Meteorological forecast meets the insurance industry: The role of storm forecasting in loss response for European storms

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Recent improvements in performance and accessibility of weather prediction model outputs offer an opportunity for insurers to gain access into timely estimates of the financial impact of storms, both before and shortly after the event occurs.

Following the active winter season of 2017/2018, Impact Forecasting, Aon's catastrophe model development unit, invested significant resources into building an event response system for European windstorms. Weather forecast data are combined with our proprietary catastrophe model to generate daily loss estimations.

In this study, we present and quantify the impact of using different forecast outputs for several storms from the 2017/2018 winter season and discuss the variation/uncertainty in the estimated results. The models used include (i) ICON from Deutscher Wetterdienst, (ii) Arpege from Météofrance and (iii) HIRLAM from FNMI.