EXPLORATIONS
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Earth's Hidden Water

https://www.colorado.edu/fiske/about-us/fiske-productions

It's difficult to measure the depletion of water reservoirs when they are underground. NASA has come up with a creative solution -- measuring changes in Earth's gravity from space. Wet ground has more mass than dry ground, just like how a wet sponge is heavier than a dry one. This means that wet ground has a larger gravitational pull than dry ground. By measuring this fractional change, a pair of NASA satellites, called the Gravity Recovery And Climate Experiment (GRACE) mission, have been mapping our remaining underground water reservoirs across the globe.

Interview: Jenni Bonin, University of South Florida, College of Marine Science

Educational Resources

NASA website for GRACE
https://www.nasa.gov/mission_pages/Grace/index.html

GRACE Follow-On, the continuation of the original mission with new satellites
https://gracefo.jpl.nasa.gov

GRACE visualization of data from 2002 - 2016
https://www.youtube.com/watch?v=MaxBOvQ2a_o

Video overview of GRACE and GRACE Follow-On missions
https://www.jpl.nasa.gov/video/details.php?id=1461

Wikipedia entry on GRACE
https://en.wikipedia.org/wiki/Gravity_Recovery_and_Climate_Experiment

GRACE real-time data portal
http://geoid.colorado.edu/grace/

Instruments on GRACE
https://web.archive.org/web/20120225162449/http://www.gpsworld.com/government/natural-resources/instrument-grace-782

NASA's Science Activation Program funds 24 teams to connect NASA science experts, real content, and experiences with community leaders to do science in ways that activate minds and promote understanding. Fiske's Explorations project is one of those teams.

https://science.nasa.gov/science-activation-team/fiske-planetarium

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