
Subject: Re: question about array interpolation
Posted by [Carsten Lechte](#) on Thu, 15 Jan 2009 09:17:19 GMT
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Hu wrote:

> Yes, mike got it, we can replace 'zero's as other unmeaningful symbols,
> I just want to replace these unmeaningful symbols with interpolated
> values from the known values.

how about this:

```
IDL> x = [1,2,0,0,5,6,0,8,9, 0,9,8,0,0,0,0,3,2,0]
IDL> xi = where( x gt 0)
IDL> xv = x[xi]
IDL> print, xi, xv
      0      1      4      5      7      8      10
     11     16     17
      1      2      5      6      8      9      9
      8      3      2
```

good data is in xi, xv

```
IDL> yi = where( x eq 0)
IDL> yv = interpol( xv, xi, yi)
% Compiled module: INTERPOL.
IDL> print, yv
      3      4      7      9      7      6      5
      4      1
```

merge data in xv with yv:

```
IDL> y = x
IDL> y[yi] = yv
IDL> print, y
      1      2      3      4      5      6      7
      8      9      9      9      8      7
      6      5      4      3      2      1
IDL>
```

note: this does not "complete the hill" in 8 9 0 9 8 to 8 9 10 9 8, but linearly interpolates to 8 9 9 9 8.

chl
