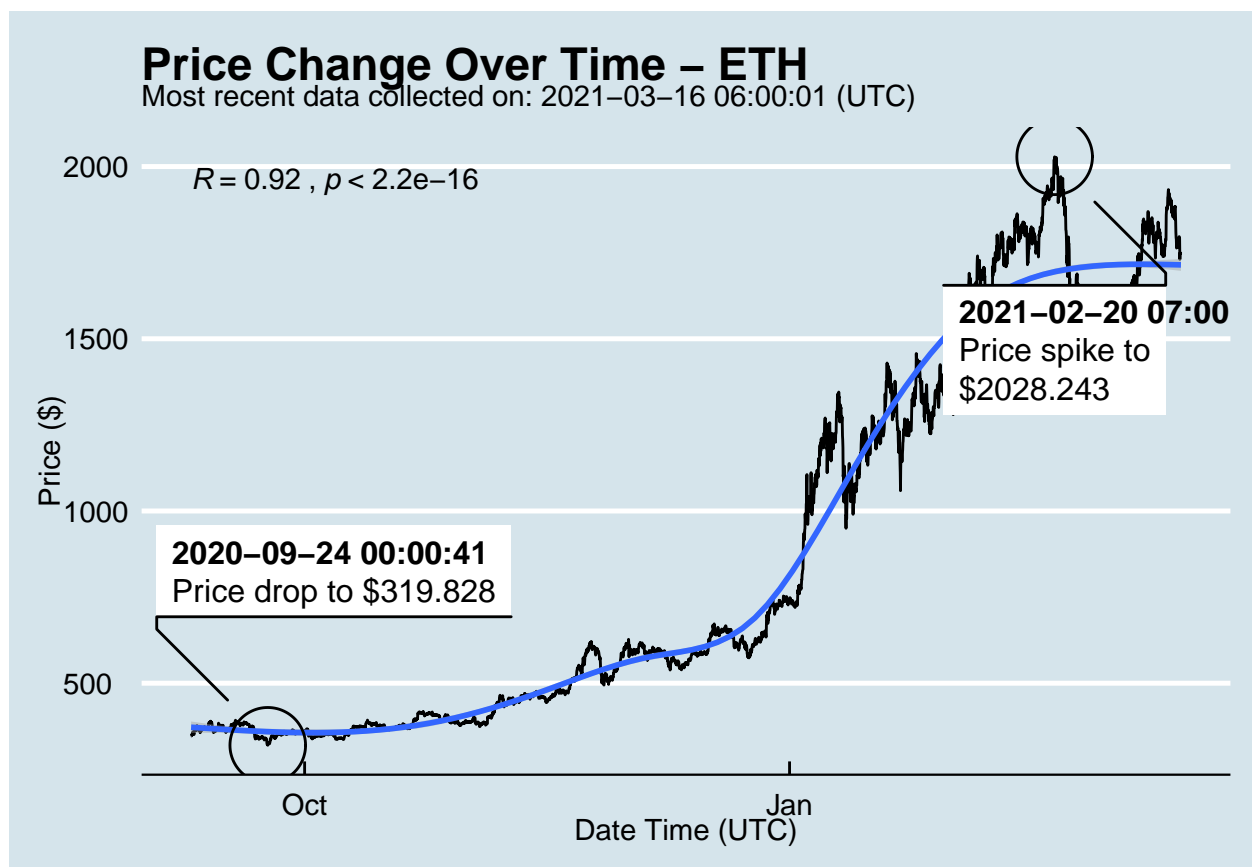# R Markdown Output

Last run on: 2021-03-16 06:29:32

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      1751.342  2021-03-16 06:00:01
## 1      BTCUSD    BTC     54077.980  2021-03-16 06:00:00
## 2      ETHUSD    ETH      1750.235  2021-03-16 05:00:01
## 3      BTCUSD    BTC     54404.990  2021-03-16 05:00:00
## 4      ETHUSD    ETH      1747.484  2021-03-16 04:00:01
## ...       ...    ...           ...                    ...
## 9583   BTCUSD    BTC     11972.900  2020-08-10 06:03:50
## 9584   BTCUSD    BTC     11985.890  2020-08-10 05:03:48
## 9585   BTCUSD    BTC     11997.470  2020-08-10 04:32:55
## 9586   BTCUSD    BTC     10686.880                    NaT
## 9587   ETHUSD    ETH       357.844                    NaT
##
## [9588 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     1751.342  lower 50th percentile of prices
## 1          BTC    54077.980  upper 50th percentile of prices
## 2          ETH     1750.235  lower 50th percentile of prices
## 3          BTC    54404.990  upper 50th percentile of prices
## 4          ETH     1747.484  lower 50th percentile of prices
## ...        ...          ...                               ...
## 9583       BTC    11972.900  upper 50th percentile of prices
## 9584       BTC    11985.890  upper 50th percentile of prices
## 9585       BTC    11997.470  upper 50th percentile of prices
## 9586       BTC    10686.880  upper 50th percentile of prices
## 9587       ETH      357.844  lower 50th percentile of prices
##
## [9588 rows x 3 columns]
```