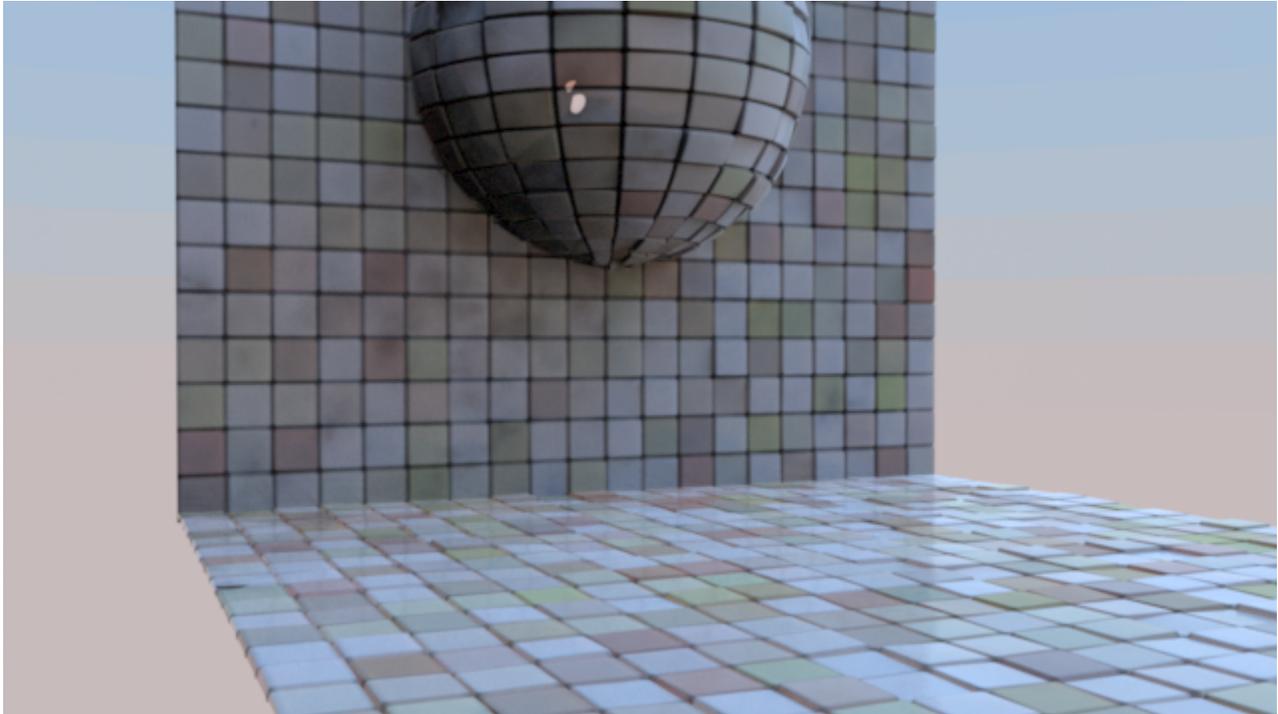


PxrBump



PxrBump used to provide the secondary bump on displaced tiles.

Produces a bumped normal from a bump map (a scalar displacement map, so only the first channel is used for the displacement). Bumps are applied in *object* space. The change in scale between *object* space and *current* space is automatically applied by the node.

Texture atlas format files can be read in either UDIM (Mari) format or Mudbox format. This plugin also supports Rtx procedural texture plugins.

Input Parameters

Input Bump

If *Input Bump* is connected (and *Filename* is not specified), the pattern executes the upstream shader graph connected to *Input Bump* three times, once at the shading point and once at $P+du$ and $P+dv$. Then it crosses the results to get the bump normal.

Note that if you have a fixed texture and UV, it is highly recommended to use the *Filename* parameter below because it is 3 times faster!

If *Filename* is specified below, *Input Bump* is ignored.

Filename

The filename of the texture. If not provided, *Input Bump* is used instead.

If *Filename* is specified, the pattern has no upstream graph connected. Instead it reads the bump value from the texture file. The input file can be a color or monochrome file; if the file is RGB, only a single channel (as specified by the *First Channel Offset* parameter) is read. The bump pattern gets the derivatives from the texture at the same time it filters it, which provides a performance benefit over using *Input Bump*.

The PxrBump pattern currently does not allow modifying the manifold of the texture.

First Channel Offset

First channel offset to be looked up for *Filename*.

Atlas Style

Specifies the style of texture atlas that is being used. If you specify an atlas style, the *Filename* parameter must contain a `_MAPID_`, which will be substituted automatically according to the surface parameterization and the style of atlas. Valid styles are:

- 0: None
- 1: MARI
- 2: Mudbox

Invert T

Inverts the t texture coordinate for texture lookup.

Blur

Specifies how much to blur the result from the texture.

Mip Interpolate

Selects whether to interpolate between adjacent resolutions in the multi-resolution texture, resulting in smoother transitions between levels.

Scale

An object-space scale applied to the bump.

Advanced

Input Normal

An additional normal to be added to the bump normal.

Reverse Normal

Reverse the resulting normal.

Adjust Amount

Amount to adjust the normals when the geometric normals are facing away from the camera. This is useful when we see cracks in the normals. You can find an example [here](#).

Surface Normal Mix

The amount to mix the resulting normals with the original surface normals. Toward 1.0 will mix in more surface normals. You can find an example [here](#).

Disabled

Use the geometric normal (ignore the modified bump).

MipBias

Bias mip selection chosen for rendering to either a higher (negative integers) or lower resolution (positive integers) selection.

MaxResolution

Clamp mip selection to a preferred maximum level. This may prevent the highest resolutions from being rendered depending on your selection.

Output Parameters

resultN

The bumped normal.