

Co-seismic Changes in the hot spring at the San-in Area, Japan, Occurred by the West Coast of Northern Sumatra Earthquake

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We observed the Co-seismic level and temperature changes at 4 stations, Tottori, Iwai, Saginoyu and Okutu hot springs, occurred by the West Coast of Northern Sumatra Earthquake, where are far distance 5000 km from the epicenter. It is estimated that their changes occurred with surface waves around the Earth.

We have observed ground water temperatures and ground water levels at hot spring in San-in area from March, 2001 (Nishida et al, 2002). Now, the 14 observation stations, Tottori, Iwai, Misasa, Shikano, Okutus, Yubara, Chiya, Saginoyu, Sanbe, Izumoyumura, Yoshioka hot spring and Hino, Nanbu-Tojo, Nanbu-Moroki are working. Ground water temperatures are observed at all station and water levels are observed at Tottori, Iwai and Saginoyu stations. As the water temperature observation system, the digital thermometer with 1/100 degrees accuracy and the data logger with 20bit resolution are used. The water temperature sensors are set to the points which water temperatures are most changing in the wells. As the water level observation system, water pressure transmitter with 0.2cm accuracy and the same data logger as the water temperature observation are used. The record is every 1 minute interval averaged record and the data is transferred by telemetry system.