









Lightness of matplotlib colormaps

Here we examine the lightness values of the matplotlib colormaps. Note that some documentation on the colormaps is available ([\[list-colormaps\]](#)).

```
mpl.rcParams.update({'font.size': 12})

# Number of colormap per subplot for particular cmap category
_DSUBS = {'Perceptually Uniform Sequential': 5, 'Sequential': 5,
          'Sequential (2)': 6, 'Diverging': 6, 'Cyclic': 3,
          'Qualitative': 4, 'Miscellaneous': 6}

# Spacing between the colormaps of a subplot
_DC = {'Perceptually Uniform Sequential': 1.4, 'Sequential': 1.4,
       'Sequential (2)': 1.4, 'Diverging': 1.4, 'Cyclic': 1.4,
       'Qualitative': 1.4, 'Miscellaneous': 1.4}

# Indices to step through colormap
x = np.linspace(0.0, 1.0, 100)

# Do plot
for cmap_category, cmap_list in cmaps.items():

    # Do subplots so that colormaps have enough space.
    # Default is 6 colormaps per subplot.
    dsub = _DSUBS.get(cmap_category, 6)
    nsubplots = int(np.ceil(len(cmap_list) / dsub))

    # squeeze=False to handle similarly the case of a single
    fig, axes = plt.subplots(nrows=nsubplots, squeeze=False)
```