

Imaging Active Tectonic Deformation on Earth with Remote Sensing Methods

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Meeting and Presentation at 3 pm
Refreshments following

Teichert Room (Room 229)
Hutchison Hall
University of Rochester

Abstract

Remotely sensed data sets from actively deforming plate boundary zones provide temporal and spatial constraints on rifting and volcanic processes. The East African rift zone represents a zone of incipient plate rupture, with plate stretching achieved by the combined processes of faulting and magmatism. We use a combination of space-based imagery including Landsat, ASTER, QuickBird, and radar interferometry as well as subsurface constraints from local earthquakes and tomography to image volcanic feeder systems and active faults and their implications for geohazards within Ethiopia.

Biography

Prof. Cynthia Ebinger completed her SM and PhD in Marine Geophysics from the MIT/WHOI Joint Program in 1988. After a NRC post-doctoral fellowship at NASA/GSFC, she moved to the Leeds University, UK, to fulfill a NATO post-doc, and subsequently accepted a lectureship at Leeds University and a professorship at Royal Holloway U of London. She moved to the University of Rochester in mid-2006. She is President of the Tectonophysics section of the American Geophysical Union, and Editor-in-Chief of Geophysical Journal International. She is also a member of the NSF MARGINS Steering Committee. Her research includes continued study of the rift in East Africa, as well as rifts and volcanoes in Arabia, South America and Australia.