MeSO-net for Detection of Mega-thrust and Intra-slab Earthquakes beneath Tokyo Metropolitan Area, JAPAN (2)

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We have started the special project for earthquake disaster mitigation in the Metropolitan Tokyo area and constructed the MeSO-net (Metropolitan Seismic Observation network) as part of the project. The MeSO-net consists of 400 stations and 172stations have been deployed at mainly elementary and junior high schools (School Yard Seismology). To achieve stable seismic observation avoiding surface ground noise, sensors were installed in boreholes at depth of 20m. This observation network has a wide dynamic range (135dB), wide frequency band (DC to 80Hz). Data is digitized with 200Hz sampling and telemetered to the Earthquake Research Institute. The MeSO-net has conducted an observation from at the beginning of 2007. The observation result shows that most of the earthquakes(more than M3.) under the metropolitan area can observe. It will provide an accurate estimation of the plate boundaries of the Philippine Sea (PSP) and the Pacific plates under the metropolitan area, resulting in possible to discuss clear understanding of the relation between a deformation of PSP and a generation of intra-slab M7+ earthquakes. Our special project will contribute directly to the next assessment of the seismic hazard in the Tokyo metropolitan area.