

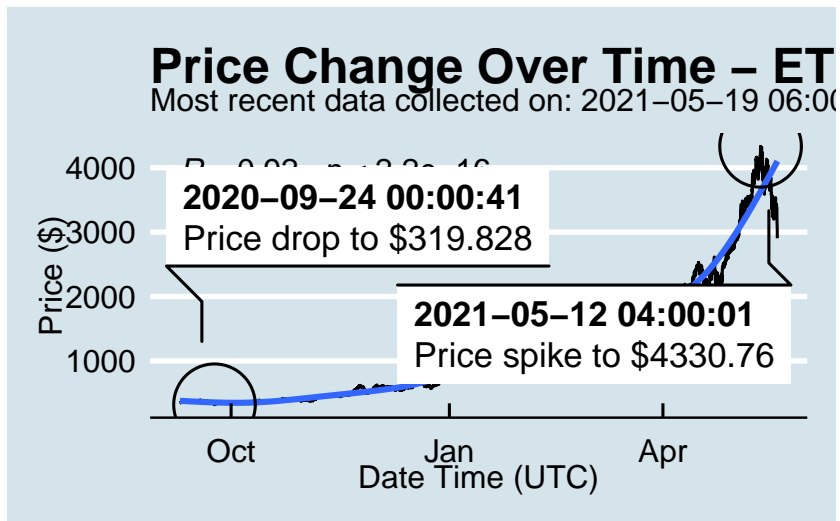
## R Markdown Output

### 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    ETHUSD   ETH      2904.554 2021-05-19 06:00:01
## 1    BTCUSD   BTC      39233.390 2021-05-19 06:00:00
## 2    ETHUSD   ETH      2919.742 2021-05-19 05:00:01
## 3    BTCUSD   BTC      39278.600 2021-05-19 05:00:00
## 4    ETHUSD   ETH      3098.714 2021-05-19 04:00:01
## ...      ...      ...      ...      ...
## 12649 BTCUSD   BTC      11972.900 2020-08-10 06:03:50
## 12650 BTCUSD   BTC      11985.890 2020-08-10 05:03:48
```

```
## 12651 BTCUSD BTC 11997.470 2020-08-10 04:32:55
## 12652 BTCUSD BTC 10686.880 NaT
## 12653 ETHUSD ETH 357.844 NaT
##
## [12654 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    2904.554  lower 50th percentile of prices
## 1      BTC   39233.390  upper 50th percentile of prices
## 2      ETH    2919.742  lower 50th percentile of prices
## 3      BTC   39278.600  upper 50th percentile of prices
## 4      ETH    3098.714  lower 50th percentile of prices
## ...      ...          ...
## 12649    BTC    11972.900  upper 50th percentile of prices
## 12650    BTC    11985.890  upper 50th percentile of prices
## 12651    BTC    11997.470  upper 50th percentile of prices
## 12652    BTC    10686.880  upper 50th percentile of prices
## 12653    ETH     357.844  lower 50th percentile of prices
##
## [12654 rows x 3 columns]
```