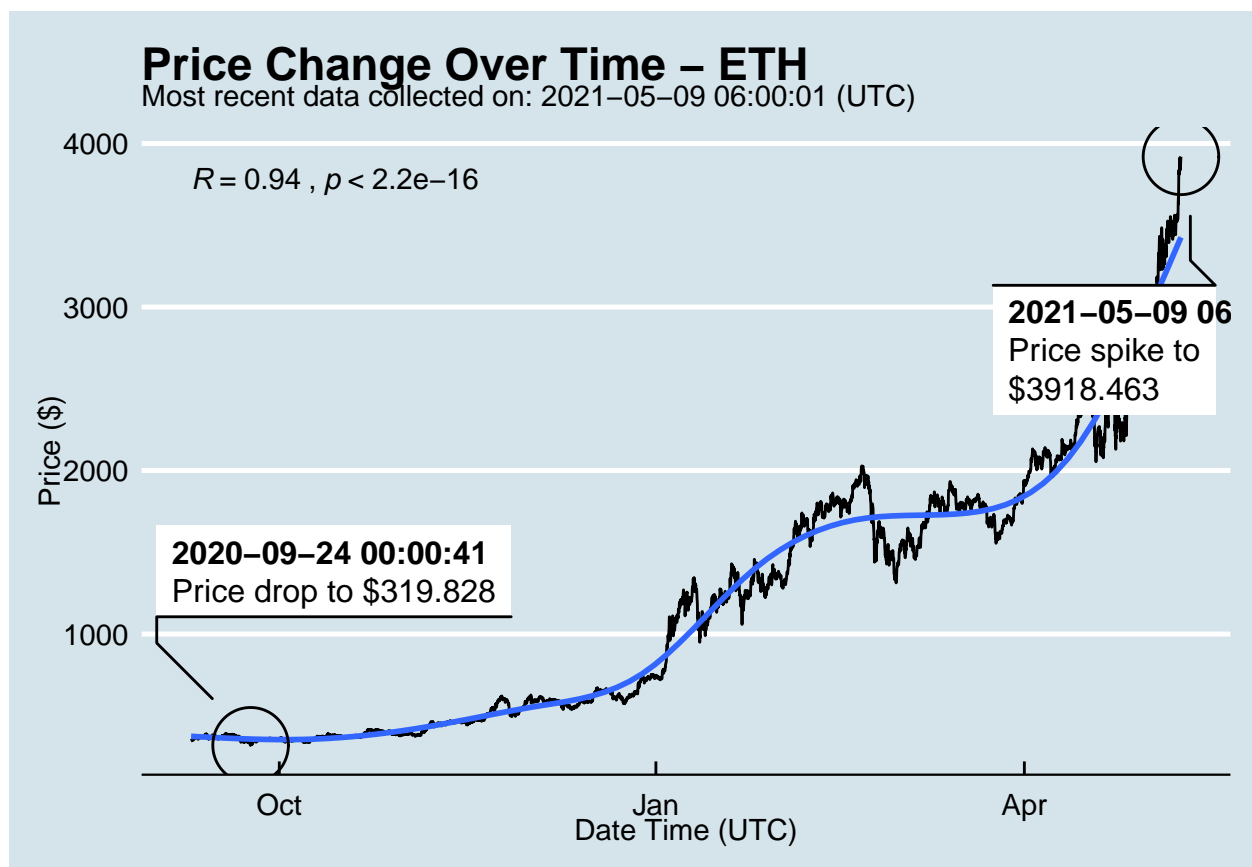# R Markdown Output

Last run on: 2021-05-09 06:30:01

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    58462.830  2021-05-09 06:00:01
## 1       ETHUSD    ETH     3918.463  2021-05-09 06:00:01
## 2       ETHUSD    ETH     3896.728  2021-05-09 05:00:01
## 3       BTCUSD    BTC    58151.860  2021-05-09 05:00:00
## 4       ETHUSD    ETH     3870.973  2021-05-09 04:00:01
## ...        ...    ...          ...                  ...
## 12171   BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 12172   BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 12173   BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 12174   BTCUSD    BTC    10686.880                  NaT
## 12175   ETHUSD    ETH      357.844                  NaT
##
## [12176 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    58462.830  upper 50th percentile of prices
## 1          ETH     3918.463  lower 50th percentile of prices
## 2          ETH     3896.728  lower 50th percentile of prices
## 3          BTC    58151.860  upper 50th percentile of prices
## 4          ETH     3870.973  lower 50th percentile of prices
## ...        ...          ...                              ...
## 12171      BTC    11972.900  upper 50th percentile of prices
## 12172      BTC    11985.890  upper 50th percentile of prices
## 12173      BTC    11997.470  upper 50th percentile of prices
## 12174      BTC    10686.880  upper 50th percentile of prices
## 12175      ETH      357.844  lower 50th percentile of prices
##
## [12176 rows x 3 columns]
```