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## EARTH: Corn syrup model splits Yellowstone's mantle plume in two



Image Copyright: Kelsey Druken

Alexandria, VA – One of the greatest controversies in science is what's underneath the Yellowstone supervolcano. The controversy surrounds a unique relationship between a mantle plume (like the one that powers Hawaiian volcanoes) and the subduction zone off the Washington-Oregon coast. Cuttingedge research using a common kitchen ingredient is explored in the latest issue of EARTH Magazine.

Recently published research explores this problem in 3-D, using a model created with corn syrup, fiberglass and a series of hydraulic pistons. What the scientists saw was a plume sliced in half by the subducting plate. Before this research, different scientific teams had only investigated the subducting tectonic plate or the mantle plume, but not both at the same time.

The resulting model of a bifurcated mantle plume potentially answers key questions about the Yellowstone supervolcano. Read about how these results impact volcano research in Washington, Oregon, Montana, Wyoming and the South Pacific in the July issue of EARTH Magazine: http://bit.ly/153lVat. For complete access – including to see the corn syrup apparatus subscribe to Earth Magazine at: www.earthmagazine.org/ digital.

Don't miss the other great articles in the July issue of EARTH Magazine. Uncover ancient earthquake damage in a Roman Mausoleum, Arctic ozone depletion, and plankton growth caused by Icelandic volcanoes, all in this month's issue of EARTH, now available on the digital newsstand at www.earthmagazine.org/digital.

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