



Correction to: Simulation and Estimation of Future Precipitation Changes in Arid Regions: a Case Study of Xinjiang, Northwest China

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Published online: 1 November 2021
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Correction to: Climatic Change (2021) 167:43
<https://doi.org/10.1007/s10584-021-03192-z>

The authors have supplied new figures to replace the figures in the original publication Figs. 1, 2, 4, 6, 7 and 8.

The original article can be found online at <https://doi.org/10.1007/s10584-021-03192-z>

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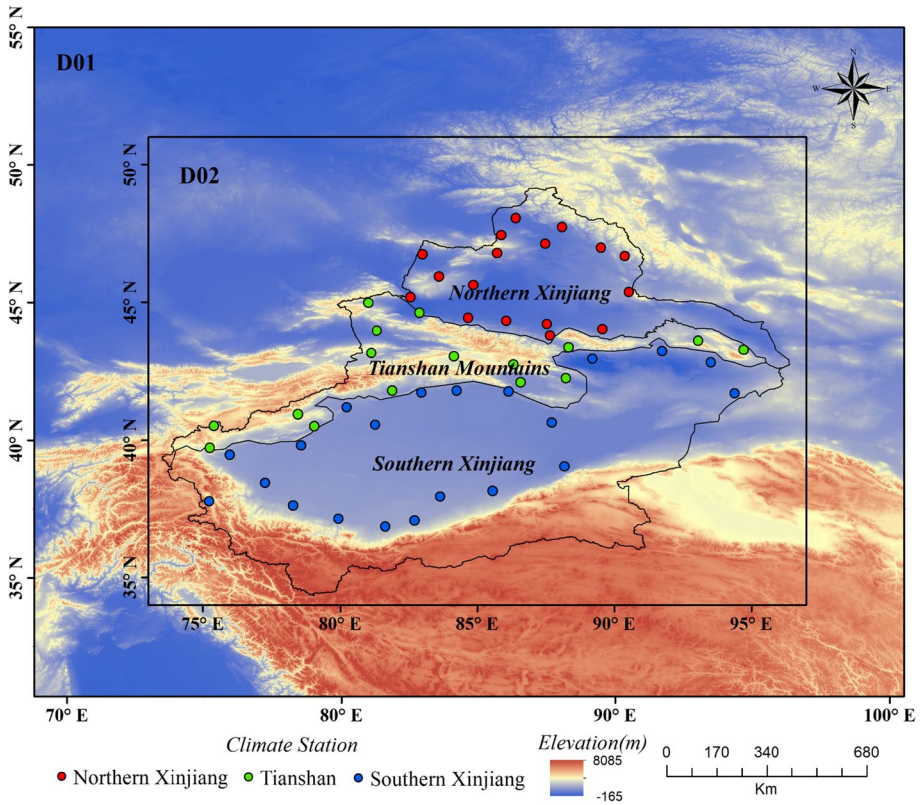


Fig. 1 WRF simulated domains (50 km (D01) and 10 km (D02)), and the ground meteorological stations with consistent precipitation variations in the study area (D02)

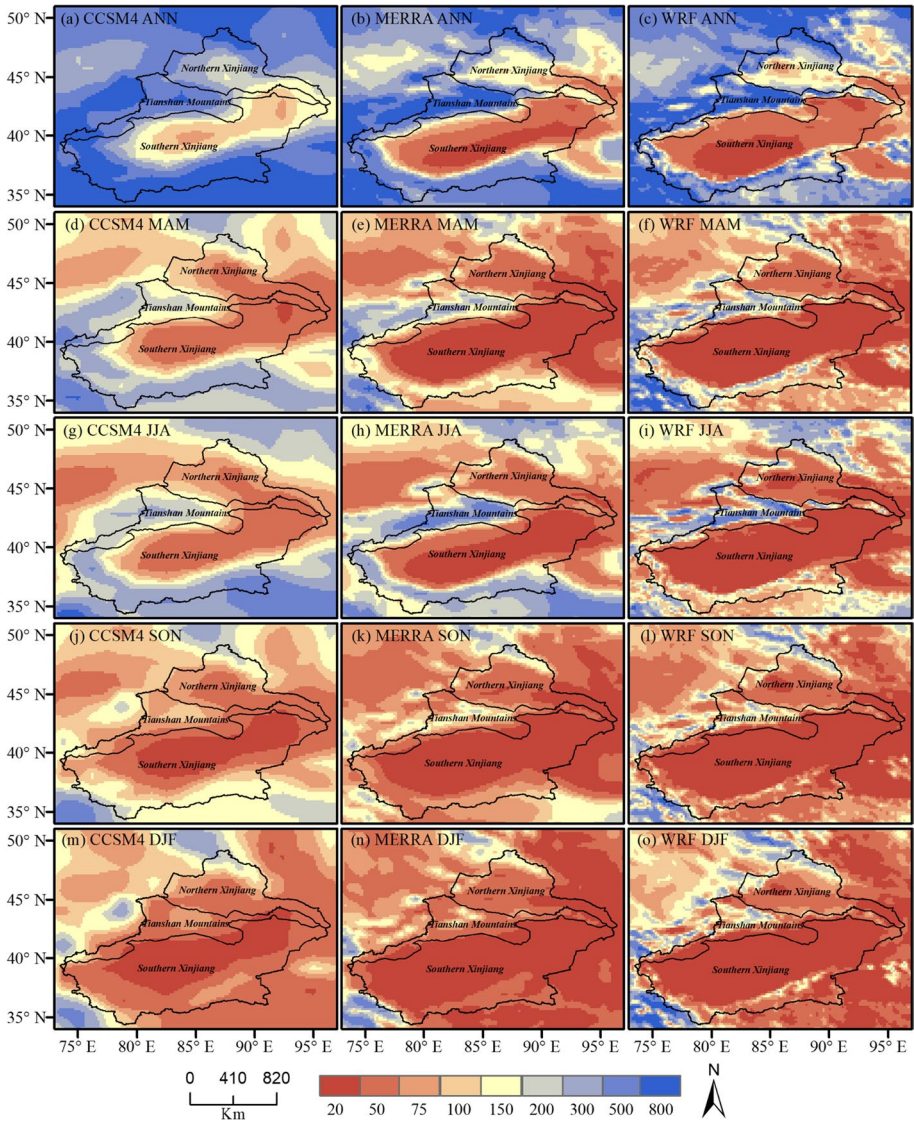
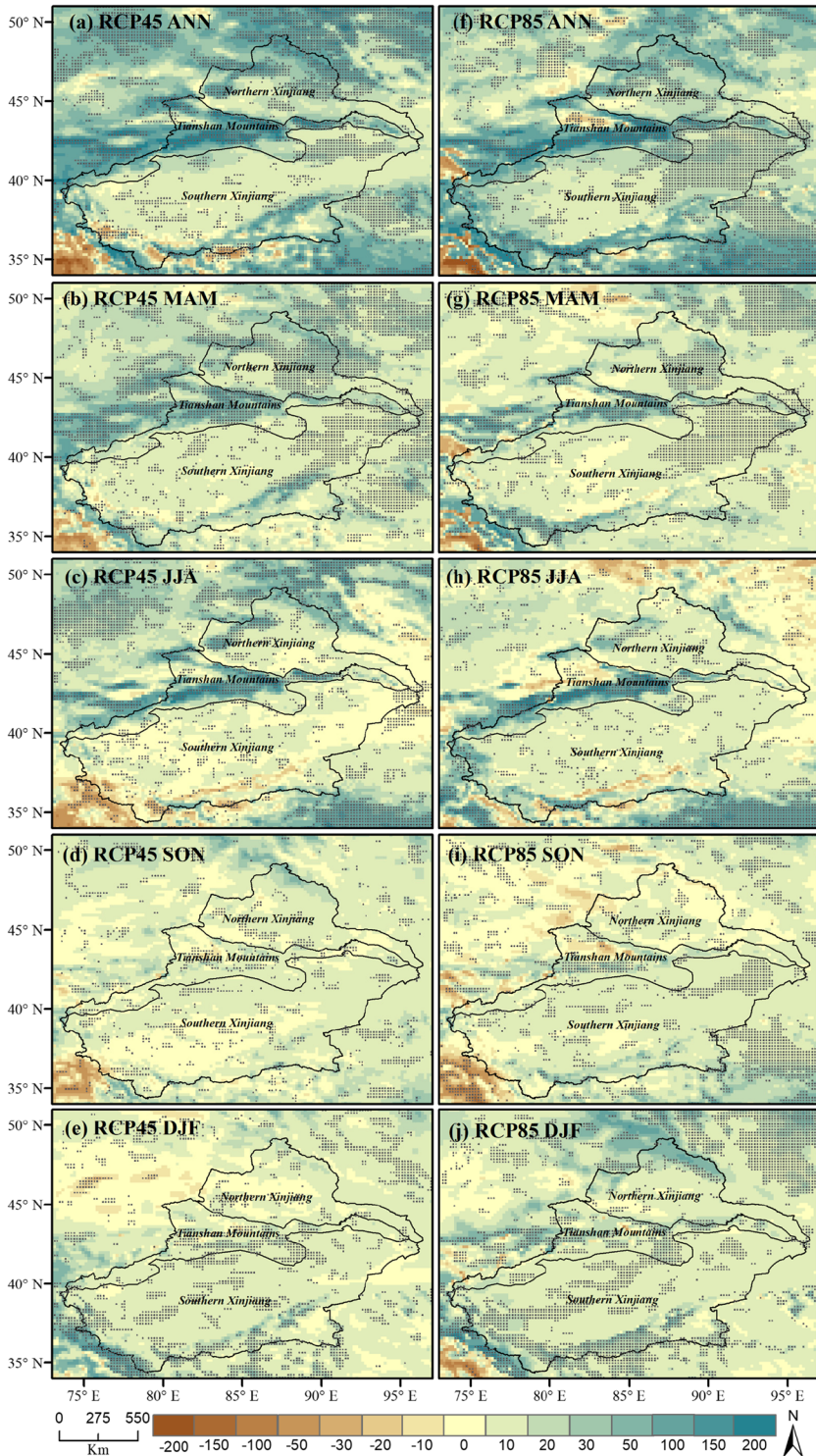


Fig. 2 Mean annual and seasonal spatial patterns of precipitation for 1986–2005 derived from CCSM4 simulation (a, d, g, j, m), MERRA reanalysis data (b, e, h, k, n), and WRF simulation (c, f, i, l, o). ANN: annual (a–c), MAM: spring (d–f), JJA: summer (g–i), SON: autumn (j–l), DJF: winter (m–o)



◀ **Fig. 4** Spatial distributions of the near-future difference (2040–2059 relative to 1986–2005) of annual, spring, summer, autumn, and winter precipitations under RCP4.5 (a, b, c, d, and e, respectively) and RCP8.5 (f, g, h, i, and j, respectively). The hatched areas indicate that the differences are significant at the 95% confidence level in a two-tailed Student’s *t*-test (units: mm)

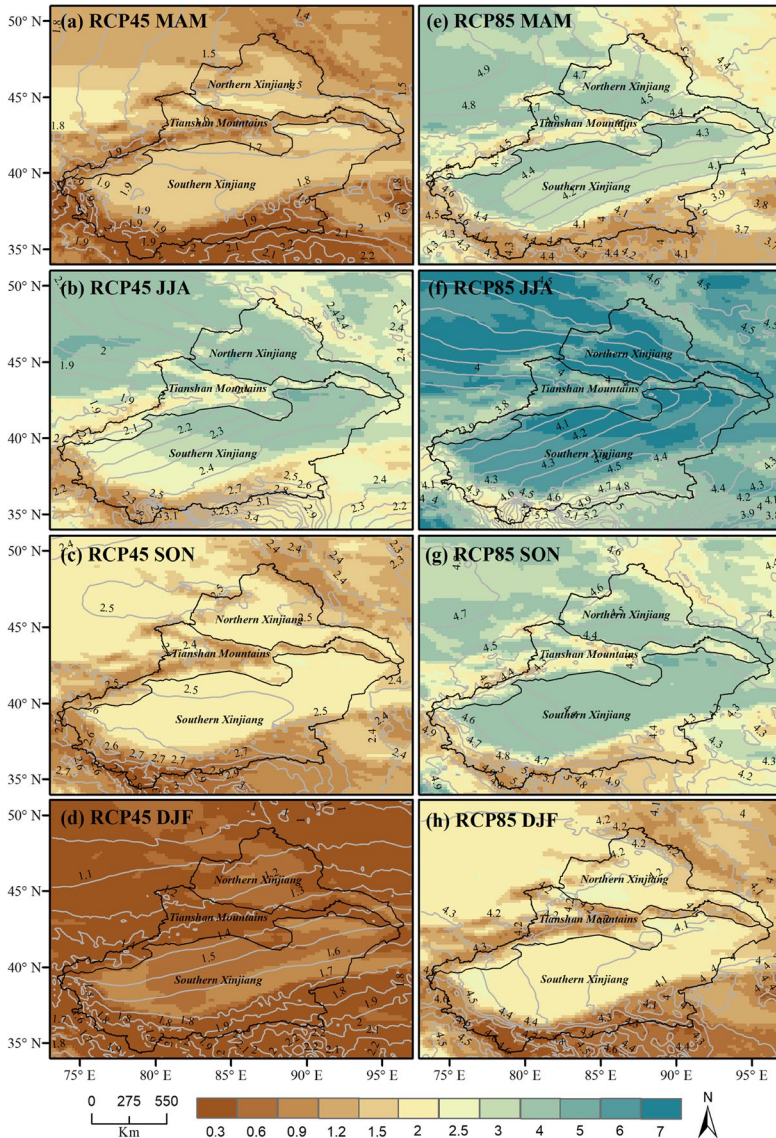


Fig. 6 Differences in PW (color scale, units: $\text{kg}\cdot\text{m}^{-2}$) and 500-hPa air temperature (contour line, line interval 0.1K) averaged under RCP4.5 and RCP8.5 in the future relative to the present day

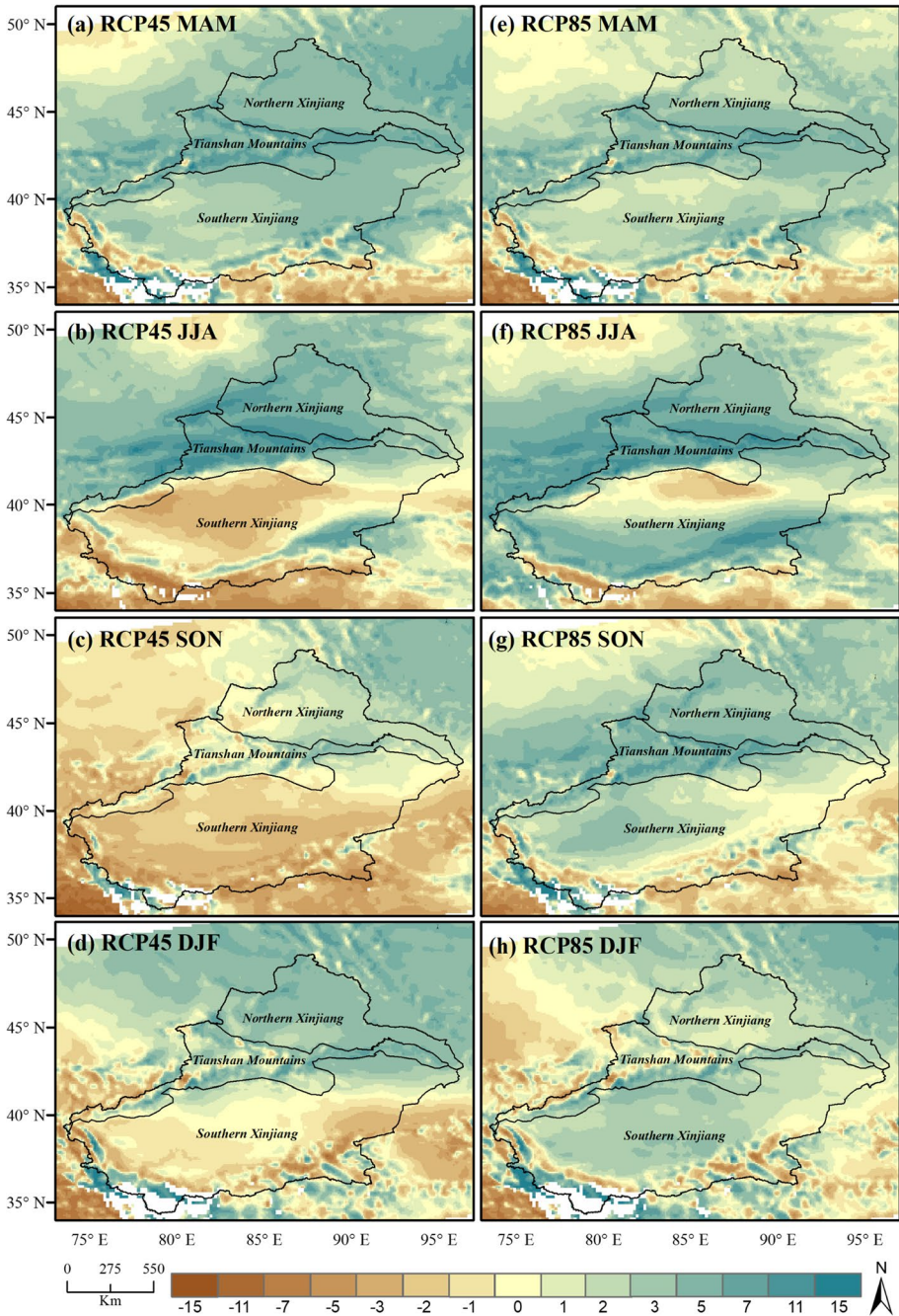


Fig. 7 Differences in 700-hPa RH (units: %) averaged under RCP4.5 and RCP8.5 in the future relative to the present day

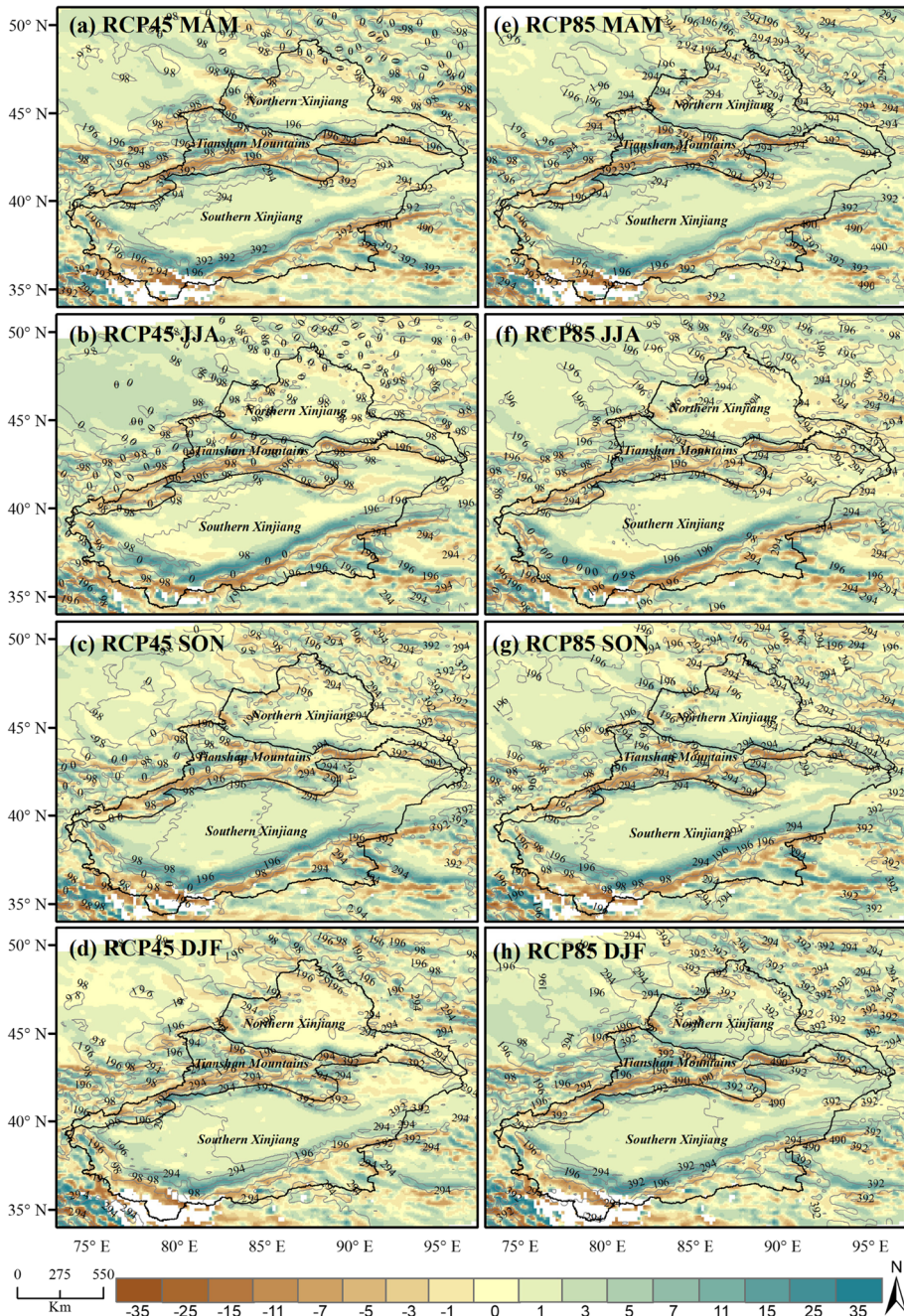


Fig. 8 Differences in relative vorticity (color scale, unit: $10^{-5} s^{-1}$) and 500-hPa geopotential (contour line, line interval 98 gpm) averaged under RCP4.5 and RCP8.5 relative to the present day. The white area is underneath the ground

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