
Subject: Re: voxel_proj and seg fault
Posted by [Rick Towler](#) on Wed, 27 Feb 2002 18:13:23 GMT
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I had the same level of success that David had:

On Solaris:

```
IDL> print, !version
{ sparc sunos unix 5.4.1 Jan 16 2001   32   64}
IDL> n = 192
IDL> vol = randomu(1, n+6, n+6, n+6)
IDL> for i=0,10 do vol = smooth(vol, 3)
IDL> vol = bytscl(vol(3:n+2, 3:n+2, 3:n+2))
IDL> !x.s = [0.,1.] / (n-1)
IDL> !y.s = [0.,1.] / (n-1)
IDL> !z.s = [0.,1.] / (n-1)
IDL> t3d, /reset, translate=[-0.5,-0.5,-0.5]
% Compiled module: T3D.
IDL> t3d, rotate=[60,0,0]
IDL> t3d, rotate=[0,0,-80]
IDL> t3d, translate=[0.5,0.5,0.5]
IDL> rgbo = bindgen(256)#[1,1,1,1]
IDL> result = voxel_proj(vol, rgbo, /interpolate)
% Program caused arithmetic error: Floating underflow
IDL> print,min(result)
0
IDL> print,max(result)
0
```

On Win32:

```
IDL> print,!version
{ x86 Win32 Windows 5.4 Sep 25 2000   32   64}
IDL> n = 192
IDL> vol = randomu(1, n+6, n+6, n+6)
IDL> for i=0,10 do vol = smooth(vol, 3)
IDL> vol = bytscl(vol(3:n+2, 3:n+2, 3:n+2))
IDL> !x.s = [0.,1.] / (n-1)
IDL> !y.s = [0.,1.] / (n-1)
IDL> !z.s = [0.,1.] / (n-1)
IDL> t3d, /reset, translate=[-0.5,-0.5,-0.5]
% Compiled module: T3D.
IDL> t3d, rotate=[60,0,0]
IDL> t3d, rotate=[0,0,-80]
IDL> t3d, translate=[0.5,0.5,0.5]
IDL> rgbo = bindgen(256)#[1,1,1,1]
```

```
IDL> result = voxel_proj(vol, rgbo, /interpolate)
% Program caused arithmetic error: Floating underflow
IDL> tv,result
IDL> print,max(result)
  0
IDL> print,min(result)
  0
```

-Rick

"Jacques Basson" <jfb37@removeme.cam.ac.uk> wrote in message
news:3C7CB205.8070100@removeme.cam.ac.uk...

```
> Hi all
>
> I seem to be getting segmentation faults when using the interpolate
> keyword to voxel_proj (strangely enough, removing the rotations gets rid
> of the segfault, but then that's not exactly useful). It is repeatable
> on several machines running linux or solaris. xvolume works fine, but is
> not configurable enough (automating translations / getting a contour
> plot instead of an image out of the thing...).
>
> Does anyone know of a suitable workaround, apart from not using the
> interpolate keyword - it's nice to have smooth-looking final plots :)
>
> Cheers,
> Jacques
>
> -----
> IDL> print, !version
> { x86 linux unix linux 5.5a Feb 7 2002    32    32}
> IDL> n = 192
> IDL> vol = randomu(1, n+6, n+6, n+6)
> IDL> for i=0,10 do vol = smooth(vol, 3)
> IDL> vol = bytscl(vol(3:n+2, 3:n+2, 3:n+2))
> IDL> !x.s = [0.,1.] / (n-1)
> IDL> !y.s = [0.,1.] / (n-1)
> IDL> !z.s = [0.,1.] / (n-1)
> IDL> t3d, /reset, translate=[-0.5,-0.5,-0.5]
> % Compiled module: T3D.
> IDL> t3d, rotate=[60,0,0]
> IDL> t3d, rotate=[0,0,-80]
> IDL> t3d, translate=[0.5,0.5,0.5]
> IDL> rgbo = bindgen(256)#[1,1,1,1]
> IDL> result = voxel_proj(vol, rgbo, /interpolate)
> Segmentation fault
> -----
```

>
