

Sharpen your decisions with unmatched operational intelligence

When it comes to weather-vulnerable operations, a lot is riding on your decisions. To quickly and confidently make the right call, you not only need timely and accurate information but being able to visualize potential impacts is also vital to ensuring appropriate actions.

While GIS data can help you see both the big picture and the finer details, not all services are created equal. Aside from data quality and frequency, critical factors like traffic loads, uptime, file formatting, a lack of support, and suddenly discontinued products can create significant issues for your organization — and those you serve.

At DTN, we offer business-grade services that eliminate these concerns — without busting your budget. A small investment in a subscription can pay for itself, delivering the resources you need to make decisions that help reduce risks, boost efficiencies, control costs, and limit liabilities. What's more, you can get everything you need from one trusted partner. And when we make service changes, you'll always know in advance, so you have the lead time you need to protect your downstream processes.

90+

The number of weather layers we offer, which can be added to any ESRI map or app

Commodity services

Our commodity data services are reliable, low-latency, easy to use, and supported 24/7. They're backed by redundant sources and scalable AWS architecture. Unlike public content, you never have to worry about site traffic slowing things down, which is essential during critical, large-scale, high-impact weather events. Our services also deliver well-known ArcGIS REST endpoints and feature services — not just pretty pictures, and we deliver frequent updates, too.

Sample GIS weather layers

- U.S. National Weather Service watches, warnings, and advisories
- Storm Prediction Center severe weather outlooks
- WPC freezing rain and snowfall outlooks
- Tropical storm forecasts
- Fronts and pressure centers
- Surface observations (weather station data)

Value-added services

Many weather data sets are hard to find, difficult to aggregate, are provided in uncommon formats, or are not easily interpreted by non-meteorologists. That's not the case with our value-added services, which are quality controlled to ensure data integrity.

Our unique, proprietary, and patented post-processing algorithms clean up and enhance data sets, like radar, to make them easier to interpret

by removing clutter that can often be mistaken for precipitation or storms. Our valued customers prefer our contoured radar data, which is much more useful and visually appealing.

We also host time-enabled data services that can be used to build animated loops that help convey a storm's direction, speed, size, and intensity. Further, we convert weather data that are often in formats that are difficult to display — such as GRIB or NetCDF — into data services that plug-and-play right into ArGIS maps and apps.

Sample GIS weather layers

- Radar with an added precipitation mask that shows whether it is rain, sleet, freezing rain, or snow
- North America (United States, Canada, Puerto Rico)
- Adds value by combining U.S. and Canadian radar into a single product
- European radar
- Australian radar
- Japanese radar
- Time-enabled radar (for all of the domains listed above)
- Contoured current conditions (United States)
- Global and continental current condition analysis
- Global Infrared satellite data (merging satellites from all over the world)

Proprietary services

Our customers choose our proprietary services because they provide valuable solutions to unique industry challenges — often at a high return on investment. Our services are the result of unique, propriety, and patented algorithms that can deliver a high-value forecast or critical, real-time analysis of severe weather events, such as tornadoes or hail.

This can include access to WeatherOps alert polygons, drawn by our meteorologists who monitor customer assets around the globe, 24/7. This premium product helps protect people and assets and includes the ability to consult with one of our forecasters, on-demand, in the event of threatening weather. These are ideal products for organizations with high-value assets, costly operations, and weather-driven business needs.

Sample GIS weather layers

- Lightning
- HailExpress – daily U.S. hail swath data back to 2003.
- TornadoTrax – real-time analysis of storm rotation, identifying possible footprints of tornadoes in real-time. Archived data is also available.
- Future radar
- Heavy precipitation algorithm
- Lightning prediction algorithm
- SPIA Ice Damage Index (for electric utilities)
- Quantitative precipitation estimates/ MetStorm (rainfall analysis)
- WeatherOps alert polygons
- 10-day global weather forecasts

Learn more

For additional details or to request a demo or trial access, please visit www.dtn.com/weather/utilities/gis/.