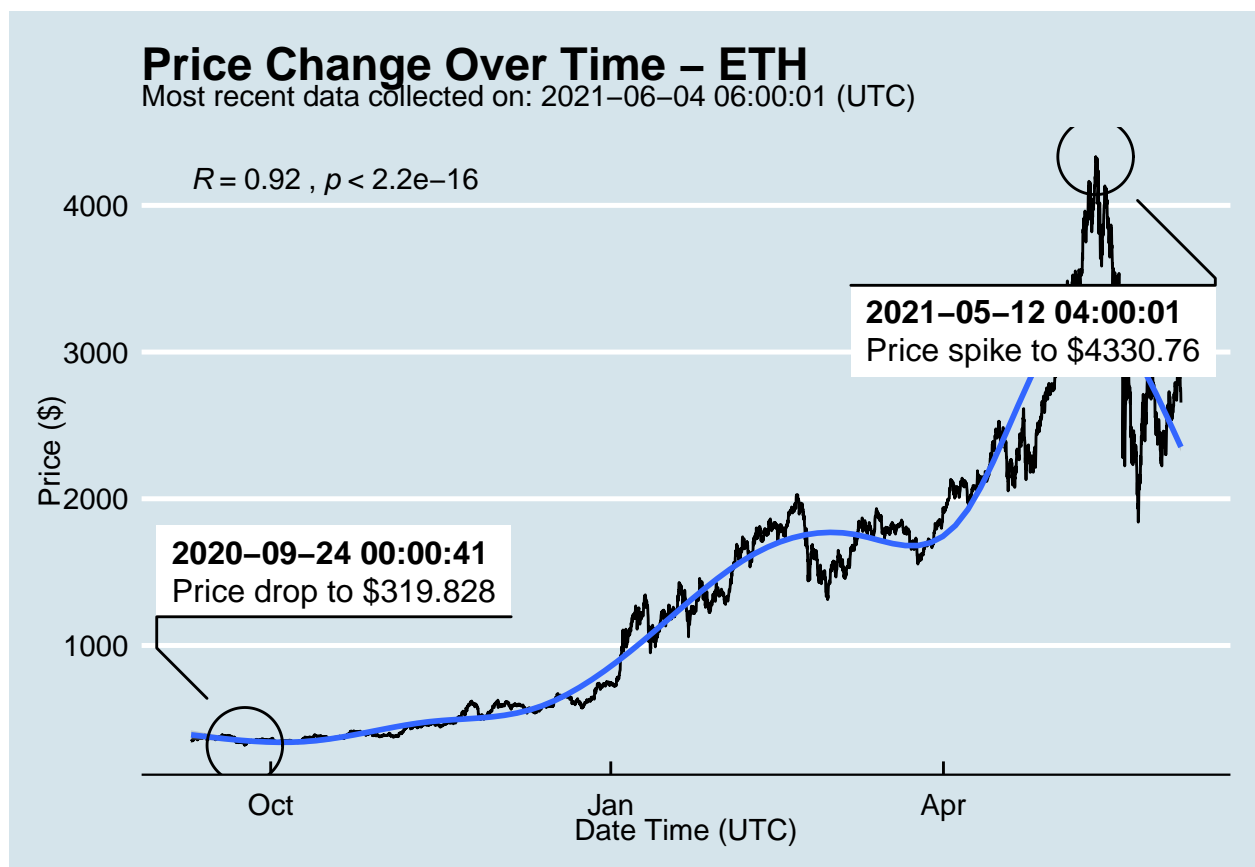# R Markdown Output

Last run on: 2021-06-04 06:44:46

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    36726.360  2021-06-04 06:00:01
## 1        ETHUSD    ETH     2655.788  2021-06-04 06:00:01
## 2        ETHUSD    ETH     2721.172  2021-06-04 05:00:01
## 3        BTCUSD    BTC    37562.040  2021-06-04 05:00:00
## 4        BTCUSD    BTC    37928.010  2021-06-04 04:00:01
## ...         ...    ...          ...                   ...
## 13415    BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 13416    BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 13417    BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 13418    BTCUSD    BTC    10686.880                   NaT
## 13419    ETHUSD    ETH      357.844                   NaT
##
## [13420 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    36726.360  upper 50th percentile of prices
## 1         ETH     2655.788  lower 50th percentile of prices
## 2         ETH     2721.172  lower 50th percentile of prices
## 3         BTC    37562.040  upper 50th percentile of prices
## 4         BTC    37928.010  upper 50th percentile of prices
## ...       ...          ...                              ...
## 13415     BTC    11972.900  upper 50th percentile of prices
## 13416     BTC    11985.890  upper 50th percentile of prices
## 13417     BTC    11997.470  upper 50th percentile of prices
## 13418     BTC    10686.880  upper 50th percentile of prices
## 13419     ETH      357.844  lower 50th percentile of prices
##
## [13420 rows x 3 columns]
```