

During the third quarter (July – September) of 2012, much of North America experienced normal to below-normal wind speeds at 80 m above ground level compared to the long-term (1997 – 2011) average for the same quarter (see Figure 1). Across most of the eastern and western United States, wind speeds were 5% to 15% below average, while in the Great Plains and much of Canada, winds were near average. The notable exception to this pattern was Alaska and the Yukon, where winds were more than 15% above average.

The patterns are explained in part by the persistence of upper-level features which influenced the path of storm tracks across North America. Several of the major climate indices were largely neutral through the quarter. The El Niño/Southern Oscillation (ENSO) index remained neutral despite above-average sea surface temperatures in the equatorial Pacific. Concurrently, the Pacific-North American pattern (PNA) and Arctic Oscillation (AO) were also neutral, while the North Atlantic Oscillation (NAO) was predominantly negative.

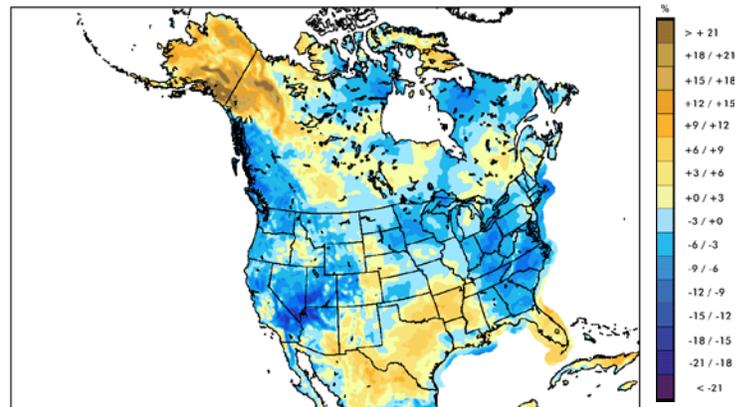


Figure 1. Wind Speed Anomaly Map: Q3 2012

The monthly speed deviations across North America shifted throughout the quarter according to the location and strength of a persistent upper-level ridge pattern which influenced the weather across most of the continent. In July, this ridge was centered over the Northern Plains, while another strong ridge was centered over Greenland. These features combined to keep wind speeds below-average (-15% to -5%) for most of Canada and the northern-tier of the United States. The Southern Plains, along the periphery of the ridge, experienced normal to slightly above-average (0% to 10%) winds. In August, the ridge shifted west, where it would remain and strengthen during the rest of the quarter, bringing below average winds and high temperatures to the Great Basin. In the southeastern United States, Hurricane Isaac made landfall in Louisiana on August 28th and progressed very slowly across the state, causing the winds in Louisiana and neighboring Mississippi to be more than 20% above average for the month. Finally, in September, a very strong pressure gradient developed between the aforementioned ridge in the west and a trough in the Bering Sea, bringing high winds and numerous strong storms to the southern coast of Alaska. Wind speeds in southern Alaska and the Yukon were more than 35% above-average for the month as a result.

For the 12-month period from 1 October 2011 to 30 September 2012, the wind resource was near to above average over most of the continent (see Figure 2). The largest positive deviations occurred in the Rocky Mountains and Great Plains, while the northeastern United States and Canadian Maritimes had below-average winds. In the previous year ending 30 September 2011, stronger than average winds were centered across the southern United States (see Figure 3).

This analysis was conducted by AWS Truepower’s meteorology team. It is based on a computer simulation of weather conditions dating back to 1997, which results in a comprehensive and detailed weather snapshot at multiple heights above ground for every hour. Project assessments, maps, data and monthly reports are available. For more information about customized analyses for your project portfolio, data or subscription options, please contact us: info@awstruepower.com.

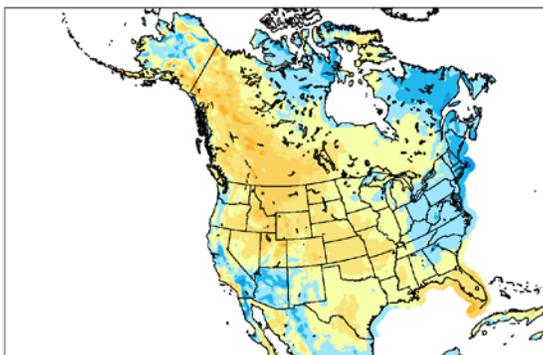


Figure 2. Wind Speed Anomaly Map: Q4 2011 – Q3 2012

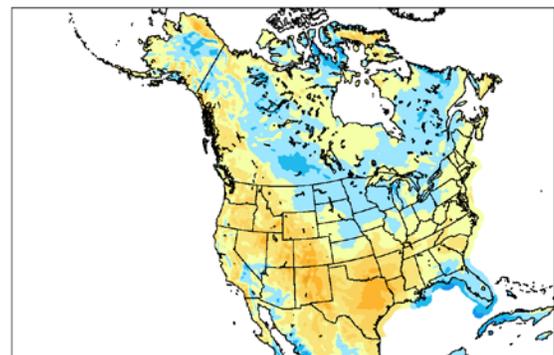
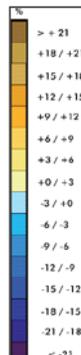


Figure 3. Wind Speed Anomaly Map: Q4 2010 – Q3 2011