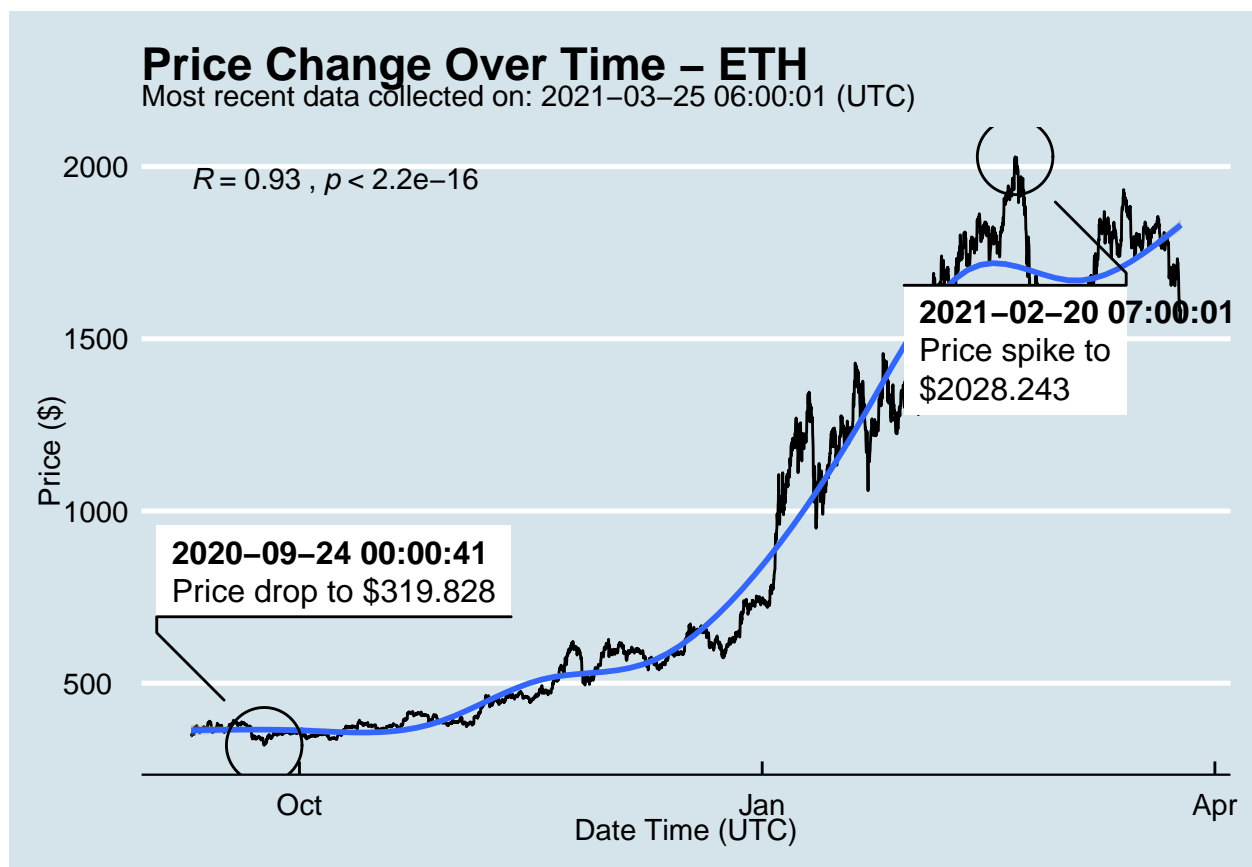# R Markdown Output

Last run on: 2021-03-25 06:16:07

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    52681.900  2021-03-25 06:00:01
## 1        ETHUSD    ETH     1585.542  2021-03-25 06:00:01
## 2        BTCUSD    BTC    52269.650  2021-03-25 05:00:01
## 3        ETHUSD    ETH     1573.603  2021-03-25 05:00:01
## 4        BTCUSD    BTC    52136.250  2021-03-25 04:00:01
## ...         ...    ...          ...                  ...
## 10013    BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 10014    BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 10015    BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 10016    BTCUSD    BTC    10686.880                  NaT
## 10017    ETHUSD    ETH      357.844                  NaT
##
## [10018 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    52681.900  upper 50th percentile of prices
## 1          ETH     1585.542  lower 50th percentile of prices
## 2          BTC    52269.650  upper 50th percentile of prices
## 3          ETH     1573.603  lower 50th percentile of prices
## 4          BTC    52136.250  upper 50th percentile of prices
## ...        ...          ...                              ...
## 10013      BTC    11972.900  upper 50th percentile of prices
## 10014      BTC    11985.890  upper 50th percentile of prices
## 10015      BTC    11997.470  upper 50th percentile of prices
## 10016      BTC    10686.880  upper 50th percentile of prices
## 10017      ETH      357.844  lower 50th percentile of prices
##
## [10018 rows x 3 columns]
```