



Figure 1. (LEFT) Map of study region showing the outline of the bathymetry (shaded lines), the age of the oceanic crust (thin solid lines) and the approximate location of the continent-ocean transition, as marked by the East Coast Magnetic Anomaly (ECMA). Large arrow shows absolute plate motion. The schematic cross section AA' illustrates hypothesized locations of Hales (H), and Lehmann (L) seismic discontinuities beneath the continent, the Gutenberg (G) seismic discontinuity beneath the ocean, the tentative profile of the lithospheric thickness (inferred from Li et al., 2002; van der Lee, 2002) and the location of the continent-ocean transition. (RIGHT) Seismic velocity of shear waves at depth of 130 km (map) and a cross-section along the cross-section from Bermuda to the Great Lakes. Velocity field extracted from the model NA00 by Susan van der Lee (<http://www.sg.geophys.ethz.ch/geodynamics/suzan/na/na00.html>).