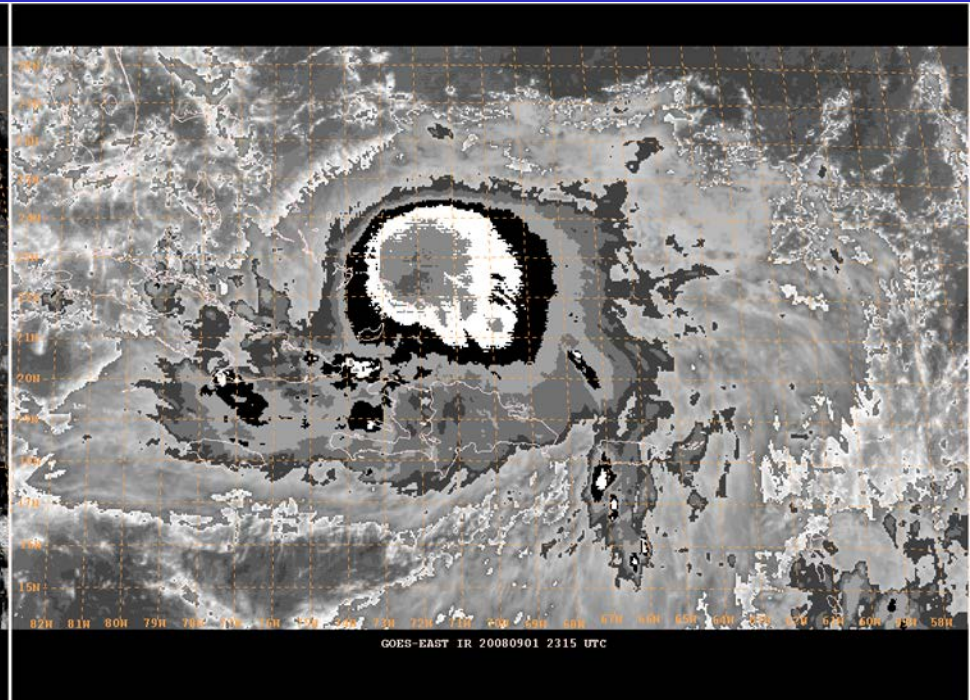
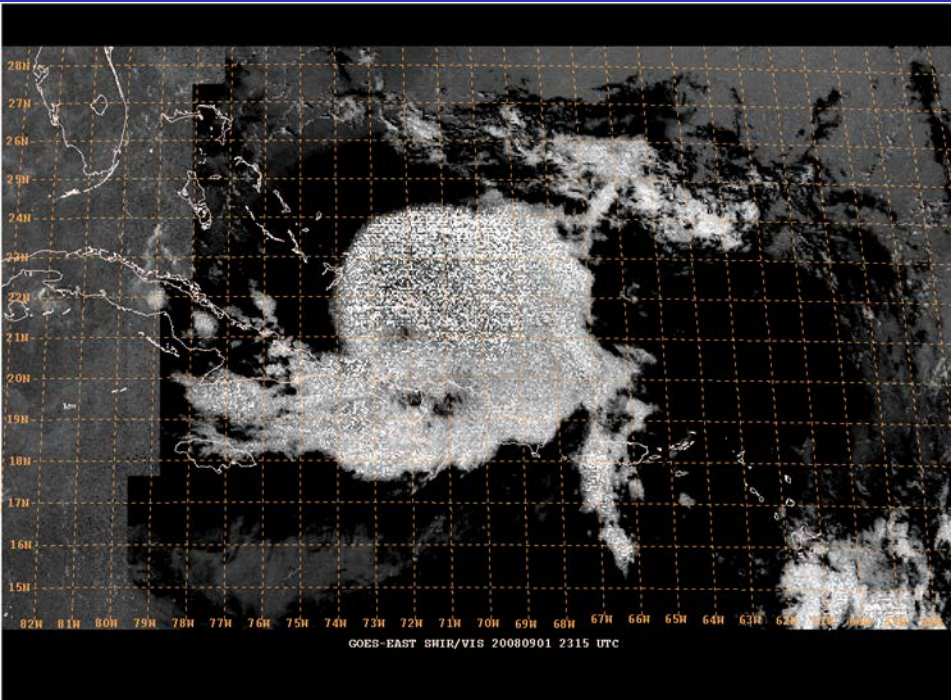


**Best Track Position: 06/1200Z 27.4N 60.4W**

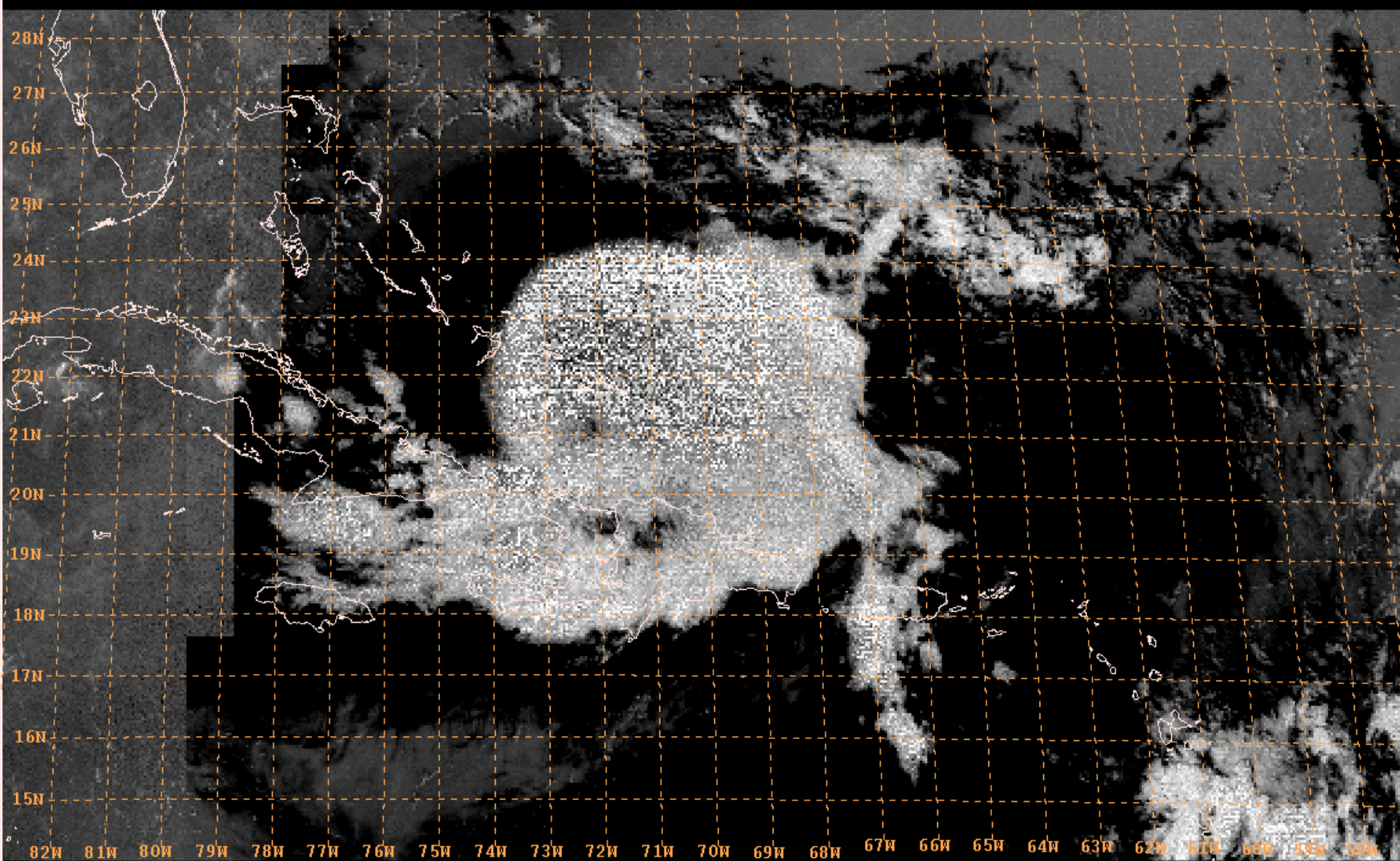
**Hurricane Philippe October 2011**



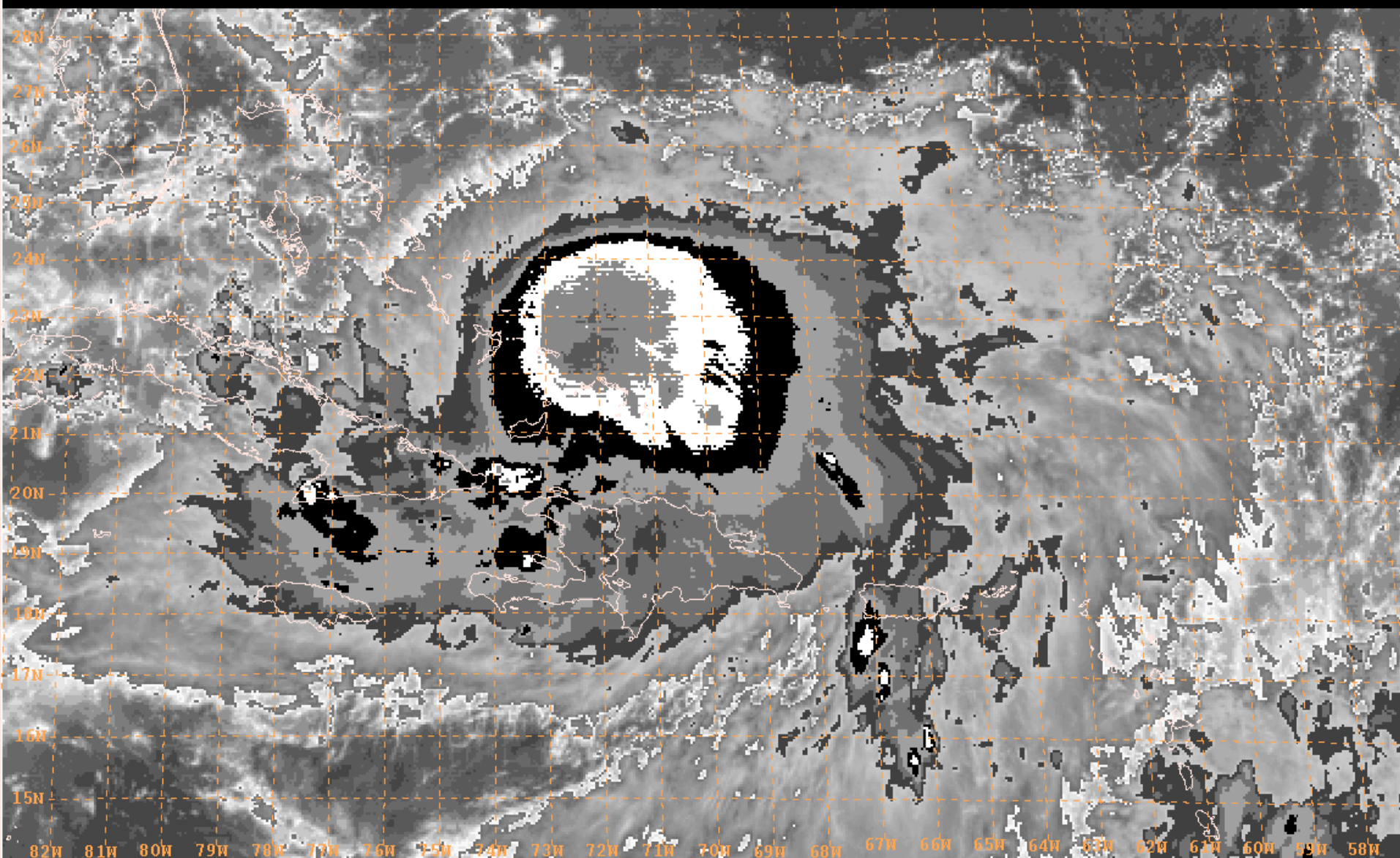
# Center Location Exercise 9







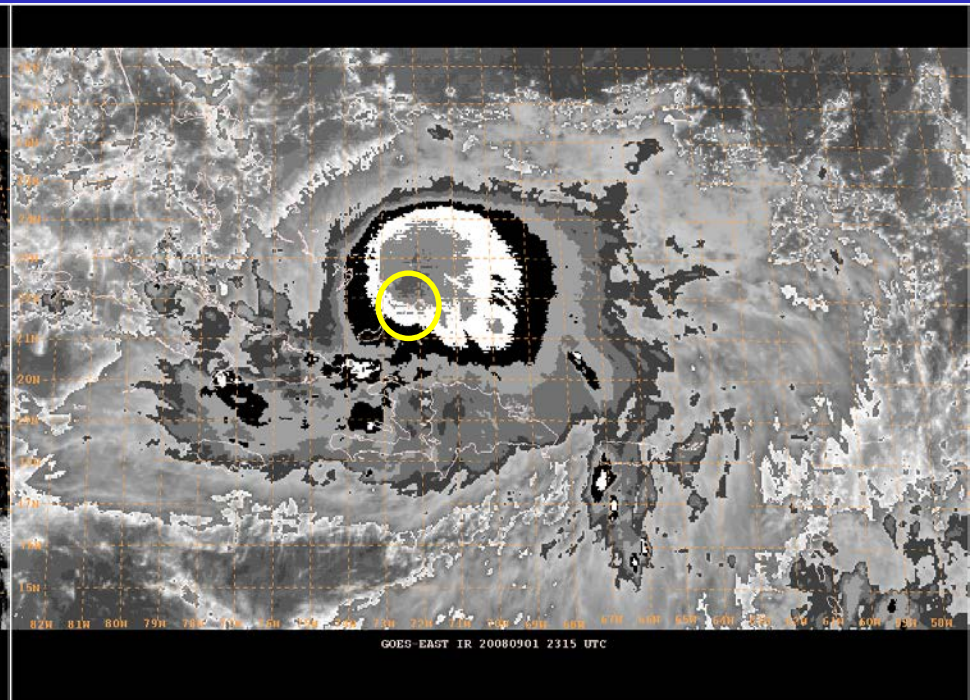
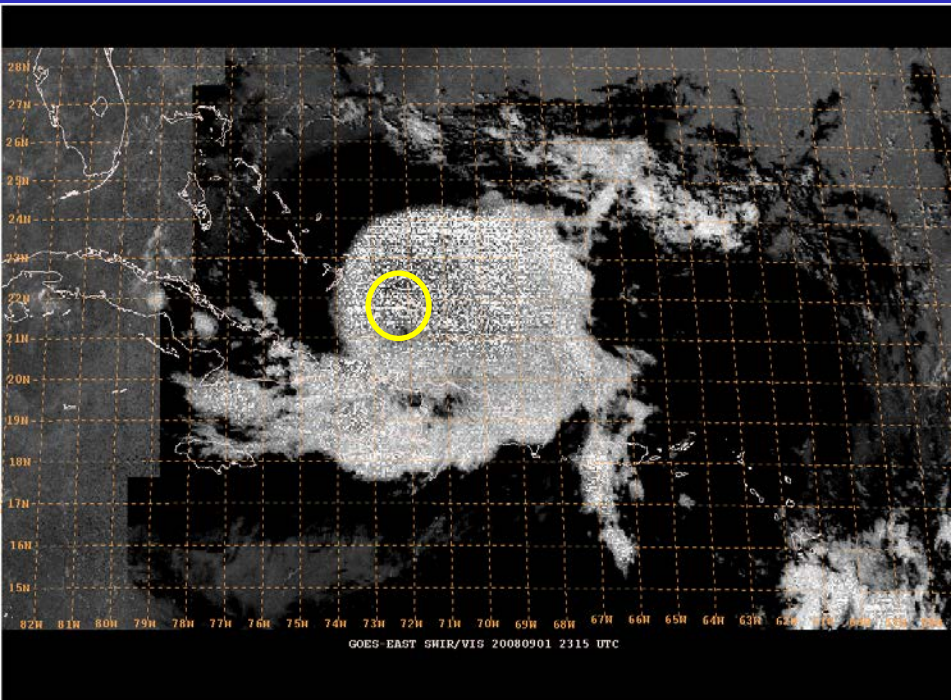
GOES-EAST SWIR/VIS 20080901 2315 UTC



GOES-EAST IR 20080901 2315 UTC



# Center Location Exercise 9

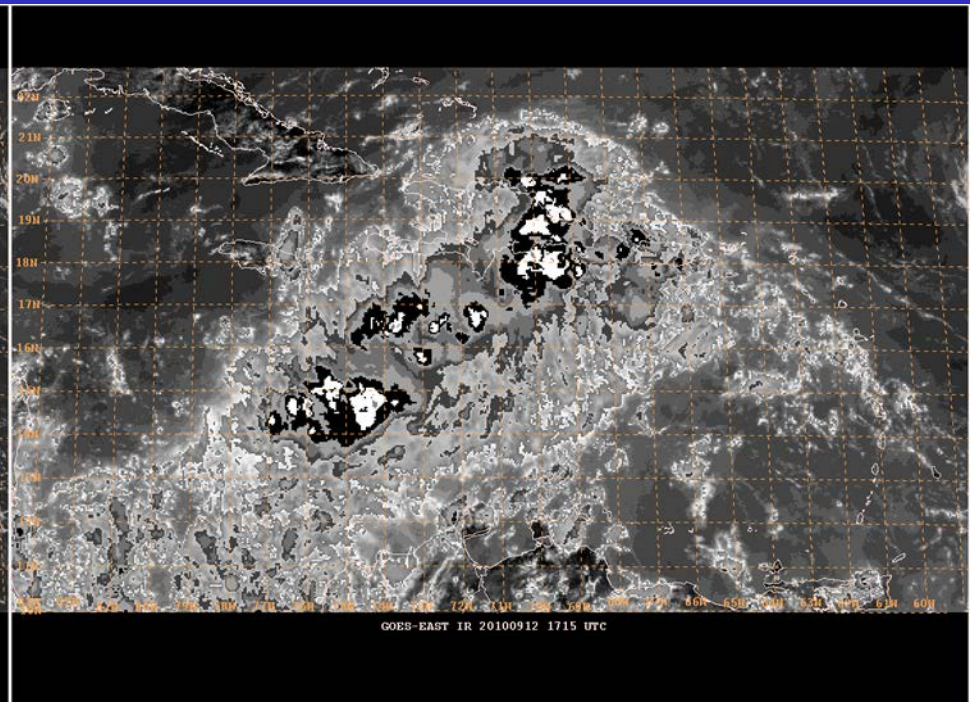
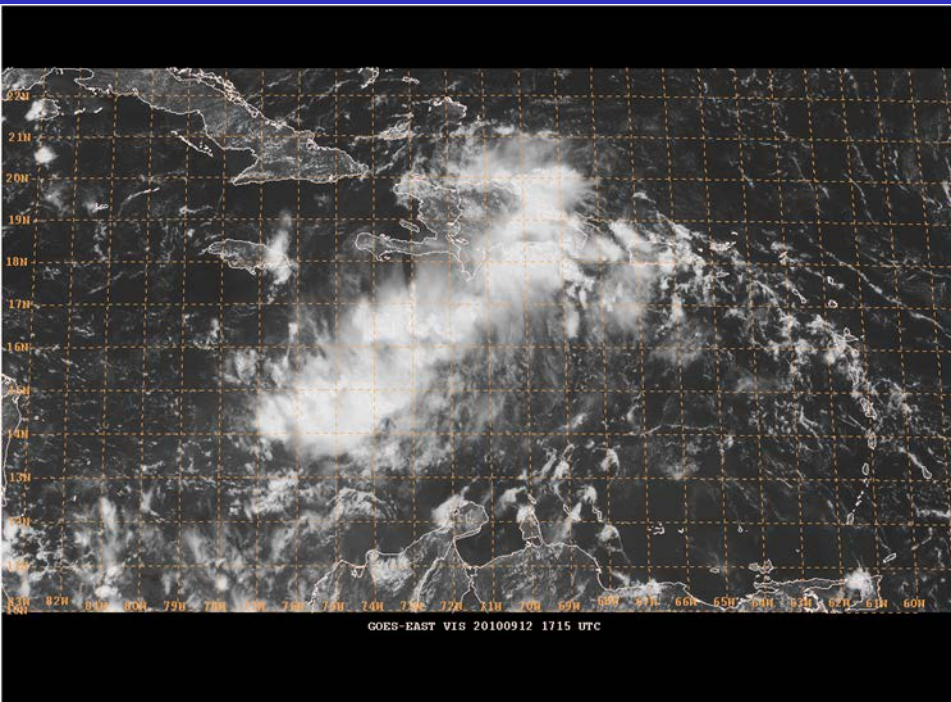


**Best Track Position: 02/0000Z 21.8N 72.3W**

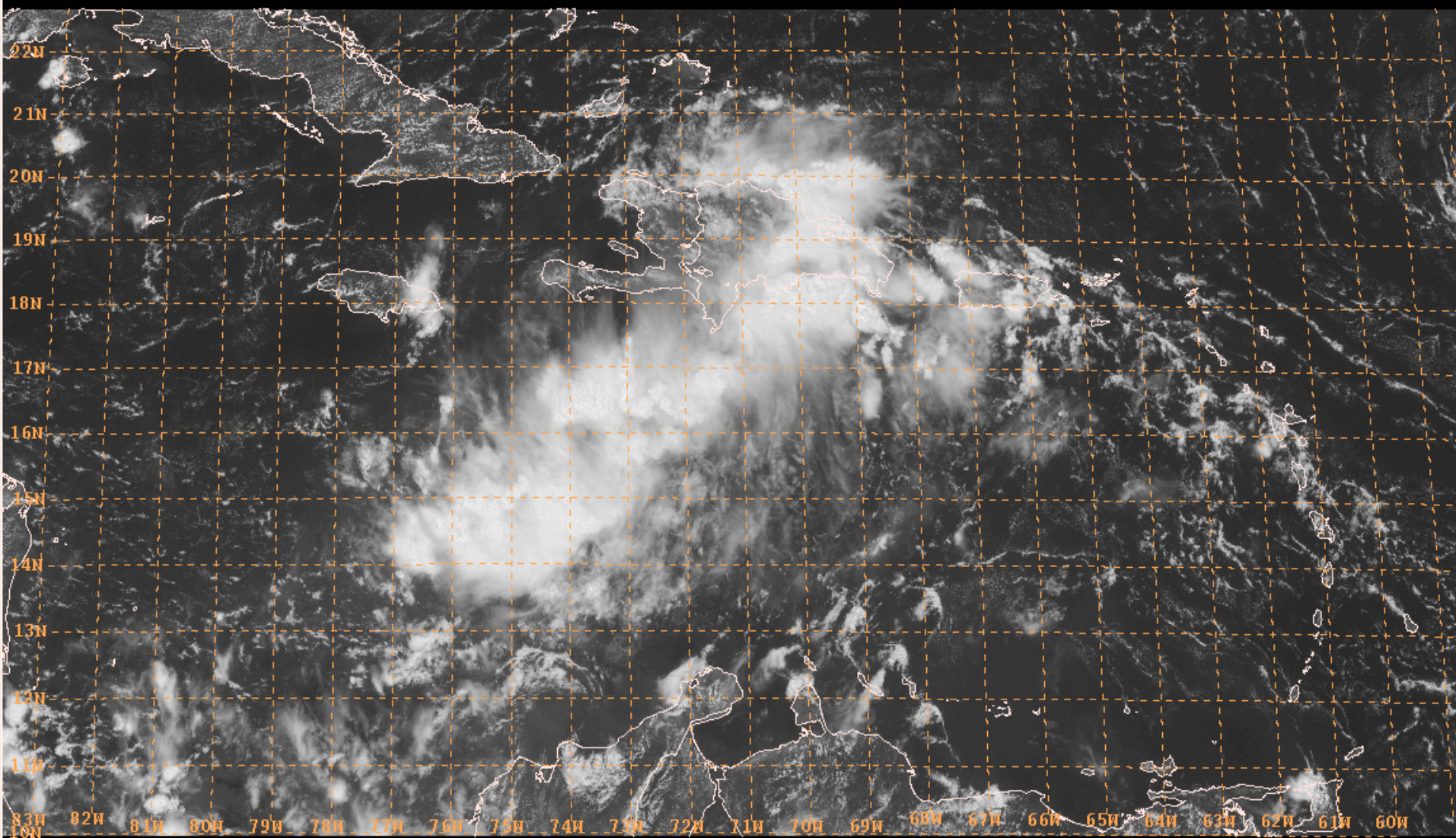
**Hurricane Hanna September 2008**



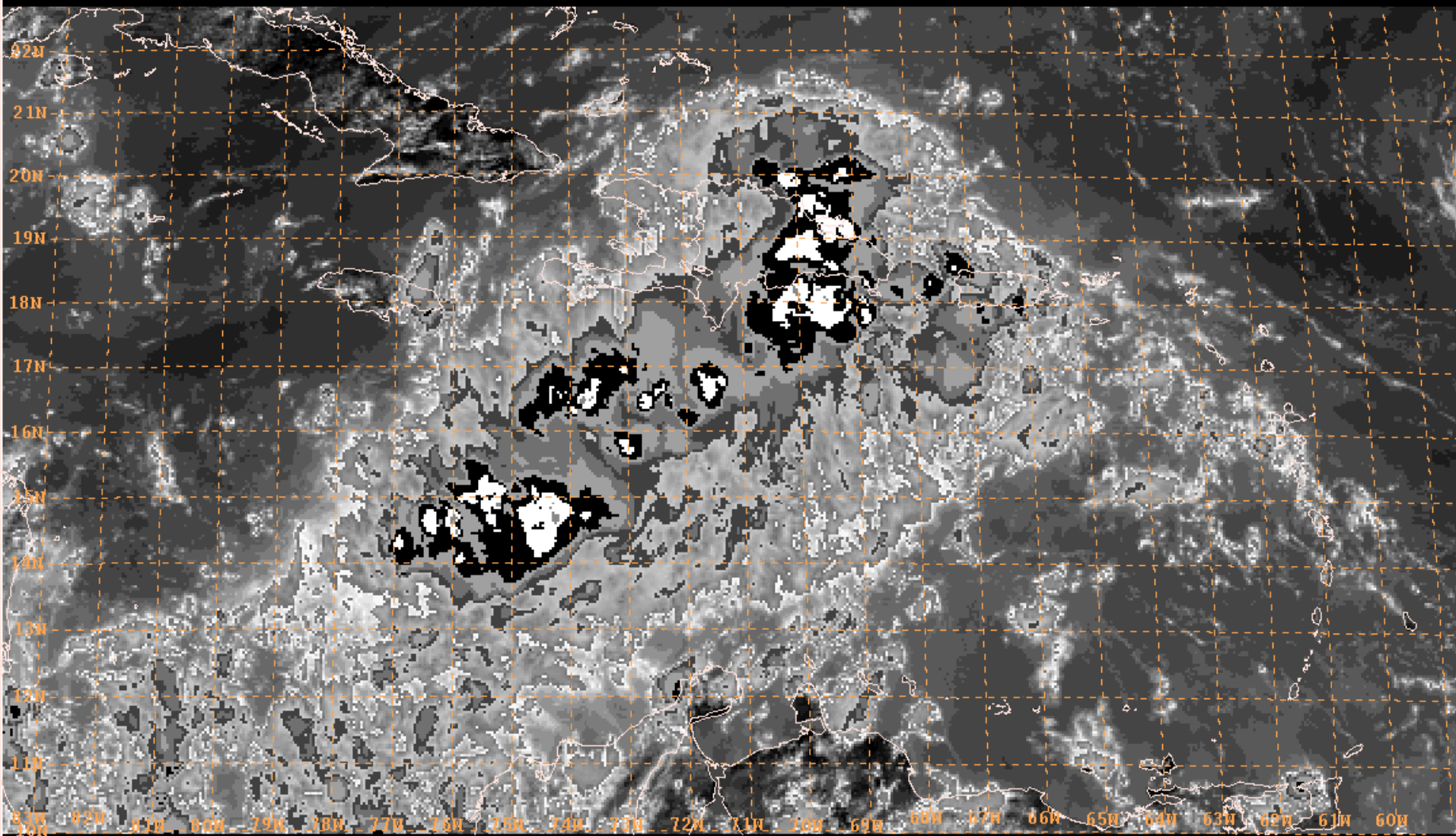
# Center Location Exercise 10







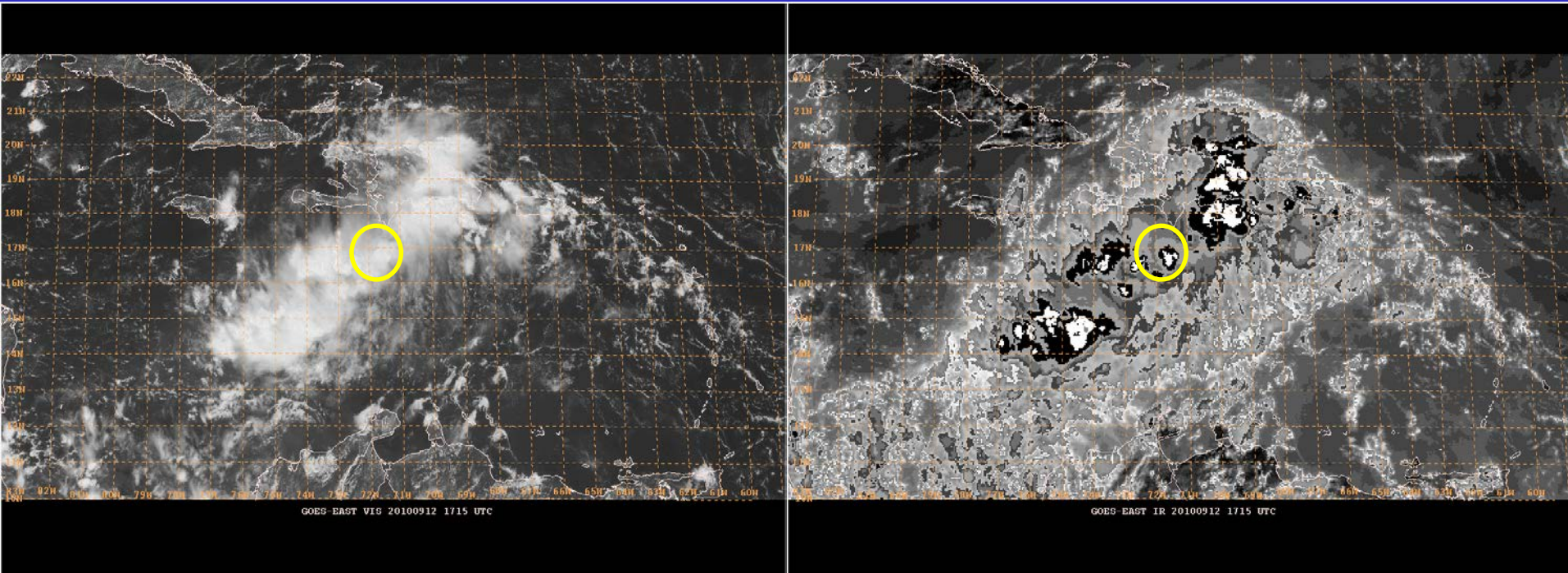
GOES-EAST VIS 20100912 1715 UTC



GOES-EAST IR 20100912 1715 UTC



# Center Location Exercise 10

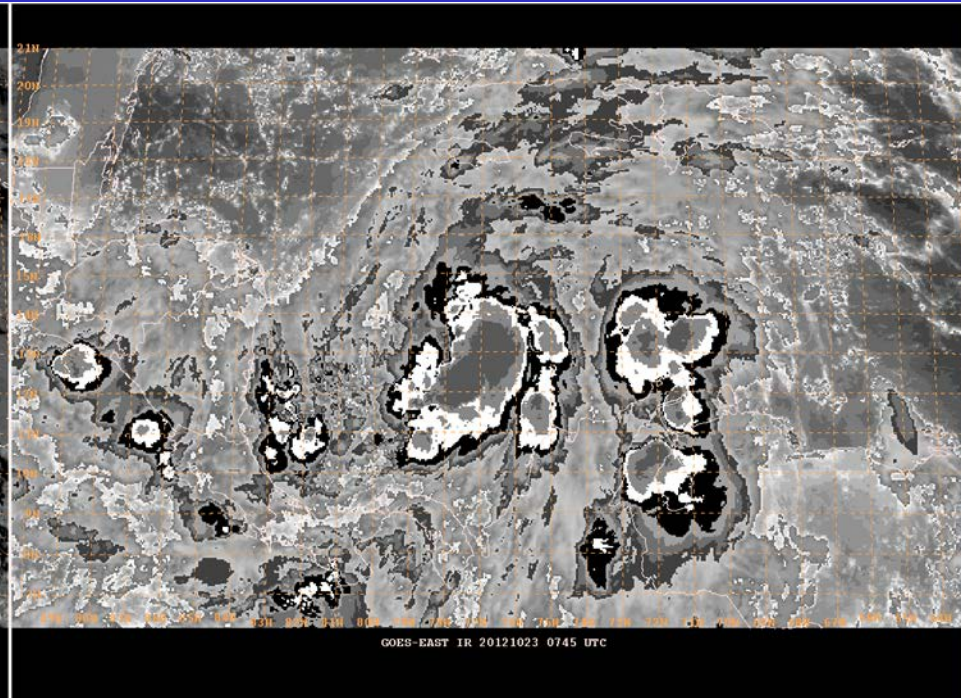
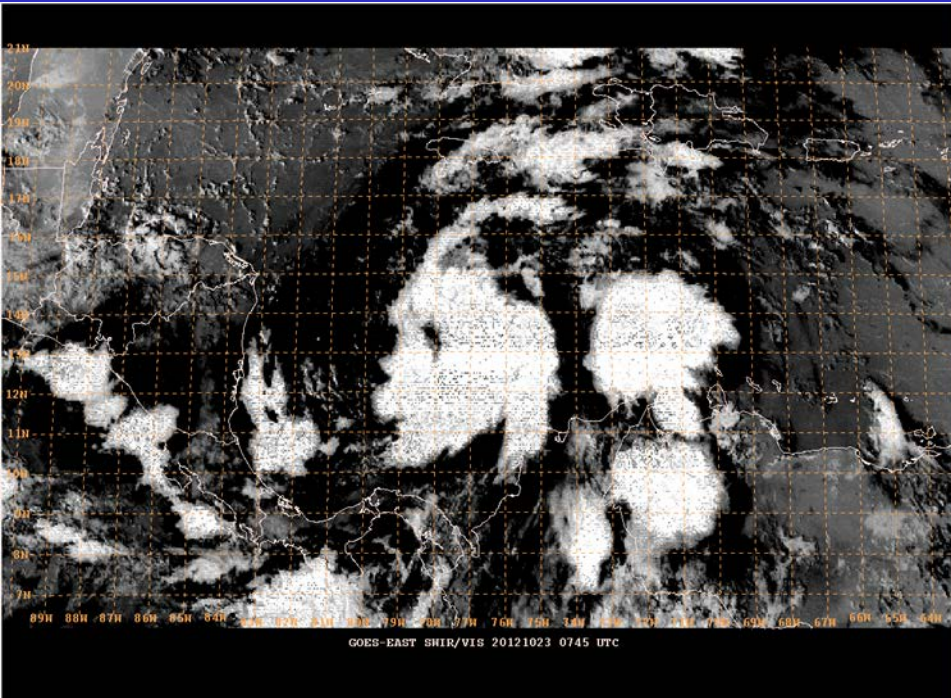


**Best Track Position: N/A**

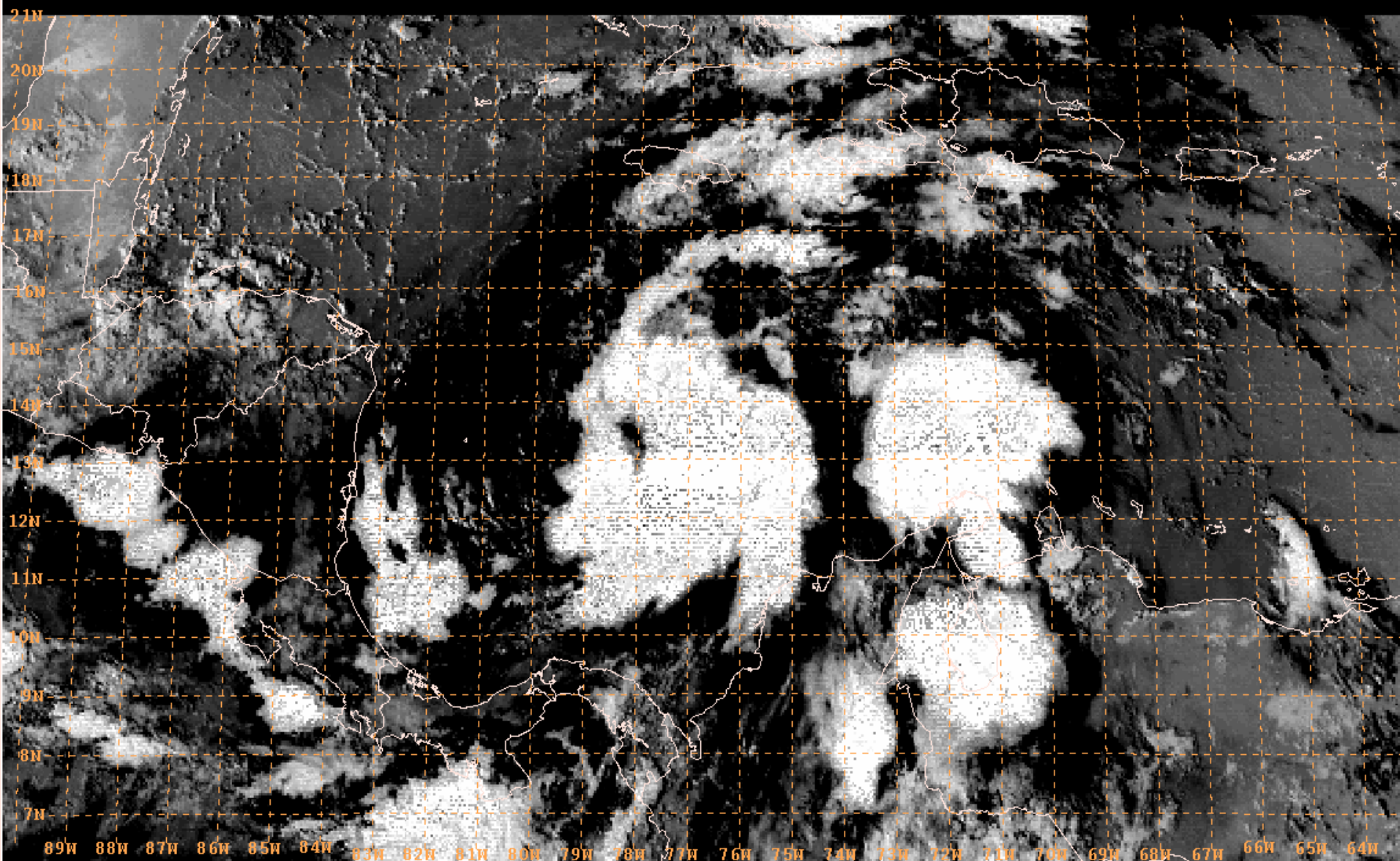
**Pre-Karl Disturbance September 2010**



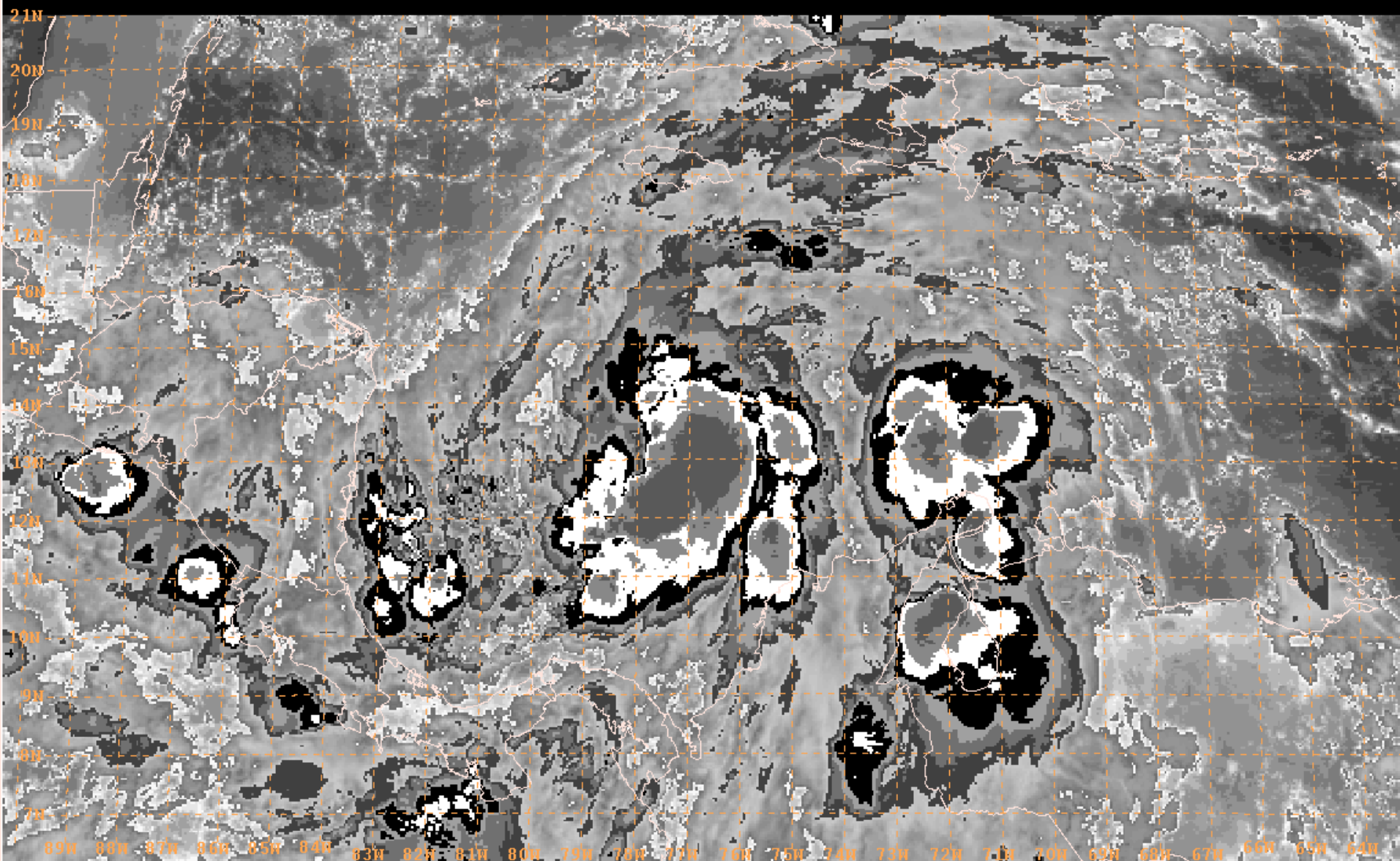
# Center Location Exercise 11







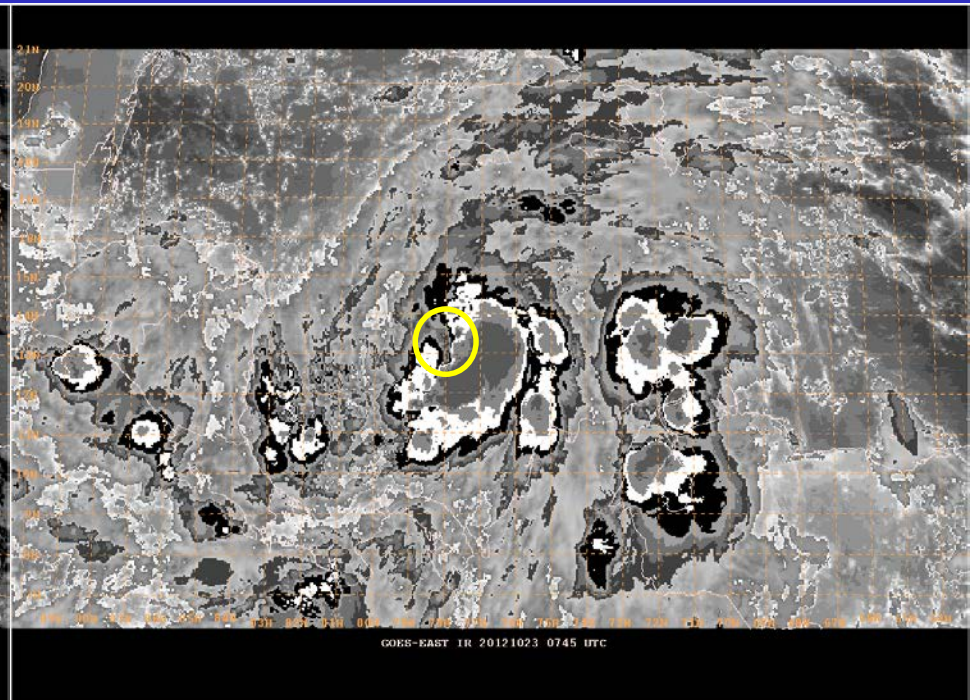
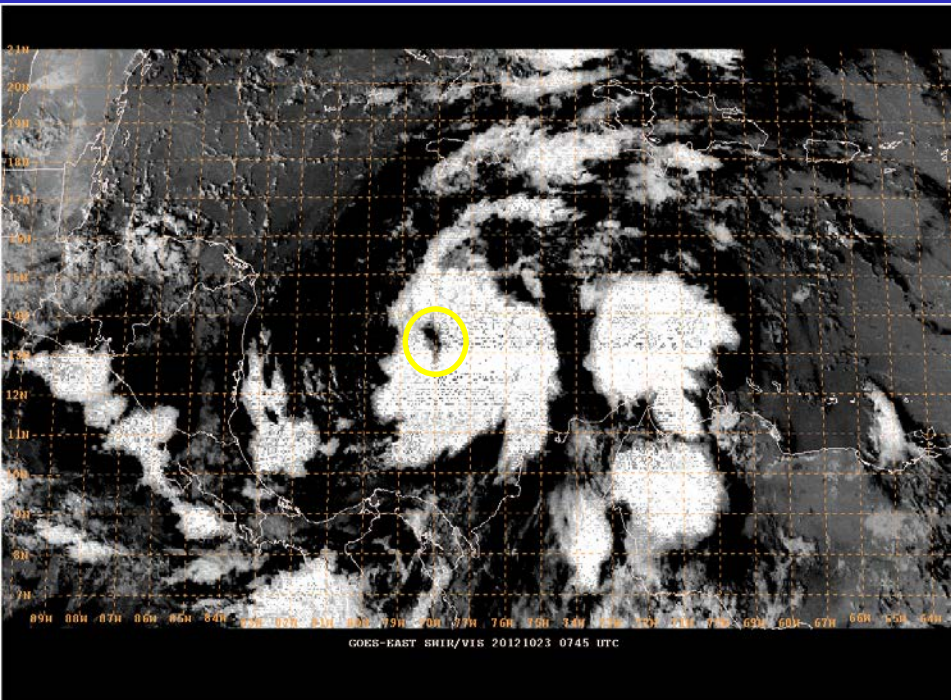
GOES-EAST SWIR/VIS 20121023 0745 UTC



GOES-EAST IR 20121023 0745 UTC



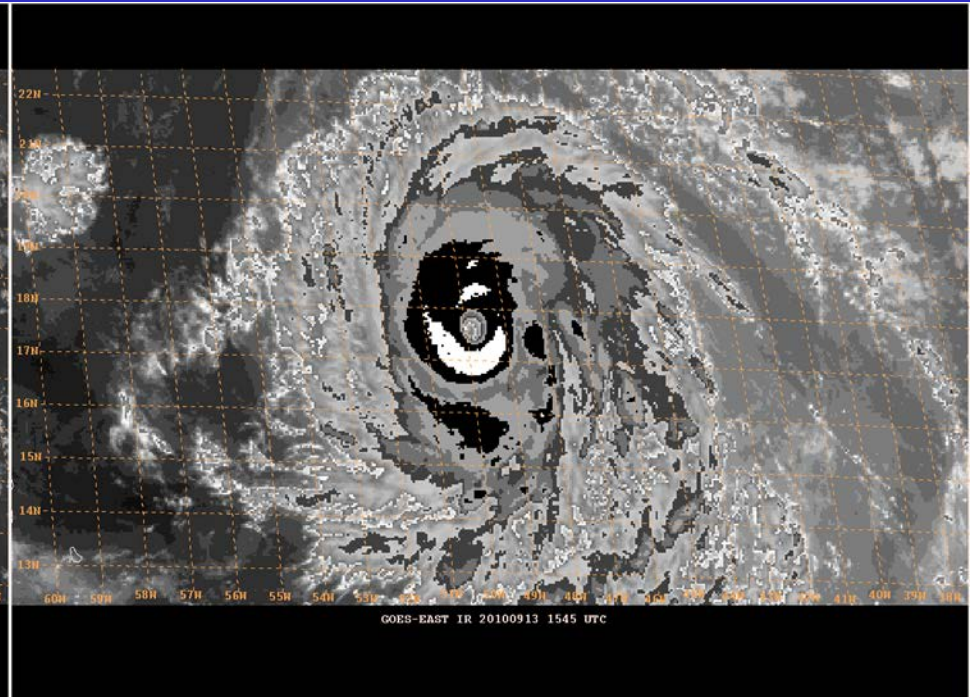
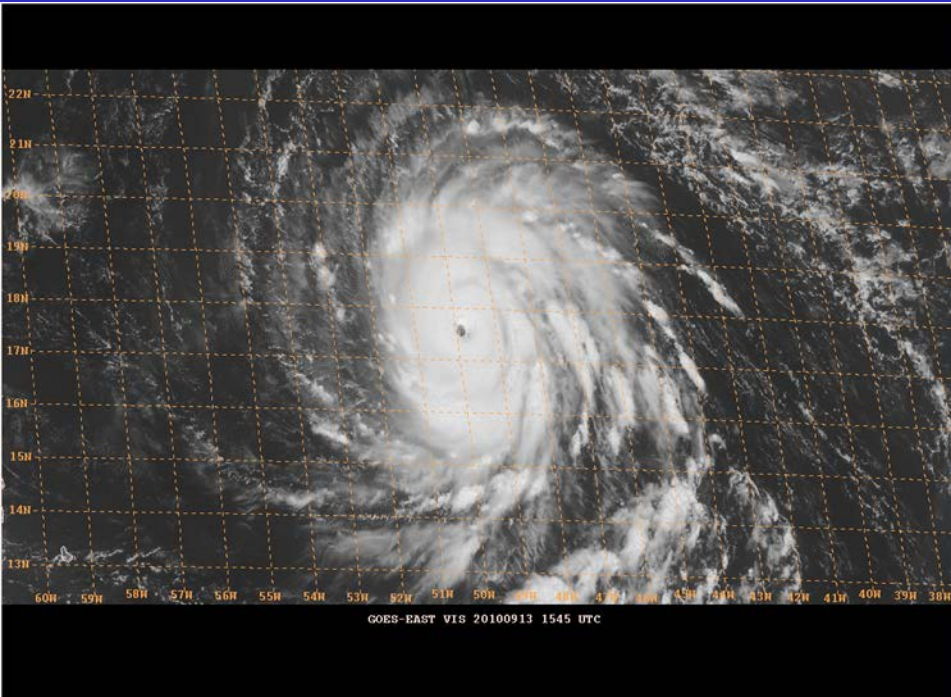
# Center Location Exercise 11



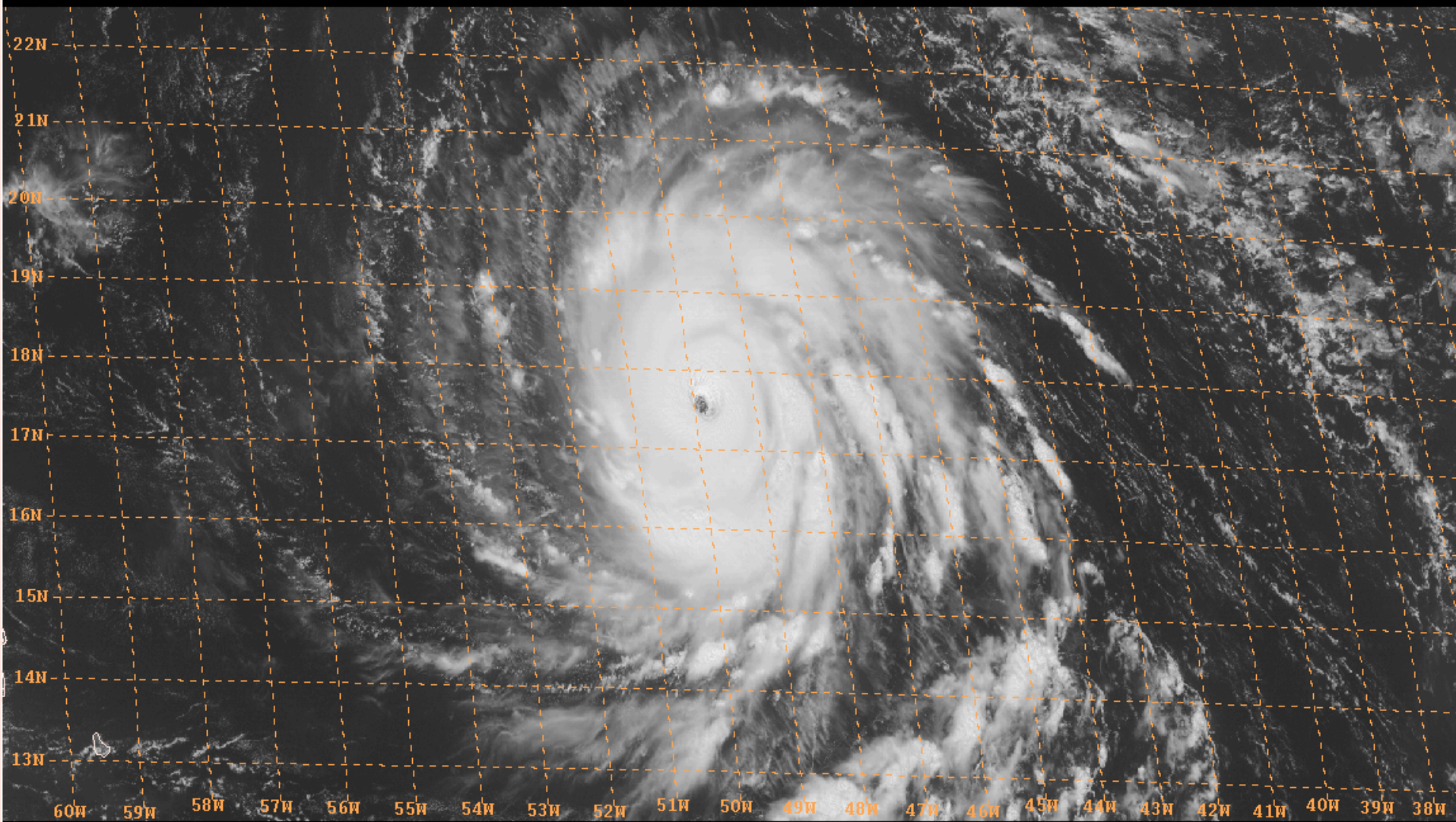
**Interpolated Best Track Position: 23/0900Z 13.2N 78.0W**  
**Tropical Storm Sandy October 2012**



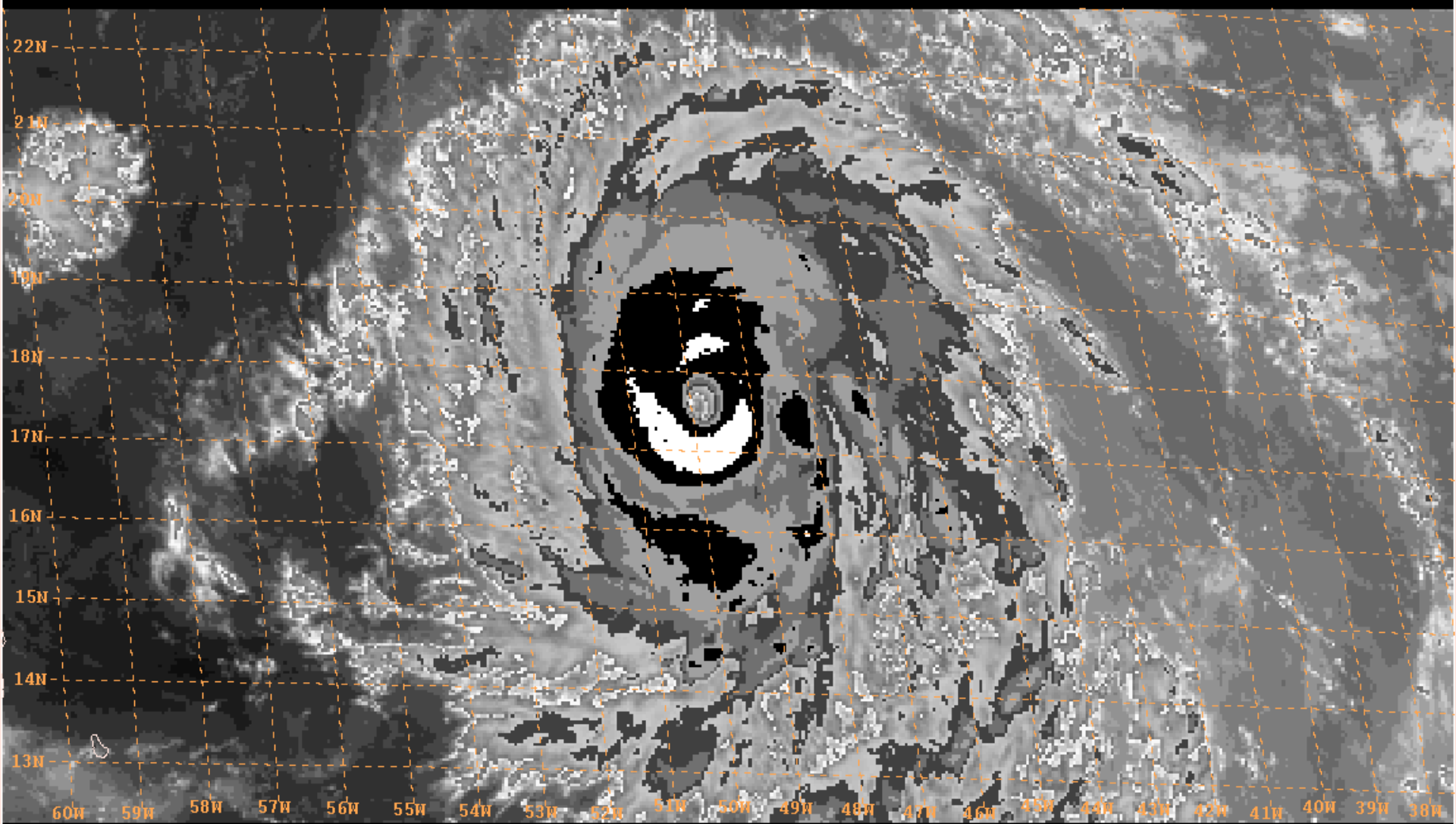
# Center Location Exercise 12







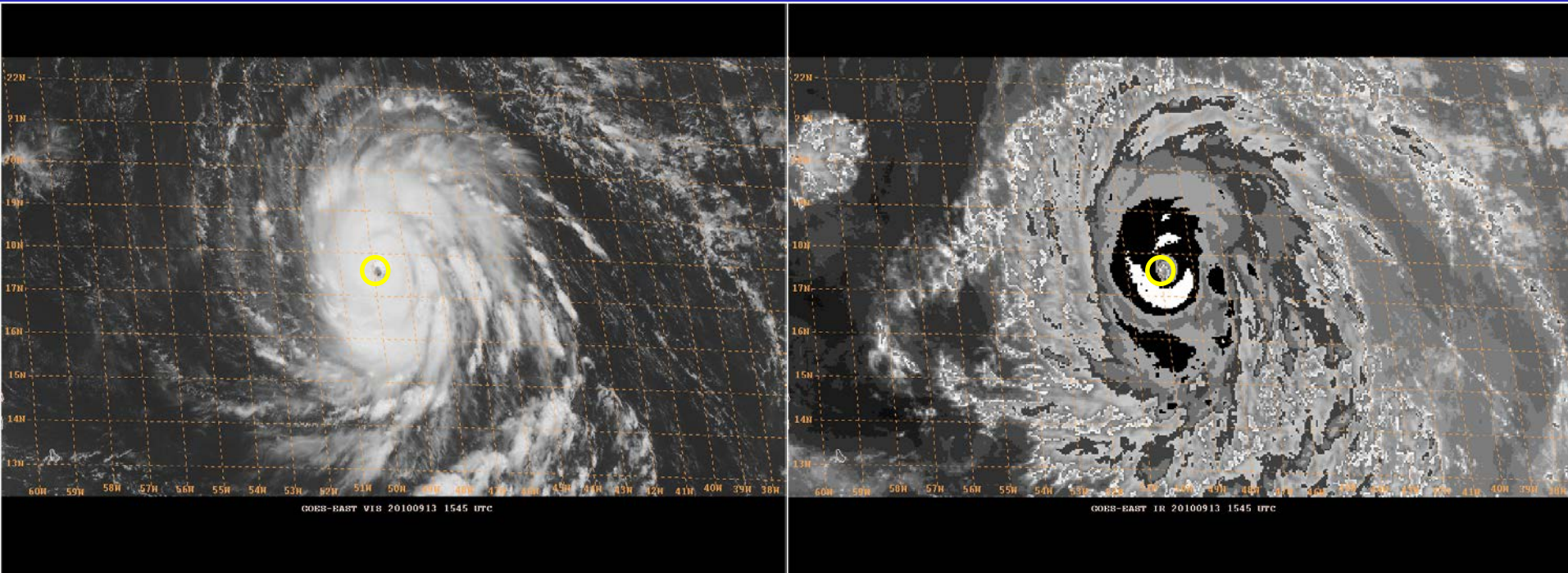
GOES-EAST VIS 20100913 1545 UTC



GOES-EAST IR 20100913 1545 UTC



# Center Location Exercise 12



**Best Track Position: 13/1800Z 17.6N 50.2W**

**Hurricane Igor September 2010**

