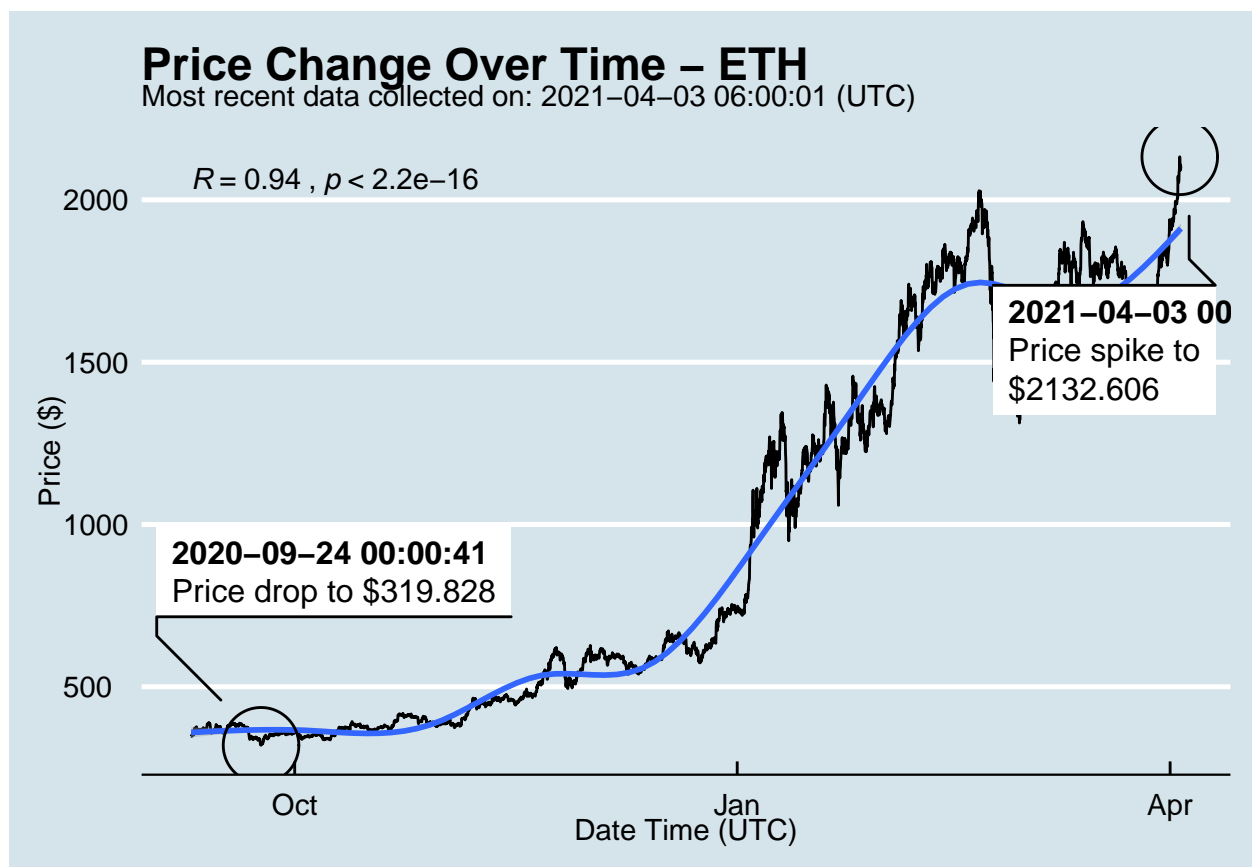# R Markdown Output

Last run on: 2021-04-03 06:14:14

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     59440.000  2021-04-03 06:00:01
## 1        ETHUSD    ETH      2104.264  2021-04-03 06:00:01
## 2        BTCUSD    BTC     59386.670  2021-04-03 05:00:01
## 3        ETHUSD    ETH      2097.812  2021-04-03 05:00:01
## 4        BTCUSD    BTC     59214.840  2021-04-03 04:00:01
## ...         ...    ...           ...                    ...
## 10445    BTCUSD    BTC     11972.900  2020-08-10 06:03:50
## 10446    BTCUSD    BTC     11985.890  2020-08-10 05:03:48
## 10447    BTCUSD    BTC     11997.470  2020-08-10 04:32:55
## 10448    BTCUSD    BTC     10686.880                    NaT
## 10449    ETHUSD    ETH       357.844                    NaT
##
## [10450 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     59440.000  upper 50th percentile of prices
## 1          ETH      2104.264  lower 50th percentile of prices
## 2          BTC     59386.670  upper 50th percentile of prices
## 3          ETH      2097.812  lower 50th percentile of prices
## 4          BTC     59214.840  upper 50th percentile of prices
## ...        ...           ...                              ...
## 10445      BTC     11972.900  upper 50th percentile of prices
## 10446      BTC     11985.890  upper 50th percentile of prices
## 10447      BTC     11997.470  upper 50th percentile of prices
## 10448      BTC     10686.880  upper 50th percentile of prices
## 10449      ETH       357.844  lower 50th percentile of prices
##
## [10450 rows x 3 columns]
```