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Supplement of

Projected climate change in Fennoscandia – and its relation to ensemble spread and global trends

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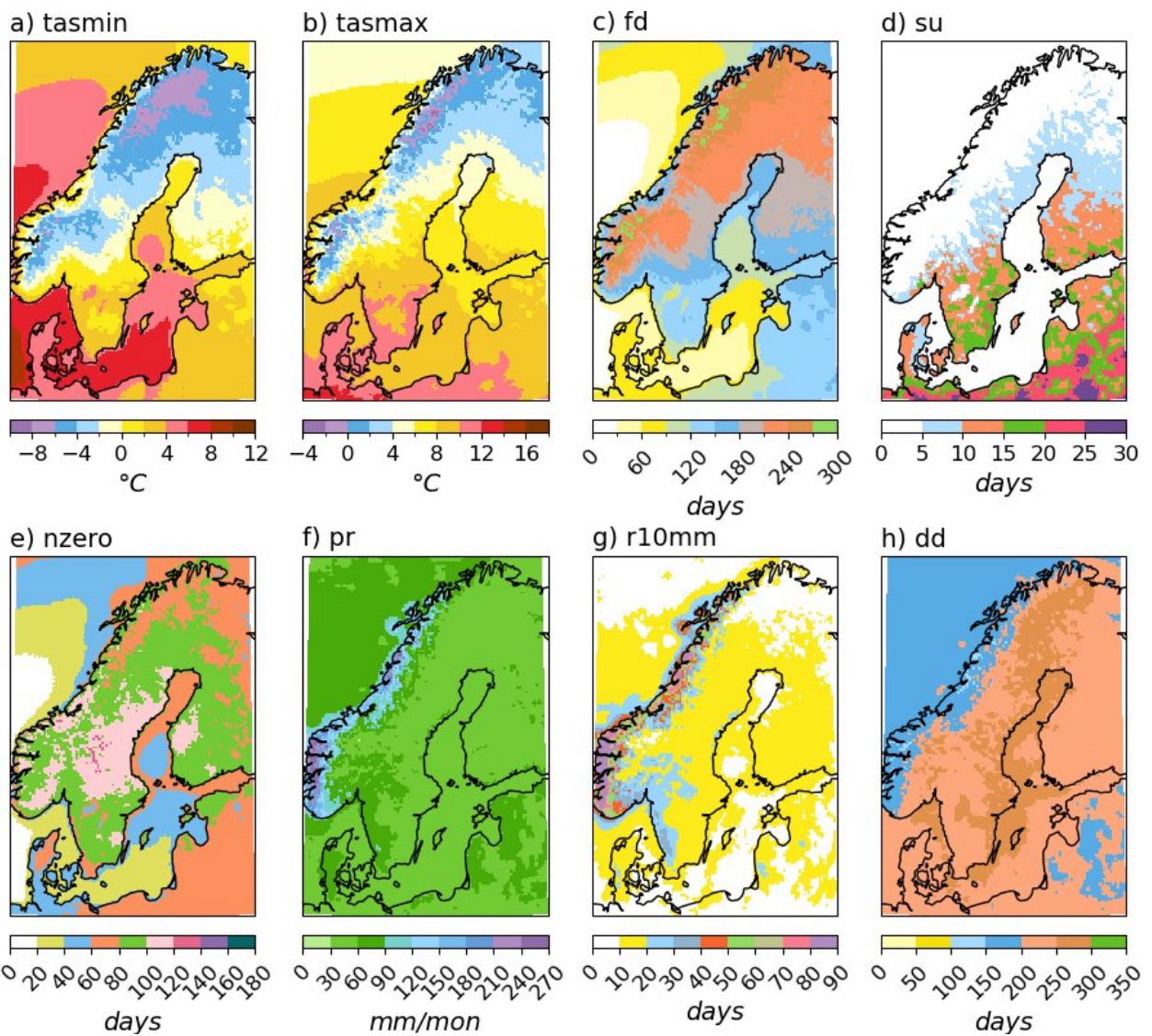


Figure S1 Annual values in 1971-2000 according to SMHI-GridClim climatology. The maps show ensemble means of a) daily minimum temperature (tasmin, °C), b) daily maximum temperature (tasmax, °C), c) number of frost days (fd, days), d) number of summer days (su, days), e) number of days with zero crossings (nzero, days), f) mean precipitation (pr, mm/day), g) number of days with heavy precipitation (r10mm, days) and h) dry days (dd, days). See table 1 for definitions of the indicators.

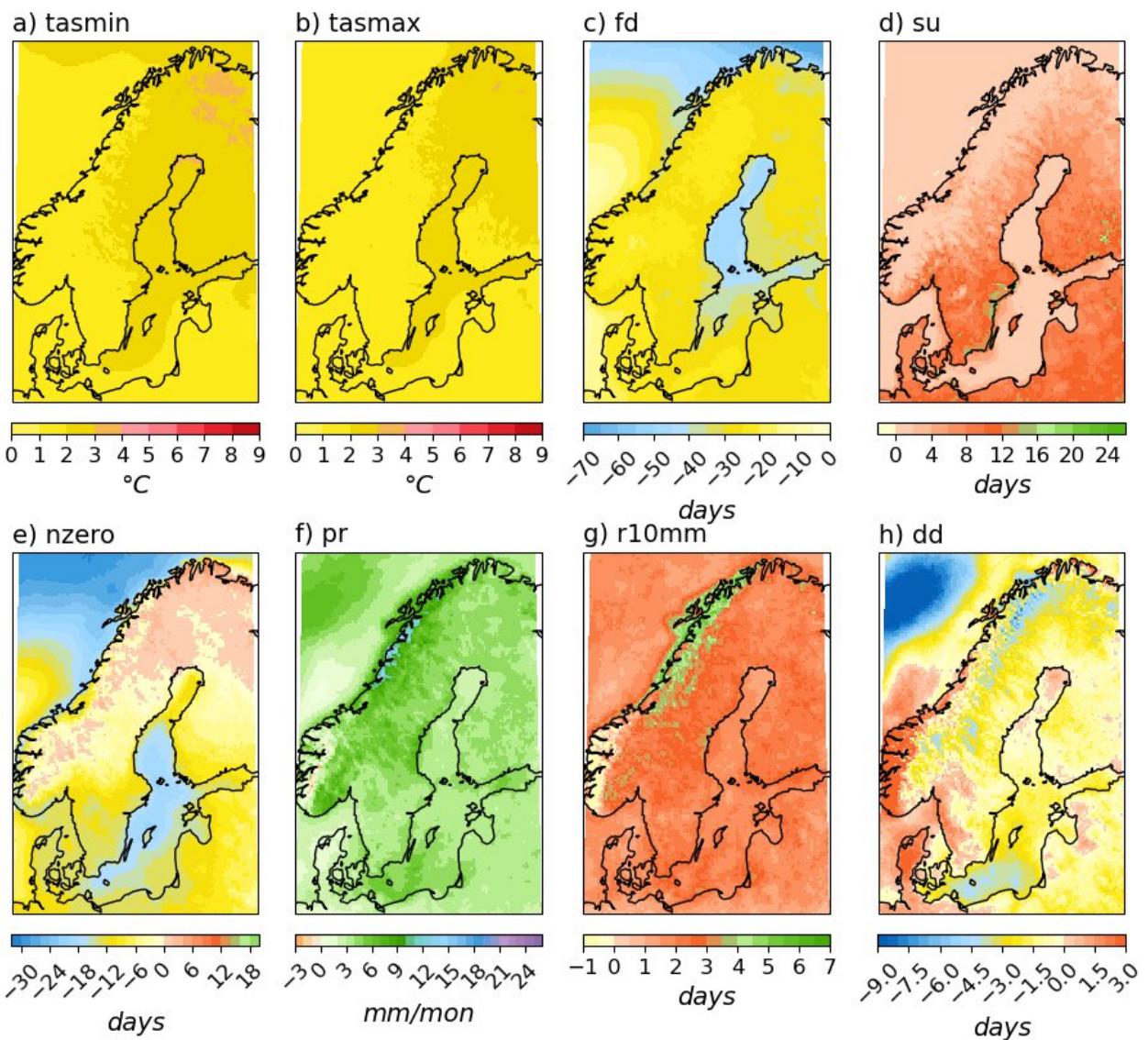


Figure S2 Annual climate change anomalies in the CORDEX RCMs between 1971-2000 and 2071-2100 according to scenario RCP2.6. The maps show ensemble means of a) daily minimum temperature (tasmin, °C), b) daily maximum temperature (tasmax, °C), c) number of frost days (fd, days), d) number of summer days (su, days), e) number of days with zero crossings (nzero, days), f) mean precipitation (pr, mm/day), g) number of days with heavy precipitation (r10mm, days) and h) dry days (dd, days). See table 1 for definitions of the indicators.

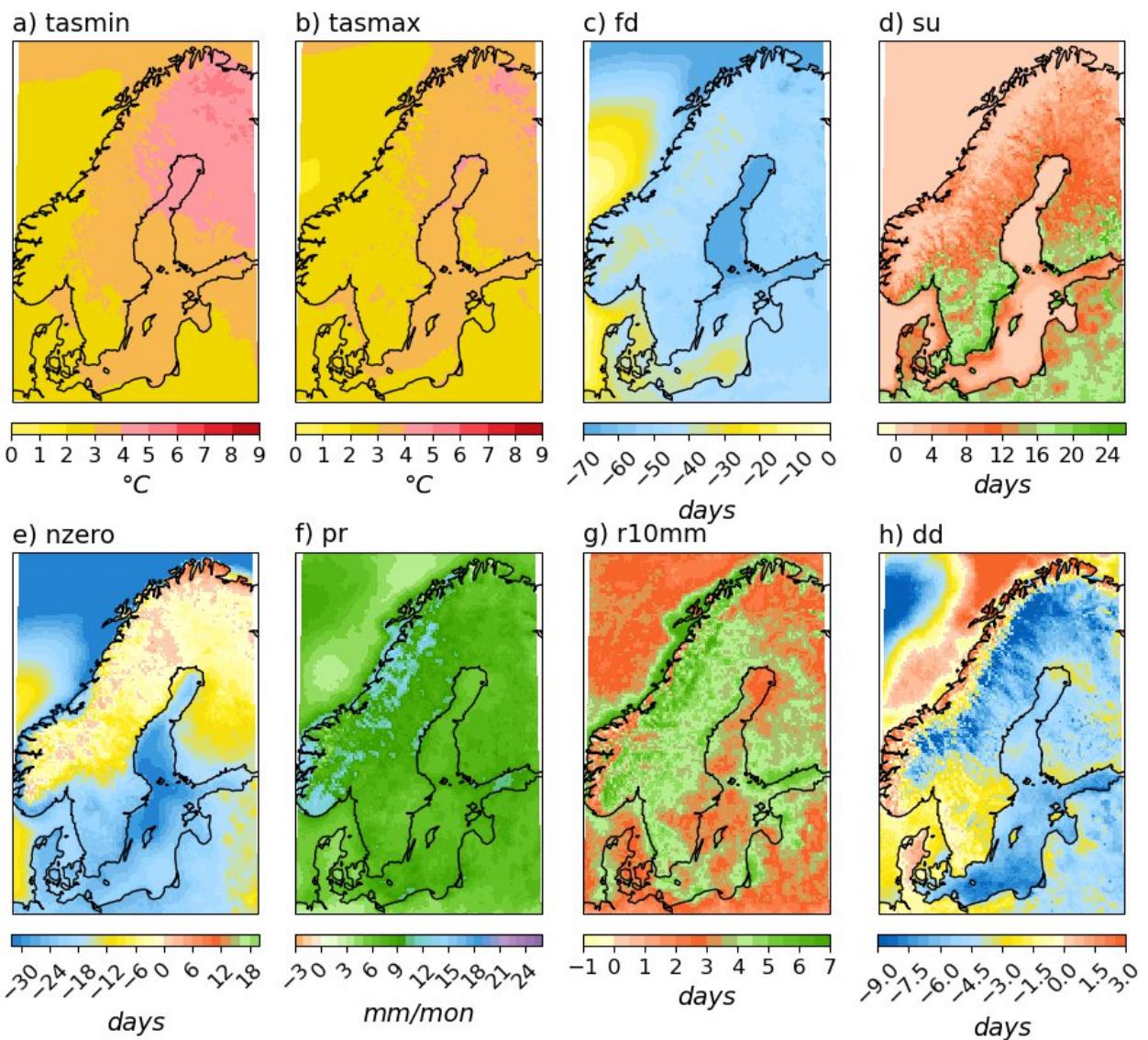


Figure S3 Same as S1, but for RCP4.5

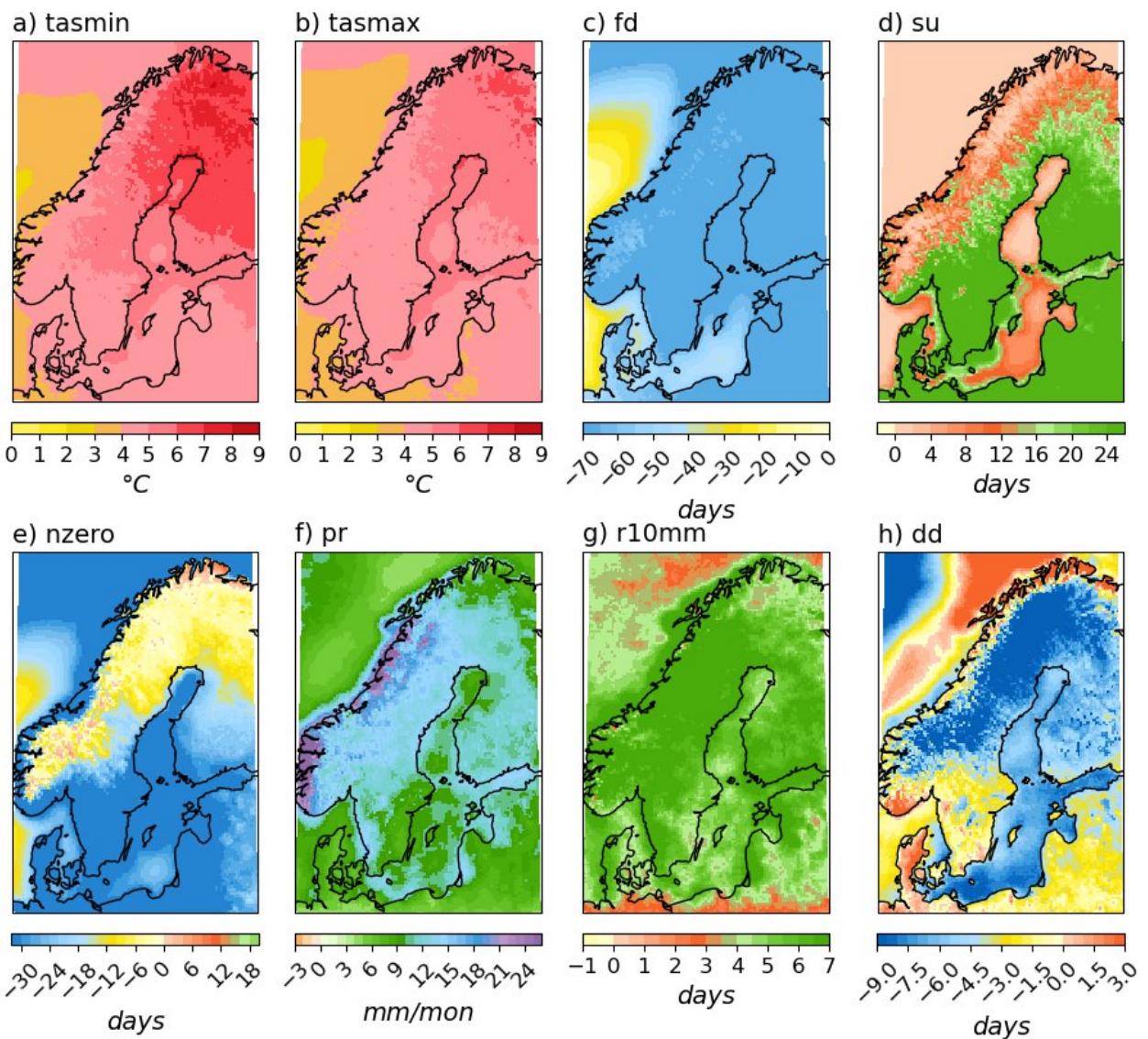


Figure S4 Same as S1, but for RCP8.5

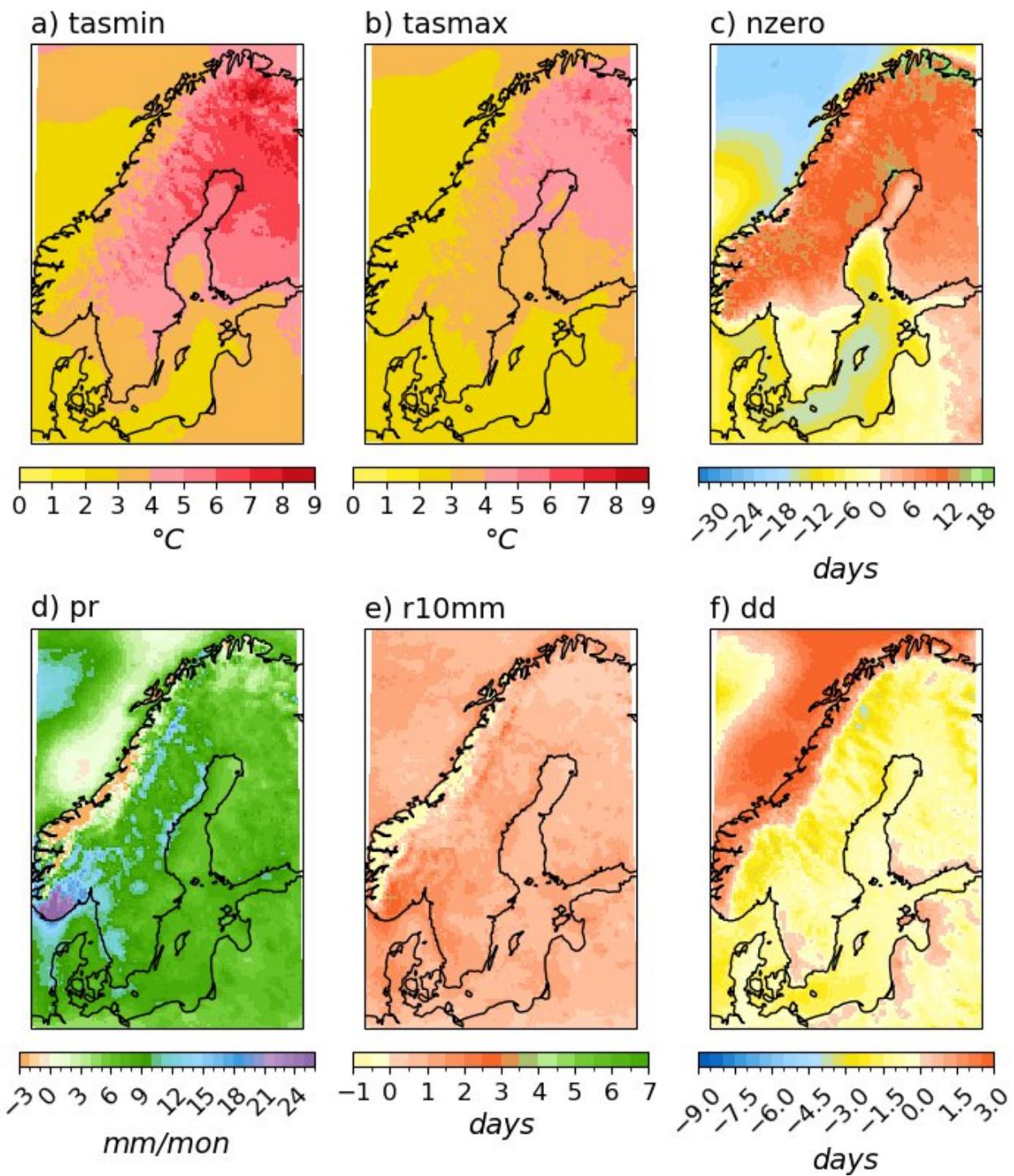


Figure S5 Climate change anomalies in the CORDEX RCMs in winter (DJF) between 1971-2000 and 2071-2100 according to scenario RCP4.5. The maps show ensemble means of a) daily minimum temperature (tasmin, $^{\circ}\text{C}$), b) daily maximum temperature (tasmax, $^{\circ}\text{C}$), c) number of days with zero crossings (nzero, days), d) mean precipitation (pr, mm/day), e) number of days with heavy precipitation (r10mm, days) and f) dry days (dd, days). See table 1 for definitions of the indicators.

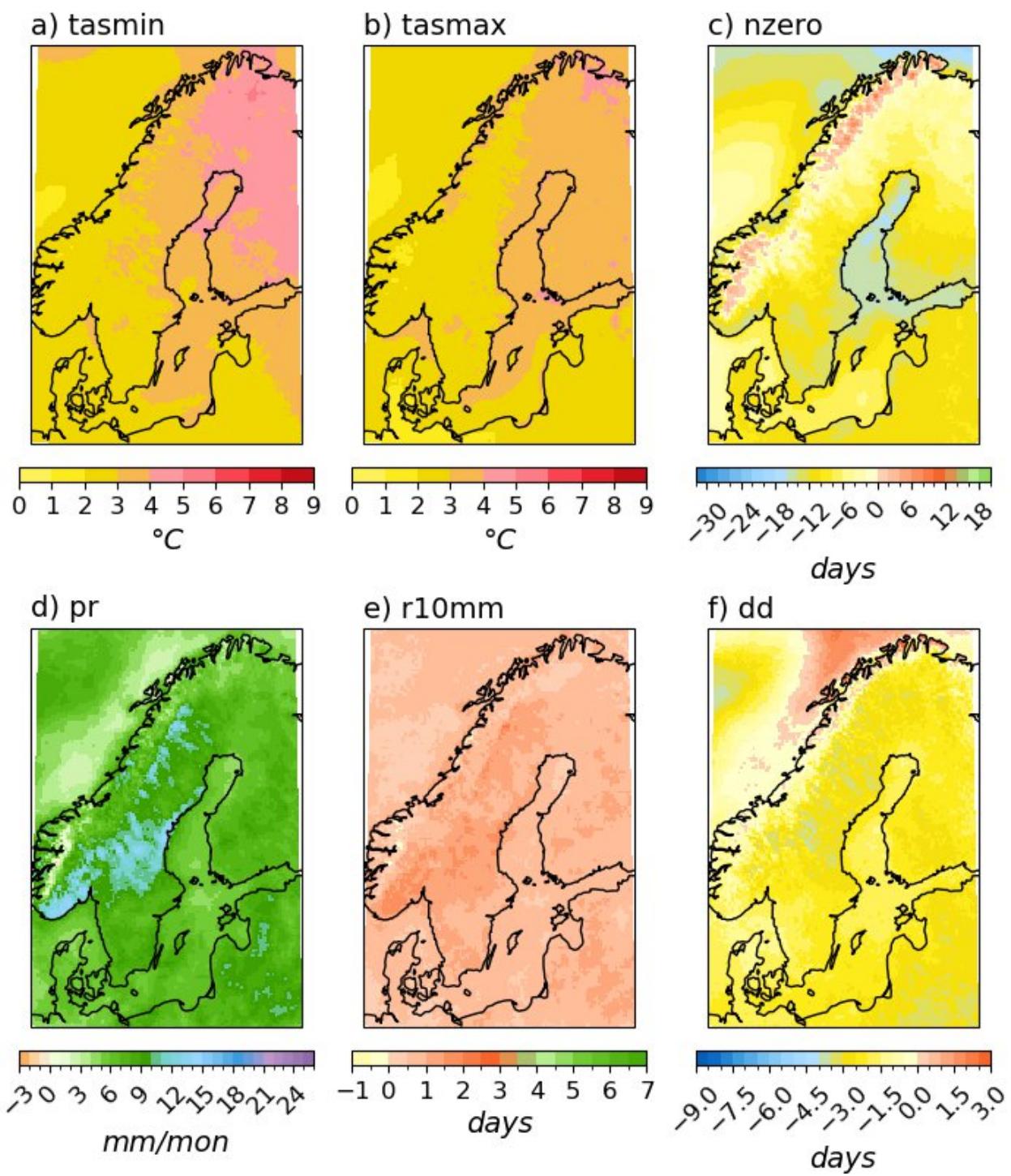


Figure S6 Same as Fig S5 but for spring (MAM).

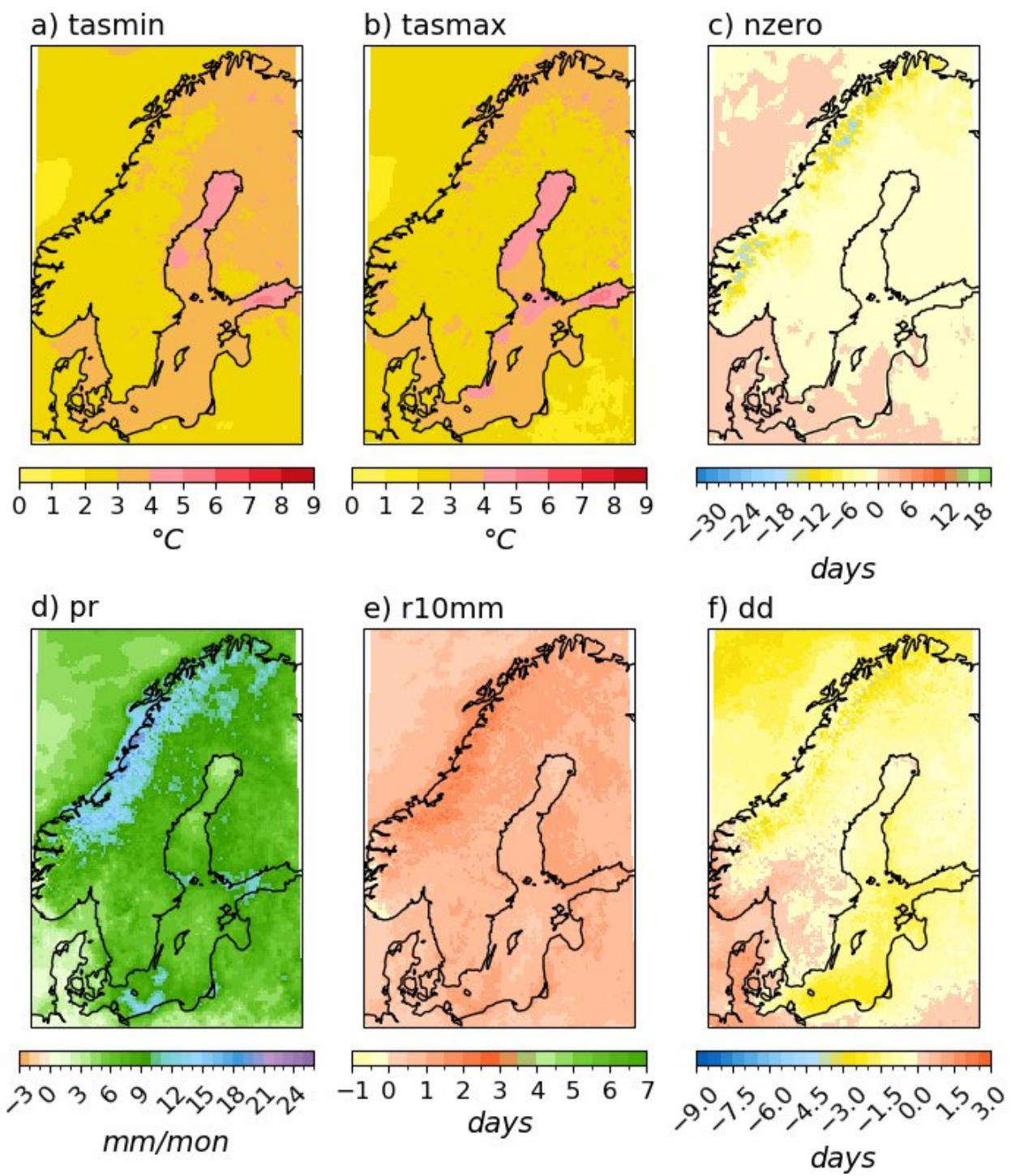


Figure S7 Same as Fig S5 but for summer (JJA).

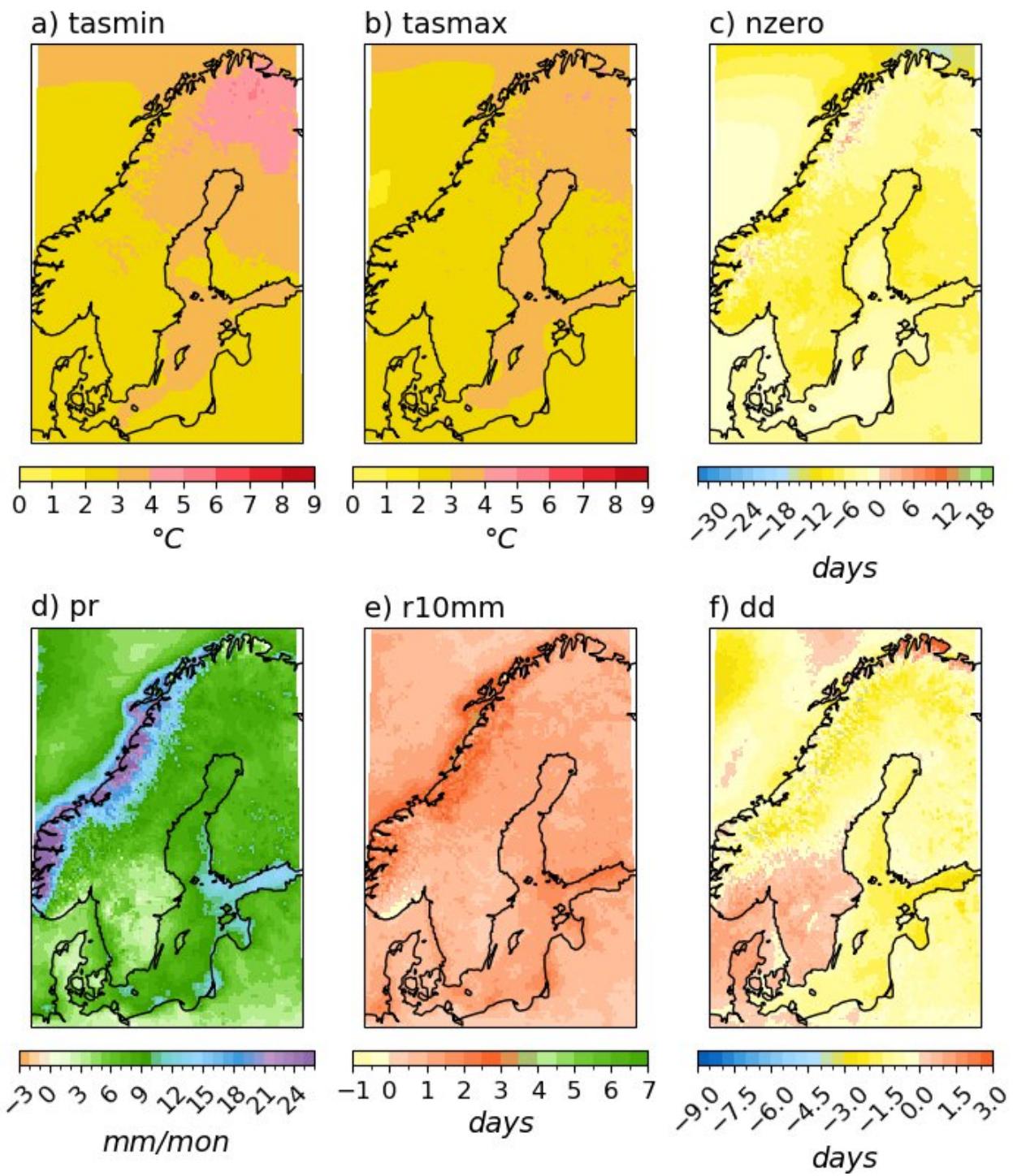


Figure S8 Same as Fig S5 but for autumn (SON).

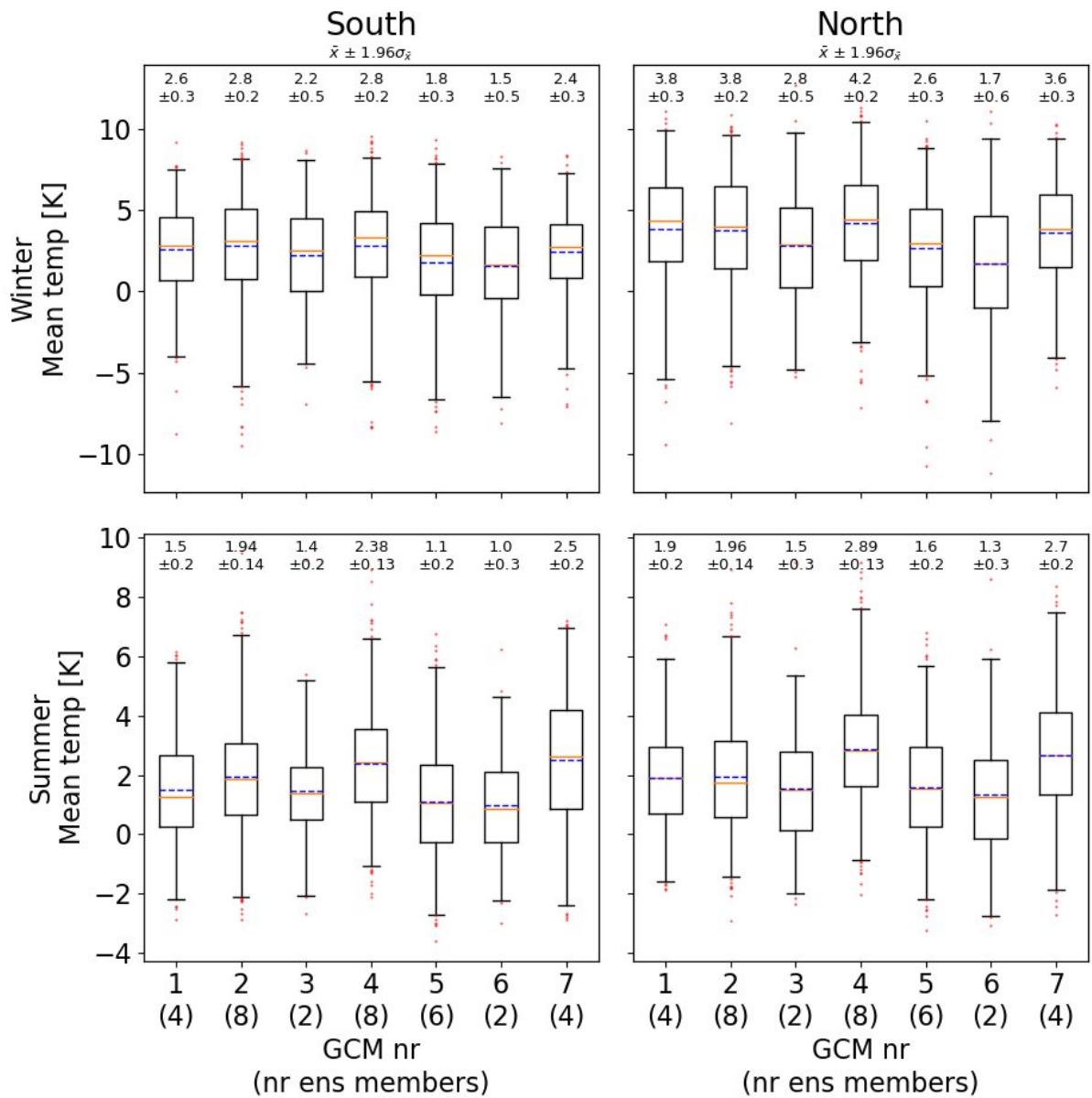


Figure S9 Temperature differences in the RCM17 ensemble between the period 1971-2000 and GWL2 for winter (top row) and summer (bottom row) in southern Sweden (left) and northern Sweden (right). Numbers indicate sub-ensemble numbers, with the number of members in parenthesis.

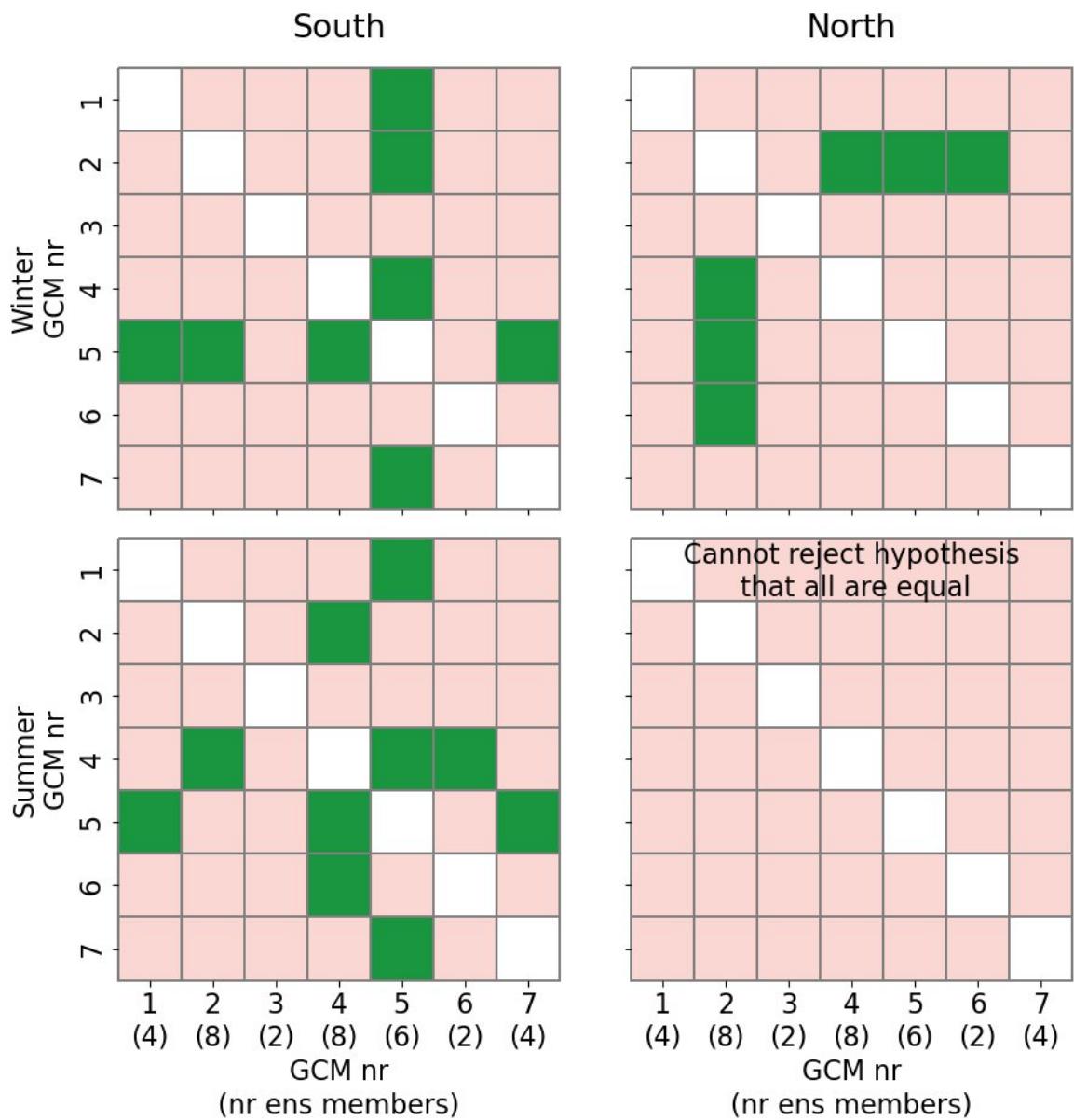


Figure S10 Matrix of significant differences in precipitation (pr) between GCM-based sub-ensembles. Green colours indicate significant differences between two sub-ensembles and pink non-significant differences. White colours indicate that an ensemble is compared with itself. Numbers indicate sub-ensemble numbers, with the number of members in parenthesis.

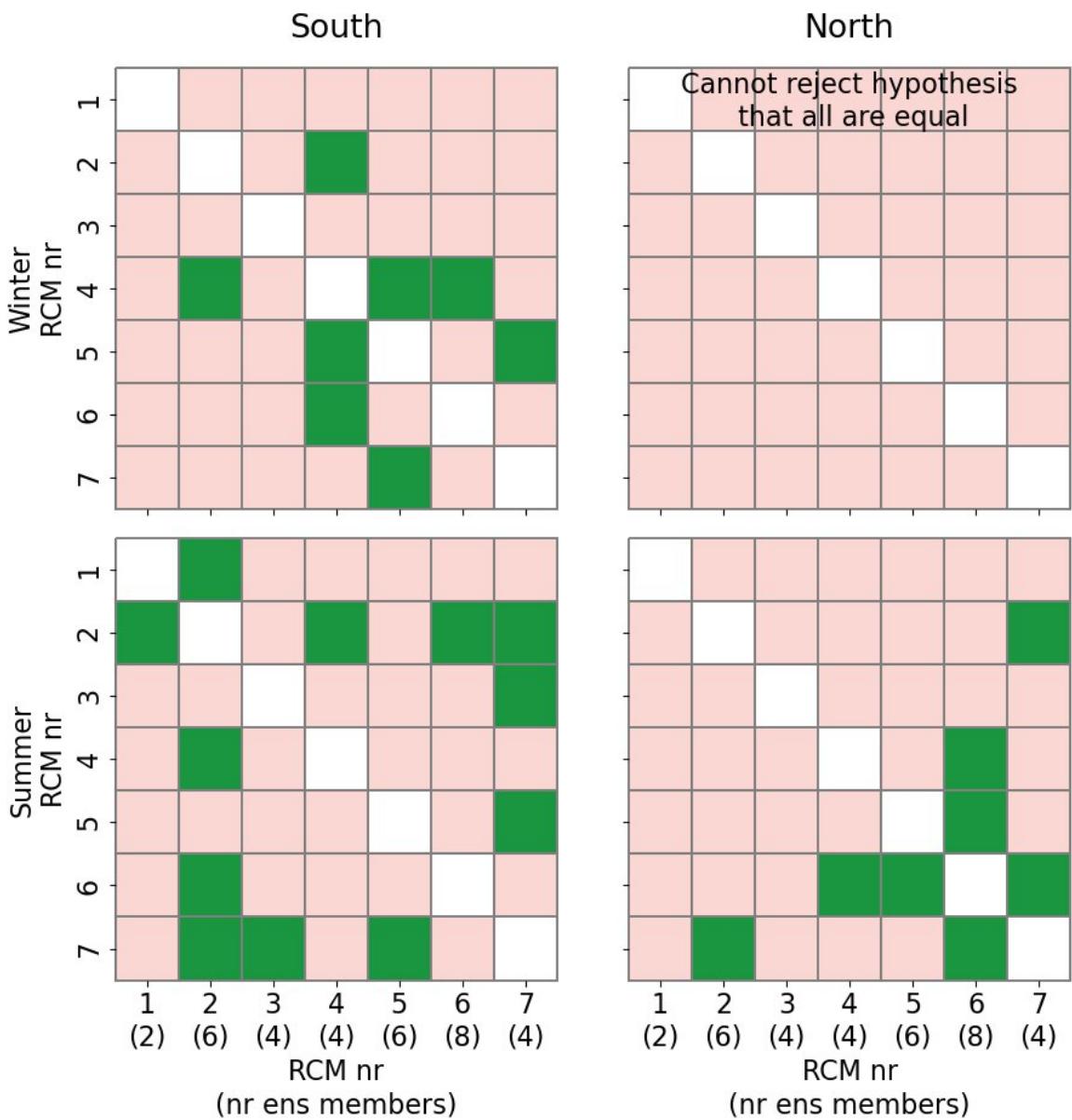


Figure S11 Matrix of significant differences in precipitation (pr) between RCM-based sub-ensembles. Green colours indicate significant differences between two sub-ensembles and pink non-significant differences. White colours indicate that an ensemble is compared with itself. Numbers indicate sub-ensemble numbers, with the number of members in parenthesis.

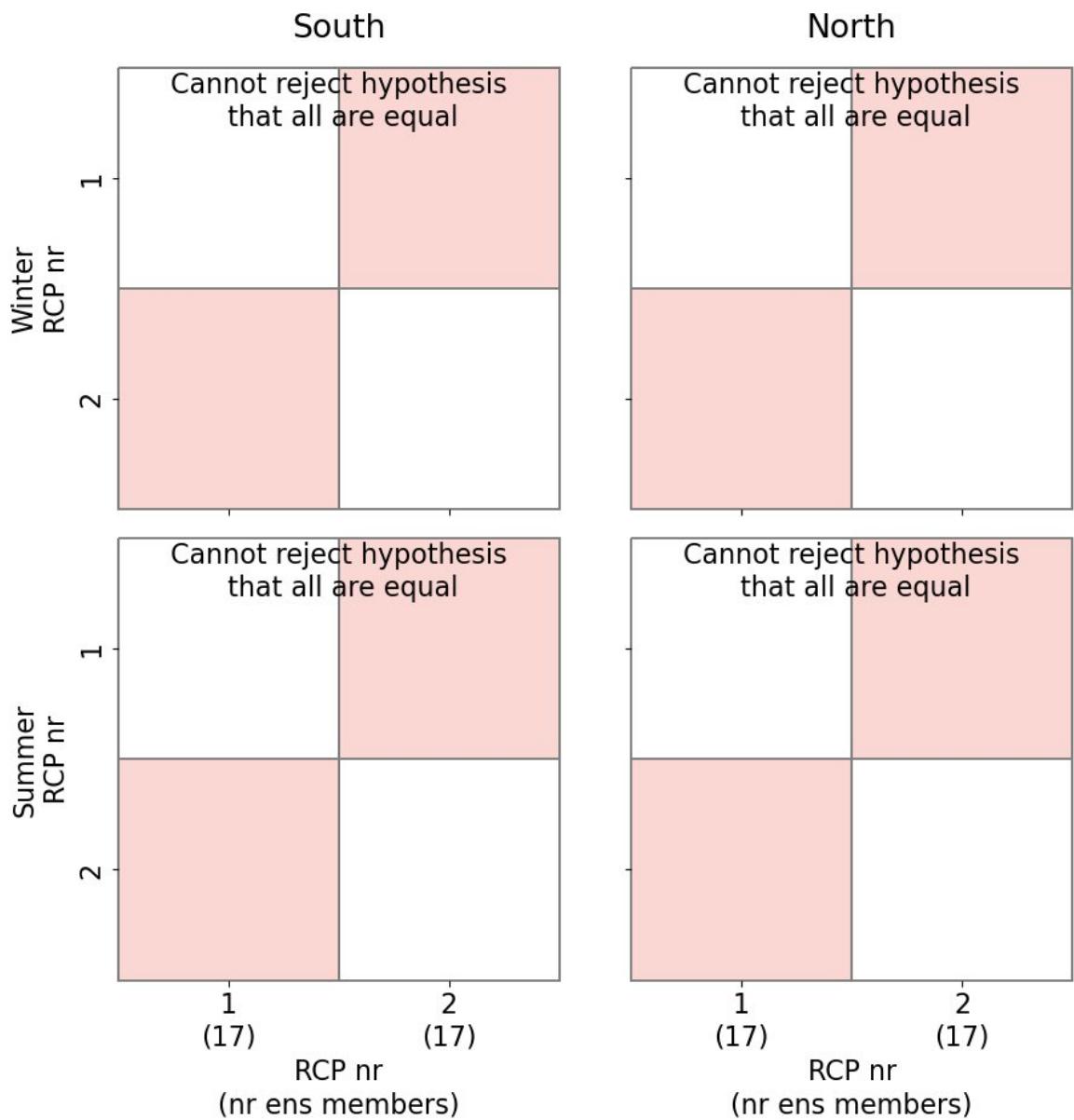


Figure S12 Matrix of significant differences in the CORDEX RCMs in tas between RCP-based sub-ensembles. Numbers indicate sub-ensemble numbers, with the number of members in parenthesis. Since there are no significant differences it is not possible to reject the hypothesis that they are all equal.