

Micro-seismicity deduced from ocean bottom observation in the off-Akita-Sakata region, the eastern margin of the Japan Sea

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We made an OBS survey of the micro-seismicity in the central part of the eastern margin of the Japan Sea, where a seismic gap have been pointed out by several authors.

12 OBSs were deployed around the seismic gap for about a month, from 29 Apr. to 22 May, 1998. Although the seismicity during this period was quite low, several swarms of micro-earthquakes were revealed. One of them corresponds to an aftershock activity of a M5.6 event which had occurred in Nov. 1997. The swarms were located at almost the same places as those identified by the previous OBS study, suggesting that the seismicity in this area tends to form a cluster pattern. The epicenter distribution, including these swarms, clearly correlates the distribution of the active faults in this area, trending in the NE-SW direction.