

Supporting Information for “Convective self-compression of cratons and the stabilization of old lithosphere”

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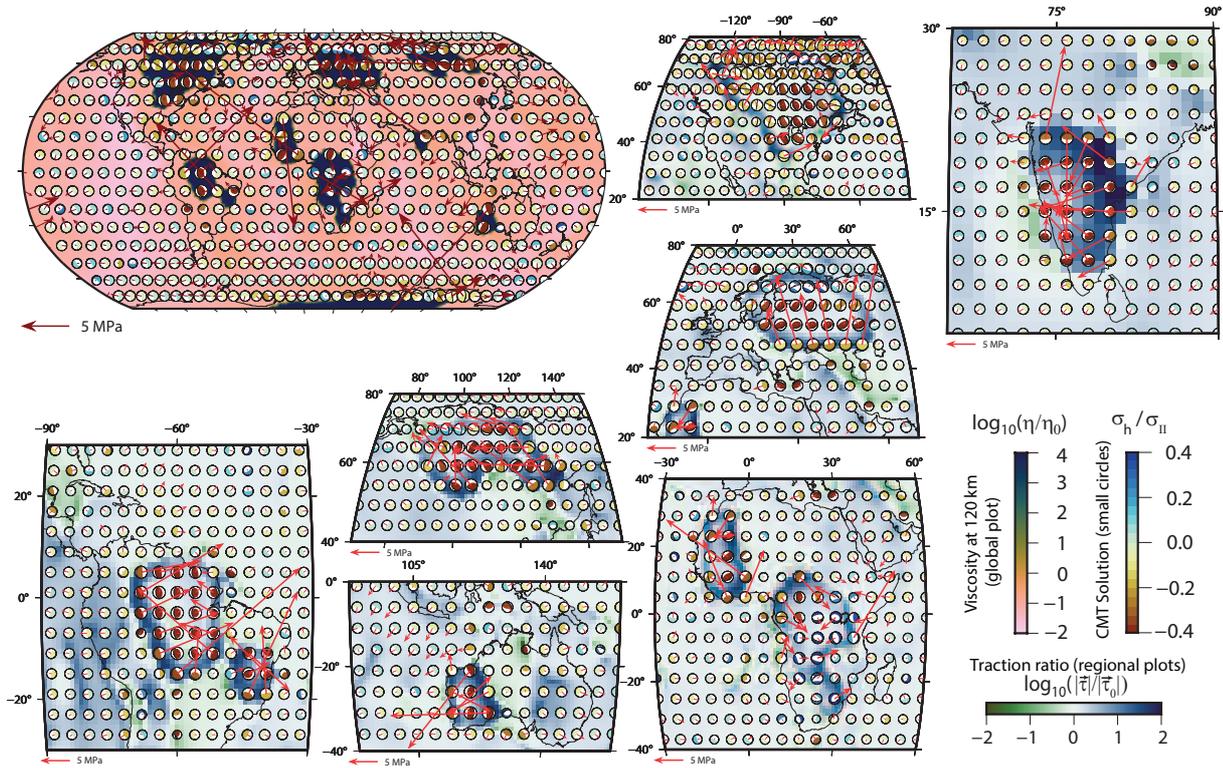


Figure S1: Global and regional traction patterns and stress regimes from a model with 150 relative viscosity of lithosphere, 0.1 relative viscosity of asthenosphere and cratons that are $100\times$ more viscous than the surrounding lithosphere. Similar to Fig. 1, background colors in the global plot indicate viscosity, and in zoomed-in plots they indicate the logarithm of the traction ratio ($\log_{10}(|\vec{\tau}|/|\vec{\tau}_0|)$). Arrows represent the magnitude and direction of absolute traction. CMT symbols are colored as the ratio of mean horizontal stress to the second invariant of deviatoric stress (σ_h/σ_{II}).

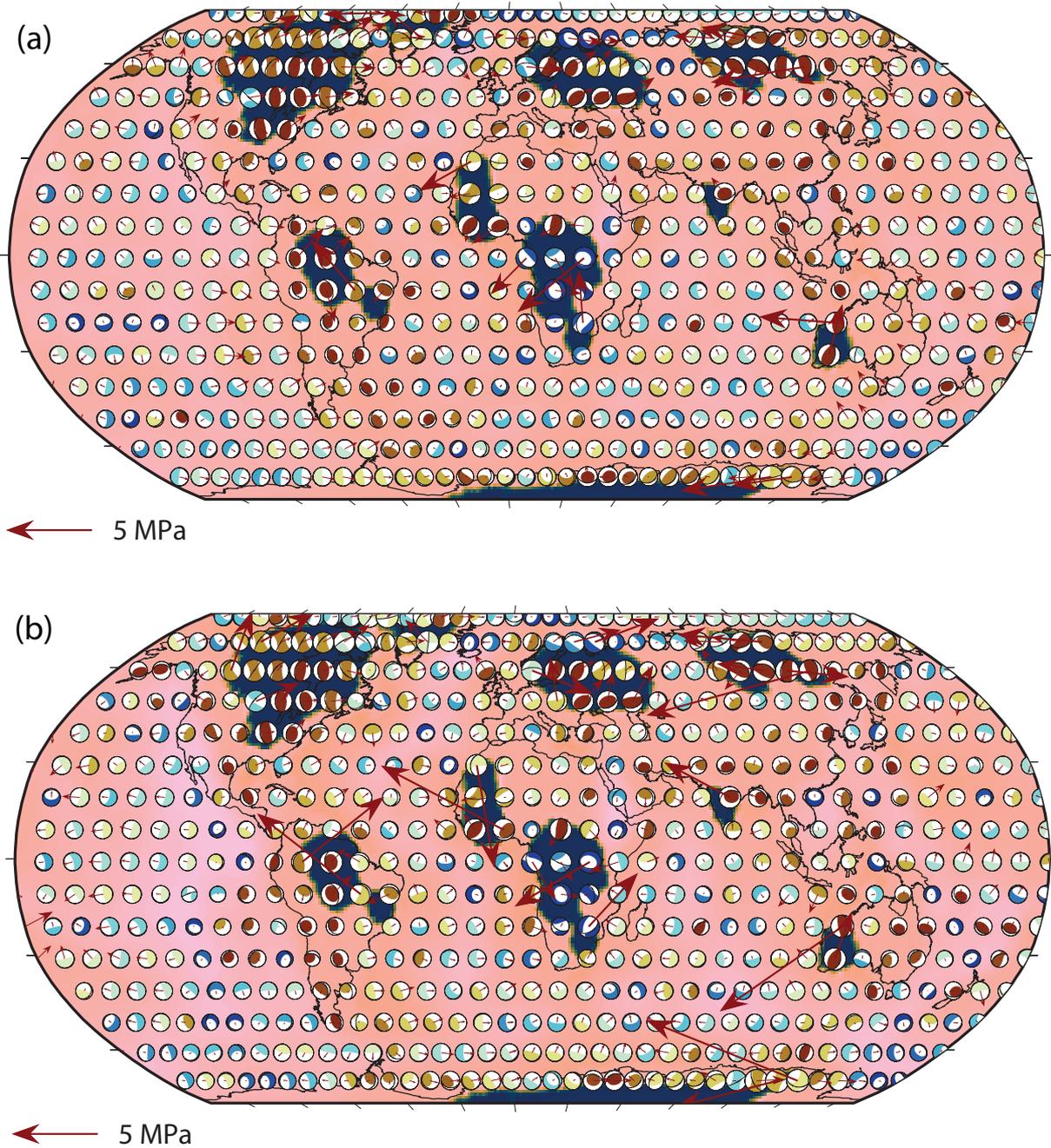


Figure S2: Global traction and stress regime at 150 km (a) and 220 km (b) depth in presence of $100\times$ more viscous craton than surrounding lithosphere.

Figure description is the same as figure 1b in the main manuscript.