

The challenge

Weather can significantly impact military operations. Even slight variations in conditions can drastically increase costs, damage equipment, and endanger lives if personnel are not prepared.

But planners and decision-makers face several challenges when accounting for the weather. The forecast data in decision-support tools is often synthetic, inaccurate or unrealistic, making it difficult to determine the real impact weather could have on operations.

Further, many of these tools cannot integrate with existing simulation tools and are not for live, virtual, and constructive simulations, limiting their ability to see the complete picture. If conditions change quickly, these solutions may not notify personnel fast enough to make crucial adjustments.

To improve training and increase operational success, military planning personnel need real weather for real locations with more accurate and integrated weather tools that support planning for various scenarios and provide automated alerts when the forecast changes.



Weatherverse Planner hosted UI example

Key benefits

- Improved accuracy and reliability: Get precise, real-world conditions, not estimations.
- Actionable predictions: Anticipate rapid changes and extreme events in real-time with easy to understand, AI-generated weather briefings, simulating the insights of an on-staff meteorologist.
- Operational relevance: Leverage visualizations that reflect local terrain and microclimate nuances critical to mission success.
- Proactive risk management: Plan smarter with data-driven risk insights and scenario modeling with probabilistic forecasts.
- Accessibility: Stay updated on changing conditions even in low bandwidth areas using our unmatched data delivery technique while maintaining full data resolution.
- Real-time adaptability: Adjust plans instantly as conditions evolve.



Weatherverse Planner plug-in UI example

The Weather Company

Weather modeling and weather simulation solutions from The Weather Company can help government and defense personnel turn weather into a powerful ally by combining highly accurate forecast data with AI technology.

These solutions use the The Weather Company's proprietary global high-resolution atmospheric forecasting models, and are designed to increase mission success, reduce sustainment costs, and protect lives with accessible, accurate, and actionable weather insights.

Superior weather intelligence

Weatherverse Planner helps military personnel make better decisions by assessing weather's impact on operations.

The solution provides highly accurate global forecast data and customized weather map visualizations of the forecast's current or future effect on objectives. Users can also set up sophisticated near-real time weather triggers that automatically alert decision-makers when certain conditions occur, such as lightning, wind, or precipitation. These triggers are designed to be used even by non-meteorologists.

Weatherverse Planner combines data from The Weather Company with information from third parties, including non-weather data, to provide customized visualizations of weather's impact on various aspects of military operations, including artillery, aviation, communications, infantry, armor, air defense, special operations, and more.



Weatherverse Sim example

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Rather than comparing analytics from multiple systems, Weatherverse Planner can be used as a standalone solution (hosted) or integrated into your existing workflows and geospatial environment (a plugin) to help save time and reduce errors. Supported integrations include Cesium, Mapbox, ESRI, and Maxar.

Advanced training and simulations for any conditions

Weatherverse Sim utilizes the Unreal Engine and is an advanced training and planning simulator that uses The Weather Company's forecast models to produce actual weather conditions from any part of the world in synthetic environments at high resolution.

Weatherverse Sim offers highly detailed visual and nonvisual weather elements at ground and sky elevations to deliver live, virtual, and constructive weather simulations.

Improve preparation with superior 3D weather map visualizations of actual conditions, such as more realistic clouds and precipitation. Trainees can also record, playback, and edit simulations to review, memorize, and adjust future training sessions.

Gain a weather advantage

Discover how you can leverage weather data from the world's most accurate forecaster and the comprehensive, feature-rich Weatherverse portfolio to improve mission outcomes. Contact us today at weathercompany.com/contact/defense to learn more about the Weatherverse portfolio.



Weatherverse Sim example

Learn more about the Weatherverse Portfolio



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