

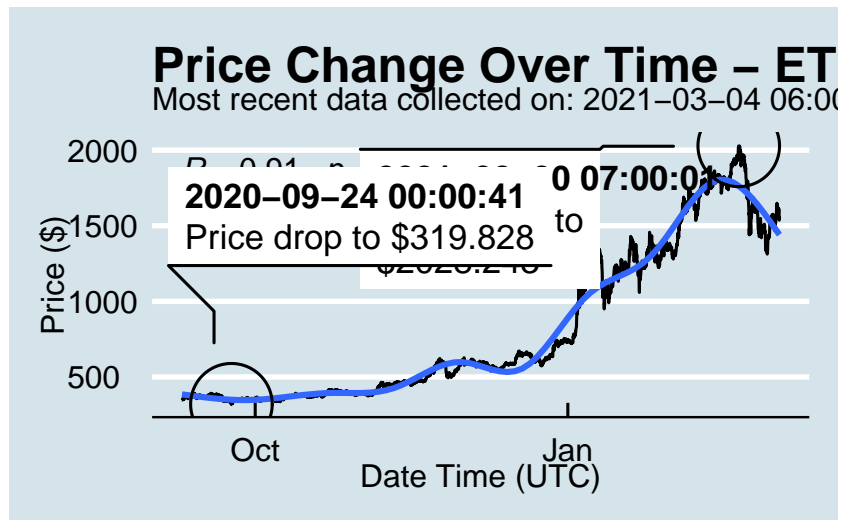
R Markdown Output

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    49660.000 2021-03-04 06:00:01
## 1    ETHUSD   ETH     1560.878 2021-03-04 06:00:01
## 2    BTCUSD   BTC    49043.890 2021-03-04 05:00:01
## 3    ETHUSD   ETH     1537.090 2021-03-04 05:00:01
## 4    ETHUSD   ETH     1554.051 2021-03-04 04:00:01
## ...      ...      ...          ...          ...
## 9009  BTCUSD   BTC     11972.900 2020-08-10 06:03:50
## 9010  BTCUSD   BTC     11985.890 2020-08-10 05:03:48
## 9011  BTCUSD   BTC     11997.470 2020-08-10 04:32:55
## 9012  BTCUSD   BTC     10686.880                NaT
```

```
## 9013 ETHUSD ETH 357.844 NaT
##
## [9014 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    49660.000  upper 50th percentile of prices
## 1      ETH     1560.878  lower 50th percentile of prices
## 2      BTC    49043.890  upper 50th percentile of prices
## 3      ETH     1537.090  lower 50th percentile of prices
## 4      ETH     1554.051  lower 50th percentile of prices
## ...     ...           ...               ...
## 9009     BTC    11972.900  upper 50th percentile of prices
## 9010     BTC    11985.890  upper 50th percentile of prices
## 9011     BTC    11997.470  upper 50th percentile of prices
## 9012     BTC    10686.880  upper 50th percentile of prices
## 9013     ETH      357.844  lower 50th percentile of prices
##
## [9014 rows x 3 columns]
```