

How to Use the Programs

One-Facet Design: NiVaried Solution

Extract files from NiVaried.zip, then the solution (or the project) NiVaried would be opened by Visual Studio 2015. Visual Studio Community 2015 can be freely downloaded at the Microsoft website

<https://www.visualstudio.com/downloads/download-visual-studio-vs>

To open the solution, select the menu “FILE| Open Project” (Figure 1).



Figure 1

Select the solution file “NiVaried.sln” (Figure 2).

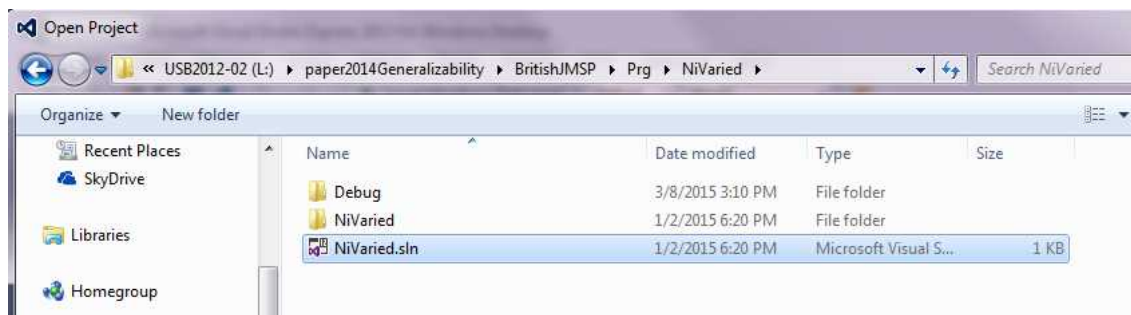


Figure 2

If some error message is presented, it can be ignored. Some explanations about errors, which can be ignored, can be obtained at the website

<http://mcn-www.jwu.ac.jp/~yokamoto/openwww/cpp/VCppGraphics/#BM1>

Rebuild the solution (Figure 3).

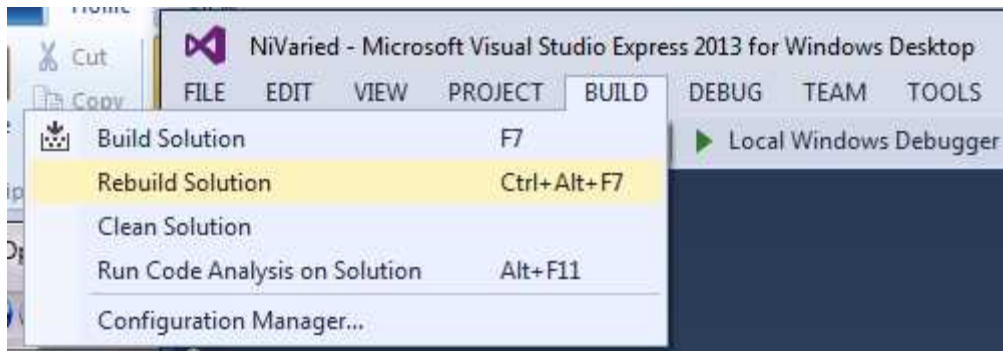


Figure 3

Select the menu “DEBUG|Start Debugging”, or “Start Without Debugging” if you would like to choose the latter one.



Figure 4

MyForm window will appear (Figure 5).

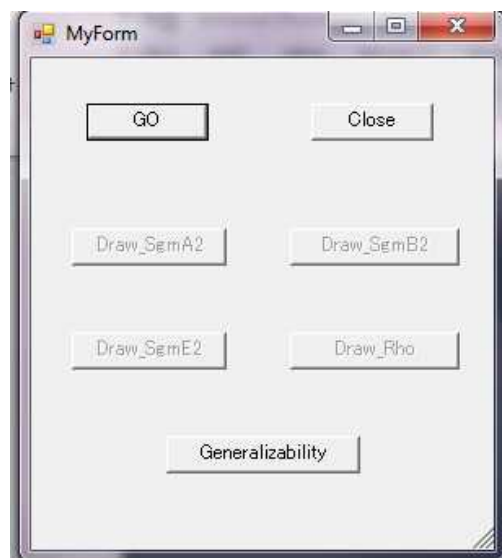


Figure 5

Select the input data file “DataA20B5.txt”, then click Open button (Figure 6).

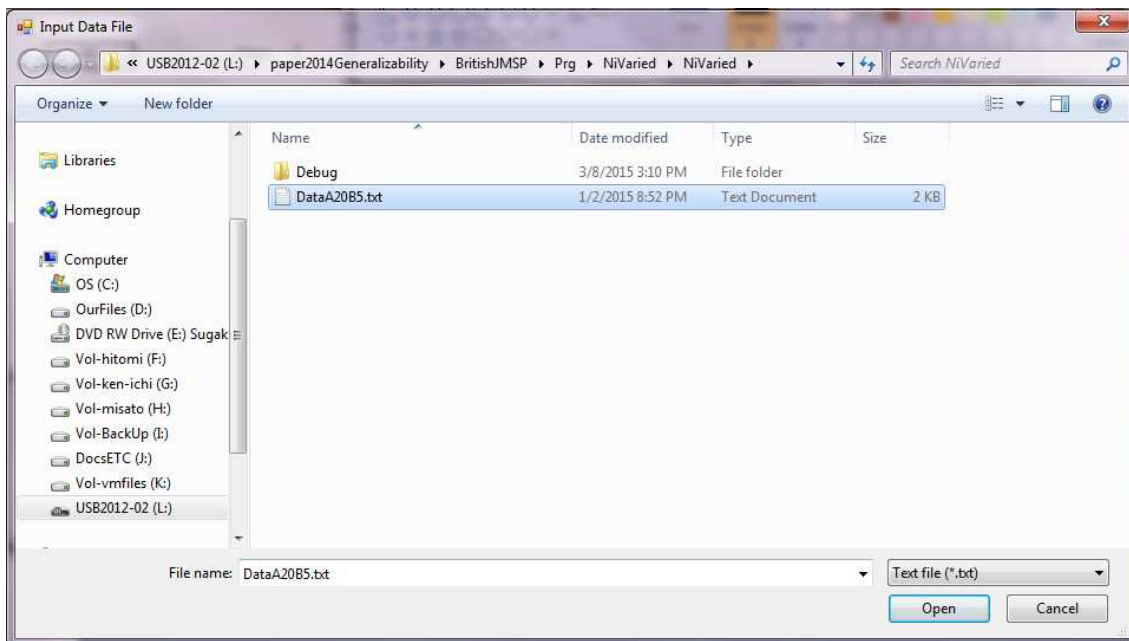


Figure 6

Next, set a name of Output text file. The name is arbitrary. Click Save button (Figure 7).

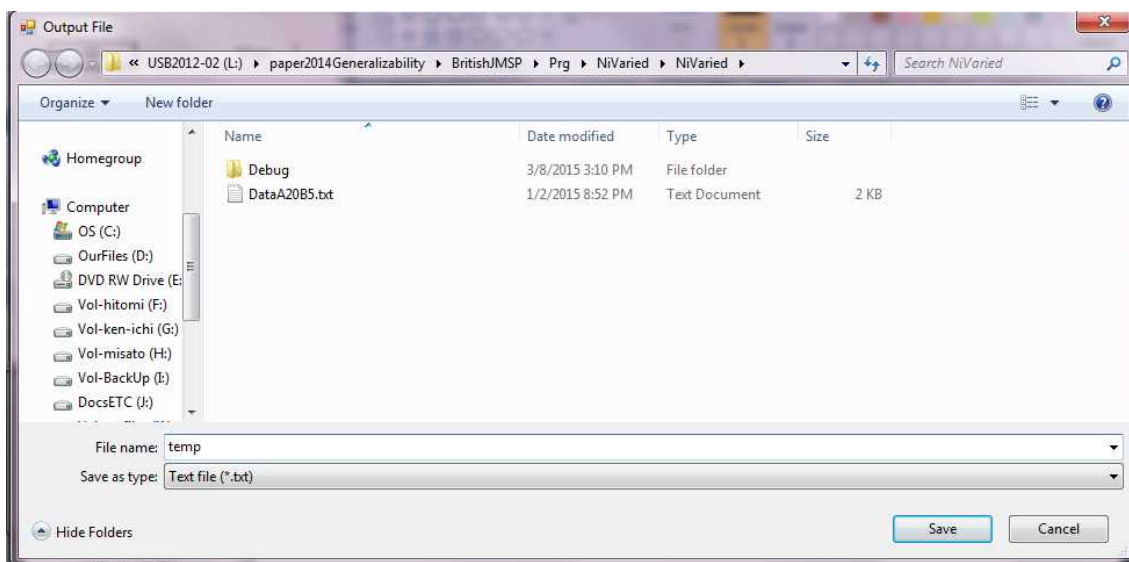


Figure 7

Then, sampling in MCMC will start. During the sampling, a window like that in Figure 8 will be presented.



Figure 8

After MCMC sampling, the window like that in Figure 9 will appear.



Figure 9

Click OK button, then MyForm window will be presented as in Figure 10.

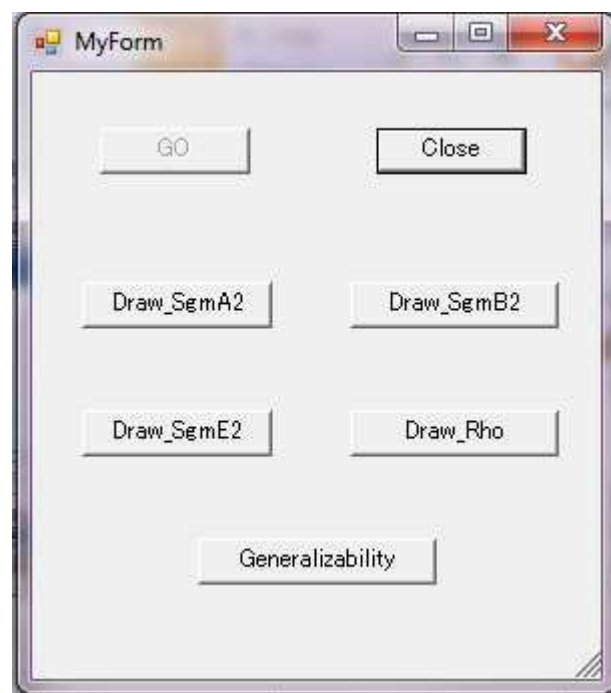


Figure 10

Click Generalizability button, then the graph, based on which Figure 1 of the submitted paper was prepared, will be presented (Figure 11).

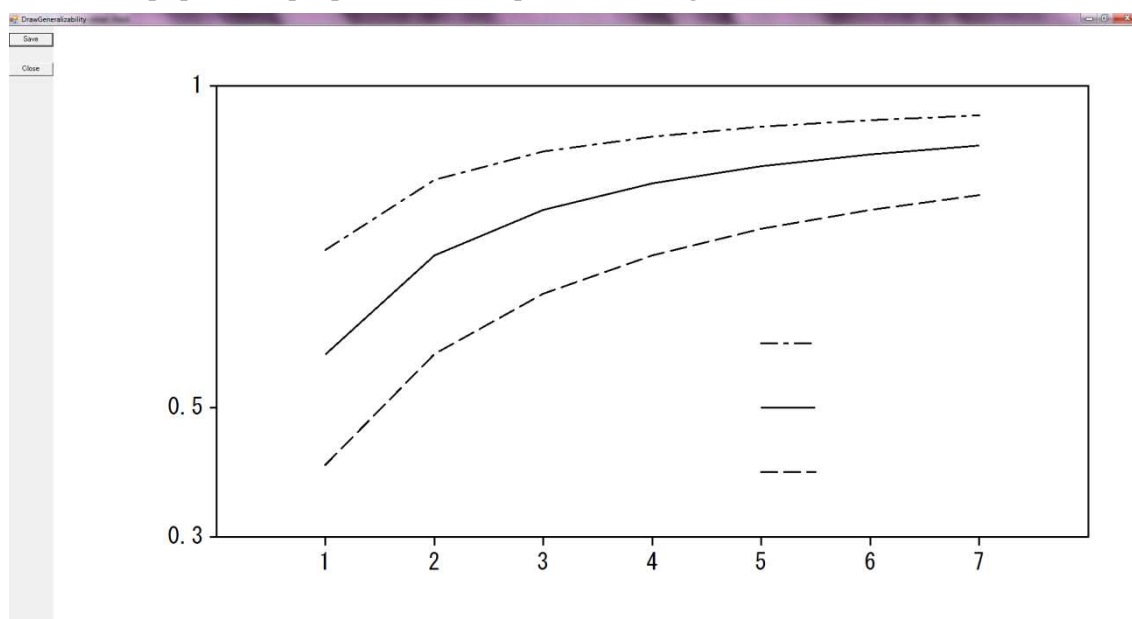


Figure 11

Two-Facet Design: NiNoVaried Solution

How to use this solution (project) is essentially the same as for NiVaried solution.

Extract files from NiNoVaried.zip, then open NiNoVaried solution by Visual Studio 2015 (Figure 12).

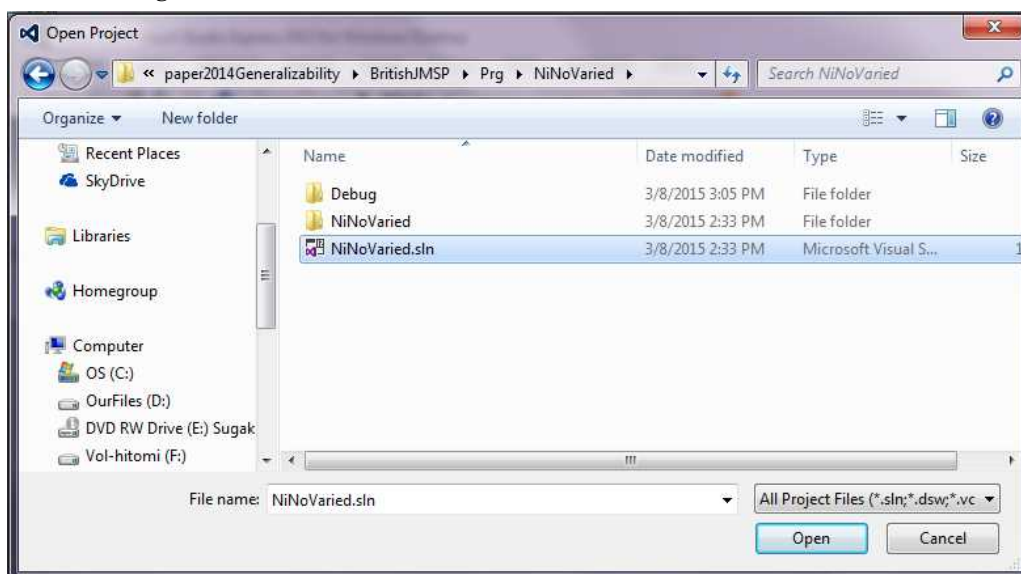


Figure 12

Select the menu “BUILD | Rebuild Solution” (Figure 13).

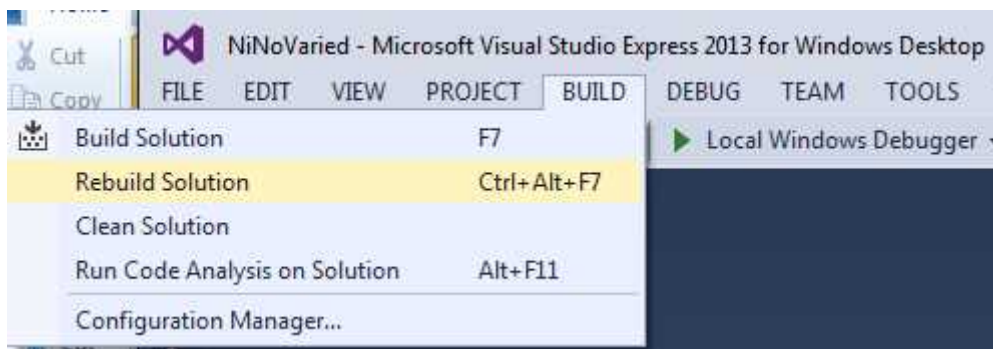


Figure 13

Select the menu “DEBUG | Start Debugging” (Figure 14).



Figure 14

Click GO button on the presented window (Figure 15).

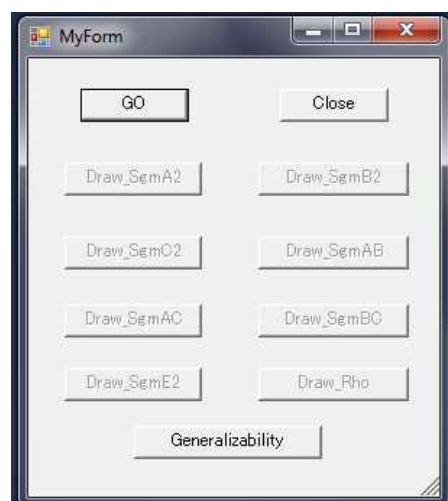


Figure 15

Select the input data file “DataNA20NB5NC3.txt” (Figure 16).

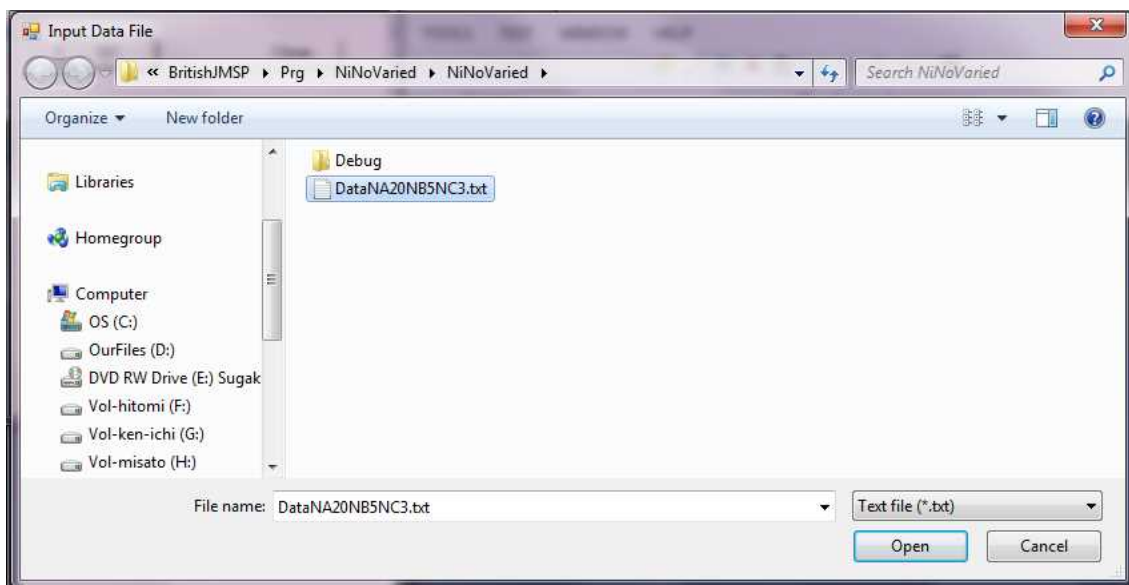


Figure 16

Set an arbitrary name of the output text file (Figure 17).

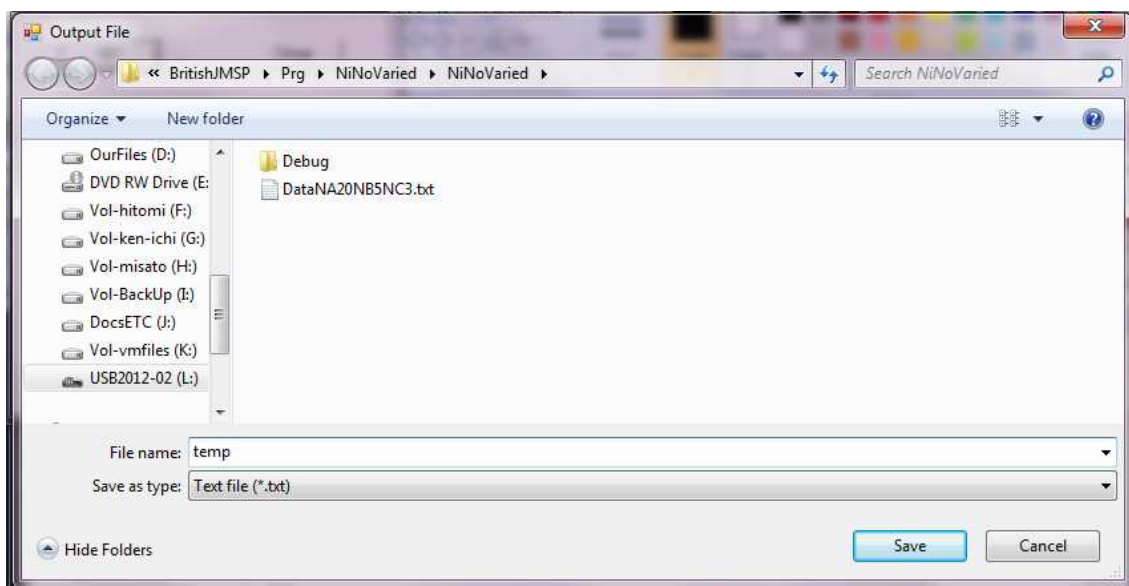


Figure 17

Click Save button, then MCMC sampling will start. After sampling by MCMC, a window like that in Figure 18 will be presented.



Figure 18

Click OK button. MyForm window will be shown as in Figure 19.

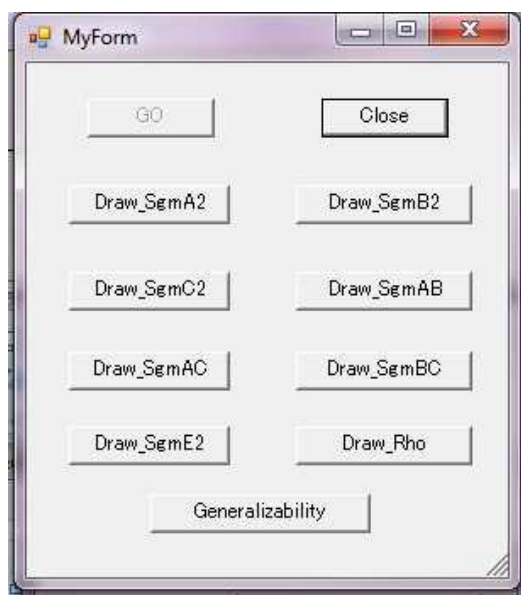


Figure 19

Click Generalizability button, then the window shown in Figure 20 will be presented. Click Ni-Varies button.

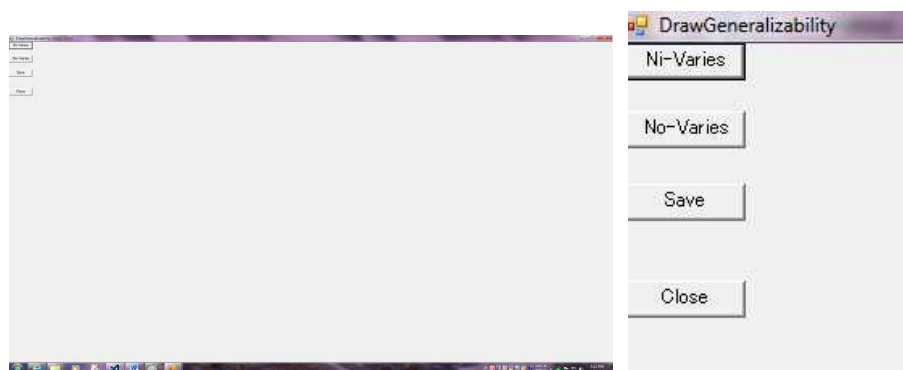


Figure 20

The window like that in Figure 21 will be presented.

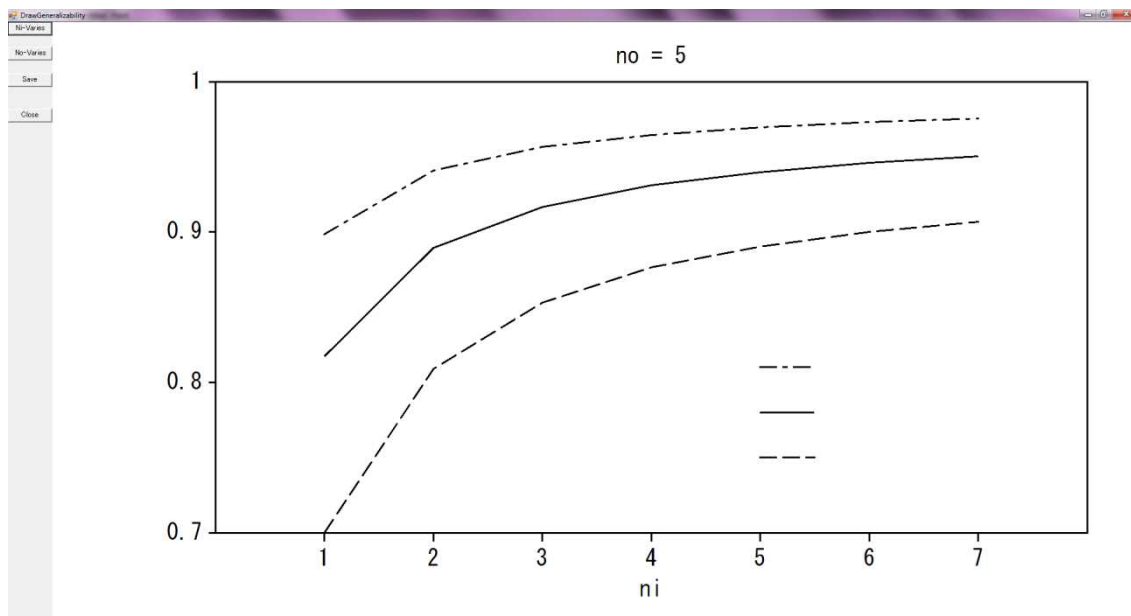


Figure 21

Based on this graph, Figure 2 of the submitted paper was prepared.

Click No-Varies button, then the window like that in Figure 22 will be presented.

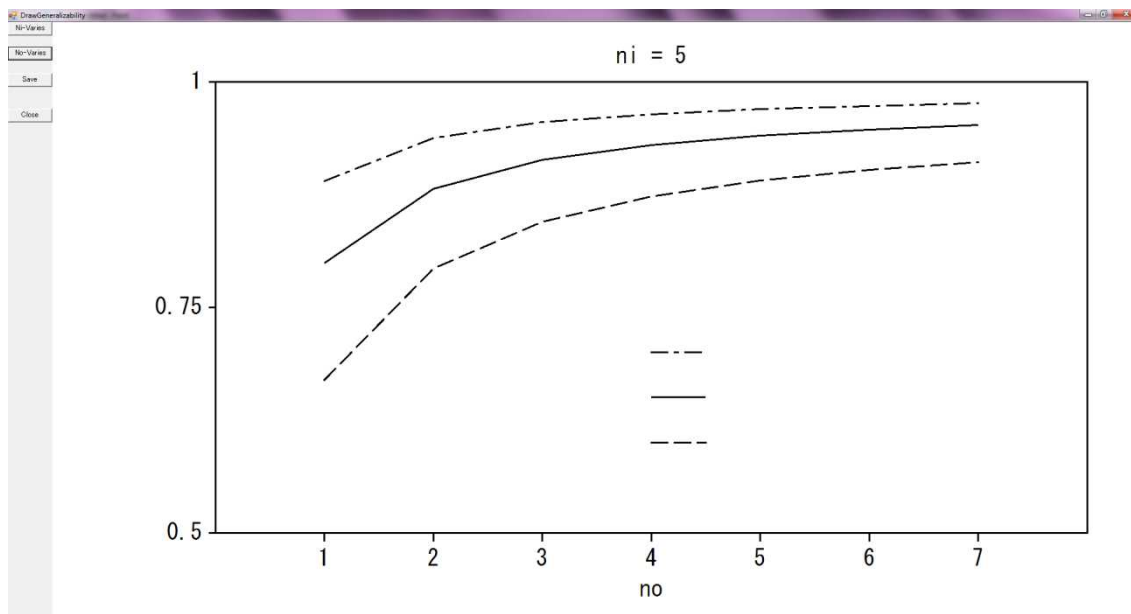


Figure 22

Figure 3 of the submitted paper was prepared based on this graph.