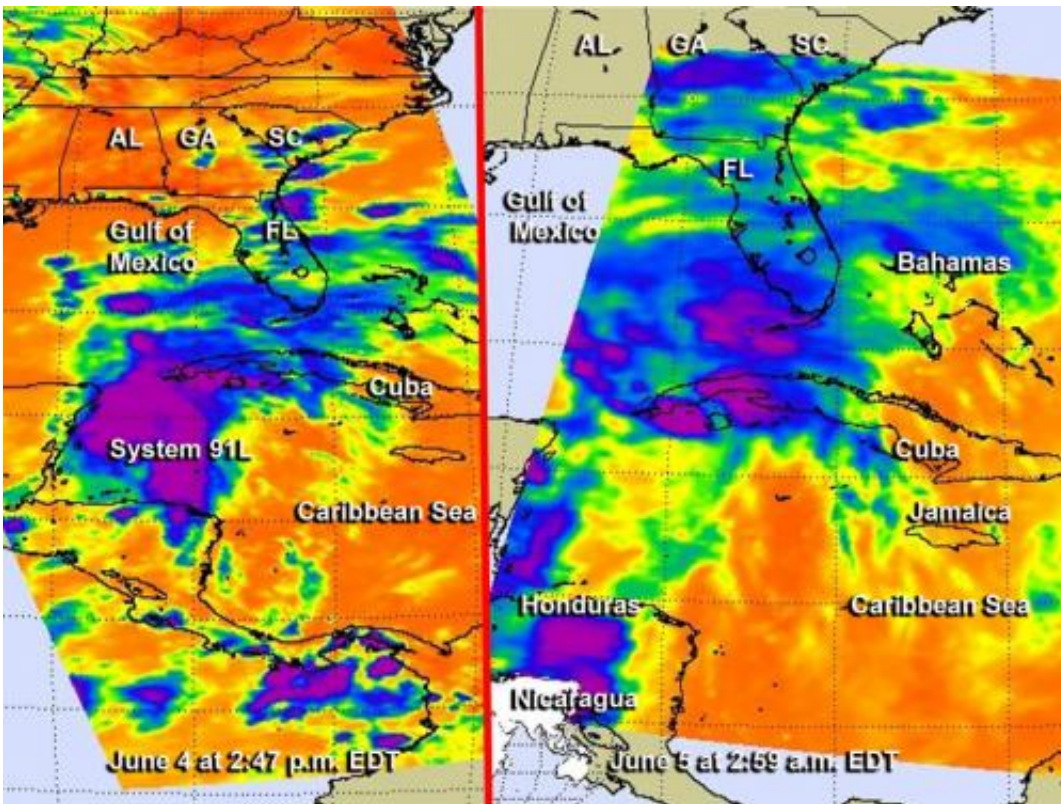


# NASA satellite sees strong thunderstorms in developing gulf low

June 5 2013



These two infrared images of System 91L taken from the AIRS instrument aboard NASA's Aqua satellite show the areas with the coldest cloud top temperatures and strongest thunderstorms (purple) on June 4 at 18:47 UTC and June 5 at 06:59 UTC. The coldest temperatures were -63F/-52C and also indicated areas of likely heavy rainfall. Credit: NASA JPL/Ed Olsen

NASA's Aqua satellite passed over low pressure System 91L in the Gulf

of Mexico and captured infrared imagery that revealed a lot of uplift and strong thunderstorms in the eastern part of the storm despite a poorly organized circulation. NOAA's GOES-East satellite showed the large extent of the low pressure area stretching from Mexico's Yucatan Peninsula to Florida.

System 91L is a tropical low pressure area that has been lingering in the northwestern [Caribbean Sea](#) and the [Gulf of Mexico](#) for several days. The low pressure area is located in the central Gulf of Mexico and covers a large area. It has a large area of disorganized thunderstorms and strong gusty winds over the southeastern Gulf.

The National Hurricane Center (NHC) noted that [thunderstorm activity](#) increased on June 5, compared to June 4, but the center of circulation is poorly-defined.

NASA's Aqua satellite passed over System 91L on June 4 and June 5 and captured [infrared images](#) of the storm. The two infrared images of System 91L showed areas with the coldest cloud top temperatures and strongest thunderstorms moved to the north. Images were captured on June 4 at 18:47 UTC (2:47 p.m. EDT) and June 5 at 06:59 UTC (2:59 a.m. EDT). The coldest temperatures were near -63F/-52C and indicated areas of likely heavy rainfall. In the June 4 image, the strongest thunderstorms were between Mexico's [Yucatan Peninsula](#) and western Cuba. On June 5, those strongest thunderstorms were over western Cuba and stretched north, over southwestern Florida.



This visible image of System 91L was taken from the GOES-14 satellite on June 6 at 17:10 UTC (1:10 p.m. EDT). System 91L's cloud cover extends from Mexico's Yucatan Peninsula east to Cuba and north over the state of Florida.  
Credit: NASA GOES Project

NOAA's GOES-14 satellite captured a [visible image](#) of System 91L the on June 6 at 17:10 UTC (1:10 p.m. EDT). The image showed that System 91L's cloud cover extended from Mexico's Yucatan Peninsula east to Cuba and north over the state of Florida.

Southern Florida, the Florida Keys and western Cuba can expect heavy rain, inland flooding and gusty winds over the next couple of days. Isolated tornadoes are also possible over the Florida peninsula late tonight, June 6, through Thursday.

Currently on June 6, many areas of Florida are under watches and advisories. For example, in Tampa, the following are in effect from June 5 through June 8 at 8 p.m. EDT: a Coastal Flood Advisory; a High Surf Advisory; a Rip Current Statement; and a Flood Watch. Current rain totals expected by the National Weather Service are between 3 and 5 inches of rain today, June 6.

The NHC gives System 91L a high chance (60%) of becoming a subtropical or tropical cyclone within the next 2 days. At the NHC 2 p.m. EDT update on June 6, forecasters noted there is potential for this system to become a Tropical depression or storm before it moves across northern Florida late Thursday or Thursday night.

Even if System 91L does not become a tropical storm, the National Weather Service expects the low to soak the southeastern U.S. and Mid-Atlantic states over the next couple of days as it moves northward.

Provided by NASA's Goddard Space Flight Center

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