Supplemental Material

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Changes in Extreme Precipitation Accumulations during the Warm Season over Continental China

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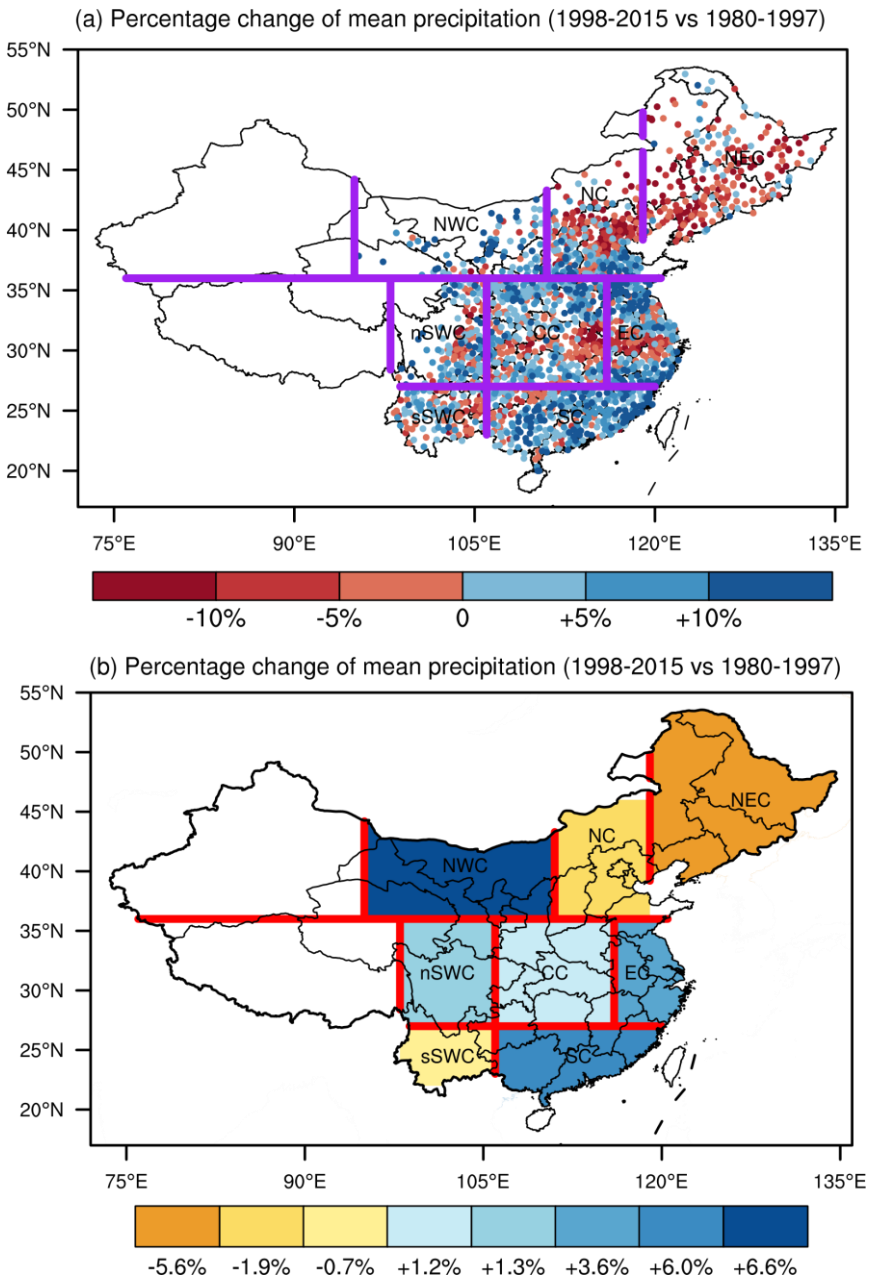

Figure S1. Percentage change of mean daily precipitation at each station (a) and each climate division (b) between 1998-2015 and 1980-1997 (1998-2015 minus 1980-1997). The color box of the legend in (a) represents the range within the adjacent two labels while the color box of the legend in (b) represents the label at the center of the color box.

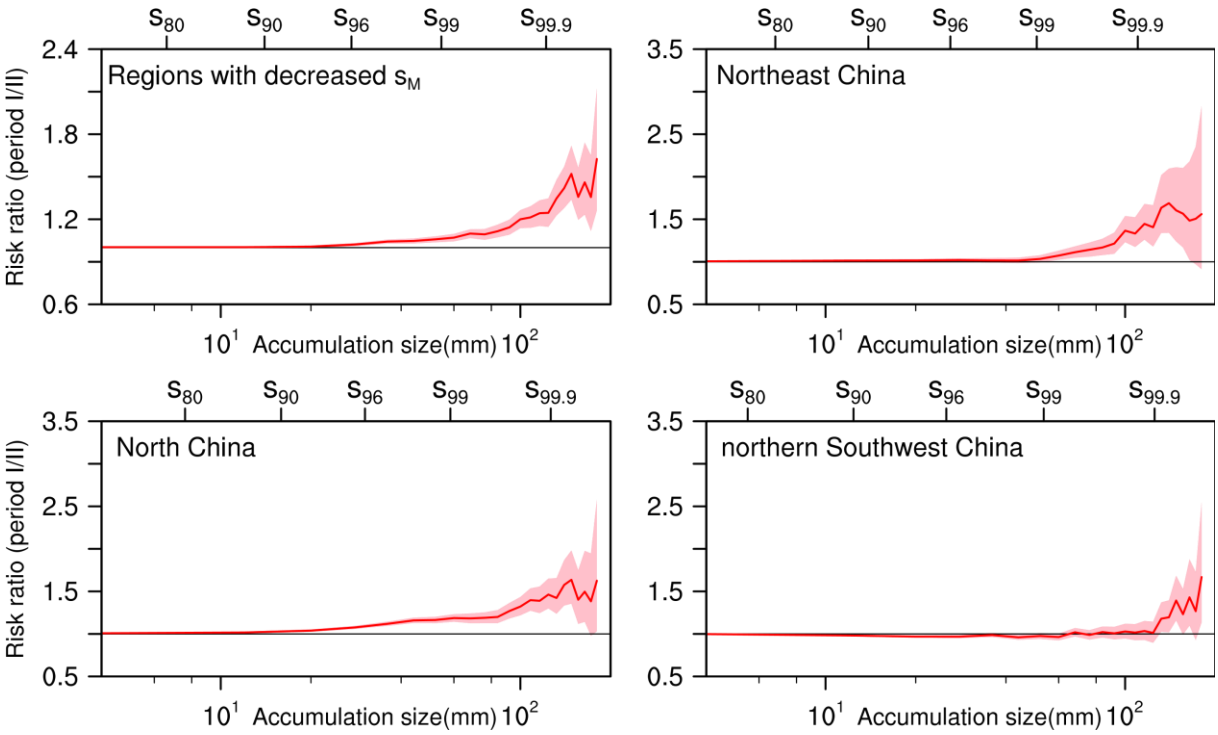

Figure S2. Accumulation risk ratios (conditioned on event occurrence), calculated from the reciprocal of (8), for the three regions with decreased s_M. Note that the first one in the first row is obtained by taking the three regions with decreased s_M as a whole. The solid red line represents the risk ratios from observations, and the pink shadow represents the 5th-95th percentiles based on 1000 bootstrap (with replacement) realizations. The top x-axis is labeled with the position of different accumulation percentiles.

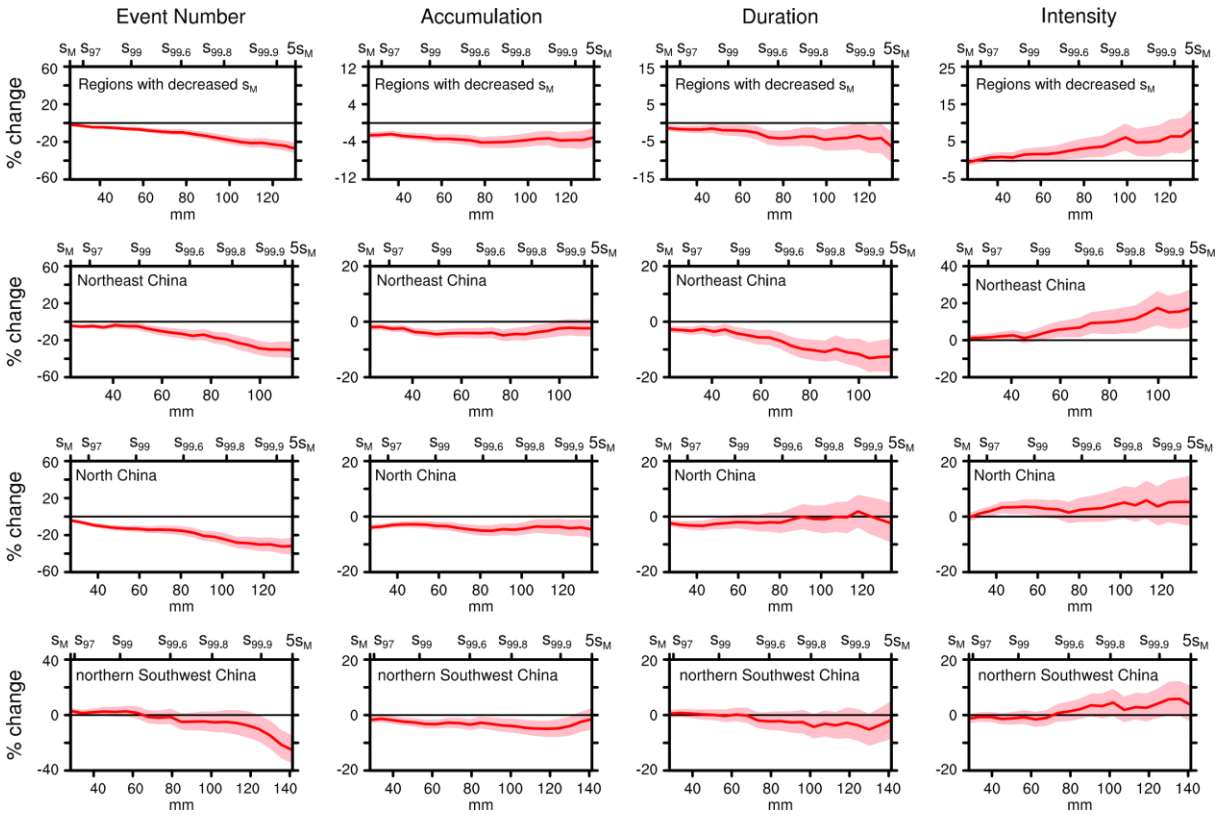

Figure S3. Changes in (first column) the number of events, (second column) mean accumulation, (third column) mean event duration and (fourth column) mean event intensity of extreme accumulation events larger than a regional threshold ranging from s_M to $5s_M$ between 1998-2015 and 1980-1997 for three regions with decreased s_M, namely, (second row) Northeast China, (third row) North China, (fourth row) northern Southwest China. The first row is obtained by taking the three regions with decreased s_M as a whole. It is worth noting that the left end of the x-axis corresponds to s_M and the right most corresponds to $5s_M$. s_M used here is calculated by using the whole period 1980-2015. The solid red line represents the changes from observations, and the pink shadow represents the 5th-95th percentiles based on 1000 bootstrap (with replacement) realizations. The top x-axis is labeled with the position of different accumulation percentiles.