

Simulation
Parameter
IK

STUDIES

FDTD
draft

Sweep_Color
draft

Editor

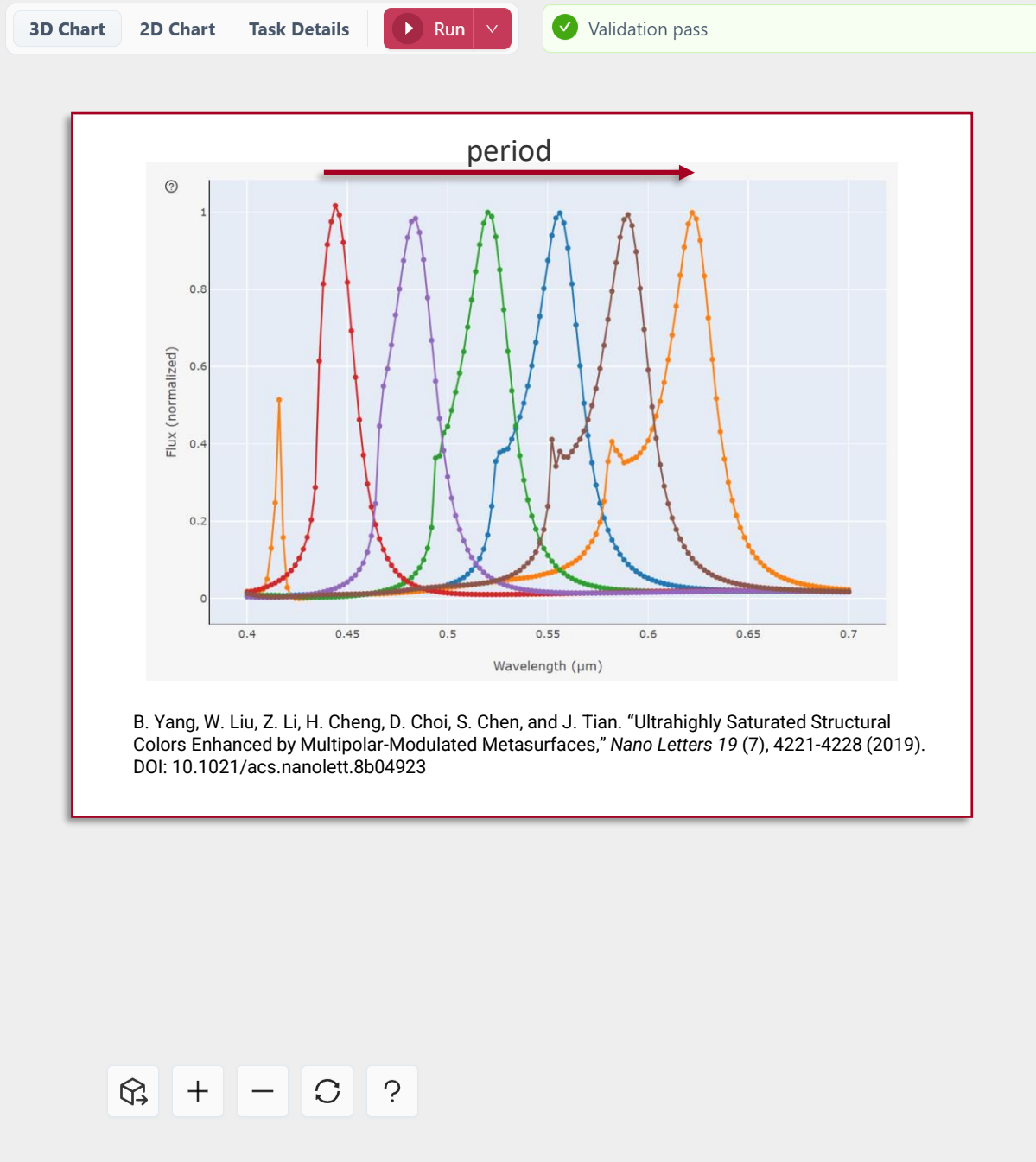
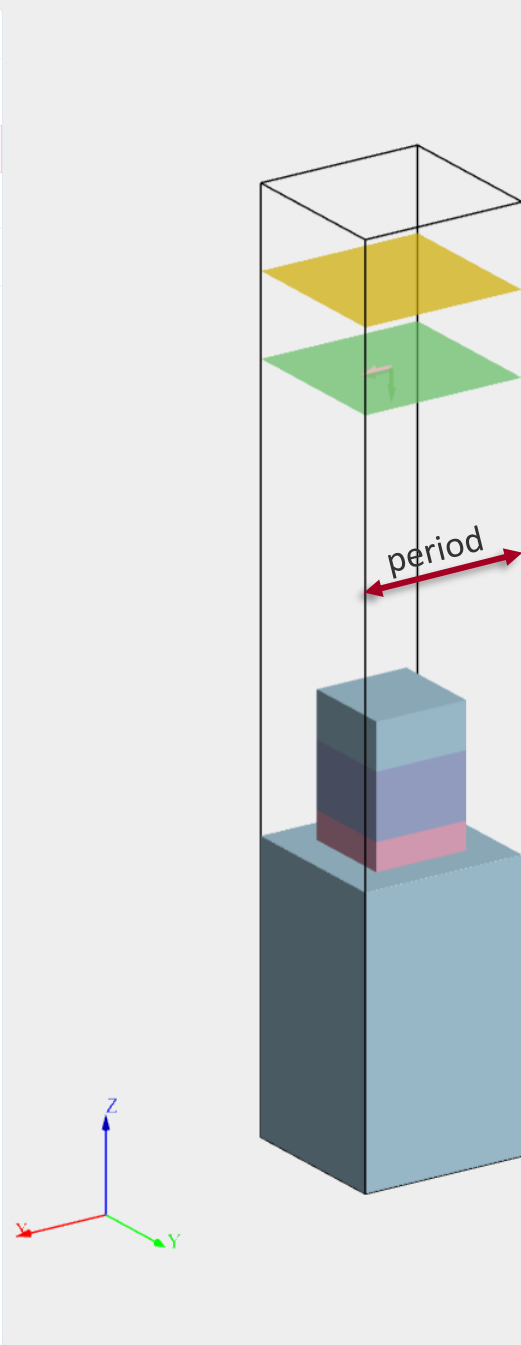
CONFIGURATION

STRUCTURES

SOURCES

MONITORS

SCRIPT OBJECTS



Visibility

Symmetry
Axes
Ruler
Simulation Domain

Sources(1/1)

Monitors(1/1)

Structures(4/4)

substrate

si3n4

tio2

sio2

Simulation Parameter K

Variable

Constant

Medium

c

pi

inf

Vacuum

SiO2

TiO2

Si3N4

3D Chart 2D Chart Task Details

Run

Why it doesn't RUN? 1 validation error for Simulation

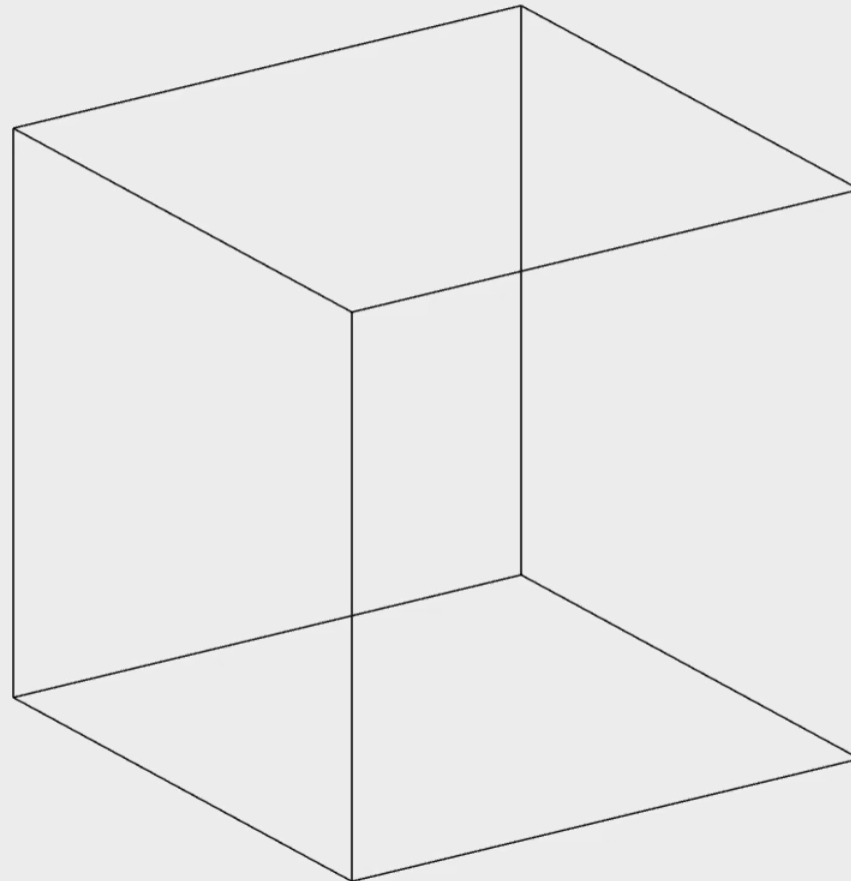
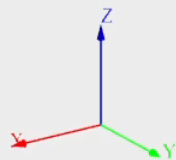
Detail

Visibility

Axes

Ruler

Simulation Domain



+

-

?



SimulationParameterK

Variable

period0.35

gap0.15

width0.199999999999...

sio2_t0.1

tio2_t0.14

si3n4_t0.06

sub_t0.6

air_t1

wl_min0.4

wl_max0.7

wl_c0.55

wl_n151

wl_range0.4,0.402,0.40...

size_z1.9

Constant

c

pi

inf

Medium

Vacuum

SiO2

TiO2

Si3N4

Edit VariableHelp

* name

size_z

* type

expression

Supported operators: +, -, *, /, ** (power)

* value

sub_t+si3n4_t+tio2_t+sio2_t+air_t

Output: 1.9

description

Total simulation size in the z-direction (um).

Apply

chart2D ChartTask Details

Run

3D visualization of a rectangular prism (box) in a 3D coordinate system. The box is light gray and has black outlines. The coordinate system has red, green, and blue axes labeled X, Y, and Z respectively. The box is positioned in the first octant, with its bottom-left-front corner at the origin. The box's dimensions are defined by the 'size_z' parameter, which is currently set to 1.9. The box is oriented such that its edges are parallel to the axes.

X

Y

Z

+

-

?

Why it doesn't RUN? 1 validation error for Simulation

Detail

Visibility

Axes

Ruler

Simulation Domain

Simulation Parameter K

STUDIES +
FDTD draft

Editor

CONFIGURATION +
Simulation Domain
Run Time
Grid Specification
Boundary and Symmetry
Shutoff Condition
Show More

STRUCTURES +

SOURCES +

MONITORS +

SCRIPT OBJECTS +

3D Chart 2D Chart Task Details

Run

Why it doesn't RUN? 1 validation error for Simulation

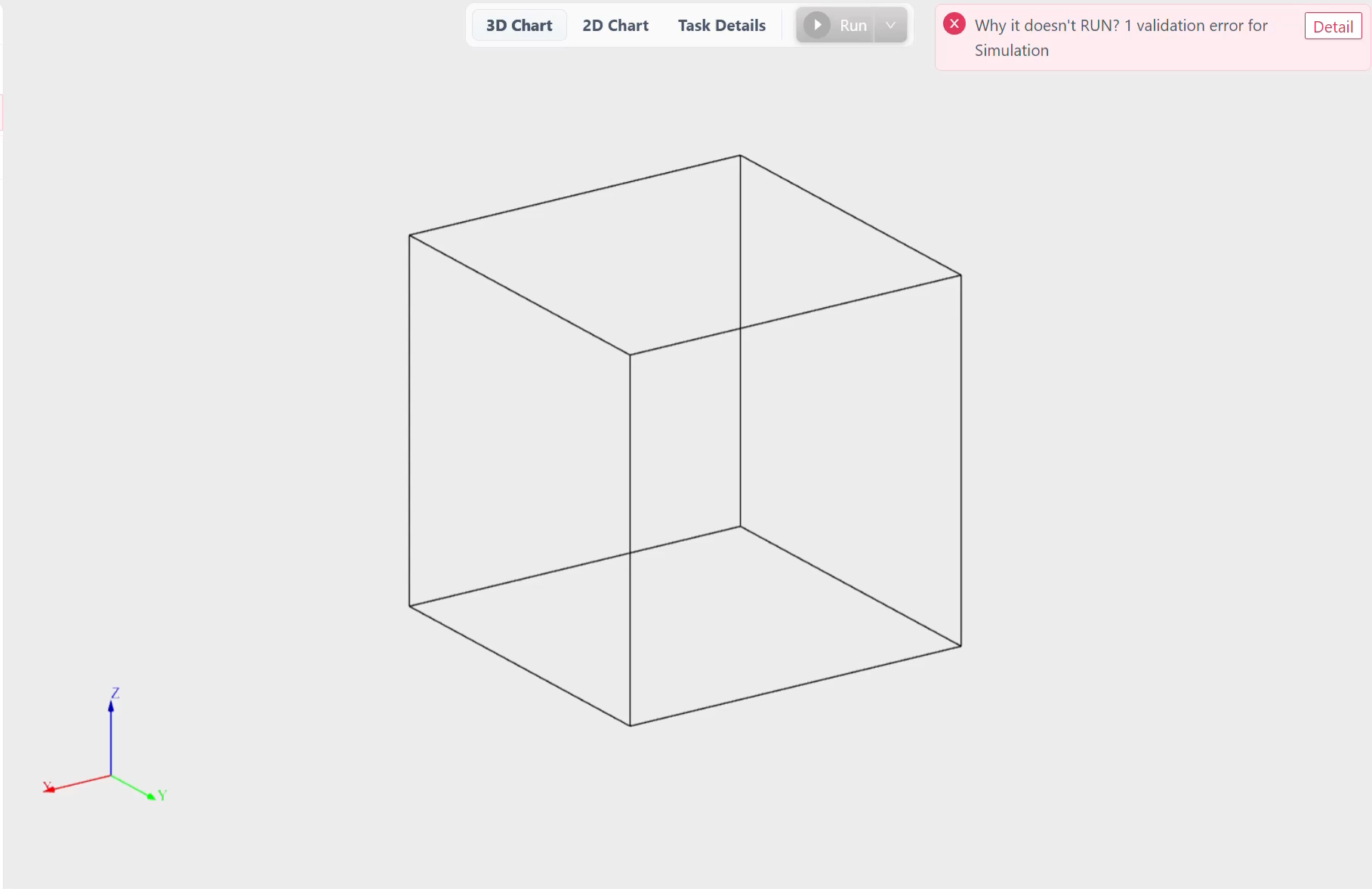
Detail

Visibility

Axes

Ruler

Simulation Domain



+

-

?



Simulation Parameter K

STUDIES

FDTD draft

Editor

CONFIGURATION

Simulation Domain

Run Time

Grid Specification

Boundary and Symmetry

Shutoff Condition

Show More

STRUCTURES

SOURCES

MONITORS

SCRIPT OBJECTS

3D Chart 2D Chart Task Details

Run

1 validation warning for Simulation

Detail

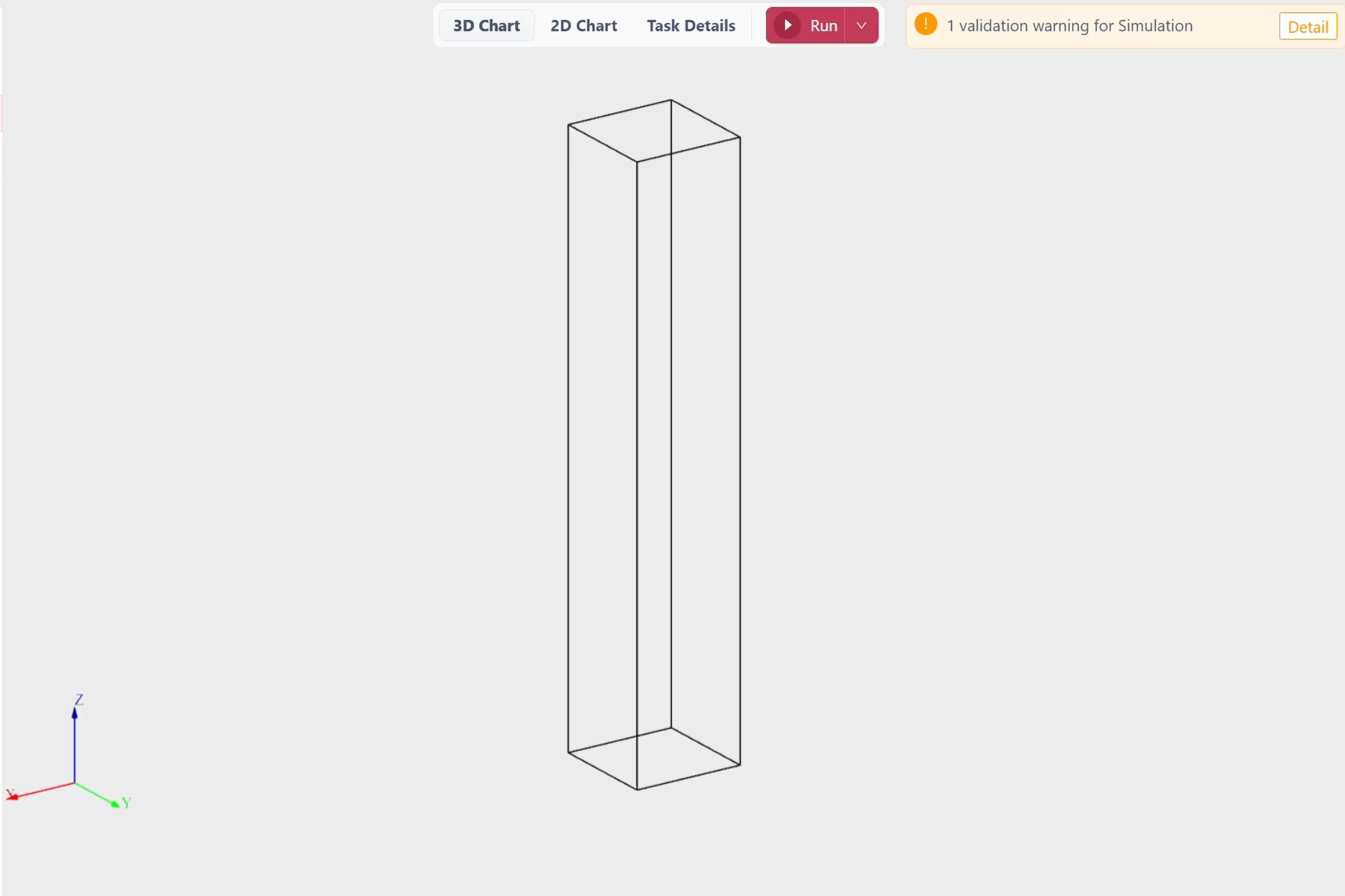
Visibility

Symmetry

Axes

Ruler

Simulation Domain



+

-

?



Simulation

Parameter

⌵

STUDIES

+

FDTD

draft

Editor

CONFIGURATION

+

Simulation Domain

Run Time

Grid Specification

Boundary and Symmetry

Shutoff Condition

Show More

STRUCTURES

+

substrate

si3n4

tio2

sio2

SOURCES

+

plane_wave

MONITORS

+

SCRIPT OBJECTS

+

Edit Source

?

Help

⌵

✕

☒ center + size

☐ bounds

center

* size

X

0

μm

X

Infinity

fx

μm

Y

0

μm

Y

Infinity

fx

μm

Z

0.675

fx

μm

Z

0

μm

* direction

-

⌵

angle_theta

?

0

degree

angle_phi

?

0

degree

pol_angle

?

0

degree

* source_time

Plot

>

GaussianPulse

⌵

☒ wavelength

☐ frequency

λmin

0.4

fx

μm

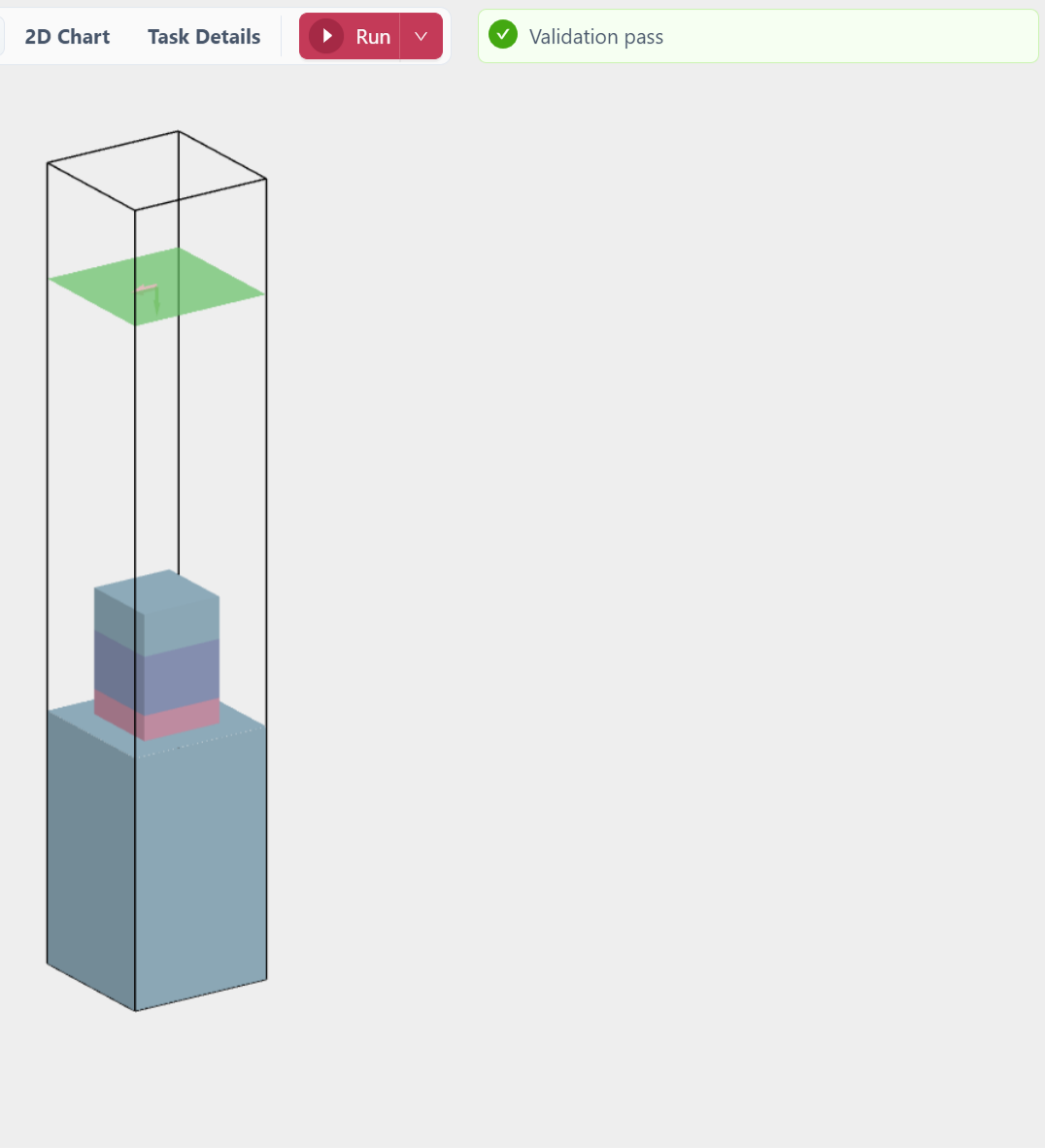
λmax

0.7

fx

μm

Apply



Visibility

Symmetry

Axes

Ruler

Simulation Domain

> Sources(1/1)


Structures(4/4)

substrate

si3n4

tio2

sio2



SimulationParameterIK

STUDIES

FDTDdraft

Editor

CONFIGURATION

Simulation Domain

Run Time

Grid Specification

Boundary and Symmetry

Shutoff Condition

Show More

STRUCTURES

substrate

si3n4

tio2

sio2

SOURCES

plane_wave

MONITORS

reflectance

SCRIPT OBJECTS

Edit MonitorHelp

* name

reflectance

* type

FluxMonitor

center + size

bounds

center

X0μm

XInfinityfxμm

Y0μm

YInfinityfxμm

Z0.8125fxμm

Z0μm

wavelengths

frequencies

unit: μm

Enter range

Custom

wl_range

number of points: 151

0.4,0.402,0.404,0.406,0.408,0.41,0.412,0.414,0.416,0.418,0.42,0.422,0.424,0.426,0.428,0.43,0.432,0.434,0.436,0.438,0.44,0.4...

Advanced

Apply

2D ChartTask Details

Run

Validation pass

Visibility

Symmetry

Axes

Ruler

Simulation Domain

Sources1/1

Monitors1/1

Structures4/4

substrate

si3n4

tio2

sio2

Simulation

Parameter

⏪

STUDIES

+

FDTD

success

Editor

CONFIGURATION

Simulation Domain

Run Time

Grid Specification

Boundary and Symmetry

Shutoff Condition

Show More

STRUCTURES

substrate

si3n4

tio2

sio2

SOURCES

plane_wave

MONITORS

reflectance

SCRIPT OBJECTS

3D Chart

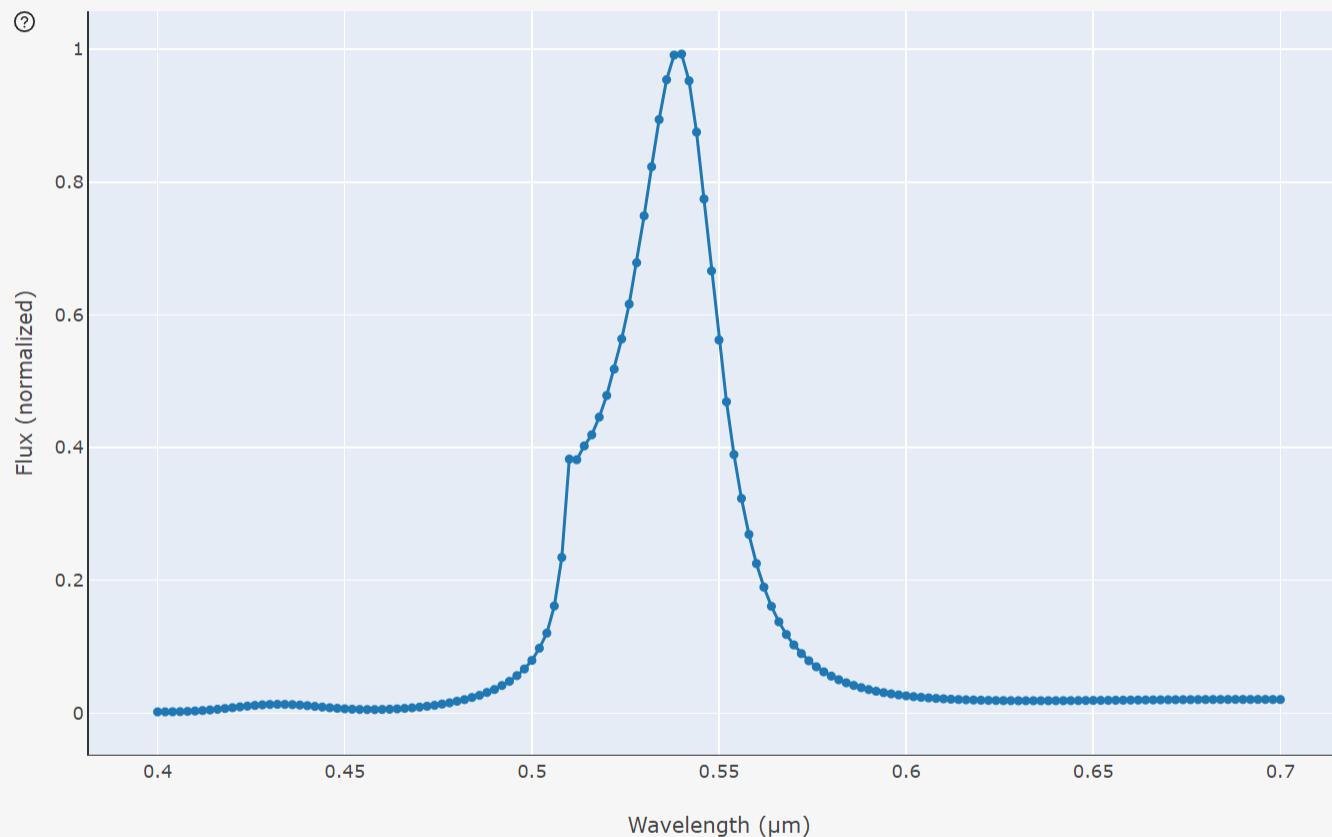
2D Chart

Post-Run Result

Task Details

Beta

Edit



Wavelength

Download Data

Result

Advanced

Beta

Monitor Name

reflectance

Type: FluxMonitor

Operation

Select operation



Simulation

Parameter

⌵

⌵

STUDIES

+

FTD

success

Editor

⌵

CONFIGURATION

⌵

Simulation Domain

⌵

Run Time

⌵

Grid Specification

⌵

Boundary and Symmetry

⌵

Shutoff Condition

⌵

Show More

⌵

⌵

STRUCTURES

⌵

substrate

⌵

si3n4

⌵

tio2

⌵

sio2

⌵

SOURCES

⌵

plane_wave

⌵

MONITORS

⌵

reflectance

⌵

SCRIPT OBJECTS

3D Chart

2D Chart

Post-Run Result

Beta

Task Details

Edit



⌵

+

-

↺

?

⌵ Visibility

⌵ Symmetry

⌵ Axes

⌵ Ruler

⌵ Simulation Domain

> Sources(1/1)

> Monitors(1/1)

⌵ Structures(4/4)

⌵ substrate

⌵ si3n4

⌵ tio2

⌵ sio2

