Subject: Re: CONVOL with 2D array and 1D kernel Posted by David Fanning on Fri, 09 Mar 2007 14:42:15 GMT View Forum Message <> Reply to Message

Eric Hudson writes:

- > Also, there seems to be a lot of confusion about what CONVOL really
- > does. Is there a definitive, readable, source so I can make sure that
- > I'm really doing what I want here (a true mathematical convolution
- > where I've made the array a bit bigger on the edges by duplicating the
- > top & bottom rows, done the convolution, and then chopped off the
- > edges to minimize edge effects).

I'm no convolution expert, but the documentation is pretty clear that if you want to do a convolution in a "mathematical" sense (as you appear to do), then you are going to have to explicitly set the CENTER keyword to zero. Otherwise, you are going to do a convolution in an "image processing" sense, which may not be what you had in mind.

Also, have you expanded the 2D array yourself, or are you hoping IDL is going to do that for you? If you did it yourself, is it possible some of the values are not what you think they are?

Cheers,

David

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")