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Uncovering Europe's Largest Hailstones: A cross-national hail size comparison using ESWD reports

Hendrik Feige

Germany (feige.hendrik@gmail.com)

Every year, intense hailstorms leave behind a trail of damage across Europe, with some storms producing hailstones of extraordinary size. While national weather services collect hail reports—often supported by photos or eye witness accounts—there is currently a lack of a unified framework for comparing these extreme events across countries and over time. This investigation presents the first systematic ranking of the largest hailstones ever documented in European countries, based on verified reports and reliable historical sources.

By compiling and analyzing ESWD reports, I provide a valuable reference for meteorologists, enabling more accurate classification of future large-hail events. In addition, this initiative serves as a call to action for weather enthusiasts, historians, and the general public to contribute overlooked or forgotten hail reports from the past, potentially rewriting parts of Europe's severe weather history.

This poster presentation will point the attention to surprising records of lesser-known hail events, challenges in validating historical data, and the potential of citizen science for hail documentation. Our aim is to encourage greater collaboration between meteorological networks, stimulate public curiosity and highlight the importance of volunteer work in weather observation. Special thanks go to Thomas Schreiner (ESWD User Support) and Thilo Kühne (ESWD Quality Control Manager) for their support during this study.