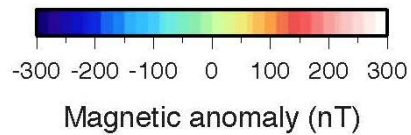
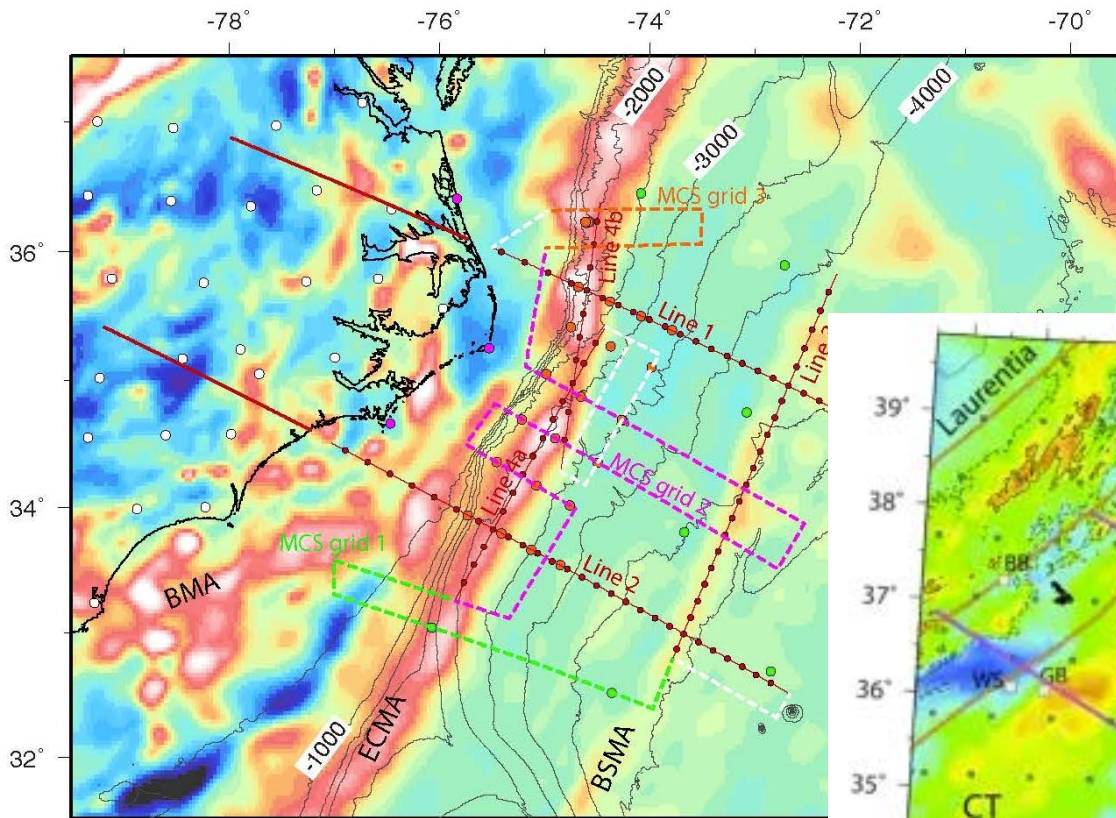


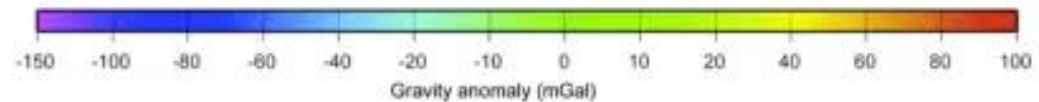
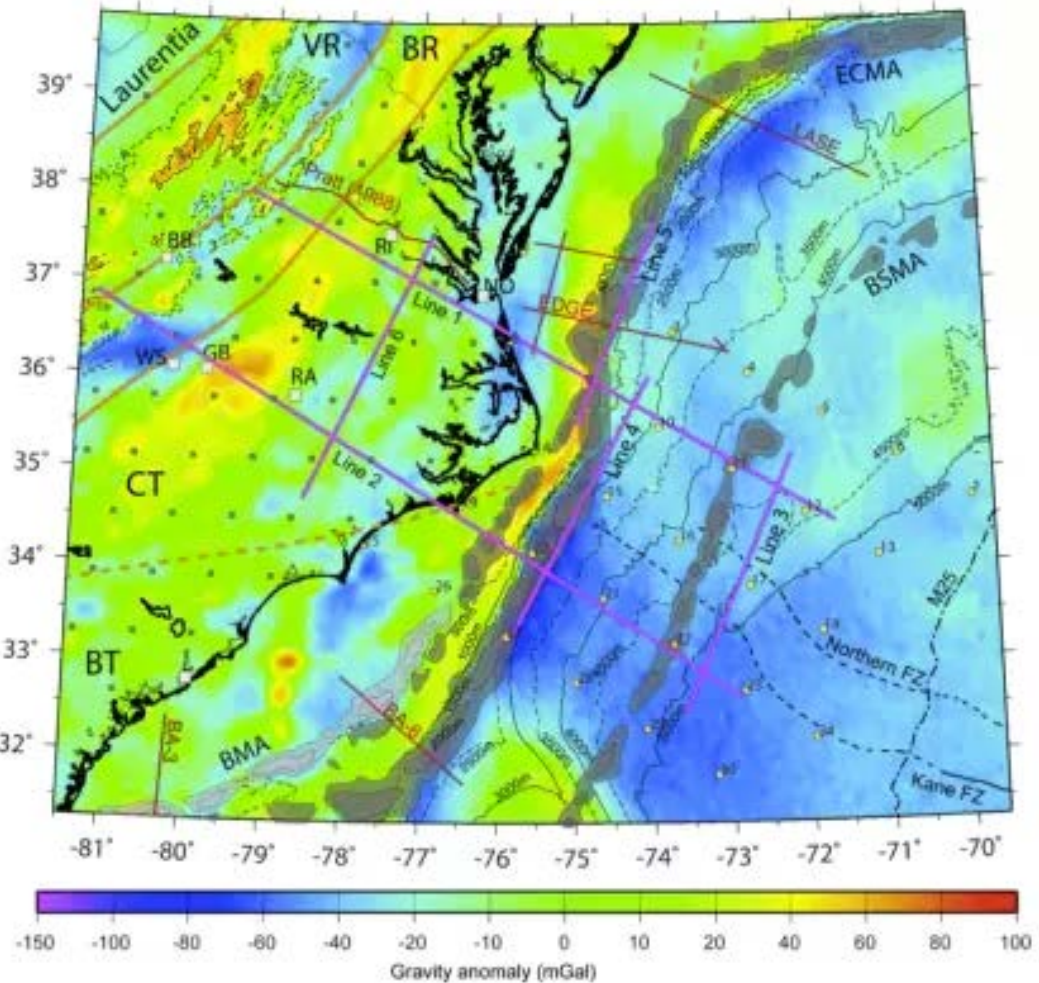
Figure 4.2.1.1. Tectonic setting of eastern North American rifted margin, strike-slip and compressional structures and early Mesozoic rift basins and key tectonic features (Benson and Doyle, 1988; Klitgord et al., 1988; Manspeizer and Coulter, 1989; Olsen et al., 1989; Tankard and Welsink, 1989; MacLean and Wade, 1994; Rankin, 1994). Thick dashed lines and squares with notation show location of sections in Figure 4.2.1.2 and purple lines and ellipses with notation show location of sections in Figure 4.2.1.3.

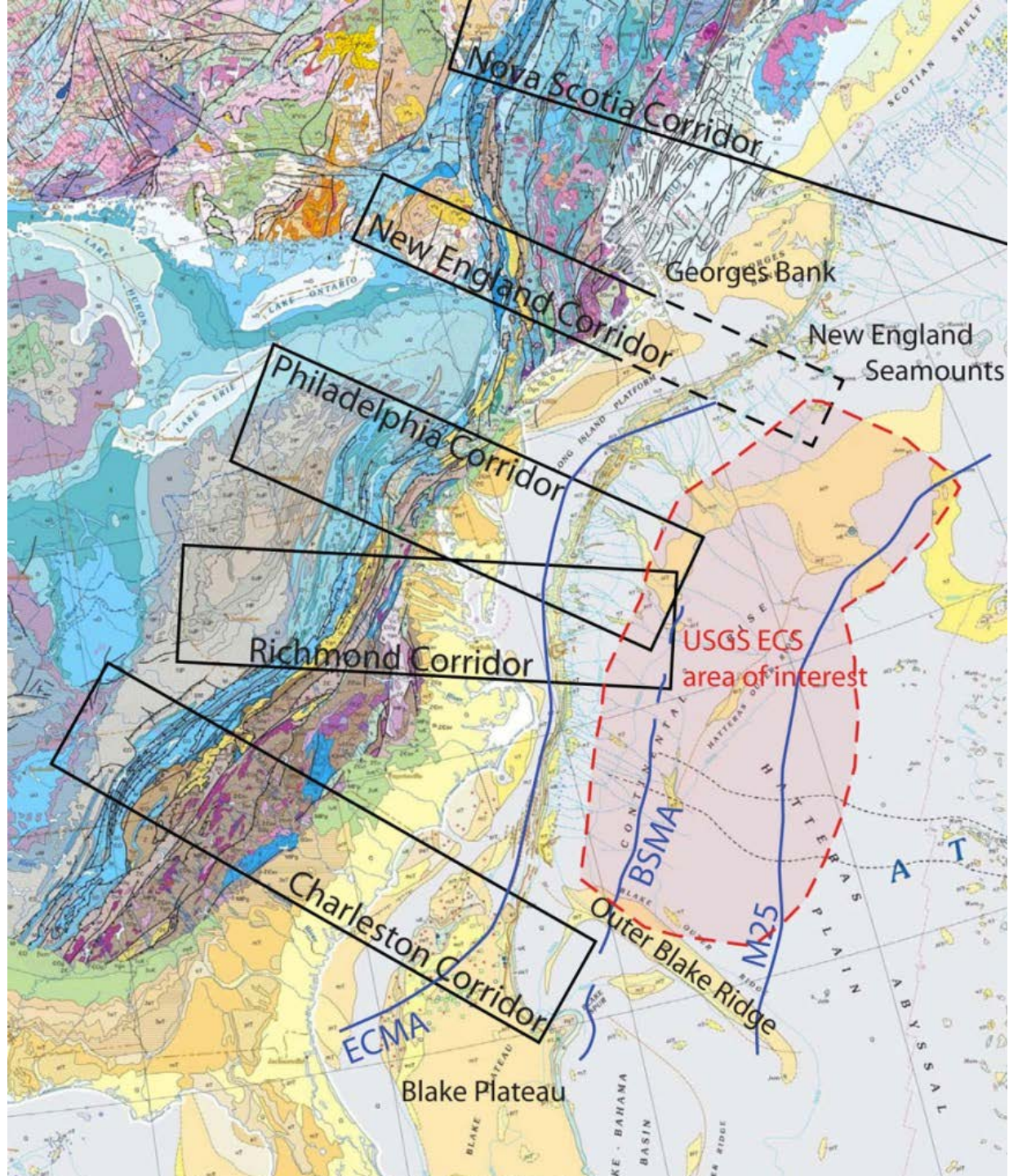
Magnetic

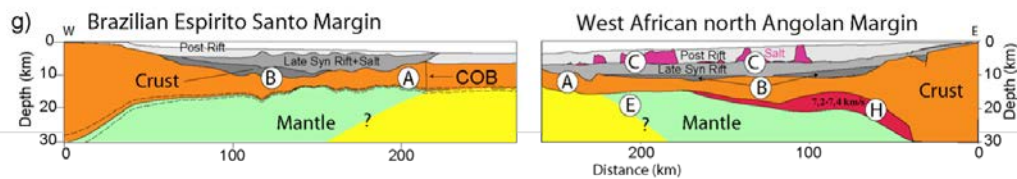
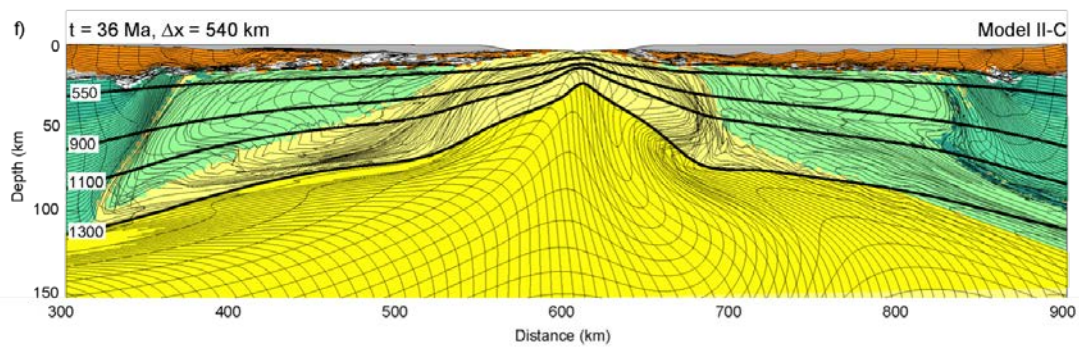
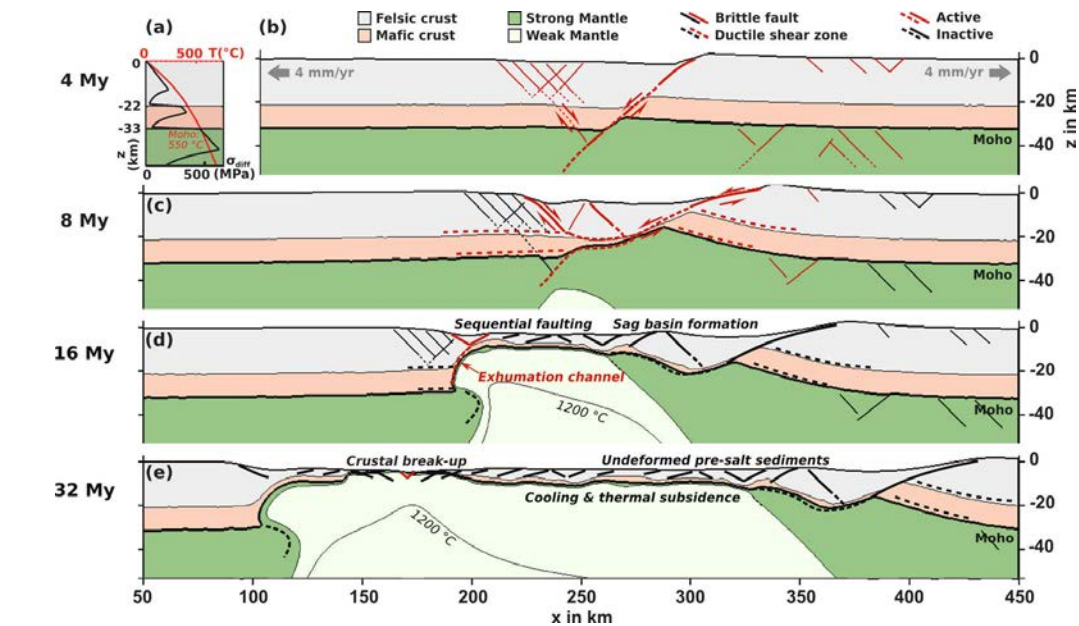


- MCS/OBS
- - - other MC
- short-per
- dense br
- sparse br
- onshore s
- US Array

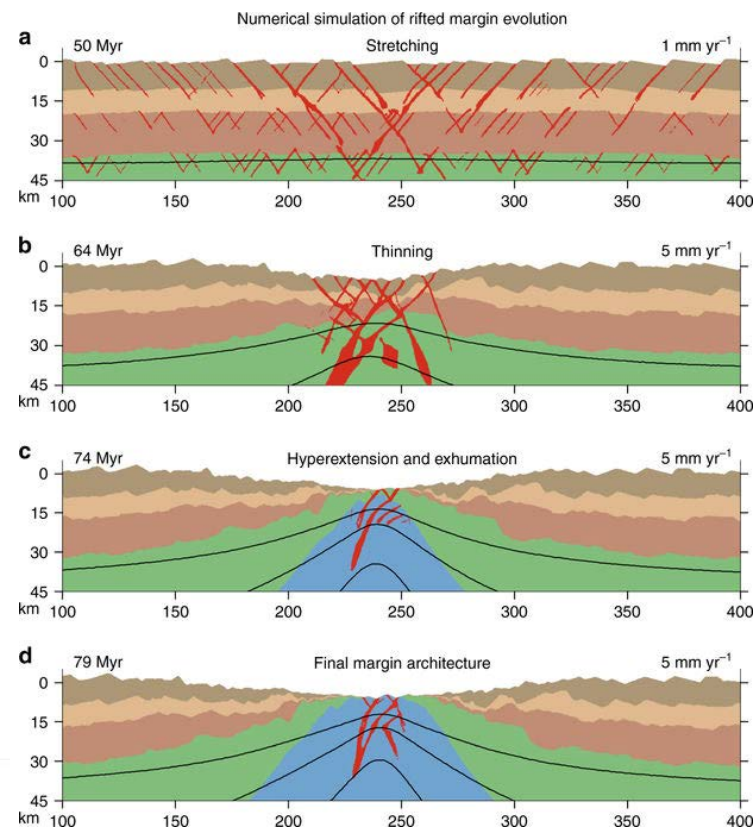
Gravity







Huismans and Beaumont, Nature 2011



ENAM Workshop

1. Relative roles of inheritance in each stage of lithospheric evolution
2. What did the young Appalachian orogen look like? (And subsequent temporal evolution?)
3. How do we reconcile crustal record with present-day mantle structures?
4. Do crust and mantle evolve independently?
5. Where do different regions fit in the spectrum of modern rifting behavior?
6. Evolution of Phanerozoic lithosphere in the absence of obvious tectonic drivers? e.g. lithospheric instability – Harrisonburg, New England, Florida anomalies
7. What is the role of large-scale mantle flow in lithospheric stability/structure?
8. Topographic evolution – separating mantle influences vs. many other factors (dynamic, isostatic, climate, stream capture, etc.)