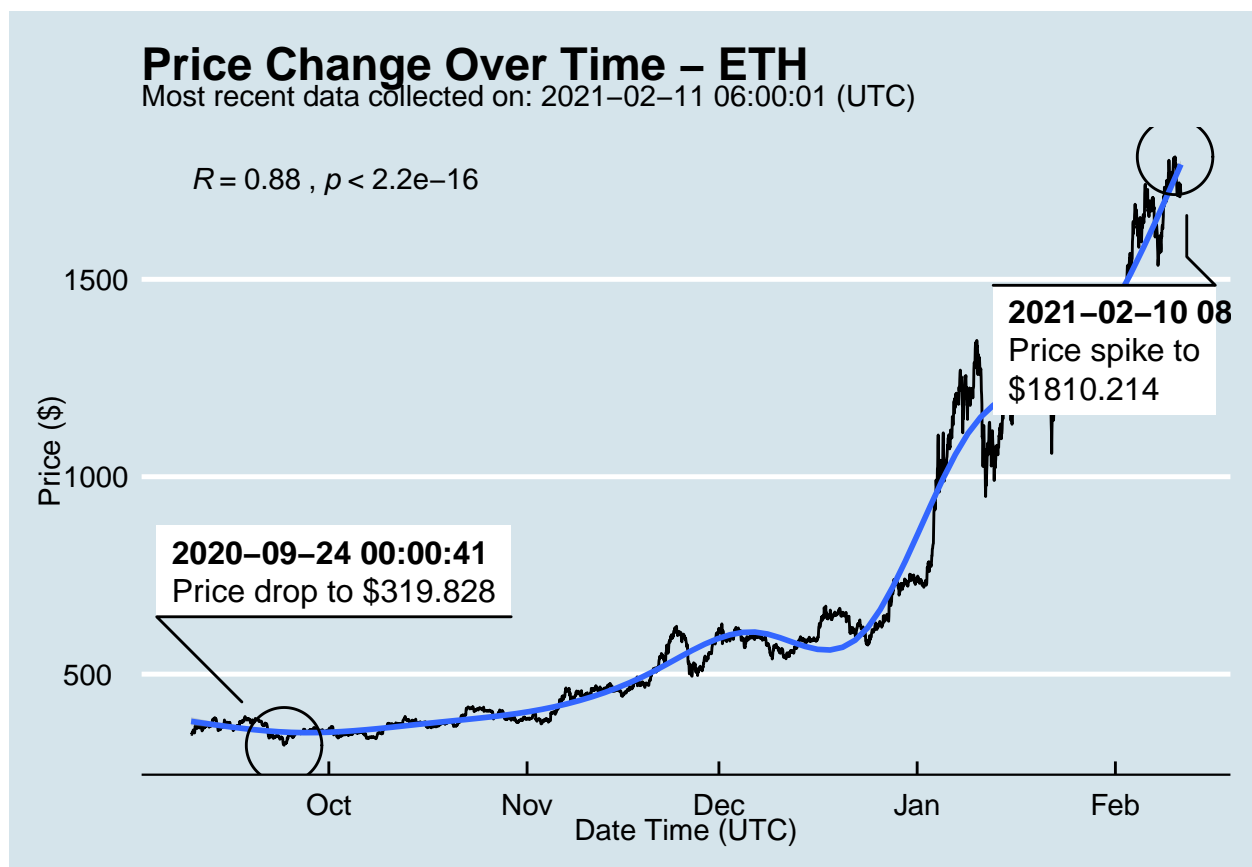# R Markdown Output

Last run on: 2021-02-11 06:29:57

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     44640.980 2021-02-11 06:00:01
## 1      ETHUSD    ETH      1716.652 2021-02-11 06:00:01
## 2      ETHUSD    ETH      1723.927 2021-02-11 05:00:01
## 3      BTCUSD    BTC     44718.930 2021-02-11 05:00:00
## 4      ETHUSD    ETH      1740.290 2021-02-11 04:00:01
## ...       ...    ...          ...                   ...
## 8001   BTCUSD    BTC     11972.900 2020-08-10 06:03:50
## 8002   BTCUSD    BTC     11985.890 2020-08-10 05:03:48
## 8003   BTCUSD    BTC     11997.470 2020-08-10 04:32:55
## 8004   BTCUSD    BTC     10686.880                   NaT
## 8005   ETHUSD    ETH       357.844                   NaT
##
## [8006 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    44640.980  upper 50th percentile of prices
## 1         ETH     1716.652  lower 50th percentile of prices
## 2         ETH     1723.927  lower 50th percentile of prices
## 3         BTC    44718.930  upper 50th percentile of prices
## 4         ETH     1740.290  lower 50th percentile of prices
## ...       ...          ...                              ...
## 8001      BTC    11972.900  upper 50th percentile of prices
## 8002      BTC    11985.890  upper 50th percentile of prices
## 8003      BTC    11997.470  upper 50th percentile of prices
## 8004      BTC    10686.880  upper 50th percentile of prices
## 8005      ETH      357.844  lower 50th percentile of prices
##
## [8006 rows x 3 columns]
```