

## Precursory Water Level Change Associated with the 2000 Tottori-ken Seibu Earthquake

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Water level had been lowered at the hot spring well 12.8km south of the epicenter of the 2000 Tottori-ken Seibu earthquake since 5 or 10 days before the quake, and was restored up to an ordinary level 19 hours before the shock. This anomalous phenomenon was noticed by unexpected decrease of the water supply from the reservoir tank in the afternoon one day before the quake. The well is 1500m deep underground, and the water pump is set at a depth of 425m. As the pump had been estimated at around the water top during the anomaly, the amount of water level change is about 300m, which is equivalent to a strain change of  $10 \times 10^{-6}$  in the local crustal block of 1 cubic km with a water capacity of 0.3% . The water sprouted out just after the shock, which is interpreted in terms of compressional strain due to a left-lateral strike slip focal mechanism of the shock.