

Earthquake early warning summit resolution

- Rapid earthquake information systems can now provide estimates of shaking intensity before the shaking is felt in some locations. This is called earthquake early warning and the alerts are available a few seconds to a few minutes before shaking. This information is a critical addition to tsunami warning systems.
- Earthquake early warning is a useful complement to the use of long-term earthquake forecasts, implementation of appropriate building codes, and personal or business earthquake preparedness plans.
- In the March 11, 2011 M9 Tohoku-oki earthquake a warning was successfully issued by the Japan Meteorological Agency to the Tohoku area where the strongest shaking occurred. The warning was received through TV, radio, cellphones and computer networks, and was used by individuals to take cover and to bring trains to a stop.
- The performance of the warning system in the March 11, 2011 Tohoku-oki earthquake and its aftershock sequence also reveals some areas that need improvement. These include the realtime recognition of the areal extent of the rupture in order to improve the shaking estimate, and the accurate detection of aftershocks in the hours and days following the main event.
- University and government scientists in the U.S. have been developing and testing methodologies for delivering early warning in California. This testing has demonstrated the technical feasibility of a warning system in the U.S. The time has come to more broadly engage potential users. The current seismic networks require significant investment of resources before they would be ready to deliver public warning.
- The participants of this summit recommend funding for geophysical networks and research be preserved and enhanced in order to develop and implement an earthquake early warning system in high earthquake hazard regions of the U.S. such as the west coast.

This resolution was prepared by the participants of the April 4, 2011 Earthquake Early Warning Summit at UC Berkeley.

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