Comparative study on the asperities of large earthquakes in Sanriku region

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Source rupture processes of large earthquakes, which have common source areas in the Sanriku region, are examined in an attempt to compare the asperities. Both teleseismic and near-field seismic data are jointly inverted into the moment release on a fault plane.

Our result shows that the 1968 Tokachi-Oki earthquake of M8 class consists of a few asperities, one of which nearly coincides with the asperity of the 1994 Sanriku-Oki earthquake of M7 class. It is also shown that the seismic coupling is nearly 100 32thin the asperities of the 1994 Sanriku event.