
Subject: problem with hidden lines in SURFACE in IDL version 5.5 and 5.6

Posted by [Kristian.Kjaer](#) on Mon, 12 May 2003 08:03:26 GMT

[View Forum Message](#) <> [Reply to Message](#)

This is now logged with RSInc as a bug.

RSI also give a workaround: Using IDL's REVERSE() function to reverse() all the arrays in question.

Surprisingly, it even works if you reverse the arrays in earlier IDL versions, (at least in 5.2) so there is no need for version-dependent code here.

(Hopefully, when they fix the bug in a future version, code modified with reverse will still work.)

See code below.

- Kristian

```
; Document a problem with hidden lines in SURFACE in IDL version 5.5
and 5.6:
```

```
; Make up some surface data:
```

```
x=-2.447+findgen(204)/203*(16.3659+2.447)
```

```
y=14.0+findgen(181)/180*(18.5-14.0)
```

```
z=1/(1+(x/8)^4)#(1/(1+(y-16.5)^6))*2500
```

```
; It also works to have x and y the same SIZE as z:
```

```
xx=x#(1+y-y)
```

```
yy=(1+x-x)#y
```

```
; Apply the following nonlinear transformation:
```

```
kvec=4.81949
```

```
degree=!pi/180.
```

```
xxx =kvec*sin(xx*degree)
```

```
yyy =kvec*sqrt(1+cos(xx*degree)^2-2*cos(xx*degree)*cos(yy*degree ))
```

```
; Now xxx and yyy are not on a rectangular grid.
```

```
surface,z,x,y,ax=45,az=-30,/hor ; Right in 5.2 and 5.6
```

```
surface,z,xx,yy,ax=45,az=-30,/hor ; Right in 5.2 and 5.6
```

```
surface,z,xxx,yyy,ax=45,az=-30,/hor ; Right in 5.2. Wrong in 5.6
```

```
shade_surf,z,x,y,ax=45,az=-30,/hor ; Right in 5.2 and 5.6
```

```
shade_surf,z,xx,yy,ax=45,az=-30,/hor ; Right in 5.2 and 5.6
```

```
shade_surf,z,xxx,yyy,ax=45,az=-30,/hor ; Right in 5.2. Wrong in 5.6
```

```
; All of the following come out right in both 5.2 and 5.6:
```

```
surface,reverse(z),reverse(x),reverse(y),ax=45,az=-30,/hor
```

```
surface,reverse(z),reverse(xx),reverse(yy),ax=45,az=-30,/hor
```

```
surface,reverse(z),reverse(xxx),reverse(yyy),ax=45,az=-30,/h or  
shade_surf,reverse(z),reverse(x),reverse(y),ax=45,az=-30,/ho r  
shade_surf,reverse(z),reverse(xx),reverse(yy),ax=45,az=-30,/ hor  
shade_surf,reverse(z),reverse(xxx),reverse(yyy),ax=45,az=-30 ,/hor
```
