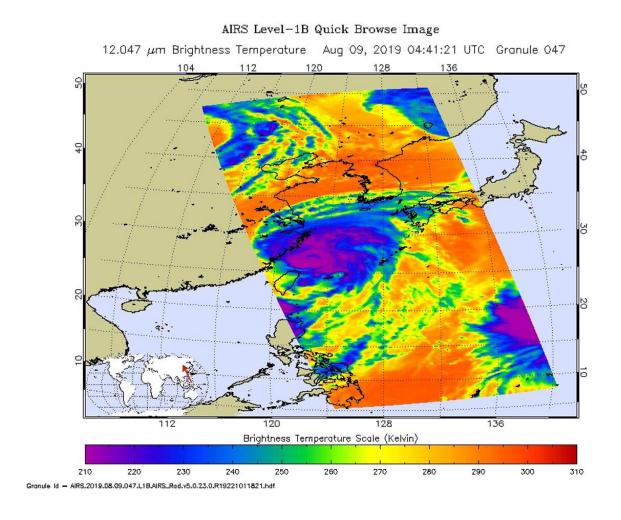


## NASA gives Typhoon Lekima a twice-over with the Aqua satellite

August 9 2019, by Rob Gutro



On Aug. 9, 2019 at 12:41 a.m. EDT (441 UTC) the AIRS instrument aboard NASA's Aqua satellite analyzed Lekima's cloud top temperatures in infrared light. AIRS found coldest cloud top temperatures (purple) of strongest thunderstorms were as cold as or colder than minus 63 degrees Fahrenheit (minus 53 degrees Celsius) in the thick band of thunderstorms around the eye



and in bands north and southeast of the center. Credit: NASA JPL/Heidar Thrastarson

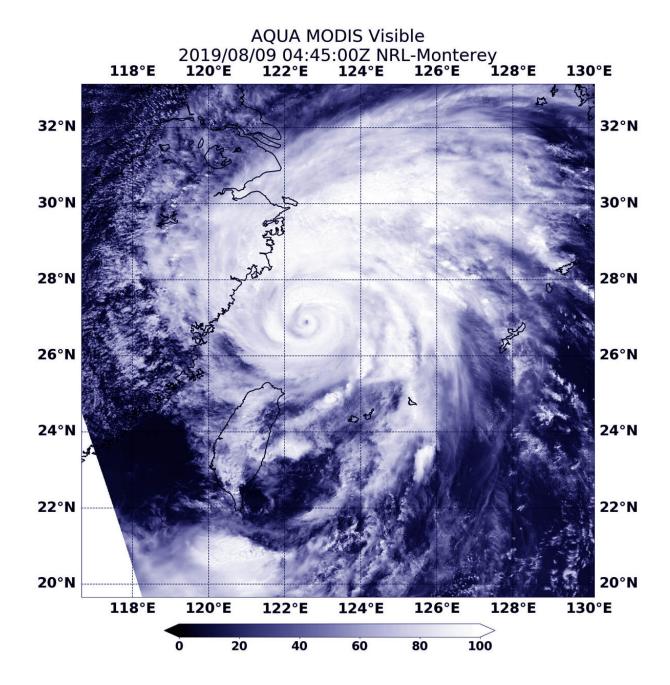
NASA's Aqua satellite provided infrared and visible views of Typhoon Lekima as it was approaching landfall in China. China has posted Typhoon and Heavy Rain Warnings for Lekima.

On Aug. 9 at 12:41 a.m. EDT (441 UTC) the Atmospheric Infrared Sounder or AIRS instrument aboard NASA's Aqua satellite analyzed Lekima's cloud top temperatures in infrared light. The stronger the storms, the higher they extend into the troposphere, and they have the colder cloud temperatures. AIRS found coldest cloud top temperatures as cold as or colder than minus 63 degrees Fahrenheit (minus 53 degrees Celsius) around the eye and in thick bands of thunderstorms wrapping into the center from the north and southeast. Storms with cloud tops that cold have been found to generate <a href="heavy rainfall">heavy rainfall</a>.

On Aug 9 at 12:45 a.m. EDT (0445 UTC), the Moderate Imaging Spectroradiometer or MODIS instrument that also flies aboard NASA's Aqua satellite provided visible views of powerful Typhoon Lekima affecting China. The satellite showed a clear, small, rounded eye surrounded by a thick, powerful ring of thunderstorms and a large band of thunderstorms extending north of the center.

At 11 a.m. EDT (1500 UTC) the center of Typhoon Lekima was located near latitude 27.8 degrees north latitude and longitude 121.8 degrees east. Lekima is moving toward the north-northeast. Maximum sustained winds are near 95 knots (109 mph/176 kph). Lekima is a Category 2 hurricane on the Saffir-Simpson Hurricane Wind Scale.





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China's National Meteorological Center (NMC) issued a Red Warning for the Typhoon at 10:00 a.m. local times on August 9 and an Orange Warning for rainstorm.

NMC said, "Typhoon Lekima is forecast to move northwest direction at the speed of 15-20 kph and moves towards coastal regions of Zhejiang and make landfall in coastal regions from Xiangshan to Cangnan of Zhejiang from the dawn to the daytime of August 10. From August 9 to 10, Bashi Channel, Taiwan Strait, coastal sea areas of Taiwan, East China Sea, Hangzhou Bay, Yangtze River Estuary, coastal regions of Zhejiang, Shanghai and southern Jiangsu, northern Taiwan Island, southern Huanghuai Sea, central-northern Fujian will be exposed to scale 7-9 gale.

Heavy rain to rainstorm will pummel Zhejiang, northern Fujian, eastern and southern Jiangsu, Shanghai, southeastern Anhui, and Taiwan Island. Heavy downpour will pound central-eastern Zhejiang, southern Shanghai, and Taiwan Island. Torrential downpour (250-320mm) will slam eastern Zhejiang and central Taiwan Island. (Aug. 9)."

The Orange Warning says, "It is predicted that from August 9 to 10, heavy rain to rainstorm will grip Zhejiang, northern Fujian, eastern and southern Jiangsu, Shanghai, southeastern Anhui, Taiwan Island, Beijing, central-southern Hebei, central Henan, southwestern and northern Chongqing, southern Sichuan, central-northern Yunnan, and eastern Heilongjiang. Heavy downpour will pound central-eastern Zhejiang, southern Shanghai, and Taiwan Island. Torrential downpour (250-320mm) will slam eastern Zhejiang and central Taiwan Island."

For updated forecasts from NMC, visit: <a href="http://www.cma.gov.cn/en2014/weather/Warnings/">http://www.cma.gov.cn/en2014/weather/Warnings/</a>



## Provided by NASA's Goddard Space Flight Center

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