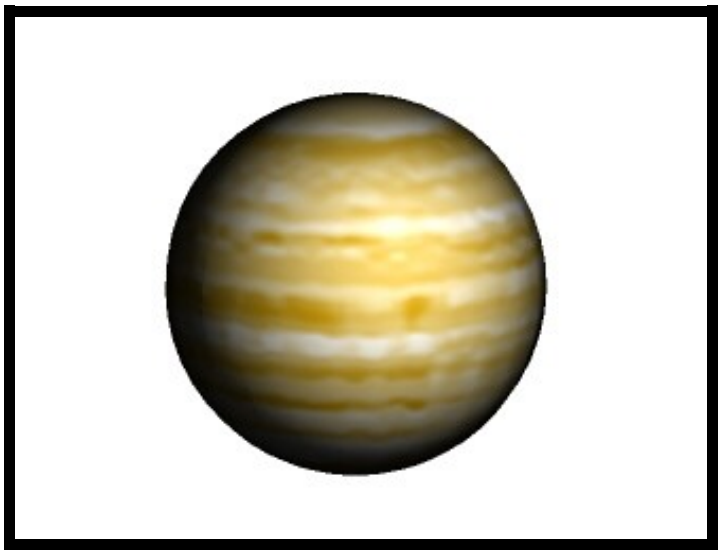
gsgiant.itx



Type : Color, Filter.

This texture applies rings of color to an object that, when viewed from the X−Y plane, makes stripes on an object, and when viewed down the Z axis will do rings. The texture has a noise function to disturb the straight banding that appears in this texture. By carefully selecting base colors for this texture, you can create planets similar to Saturn, Jupiter, Uranus, or even Rigel 12. By applying this texture carefully to a disk, you can create the rings that go around the planets complete with spaces between the rings:
Creating a planet that looks a bit like Saturn: Add a primitive sphere. leave the spheres attributes as−is, and apply GasGiant to the sphere. Add a primitive disk to the scene, and using Transform, rotate it's axis by 90 degrees around X (so that the objects Z axis will now point out of the surface). Scale this disk to 2.3 times it's original size, and rotate it 90 degrees about it's X axis so it is oriented properly around the sphere (the planet). Changes the disks filter attribute to 255, 255, 255, and apply GasGiant to the disk. Make the following modifications to the GasGiant texture on the disk: Set the Minimum Ring Radius to 60 and the Maximum to 115. Set the Filter Adjust to 1.0. Set either the Noise Magnitude or the Noise Velocity to 0.0. There it is. If the bands on the planet look too stormy, adjust the noise values so they don't add as much disturbance as they do. If the colors aren't quite right, adjust the two base colors in the texture to two that better represent the color range you're looking for. If there is too many bands in the rings around the planet, change the Banding Width Adjust to a larger number to get fewer, but wider rings.

REQUESTER TABS

- ***Color***
  - ♦ Colors 1 and 2: These parameters set up two colors from which all the colors used in the banding are randomly interpolated.
- ***Controls***
  - ♦ Minimum/Maximum Ring Radius: This texture has a specific region over which it applies itself. This region is defined as being within a certain radial range from the texture axis. Outside of this region, the texture does nothing. At the edges of this region, the texture fades to fully filtered. Within the center of this region is where this texture does it's thing. These parameters set up this range.
  - ♦ Banding Width Adjust: This parameter is used to adjust the approximate width of the color bands in this texture.
  - ♦ Filter Adjust: This texture allows for bands of filtered out areas along with the color banding. This parameter sets how far towards fully transparent these filtered bands can get.
- ***Noise***
  - ♦ Noise Magnitude and Velocity: This noise function allows you to make the bands look as smooth or

stormy as you want. The magnitude controls how much disturbance is added. The velocity parameter controls how fast that noise changes.