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Type: **Demo**

3-D weather forecast visualizations generated with open-source research software and based on open data

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Recent developments in open data policies of meteorological agencies have much expanded the set of up-to-date weather observation and forecast data that is publicly available to meteorological research and education. To improve use of this open data, we have developed 3-D visualization products that extract and display meteorological information in novel ways. In this demo, we present visualization products derived from publicly available data from operational agencies including the German Weather Service (DWD) and the European Centre for Medium-Range Weather Forecasts (ECMWF). Visualizations are created with the open-source, interactive, 3-D visualization research software “Met.3D”(<https://met3d.readthedocs.org>). Met.3D has primarily been developed for rapid exploration of gridded atmospheric data by interactive means and has recently been extended with capabilities for batch-creation of visualizations and animations. In this demo, we show how we generate daily 3-D movies of current weather data for use in teaching and research, and how the Met.3D research software can be used to further explore data of interest in an interactive way.

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no

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