

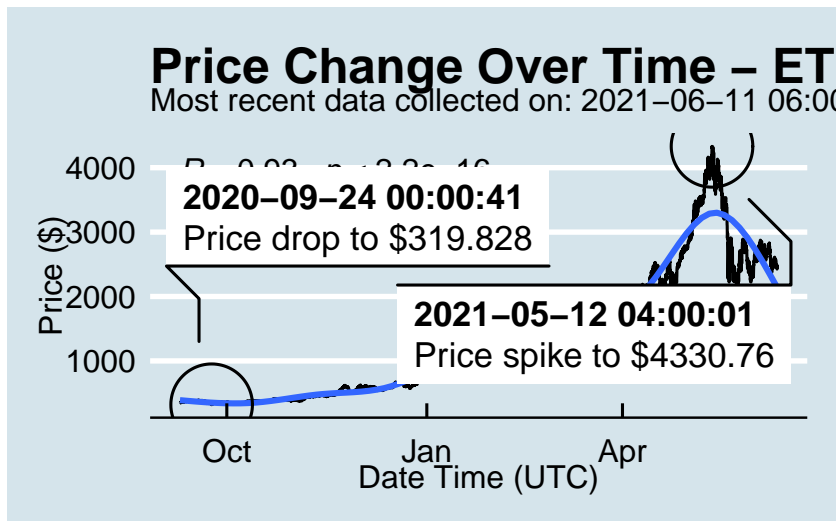
## R Markdown Output

### 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    | 37010.000   | 2021-06-11 06:00:01 |
| ## 1     | ETHUSD | ETH    | 2465.328    | 2021-06-11 06:00:01 |
| ## 2     | ETHUSD | ETH    | 2478.149    | 2021-06-11 05:00:01 |
| ## 3     | BTCUSD | BTC    | 37031.840   | 2021-06-11 05:00:00 |
| ## 4     | BTCUSD | BTC    | 36755.330   | 2021-06-11 04:00:01 |
| ## ...   | ...    | ...    | ...         | ...                 |
| ## 13751 | BTCUSD | BTC    | 11972.900   | 2020-08-10 06:03:50 |
| ## 13752 | BTCUSD | BTC    | 11985.890   | 2020-08-10 05:03:48 |

```
## 13753 BTCUSD BTC 11997.470 2020-08-10 04:32:55
## 13754 BTCUSD BTC 10686.880 NaT
## 13755 ETHUSD ETH 357.844 NaT
##
## [13756 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    37010.000  upper 50th percentile of prices
## 1      ETH     2465.328  lower 50th percentile of prices
## 2      ETH     2478.149  lower 50th percentile of prices
## 3      BTC    37031.840  upper 50th percentile of prices
## 4      BTC    36755.330  upper 50th percentile of prices
## ...      ...          ...
## 13751   BTC    11972.900  upper 50th percentile of prices
## 13752   BTC    11985.890  upper 50th percentile of prices
## 13753   BTC    11997.470  upper 50th percentile of prices
## 13754   BTC    10686.880  upper 50th percentile of prices
## 13755   ETH      357.844  lower 50th percentile of prices
##
## [13756 rows x 3 columns]
```