

## NASA's IMERG measures heavy rainfall in California wildfire areas

December 4 2018



NASA IMERG rainfall estimates show the heaviest rainfall concentration in north central California, northwest of Sacramento(between the Mendocino and Plumas National forests) where rainfall totaled between 6.3 (160 mm) and 9.4 inches (240 mm) . Lesser rainfall fell, as much as 6.3 inches (160 mm) from the Sierra National Forest and areas just north of Fresno, north to the Plumas National Forest. That heavy rainfall fell in the National Forests between Plumas and Sierra, and included: Eldorado, Stanislaus, and Yosemite National Forests. Credit: NASA/JAXA, Hal Pierce



Heavy precipitation recently fell in areas of California that were recently devastated by deadly wildfires such as the Camp Fire and the Woolsey fire. This flooding rainfall has resulted in evacuations in burn scarred areas such as Butte County where the deadly Camp Fire hit this month. NASA used data from satellites and other sources to calculate the amount of rainfall that has occurred recently.

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, NASA's Integrated Multi-satellitE Retrievals for GPM (IMERG) data were used to show rainfall total estimates over the western United States. Various satellites in the Global Precipitation Measurement mission or GPM Constellation provide data that are calibrated with measurements from the GPM Core Observatory and rain gauge networks around the world. GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency, JAXA. IMERG data are generated in near-realtime at half hourly intervals by NASA's Precipitation Processing System.

The analysis at NASA Goddard showed total rainfall accumulation estimates using IMERG data produced during the seven day period from November 23 to 30, 2018.

NASA IMERG rainfall estimates show the heaviest rainfall concentration in north central California, in an area northwest of Sacramento, between the Mendocino and Plumas National forests, where rainfall totaled between 6.3 (160 mm) and 9.4 inches (240 mm).

Lesser rainfall fell over a greater area in central California from that series of storms. IMERG calcuations indicate as much as 6.3 inches (160 mm) fell from the Sierra National Forest and areas just north of Fresno, north to the Plumas National Forest. That heavy <u>rainfall</u> fell in the National Forests between Plumas and Sierra, and included: Eldorado, Stanislaus, and Yosemite National Forests.



Flash floods, debris flows and mudslides were predicted in areas where deadly wildfires stripped away vegetation. On a positive note, these Pacific storms are expected to dampen wildfires and replenish the Sierra Nevada snowpack. This snowpack is an important source of water for California's streams and rivers.

## Provided by NASA's Goddard Space Flight Center

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