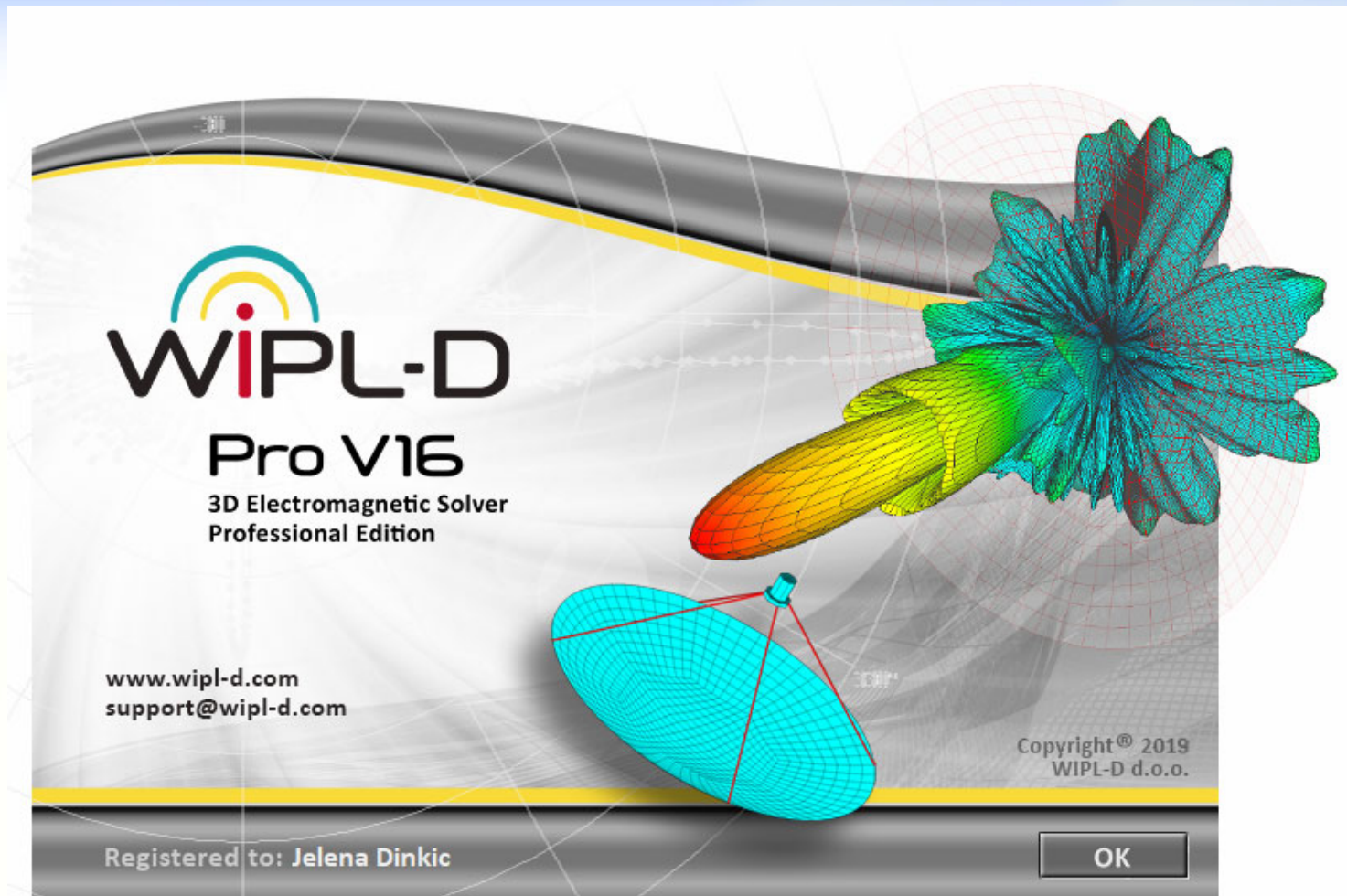
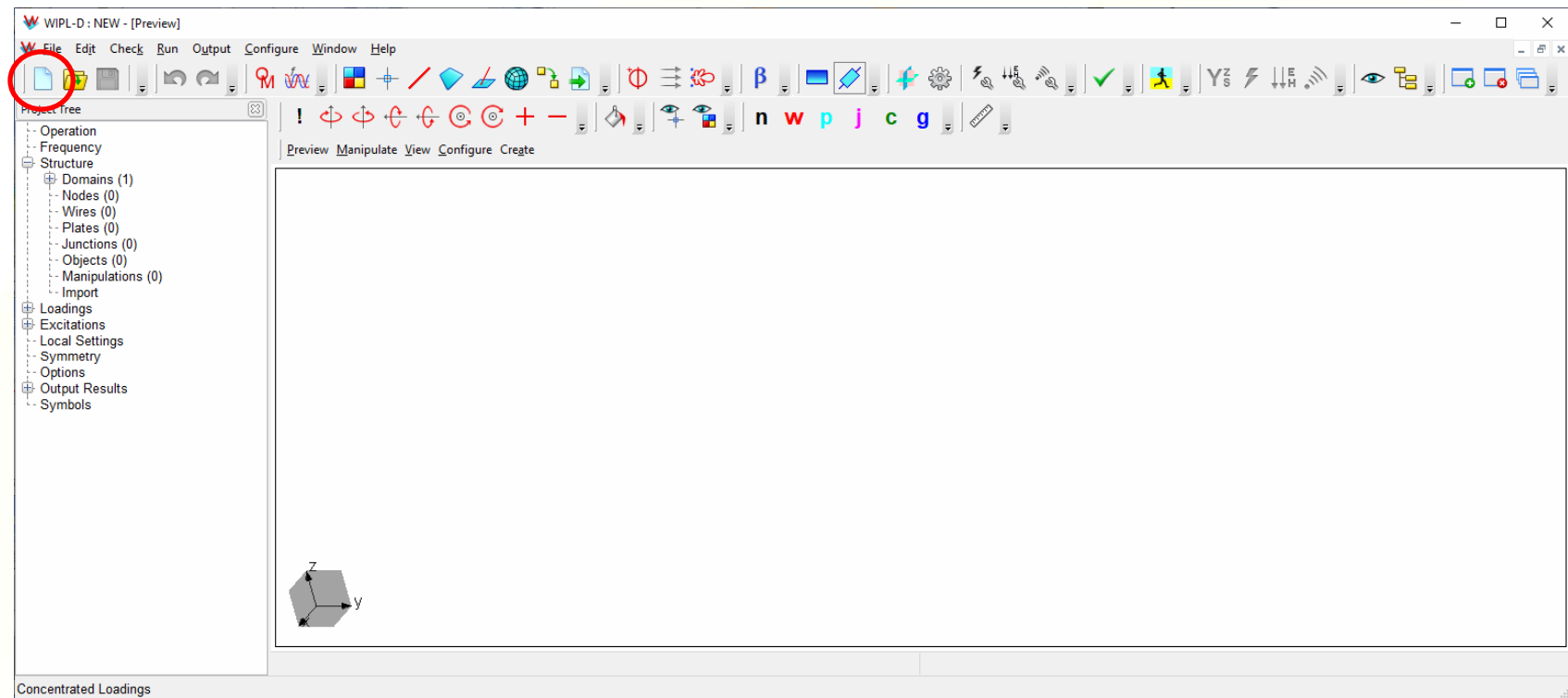


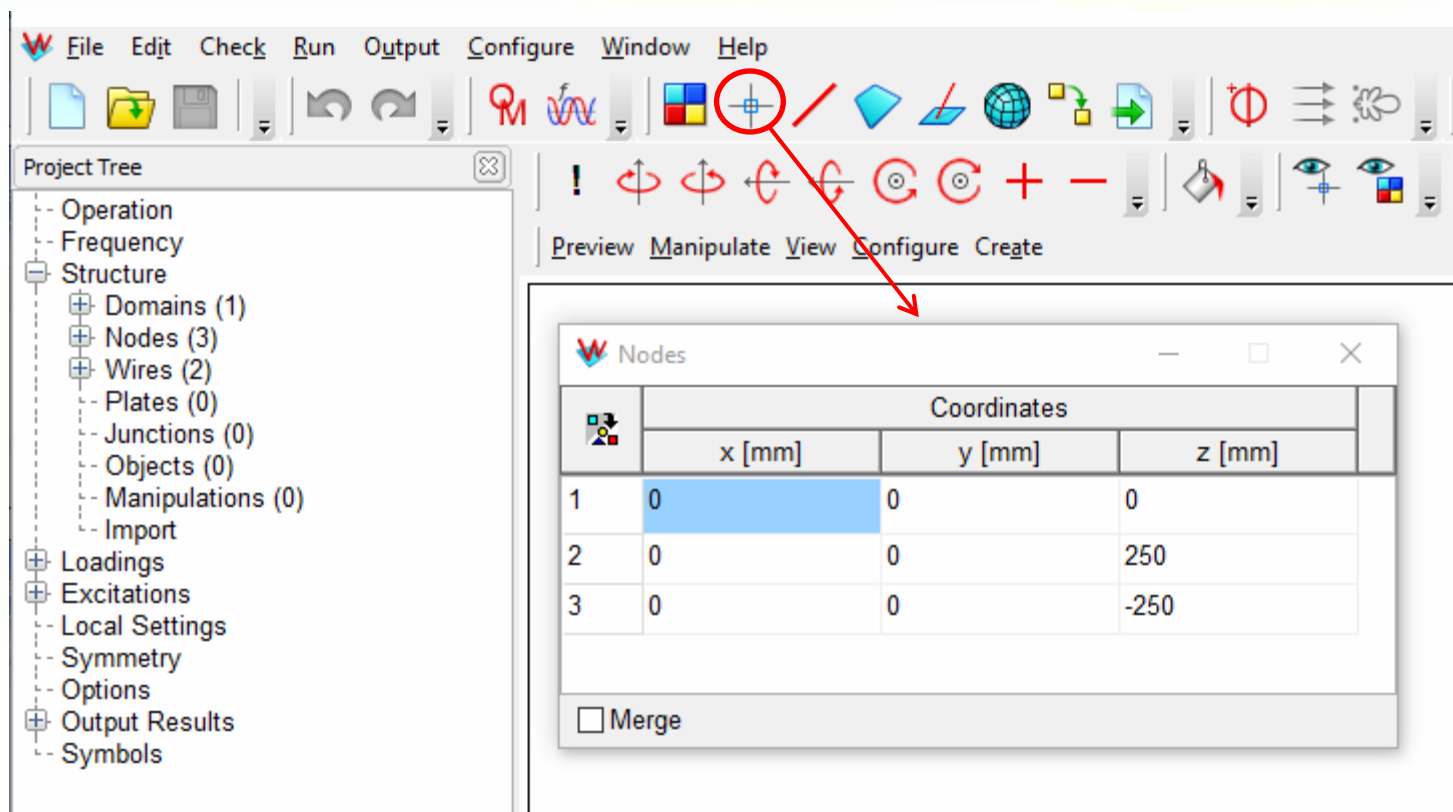
WIPL-D



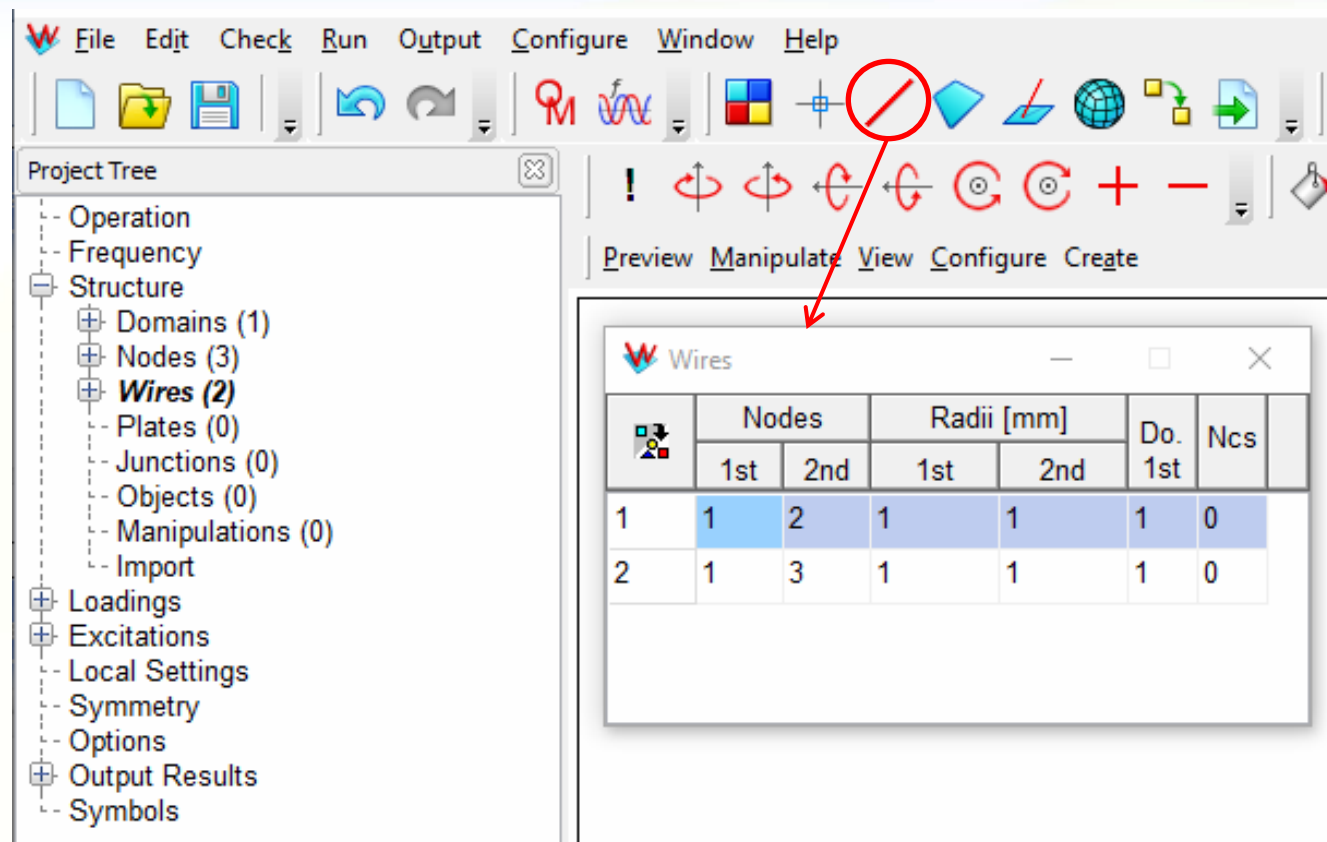
Нова ЕМ компонента: симетрични дипол



Геометрија: чворови



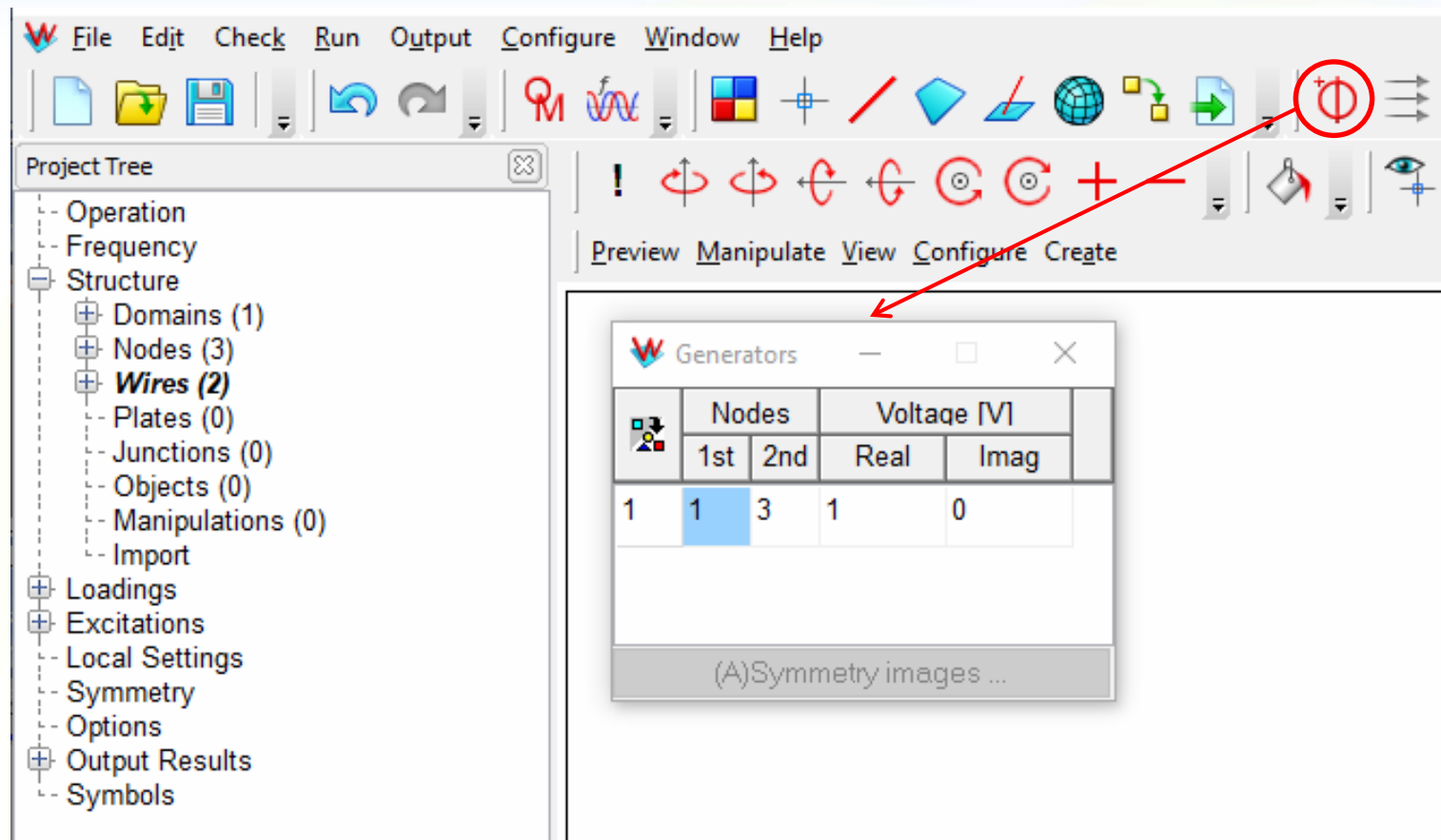
Геометрија: жице



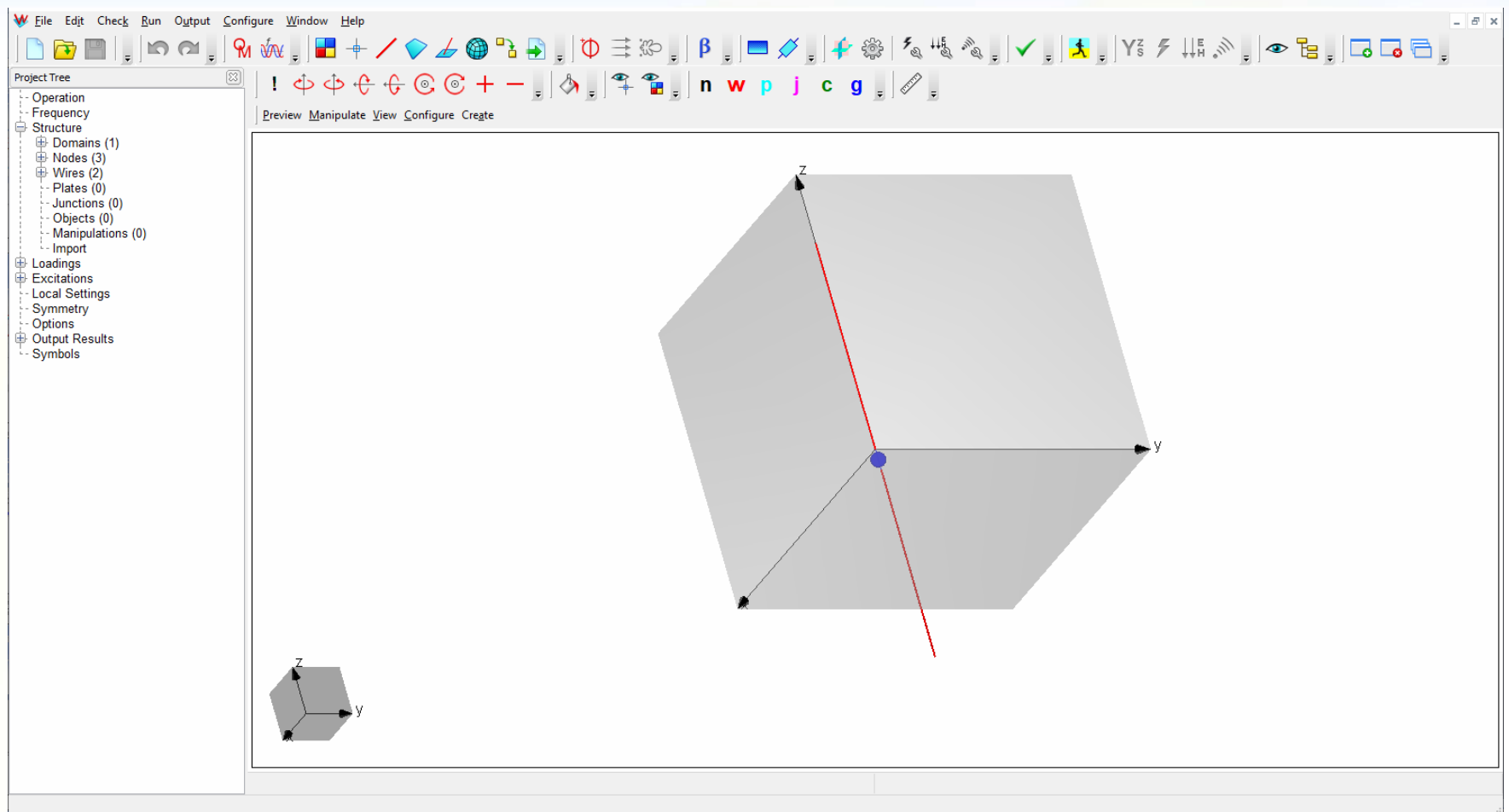
The screenshot displays a software interface with a menu bar (File, Edit, Check, Run, Output, Configure, Window, Help) and a toolbar. The 'Project Tree' on the left lists various components, including 'Wires (2)'. The 'Wires' dialog box is open, showing a table with two rows of data. A red circle and arrow highlight the 'Wires' icon in the toolbar.

	Nodes		Radii [mm]		Do. 1st	Ncs
	1st	2nd	1st	2nd		
1	1	2	1	1	1	0
2	1	3	1	1	1	0

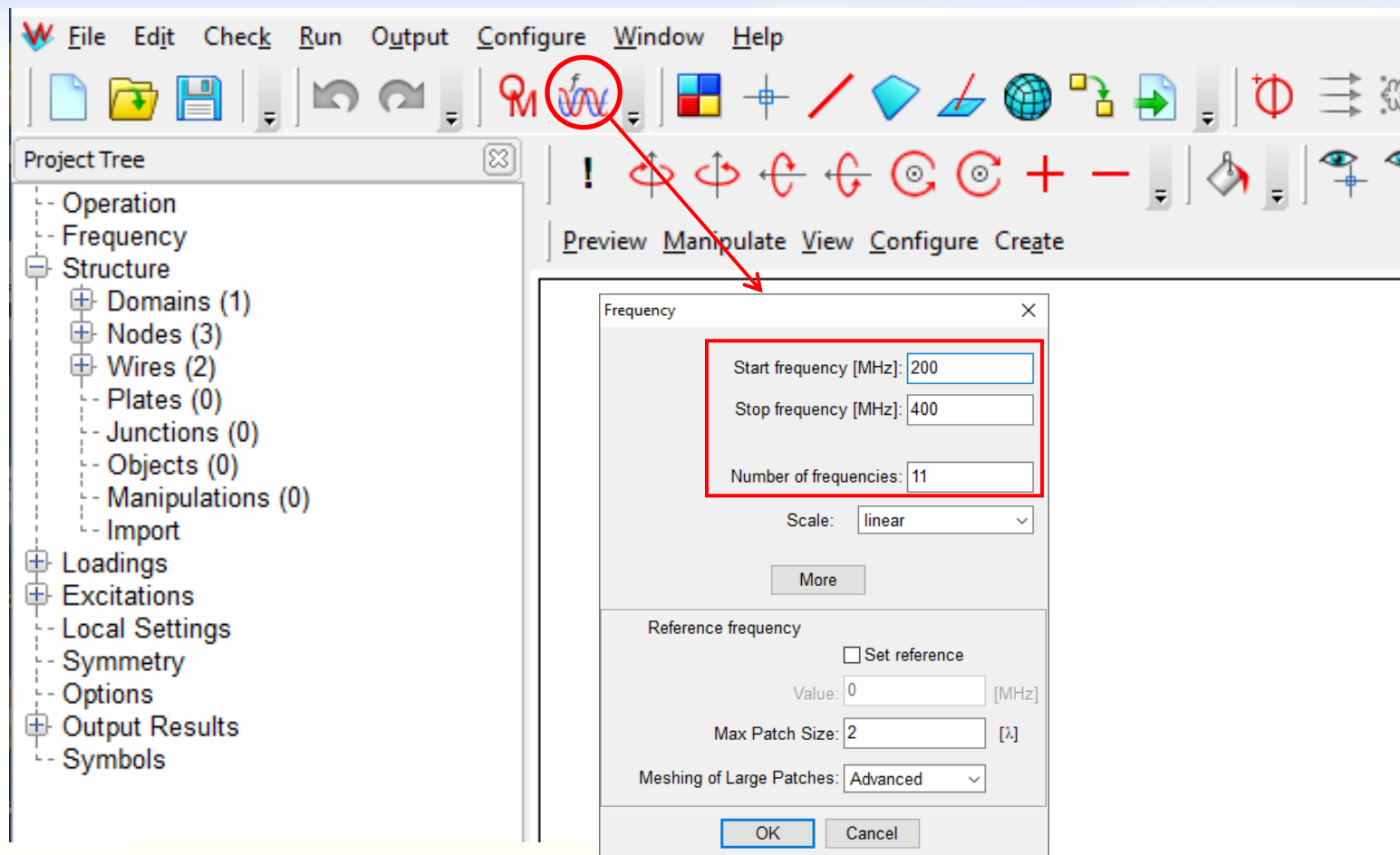
Генератор



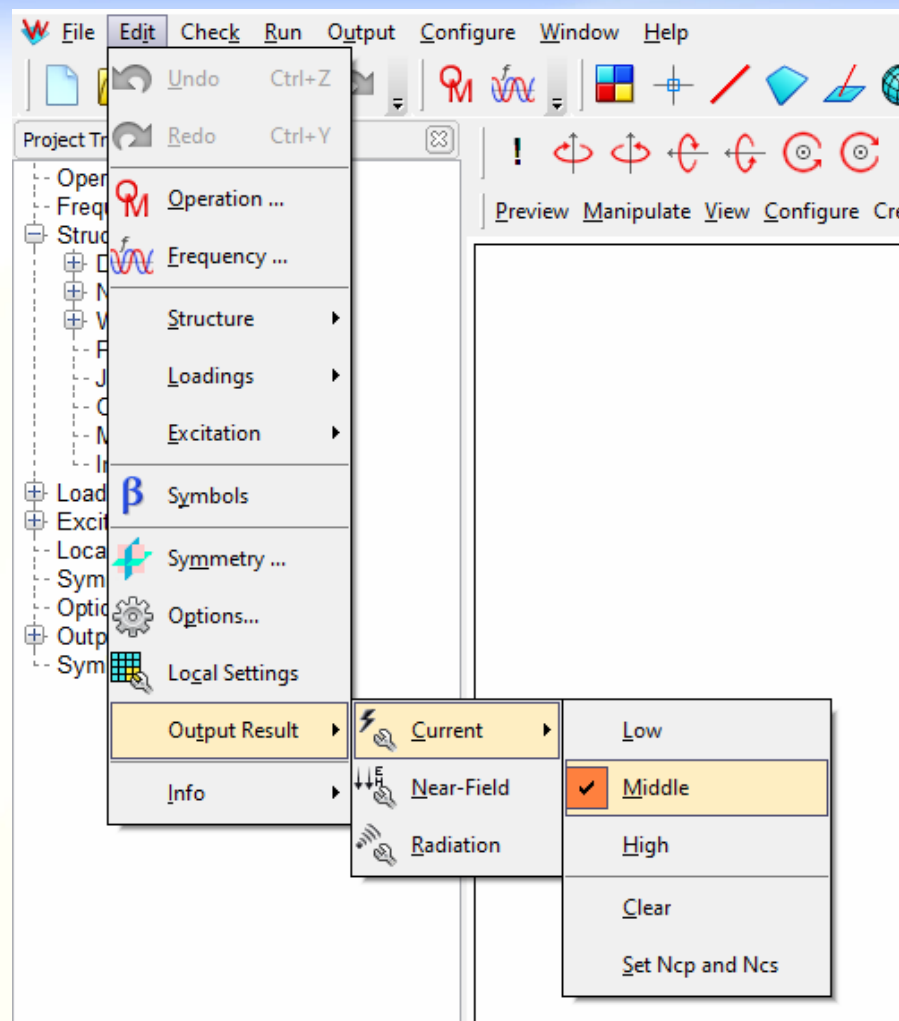
3D Структура



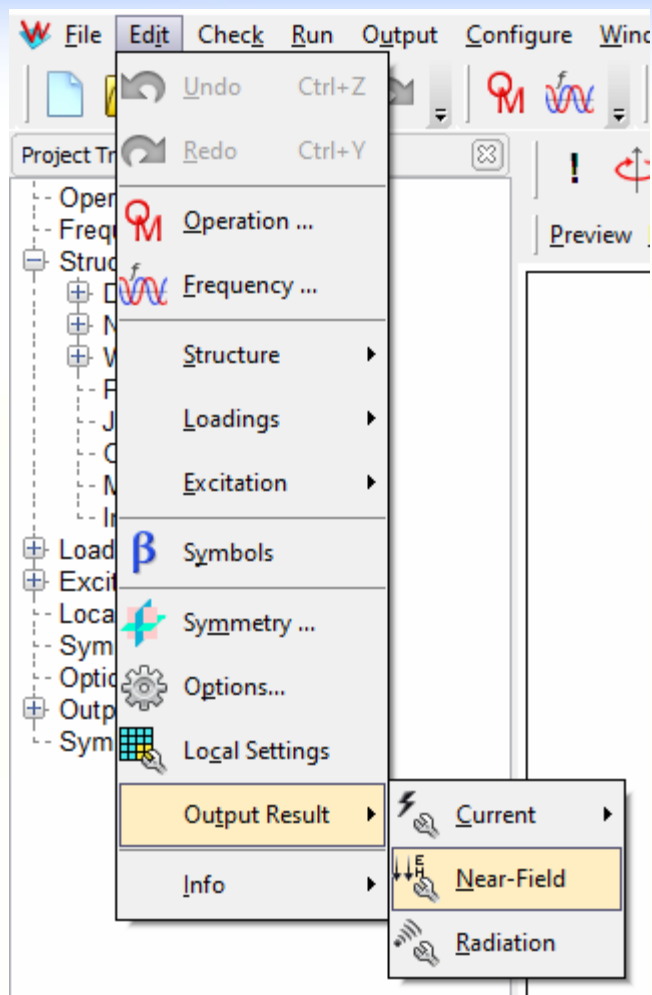
Учестаности на којима се врши симулација



Задавање величина које се рачунају: струје



Задавање величина које се рачунају: блиско поље



Near-Field

Number of X-coordinates: 10

Start X-coordinate [mm]: -1000

Stop X-coordinate [mm]: 1000

Number of Y-coordinates: 10

Start Y-coordinate [mm]: -1000

Stop Y-coordinate [mm]: 1000

Number of Z-coordinates: 1

Start Z-coordinate [mm]: 0

Stop Z-coordinate [mm]: 0

Domain: ALL

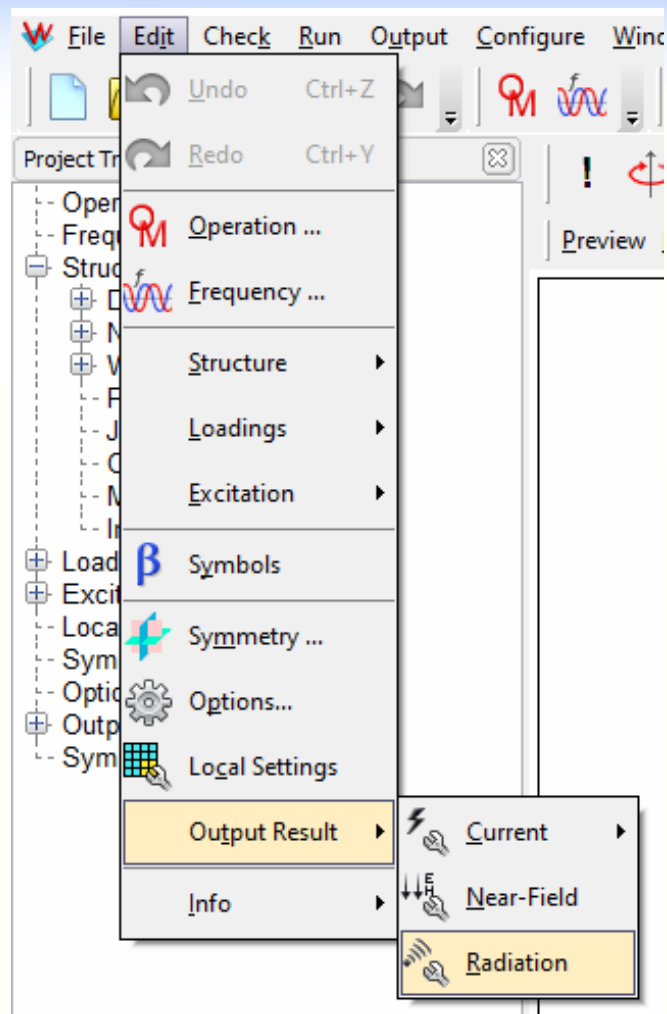
Calculation Method: Regular

SAR: ☐

☒ Calculate NF

OK Cancel

Задавање величина које се рачунају: поље у зони зрачења



Radiation Pattern [X]

Directions

Number of directions: 72

Start direction: 0

Stop direction: 360

θ

Number of directions: 36

Start direction: -90

Stop direction: 90

☐ Calculate Additional Radiation Pattern
at Distance: 0 [mm]

☐ Calculate Power Balance

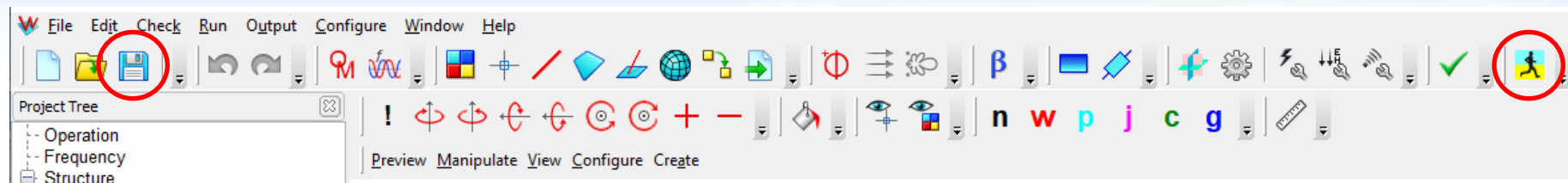
☐ Gain correction

☐ Y,Z,S correction

☒ Calculate RP

OK Cancel

Снимање и симулација



C:\Microwave Pro v5.1.13DEM\WIPLER.EXE

Project: primer_~

.....

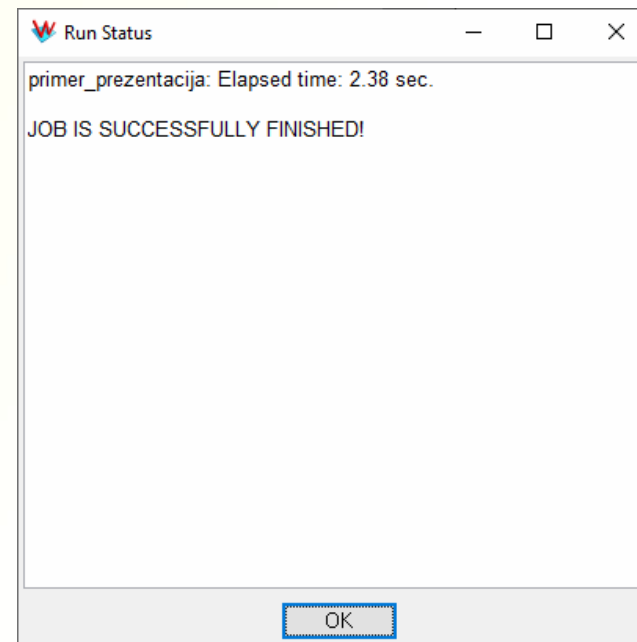
NUMBER OF POINTS	(MAX	250000)	:	3
NUMBER OF ELEMENTS	(MAX	250000)	:	2
NUMBER OF EXCITATIONS	(MAX	200000)	:	1
NUMBER OF UNKNOWNNS	(MAX	100000)	:	3
- electric currents	(MAX	100000)	:	3
- magnetic currents	(MAX	100000)	:	0

.....

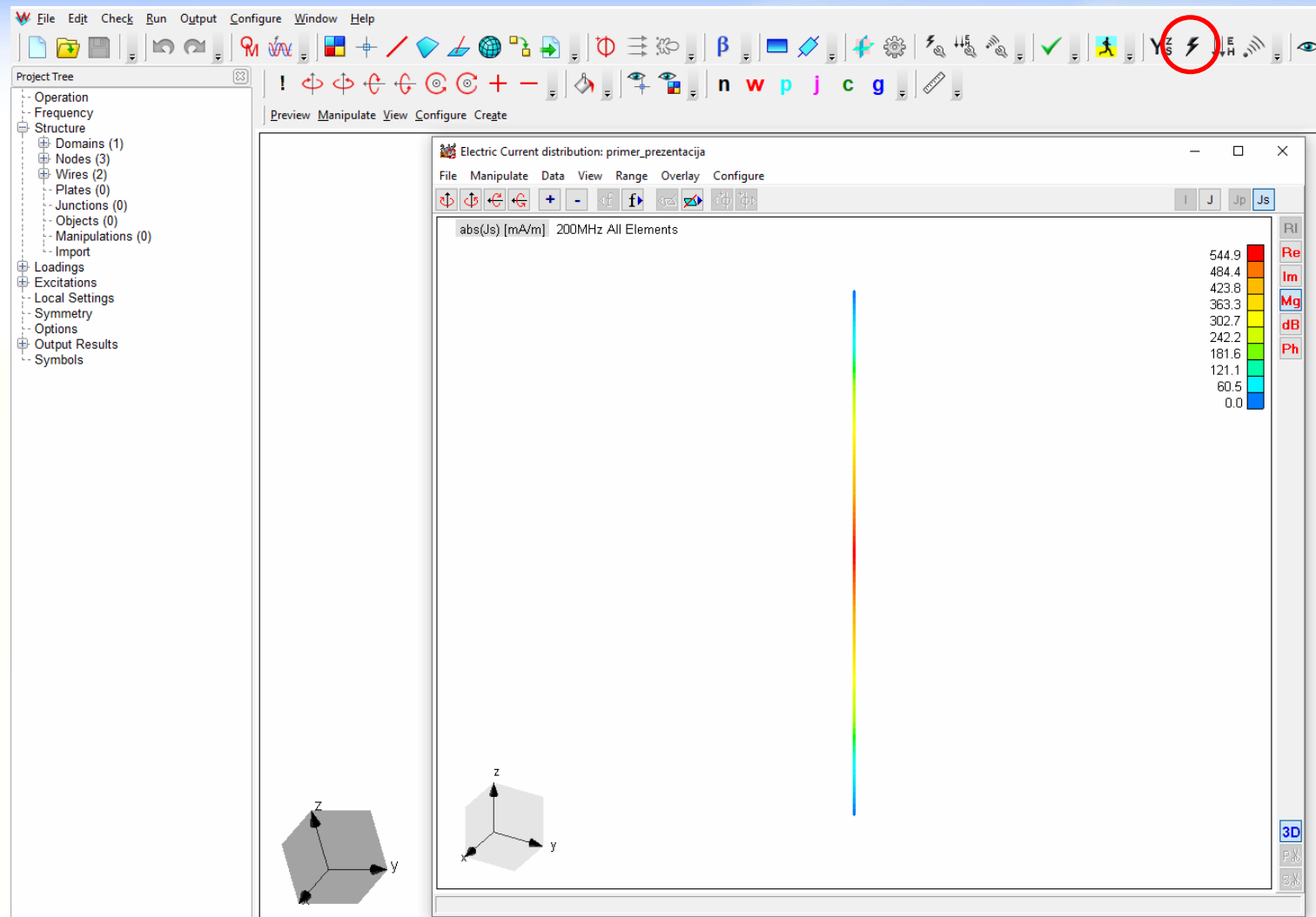
Frequency	Excitation	Test element	Matrix inversion step	Currents over element	Radiation direction	Near Field point
11	1	2	3	2	72 36	10 10 1

.....

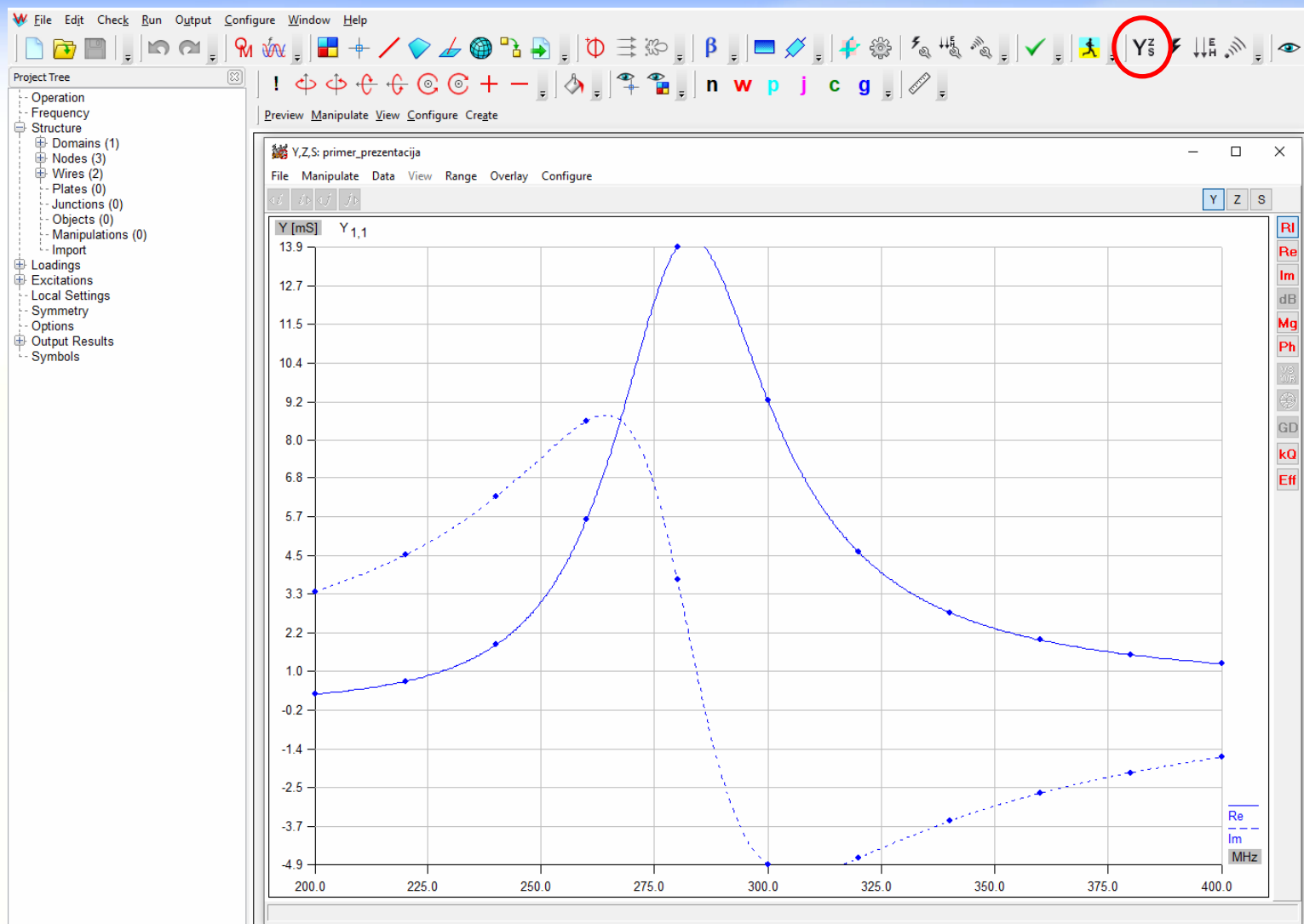
8	1				32 10	
---	---	--	--	--	-------	--



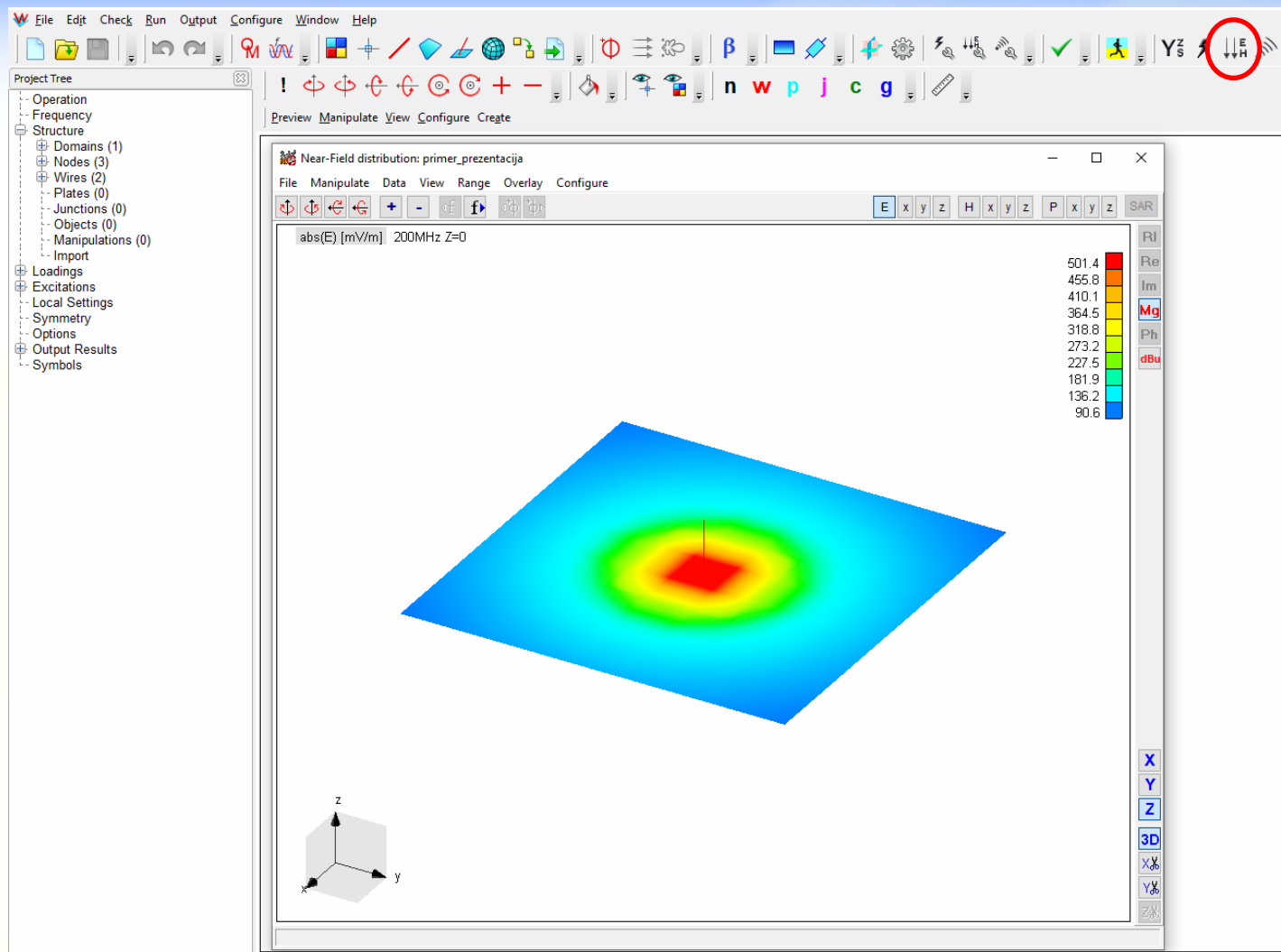
Резултати: расподела струја



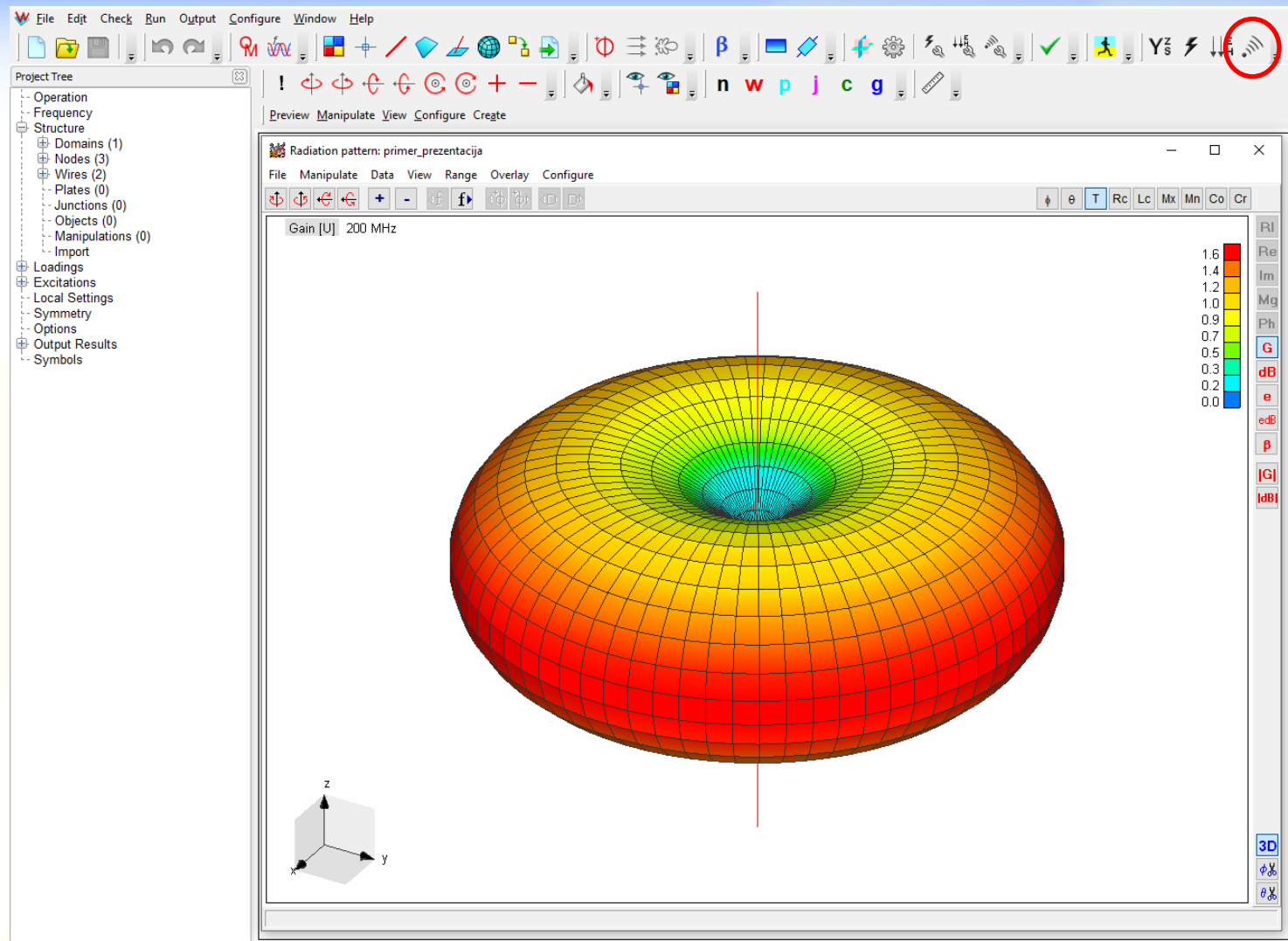
Результати: Y,Z,S-параметри



Резултати: блиско поле



Резултати: дијаграм зрачења



Биконична антена

File Edit Check Run Output Configure Window Help

Project Tree

- Operation
- Frequency
- Structure
 - Domains (1)
 - Nodes (5)
 - Wires (4)
 - Plates (0)
 - Junctions (0)
 - Objects (0)
 - Manipulations (0)
- Import
- Loadings
- Excitations
- Local Settings
- Symmetry
- Options
- Output Results
- Symbols

Preview Manipulate View Configure Create

Nodes

	Coordinates		
	x [mm]	y [mm]	z [mm]
1	0	0	0
2	0	0	250
3	0	0	-250
4	0	0	375
5	0	0	-375

☐ Merge

Wires

	Nodes		Radii [mm]		Do, 1st	Ncs
	1st	2nd	1st	2nd		
1	1	2	1	125	1	6
2	1	3	1	125	1	6
3	4	2	1	125	1	4
4	5	3	1	125	1	4

Frequency

Start frequency [MHz]: 100

Stop frequency [MHz]: 500

Number of frequencies: 32

Scale: linear

More

Reference frequency

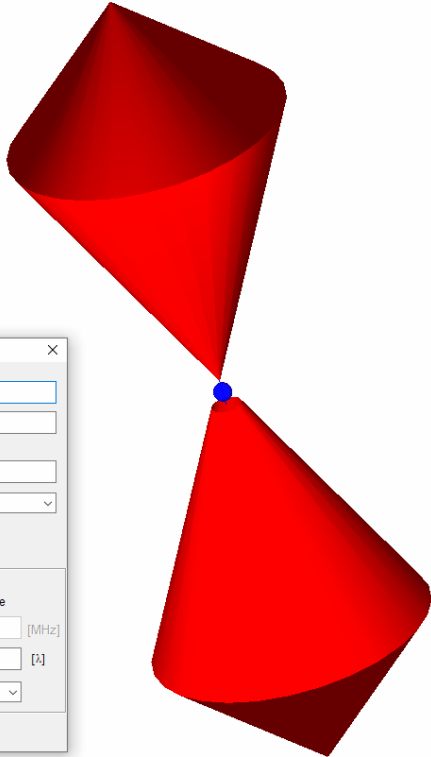
☐ Set reference

Value: 0 [MHz]

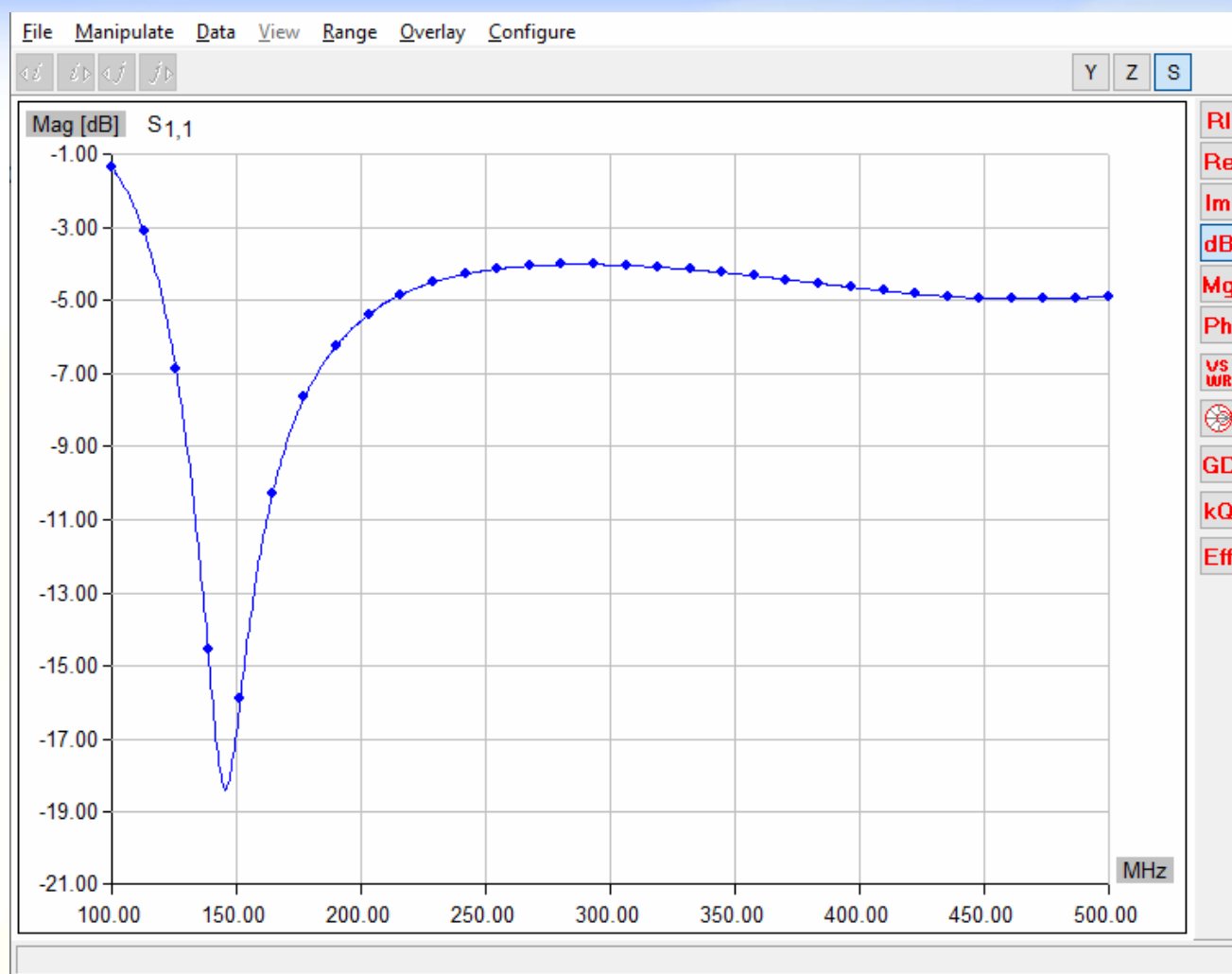
Max Patch Size: 2 [λ]

Meshing of Large Patches: Advanced

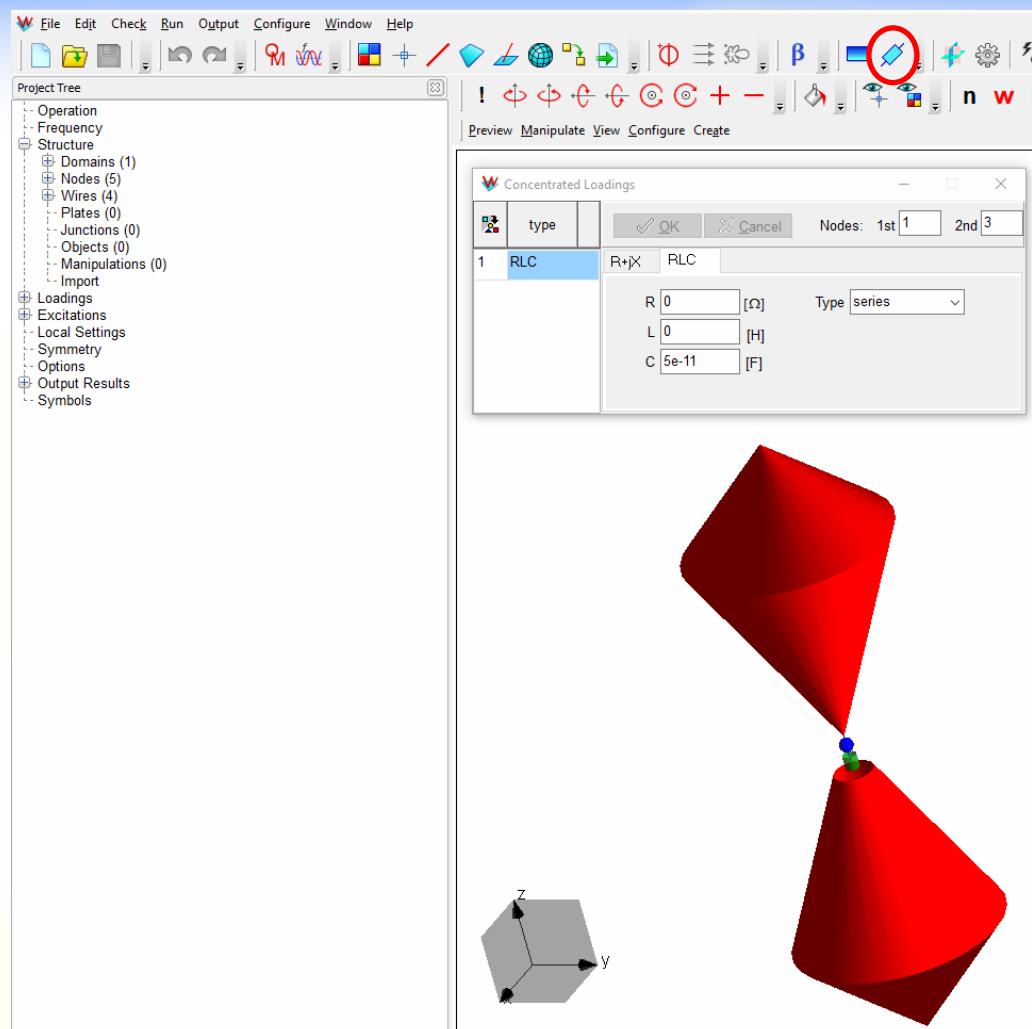
OK Cancel



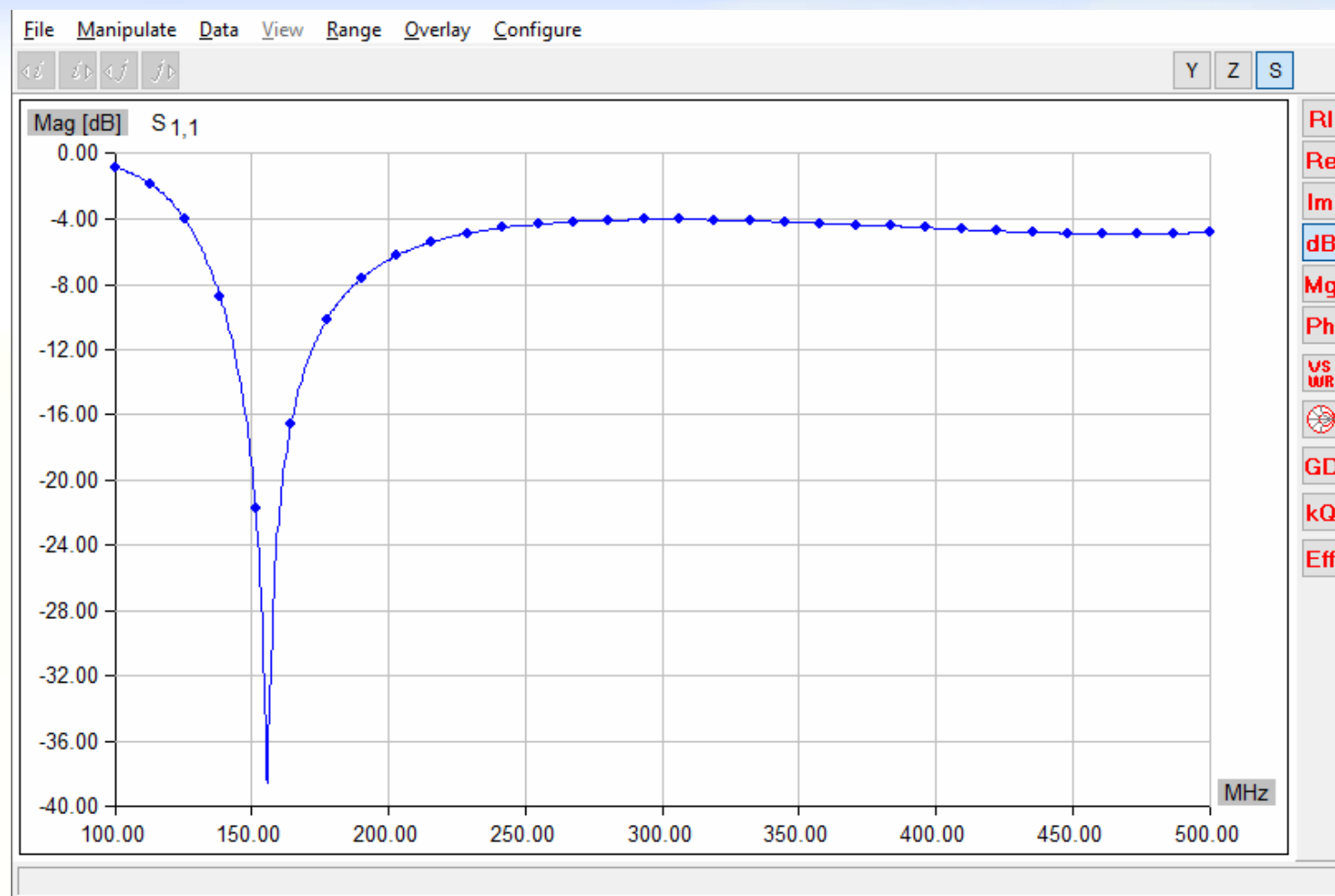
Биконична антена: резултати



Додавање концентрисаних оптерећења



Резултат: боље прилагођење



Трапезасти монопол: чворови, жице и генератор

File Edit Check Run Output Configure Window Help

Project Tree

- Operation
- Frequency
- Structure
 - Domains (1)
 - Nodes (6)
 - Wires (1)
 - Plates (1)
 - p1 (n3,n4,n5,n6)[1,0]
 - Junctions (1)
 - Objects (0)
 - Manipulations (0)
 - Import
- Loadings
- Excitations
- Local Settings
- Symmetry
- Options
- Output Results
- Symbols

Preview Manipulate View Configure Create

Nodes

	Coordinates		
	x [mm]	y [mm]	z [mm]
1	0	0	0
2	0	0	10
3	0	10	10
4	0	-10	10
5	0	62.5	250
6	0	-62.5	250

☐ Merge

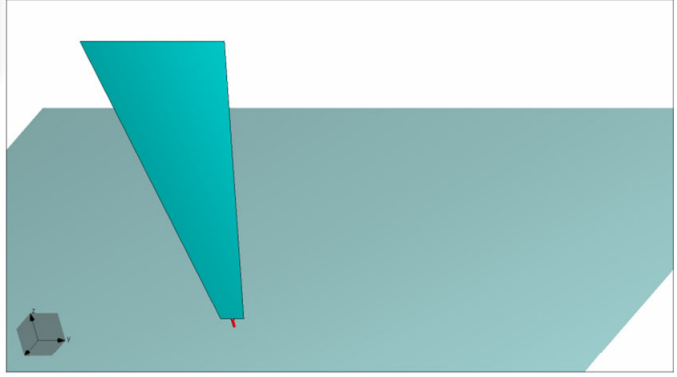
Wires

	Nodes		Radii [mm]		Do. 1st	Ncs
	1st	2nd	1st	2nd		
1	1	2	1	1	1	0

Generators

	Nodes		Voltage [V]	
	1st	2nd	Real	Imag
1	1	2	1	0

(A)Symmetry images ...



Трапезасти монопол: плоча

The Project Tree shows the following structure:

- Operation
- Frequency
- Structure
 - Domains (1)
 - Nodes (6)
 - Wires (1)
 - Plates (1)
 - p1 (n3,n4,n5,n6)[1,0]
 - Junctions (1)
 - Objects (0)
 - Manipulations (0)
 - Import
- Loadings
- Excitations
- Local Settings
- Symmetry
- Options
- Output Results
- Symbols

The 'Plates' window displays the following table:

	Nodes				Domains		Current	
	1st	2nd	3rd	4th	1st	2nd	Ncp	Ncs
1	3	4	5	6	1	0	0	0

Трапезасти монопол: спој жица-плоча

The software interface shows a menu bar with options: File, Edit, Check, Run, Output, Configure, Window, Help. Below the menu bar is a toolbar with icons for file operations, simulation, and visualization. The Project Tree on the left lists the following items:

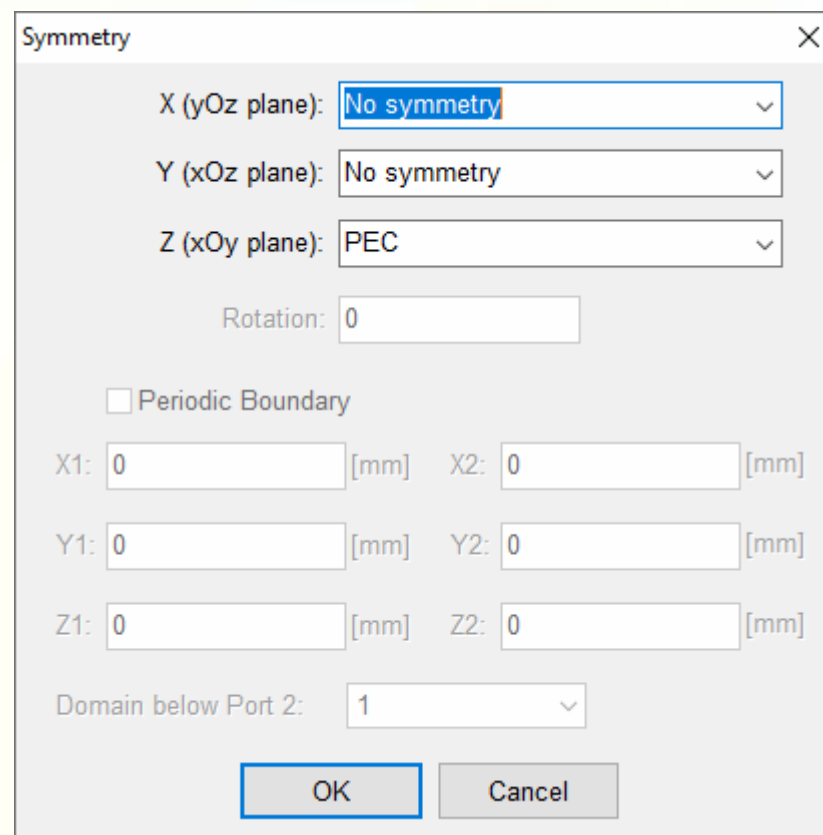
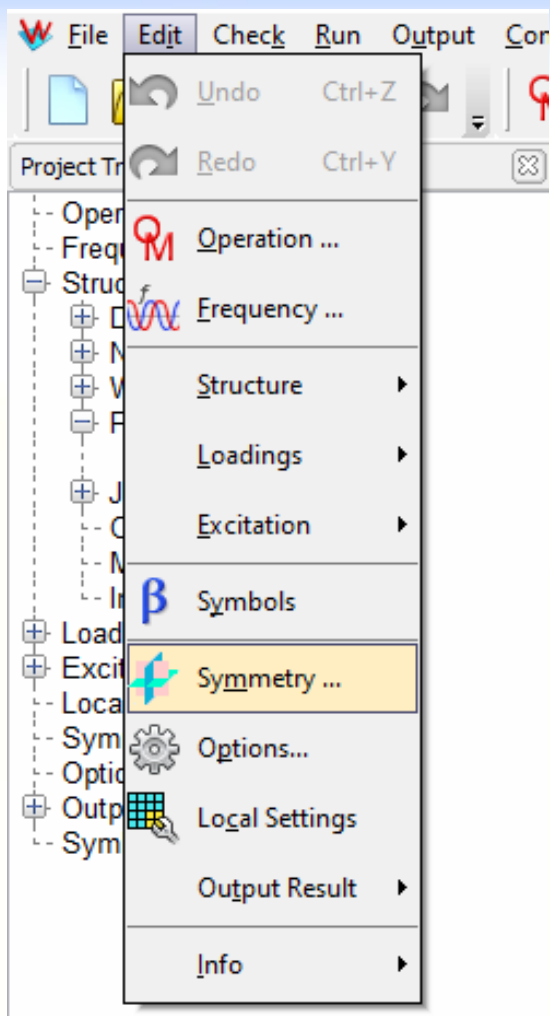
- Operation
- Frequency
- Structure
 - Domains (1)
 - Nodes (6)
 - Wires (1)
 - Plates (1)
 - p1 (n3,n4,n5,n6)[1,0]
 - Junctions (1)
 - Objects (0)
 - Manipulations (0)
 - Import
- Loadings
- Excitations
- Local Settings
- Symmetry
- Options
- Output Results
- Symbols

The Junctions dialog box on the right displays a table with the following data:

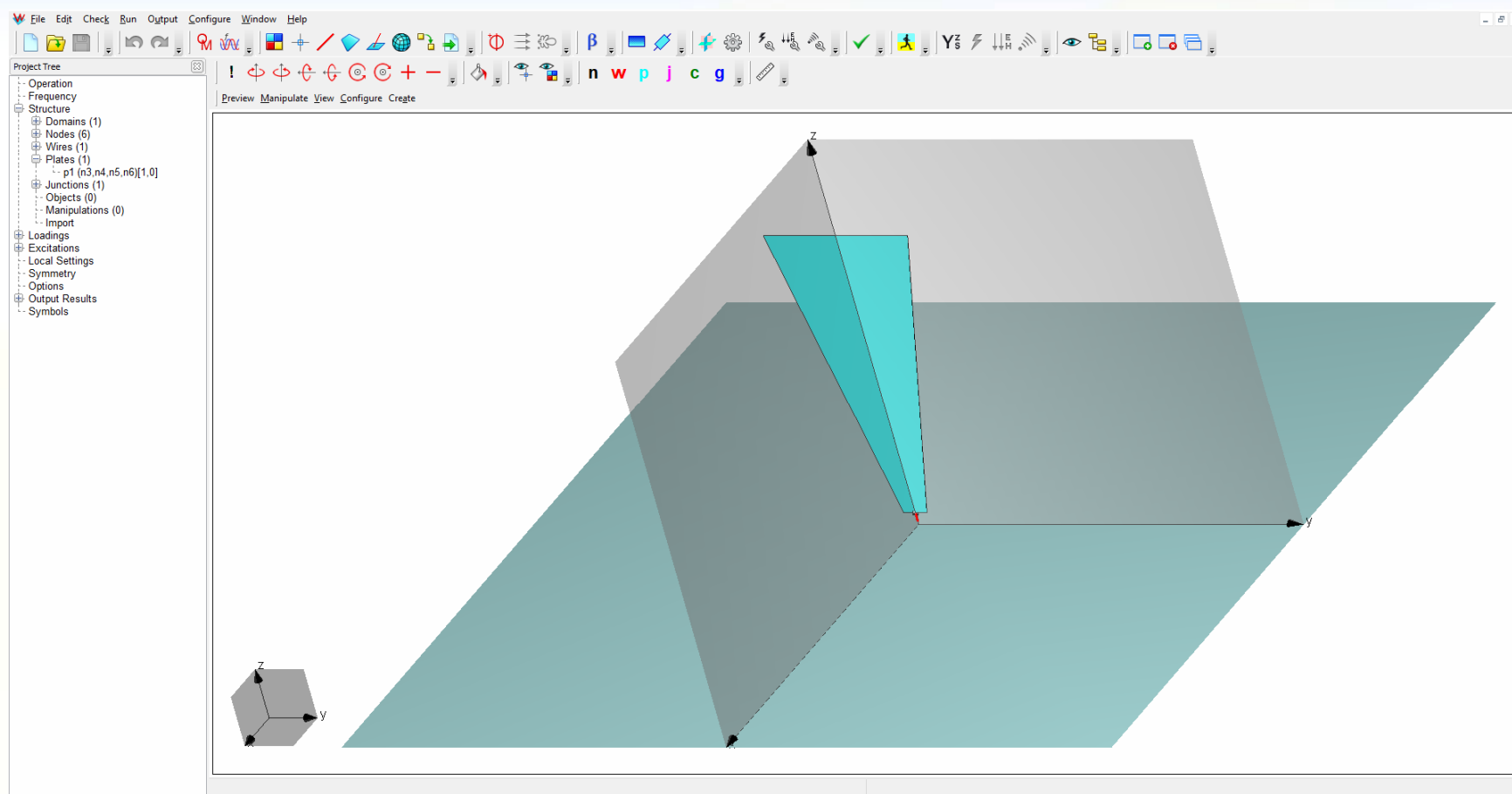
		Nodes											
		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1	2	0	0	0	0	0	0	0	0	0	0	0	0

Below the table, there is a checkbox labeled "Automatic" which is currently unchecked.

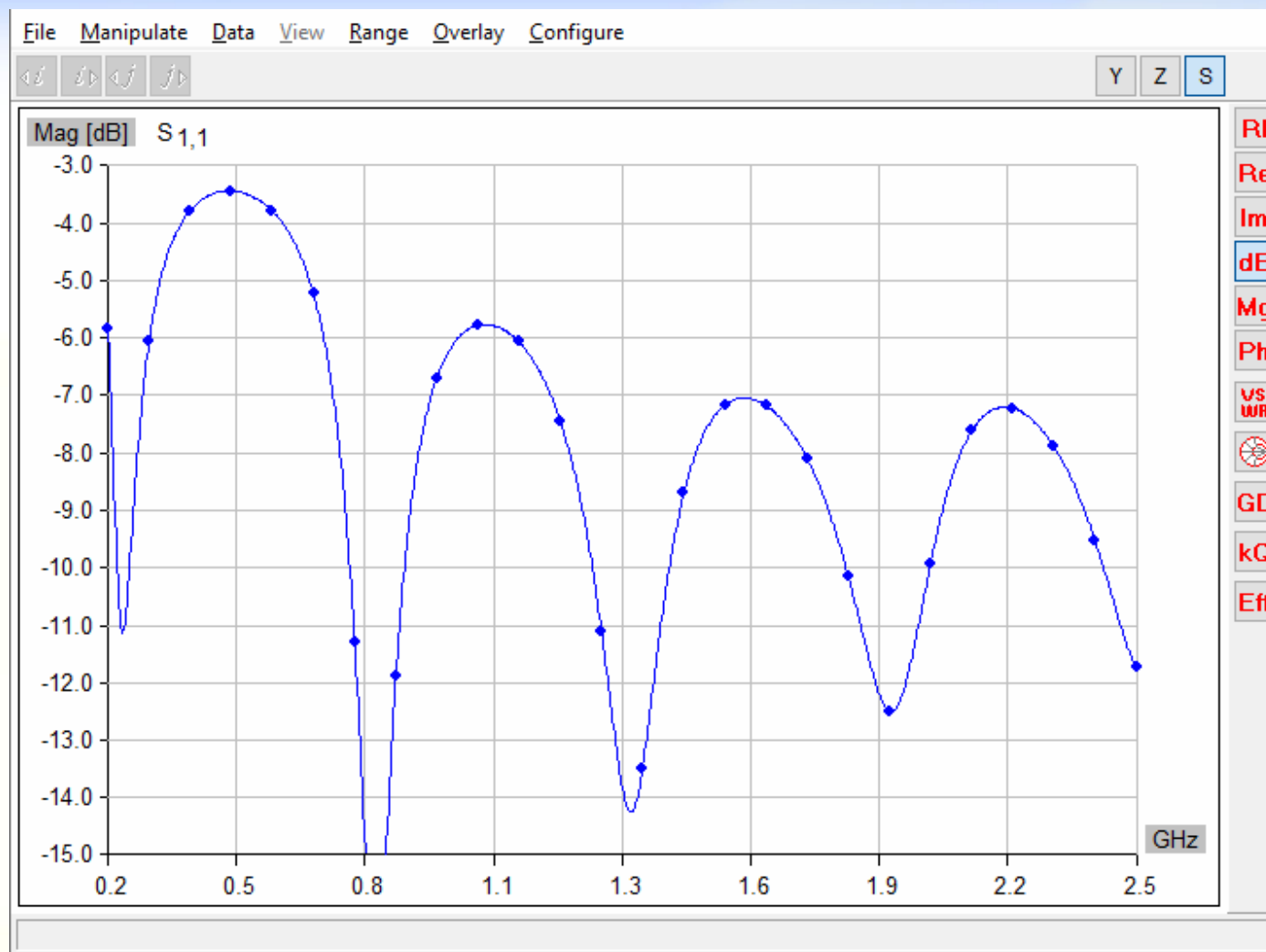
Трапезасти монопол: симетрија



Трапезасти монопол

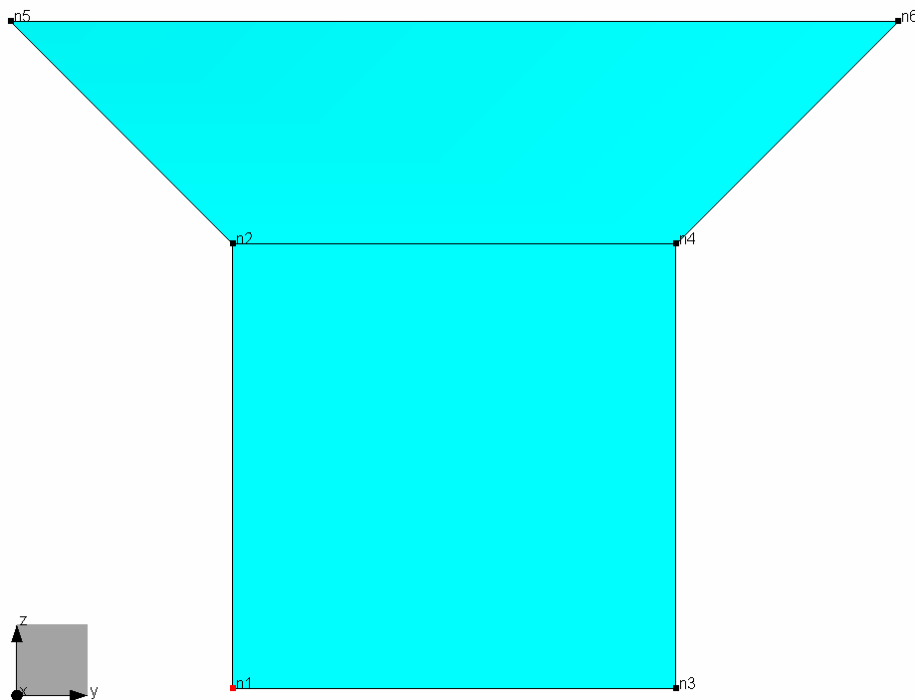


Трапезасти монопол: резултати

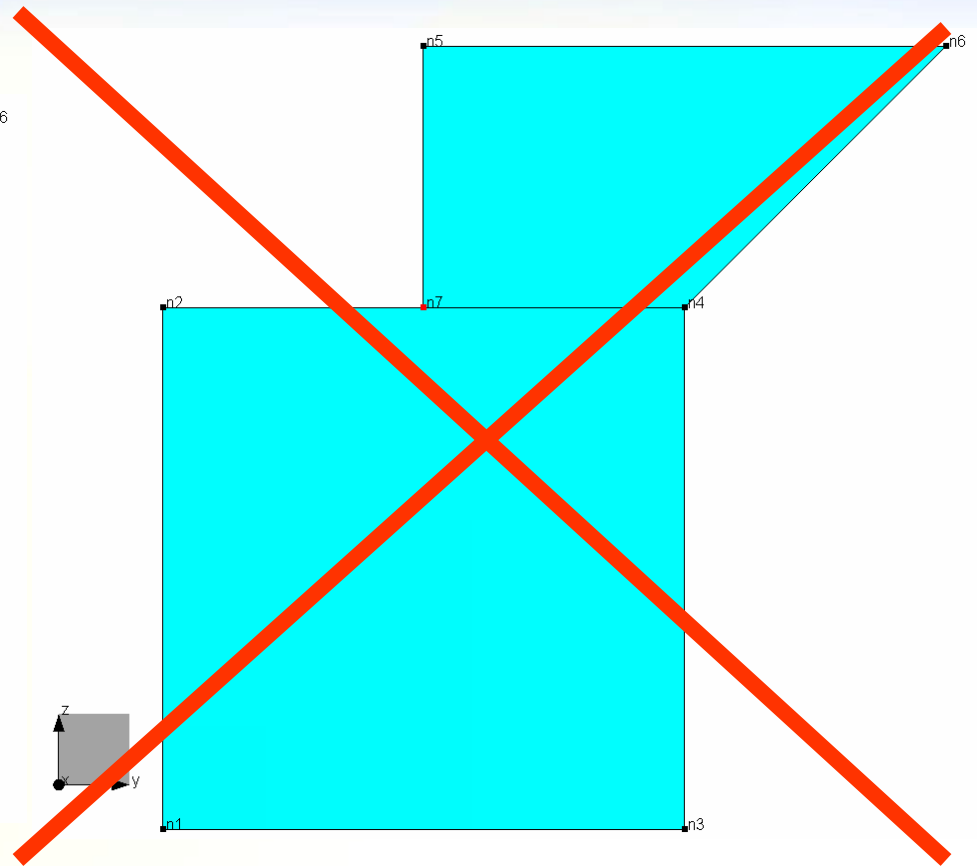


Спој плоча-плоча

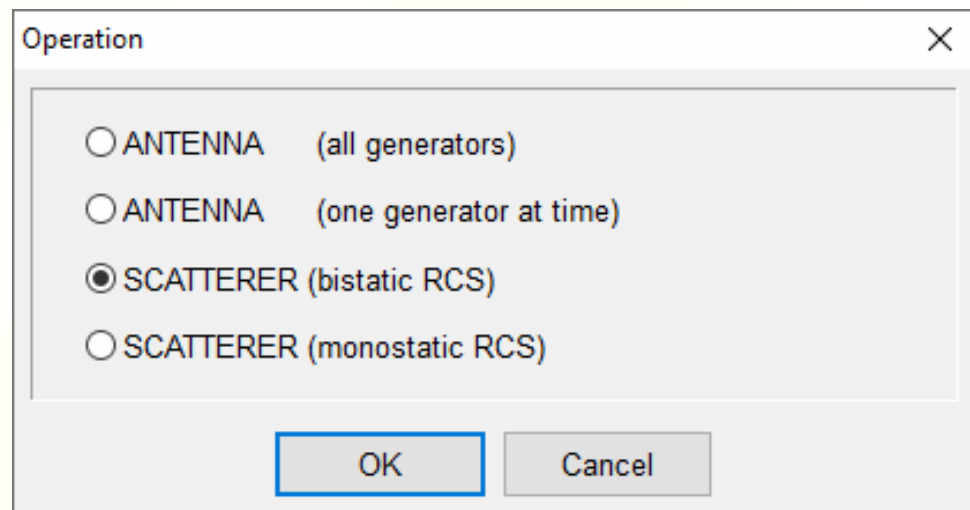
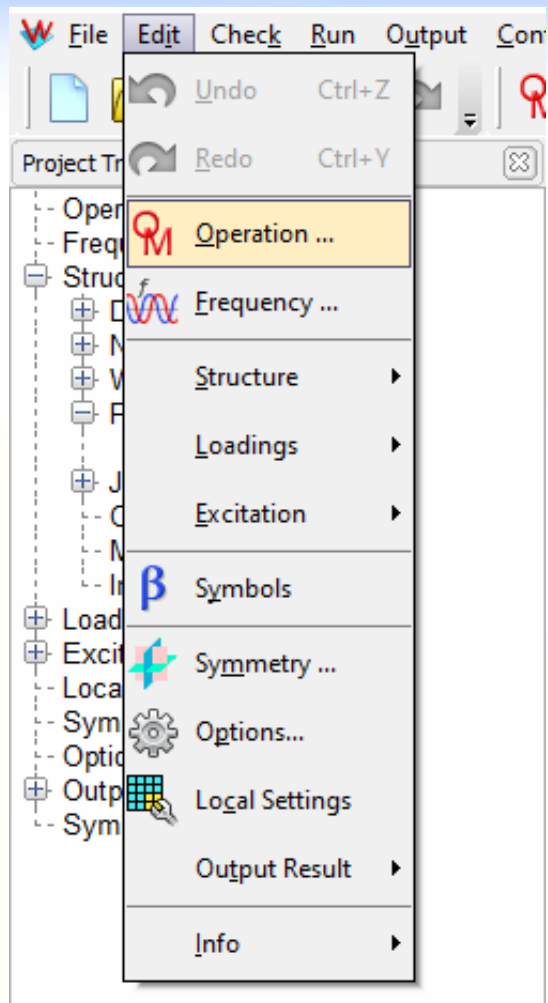
Суседне плоче морају имати заједничку ивицу



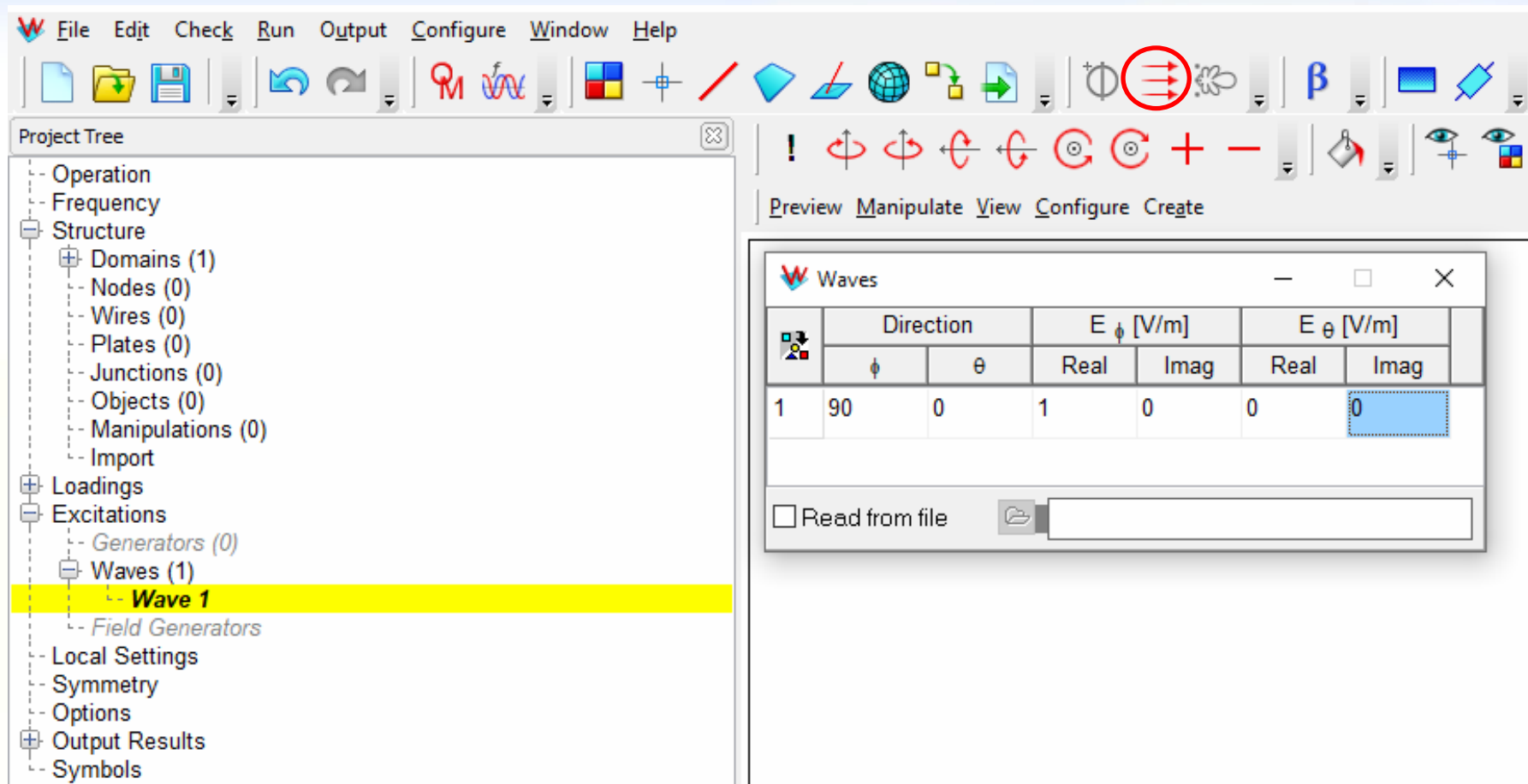
OK



Побуда равним униформним таласом



Задавање параметара таласа



The screenshot displays a software interface for defining wave parameters. The 'Project Tree' on the left shows a hierarchy of objects, with 'Wave 1' selected under 'Excitations'. The 'Waves' dialog box on the right contains a table for defining wave parameters.

Project Tree:

- Operation
- Frequency
- Structure
 - + Domains (1)
 - Nodes (0)
 - Wires (0)
 - Plates (0)
 - Junctions (0)
 - Objects (0)
 - Manipulations (0)
 - Import
- + Loadings
- Excitations
 - Generators (0)
 - + Waves (1)
 - Wave 1**
 - Field Generators
- Local Settings
- Symmetry
- Options
- + Output Results
- Symbols

Waves Dialog Box:

	Direction		E_ϕ [V/m]		E_θ [V/m]	
	ϕ	θ	Real	Imag	Real	Imag
1	90	0	1	0	0	0

☐ Read from file