
Subject: Re: PV-WAVE: shade_surf question
Posted by [glenn](#) on Wed, 14 Jul 1993 12:45:06 GMT
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In article YgEmuPO00X0M824KgZ@andrew.cmu.edu, "Todd M. Kulick" <kulick+@CMU.EDU> writes:

> My goal is to render shaded surface images of actual
> landscapes. I have elevation and color data (LANDSAT). The color
> data is 24-bit (RGB) color data. I am trying to use the 'shade_surf'
> procedure with the 'shades=' option to accomplish my goal. I best-fit
> the 24-bit color data so that my 'shades' data is of N colors, not
> 256**3. It is my understanding that the 'shade_surf' procedure will
> only take byte arrays for the 'shades=' option. If anyone knows of a
> neat (or even non-neat) way of overlaying 24-bit color data onto my
> elevation data I would be very interested. Still, this is not my only
> problem. Even once I concede to best-color-fit my data (which is fine
> since I may end up displaying the final image on a PsuedoColor device
> anyway) I cannot achieve my goals. :(
>

Since shade_surf only works in 8 bit, to create a 24 bit image you should call it 3 times; once for the red, once for the green and once for the blue images. Separate your input RGB data into the red, green and blue. Use each of those in turn for shade_surf and combine the 3 component images to give you a 24bit image.

Unfortunately, there is not a decent procedure in waveCL to convert 24 to 8 bit images. So, I output the image as a 24bit TIFF file. Then use the public domain program 'xv' to view it. 'xv' will let you view 24bit images in a variety of modes and is highly recommended. I use this technique for producing 24bit, full colour images, from the wave raytracer.

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