

## **The Weather Company Launches ‘Deep Thunder’ - the World’s Most Advanced Hyper-Local Weather Forecasting Model for Businesses**

**- New Weather Model Developed by IBM Research and The Weather Company to Help Improve Precision and Accuracy of Weather Forecasting on Global Scale - Machine Learning Models Based on IBM Deep Thunder Help Predict the Business Impact of Weather**

**ARMONK, N.Y. - 15 Jun 2016:** The Weather Company, an IBM (NYSE: [IBM](#)) Business, today announced plans to advance the precision and accuracy of weather forecasting by combining hyper-local, short-term custom forecasts developed by IBM Research with The Weather Company's global forecast model. The powerful combination of the two models will be called Deep Thunder, and will also use historical weather data to train machine learning models that will help businesses predict the actual impact of weather.

Every day, The Weather Company's sophisticated models analyze data for every location worldwide, using more than 100 terabytes of third-party data daily, one of the largest troves of location data available anywhere, and Weather Underground's network of more than 195,000 personal weather stations. Combining that enormous volume and variety of data with advances in atmospheric and computational sciences enables The Weather Company to produce one of the most reliable global forecasts available today.

Businesses around the world rely on the high performance forecast accuracy of The Weather Company's regional models that provide fresh new guidance every three hours. The models developed by IBM Research have been highly customized for business clients and have zeroed in on hyper-local forecasts – at a 0.2 to 1.2 mile resolution – and take into account other relevant environmental data such as vegetation and soil conditions to better understand the impact of a weather system. The Weather Company will integrate this capability and broaden access to it on a global scale.

IBM Deep Thunder can also analyze weather for targeted areas retrospectively, and use machine learning-based weather impact models to help businesses more precisely predict how even modest variations in temperature could potentially have an impact on their business, from consumer buying behavior to how retailers should manage their supply chains and stock shelves; how insurance companies can analyze the impact of past weather events to assess the validity of insurance claims related to weather damage; or how utility companies can mine and model historical data of damage caused to power lines or telephone poles and couple that information with a hyper-local forecast to better plan for how many repair crews would be needed, and where.

“The Weather Company has relentlessly focused on mapping the atmosphere, while IBM Research has pioneered the development of techniques to capture very small scale features to boost accuracy at the hyper local level for critical decision making,” said Mary Glackin, Head of Science & Forecast Operations for The Weather Company. “The new combined forecasting model we are introducing today will provide an ideal platform to advance our signature services – understanding the impacts of weather and identifying recommended actions for all kinds of businesses and industry applications.”

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### **The Weather Company, an IBM Business**

The Weather Company, an IBM Business, is the world's largest private weather enterprise, helping people make informed decisions – and take action – in the face of weather. The company offers the most accurate, personalized and actionable weather data and insights to millions of consumers and thousands of businesses via Weather's API, its business solutions division, and its own digital products from The Weather Channel (weather.com) and Weather Underground (wunderground.com).

The company delivers up to 26 billion forecasts daily. Its products include a top weather app on all major mobile platforms globally; the world's largest network of personal weather stations; a top-20 U.S. website; the seventh most data-rich site in the world; one of the world's largest IoT data platforms; and industry-leading business solutions.

Weather Means Business™. The world's biggest brands in aviation, energy, insurance, media, and government rely on The Weather Company for data, technology platforms and services to help improve decision-making and respond to weather's impact on business. For more, visit [www.theweathercompany.com](http://www.theweathercompany.com).

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