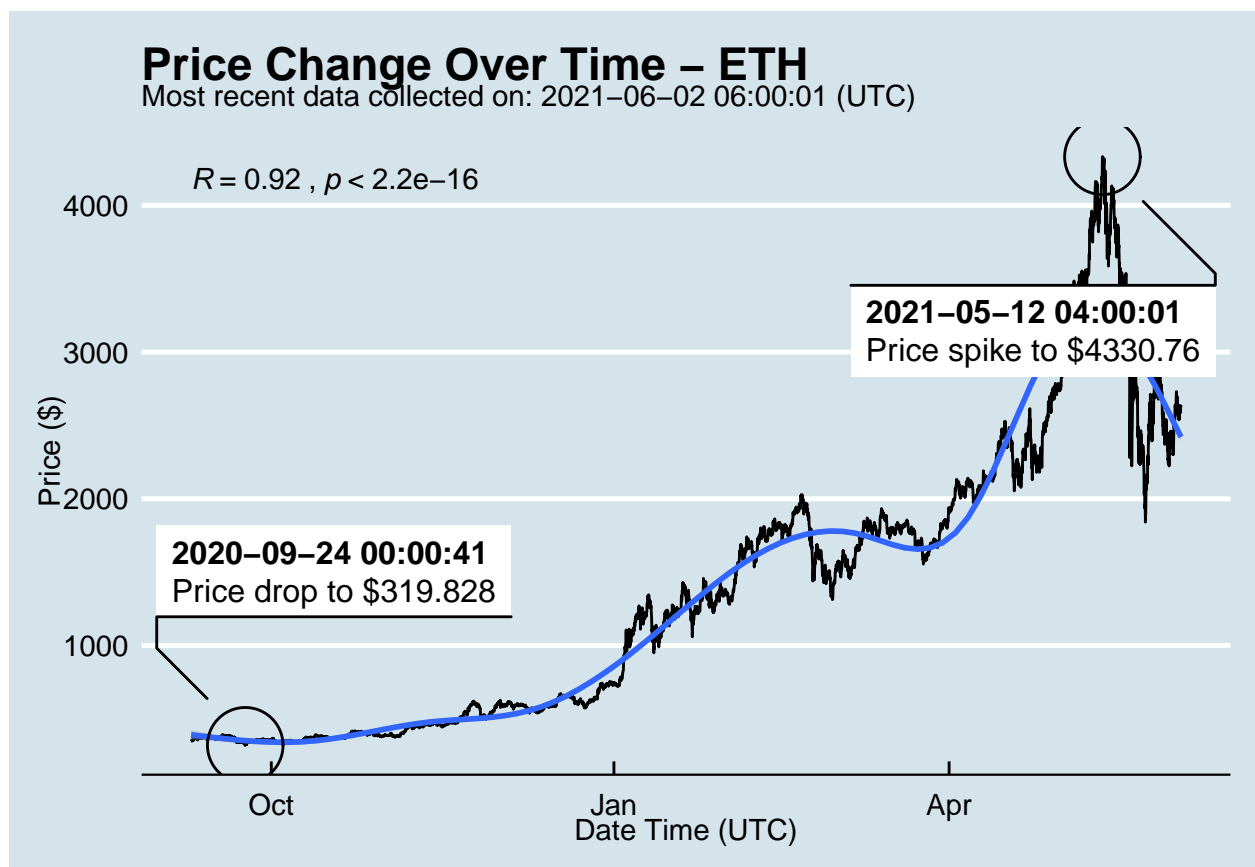# R Markdown Output

Last run on: 2021-06-02 06:56:39

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      2640.367 2021-06-02 06:00:01
## 1       BTCUSD    BTC     36815.290 2021-06-02 06:00:00
## 2       BTCUSD    BTC     36669.160 2021-06-02 05:00:01
## 3       ETHUSD    ETH      2625.964 2021-06-02 05:00:01
## 4       ETHUSD    ETH      2617.467 2021-06-02 04:00:01
## ...        ...    ...          ...                    ...
## 13319   BTCUSD    BTC     11972.900 2020-08-10 06:03:50
## 13320   BTCUSD    BTC     11985.890 2020-08-10 05:03:48
## 13321   BTCUSD    BTC     11997.470 2020-08-10 04:32:55
## 13322   BTCUSD    BTC     10686.880                    NaT
## 13323   ETHUSD    ETH       357.844                    NaT
##
## [13324 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     2640.367  lower 50th percentile of prices
## 1          BTC    36815.290  upper 50th percentile of prices
## 2          BTC    36669.160  upper 50th percentile of prices
## 3          ETH     2625.964  lower 50th percentile of prices
## 4          ETH     2617.467  lower 50th percentile of prices
## ...        ...          ...                              ...
## 13319      BTC    11972.900  upper 50th percentile of prices
## 13320      BTC    11985.890  upper 50th percentile of prices
## 13321      BTC    11997.470  upper 50th percentile of prices
## 13322      BTC    10686.880  upper 50th percentile of prices
## 13323      ETH      357.844  lower 50th percentile of prices
##
## [13324 rows x 3 columns]
```