

**NAME**

mgf2meta - convert Materials and Geometry Format file to Metafile graphics

**SYNOPSIS**

**mgf2meta** [ **-t threshold** ] {x|y|z} **xmin xmax ymin ymax zmin zmax** [ **input ..** ]

**DESCRIPTION**

*Mgf2meta* converts one or more Materials and Geometry Format (MGF) files to a 2-D orthographic projection along the selected axis in the *metafile(1)* graphics format. All geometry is clipped to the specified bounding box, and the resulting orientation is as follows:

| Projection | Orientation             |
|------------|-------------------------|
| =====      | =====                   |
| x          | Y-axis right, Z-axis up |
| y          | Z-axis right, X-axis up |
| z          | X-axis right, Y-axis up |

If multiple input files are given, the first file prints in black, the second prints in red, the third in green and the fourth in blue. If more than four input files are given, they cycle through the colors again in three other line types: dashed, dotted and dot-dashed.

The *-t* option may be used to randomly throw out line segments that are shorter than the given *threshold* (given as a fraction of the plot width). Segments are included with a probability equal to the square of the line length over the square of the threshold. This can greatly reduce the number of lines in the drawing (and therefore improve the drawing speed) with only a modest loss in quality. A typical value for this parameter is 0.005.

All MGF material information is ignored on the input.

**EXAMPLE**

To project two MGF files along the Z-axis and display them under X11:

```
mgf2meta z 0 10 0 15 0 9 building1.mgf building2.mgf | x11meta -r
```

To convert a RADIANCE scene to a line drawing in RADIANCE picture format:

```
rad2mgf scene.rad | mgf2meta x 'getbbox -h scene.rad' | meta2tga | ra_t8 -r > scene.hdr
```

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**SEE ALSO**

getbbox(1), meta2bmp(1), meta2tga(1), metafile(5), mgf2rad(1), pflip(1), protate(1), psmeta(1), ra\_t8(1), rad2mgf(1), x11meta(1)

MGF web site "<http://radsite.lbl.gov/mgf/HOME.html>"