

Draft Agenda (Title talks in blue are placeholders)

Fault Displacement Hazard Analysis Workshop

December 8 – 9, 2016

Menlo Park, CA

December 8, 2016

8:00 – 9:00 IAEA Working Group Meeting I (Small conference room)

8:00 – 9:00 Workshop Registration

9:00 – 9:30 Welcome and Introductory Remarks

(Dawson, Baize, Cinti, Schwartz)

Session I: Lessons learned from recent earthquakes

9:30 – 10:30

Surface rupture in the 2016 Earthquake Sequence in Italy –

Francesca Cinti (INGV)

Surface Rupture and effects on infrastructure in the 2016 Kumamoto earthquake

Shinji Toda (IRIDes - Tohoku University)

10:30 – 10:45 *Break*

10:45 – 11:45 Variation in earthquake surface rupture characteristics across intraplate Australia

Dan Clark (Geoscience Australia)

Fault rupture observations from the most recent and prior events along New Zealand's Alpine Fault and Greendale Fault

Greg dePascal (University of Chile)

Modeling the near-surface displacement field using mobile t-lidar in the 2014 South Napa earthquake

Ben Brooks (USGS)

11:45 – 12:00 Discussion

12:00 – 13:30 *Lunch and unstructured discussion*

**Session II: Observational data for the Surface Rupture during Earthquakes (SURE)
Database**

13:30 – 15:00

Introduction to Session II – Perspectives from California

Tim Dawson (California Geological Survey)

Issues associated with setback distance from active fault in China: What we have learned from the 2008 Wenchuan Earthquake

Xiwei Xu (China Earthquake Administration)

Quantifying Co-seismic Distributed Deformation Using Optical Image Correlation: Implications for Empirical Earthquake Scaling Laws and Safeguarding The Built Environment

Chris Milliner (U.C. Berkeley)

A new technique to measure 3D slip vectors from high-resolution topography, applied to photogrammetry of historic ruptures

Austin Elliot (COMET/ University of Oxford)

Discussion

15:00 – 15:15 Break

15:15 – 16:30 (1 hr 15 min)

[Constraints on rupture lengths/displacements from historical earthquake observations](#)

David Schwartz (USGS)

**Session II: Observational data for the Surface Rupture during Earthquakes (SURE)
Database (Continued)**

Towards a unified database of Surface Ruptures (SURE): objectives and perspectives

Stéphane Baize (IRSN)

16:30 – 17:00 Discussion and Day 1 Wrap up

17:00 Adjourn

(See next page for Day 2)

Workshop Day 2

December 9, 2016

8:30 – 9:00 Workshop Registration

9:00 – 9:15 Overview/Observations from Day 1 (TD or SB or FC or DS)

Session III: Application and Advances in Deterministic and Probabilistic Fault Displacement Hazard Analysis

9:15 – 10:30

The Santa Susana fault, Aliso Canyon gas storage field, southern California-possible fault rupture hazard, gas well integrity, and regulatory implications

Thom Davis

ANS guidelines

Ivan Wong (Lettis Consultants International)

PFDHA methodology

Mark Petersen (USGS)

Deterministic and probabilistic fault displacement hazard methodologies for gas pipeline crossings in California: applications and data needs

Steve Thompson (Lettis Consultants International)

10:35 – 10:50 *Break*

10:50 – 11:10

Lake Isabella Dam FDHA Study

Keith Kelson (U.S. Army Corp of Engineers)?

11:10 – 12:00 **“Flash Talks”**

Attendees are asked to present their top lessons learned in the applications of FDHA and the most pressing user needs in 1-2 slides, in about 2 minutes each.

12:00 – 13:30 Lunch (On your own, see list of local restaurants and lunch options)

13:30 – 15:00

Application or Miss-Application of PFDHA. What Relationships are Appropriate and Is the Displacement Result Reasonable?

Donald Wells (Amec – Foster Wheeler)

Displacement probabilities

Glenn Biasi (University of Nevada, Reno)

Earthquake surface rupture (fault displacement) assessment using dynamic rupture models: Case study of the 1999 Chi-chi Taiwan earthquake

Luis Dalguer (Swiss Nuclear)

Engineering Implementation of the Results of a Fault Displacement Hazards Analysis

Jonathan Bray (U.C. Berkeley)

Discussion

15:00 – 15:15

Break

Session IV: Moving Forward

15:15 – 16:15

The Path Forward: Research Directions and Plans for a Future PEER-Funded Research Project

Norm Abrahamson (Pacific Gas and Electric)

Collaborative Opportunities and Coordination of Research Efforts

Jeff Bachhuber (PG&E), Yousef Bozorgnia (PEER)

16:15 – 17:00 (1 hr) Workshop Discussion

17:00 *Adjourn*

17:00 – 18:00

IAEA Working Group Meeting II (Small conference room, USGS Campus)