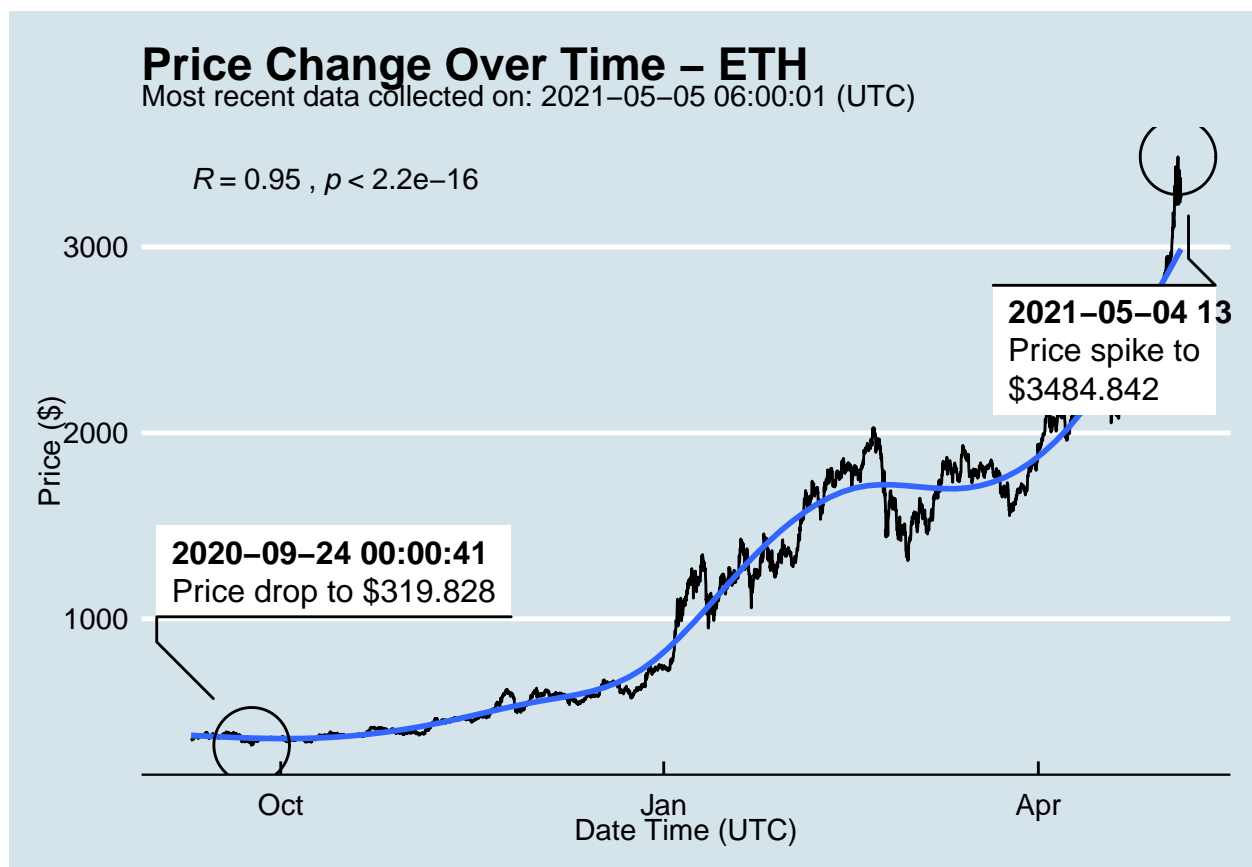# R Markdown Output

Last run on: 2021-05-05 06:31:30

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        ETHUSD    ETH     3283.864 2021-05-05 06:00:01
## 1        BTCUSD    BTC    54741.080 2021-05-05 06:00:00
## 2        BTCUSD    BTC    54590.000 2021-05-05 05:00:01
## 3        ETHUSD    ETH     3263.297 2021-05-05 05:00:01
## 4        ETHUSD    ETH     3298.676 2021-05-05 04:00:01
## ...         ...    ...          ...                 ...
## 11979    BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 11980    BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 11981    BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 11982    BTCUSD    BTC    10686.880                 NaT
## 11983    ETHUSD    ETH      357.844                 NaT
##
## [11984 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         ETH     3283.864  lower 50th percentile of prices
## 1         BTC    54741.080  upper 50th percentile of prices
## 2         BTC    54590.000  upper 50th percentile of prices
## 3         ETH     3263.297  lower 50th percentile of prices
## 4         ETH     3298.676  lower 50th percentile of prices
## ...       ...          ...                              ...
## 11979     BTC    11972.900  upper 50th percentile of prices
## 11980     BTC    11985.890  upper 50th percentile of prices
## 11981     BTC    11997.470  upper 50th percentile of prices
## 11982     BTC    10686.880  upper 50th percentile of prices
## 11983     ETH      357.844  lower 50th percentile of prices
##
## [11984 rows x 3 columns]
```