Subject: Convolution with non-constant Kernel? Posted by SonicKenking on Fri, 12 Nov 2010 00:56:18 GMT View Forum Message <> Reply to Message

Hi, I wonder if there is an easy way to perform convolution on an array with non-constant kernel.

The IDL built-in CONVOL function requires the kernel to be a fixed array, e.g.

[-1,2,-1]. I want to have a dynamic kernel that changes based on the position of the array. Something like

 $array = [8,6,7,9,1,3,4,5], kernel=[sin(index_i-1), 2, sin(index_i+1)]$ 

Is there any other built-in IDL function that can do this or is there someone who has already coded this up? If the answer is no, I'll go ahead and code my own program. Just checking it here beforehand to avoid re-inventing wheels.

Thanks!