

# **January 2012 News Notes**

- Prof. Panero outlines possibility of "diamond planets"
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## Prof. Panero outlines possibility of diamond planets

SES Associate Professor Wendy Panero and doctoral student Cayman Unterborn have described the possibility of the existence of planets composed largely of diamond. Their paper presented at the American Geophysical Union Fall Meeting in San Francisco in December was described on the *Huffington Post*, where it was featured on the front page.

The full *Huffington Post* article is available online at:

http://www.huffingtonpost.com/2011/12/10/diamond-planets\_n\_1134483.html



Image from http://earthsciences.osu.edu

# Prof. Shum describes 2011 Japan "double tsunami"

SES Professor and Distinguished University Scholar CK Shum and his colleague Dr. Y. Tony Song of NASA Jet Propulsion Laboratory have used satellite data to measure the dynamics of the catastrophic March 2011 tsunami. An earthquake off the Pacific Coast of Tohoku, Japan triggered a powerful tsunami that ultimately led to major nuclear accidents in Japan. Prof. Shum and Dr. Song used satellite measurements and in situ GPS stations to study the dynamics of the tsunami, concluding that multiple waves joined to create a merged or "double tsunami", amplifying the waves, and ultimately increasing the devastation that was caused. Their paper presented at the American Geophysical Union Fall Meeting in San Francisco was described on *The Guardian*, at:

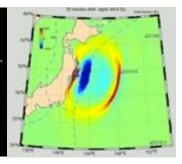
http://bit.ly/yy6iJf

A video of the simulation of the tsunami waves is available here:

#### http://bit.ly/vhl3Ut

This animation shows a model simulation of the major tsunami generated by the March 11, 2011
Tōhoku-Oki earthquake off the coast of northeastern Japan.

The animation is generated from detailed ground motion data from 1,200 Japanese GPS stations, synchronized with actual sea surface height data from NASA's Jason-1 and Jason-2 satellites as the tsunami moved across the Pacific Ocean.



Images from The Guardian video linked above.

### Prof. Bevis measures Greenland bedrock uplift due to ice loss

SES Professor and Ohio Eminent Scholar in Geodynamics Michael Bevis is the Principal Investigator for the Greenland GPS Network (G-NET), which measures changes in Greenland bedrock elevation, including the response of the rock to changing ice sheet mass. In 2010, the G-NET measured an anomalously high uplift of the bedrock. Prof. Bevis argues that the significant change in uplift is due to anomalously high ice sheets. His paper presented at the American Geophysical Union Fall Meeting in San Francisco, and is described at:

http://researchnews.osu.edu/archive/greenlift.htm



Image of G-Net site from http://researchnews.osu.edu/archive/greenlift.htm

# Profs. Thompson receive medal

SES Prof. and Distinguished University Professor Lonnie Thompson and Ohio State Geography Prof. Ellen Mosley Thompson have been selected to the 2012 Benjamin Franklin Medal in Earth and Environmental Science, for "their collective studies of ice cores from around the world which have improved the understanding of Earth's climate history, including the role of the tropics in global climate change", as described at the Franklin Institute:

http://www.fi.edu/franklinawards/12/bf\_earth.html

## Orton Geological museum featured in College newsletter

The Orton Geological museum, SES Prof. Bill Ausich, and museum curator Dale Gnidovec were featured in the College of Arts and Sciences Autumn newsletter, in a piece entitled, "Rock Solid". The museum is named for Edward Orton, who was the first Ohio State University president, as well as the first OSU professor of Geology.

http://artsandsciences.osu.edu/ascent/2011/autumn-2011/rock-solid