

SSS028-03

会場:302

時間:5月26日 09:00-09:15

## 稠密アレイ観測に基づく濃尾地震震源域の不均質構造～震源分布・地震波速度構造・レシーバー関数解析

Heterogeneous structures in the source region of the 1891 Nobi Earthquake based on a dense linear array

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We deployed a dense seismic array along the source faults of the 1891 Nobi-earthquake (the largest magnitude intraplate earthquake in Japan). The seismic array consisted of 98 temporary seismometers with spatial interval of about 1 km. We manually picked first arrival times of P and S-waves for local and intraslab earthquakes beneath the seismic array, based on JMA catalog. Then, we obtained a detailed velocity model along the source faults, applying the TomoDD-code. In addition, we calculated receiver functions using teleseismic waveforms recorded by stations equipped with 1 Hz seismometers within the array, applying the spectral division.

The depth of hypocenters gradually deepens from NW to SE. At NW edge, we found out a localized low velocity layer near the bottom of the seismogenic zone. This low velocity layer also gradually deepens toward SE. Most of earthquakes near the faults occur along the periphery of high velocity bodies. We identified a high-velocity gap at depths around 20 km beneath the source faults. Furthermore, the oceanic Moho of subducting Philippine Sea Plate is imaged around SE areas.