67˚ 68˚ 69˚ 70˚ 71˚ 72˚2674.901 488.473 mSBTm 488.4737285.73.9488.473 jSBTm 488.4737285.73.9 485.906 lSBT67 485.90

Table 1
Bhuj Earthquake Intensities

Table 1
Bhuj Earthquake Intensities (*continued*)

Location	Lat.	Long.	MMI	Report	Source
Samakhiali, Gujarat	23.329	70.587	9	Water flooded salt pans ground cracking	*Times of India*
Sanghar, Sindh (Pakistan)	26.050	68.937	6–7	Buildings damaged	*The Dawn*
Shikarpur, Sindh (Pakistan)	27.965	68.635	3	“Brief spell of earthquake”	*The Dawn*

Figure 6. (*Continued*).

which, according to the interpretation of Hough *et al.* (2000), occurred on 7 February 1812. Hough

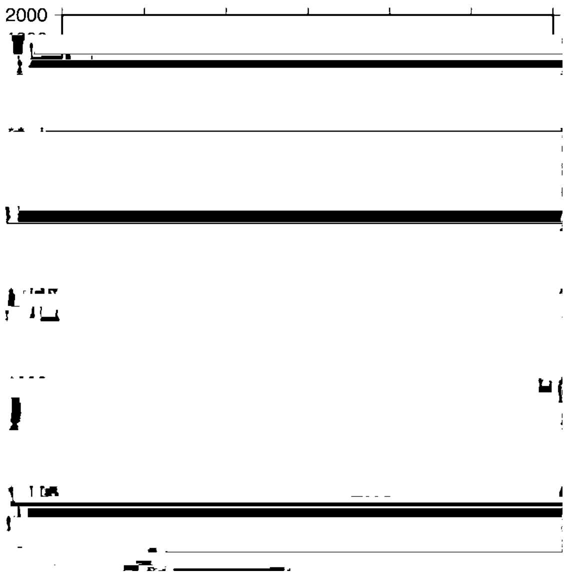

Figure 10. Attenuation function used in this study (Singh *et al.*, 1999) is shown (dark line) along with $Q(f)$ inferred for the central United States (CUS) and eastern United States (EUS) by Benz *et al.* (1997).

cussed earlier, site-response patterns are quite evident in the intensity distribution at both near and far distances. The overall felt distribution of the event also provides insights into the nature of *Lg*-wave propagation. Hanks and Johnston (1992) showed that the far-reaching effects of central/eastern United States earthquakes can be explained by the efficient propagation of *Lg* waves (i.e., higher-mode surface waves) within cratonic North America. Kennett (1989) showed that *Lg* waves will propagate efficiently within a waveguide but will be disrupted when they encounter complexity such as crustal thickening. The felt area of the Bhuj earthquake is contained almost entirely within the Indian subcontinent. Our results therefore provide observational confirmation of the modeling results of Kennett (1989), that *Lg* waves are significantly disrupted by large-scale crustal complexity.

Our finite-fault-modeling results show that our estimated MMI values provide a good indication of the distribution of ground motions (PGA

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