

Simulation Parameter

STUDIES

FDTD success

modesolve... success

Editor

CONFIGURATION

STRUCTURES

SOURCES

MONITORS

SCRIPT OBJECTS

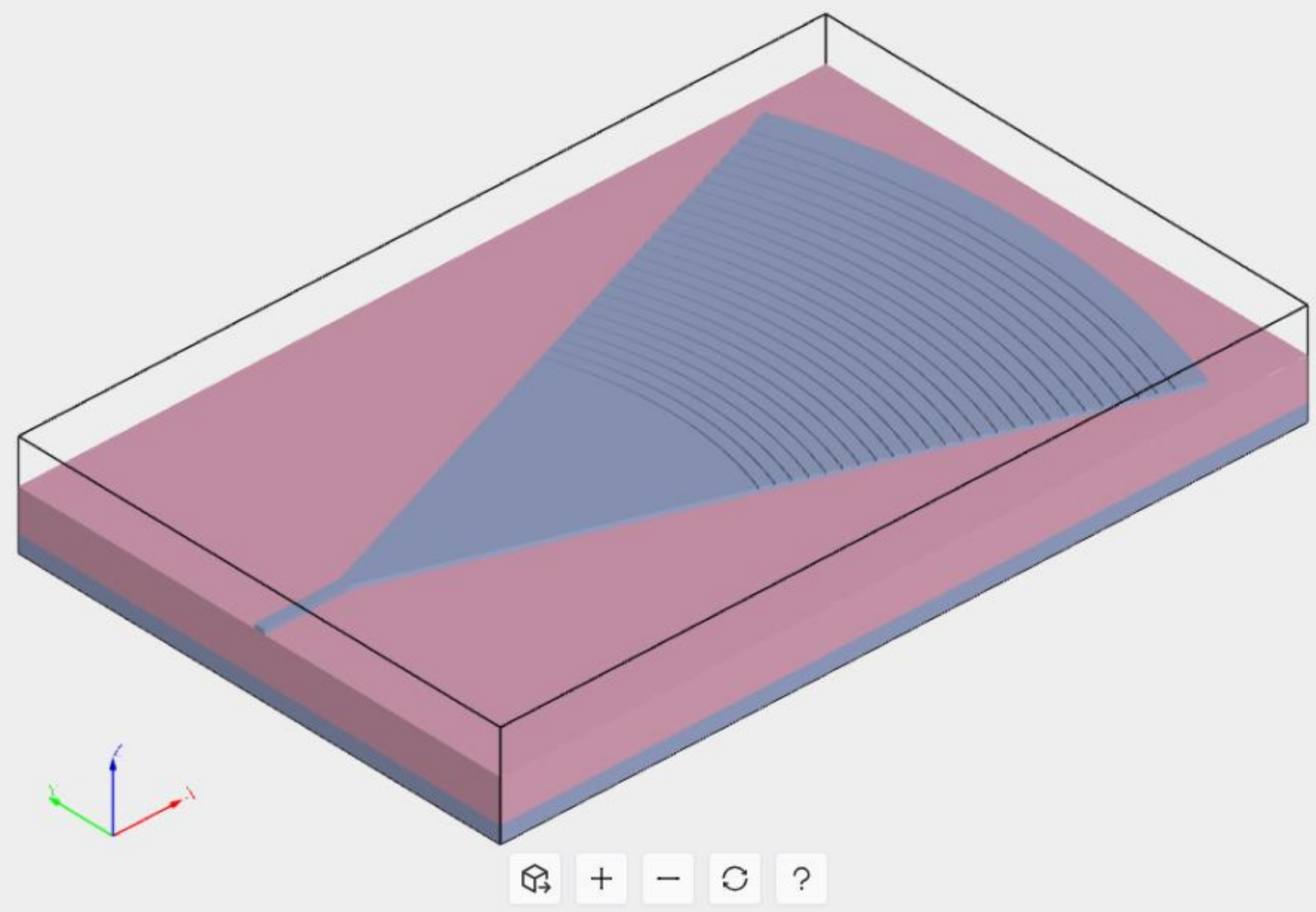
3D Chart

2D Chart

Post-Run Result

Task Details

Edit



Visibility

Symmetry

Axes

Ruler

Simulation Domain

Sources0/1

Monitors0/6

Grid Override Stru... 0/1

Structures30/31

cladding

box

substrate

focused_gc_028/28

Script Objects1/1



Simulation Parameter ⏪

✓ STUDIES +

FDTD success

modesolve... success

Editor

> CONFIGURATION

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> SOURCES

> MONITORS

> SCRIPT OBJECTS

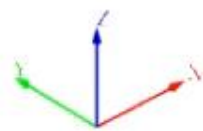
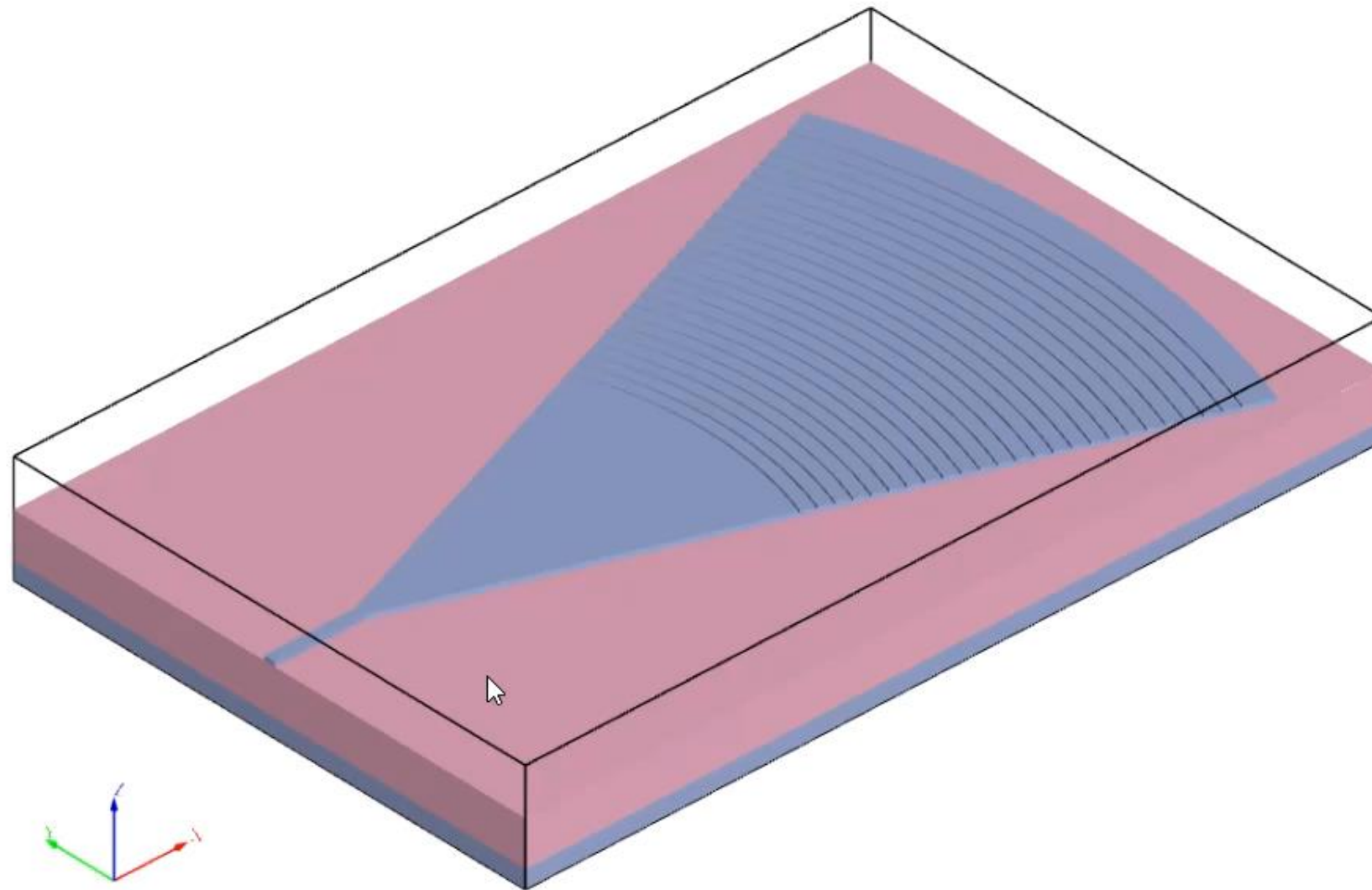
3D Chart

2D Chart

Post-Run Result ^{Beta}

Task Details

✎ Edit



> Visibility

Symmetry

Axes

Ruler

Simulation Domain

> Sources (0/1)

> Monitors (0/6)

> Grid Override Stru... (0/1)

v Structures (30/31)

cladding

box

substrate

focused_gc_0(28/28)

> Script Objects (1/1)



Simulation Parameter

STUDIES

FDTD success

modesolve... success

Editor

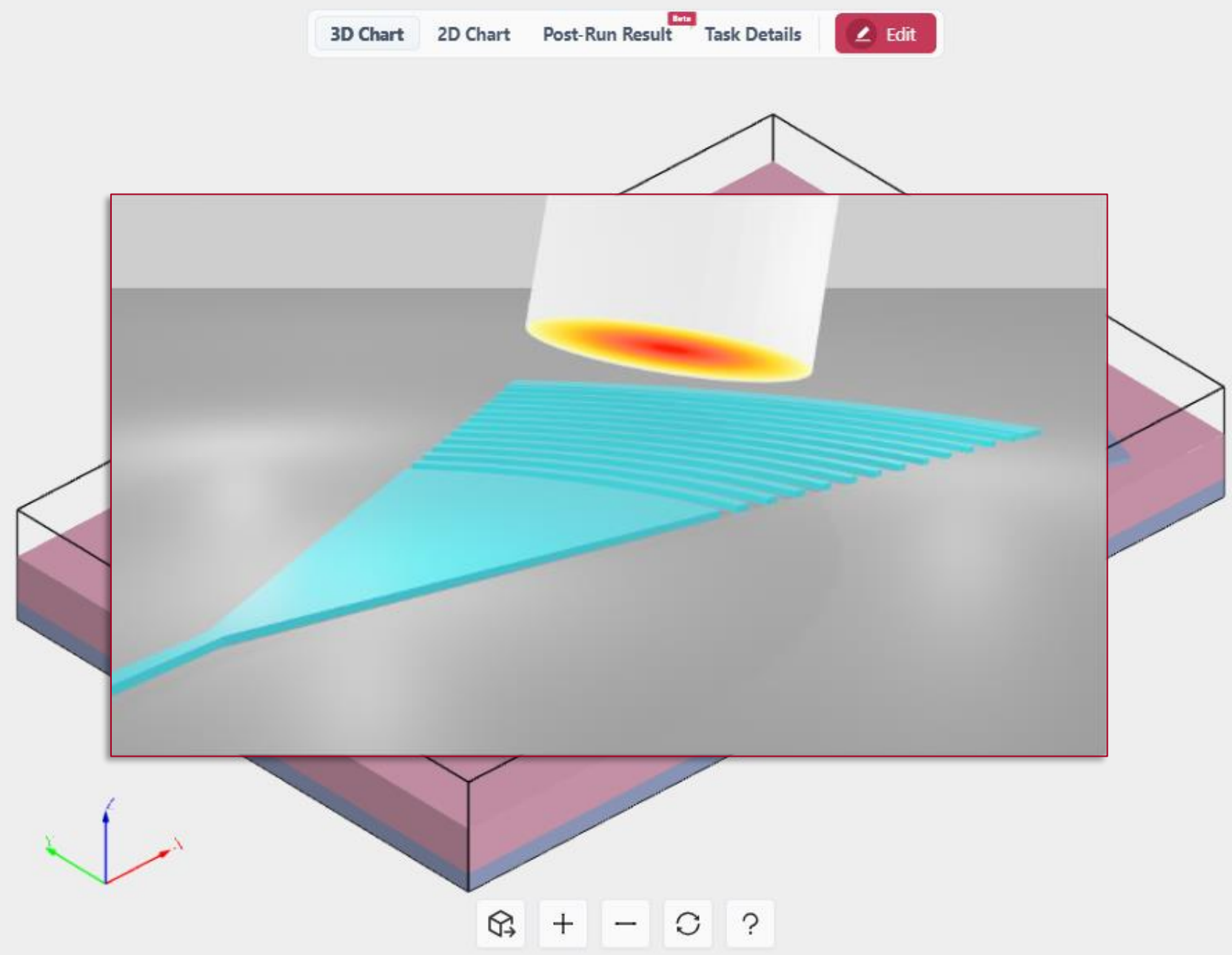
CONFIGURATION

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SCRIPT OBJECTS



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Simulation Domain

Sources(0/1)

Monitors(0/6)

Grid Override Stru... (0/1)

Structures(30/31)

- cladding
- box
- substrate
- focused_gc_0(28/28)

Script Objects(1/1)

Simulation Parameter

STUDIES

FDTD success

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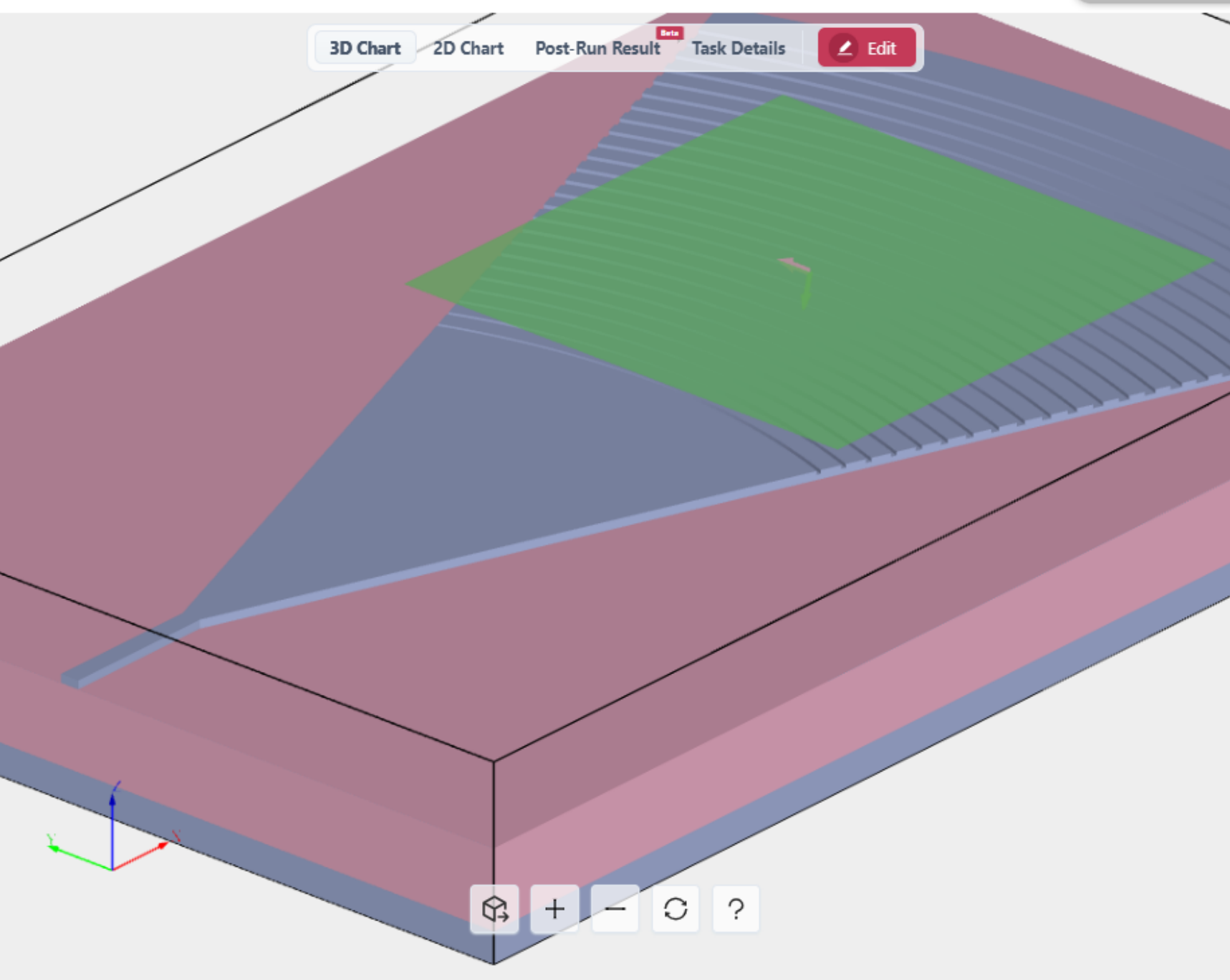
STRUCTURES

SOURCES

gaussian_source

MONITORS

SCRIPT OBJECTS



Visibility

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Axes

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Simulation Domain

Sources(1/1)

Monitors(0/6)

mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

Grid Override Stru... (0/1)

Structures(30/31)

cladding

box

substrate

focused_gc_0(28/28)

Script Objects(1/1)

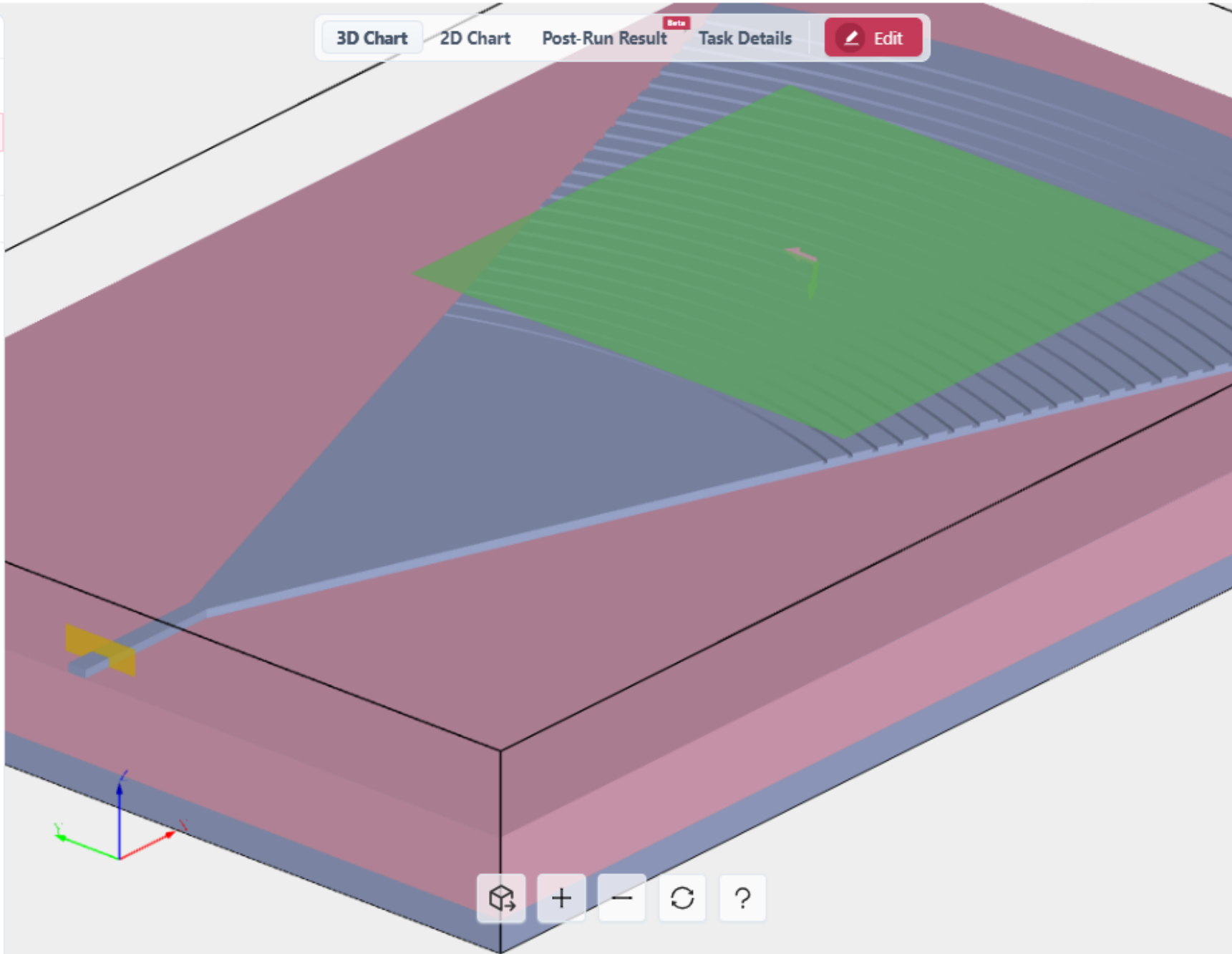
Simulation Parameter

STUDIES

- FDTD success
- modesolve... success

Editor

- CONFIGURATION
- STRUCTURES
- SOURCES
 - gaussian_source
- MONITORS
- SCRIPT OBJECTS



Visibility

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- Ruler
- Simulation Domain
- Sources (1/1)
- Monitors (1/6)
 - mode_monitor
 - flux_sub
 - flux_ref
 - field_xy
 - field_xz
 - field_t
- Grid Override Stru... (0/1)
- Structures (30/31)
 - cladding
 - box
 - substrate
 - focused_gc_0(28/28)
- Script Objects (1/1)

Simulation Parameter



STUDIES



FDTD draft

modesolver_0 draft

Editor

> CONFIGURATION

> STRUCTURES



SOURCES



gaussian_source

MONITORS



mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

> SCRIPT OBJECTS



Edit Monitor Help



* name

mode_monitor

* type

ModeMonitor

☒ center + size☐ bounds

center

* size

X 0.775 μm Y 0 μm Z 0 μm

* wavelengths frequencies

unit: μm ☒ Enter range ☐ Custom☒ Set the range from source

gaussian_source

min: 1.52

max: 1.58

Apply

Task Details

Run

Validation pass

Visibility

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Simulation Domain

> Sources(1/1)

Monitors(1/6)

mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

> Grid Override Stru... (0/1)

Structures(30/31)

cladding

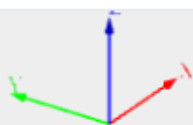
box

substrate

focused_gc_0(28/28)

> Script Objects(1/1)

$$(\mathbf{u}_1, \mathbf{u}_2) = \frac{1}{4} \int_A (\mathbf{E}_1^* \times \mathbf{H}_2 + \mathbf{E}_2 \times \mathbf{H}_1^*) \cdot d\mathbf{A}$$



Simulation Parameter <

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- modesolver_0 draft

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MONITORS

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- field_xz
- field_t

SCRIPT OBJECTS

Edit Monitor ? Help

* wavelengths frequencies unit: μm

☒ Enter range ☐ Custom

☒ Set the range from source

gaussian_source

min: 1.52 max: 1.58

number of points (uniform sampling)

61

1.52, 1.521, 1.522, 1.523, 1.524, 1.525, 1.526, 1.527, 1.528, 1.529, 1.53, 1.531, 1.532, 1.533, 1.534, 1.535, 1.536, 1.537, 1.538, 1.539, 1.54, ...

mode_spec ?

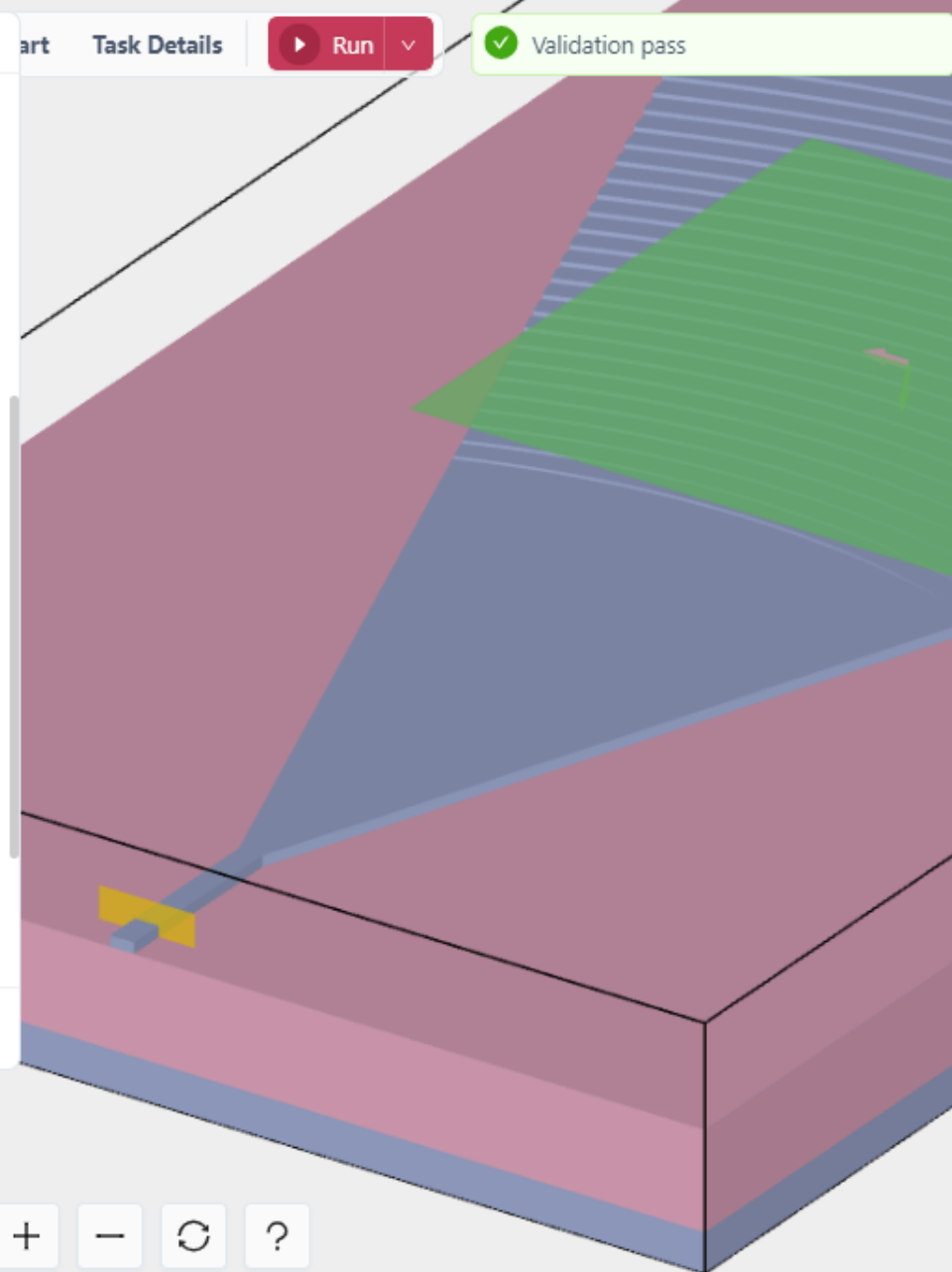
Open ModeSolver

num_modes ?

1

target_neff ?

Apply



Visibility

- Symmetry
- Axes
- Ruler
- Simulation Domain

Sources (1/1)

Monitors (1/6)

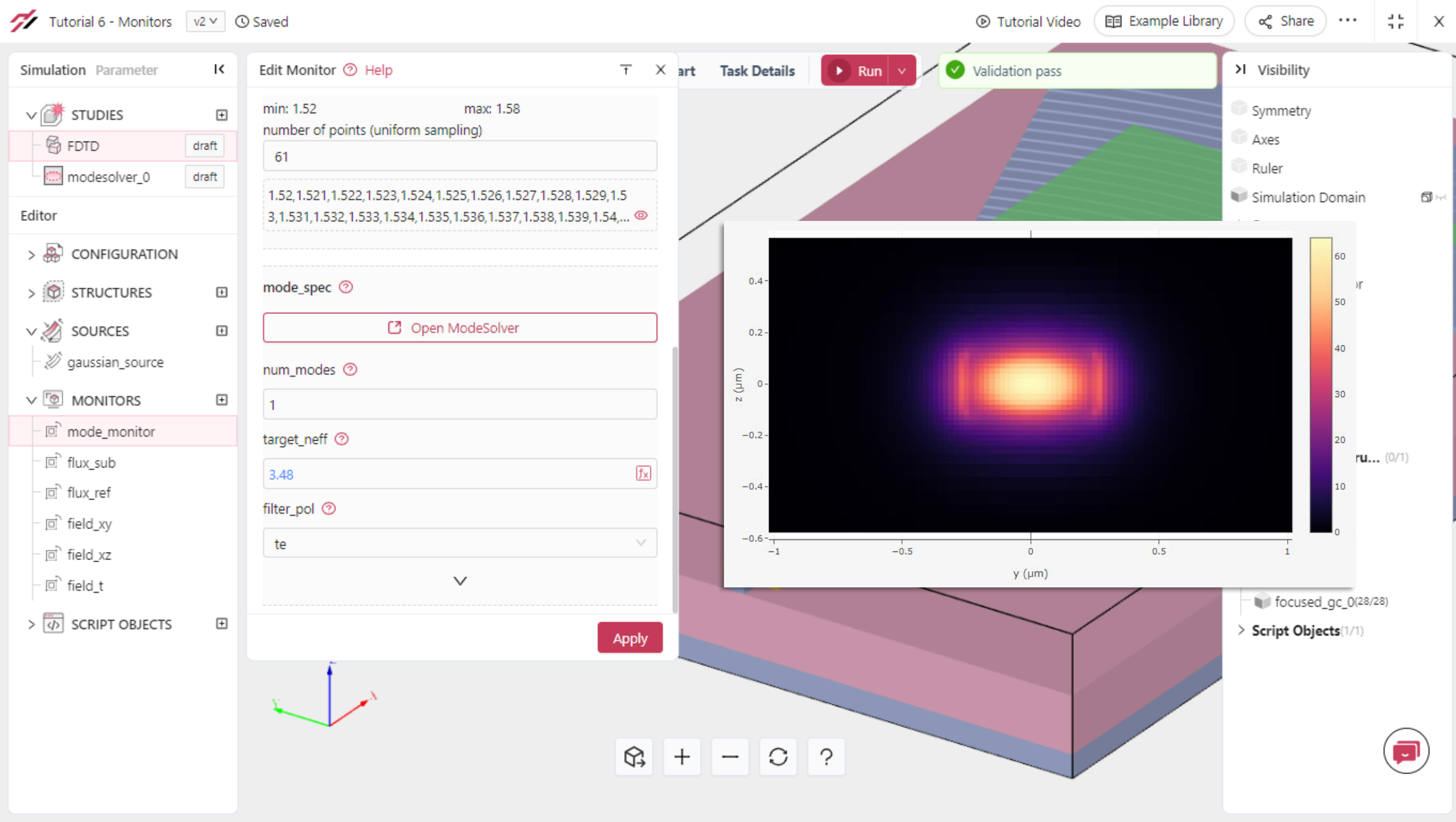
- mode_monitor
- flux_sub
- flux_ref
- field_xy
- field_xz
- field_t

Grid Override Stru... (0/1)

Structures (30/31)

- cladding
- box
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- focused_gc_0 (28/28)

Script Objects (1/1)



Simulation Parameter



STUDIES



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draft

modesolver_0

draft

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STRUCTURES



SOURCES



gaussian_source

MONITORS



mode_monitor

flux_sub

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field_t

SCRIPT OBJECTS



Edit Monitor



Help



* name

flux_sub

* type

FluxMonitor

☒ center + size☐ bounds

center

* size

X

0

 μm

X

Infinity

 μm

Y

0

 μm

Y

Infinity

 μm

Z

-2.22

 μm

Z

0

 μm

* wavelengths

frequencies

unit:

 μm ☒ Enter range☐ Custom☒ Set the range from source

gaussian_source

min: 1.52

max: 1.58

Apply

Task Details

Run



Validation pass

Visibility

Symmetry

Axes

Ruler

Simulation Domain

Sources(1/1)

Monitors(2/6)

mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

Grid Override Stru... (0/1)

Structures(28/31)

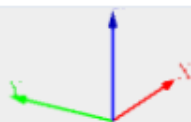
cladding

box

substrate

focused_gc_0(28/28)

Script Objects(1/1)



Simulation Parameter

STUDIES

- FDTD draft
- modesolver_0 draft

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- gaussian_source

MONITORS

- mode_monitor
- flux_sub
- flux_ref
- field_xy
- field_xz
- field_t

SCRIPT OBJECTS

Edit Monitor Help

* wavelengths frequencies unit: μm

☒ Enter range ☐ Custom

☒ Set the range from source

gaussian_source

min: 1.52 max: 1.58

number of points (uniform sampling)

61

1.52, 1.521, 1.522, 1.523, 1.524, 1.525, 1.526, 1.527, 1.528, 1.529, 1.53, 1.531, 1.532, 1.533, 1.534, 1.535, 1.536, 1.537, 1.538, 1.539, 1.54, ...

Advanced

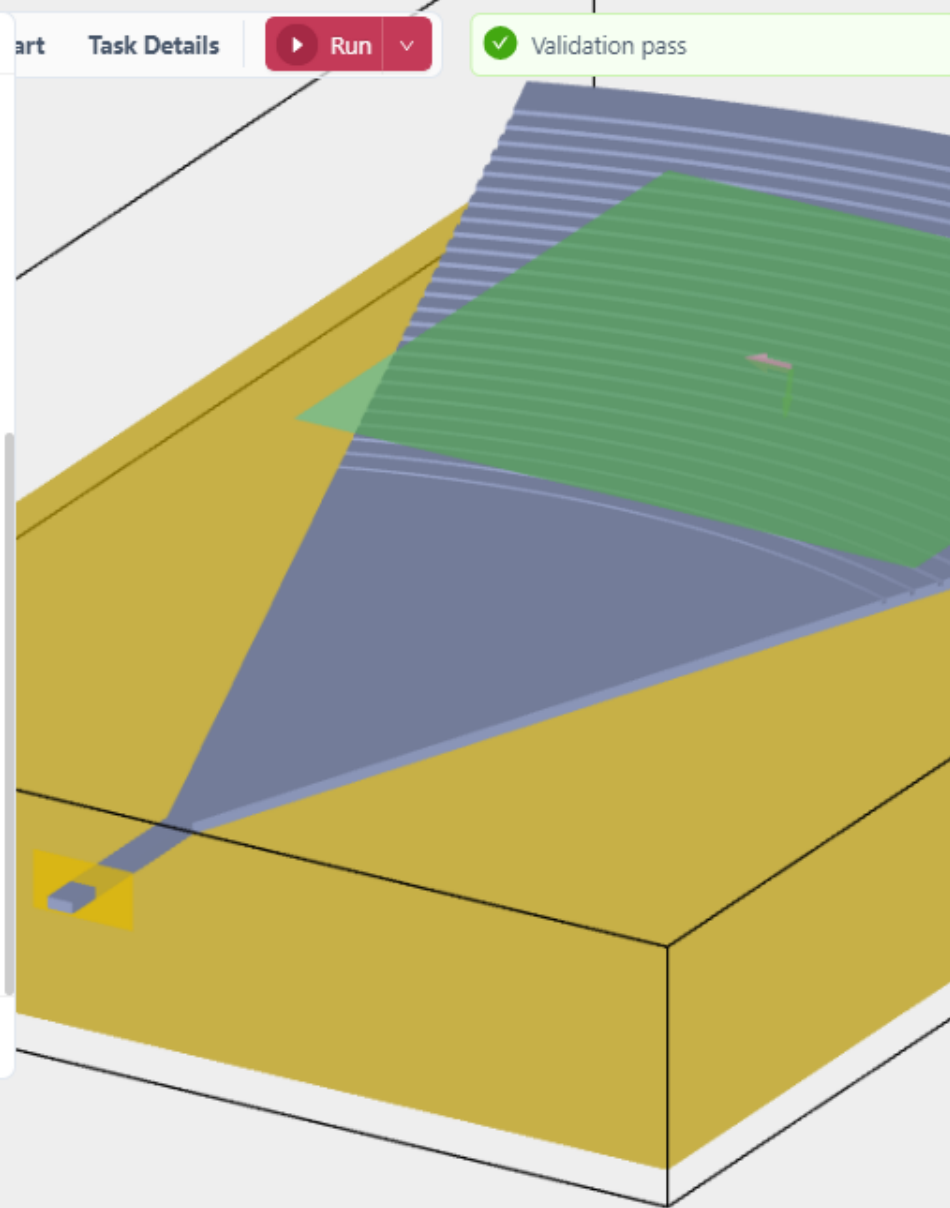
normal_dir

-

exclude_surfaces

Select

Apply



Visibility

Symmetry

Axes

Ruler

Simulation Domain

Sources (1/1)

Monitors (2/6)

- mode_monitor
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- field_xz
- field_t

Grid Override Stru... (0/1)

Structures (28/31)

- cladding
- box
- substrate
- focused_gc_0 (28/28)

Script Objects (1/1)

Simulation Parameter



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SOURCES



gaussian_source

MONITORS



mode_monitor

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SCRIPT OBJECTS



Edit Monitor



Help



* name

flux_ref

* type

FluxMonitor

☒ center + size☐ bounds

center

* size

X

0

 μm

X

Infinity

 μm

Y

0

 μm

Y

Infinity

 μm

Z

1.05

 μm

Z

0

 μm

* wavelengths

frequencies

unit:

 μm ☒ Enter range☐ Custom☒ Set the range from source

gaussian_source

min: 1.52

max: 1.58

Apply

Task Details

Run



Validation pass

Visibility

Symmetry

Axes

Ruler

Simulation Domain

Sources(1/1)

Monitors(3/6)

mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

Grid Override Stru... (0/1)

Structures(28/31)

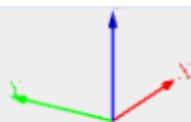
cladding

box

substrate

focused_gc_0(28/28)

Script Objects(1/1)



Simulation Parameter

STUDIES

FTD

draft

modesolver_0

draft

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field_xz

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SCRIPT OBJECTS

Edit Monitor

name

field_xy

type

FieldMonitor

center + size

center

X

0

μm

Y

0

μm

Z

0.04

μm

size

X

Infinity

μm

Y

Infinity

μm

Z

0

μm

For 1D/2D monitors, set the size of the corresponding dimensions to 0.

fields

Ex x

Ey x

Ez x

Hx x

Hy x

Hz x

wavelengths

frequencies

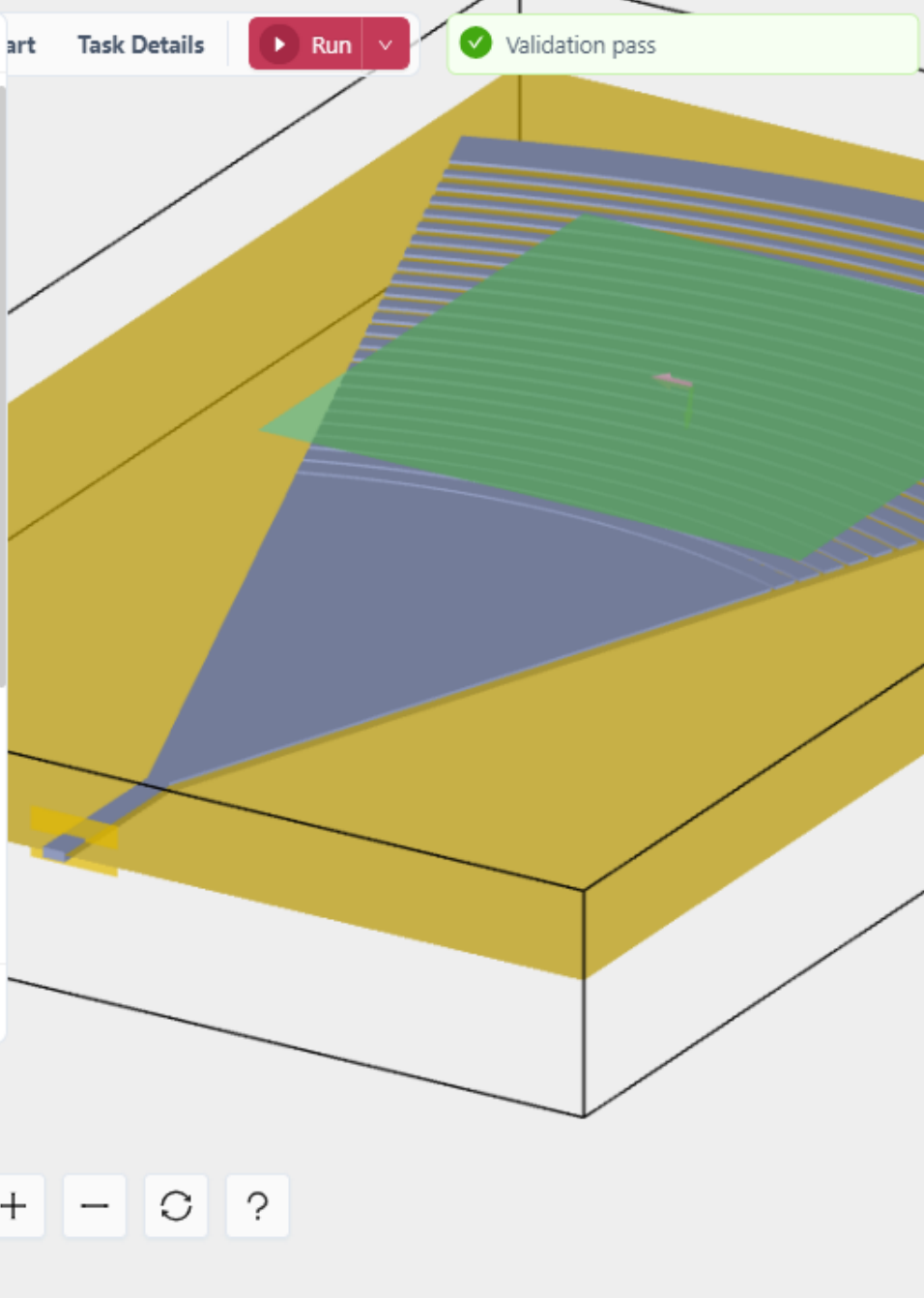
unit: μm

Apply

Task Details

Run

Validation pass



Visibility

Symmetry

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Ruler

Simulation Domain

Sources

Monitors

mode_monitor

flux_sub

flux_ref

field_xy

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Script Objects

Simulation Parameter



STUDIES



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modesolver_0 draft

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MONITORS

mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

> SCRIPT OBJECTS

Edit Monitor Help



dimensions to 0.

fields

Ex x

Ey x

Ez x

Hx x

Hy x

Hz x

* wavelengths frequencies

unit: μm ☐ Enter range ☒ Custom

wl

number of points: 1

1.55

Downsampling

interval_space

X 1

Y 1

Z 1

colocate

☐ Yes☒ No

Apply

Task Details

Run



Validation pass

Visibility

Symmetry

Axes

Ruler

Simulation Domain

> Sources(1/1)

Monitors(2/6)

mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

> Grid Override Stru... (0/1)

Structures(28/31)

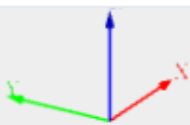
cladding

box

substrate

focused_gc_0(28/28)

> Script Objects(1/1)



Simulation Parameter



STUDIES



FDTD draft

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> SCRIPT OBJECTS

Edit Monitor Help



dimensions to 0.

fields

Ex x

Ey x

Ez x

Hx x

Hy x

Hz x

* wavelengths

frequencies

unit:

 μm ☐ Enter range☒ Custom

wl

number of points: 1

1.55

Downsampling

interval_space

X 1

Y 1

Z 1

colocate

☐ Yes☒ No

Apply

Task Details

Run



Validation pass

Visibility

Symmetry

Axes

Ruler

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> Sources(1/1)

Monitors(2/6)

mode_monitor

flux_sub

flux_ref

field_xy

field_xz

field_t

> Grid Override Stru... (0/1)

Structures(28/31)

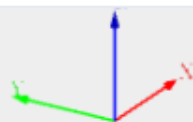
cladding

box

substrate

focused_gc_0(28/28)

> Script Objects(1/1)



Simulation Parameter

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SCRIPT OBJECTS

Edit Monitor Help

SIZE

X	2	μm	X	0	μm
Y	0	μm	Y	0	μm
Z	0	μm	Z	0	μm

For 1D/2D monitors, set the size of the corresponding dimensions to 0.

fields

Ey x

Time

start

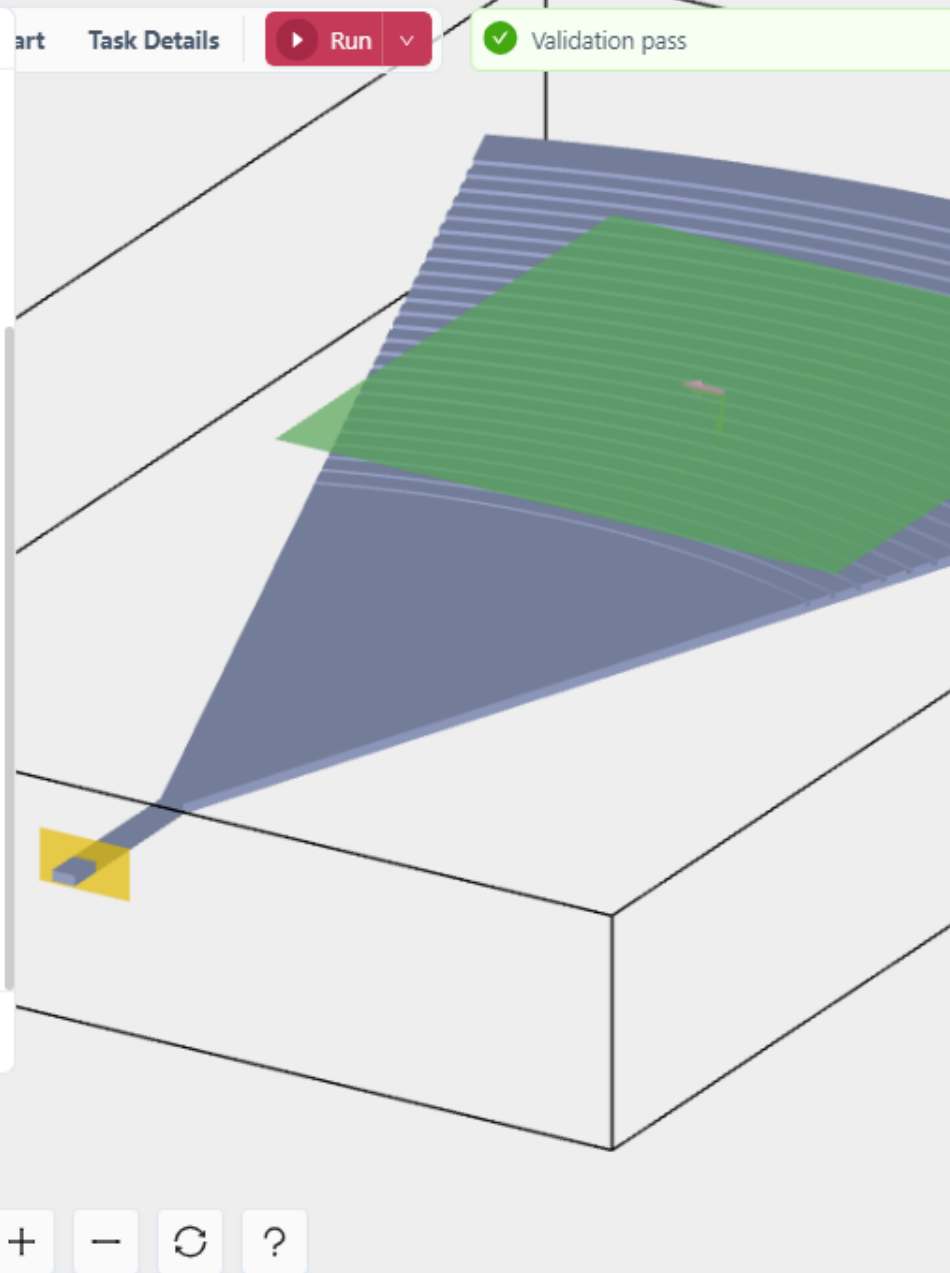
0	s	stop		s
---	---	------	--	---

interval

1

Downsampling

Apply



Visibility

- Symmetry
- Axes
- Ruler
- Simulation Domain
- Sources (1/1)
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 - flux_ref
 - field_xy
 - field_xz
 - field_t
- Grid Override Stru... (0/1)
- Structures (28/31)
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- STUDIES
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Editor

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- field_xz
- field_t
- SCRIPT OBJECTS

3D Chart

2D Chart

Task Details

Run

Validation pass

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flux_sub

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field_xy

field_xz

field_t

Grid Override Stru... 0/1

Structures 30/31

cladding

box

substrate

focused_gc_0(28/28)

Script Objects 1/1

