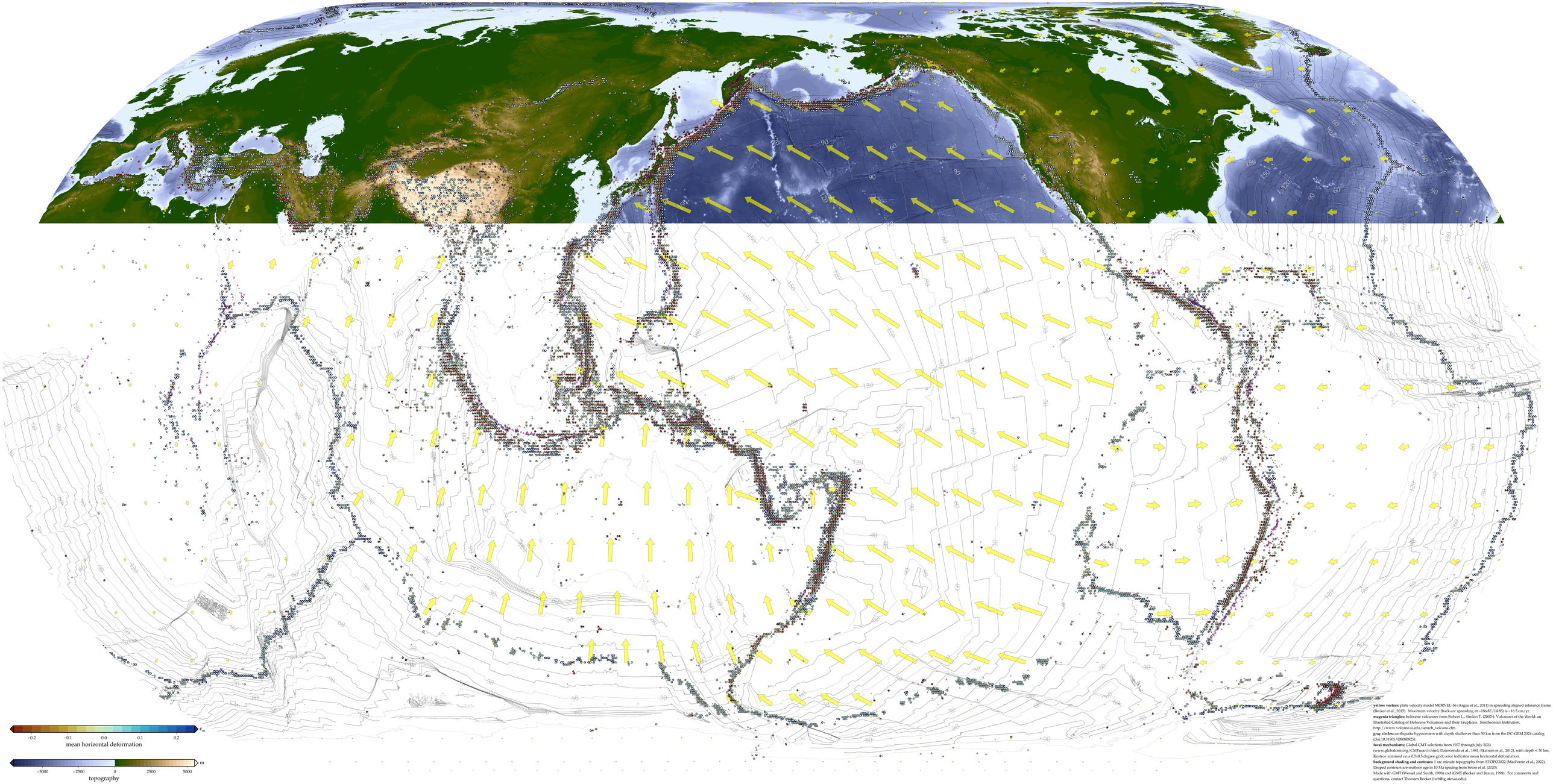

yellow vectors: plate velocity model MORVEL-56 (Argus et al., 2011) in spreading aligned reference frame (Becker et al., 2015). Maximum velocity (back-arc spreading at ~186.8E/14.8S) is ~16.5 cm/yr.
magenta triangles: holocene volcanoes from Siebert L., Simkin T. (2002): Volcanoes of the World: an Illustrated Catalog of Holocene Volcanoes and their Eruptions. Smithsonian Institution, http://www.volcano.si.edu/search_volcano.cfm.
gray circles: earthquake hypocenters with depth shallower than 50 km from the ISC-GEM 2024 catalog (doi:10.31905/D808B825).
focal mechanisms: Global CMT solutions from 1977 through July 2024 (www.globalcmt.org/CMTsearch.html; Dziewonski et al., 1981; Ekstrom et al., 2012), with depth < 50 km, Kostrov summed on a 0.5x0.5-degree grid; color indicates mean horizontal deformation.
background shading and contours: 1 arc minute topography from ETOPO2022 (MacFerrin et al., 2022). Draped contours are seafloor age in 10 Ma spacing from Seton et al. (2020).
Made with GMT (Wessel and Smith, 1998) and iGMT (Becker and Braun, 1998). For comments and questions, contact Thorsten Becker (twb@ig.utexas.edu).