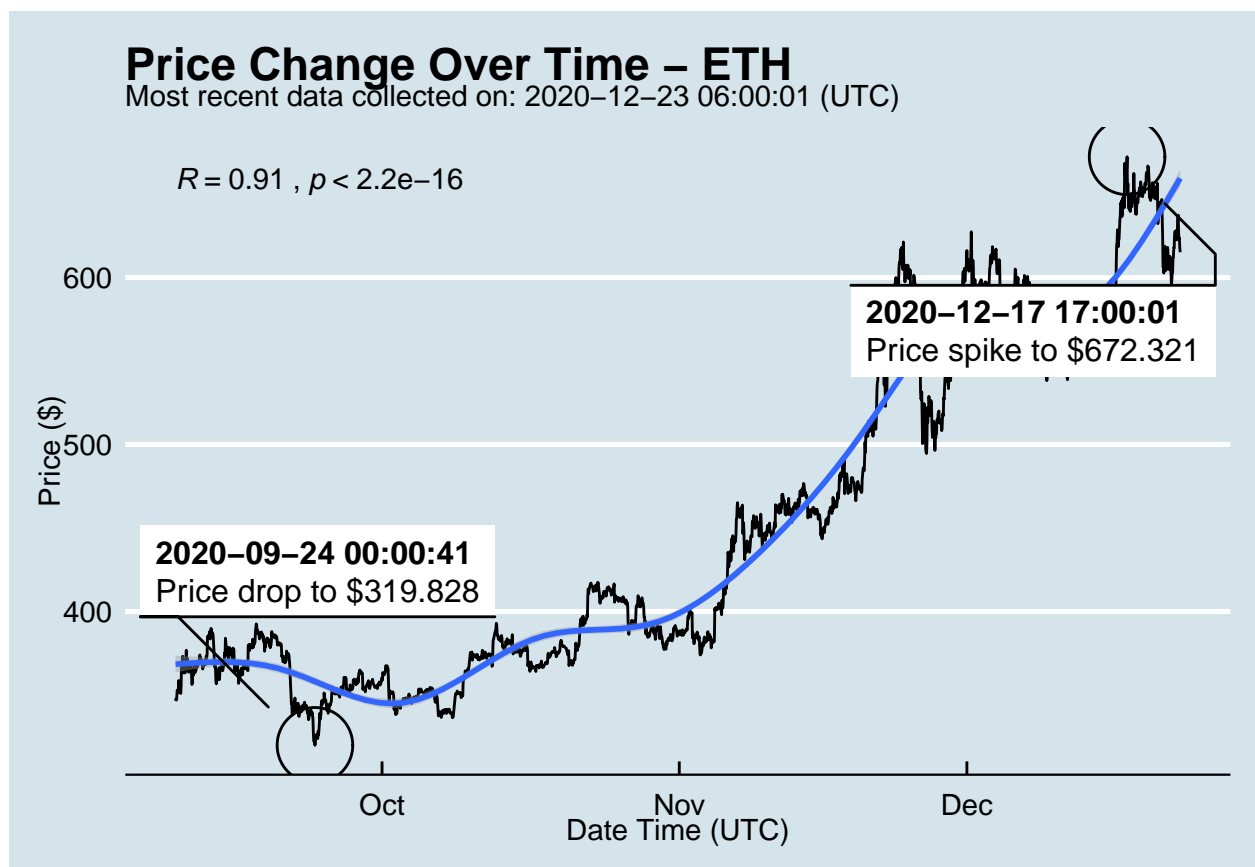# R Markdown Output

Last run on: 2020-12-23 06:32:10

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       BTCUSD    BTC     23525.000   2020-12-23 06:00:01
## 1       ETHUSD    ETH       615.130   2020-12-23 06:00:01
## 2       BTCUSD    BTC     23446.650   2020-12-23 05:00:01
## 3       ETHUSD    ETH       617.556   2020-12-23 05:00:01
## 4       ETHUSD    ETH       623.627   2020-12-23 04:00:01
## ...        ...    ...           ...                   ...
## 5601    BTCUSD    BTC     11972.900   2020-08-10 06:03:50
## 5602    BTCUSD    BTC     11985.890   2020-08-10 05:03:48
## 5603    BTCUSD    BTC     11997.470   2020-08-10 04:32:55
## 5604    BTCUSD    BTC     10686.880                   NaT
## 5605    ETHUSD    ETH       357.844                   NaT
##
## [5606 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         BTC     23525.000   upper 50th percentile of prices
## 1         ETH       615.130   lower 50th percentile of prices
## 2         BTC     23446.650   upper 50th percentile of prices
## 3         ETH       617.556   lower 50th percentile of prices
## 4         ETH       623.627   lower 50th percentile of prices
## ...       ...           ...                               ...
## 5601      BTC     11972.900   upper 50th percentile of prices
## 5602      BTC     11985.890   upper 50th percentile of prices
## 5603      BTC     11997.470   upper 50th percentile of prices
## 5604      BTC     10686.880   upper 50th percentile of prices
## 5605      ETH       357.844   lower 50th percentile of prices
##
## [5606 rows x 3 columns]
```