1114-57-174 J. Scott Carter* (carter@southalalabama.edu), Department of Mathematics and Statistics, ILB 325, Mobile, AL 36688. Fractal Simplices.

This work is based upon some notes I made a number of years ago. There are higher dimensional analogues of the Sierpinski triangle that are created by removing a central portion of the *n*-simplex. These can be simulated via the chaos game, and by coloring the multinomial coefficients mod 2. I am hoping to produce some animations for the talk that illustrates these structures. I imagine that they can be useful point sets to study persistent homology. (Received August 25, 2015)