

Supplementary Information to: Rising extreme sea levels in the German Bight under enhanced CO₂ levels

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This supplementary material contains Figures S.1 - S.6, complementary to the ones shown in the main article.

Internal ESL variability

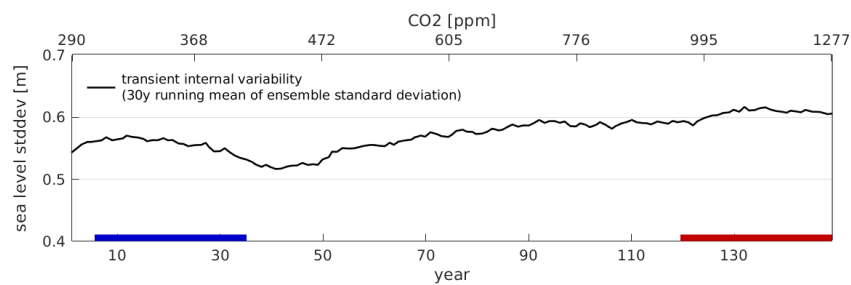


Fig. S.1 Transient internal variability of ESL at Cuxhaven in terms of the ensemble standard deviation. The two time slices used for the climate change analysis are marked by the blue and red bars.

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Atmospheric drivers: Summer response

Additionally to the winter response shown in the main article we show here the corresponding summer response for 10m wind and large-scale storminess.

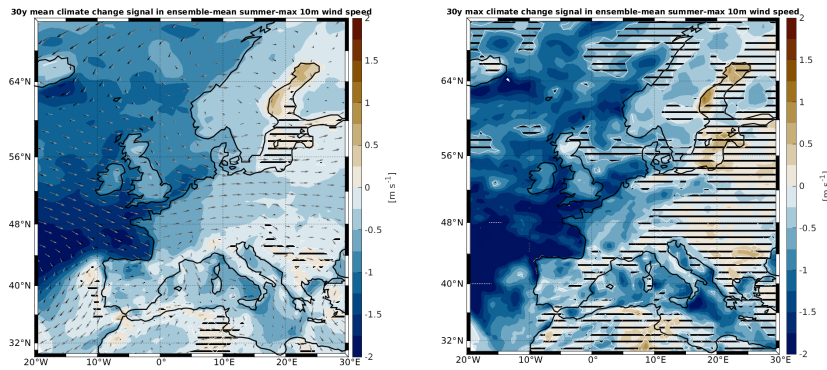


Fig. S.2 Summer change in 10 m wind of 1-year return period (left) and 30-year return period (right)).

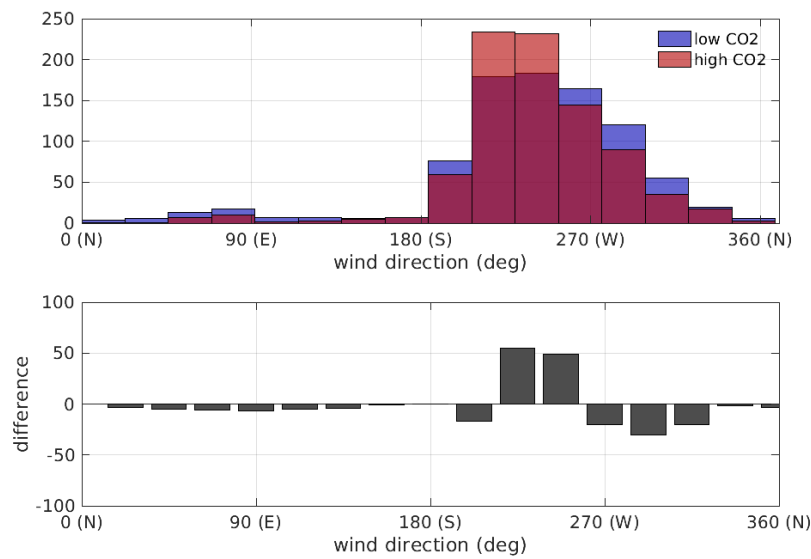


Fig. S.3 Summer change in 10 m wind direction of 1-year return periods. Areas not significant on the 95% confidence level are striped out.

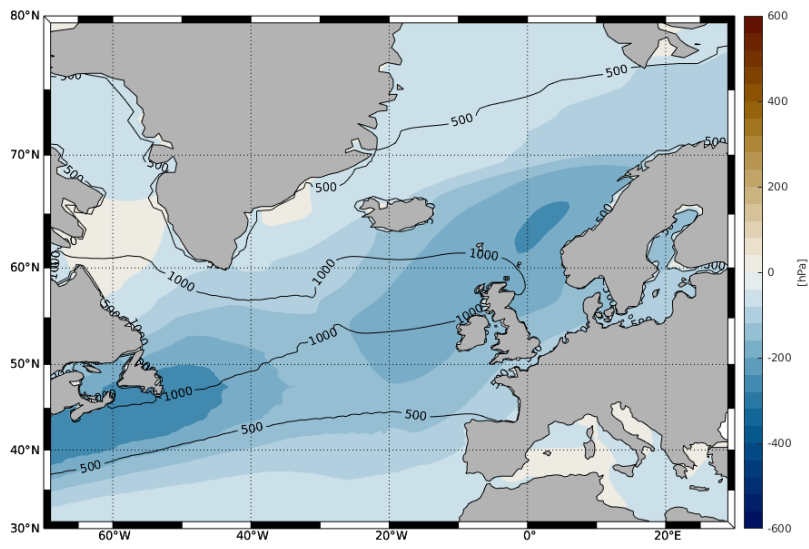


Fig. S.4 Summer change in storminess (based on 2-5-day Blackmon-filtered SLP).

Lagged EOF analysis

Additionally to the First EOF shown in the article, we include here the second and third lagged EOF as well as statistics of their respective principal components.

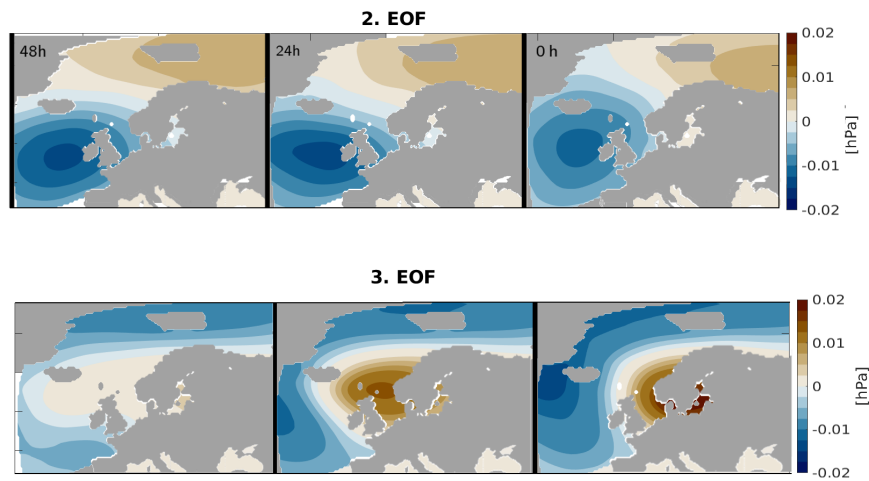


Fig. S.5 Second and third EOF.

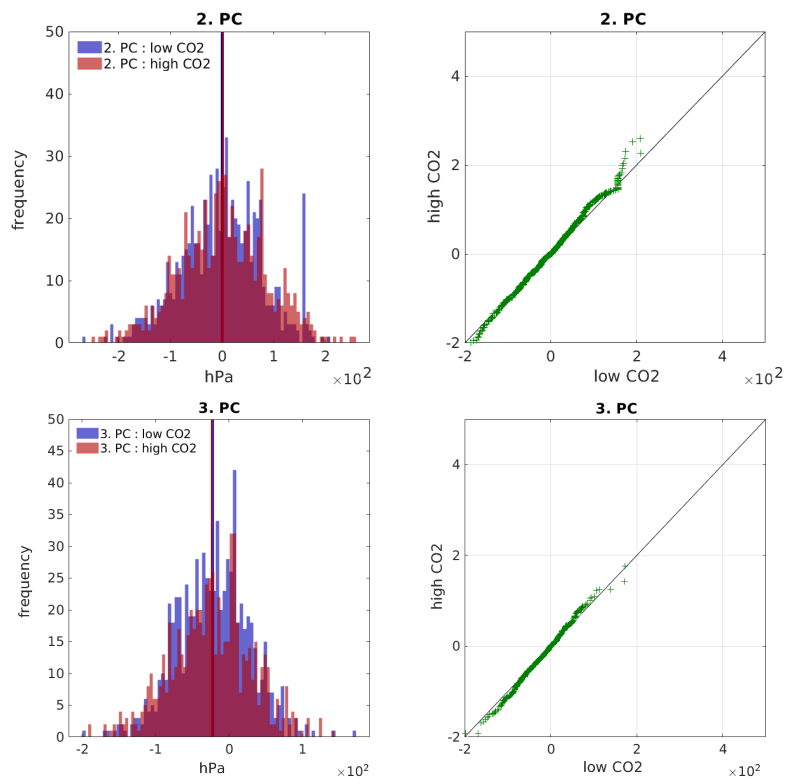


Fig. S.6 Statistics of second and third principal components.