

Subscribing Member News

CSI Donates Software to CGHED

EERI Subscribing Member Computers and Structures, Inc., has donated its structural analysis program SAP2000 to the Center for Global Health and Economic Development (CGHED) Access Project at Columbia University, which will use the software to design health care facilities in Mayange, Rwanda. Through the Access Project, CGHED mobilizes global health programs that enable low-resource countries to develop quality health systems for the poor, promote sustainable economic development, and achieve the United Nations' Millennium Development Goals. Access Project staff members facilitate communication between local, district, and central health care facilities and improve health facilities infrastructure. For more information, visit www.theaccessproject.com.

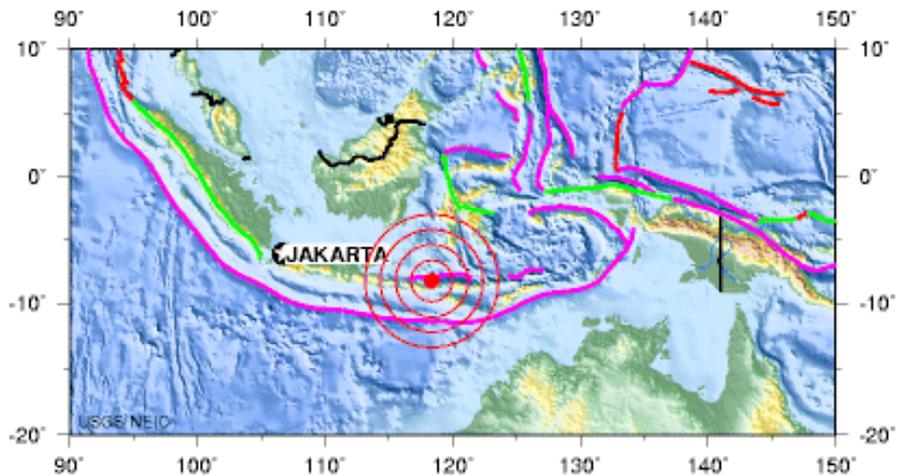
Kinematics' New Product

EERI Subscribing Member Kinematics, Inc., has introduced the Rock family of products — the fifth generation of Kinematics digital, multi-channel, low-power and high-dynamic range data acquisition systems. The Rock family is designed to meet the needs of various environmental monitoring data acquisition operational models and missions while offering exceptional data fidelity and signal purity at low-power consumption. The Granite 24-bit multi-channel recorder is the first product of the new Rock family, offering enhanced ease of use and functionality. The Granite is designed to withstand a 1-m drop and a 1-m-depth temporary water immersion without failure. It will meet a significant variety of user requirements. For more information, visit <http://www.kinematics.com>.

Learning from Earthquakes

Sumbawa, Indonesia, Earthquake of November 25, 2007

A M6.5 earthquake occurred in the Sumbawa region of Indonesia at 9:02 AM MST, Nov. 25, 2007 (Nov. 26 at 12:02 AM local time). The earthquake occurred off the northeast coast of Sumbawa Island (8.294°S, 118.360°E). On the map below, the epicenter is shown just south of a subduction zone. Three people were killed, hundreds were injured, and hundreds of houses were destroyed.



Map showing the location of the earthquake epicenter, nearby islands, and faulting along the Indian, Eurasian, and Pacific Plate boundaries.



Collapsed building on Sumbawa Island (photo: Teddy Boen).



Poor joint detailing on collapsed building (photo: Teddy Boen).

The earthquake had the following intensities. Felt (V) in the Bima-Dompu-Raba area. Felt (IV) at Sumbawabesar; (III) at Taliwang. Also felt (IV) at Mataram, Lombok, and (III) at Denpasar, Bali, and Labuanbajo, Flores. Felt at Kuta and Ubud, Bali.

Damage occurred almost exclusively to non-engineered buildings. It is customary in Sumbawa to use bamboo and rattan as reinforcement in buildings. Structures are weak due to concrete shrinkage and poorly detailed joints. Non-engineered buildings continue to be at high risk in much of the world. More work on affordable, easily constructed, and earthquake-resistant small buildings is needed.