

---

Subject: Re: FFT with NaNs in an array  
Posted by [adisn123](#) on Fri, 21 Jul 2006 00:08:47 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

^^;  
Thanks for the tip.

Steve Eddins wrote:

```
> 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
```

---