Subject: Re: interpolation question Posted by Jo Klein on Mon, 24 Apr 2006 19:04:55 GMT

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Hi Chen,
```

VALUE_LOCATE works differently: It returns the location as the interval in which your value is to be found, vec[location]<=value<vec[location+1] It's not designed to be a nearest-neighbour-style routine. Granted, the function name is a bit misleading ... Cheers.

Jo

```
chen123.dian@gmail.com wrote:
> Hi,
>
> Thanks so much for all suggestions here.
>
> I am so wonder that why IDL has no simple function like MATLAB's
> 'interp2'. Another problem is for value locate. Some suggestions
> mentioned to use value_locate. Here is a example to show my problem.
>
> IDL> vec = [2.0, 5.0, 8.0, 10.0]
> IDL> print, vec
      2.00000
                  5.00000
                             8.00000
                                         10.0000
>
> IDL> loc = VALUE_LOCATE(vec, [0.0, 4.5, 5.0, 6.0, 12.0])
> IDL> print, loc
        -1
                 0
                         1
                                 1
                                          3
>
> We can see the value of "4.5" corresponds to index location of "0".
> Actually, the value of "4.5" should correspond to index location of "1"
> because the value of "4.5" is closer to the value of "5.0" having index
> location of "1".
```

> Thanks.

>

> Regards,

> Chen