Subject: Re: Threads in IDL 7.0 Posted by Heinz Stege on Mon, 27 Oct 2008 17:26:40 GMT View Forum Message <> Reply to Message

On Mon, 27 Oct 2008 16:44:29 +0100, Bernhard Reinhardt wrote:

```
> Well, I wasni¿½t really precise. Ii¿½m not doing this on a 1d-array but on a
> 4d-array, where 2 dimensions are time and 2 dimensions are space. I try
> to filter special events in time and count those on a 2d-map. Here 2.1/2s the
> code:
>
      for i = 0, N ELEMENTS(STRUC.data[*,0,0,0])-1 do begin
>
       for j = 0, N_ELEMENTS(STRUC.data[0,*,0,0])-1 do begin
>
        indices = Where(STRUC.data[i,j,*,*] GE 150., count)
>
        freq [i,j]=count
>
       endfor
>
      endfor
>
> Although the array data is quite big "where" only geti; 1/2s a small portion
> to see of it. So thread-pool isni¿½t invoked. => CPU-Usage still 50%
> I also asked some more IDL-experienced colleagues about generating
> threads manually but they also didni¿½t know about anything like that :(
> BUT using your method still brought me a gain of 3.6 times faster
> execution:)
> regards
> Bernhard
```

Please try the following command:

freq=total(total(STRUC.data ge 150.,4,/integer),3,/integer)

The IDL manual says, that TOTAL makes use of IDL�s thread pool. And there is no for-loop needed anymore...

HTH, Heinz