

3D seismic reflection imaging of the Large Thrust Slice Zone in the western Nankai Trough

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We carried out a 3D seismic reflection survey in the Nankai trough, off Cape Muroto. We discuss about the structure in the Large Thrust Slice Zone (LTSZ). The LTSZ is located 30km landward from the trench axis. We can see several faults well developed there. Most of the faults in the LTSZ start around the updip limit of the seismogenic zone. Some of them have very low angle and they might be out-of-sequence faults. The central region of the LTSZ has a complicated structure, which suggests that this region has been intensively deformed. The reflection image is quite clear in the western part of the LTSZ, but not clear in the eastern part. The angles of faults change steeper to the east. These things seem to be related with the subduction of the sea mount off east of our survey area.