Subject: Re: how many array elements with a certain value in a row
Posted by Jeremy Bailin on Thu, 01 Apr 2010 15:11:00 GMT
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On Apr 1, 10:14 am, Chris W <cwood1...@gmail.com> wrote:
> On Apr 1, 8:56 am, Jeremy Bailin <astroco...@gmail.com> wrote:
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>> On Apr 1, 9:48 am, Chris W <cwood1...@gmail.com> wrote:
>
>>> On Apr 1, 7:49 am, Jeremy Bailin <astroco...@gmail.com> wrote:
>
>>>> Does anyone have a nice simple efficient solution to this problem (I
>>>> have a simple inefficient solution and a vague sketch in my mind of a
>>>> convoluted but probably efficient solution):
>
>>>> I have an image in which many pixels are saturated (=65535, they're
>>>> short unsigned). I want to treat each set of consecutive saturated
>>>> pixels in a row as a single unit and know how many saturated pixels in
>>>> a row there are. So I would like to have a list that contains (a) the
>>>> rightmost pixel of each set of consecutive saturated pixels, and (b)
>>>> how many saturated pixels there were in the set.
>
>>>> Any suggestions?
>
>>>> -Jeremy.
>
>>> create an array the same size as the image, with values equal to the x
>>> index ([0,1,2,3,4,5,.....]:
>
>>> x = indgen(512)
>>> rx = rebin(x,512,512)
>
>>> ;;create a mask
>>> mask = image eq 65535
>
>>> ;; index values of the mask
>>> rxmask = rx*mask
>
>>> rightvalues = max(rxmask, dimension=1)
>
>>> number_in_rows = total(mask, 1)
>
>> No, that won't work - it will only pick up one set per row. There
>> could be none or many sets in a ny given row.

>
>> -Jeremy.
>
> How about using reform to convert the 2d image into a vector, use
> label region to number each set, then histogram with reverse_indices
> to find the coordinates of each set (the number in each set will be
> the histogram values).
>
> Chris

Yeah, that's good - it's basically what Ben was suggesting, but doing that reform at the beginning takes away a lot of the extra bookkeeping that was making me avoid it. Just need to throw an extra column of 0s at the edge of the image before the reform to make sure that a run at the end of one row doesn't get attached to any at the beginning of the next row.

Thanks!

-Jeremy.
