matplotlib.colorbar
matplotlib.colors
matplotlib.container
matplotlib.contour
matplotlib.dates
matplotlib.docstring
matplotlib.dviread
matplotlib.figure
matplotlib.font_manager
matplotlib.fontconfig_pattern
matplotlib.gridspec
matplotlib.image
matplotlib.legend
matplotlib.legend_handler
matplotlib.lines
matplotlib.markers
matplotlib.mathtext
matplotlib.mlab
matplotlib.offsetbox
matplotlib.patches
matplotlib.path
matplotlib.patheffects
matplotlib.pyplot
matplotlib.projections
matplotlib.quiver
matplotlib.rcsetup
matplotlib.sankey
matplotlib.scale
matplotlib.sphinxext.mathmpl
matplotlib.sphinxext.plot_directive
matplotlib.spines
matplotlib.style
matplotlib.table
matplotlib.testing
matplotlib.text
matplotlib.texmanager
matplotlib.textpath
matplotlib.ticker
matplotlib.tight_bbox
matplotlib.tight_layout
matplotlib.transforms
matplotlib.tri
matplotlib.type1font
matplotlib.units
matplotlib.widgets
matplotlib._api
matplotlib._enums
mpl_toolkits.mplot3d
mpl_toolkits.axes_grid1
mpl_toolkits.axisartist
mpl_toolkits.axes_grid

Frame grabbing

Use a MovieWriter directly to grab individual frames and write them to a file. This avoids any event loop integration, and thus works even with the Agg backend. This is not recommended for use in an interactive setting.

```
import numpy as np
import matplotlib
matplotlib.use("Agg")
import matplotlib.pyplot as plt
from matplotlib.animation import FFMpegWriter

# Fixing random state for reproducibility
np.random.seed(19680801)


metadata = dict(title='Movie Test', artist='Matplotlib',
                comment='Movie support!')
writer = FFMpegWriter(fps=15, metadata=metadata)

fig = plt.figure()
l, = plt.plot([], [], 'k-o')

plt.xlim(-5, 5)
plt.ylim(-5, 5)

x0, y0 = 0, 0

with writer.saving(fig, "writer_test.mp4", 100):
    for i in range(100):
        x0 += 0.1 * np.random.randn()
        y0 += 0.1 * np.random.randn()
        l.set_data(x0, y0)
        writer.grab_frame()
```

Download Python source code: frame_grabbing_sgskip.py

Download Jupyter notebook: frame_grabbing_sgskip.ipynb

Keywords: matplotlib code example, codex, python plot, pyplot

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