
Subject: creating a 2D mask for image filtering

Posted by [David Higgins](#) on Wed, 17 Aug 2011 10:47:20 GMT

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Hi all

I need to create a 2D mask to filter data in the frequency domain (apodization). I would like to leave 0.8 of the centre-to-edge of the data untouched (i.e. a circle of untouched data), and then a Hanning-type shape to smooth down to zero at the edges. (Think of an upside-down frying pan, kinda.) I can apply a Hanning filter with

```
apod_fn = HANNING(kx_res, ky_res, alpha=0.5)
```

but of course the centre area which I would like to have untouched doesn't exist, and the filter is too aggressive. I'd go without the Hanning shape requirement if I could get more-or-less the right shape. I see also DIGITAL_FILTER, but can't seem to widen the filter with my changes to it's arguments.

Thanks for any pointers.
