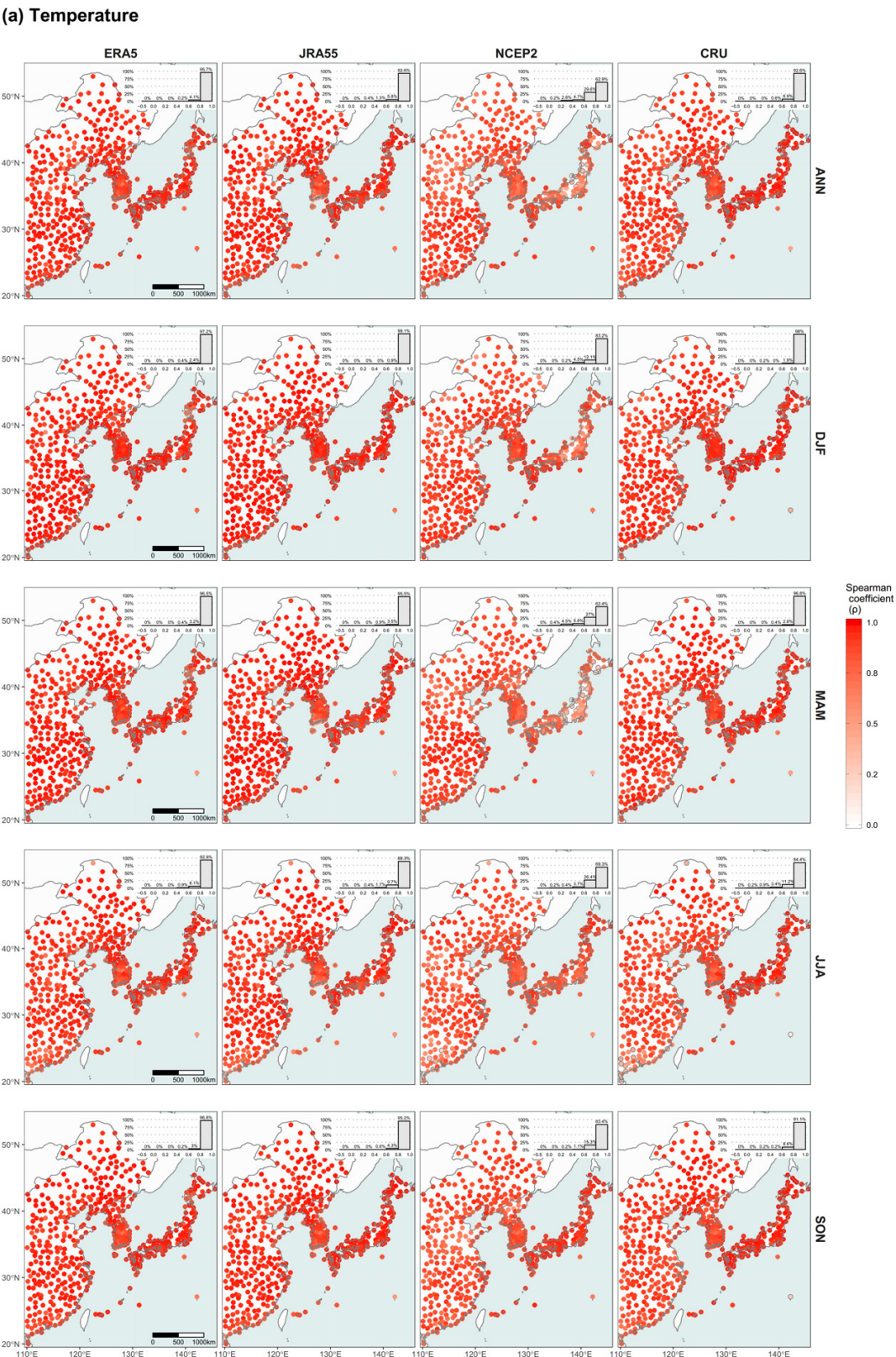


Supplementary Figures



(b) Precipitation

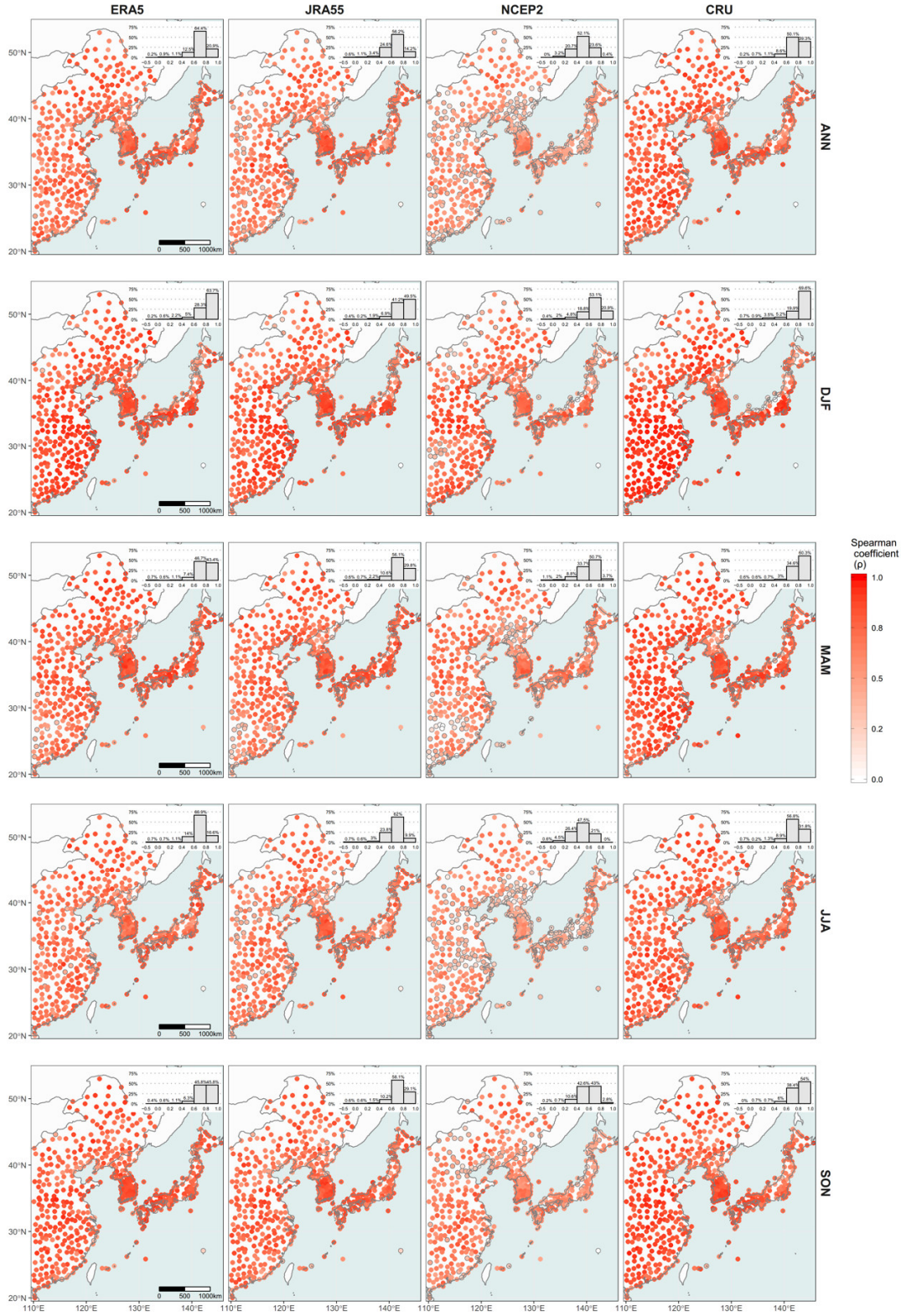
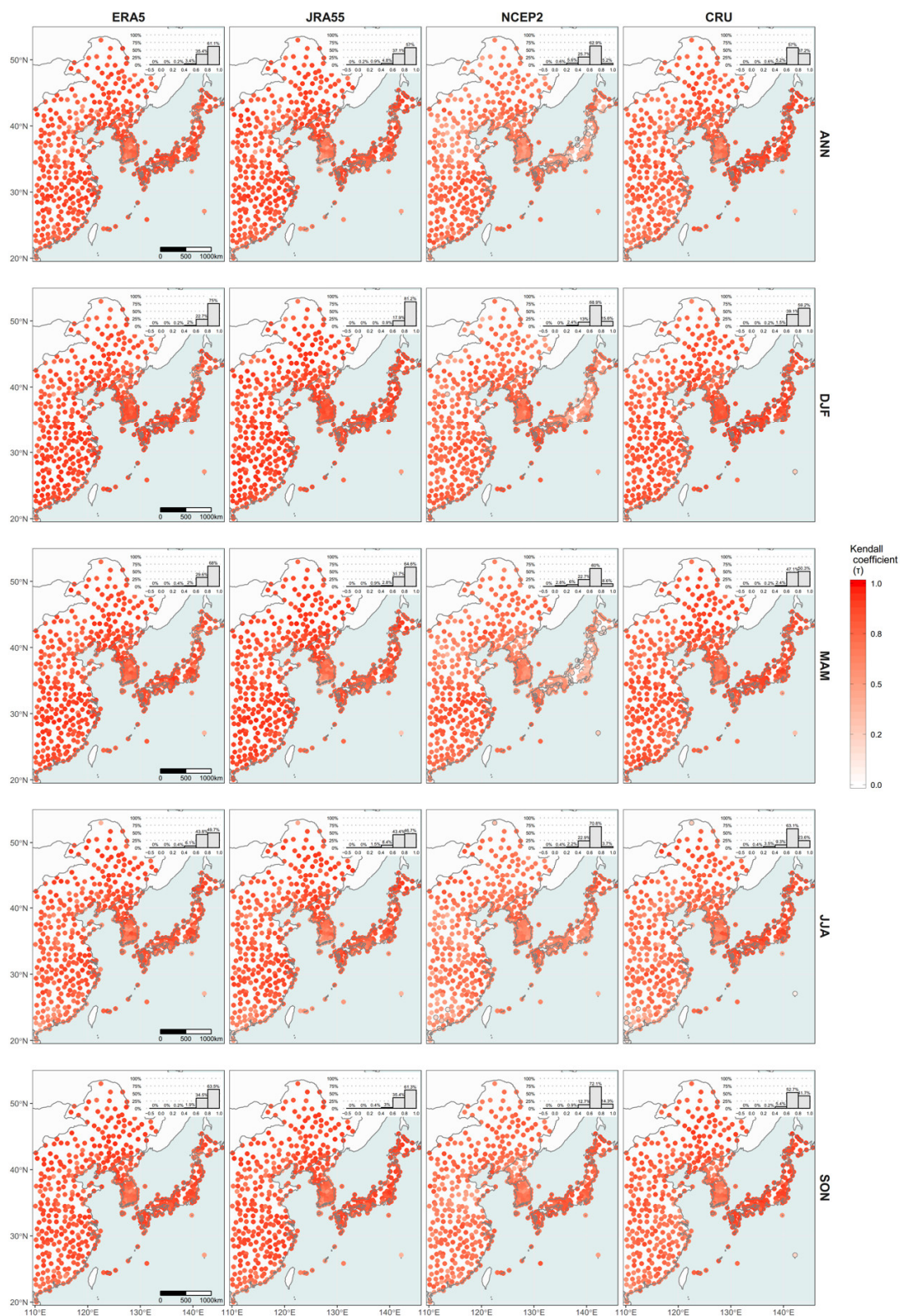


Figure S1. Spearman (ρ) correlation coefficients of (a) temperature and (b) precipitation from ERA5, JRA55, NCEP2, and CRU with observations in the EAM region for annual and seasonal means during the forty years of 1981-2020 for North Korea, South Korea, and Japan and the thirty years of 1981-2010 for China. Gray edges around points represent insignificant (p -value > 0.01). Histograms at the upper-right corner of map show the numbers of stations belonging to each range of correlation coefficients.

(a) Temperature



(b) Precipitation

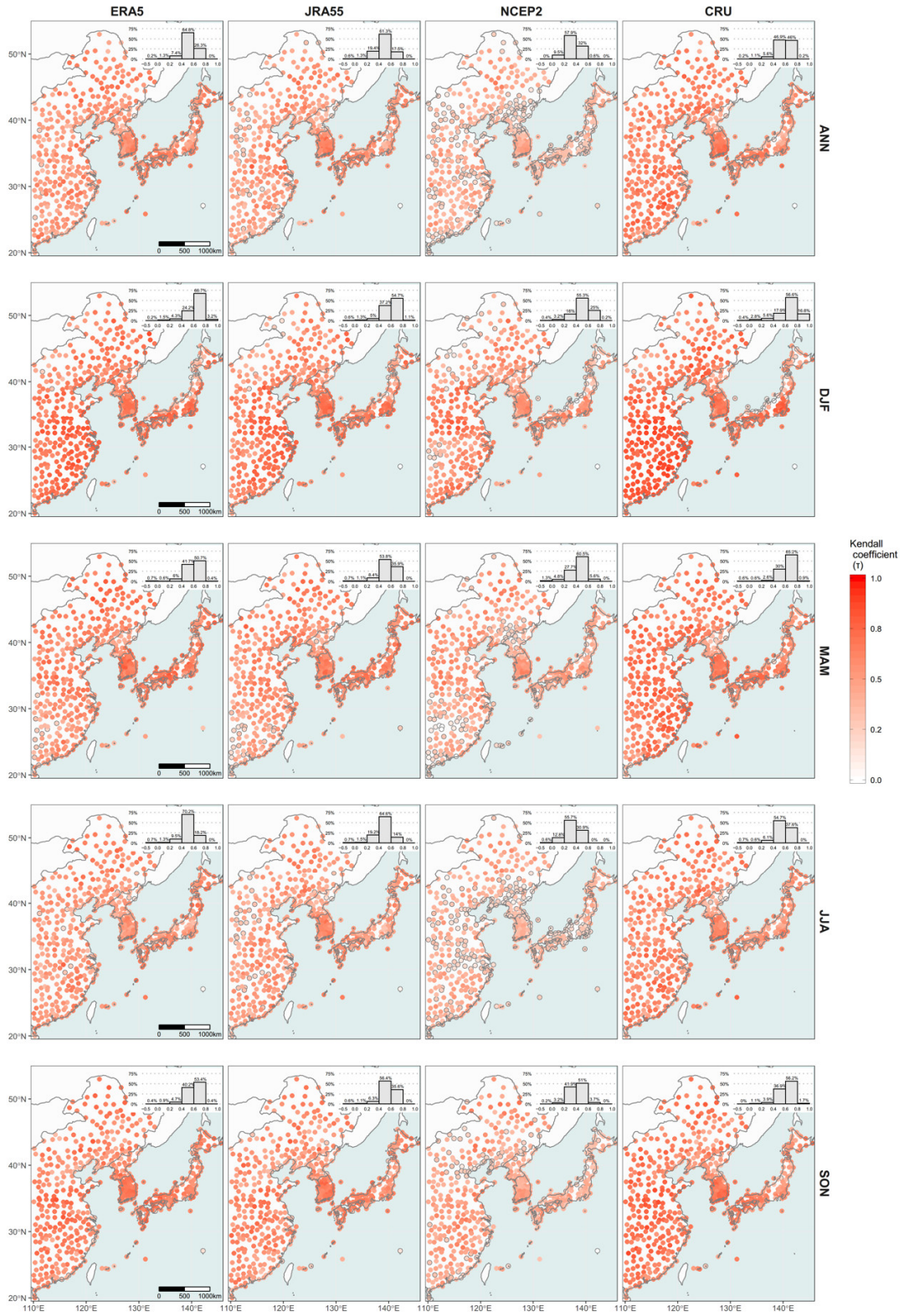
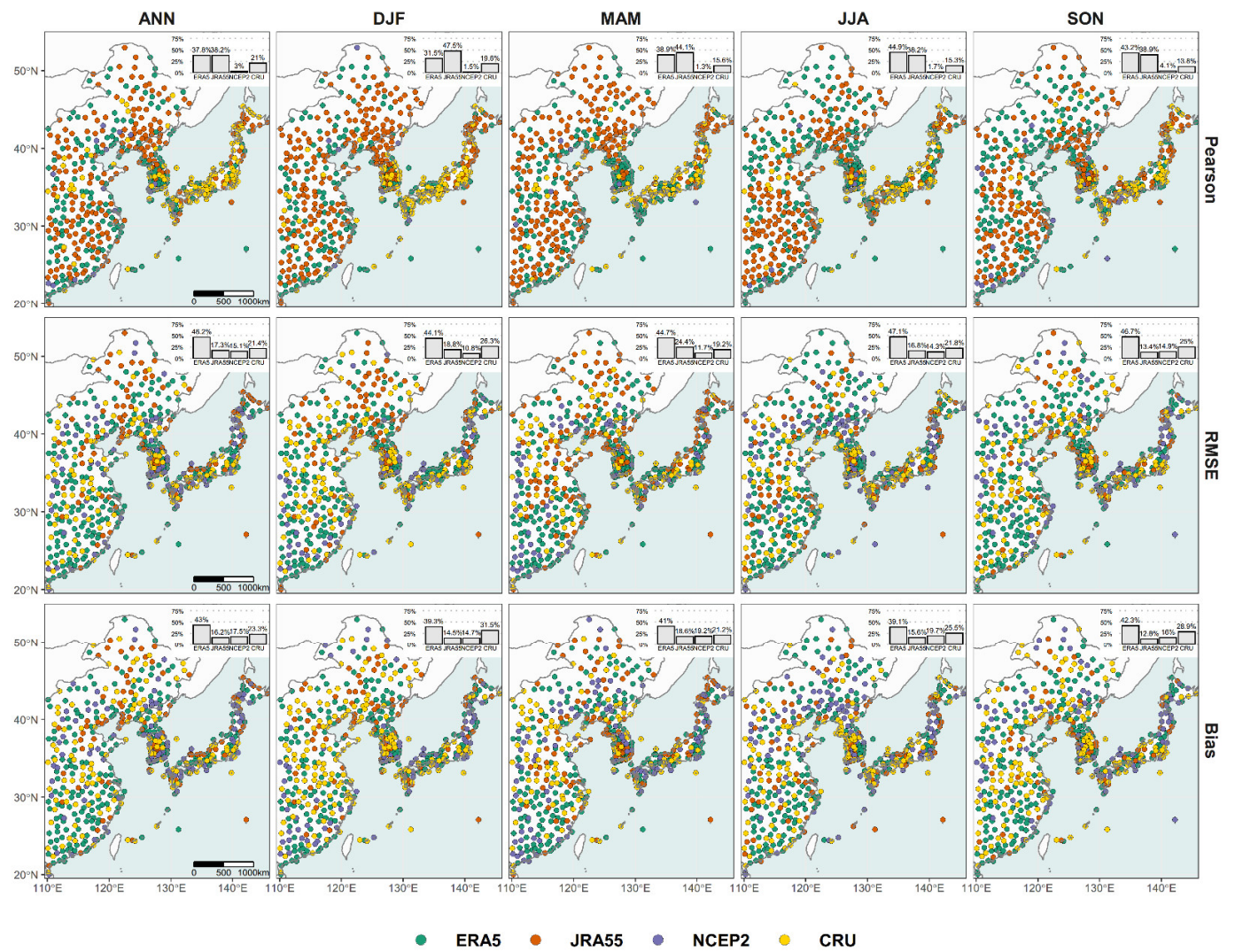


Figure S2. Same as in Figure S1, but with Kendall (τ) correlation coefficients.

(a) Temperature



(b) Precipitation

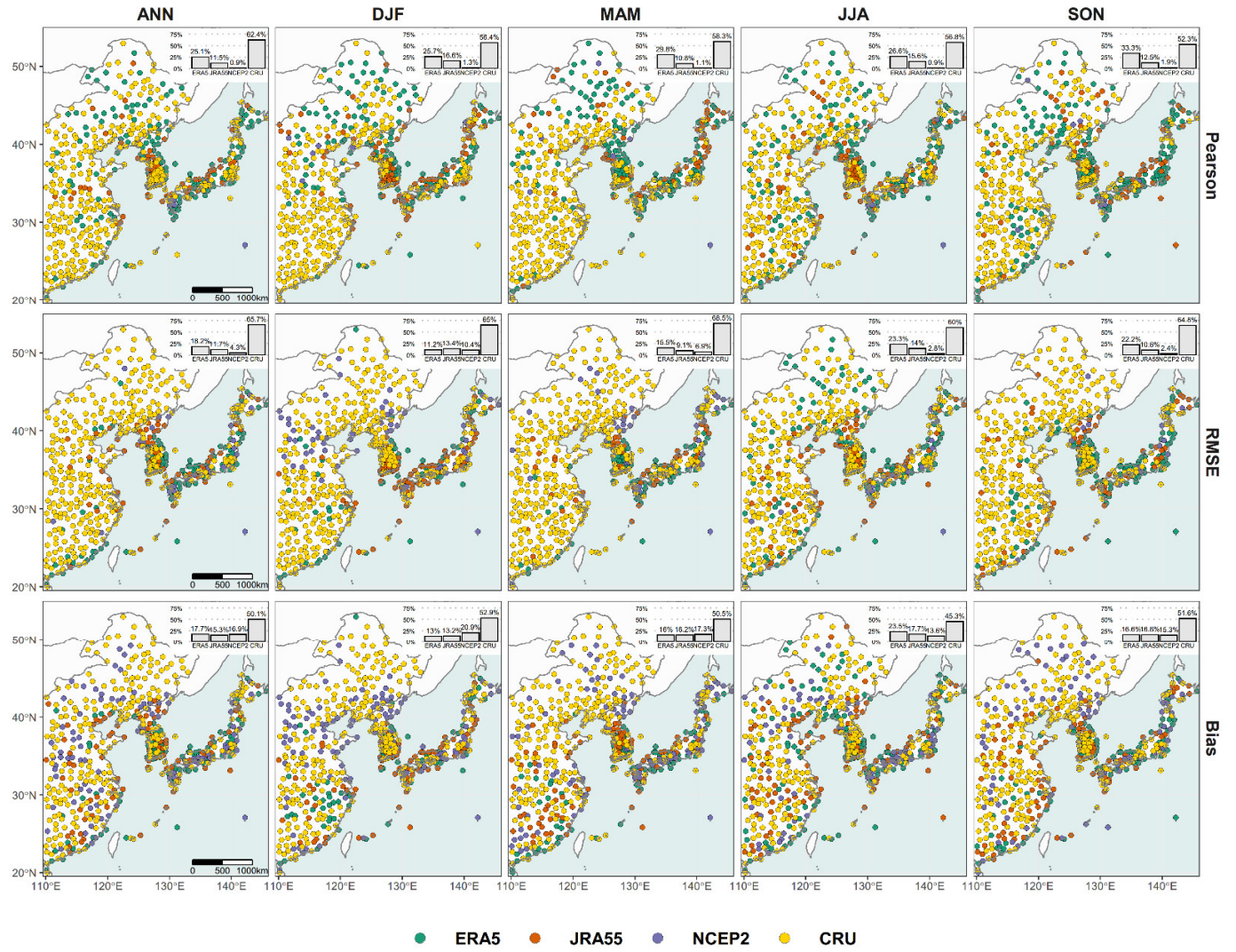


Figure S3. The selected best reanalysis data among ERA5, JRA55, NCEP2, and CRU by stations of (a) temperature and (b) precipitation based on Pearson correlation coefficients, bias, and RMSE in the EAM region for annual and seasonal means during the forty years of 1981-2020 for North Korea, South Korea, and Japan and the thirty years of 1981-2010 for China. Histograms at the upper-right corner of map indicated the number of stations selected as the best reanalysis.