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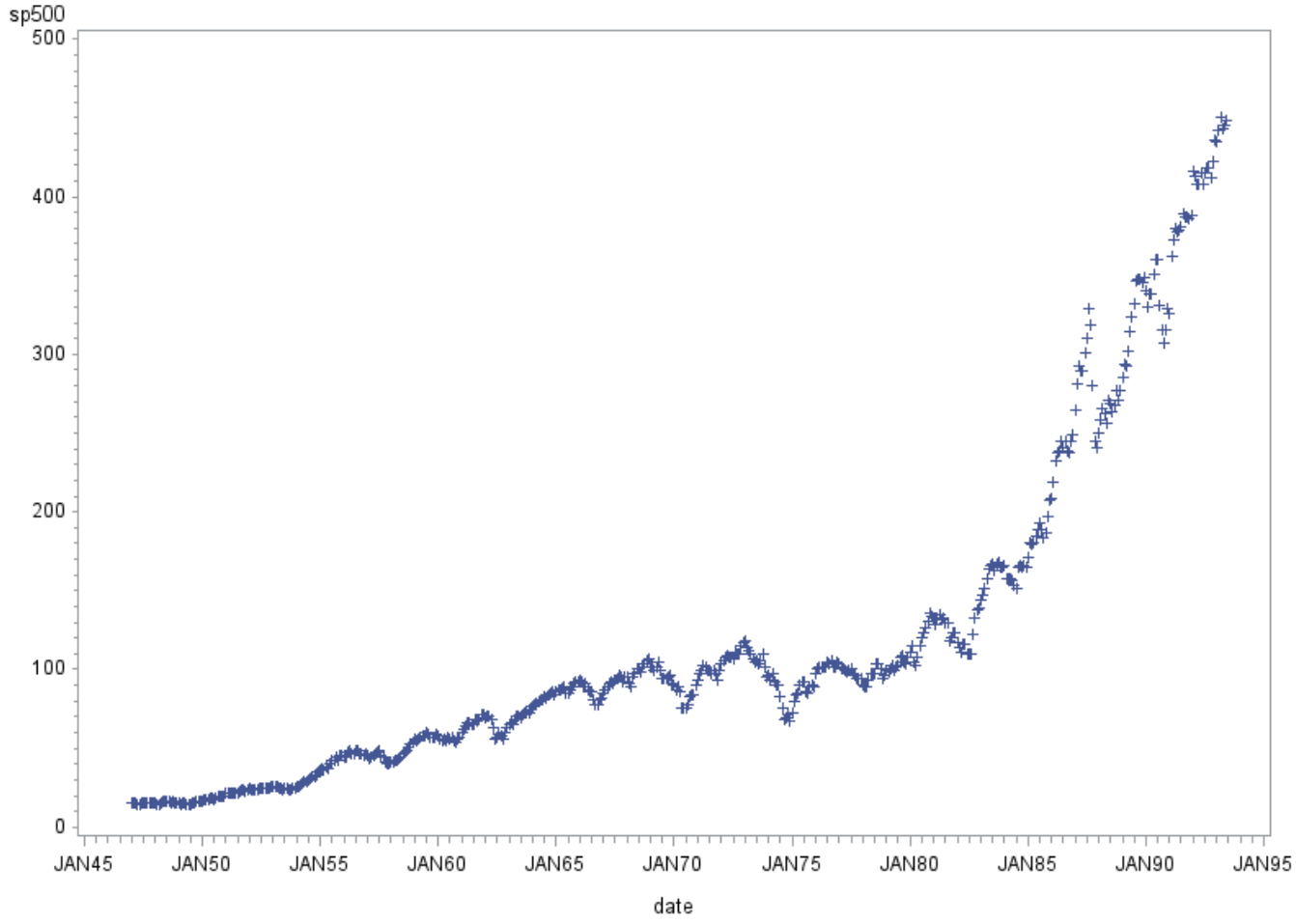
ECO 581 Lab 12

1.

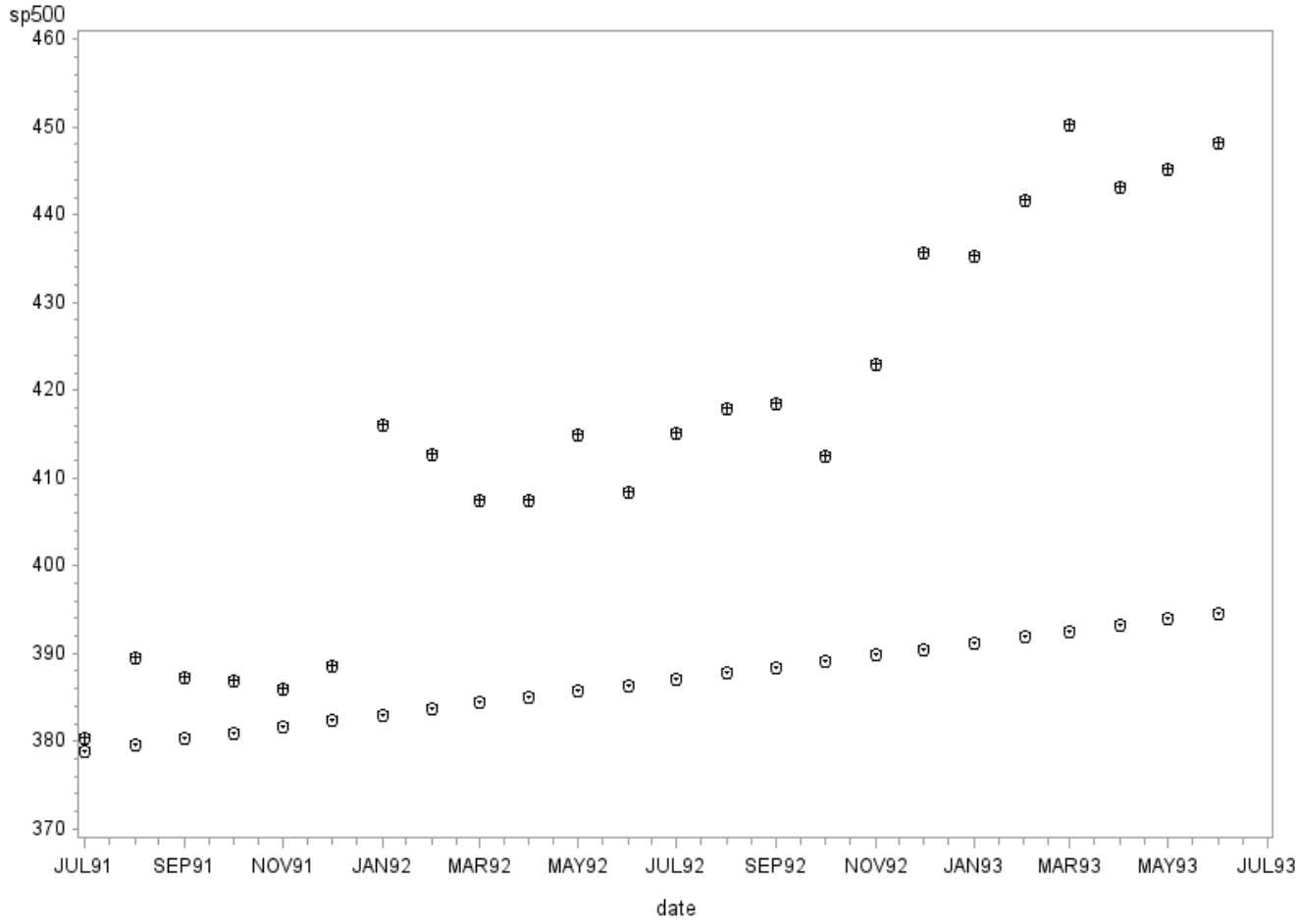
Here we have a simple gplot of the entire dataset.



3. [See first ARIMA output for results]

4. [See second ARIMA output for results] Here we have a p-value above 5%, so we fail to reject null and therefore, can continue with these forecasted values for the next two years.

5. We delete all the entries before JUN 1991, leaving just our forecasted values. Merging it back with our dataset, we can now plot the last two years of what actually happened vs. what we forecasted would happen.



Note that our forecasted values do not fall in line despite the ARIMA function having nearly 50 years of data to work with. This makes sense though considering the nature of the market we are trying to predict; stock indexes (and the stock market in general) is not always perfectly foreseeable with how many factors affect the market. However, in the first few months, we can see that our forecast got close, until Jan 92 where there was a huge jump in the S&P 500 that our forecast did not predict (understandably).