

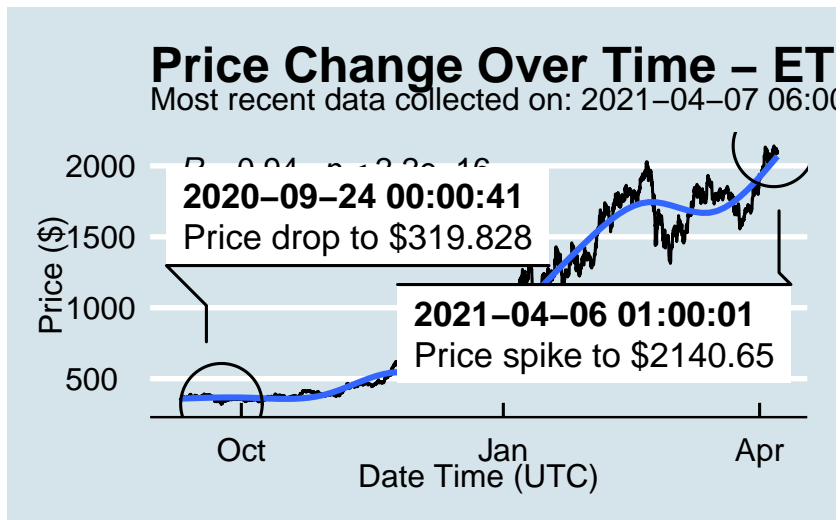
## R Markdown Output

### 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      2102.043 2021-04-07 06:00:01
## 1    BTCUSD   BTC     58280.490 2021-04-07 06:00:00
## 2    ETHUSD   ETH      2087.308 2021-04-07 05:00:01
## 3    BTCUSD   BTC     57620.900 2021-04-07 05:00:00
## 4    BTCUSD   BTC     57899.190 2021-04-07 04:00:01
## ...      ...      ...      ...      ...
## 10637 BTCUSD   BTC     11972.900 2020-08-10 06:03:50
## 10638 BTCUSD   BTC     11985.890 2020-08-10 05:03:48
## 10639 BTCUSD   BTC     11997.470 2020-08-10 04:32:55
## 10640 BTCUSD   BTC      10686.880                NaT
```

```
## 10641 ETHUSD ETH 357.844 NaT
##
## [10642 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    2102.043  lower 50th percentile of prices
## 1      BTC   58280.490  upper 50th percentile of prices
## 2      ETH    2087.308  lower 50th percentile of prices
## 3      BTC   57620.900  upper 50th percentile of prices
## 4      BTC   57899.190  upper 50th percentile of prices
## ...      ...          ...                ...
## 10637    BTC   11972.900  upper 50th percentile of prices
## 10638    BTC   11985.890  upper 50th percentile of prices
## 10639    BTC   11997.470  upper 50th percentile of prices
## 10640    BTC   10686.880  upper 50th percentile of prices
## 10641    ETH    357.844  lower 50th percentile of prices
##
## [10642 rows x 3 columns]
```