

Python Companion to ISLR

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1 Introduction

Figure 1 shows graphs of Wage versus three variables.

Figure 2 shows boxplots of previous days' percentage changes in S&P 500 grouped according to today's change Up or Down.

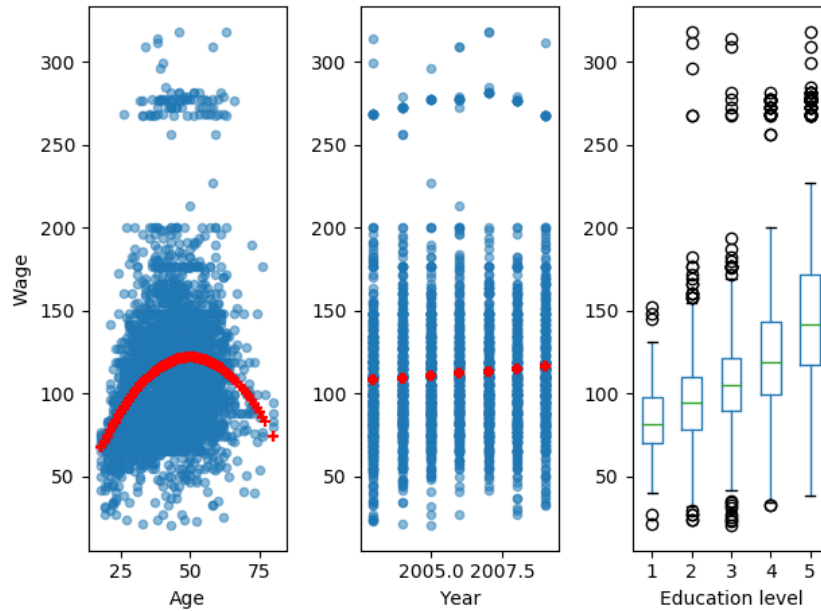


Figure 1: **Wage** data, which contains income survey information for males from the central Atlantic region of the United States. Left: **wage** as a function of **age**. On average, **wage** increases with **age** until about 60 years of age, at which point it begins to decline. Center: **wage** as a function of **year**. There is a slow but steady increase of approximately \$10,000 in the average **wage** between 2003 and 2009. Right: Boxplots displaying **wage** as a function of **education**, with 1 indicating the lowest level (no highschool diploma) and 5 the highest level (an advanced graduate degree). On average, **wage** increases with the level of **education**.

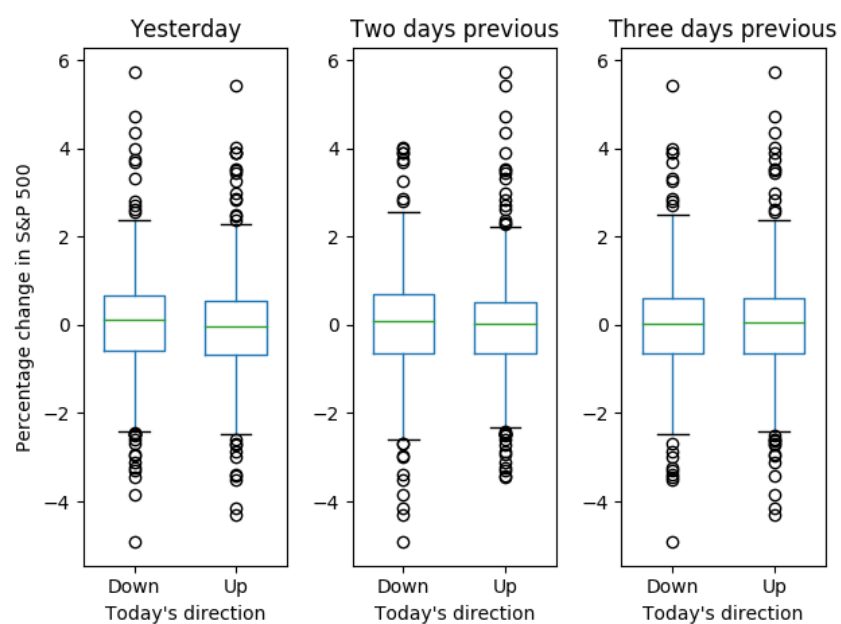


Figure 2: Left: Boxplots of the previous day's percentage change in the S&P 500 index for the days for which the market increased or decreased, obtained from the **Smarket** data. Center and Right: Same as left panel, but the percentage changes for two and three days previous are shown.