

## Thai Seismic Array (TSAR) Project

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Thailand is located in an important area for teleseismic observations to study the core-mantle boundary and the inner core. However, the number of broadband stations is limited. On the occasion of the KAKENHI project for an innovative area "Core-mantle co-evolution", we plan to construct a mobile broadband seismic array in Thailand as a part of the project "Seismic and geo-electromagnetic observation for core and mantle". This array will be also useful for the understanding of a local structure and seismicity in Thailand.

To date, we have conducted the site survey for 3 times (Nov.16-27, 2015; Dec.13-22, 2015; Jan. 9-16, 2015) to determine 40 possible sites. Along the western edge of Thailand to the center of Malay Peninsula, the part of TSAR will form a linear array whose approximately 15 stations run in north-south direction with a length of more than 1,000 km. In the central part of Thailand, TSAR will cover an area of about 400 km (from east to west) x 600 km (from north to south) length with station spacing of approximately 100 km. After the 3rd site survey, we have constructed two pilot stations in Suphanburi and Kanchanaburi, where we test the durability of the stations for high temperature, heavy rain, lightening and check the data quality. Since November, 2016, we plan to deploy additional 38 broadband seismic stations for a period of 2 years.

Keywords: Thailand, Mobile broadband seismic array, Site Survey