

Introduction to Procedural Texture

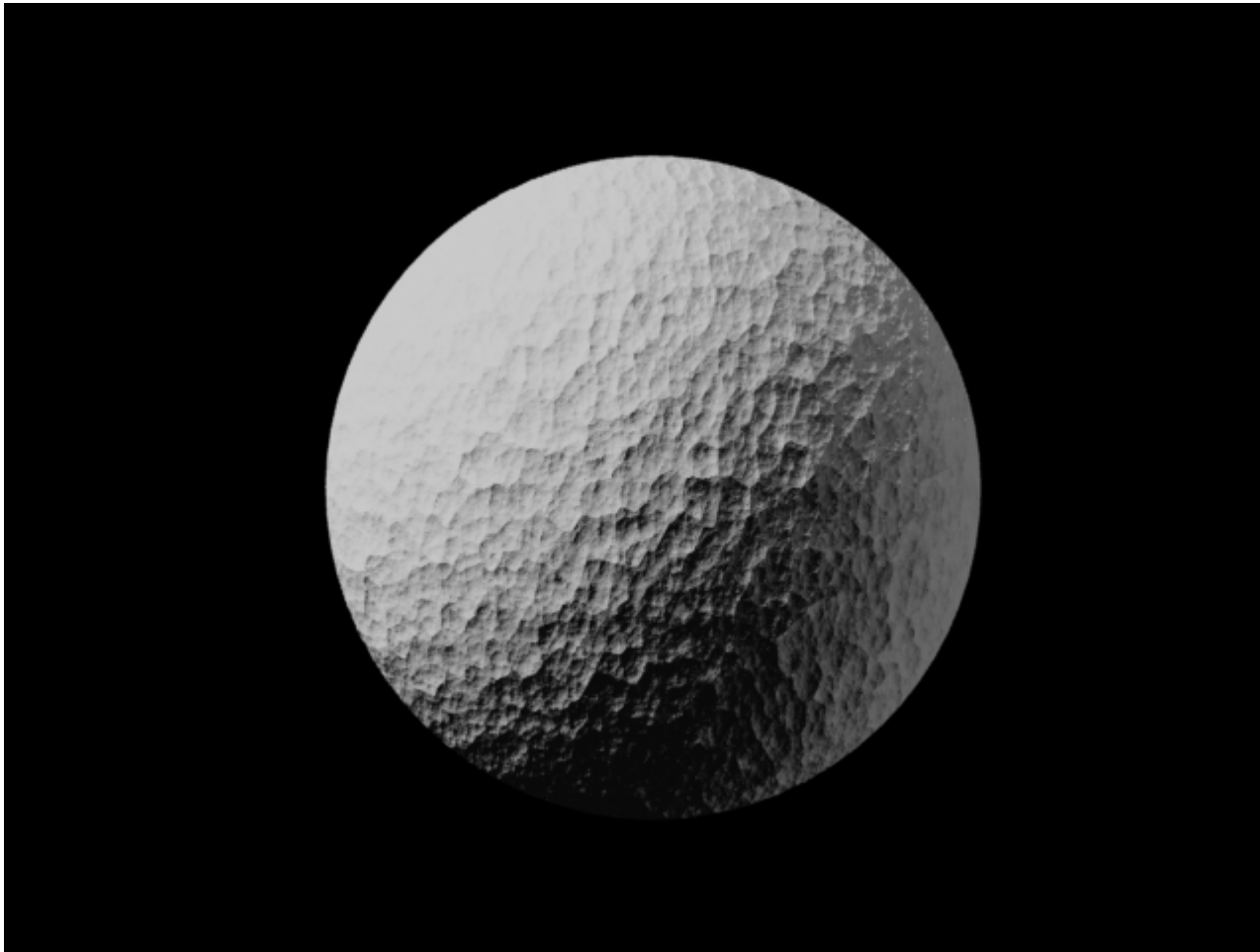
(crumple and fractal noise)

Characteristic of Procedural

- It is a mathematical function generated texture. So no matter how close the camera zoom in/out on an object, the texture will not lose detail or become blurry.
- The patterns generated by the function aren't repeated (but it still can generate repeated pattern).

Type of Procedural

- **Brick:** good at creating tile floor, brick wall, repeated rectangular pattern.
- **Turbulence:** good at creating water, ocean, fluid.
- **Crumple:** good at creating rock, landscape.
- **You can always write your own procedural texture.**



A sphere with crumple procedural
texture.

File Create Modify Multiply Construct Detail Map Display Unnamed * <> 1

Modeler Top [XZ] Perspective

Surface Editor F3 Image Editor F4 Presets

Objects
Box X
Ball 0
Disc
Cone

Elements
Pen
Text
Sketch
Make Curve
Points +
Make Pol
Make Fan
Make Strip

Back [XY]

Sel: 0

W T M (none)

The interface displays a 3D scene with a sphere. The top-left view shows a wireframe sphere on a grid. The top-right view shows a shaded sphere. The bottom-left and bottom-right views show wireframe spheres. A 'Change Surface' dialog box is open in the center, allowing for surface property adjustments.

Change Surface

Name: surface

Make Default

Set Initial Color

Color: 200 200 200

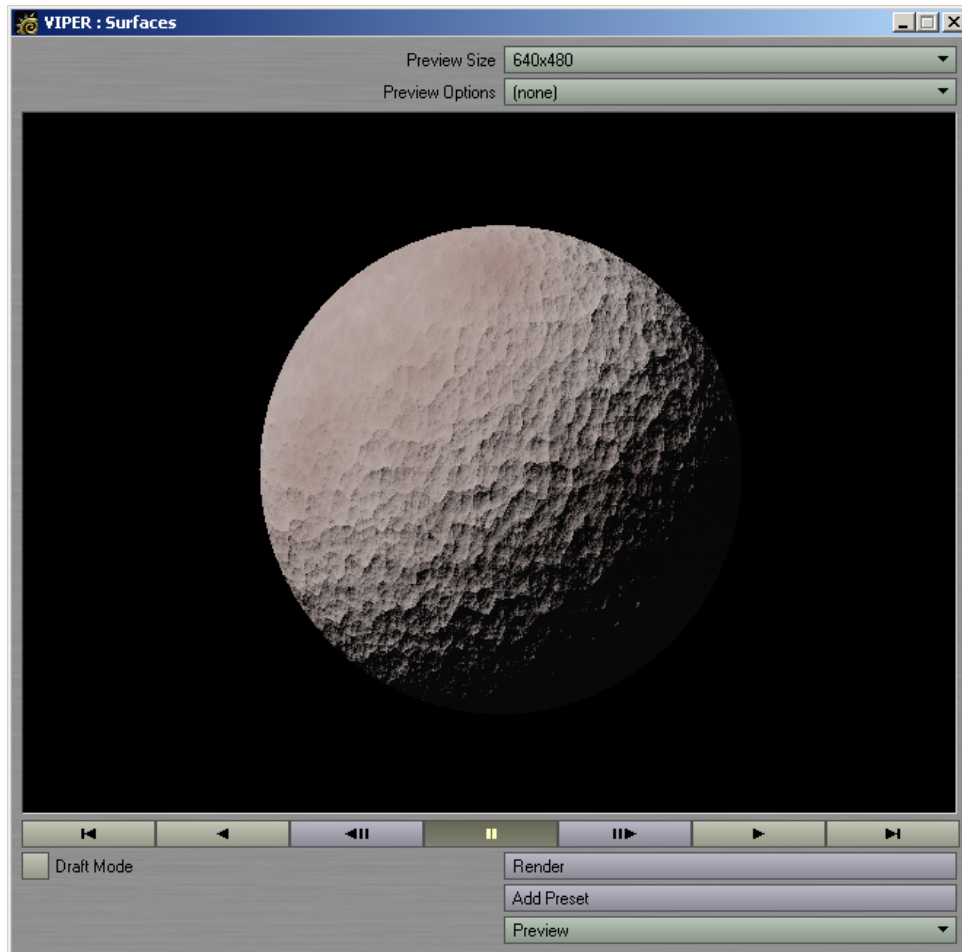
Diffuse: 100.0 %

Specular: 0.0 %

Smoothing

OK Cancel

Use VIPER tool to see texture change in real time.

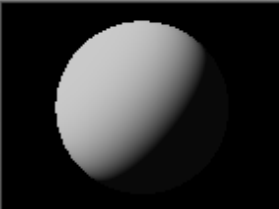


Surface Editor

Edit by: Object
Filter by: Name
Pattern:

Surface Name: obj
Default
surface

Objects: 1
Load Save



Surface Editor Properties:

- Color: 192
- Luminosity: 0.0 %
- Diffuse: 100.0
- Specularity: 0.0 %
- Glossiness: 20.0 %
- Reflection: 0.0 %
- Transparency: 0.0 %
- Refraction Index: 1.0
- Translucency: 0.0 %
- Bump: 100.0 %
- Smoothing:
- Smooth Threshold: 89.53 °
- Double Sided:

Comment:

Texture Editor - surface - Bump

Add Layer Remove Layer
Copy Paste

Layer Name	Opac	B
P: Crumple	100%	N

Layer Type: Procedural Texture
Blending Mode: Normal
Layer Opacity: 100.0 %
 Invert Layer

Procedural Type: Crumple

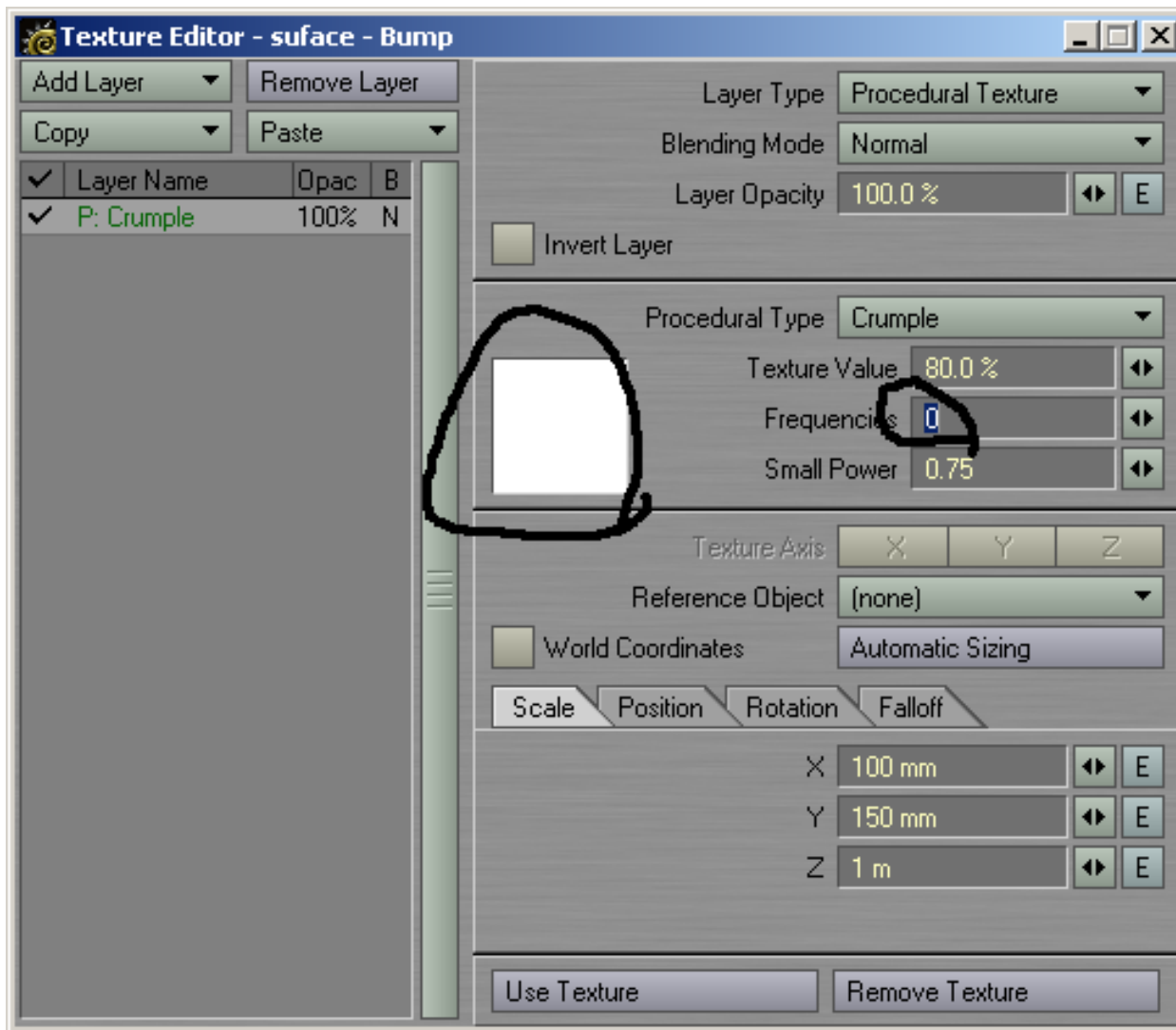
Texture Value: 80.0 %
Frequencies: 4
Small Power: 0.75

Texture Axis: X Y Z
Reference Object: (none)
 World Coordinates: Automatic Sizing

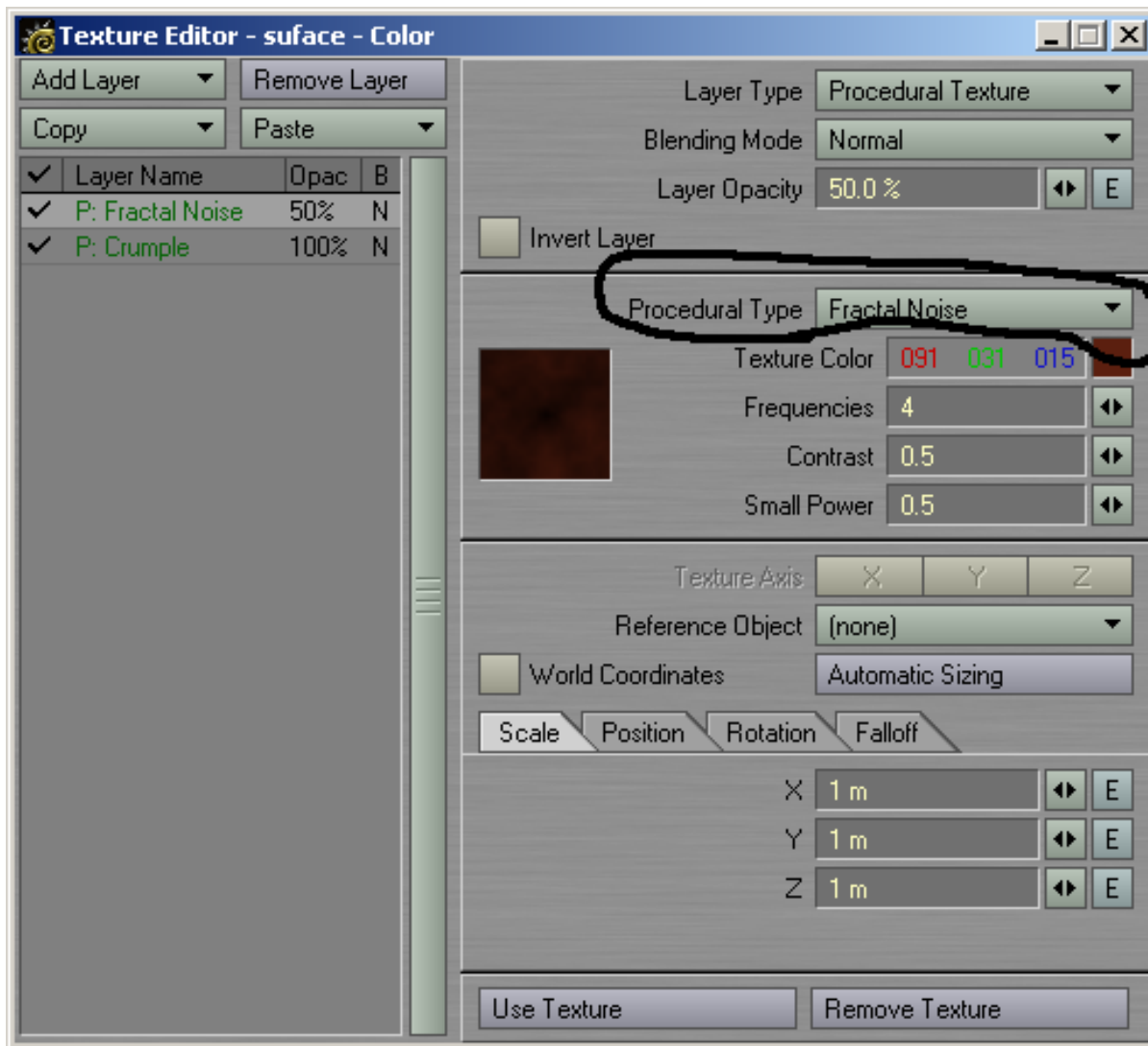
Scale Position Rotation Falloff

X: 100 mm
Y: 150 mm
Z: 1 m

Use Texture Remove Texture



Usually frequencies higher than 6 is not detectable by normal human eye.



Now, lets give some dirt onto the surface.

