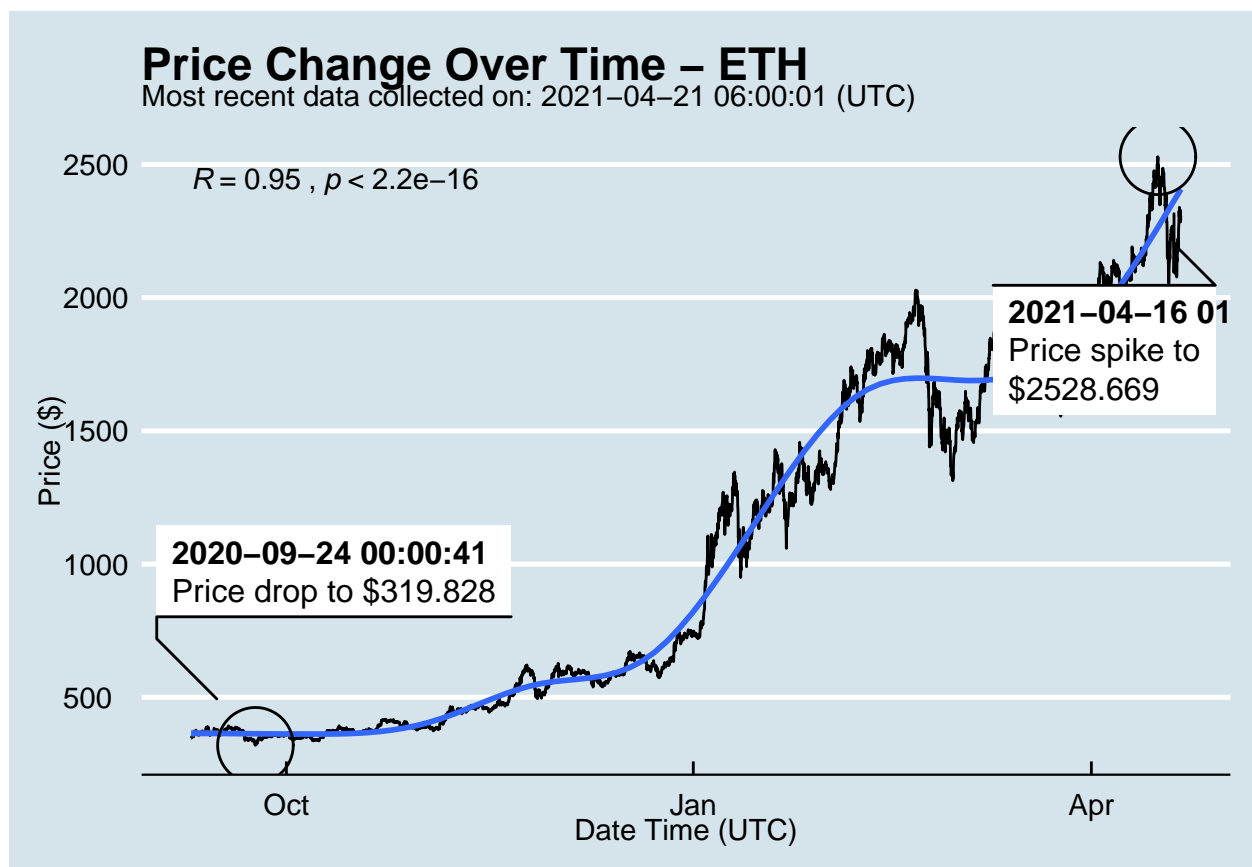# R Markdown Output

Last run on: 2021-04-21 06:19:31

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     2303.354 2021-04-21 06:00:01
## 1       BTCUSD    BTC    55386.850 2021-04-21 06:00:00
## 2       ETHUSD    ETH     2305.398 2021-04-21 05:00:01
## 3       BTCUSD    BTC    55385.080 2021-04-21 05:00:00
## 4       ETHUSD    ETH     2284.321 2021-04-21 04:00:01
## ...        ...    ...          ...                 ...
## 11309   BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 11310   BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 11311   BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 11312   BTCUSD    BTC    10686.880                 NaT
## 11313   ETHUSD    ETH      357.844                 NaT
##
## [11314 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     2303.354  lower 50th percentile of prices
## 1         BTC    55386.850  upper 50th percentile of prices
## 2         ETH     2305.398  lower 50th percentile of prices
## 3         BTC    55385.080  upper 50th percentile of prices
## 4         ETH     2284.321  lower 50th percentile of prices
## ...       ...          ...                              ...
## 11309     BTC    11972.900  upper 50th percentile of prices
## 11310     BTC    11985.890  upper 50th percentile of prices
## 11311     BTC    11997.470  upper 50th percentile of prices
## 11312     BTC    10686.880  upper 50th percentile of prices
## 11313     ETH      357.844  lower 50th percentile of prices
##
## [11314 rows x 3 columns]
```