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Supplement of

Impacts of climate change and climate extremes on major crops productivity in China at a global warming of 1.5 and 2.0 $^{\circ}$ C

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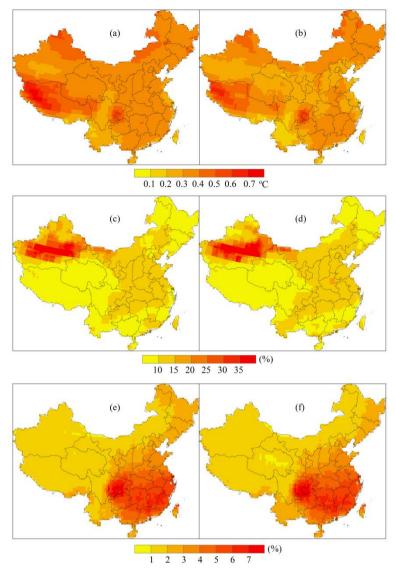


Figure S1: Standard deviation of projected changes in mean temperature (a, b), precipitation (c, d), and solar radiation (e, f) during 2106-2115 under 1.5°C warming (a, c, e) and 2.0°C warming (b, d, f) scenarios relative to 2006-2015.

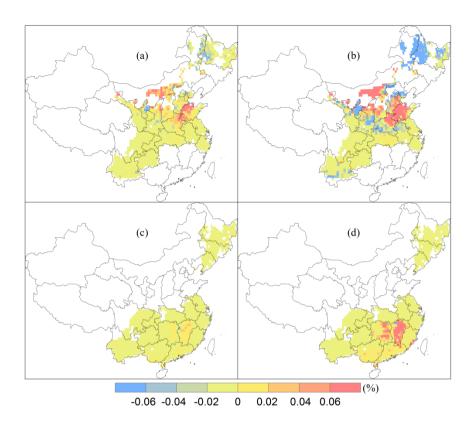


Figure S2. (a) Differences between Fig. 7a and Fig. 7c; (b) Differences between Fig. 7b and Fig. 7d; (c) Differences between Fig. 7e and Fig. 7g; (d) Differences between Fig. 7f and Fig. 7h.

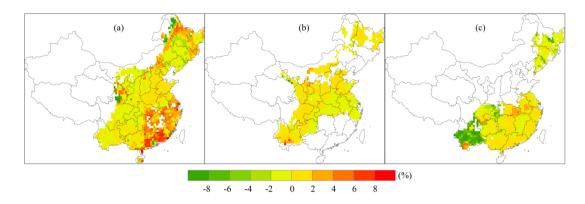


Figure S3. Changes in variation coefficient of simulated yields between 1.5°C and 2.0°C warming scenarios for maize (a), wheat (b) and rice (c).

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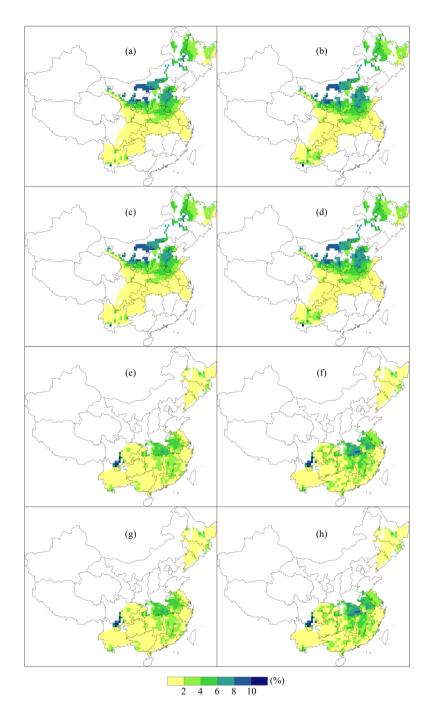


Figure S4. Standard deviation of changes in projected yield loss caused by heat stress for wheat (a, b, c, d) and maize (e, f, g, h) during 2106-2115 under 1.5°C warming (a, c, e, g) and 2.0°C warming scenarios (b, d, f, h) relative to 2006-2015, without (a, b, e, f) and with (c, d, g, h) CO₂ fertilization effect.

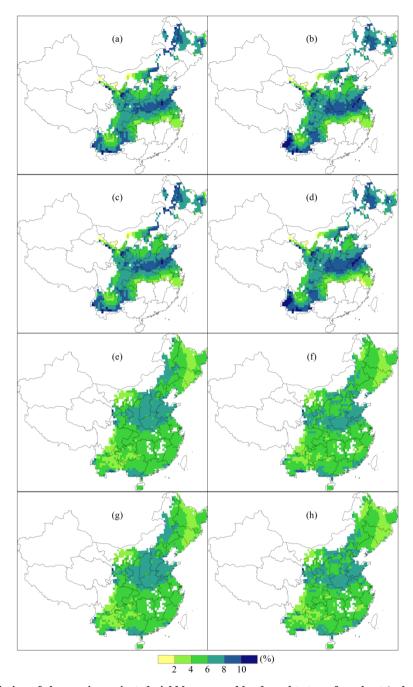


Figure S5. Standard deviation of changes in projected yield loss caused by drought stress for wheat (a, b, c, d) and maize (e, f, g, h) during 2106-2115 under 1.5°C warming (a, c, e, g) and 2.0°C warming scenarios (b, d, f, h) relative to 2006-2015, without (a, b, e, f) and with (c, d, g, h) CO₂ fertilization effect.