Subject: Re: Congrid/Rebin Conundrum
Posted by wlandsman on Thu, 13 Sep 2007 14:28:45 GMT
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On Sep 13, 9:57 am, David Fanning <n...@dfanning.com> wrote:
> wlandsman writes:
>> So CONGRID is always just resampling your 4 x 4 array to a 1 x 1
>> array, so it just takes the value of data[0,0]. --Wayne
>
> OK, suppose I buy that. Then what is REBIN doing?
>

REBIN is averaging as your example shows. So I am making a distinction between interpolation (finding a value at a point by using values at neighboring points) and averaging. In general, CONGRID is for interpolation (including nearest neighbor) whereas REBIN is for averaging (though it does use interpolation for expansion).

I should mention frebin.pro (http://idlastro.gsfc.nasa.gov/ftp/pro/image/frebin.pro) which averages using partial pixels and thus, unlike REBIN, can shrink or expand to any size. --Wayne