TABLE 1. RELATIONSHIP BETWEEN RELATIVE Vs AND TEMPERATURE INCREASE, ESTIMATE OF POSSIBLE ADVECTION DEPTH

Relative *Vs*– or Δ*V* (%)	*Zb* – Base Δ*Vs* zone (km)	*T*(Geo) (°C)	Δ*T* (°C)	Δ*T* min (°C)	Δ*T* max (°C)	*T* (°C)	*T* min (°C)	*T* max (°C)	*Z* Upw (km)	*Z* min Upw – Ave (km)	*Z* max n/a
–5.4	274	1337	444	342	635	1781	1679	1972	633	495 – 589	n/a
–4.4	348	1355	398	306	568	1752	1661	1921	588	449 – 543	n/a
–3.5	415*	1453	346	266	494	1799	1719	1947	651	544 – 637	n/a

*35 km depth addition estimated at the same width in the –4.4% relative Vs zone just above.

Note: Zb is at the base of the relative *Vs* zone from Figure 2; *T*(Geo)—temperature at *Zb* estimated from the average geotherm through the upper mantle (Jeanloz, 2000); Δ*T*—temperature increase estimates corresponding to relative *Vs*-depth (temperature) dependence (Julian, 2005; Karato, 1993) where Δ*T* min and Δ*T* max are estimated limits (uncertainty to perhaps 30%; Julian, 2005); *T*—present estimated temperature at *Zb* = *T*(Geo) + Δ*T*; *T* min and *T* max—associated uncertainty limits; *Z* with associated limits *Z* max and *Z* min—depth estimates for *T* from the upwelling geotherm (Upw) or from the average geotherm (Ave) (Jeanloz, 2000); however, depth estimates *Z* for *T* from the average geotherm (Ave) are below the transition zone, and both depth estimates for *T* max (Upw and Ave) are below the transition zone (Jeanloz, 2000).