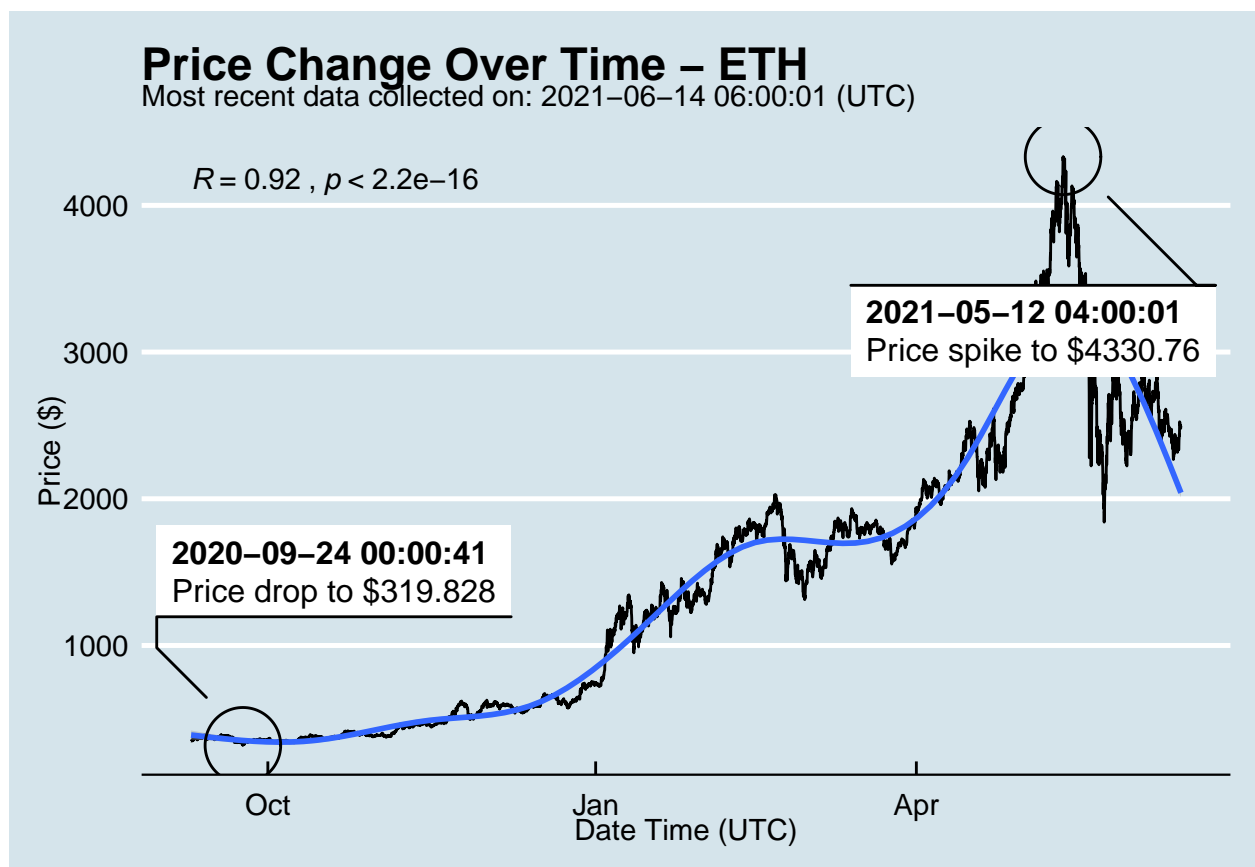# R Markdown Output

Last run on: 2021-06-14 06:13:17

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    39391.850 2021-06-14 06:00:01
## 1         ETHUSD    ETH     2498.049 2021-06-14 06:00:01
## 2         ETHUSD    ETH     2490.316 2021-06-14 05:00:01
## 3         BTCUSD    BTC    39250.260 2021-06-14 05:00:00
## 4         ETHUSD    ETH     2479.507 2021-06-14 04:00:01
## ...          ...    ...          ...                 ...
## 13895     BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 13896     BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 13897     BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 13898     BTCUSD    BTC    10686.880                 NaT
## 13899     ETHUSD    ETH      357.844                 NaT
##
## [13900 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    39391.850  upper 50th percentile of prices
## 1          ETH     2498.049  lower 50th percentile of prices
## 2          ETH     2490.316  lower 50th percentile of prices
## 3          BTC    39250.260  upper 50th percentile of prices
## 4          ETH     2479.507  lower 50th percentile of prices
## ...        ...          ...                              ...
## 13895      BTC    11972.900  upper 50th percentile of prices
## 13896      BTC    11985.890  upper 50th percentile of prices
## 13897      BTC    11997.470  upper 50th percentile of prices
## 13898      BTC    10686.880  upper 50th percentile of prices
## 13899      ETH      357.844  lower 50th percentile of prices
##
## [13900 rows x 3 columns]
```