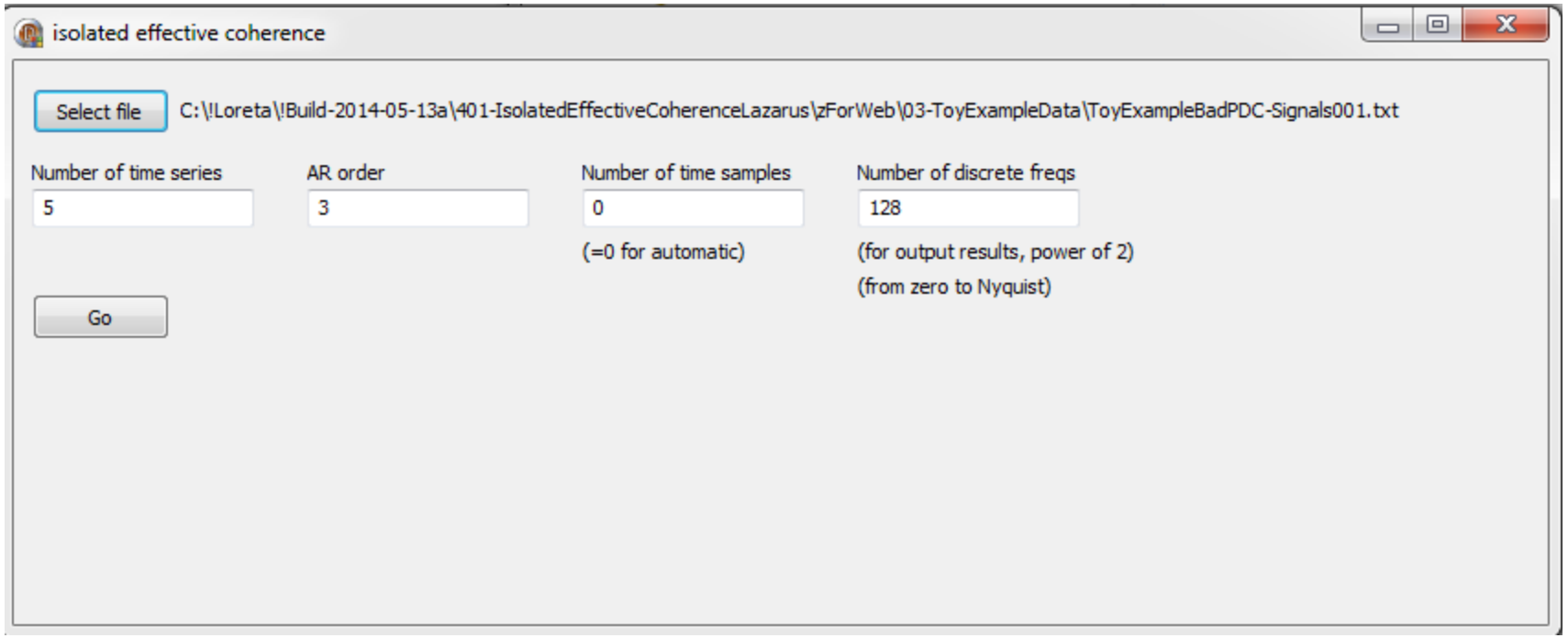
The file “2013-11-07-IsolatedEffCoh-20140513-errataFixed.pdf” is the technical report (pre-print) with the new method:
iCoh: isolated effective coherence

…\01-iCohExecutableWin\p_iCoh1.exe : this is the program (executable for windows) that computes iCoh and the generalized partial directed coherence (gPDC) of Baccala and Sameshima



This is an example RUN with the example data included here

…\02-iCohLazarusDelpiPascalCode : this folder contains all the pascal code for iCoh and gPDC.

This was compiled using lazarus free-pascal “www.lazarus.freepascal.org”

…\03-ToyExampleData\ToyExampleBadPDC-Signals001.txt :
This is test data, toy example. This is explained in detail in the ARXIV paper (toy example 9.2 therein).
It is a simple text file, numbers separated by space. 25600 rows (time samples), 5 columns (number of time series).

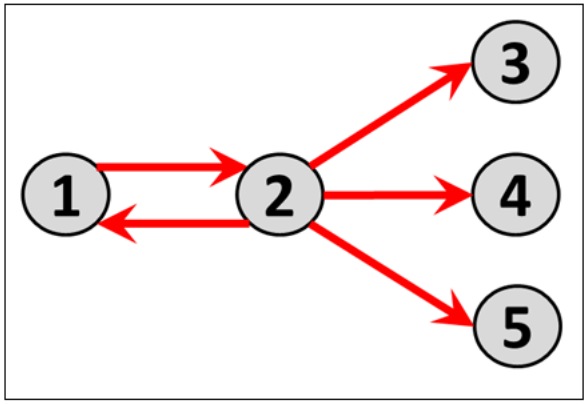


Figure 5: Toy Example 9.2. Schematic representation of the direct wiring among 5 nodes.

Table 2 shows the time domain auto-regressive parameters for Toy Example 9.2.

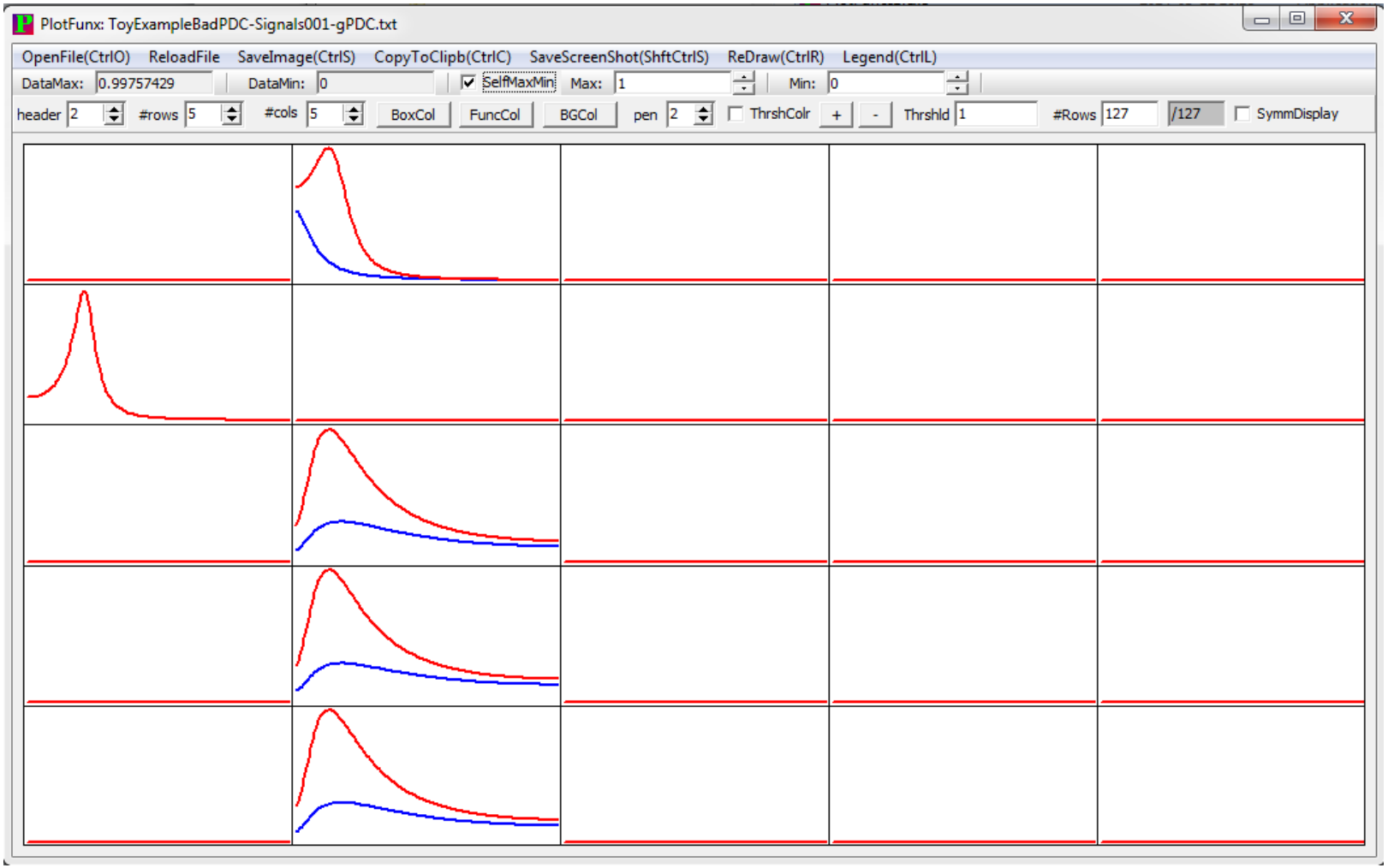
$\mathbf{A}(1) =$	1.5	-0.25	0	0	0
	-0.2	1.8	0	0	0
	0	0.9	1.65	0	0
	0	0.9	0	1.65	0
	0	0.9	0	0	1.65
$\mathbf{A}(2) =$	-0.95	0	0	0	0
	0	-0.96	0	0	0
	0	-0.8	-0.95	0	0
	0	-0.8	0	-0.95	0
	0	-0.8	0	0	-0.95
$diagonal\ \mathbf{S}_{\varepsilon} =$	1	1	1	1	1

…\04-iCoh&gPDCresults : this folder contains results for estimated iCoh and gPDC from the toy example.

The files within are:
ToyExampleBadPDC-Signals001-gPDC.txt: gPDC
ToyExampleBadPDC-Signals001-iCoh.txt: iCoh
ToyExampleBadPDC-Signals001-Noisevar-ARcoeff.txt: The innovations covariance, followed by the estimated AR coefficients up to order 3 (in this example)

The TEXT files with gPDC and iCoh consist of 25 columns and 128 rows:
The first row is a header line, with 25 column names clearly indicating SENDER $\rightarrow$ RECEIVER
This is followed by 128 rows, with the connectivities at discrete frequencies 0 to 127 (from DC up to the Nyquist frequency minus 1). For example, if the data was sampled at 256 Hz, then the 128 rows correspond exactly to the range 0 to 127 Hz.

…\05-PlotFuncViewerExecutableWin\PlotFuncs1.exe : this is the program (executable for windows) displays the connectivity files produced by the iCoh program. For instance, if you open both files “ToyExampleBadPDC-Signals001-gPDC.txt” and “ToyExampleBadPDC-Signals001-iCoh.txt”, you will see:



where RED=iCoh and BLUE=gPDC.

iCoh gives correct results. gPDC gives incorrect results in two fundamental aspects: Incorrect information on the frequencies that are transmitted, and incorrect low values in general for the connectivity strength.