

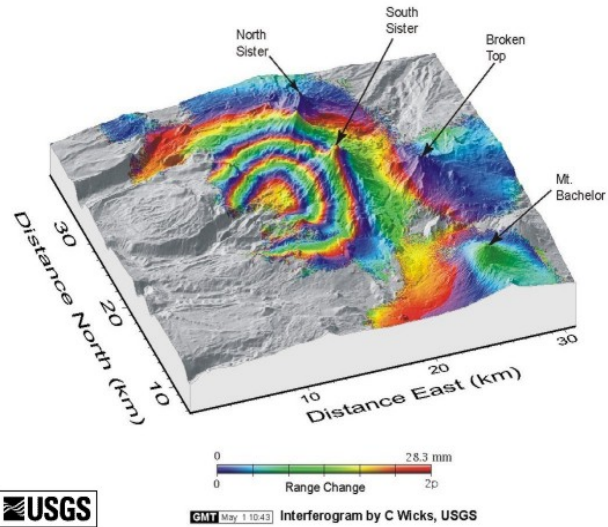
You Are Cordially Invited to Attend:

What: Using Spaceborne Radar to Understand Our Changing Earth

When: Tuesday, February 13, 2007 — 12:00 noon to 1:30 p.m.

Where: 2325 Rayburn House Office Building — Washington, D.C.

On June 28, 1978, the NASA, Jet Propulsion Laboratory launched SEASAT, the first dedicated space-borne satellite flying a SAR (Synthetic Aperture Radar). Shooting radar pulses and recording the reflected signals from the Earth's ocean surface, height above the ocean surface, wind speed and direction, sea surface temperature, polar sea ice conditions were measured and cloud, land and water features were identified. A short circuit in the electrical system ended the mission after 42 hours of data collection. No dedicated civil US SAR satellite has since flown, except for short Shuttle flights such as the SIR-A to SIR-C missions, and the remarkable Shuttle Radar Topography Mapping Mission (SRTM). In the meantime, Europeans, Canadians, and Japanese are actively engaged in flying long-term dedicated civil space-borne SAR missions collecting huge amounts of data. These missions generate a derivative type imaging called InSAR (Interferometric Synthetic Aperture Radar). This technique enables one to map minute changes in topography due to tectonic, volcanic, or anthropogenic activity. This briefing will discuss this unique technology and exciting earth remote sensing applications.



InSAR image showing a pattern of ground uplift centered about 3 miles (5 km) west of South Sister volcano in central Oregon.

> **Welcome**

Dr. Martin Sokoloski

IEEE-USA Committee on Transportation and Aerospace Policy

> **Opening Remarks**

The Hon. Rush Holt (D-N.J.)

The Hon. Judy Biggert (R-III.)

Co-Chairs, Research and Development Caucus

U.S. House of Representatives

> **Speakers**

Dr. Jean-Bernard Minster

Professor of Geophysics, Scripps Institution of Oceanography, UCSD

Dr. Paul Rosen

NASA, Jet Propulsion Laboratory, California Institute of Technology

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> Institute of Electrical and Electronics Engineers-USA (IEEE-USA)

> American Geophysical Union (AGU)

In conjunction with:

> The Congressional Research and Development Caucus [www.researchcaucus.org]

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