Subject: project_vol() in IDL
Posted by gpetty on Thu, 26 Feb 1998 08:00:00 GMT
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Today's my first day using IDL and I must say I am very impressed with its capabilities (BTW, David Fanning's book made it vastly easier for me to take the plunge and actually accomplish something useful during this foray -- thanks, David!)

However, I have already run into what seems to be an annoying limitation in project_vol() and am wondering whether I'm just overlooking something.

What I want to do is take a 3-D volume, and project it onto a 2-D plane. OK, fine, that's what project_vol() does. But for the life of me, I can't figure out a way to make the values of the projected image consist of the CUMULATIVE TOTAL of the data values along a ray. Rather, it seems to insist on doing an average or something similar. (Same complaint applies to voxel_proj(), by the way).

To give a simple example, if I define a cubical array to contain data values equal to 0.1 everywhere, project_vol() makes the cube look the same shade everywhere, whereas it ought (for my application) to look translucent, with the edges of the cube "thinner" (i.e., darker) than the center.

Playing with OPAQUE etc. has not led me to a satisfactory solution yet. DEPTH_Q seems to do something different, based on geometric depth rather than cumulative data value.

Any suggestions for a workaround?

thanks
Grant

P.S. As long as I'm posting to this NG, I might as well mention one other suggested improvement to IDL that immediately comes to mind: command line history/editing/completion capabilities, a la the UNIX tcsh shell. It's a pain to have to retype an entire lengthy command from scratch when all I want to do is change one parameter!

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