

Small array observation just on the active area of the February 2007 deep non-volcanic tremor in Aichi

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During February 4-10, 2007 a strong activity of the deep non-volcanic tremor under Aichi prefecture occurred. Obara (2002) reported that the deep non-volcanic tremor was generated in the subduction zone of the Philippine Sea plate beneath the Japan plate. The nearly same tremor was observed in the Cascadia subduction zone (e.g., La Rocca et al., 2005). We observed it by a temporary small array installed just on the active area in Aichi prefecture. We report a seismological result especially by seismic wave analysis of the observed tremor. The array is shaped as a regular triangle with the side lengths of about 27-28m. We put four high sensitive and three- component 2Hz seismometers on its three vertexes and center. The seismic wave data were recorded in a high capacity HDD. We recorded the tremor during its activity except the period from 8 am on February 5 to 12 am on February 8 (JST).

References

- Obara, K. (2002), Nonvolcanic deep tremor associated with subduction in Southwest Japan, *Science*, 296, 1679-1681.
 La Rocca, M., W. McCausland, D. Galluzzo, S. Malone, G. Saccorotti, and E. Del Pezzo (2005), *Geophys. Res. Lett.*, 32, L21319.

Figure. Example of deep tremor burst recorded at 09:13, February 9 (JST) by the small array. Upper: Records of one minute length for each channels. Lower part shows vertical motions observed by four seismographs of the array.

