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Abstract

A heavy winter storm hit Western and Central Europe in March 1876 (the storm is termed "Märzorkan"). This paper analyses the meteorological situation during this event using the Twentieth Century Reanalysis version 2c (20CRv2c) data set. The "Märzorkan" was related to a low-pressure system that developed over the North Atlantic and moved towards Scandinavia. Strong westerly winds over Northern Europe were associated with this cyclone. The impacts of this extreme event originated both from high wind speeds and high precipitation amounts. A good agreement was found between 20CRv2c and historical reports, which therefore confirms the applicability of this data set for at least this extreme event.