

and Vs Tomography Beneath the Kalabsha Area, Lake Nasser, Aswan, Egypt

Tomographic inversion is applied to determine detailed three-dimensional velocity (V_p , V_s) structures beneath the Kalabsha area, Aswan by inverting the arrival time data from 731 events.

The results obtained from three-dimensional inversion shows a low P-wave velocity zone in the north-western side of the Kalabsha area elongated to the east direction around Seiyal fault and to the south between Khour Ramla and Kurkur faults extended down to 6 km. A high velocity block appears in the northeast of the studied area around Khour Ramla fault at depth 1 Km extended horizontally to south and down to 6 km.

High S-wave velocity zone appears in the northeastern side of the Kalabsha region around Khour Ramla fault extended horizontally to south and extended down to 6 Km, tending to southeast direction. Low S-wave velocity zone appears in the south western Kalabsha fault extended down to 14 Km.

Primary author: AHMED, Abubaker Ahmed Shater (National Research Institute of Astronomy and Geophysics (NRIAG))

Presenter: AHMED, Abubaker Ahmed Shater (National Research Institute of Astronomy and Geophysics (NRIAG))

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