

Substantial increase in heavy precipitation events preceded by moist heatwaves over China during 1961–2019

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This file includes:
Figure S1-S5

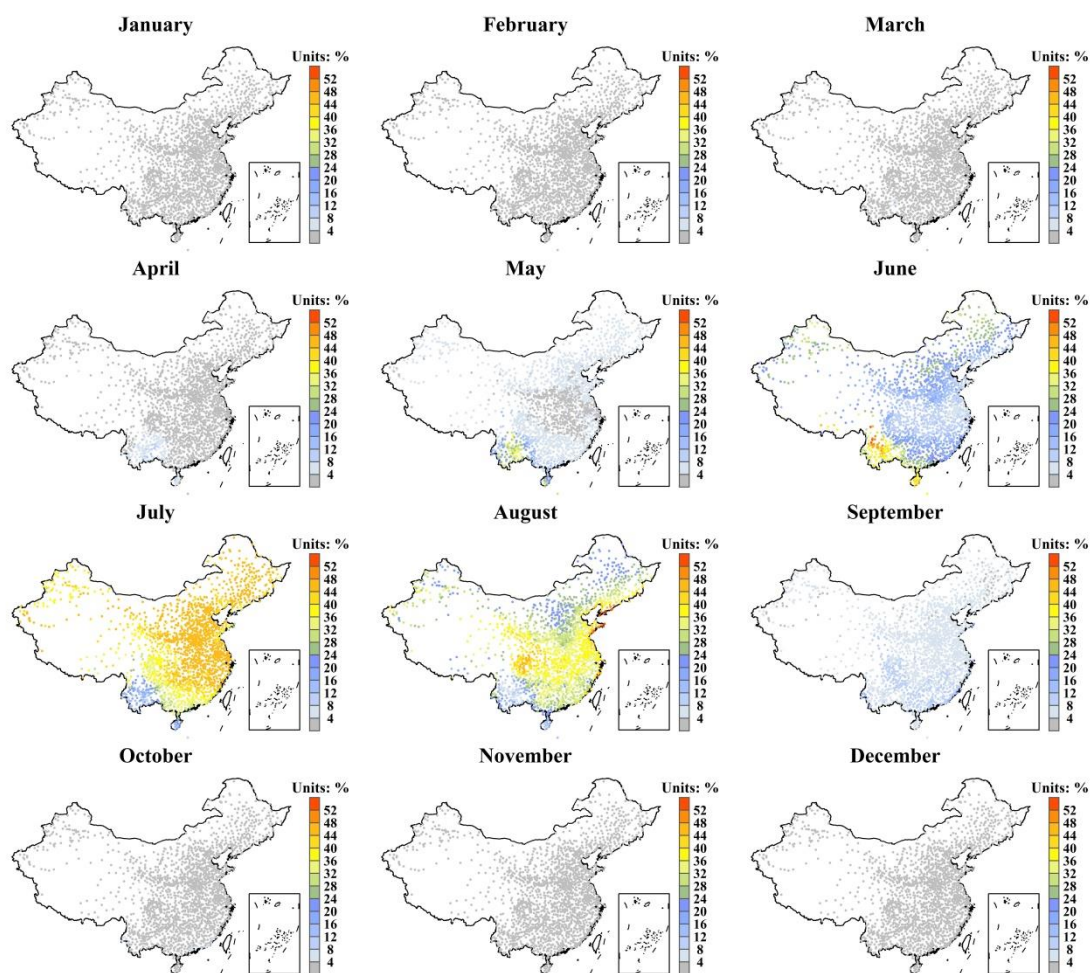


Figure S1. Percentage of HI-based HW (HW_HI) identified in each month during 1961–2019.

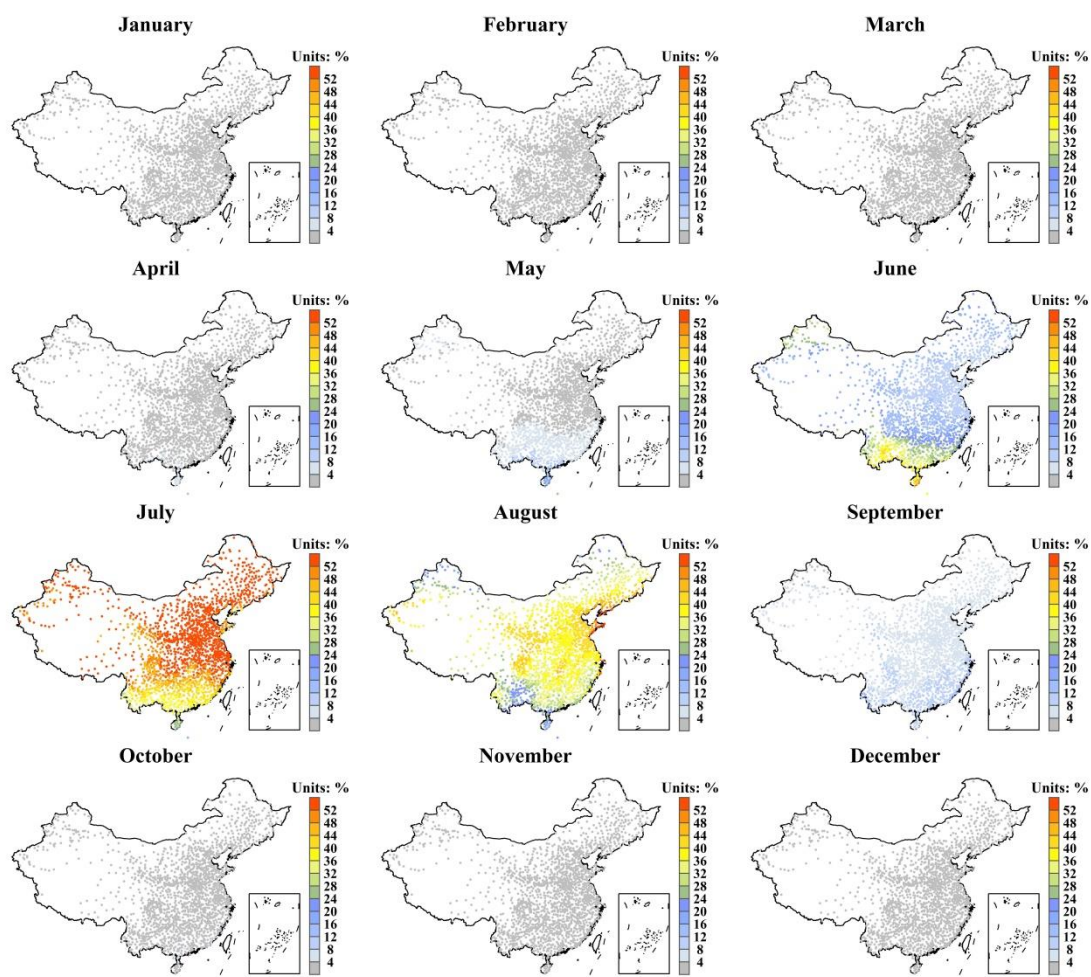


Figure S2. The same as Figure S1, but for TW-based HW (HW_TW).

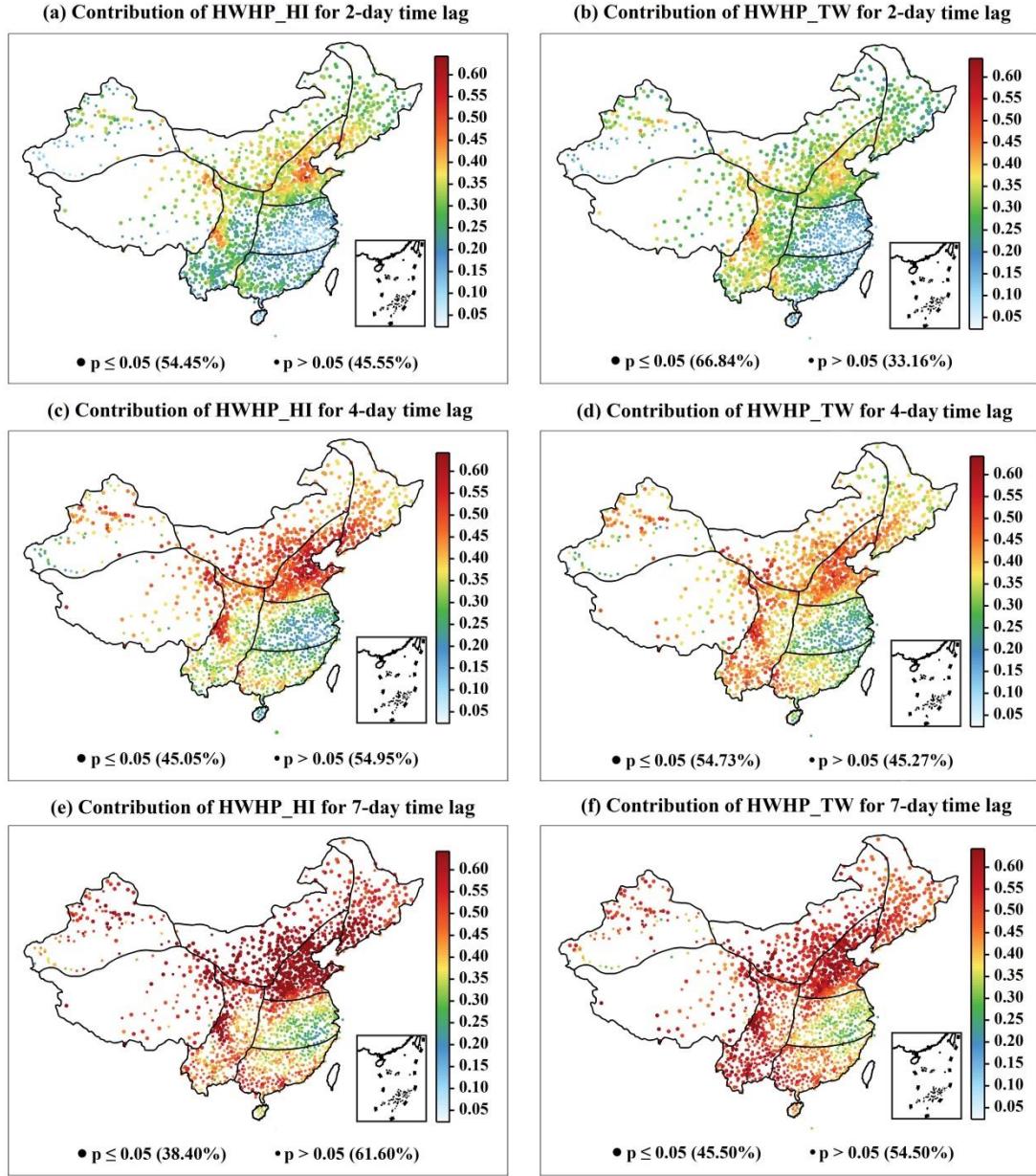


Figure S3. Fractional contributions of heatwave-heavy precipitation (HWP) events to total heavy precipitation (HP) events in summer during 1961–2019. The heat index (wet-bulb temperature)-based HWP events are noted as HWHP_HI (HWHP_TW). Colored dots indicate the fractional contributions, and large dots indicate that lagged coincidence between HW and HP is significantly different from a Poisson process (i.e. $p < 0.05$). The time lag between HWs and HP is set as 2, 4, and 7 days, respectively.

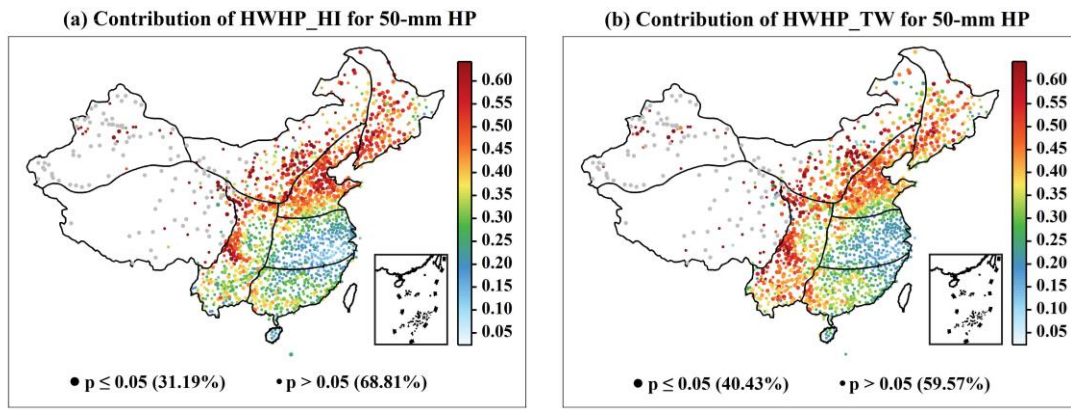


Figure S4. The same as Figure S3 but for HP events exceeding 50 mm. The time lag between HWs and HP is set as 3 days.

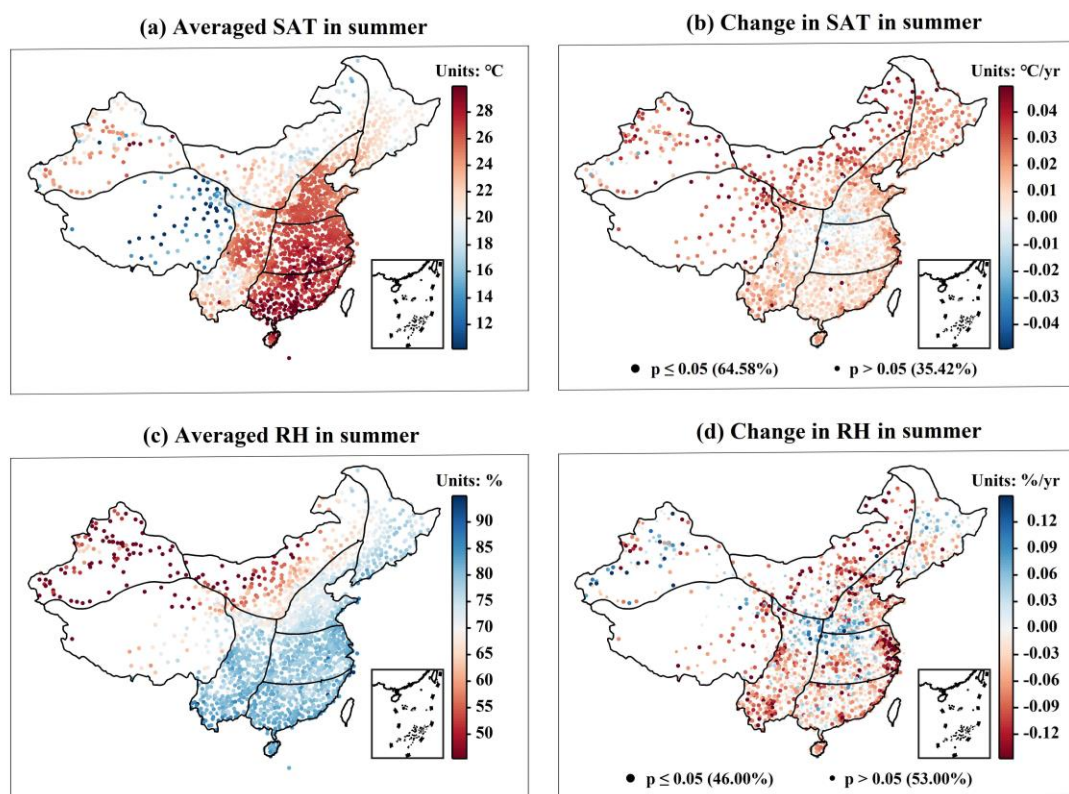


Figure S5. Mapping shows average surface air temperature (a) and relative humidity (c) in summer over China, and their trends during 1961–2019 (b and d, respectively).