Subject: Non-traditional "traditional" Surface Command

Posted by David Fanning on Sat, 27 Nov 2010 16:18:27 GMT

Folks,

As you know, the traditional IDL surface command, SURFACE,
is pretty lame. Even when it is fancied up in a modern
skin, as in FSC_SURF, it can't overcome all its deficiencies.
And, in particular, SURFACE isn't a true 3D command, since
the surface can't be rotated independently around all
three axes.

The SURFACE command isn't useless, however, and it is
still indispensable for combining surfaces with other
graphics for those who don't yet have IDL 8.

Nevertheless, most of the time when I want to look at a
surface I use FSC_SURFACE to do so. But after working
on FSC_SURF last week, FSC_SURFACE seemed pretty dowdy
itself. (I think I wrote it originally in 1996.)

All this to say that I used the time between the football
and the turkey to completely re-write FSC_SURFACE
with the intention of creating a non-traditional
"traditional" surface command. That is to say, a command
that works like the traditional SURFACE command, using
the same keywords, etc., whenever possible, but creating
a command with additional functionality and interactivity.
I'm pretty happy with the result.

You can play with it to see what you think, but it does
the basic things really well, and it has a few bells and
whistles that I think set it apart. For example, the surface
is lighted with four different light sources, and you can
easily control the color and intensity (or turn them off
if you want) of each of the lights to achieve different surface
effects.

Another feature I like is the ability to add any 2D or true-color
image as a texture map to the surface with the TEXTURE_IMAGE
keyword.

You can find the new FSC_SURFACE program here:

  http://www.dfanning.com/programs/fsc_surface.pro

Naturally, it requires other programs from the Coyote Library, and

these have *all* been undergoing a recent refurbishing, so get the
latest! :-)

   http://www.dfaning.com/programs/coyoteprograms.zip

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")