Benoit Mandelbrot, a mathematician who wrote the now famous book “The Fractal Geometry of Nature” (1982) showed that the temporal $1/f^{\beta}$ fluctuations observed in many physical systems/many physical processes are but a special class of a broader, more general ***fractal***, ***self-similar*** behavior of nature/our universe – which also includes *e.g.* 1D, 2-D and 3-D spatial “noise” fluctuations, such as the fractal nature of iterative, weathering/erosion processes associated with coastlines, mountains, cloud formations, as well as living systems, such as trees...

The following pix show examples of computer-generated fractal images of such things: