

**The map**

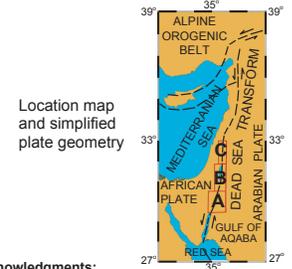
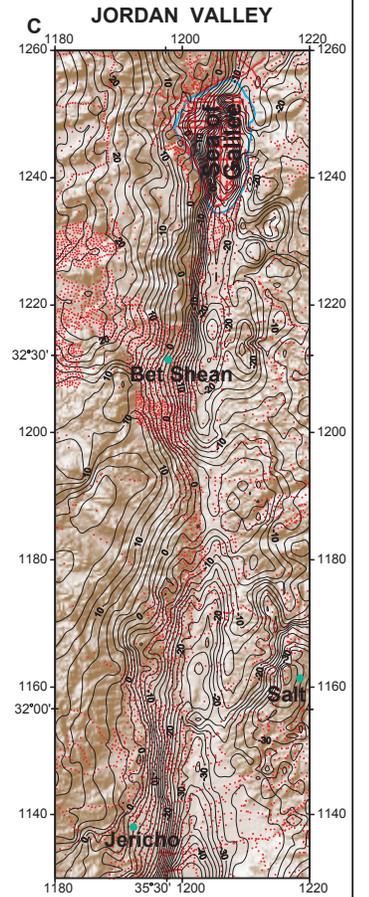
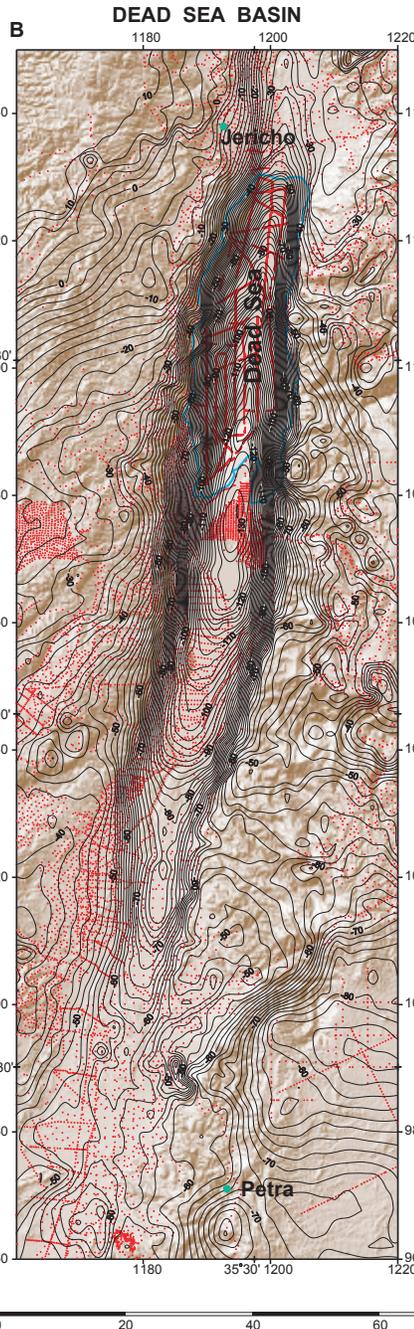
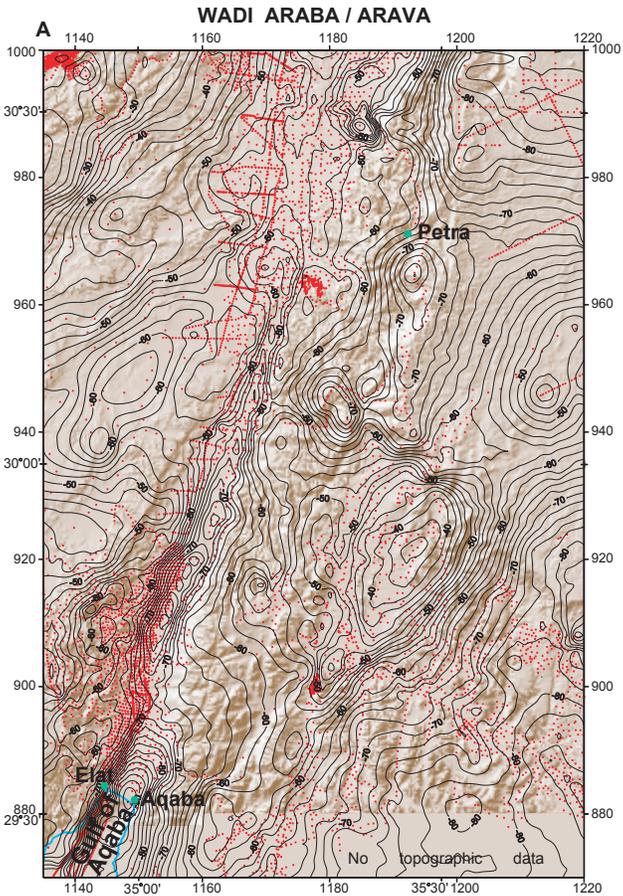
This Bouguer gravity anomaly map of the Dead Sea rift supercedes U.S.G.S. Open-File Report 98-516, "Bouguer gravity anomaly map of the Dead Sea fault system, Jordan and Israel" by ten Brink et al., 1998. It includes many new measurements within the Dead Sea rift and its surrounding highlands as well as recalculated values from the marine gravity survey in the Dead Sea.

The map is based on approximately 39,000 gravity stations, measured during the past 25 years by Natural Resources Authority (NRA), Jordan, the Geophysical Institute of Israel (GII), and the Lamont-Doherty Earth Observatory marine surveys of the Dead Sea and Sea of Galilee (ten Brink et al., Journal of Geophysical Research, vol. 98, pp. 21,877-21,894, 1993; Ben-Avraham et al., Journal of Geophysical Research, vol. 101, pp. 533-544, 1996). The data bases of Jordan and Israel were mutually tied by measurements made at the Aqaba - Eilat and Bet-Shean border crossings. The data were tied to absolute gravity base station 9002, Amman, Jordan, and were reduced according to the 1971 Reference Ellipsoid. Bouguer correction with a density of 2.67 g/cc was applied to all land data. Bouguer correction was also applied to the submarine areas of the Sea of Galilee and Gulf of Aqaba replacing water density with rock density of 2.67 g/cc. The map was produced by gridding and contouring the data with a kriging algorithm using Surfer™ software. The map is plotted without projection, and is annotated with geographic coordinates and the Cassini Palestine coordinates.

The background is a shaded topographic relief image courtesy of Dr. John Hall (J. Hall, Israel Geological Survey Current research, v. 8, pp. 47-60).

**LEGEND**

- Gravity station
- Shoreline
- Gravity contour (mGal)
- Town



**Acknowledgments:**

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**BOUGUER GRAVITY ANOMALY MAP OF THE DEAD SEA FAULT SYSTEM, JORDAN AND ISRAEL**  
Contour interval 2 mGal

By

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