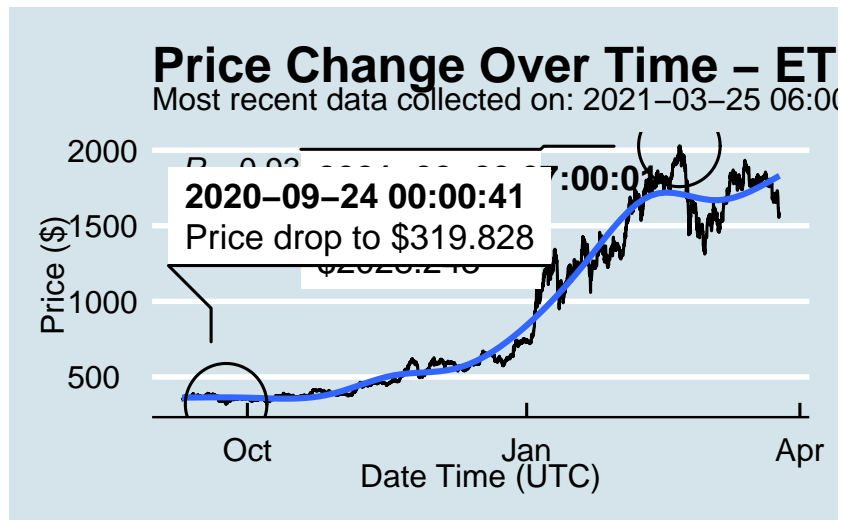# R Markdown Output

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

```python
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     52681.900  2021-03-25 06:00:01
## 1       ETHUSD    ETH      1585.542  2021-03-25 06:00:01
## 2       BTCUSD    BTC     52269.650  2021-03-25 05:00:01
## 3       ETHUSD    ETH      1573.603  2021-03-25 05:00:01
## 4       BTCUSD    BTC     52136.250  2021-03-25 04:00:01
## ...        ...    ...           ...                  ...
## 10013   BTCUSD    BTC     11972.900  2020-08-10 06:03:50
## 10014   BTCUSD    BTC     11985.890  2020-08-10 05:03:48
## 10015   BTCUSD    BTC     11997.470  2020-08-10 04:32:55
## 10016   BTCUSD    BTC     10686.880                  NaT
```

```
## 10017   ETHUSD     ETH      357.844                     NaT
##
## [10018 rows x 4 columns]
```

One more Python example

The code below creates a new column `price_percentile` that speci-
fies 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    52681.900  upper 50th percentile of prices
## 1         ETH     1585.542  lower 50th percentile of prices
## 2         BTC    52269.650  upper 50th percentile of prices
## 3         ETH     1573.603  lower 50th percentile of prices
## 4         BTC    52136.250  upper 50th percentile of prices
## ...       ...          ...                              ...
## 10013     BTC    11972.900  upper 50th percentile of prices
## 10014     BTC    11985.890  upper 50th percentile of prices
## 10015     BTC    11997.470  upper 50th percentile of prices
## 10016     BTC    10686.880  upper 50th percentile of prices
## 10017     ETH      357.844  lower 50th percentile of prices
##
## [10018 rows x 3 columns]
```