
astetik Documentation

Release latest

November 13, 2016

1	1.1. List of Functions	3
2	1.2. Common function parameters	5
3	2. Examples of text and table presentation	7
3.1	2.1. Tweets with most retweets	7
3.2	2.2. Negative tweets sorted by number of retweets	7
3.3	Descriptive statistics in a table	7
3.4	OLS Regression Test	7
4	3. Examples of plot presentation	9
4.1	3.1. Side-by-side histograms	9
4.2	3.2. Horizontal bars for a single dimension of data	9
4.3	3.3. Bubble chart for displaying 4 dimensions of data	10
4.4	3.4. Correlation heatmap for up to 30 variables	10
4.5	3.5. Kernel Density Estimation	10
4.6	3.6. Swarming	11
5	4. Examples of general presentation	13
5.1	4.1. Toggle for hiding code cells	13
6	5. Using astetik in your next research project	15

First let's get some data (in this case 1000 tweets about Donald Trump. I'm using Somecode Twitter Research kit to get the data directly in to a pandas dataframe from Twitter API

```
import somecode as some
df = some.search("trump",100)
```

```
DataFrame with n=100 for keyword 'trump' created on 2016-11-13 10:45:58 succesfully without errors.
```

1.1. List of Functions

- Text (e.g. tweets)
- Descriptive Stats
- Bars
- Side-by-side Histogram
- Bubble Chart (4 dimensions)
- Heatmap Correlation (up to 40 variables)
- Kernel Density Estimation
- Swarming
- OLS Regression test

1.2. Common function parameters

Because generally the user is required to spend much time to figure out basic configuration, such as titles, scales etc, astetik is focused on making frequently repeated operations as intuitive accessible as possible.

Example paramaters:

- title / string to be used as a title for the graphic
- suptitle / string to be used as subtitle for the graphic
- xscale / for setting the scale of x axis (“linear”, “symlog”, “log”)
- yscale / see above line
- color / for changing a single color
- palette / for changing a palette of colors (astetik is using Seaborn palettes but you could use any)

2. Examples of text and table presentation

The below examples highlight astetik's functionality when used at the most basic level.

3.1 2.1. Tweets with most retweets

```
astetik.text(df, 'text', 5, sort_by='retweet_count')
```

3.2 2.2. Negative tweets sorted by number of retweets

```
astetik.text(df[df.neg > 0.2], 'text', "Negative tweets with many retweets", 5, sort_by='retweet_count')
```

3.3 Descriptive statistics in a table

```
astetik.descriptive(df, ['neg', 'neu', 'pos'], "Sentiment")
```

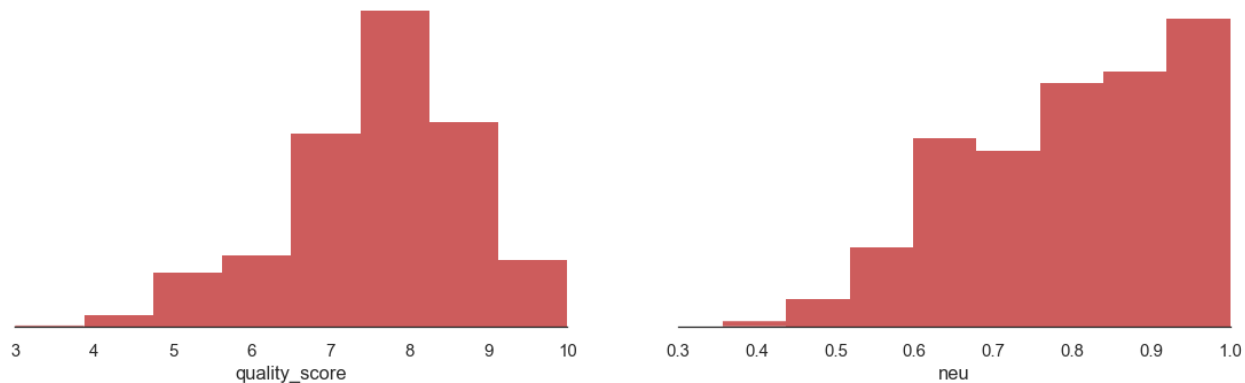
3.4 OLS Regression Test

```
astetik.ols(df, 'retweet_count', 'neg', 'neu', 'pos')
```

3. Examples of plot presentation

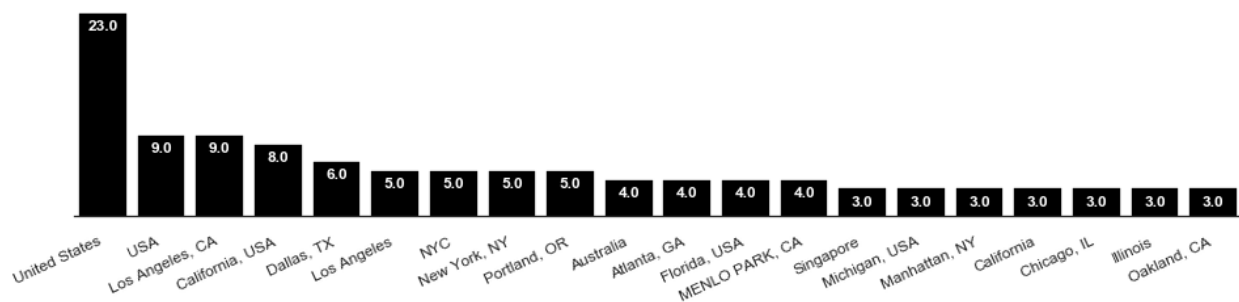
4.1 3.1. Side-by-side histograms

```
astetik.histogram(df, ['quality_score', 'neu'])
```



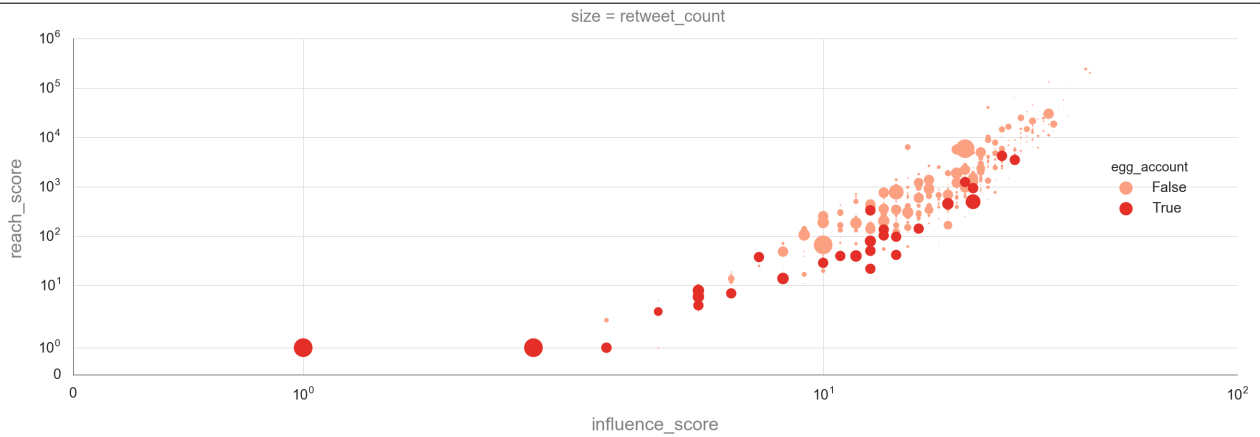
4.2 3.2. Horizontal bars for a single dimension of data

```
astetik.bars(df.location)
```



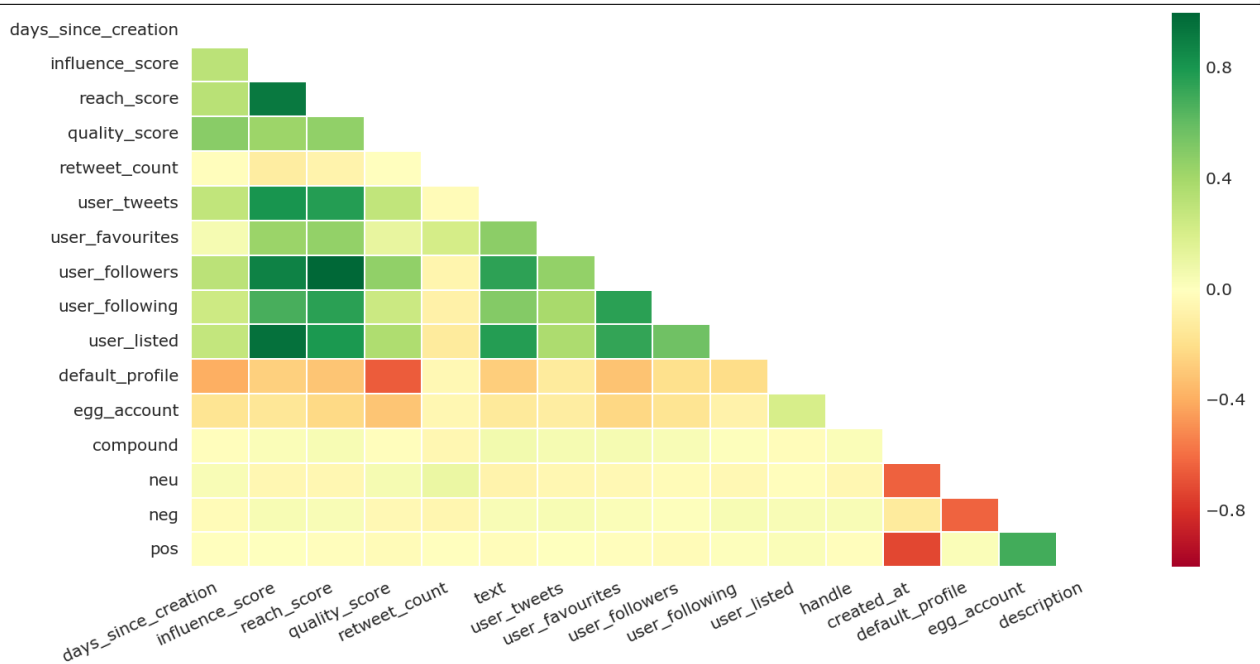
4.3 3.3. Bubble chart for displaying 4 dimensions of data

```
astetik.bubble(df, 'influence_score', 'reach_score', 'egg_account', 'retweet_count', xscale='symlog', yscale='symlog', size=retweet_count)
```



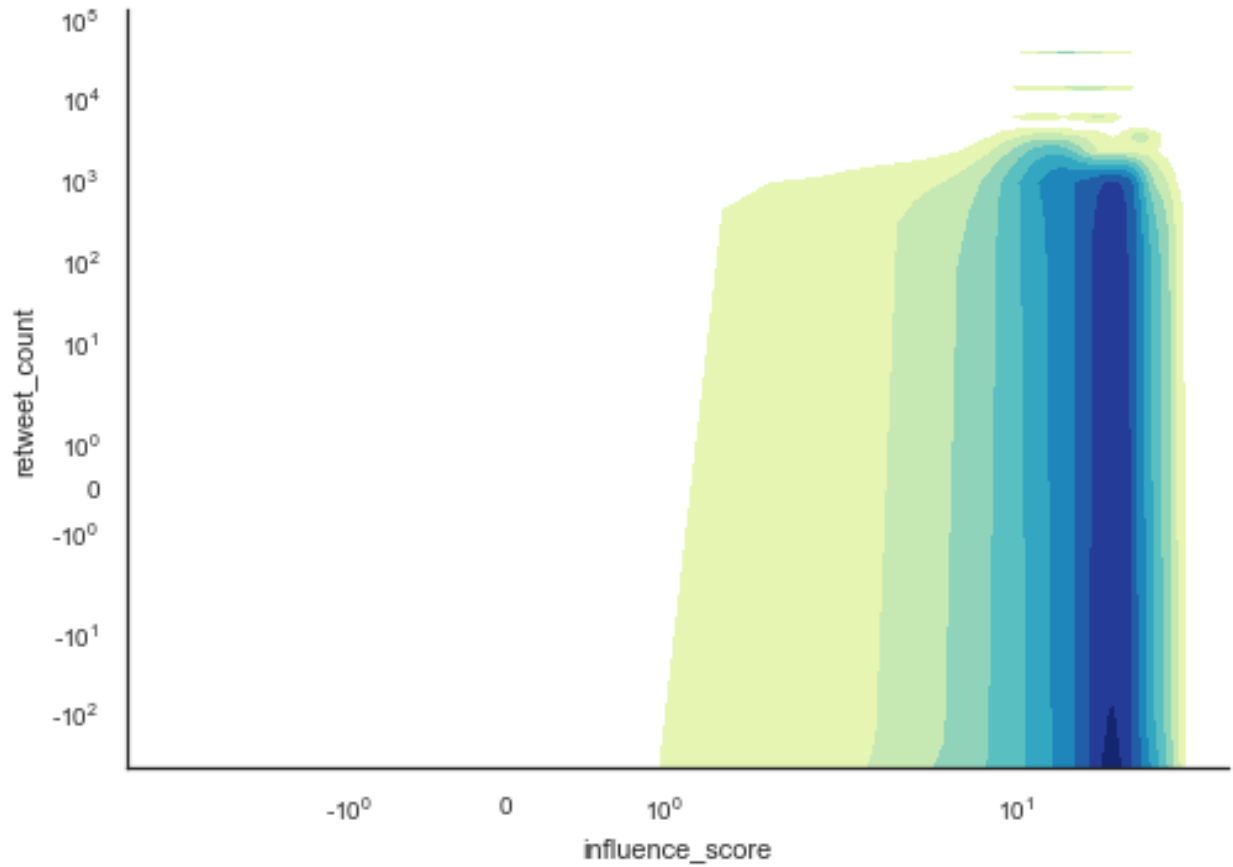
4.4 3.4. Correlation heatmap for up to 30 variables

```
astetik.correlationt(df)
```



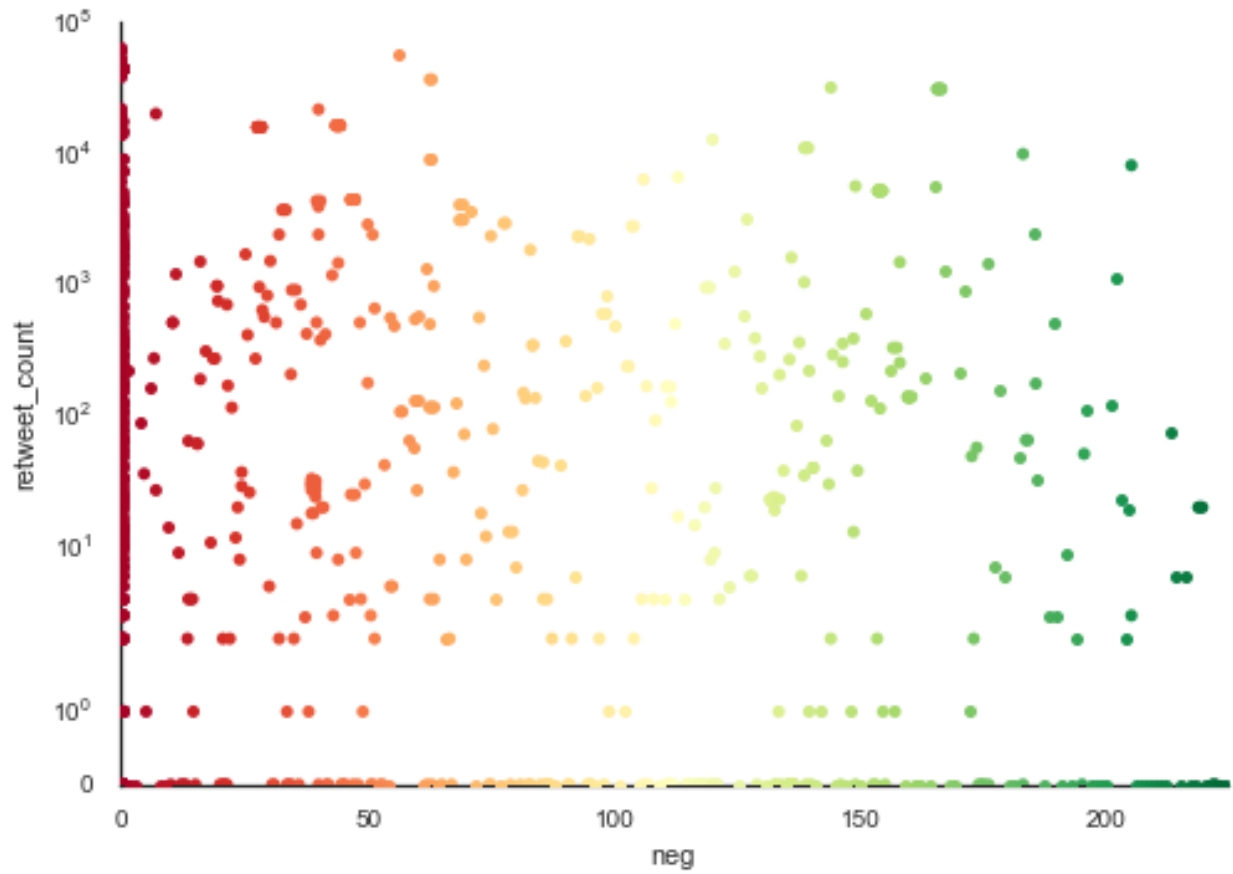
4.5 3.5. Kernel Density Estimation

```
astetik.kde(df.influence_score, df.retweet_count, xscale="symlog", yscale="symlog")
```



4.6 3.6. Swarming

```
astetik.swarm(df, 'neg', 'retweet_count', yscale="symlog")
```



4. Examples of general presentation

5.1 4.1. Toggle for hiding code cells

```
astetik.toggle()
```

```
astetik.warning()
```

5. Using astetik in your next research project

```
pip install astetik
```