

# **Best of Last Week—Massive reserve of mercury in permafrost, new way to filter salt from water, and maybe curing baldness**

February 12 2018, by Bob Yirka

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Maps of mercury concentrations (micrograms of mercury per square meter) in Northern hemisphere permafrost zones for four soil layers: 0-30 centimeters, 0-100 centimeters, 0-300 centimeters, and permafrost. The permafrost map represents the mercury bound to frozen organic matter below the Active Layer Depth (ALD) and above 300 cm depth. Credit: Schuster et al./GRL/AGU.

It was a big week for news about planet Earth as a team at the University of Auckland found that [a 'sinking' Pacific nation is getting bigger](#)—many had expected the island nation of Tuvalu to disappear as ocean levels rise, but instead, it is actually getting bigger, the team found. Also, an international team of researchers [found massive reserves of mercury hidden in permafrost](#)—the largest-known reserve on the planet, and one likely to present problems for northern inhabitants as the Earth heats up. Also indirectly impacting Earth, a team from the Scripps Institution of Oceanography and the University of California found that [reduced energy from the sun might occur by mid-century](#), enough to offset some greenhouse gas warming.

In technology news, a joint effort by researchers from Monash University and the University of Texas has resulted in the discovery of [an efficient and sustainable way to filter salt and metal ions from water](#) based on metal-organic frameworks. And a group at the University of Maryland announced that they have developed [a new process that could make wood as strong as titanium alloys, but lighter and cheaper](#)—offering a less expensive alternative to products made with carbon fiber. Also, a combined team of researchers from the University of New South Wales, the University of Adelaide, the University of South Australia and the Australian National University found that [the future of wireless communications is terahertz](#), based on a novel platform that could tailor telecommunication and optical transmissions.

In other news, NASA announced that [New Horizons has captured record-breaking images in the Kuiper Belt](#) and released some of them to the press. And a team with members from Yokohama National University and Okayama University of Science found [a way to regrow hair at a record rate](#) in mice, possibly hinting at a cure for human baldness. And a joint project between Britain's Natural History Museum and University College London led to worldwide headlines, as the researchers announced finding [DNA evidence showing that the first modern Briton](#)

[had dark skin and blue eyes](#)—"cheddar man" lived in what is now southwest England approximately 10,000 years ago.

And finally, if you are someone who likes to live or work in low-light environments, you might want to rethink your lifestyle as a team at Michigan State University found that [dim light may make us dumber](#)—or at least harm our ability to remember and learn.

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