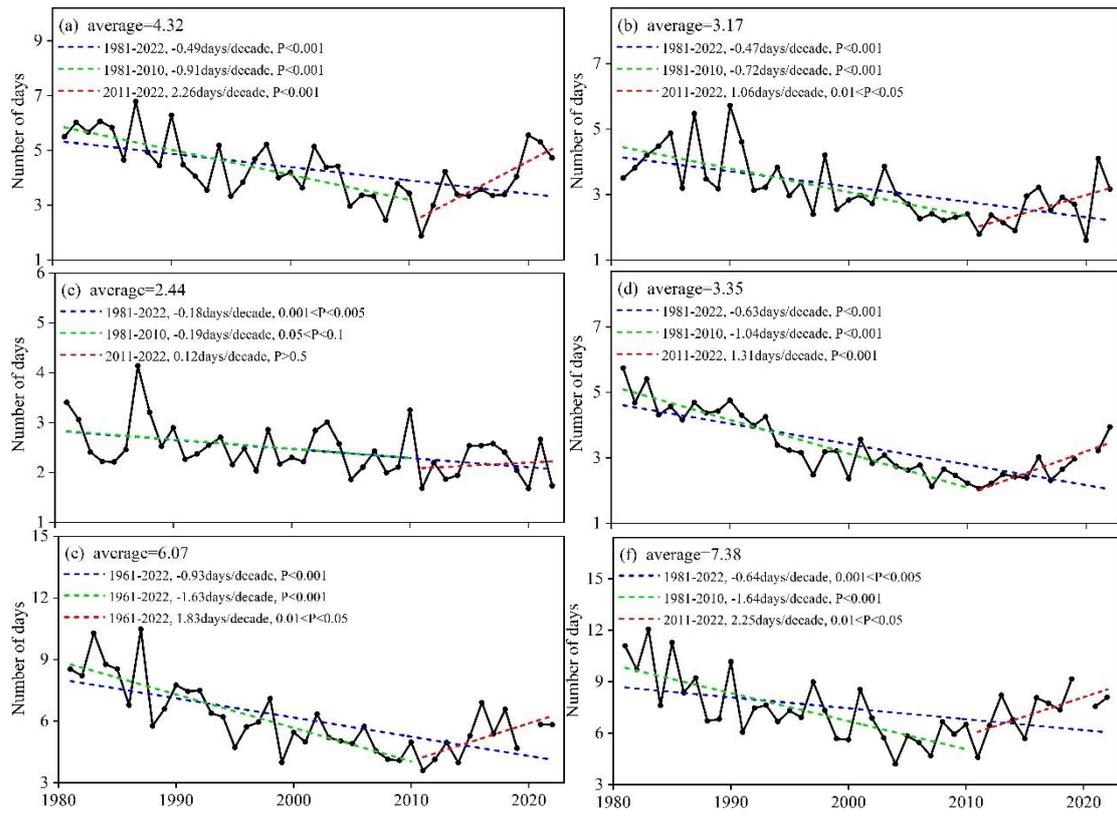
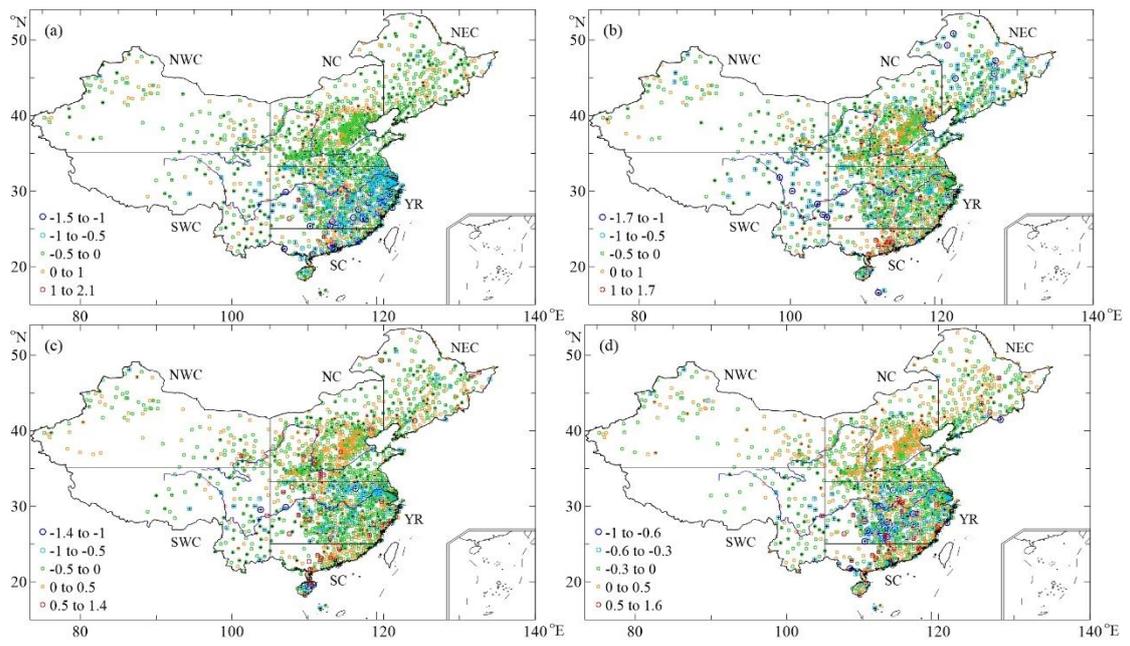


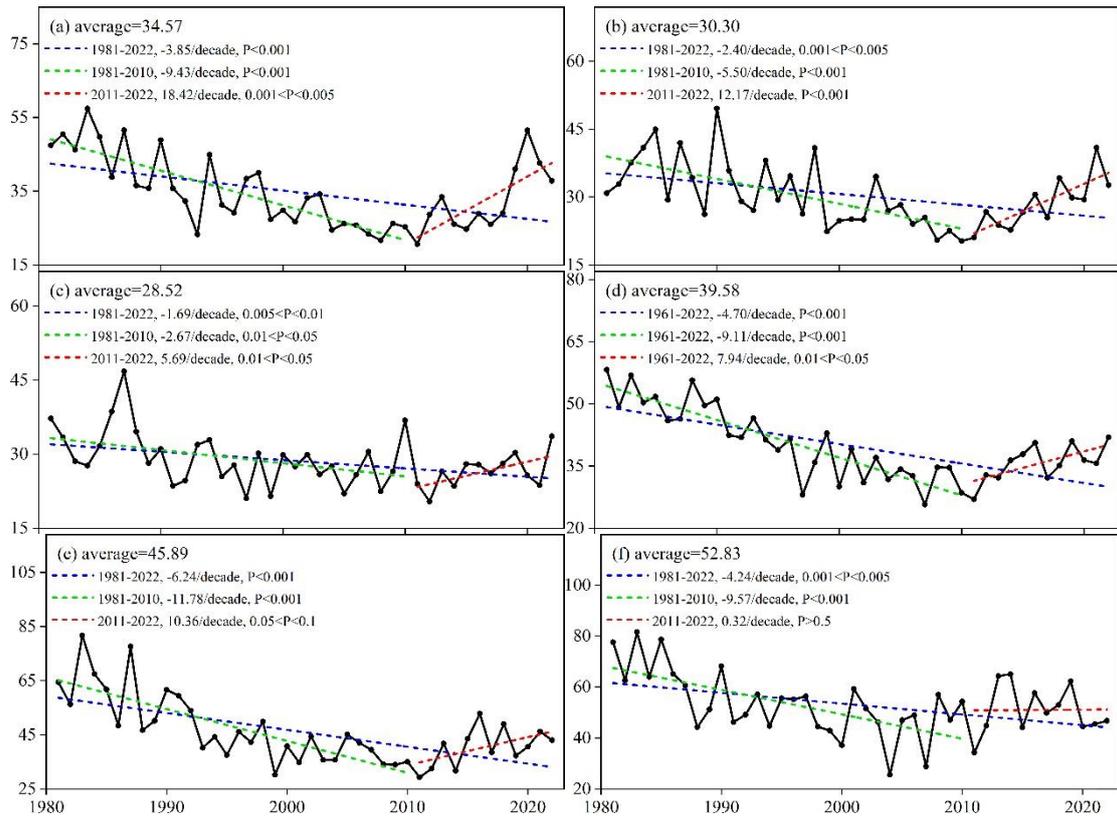
**Figure S1.** Distribution of annual average daily extreme wind speed (Units: metre per second) and daily extreme precipitation (Units: mm) thresholds at each station in mainland China. (a, b: 85<sup>th</sup> percentiles; c, d: 90<sup>th</sup> percentiles; e, f: 95<sup>th</sup> percentiles; g, h: 98<sup>th</sup> percentiles)



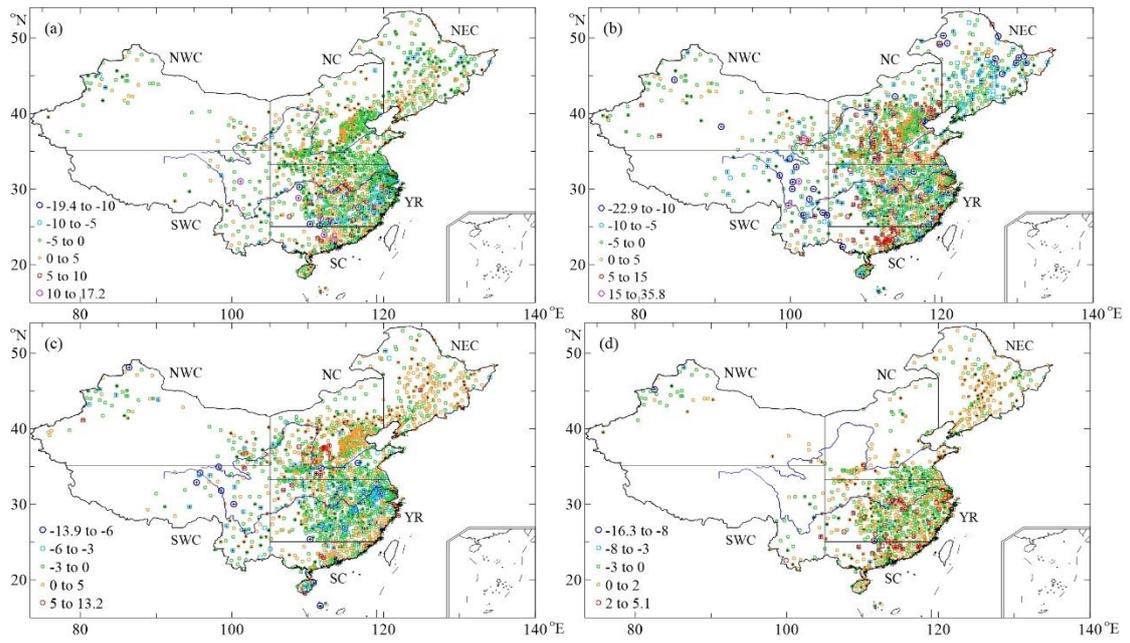
**Figure S2.** Inter-annual changes of regional CWPDs frequencies (W85∩P85) during 1981–2022. (a: NEC; b: NC; c: NWC; d: SWC; e: YR; f: SC)



**Figure S3.** Spatial trends (Units: days per decade) of seasonal CWP frequencies in mainland China during 1981–2022. Positive sign denotes the trend significant at 95% confidence level. (a: Spring; b: Summer; c: Autumn; d: Winter)



**Figure S4.** Inter-annual changes of regional CWPDs intensities (W85∩P85) during 1981–2022. (a): NEC; b: NC; c: NWC; d: SWC; e: YR; f: SC)



**Figure S5.** Spatial trends (Units: unitless per decade) of seasonal CWPDs ( $W85 \cap P85$ ) intensities in mainland China during 1981–2022. Positive sign denotes the trend significant at 95% confidence level. (a: Spring; b: Summer; c: Autumn; d: Winter)