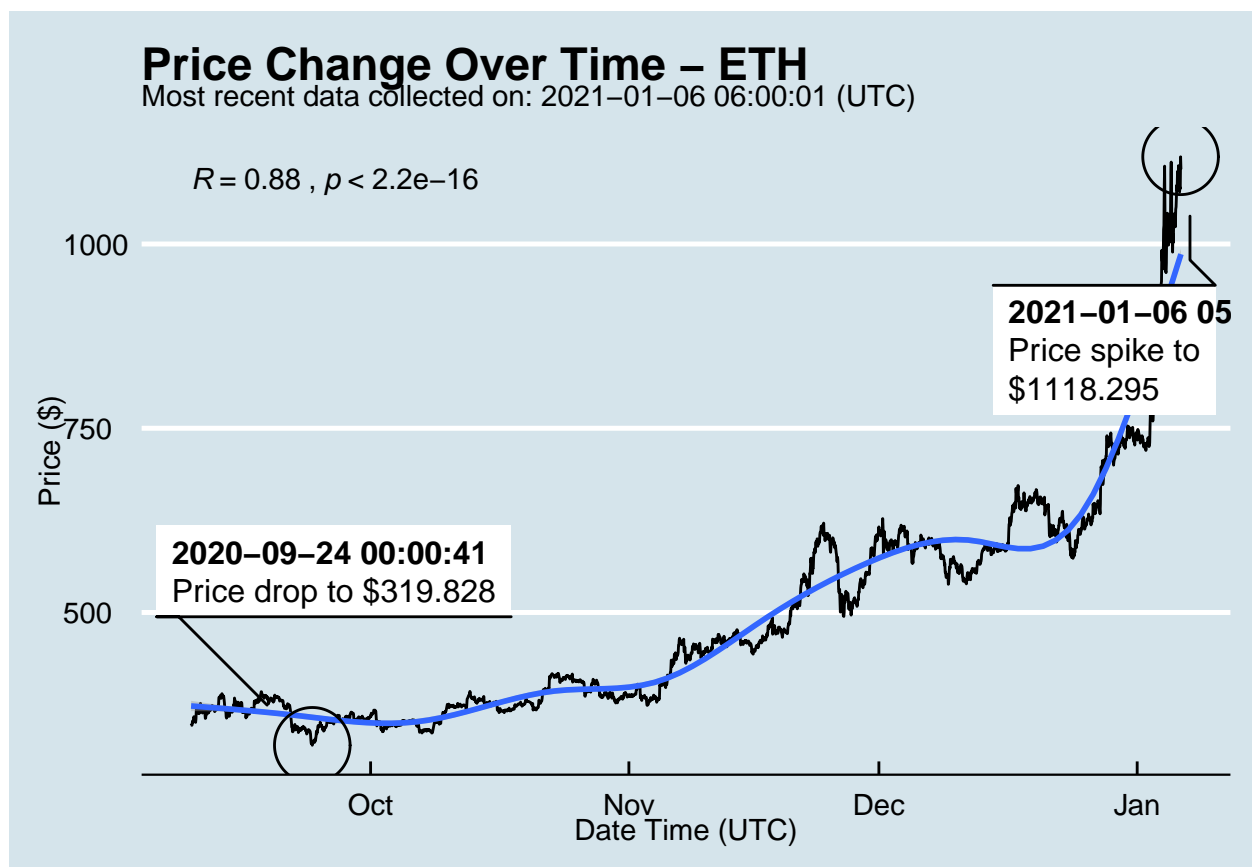# R Markdown Output

Last run on: 2021-01-06 06:36:00

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     34974.040 2021-01-06 06:00:01
## 1      ETHUSD    ETH      1101.446 2021-01-06 06:00:01
## 2      ETHUSD    ETH      1118.295 2021-01-06 05:00:01
## 3      BTCUSD    BTC     35332.310 2021-01-06 05:00:00
## 4      ETHUSD    ETH      1075.253 2021-01-06 04:00:01
## ...       ...    ...           ...                    ...
## 6273   BTCUSD    BTC     11972.900 2020-08-10 06:03:50
## 6274   BTCUSD    BTC     11985.890 2020-08-10 05:03:48
## 6275   BTCUSD    BTC     11997.470 2020-08-10 04:32:55
## 6276   BTCUSD    BTC     10686.880                    NaT
## 6277   ETHUSD    ETH       357.844                    NaT
##
## [6278 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     34974.040  upper 50th percentile of prices
## 1        ETH      1101.446  lower 50th percentile of prices
## 2        ETH      1118.295  lower 50th percentile of prices
## 3        BTC     35332.310  upper 50th percentile of prices
## 4        ETH      1075.253  lower 50th percentile of prices
## ...      ...          ...                               ...
## 6273     BTC     11972.900  upper 50th percentile of prices
## 6274     BTC     11985.890  upper 50th percentile of prices
## 6275     BTC     11997.470  upper 50th percentile of prices
## 6276     BTC     10686.880  upper 50th percentile of prices
## 6277     ETH       357.844  lower 50th percentile of prices
##
## [6278 rows x 3 columns]
```