

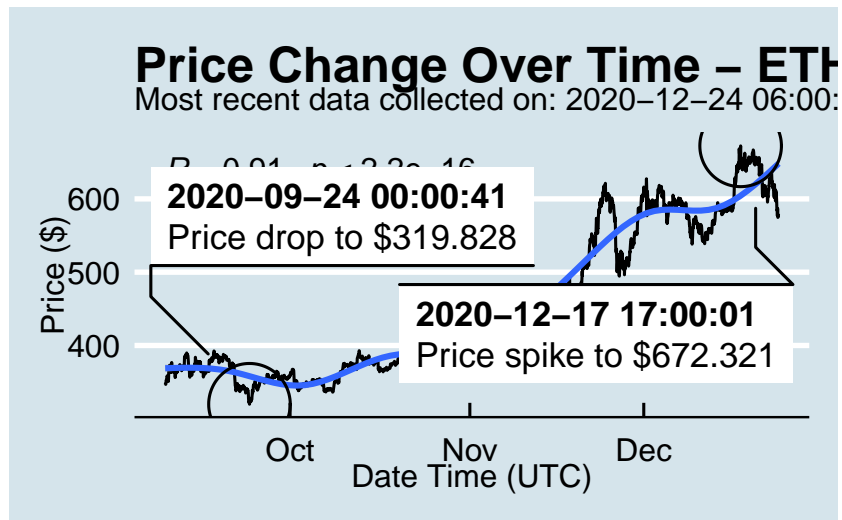
## R Markdown Output

### 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	23050.230	2020-12-24 06:00:01
## 1	ETHUSD	ETH	579.849	2020-12-24 06:00:01
## 2	ETHUSD	ETH	578.561	2020-12-24 05:00:01
## 3	BTCUSD	BTC	23022.380	2020-12-24 05:00:00
## 4	ETHUSD	ETH	575.313	2020-12-24 04:00:01
## ...	...	...	...	...
## 5649	BTCUSD	BTC	11972.900	2020-08-10 06:03:50
## 5650	BTCUSD	BTC	11985.890	2020-08-10 05:03:48
## 5651	BTCUSD	BTC	11997.470	2020-08-10 04:32:55
## 5652	BTCUSD	BTC	10686.880	NaT

```
## 5653  ETHUSD    ETH      357.844      NaT
##
## [5654 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    23050.230  upper 50th percentile of prices
## 1      ETH      579.849  lower 50th percentile of prices
## 2      ETH      578.561  lower 50th percentile of prices
## 3      BTC    23022.380  upper 50th percentile of prices
## 4      ETH      575.313  lower 50th percentile of prices
## ...    ...          ...                ...
## 5649    BTC    11972.900  upper 50th percentile of prices
## 5650    BTC    11985.890  upper 50th percentile of prices
## 5651    BTC    11997.470  upper 50th percentile of prices
## 5652    BTC    10686.880  upper 50th percentile of prices
## 5653    ETH      357.844  lower 50th percentile of prices
##
## [5654 rows x 3 columns]
```