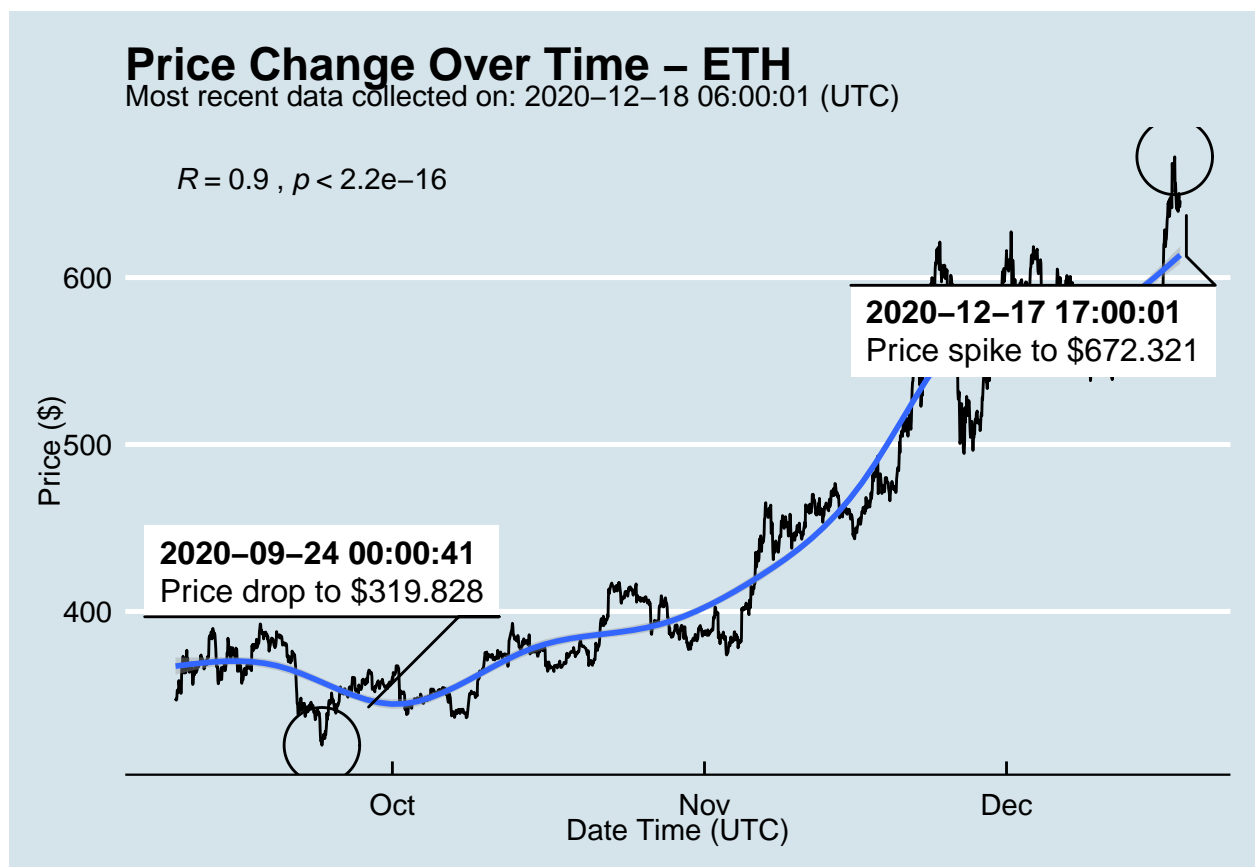# R Markdown Output

Last run on: 2020-12-18 06:28:37

Overview

This document has code embedded throughout. In the next section we will create a visualization using the already loaded dataset `eth_data`:

```
datatable(eth_data)
```

Price Chart - Ethereum

Python Code Example

```python
import pandas as pd
# Create the Python object from R
df = r.cryptodata
# Show the new Python dataframe
df
```

```
##            pair symbol   ask_1_price        date_time_utc
## 0       ETHUSD    ETH        646.072  2020-12-18 06:00:01
## 1       BTCUSD    BTC      22961.590  2020-12-18 06:00:00
## 2       ETHUSD    ETH        642.426  2020-12-18 05:00:01
## 3       BTCUSD    BTC      22866.880  2020-12-18 05:00:00
## 4       ETHUSD    ETH        643.288  2020-12-18 04:00:01
## ...        ...    ...            ...                  ...
## 5361    BTCUSD    BTC      11972.900  2020-08-10 06:03:50
## 5362    BTCUSD    BTC      11985.890  2020-08-10 05:03:48
## 5363    BTCUSD    BTC      11997.470  2020-08-10 04:32:55
## 5364    BTCUSD    BTC      10686.880                  NaT
## 5365    ETHUSD    ETH        357.844                  NaT
##
## [5366 rows x 4 columns]
```

One more Python example

The code below creates a new column `price_percentile` that specifies if the price for the row was in the upper or lower 50th percentile of prices (BTC should be upper and ETH lower):

```python
import numpy as np
# Create a new column based on the ask_1_price value:
df['price_percentile'] = np.where(df['ask_1_price'] >
                                 np.percentile(df['ask_1_price'], 50),
                          'upper 50th percentile of prices',
                          'lower 50th percentile of prices')
# Show modified dataframe:
df[['symbol', 'ask_1_price', 'price_percentile']]
```

```
##      symbol   ask_1_price                    price_percentile
## 0       ETH       646.072  lower 50th percentile of prices
## 1       BTC     22961.590  upper 50th percentile of prices
## 2       ETH       642.426  lower 50th percentile of prices
## 3       BTC     22866.880  upper 50th percentile of prices
## 4       ETH       643.288  lower 50th percentile of prices
## ...     ...           ...                              ...
## 5361    BTC     11972.900  upper 50th percentile of prices
## 5362    BTC     11985.890  upper 50th percentile of prices
## 5363    BTC     11997.470  upper 50th percentile of prices
## 5364    BTC     10686.880  upper 50th percentile of prices
## 5365    ETH       357.844  lower 50th percentile of prices
##
## [5366 rows x 3 columns]
```