Subject: Re: Convolving speed issue
Posted by pgrigis on Thu, 17 Apr 2008 20:03:39 GMT
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Again, I don't know for sure what Matlab does,
but the following gives the convolution of a * b

```
s1=size(a)
s2=size(b)
nx1=s1[1]
ny1=s1[2]
nx2=s2[1]
ny2=s2[2]

aa=fltarr(nx1+nx2-1,ny1+ny2-1)
bb=fltarr(nx1+nx2-1,ny1+ny2-1)
aa[0,0]=a
bb[nx1-1,ny1-1]=b

conv=double(shift(fft(fft(aa,-1)*fft(bb,-1),
1)*n_elements(aa),nx2,ny2))
;use double because real_part seem to be broken on my system for some
reaon...
```

Ciao,
Paolo

rog...@googlemail.com wrote:
> Yes, you're right. But I have to produce the same results Matlab
> produces with conv2. The Implementation of convolving matrices in the
> frequency domain is unfortunately also different. I tried this before
> - for small and also for large matrices.
>
> I can't understand, why there should not be another possibility within
> IDL to compute simple c[n1,n2]=sum(sum(a[k1,k1]*b[n1-k1,n1-k1]))? Any
> other ideas?
>
> Nevertheless, thanks Paolo for the hint.
>
> Best regards
>
> Chris