R Markdown Output

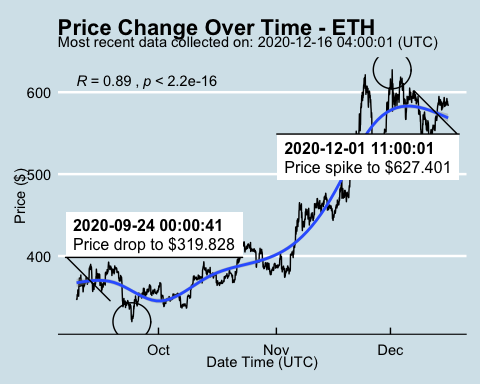
Last run on: 2020-12-16 05:00:33

# 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]