Supplement to "Effects of melt-percolation, refertilisation, and deformation on upper mantle seismic anisotropy: constraints from peridotite xenoliths, Marie Byrd Land, West Antarctica"

Vasileios Chatzaras, Seth C. Kruckenberg

1. Figures

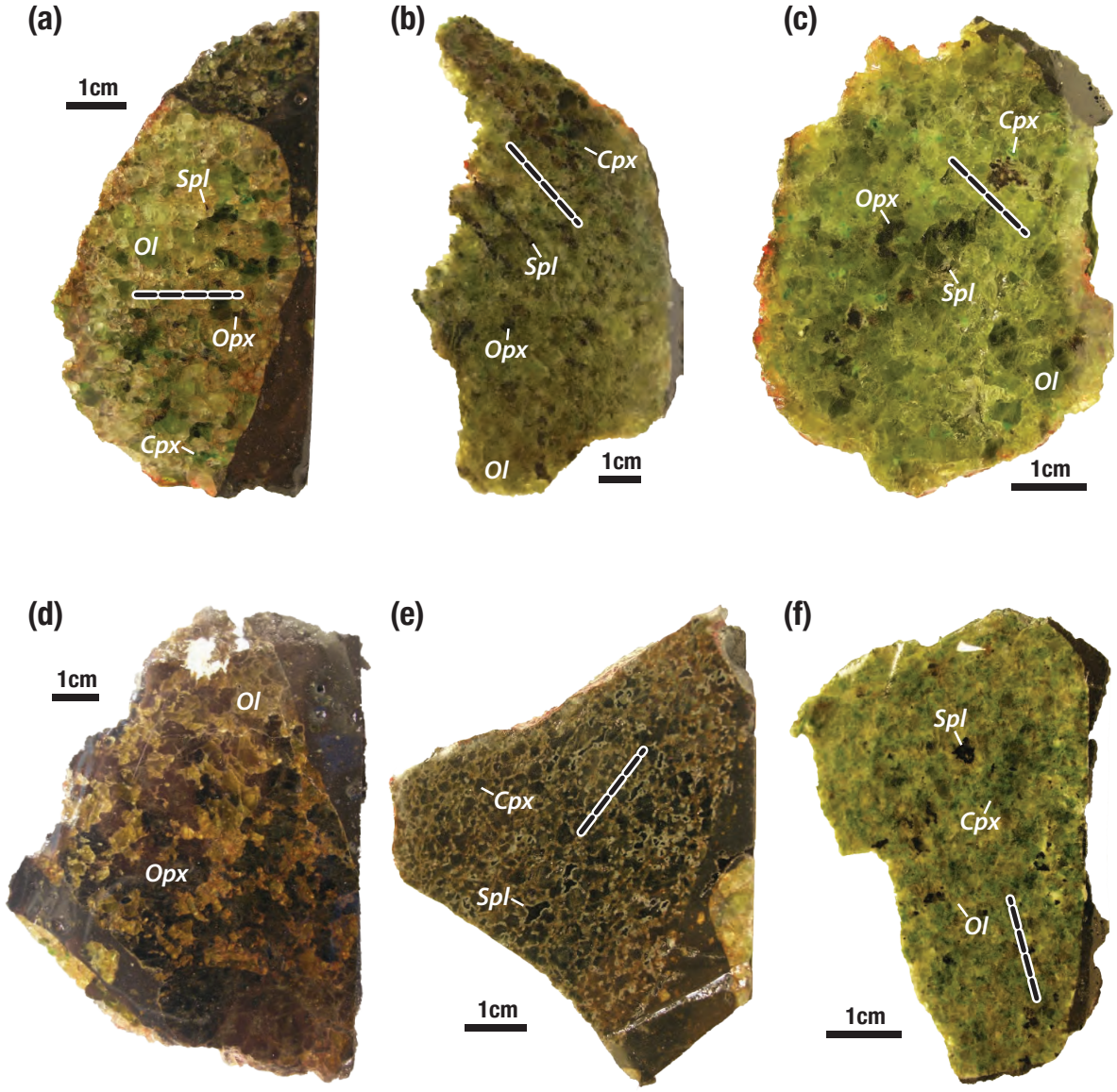

Figure S1. Examples of mantle xenoliths from Fosdick Mountains, Marie Byrd Land. (a) Harzburgite FDM-DB02-X08. (b) Lherzolite FDM-AVBB05. (c) Lherzolite FDM-RN03-X01. (d) Dunite crosscut by websteritic veins, FDM-DB02-X06. (e) Clinopyroxenite FDM-DB02-X05. (f) Wehrlite FDM-BB01-X01. All sections are cut perpendicular to the foliation and the broken black lines correspond to the trace of the lineation. The foliation and lineation were determined by the three-dimensional shape of spinel grains using X-ray computed tomography (Chatzaras et al., 2016).

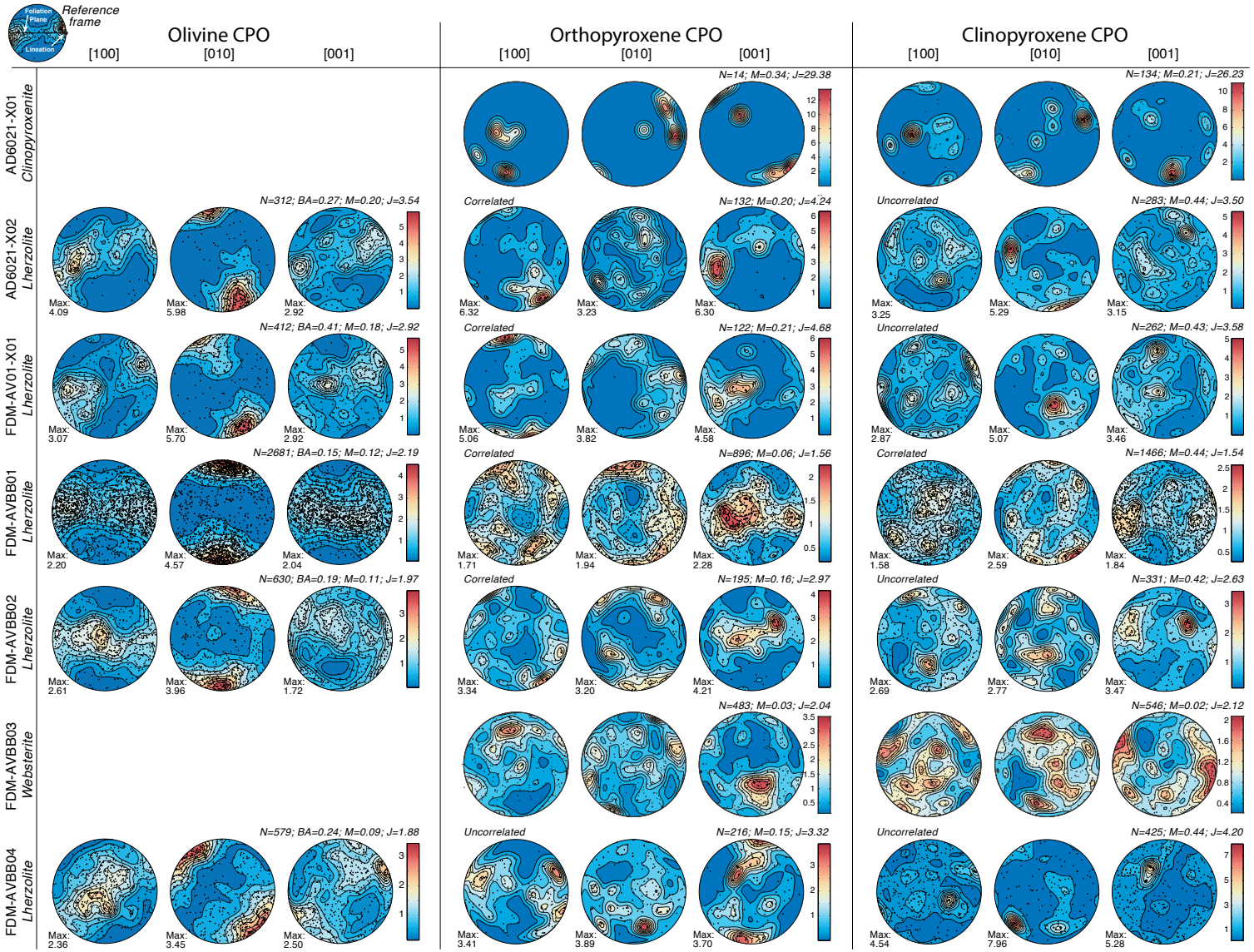

Figure S2. Crystallographic orientations of olivine, orthopyroxene, and clinopyroxene. Crystallographic orientations are plotted as one point per grain data sets in lower hemisphere equal area projections, relative to the spinel fabric ellipsoid axes. Color scales are for multiples of uniform distribution. The J, and M indices are given for all three minerals and the BA index for olivine.

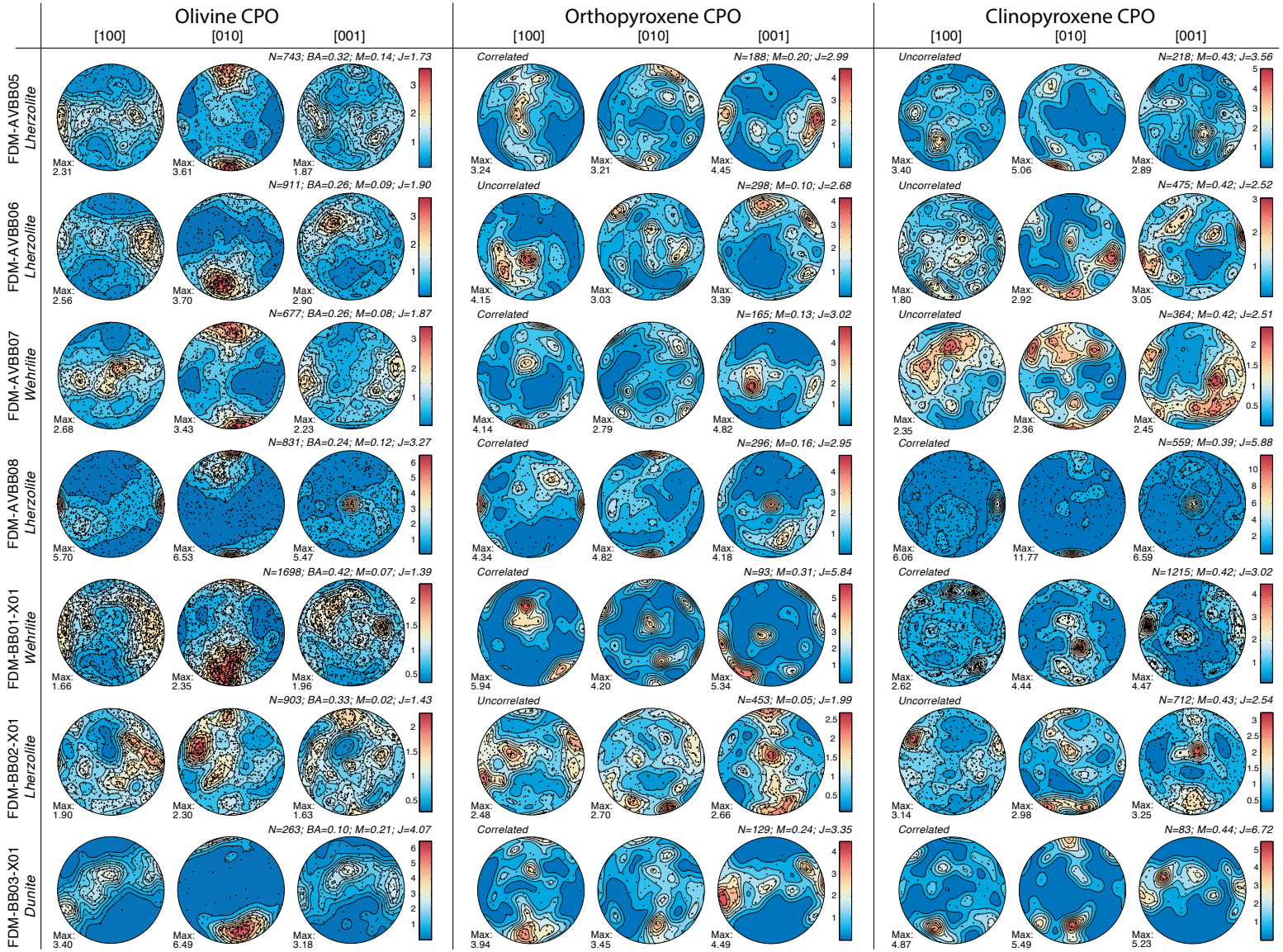

Figure S2. (continued)

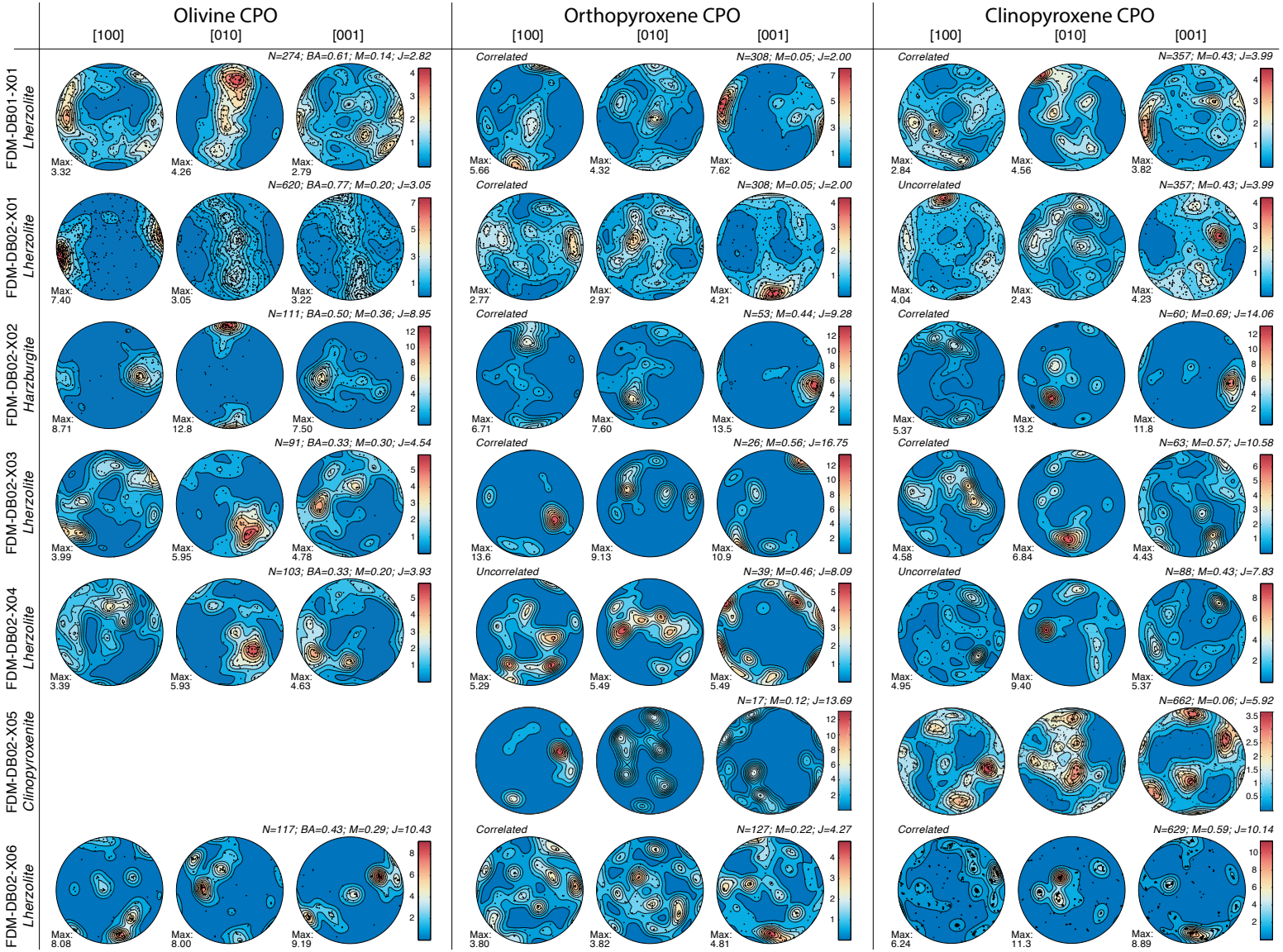

Figure S2. (continued)

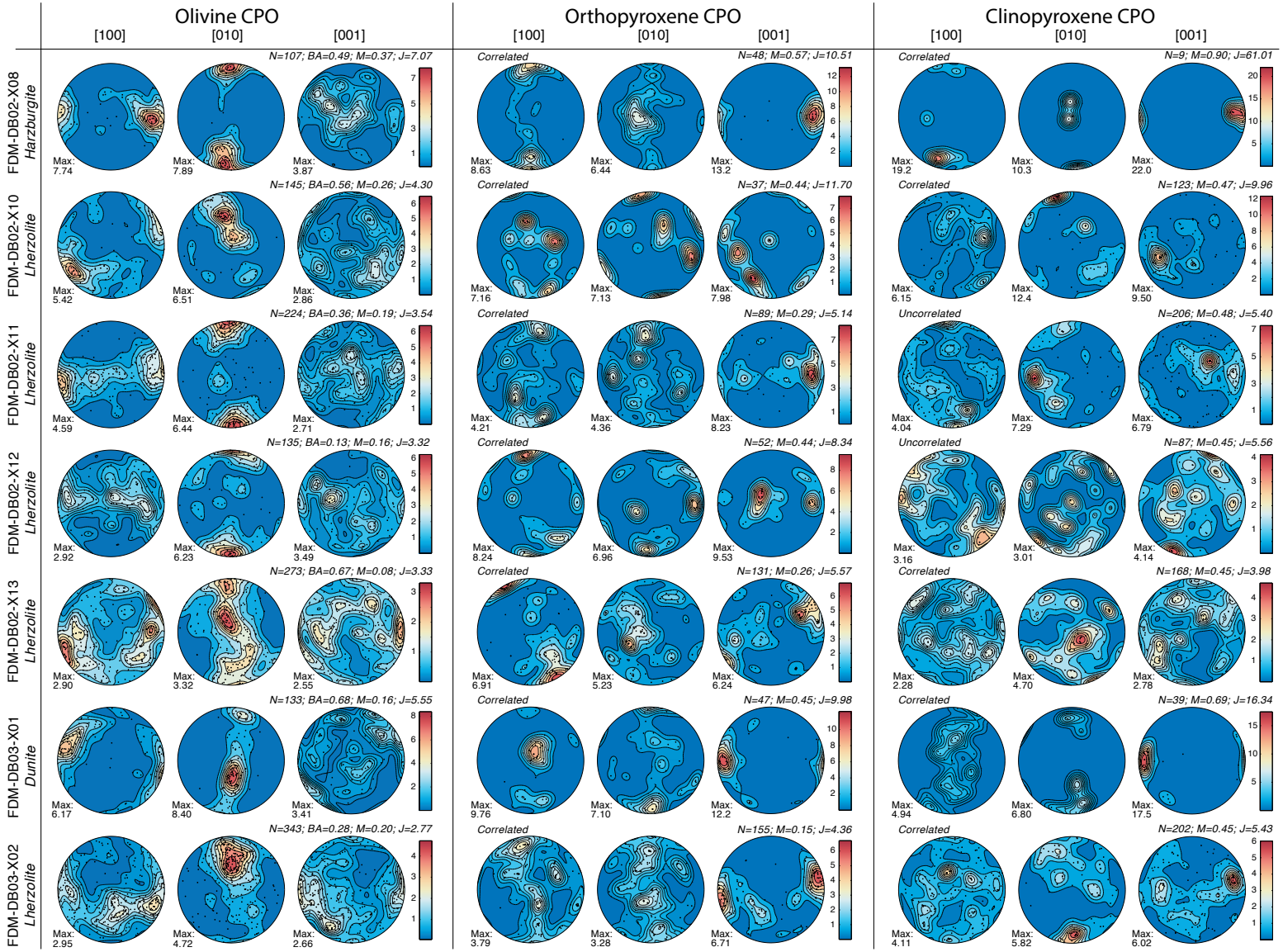

Figure S2. (continued)

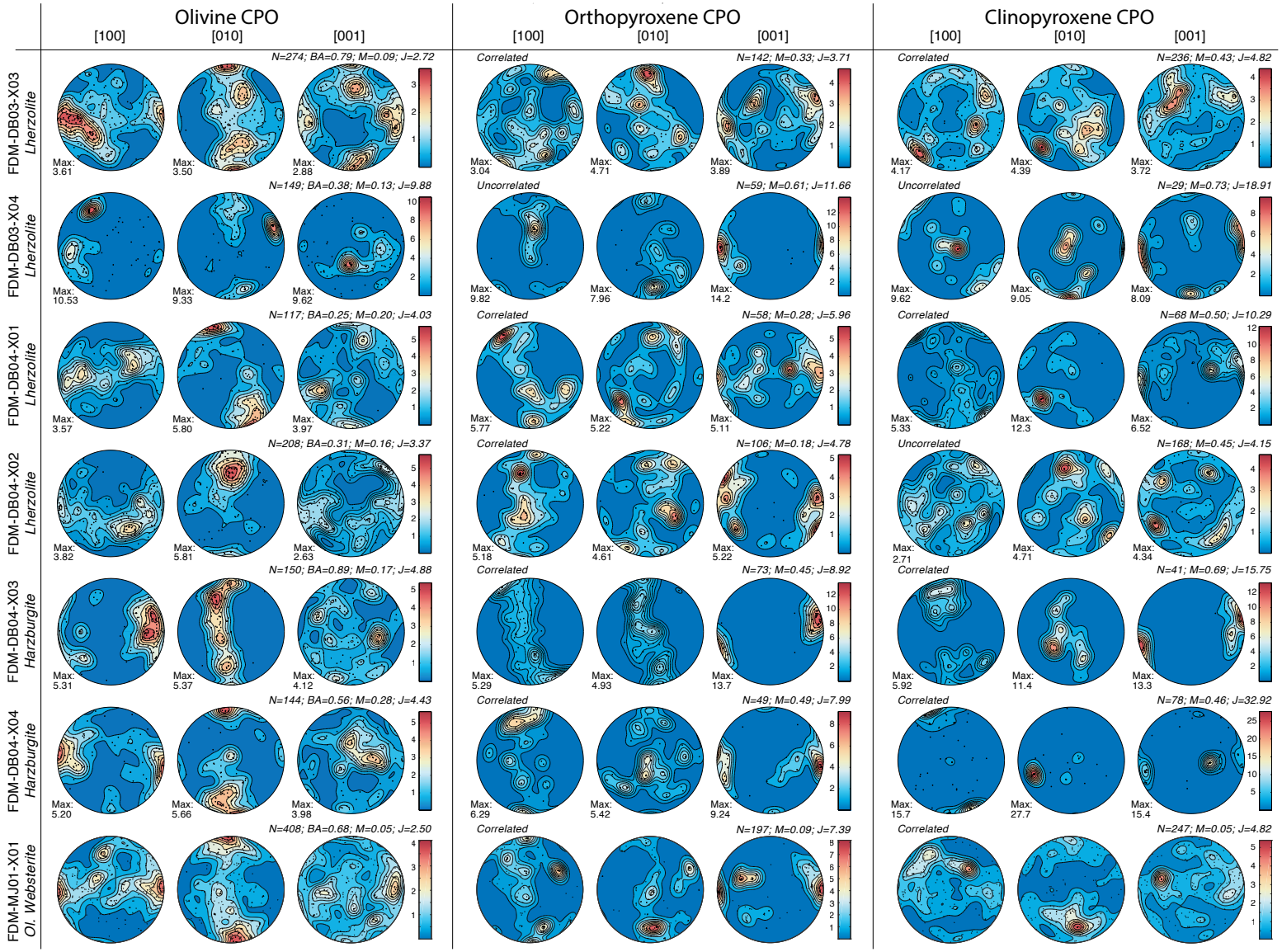

Figure S2. (continued)

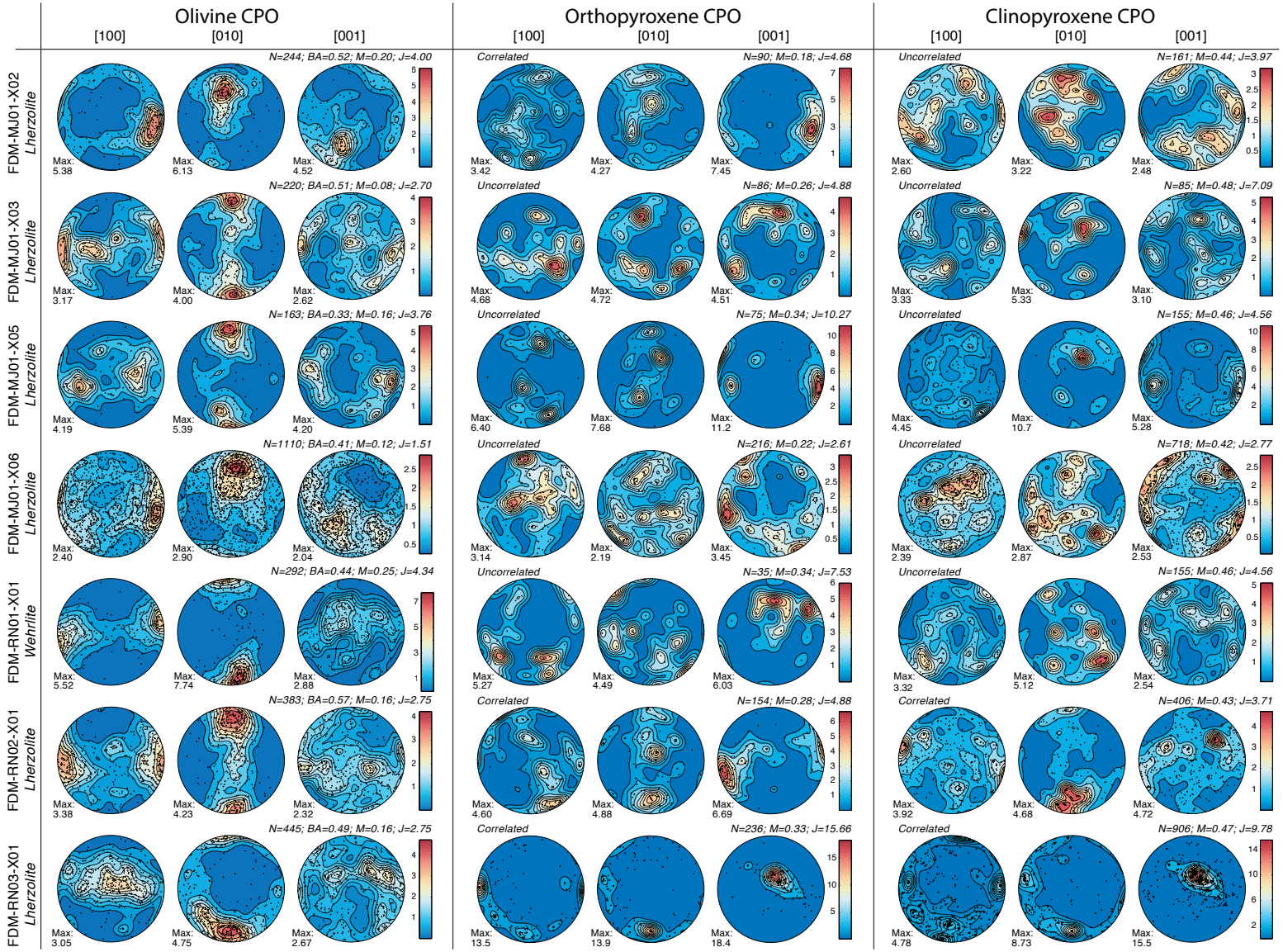

Figure S2. (continued)

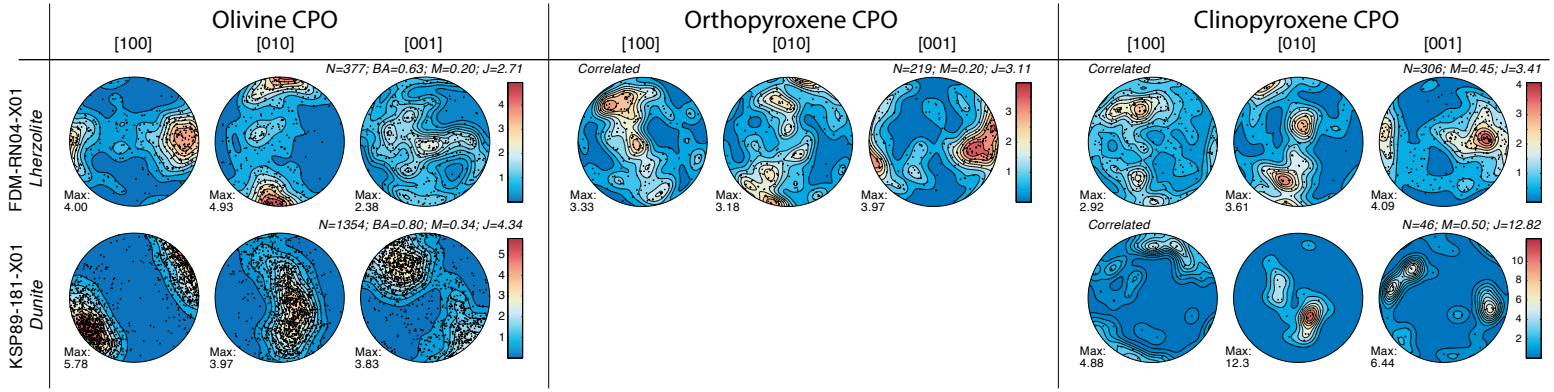

Figure S2. (continued)

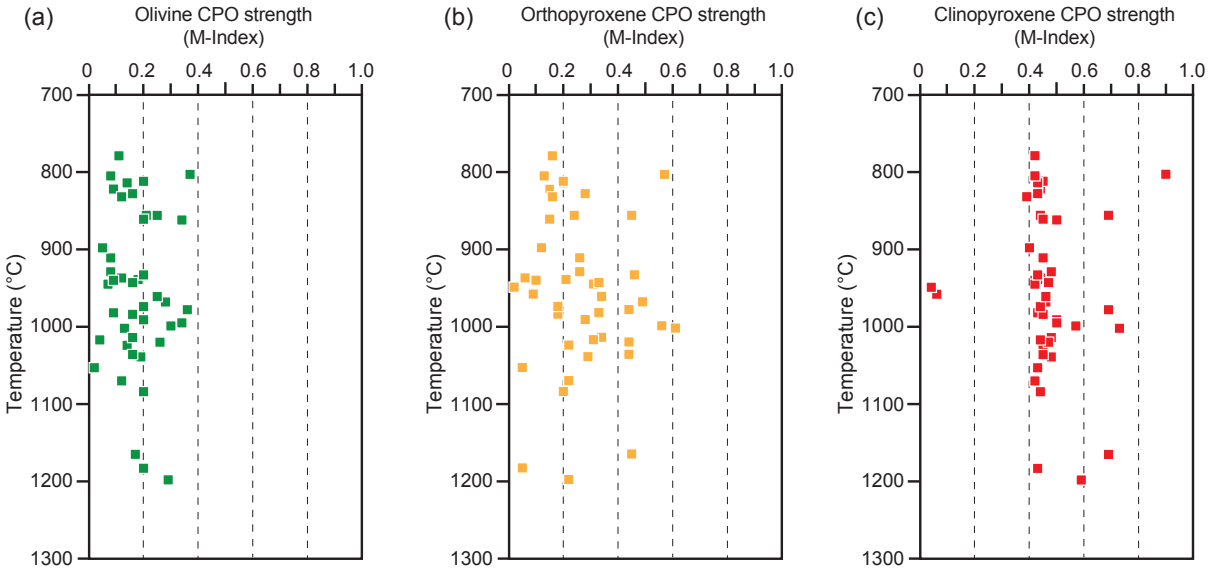

Figure S3. Variation of olivine (a), orthopyroxene (b), and clinopyroxene (c) CPO strength with temperature.