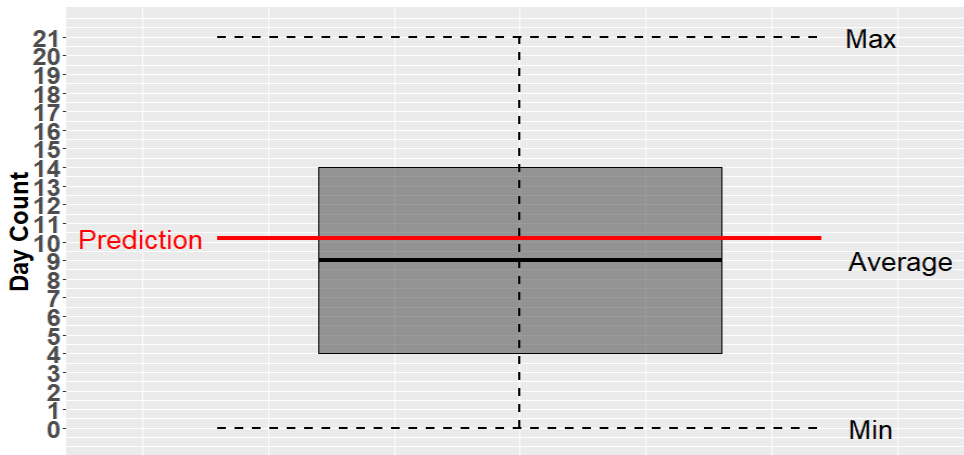


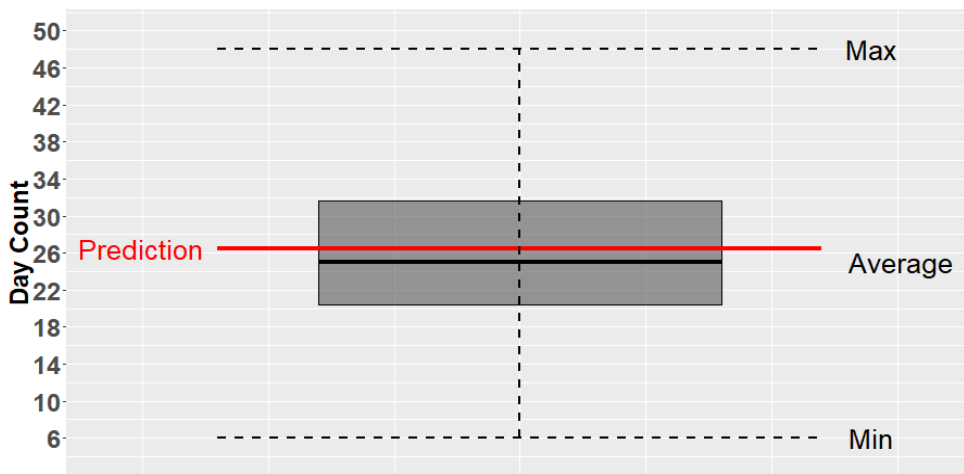
**Issued: Tuesday, December 3, 2019**

The following product from Atmospheric Data Solutions uses numbers of statistical methods to make long range predictions of the Santa Ana wind season in Southern California. This outlook uses 38 years of historical meteorological data in conjunction with a blend of three statistical models which forecast above/below normal numbers of Santa Ana wind days for a 1-month and a 3-month time period. While it is difficult to assign specific winds speeds, a Santa Ana wind day is determined to be distinctly different from the light offshore winds which normally occur during the overnight and early morning hours of the day. Santa Ana wind days were defined by correlating wind velocities with synoptic scale weather patterns that result in gusty, dry offshore winds across Southern California. The models used in this outlook are: Random Forest, ARIMA Time Series, and Analog. The Random Forest and Analog methods use various predictors such as the Pacific Decadal Oscillation (PDO), the Atlantic Multidecadal Oscillation (AMO), and the Niño3.4 index.

The model is forecasting a normal Santa Ana wind day count for the month of December. The normal Santa Ana Wind day count for December is between 8 to 10 days.



The model is forecasting a normal total Santa Ana wind day count of 26 days from December through February. The normal total Santa Ana wind day count from December through February is between 24 to 27 days.



## Summary:

Based on our blend of forecast guidance products, we anticipate an above or near normal Santa Ana wind day count for December and a near or slightly above normal total day count for December through February.