

In [2]:

```
import pandas as pd
import seaborn as sns
%matplotlib inline

pd.options.display.max_columns = 70
pd.options.display.max_rows = 20

top10_data_industry = pd.read_csv('top_10.csv', header = None)
top10_data_industry = top10_data_industry.transpose()

top10_data_industry.columns = top10_data_industry.iloc[0] # set column header
top10_data_industry = top10_data_industry.drop(0) # drop duplicated row
top10_data_industry = top10_data_industry.drop(1) # drop scores row
top10_data_industry = top10_data_industry.drop(8) # drop scores row

top10_data_industry['cat'] = "top 10" # create top/overall cat

top10_data_industry.rename(columns={'industry': 'thermometer'}, inplace=True)

random_data = pd.read_csv('random_comma_data.csv', header = None)
random_data = random_data.transpose()

random_data.columns = random_data.iloc[0] # set column header
random_data = random_data.drop(0) # drop duplicated row
random_data = random_data.drop(1) # drop scores row
random_data = random_data.drop(8) # drop scores row

random_data['cat'] = "top 100" # create top/overall cat

random_data.rename(columns={'industry': 'thermometer'}, inplace=True)

top10_data_industry
```

Out[2]:

| | thermometer | automotive- automotive-other | automotive- automotive-other | automotive- automotive-other | automotive- automotive-other | automotive- automotive-other | automotive- automotive-other | automotive- automotive-other |
|---|-------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 2 | a_weighted_rating | 0.800508673406529 | 0.899243370723261 | 0.617104285874213 | 1.0 | 0.996440454544235 | 0.840841115691487 | 0.84931235014502 |
| 3 | a_visibility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | a_spread | 0.45 | 0.88 | 0.598076923076923 | 0.5 | 0.348245614035088 | 0.88 | 0.88 |
| 5 | a_volume | 0.45 | 0.275 | 0.675 | 0.475 | 0.475 | 0.6 | 0.65 |
| 6 | a_time | 1.0 | 0.285714285714286 | 1.0 | 0.642857142857143 | 1.0 | 0.821428571428571 | 1.0 |
| 7 | a_length | 0.708812260536399 | 0.461538461538462 | 0.459302325581395 | 0.736842105263158 | 0.192982456140351 | 0.628571428571429 | 0.75 |

6 rows x 600 columns

In [3]:

```
import matplotlib.pyplot as plt

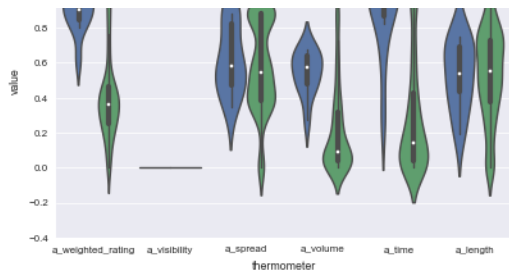
prev = None # print unique columns

for column in top10_data_industry:
    if column != "cat" and column != "thermometer" and column != prev:
        print column
        prev = column
        temp = pd.melt(top10_data_industry, id_vars=['thermometer', 'cat'], value_vars=[column])
        temp_random = pd.melt(random_data, id_vars=['thermometer', 'cat'], value_vars=[column])
        result = temp.append(temp_random)
        result['value'] = result['value'].astype(float)
        sns.set()
        sns.set_context("paper")
        sns.violinplot(x="thermometer", y="value", hue='cat', data=result)
        plt.show()
```

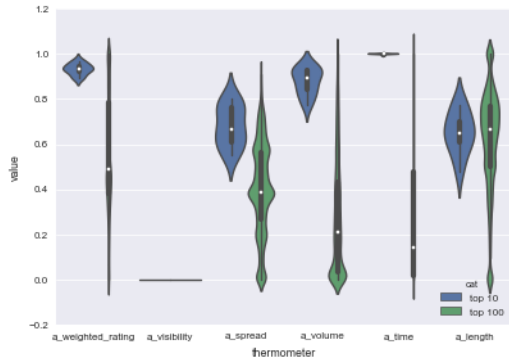
automotive-automotive-other

//anaconda/lib/python2.7/site-packages/matplotlib/_init_.py:892: UserWarning: axes.color_cycle is deprecated and replaced with axes.prop_cycle; please use the latter.
warnings.warn(self.msg_depr % (key, alt_key))

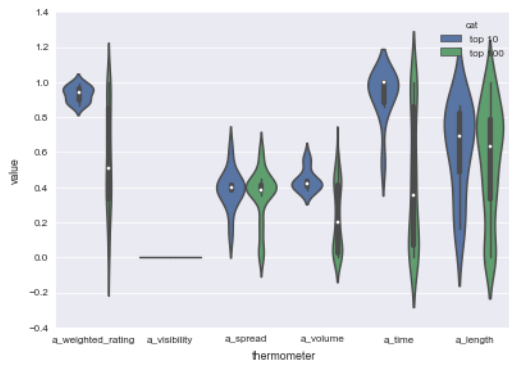




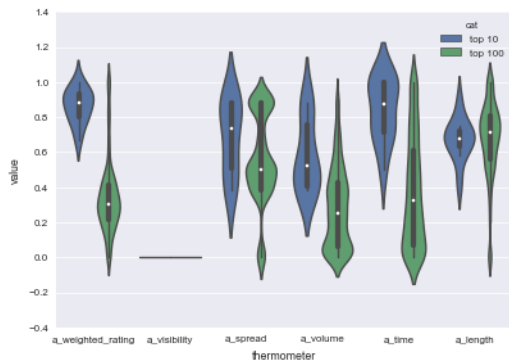
automotive-dealer



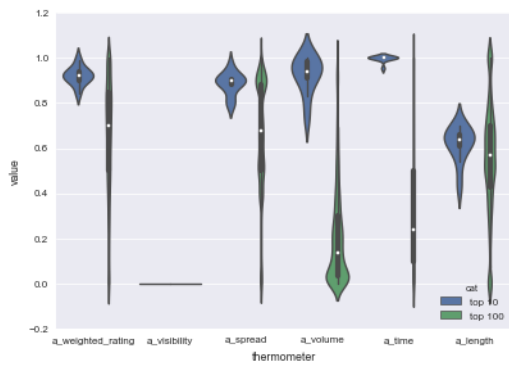
automotive-oem



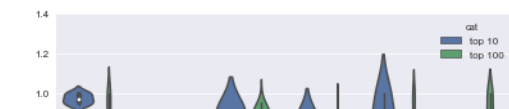
automotive-parts

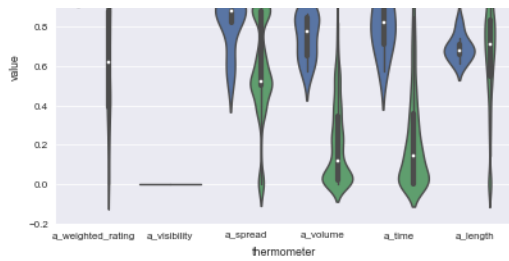


automotive-rental

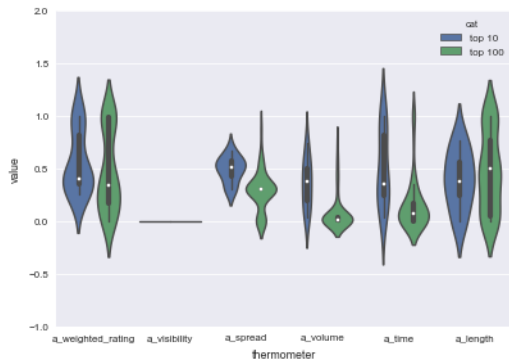


automotive-repair-&-service

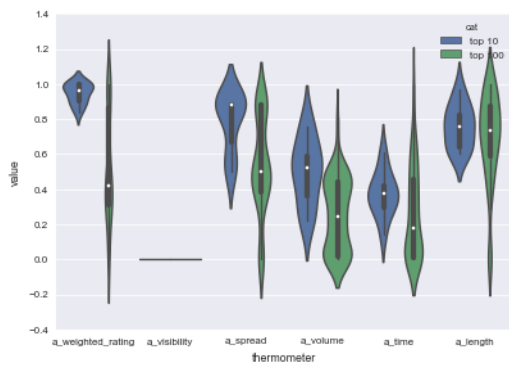




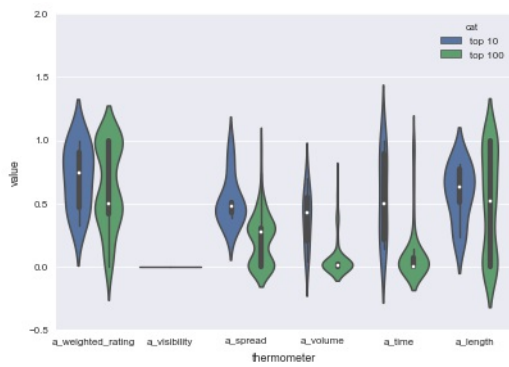
automotive-tires



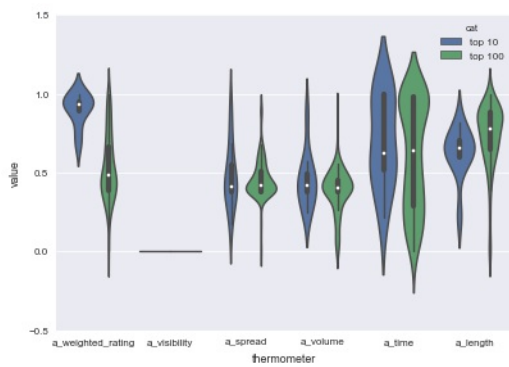
beauty-beauty-other



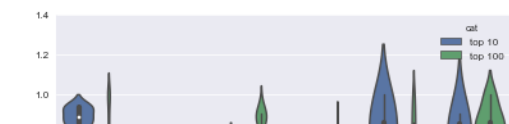
beauty-hair-grooming

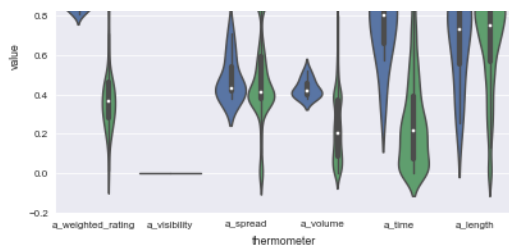


beauty-skin-care

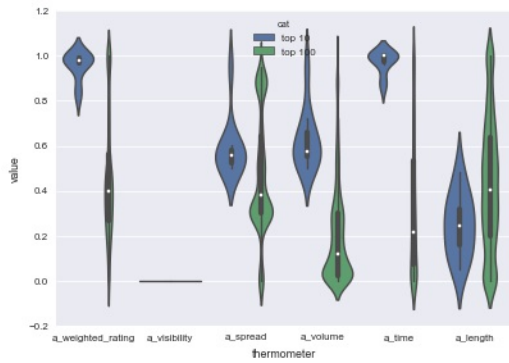


beauty-spa

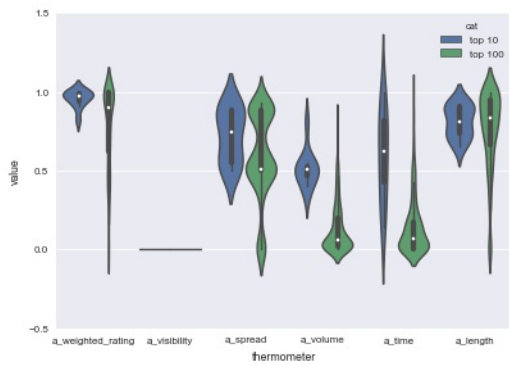




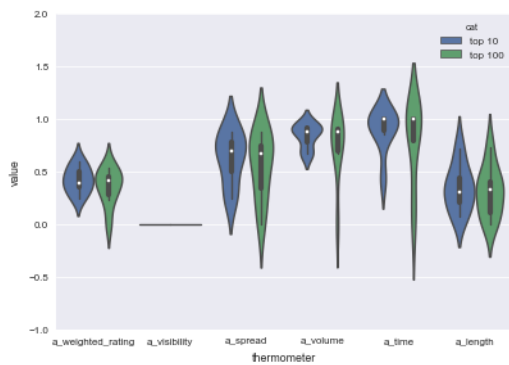
default-default



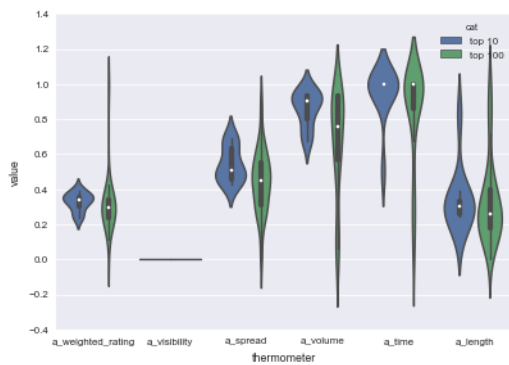
education-education-other



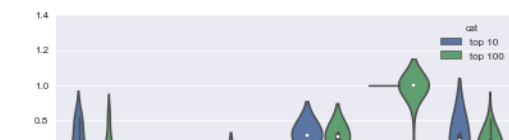
entertainment-amusement-park

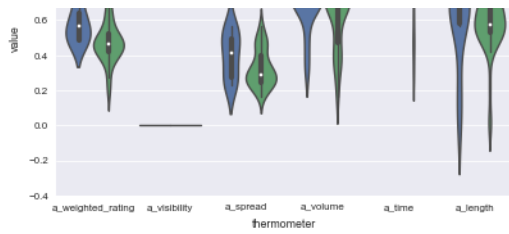


entertainment-live-performance-&-sports

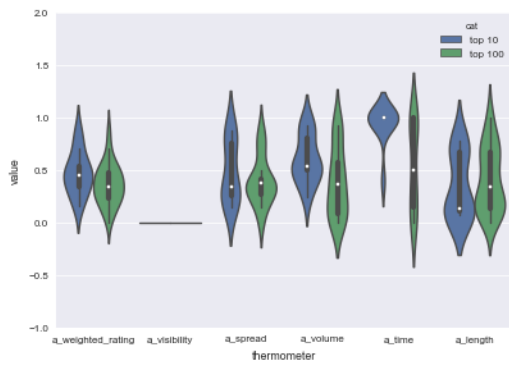


entertainment-museums-and-parks

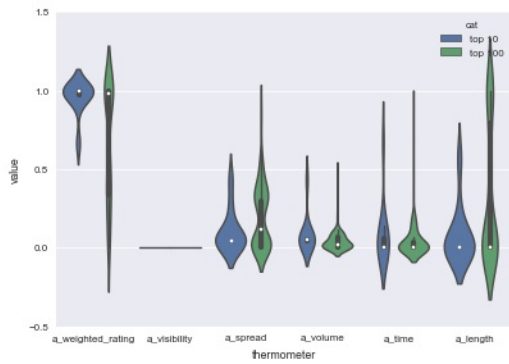




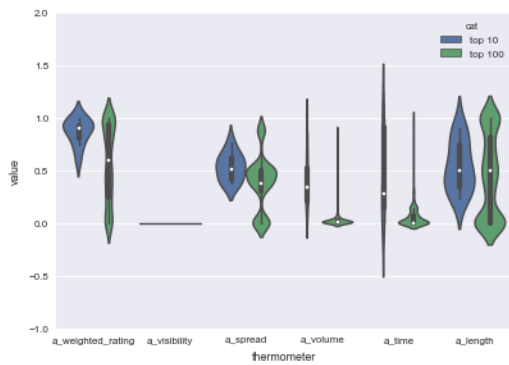
entertainment-other



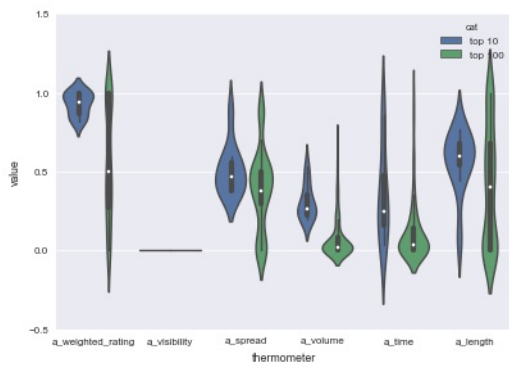
financial-services-accounting



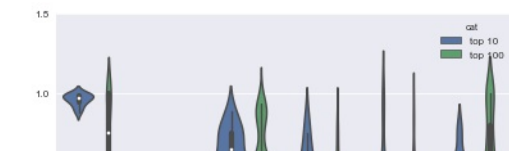
financial-services-banks

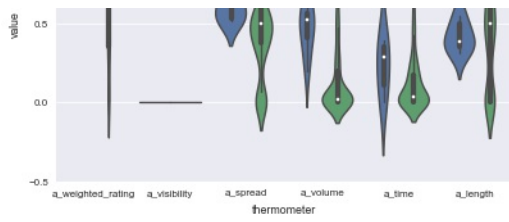


financial-services-financial-services-other

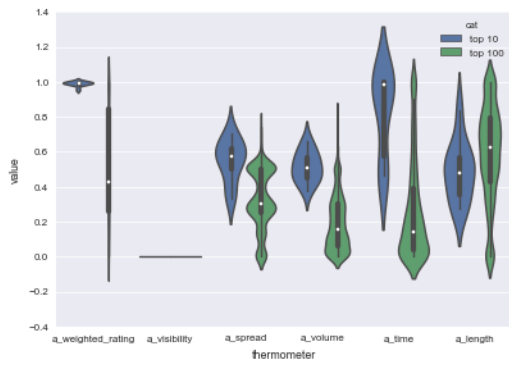


financial-services-insurance

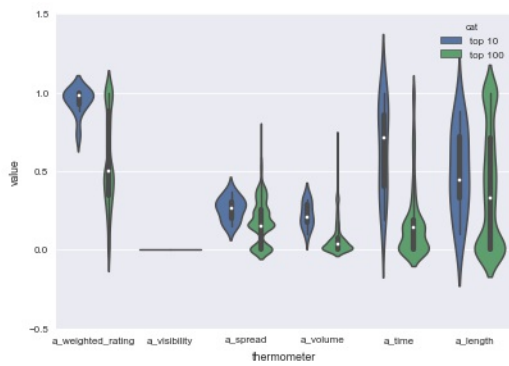




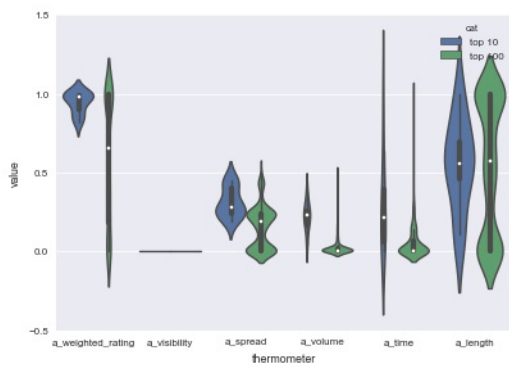
health-care-dentists



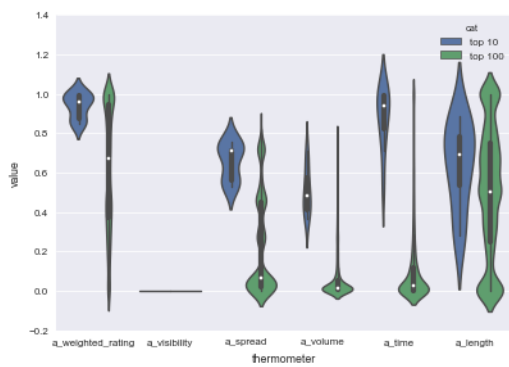
health-care-health-care-other



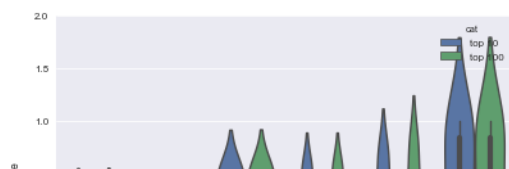
health-care-home-care

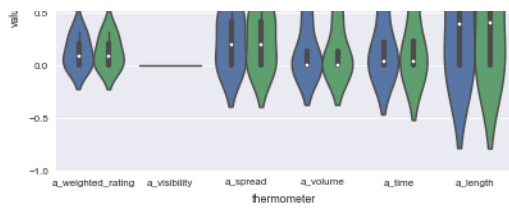


health-care-hospitals-&-facilities

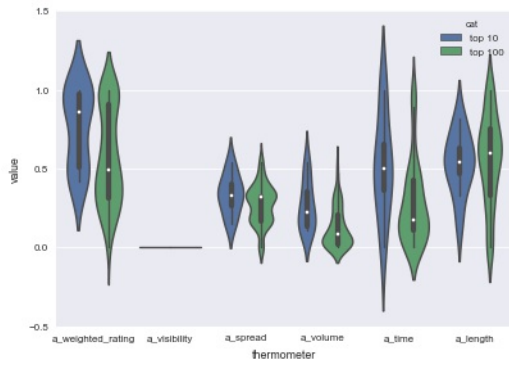


health-care-medical-spa

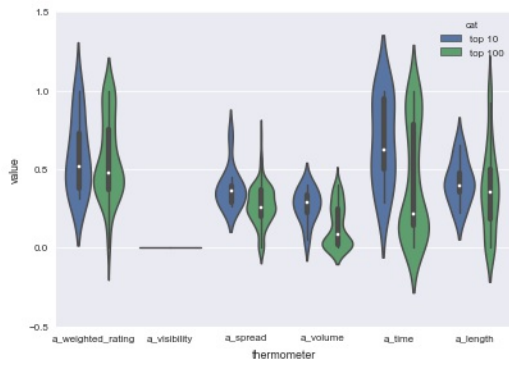




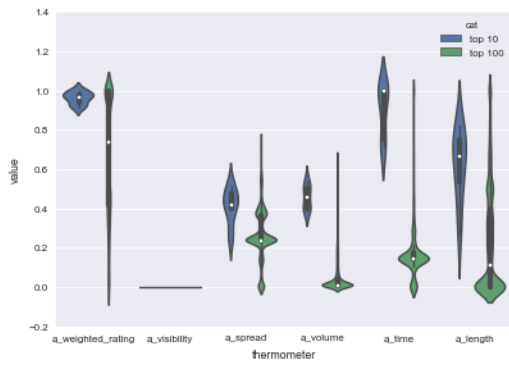
health-care-optometrist-&-opthamologist



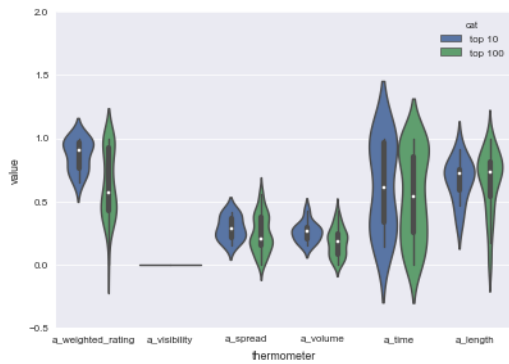
health-care-pediatricians



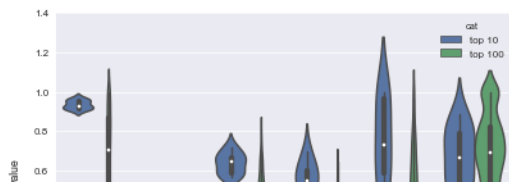
health-care-physicians

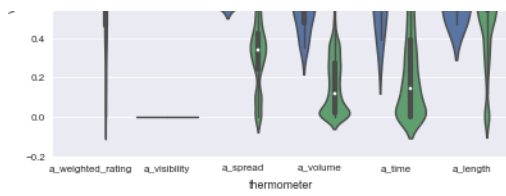


health-care-plastic-&-cosmetic-surgeons

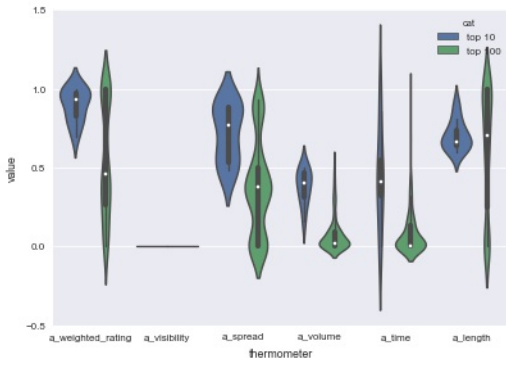


health-care-senior-care

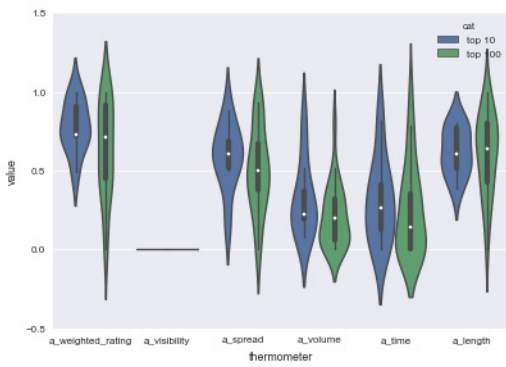




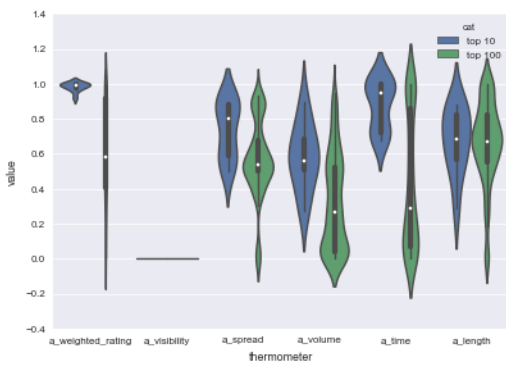
home-services-cleaning



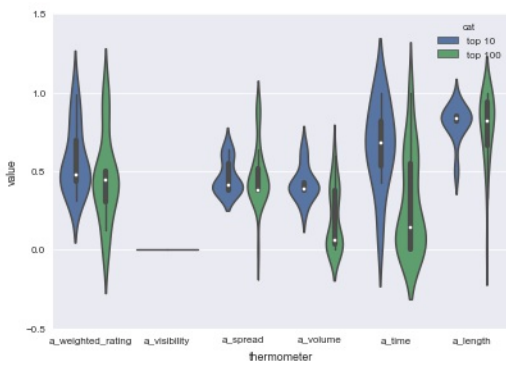
home-services-general-contracting



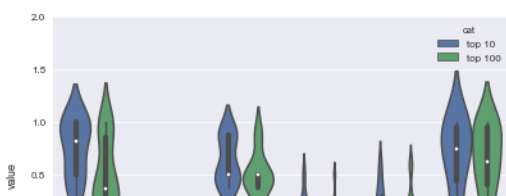
home-services-home-services-other

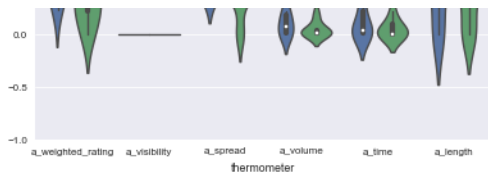


home-services-interior-design

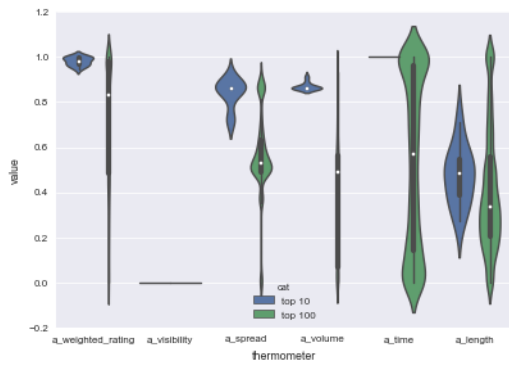


home-services-landscaping

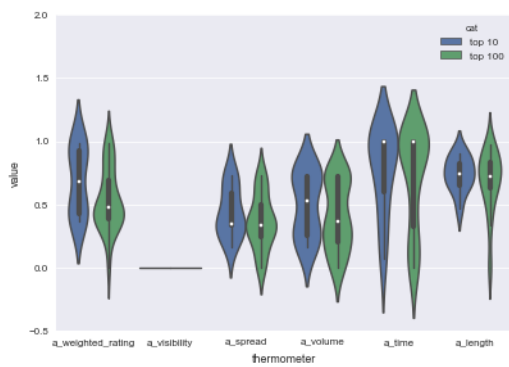




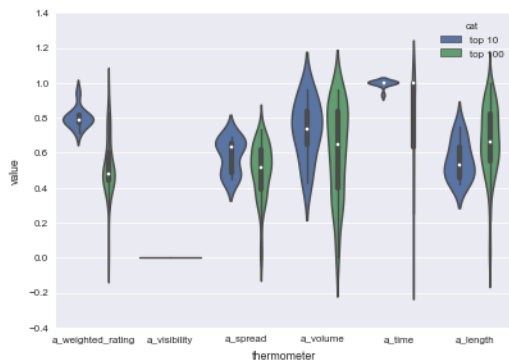
home-services-moving-&-storage



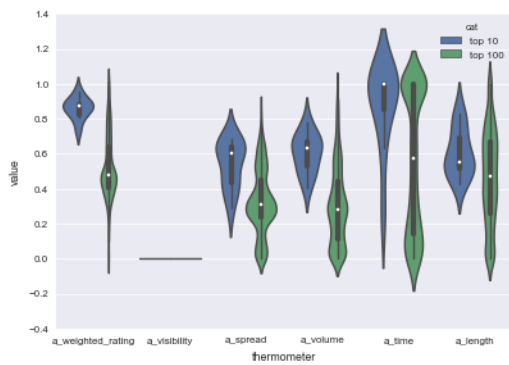
hospitality-&-travel-activities



hospitality-&-travel-hospitality-&-travel-other

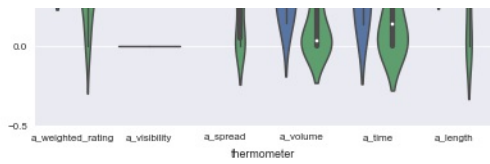


hospitality-&-travel-hotel-&-motel

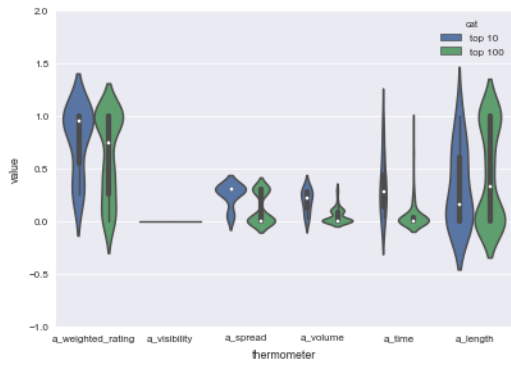


legal-law-firm

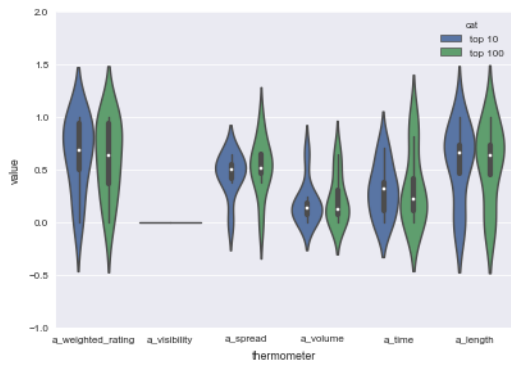




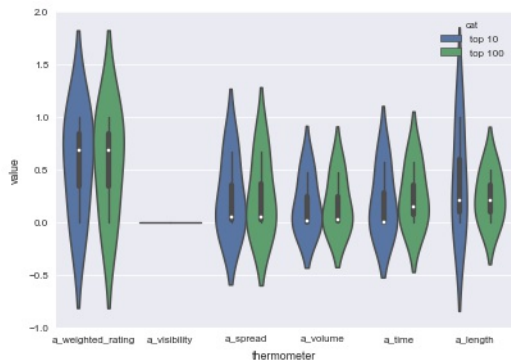
legal-legal-other



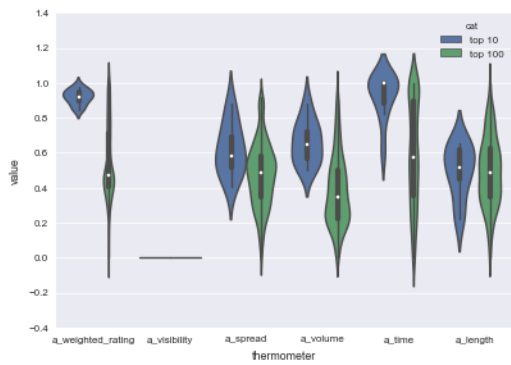
pets-pet-services



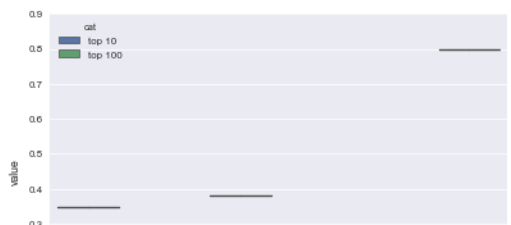
pets-pets-other

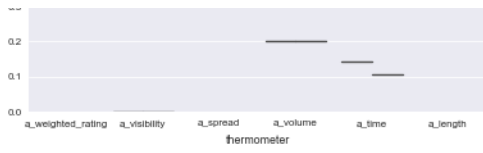


pets-veterinarians

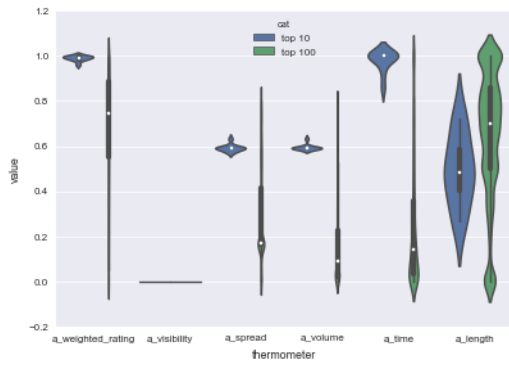


real-estate-mortgage

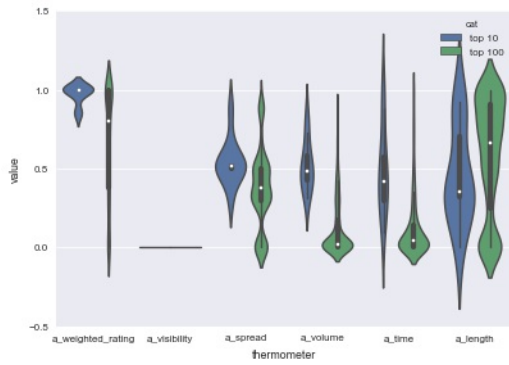




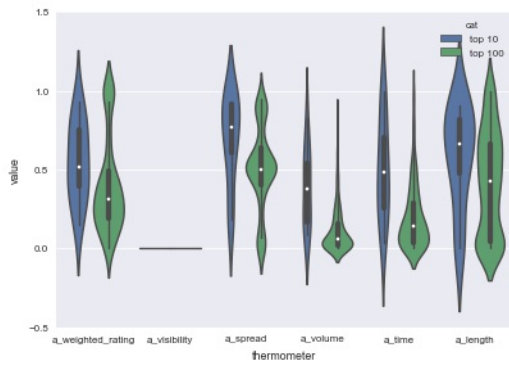
real-estate-property-management



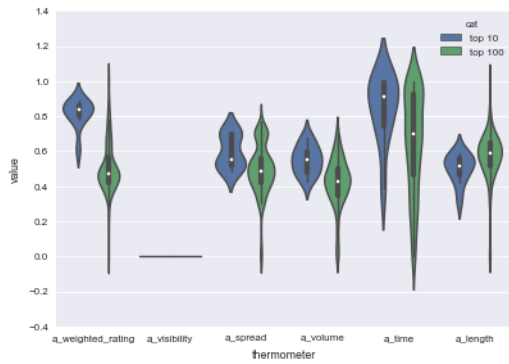
real-estate-real-estate-agency



real-estate-real-estate-other

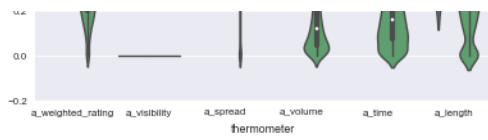


restaurants-carry-out

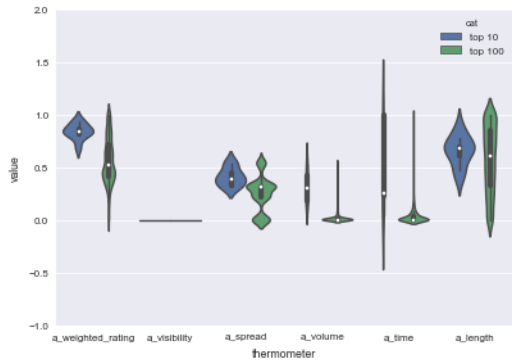


restaurants-fast-food

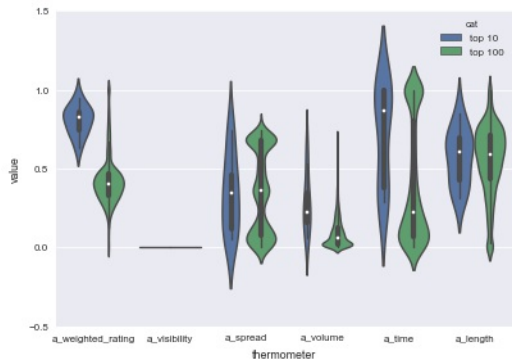




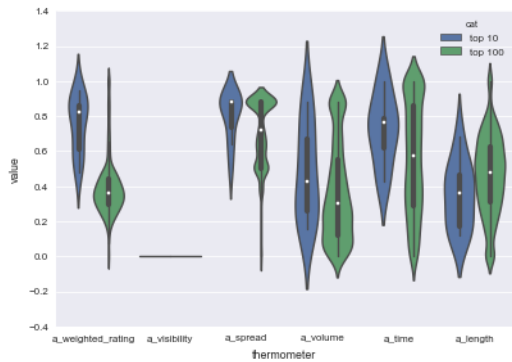
restaurants-fine-dining



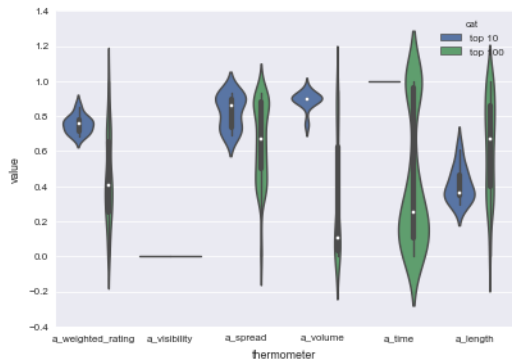
restaurants-restaurants-other



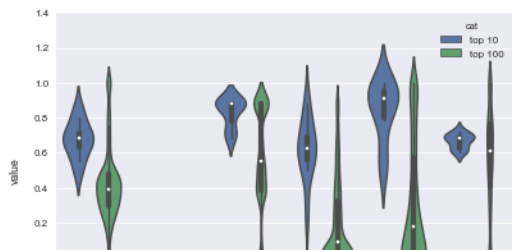
retail-big-box



retail-department-stores

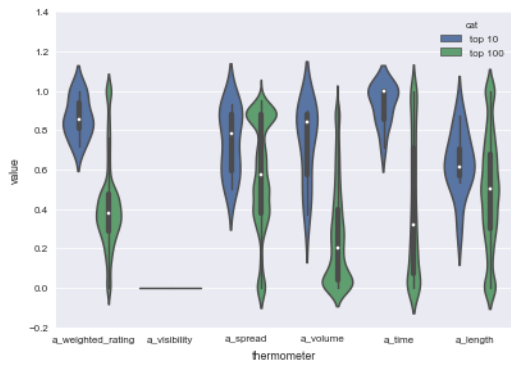


retail-retail-clothing

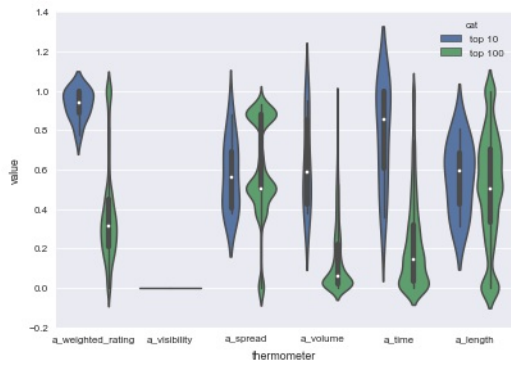




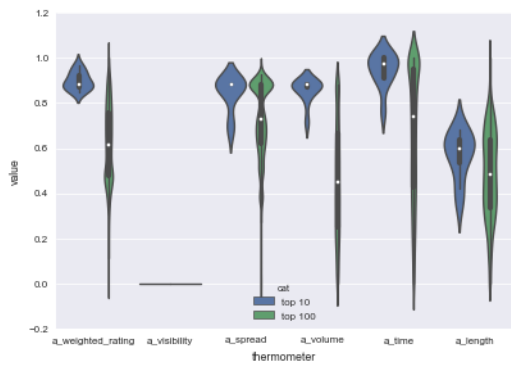
retail-retail-other



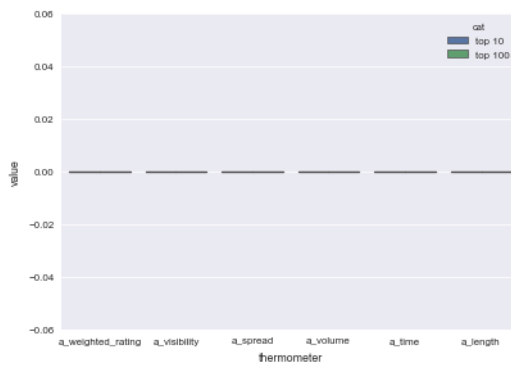
retail-special-services



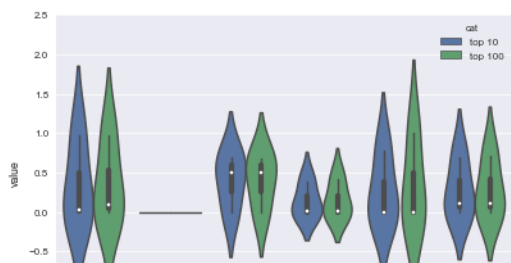
retail-supermarkets



technology-electronics

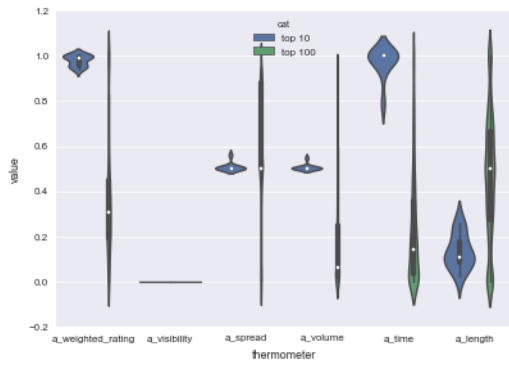


technology-internet-service-provider

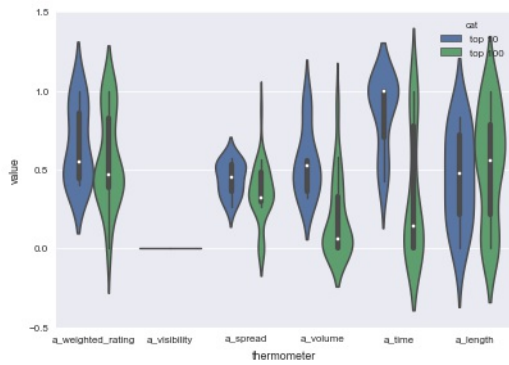




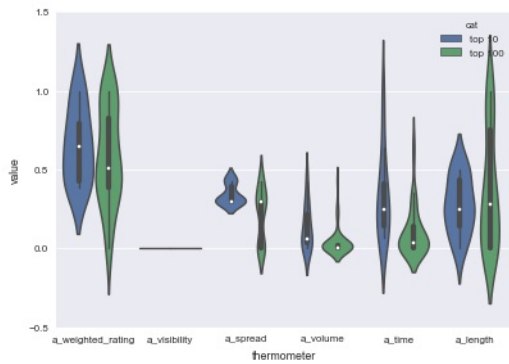
technology-mobile-provider



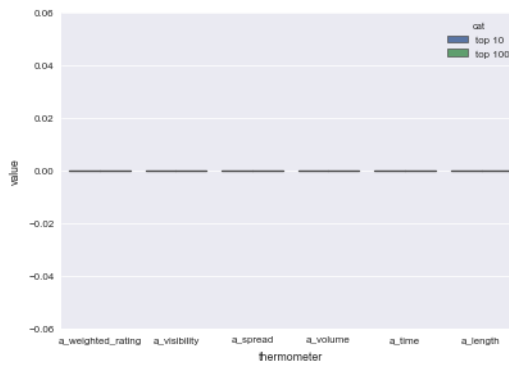
technology-technology-other



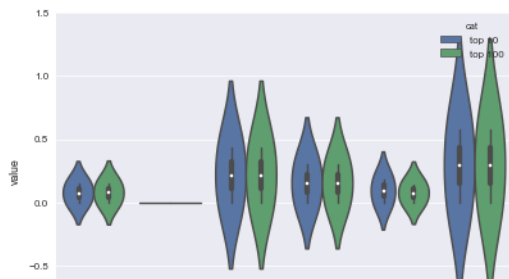
uk-take-away-food-supplier



wedding-&-special-events-entertainers

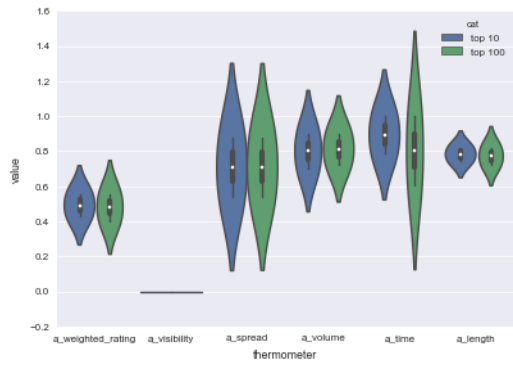


wedding-&-special-events-event-planners

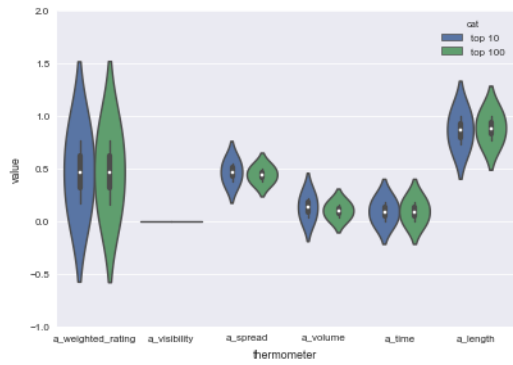




wedding-&-special-events-party-venues



wedding-&-special-events-wedding-&-special-events-other



In []: