

KATRINA DESTROYED OVER 300 MILLION TREES, RELEASING MILLIONS OF TONS OF CARBON INTO ATMOSPHERE

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More than 320 million large trees were destroyed when Hurricane Katrina ripped through the Gulf Coast region in 2005, releasing some 105 million tons of carbon - almost the same amount as all the forests in the United States are able to draw down in a year.

The discovery was made by a team of scientists from Tulane University in New Orleans and the University of New Hampshire in Durham. By using satellite data and detailed forest surveys, the scientists were able to map the footprint of Katrina and, for the first time, estimate the number of trees killed in the storm with unprecedented accuracy.

As trees die and decompose, the carbon in the wood is released back to the atmosphere in the form of carbon dioxide, an important greenhouse gas. When a large hurricane like Katrina destroys such vast tracts of forest, it represents a massive amount of carbon dioxide committed back to the atmosphere.

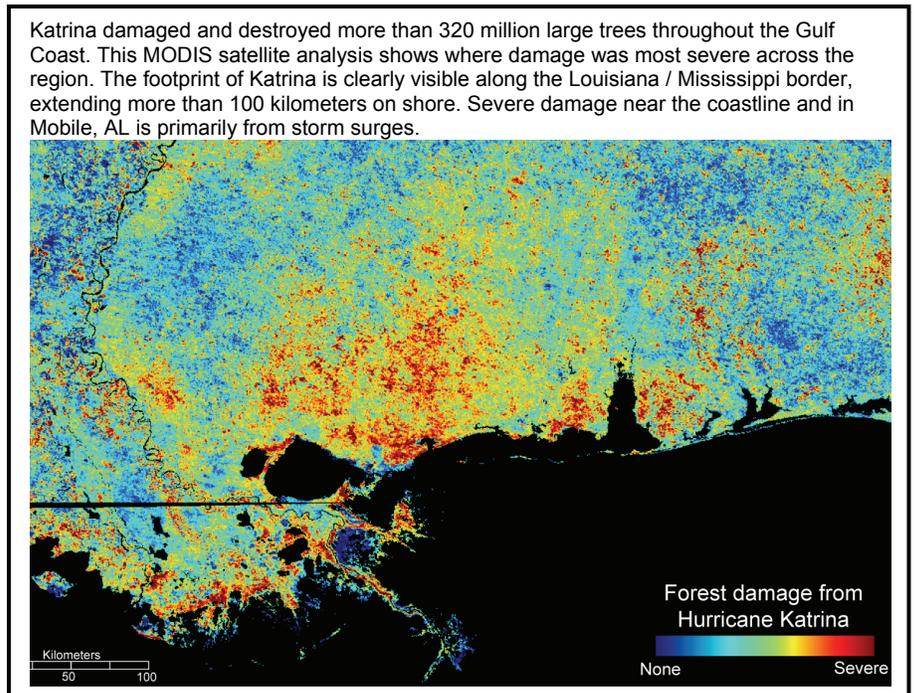
“Trees are one of nature’s most important tools for drawing carbon dioxide out of the atmosphere, so losing so many is pretty big news,” says Dr. Jeremy Fisher, a team member now at Synapse Energy Economics in Cambridge, Massachusetts.

“One of the reasons so many trees perished is because we’ve replaced the natural forests with pine plantations,” said Fisher. “We found that the few natural forests that remain weathered the hurricane pretty well, but the pines just snapped.”

“Without human interference, we would have no reason to believe that natural forests couldn’t grow back again,” said Fisher, “but it will be a long time until they store as much carbon as before the hurricane.”

In the meantime, meteorologists are predicting that as the climate changes with global warming, Atlantic hurricanes will become more severe and more common.

“So forests in hurricane-prone regions may have previously had 50 or 100 years to grow to maturity, but now we might expect that they’ll be flattened again much sooner,” said Fisher. “This sets up an unfortunate positive feedback cycle: human-caused global warming leads to more intense hurricanes, which in turn make these forests less effective in countering global warming.”



While the scientists point out that the destruction from Katrina represents a large flux of carbon dioxide back to the atmosphere, they are quick to point out that this is a very small amount compared to releases from fossil fuel burning.

“Power plants in the United States emit nearly seven times as much carbon dioxide *every year* as we estimated came from Katrina,” said Fisher. “While we cannot do much to stop a hurricane, there is so much we can do to slow global warming and reduce hurricane severity.”

Synapse Energy Economics, Inc. provides research, testimony, reports and regulatory support to environmental organizations, consumer advocates, regulatory commissions, state energy offices, and others. The firm, founded in 1996, is comprised of economists, scientists, and engineers specializing in consulting on energy and carbon economics, as well as other environmental topics.

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