

This command initiates a dialog that provides access to the bulk of the parameters that affect the resultant fractal landscape. The dialog will limit the values entered in each field to those that either make sense in context or to those that will keep the program from generating overflow or other obnoxious error conditions. If a value is entered which falls outside of the valid range, the dialog will beep and select the offending value, not allowing you to proceed further until the problem is corrected.

The first parameter is Height:Width Ratio. This parameter (which should probably be renamed to Width:Height Ratio but isn't for mundane reasons) limits the overall vertical displacement that happens during the subdivision process. The overall affect of this parameter is to control the general height of the fractal landscape. The smaller this number is, the higher the peaks (and deeper the valleys) will be. The larger this number is the flatter the resulting landscape will be. By having a Script file that starts with a very large Height:Width Ratio and ends with a small one, you can create an animation of "growing mountains". This is a positive floating point number which the dialog box limits to a range between 25.0 and 0.25 inclusive.

The next parameter is Fog Visibility. This basically dictates just how thick the haze is. It is a positive floating point number limited to a range of 1 to 500,000. A value of 1 will look like impenetrable fog, while 500,000 is crystal clear. A more useful low end value would be in the range to 10,000 to 20,000 which will get you close to San Francisco on a bad day.

While it is possible to "turn off" the haze effect by using a large number, part of the rationale for putting the model in the program in the first place was to provide a form of depth cuing. With images rendered with no haze at all it is sometimes difficult to differentiate near features from far one. A little haze goes a long way to providing ample visual cues to add a real feeling of depth to the images.

For lack of a better term, the next parameter is called H Factor, and basically controls the local area roughness of the terrain. It is related to but not the same as the "fractal dimension" referred to in the applicable texts. This value is a positive floating point number in the range 0.1 to 10.0. The smaller numbers will yield crazy looking spiky terrain, and the larger numbers will yield soft rolling terrain.

The next four parameters affect the view-point and view-angle of the

“camera”. The manual explains each of these parameters more fully.

Note that each of these four parameters has a button to the right of it labeled “Conform”. When clicked, the program will attempt to adjust the corresponding parameter such that Sea Level) at the front of the landscape grid will match up with the bottom of the window that the image is being rendered to. Sometimes, due to rounding errors, this might be off by a pixel or two. Simply adjust the Y Translate parameter by hand to compensate for this and re-render the image.

The final parameter is the Random Seed. This is the value that actually determines what your fractal landscape will look like. While you can set this seed directly, the program will automatically generate a new seed whenever a render is initiated unless the Fixed Seed parameter is set on.