



A reconstruction of the August 1st 1674 thunderstorms over Holland

Gerard van der Schrier and Rob Groenland

Royal Netherlands Meteorological Institute, De Bilt, Netherlands

On August 1st 1674 an active cold front moves over the low countries. The accompanying thunder storms along the squall line were abnormally active, leading to large-scale damages in Europe, from northern France to the northern parts of Holland where damages were particularly severe. No similarly violent and widespread summer storm has hit Holland since the Middle Ages. Using reported and pictured observations of damages, a reconstruction of this storm is made and an interpretation using modern meteorological concepts is given. This storm is related to a derecho-like event with a developed bow-echo structure. An estimate of the wind speeds associated with this event and an estimate of the return time of this event is given. Special attention is given to the city of Utrecht which was hit hardest, and where the impact of this storm is still recognisable in the cityscape.