Subject: Re: quick search of array
Posted by K. Bowman on Thu, 23 Jun 2005 19:33:49 GMT
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In article <1119544592.305102.257100@g49g2000cwa.googlegroups.com>,
 tanqian@hotmail.com wrote:

> Hi,
>
> I have four arraies
>
> all_time = fltarr(10000)
> all_location = fltarr(3, 10000)
>
> sel_time = fltarr(4000)
> sel_location = fltarr(3,4000)
>
> the 'sel_time' is a subset of 'all_time'. Is there a quick way I could
> find index 'j' of all_time for each sel_time(i) (when
> abs(all_time(j)-sel_time(i)) lt 1e-5)? So I could use that index to
> pick the sel_location from all_location for each sel_time(i). Since I
> have multiple(~20000) such tests, loop through both of them will be too
> time consuming.
>
> Should I sort both all_time and sel_time to descent/ascent order to
> speed it up?

If you sort your arrays, you can use VALUE_LOCATE (a binary search) instead of WHERE (an exhaustive search). Depending on circumstances, the speed difference can be substantial.

Ken Bowman