Figure 10: Seismograms recorded at stations CCM (Cathedral Cave, MO) and PAS (Pasadena, CA) for the m_b 4.5 event in southeastern New Mexico that occurred on January 2, 1992 at 11:45:35.6 UT. The epicentral distance to CCM (along a relatively high-Q path) is 1256 km and to PAS (along a relatively low-Q path) is 1417 km. From ?
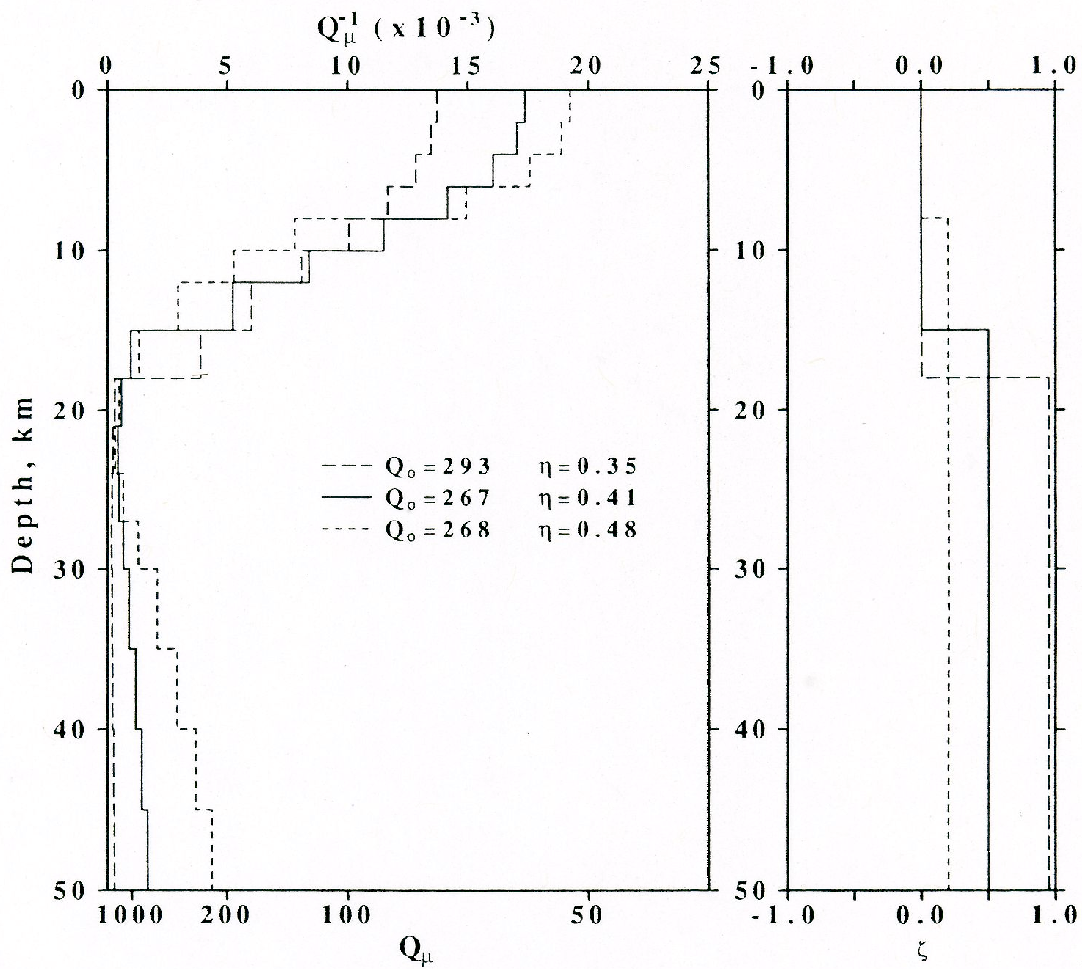
.

Figure 11: Left - Three Q_μ models resulting from the inversion of Rayleigh-wave attenuation coefficient data from the Basin and Range province. The numbers refer to the values of Q_o and η predicted by the three models for Q_{Lg}. Right - Three selected models for the variation of Q_μ frequency dependence with depth in the crust of the Basin and Range province. Each of these depth distributions was fixed during inversions that produced the Q_μ models. From **?**.

Windows: 1 - 40
Low Frequency: 0.5Hz
High Frequency: 6.0Hz
Q_o = 753 ± 35
h = 0.46 ± 0.05

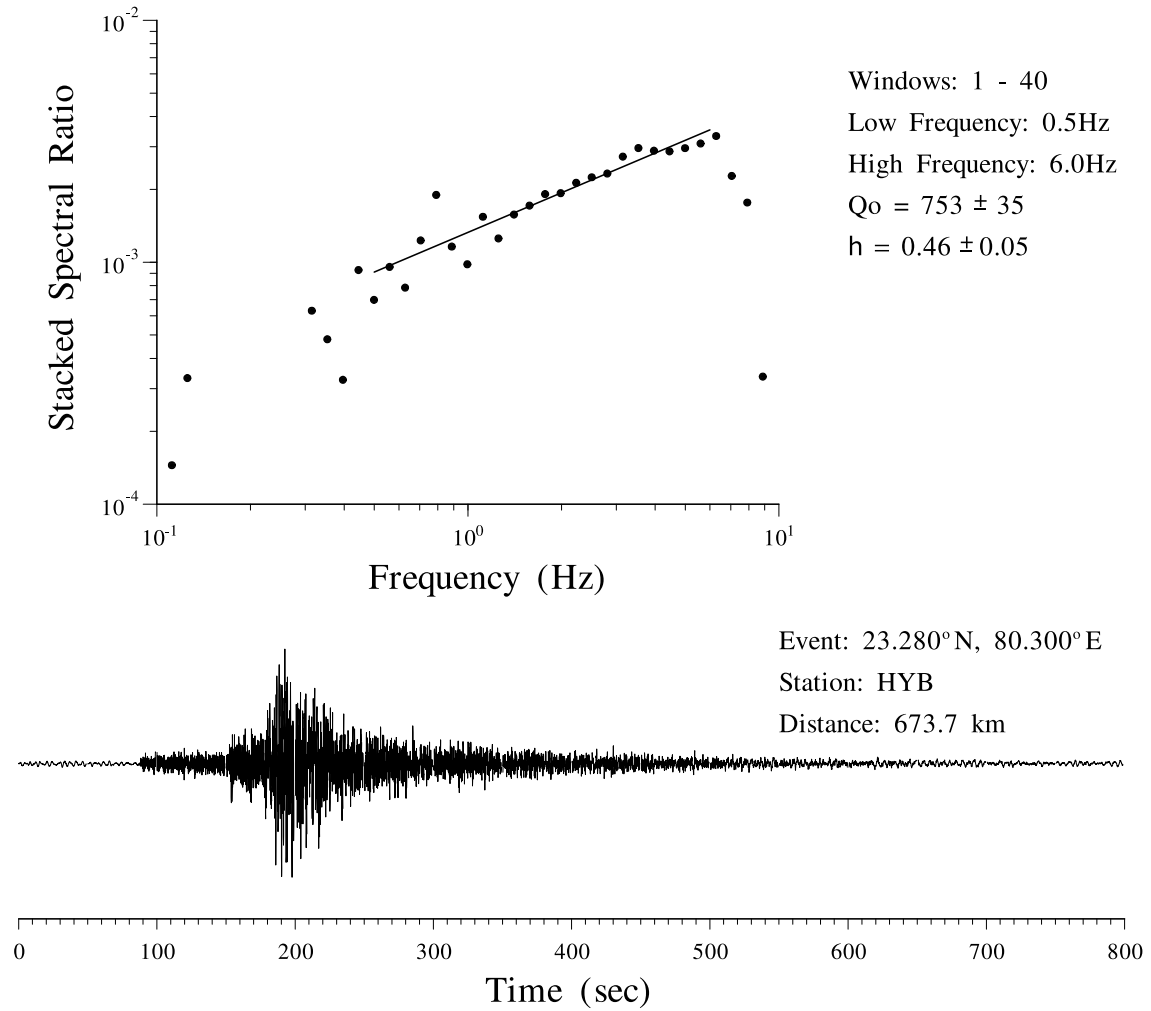Event: 23.280° N, 80.300° E
Station: HYB
Distance: 673.7 km

Figure 12: Bottom - Seismogram and Top - Stacked Spectral Ratio (SSR) as a function of frequency for a relatively High-Q path in India.
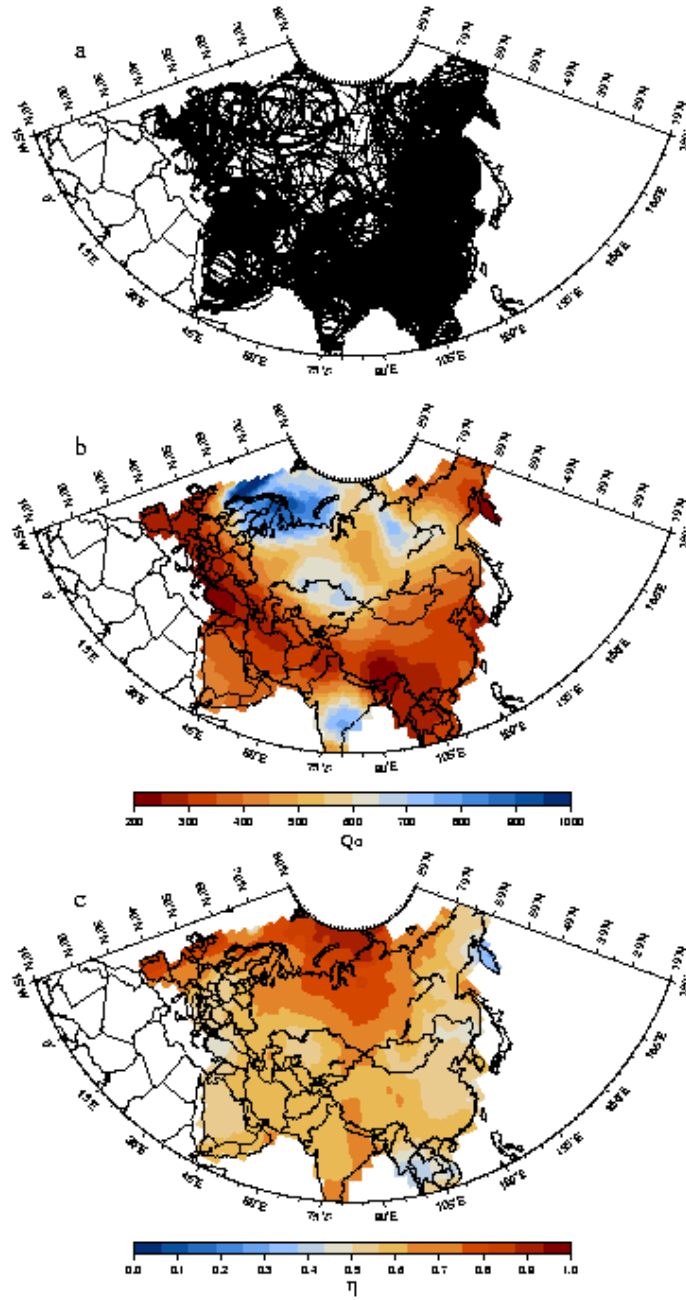
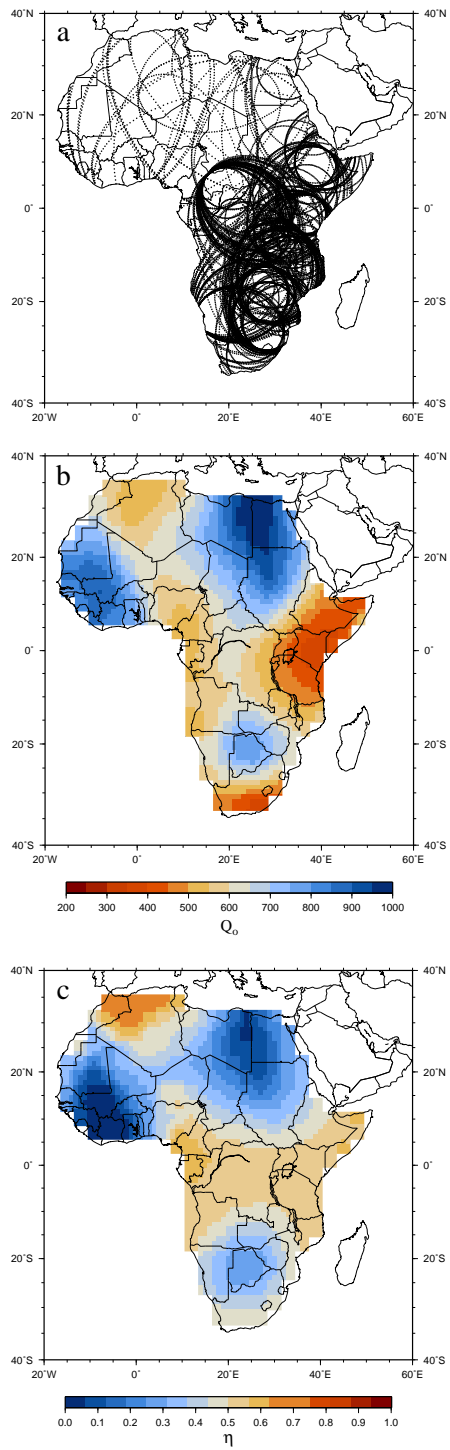Figure 13: (a) A scattering ellipse map, (b) a Q_o map, and (c) an η map for Eurasia. Adapted from **?**.

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Figure 14: (a) A scattering ellipse map, (b) a Q_o map, and (c) an η map for Africa. Adapted from **?**.
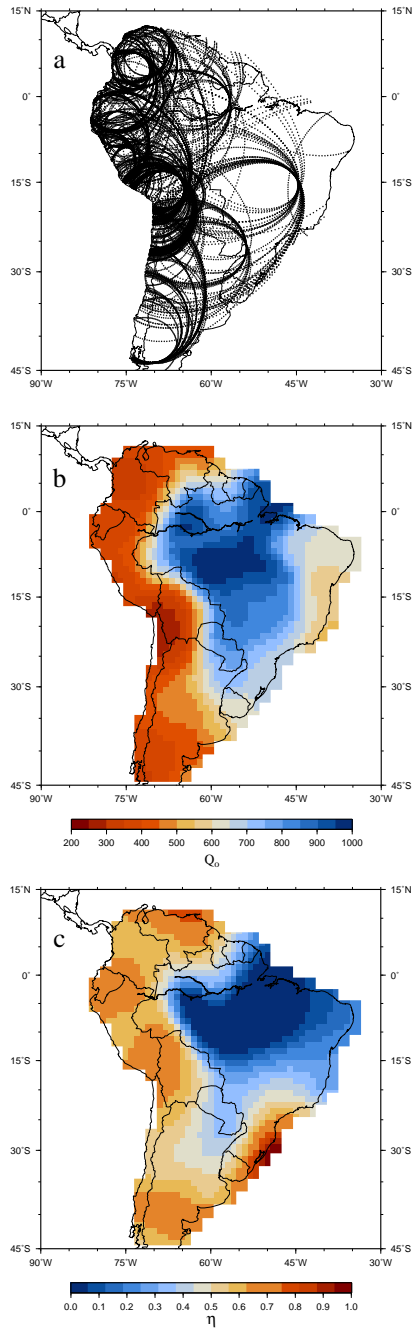
Figure 15: (a) A scattering ellipse map, (b) a Q_o map, and (c) an η map for South America. Adapted from ?.
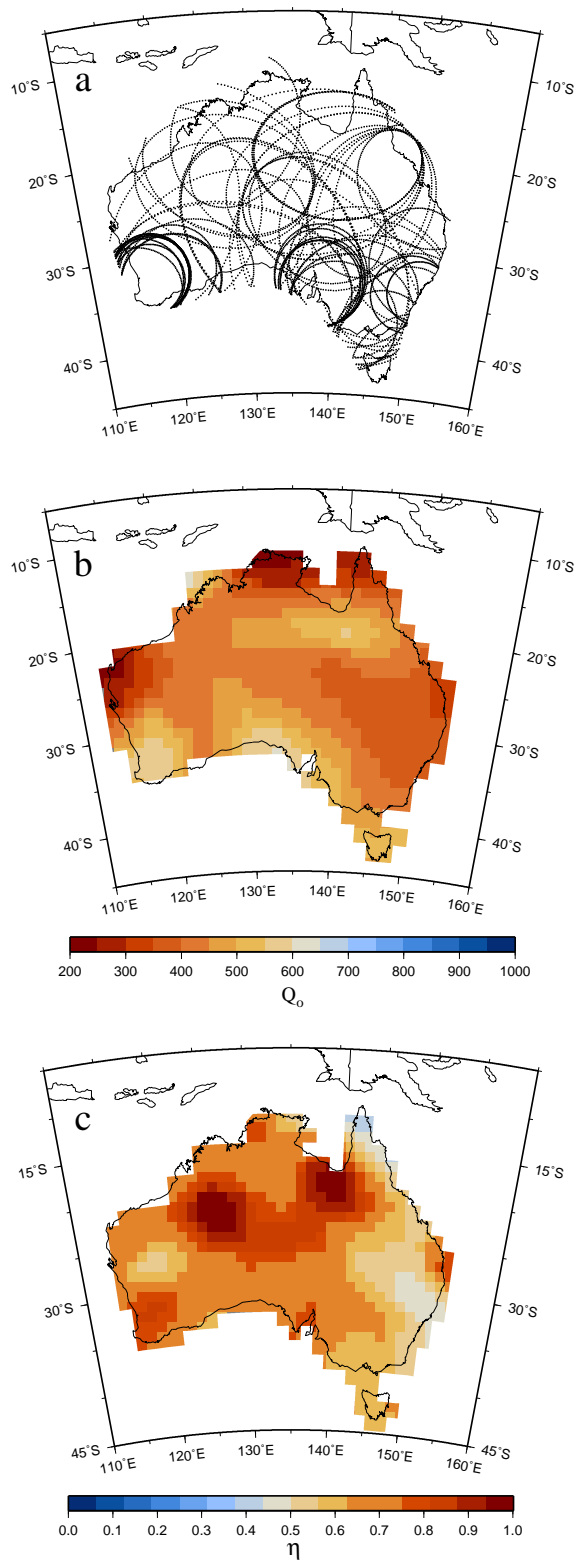
Figure 16: (a) A scattering ellipse map, (b) a Q_o map and (c) an *eta* map of Q_{Lg}^C for Australia. Adapted from **?**.
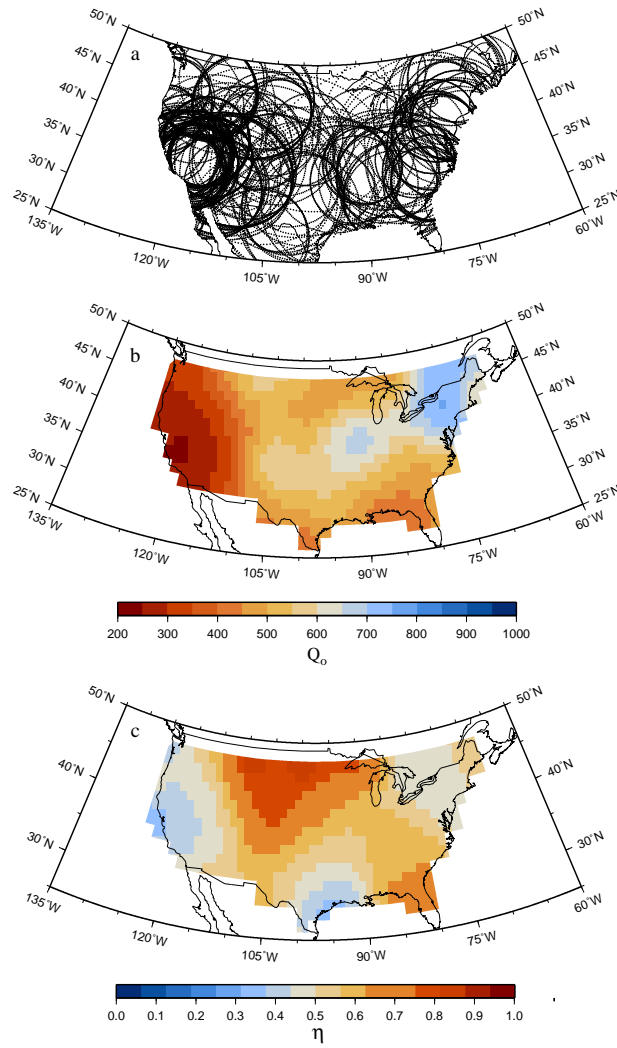
Figure 17: (a) A scattering ellipse map, (b) a Q_o map and (c) an *eta* map of Q_{Lg}^C for the United States. Adapted from **?**.
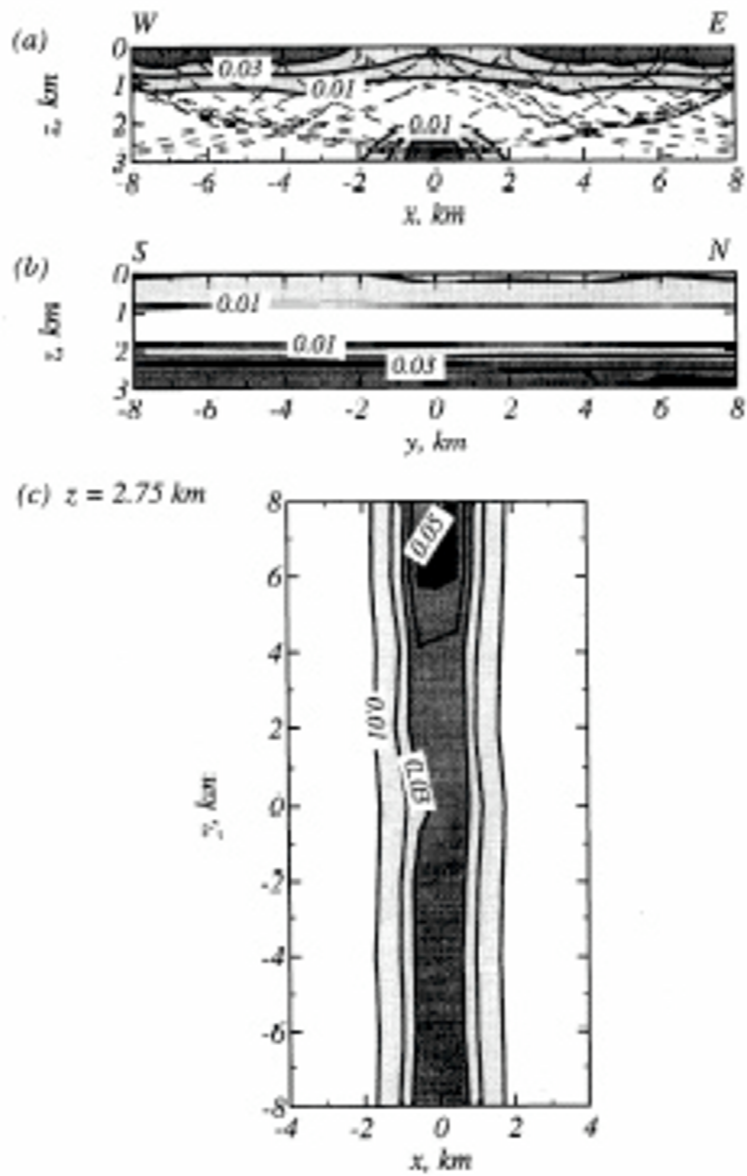
Figure 18: Results of inversion for along-axis variations in the upper crust of the East Pacific Rise and peripheral regions near $90^o 30'$ N latitude. (a) The axisymmetric starting model obtained from a two-dimensional inversion of t^* values for upper crustal wave paths, (b) A vertical cross-section through the three-dimensional solution aligned along the rise axis, and (c) A horizontal cross-section at 2.75 km depth. Numbers on the cross-sectons and map denote values of Q_{-1} for P waves. From ?.

Figure 19: Figure 19. Q_o for Q_{Lg}^C at 1 Hz versus time elapsed in selected regions since the most recent episode of tectonic or orogenic activity. A-The Andes; B-Basin and Range Province in the western United States; C-Tethys region of convergence between the Eurasian and African/Arabian/Indian plates; D-the Arabian Peninsula; E-the East African Rift; F-the Rocky Mountains; G–northeastern China; H-the eastern Altaid belt in Eurasia; I-the Tasman Province in Australia; J-the Atlantic Shield in South America; K-the African fold belts; L-the portion of the North American craton in the United States; M-the Australian craton; N-Eurasian cratons; O-African shields; P-the Brazilian shield; Q-the Indian shield. Adapted from ?.