
Subject: Re: estimation matrix elements in a vector

Posted by [Markus Schmassmann](#) on Mon, 03 Apr 2017 09:46:37 GMT

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On 04/01/2017 07:12 PM, kghreep21@gmail.com wrote:

> On Monday, March 27, 2017 at 9:00:39 AM UTC+2, Yngvar Larsen wrote:

>> On Sunday, 26 March 2017 23:59:26 UTC+2, kghr...@gmail.com wrote:

>>> On Sunday, March 26, 2017 at 3:37:54 PM UTC+2, Yngvar Larsen wrote:

>>>> <https://www.harrisgeospatial.com/docs/VALUE Locate.html>

>>> Thanks Yngvar.

>>> I am already solve my problem

>> Good!

>>

>> As a courtesy to other readers, maybe you can post your code to solve this problem? This is a rather typical kind of IDL array juggling problem that others might be interested in.

>

> Pro Inter_Data

>

> ; we have a measured wind speed as a string like this:

> acutal_w= [5.5, 6.4, 8.9, 10.3, 8.2, 7.7, 6.8, 5.9, 5.4, 6.6, 6.1, 6.5]

>

> In laboratory, we have measured a wind power Coor_P corresponding to laboratory wind speed w_t

>

> w_t=[0.0, 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0,
9.0,10.0,11.0,12.0,13.0,14.0,15.0,16.0,17.0,18.0,19.0,20.0,2
1.0,22.0,23.0,24.0,25.0,26.0,27.0,28.0,29.0,30.0]

>

> coor_P=[0.00,0.00,0.00,5.00,25.00,60.00,118.00,154.00,269.00
,411.00,538.00,600.00,600.00,\$

> 600.00,600.00,600.00,600.00,600.00,600.00,600.00,600.00,600.
00,600.00,600.00,600.00,600.00,0.00,0.00,0.00,0.00,0.00]

> ; we would like to estimate a wind power corresponding a measured wind speed ;acutal_w. first,
we have locate value of acutal_w in W_t via Value_locate ;function

>

> R = VALUE Locate (w_t ,acutal_w, /L64)

>

> ; the estimated wind power as function in acutal_w, W_t and coor_P as follows:-

>

> pow_est=dblarr(n_elements(r))

>

> for j = 0, n_elements(r)-1 do begin

>

> pow_est(j) = coor_P (r(j)+1) - (coor_P(r (j) + 1) - coor_P(r(j))) * ((w_t (r(j)+1) - acutal_w(
j)) / (w_t (r(j)+1)- w_t(r(j)))))

>

> endfor

>

```
>  
>  
> print, pow_est, format=' (12(F9.2,3x))'  
>  
> end  
>  
you can also use the INTERPOL function:
```

```
pow_est=interpol(coor_P,w_t,acutal_W)
```

see:

<http://www.harrisgeospatial.com/docs/INTERPOL.html>
