

# Comcast stock analysis with OHLC chart (open, high, low, close)

```
In [3]: from matplotlib import pyplot as plt
from matplotlib import style
from matplotlib.finance import candlestick_ohlc
from pandas_datareader import data as pdr
import matplotlib.dates as mdates
import pandas as pd
import fix_yahoo_finance as fyf
fyf.pdr_override()
style.use('ggplot')
%matplotlib inline
```

```
In [4]: # reads in Comcast stock to df
df = pdr.get_data_yahoo('CMCSA', start='2016-01-01')
style.use('ggplot')
```

[\*\*\*\*\*100%\*\*\*\*\*] 1 of 1 downloaded

```
In [5]: df.head()
```

Out[5]:

	Open	High	Low	Close	Adj Close	Volume
Date						
2016-01-04	27.575001	27.825001	27.424999	27.820000	25.877962	26524600
2016-01-05	27.920000	28.025000	27.740000	27.825001	25.882614	28308800
2016-01-06	27.459999	27.825001	27.375000	27.610001	25.682621	21650800
2016-01-07	27.045000	27.680000	26.885000	27.305000	25.398912	32423400
2016-01-08	27.430000	28.020000	27.285000	27.334999	25.426817	28184600

```
In [6]: # resampling with a 10 day window
df_ohlc = df['Adj Close'].resample('10D').ohlc()
df_volume = df['Volume'].resample('10D').sum()
```

```
In [7]: # resets the index so the dates is a column
df_ohlc.reset_index(inplace=True)
df_ohlc['Date'] = df_ohlc['Date'].map(mdates.date2num)
```

In [8]: `df_ohlc.head()`

Out[8]:

	Date	open	high	low	close
0	735967.0	25.877962	25.882614	24.905910	24.905910
1	735977.0	25.603554	25.733786	24.933815	25.733786
2	735987.0	25.212872	25.957031	25.166365	25.389610
3	735997.0	26.901169	27.631376	25.957031	26.408169
4	736007.0	26.733742	27.045357	26.659327	27.045357

```
In [9]: plt.figure(figsize=(16,6))
ax1 = plt.subplot2grid((6,1),(0,0),rowspan=5,colspan=1)
ax2 = plt.subplot2grid((6,1),(5,0),rowspan=1,colspan=1,sharex=ax1)
ax1.xaxis_date()

candlestick_ohlc(ax1, df_ohlc.values, width=2, colorup='g')
ax2.fill_between(df_volume.index.map(mdates.date2num),df_volume.values,0);
```

