



Seismic Arrays in the Taipei Metropolis of Northern Taiwan

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With an estimated population of 7 million, the Taipei Metropolis (TM) is the largest metropolitan area in Taiwan. It included Taipei City, Keelung and New Taipei City. Taipei City serves as the core of the metropolitan area where the government of Taiwan and major commercial districts are located. It is also the home to one of the most famous high-rise buildings in the world, the Taipei 101 Tower. Taipei City is an area overlay hundreds meters thick of soft soil deposits, damage from the Hualien earthquake of 1986 and the Chi-Chi earthquake of 1999 was concentrated in areas underlain by soft soil deposits. To decrease amounts of damage due to amplification effects of soft soil deposits from earthquake ground shaking, a set of integrated arrays began to construct in 2005. This paper describes the design objectives of these arrays, their location, seismic and geologic information, and instrumentation configuration.