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Abstract

On 13 November 1872, the Baltic Sea coast from Denmark to Pomerania was devastated by an extreme storm surge caused by high winds. This is still the strongest surge on record, and understanding its development can contribute to improved risk assessment and protection. In this paper we trace this event in sea-level pressure and wind data from the “Twentieth Century Reanalysis” (20CR) and compare the results with other observation-based data sources. The analysis shows that, in the ensemble mean of 20CR, the general development is qualitatively well depicted, but with much reduced strength compared to other data sets. The same is true when selecting the ensemble member with maximum wind speeds.