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Subject: SUMMARY: oplot - error in plotting to Z buffer only

Posted by [fireman](#) on Fri, 12 Feb 1999 08:00:00 GMT

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## THE PROBLEM:

An error sometimes arises when plotting to the Z-buffer:

% PLOT: No valid points, must have at least 2 distinct points

## AN EXAMPLE:

```
IDL> ; first, compile the function CIRCLE at the end of this message
IDL> usersym,circle(0,0,1,20),/fill
IDL> plot,psym=8,yrange=[0,1],-0.01+FlndGen(100)/5000
IDL> set_plot,'z'
IDL> plot,psym=8,yrange=[0,1],-0.01+FlndGen(100)/5000
```

## A SUSPECT:

It seems to have something to do with improper clipping to plot boundaries when using filled user-defined symbols. Setting !P.Clip = 0 prevents the error but doesn't always result in desirable plots.

## A WORKAROUND:

```
IDL> ;After setting plot boundaries with an initial plot,
IDL> clip = where( (x gt !x.crange[0]) and (x lt !x.crange[1]) $
IDL>      and (y gt !y.crange[0]) and (y lt !y.crange[1]) )
IDL> oplot, x[clip], y[clip]
```

## THE SOLUTION:

Upgrade to IDL 5.2

## CREDITS:

Eduardo Santiago <[esm@lanl.gov](mailto:esm@lanl.gov)> for first pointing out the filled psym/p.clip connection

Dick Jackson <[djackson@dfanning.com](mailto:djackson@dfanning.com)> for giving a simple example, and for pointing out that IDL 5.2 has corrected the problem.

Gwyn Fireman <[Gwyn.Fireman@gsfc.nasa.gov](mailto:Gwyn.Fireman@gsfc.nasa.gov)> (me) for posting the workaround.

Thanks everyone!

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---- Gwyn F. Fireman  
---- General Sciences Corporation

---- MODIS Characterization Support Team  
---- Gwyn.Fireman@gsfc.nasa.gov 301-352-2118

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