

ShapeMaster Daily 2023-03-22

SYRyu(auros)

March 23, 2023

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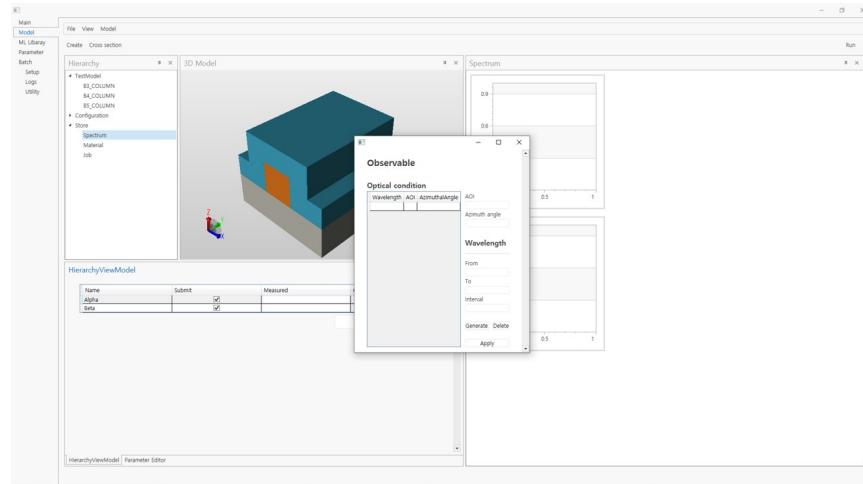
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1 Summary Fix History

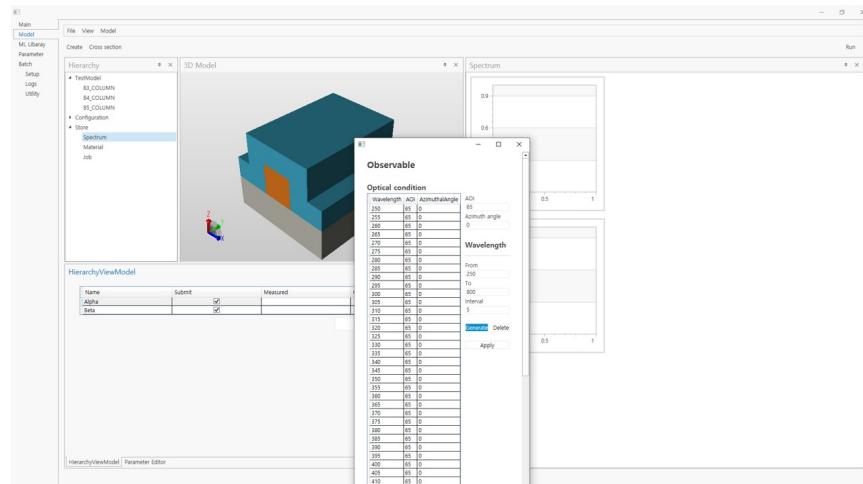
1.1 Done

1.possible to input optical info without loading spectrum for 3D simulation

1-1.input optical info without loading spectrum

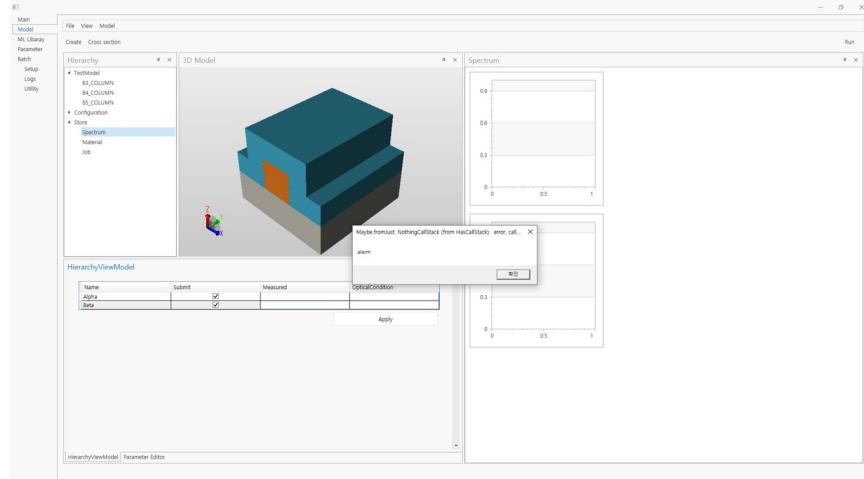


1-2.generating dispersion table from optical info



2.job submission success(job finish is also confirmed) for 3D simulation - OneBoxCoatingAround

2-1.job submission complete



2-2.error message

JobResult.Info.Result.Left

```
Maybe.fromJust: Nothing
CallStack (from HasCallStack):
error, called at libraries/base/Data/Maybe.hs:149:21 in base>Data.Maybe
fromJust, called at src/Fmmdosa/Serve/ToFMM.hs:20:27 in fmmdosa-serve-1.2.0.0-6g5ibbAFyxO6Rqie7qYupX:fmmdosa.Serve.ToFMM
M
```



1.2 ToDo

- See 'Fix History'

2 Test Environment

2.1 User Side

- Hardware : syryu's LG laptop
- OS : windows 10

2.2 Server Side

- Hardware : node01 of Auro's HPC
- OS : nixpkgs commit 596a8e828c5dfa504f91918d0fa4152db3ab5502

3 Deploy Process

3.1 GUI software (through *ShapeMaster* repository)

- commit : aeeb65b8236a189efd338940ee7b5b4da5ef3695
- installation method : portable install via 'git clone'

3.2 Backend Server (through *declarative-hpc* repository)

- commit : 501d23b7f50c583a9516458fc794ad5a9f9a952b
- installation method : remote deploy via Nix

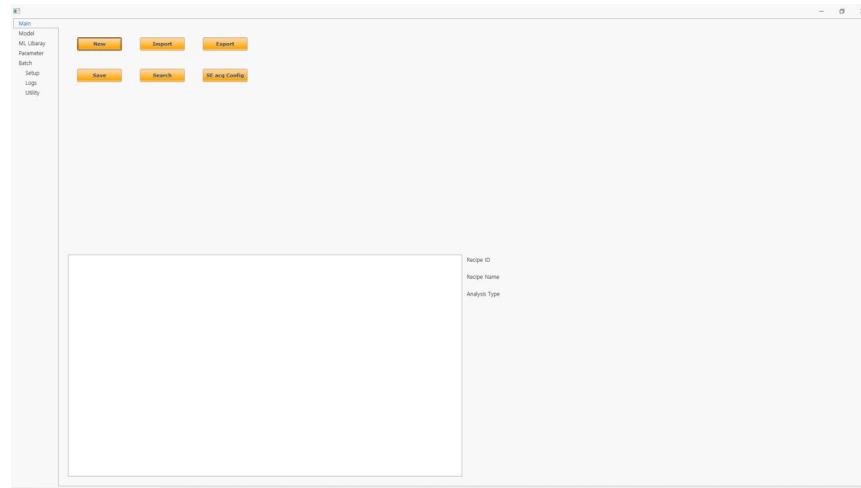
3.3 Algorithm (through *fmmdosa* repository)

- version: 1.2.0.0
- commit : ee1ff8f7f0a0dd0220108b3b29d9209a18fdc10d
- installation method : remote deploy via Nix

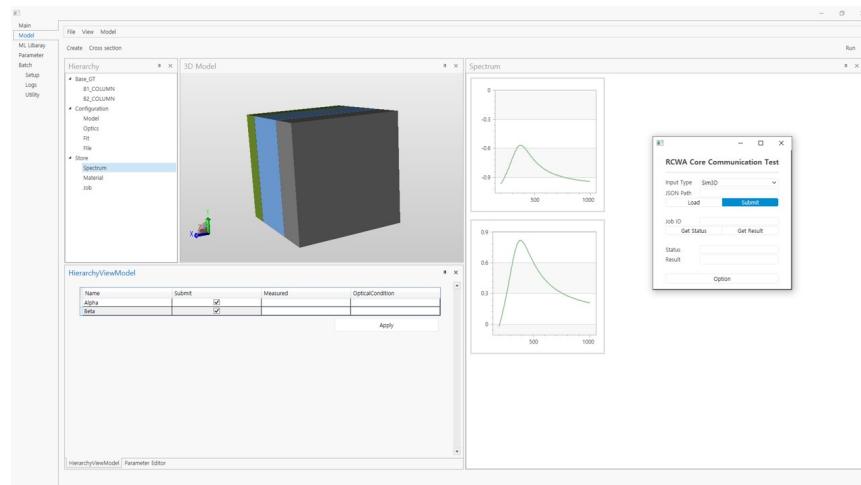
4 GUI Functionality Tests

4.1 Major tabs

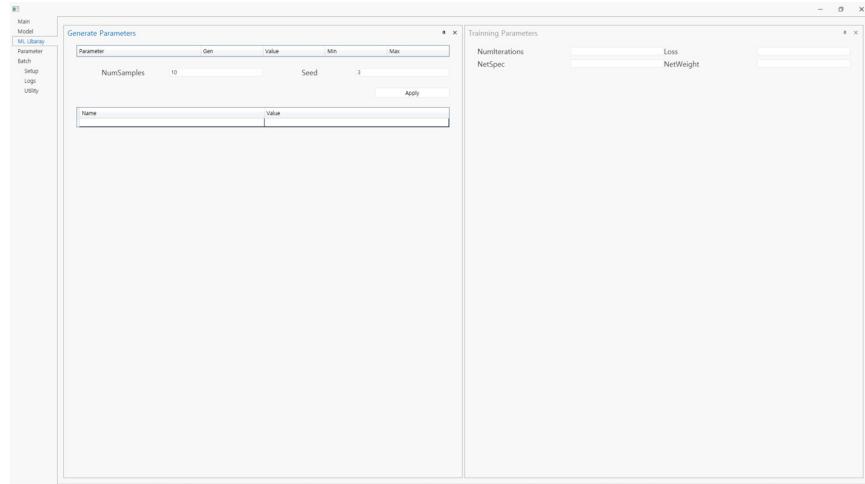
4.1.1 Main Tab



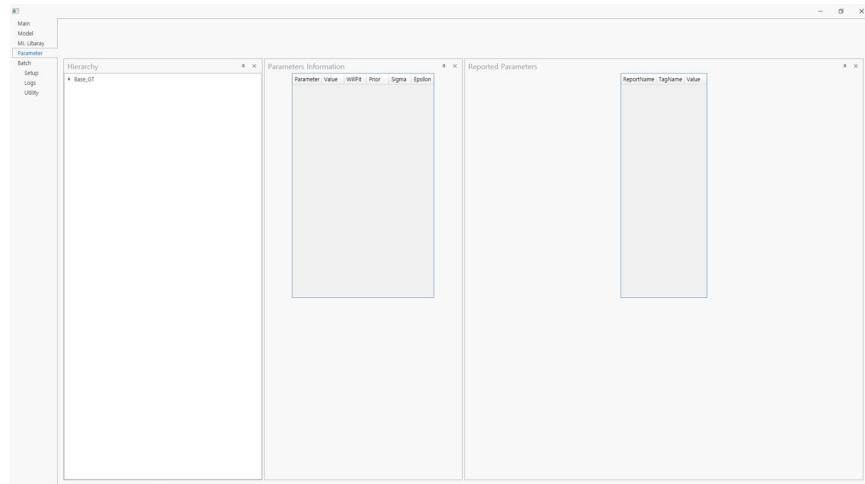
4.1.2 Model Tab



4.1.3 ML Tabl



4.1.4 Parameter Tab

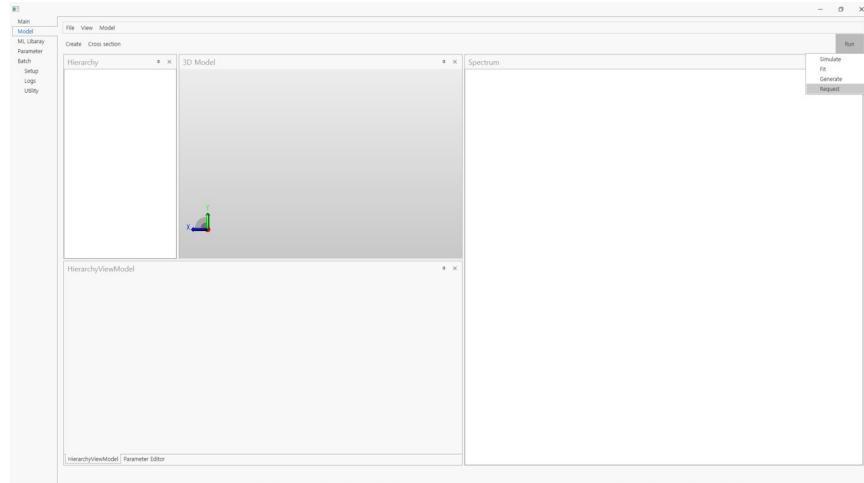


5 Tests for the Standard Examples

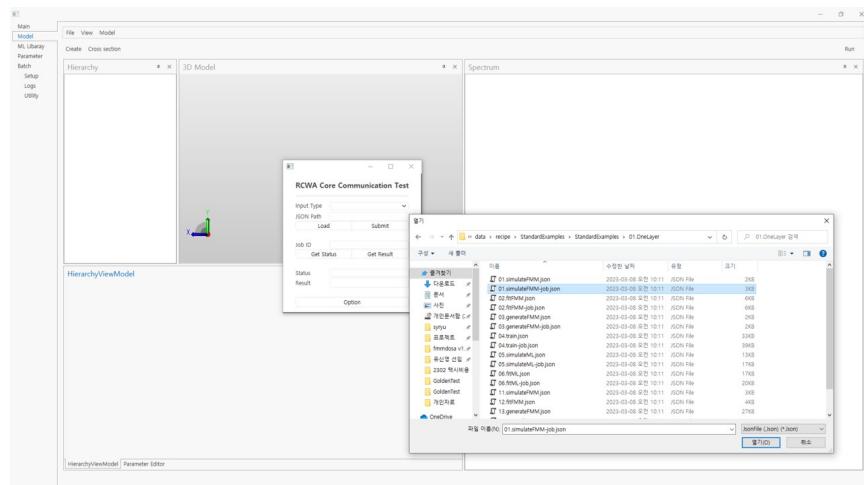
5.1 Job Request (Communication) Test

5.1.1 UI Process

1. Model Tab -> Run -> Request

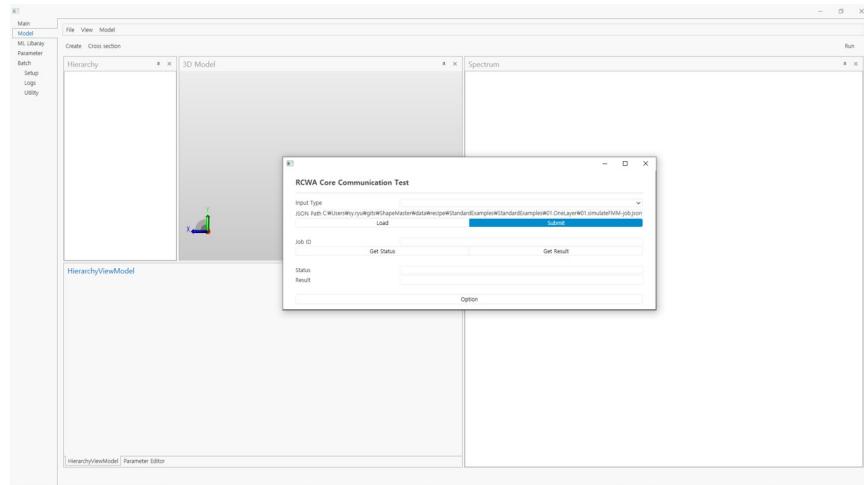


2. Load JSON

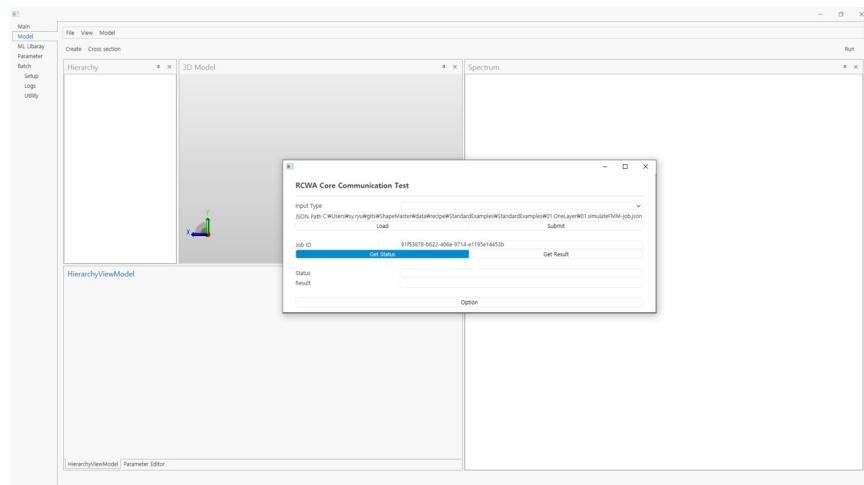


As an example, ShapeMaster/data/recipe/StandardExamples/StandardExamples/01.OneLayer/01.job.json

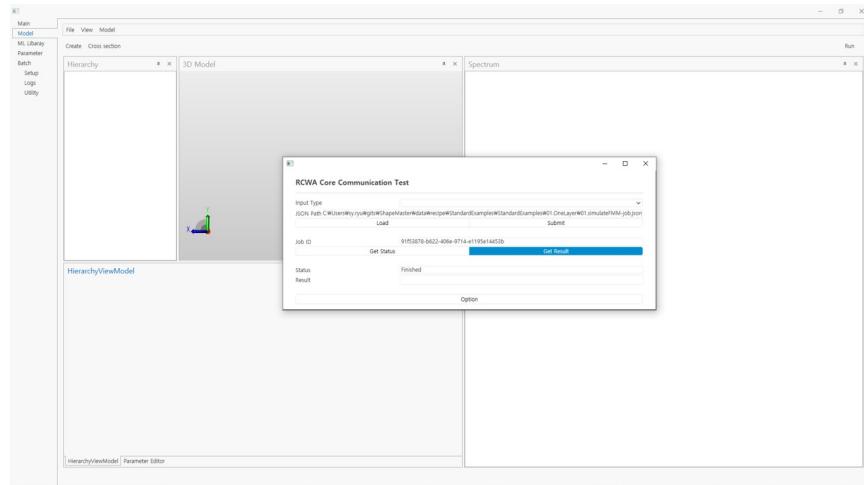
3. Submit



4.Get Status

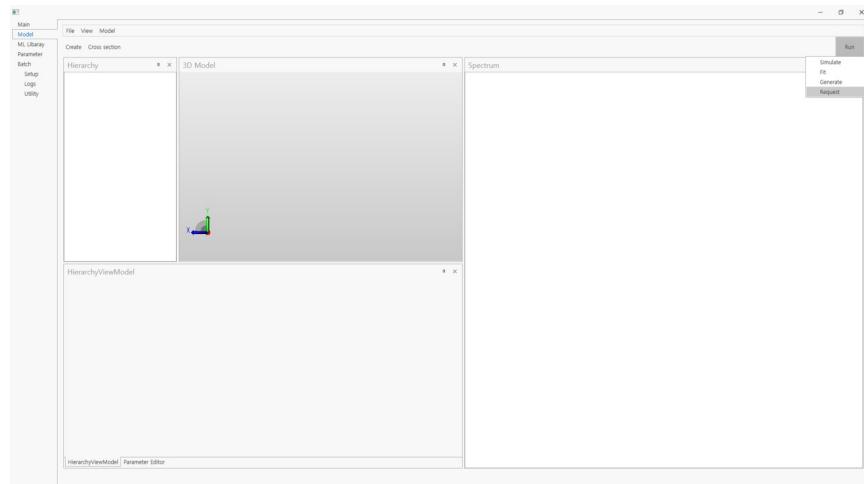


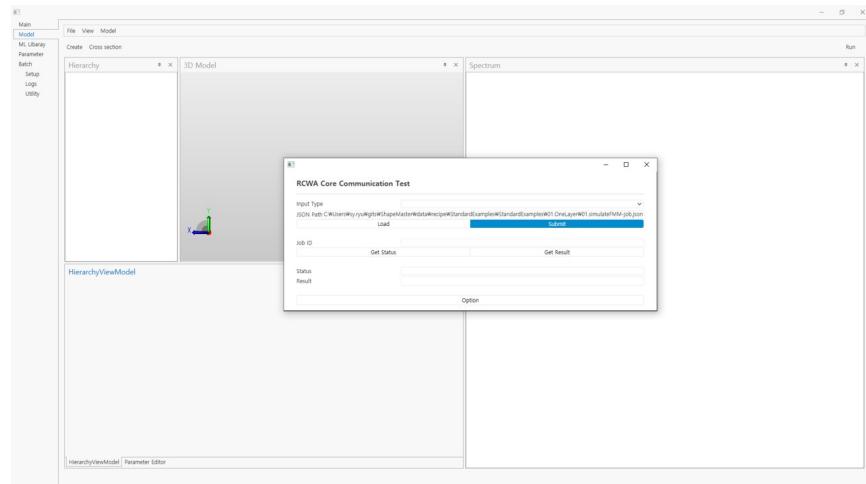
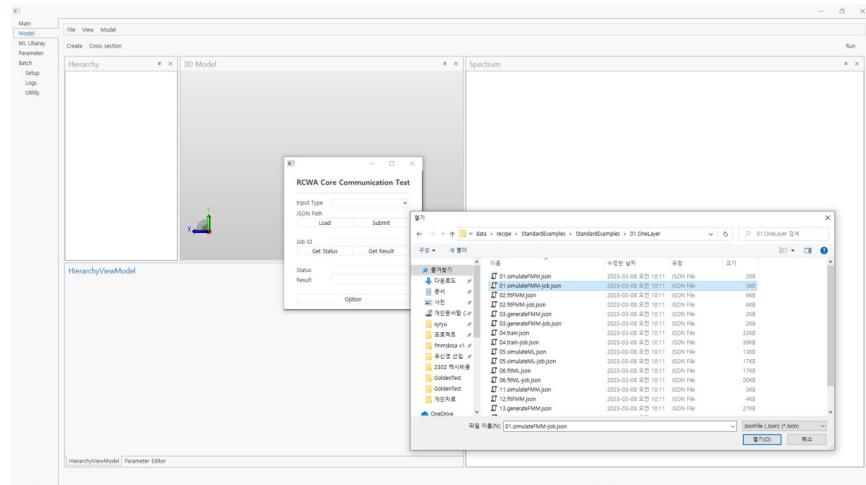
5.Get Result

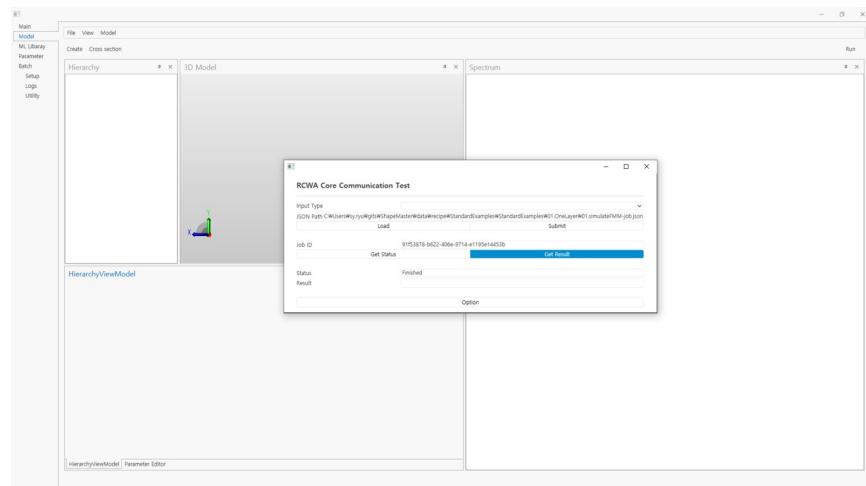
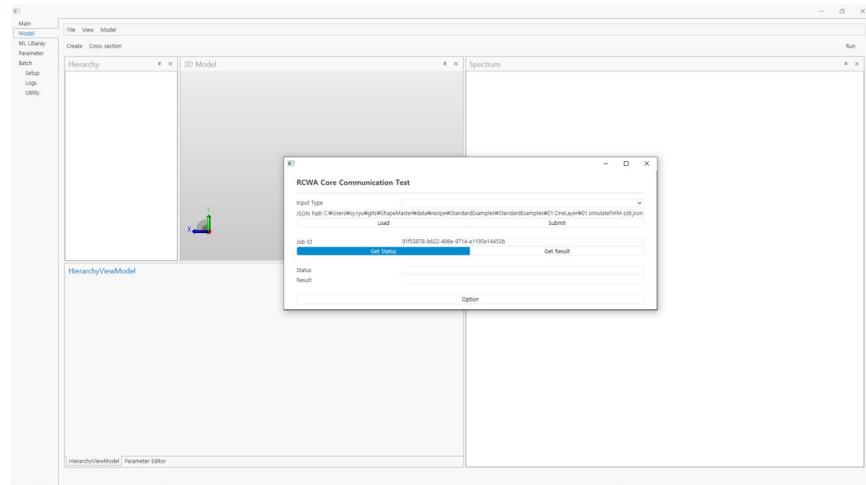


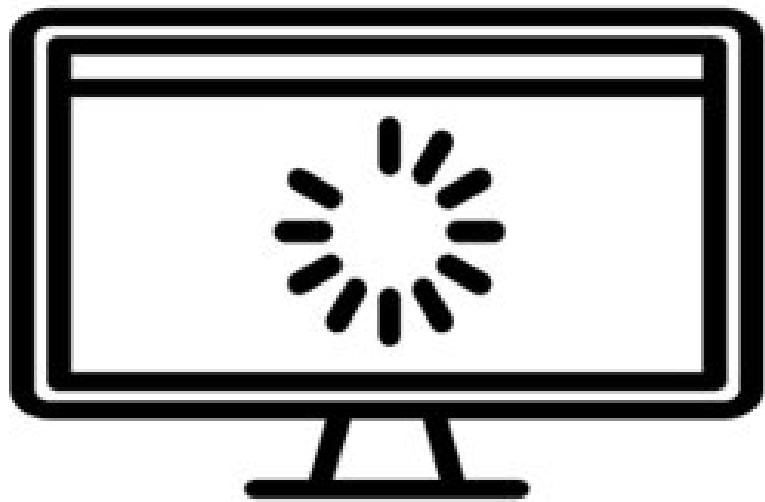
5.1.2 Results

1-1. One Layer (network problem) : HANGING!



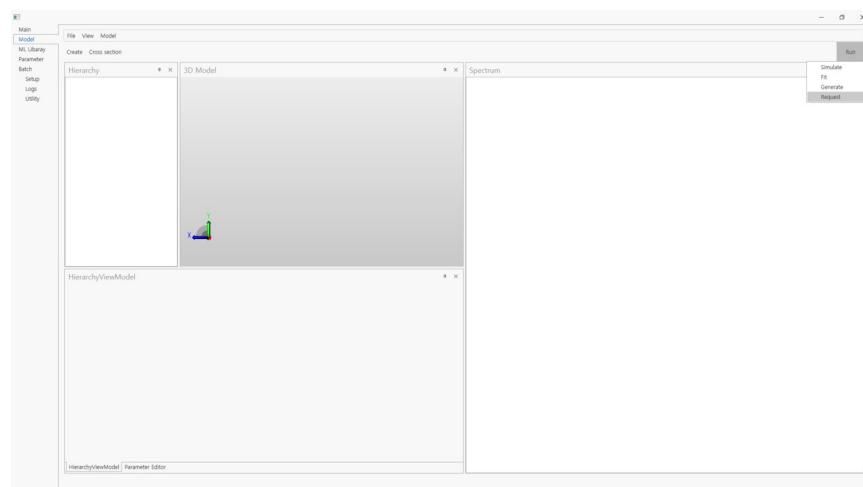


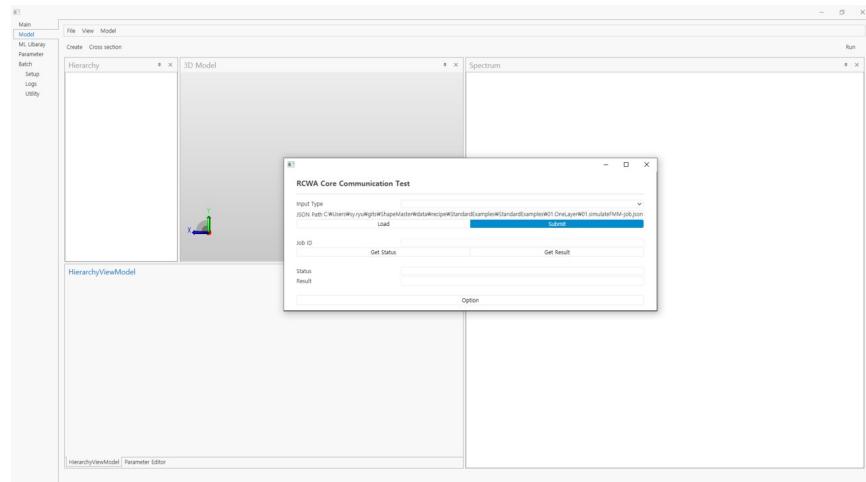
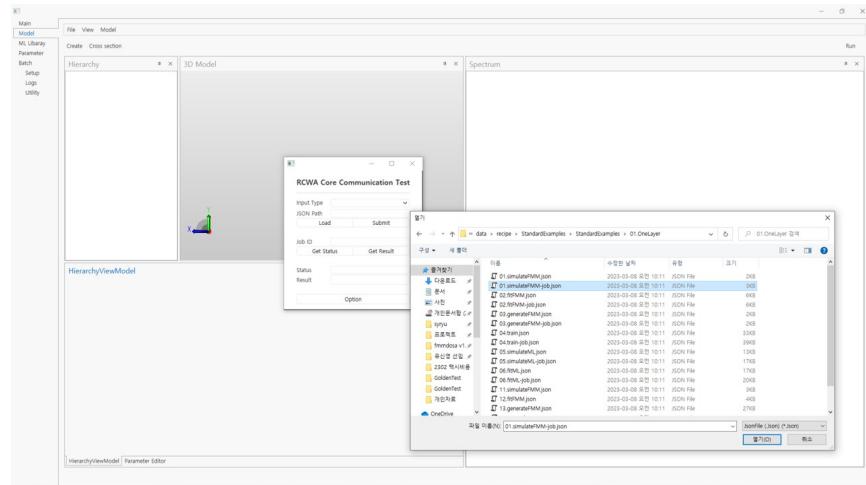


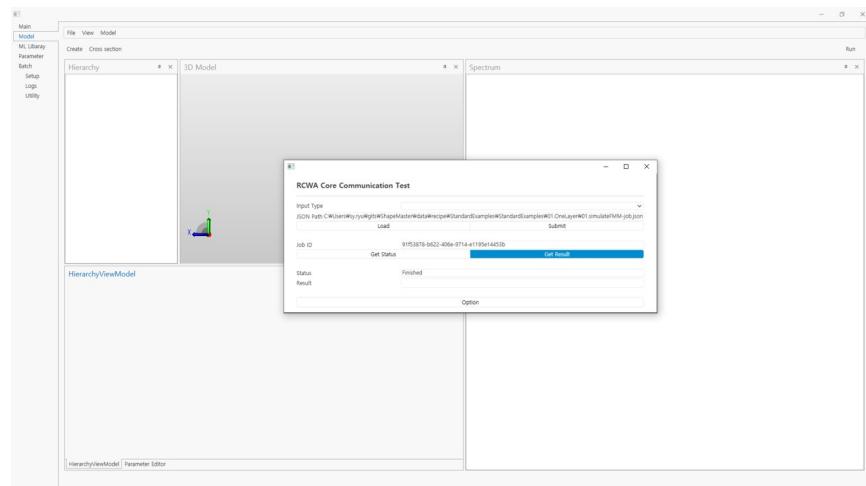
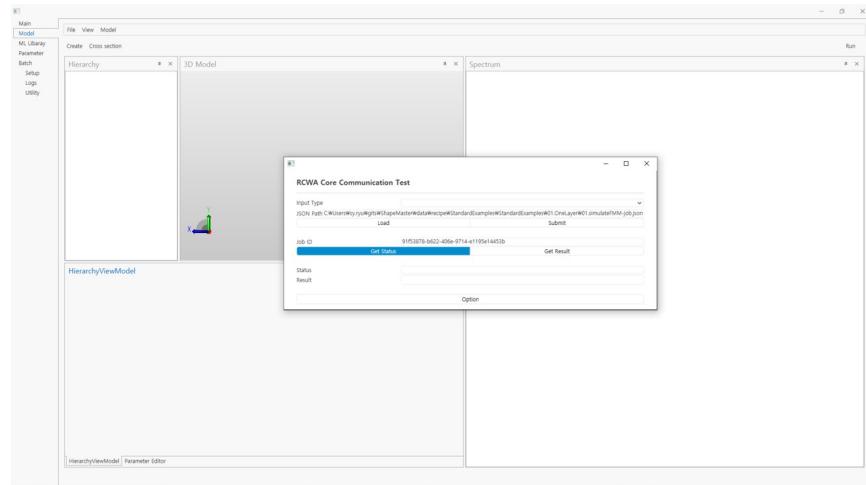


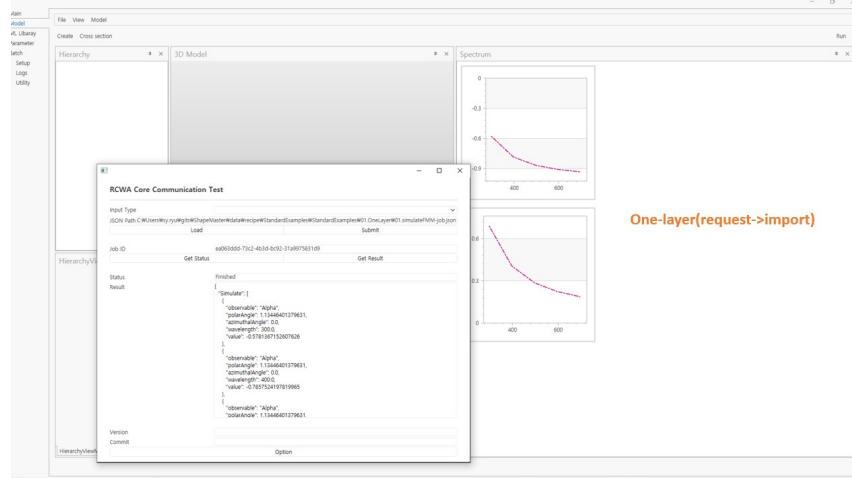
symptom : after 'submit' process hanging reason : cannot access to proxy server (in 7th floor) solution: return msg for network malfunction (turn on auros internal VPN)

1-2. One Layer : FINISH! GRAPH SHOWN WITHOUT LOADING SPECTRUM.



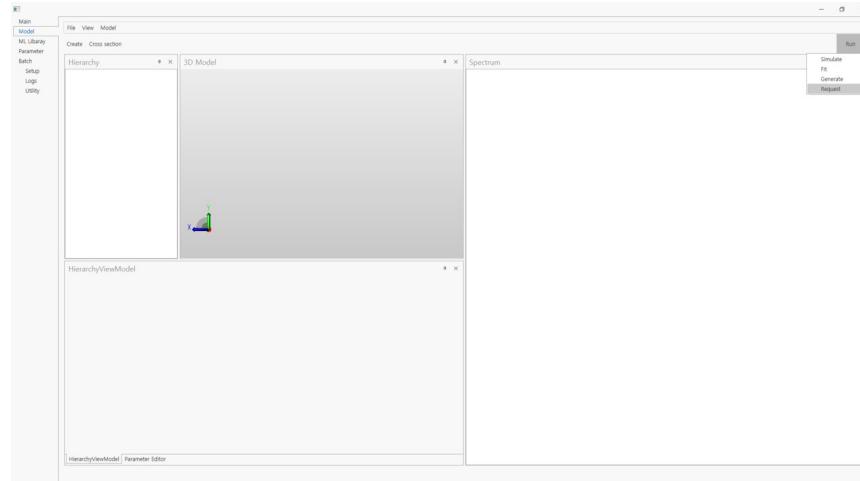


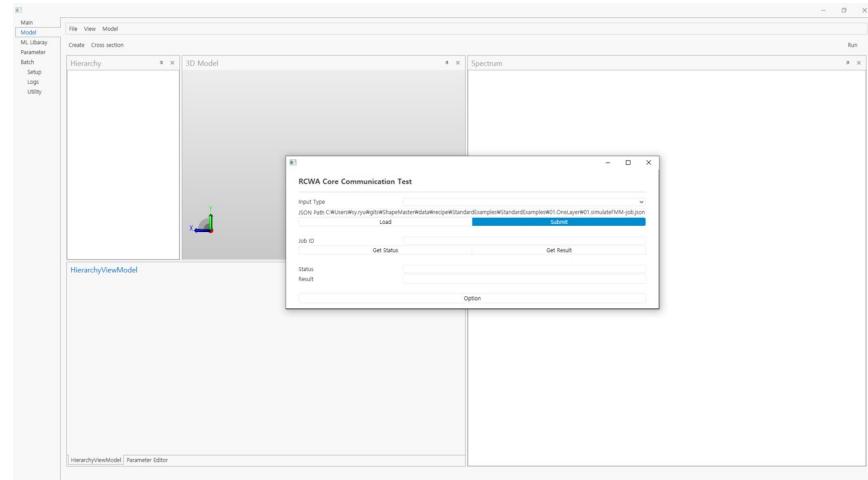
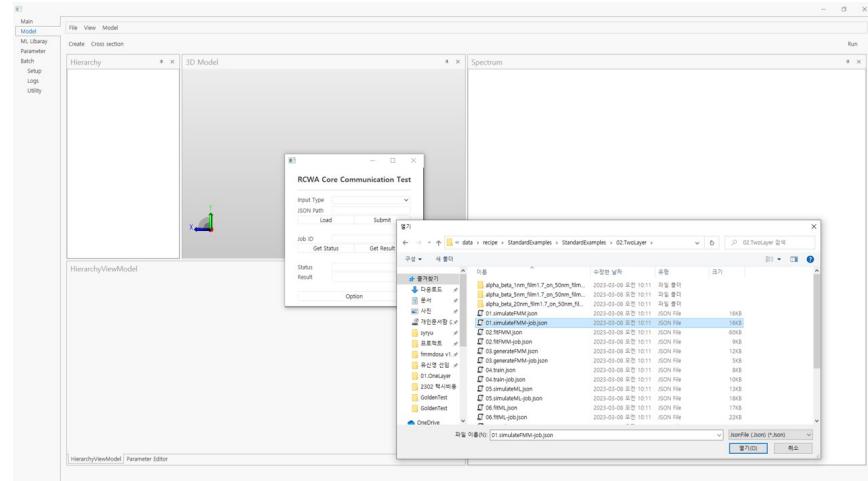


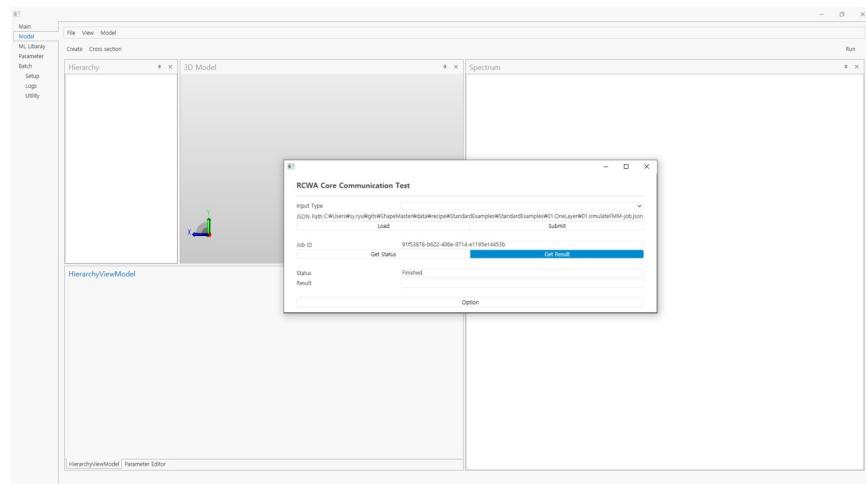
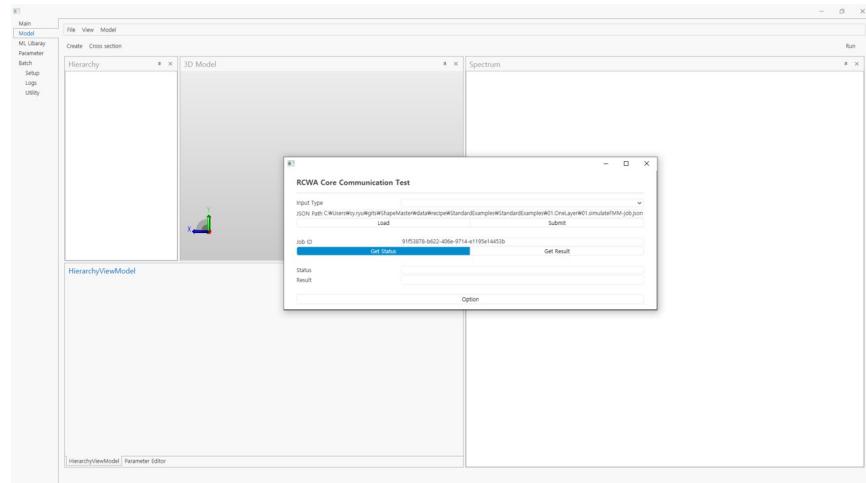


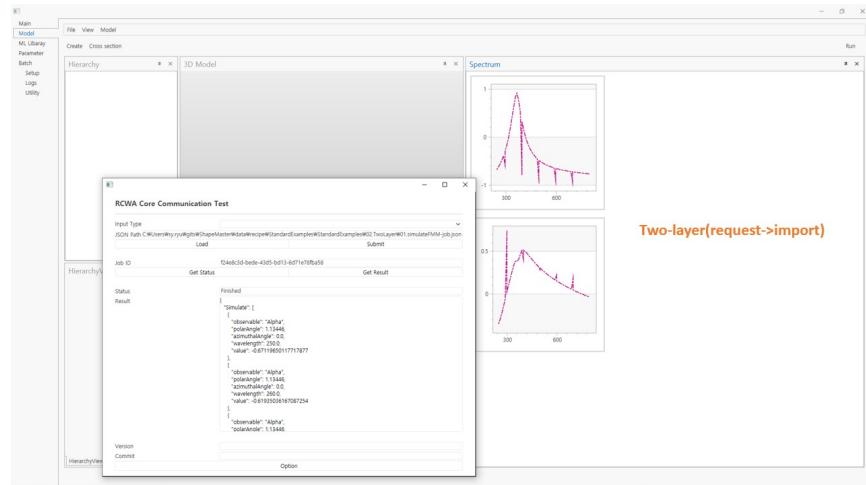
symptom : no crash, get result! but no spectrum shown reason : solution:

2.Two Layer : FINISH! GRAPH SHOWN WITHOUT LOAD-SPECTRUM.

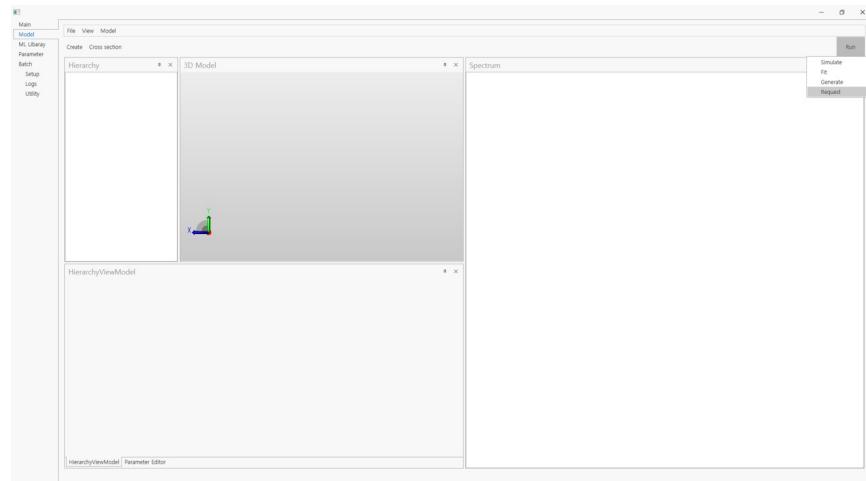


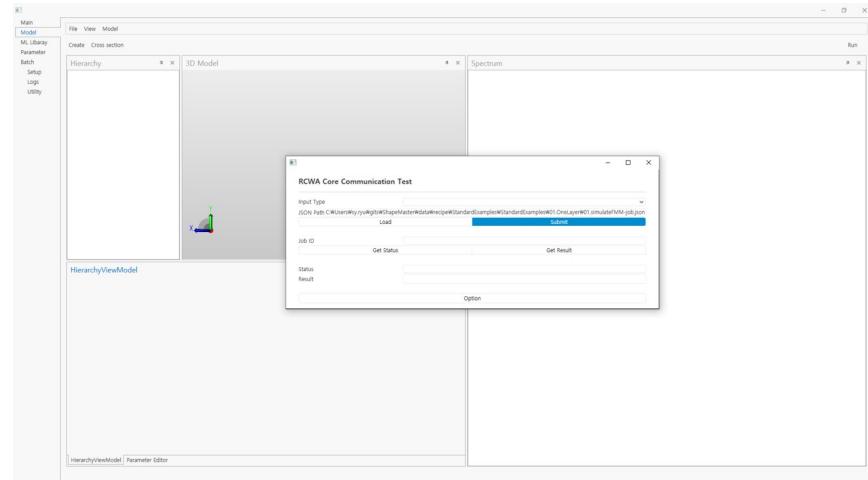
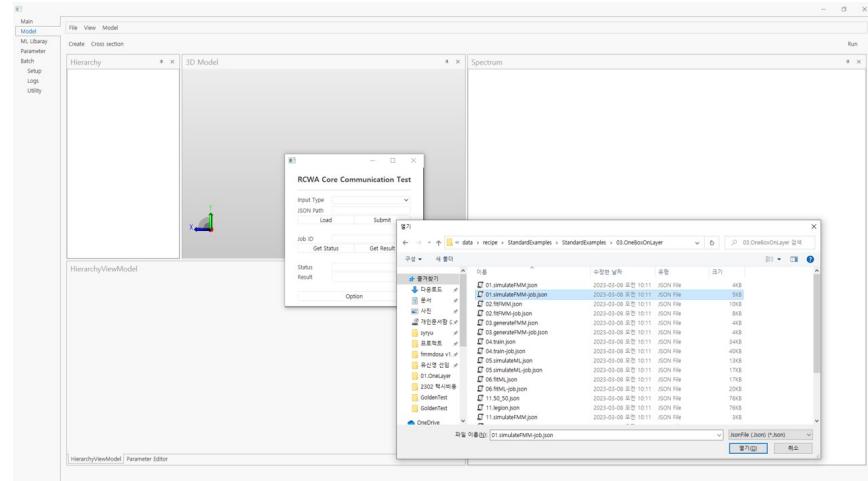


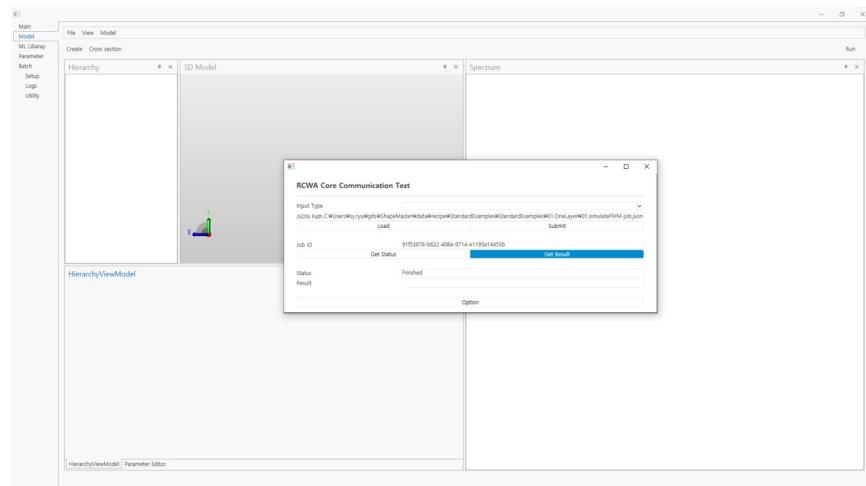
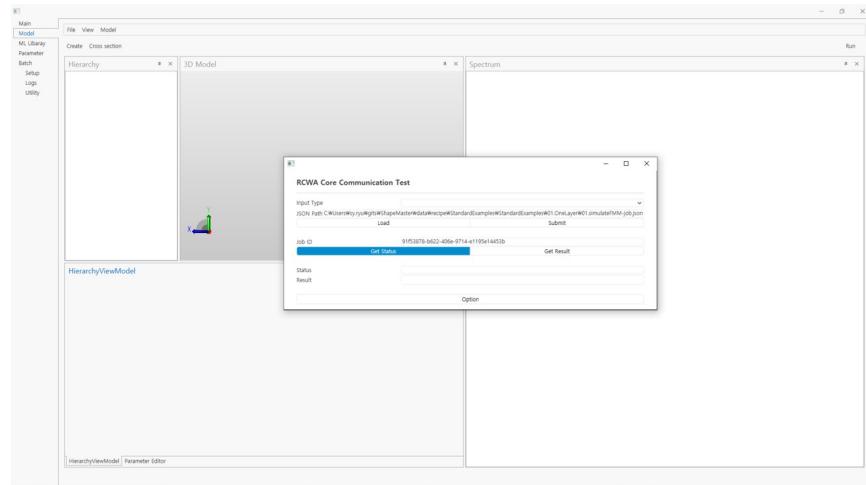




symptom : no crash, get result! but no spectrum shown reason : solution:
3. One Box On One Layer : CRASH!

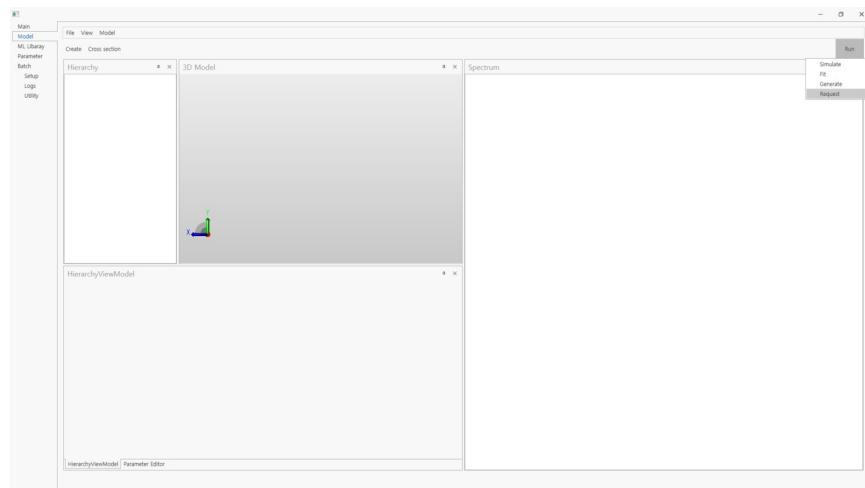


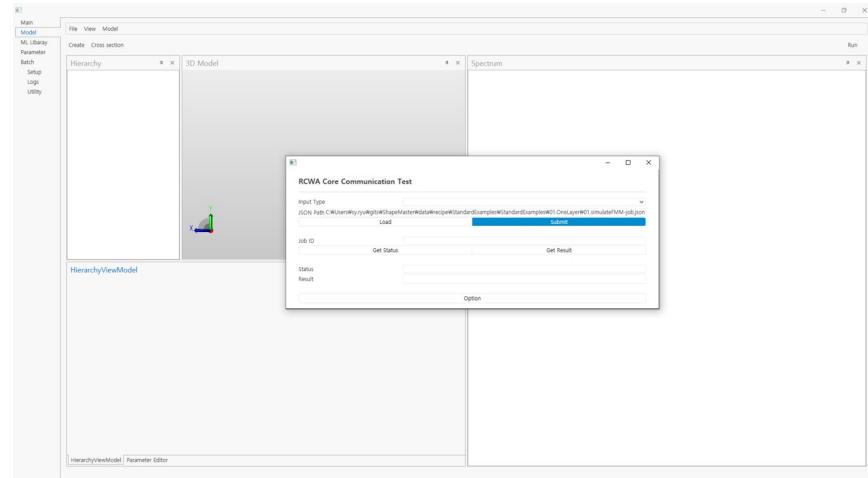
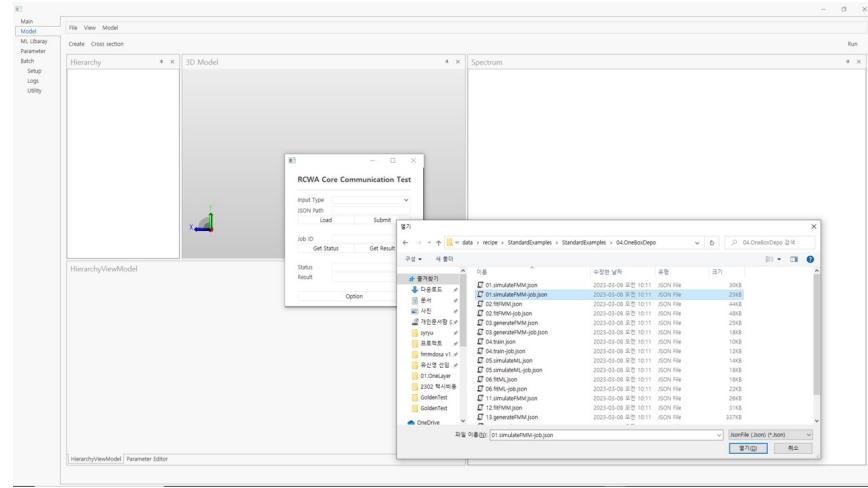


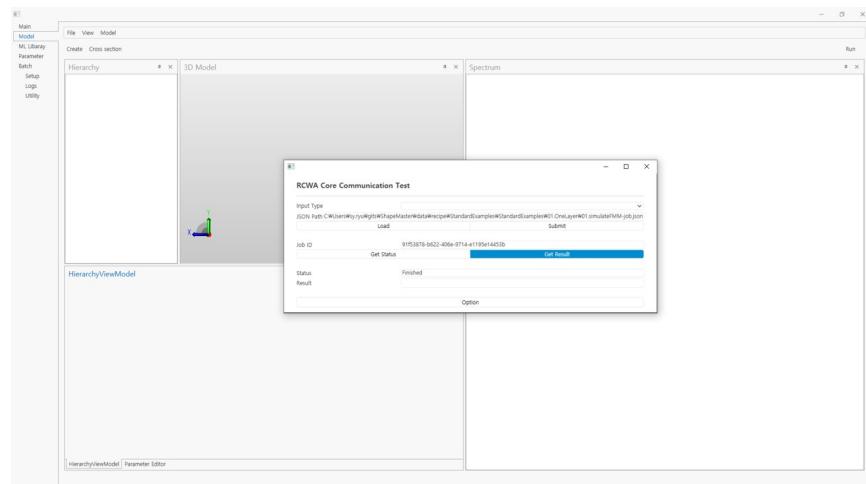
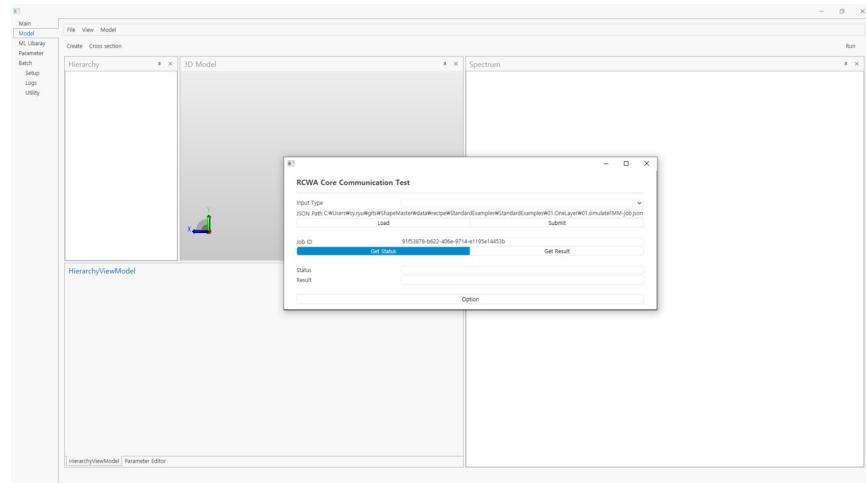




4. One Box Depo : CRASH!







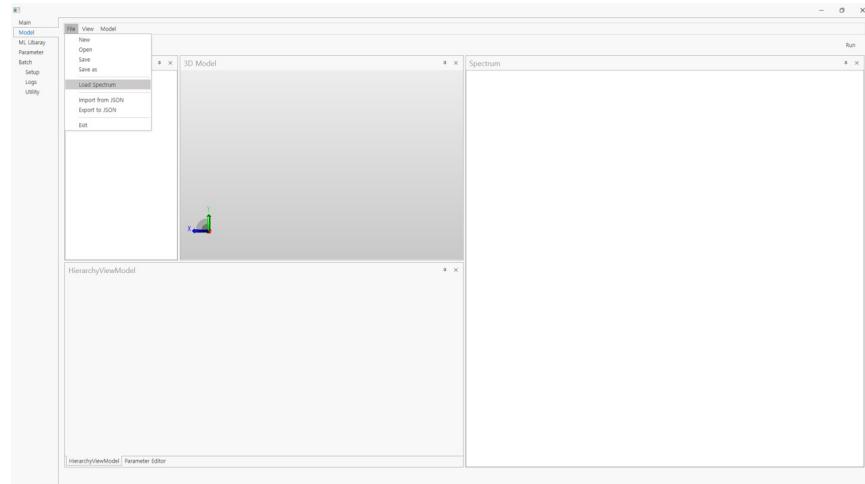


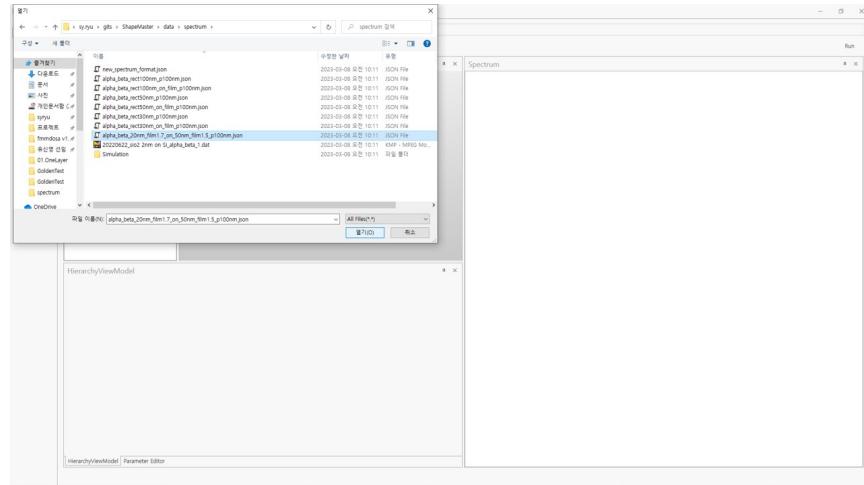
5.2 Recipie Creation Test

5.2.1 UI Process

1.load spectrum

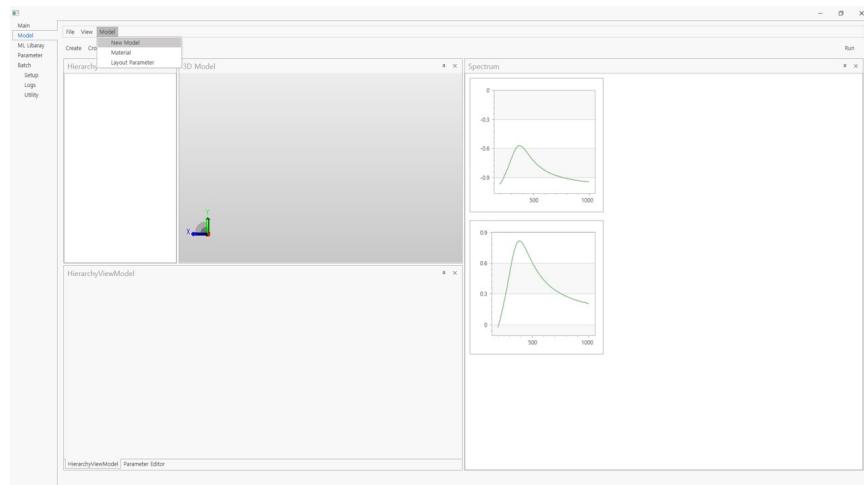
1-1. Model Tab -> File -> Load Spectrum
ShapeMaster/data/spectrum/any_spectrum.json





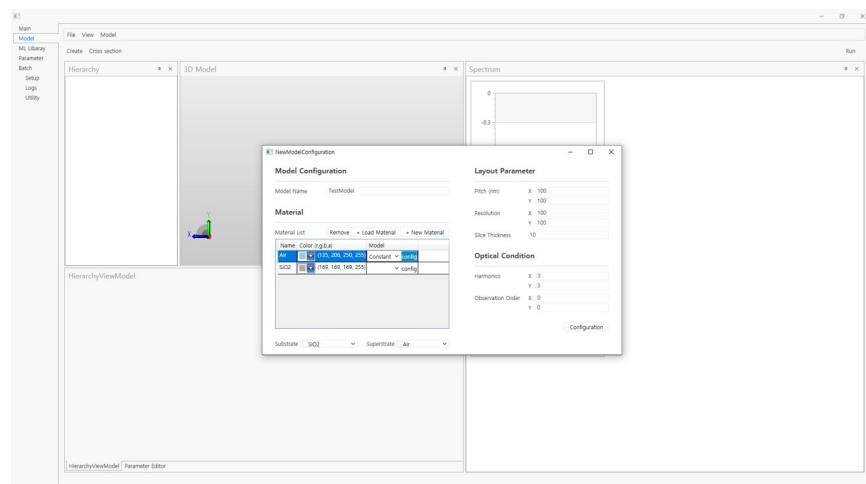
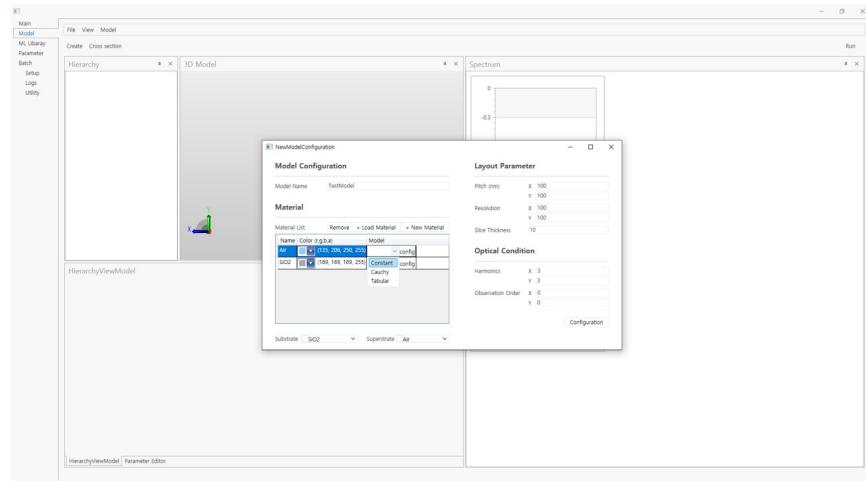
2.make 'new model'

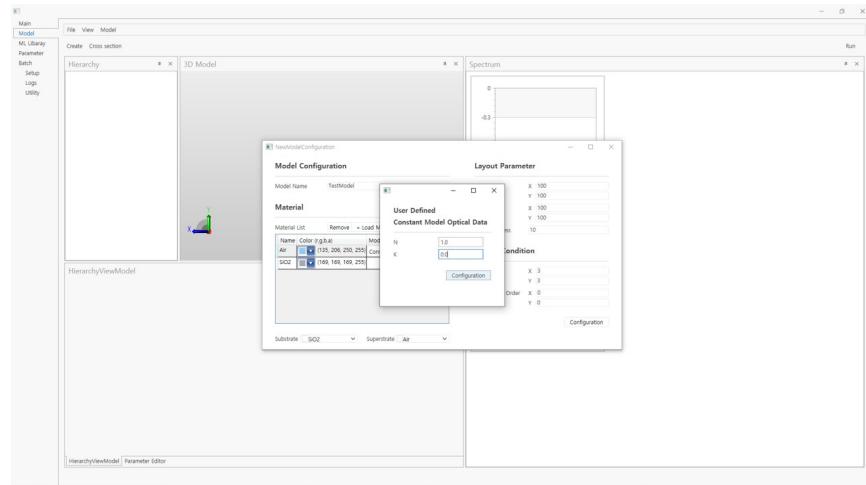
2-1. Model Tab -> Model -> New Model



2-2.NewModelConfiguration window

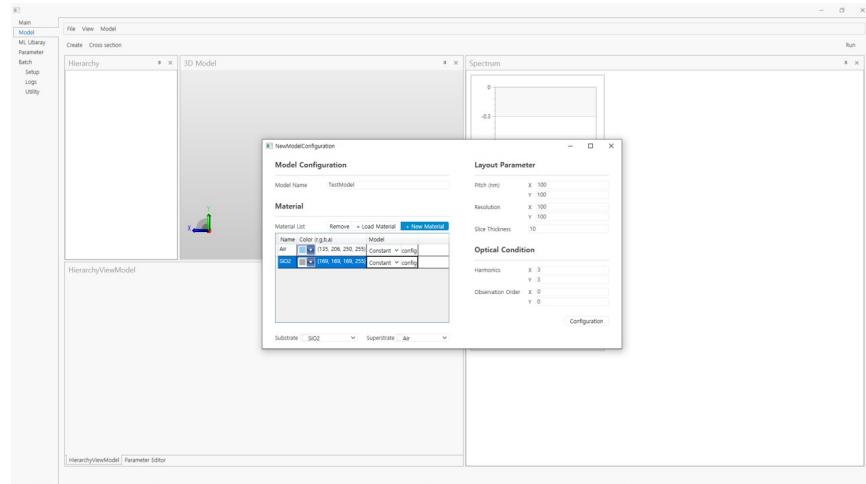
color -> choose model(constant, cauchy, tabular) -> config -> optical info -> configuration

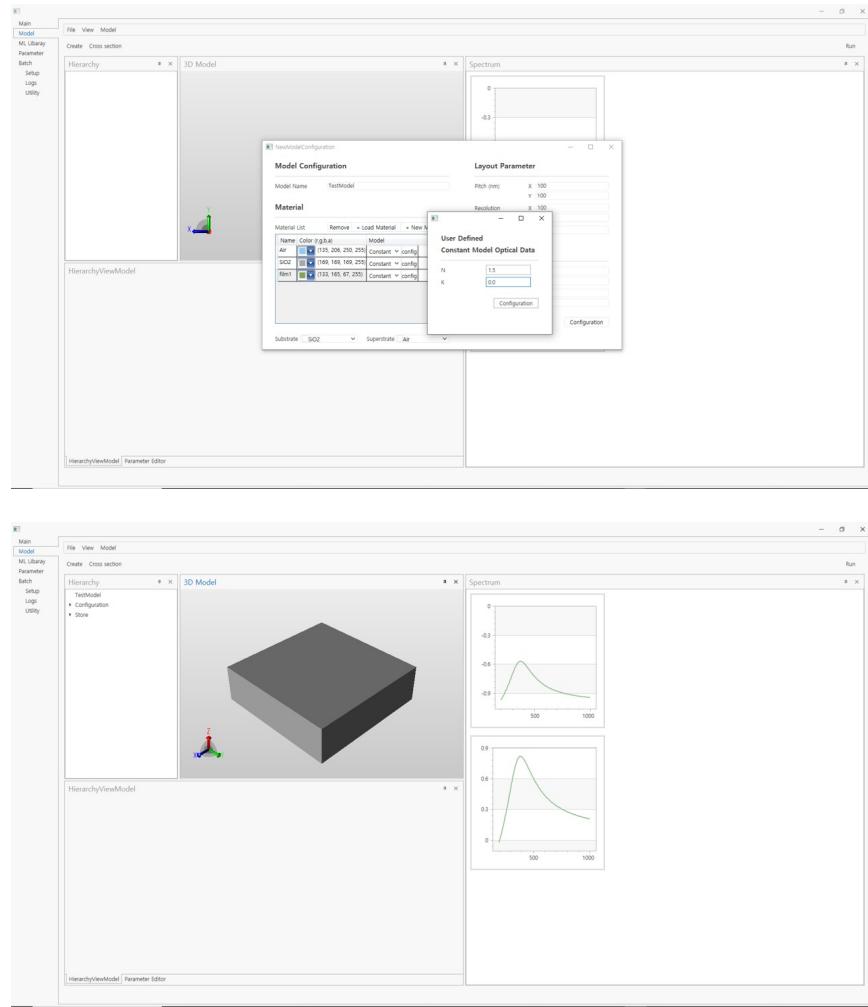




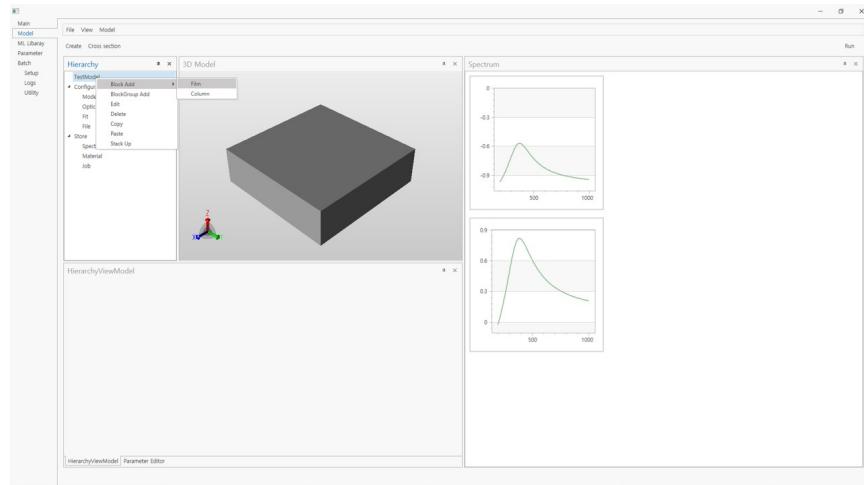
2-3.+New material

color -> choose model(constant, cauchy, tabular) -> config -> optical info -> configuration

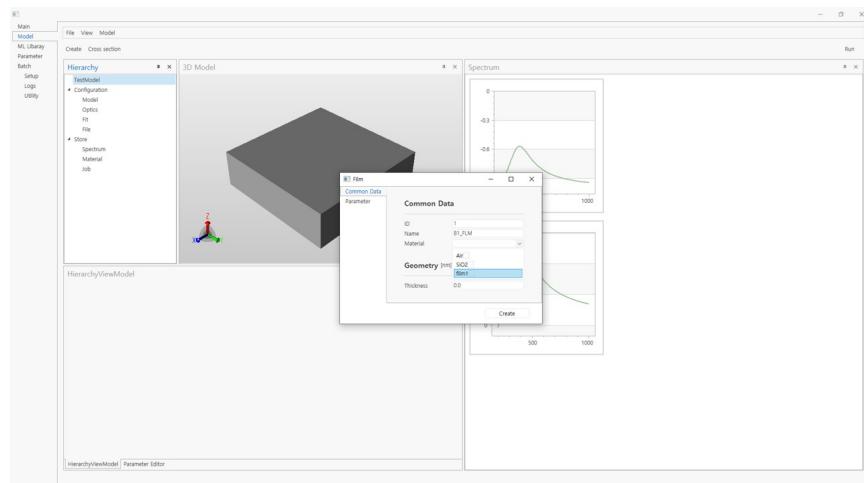


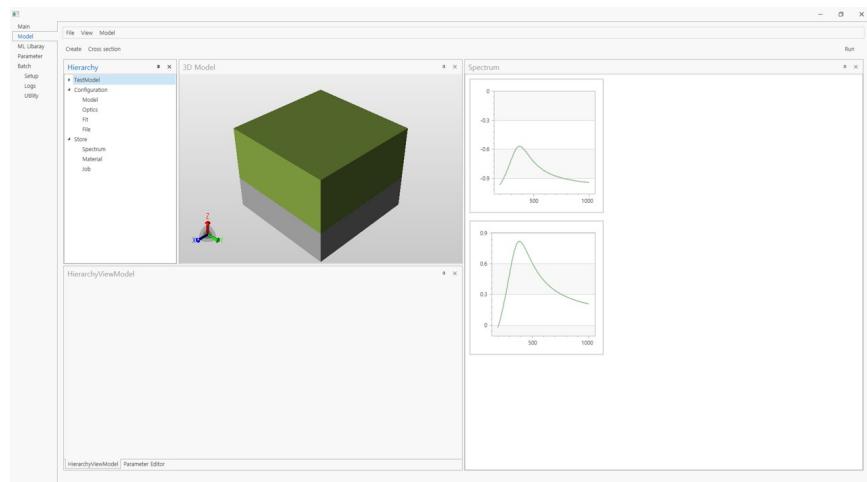
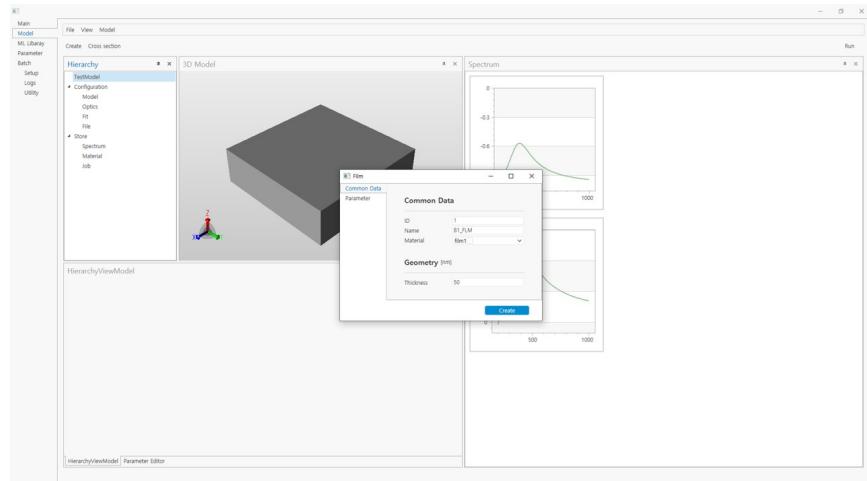


2-4.Hierarchy window -> TestModel -> BlockAdd -> Film

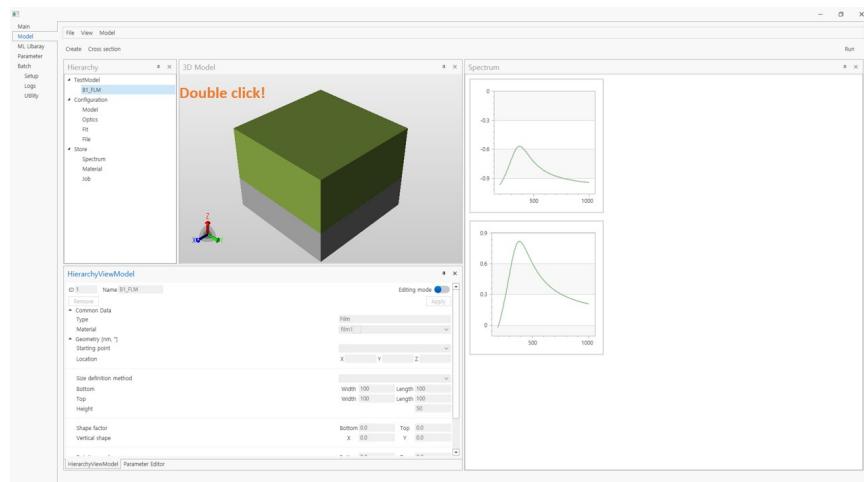
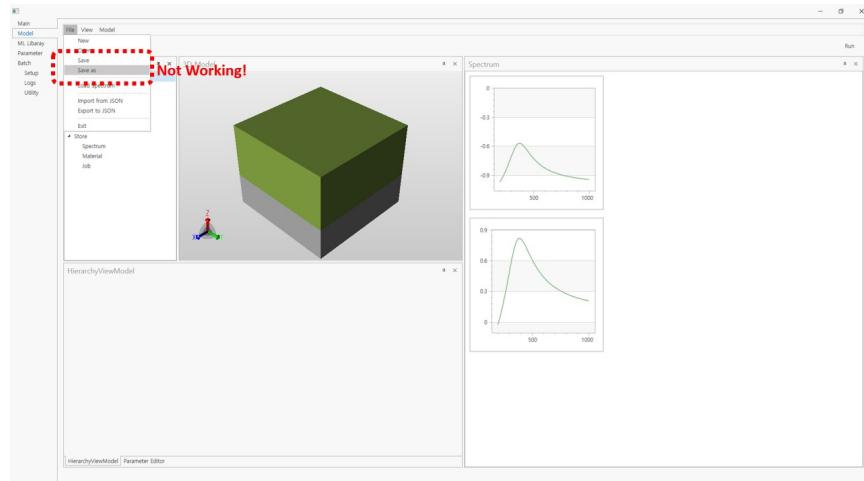


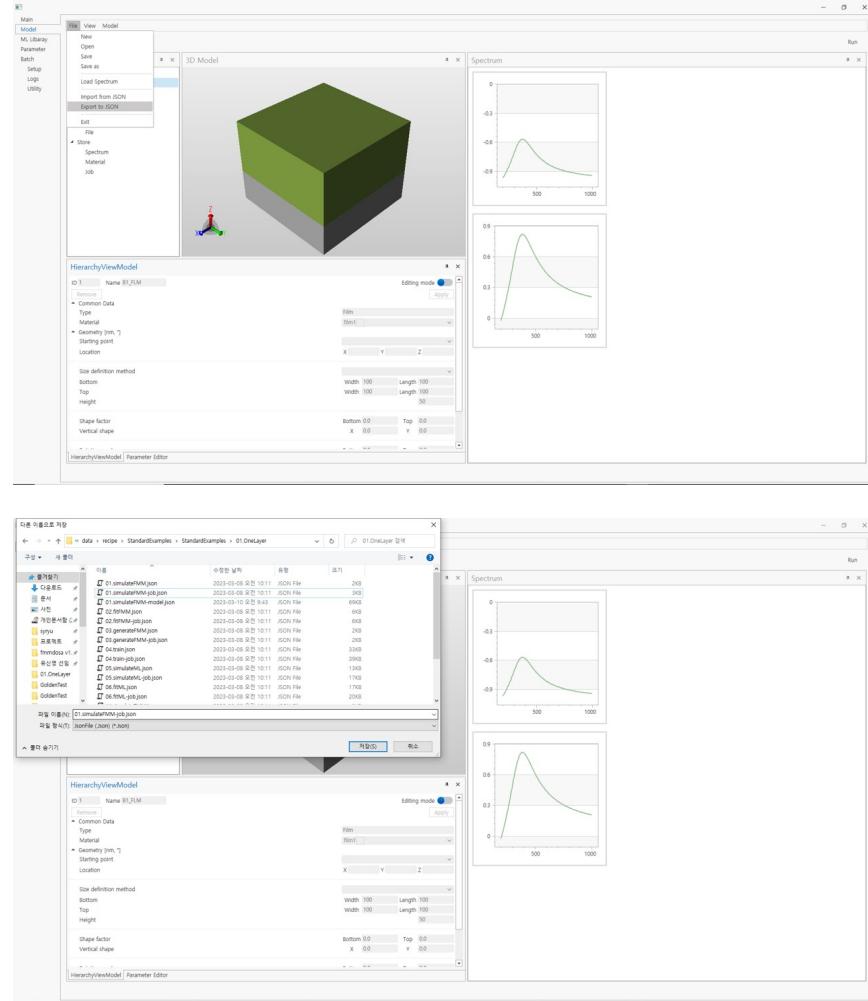
2-5.Film window -> Name -> Material -> Geometry -> thickness -> config





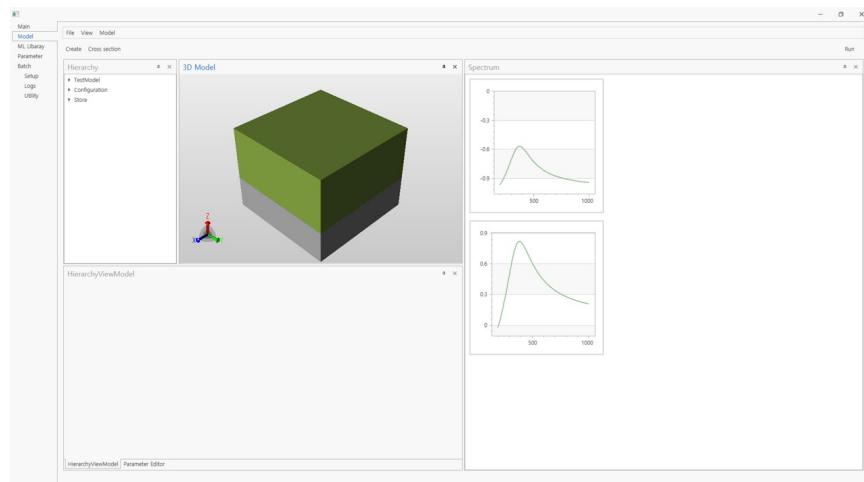
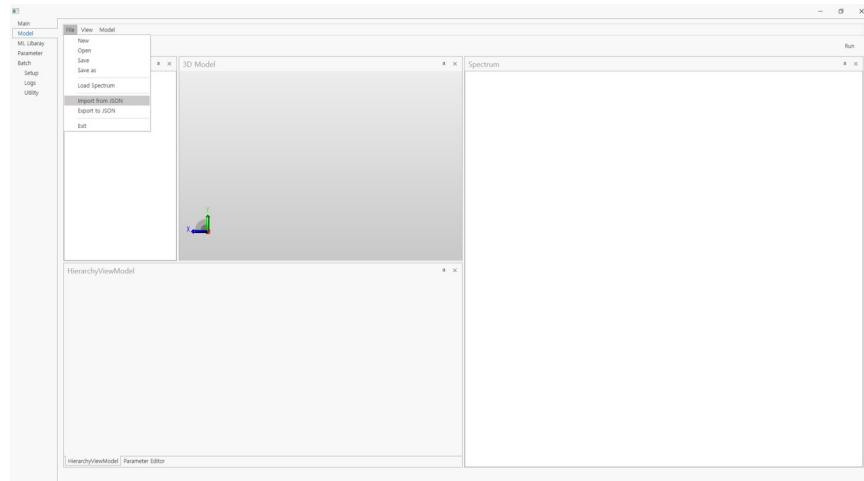
2-6.File -> Export to JSON (not 'save' or 'save as')



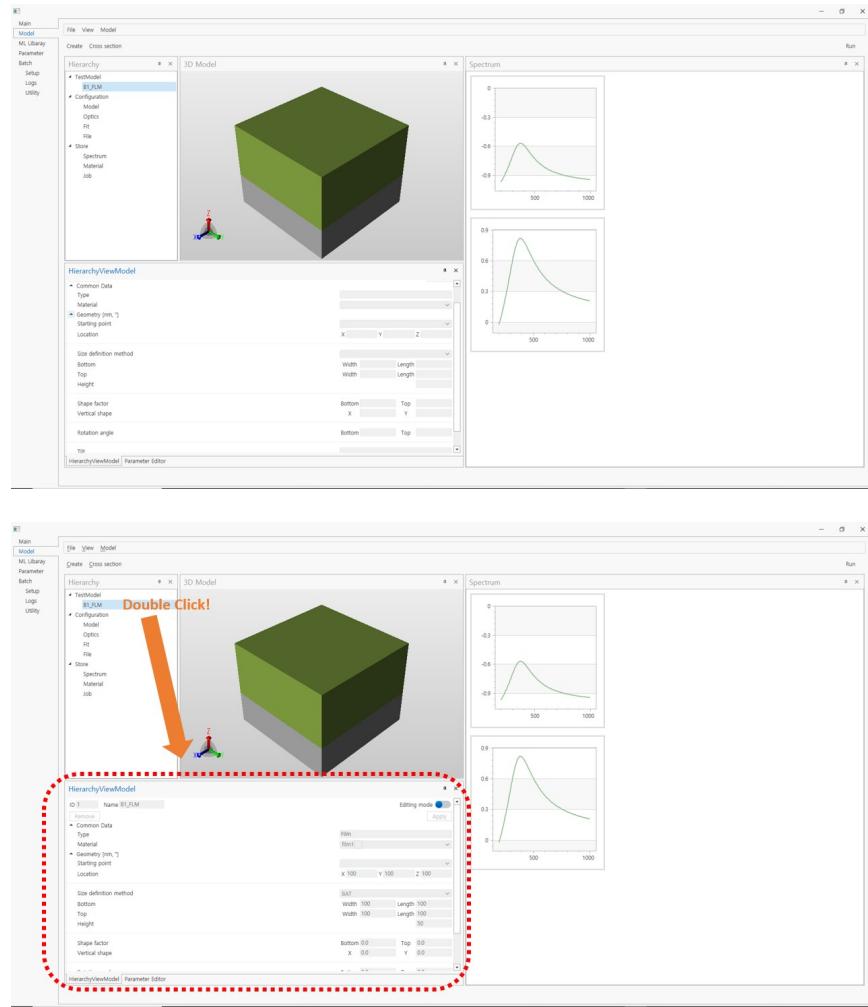


3.import 'new model'

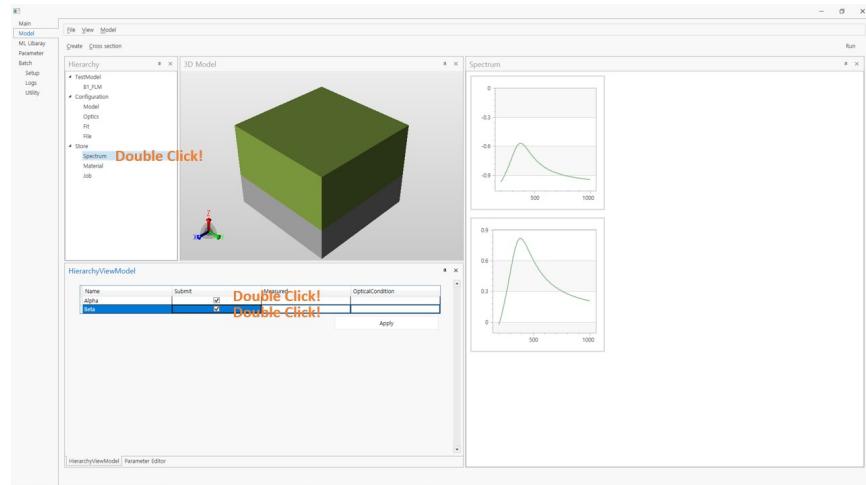
3-1. Model Tab -> File -> Import from Json



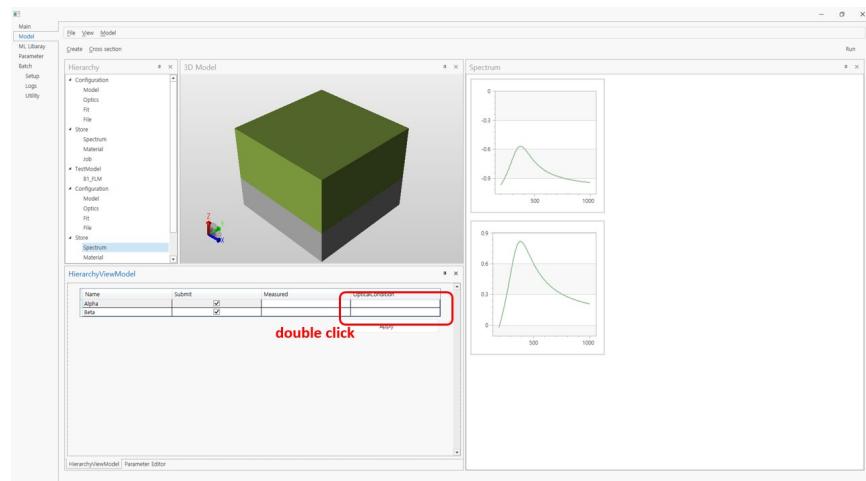
3-2.Hierarchy window -> TestModel -> block-name(double-click)

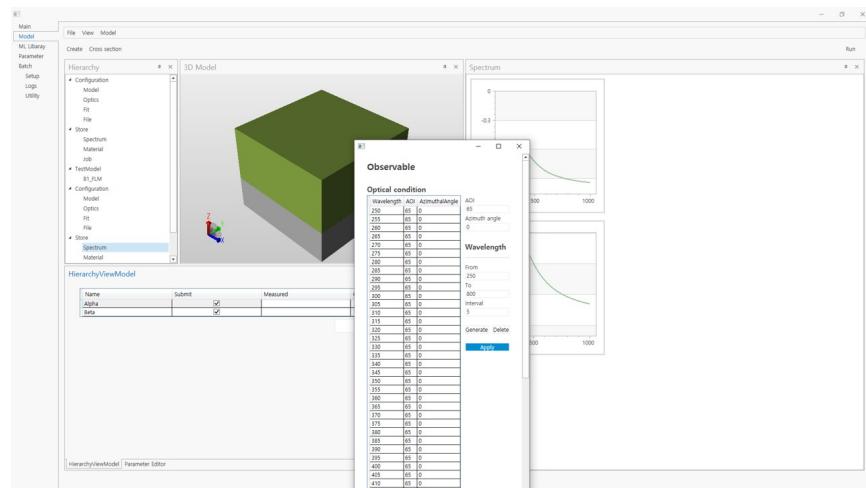
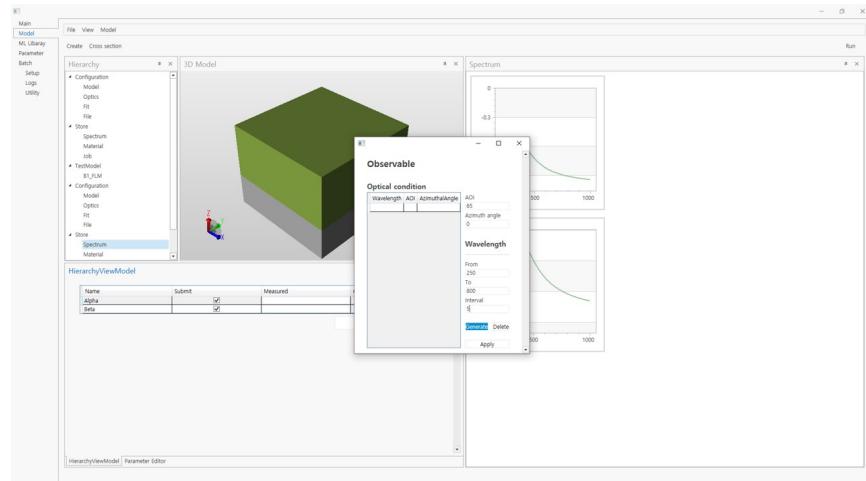


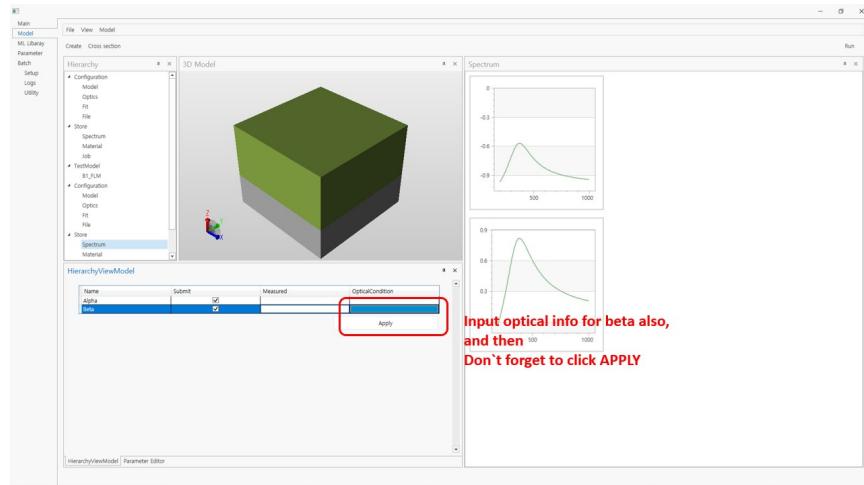
3-3.Hierarchy window -> Store -> Spectrum(double-click)



3-4.Hierarchy window -> Store -> Spectrum(double-click) -> optical info(double-click)

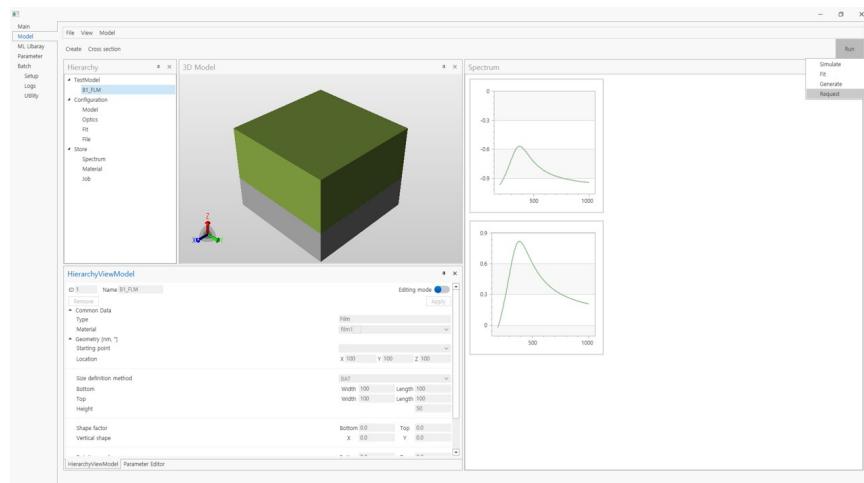


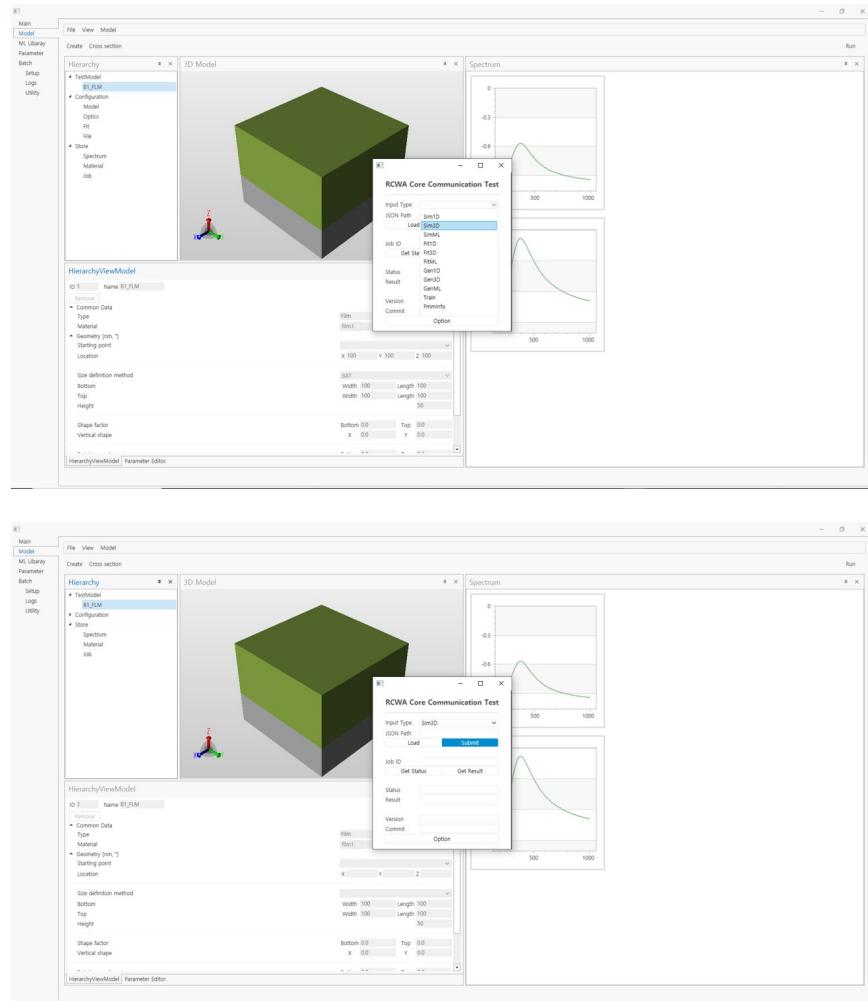




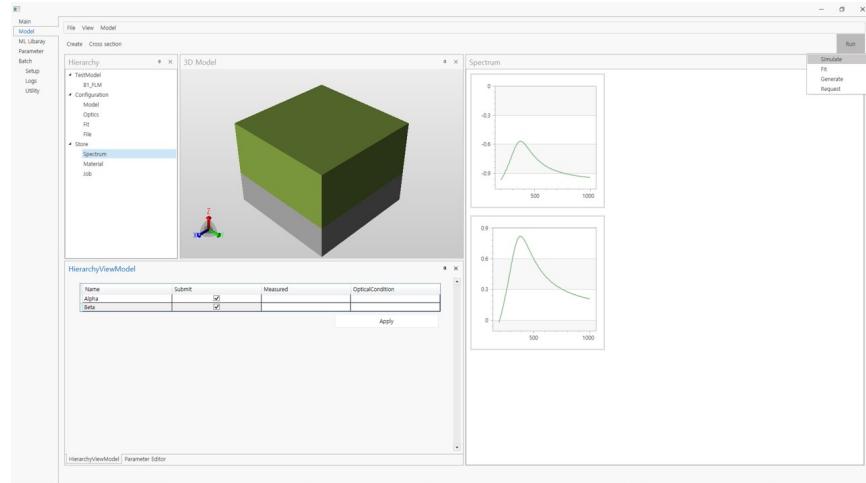
4.run 'new model'

4-1.Model Tab -> Run -> Request -> Sim3D -> submit



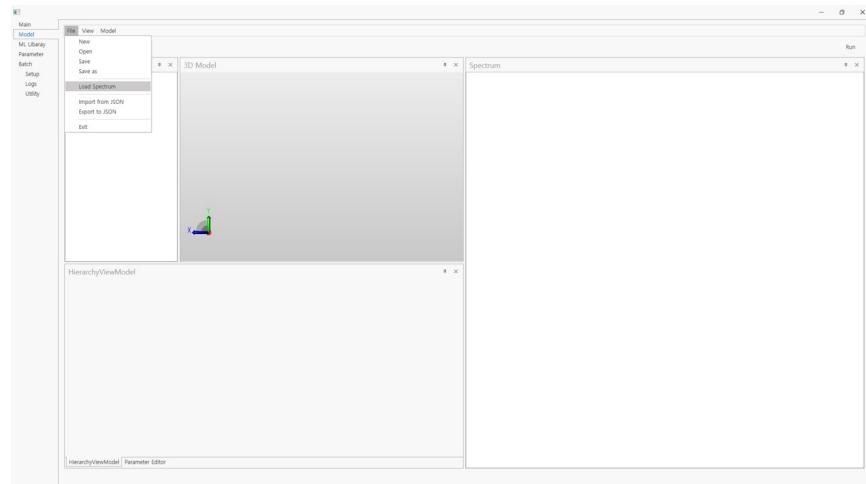


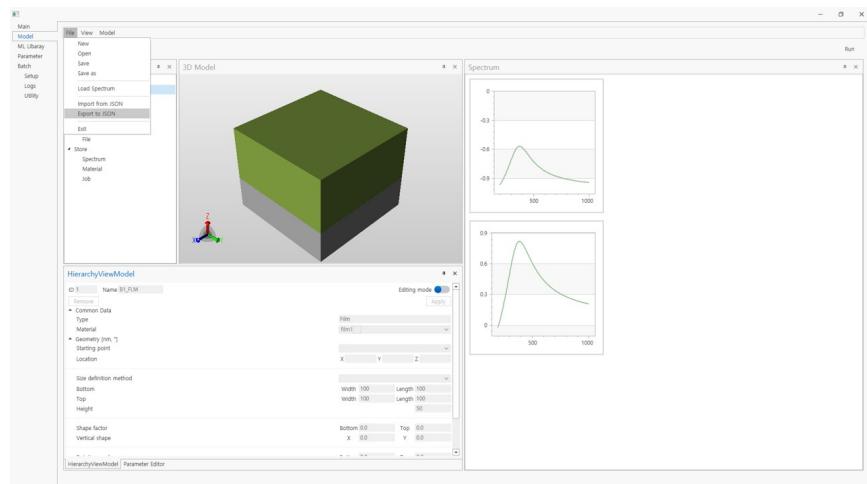
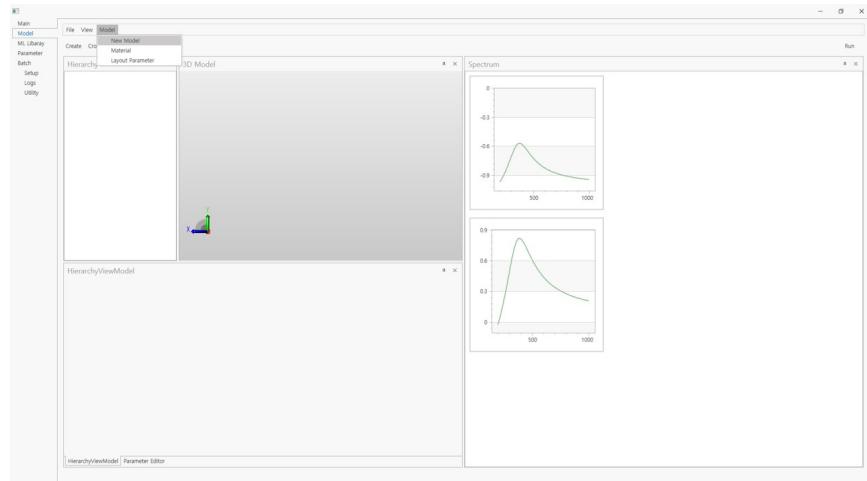
4-2.Model Tab -> Run -> Simulate

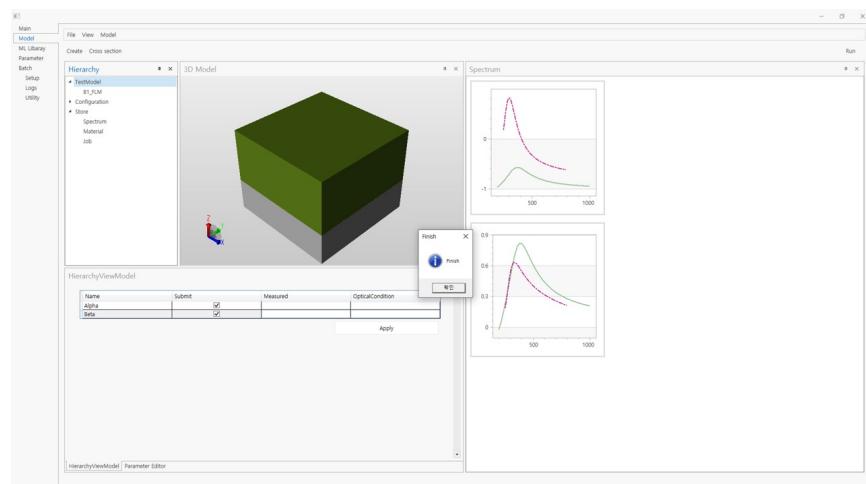
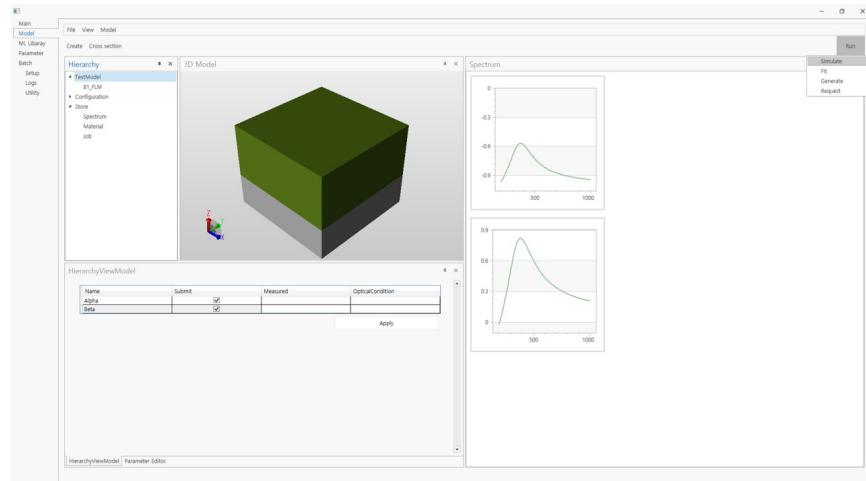


5.2.2 Results

1. One Layer (Simulate) : FINISH! GRAPH SHOWN!



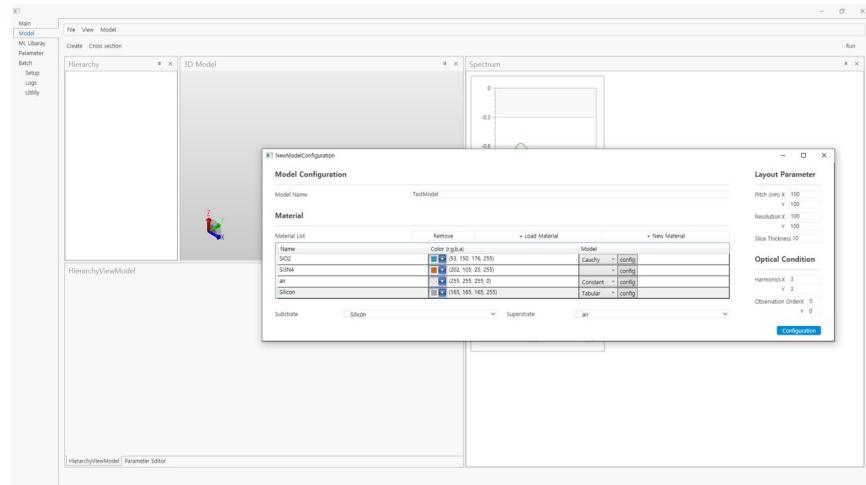




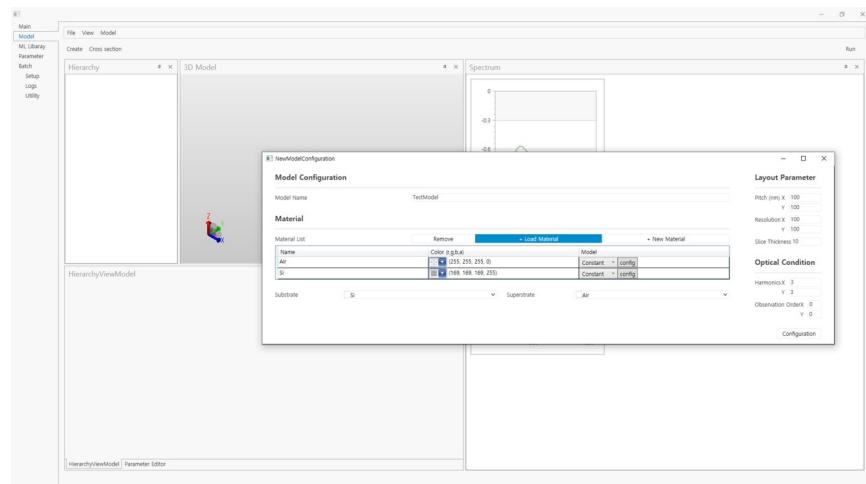
symptom : reason : solution:

2.Two Layer : MODELING HAS NO PROBLEM, BUT CRASH WHEN 'CREATE'

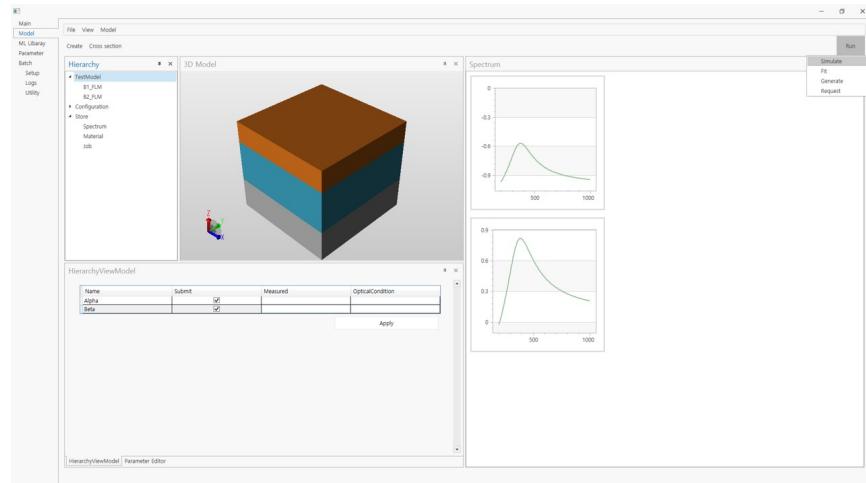
possible to use 'tabular' type material info



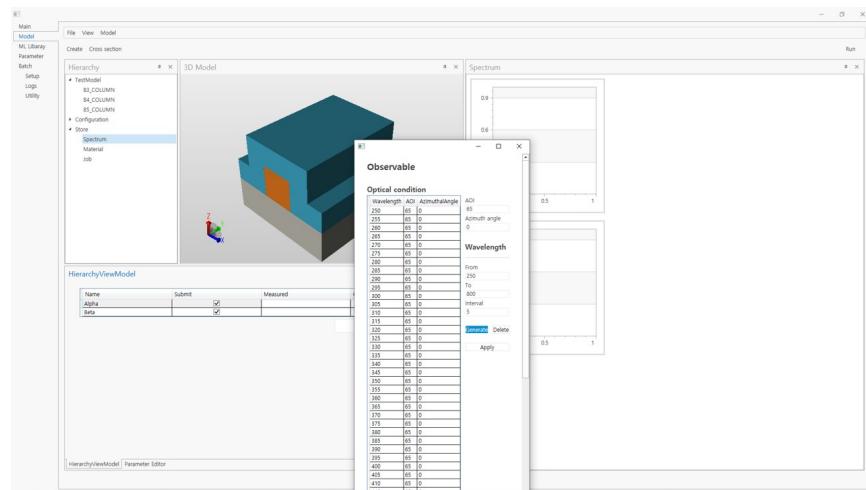
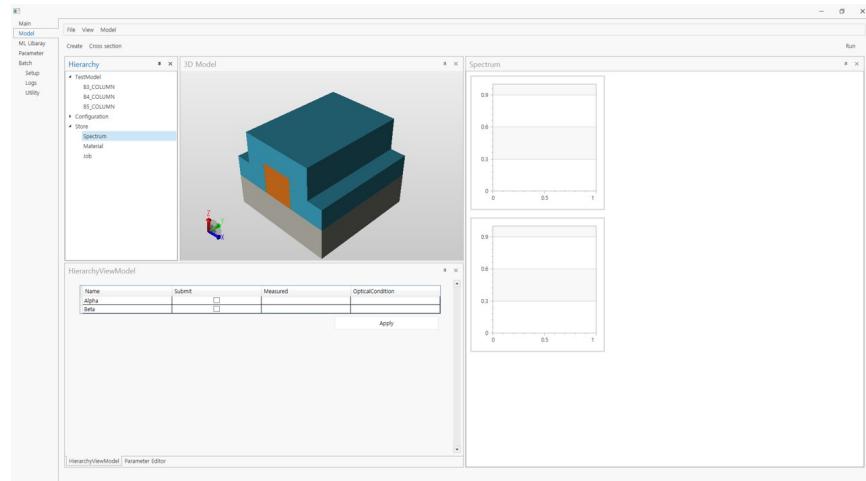
'+load material' button loads pre defined 'materials info'

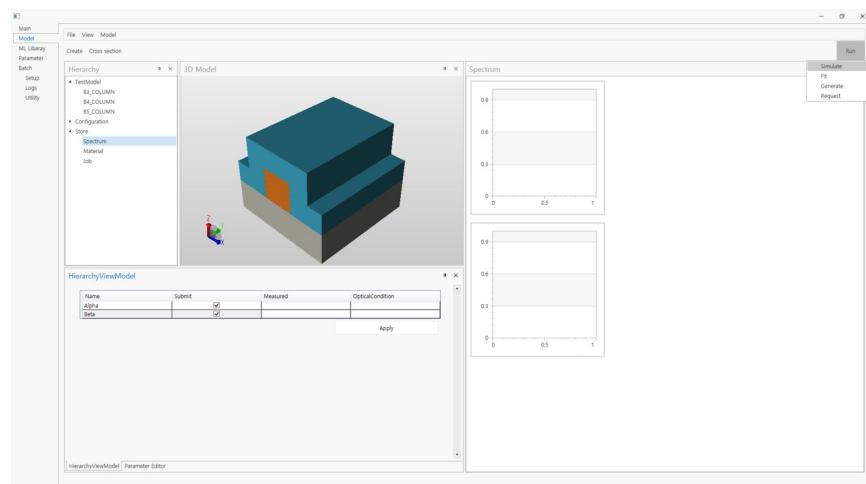
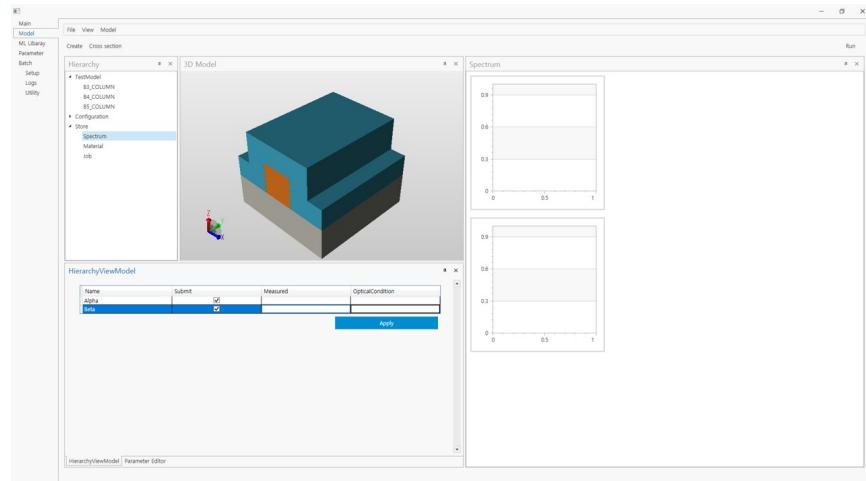


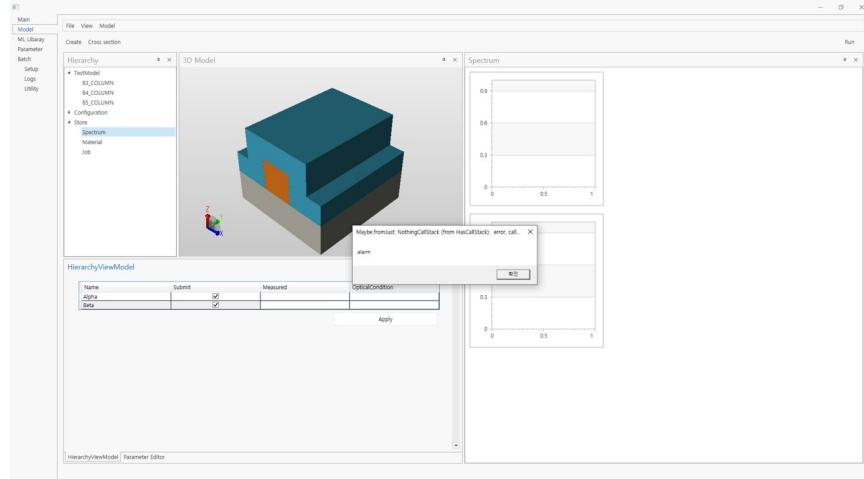
CRASH when 'CREATE' :



3. One Box on One Layer
4. One Box Depo
5. One Box Coating (2D) : Job submission complete, confirm Job finish! but error message

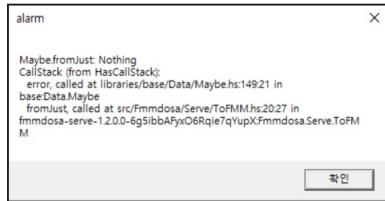






JobResult.Info.Result.Left

```
Maybe.fromJust: Nothing
CallStack (from HasCallStack):
  error, called at libraries/base/Data/Maybe.hs:149:21 in base:Data.Maybe
  fromJust, called at src/Fmmdosa/Serve/ToFMM.hs:20:27 in fmmdosa-serve-1.2.0.0-6g5ibbAFyxO6Rqie7qYupX.Fmmdosa.Serve.ToFMM
```



symptom : job submission complete (job ID was confirmed), error message from 'get result' reason : finding... solution:

5.3 [TODO] Recipe Load Test