
Subject: transfer the specific data in array A to array B
Posted by [lczhang123](#) on Wed, 02 Apr 2014 18:37:55 GMT
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I got a question when I was trying to save the interested data from array A to a NEW array B.

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j=0
FOR i=0,n-2 do begin

  IF A[i+1]-A[i] gt 80 THEN BEGIN
    B[j]=A[i]
    j=j+1

  ENDIF

ENDFOR
```

it seems theres something wrong with B[j]=A[i] should I define B as an array first? Or anyone has a better idea? I know it is a stupid question....sorry about that

Subject: Re: transfer the specific data in array A to array B
Posted by [Craig Markwardt](#) on Wed, 02 Apr 2014 18:46:51 GMT
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On Wednesday, April 2, 2014 2:37:55 PM UTC-4, lczha...@gmail.com wrote:

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This is the kind of situation where thinking in IDL vector notation is probably best. The IDL WHERE() function does all the work for you.

```
;; WHERE(expression) returns indices where expression is true
wh = where(A[1:]-A[*] GT 80, ct)
```

```
;; Use WH as an index list for A[]
if ct GT 0 then B = A[wh]
```

Done!
Craig

Subject: Re: transfer the specific data in array A to array B
Posted by [Andy Sayer](#) on Wed, 02 Apr 2014 18:51:00 GMT
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Yes, you have to define the array B before you can attempt to fill its elements like that.

There are other ways you could code something like the above, although if you're a beginner then try first however makes sense to you. :) For example, this should work:

```
ndata=n_elements(a)
```

```
for_b=where(a[1:ndata-2]-a[0:ndata-1] gt 80,nvals)
```

```
if nvals gt 0 then b=a[for_b]
```

And in case you need it, nvals in the above is the same as the final value of j.

Hope this helps,

Andy

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Subject: Re: transfer the specific data in array A to array B
Posted by [Andy Sayer](#) on Wed, 02 Apr 2014 18:52:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

Ah, ninjad by Craig. :)

On Wednesday, April 2, 2014 2:51:00 PM UTC-4, AMS wrote:

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Subject: Re: transfer the specific data in array A to array B
 Posted by [Andy Sayer](#) on Wed, 02 Apr 2014 20:57:26 GMT
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To follow up a message the original poster sent via email, the question was asked about how to define 'b' beforehand when you don't know how big it is. The short answer is you can't really. What you could do is define 'b' to be the same size as 'a', and then shrink it afterwards when you know how many good elements there are. For example, this:

```

b=a
b[*] = !values.f_nan

```

And then after transferring valid values from a to b:

```

is_good=where(finite(b),ngood)
if ngood > 0 then b=b[is_good]

```

Andy

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