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Spire Global Launches Breakthrough AI Weather Models Built on NVIDIA Omniverse Blueprint for Earth-2

- *Enriched with proprietary satellite data, Spire's AI-driven models deliver medium-range and sub-seasonal forecasts out to 45 days*
- *Accelerated by NVIDIA GPUs, Spire's AI models run 1,000 times faster than traditional physics-based models, enabling large ensemble forecasts that capture the full range of possible weather outcomes*

VIENNA, Va.--(BUSINESS WIRE)-- [Spire Global, Inc.](#) (NYSE: SPIR) ("Spire" or "the Company"), a global provider of space-based data, analytics and space services, today announced the launch of two advanced AI weather models: AI-WX and AI-S2S. Developed on [NVIDIA Omniverse Blueprint for Earth-2](#), these models leverage Spire's proprietary satellite data to deliver both medium-range and sub-seasonal forecasts, offering unparalleled forecasting capabilities to industries such as energy, utilities and commodities.

AI-WX and AI-S2S offer comprehensive weather forecasting capabilities, with AI-WX providing up to 20-day forecasts and AI-S2S extending up to 45 days. Built on Spire's proprietary data assimilation techniques, these models integrate data from Spire's extensive satellite network, including atmospheric profiles, soil moisture readings, and ocean surface winds. Differing from traditional deterministic models, the models provide probabilistic forecasts, offering a range of possible weather outcomes rather than a single prediction. Customers including Freepoint Commodities and Dominion Energy are using these new products to navigate market complexities with enhanced precision and to evaluate potential risks and likelihood of extreme weather events.

"At Freepoint Commodities, staying ahead isn't just about innovation—it's about having an edge in an ever-changing market," said a spokesperson from Freepoint Commodities. "This collaboration with Spire Global represents a major leap forward in weather intelligence for commodity trading. By combining NVIDIA's advanced computing power with Spire's proprietary satellite data, our traders now have the tools to help anticipate market shifts faster, and with increasing accuracy."

As climate variability intensifies, leading to more frequent and severe weather events, the demand for more advanced and accurate forecasting capabilities is increasing. Industries such as energy and commodities are particularly vulnerable to the impacts of unexpected weather changes, which can disrupt operations and inflate costs dramatically. Spire's new AI models provide detailed insights that enable companies to anticipate and effectively respond to weather disruptions.

"By harnessing the computational power of NVIDIA GPUs paired with the unique space-

based data from our satellite network, we have developed AI-driven models that transform how industries manage weather risks," said Michael Eilts, general manager of weather and climate at Spire. "These models not only predict weather events with unprecedented accuracy, but they also enhance our understanding of weather, enabling energy providers and commodity trading firms to optimize operations and increase both efficiency and profitability in the face of unpredictable weather patterns."

"With Spire's cutting-edge advancements in AI weather modeling, we can anticipate weather impacts further in advance, enabling more precise and strategic risk management for both immediate and long-term weather patterns," said Jeff Mock, lead meteorologist at Dominion Energy. "This heightened foresight is crucial for strengthening resilience against adverse weather, safeguarding critical services, and ensuring operational continuity. By harnessing Spire's advanced forecasting tools and exclusive data sets, we are able to enhance efficiency and minimize disruptions for communities facing the impact of extreme weather."

Previously, [Spire collaborated with NVIDIA](#) to integrate Spire's Radio Occultation data and proprietary data assimilation capabilities with NVIDIA Earth-2 Cloud APIs, setting the foundation for the new models announced today.

Learn more about Spire's AI Ensemble Weather Model and Sub-Seasonal AI Model [here](#).

About Spire Global, Inc.

Spire (NYSE: SPIR) is a global provider of space-based data, analytics and space services, offering unique datasets and powerful insights about Earth so that organizations can make decisions with confidence in a rapidly changing world. Spire builds, owns, and operates a fully deployed satellite constellation that observes the Earth in real time using radio frequency technology. The data acquired by Spire's satellites provides global weather intelligence, ship and plane movements, and spoofing and jamming detection to better predict how their patterns impact economies, global security, business operations and the environment. Spire also offers Space as a Service solutions that empower customers to leverage its established infrastructure to put their business in space. Spire has nine offices across the U.S., Canada, UK, Luxembourg, Germany and Singapore. To learn more, visit spire.com.

Forward Looking Statements

This press release contains forward-looking statements, including information regarding management's view of Spire's future expectations, plans and prospects, including our views regarding future execution within our business, and the opportunity we see in our industry, within the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. These statements involve known and unknown risks, uncertainties and other factors which may cause the results of Spire to be materially different than those expressed or implied in such statements. Certain of these risk factors and others are included in documents Spire files with the Securities and Exchange Commission, including but not limited to, Spire's Annual Report on Form 10-K for the year ended December 31, 2023, as well as subsequent reports filed with the Securities and Exchange Commission. Other unknown or unpredictable factors also could have material adverse effects on Spire's future results. The forward-looking statements included in this press release are made only as of the date hereof. Spire cannot guarantee future results, levels of activity, performance or achievements.

Accordingly, you should not place undue reliance on these forward-looking statements. Finally, Spire expressly disclaims any intent or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

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