Subject: Re: Search single column of array - removing nasty loop
Posted by Yngvar Larsen on Wed, 30 Nov 2011 20:15:38 GMT

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On Nov 29, 6:53 pm, Heinz Stege <public.215....@arcor.de> wrote:
> Hi Rob,
>
> no loop necessary:
>
> array=(randomu(seed,2,6,360,42)-.1)>0.   ; sample array
> array=reform(array,n_elements(array)/42,42,/overwrite)
> ii=where(min(array,dim=2) eq 0.,count)
> if count ge 1 then array[ii,*]=0.
> array=reform(array,2,6,360,42,/overwrite)

Hm. The /OVERWRITE keyword to REFORM was new to me. Thanks!

Silly me. I have somehow always imagined that the compiler was smart
enough to do this (i.e. not copy any data, only alter the internal IDL
descriptor of the ARRAY variable) automatically when input and output
to REFORM is the same variable. But a bit of profiling shows this is
not at all the case. This will be _very_ useful many places in my
operational code...

A small comment to the code above: "where(min(array,dim=2) eq 0.)"
obviously only works if array contains only non-negative data. If not,
"where(total(array eq 0, 2) gt 0)" will do the trick also for floating
point data containing negative numbers, with more or less the same
performance.

--
Yngvar