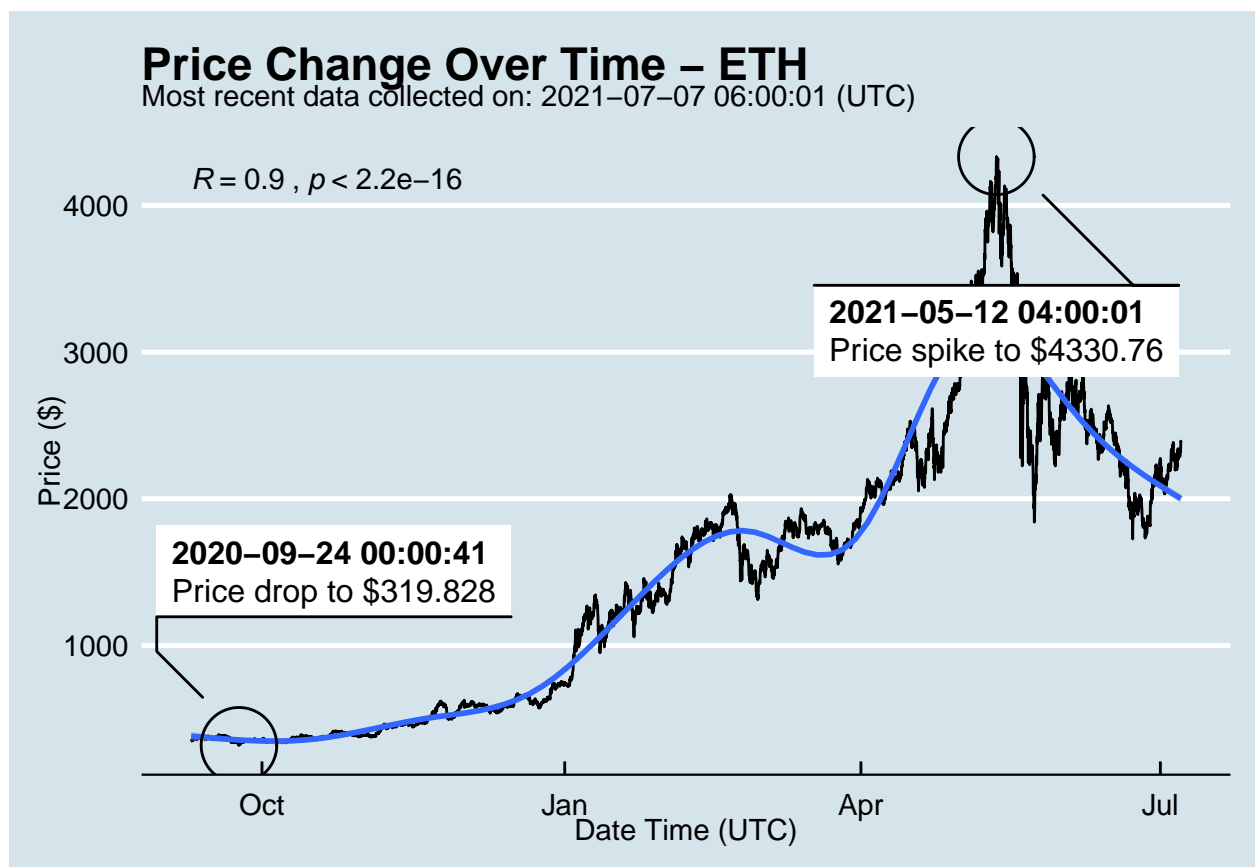# R Markdown Output

Last run on: 2021-07-07 06:13:57

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    34822.380 2021-07-07 06:00:01
## 1          ETHUSD    ETH     2384.943 2021-07-07 06:00:01
## 2          BTCUSD    BTC    34715.600 2021-07-07 05:00:01
## 3          ETHUSD    ETH     2392.826 2021-07-07 05:00:01
## 4          ETHUSD    ETH     2340.197 2021-07-07 04:00:01
## ...           ...    ...          ...                   ...
## 14999      BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 15000      BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 15001      BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 15002      BTCUSD    BTC    10686.880                   NaT
## 15003      ETHUSD    ETH      357.844                   NaT
##
## [15004 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    34822.380  upper 50th percentile of prices
## 1         ETH     2384.943  lower 50th percentile of prices
## 2         BTC    34715.600  upper 50th percentile of prices
## 3         ETH     2392.826  lower 50th percentile of prices
## 4         ETH     2340.197  lower 50th percentile of prices
## ...       ...          ...                              ...
## 14999     BTC    11972.900  upper 50th percentile of prices
## 15000     BTC    11985.890  upper 50th percentile of prices
## 15001     BTC    11997.470  upper 50th percentile of prices
## 15002     BTC    10686.880  upper 50th percentile of prices
## 15003     ETH      357.844  lower 50th percentile of prices
##
## [15004 rows x 3 columns]
```