Agenda 2016 UJNR Meeting, Napa, CA

Wednesday, 16 November 2016

08:30 Welcoming Remarks (Dr. William Leith, Mr. Masato Kano)

Session 1 National Policies, Strategies Programs, Networks, and ongoing/upcoming Projects

08:45 William Leith "Update on the Earthquake Hazards Program"

09:00 Gerald Bawden "Development of a GNSS-Enhanced Tsunami Early Warning System"

09:15 Naoshi Hirata "Japanese earthquake researches for seismic and tsunami disaster reduction"

09:30 Gerald Bawden "NISAR – NASA and ISRO Synthetic Aperture Radar Mission Overview of the mission and science objectives"

09:45 Elizabeth Cochran "The Path Towards Public Earthquake Early Warning for the Western U.S."

10:00 Morgan Moschetti "The 2014 Update of the U.S. National Seismic Hazard Model"

10:15 Gavin Hayes "Recent advances in earthquake response and research at the USGS NEIC"

10:30-10:45 Break

Session 2 The 2016 Kumamoto Earthquake Sequence

10:45 Noriko Kamaya "The 2016 Kumamoto Earthquake - Overview of the Seismic Activity and New Guidelines for the Seismic Forecast Information after Big Earthquakes"

11:00 Masayuki Yoshimi "Strong ground motion of the 2016 Kumamoto earthquake observed in the midst of severely damaged area"

11:15 Norimitsu Nakata "Seismicity and structure responses following the 2016 Kumamoto earthquake"

11:30 Takahiko Uchide “Fault model of the 2016 Kumamoto earthquake inferred from hypocenter distribution and strong-motion records”

11:45 Tomokazu Kobayashi “Detailed ground surface displacement and fault ruptures of the 2016 Kumamoto Earthquake Sequence revealed by SAR and GNSS data”

12:00 Hiroshe Une “Small displacement surface linear ruptures of the 2016 Kumamoto earthquake sequence detected by ALOS-2 SAR interferometry”

12:15 Yuki Kodera “Earthquake Early Warning for the 2016 Kumamoto Earthquake: Performance Evaluation of the Current System and the Next-Generation Methods of the Japan Meteorological Agency”

12:30-13:30 lunch

Session 3 Earthquake Hazard Studies, Recurrence, and Mapping

13:30 Ned Field “A Spatiotemporal Clustering Model for the Third Uniform California Earthquake Rupture Forecast (UCERF3-ETAS) – Toward an Operational Earthquake Forecast”

13:45 Jeanne Hardebeck “Operational Aftershock Forecasting for the United States and Globally”

14:00 Morgan Moschetti “Incorporating ground motions from 3-D earthquake simulations into the U.S. National Seismic Hazard Model”

14:15 Kevin Milner “Supercycles and Synchronization Signatures in Synthetic Seismic Sequences”

14:30 Nadia Lapusta “Possibility of large seismic slip on creeping fault segments and deeper creeping fault extensions”

14:45 Yehuda Ben-Zion “Correlations between fault zone and earthquake properties in the Southern California plate-boundary around the San Jacinto Fault Zone”

15:00 Tom Brocher “Evidence for Distributed Clockwise Rotation of the Crust in the Northwestern United States from Fault Geometries and Earthquake Focal Mechanisms”

15:15 Andrea Donellan “Shallow surface deformation observed with UAVSAR. What are the implications for earthquake hazard?”

15:30-15:45 Break

Session 4 Induced Seismicity

15:45 Donald Turcotte "Statistics and risk associated with induced seismicity at The Geysers geothermal area, California and in Oklahoma"

16:00 Greg Beroza "Efficient Similarity-Based Earthquake Detection Applied to the Onset of the Guy-Greenbrier, Arkansas Sequence"

16:15 William Ellsworth "Managing the Hazard of Induced Earthquakes: Insights from InSAR and Geology"

16:30 Sara Dougherty "LArge-n Seismic Survey in Oklahoma (LASSO): Probing injection-induced seismicity with a dense array "

16:45 Xinglin Lei "Increasing injection-induced seismicity in Asia"

17:15 Joern (Ole) Kaven "Induced seismicity insights from the Decatur, IL, CO2 sequestration project"

17:30-18:00 Poster session preview (2-3 minutes each)

18:00 Adjourn

18:30 Reception

Thursday 17 November, 2016

Session 5 Subduction Zone Science (note earlier start time)

Recent Initiatives (S-Net, DONET, 'Ring of Fire', Subduction Zone Observatory)

08:00 Makoto Matsubara "Estimation of seismic velocity structure beneath the ocean using seismic stations offshore and on lands"

08:15 Jeanne Sauber-Rosenberg "GRACE and follow-on gravity missions: Contributions to subduction zone science and prospects for the future"

08:30 Shin Aoi "Real-Time Tsunami Inundation Forecast System using S-net Data"

08:45 Ryota Hino “Recent progress of seafloor geodetic monitoring in Japan”

09:00 Joan Gomberg “Advancing USGS Subduction Zone sciences”

Episodic Tremor and Slow Slip

09:15 Satoshi Itaba “Shallow Slow Slip Event Off Kii Peninsula, Japan”

09:30 David Shelly “Fluid-faulting evolution in high definition: connecting fault structure and frequency-magnitude variations during the 2014 Long Valley Caldera, California earthquake swarm”

09:45 Makiko Ohtani “Interaction of SSE and brittle nucleation in simulated pre-seismic slip”

10:00-10:15 break

Session 5 Subduction Zone Science (*continued*)

Operational Forecasting and Early Warning Systems of Earthquakes and Tsunamis

10:15 John Rundle “GNSS Tsunami Early Warning: Status and Plans

10:30 Jessica Murray “Toward incorporation of real-time GNSS data in the West Coast Earthquake Early Warning system”

10:45 Mitsuyuki Hoshiba “'Real-time prediction of ground shaking without source information: Data assimilation and simulation of seismic wave propagation for Earthquake Early Warning”

11:00 Tom Jordan “CISM earthquake forecasting activities”

11:15 Anne Wein “Communication of aftershock information”

11:30 Richard Allen “Warning when it matters: Earthquakes and tsunamis around the globe”

11:45 Sarah Minson “The Theoretical and Observational Limits of Earthquake Early Warning”

12:00 Ben Brooks “Internet of Things Earthquake Early Warning”

12:15-13:15 lunch

13:15-14:15 Poster Session

Satoshi Annoura “Low frequency tremor near the Nankai trough axis, Japan”

Delphine Fitzenz “Bayesian combination of models for a data-driven approach to earthquake recurrence, for crustal or subduction sources”

Satoshi Kawamoto “The GEONET real-time analysis system for rapid finite fault modeling”

Tomokazu Kobayashi “Earthquake rupture properties of the 2016 Kumamoto Earthquake foreshocks (Mj 6.5 and Mj 6.4) revealed by conventional and multiple-aperture InSAR”

Makoto Otsubo “Estimation of fluid volumes necessary for the fracturing around the seismogenic zone: Insights from the formation of mineral veins”

Natanya Porto “Alternative Segmentation Methods for Subduction Zones: An Alaskan Megathrust Model”

Susan Schwartz “Regional and stress drop effects on aftershock productivity of large megathrust earthquakes”

Emel Seyhan “Basin edge and depth effects on ground motion amplifications in the Kanto Basin, Japan”

Yoshiki Shirahama “Surface ruptures associated with the 2016 Kumamoto earthquake sequence, central Kyushu, Japan”

Masayuki Yoshimi “Earthquake Fatalities Mapping for the Eastern Asia Earthquake and Volcanic Hazards Information Map”

Session 5 Subduction Zone Science (*continued*)

Probabilistic Earthquake and Tsunami Hazard Estimation

14:15 Mark Simons “Inferring seafloor displacements during the 2011 Tohoku-Oki earthquake with minimal prior information”

14:30 Thorne Lay “Northern Limit of Shallow Slip for 2011 Tohoku: Re-rupture of 1896 Tsunami Earthquake Zone”

14:45 Bunichiro Shibazaki “Modeling deformation processes of the island arc crust and mantle during the interseismic and postseismic periods of the Tohoku-oki earthquake”

15:00 Guy Gelfenbaum “Using tsunami deposits to interpret tsunami wave and seafloor rupture characteristics: lessons from Japan applied to the Aleutians”

15:15 Masanobu Shishikura “Evaluation of variety in earthquake rupture along the Nankai Trough deduced from paleoseismological data”

15:30 Quentin Bletery “Smooth megathrusts are more prone to mega-earthquakes”

15:45 Keisuke Ariyoshi “Modeling Research toward Earthquake Disaster Mitigation by using Japanese High Performance Computing Systems”

Real-time Seismic and Geodetic Monitoring and Seafloor Observations

16:00 Roland Burgmann “Transient Deformation and Stress From Enduring Postseismic Deformation of the 2011 Tohoku-Oki Earthquake”

16:15 Meghan Miller “Subduction Zone Geodesy and UNAVCO Community Science Results”

16:30 Wayne Thatcher “New ways to look at active tectonic deformation of the western United States”

16:45 Group Photo

17:10 for those interested in group dinner, meet in hotel lobby

17:15 depart hotel

17:30 arrive at restaurant Morimoto for dinner

~20:30 Return to hotel

Friday 18 November, 2016

Session 6 The South Napa Earthquake

09:00 Ken Hudnut “Fault Afterslip Forecast for the August 24, 2014, South Napa Earthquake”

09:15 Jem Erdem “Ground-Motion Attenuation for the South Napa earthquake in the Sacramento-San Joaquin Delta, California”

09:30 Annemarie Baltay “Regional attenuation parameters in ground-motion predictions: An example from the 2014 South Napa earthquake”

09:45 Margaret Glasscoe “Using Numerical Models to Investigate Distributed Deformation — The South Napa Earthquake as a Case Study”

10:00 Presentation of the 11th UJNR Resolution

10:15 Concluding Remarks (Dr. William Leith, Mr. Masato Kano)

Field Trip to the 2014 M6.0 South Napa Earthquake Rupture Area

~10:45 Departure

12:00 lunch

~17:00 Return to hotel