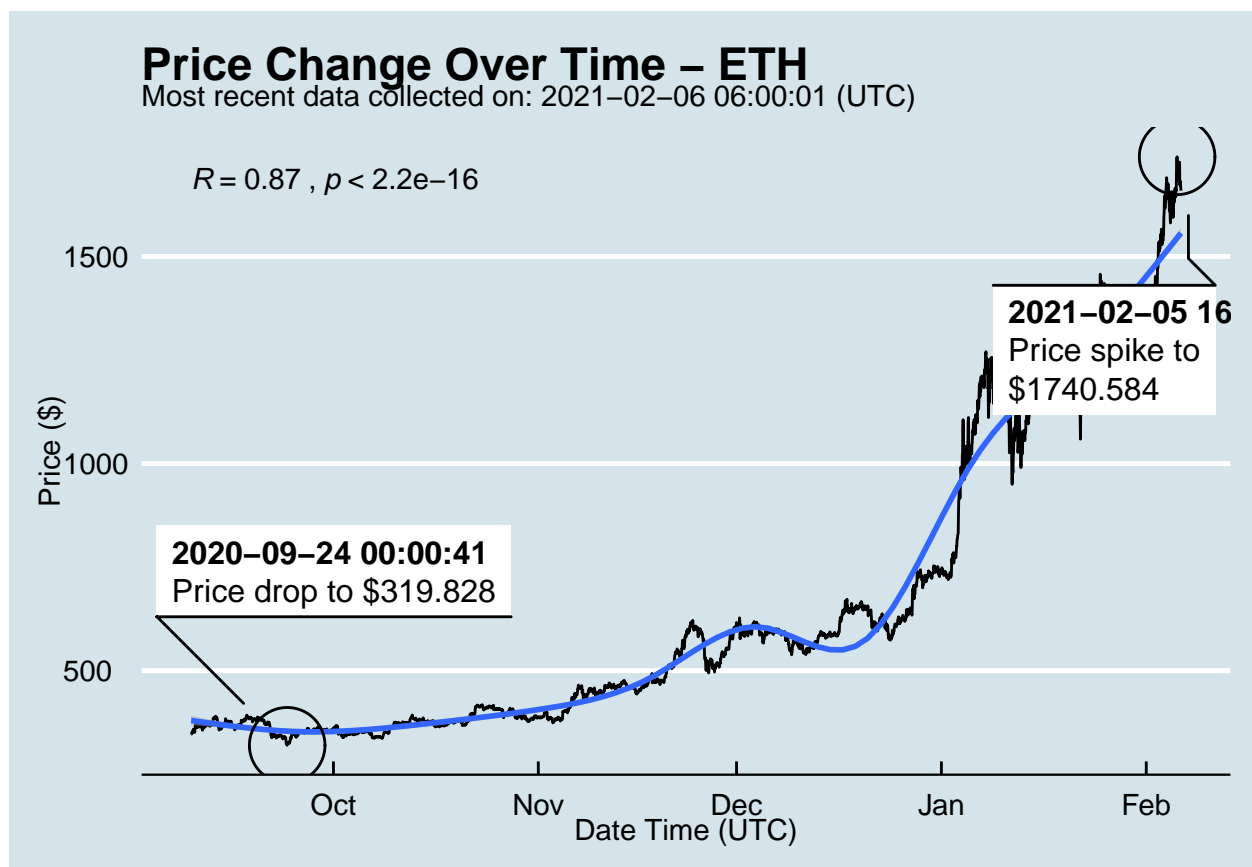# R Markdown Output

Last run on: 2021-02-06 06:29:17

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      1658.848  2021-02-06 06:00:01
## 1      BTCUSD    BTC     39019.140  2021-02-06 06:00:00
## 2      ETHUSD    ETH      1669.399  2021-02-06 05:00:01
## 3      BTCUSD    BTC     39182.540  2021-02-06 05:00:00
## 4      ETHUSD    ETH      1681.316  2021-02-06 04:00:01
## ...       ...    ...          ...                   ...
## 7761   BTCUSD    BTC     11972.900  2020-08-10 06:03:50
## 7762   BTCUSD    BTC     11985.890  2020-08-10 05:03:48
## 7763   BTCUSD    BTC     11997.470  2020-08-10 04:32:55
## 7764   BTCUSD    BTC     10686.880                   NaT
## 7765   ETHUSD    ETH       357.844                   NaT
##
## [7766 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     1658.848  lower 50th percentile of prices
## 1         BTC    39019.140  upper 50th percentile of prices
## 2         ETH     1669.399  lower 50th percentile of prices
## 3         BTC    39182.540  upper 50th percentile of prices
## 4         ETH     1681.316  lower 50th percentile of prices
## ...       ...          ...                             ...
## 7761      BTC    11972.900  upper 50th percentile of prices
## 7762      BTC    11985.890  upper 50th percentile of prices
## 7763      BTC    11997.470  upper 50th percentile of prices
## 7764      BTC    10686.880  upper 50th percentile of prices
## 7765      ETH      357.844  lower 50th percentile of prices
##
## [7766 rows x 3 columns]
```