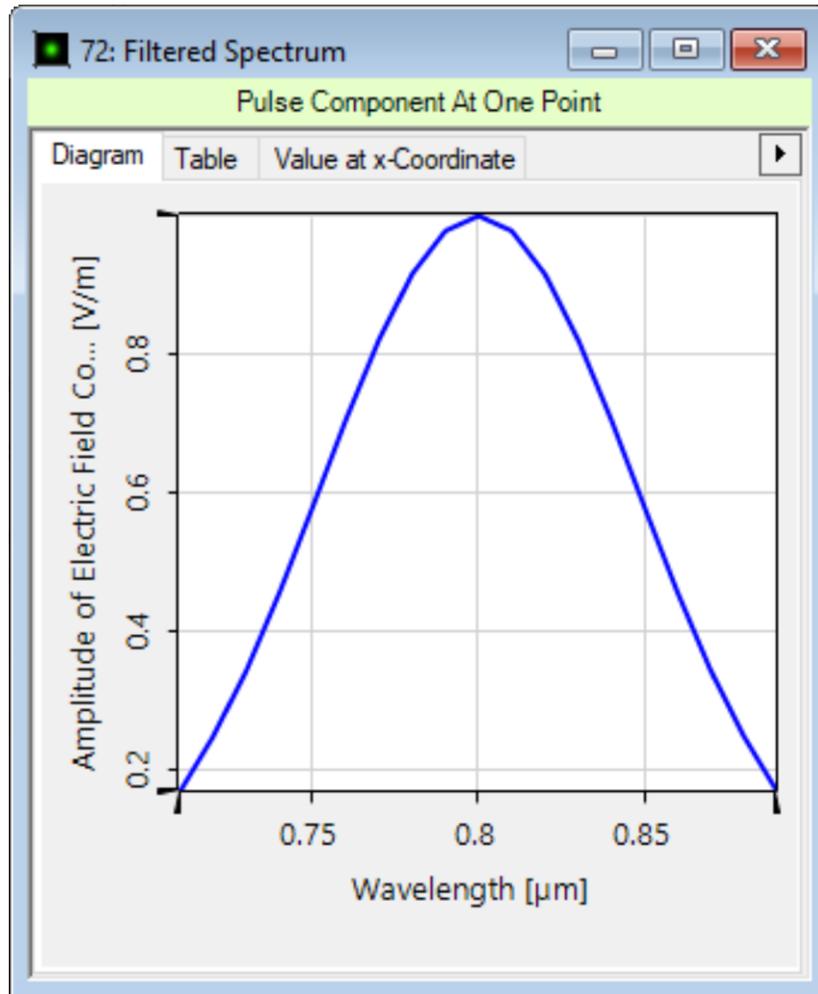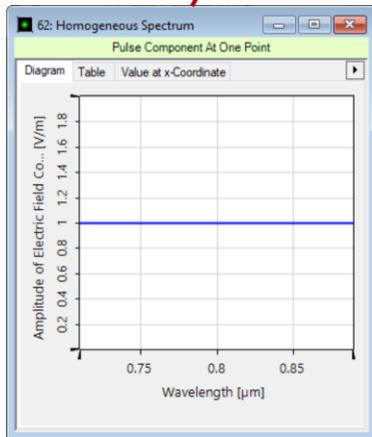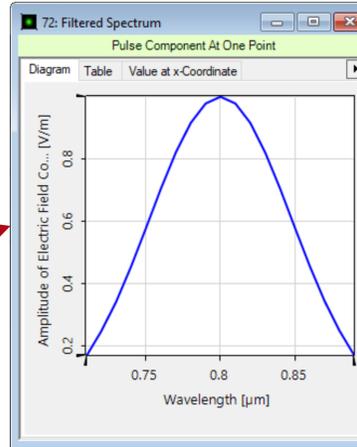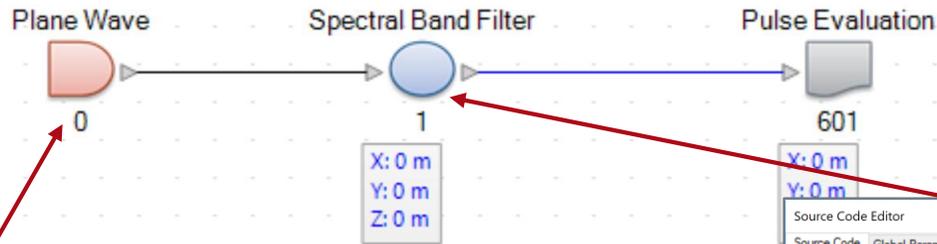# Programming a Spectral Band Filter

Abstract

This example shows how to define a customizable spectral band filter by using a programmable function in VirtualLab Fusion. The filter function is demonstrated on a homogenous input spectrum. The user can define the spectral filter profile with a 2D double array containing the wavelength-dependent transmittance values. One can modify the spectral filter in the source code editor or import the filter from ASCII files.
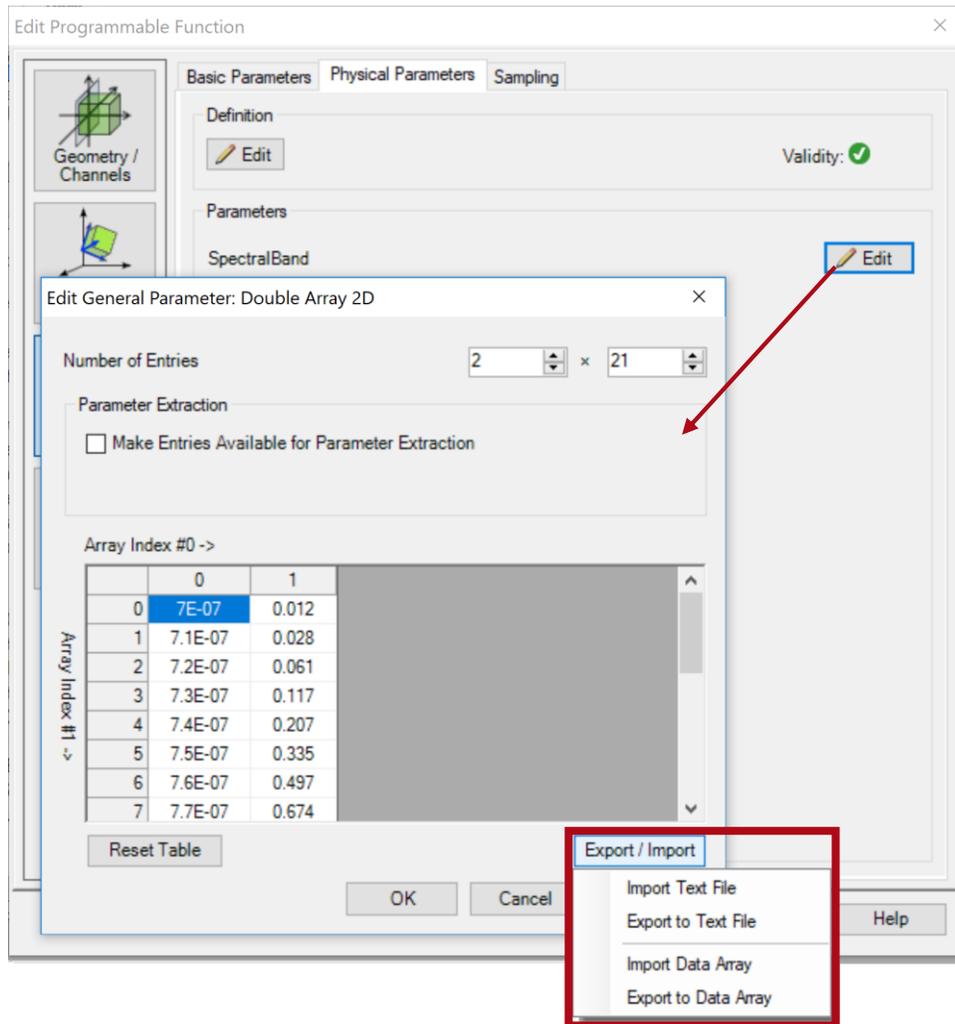
System Setup for a Spectral Band Filter

Task:
Create a customizable spectral band filter.

Settings of the Spectral Band Filter

In the Settings the user can directly define a 2D-Array containing the wavelength-dependent transmittance values, or by loading another array or file by clicking on "Export/Import".

Document Information

title	Programming a Spectral Band Filter
document code	CZT.0060
version	1.0
toolbox(es)	Starter Toolbox
VL version used for simulations	7.4.0.49
category	Feature Use Case
further reading	- How to Work with the Programmable Function in VirtualLab Fusion + Example: Cylindrical Lens - Programming an Axicon Transmission Function