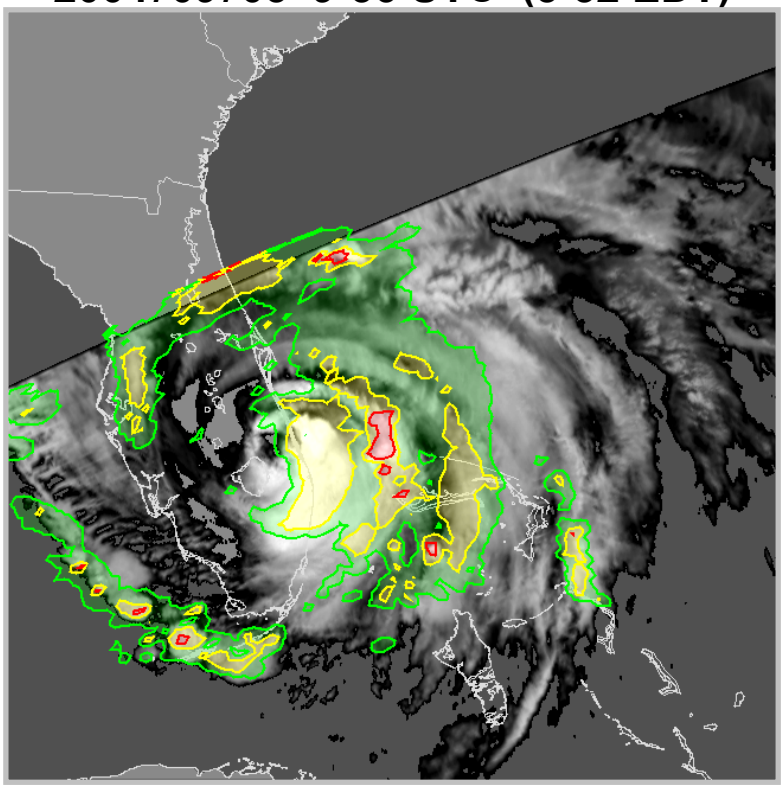
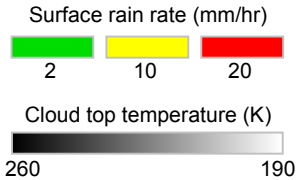
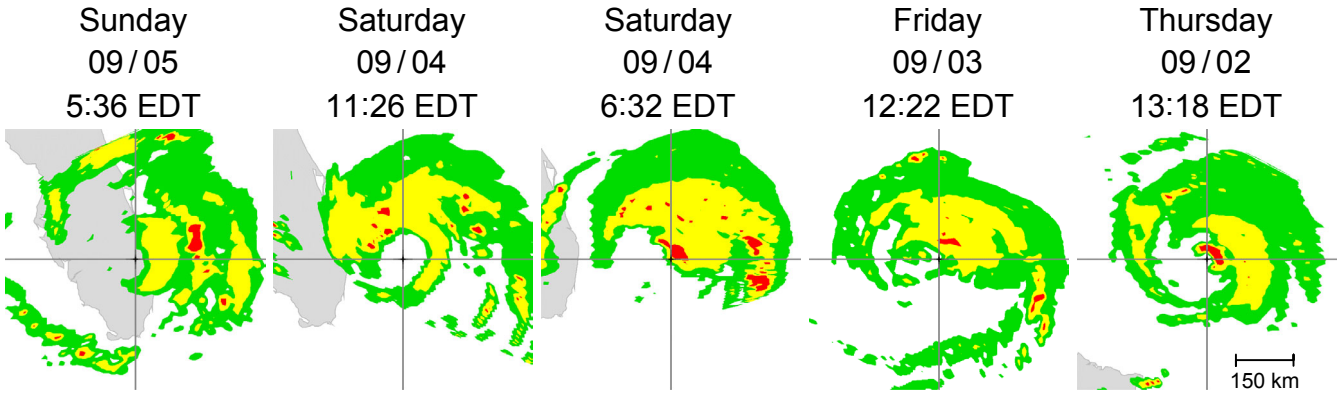
Hurricane Frances Strikes Florida

2004/09/05 9:36 UTC (5:32 EDT)



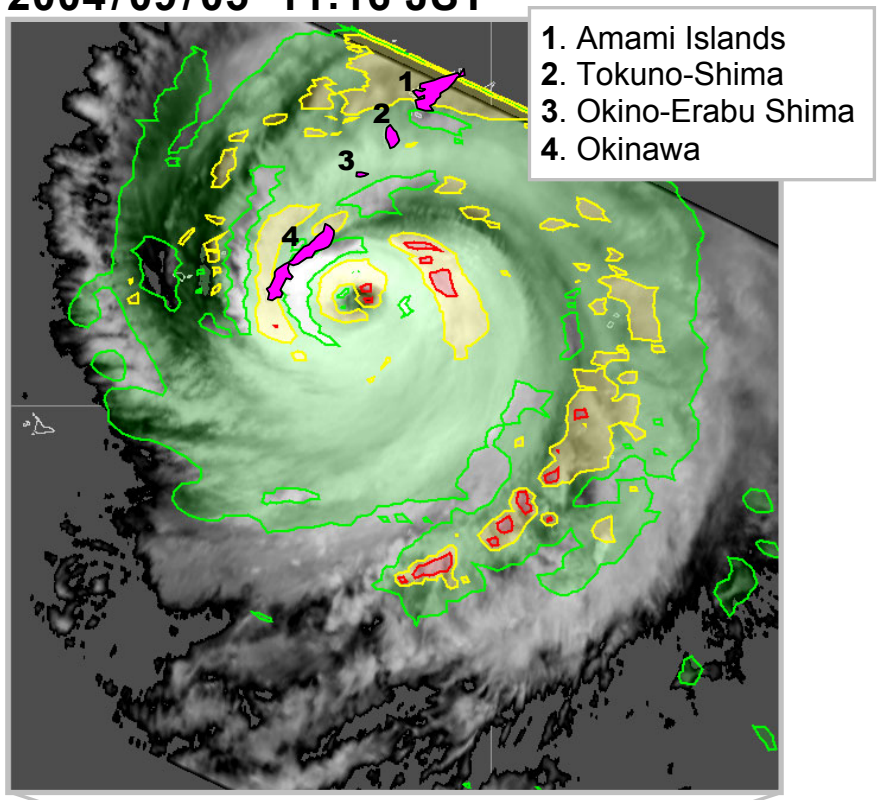




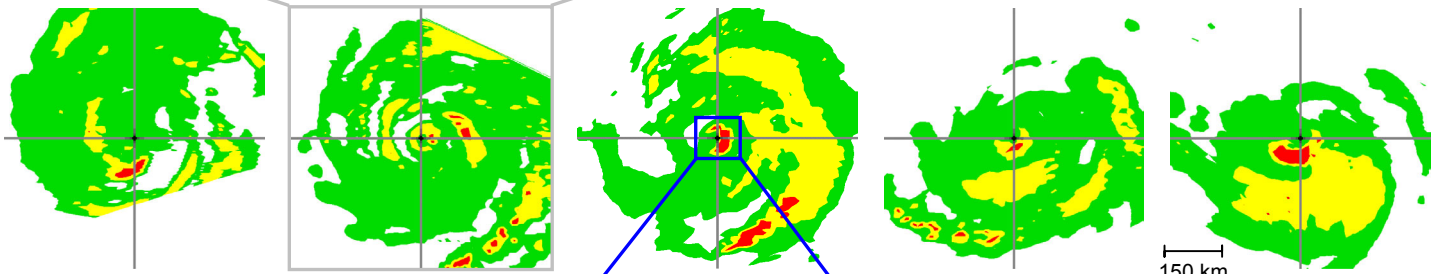
The Tropical Rainfall Measuring Mission (TRMM) satellite flew over Hurricane Frances as the storm's eye made landfall over central Florida. The upper image shows the TRMM overflight at 5:32 EDT on Sunday, September 5, 2004. A few hours later, Hurricane Frances was downgraded to a category 1 hurricane on the Saffir/Simpson scale with sustained winds under 96 mph. In the upper image, the shades of gray show the cloud height with white indicating the highest clouds. Colors contours indicate the surface rainfall rate. The sequence of images along the bottom repeats the 5:32 AM rain contours and provides the rain contours from four previous overflights. The sequence shows that for the past several days, the storm has been growing increasing asymmetric, with the exception of the 11:26 EDT overflight on September 4. Increasing asymmetry is often related to decreasing storm strength. TRMM is a joint mission between NASA and the Japanese Aerospace Exploration Agency (JAXA). For more information, visit the TRMM homepage at http://trmm.gsfc.nasa.gov.

Typhoon Songda (T0418) Strikes Okinawa

2004/09/05 11:16 JST



The Tropical Rainfall Measuring Mission (TRMM) satellite flew over Typhoon Songda before and after the storm struck the island of Okinawa on September 5, 2004. For several days, the storm had hovered between category 3 and 4 on the Saffir/Simpson scale with sustained winds in excess of 95 mph. In the upper image, the shades of gray show the cloud height with white indicating the highest clouds. Colors contours indicate the surface rainfall rate. The sequence of images below shows that, for several days, Typhoon Songda maintained a compact eyewall containing heavy rain, which suddenly dispersed several hours after striking Okinawa. The high resolution data from the TRMM Precipitation Radar shows how well organized the eyewall was prior to striking the island. TRMM is a joint mission between NASA and the Japanese Aerospace Exploration Agency (JAXA). For more information, visit the TRMM homepage at http://trmm.gsfc.nasa.gov.



09/06 5:25 JST After striking Okinawa

09/05 11:16 JST Prior to striking Okinawa

TRMM Precipitation Radar

09/05 4:43 JST

09/03 4:59 JST

09/02 12:28 JST

TRMM Microwave Imager

Surface rain rate (mm/hr)

2 10 20 100

Cloud top temperature (K)

260 190