

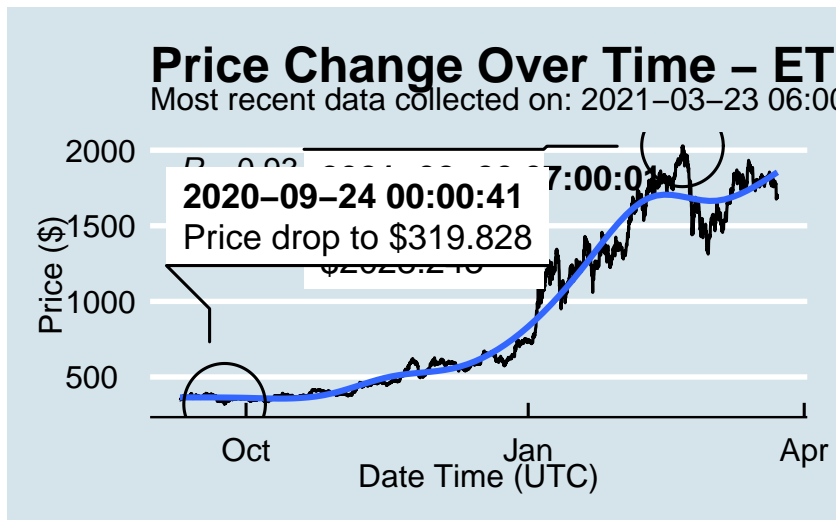
## R Markdown Output

### 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    1676.748 2021-03-23 06:00:01
## 1    BTCUSD   BTC    53528.000 2021-03-23 06:00:00
## 2    ETHUSD   ETH    1693.591 2021-03-23 05:00:01
## 3    BTCUSD   BTC    54433.970 2021-03-23 05:00:00
## 4    ETHUSD   ETH    1701.902 2021-03-23 04:00:01
## ...      ...      ...      ...      ...
## 9917 BTCUSD   BTC    11972.900 2020-08-10 06:03:50
## 9918 BTCUSD   BTC    11985.890 2020-08-10 05:03:48
## 9919 BTCUSD   BTC    11997.470 2020-08-10 04:32:55
## 9920 BTCUSD   BTC    10686.880                NaT
```

```
## 9921  ETHUSD    ETH      357.844      NaT
##
## [9922 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    1676.748  lower 50th percentile of prices
## 1      BTC   53528.000  upper 50th percentile of prices
## 2      ETH    1693.591  lower 50th percentile of prices
## 3      BTC   54433.970  upper 50th percentile of prices
## 4      ETH    1701.902  lower 50th percentile of prices
## ...    ...          ...                ...
## 9917    BTC    11972.900  upper 50th percentile of prices
## 9918    BTC    11985.890  upper 50th percentile of prices
## 9919    BTC    11997.470  upper 50th percentile of prices
## 9920    BTC    10686.880  upper 50th percentile of prices
## 9921    ETH      357.844  lower 50th percentile of prices
##
## [9922 rows x 3 columns]
```