

# R Markdown Output

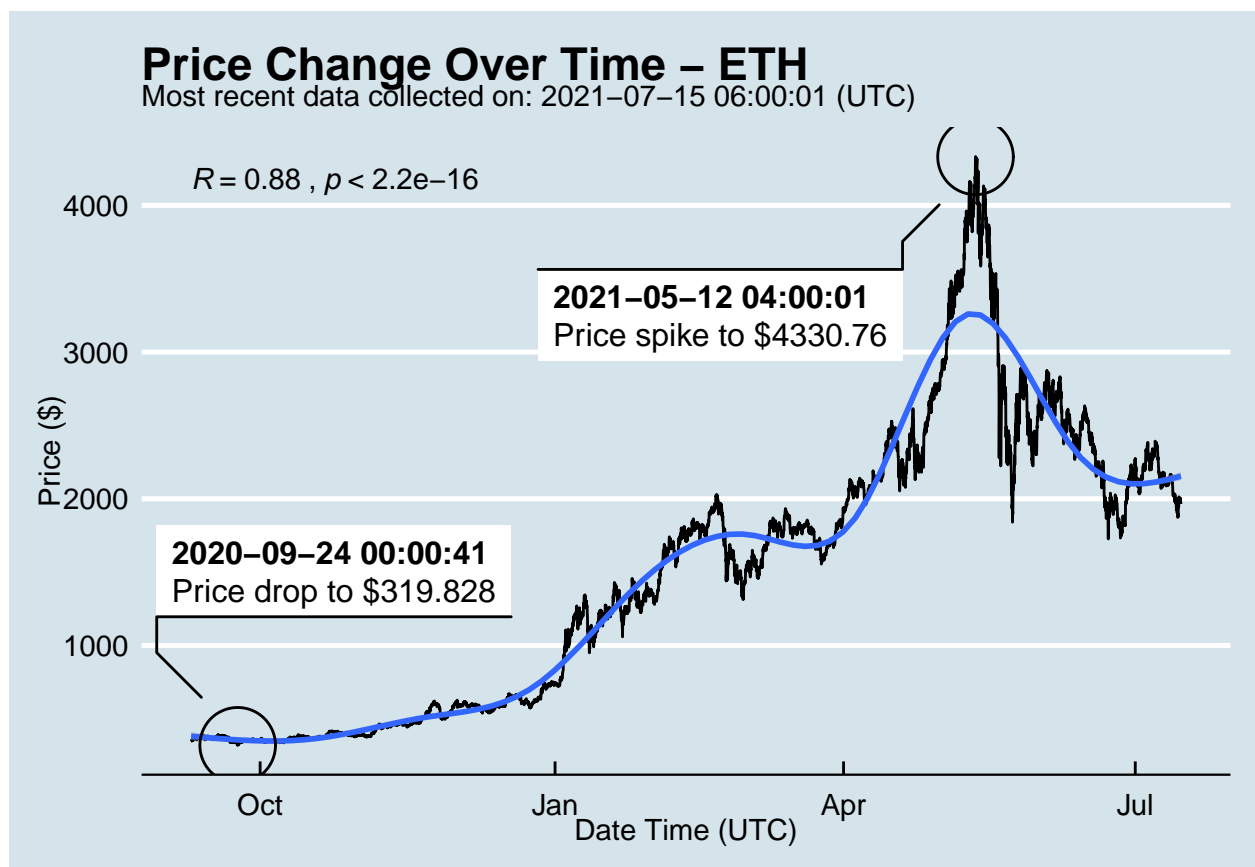
Last run on: 2021-07-15 06:12:39

## 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    1964.267 2021-07-15 06:00:01
## 1      BTCUSD   BTC   32583.050 2021-07-15 06:00:00
## 2      BTCUSD   BTC   32673.000 2021-07-15 05:00:01
## 3      ETHUSD   ETH    1973.606 2021-07-15 05:00:01
## 4      BTCUSD   BTC   32651.650 2021-07-15 04:00:01
## ...      ...    ...           ...
## 15220 BTCUSD   BTC   11921.180 2020-08-16 04:03:55
## 15221 BTCUSD   BTC   11877.910 2020-08-16 03:03:52
## 15222 BTCUSD   BTC   11875.600 2020-08-16 02:04:00
## 15223 BTCUSD   BTC   11822.170 2020-08-16 01:04:00
## 15224 BTCUSD   BTC   11860.060 2020-08-16 00:03:57
##
## [15225 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    1964.267  lower 50th percentile of prices
## 1            BTC   32583.050  upper 50th percentile of prices
## 2            BTC   32673.000  upper 50th percentile of prices
## 3            ETH    1973.606  lower 50th percentile of prices
## 4            BTC   32651.650  upper 50th percentile of prices
## ...      ...    ...           ...
## 15220 BTC      11921.180  upper 50th percentile of prices
## 15221 BTC      11877.910  upper 50th percentile of prices
## 15222 BTC      11875.600  upper 50th percentile of prices
## 15223 BTC      11822.170  upper 50th percentile of prices
## 15224 BTC      11860.060  upper 50th percentile of prices
##
## [15225 rows x 3 columns]
```