1. Delta airline data

(1) initial data

Here we will collected data from yahoo finance on Delta Airline’s daily stock adjust close price from May 2010 to May 2016 (6 years). Totally, we have 1531 samples.

Reference: [http://finance.yahoo.com](http://finance.yahoo.com/q/hp?s=DAL)

2. Correlation test

(1) Chart5:Line Chart of Crude oil price and American airline stock price

(2) pearson correlation test (linear correlation)

We use pearson correlation test to find the correlation relationship between American Airline Price and crude oil price.

|  |  |  |  |
| --- | --- | --- | --- |
| **Chart7:Pearson Correlations Test** | | | |
|  | | Stock Price | Oil Price |
| Stock Price | Pearson Correlation | 1 | -.62\*\* |
| Sig. (2-tailed) |  | .000 |
| N | 1531 | 1530 |
| Oil Price | Pearson Correlation | -.612\*\* | 1 |
| Sig. (2-tailed) | .000 |  |
| N | 1531 | 1531 |
| 3. **regression line Model**  (1) notation   |  |  |  | | --- | --- | --- | | Notation | Value | unit | | X | Crude oil price | Dollar | | A | American Airline Share Price | Dollar |   (2)model         |  |  |  |  | | --- | --- | --- | --- | | **Model Summary** | | | | | R | R Square | Adjusted R Square | Std. Error of the Estimate | | .625 | .391 | .391 | 12.078 | | The independent variable is oil price. | | | | | | | |