

## AOB Seminar

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所 属: USGS

開催日時: 2011年11月21日(月) 13:30 - 14:30

場 所: 地震・噴火予知研究観測センター 別館 第一会議室

講演題目: Applications of GPS data for improving seismic hazard assessment and transient deformation detection

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概 要 :

The first part of this talk will focus on the application of Global Positioning System (GPS) data to quantify fault slip rates and distributed shear strain in order to improve seismic hazard assessment. I will present newly estimated GPS velocities based on data collected in the vicinity of the San Andreas fault system in California and preliminary crustal deformation models designed to test current hypotheses regarding ongoing deformation processes. The second part of the talk will focus on automated detection of transient crustal deformation from continuous GPS data. The growing number of continuously-recording GPS sites worldwide provides the opportunity to observe temporal changes that may signal transient fault slip or volcanic unrest in near-real-time, however the large volume of data and potentially subtle signals makes it impractical to attempt such monitoring by eye. I will present an approach I have developed for this purpose and discuss the further development of this method which is the subject of my research while visiting ERI.