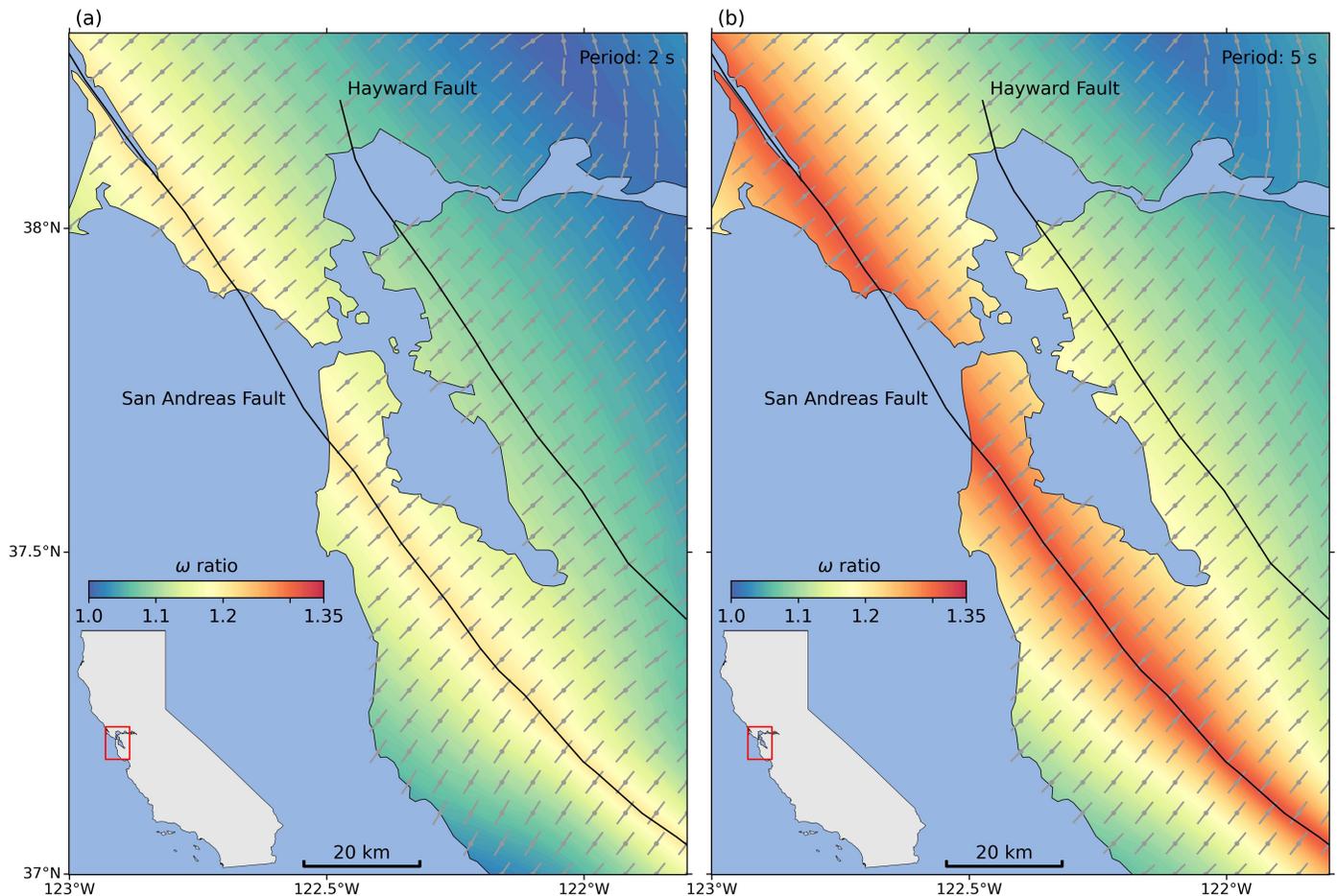


Supplemental Material to

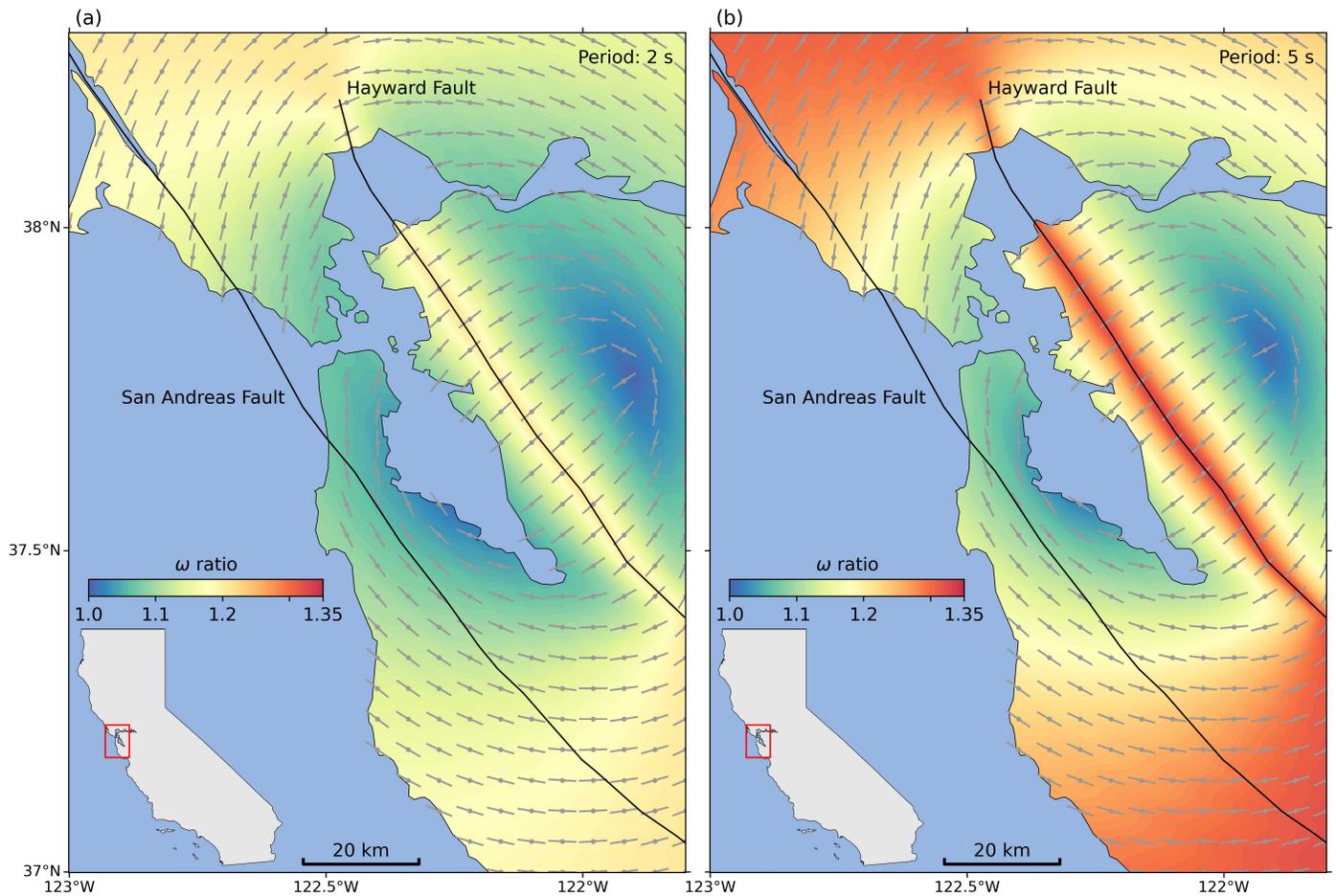
# Incorporating Ground Motion Directionality into Probabilistic Seismic Hazard Analysis

by Alan Poulos and Eduardo Miranda

This supplemental material includes two figures analogous to Figure 9 of the main manuscript, one considering only the San Andreas Fault (Figure S1) and the other only the Hayward Fault (Figure S2).



**Figure S1:** Spatial distribution within the San Francisco Bay Area of the maximum to minimum pseudo-spectral acceleration ratio ( $\omega$ ) at (a) 2 s and (b) 5 s for a 2475-year return period, considering only the San Andreas Fault. Different sites are depicted by gray circles and the gray lines correspond to the orientations of maximum pseudo-spectral acceleration at each site. The lower-left inset shows the location of the map within California.



**Figure S2:** Spatial distribution within the San Francisco Bay Area of the maximum to minimum pseudo-spectral acceleration ratio ( $\omega$ ) at (a) 2 s and (b) 5 s for a 2475-year return period, considering only the Hayward Fault. Different sites are depicted by gray circles and the gray lines correspond to the orientations of maximum pseudo-spectral acceleration at each site. The lower-left inset shows the location of the map within California.