## Resolution of the Seventh Joint Meeting of the U.S.-Japan Panel on Earthquake Research UJNR

October, 2008

The UJNR Panel on Earthquake Research promotes advanced research toward a more fundamental understanding of the earthquake process and hazard estimation. The Seventh Joint meeting was extremely beneficial in furthering cooperation and deepening understanding of the common problems in both U.S. and Japan.

The meeting included very productive exchanges of information on approaches to systematic observation and modeling of earthquake processes. The Panel recognizes the benefits of working together to achieve our common goal of reducing earthquake risk. We look forward to continued cooperation on issues involving densification of observation networks and the open exchange of data among scientific communities. We recognize the importance of making information publicly available in a timely manner. We also recognize the importance of information exchange on research policy and strategies including framework of research organizations.

## **Areas of Cooperation**

Specific areas of earthquake research where cooperative research between the U.S. and Japan may lead to significant advancement include, but are not limited to:

- Real-time information of seismic, geodetic and strain measurements including borehole strainmeters and ocean bottom seismometers using marine cable
- Technologies for measuring crustal deformation including GNSS, GPS/acoustic, InSAR, LiDAR, VLBI and SLR
- Earthquake recurrence studies using paleoseismic, geodetic and seismic methods
- Laboratory, theoretical and in situ studies of fault-zone physics
- Studies of episodic tremor and slow slip using seismic, geodetic, and borehole strain measurements.
- Systematic studies of earthquake predictability through rigorously evaluated scientific prediction experiments
- Studies of near-source ground motions, geological effects and structural response
- Probabilistic seismic and tsunami hazard estimation incorporating knowledge of current and past behavior, and physics based computational models.

The Panel strongly urges that the appropriate agencies in the U.S. and Japan that are represented on this panel work together with the academic sector to support and coordinate the scientific work in these areas of cooperation.

The Panel recognizes the importance of promoting exchange of scientific personnel, exchange of data, and fundamental studies to advance progress in earthquake research. Japan and the U.S. should promote these exchanges throughout Asia and the world. The Panel endorses continuation of these activities.

## **Next Meeting**

The next meeting will be held in Japan in the autumn of 2010.