Subject: Re: "infinite" nested for
Posted by David Fanning on Mon, 25 Nov 2013 16:37:18 GMT
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Chrisss writes:

Another way you can improve this code is to only calculate unchanging variable once, and outside the loops. For example, you have this, in which you calculate the number of elements of X, which never changes, six times!

```
for i=0, dx-1 do begin
 for j=0,dy-1 do begin
  y=reform (Im[i,j,*],N_ELEMENTS(x)))
  fitErrors=FLTARR(N_ELEMENTS(x))
  T1values=FLTARR(N_ELEMENTS(x))
  S0values=FLTARR(N_ELEMENTS(x))
  fvalues=FLTARR(N_ELEMENTS(x))
  for t=0,N_ELEMENTS(x)-1 do begin
```

This can be changed to this:

```
  num_x = N_Elements(x)
  fitErrors=FLTARR(num_x)
  T1values=FLTARR(num_x)
  S0values=FLTARR(num_x)
  fvalues=FLTARR(num_x)
  for i=0, dx-1 do begin
    for j=0,dy-1 do begin
      y=reform (Im[i,j,*],num_x)
      for t=0,num_x-1 do begin
```

If you need to reinitialize your arrays inside the loop, then do this, rather than re-allocating more memory. I think this is probably why your program crashed after 12 hours. You ran out of dynamic memory on your machine:

```
   fitErrors=Temporary(fitErrors)*0.0
   T1values=Temporary(T1values)*0.0
   S0values=Temporary(S0values)*0.0
   fvalues=Temporary(fvalues)*0.0
```

Cheers,

David
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