Subject: Re: FFT with NANs in an array
Posted by Steve Eddins on Thu, 20 Jul 2006 19:44:46 GMT
View Forum Message <> Reply to Message

Steve Eddins wrote:
> adisn123@yahoo.com wrote:
>> Hi,
>>
>> I'm trying to fourier transform a spacial domain image to frequency
>> domain using FFT function in IDL.
>>
>> My image has quite a bit of NANs in an array, about 5%.
>>
>> When I use FFT into the image, it doesn't give me any errors, but when
>> I inversely fourier transform after
>>
>> filtering, it gives a little funky result.
>
> I would have expected you to get a VERY funky result. Since every
> output element of an FFT depends on every input element, I'd expect
> every output element of your result to be NaN.
>
>> How do I make FFT ignore NANs in their job or filtering?
>
> I think you'll need to explicitly replace the NaNs with 0s, like this:
>
> A(isnan(A)) = 0;

Whoops, forgot which newsgroup I was in, sorry. The above code line is
MATLAB syntax. Replace it with suitable IDL syntax.

--
Steve Eddins
http://blogs.mathworks.com/steve