

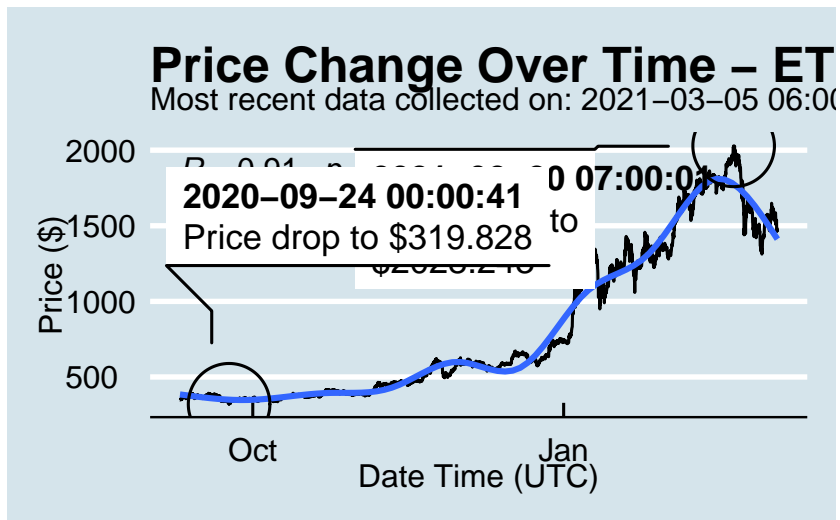
## R Markdown Output

### 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    47150.230 2021-03-05 06:00:01
## 1    ETHUSD    ETH     1472.467 2021-03-05 06:00:01
## 2    BTCUSD    BTC    46700.170 2021-03-05 05:00:01
## 3    ETHUSD    ETH     1465.696 2021-03-05 05:00:01
## 4    ETHUSD    ETH     1481.589 2021-03-05 04:00:01
## ...      ...      ...      ...      ...
## 9057 BTCUSD    BTC     11972.900 2020-08-10 06:03:50
## 9058 BTCUSD    BTC     11985.890 2020-08-10 05:03:48
## 9059 BTCUSD    BTC     11997.470 2020-08-10 04:32:55
## 9060 BTCUSD    BTC     10686.880                NaT
```

```
## 9061  ETHUSD    ETH      357.844      NaT
##
## [9062 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    47150.230  upper 50th percentile of prices
## 1      ETH     1472.467  lower 50th percentile of prices
## 2      BTC    46700.170  upper 50th percentile of prices
## 3      ETH     1465.696  lower 50th percentile of prices
## 4      ETH     1481.589  lower 50th percentile of prices
## ...     ...           ...               ...
## 9057     BTC    11972.900  upper 50th percentile of prices
## 9058     BTC    11985.890  upper 50th percentile of prices
## 9059     BTC    11997.470  upper 50th percentile of prices
## 9060     BTC    10686.880  upper 50th percentile of prices
## 9061     ETH      357.844  lower 50th percentile of prices
##
## [9062 rows x 3 columns]
```