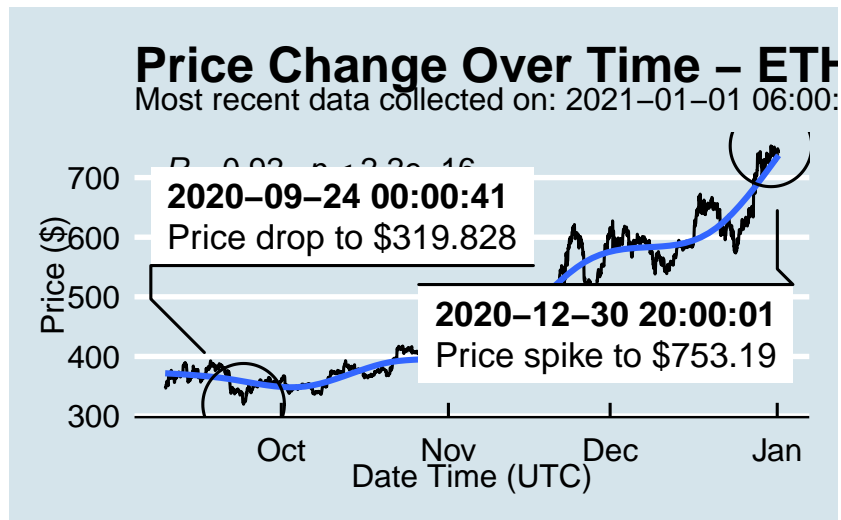# R Markdown Output

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      ETHUSD     ETH      740.836  2021-01-01 06:00:01
## 1      BTCUSD     BTC    29186.430  2021-01-01 06:00:00
## 2      ETHUSD     ETH      742.284  2021-01-01 05:00:01
## 3      BTCUSD     BTC    29217.820  2021-01-01 05:00:00
## 4      BTCUSD     BTC    29276.530  2021-01-01 04:00:01
## ...       ...     ...          ...                  ...
## 6033   BTCUSD     BTC    11972.900  2020-08-10 06:03:50
## 6034   BTCUSD     BTC    11985.890  2020-08-10 05:03:48
## 6035   BTCUSD     BTC    11997.470  2020-08-10 04:32:55
## 6036   BTCUSD     BTC    10686.880                  NaT
```

```
## 6037  ETHUSD    ETH      357.844                NaT
##
## [6038 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):

```python
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      740.836  lower 50th percentile of prices
## 1         BTC    29186.430  upper 50th percentile of prices
## 2         ETH      742.284  lower 50th percentile of prices
## 3         BTC    29217.820  upper 50th percentile of prices
## 4         BTC    29276.530  upper 50th percentile of prices
## ...       ...          ...                               ...
## 6033      BTC    11972.900  upper 50th percentile of prices
## 6034      BTC    11985.890  upper 50th percentile of prices
## 6035      BTC    11997.470  upper 50th percentile of prices
## 6036      BTC    10686.880  upper 50th percentile of prices
## 6037      ETH      357.844  lower 50th percentile of prices
##
## [6038 rows x 3 columns]
```