Subject: Projection of an emissivity cube
Posted by CM on Wed, 26 May 2004 16:14:41 GMT
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Hi everybody,

I'm trying to compute the projection on any plane of an emmisivity cube. All the routines I found to performe this kind of computation are used (and made) by medical imaging scientists, that is quite always a question of absorbing along a line of sight a radiation comming from somewhere.

My problem is that it doesn't work for the astronomical objects I'm considering: in my case, there is no external source, and every cell of the object (a 3D cube) is an emmiting source. Then to compute the projection on the sky plane, I have to integrate (sum up in one direction) the whole cube, without absorbtion at all.

The way I'm doing this now is to rotate the whole cube, and then to perform a total(cube,1). This is very slow, as the cube can be 100*100*100, and the rotation takes a few minutes; no real time available with my poor method.

I was thinking diving into project_vol.pro to change the way the sum is done, removing the absorbtion and adding all the cells in one direction. But before, I wanna know if anybody already did the job, or if there is references I could start from.

Thanks a lot,
CM.