

# R Markdown Output

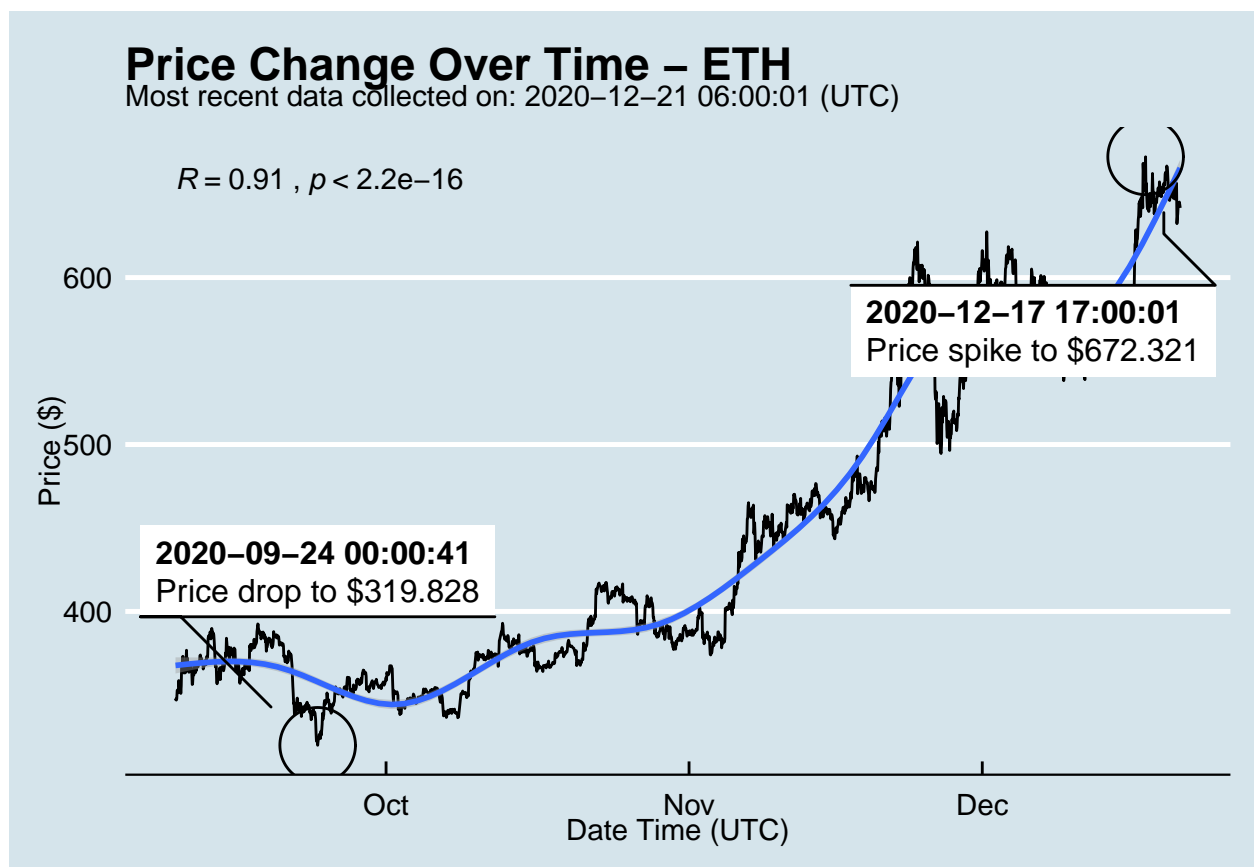
Last run on: 2020-12-21 06:27:25

## 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    BTCUSD    BTC    23904.010 2020-12-21 06:00:01
## 1    ETHUSD    ETH      641.740 2020-12-21 06:00:01
## 2    ETHUSD    ETH      643.657 2020-12-21 05:00:01
## 3    BTCUSD    BTC    23894.390 2020-12-21 05:00:00
## 4    BTCUSD    BTC    23950.580 2020-12-21 04:00:01
## ...      ...      ...      ...
## 5505   BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 5506   BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 5507   BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 5508   BTCUSD    BTC    10686.880                NaT
## 5509   ETHUSD    ETH      357.844                NaT
##
## [5510 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        BTC    23904.010  upper 50th percentile of prices
## 1        ETH      641.740  lower 50th percentile of prices
## 2        ETH      643.657  lower 50th percentile of prices
## 3        BTC    23894.390  upper 50th percentile of prices
## 4        BTC    23950.580  upper 50th percentile of prices
## ...      ...      ...
## 5505     BTC    11972.900  upper 50th percentile of prices
## 5506     BTC    11985.890  upper 50th percentile of prices
## 5507     BTC    11997.470  upper 50th percentile of prices
## 5508     BTC    10686.880  upper 50th percentile of prices
## 5509     ETH      357.844  lower 50th percentile of prices
##
## [5510 rows x 3 columns]
```