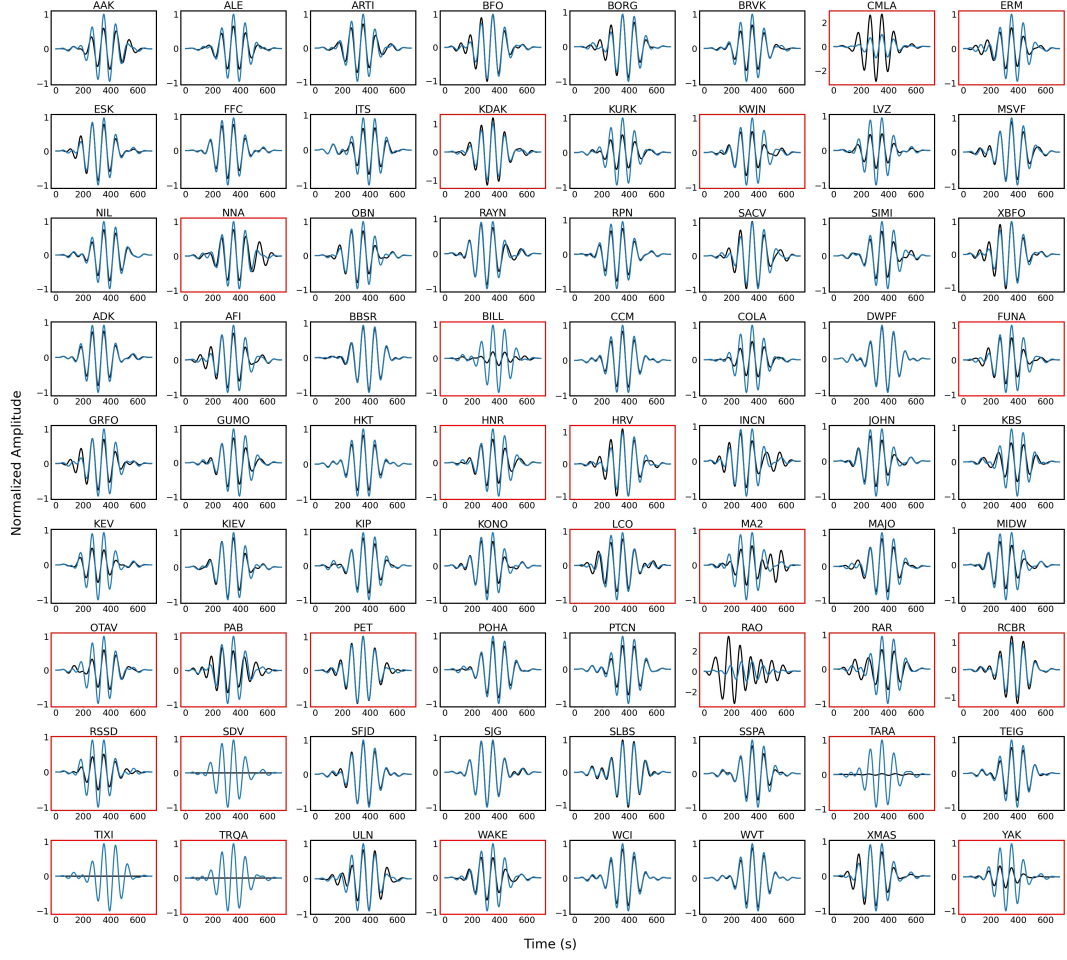
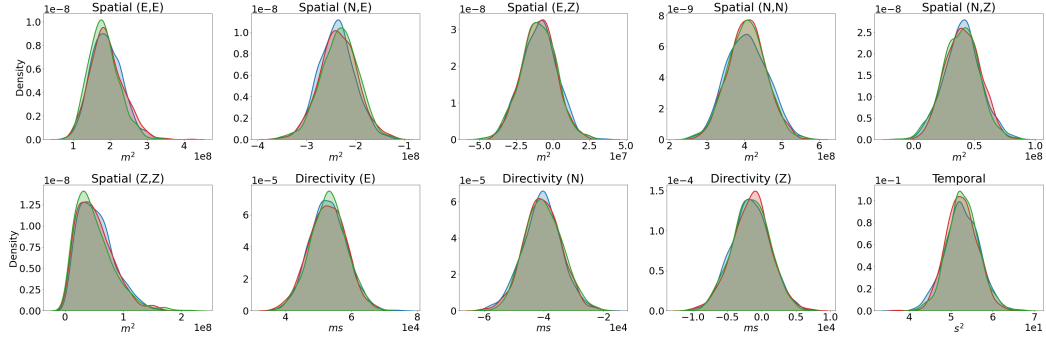
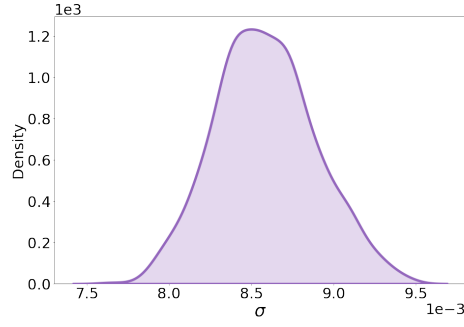


1 **Supplementary Figures**

**Figure S1.** Traces of stations submitted to manual quality control in this study. Station plots with black outlines indicate stations that were kept. Station plots with red outlines indicate stations that weren't kept



**Figure S2.** Kernel density estimate plots for multiple chains describing the distributions of independent components of the second moments of the stress glut for the 2019 Ridgecrest sequence mainshock. Different colors (blue, red, and green) represent different chains of the inversion.



**Figure S3.** Distribution of hyperparameter  $\sigma$  determined in the inversion using real data and included in the inversion using synthetic data.