

## The application of the station correction to the earthquake in and around Amami-Oshima Island

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Hypocenters are redetermined using station correction for the earthquakes around Amami Oshima Island, South-western Islands in Japan. Then we could achieve to improve the hypocenter distribution routinely determined by JMA. The station correction is performed using the travel time differences between JMA data and Kagoshima University data, retrieved by the tentative observation network (Moriwaki et al. 2007).

We get the correction value for Kikaijima station, about 50km away eastward from Amami Oshima Island, such as, 1.15 seconds for P-wave and 2.83 seconds for S-wave. The redetermined hypocenters are compared with the ones by Kagoshima University. As a result, the feature of the descending slab are shown, which has been vague in the distribution of routinely determined by JMA catalog. Then applying this station correction we can expect to improve the tsunami warning accuracy, the routine hypocenter determination around Amami Oshima Island.