



From Short Fuse Warnings to Long Range Forecasts: The Role of the Meteorologist in Global Weather Industry

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As our understanding of the atmosphere evolves and the computing resources to model the atmosphere become more accurate, the traditional role of the forecaster is being replaced by a new, rapidly-changing paradigm. The significant advancement of Big Data and the Internet of Things are providing data sources and data density never before seen. Even with these advances, the human forecaster plays a critical and quickly-evolving role in the development and issuance of weather forecasts. AccuWeather – the largest, most accurate source of weather forecasts and warnings in the world – makes use of meteorologists as part of an innovative forecast process that combines human expertise with proprietary state-of-the-science data ingestion, processing, and analysis methods. This process continuously evolves to ensure forecasts that are provided to a variety of users such as governments, businesses, and the general public are the most actionable, timely, and detailed. By providing forecasts that are the most accurate, localized, and impact-based, AccuWeather communicates weather information worldwide that helps people make decisions to improve their lives. Over the last several years, there has been much discussion within the weather community, and increasingly outside of it, about the future role of the forecaster. At AccuWeather, as part of the human in the loop process, forecasters regularly target high impact weather events, where their influence can have the most additive impact over the model skill. The AccuWeather forecast process will be discussed including the transformational role of the meteorologist, increasing interaction with complex big data sets, and customized communications by platform where accurate, contextually relevant weather forecasts from AccuWeather reach over 1.5 billion users around the world every day.