



CSEP/USGS/GEM Workshop:

Epistemic Uncertainties in Earthquake and Ground Motion Forecasts

12 September 2015
SCEC Annual Meeting, Palm Springs

Organizers:

Max Werner (U Bristol), Danijel Schorlemmer (GFZ Potsdam),
Tom Jordan (USC), Andy Michael (USGS),
Morgan Page (USGS), Marco Pagani (GEM)

Goals and Objectives

- Strengthen collaboration between CSEP, USGS and GEM
 - Focus current joint activities and identify new projects
- Improve CSEP infrastructure to enhance the testing of Operational Earthquake Forecasting (OEF) models (US, NZ, Japan, China, Italy, global)
 - Assess adequacy of current infrastructure and identify next steps
- Upgrade CSEP T&E to account for epistemic uncertainties (EU)
 - Identify diversity and importance of EU in models and T&E
 - Develop modeling and T&E strategies that account for EU (seismicity)
- Expand T&E of seismic hazard models and ground motion forecasts
 - Assess community needs and current T&E; identify next steps
- Begin T&E of forecasting models of induced seismicity (IS) and hazard:
 - Design new experiments of IS models, including of USGS forecasts

Agenda

Morning

Overview of OEF & CSEP

09.10 – 10.50 CSEP & OEF: Updates from around the world

OEF, Aftershocks & Retrospective Experiments

11.05 – 11.50 UCERF3-ETAS, Canterbury experiment, CISM, Global experiments

11.50 – 1.00 *Panel Discussion: Epistemic uncertainties*

Afternoon

Evaluating Hazard Models

2.00 – 2.45 Testing PSHA, GEM hazard modeling and testing,

2.45 – 3.30 *Discussion: How should hazard models be tested?*

Induced Seismicity

3.45 – 4.05 Forecasting induced seismicity in the CEUS, public policy challenges

4.05 – 4.45 *Discussion: CSEP experiments of induced seismicity forecasts?*

4.45 – 5.00 Wrap-up