Subject: Rebinning large array
Posted by amolins on Wed, 07 Jul 2004 15:37:17 GMT

Hello,
I have to change the coordinate system in which is sampled a very big
array, in a very sparse way as the coordinates of S2 (the target
system) are each one related with the 3 coordinates of S1 (the
original system) in a non-linear way, so to fill two or three
contiguous target coordinates I have to look over almost the entire
original array. This can be done very efficiently with INTERPOLATE (in
fact, this was the original method), even when you reach a big array
size (1.1 GB of floats) making use of SHMMAP. But when you increase
more the size of the array, IDL don't let you even declare the array
with SHMVAR, claiming that you have exceeded the number of elements.

Do you know any clever strategy of performing this in an efficient
way? I have to cope with very big files that result from a CT
acquisition, and now I am doing it through coded IDL interpolation,
traversing the file in disk with POINT_LUN and WRITEU and FOR loops,
resulting in inacceptable execution times.

Any clue will be welcomed.

Thanks in advance,
Antonio Molins.