Abstract
UNAVCO community investigators are actively engaged in using space and terrestrial geodetic techniques to study earthquake processes, marine properties, active tectonics, regional and global baselines, coastal floods, deformation, global isotropic adjustment, global change, and atmospheric processes. Since the first GPS field projects were conducted more than thirty years ago, these activities and the associated technology not only as a whole but also in the context of participation and collaboration were driven by the need to scientifically refine our understanding of the Earth’s surface. This session provides a forum to highlight recent accomplishments and future directions in support of those needs. OVERVIEW: Keynote Presentation - Future Visualization Technologies for Earth Science: The smoking gun. (Nina Mendelsohn, UNAVCO and Stanford University) UNAVCO’s new EarthScope monitoring system for geodetic observatories around the globe is engaged with the upcoming deep seismic monitoring for the Nihonkai-Chubu region off the coast of Japan where unprecedented seismic activity may suggest that a major earthquake is imminent. Additionally, a new project called the Global Positioning System (GPS) Project (UNAVCO, Stanford University and Stanford University) by using global positioning systems (GPS) to monitor changes in the Earth's crust. This project will provide real-time monitoring data of the Earth's crust and will be used to improve our understanding of the processes that cause crustal deformation. OVERVIEW: Keynote Presentation - Future Visualization Technologies for Earth Science: The smoking gun. (Nina Mendelsohn, UNAVCO and Stanford University) UNAVCO’s new EarthScope monitoring system for geodetic observatories around the globe is engaged with the upcoming deep seismic monitoring for the Nihonkai-Chubu region off the coast of Japan where unprecedented seismic activity may suggest that a major earthquake is imminent. Additionally, a new project called the Global Positioning System (GPS) Project (UNAVCO, Stanford University and Stanford University) by using global positioning systems (GPS) to monitor changes in the Earth's crust. This project will provide real-time monitoring data of the Earth's crust and will be used to improve our understanding of the processes that cause crustal deformation. OVERVIEW: Keynote Presentation - Future Visualization Technologies for Earth Science: The smoking gun. (Nina Mendelsohn, UNAVCO and Stanford University) UNAVCO’s new EarthScope monitoring system for geodetic observatories around the globe is engaged with the upcoming deep seismic monitoring for the Nihonkai-Chubu region off the coast of Japan where unprecedented seismic activity may suggest that a major earthquake is imminent. Additionally, a new project called the Global Positioning System (GPS) Project (UNAVCO, Stanford University and Stanford University) by using global positioning systems (GPS) to monitor changes in the Earth's crust. This project will provide real-time monitoring data of the Earth's crust and will be used to improve our understanding of the processes that cause crustal deformation. OVERVIEW: Keynote Presentation - Future Visualization Technologies for Earth Science: The smoking gun. (Nina Mendelsohn, UNAVCO and Stanford University) UNAVCO’s new EarthScope monitoring system for geodetic observatories around the globe is engaged with the upcoming deep seismic monitoring for the Nihonkai-Chubu region off the coast of Japan where unprecedented seismic activity may suggest that a major earthquake is imminent. Additionally, a new project called the Global Positioning System (GPS) Project (UNAVCO, Stanford University and Stanford University) by using global positioning systems (GPS) to monitor changes in the Earth's crust. This project will provide real-time monitoring data of the Earth's crust and will be used to improve our understanding of the processes that cause crustal deformation. OVERVIEW: Keynote Presentation - Future Visualization Technologies for Earth Science: The smoking gun. (Nina Mendelsohn, UNAVCO and Stanford University) UNAVCO’s new EarthScope monitoring system for geodetic observatories around the globe is engaged with the upcoming deep seismic monitoring for the Nihonkai-Chubu region off the coast of Japan where unprecedented seismic activity may suggest that a major earthquake is imminent. Additionally, a new project called the Global Positioning System (GPS) Project (UNAVCO, Stanford University and Stanford University) by using global positioning systems (GPS) to monitor changes in the Earth's crust. This project will provide real-time monitoring data of the Earth's crust and will be used to improve our understanding of the processes that cause crustal deformation.