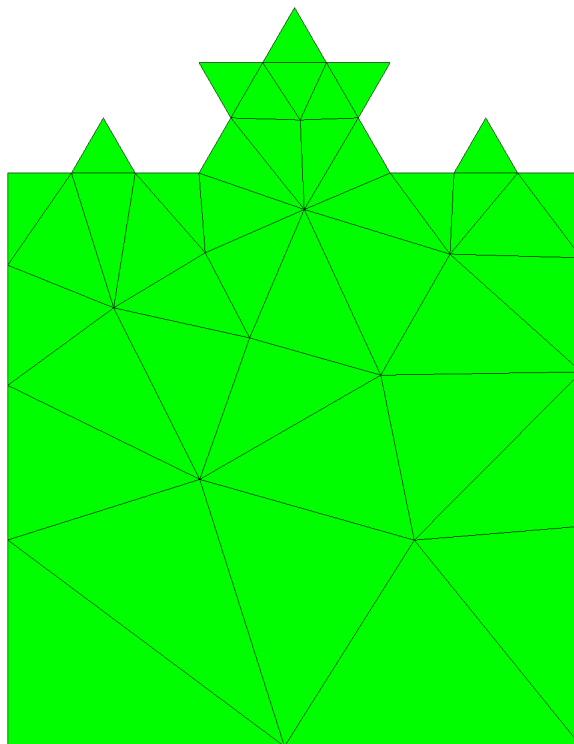# A note on geogen.py/MakeGeometry.

Chuning Wang
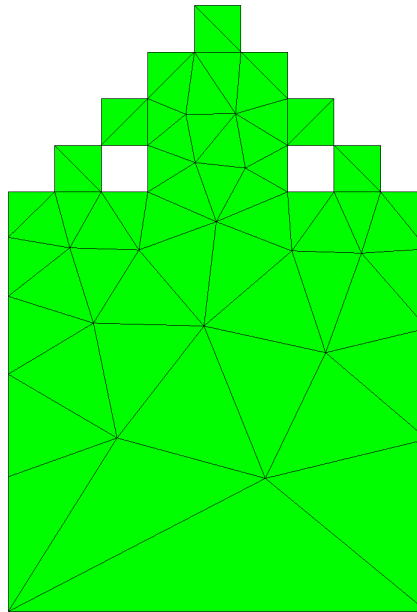
3/19/2024

```
def MakeGeometry(geotype, fractal_level=2, scaling=1, h_max=2)
```
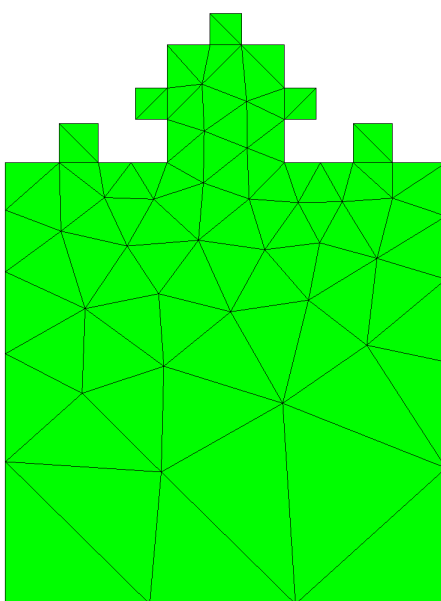
- geotype: 2d

  fractal level: 2

  ℓ: 0.1111111111111111

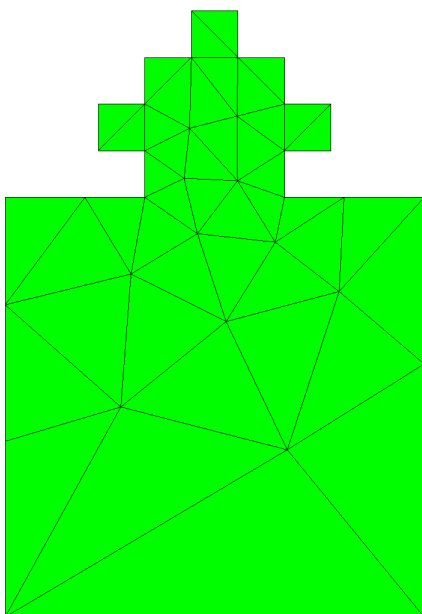 length of the fractal: 1.7777777777777777

- geotype: 2dquad

  fractal level: 2

  scaling: 1.0

  ℓ: 0.1111111111111111

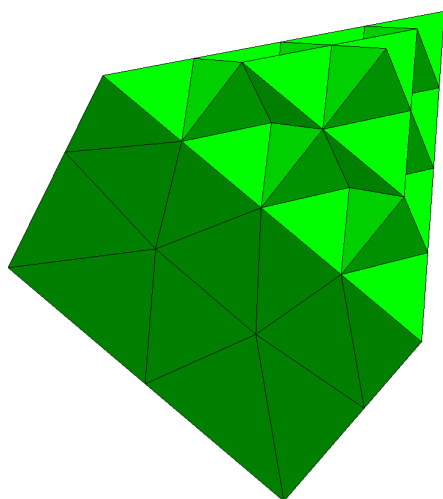 length of the fractal: 2.7777777777777772

- geotype: 2dquad

  fractal level: 2

  scaling: 0.8

  ℓ: 0.08888888888888889

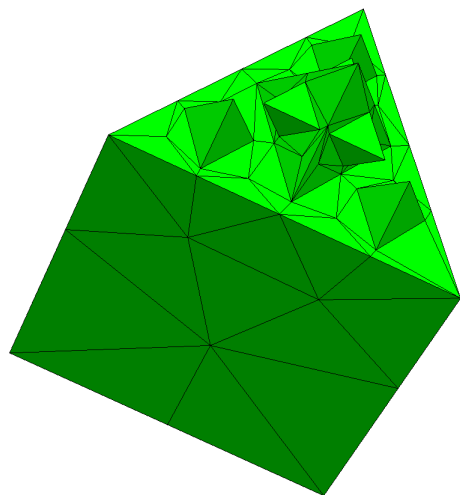 length of the fractal: 2.31555555555556

- geotype: 2dmidquad

  fractal level: 2

  scaling: 1.0

  ℓ: 0.1111111111111111

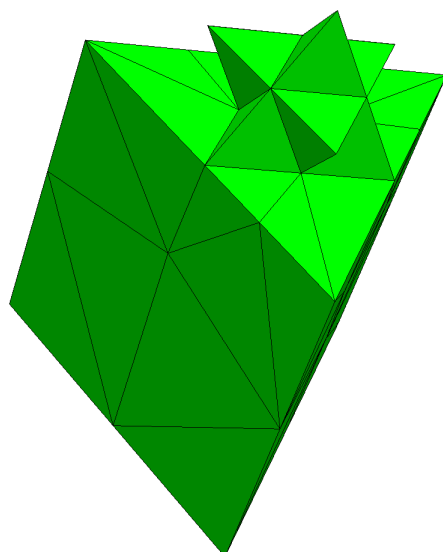 length of the fractal: 1.444444444444444

- geotype: 3d

  fractal level: 2

  scaling: 1.0

  ℓ: 0.25

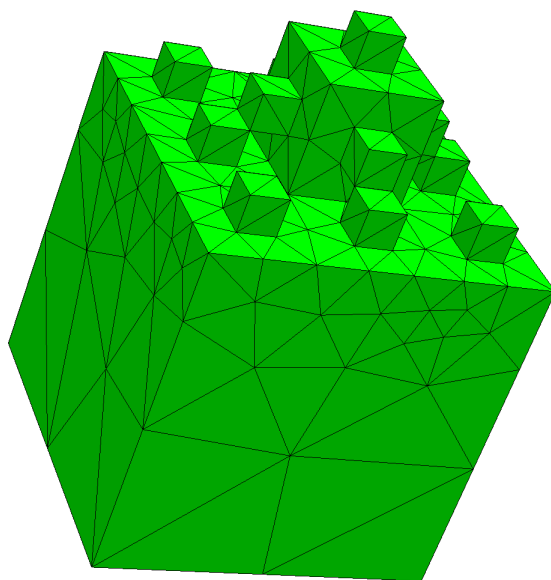 area of the fractal: 0.9742785792574934

- geotype: 3d

  fractal level: 2

  scaling: 0.8

  ℓ: 0.16000000000000003
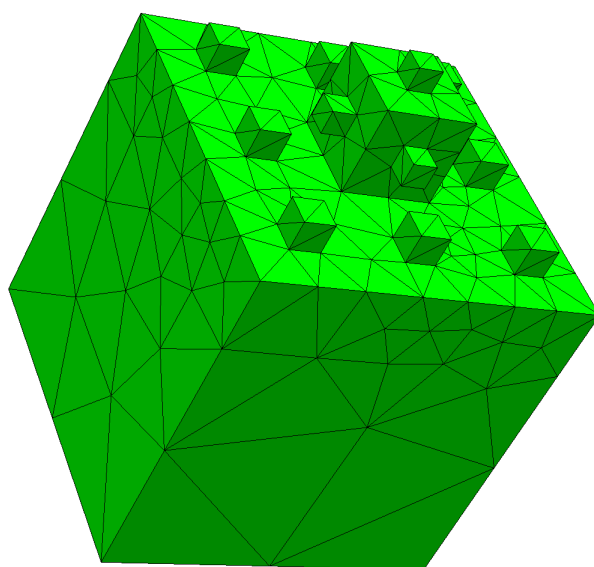
  area of the fractal: 0.742010565962507

- geotype: 3dmid

  fractal level: 2

  scaling: 1.0

  ℓ: 0.25

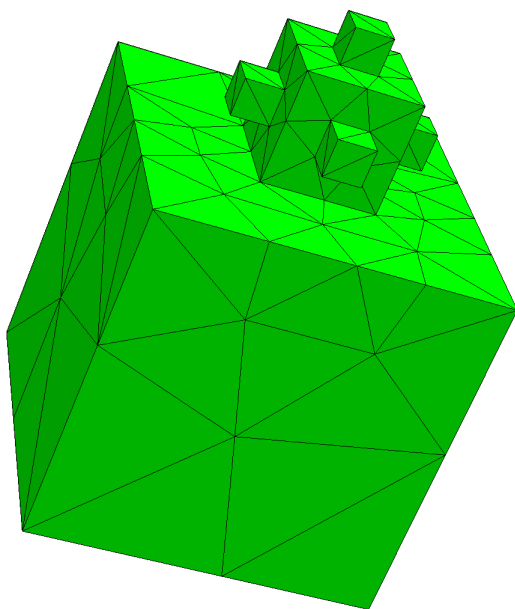 area of the fractal: 0.8118988160479111

- geotype: 3dquad

  fractal level: 2

  scaling: 1.0

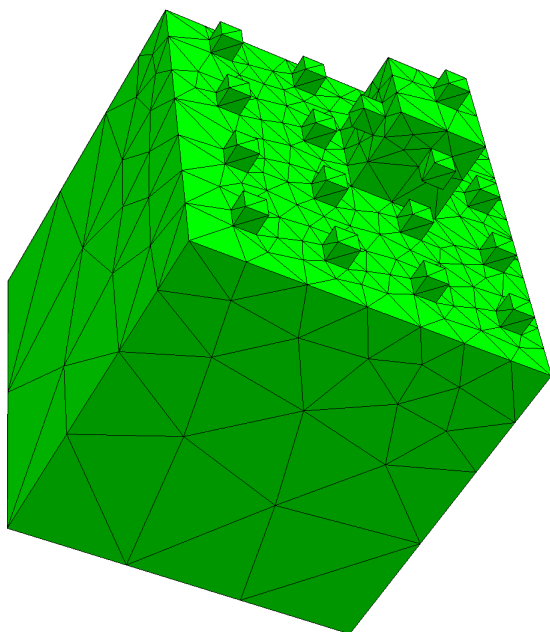 ℓ: 0.1111111111111111

  area of the fractal: 2.0864197530864197

- geotype: 3dquad

  fractal level: 2

  scaling: 0.8

  ℓ: 0.07111111111111111

  area of the fractal: 1.6384197530864197

- geotype: 3dmidquad

  fractal level: 2

  scaling: 1.0

  ℓ: 0.1111111111111111

  area of the fractal: 1.691358024691358

- geotype: 3d14quad

  fractal level: 2

  scaling: 1.0

  ℓ: 0.0625

  area of the fractal: 1.5625

- geotype: lshape