Knife   **MMT release 9.0.0.0**

7   8   9   10

11

12

level of refinement

3.12.2024

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Blade geometry

1 mm
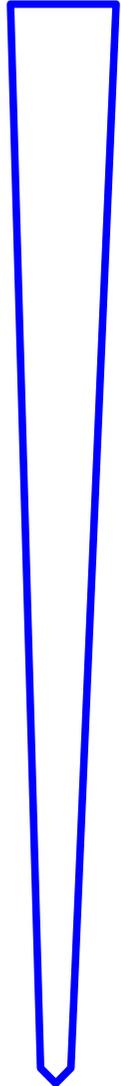
50 mm

0.1 mm, 90 °

Geometry Input	Stl file
44	triangles
10 x 10 x 100	handle - mm
50 x 240	blade - mm

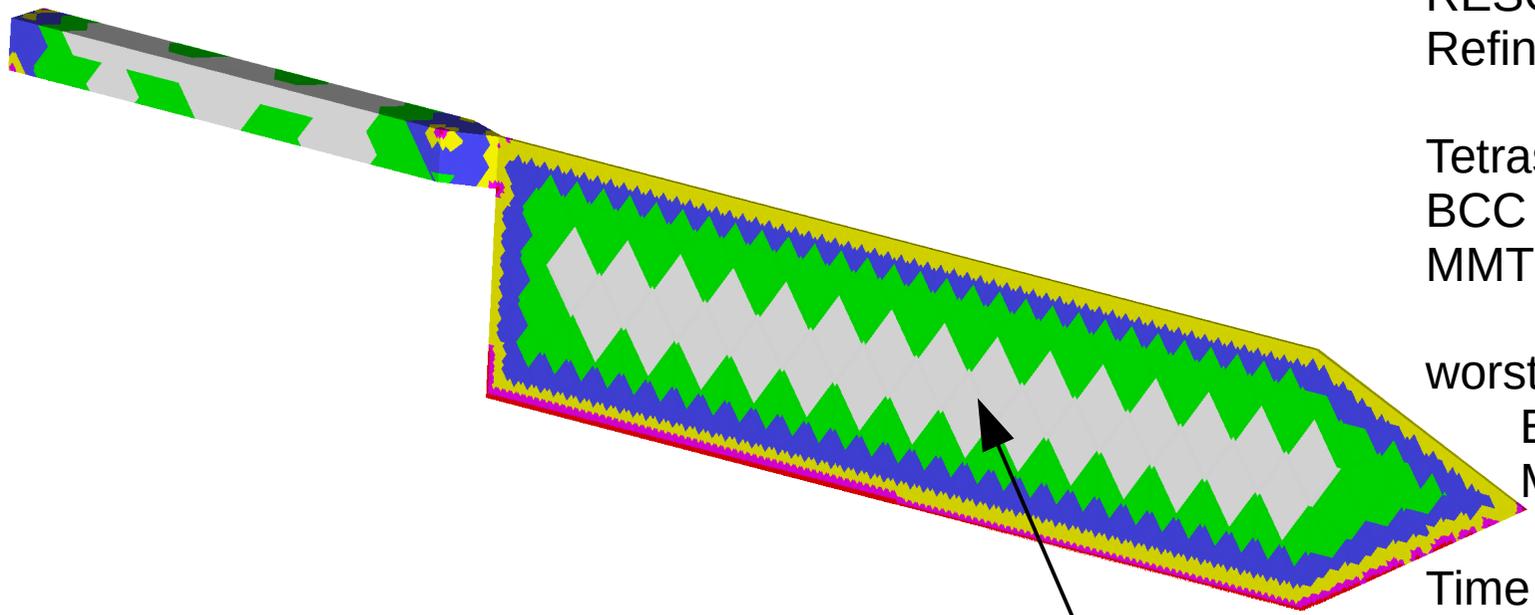Lautsch-FE.com **Lautsch Finite Elemente** GmbH
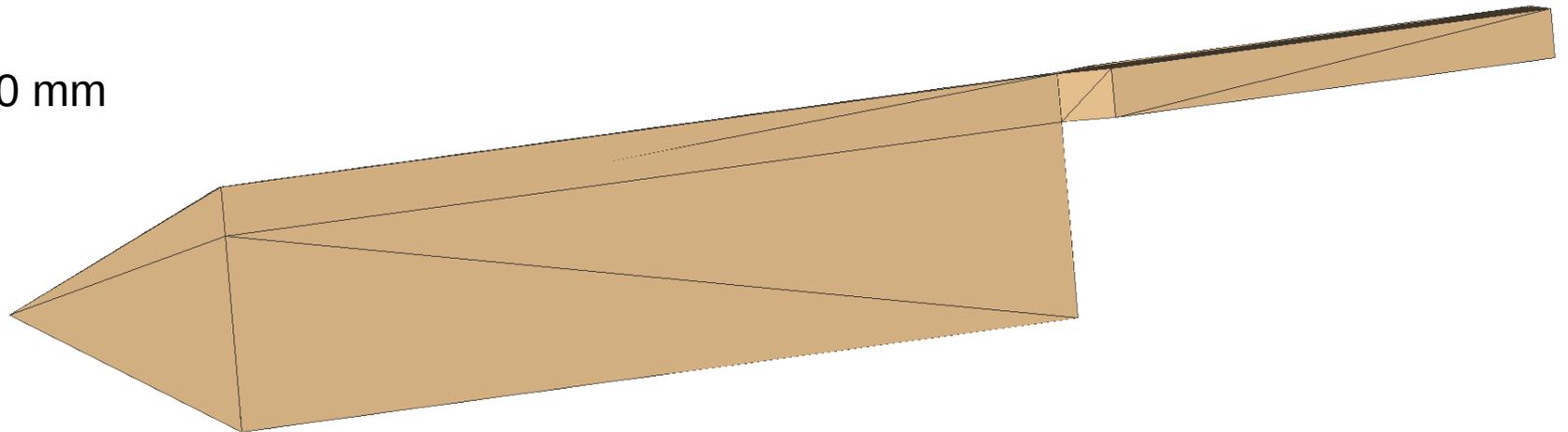
RESOLUTION   1 mm
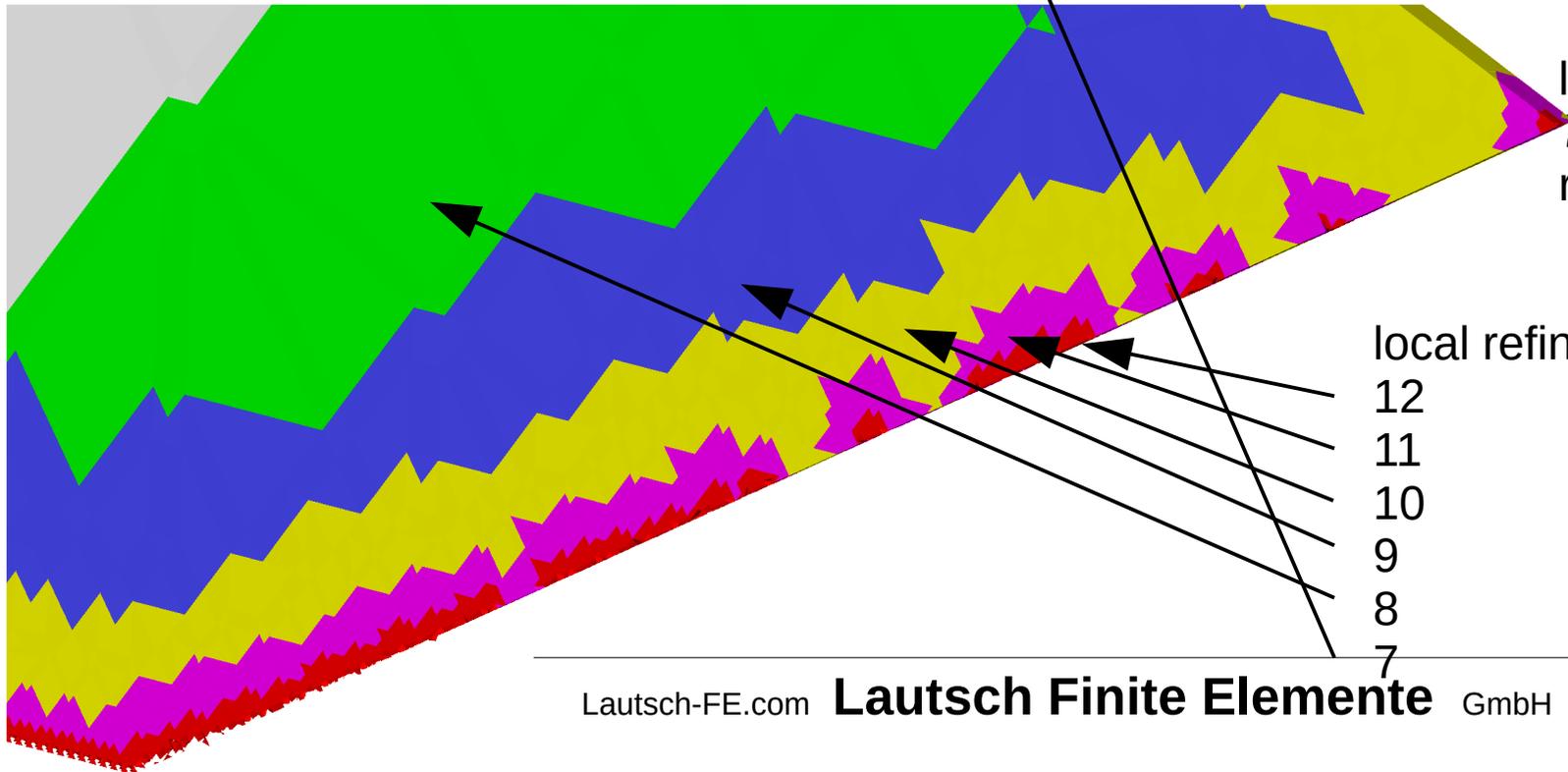Refinement   11 + 1

Tetras knife + fluid
BCC   132 516
MMT   346 849

worst tetra
    BCC   0.155
    MMT   2.1 e-6

Time
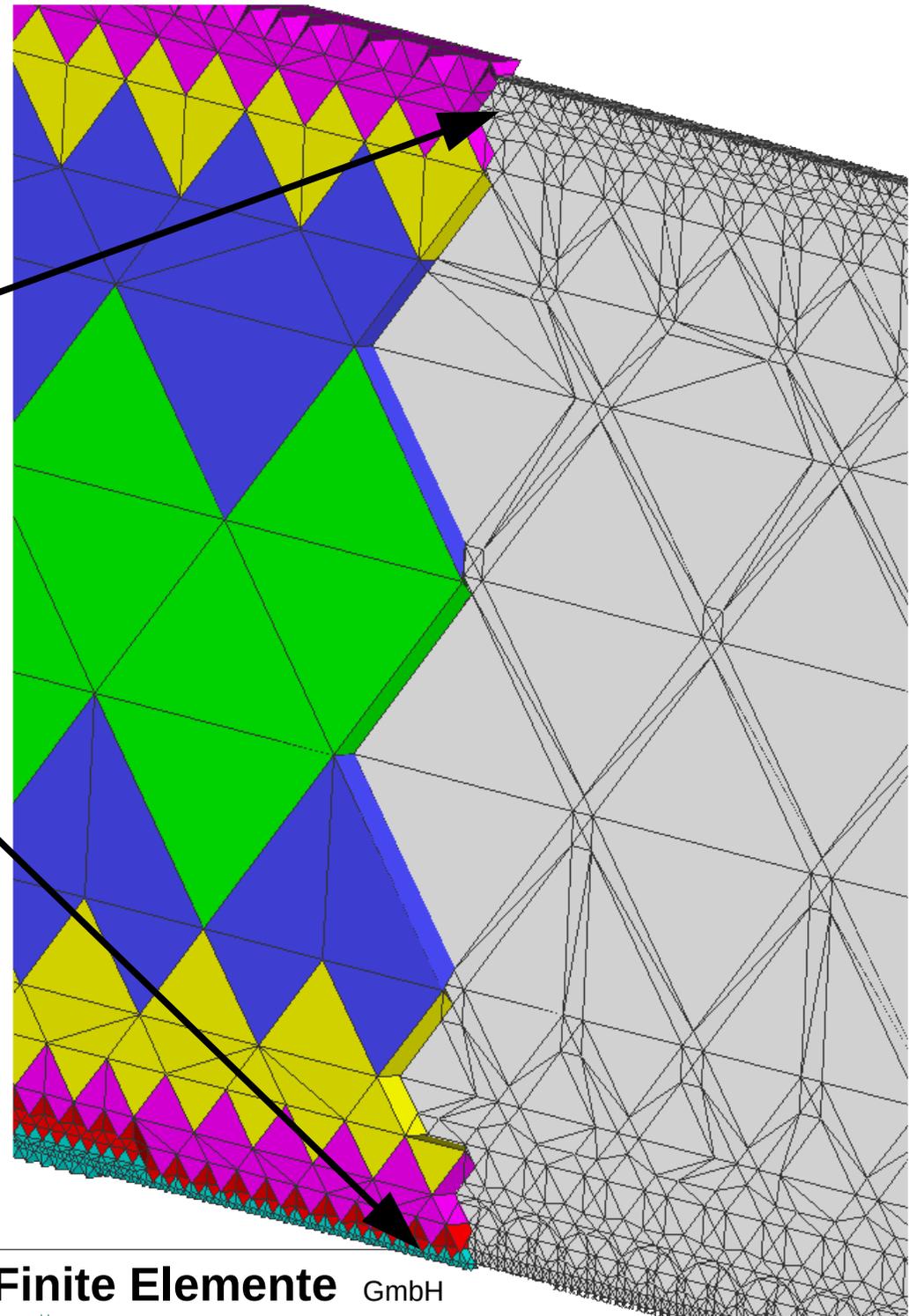(laptop, 5 years old)   10 seconds

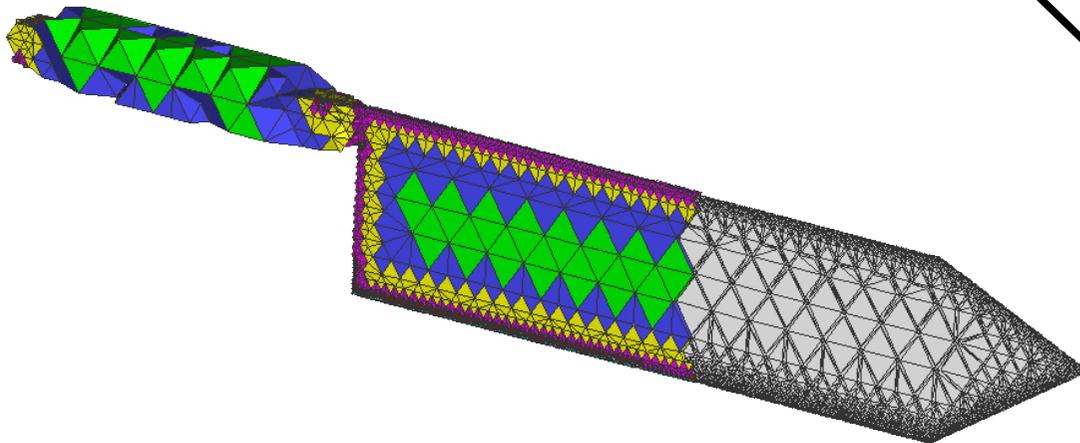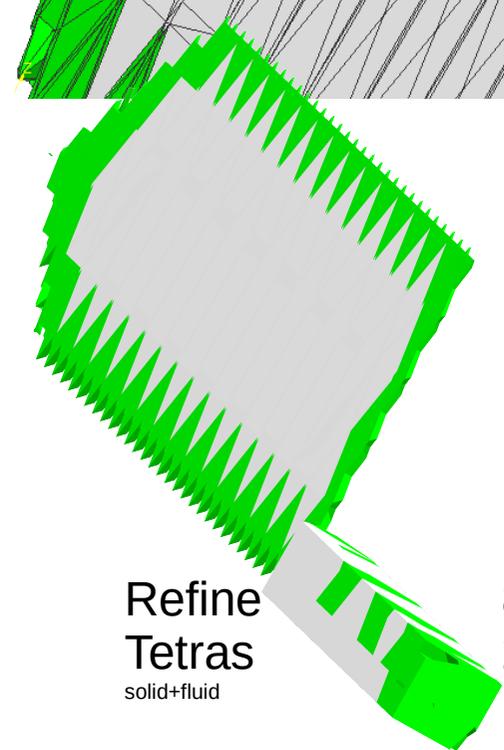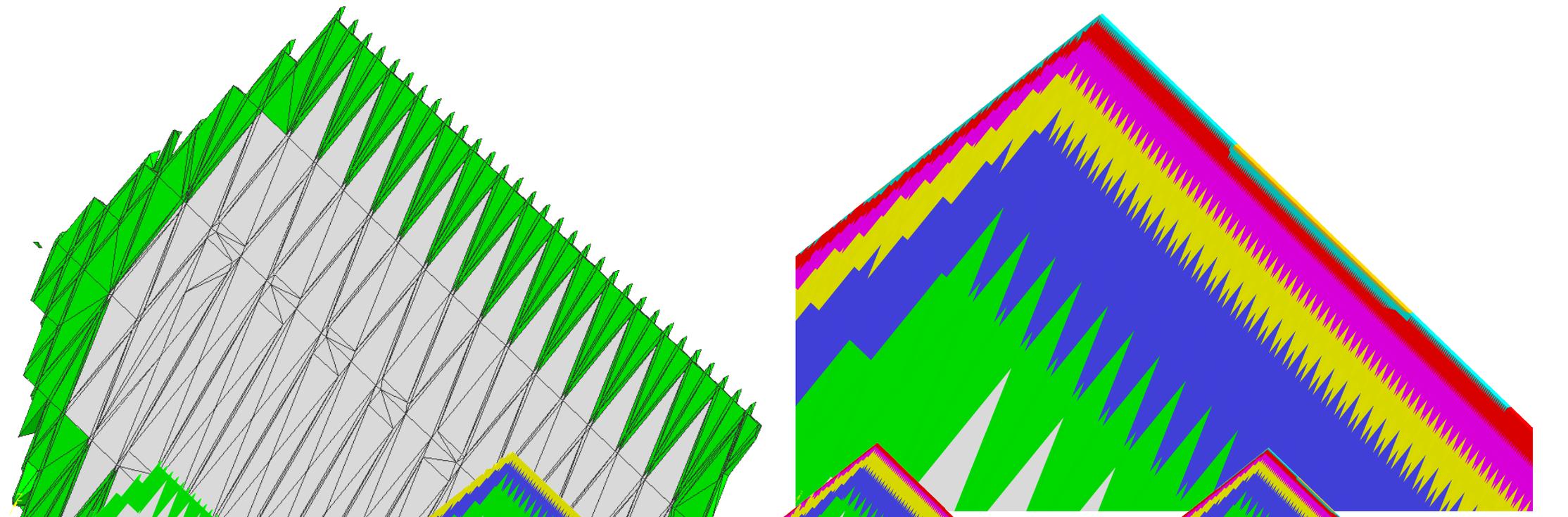large edge input   786.1
786/2**11 = 0.38 =
resolution (roughly)

local refinement level
12
11
10
9
8
7

3

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Knife and it's BCC approximation

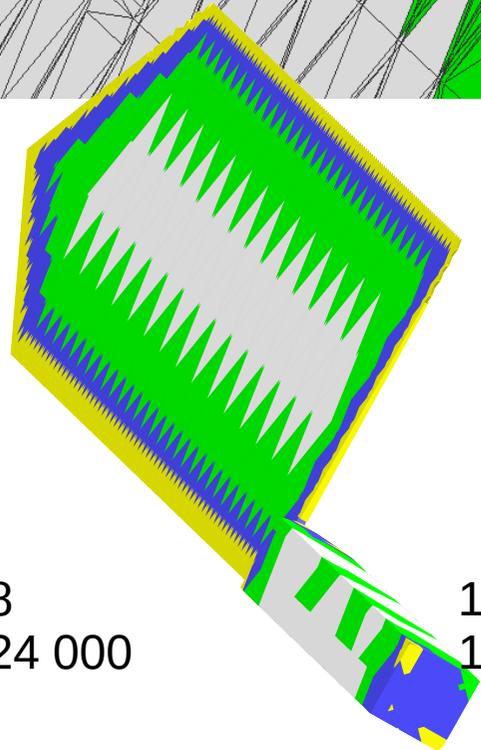Terminates locally at 9 BCC refinements because geometry approximation is good.

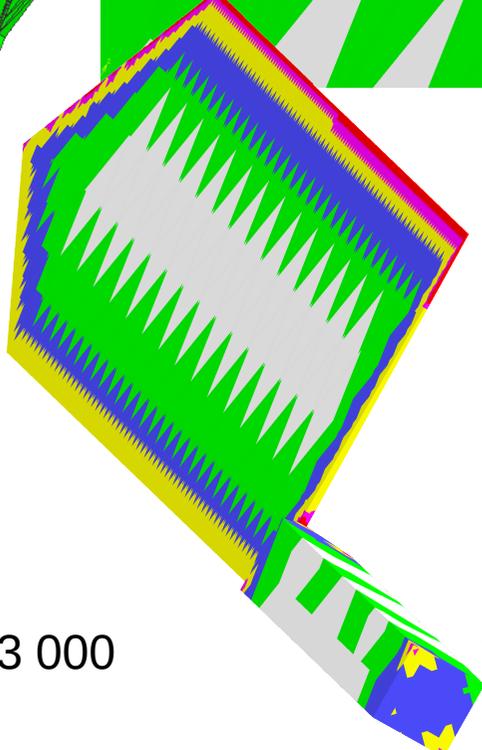Terminates locally at 11 BCC refinements because 11 is the maximum number of refinements as required by the user.
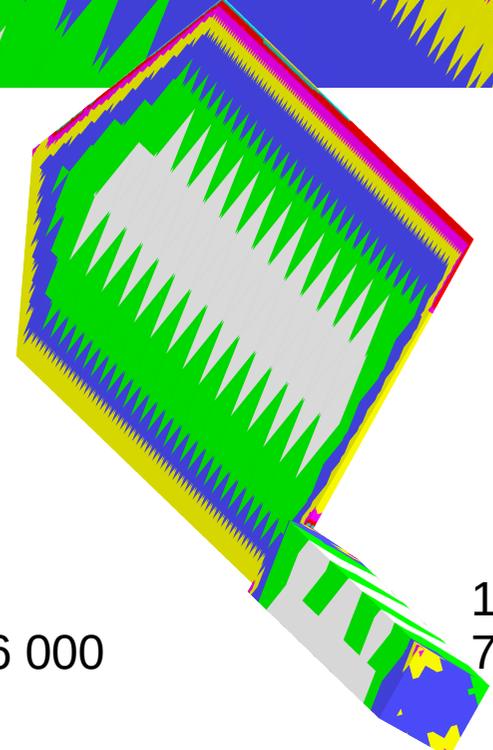
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Refine 8 10 12 14

Tetras 24 000 133 000 346 000 719 000

solid+fluid

5

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