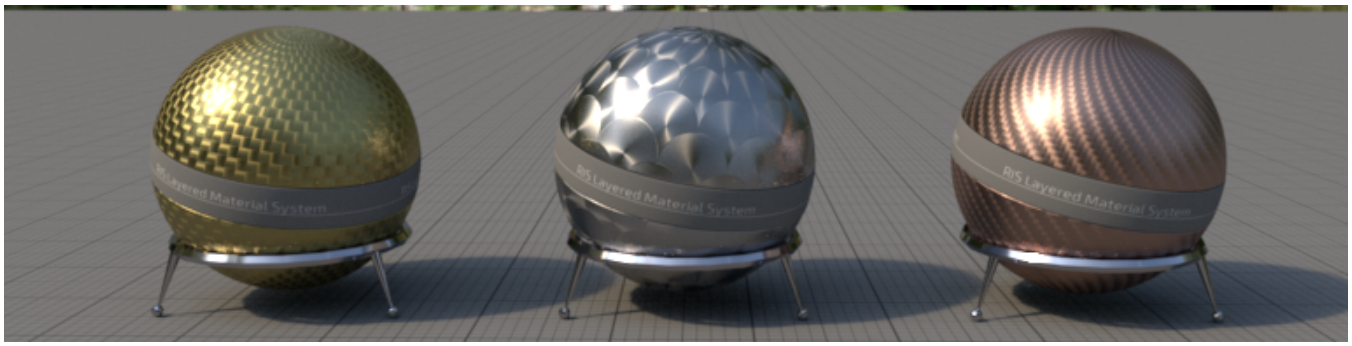
PxrTangentField



Defines a tangent field typically used to control anisotropic direction.

- *InputRotation* takes a single grayscale channel where black means 0 degrees and white means 360 degrees.
- *InputVector* takes a 2-channel map where the red channels is x and green is y. The blue channel is ignored.

The vector method often gives better results by minimizing texture filtering artifacts. If such artifacts are too visible, use the *nearest* texture filter.

> The nearest filter disables entirely mip-mapping, so you should only use it with a low-resolution map to avoid slowing down the renderer and consuming too much texture memory.

Input Parameters

Input Rotation

A single float value to rotate the shading tangent. This input will take precedence over inputVector.

Input Vector

The red and green channels will be read as x and y coordinates of a 2d vector. If inputRotation is connected, this input will be ignored.

Rotation Offset

A global rotation offset in degrees.

Rotation Range

Scales the rotation range. 1.0 equates 0 to 360 degrees.

Centered Vectors

Centers the gradient values of the vector map. Ignored when inputRotation is used.

Output Parameters

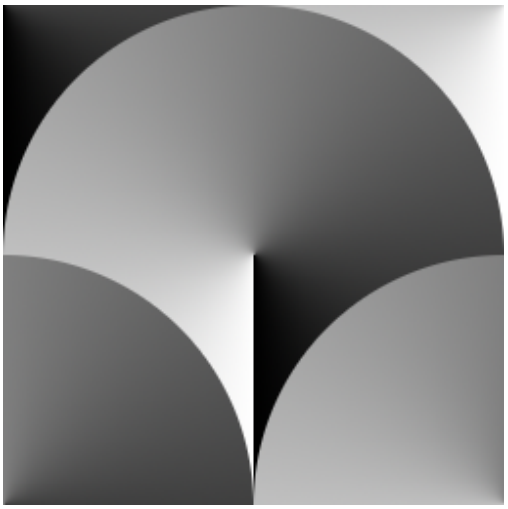
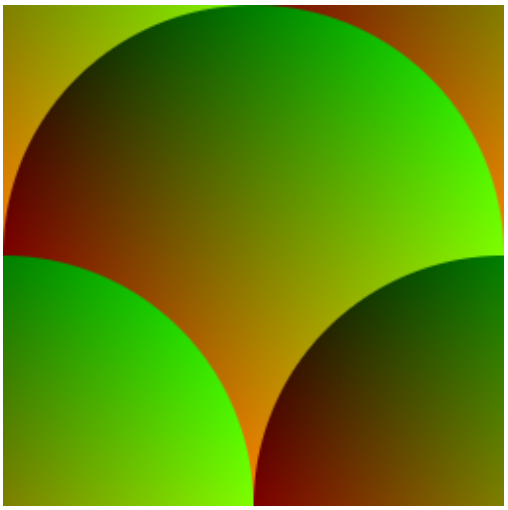
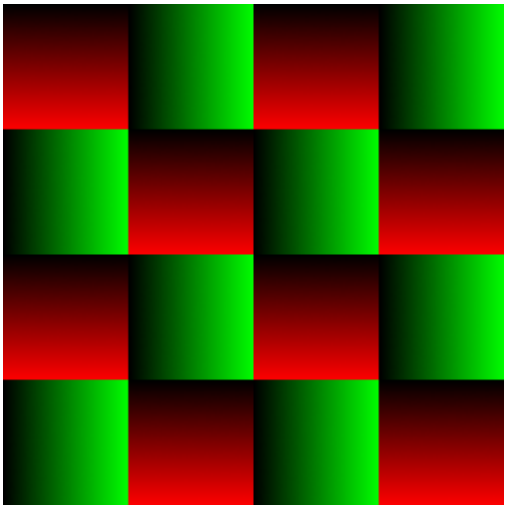
resultXYZ

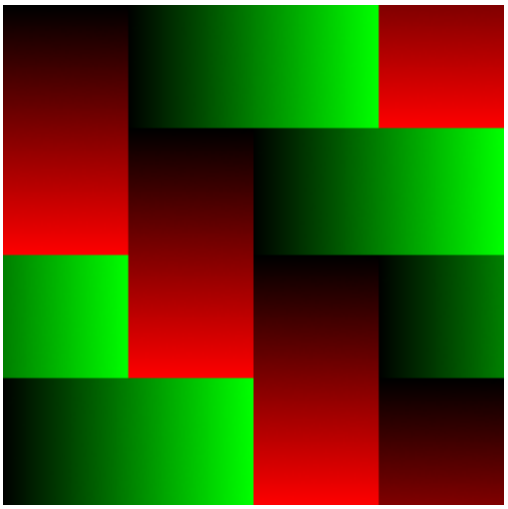
The final tangent vector that should be connected to the Bxdf's Shading Tangent input.

Sample textures

Sample textures have a resolution of 256x256 pixels and should tile perfectly (use the appropriate `txmake` wrap mode, e.g. `txmake -mode periodic`).

Texture	Description

	Rotation map to create an anisotropic brushed metal pattern.
	Vector map to create an anisotropic brushed metal pattern.
	Vector map to create an anisotropic fiber mesh pattern.

	Vector map to create an anisotropic carbon fiber mesh pattern.