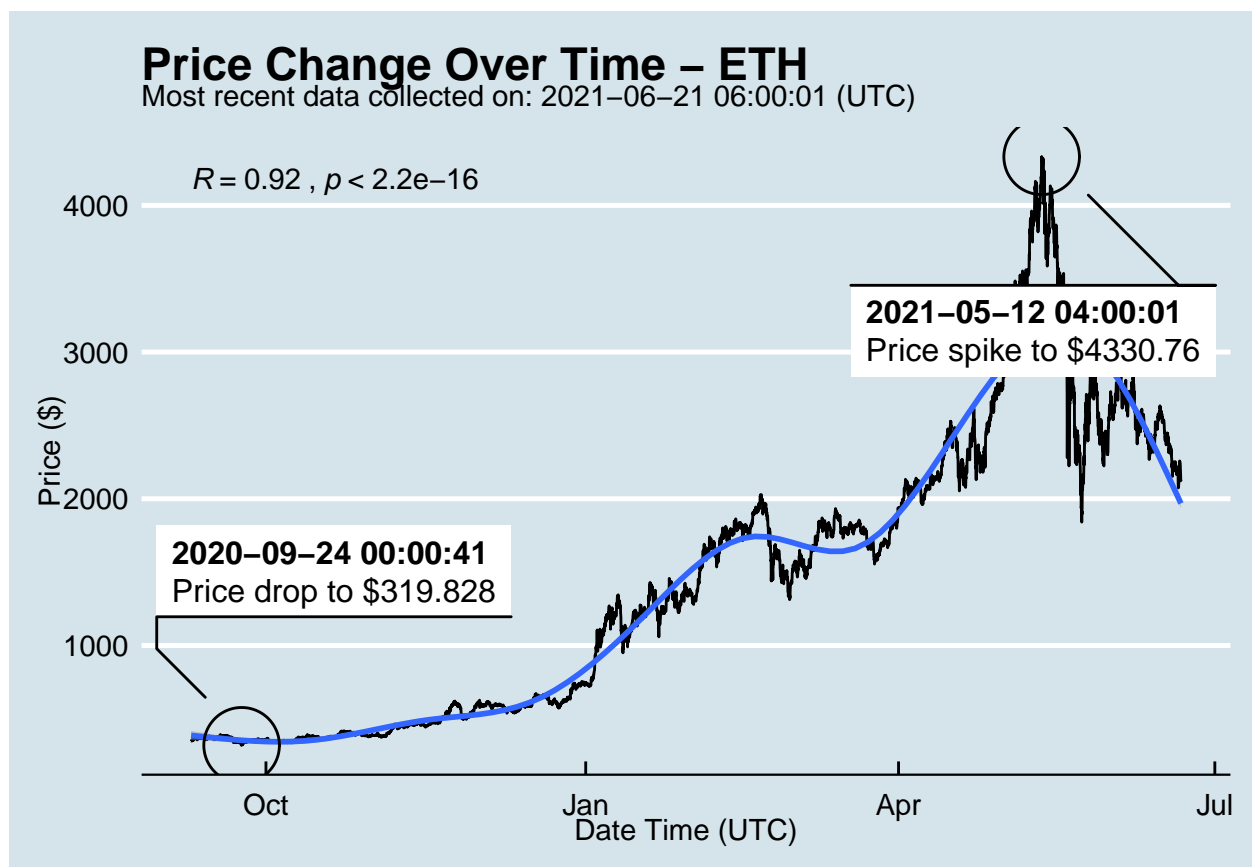# R Markdown Output

Last run on: 2021-06-21 06:12:55

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    34439.270  2021-06-21 06:00:01
## 1         ETHUSD    ETH     2129.000  2021-06-21 06:00:01
## 2         ETHUSD    ETH     2123.333  2021-06-21 05:00:01
## 3         BTCUSD    BTC    34242.380  2021-06-21 05:00:00
## 4         ETHUSD    ETH     2156.559  2021-06-21 04:00:01
## ...          ...    ...          ...                    ...
## 14231     BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 14232     BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 14233     BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 14234     BTCUSD    BTC    10686.880                    NaT
## 14235     ETHUSD    ETH      357.844                    NaT
##
## [14236 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    34439.270  upper 50th percentile of prices
## 1         ETH     2129.000  lower 50th percentile of prices
## 2         ETH     2123.333  lower 50th percentile of prices
## 3         BTC    34242.380  upper 50th percentile of prices
## 4         ETH     2156.559  lower 50th percentile of prices
## ...       ...          ...                              ...
## 14231     BTC    11972.900  upper 50th percentile of prices
## 14232     BTC    11985.890  upper 50th percentile of prices
## 14233     BTC    11997.470  upper 50th percentile of prices
## 14234     BTC    10686.880  upper 50th percentile of prices
## 14235     ETH      357.844  lower 50th percentile of prices
##
## [14236 rows x 3 columns]
```