

Seismic activity inferred from Ocean bottom seismographic observation around northwest off Amami-Oshima, Nansei syoto islands

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We investigated seismic activity northwest off Amami Oshima from April 23 to June 23,1998 by using data from OBS and land seismic observations. 720 events are located precisely.

Seismicity was high at the three zones which align parallel to Nansei-Syoto trench from Amami Oshima. In south off Tokara channel and near Okinawa-trough, seismic activity were also high. Intermediate events deeper than 100km occurred beneath Tokara Channel indicates that dip angle of Wadati-Benioff zone do not change remarkably across the channel. However, the focal mechanism solutions change across the channel; down-dip extension in the north of the channel and down-dip compression in the south of the channel.