

NASA satellite and International Space Station catch Earl weakening

September 3 2010



Astronaut Douglas Wheelock aboard the International Space Station (ISS) caught this image of the eye of the storm as the ISS flew over Hurricane Earl just to the east on Sept. 3. Wheelock noted that it looks like magnificent chaos from up there on the Space Station and called it incredibly breathtaking. Credit: NASA, Douglas Wheelock

NASA satellites and the International Space Station are keeping eyes on Hurricane Earl as it heads for New England. Watches and Warnings are posted in the U.S. northeast.

Having felt the effects of both increasing <u>wind shear</u> and cooler waters, <u>Hurricane</u> Earl weakened to a Category 2 storm on the Saffir-Simpson scale with winds still powerful at 90 knots (104 mph) as it neared the North Carolina coast. It was at this time that the <u>Tropical Rainfall</u> Measuring Mission (TRMM) satellite captured the data about TRMM's



rainfall rates.

The rainfall pattern associated with Earl and was made using data from the TRMM satellite when it flew over the storm on September 3 at 08:22 UTC (4:22 a.m. EDT). Rainbands from Earl were visible over the outer banks, eastern North Carolina, and southeastern Virginia, but the storm no longer has a well-defined eye. TRMM observed moderate rainfall mostly to the north of Earl's center.

Meanwhile, from a second vantage point in space, at the <u>International Space Station</u>, Astronaut Douglas Wheelock caught an image of the eye of the storm on September 3. As the ISS flew over <u>Hurricane Earl</u> Wheelock noted that it looked like magnificent chaos from up there on the Space Station and called it incredibly breathtaking.

At 11 a.m. EDT on Sept. 3, Hurricane Earl's maximum sustained winds were near 85 mph. It was located about 350 miles south-southwest of Nantucket, Mass. near 36.8 North and 73.1 West. Earl's minimum central pressure was 961 millibars, and he was moving north-northeast at 21 mph.





This image of Earl's rainfall was captured by the TRMM satellite on Sept. 3 at 0822 UTC (4:22 a.m. EDT) and showed moderate rainfall (green) mostly to the north of Earl's center. Credit: NASA/SSAI, Hal Pierce

Because Earl is now forecast to track farther away from the coast, many of the watches and warnings have been discontinued, but new watches and warnings are in place. The current watches and warnings in effect include: a hurricane warning is in effect for Woods Hole eastward around Cape Cod to Sagamore Beach Massachusetts, including Marthas Vineyard and Nantucket Island. In addition a Hurricane Watch is now in effect for Nova Scotia, Canada from Ecum Secum westward to Digby.

Earl is expected to weaken further as it continues northward over cooler waters along the Eastern Seaboard. Updates on Earl are available through the National Hurricane Center at www.nhc.noaa.gov and through the NASA Hurricane twitter page.

Provided by NASA's Goddard Space Flight Center

Citation: NASA satellite and International Space Station catch Earl weakening (2010, September 3) retrieved 25 April 2024 from https://phys.org/news/2010-09-nasa-satellite-international-space-station.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.