Slab Structure – Southern Mexico

A detailed view of the local anisotropy tomography. The V and U waves are clearly visible in the attenuation images. The slab structure is clearly evident in the attenuation images. The slab structure is also visible in the tomographic model. The slab structure is interpreted as a south-dipping structure, which is consistent with the kinematics of subduction. The slab structure is also visible in the tomographic model. The slab structure is interpreted as a south-dipping structure, which is consistent with the kinematics of subduction.

Yucatan Micro-Plate

The waveform modeling shows the region where the ultra-slow velocity layer (USL) exists between the slab and the overlying continent. The color scale is as follows:

- Dark blue: Where the USL fairly exists
- Red: Where the USL does not exist
- Green: A mixed case

The evaluation of the slab rollover appears to be taking place with the slab fragmenting into “Bolts”, each of which roll back separately.

Minerology

The mineralogy of the slab is as follows:

- South-dipping part of the slab
- Lower oceanic crust
- Upper oceanic crust
- Upper mantle
- Lower mantle

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Southern Mexico Anomaly

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Data Products


References