

Weatherverse Sim from The Weather Company

The challenge

Weather changes outcomes. As global weather events become increasingly intense, effective planning for the impact of weather on operations and missions is more important than ever.

But current weather simulation capabilities often aren't good enough. Frequently, the data used is synthetic and, therefore, unable to authentically simulate actual conditions. Most existing tools also don't allow users to effectively conduct "what-if" weather scenarios, hindering their ability to prepare for sudden changes in conditions.

To improve operational effectiveness, reduce monetary losses and even save lives, you need realistic weather data and visualizations for training and planning simulators.

Key benefits

- **Increase mission success** by bringing actual current and forecast conditions into simulations to better assess and prepare for the likely impact of weather on operations and missions.
- **Reduce losses** of equipment, money and lives by allowing analysis of "what-if" weather scenarios for ground and air operations with probabilistic guidance.
- **Enhance future training and planning** by recording, editing and reviewing different simulations so users can make adjustments to improve likely outcomes.

The Weather Company

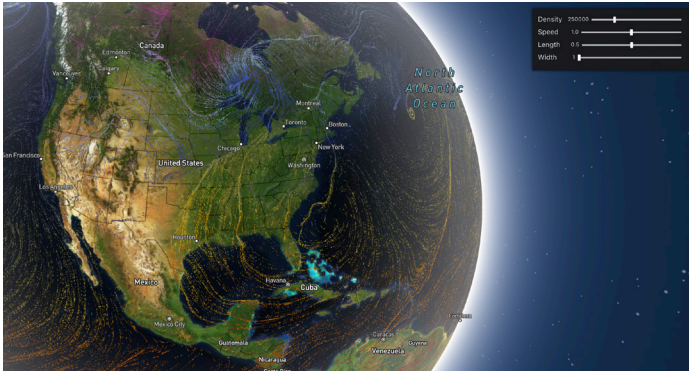
Using the latest models, including The Weather Company's proprietary global high-resolution atmospheric forecasting model (GRAF), Weatherverse Sim enables training and planning simulators to bring actual weather conditions from anywhere in the world into their synthetic environments at high resolution.



GRAF is a physics-based, high precision, rapidly-updating, global weather modeling system that can predict something as small as a thunderstorm virtually anywhere on the planet.

GRAF uses high-resolution data and the latest in NVIDIA weather graphics to predict weather activity around the globe. The first weather model to run on a GPU-accelerated supercomputer which enables increased resolution and update frequency, GRAF incorporates extensive atmospheric observations and employs machine-learning (AI) techniques to refine and optimize the model.

Initially launched as an Unreal Plugin, Weathervers Sim offers highly detailed visual and non-visual (wind, turbulence, etc.) weather elements at ground and sky elevations to deliver the ultimate simulation of weather and its impacts.

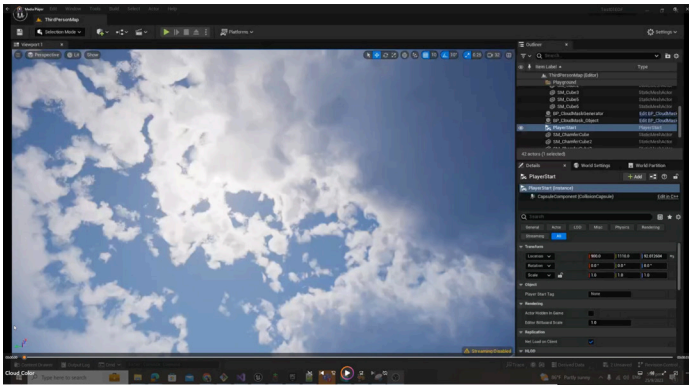


The tool provides recording, playback and editing capabilities so trainees can review and memorize different simulations and adjust future training sessions. You can also integrate a planning tool for a more comprehensive, feature-rich weather ecosystem purposefully designed for the defense industry.

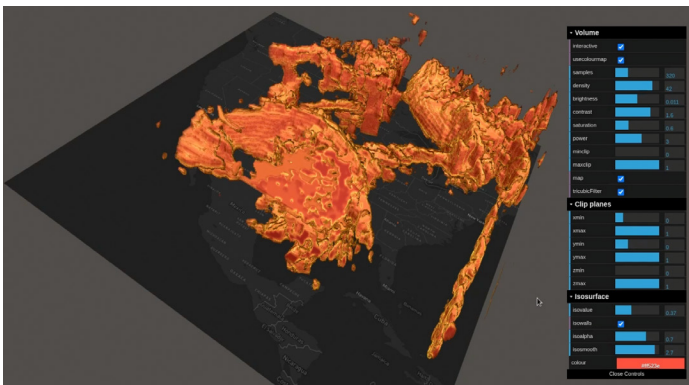


Make weather a powerful ally

Weathervers Sim offers superior 3D visualizations of the actual weather, such as more realistic clouds and precipitation, to improve mission preparation. Adjust weather intensity for stronger wind, more rain, less cloud coverage and more to simulate countless combinations of conditions that a unit might face in the field.



Take your training and planning simulations to the next level. Contact us today at weathercompany.com/defense.



Learn more about the
Weathervers portfolio

