

**NAME**

grandtour – grand tour for multispectral images

**SYNOPSIS**

**grandtour** [**-t0** *tinit*] [**-nview** *nview*] [**-d** *ndim*] [**-step** *stepsize*]

**DESCRIPTION**

*grandtour* generates a sequence of projections of a multiframe image onto lower-dimensional images with dimension *ndim*. The sequence is dense in the space of all *ndim*-dimensional projections.

**OPTIONS**

**-d** *ndim*

dimensionality of projections

**-nview** *nview*

number of views generated

**-t0** *tinit*

initial value of t (determines starting point of GT)

**-step** *stepsize*

stepsize of GT, determines smoothness of GT, should be set to a small (real) value (e.g. 0.01465)

**EXAMPLE**

Simple 1-dimensional GT:

```
grandtour -nview 100 < in.hips > out.hips
```

The resulting image out.hips is a 100-frame image which can be viewed in a movie-like fashion with xshow.

A 3D Grand Tour may be realized this way:

```
grandtour -t0 10 -d 3 -nview 10 -step 0.03268 < in.hips > out.hips
```

out.hips is a 30 (3 x 10)-frame image. These could be viewed as 10 RGB images typically revealing more structure than 1-dimensional projections displayed as grayscale images.

**REFERENCE**

Asimov, D. (1985): The Grand Tour: a Tool for viewing multidimensional Data, *SIAM J. Sci. Comput.* **6**, 128-143

**SEE ALSO**

maf(1), epp(1)

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