

# CYBERGOOCH'S CINEMA 4D NOISE TEXTURE REFERENCE

[http://www.cybergooch.com/pages/c4d/noise/c4d\\_noise.htm](http://www.cybergooch.com/pages/c4d/noise/c4d_noise.htm)

I've always liked using procedural noise textures in my 3D work. I was amazed that Cinema 4D had 30 to choose from. But when I first started working with C4D, it was difficult to remember which texture gave which results.

I decided to create a chart of sorts, to help me learn about the differences. It occurred to me that others in the C4D community might benefit from this as well, so I'm sharing it here.

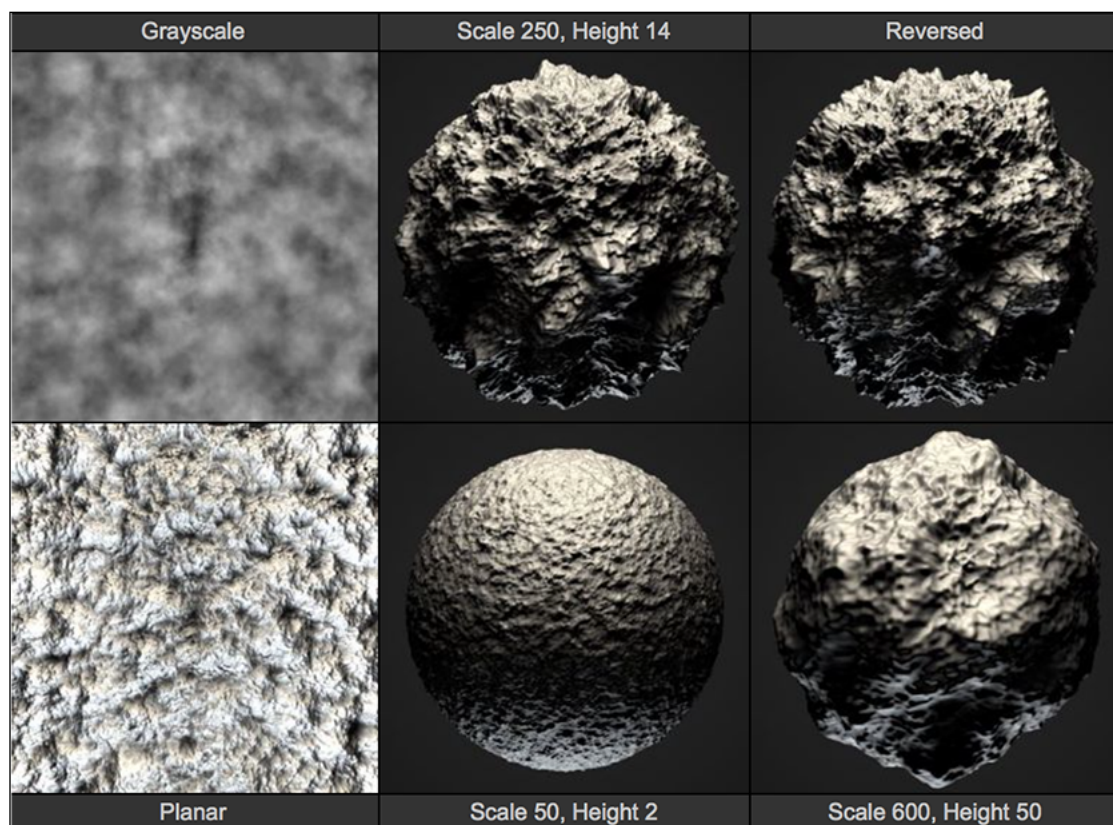
The example images in the reference are composed of a standard sphere that has a Sub-Polygon Displacement using the named texture on each page. I used a Subdivision Level of 6 to bring out more detail. The numbers that you see next to each sample represent the changes I made in both the Global Scale of the texture itself, and the height of the Displacement.

To help define the texture a little more, warm lighting comes from above, cool from below, and a short, wide specular has been applied. The sphere itself has not been scaled from the default size, so if you use the settings you see in the samples, your results should be the same.

Hopefully this will help some others out there who may be new to Cinema 4D and learning the basics of procedural noise.

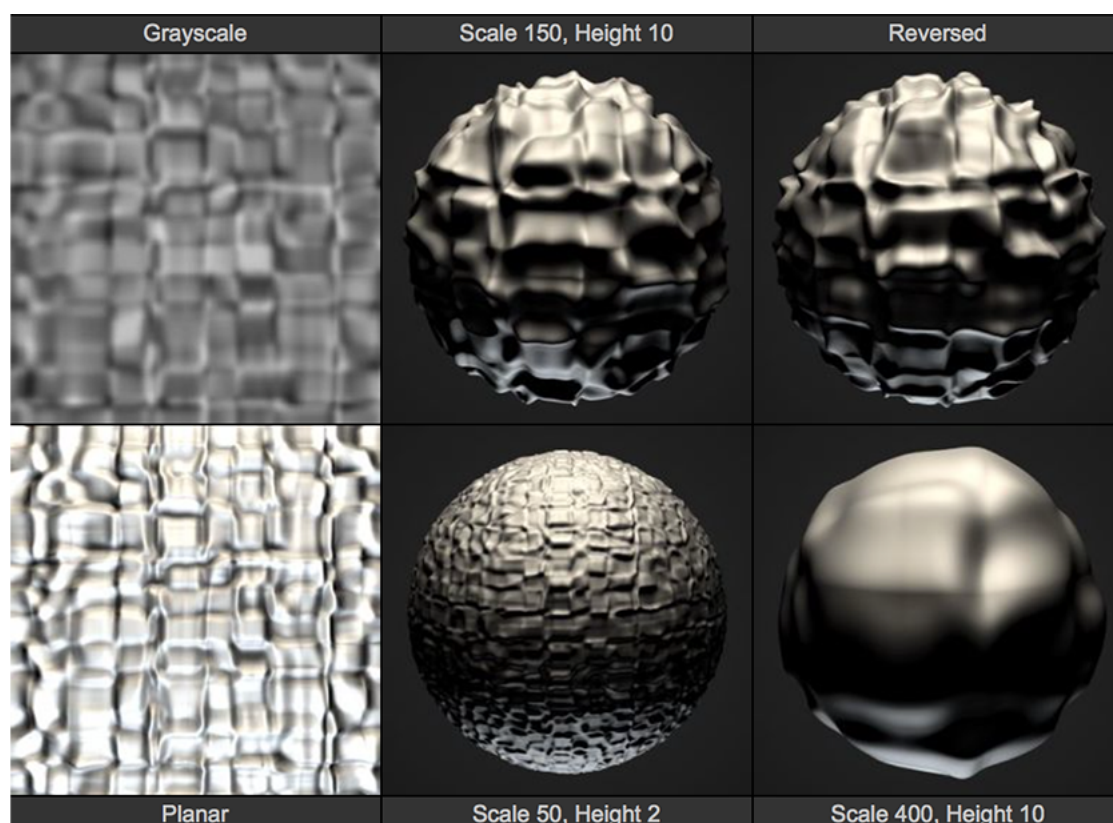
## BLISTERED TURBULENCE

Blistered Turbulence has a good random distribution of detailed lights and darks, providing an almost mineral-like appearance.



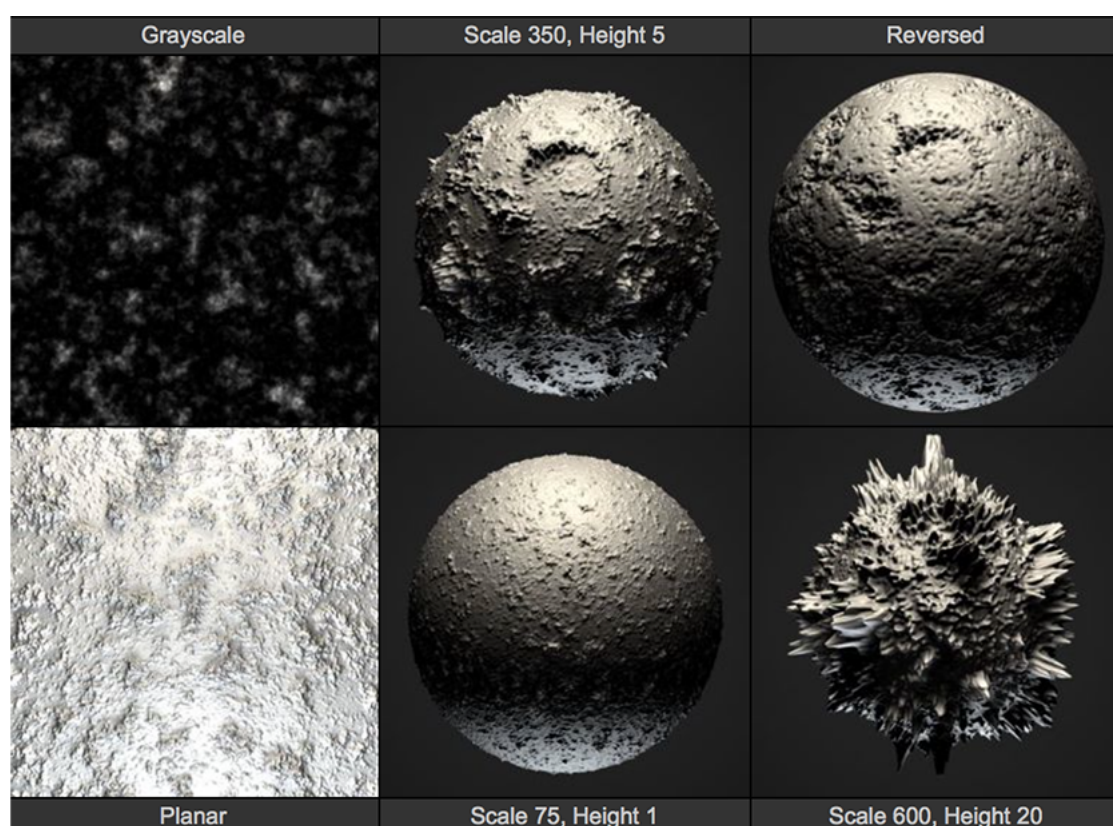
## BOX NOISE

Box Noise is a more ordered pattern, sort of like squares thrown out of focus. Still random, but a more cubic pattern than most.



## BUYA

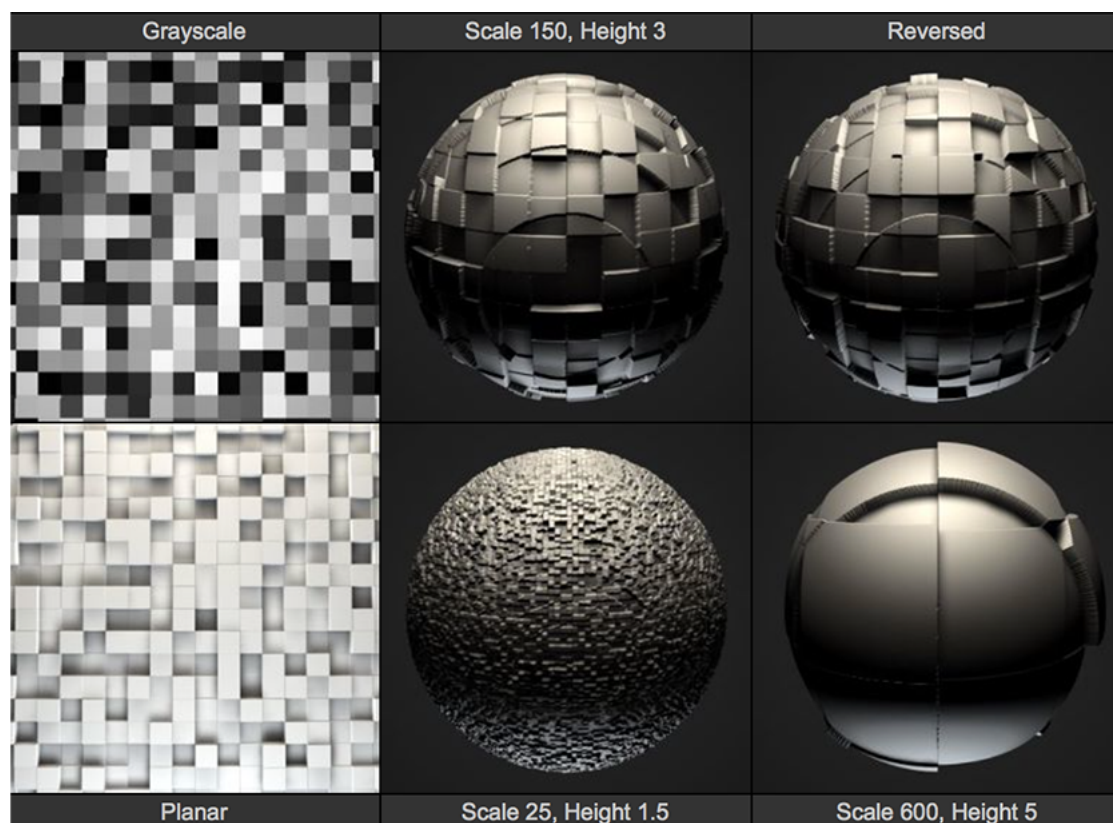
Buya offers some spikey goodness. Because of the more intermittent light areas and a predominantly black base, you get peaks rising from a fairly low base that still has some detail. Reversed it gives a pitted surface.





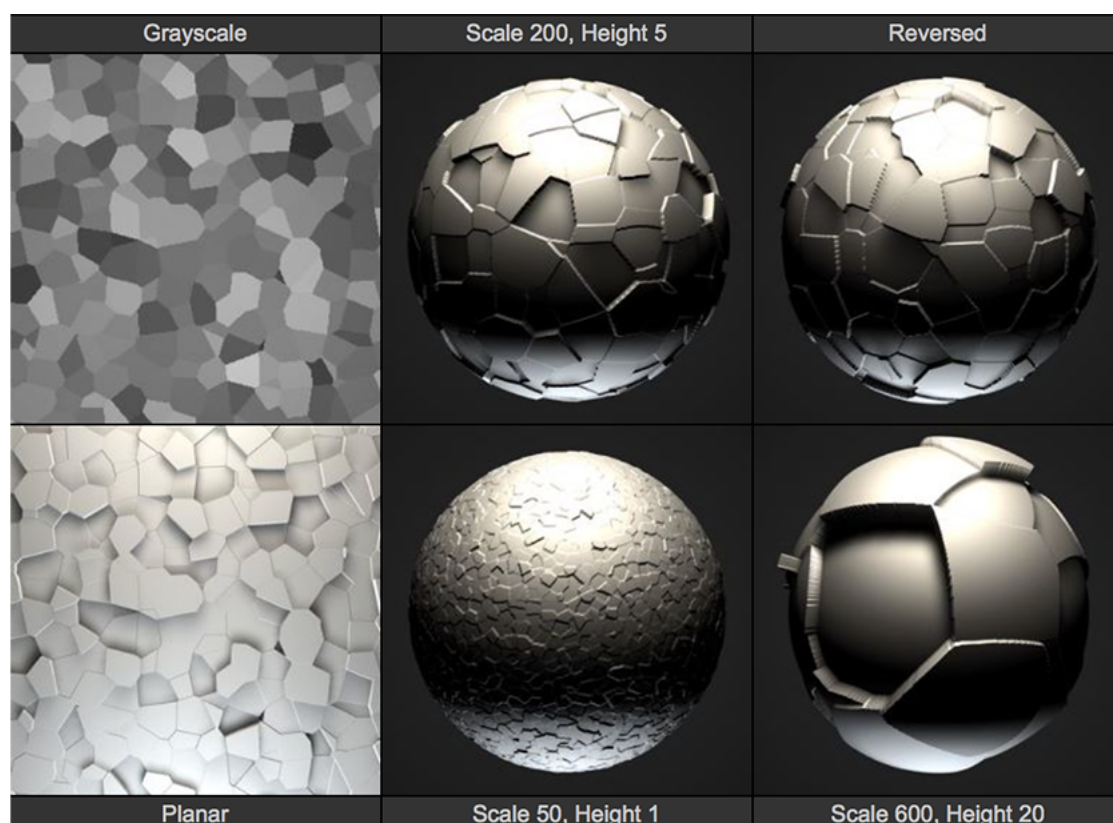
## CELL NOISE

Cell Noise is squares of random gray values. Looks almost like blocks of wood at various heights or tile. At the small size it looks almost like pixels or digital noise.



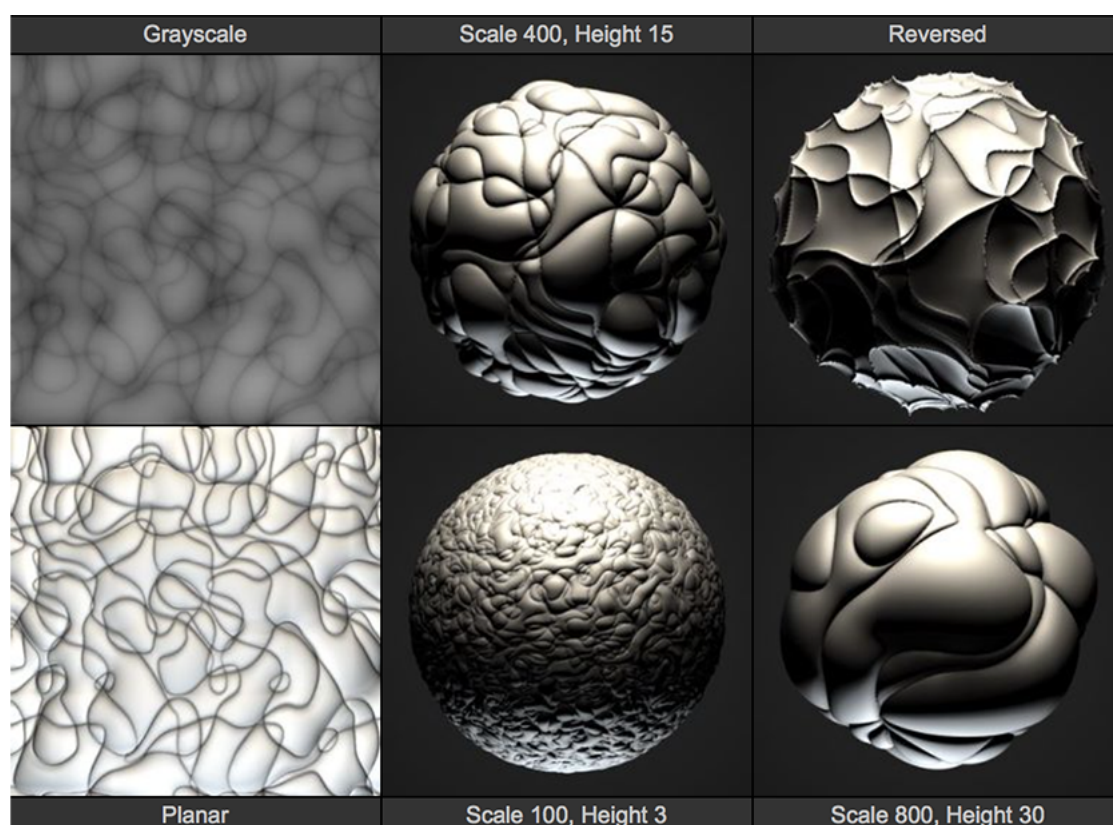
## CELL VORONOI

Cell Voronoi is similar to Cell Noise, but instead of squares has a more mosaic-like or fractured pattern. It's a little reminiscent of slate or fieldstone.



## CRANAL

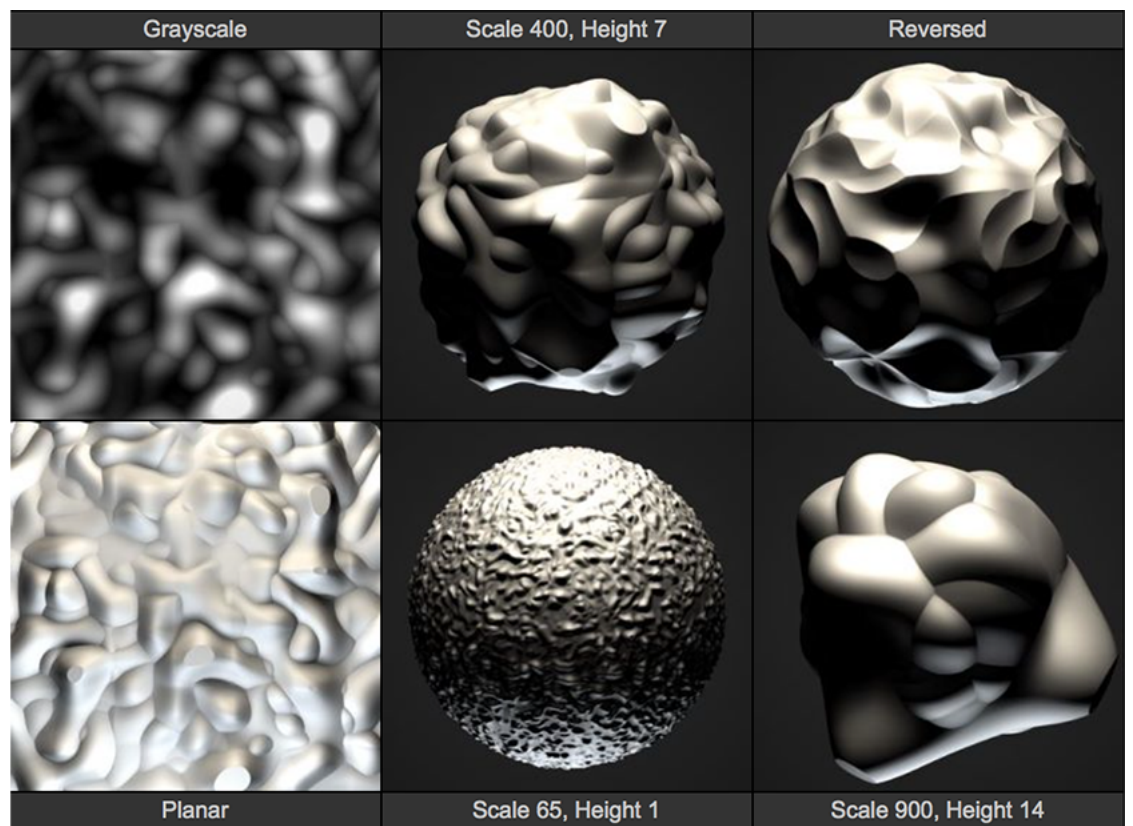
Cranal has puffy raised areas between smoothly curving lines. Looks a little like padded fabric that has stitching running through it randomly. Also has a strange organic feel at some scales. Interesting reversed too.





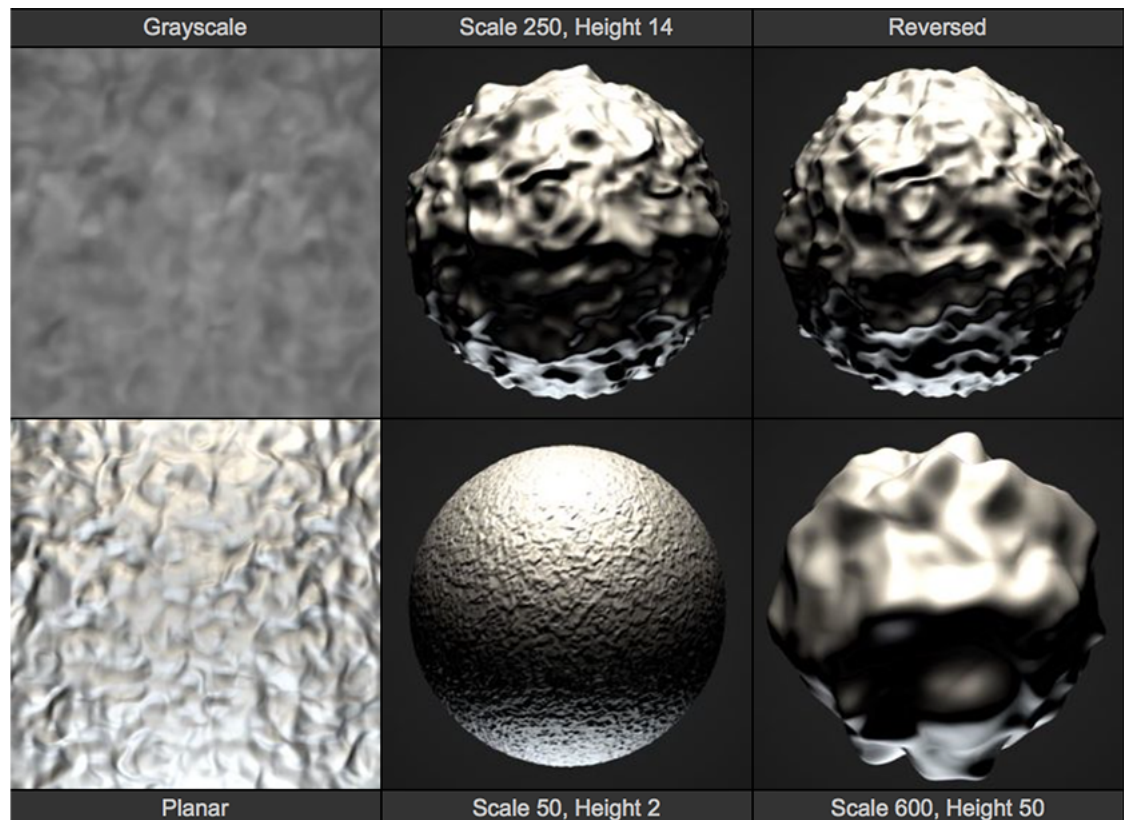
## DENTS

Dents has a strange twisting, layered feel to it. Looks a bit like piles of organic something. When reversed, looks like pieces have been carved out with a spoon.



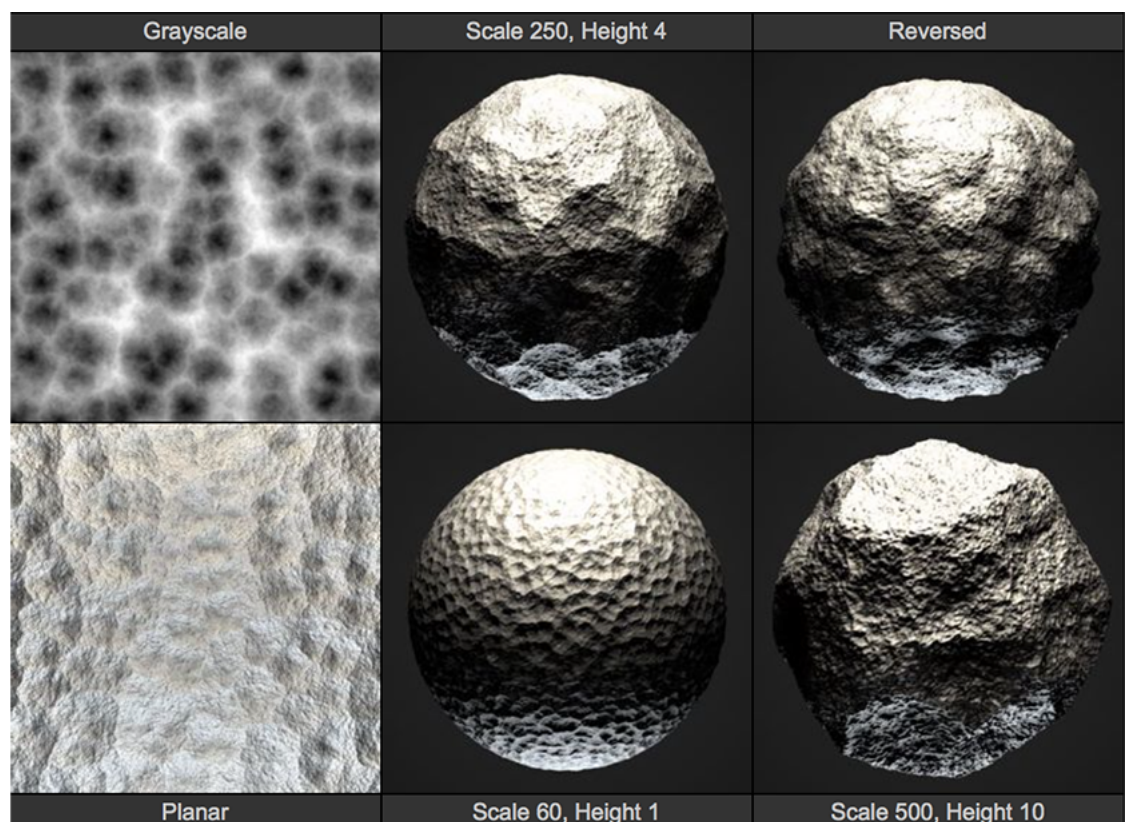
## DISPLACED TURBULENCE

Displaced Turbulence is a little softer overall than some of the others, but still has a broken randomness to it so that it's not too even.



## DISPLACED VORONOI

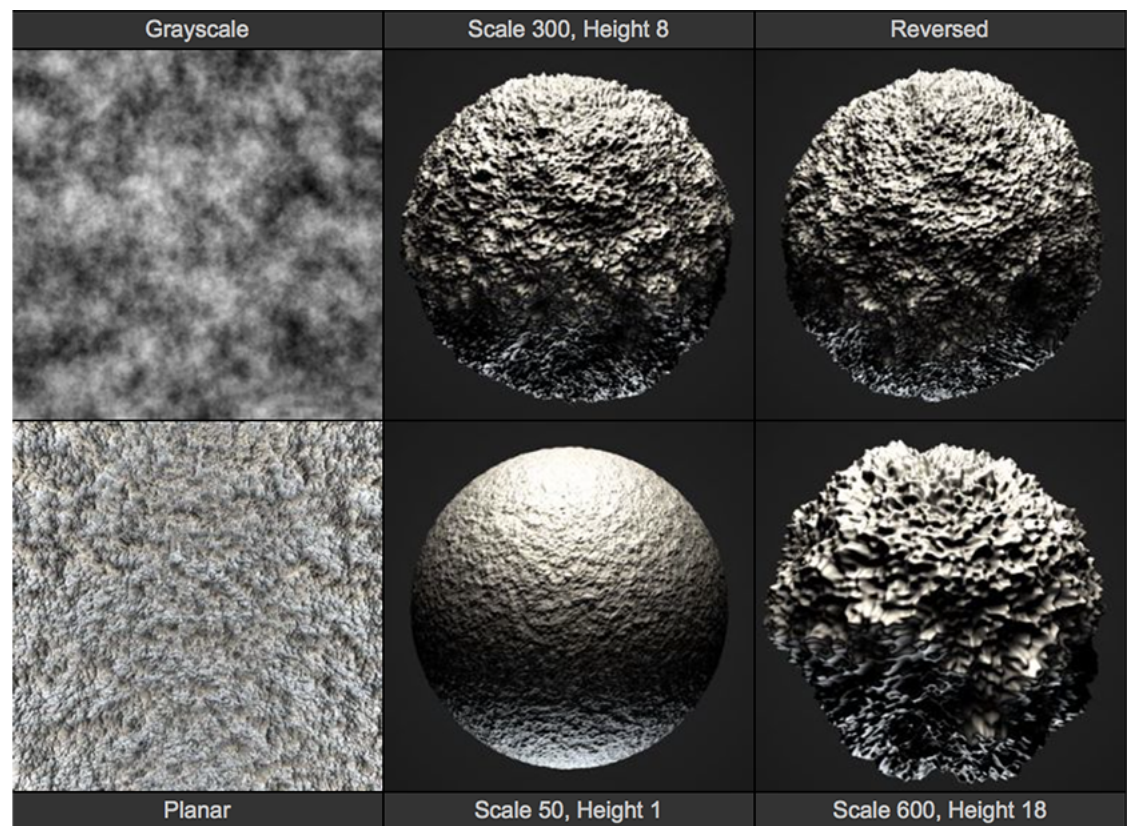
Displaced Voronoi uses the basic Voronoi pattern, but adds an additional, smaller noise pattern to break it up. There's a sort of chiseled or hammered look to the surface. Could be used for ice or rock.





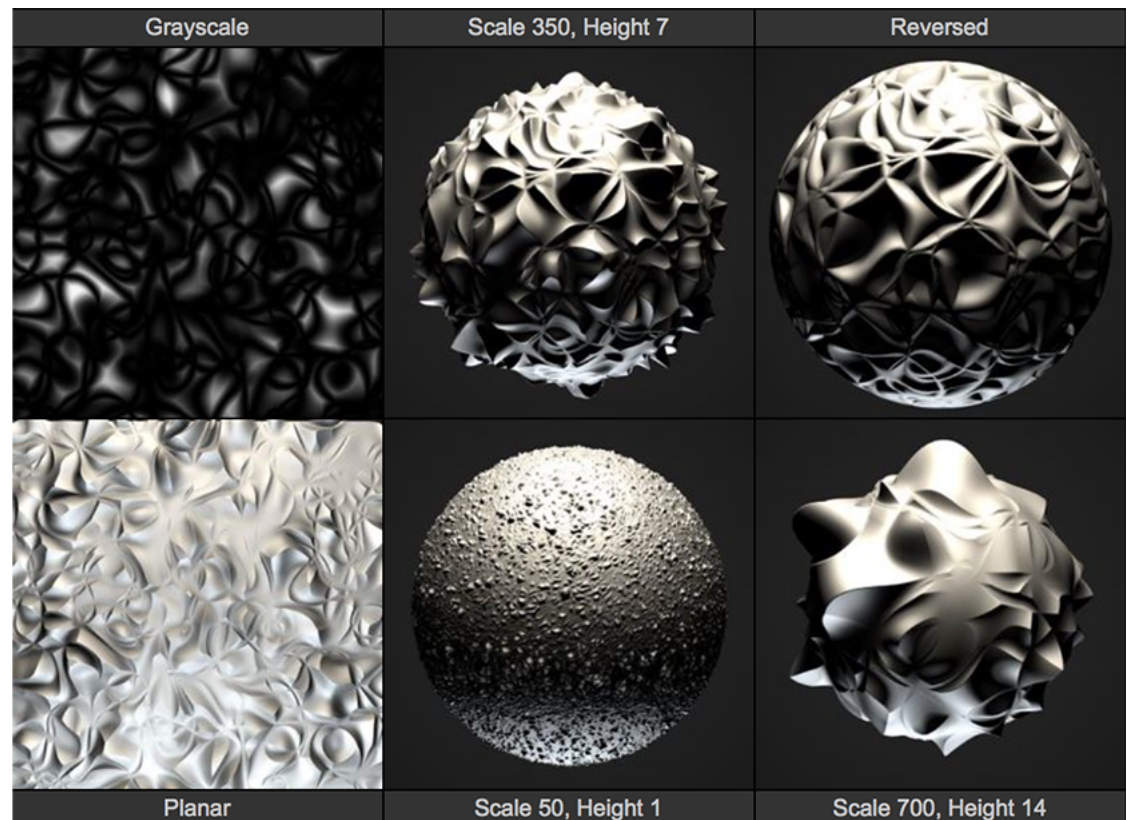
## FBM

FBM has a lot of finer detail to it for a variety of layers. Very rough, organic or mineral feel. Larger scale looks like a sea sponge.



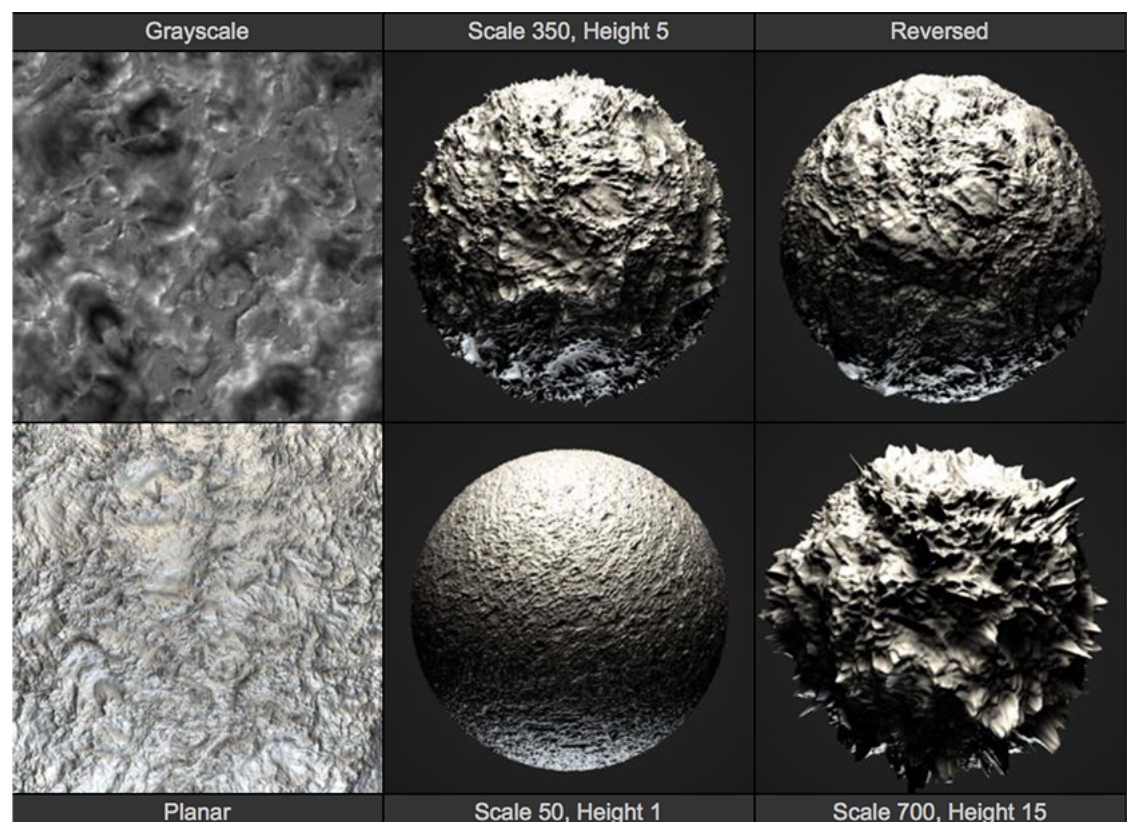
## HAMA

Hama is a little bit alien in feel. Sort of a more jagged, broken version of Dents. At small scales gives a nice random rough surface.



## LUKA

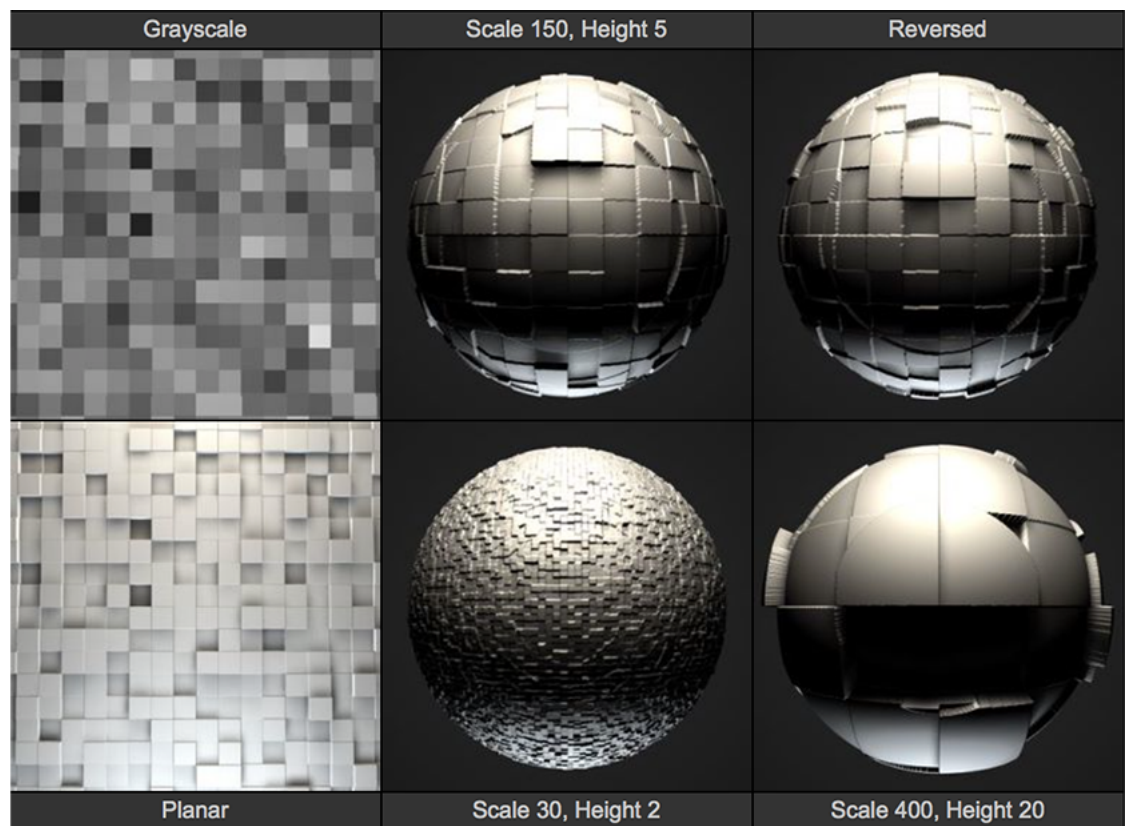
Luka has a nice combination of rough large areas broken up by smaller, more detailed spots, and even the occasional spike. Gives a good degree of complexity. Reversed has a nice rock face feel.





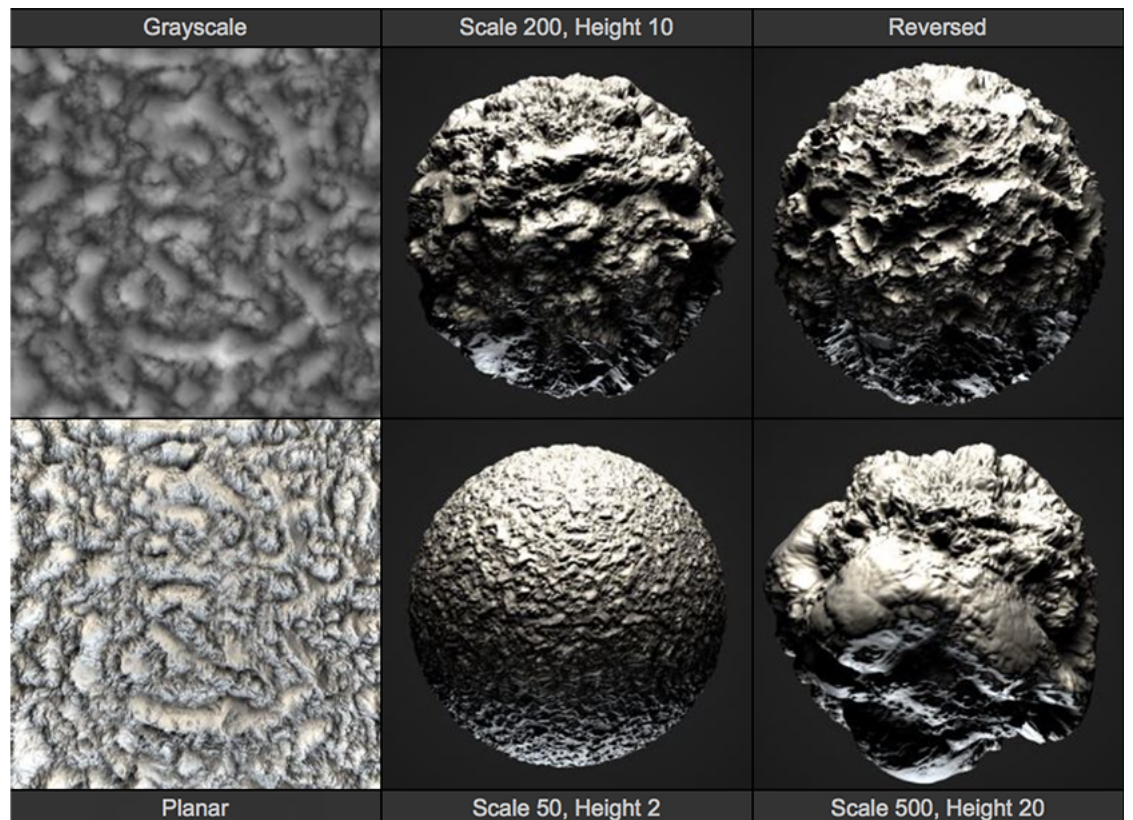
## MOD NOISE

Mod Noise is another cubic variation pattern like Cell Noise. In fact, I'm not really sure what the real difference is. It could be that Mod has a slightly less contrasty variation in values.



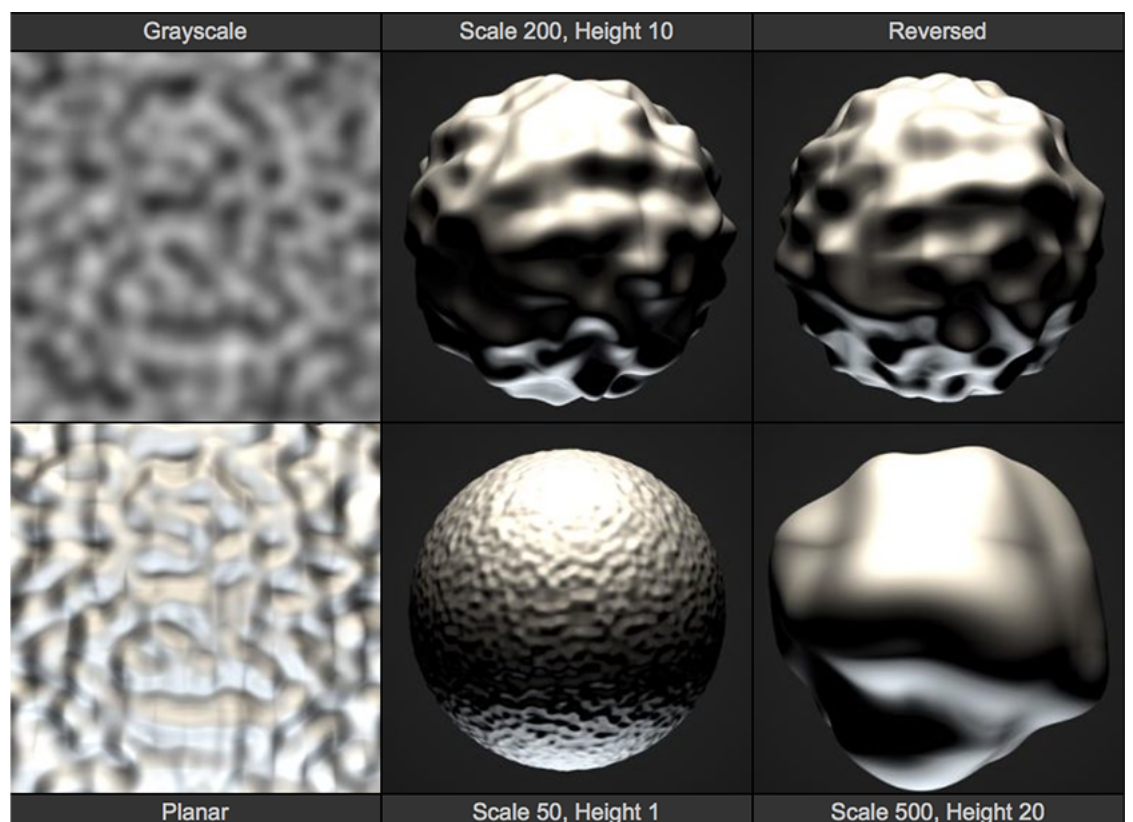
## NAKI

Naki has more of a wet feel to it, like mud or rough cement. It gets very interesting especially at larger scales, with a nice variation of scales.



## NOISE

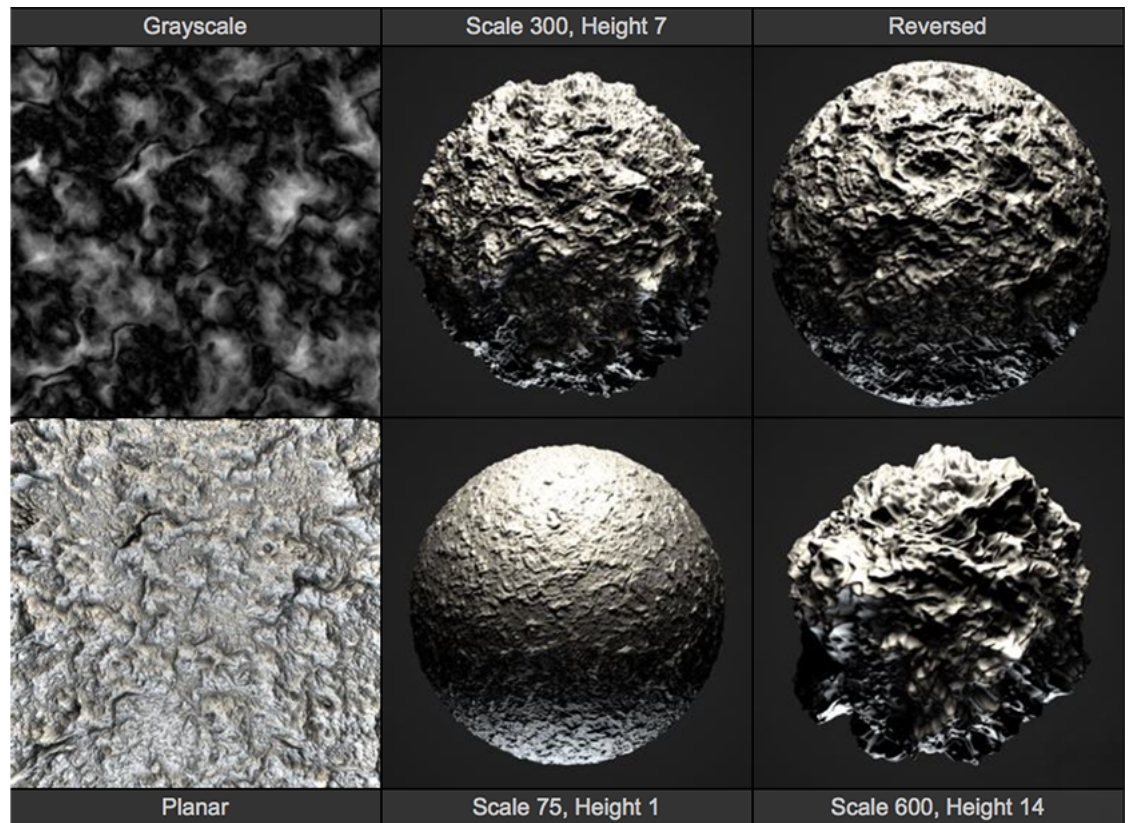
Noise is the generic (and default) texture you'll get when you first select noise as a texture in C4D. It is the softest overall, looking like a very out of focus random pattern, with no sharp detail or variations.





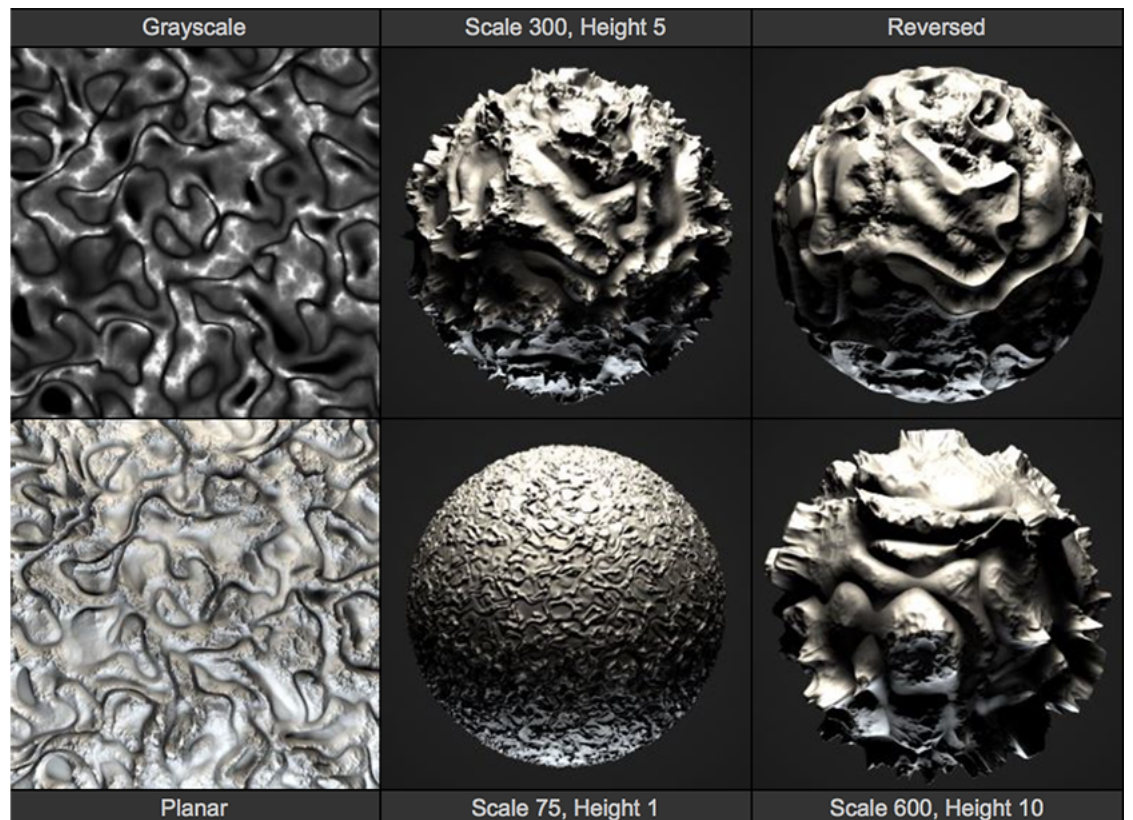
# NUTOUS

Nutous has a nice variation in levels of detail. A predominantly dark base with random light areas rising from it. Larger scale has a meteor-like feel.



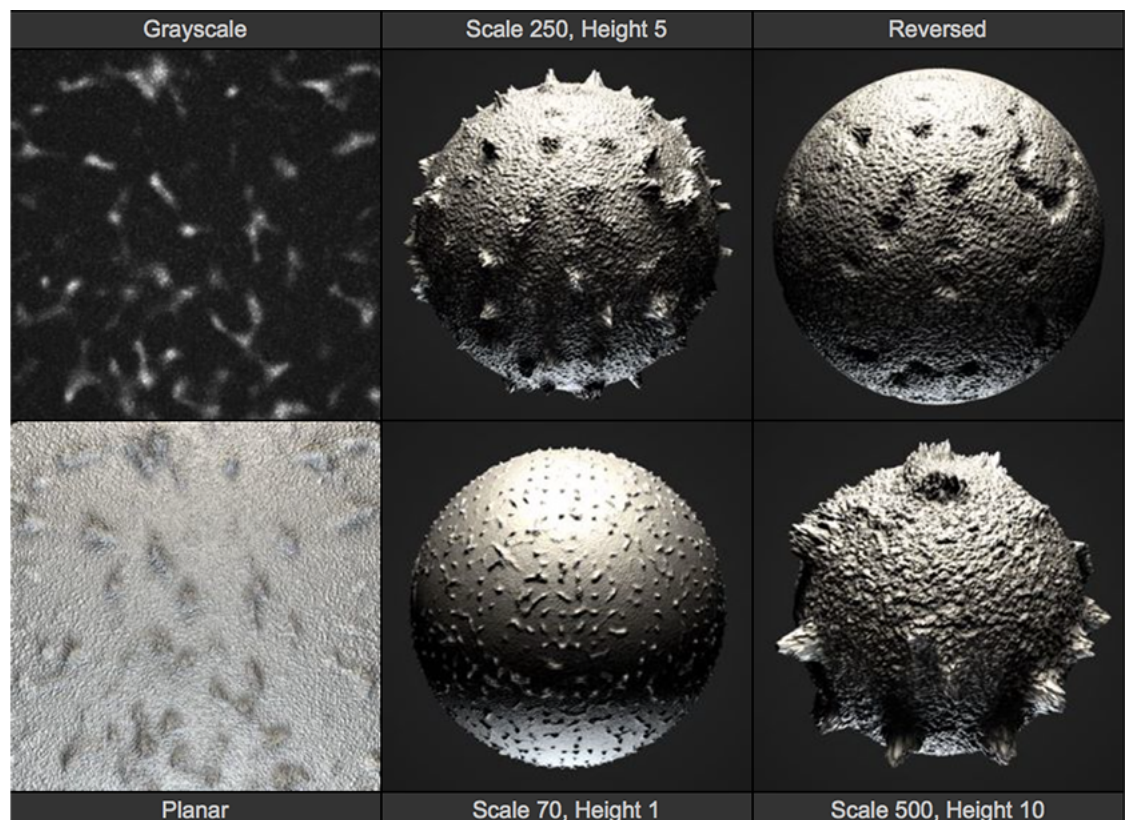
# OBER

Ober is kind of a cross between Cranal and Luka. Nice rough areas and peaks, but interspersed with flowing lines. When reversed, the lines become ridges along the outermost surface.



# PEZO

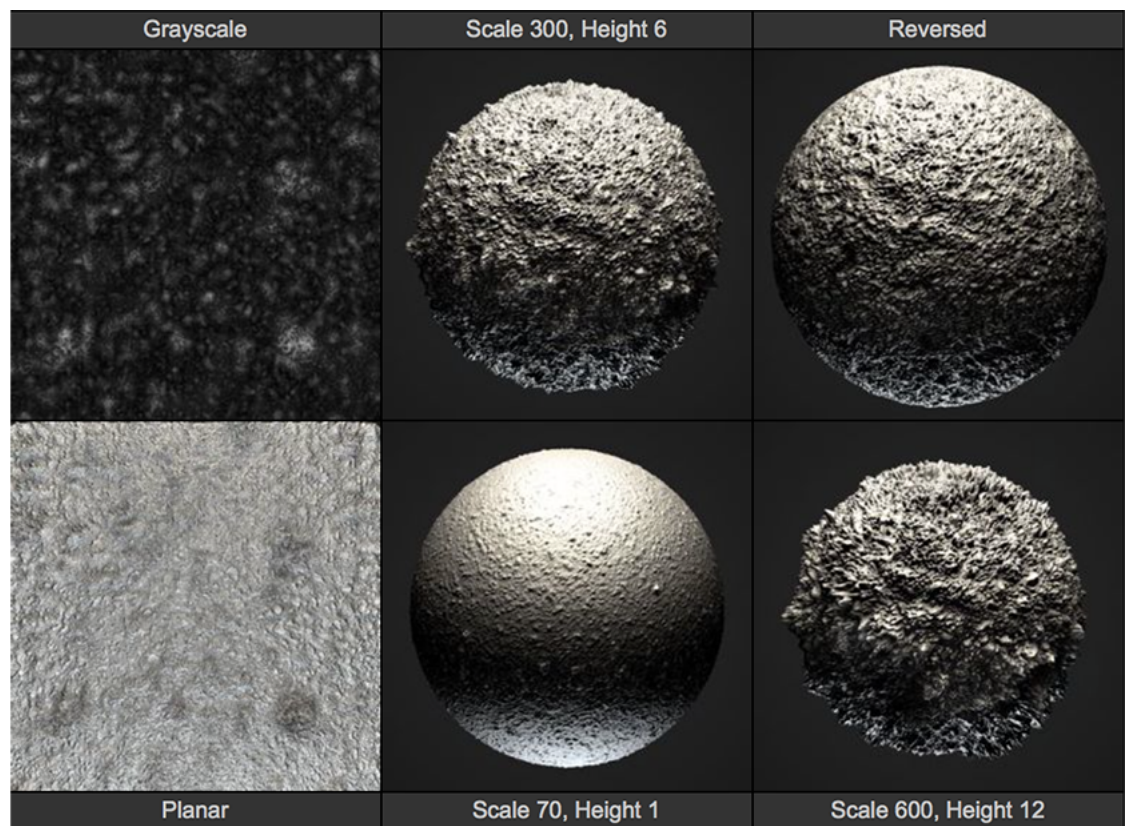
Pezo is another texture with a predominantly dark base, with small intermittent white areas. Good when you want obvious peaks rising from a fairly level base. At large scales resembles pollen or other microscopic bits.





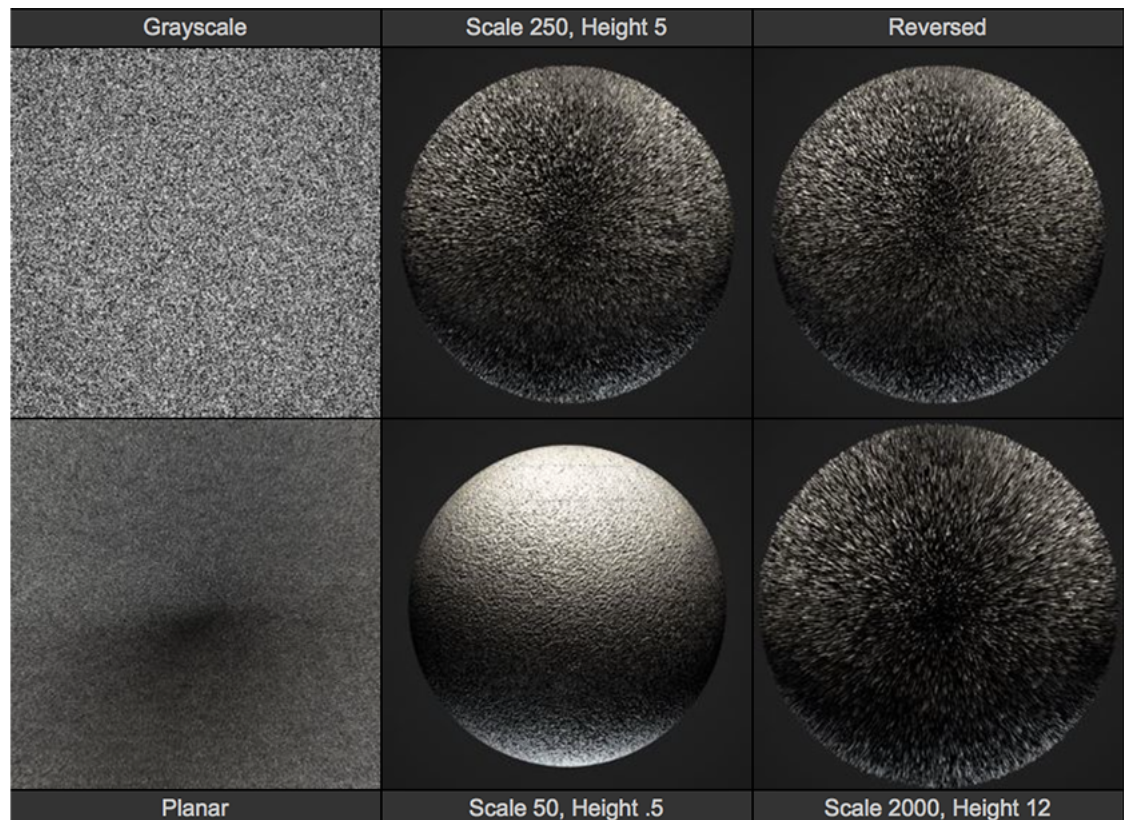
## POXO

Poxo has a lot of fine detail to it, on top of a nice varied larger pattern. Larger scales resemble a crystalline structure.



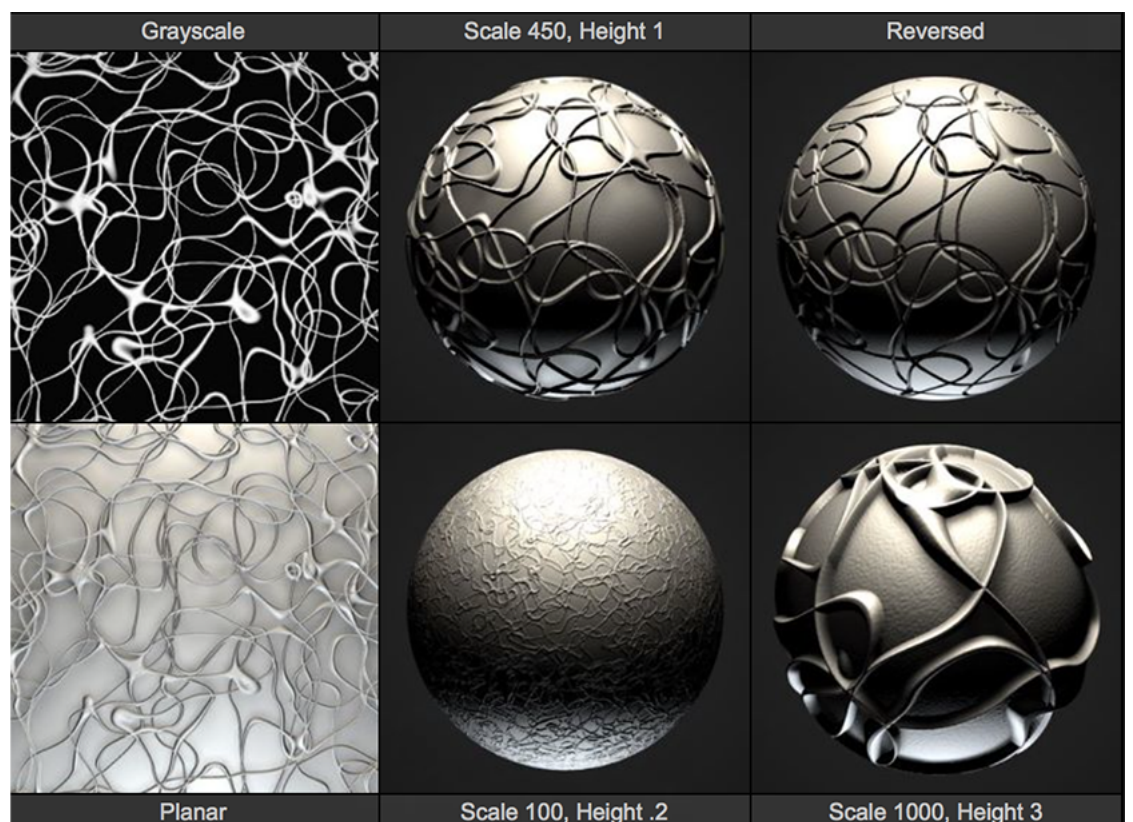
## RANDOM

Random is a strange creature. It doesn't seem to be affected by scale. That's not a typo below, the global scale was set to 2000, but it's not much different than at 250. Good when you need the finest noise possible. Could probably be used for static or white noise on a TV screen when animated.



## SEMA

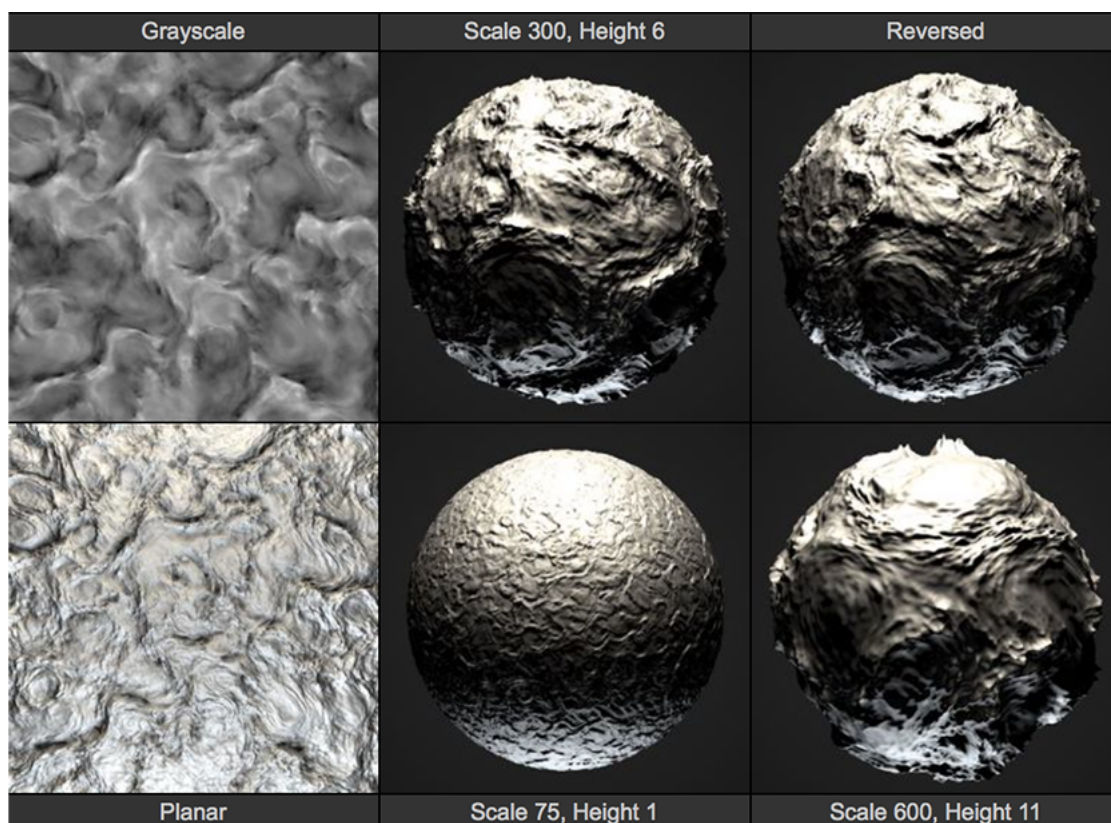
Sema has a very distinct pattern, like paint dripping from a brush or melted plastic. Also has a somewhat alien feel to it.





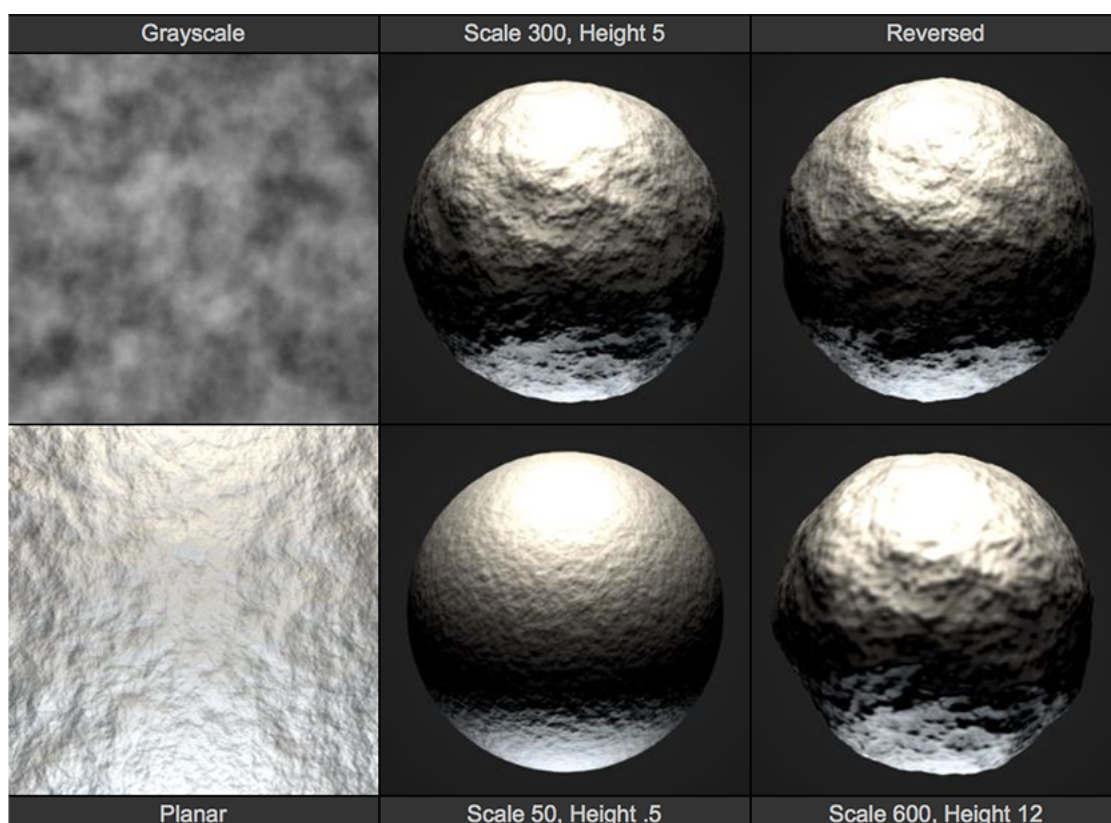
## STUPL

Stupl has a nice flowing feel to it, almost like cooled lava flows. The smaller scale looks a little like smeared wax.



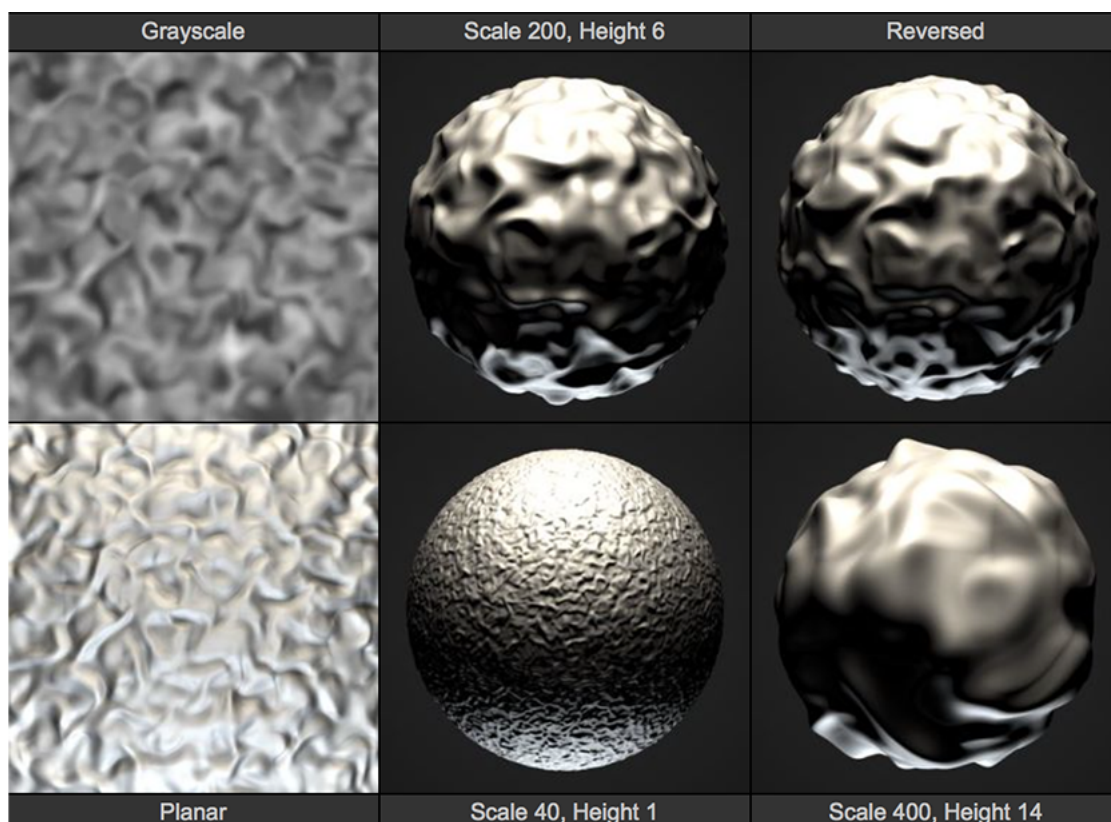
## TURBULENCE

Turbulence is one of the more subtle noise patterns, but still has some nice detail to it. It can be nice when you want to add just a bit of detail. The smaller scale looks a little like skin or leather.



## VL NOISE

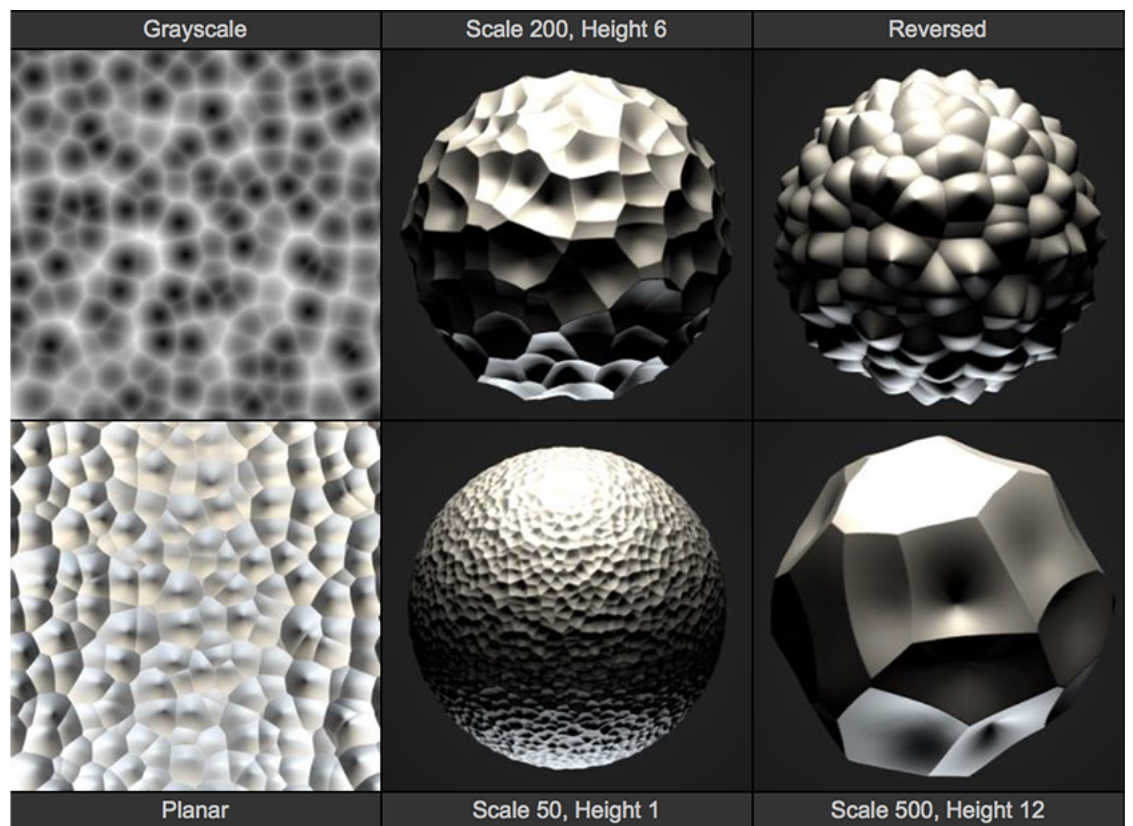
VL Noise is a bit like the default Noise that's been stirred up a bit. A softer overall effect than some, without strong sharp details, but more randomness than regular Noise.





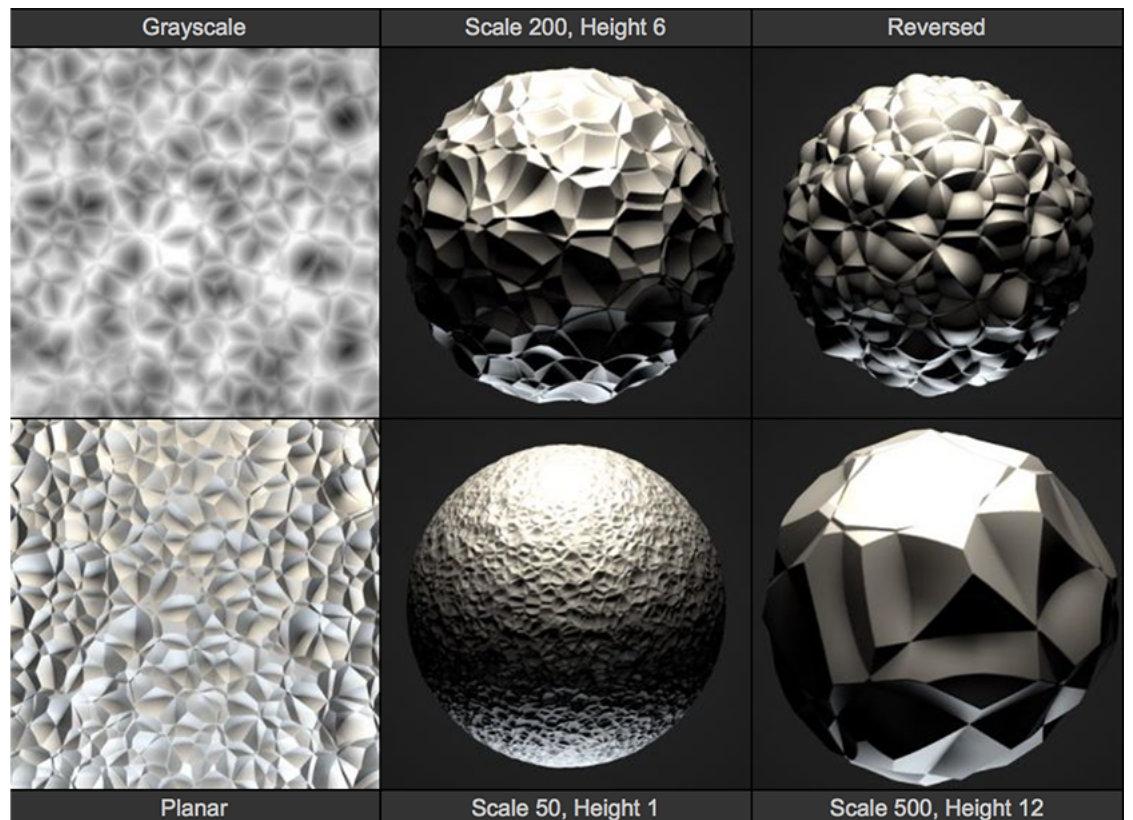
## VORONOI 1

Voronoi 1 is the most basic of the Voronoi patterns, and has a very chiseled look. Reversed it looks like some sort of fruit or seedpod.



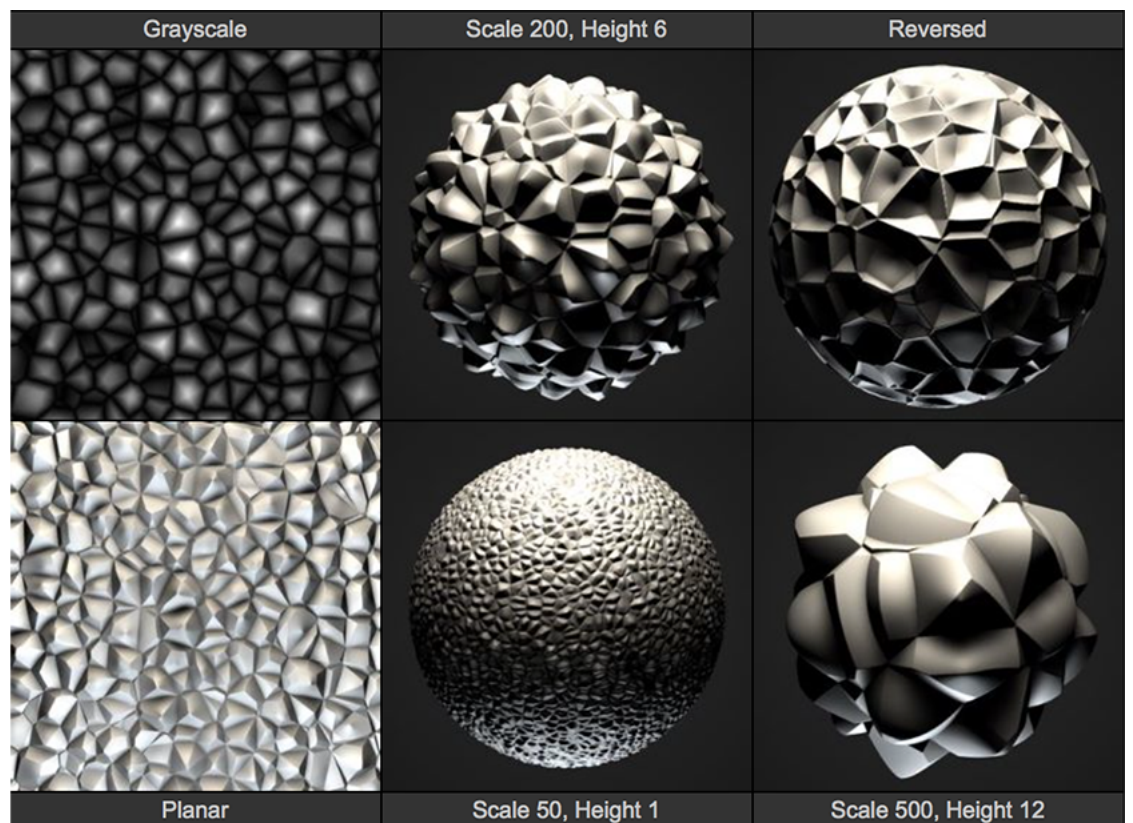
## VORONOI 2

Voronoi 2 has an additional secondary pattern for more complexity. Has sort of a fractured cellular look.



## VORONOI 3

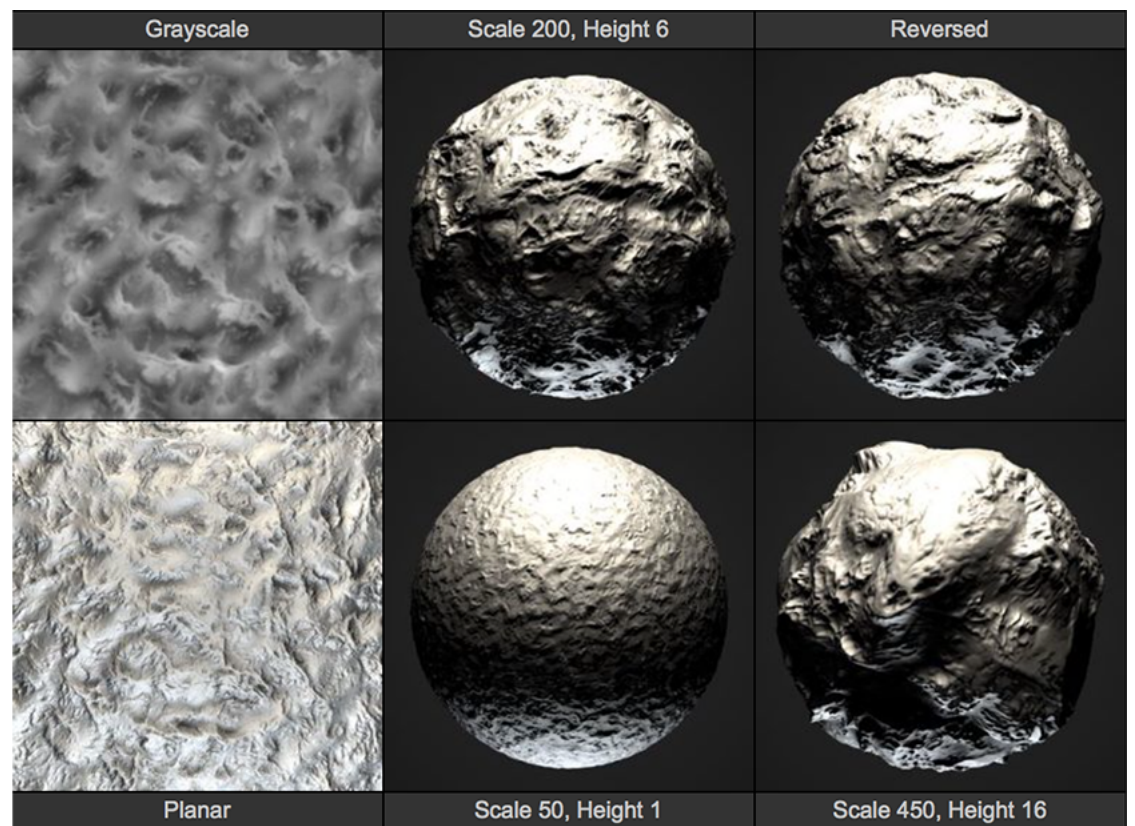
Voronoi 3 is a reversal of Voronoi 1, and has a higher contrast pattern with wider lines. The smaller scale looks like a concrete/aggregate surface. At a lower height setting, could resemble cobblestone.





# WAVY TURBULENCE

Wavy Turbulence has what seems like an underlying soft random pattern overlaid with harder random peaks. Has a nice varied organic feel to it. Larger scales get particularly interesting.



# ZADA

Last but not least, Zada looks like a cross between Sema and Cranal. The combination has an odd alien feel to it, with twisting organic shapes. Reversing it brings out some nice sharp peaks.

