
Subject: Re: FFT in 1 dimension

Posted by hradilv.nospam on Fri, 07 Dec 2001 20:10:03 GMT

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OOPS - I think this one works:

```
function ft1d, data, dim, inverse=inverse

  ds = size(data)
  ndim = ds[0]
  nlines = n_elements(data)/ds[dim]

  dims = lindgen(ndim)+1
  dims[dim-1] = -1
  porder = sort(dims)

  fdata = transpose(data,porder)
  fdata = reform(fdata,ds[dim],nlines)

  for i=0, nlines-1 do fdata[* ,i] = fft(fdata[* ,i],inverse=inverse)

  dims[0] = dim
  porder = sort(dims)
  fdata = reform(fdata,(ds[1:ndim]))[porder]
  fdata = transpose(fdata,porder)

  return, fdata
end
```

On Fri, 07 Dec 2001 19:05:36 GMT, hradilv.nospam@yahoo.com wrote:

```
> Here's what I came up with. Any comments?
>
> function ft1d, data, dim, inverse=inverse
>
>   ds = size(data)
>   ndim = ds[0]
>   nlines = n_elements(data)/ds[dim]
>
>   dims = lindgen(ndim)+1
>   dims[dim-1] = -1
>   porder = sort(dims)
>
>   fdata = transpose(data,porder)
>   fdata = reform(fdata,ds[dim],nlines)
>
>   for i=0, nlines-1 do fdata[* ,i] = fft(fdata[* ,i],inverse=inverse)
```

```
>  
> porder = (ds[1:ndim])[sort(dims)]  
> fdata = reform(fdata,porder)  
> fdata = transpose(fdata,sort(porder))  
>  
> return, fdata  
> end  
>
```
