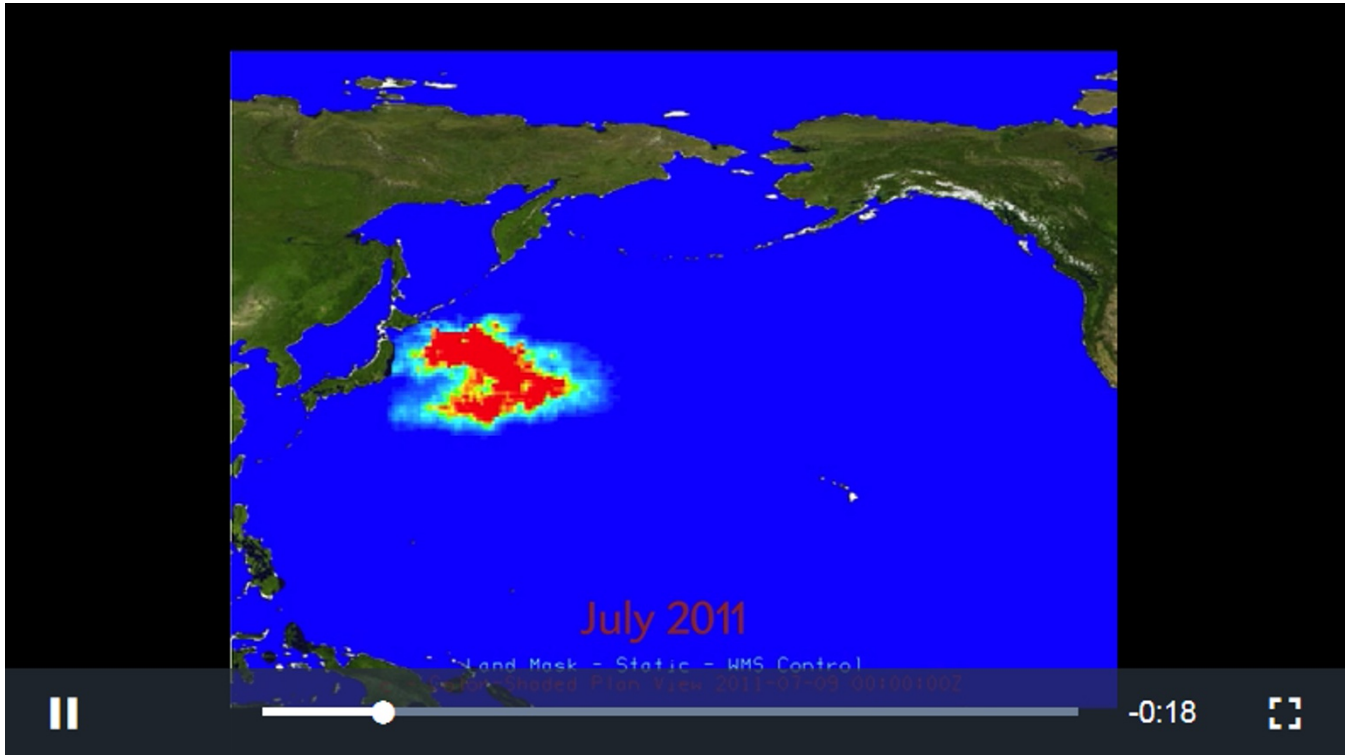


Finding the flotsam: where is Japan's floating tsunami wreckage headed?

Scientists model where and when the detritus will reach the US west coast.

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06 March 2012



An article from *Scientific American*.

When the 10-meter-high tsunami wave that followed the March 2011 magnitude 9.0 earthquake in Japan receded, it took with it some 23 million metric tons of material, including pieces of buildings, wood, plastics and more. Whereas most of the wreckage sank to the ocean floor, some of it is still floating toward other Pacific nations. The "debris field"—the visible wave of material—has dissipated, leaving the junk invisible to satellites.

So scientists at the National Oceanic and Atmospheric Administration (NOAA) and the University of Hawaii at Manoa (U.H.) who are monitoring that mass have modeled where it might go and when it might get there. You can see one of the scenarios, based on a model from the U.H.'s International Pacific Research Center Institute, in this video. For the model, scientists estimated that the tsunami left around 900,000 metric tons of floating debris in the ocean, although it is impossible to ever know the exact amount. Red areas highlight where the collection is densest, blue where it is least dense.

It is possible that most of that junk—which is not radioactive—will break up and sink before it gets to the U.S. west coast. And if it does, it will be almost impossible to tell whether it came from the tsunami, or from somewhere else, says Dianna Parker, who works with NOAA's marine debris program. "We get debris from Asia all the time," she says, and even the most recent reports of buoys that many suspect came from the disaster could have come from elsewhere. "We've seen those kinds of buoys before the tsunami, too," she adds.

Nature | doi:10.1038/nature.2012.10178