IMERG shows devastating rainfall over East Africa
4 May 2018

From April 27 to early May 4, 2018, NASA's IMERG product calculated rainfall over eastern Africa. Rainfall totals in some areas near the Indian Ocean coast were estimated by IMERG to be greater than 430 mm (16.9 inches). Over western Kenya and eastern Uganda rainfall was estimated by IMERG to frequently exceed 200 mm (7.9 inches). Credit: NASA/JAXA, Hal Pierce

GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency or JAXA. GPM also utilizes a constellation of other satellites to provide a global analysis of precipitation.

During this period heavy seasonal precipitation fell over Kenya. Rainfall totals in some areas near the Indian Ocean coast were estimated by IMERG to be greater than 430 mm (16.9 inches). Over western Kenya and eastern Uganda rainfall was estimated by IMERG to frequently exceed 200 mm (7.9 inches). IMERG data are produced using data from the satellites in the GPM Constellation, and are calibrated with measurements from the GPM Core Observatory satellite as well as rain gauge networks around the world.

Heavy seasonal rainfall has recently caused flooding in Kenya and NASA analyzed and estimated the total rainfall using data from a suite of satellites and gauges.

The heavy rainfall has resulted in the displacement of over 244,000 people. This deluge follows the severe drought that afflicted East Africa in 2017. The estimated death toll from flooding and mudslides has recently been increased to about 100 people.

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, NASA's Integrated Multi-satelliteE Retrievals for GPM (IMERG) created a merged precipitation product from the GPM or Global Precipitation Measurement mission constellation of satellites. Rainfall accumulation estimates were calculated and summarized for the period from April 27 to early May 4, 2018.

Provided by NASA's Goddard Space Flight Center