



Figure 3. A) Map of the Northeastern US showing shear wave splitting parameters determined for two core-refracted S phases. Splitting azimuth and delay are shown at each station as arrows aligned with fast direction and scaled with delay. Splitting arrows, as well as phase vectors in the upper right, are coded by event, solid arrows for one and open arrows for the other. Splitting direction for the two events is quite different, yet is fairly consistent across the region for each event. B) A schematic representation of the model for seismic anisotropy distribution under HRV (from Levin et al, 1999) C) Observed and predicted variation of the apparent fast direction. See Levin et al (1999, 2000b) for details. (Left) Data for station HRV, covering 1990-1997. Observations are shown by triangles (Right) Data for all stations shown in A) observed during the spring and summer of 1995. All stations in the region follow the same general pattern. Solid lines on both plots show a pattern of fast direction values predicted by our model of seismic anisotropy, shown in B, for one value of phase velocity.