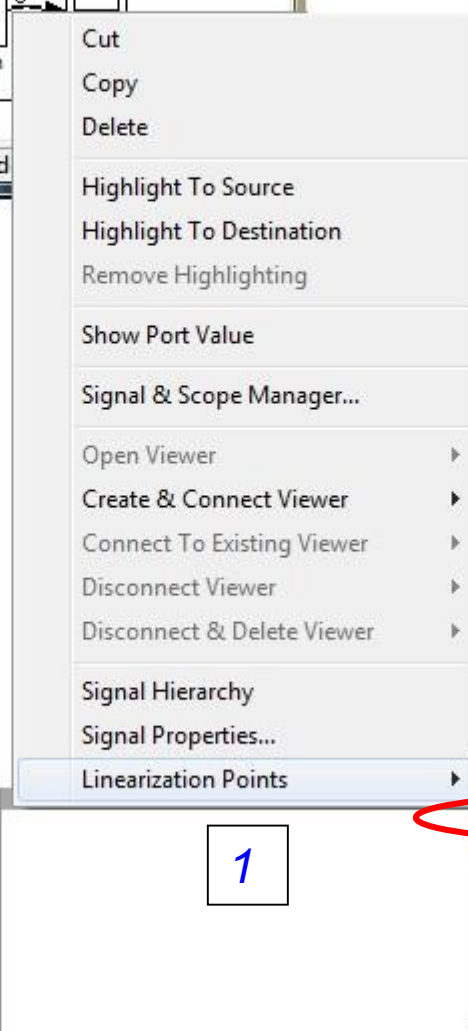
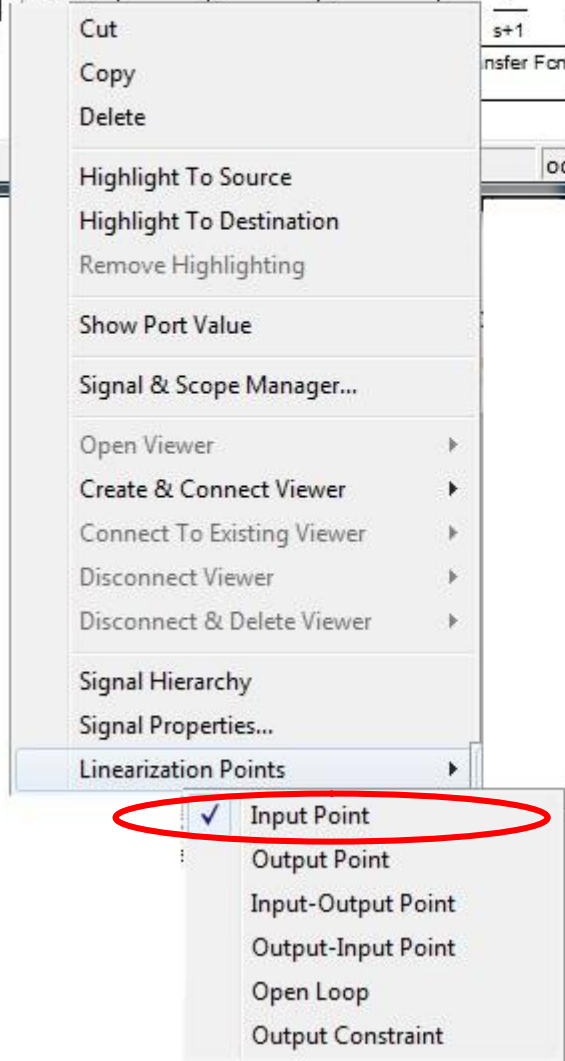
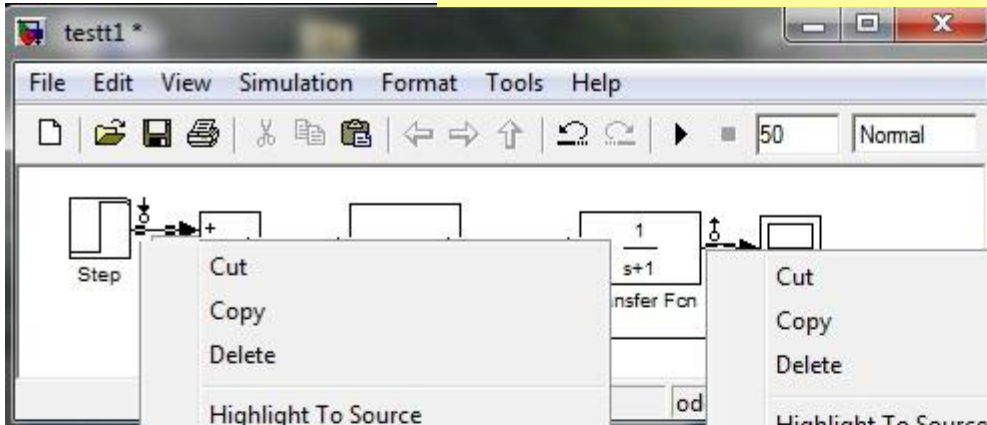
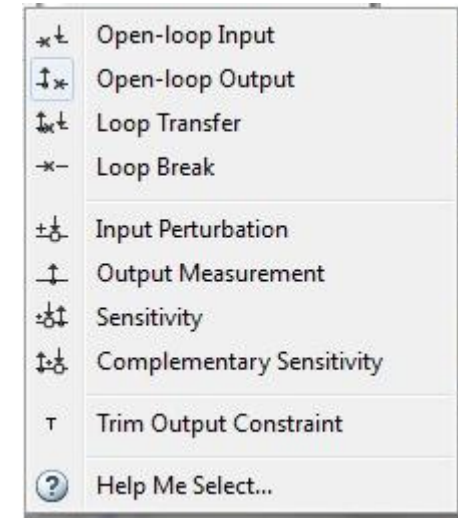


Simulink / Linear Analysis Tools

schemat → *prawe menu* → *Linearization Points*



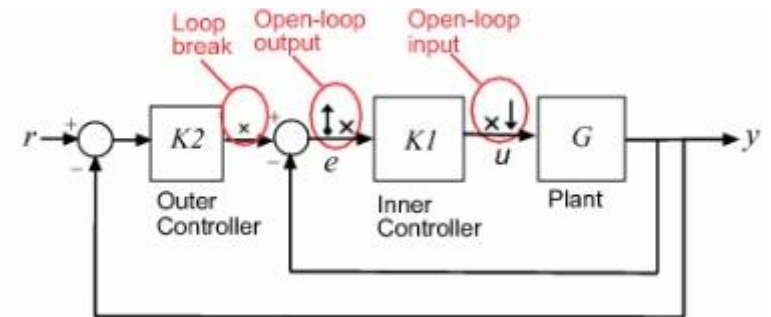
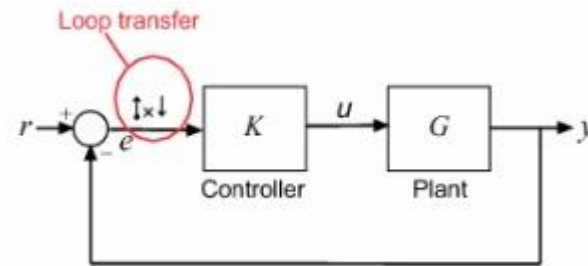
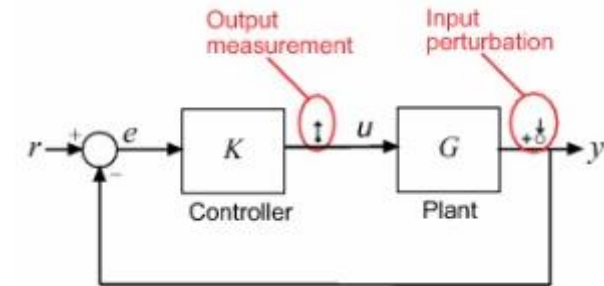
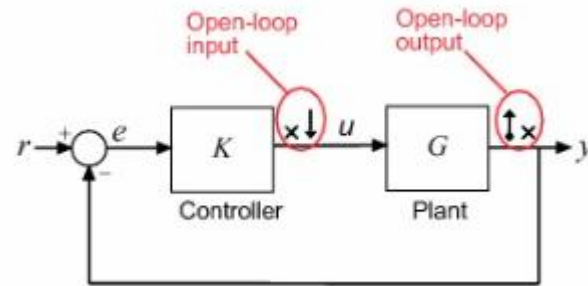
v.2013



Simulink / Linear Analysis Tools

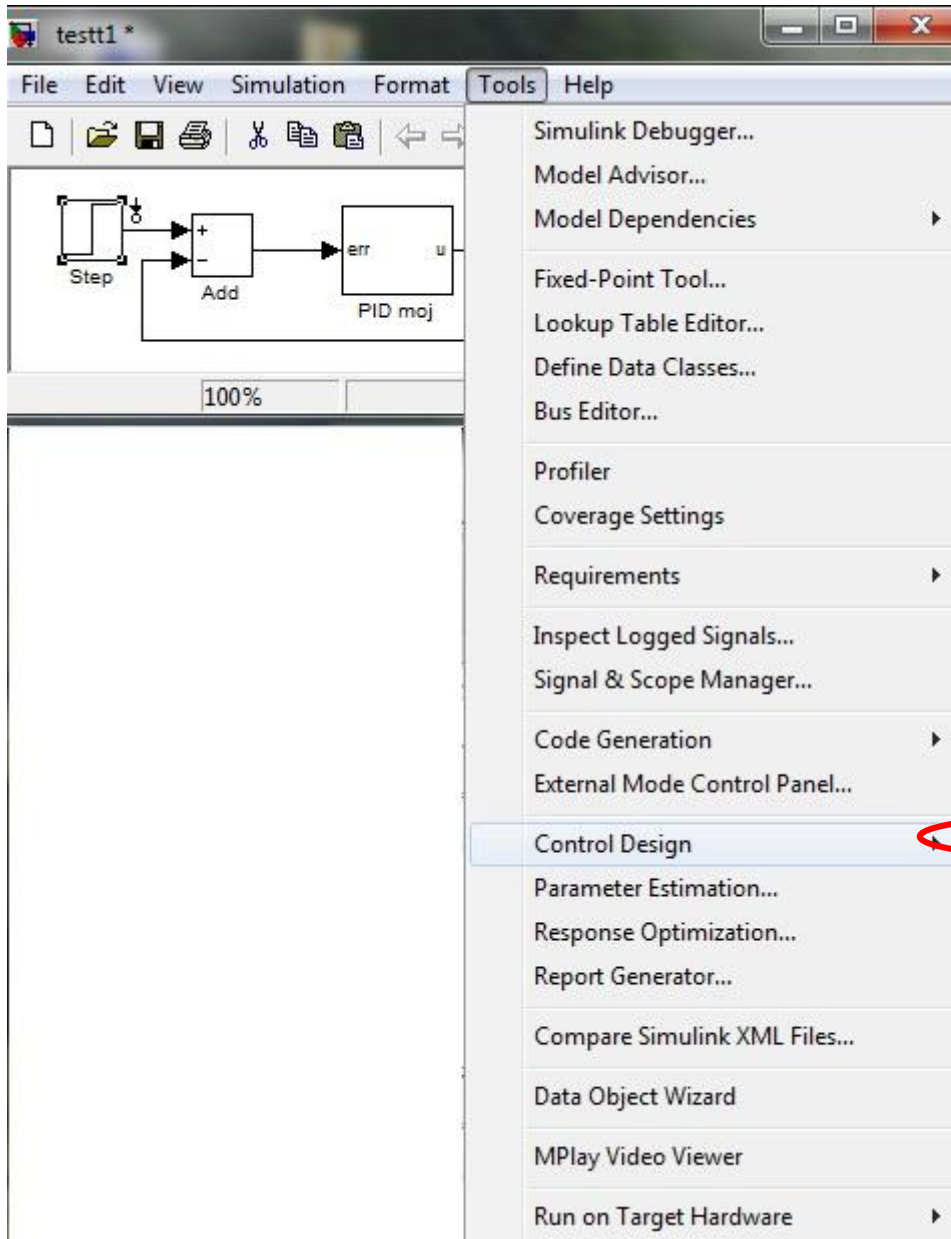
v.2013

	Open-loop Input
	Open-loop Output
	Loop Transfer
	Loop Break
	Input Perturbation
	Output Measurement
	Sensitivity
	Complementary Sensitivity
	Trim Output Constraint
	Help Me Select...

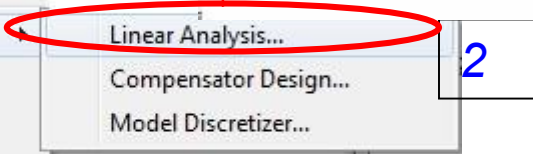
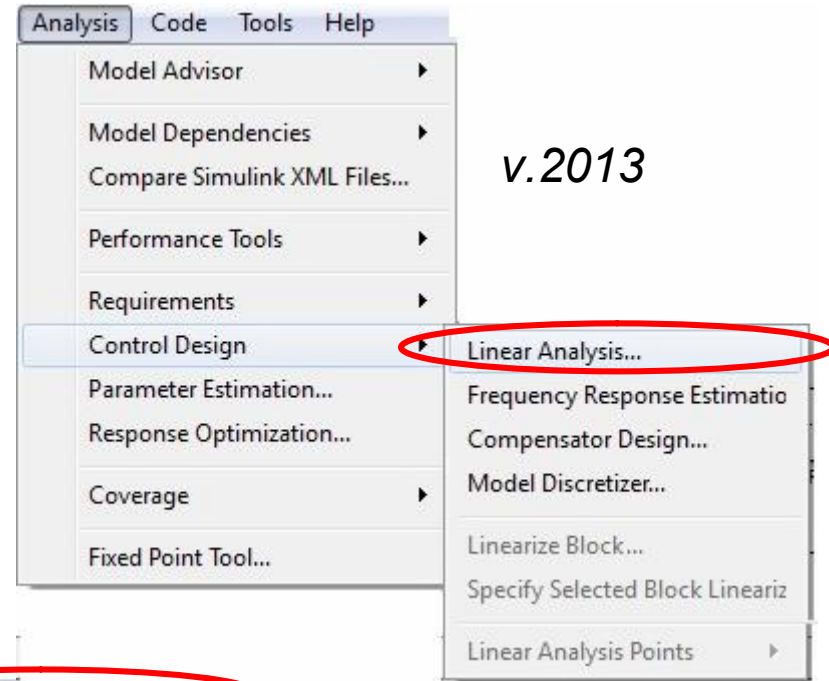


Simulink / Linear Analysis Tools

schemat → *Tools* → *Control Design* → *Linear Analysis*

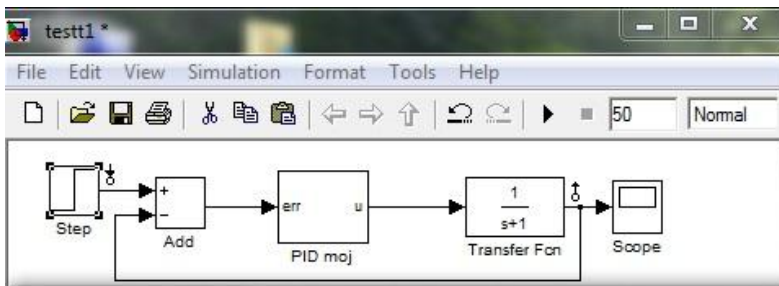


schemat → *Analysis* →



Matlab + Simulnik + Simulink Control Design

Simulink / Linear Analysis Tools



Linear Analysis Tool - testt1

LINEAR ANALYSIS EXACT LINEARIZATION FREQUENCY RESPONSE ESTIMATION

Analysis I/Os: Model I/Os Plot Result: New Step

Operating Point: Model Initial Condition Options Launch Dia

SETUP

Data Browser

Search workspace variables

MATLAB Workspace

Name	Value
K	2
KTi	0.5000
Kp	2
ans	'C:\testac'
kTi	0.5000

Linear Analysis Workspace

Name	Value
------	-------

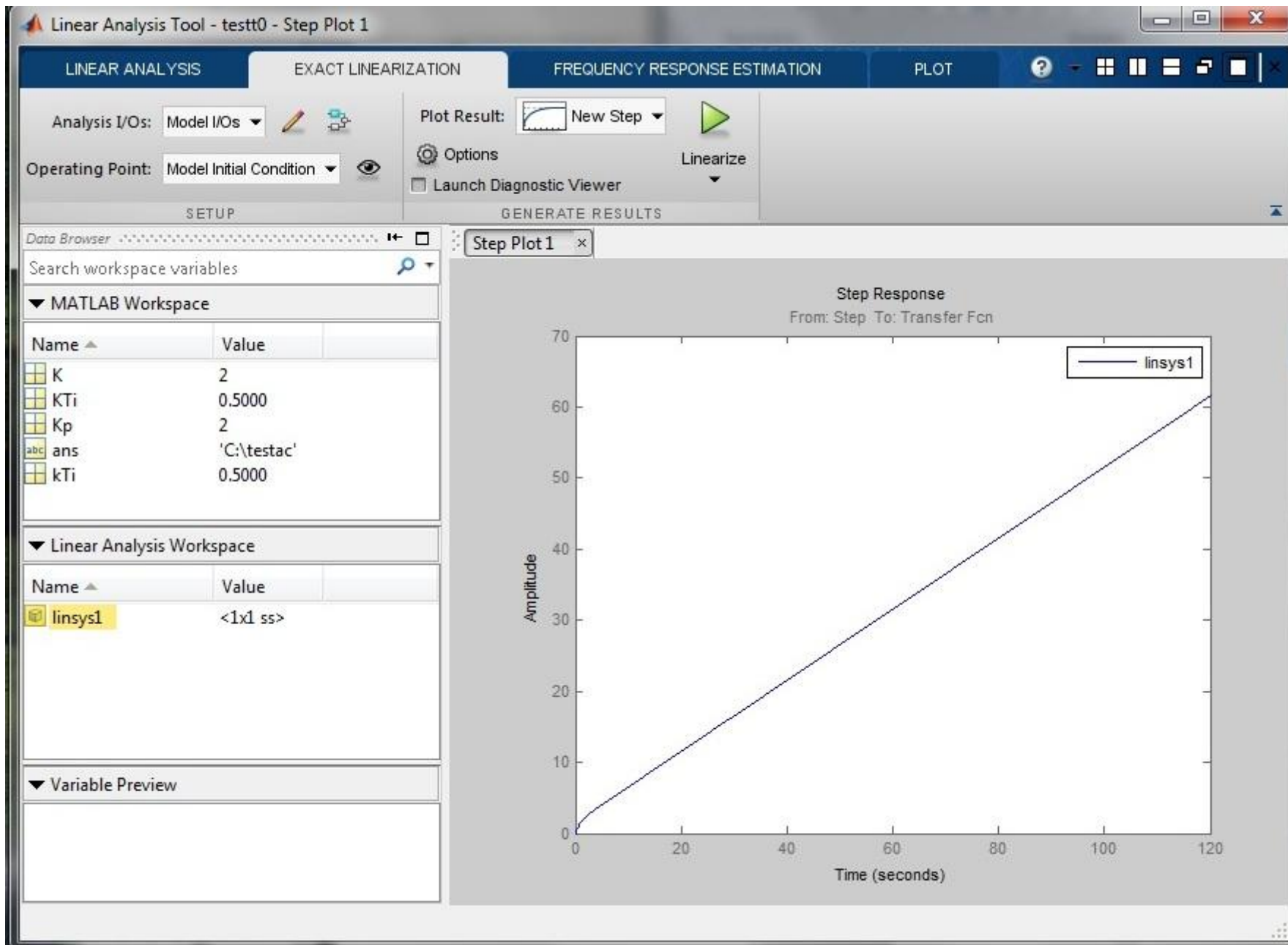
Variable Preview

Linearization at model initial condition:
State-space model with 1 outputs, 1 inputs, and 2 states.

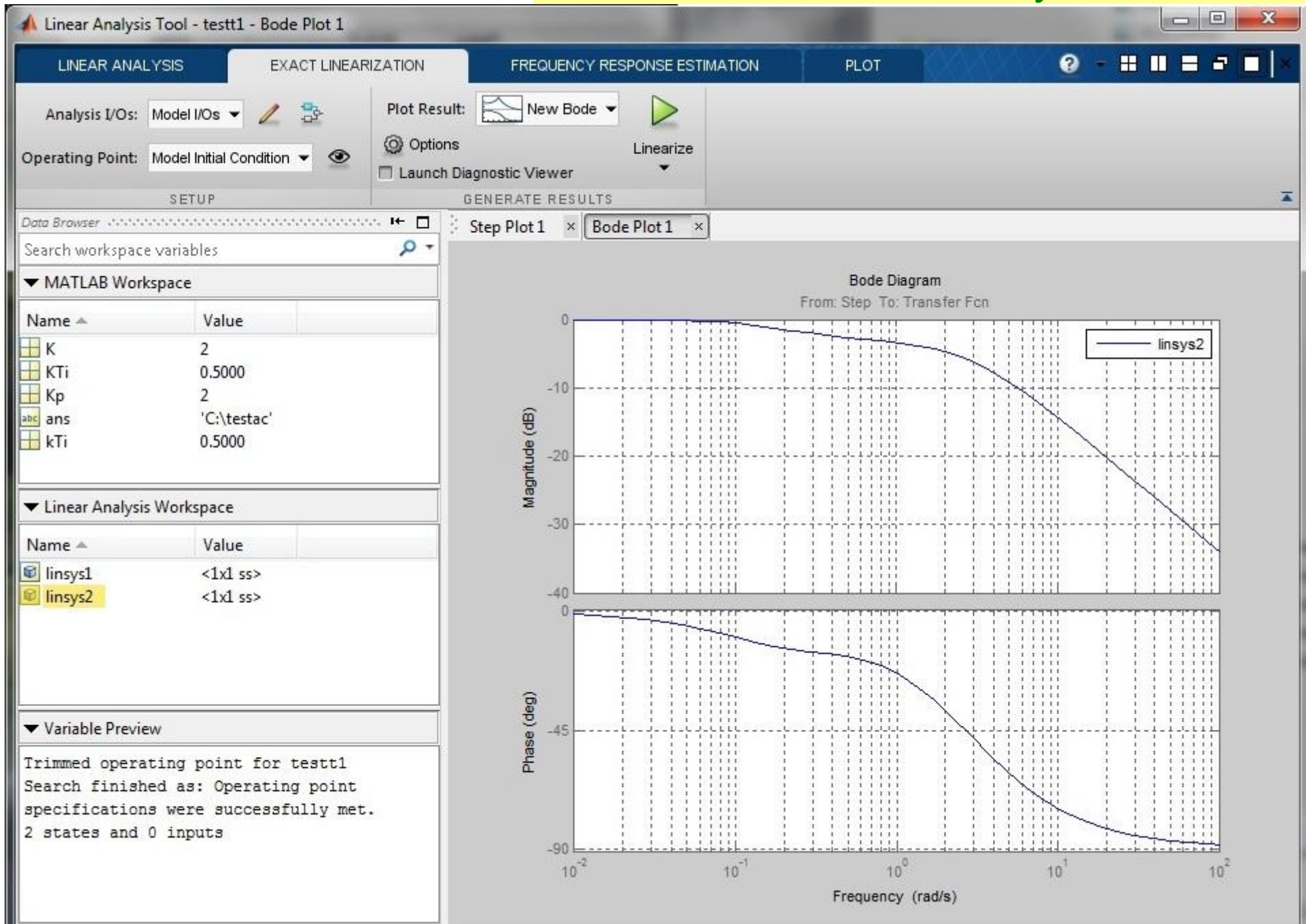
Create New Plot

- New Step
- New Bode
- New Impulse
- New Nyquist
- New Nichols
- New Singular Value
- New Pole/Zero Map
- New I/O Pole/Zero Map

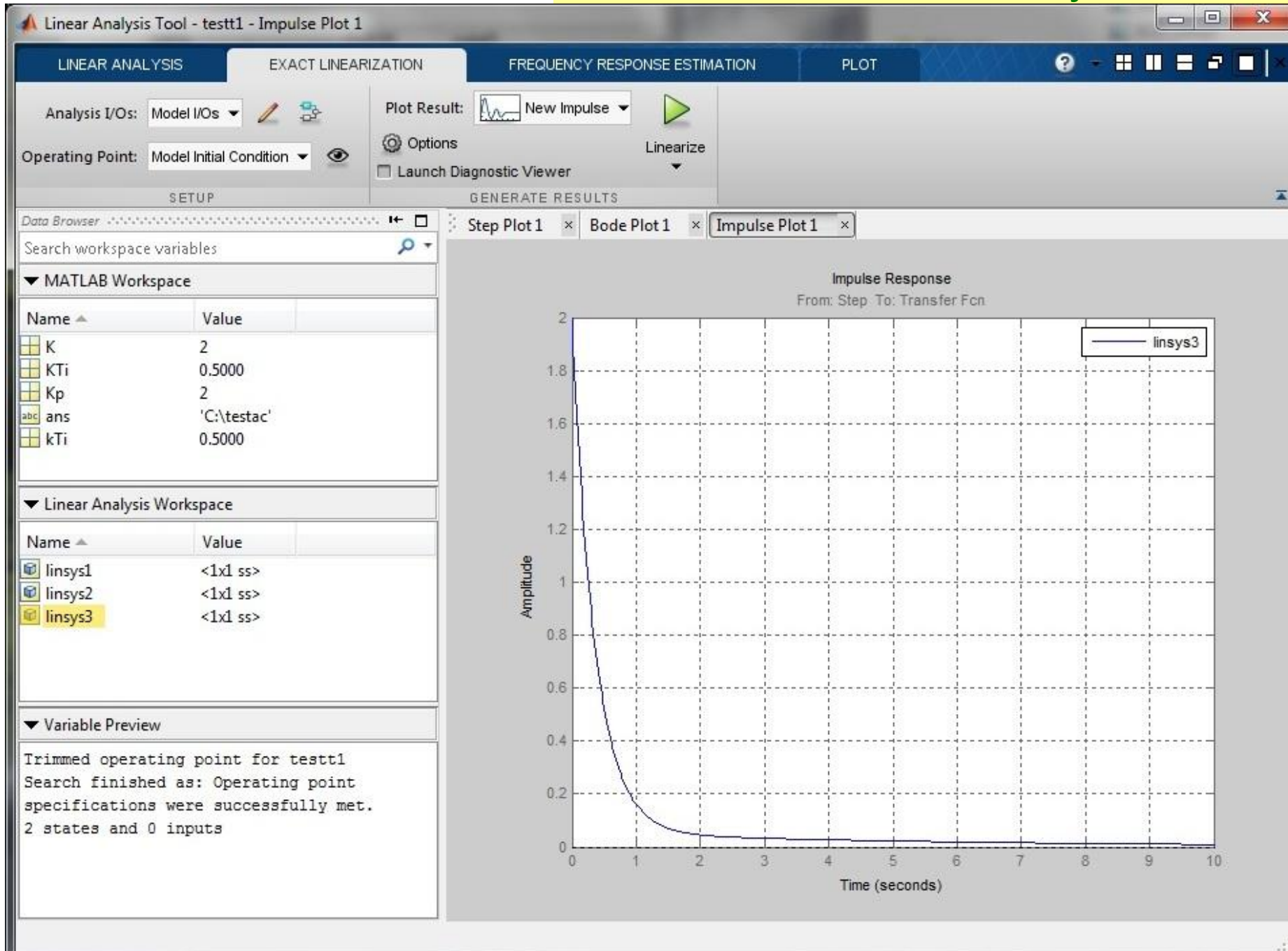
Simulink / Linear Analysis Tools



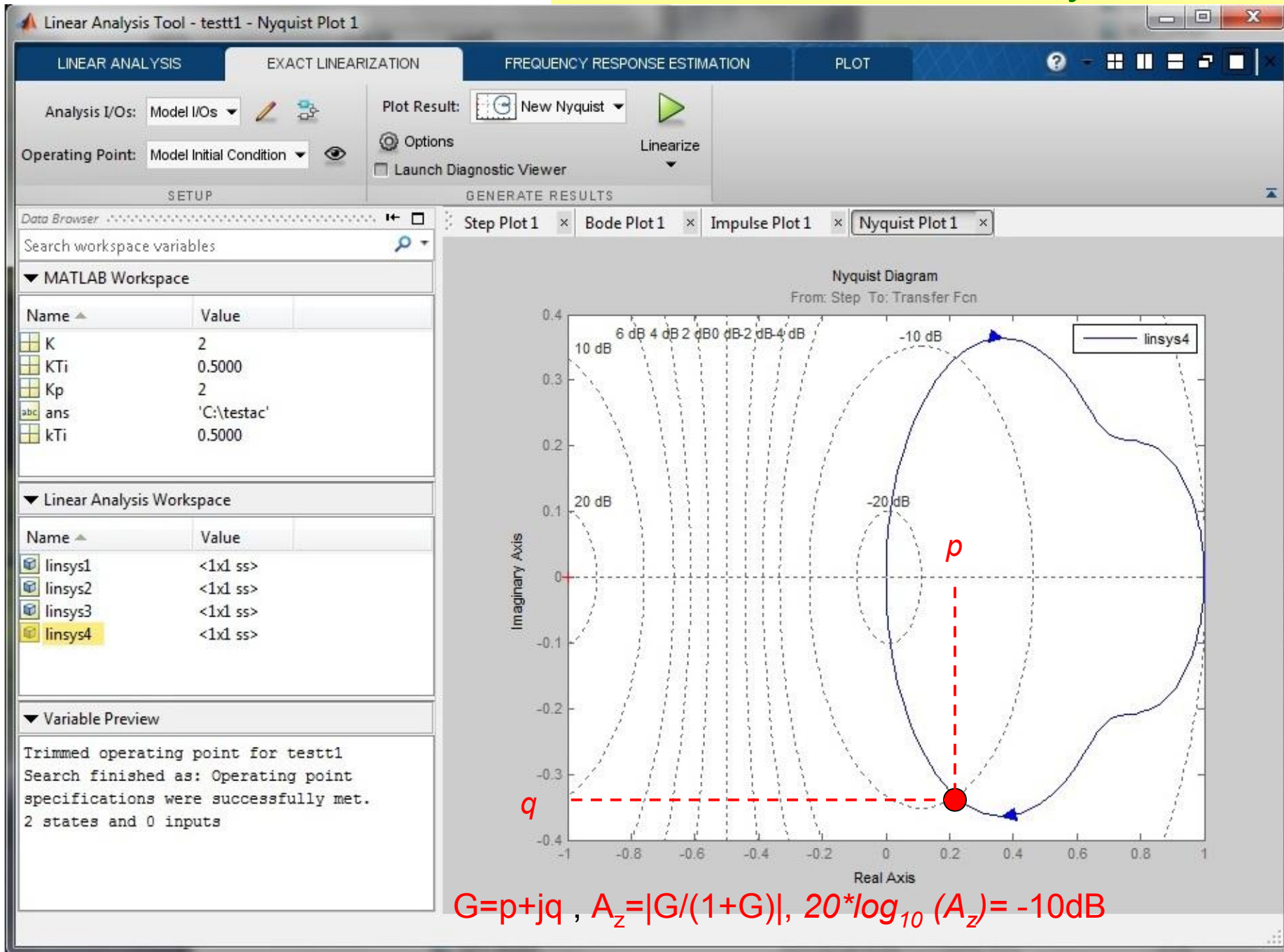
Simulink / Linear Analysis Tools



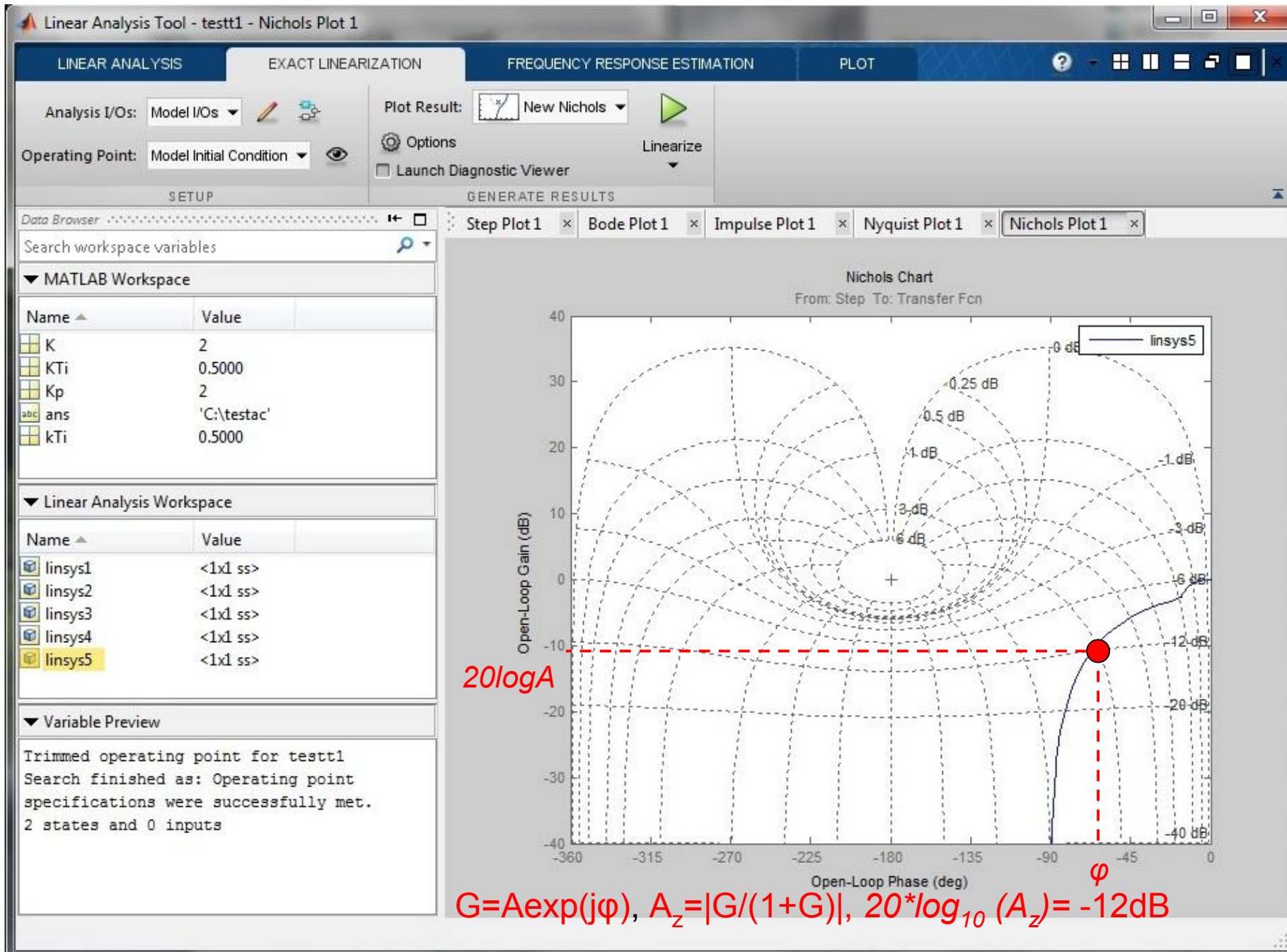
Simulink / Linear Analysis Tools



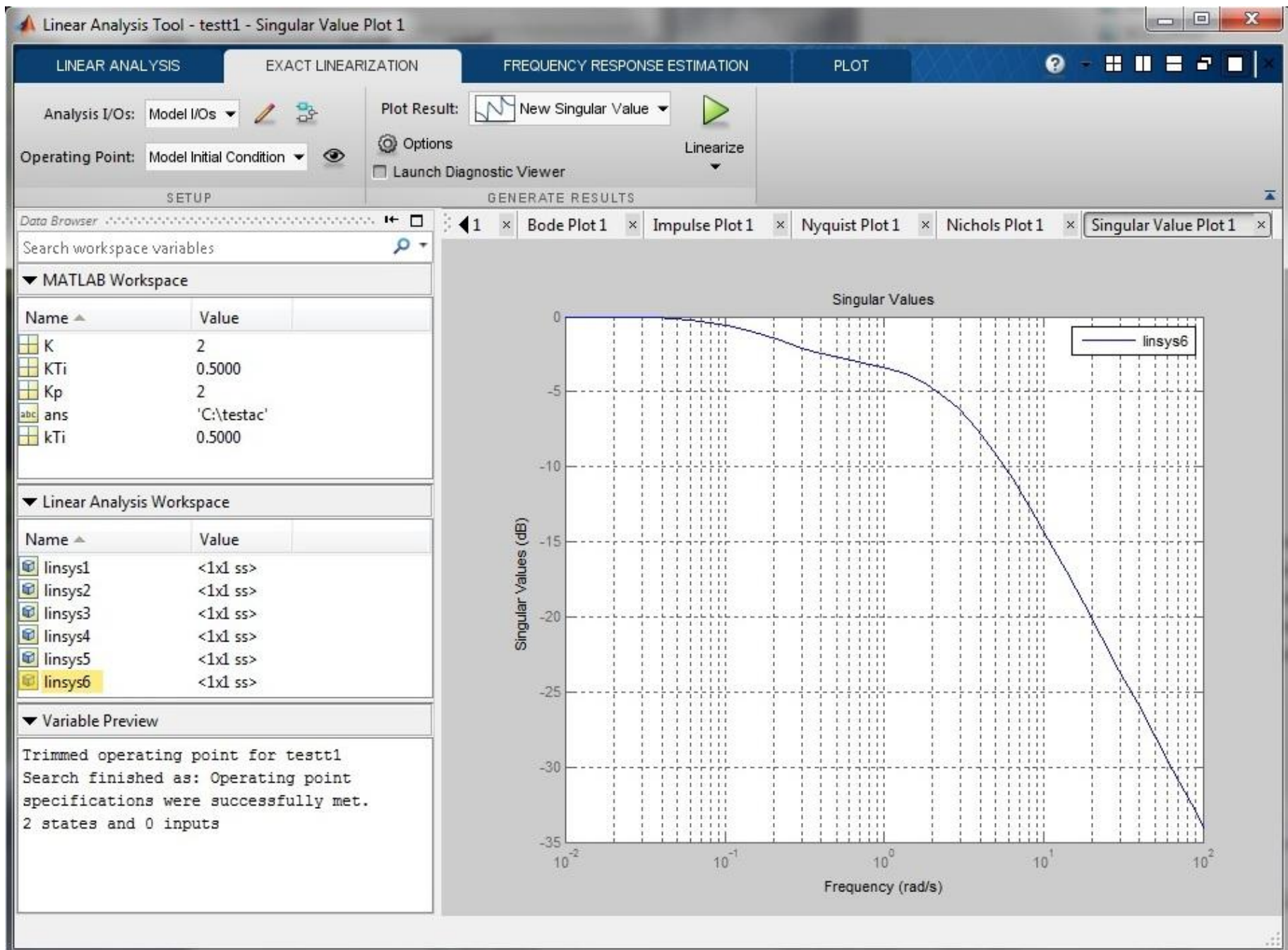
Simulink / Linear Analysis Tools



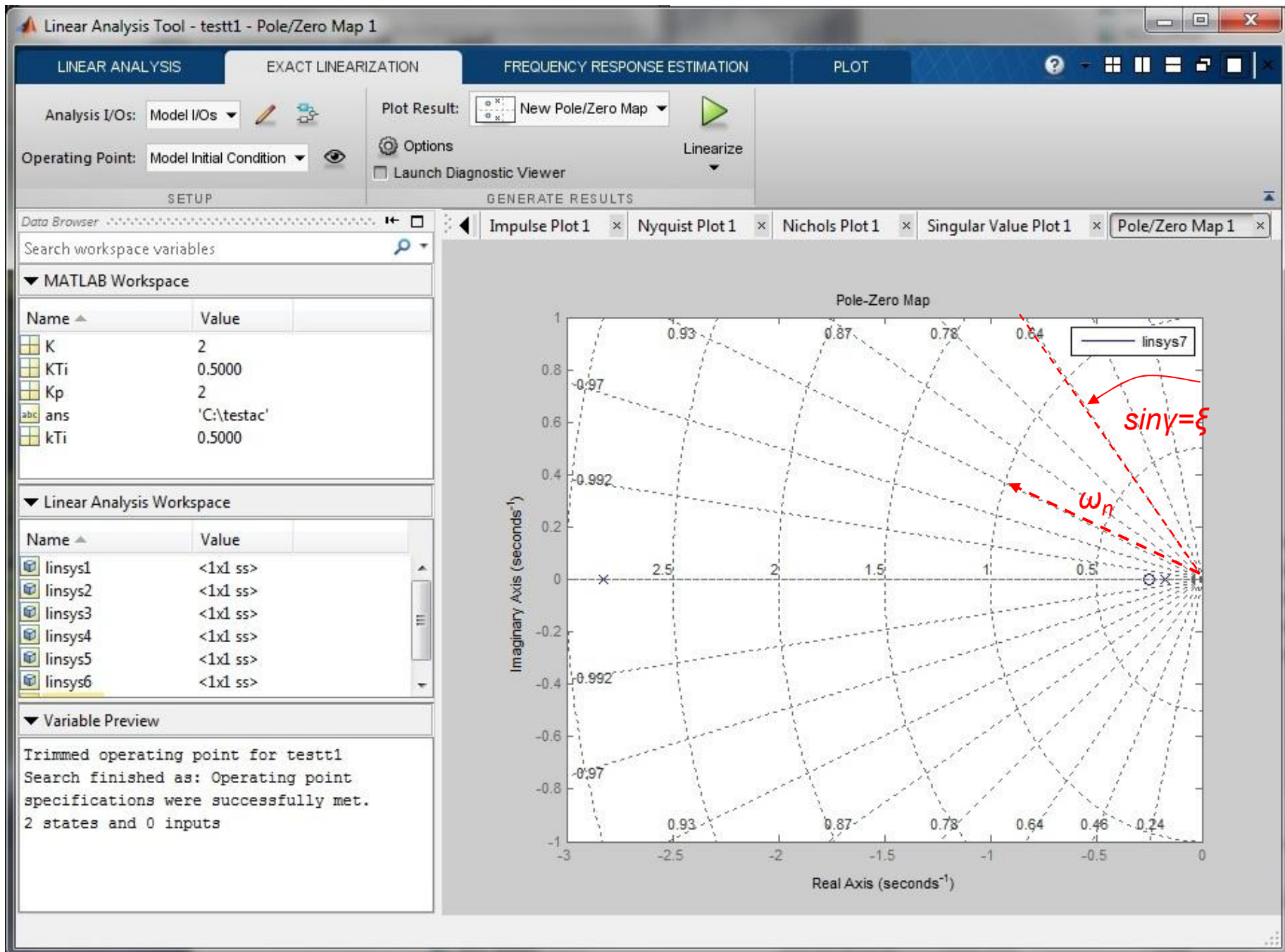
Simulink / Linear Analysis Tools



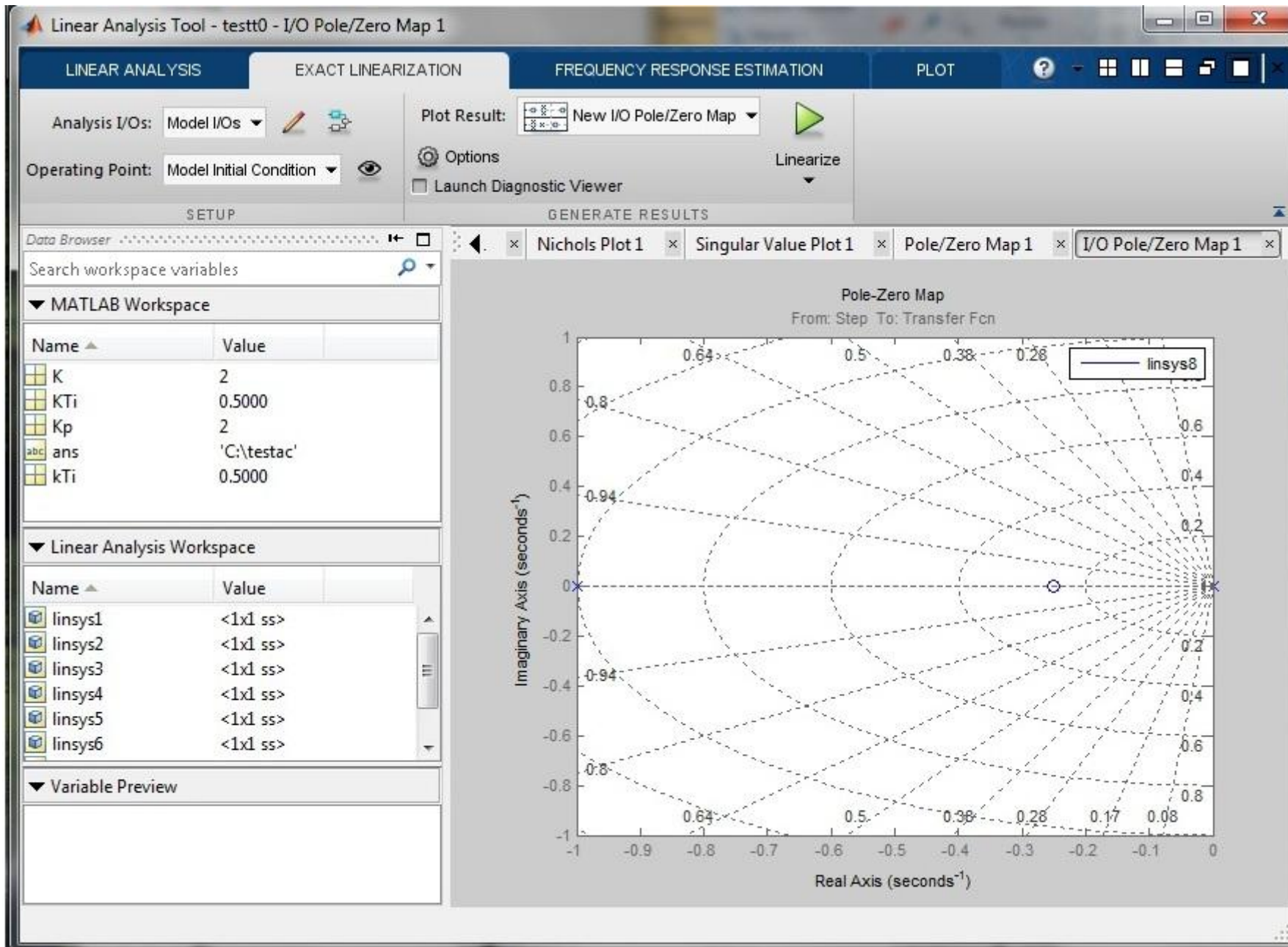
Simulink / Linear Analysis Tools



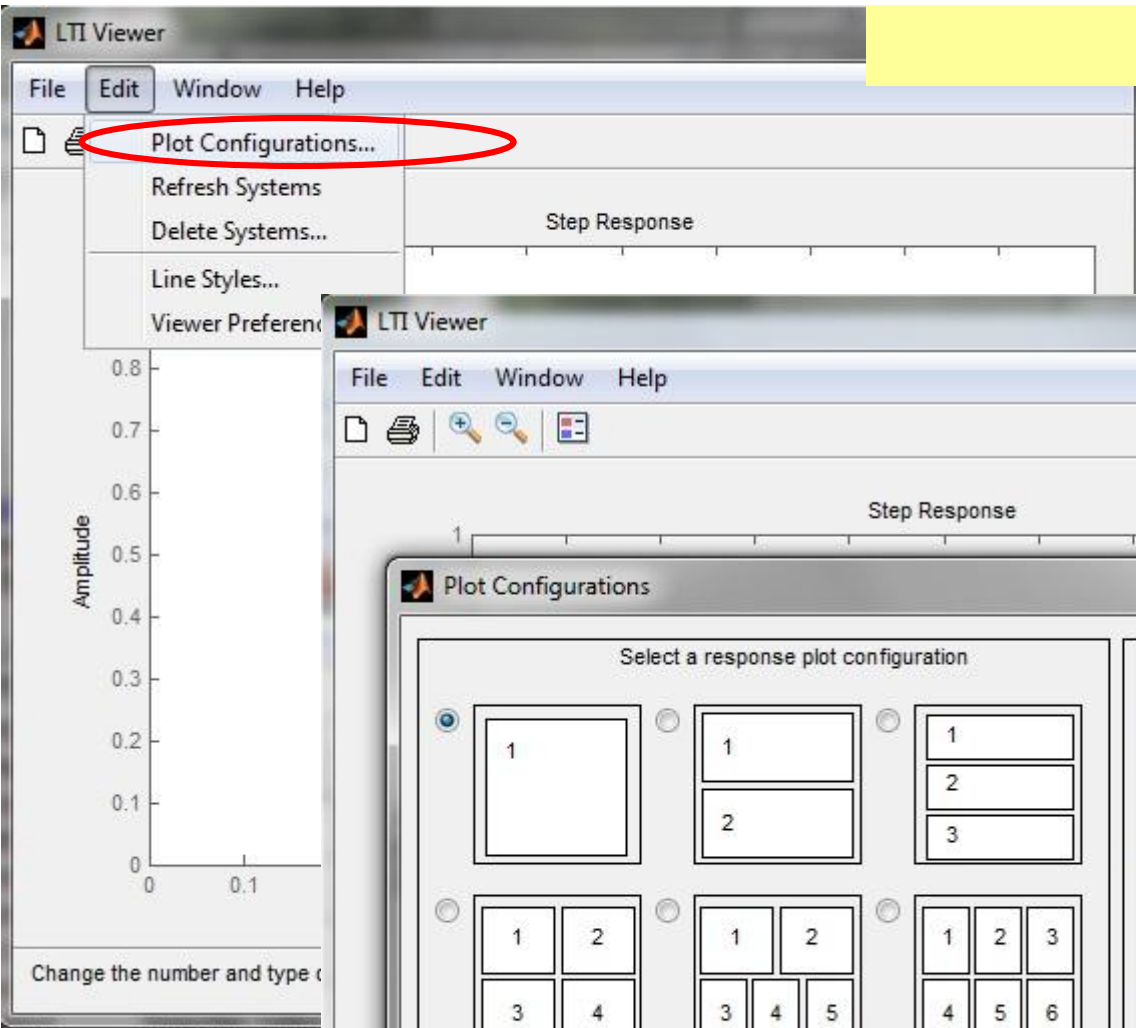
Simulink / Linear Analysis Tools



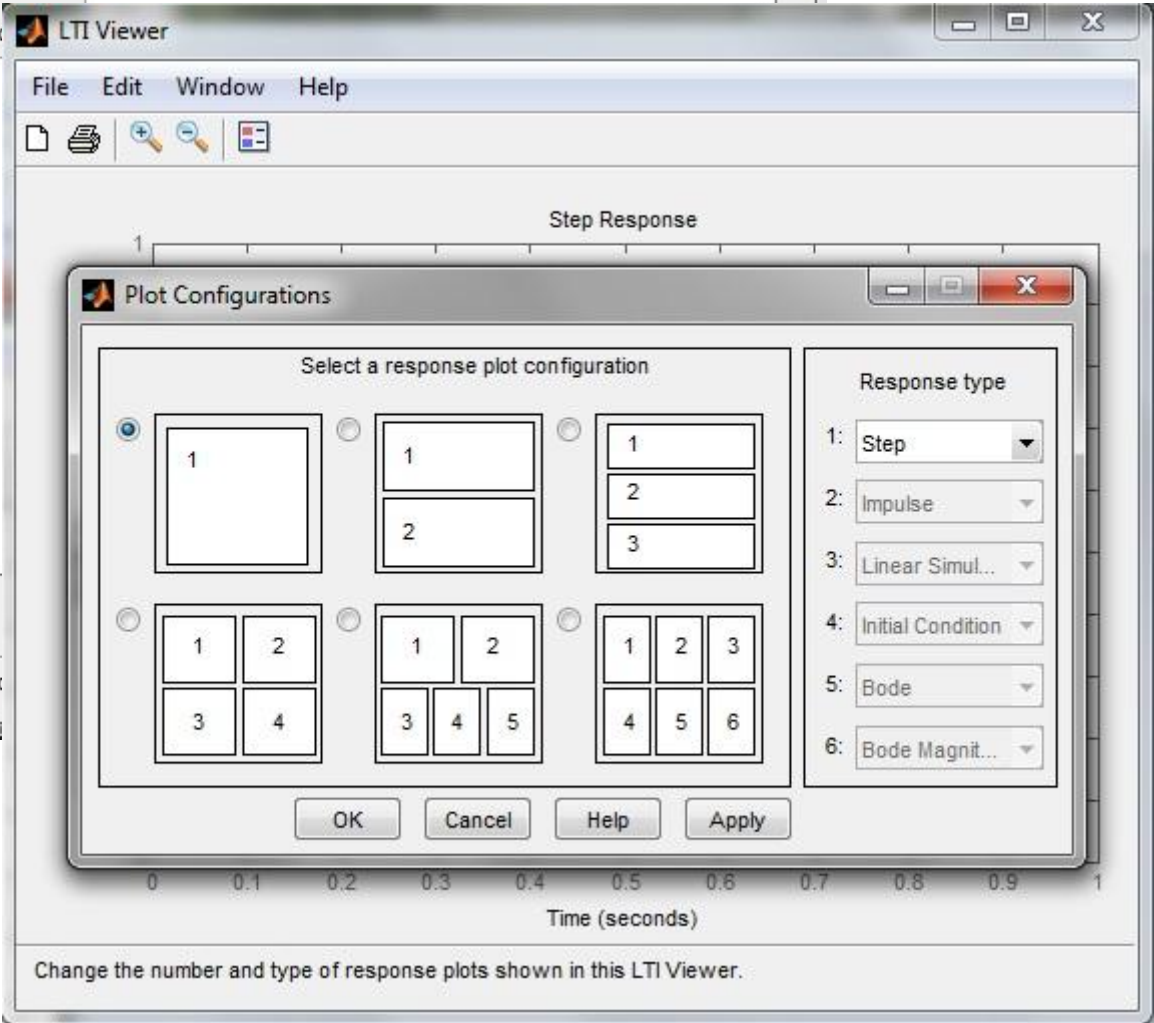
Simulink / Linear Analysis Tools



LTI Viewer



ltiview()
ltiview(obiekty_lti)
ltiview(wykresy, obiekty)



Funkcje Control:
step(...)
impulse(...)
bode(...)
bodemag(...)
nyquist(...)
nichols(...)
sigma(...)
pzmap(...)
iopzmap()

LTI Viewer

ltiview()
ltiview(obiekty_lti)

The image displays the LTI Viewer software interface. The main window shows a plot of the step response of a system, with Amplitude on the y-axis (0 to 1) and Time (seconds) on the x-axis (0 to 1). The plot shows a curve that starts at (0,0) and asymptotically approaches an amplitude of 1. A horizontal dashed line is drawn at Amplitude = 0.5, and the time it takes for the curve to reach this level is approximately 0.1 seconds.

An 'Import System Data' dialog box is open, showing the 'Systems in Workspace' table:

System Name	Order	Type
model	1x1	tf
s	1x1	tf

The dialog box also includes options for 'Import from' (Workspace or MAT-file), a 'MAT-File Name' field, and a 'Browse' button. The 'OK' button is visible at the bottom.

A second LTI Viewer window is shown in the foreground, displaying the 'Step Response' and 'Bode Diagram' for the system. The 'Step Response' plot shows Amplitude vs. Time (seconds) from 0 to 6, with the curve reaching a steady-state value of 1.5. The 'Bode Diagram' plots Phase (deg) vs. Magnitude (dB) vs. Frequency (rad/s) on a log-log scale from 10⁻² to 10². The magnitude plot shows a flat line at 0 dB, and the phase plot shows a phase shift from 0 degrees to -90 degrees.