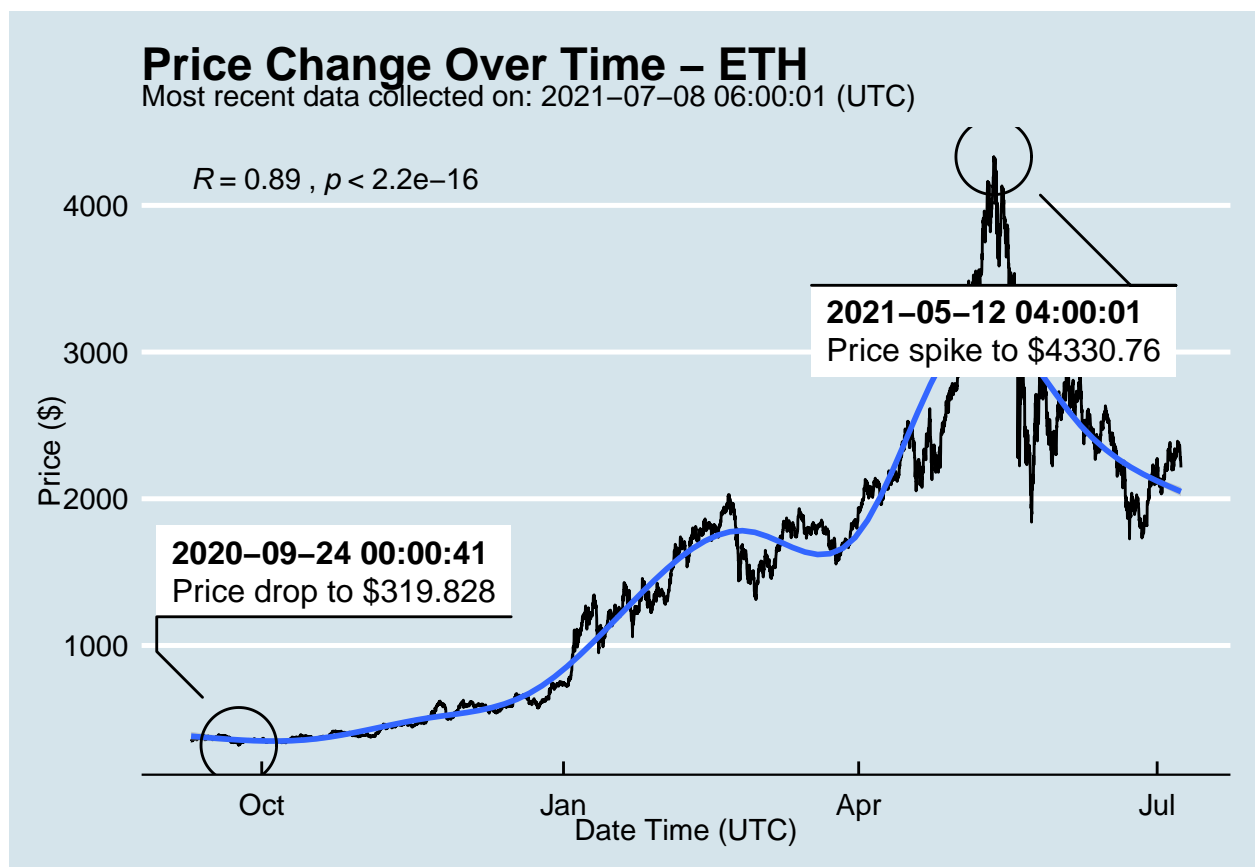# R Markdown Output

Last run on: 2021-07-08 06:12:32

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    32872.100 2021-07-08 06:00:01
## 1       ETHUSD    ETH     2213.664 2021-07-08 06:00:01
## 2       BTCUSD    BTC    33296.350 2021-07-08 05:00:01
## 3       ETHUSD    ETH     2241.614 2021-07-08 05:00:01
## 4       ETHUSD    ETH     2254.954 2021-07-08 04:00:01
## ...        ...    ...          ...                  ...
## 15047   BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 15048   BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 15049   BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 15050   BTCUSD    BTC    10686.880                  NaT
## 15051   ETHUSD    ETH      357.844                  NaT
##
## [15052 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    32872.100  upper 50th percentile of prices
## 1          ETH     2213.664  lower 50th percentile of prices
## 2          BTC    33296.350  upper 50th percentile of prices
## 3          ETH     2241.614  lower 50th percentile of prices
## 4          ETH     2254.954  lower 50th percentile of prices
## ...        ...          ...                              ...
## 15047      BTC    11972.900  upper 50th percentile of prices
## 15048      BTC    11985.890  upper 50th percentile of prices
## 15049      BTC    11997.470  upper 50th percentile of prices
## 15050      BTC    10686.880  upper 50th percentile of prices
## 15051      ETH      357.844  lower 50th percentile of prices
##
## [15052 rows x 3 columns]
```