

Seismic and Tsunami Observations of Myanmar

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1. Seismic Network

Earthquake recording was undertaken at Yangon as early as 1961 and at Mandalay in 1966, using only then the electromagnetic seismographs with photographic recordings. In 1976, two sets of Japanese visual seismographs were purchased and each set was installed at Yangon and Mandalay in 1977. In 1984 two sets of solar powered visual velocity type seismographs were obtained through the assistance of the Japan International Co-operation Agency (JICA). One set of solar powered seismograph was installed at Sittwe in 1984 and the other was installed at Dawei in 1985. K-2 digital seismograph, manufactured in USA, was obtained through the assistance of the regional UNESCO office in New Delhi India in 1995. The relevant software training on interpretation of seismic wave is being requested to the UNESCO. For a Strong Motion Network, ten sets of Strong Motion Accelerographs {ETNA-SI (MOC-02) 3 Channels High Dynamic Range} were kindly donated by OYO Corporation, Japan, through kind sponsorship of World Seismic Safety Initiative (WSSI) in 2000. Installation of ten sets of accelerographs at ten stations is completed.

Two sets of Digital Seismographs were donated by the Seismological Bureau of Yunan Province, People's Republic of China (YSB) in 2002. Installation at two stations was completed. These stations are at Yangon and Mandalay in Myanmar. Two sets of Digital Seismograph were donated by the Seismological Bureau of China Earthquake Administration (CEA) in 2007. These digital Seismographs will be installed at Myitkyina and Nansam. At present, Nansam Seismological Station was brought into construction by the Seismological Bureau of China Earthquake Administration (CEA) in cooperation with our department and Myanmar engineers. In the near future, construction of Myitkyina Seismological Station will be brought into existence by CEA of China and DMH of Myanmar.

At present, our department has established Multi-Hazard Early Warning system including Early Warning System for Tsunami after the great Tsunami occurred in Indian Ocean on 26th December 2004. Four sets of digital seismograph were installed in D.M.H at Yangon and Mandalay in April 2003, Myatkyinar and Namm san in 2008, which were donated by Yunnan Seismological Bureau and China Earthquake Association, People's Republic of China. Moreover, two sea level tide gauges have been installed at Myanmar coastal area, Mawlamyine and Sittwe, which were donated by Asian Disaster Preparedness Center (ADPC).

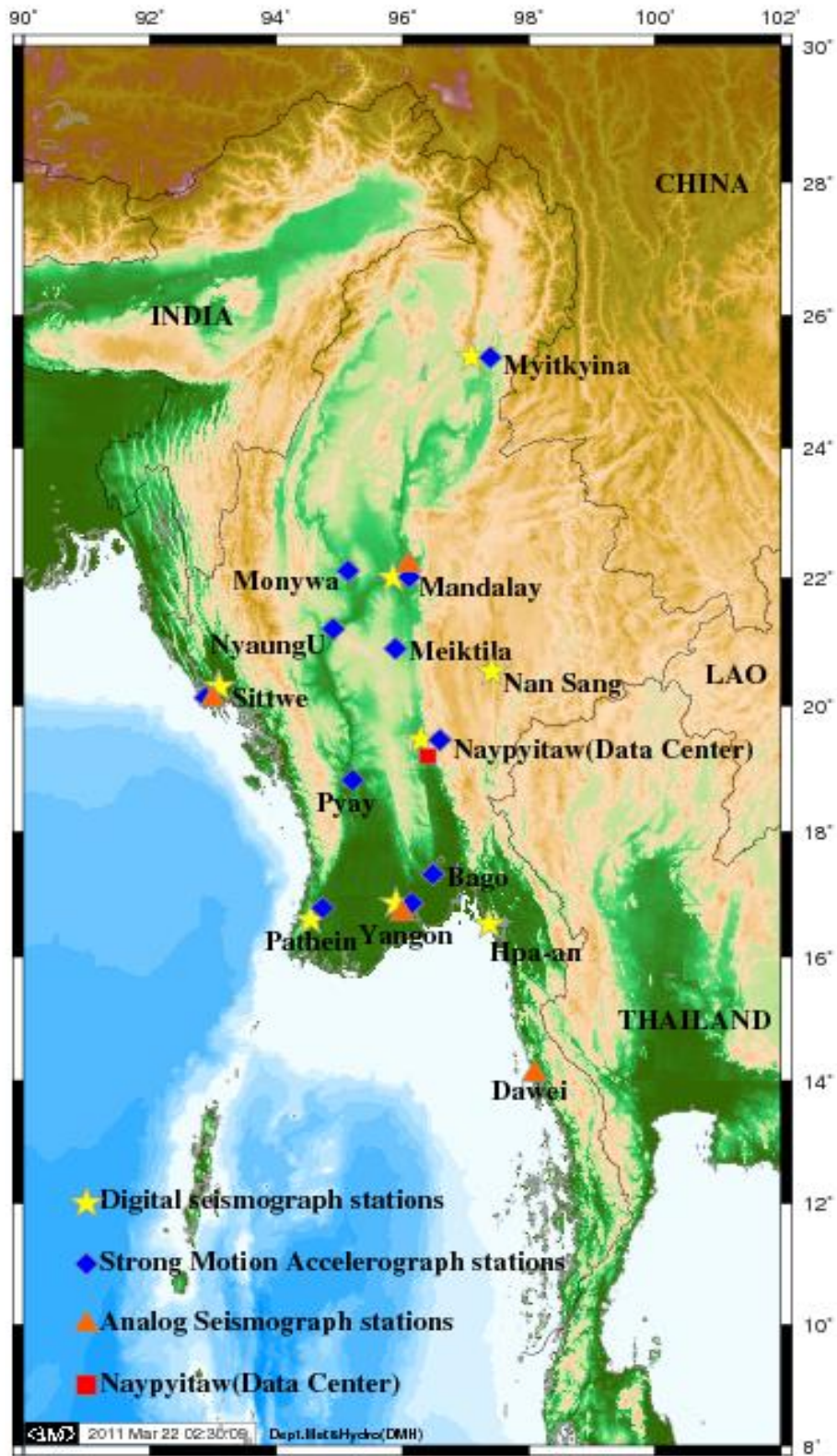


Figure 1. Seismic Network in Myanmar

2. Tsunami Warning Network

At present, earthquake warnings are issued by the Department of Meteorology & Hydrology (DMH) under the Ministry of transport. DMH is now connecting with UNESCO/IOC and two sea level tide gauges were installed at Myanmar coastal area, Mawlamyine and Sittwe during July 2006. Installation at two stations is completed. DMH also communicate with Japan Meteorological Agency (JMA), Pacific Tsunami Warning Center (PTWC) and ASEAN Secretariat office for communication test of Tsunami Information (Fig. 2).

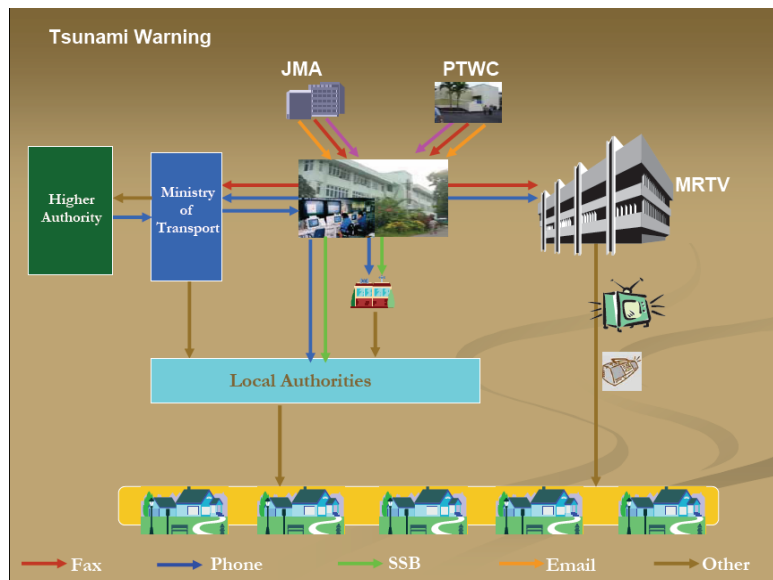


Figure 2. Tsunami Warning Network