Subject: Re: Sky Falling, etc. : Array substitution + addition with plus-equal (+=)
Posted by MarioIncandenza on Tue, 13 Mar 2007 18:35:53 GMT
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Thanks for the great explanations, that one really had my head
spinning.

> One additional point is worth mentioning: when setting large arrays, the
> "offset" method of specifying a single index on the LHS is much faster
> than the '*' method of building the full index list to match up the
> dimensions of left and right-hand side arrays:

Well, yes. Which is how I came across this problem. The "offset"
method does not work for "+=" or any of the "iterative" operations,
because of the behavior you described.

My application is building a grand [X,Y,T] sum, from contributions of
a routine which returns an [X,Y,n] array, with n varying from, say, 1
to 10. Without the increment operation, I have to do

```
totals=fltarr(2,2,6);
add=GetAdd(InputArgs,ReturnT0=T0); Get ADD and the initial index in T
(T0)
sz=size(add)
if(sz[0] eq 2) then NT=1 else NT=sz[3]; get size of 3rd dimension
T1=T0 + NT - 1
previous_totals=totals[*,*,T0:T1]; extract subarray corresponding to
ADD
totals[0,0,t0] = previous_totals + add ; copy new totals back into
TOTALS
```

Which comes at considerable computational cost. But, that's life.
Thanks again for the explanations.