

Strong ground motion observation system in Japan

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1. STRONG GROUND MOTION OBSERVATION SYSTEM

In Japan, 1376 SMAC type Strong Motion Seismographs, 15 DC type Seismographs, and 529 other type seismographs are installed. On the SMAC and DC type seismometer, 357 are installed on the ground surface, and others are on the structures. On other type seismometers, 354 are installed on the ground surface. Almost all of SMAC and DC type seismometer are analog recording systems and the others are digital recording systems.

Main organizations concerning the operation of these instruments are listed in Table 1.

These records are collected to the Strong Motion Earthquake Observation Council (President: Prof. Hiroyoshi Kabayashi, Secretary-General: Prof. Tsuneo Katayama). The publication of the Council is "Strong-Motion Earthquake Record in Japan" (yearly book).

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2. DATA PROCESSING SYSTEM

Now in Japan, two Data Processing Systems are working:

1. Data Management System, Association for Earthquake Disaster Prevention.

Chairman: Prof. Shun'ichiro Omori, Co-chair: Prof. Tsuneo Katayama.

2. Working Group for Strong Motion Record Database, Architectural Inst. of Japan.

In 1992, it was published the "Digital Strong-Motion Earthquake Data-1987 Chiba-ken Toho-oki Earthquake (East off of Chiba Prefecture)". It included strong motion records of 70 sites, from the Architectural Inst. of Japan (Fax 81-3-3436-2058).

Table 1

National Research Institutes for Earth Science and Disaster Prevention:

Public Works Research Inst.
Building Research Inst.
Port and Harbour Research Inst.
Earthquake Research Inst.
Inst. of Industrial Science
Nippon Telephone and Telegrams Co.
Railway Technical Research Inst.
Tokyo Metropolitan Government
Research Inst. of Major Construction Co.
Science and Technology Agency
Ministry of Construction
Ministry of Construction
Ministry of Transport
University of Tokyo
University of Tokyo

