
Subject: Re: Expand

Posted by [davidf](#) on Mon, 05 Jan 1998 08:00:00 GMT

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Kelly Dean (krdean@lamar.colostate.edu) writes:

> I am reading some AVHRR LAC data in the Level 1B format. The image
> provides 51 latitude/longitude pairs for each 2048 pixel scan line. They
> are sampled every 40 points starting at point 25 (25, 65, 105,..., 1945,
> 1985, 2025).
>
> I created a simple IDL routine to expand the 51 values to 2048 values
> using FOR loops. I am looking for suggestions to make this more
> efficient.

Uh, why? It's pretty darn fast on my middling machine. :-)

[Code snipped.]

I don't think you can get rid of the outside loop (stepping between the known points), but you can speed up the inside loop I guess (interpolating values between the known points) by doing something like this:

```
FOR j=25, 1985, 40 DO BEGIN
  array2048(j:j+39) = Findgen(40) * $
    ((value[j+39]-value[j])/39) + value[j]
ENDFOR
```

Cheers,

David

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