

# R Markdown Output

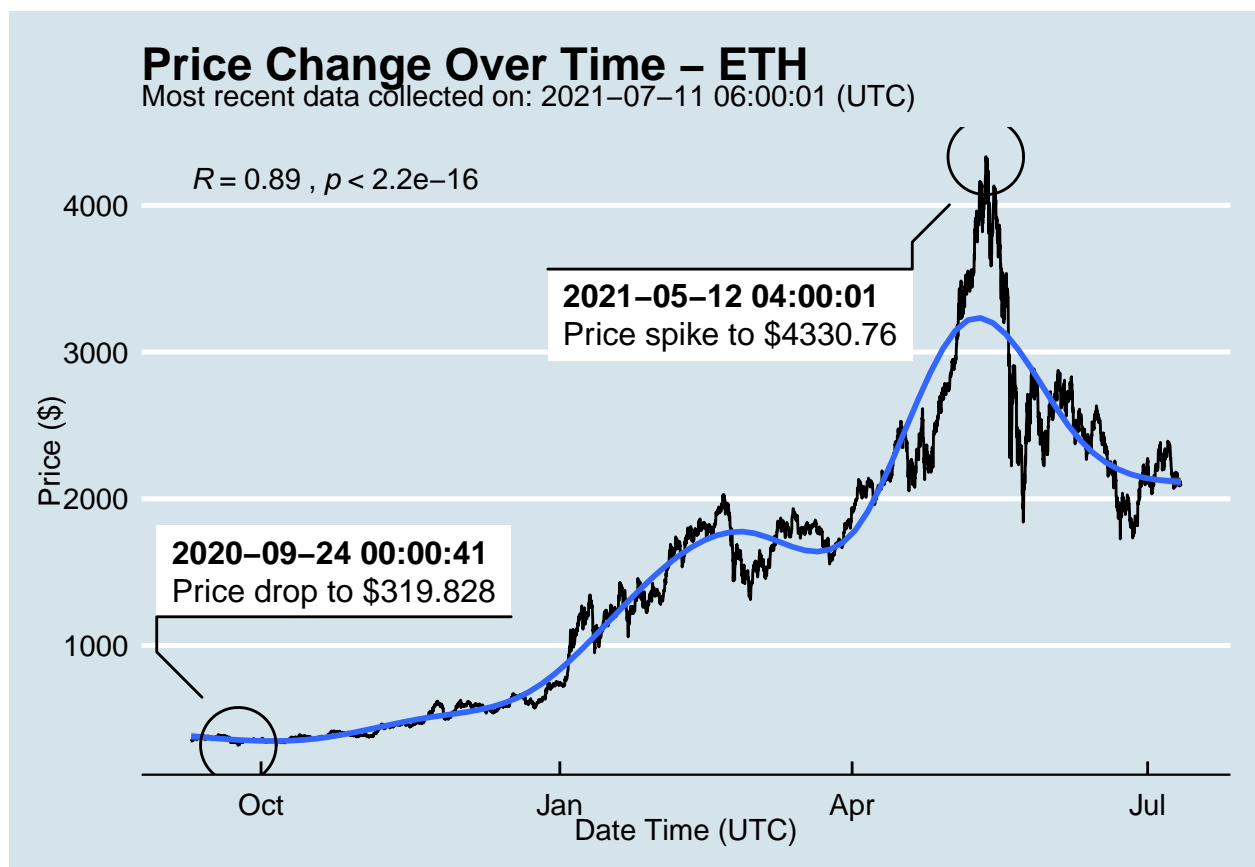
Last run on: 2021-07-11 06:14:34

## 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

```
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    2099.617 2021-07-11 06:00:01
## 1      BTCUSD   BTC    33579.600 2021-07-11 06:00:00
## 2      ETHUSD   ETH    2094.423 2021-07-11 05:00:01
## 3      BTCUSD   BTC    33463.920 2021-07-11 05:00:00
## 4      ETHUSD   ETH    2091.950 2021-07-11 04:00:01
## ...      ...    ...      ...      ...
## 15125 BTCUSD   BTC    11573.270 2020-08-13 00:03:52
## 15126 BTCUSD   BTC    11266.550 2020-08-12 03:03:52
## 15127 BTCUSD   BTC    11331.140 2020-08-12 02:03:56
## 15128 BTCUSD   BTC    11346.560 2020-08-12 01:03:56
## 15129 BTCUSD   BTC    11372.920 2020-08-12 00:03:55
##
## [15130 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):

```
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    2099.617  lower 50th percentile of prices
## 1           BTC   33579.600  upper 50th percentile of prices
## 2           ETH    2094.423  lower 50th percentile of prices
## 3           BTC   33463.920  upper 50th percentile of prices
## 4           ETH    2091.950  lower 50th percentile of prices
## ...      ...    ...      ...
## 15125        BTC   11573.270  upper 50th percentile of prices
## 15126        BTC   11266.550  upper 50th percentile of prices
## 15127        BTC   11331.140  upper 50th percentile of prices
## 15128        BTC   11346.560  upper 50th percentile of prices
## 15129        BTC   11372.920  upper 50th percentile of prices
##
## [15130 rows x 3 columns]
```