

Natl. Res. Center for Disaster Prev., Ibaraki, Japan.

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Kasahara, Minoru and Tsutomu Sasatani, 1985. **Source characteristics of the Kunashiri Strait [S. Kurile Arc] earthquake of December 6, 1978 as deduced from strain seismograms.** *Phys. Earth planet. Interiors*, 37(2-3):124-134. Res. Center for Earthquake Pred., Hokkaido Univ., Sapporo 060, Japan.

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King, G.C.P. et al., 1985. **The evolution of the Gulf of Corinth (Greece): an aftershock study of the 1981 earthquakes.** *Geophys. J. R. astr. Soc.*, 80(3):677-693.

The well-located aftershocks do not lie on the main fault planes and are mostly located between the north-dipping faulting on which the first two earthquakes occurred and the south-dipping faulting associated with the third event. A cluster of aftershocks also lies in the footwall of the eastern end of the south-dipping fault. In the evolution of the Eastern Gulf of Corinth, antithetic faulting apparently predates main faulting at the surface, explicable by motion on a deep-seated, shallow-angle, aseismic normal fault. A model based on such a fault accounts for the aftershock distribution. Bullard Lab., Madingley Rd., Cambridge CB3 0EZ, UK.

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King, Geoffrey, 1983. **The accommodation of large strains in the upper lithosphere of the Earth and other solids by self-similar fault systems: the geometrical origin of b -value.** *Pure appl. Geophys.*, 121(5-6):761-815. Bullard Labs., Cambridge Univ., Madingley Rise, Madingley Rd., Cambridge CB3 0EZ, UK.

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McLaren, J.P. and Cliff Frohlich, 1985. **Model calculations of regional network locations for earthquakes in subduction zones.** *Bull. seism. Soc. Am.*, 75(2):397-413. Wayward-Clyde Consultants, 556 El Dorado, Pasadena, CA 91101, USA.

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Milkereit, B. and E.R. Flüh, 1985. **Saudi Arabian refraction profile: crustal structure of the Red Sea-Arabian Shield transition.** *Tectonophysics*, 111(3-4):283-298.

An interpretation of deep seismic sounding measurements across the ocean-continent transition of the Red Sea-Saudi Arabian Shield is presented. Crustal thickness varies along the profile from 15 km

(Red Sea Shelf) to 40-45 km (beneath the Asir Mountains and Saudi Arabian Shield). Based on the computation of synthetic seismograms the model requires a velocity inversion in the Red Sea-Arabian Shield transition. High-velocity oceanic mantle material is observed above continental crust and mantle, thereby forming a double-layered Moho. Results indicate a thick sedimentary basin in the shelf area, and zone of high velocities within the Asir Mountains; prominent secondary low-frequency arrivals are interpreted as multiples. Inst. for Geophys., Univ. of Kiel, D-2300 Kiel, FRG.

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Mooney, W.D., M.E. Gettings, H.R. Blank and J.H. Healy, 1985. **Saudi Arabian seismic-refraction profile: a travelttime interpretation of crustal and upper mantle structure.** *Tectonophysics*, 111(3-4):173-246. USGS, Menlo Park, CA 94025, USA.

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Nakada, Masao, 1984. **Theoretical world-wide sea level change associated with non-Newtonian flow in the upper mantle.** *J. Phys. Earth*, 32(5):435-447.

Relative sea level patterns based on the model are divided: glaciated region, forebulge region, and continental margin and oceanic island. Relative sea levels at the oceanic islands may depend on their size, constraining lower mantle viscosity. Hydroisostatic adjustment in the Holocene away from the glaciated region is predicted to be localized to the boundary between ocean and continent or island. Relaxation time may be several tens of thousands of years, so no world-wide adjustment of ocean basins to the load of meltwater has been completed. Res. Sch. of Earth Sci., Australian Natl. Univ., Canberra, ACT 2601, Australia.

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Papadopoulos, G.A. and S.B. Pavlides, 1984. **Shallow seismogenic layer in the outer part of the Hellenic Arc.** *Boll. Geofis. teor. appl.*, 26(104): 221-227.

The outer part of the Hellenic Arc exhibits a thick (~70 km) seismogenic layer. Its upper part (0-40 km) is clearly more active than the lower, and the parameter b of the magnitude-frequency relation systematically increases with depth in this layer. Possible explanations are offered. Hellenic Air Force Acad., Athens, Greece.

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Prodehl, Claus, 1985. **Interpretation of a seismic-refraction survey across the Arabian shield in**