PAn - Projection Analyzer

http://code.google.com/p/projection-analyzer/

Plot Projection 2D Instructions

Description:

The Python script `'pan_plotproj2d.py'` is part of Projection Analyzer (PAn) and it is used for plotting 2d projections.

Pre-requisites:

- PAn Libs
- Python 2.6 or later <http://www.python.org/>
- NumPy <http://numpy.scipy.org/>
- SciPy <http://www.scipy.org/>
- Matplotlib <http://matplotlib.sourceforge.net/>
- PyLab <http://www.scipy.org/PyLab>

Usage syntax:

```
pan_plotproj2d -infile <projection_file> [-saveim <yes|no>] [-legend <yes|no>]
[-letext <legend_text>]
```

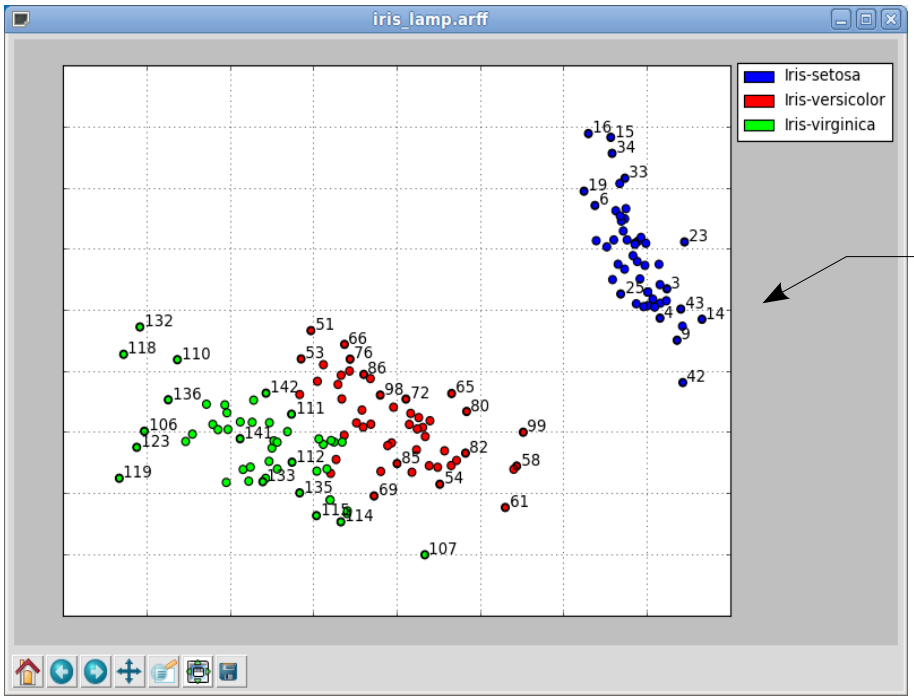
Parameters explanation:

Parameter	Description	Required	Default Value
`-infile`	input file name	obligatory	-
`-saveim`	save image to disk (same path of the input file)	optional	no
`-legend`	generate legend	optional	no
`-letext`	legend text as comma separated value ***Obs:*** *the maximum number of legend elements must be less or equal to number of rows of the colormap file.*	optional	class1,class2,...,classM

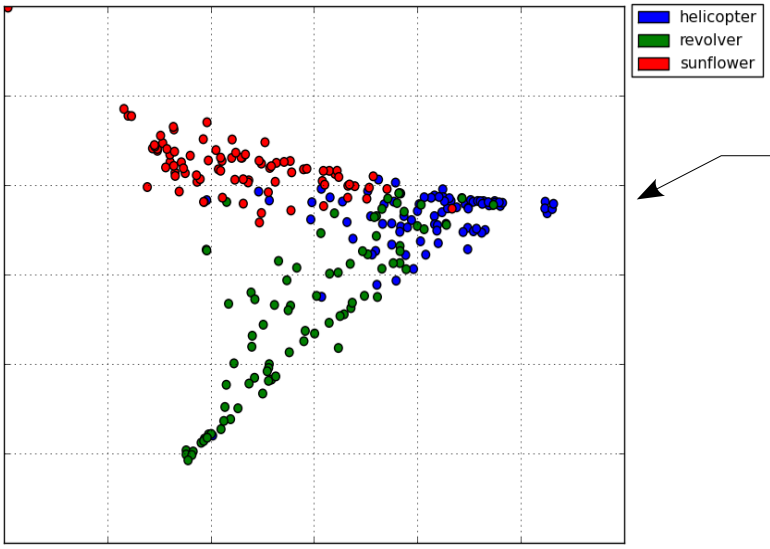
Examples:

```
./pan_plotproj2d.py -infile ../../data/iris_lamp.arff -saveim no -legend yes

./pan_plotproj2d.py -infile ../../data/ssurface.prj -saveim yes -legend no

./pan_plotproj2d.py -infile ../../data/caltech-3classes-normcols.arff -saveim
yes -legend yes -letext   helicopter,revolver,sunflower
```

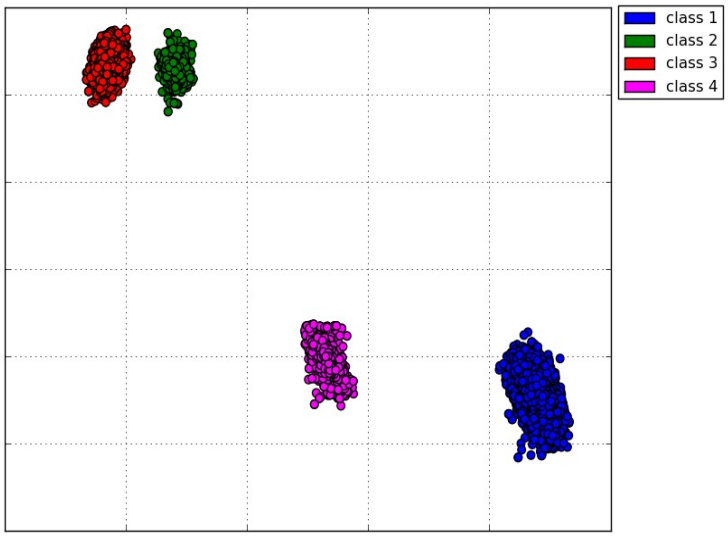
Some examples of projection plots:



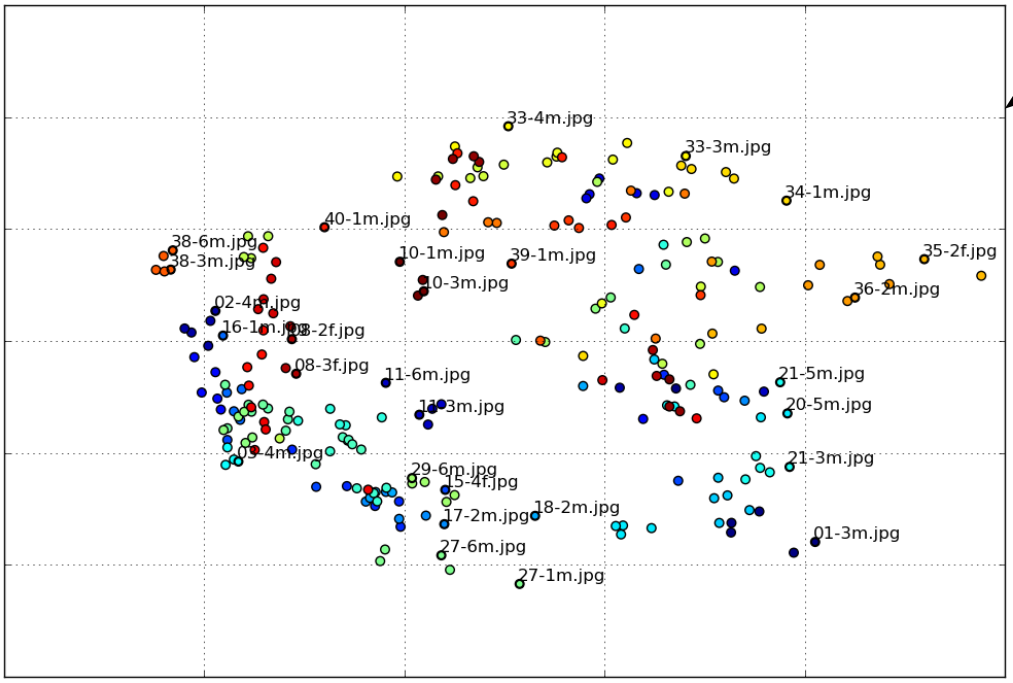
Dataset: iris
Dim: 150x4
Technique: LAMP



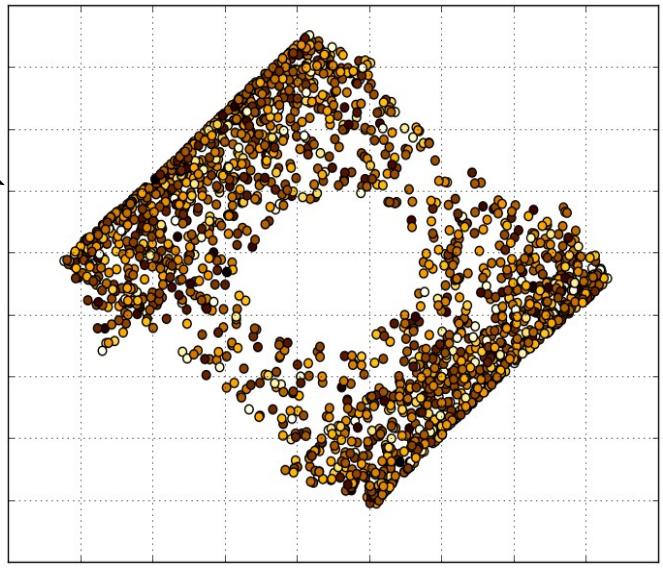
Dataset: caltech-3classes-normcols
Dim: 255x25
Technique: CSMP



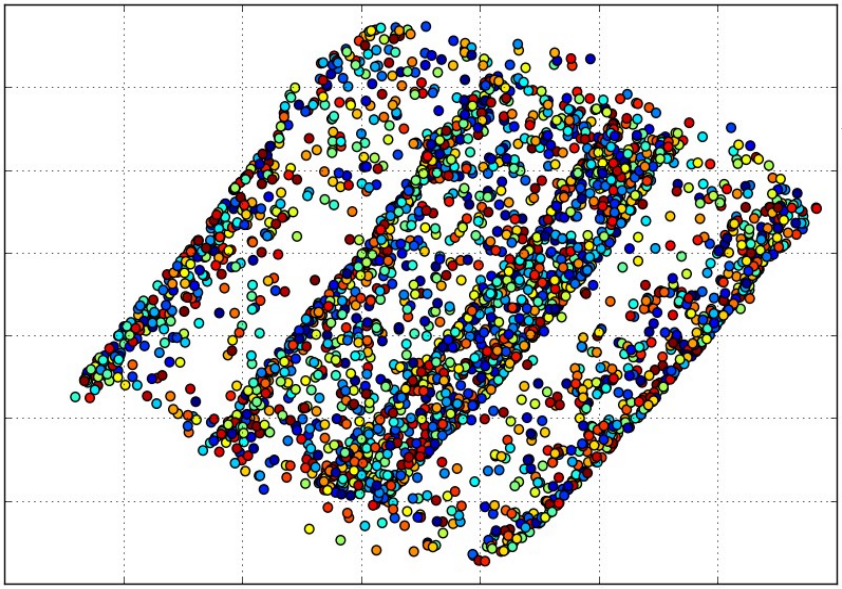
Dataset: mammals20k
Dim: 20000x72
Technique: LAMP



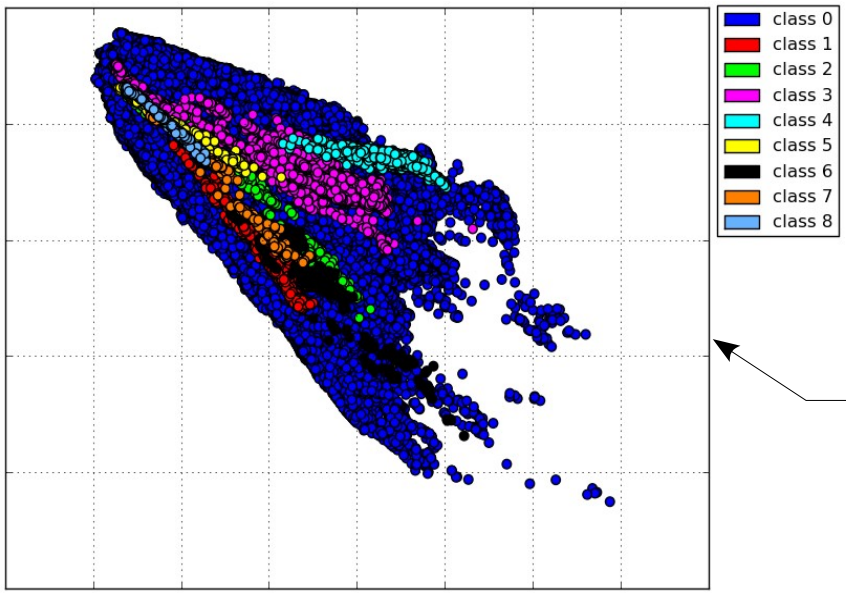
Dataset: faces
Dim: 240x28
Technique: LAMP



Dataset: ssurface
Dim: 2000x3
Technique: LAMP

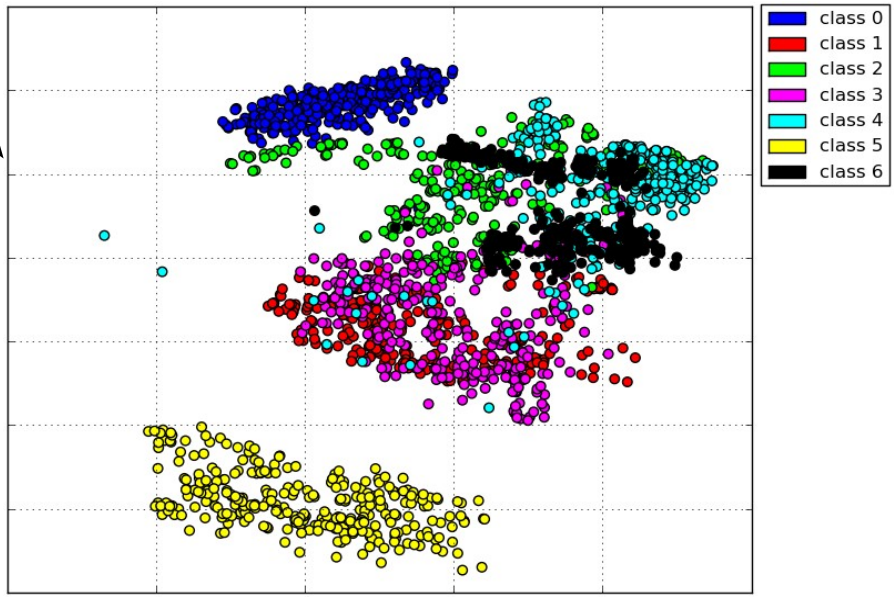


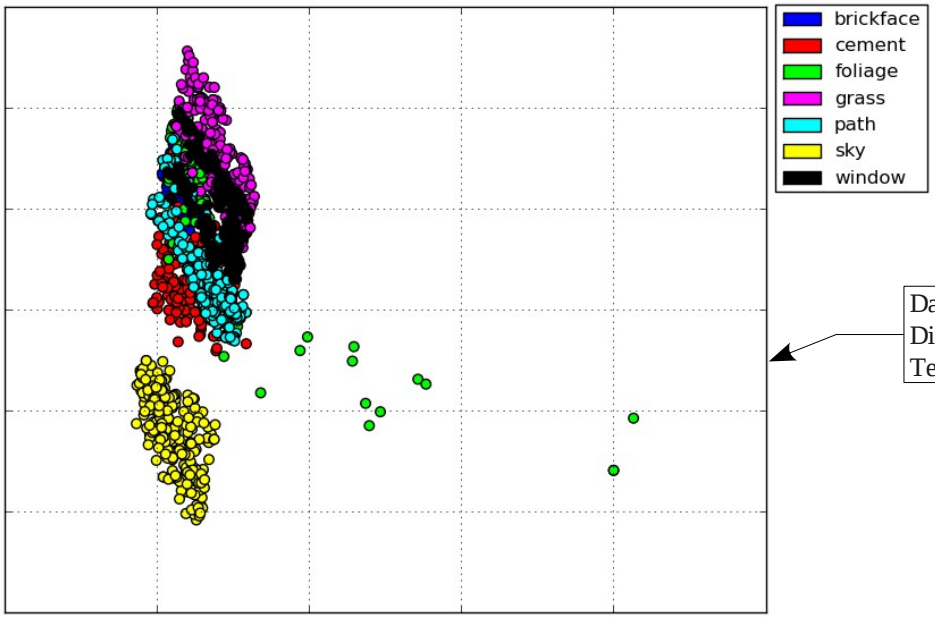
Dataset: swissroll
Dim: 3000x3
Technique: LAMP



Dataset: fiber-notnorm
Dim: 250000x30
Technique: LAMP

Dataset: segmentation-normcols
Dim: 2100x19
Technique: LAMP





Dataset: segment-challenge
Dim: 1500x19
Technique: LAMP