Active faulting along the Dead Sea Basin: Geological and geophysical observations

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The Dead Sea basin is a deep elongated structure located along an active continental plate boundary transform. Seismological measurements, geological observations and seismic interpretations demonstrate recent activity along several fault segments in the basin. Mechanical analysis points on partitioning of slip and stress between the basin and its margins. We present a model which shows that this partitioning is controlled by tectonic and gravitational forces.