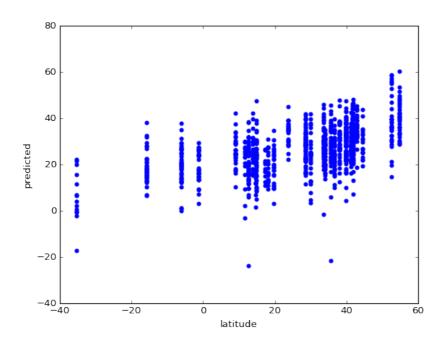
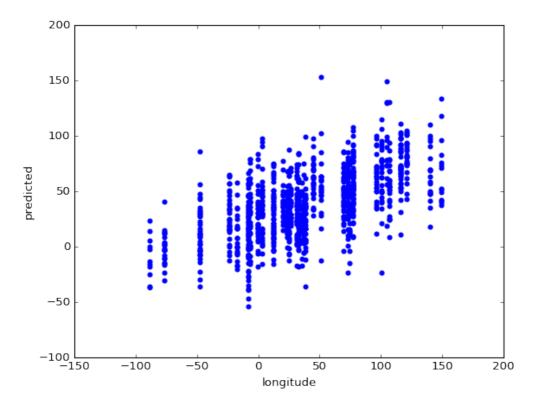
The plots for linear regression without boxcox are:

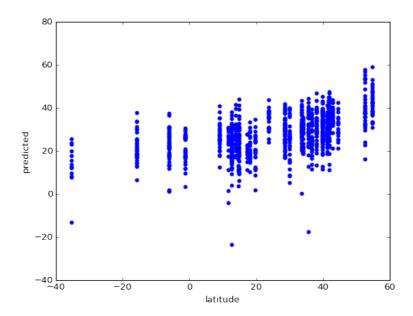


R-square: 0.292809200484

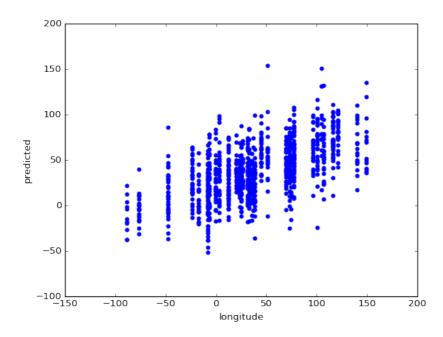


R-square: 0.364576702965

## Boxcox Transformation for linear regression:



Best lambda: 1.71674482126 R-square: 0.250766639809



Best lambda: 0.93937926715 R-square: 0.368570724885

The boxcox transformation does not necessarily increase the R-square value. It fluctuates in the normal range. Because boxcox is no the most optimal tool for producing reliable high-dimensional data, so it may produce fluctuation.