Subject: Re: value_locate.pro location in IDL library Posted by Joel Gales on Sat, 16 Sep 2006 13:05:54 GMT

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Ben Tupper wrote:
> Mark Hadfield wrote:
>> ZMY wrote:
>>
>>> Thanks, Wayne and David. The information is very helpful. Craig's
>>> value_locate.pro still doesn't work since spl_interp is not built into
>>> GDL yet (as far as I can tell for version 0.9).
>>
>>
>> Surely you could patch in an alternative interpolation routine. Linear
>> interpolation would be adequate in many cases.
>>
> Hi.
>
  This is from the online help...
>
  "This function is useful for interpolation and table-lookup, and is an
  adaptation of the locate() routine in Numerical Recipes. VALUE_LOCATE
  uses the bisection method to locate the interval."
>
  You can find the Numerical Recipes algorithm online. Seems like it
> should should easy to implement in IDL. One interesting thing I have
  recently bumped into is that IDL's built-in works with strings.
>
 IDL> Arr = ['at', 'bat', 'cat', 'dat', 'eat', 'fat', 'gat', 'hat']
  IDL> print, value locate(arr, 'cup')
         2
>
  IDL> print, value_locate(arr, 'eet')
>
  IDL> print, value_locate(arr, 'Bat')
>
  IDL> print, value_locate(reverse(arr), 'cup')
>
>
> Nifty!
> Ben
```

There is a VALUE_LOCATE procedure in the CVS repository in src/pro.

Joel