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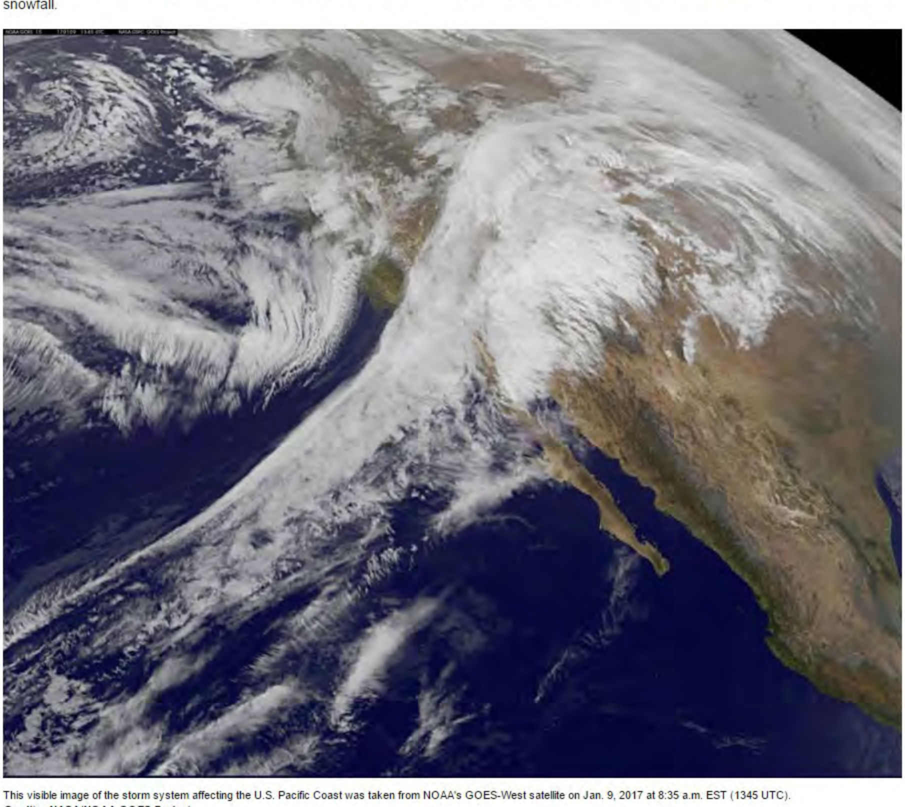
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Jan. 9, 2017

NASA Sees Storms Affecting the Western U.S.

Extreme rain events have been affecting California and snow has blanketed the Pacific Northwest. NASA/NOAA's GOES Project created a satellite animation showing the storms affecting the region from January 6 through 9, 2017, and NASA's Aqua satellite captured a look at the snowfall.



This visible image of the storm system affecting the U.S. Pacific Coast was taken from NOAA's GOES-West satellite on Jan. 9, 2017 at 8:35 a.m. EST (1345 UTC).
Credits: NASA/NOAA GOES Project

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, an animation of visible and infrared imagery from NOAA's GOES-West satellite showed a series of moisture-laden storms affecting California from Jan. 6 through Jan. 9, 2017. NOAA manages the GOES series of satellites and the NASA/NOAA GOES Project uses the satellite data to create animations and images. The animation shows a stream of storms affecting the U.S. West coast over that period, as a low pressure area center churned off of Canada's west coast.

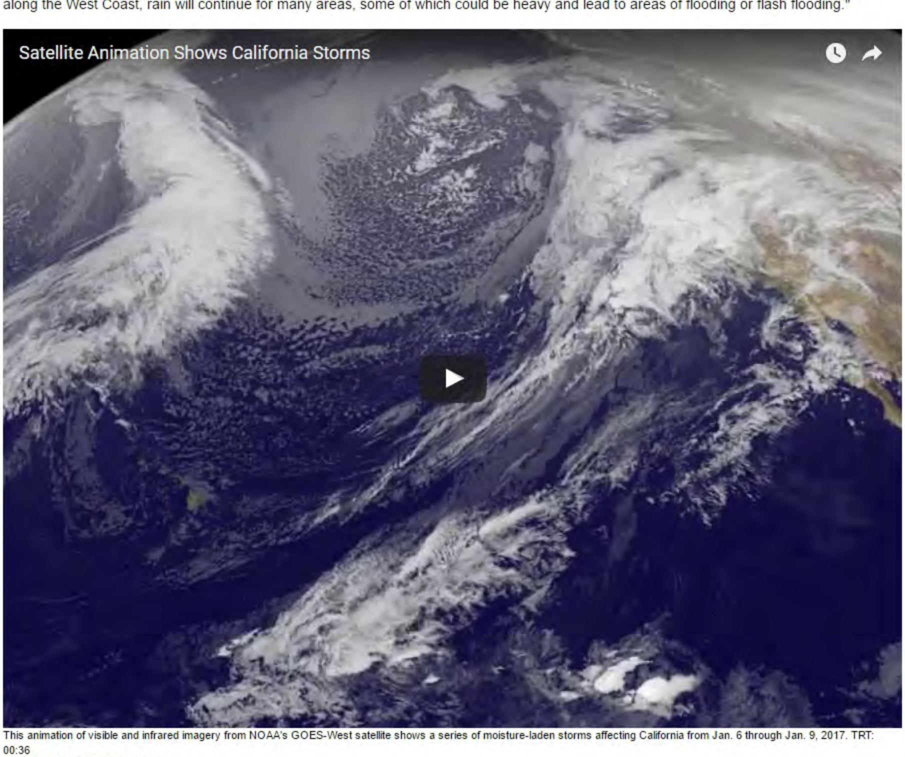
On January 9, another area of low pressure moved over Oregon, where the National Weather Service is forecasting heavy snows. The Eastern Douglas County Foothills, south central and southern Oregon Cascades, and Siskiyou Mountains were all under a Winter Storm Warning that calls for "6 to 10 inches possible above 3,000 feet and 1 to 2 feet possible above 5,000 feet."



This visible image from NASA's Aqua satellite on Jan. 6, 2017 at 3:35 p.m. EST (20:35 UTC) shows snow cover in the U.S. Pacific Northwest in Washington, Idaho, Oregon, northern California and Nevada.
Credits: NASA Goddard MODIS Rapid Response

On January 6 at 3:35 p.m. EST (20:35 UTC) The Moderate Resolution Imaging Spectroradiometer or MODIS instrument that flies aboard NASA's Aqua satellite captured an image of snow cover that blanketed Washington, Idaho, Oregon, northern California and Nevada.

On Monday, January 9, National Weather Service Weather Prediction Center (NWS WPC) in College Park Md. noted "At the lower elevations along the West Coast, rain will continue for many areas, some of which could be heavy and lead to areas of flooding or flash flooding."



This animation of visible and infrared imagery from NOAA's GOES-West satellite shows a series of moisture-laden storms affecting California from Jan. 6 through Jan. 9, 2017. TRT: 00:36
Credits: NASA/NOAA GOES Project

It was the same week last year that the West Coast endured a similar bout of very wet weather. Heavy rain affected the Pacific coast in 2016 during the same week from Jan. 5 through Jan 7, as a progression of storm systems in the Eastern Pacific Ocean hit southern California and generated flooding and mudslides.

NWC WPC stated in its Short Range Public Discussion on January 9, "A series of Pacific storm systems will continue to impact the western U.S. through midweek, bringing periods of rain and snow, some of which could be heavy, to many areas."

For updated forecasts, visit the National Weather Service website at: www.weather.gov.

Rob Gutro
NASA Goddard Space Flight Center

Last Updated: Jan. 9, 2017
Editor: Lynn Jenner

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards

Earth

Dec. 30, 2016

Satellite View of Big Snowstorm for the Northeastern U.S.

The National Weather Service has forecast a significant winter storm to impact the Interior Northeastern U.S. today, Thursday, Dec. 29 and Friday, Dec. 30. Imagery and animations from NOAA's GOES-East satellite show the clouds associated with this powerful storm were already over New England.

Tags: Climate, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards

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Earth

Dec. 14, 2016

A Look at the U.S. Cold Snap from NASA Infrared Imagery

Imagery and an animation of infrared imagery from the AIRS instrument aboard NASA's Aqua satellite showed the movement of cold, Arctic air over the U.S. from Dec. 1 to Dec. 11. That frigid air mass is expected to affect states from the north central to the northeastern and Mid-Atlantic.

Tags: Aqua Satellite, Climate, Earth, Goddard Space Flight Center

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Global Precipitation

Dec. 1, 2016

GPM Sees Deadly Tornadic Storms Moving Through U.S. Southeast

The Global Precipitation Measurement mission or GPM core satellite gathered rainfall data on the severe storms that southeastern U.S. over two days. From Tuesday evening, Nov. 29 through Wednesday morning, Nov. 30, 2016 tornadoes formed along a squall line in advance of a cold front that moved through the Southeast. Over three dozen tornadoes were reported with sightings occurring in Louisiana, Alabama, Mississippi, Tennessee and Alabama.

Tags: Earth, Goddard Space Flight Center, GPM (Global Precipitation Measurement), Hazards

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Hurricanes

Dec. 1, 2016

Otto (was TD16 - Atlantic Ocean)

Nov. 30, 2016 - NASA Animation Shows Hurricane Otto Over 5 Days

Tags: Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards, Hurricanes

Read Full Article

Earth

Nov. 30, 2016

NASA Tracks Wildfires Still Plaguing Southeastern U.S.



NASA's Aqua satellite captured this image, using its MODIS instrument, of several wildfires still plaguing the southeastern United States on November 26, 2016. There are four fires identified in this image, however, there are many others still raging on whose smoke or heat signatures were not picked up on this particular satellite pass. The fires identified here are the Rock Mountain fire in Georgia, the Pinnacle Mountain fire in South Carolina, and the Party Rock, Boteler and Ferebee-Tellico fires in North Carolina. There are other fires that have been reported recently near Gatlinburg, Tennessee, but this satellite image does not show those fires.

The Rock Mountain fire has been underway since November 09, 2016. Currently the fire has affected 24,725 acres and is now 50% contained. The fire was human caused and the origins of that fire are now being investigated. Expected rain should continue through

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, Hazards

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Earth

Nov. 18, 2016

NASA Analyzes Heavy Rainfall over Hispaniola

Slow moving frontal systems draped over Hispaniola and a tropical wave recently caused heavy rainfall that led to wide spread flooding over the northern Dominican Republic. NASA analyzed that heavy rainfall using data from satellites.

Scattered to numerous showers and scattered thunderstorms have occurred over Hispaniola during the week of Nov. 14. Hispaniola includes the Dominican Republic and Haiti.

Tags: Earth, Goddard Space Flight Center, GPM (Global Precipitation Measurement), Hazards

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Hurricanes

Sept. 2, 2016

Madeline (Central Pacific)

NASA's Terra Satellite Sees Small Burst in Tropical Depression Madeline

Although Tropical Storm Madeline weakened to a depression, infrared satellite imagery showed a small burst of strength in the storm as strong thunderstorms developed near the center of the storm.

On Sept. 2 at 8:45 a.m. EDT (1245 UTC) NASA's Aqua satellite passed over Tropical Depression Madeline when it was about 400 miles away from the big island of Hawaii. An infrared image from Aqua's Moderate Resolution Imaging Spectroradiometer known as MODIS showed a

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, Hazards, Hurricanes

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Hurricanes

Aug. 26, 2016

99L (Atlantic Ocean)

NASA Examines System 99L Over Hispaniola in Infrared Light

When NASA's Aqua satellite passed over the tropical low pressure area known as System 99L it was located over Hispaniola. The AIRS instrument aboard Aqua analyzed the low pressure area in infrared light.

The Atmospheric Infrared Sounder or AIRS instrument aboard Aqua provided temperature data on System 99L on Aug. 25 at 1:47 p.m. EDT (1747 UTC). AIRS infrared data showed that the depression had some powerful thunderstorms with high cold cloud tops as cold as

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, Hazards, Hurricanes

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Hurricanes

Aug. 23, 2016

Fiona (was TD06 - North Atlantic Ocean)

NASA Sees a Fading Fiona in Atlantic

When NASA's Aqua satellite passed over the eastern Atlantic Ocean it looked at the weakening Tropical Depression Fiona and a developing tropical low pressure area named System 99L. Fiona became a post-tropical depression today, Aug. 23.

False-colored infrared image from the AIRS instrument aboard NASA's Aqua satellite.

Tags: Aqua Satellite, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards, Hurricanes

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Hurricanes

Aug. 5, 2016

Earl (Caribbean Sea)

Aug. 8, 2016 - NASA's IMERG Measures Hurricane Earl's Deadly Rainfall in Mexico

Data from NASA's Integrated Multi-satellite Retrievals for GPM (IMERG) were used to estimate the amount of rain that fell from Earl Aug. 2 through Aug. 8.

- Read more

Tags: Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards, Hurricanes

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Hazards

Feb. 25, 2016

NASA's RapidScat Saw Strong Winds Ahead of Powerful Weather System

NASA's RapidScat instrument that flies aboard the International Space Station measured surface winds ahead of a powerful cold front that generated a line of strong to severe storms on Feb. 24. The cold front moved through the southeastern and Mid-Atlantic U.S. and generated many reports of severe weather. Early the next day, NOAA's GOES-East satellite showed that powerful front had moved off the U.S. East Coast.

RapidScat from 2016-02-24 14:04Z to 2016-02-24 15:36Z

Tags: Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards, RapidScat

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Earth

Jan. 25, 2016

NASA Provides a Look at Post-Blizzard Snowfall and Winds

Update #8 - Jan. 25, 2016 - 12:07 PM EST

NASA Provides a Look at Post-Blizzard Snowfall and Winds

NASA satellites obtained a number of different views of the great winter storm that left many snowfall records from Virginia to New York City from January 22 to 24, 2016. RapidScat provided a look at the strong winds that led to flooding in southern New Jersey, while NASA's Aqua

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, Hazards, Land, Landsat, RapidScat

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Hurricanes

Jan. 17, 2016

Alex (was 90L/Atlantic Low #1 - Atlantic Ocean)

Extra-Tropical Alex Speeding Through North Atlantic

Tropical Storm Alex quickly acquired extra-tropical characteristics late on Jan. 15 as it sped northward toward Greenland in the North Atlantic Ocean. A GOES-East satellite image on Jan. 16 showed the elongated system south of Greenland.

Tropical Storm Alex became extra-tropical by Jan. 15 at 2100 UTC (4 p.m. EST). At that time the National Hurricane Center issued their final warning on the system and said "Satellite images and surface observations indicate that Alex has lost its tropical characteristics."

Tags: Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards, Hurricanes

Read Full Article

Hazards

Jan. 9, 2016

NASA Looks at Storms Hitting California

Extreme rain events fueled by the current strong El Nino have started to affect California. NASA estimated rainfall over a period of 7 days while NASA/NOAA's GOES Project created a satellite animation showing the storms affecting the region over the past three days.

Satellite Movie Sees Southern California Storms

Tags: Climate, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards

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Hurricanes

Sept. 18, 2015

TD9 (Atlantic Ocean)

Satellite Shows Tropical Depression 9 Weakening

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), GPM (Global Precipitation Measurement), Hazards, Hurricanes, RapidScat

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Hurricanes

Sept. 8, 2015

Fred (Atlantic Ocean)

Fred Fades in Far Atlantic

NOAA SHOUT '15 - Overflight of T.S. Fred by NASA GH

Tags: Ames Research Center, Aqua Satellite, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), GPM (Global Precipitation Measurement), Hazards, Hurricanes, RapidScat, Suomi NPP (National Polar-orbiting Partnership)

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Hurricanes

Aug. 30, 2015

Erika (Atlantic Ocean)

NASA Measured Erika's 9-Day Rainfall Totals From Space

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), GPM (Global Precipitation Measurement), Hazards, Hurricanes, Terra Satellite

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Hurricanes

Aug. 25, 2015

Danny (was TD4 - Atlantic Ocean)

Update #2 - Danny the "Degenerate" Followed by Two Lows

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), GPM (Global Precipitation Measurement), Hazards, Hurricanes, International Space Station (ISS), Terra Satellite

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Hurricanes

June 22, 2015

Satellite Movie Shows Tropical Depression Bill's Remnants Exit U.S.

Bill (was 02L/91L) - Gulf of Mexico

Satellite Movie Shows Tropical Depression Bill's Remnants Exit U.S.

Tags: Aqua Satellite, Earth, Goddard Space Flight Center, GOES (Geostationary Environmental Operational Satellites), Hazards, Hurricanes

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