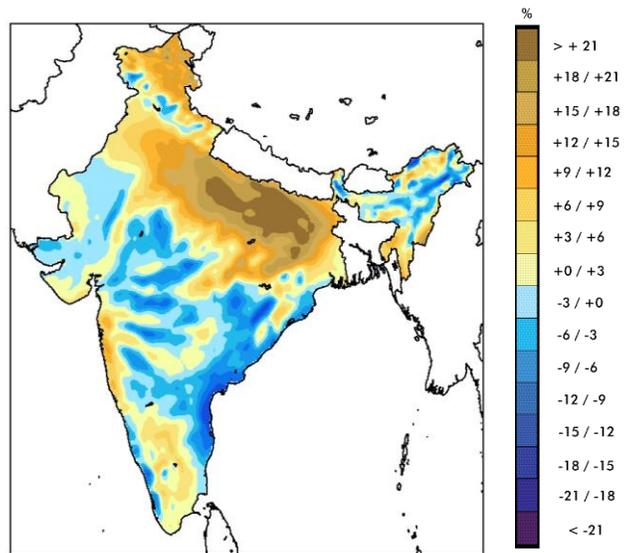


In much of Northern and Eastern India, wind speeds at 80 m above ground level during the first quarter of 2012 were well above-normal relative to the long-term (1997 – 2012) average; near to below-average values occurred across most other regions (see inset map). The wind resource was furthest above-average in Uttar Pradesh and Bihar (+20% or more); it was furthest below-normal in southeastern coastal areas (-15% to -10%).

The Southern Oscillation Index (SOI) was positive in January, but trended toward neutral during February and March. The El Niño Southern Oscillation (ENSO) began the period in a slightly negative phase (La Niña), but by March was also neutral. The Dipole Mode Index (a measure of the sea surface temperature gradient anomaly between the western equatorial Indian Ocean and the southeastern equatorial Indian Ocean) was negative throughout the first quarter of 2012. The winter phase of the summer monsoon index remained above-normal throughout the quarter. Surface air pressures were below-normal during the quarter as a persistent trough was positioned over western coastal and northern areas. This pattern evolution influenced the monthly regional wind speed distributions described below.

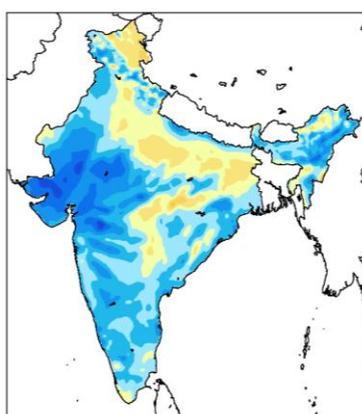


Wind Speed Anomaly Map: Q1 2012

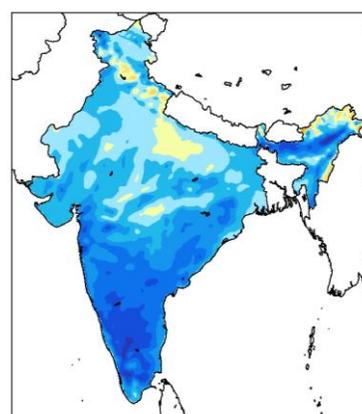
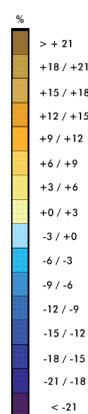
Throughout the quarter, small variability was observed in the wind speed deviation pattern in most regions. The wind resource across Uttar Pradesh and Bihar remained well above-normal (+15% or more); it was near-normal (-10% to +10%) in the northeast region. Wind speeds were predominantly below-normal in Jammu and Kashmir in January, shifting to well above-average (+15% or more) during February and March. Across the southern and western regions, wind speeds were slightly below-normal (-10% to 0%) in January, shifting to near to slightly above-normal (0% to +10%) in February. In the parts of the Western and Southern Ghats, the wind resource was 15% or more above-average. During March, the Western Ghats and higher elevation parts of the Deccan Plateau experienced above-normal wind speeds (+5% to +10%), while below-average values (-10% to -5%) were observed elsewhere across this region. In addition, wind speeds were near-normal (-5% to +5%) in Gujarat and Rajasthan.

For the 12-month period from 1 April 2011 to 31 March 2012, wind speeds were predominantly near to below-normal, except for parts of Northern and Eastern India where small (0% to +5%) positive anomalies were observed (see map below left). In parts of Gujarat and Rajasthan, speeds were furthest below-normal (-10% to -15%). Wind speeds have generally increased across India over the past twelve months relative to the previous year; only in some western areas (Gujarat and Rajasthan) has the wind resource decreased over the same period (see map below right).

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. To view additional bulletins and sign up for our Wind Trends mailing list, visit <http://www.awstruepower.com/knowledge-center/windtrends-bulletins/>.



Wind Speed Anomaly Map: Q2 2011 – Q1 2012



Wind Speed Anomaly Map: Q2 2010 – Q1 2011