



## Windstorms in the Czech Lands II: Outstanding windstorms of the 18th–19th centuries

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Documentary evidence (chronicles and memories, economic and financial reports, newspapers, forestry journals etc.) represent an important source of information for the study of past outstanding windstorms. The most damaging windstorms of the 18th century (20/21 December 1740) and of the 19th century (7 December 1868 and 26/27 October 1870) are presented with respect to their course, spatial extent and damaging impacts. While the first event is based only on documentary data, both events from the 19th century allow combine documentary data with systematic meteorological observations (wind force and direction) and also with information derived from an atmospheric reanalysis dataset, documenting the hurricane-force severity attributed to the passage of a cold front. During all three windstorms fatalities and seriously injured people were recorded, particularly for the windstorm from 7 December 1868, when cold front passed over the territory of the Czech Lands during the day (at least 27 fatalities and 38 largely seriously injured). Also severe damage to building and other structures as well as forest damage were documented for all three events (for example, the 1868 windstorm damaged at least 8 million m<sup>3</sup> of timber). The 1870 windstorm totally devastated particularly many forested areas of the Šumava Mts. in south-west Bohemia. Because short time between 1868 and 1870 windstorms did not allow fast processing of enormous quantity of windthrown wood in forests, a severe subsequent bark-beetle infestation calamity appeared in the 1870s. The (Central) European scale of three windstorms is also well documented by meteorological and documentary data from other countries. (This work was supported by Czech Science Foundation, project no. 15-11805S “Windstorms in the Czech Lands during the past 500 years”.)