Supporting Information

Enhanced Evaluation of Sub-daily and Daily Extreme Precipitation in Norway from Convection-Permitting Models at Regional and Local Scales

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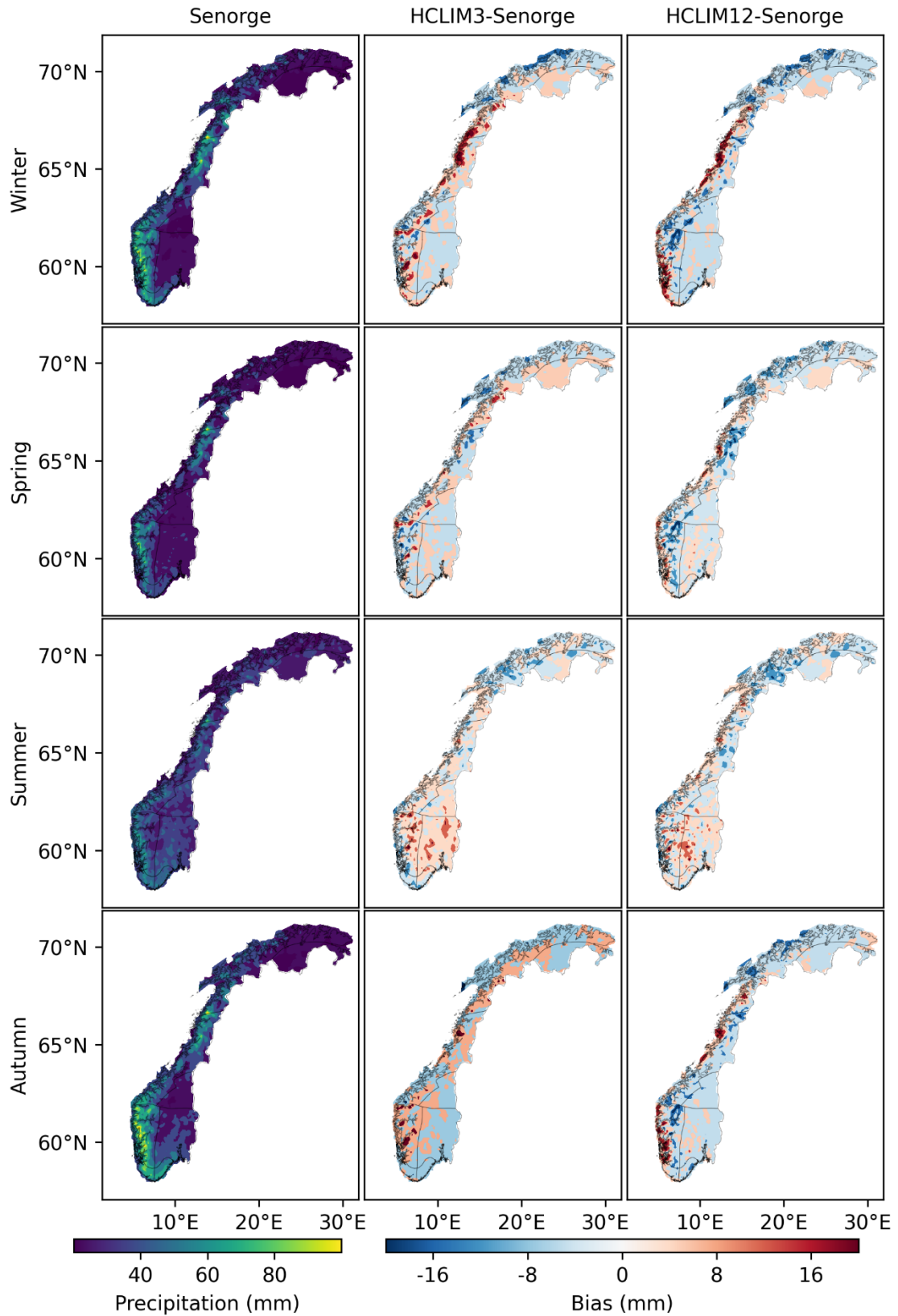*Correspondence to*: Hua Chen (chua@whu.edu.cn); Lu Li (luli@norceresearch.no)

Figure S1. Spatial distribution of seasonal maximum 1-day precipitation (Rx1d) from SeNorge and its bias with simulations (HCLIM3 and HCLIM12) during 1999-2018.
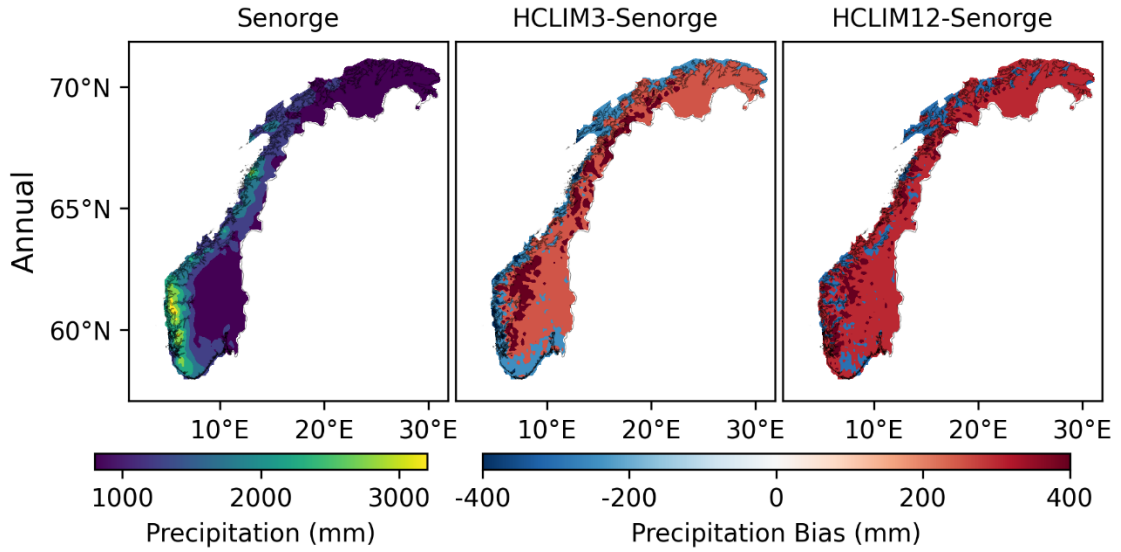
Figure S2. Spatial distribution of annual precipitation from SeNorge and its bias with simulations (HCLIM3 and HCLIM12) during 1999-2018.
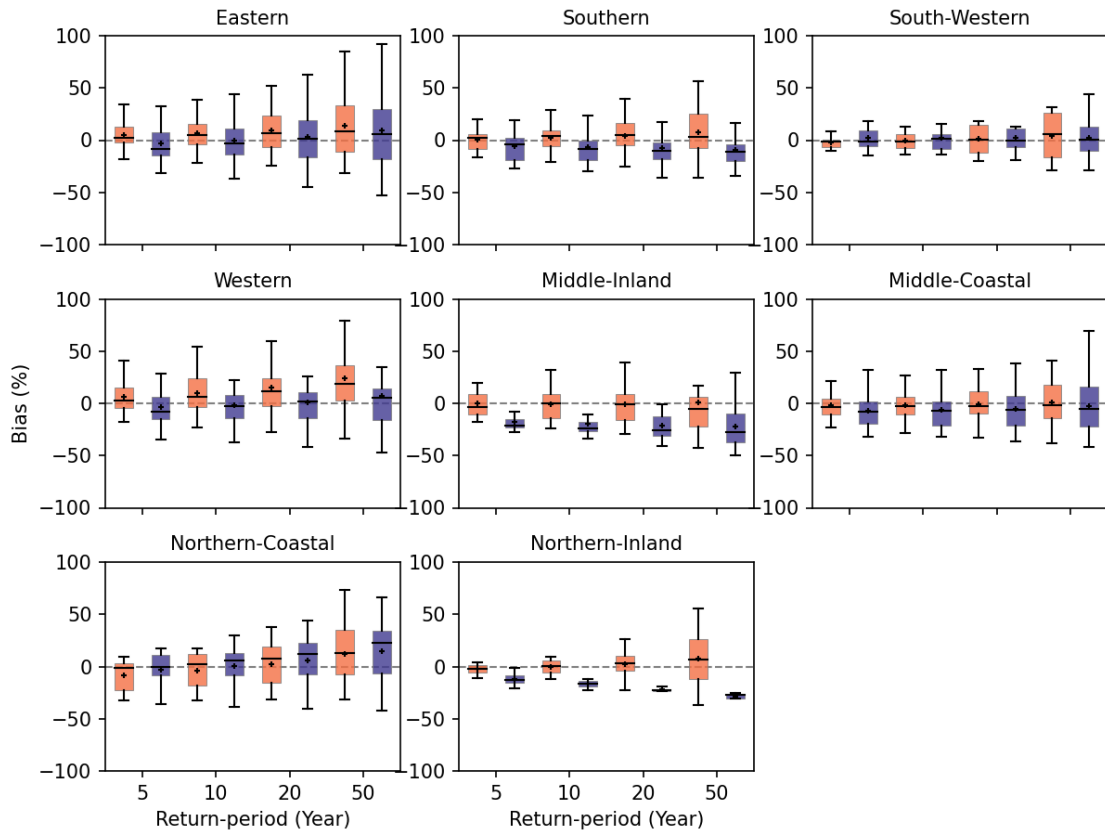

Figure S3. Bias of return-levels in the present-day for HCLIM3 and HCLIM12 relative to observation for 5-, 10-, 20-, and 50-year return periods in the 192 daily rain-gauges. Return periods of 5-, 10-, 20-, and 50-year are calculated on the basis of station-scale GEV. The bias of return-levels for 192-rain-gauges are statistics by regions.
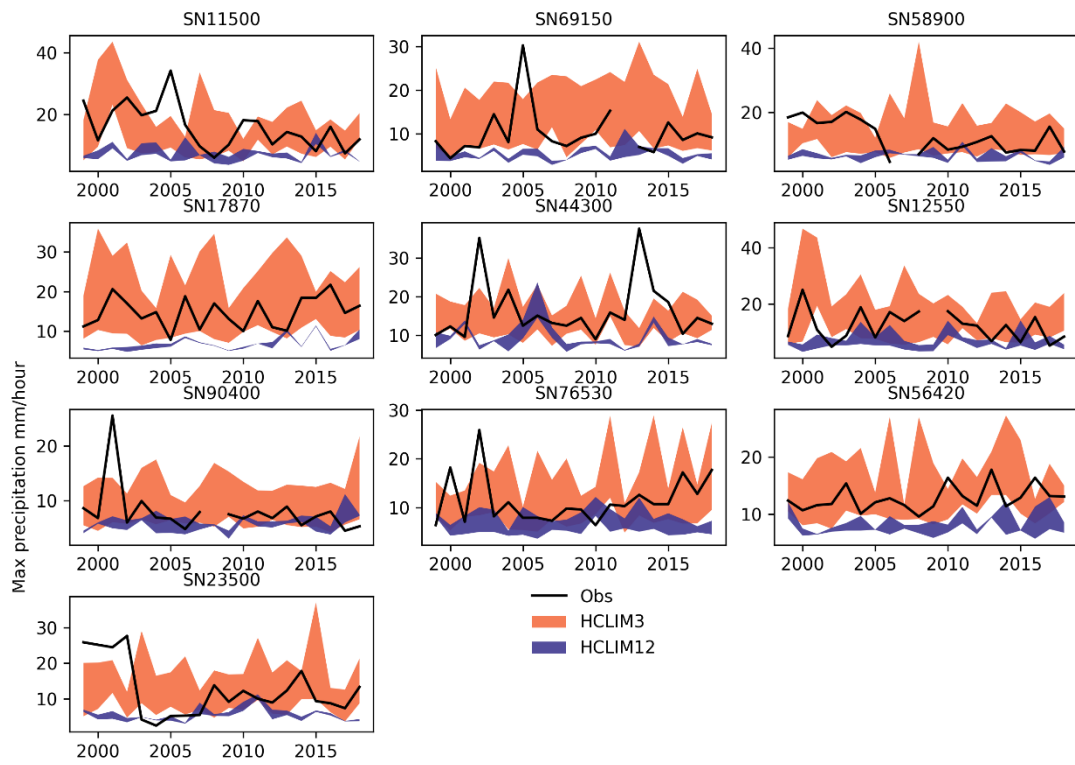
Figure S4. Time evolution of annual maximum hourly precipitation for each year from observation, HCLIM3 and HCLIM12 during 1999-2018 at 10 hourly rain-gauges.