Subject: Re: collapsing 3-d arrays
Posted by hahn on Thu, 11 Jul 1996 07:00:00 GMT
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deb <summa@lanl.gov> wrote:

> I have a pretty large 3-D data array (~10 million pts). I'd like to
> collapse
> the data and look at a 2-d image that contains the max value encountered
> along the third coordinate. I can write a nested loop that
> looks thru the array and pulls out the max data value along the z-axis
> for each
> x,y coordinate pair, but that's pretty cumbersome. It seems like IDL
> should have
> a built-in function for doing this kind of thing, but i can't seem to
> find it.

The IDL function is MAX. It accepts an array as argument and returns
a scalar. Thus you need two nested loops to make a 2-d matrix.

Let's assume your 3-D data array is named D3, you may write:

```
si = size ( D3 )

D2 = fltarr(si(1),si(2), /nozero)

for i=0,si(1)-1 do begin
  for j=0,si(2)-1 do            D2(i,j) = max ( D3(i,j,*) )
endfor
```

Hope this helps
Norbert