Problem info

Problem type: AC Conduction , frequency: 1.00000004749745E-03 Hz,
Geometry model class: Axisymmetric
Problem database file names:

- Problem: *Levelmeter_conical.pbm*
- Geometry: *Levelmeter_conical.mod*
- Material Data: *Levelmeter_conical.dec*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

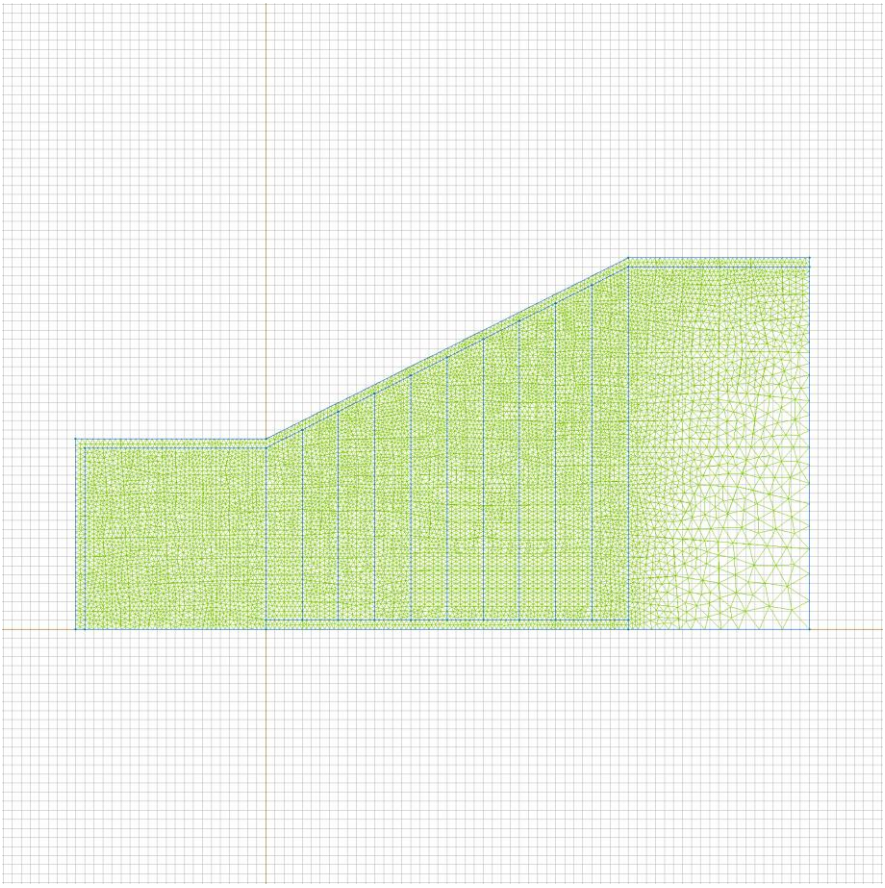


Table 1. Geometry model statistics

	With Label	Total
Blocks	3	14
Edges	2	46
Vertices	0	33

Number of nodes: 10796.

Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

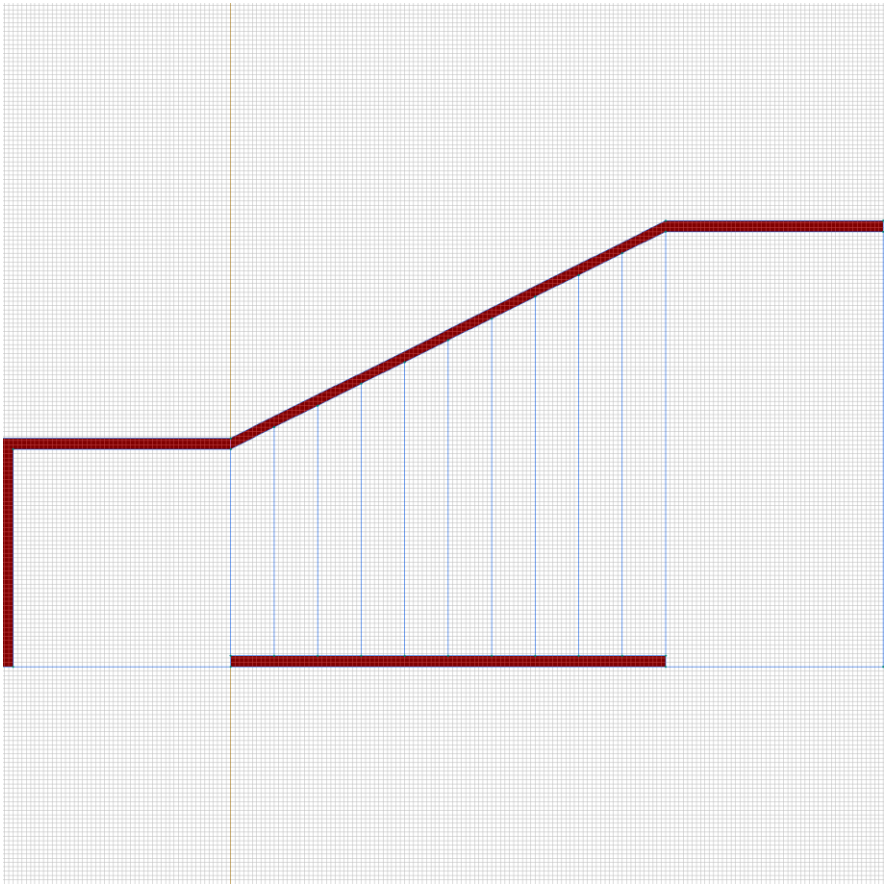
Blocks:	Edges:	Vertices:
• Steel • Medium • Air •	• Bottom_Rod • Top_Rod •	

Detailed information about each label is listed below.

Labelled objects: block "Steel"

There are (2) objects with this label

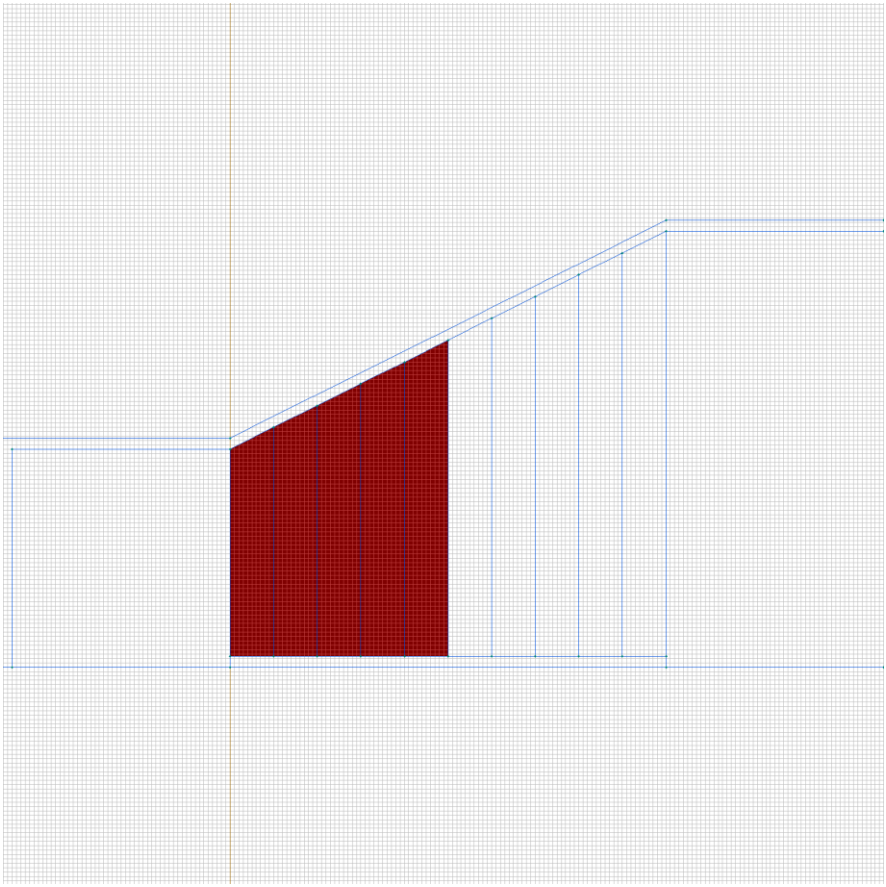
Relative electric permittivity eps_x=1000000000, eps_y=1000000000
Electrical conductivity sigma_x=6000000 [S/m], sigma_y=6000000 [S/m]



Labelled objects: block "Medium"

There are (5) objects with this label

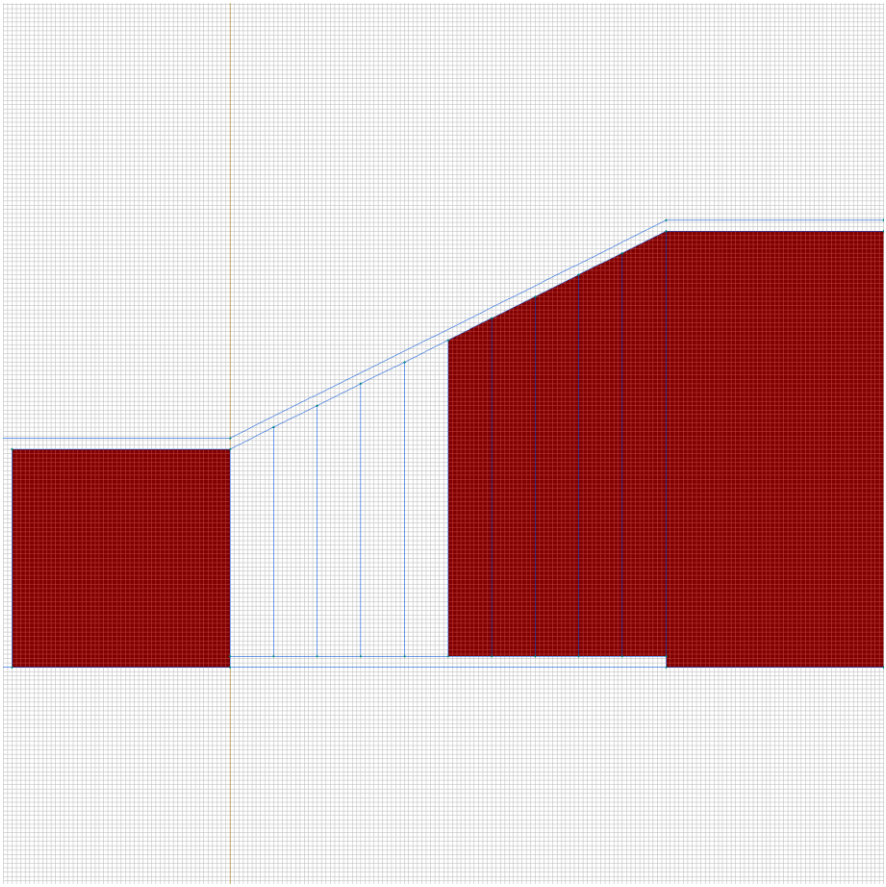
Relative electric permittivity eps_x=81, eps_y=81
Electrical conductivity sigma_x=0.1 [S/m], sigma_y=0.1 [S/m]



Labelled objects: block "Air"

There are (7) objects with this label

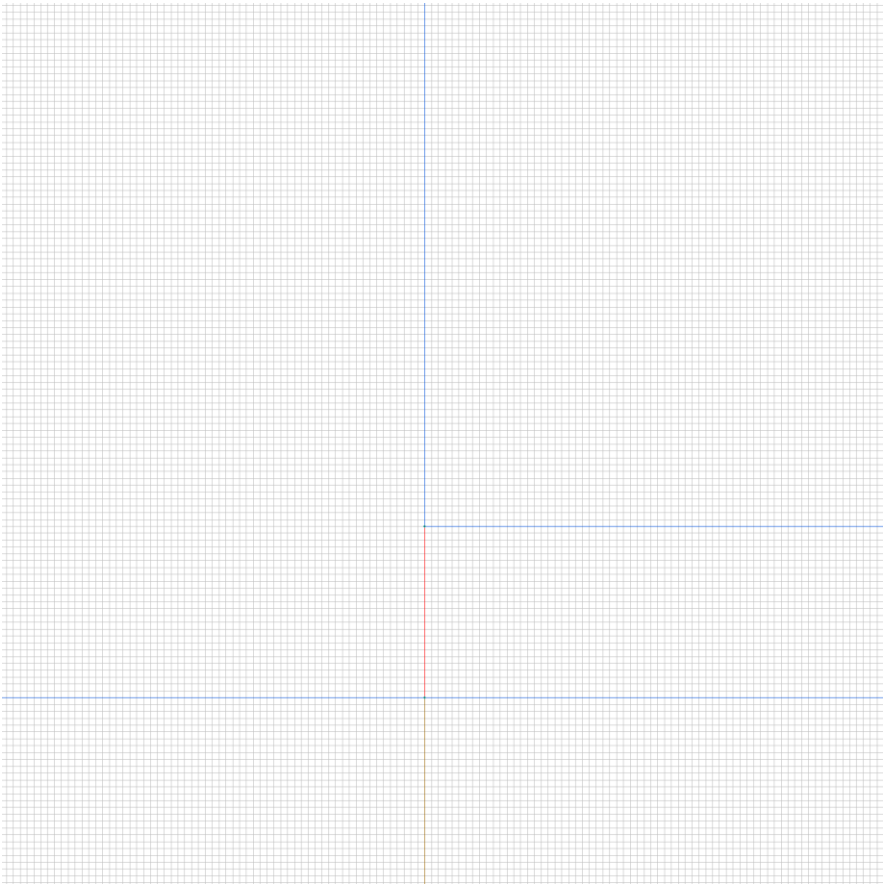
Relative electric permittivity eps_x=1, eps_y=1
Electrical conductivity sigma_x=0 [S/m], sigma_y=0 [S/m]



Labelled objects: edge "Bottom_Rod"

There are (1) objects with this label

Voltage: U=0 [V], phase 0 [deg]



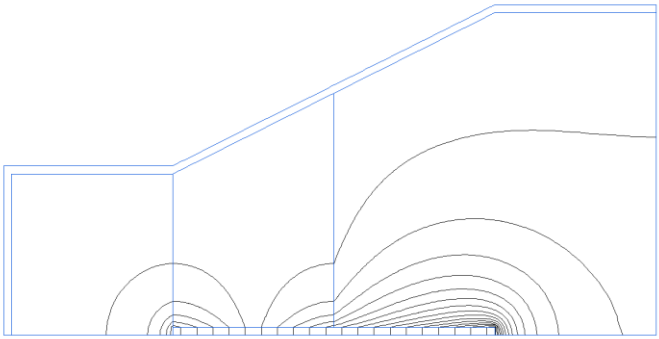
Labelled objects: edge "Top_Rod"

There are (1) objects with this label

Voltage: U=2 [V], phase 0 [deg]

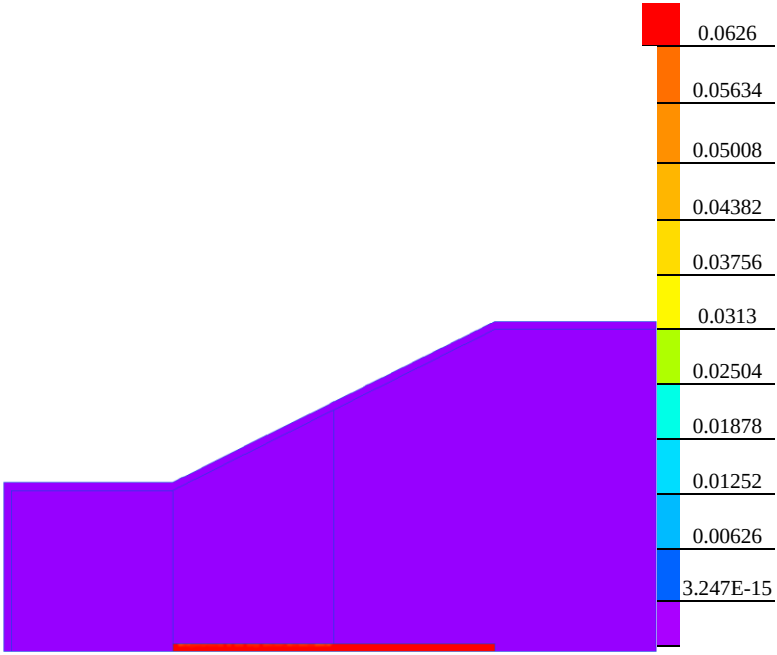
Results

Field lines



Results

Color map of Electric induction |D| [C/m2]



Nonlinear dependencies

No non-linear dependencies are used in this problem data