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Does mild Winter Weather worsen Forest Windthrow?

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Storm damage in Swedish forests has increased since the middle of the last century. The recent storm, on the 8^{th} of January 2005, left 75 million cubic metres of uprooted trees and damaged timber in the forests. Thus, it was thrice as devastating as the previously worst one in September 1969 and caused damage amounting to 60% of all previous accumulated windthrow on record. It has been suggested that wet soils and the mild winter weather without frozen ground contributed to the devastating impact of this storm. To examine this hypothesis we analyse the weather during the 20 day time period preceding selected windthrow events in southern Sweden. A database of storm damage in Swedish forests were used to find devastating winter storms. Meteorological data were extracted from observational records and from gridded surface fields produced by a data assimilation system.