



Newly Digitized Historical Climate Data of the German Bight and the Southern Baltic Sea Coasts

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The detection of historical climate information plays an important role with regard to the discussion on climate change, particularly on storminess. The German Meteorological Service houses huge archives of historical handwritten journals of weather observations. A considerable number of original observation sheets from stations along the coast of the German Bight and the southern Baltic Sea exists which has been until recently almost unnoticed. These stations are called signal stations and are positioned close to the shore. However, for this region meteorological observation data of 128 stations exist from 1877 to 1999 and are partly digitized. In this study we show an analysis of firstly newly digitized wind and surface air pressure data of 15 stations from 1877 to 1939 and we also present a case study of the storm surge at the coast of the southern Baltic Sea in December 1913. The data are quality controlled by formal, climatological, temporal and consistency checks. It is shown that these historical climate data are usable in consistency and quality for further investigations on climate change, e.g. as input for regional and global reanalysis.