



CustomWeather Statistical Forecasting (MOS)

Improve ROI with Breakthrough High-Resolution Forecasting Technology

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INTRODUCTION

Economists believe that 70% of the U.S. economy is vulnerable to abnormal weather patterns. Weather derivatives allow businesses sensitive to the changes in weather to protect themselves against fluctuations in costs and sales linked to variations in weather.

Every organization involved in Commodities or Energy trading faces the same challenge: How to minimize risk. The process of assessing risk includes many steps, but the actual end result is highly dependent on the quality of weather forecasting available. Assessing the impact of seasonal weather inherently includes a margin of error.

As a result, many managers are looking for more decision-support analysis, more specific alerts and advisories, and improved accuracy.

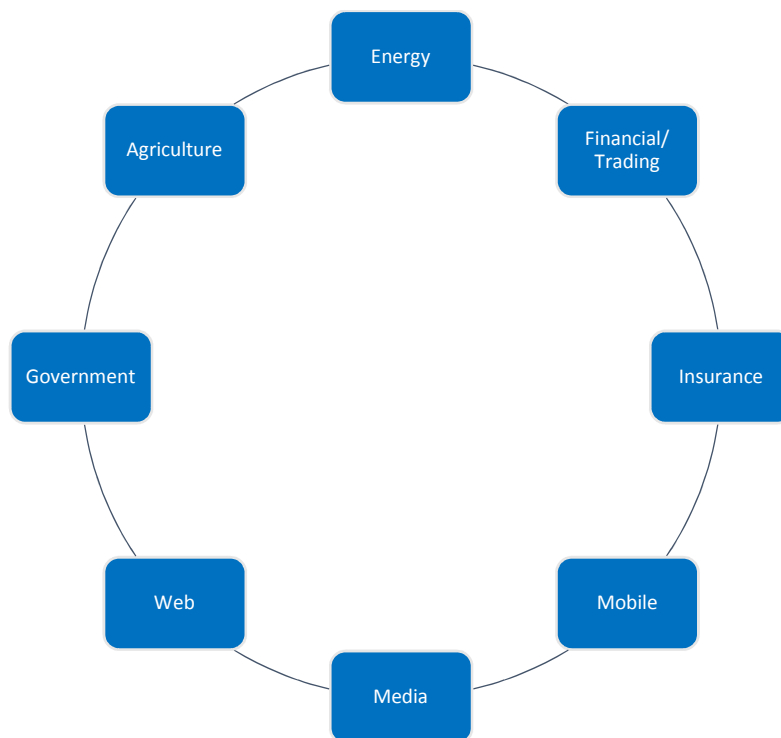
An ideal solution for this challenge requires:

- Seasonal Forecasts in each major growing region in the world for weather affecting the grain/oilseed futures, food/fiber futures, and livestock
- Forecasts of the effect of weather on energy production, consumption and transportation, including effects on crude oil, heating oil and natural gas
- Timely alerts for any extreme weather condition that may affect production, distribution, or demand.
- Consistent, accurate forecast techniques at the seasonal, short-term and daily levels.

CustomWeather is

HELD TO A HIGHER STANDARD

Because CustomWeather is focused on the delivery of weather data for enterprise decision support, CustomWeather clients have a higher demand for accuracy.



Even other weather companies rely on the accuracy and reliability of CustomWeather.

CustomWeather's R&D efforts in meteorology have been acknowledged by the Federal Government.

DEVELOPMENT

Research • Analysis • Results

Years of research.

CustomWeather recently completed a 4-year R&D effort on an advanced MOS weather model that adds an additional layer of quantitative bias correction to traditional forecasting techniques.

Careful analysis, continuous improvement.

The CustomWeather statistical forecasts (MOS or Model Output Statistics) are based on an analysis of every available and applicable weather model run for at least the past two years.

- ❖ During the CustomWeather analysis or “training” period, the raw model forecasts are compared with the actual weather that was recorded during the same time period.
- ❖ Model biases are located and accounted for. Through the extensive use of back-fitting, CustomWeather creates algorithms that produce improved forecasts moving forward.
- ❖ The CustomWeather MOS forecasts learn from the mistakes of the past and apply that knowledge to current and future forecasts.
- ❖ The process is continuous, so that even as the US government models get better, CustomWeather MOS forecasts continue to remain a step ahead.

Comprehensive.

CustomWeather runs statistics on dozens of different weather variables in **hourly increments**, resulting in improved daily AND hourly forecasts in numerous areas:

- ❖ temperature
- ❖ wind speed
- ❖ relative humidity
- ❖ probability of precipitation (POP)
- ❖ cloud cover

Exciting results.

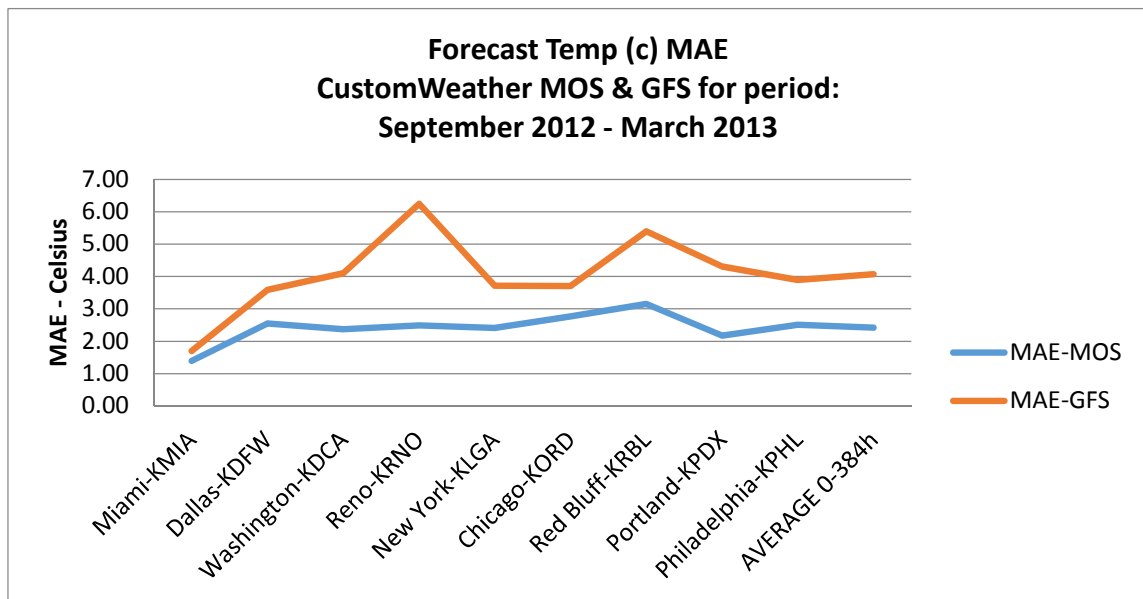
The model is showing tremendous results, greatly reducing the errors and swings in the forecast between model runs versus the results from traditional models.

Breakthrough levels of accuracy at the 15-day and hourly levels create an intense information advantage at the short term, daily and hourly levels.

Forecast Technology

Integrating Bias Correction

- ❖ Testing results have demonstrated significant improvement, consistency and performance over existing forecasting techniques. Improvement was demonstrated across all forecast lead-times.
- ❖ MAE (Mean Absolute Error) for days 4-7 outperforms industry standards typically only found in 1-3 day forecasts.
- ❖ CustomWeather MOS MAE for hour-by-hour forecasts are outperforming even the daily forecast values currently available from other sources.



CustomWeather MOS MAE for the Americas is only 2.43C, vs. GFS 4.07C over 15-day lead time forecasts.

How to find out more

To learn more about CustomWeather, go to www.CustomWeather.com, where you will find information about all of our products and services. You can also arrange a personalized online MOS demo over the Internet.

To contact our sales team directly: sales@customweather.com or 415-777-3303.

About CustomWeather, Inc.

CustomWeather is a San Francisco-based provider of high resolution weather forecast and alert services, offering the industry's most robust weather solutions for both decision support and consumer application. CustomWeather generates granular weather forecasts for over 200 countries worldwide, providing sophisticated weather services to leading companies in a variety of industries including Utilities, Oil and Gas, Offshore Drilling and Exploration, Insurance, Agriculture, Transportation, Mobile, and Media. For over a decade, CustomWeather has been the leading one-stop solution for historical, real-time, and forecast weather services.

