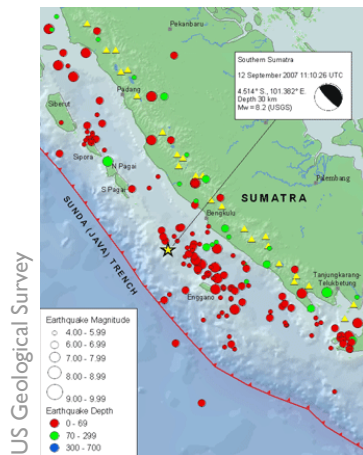




September 2007 US IOTWS Program Update

US Indian Ocean Tsunami Warning System (IOTWS) Program
from advanced technologies to resilient communities



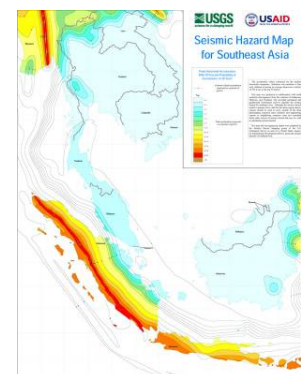
Map of earthquake magnitudes and depths off the coast of Sumatra

IOTWS is Put to the Test after 8.2 Earthquake Shakes Sumatra September 12, 2007, Sumatra, Indonesia

The developing Indian Ocean Tsunami Warning System (IOTWS) was put to the test after a magnitude 8.2 earthquake struck Sumatra on September 12, 2007, causing a tsunami of less than one meter in Padang, Indonesia. Warning centers were on high alert after the U.S. Geological Survey (USGS) and national seismic stations across the Asia-Pacific registered the event. NOAA's Pacific Tsunami Warning Center (PTWC) issued its first bulletin 15 minutes after the earthquake, alerting of a potential basin-wide tsunami. This event—the fourth earthquake of magnitude greater than 7.9 over the past decade near the plate boundaries offshore from Sumatra—reinforces the importance of a fully operational IOTWS. In support of efforts to strengthen regional detection and warning capacity, the US IOTWS Program has provided assistance such as PTWC warnings, the installation and integration of seismic stations into international networks, and the launch of a tsunami detection station off the Nicobar/Andaman Islands, which provided critical forecast data soon after the earthquake.

Scientists Gain New Understanding of Seismic Risks and Revise Hazard Maps for Southeast Asia September 27, 2007, Bangkok, Thailand

USGS has revised seismic hazard maps for Southeast Asia which will promote disaster resilience by assisting engineers in designing buildings and developing building codes that withstand strong ground shaking. Accurate understanding of seismic risk will enable retrofitting and other measures that can reduce structural damage and the related loss of lives and livelihoods from large earthquakes in the future. The maps are the result of collaboration between USGS and local scientists and engineers in the Indian Ocean region to develop and apply new seismic models and ground-motion prediction equations. Building code officials are now updating the codes in Thailand and Indonesia to incorporate this information. USGS implemented the Southeast Asia Seismic Hazard Project under the US IOTWS Program to strengthen technical expertise on assessing seismic risks and developing seismic hazard maps.



Seismic hazard map for Southeast Asia

ICS Foundational Course in Thailand September 17-21, 2007, Pathumthani, Thailand

Disaster managers in Thailand and the Maldives gained much-needed new skills in emergency response and coordination at the Incident Command Systems (ICS) Foundational Training Course, held at the Asian Institute of Technology in Bangkok. The course familiarized participants with organizational resources used in ICS, which



will improve inter-agency coordination, management structures, and communications, thereby increasing disaster response effectiveness. Organizers from the U.S. Forest Service (USFS), Asian Disaster Preparedness Center (ADPC), and other US IOTWS program partners facilitated exercises with scenarios including floods, explosions, storm surges, road accidents, and a ship wreck. Following the course, ADPC will work with Thailand's Department of Disaster Prevention and Mitigation, other relevant agencies in Thailand, and the Maldives' National Disaster Management Center to provide further technical assistance in ICS.

Indonesia Launches Second U.S.-designed Tsunameter in the Indian Ocean

September 19, 2007, Jakarta, Indonesia



A technician checks the DART buoy before its launch into the Indian Ocean



Indonesian and U.S. officials with the DART tsunameter

The second Deep-ocean Assessment and Reporting of Tsunamis (DART) buoy in the Indian Ocean was launched on September 19, 2007, under the USAID-funded US IOTWS. The tsunameter station includes a pressure gauge set on the ocean floor to monitor sea-level changes and communications equipment to send data via satellite to global networks. This is the first DART tsunameter managed by the Indonesian government, through the Agency for Assessment and Application of Technology (BPPT). Following a launching ceremony in Jakarta, which also marked the deployment of four ATLAS buoys to monitor climate change, the DART buoy was placed off the coast of West Sumatra at approximately 0°N and 92°E. The U.S. National Oceanic and Atmospheric Administration, BPPT, and Indonesia's Agency for Marine and Fisheries Research also agreed to future exchanges for capacity building in tsunami detection, climate monitoring, and fisheries management. Several earthquakes in Sumatra over the previous week, including a massive one measuring 8.2 on the Richter scale, underscores the need for a fully operational tsunami warning system and effective communication between warning centers and coastal communities. This tsunameter joins one jointly deployed with Thailand under the US IOTWS Program in December 2006 in a planned array of buoys that will ring the Indian Ocean to provide real-time data on potential tsunamis.

The Jakarta Post

US IOTWS Program

UPCOMING US IOTWS PROGRAM AND RELATED ACTIVITIES

Incident Command System Planning Section Course, October 31-November 9, 2007

Jakarta, Indonesia

For more information contact S.H.M. Fakhruddin at fakhruddin@adpc.net

US IOTWS Program Transition Workshop, December 6-7, 2007

Bangkok, Thailand

For more information contact Peter Collier at pcollier@iotws.org

Study Tour on Disaster Management, January 12-19, 2008

San Francisco and Sacramento, California, USA

For more information contact S.H.M. Fakhruddin at fakhruddin@adpc.net

Cross-Training Workshop on Media and Disaster Early Warning Systems, January 14, 2008

Jakarta, Indonesia

For more information contact S.H.M. Fakhruddin at fakhruddin@adpc.net

Local Tsunami Early Warning Systems Workshop, January 16-18, 2008

West Timor, Indonesia

For more information contact S.H.M. Fakhruddin at fakhruddin@adpc.net

About the US Indian Ocean Tsunami Warning System (IOTWS) Program

The US IOTWS Program is part of the international effort to develop tsunami warning system capabilities in the Indian Ocean following the December 2004 tsunami disaster. The US program adopts an "end-to-end" approach—addressing regional, national, and local aspects of a truly functional warning system—along with multiple other hazards that threaten communities in the region. In partnership with the international community, national governments, and other partners, the US program offers technology transfer, training, and information resources to strengthen the tsunami warning and preparedness capabilities of national and local stakeholders in the region. For more information please visit www.us-iotws.gov.

U.S. Agency for International Development
www.usaid.gov

US IOTWS Program Update – September 2007

