

# R Markdown Output

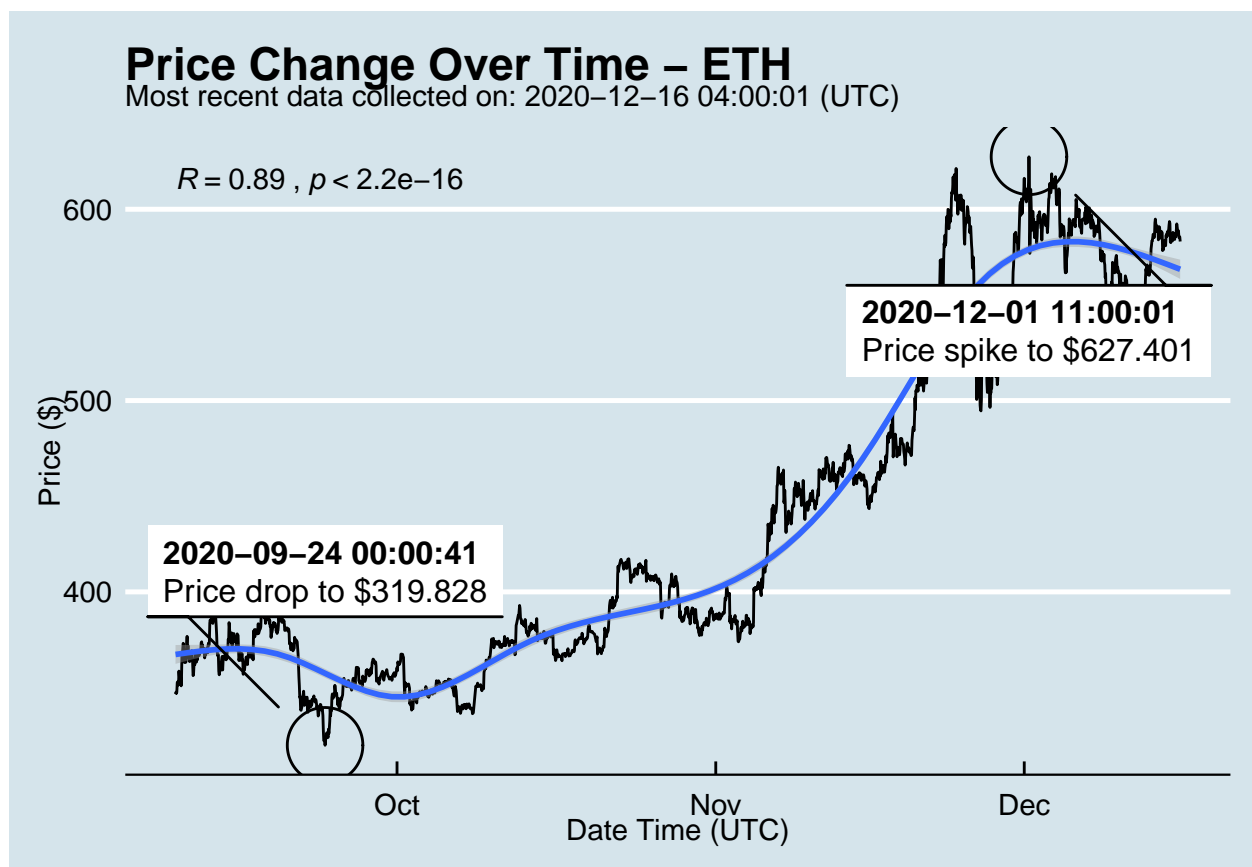
Last run on: 2020-12-16 04:23:00

## 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      583.142 2020-12-16 04:00:01
## 1    BTCUSD    BTC     19346.120 2020-12-16 04:00:00
## 2    ETHUSD    ETH      585.586 2020-12-16 03:00:01
## 3    BTCUSD    BTC     19440.030 2020-12-16 03:00:00
## 4    ETHUSD    ETH      585.131 2020-12-16 02:00:01
## ...      ...      ...      ...      ...
## 5261 BTCUSD    BTC     11972.900 2020-08-10 06:03:50
## 5262 BTCUSD    BTC     11985.890 2020-08-10 05:03:48
## 5263 BTCUSD    BTC     11997.470 2020-08-10 04:32:55
## 5264 BTCUSD    BTC     10686.880                NaT
## 5265 ETHUSD    ETH       357.844                NaT
##
## [5266 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      583.142  lower 50th percentile of prices
## 1      BTC     19346.120  upper 50th percentile of prices
## 2      ETH      585.586  lower 50th percentile of prices
## 3      BTC     19440.030  upper 50th percentile of prices
## 4      ETH      585.131  lower 50th percentile of prices
## ...      ...      ...      ...
## 5261 BTC     11972.900  upper 50th percentile of prices
## 5262 BTC     11985.890  upper 50th percentile of prices
## 5263 BTC     11997.470  upper 50th percentile of prices
## 5264 BTC     10686.880  upper 50th percentile of prices
## 5265 ETH       357.844  lower 50th percentile of prices
##
## [5266 rows x 3 columns]
```