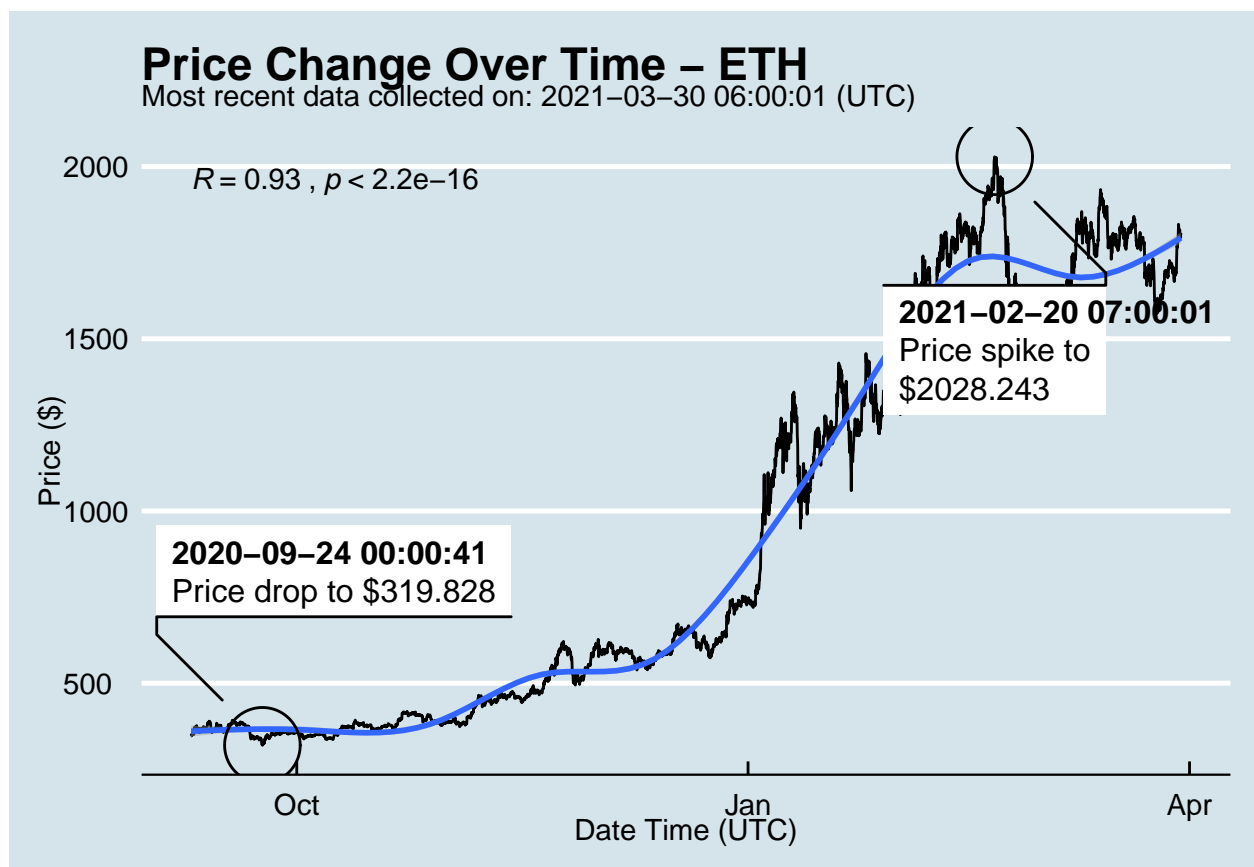# R Markdown Output

Last run on: 2021-03-30 06:15:07

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    57679.650  2021-03-30 06:00:01
## 1        ETHUSD    ETH     1807.085  2021-03-30 06:00:01
## 2        BTCUSD    BTC    57586.000  2021-03-30 05:00:01
## 3        ETHUSD    ETH     1802.569  2021-03-30 05:00:01
## 4        BTCUSD    BTC    57182.030  2021-03-30 04:00:01
## ...         ...    ...          ...                  ...
## 10253    BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 10254    BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 10255    BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 10256    BTCUSD    BTC    10686.880                  NaT
## 10257    ETHUSD    ETH      357.844                  NaT
##
## [10258 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    57679.650  upper 50th percentile of prices
## 1         ETH     1807.085  lower 50th percentile of prices
## 2         BTC    57586.000  upper 50th percentile of prices
## 3         ETH     1802.569  lower 50th percentile of prices
## 4         BTC    57182.030  upper 50th percentile of prices
## ...       ...          ...                              ...
## 10253     BTC    11972.900  upper 50th percentile of prices
## 10254     BTC    11985.890  upper 50th percentile of prices
## 10255     BTC    11997.470  upper 50th percentile of prices
## 10256     BTC    10686.880  upper 50th percentile of prices
## 10257     ETH      357.844  lower 50th percentile of prices
##
## [10258 rows x 3 columns]
```