

UR1986-16

1986/16. Screen graphics on the Geological Survey mini-computer  
(Revision 1)

R.G. Richardson

*Abstract*

The Tektronix 4010 emulation makes previews of spooled plotfiles and interactive graphics available on the Geological Survey mini-computer. The maximum x-axis (across the screen) dimension is 7.3 inches and the maximum y-axis (up the screen) dimension is 5.5 inches.

INTRODUCTION

By using the plotter commands outlined in Richardson (1985) and several additional commands, a user may direct graphics output to the screen graphics device. Whenever the graphics display is to be cleared (either by a CALL TEKCLEAR or a CALL RSTR(I) command), the program pauses until CONTINUE is typed at the user terminal.

Plotfiles on disc that are to be sent to a hardcopy plotter may be previewed. In all cases plotting outside the screen limits will produce a meaningless plot.

USE OF THE SOFTWARE

To send plotter files from disc to the graphics screen use the TEKPLOT command, which has the following syntax:

```
TEKPLOT (FNAME) (,FACT)
  where ( ) indicates an optional argument.
  FNAME is the name of the disc file to be plotted and
  defaults to TEMP.PLT.
  FACT is the scaling factor to be applied to the plot
  over and above any scaling initially applied.
  The default is 1.0.
```

At each call of RSTR the program will pause. When viewing is complete the user must type CONTINUE on the user terminal.

At each call of RSTR the graphics terminal will beep and pause. When viewing is complete the user may press any key to continue.

When used interactively the line

```
$INCLUDE SYSF:TEKSUB.FTN/G
```

should be appended to the user program. It should be noted that this includes about one thousand lines of source code and lengthens compile and link times and produces large .OBJ and .TSK files.

ADDITIONAL SUBROUTINES AND INTERACTIVE USE

RESET - used at the end of a plot to reset the scaling factor and reset a number of variables used by the plotting subroutines.  
- format CALL RESET.

TEKCLEAR - clears the graphics screen  
- format CALL TEKCLEAR.

UNPLOT - used to remove vectors, characters or symbols from the display by changing the writing colour to black. Where portions of the plot that are being removed cross other lines, small gaps will be left.  
- format CALL UNPLOT (I)

where I controls the colour of the line drawn  
I = 0 green on black (the default) is used  
I = 1 a black line is drawn allowing the removal of specified lines until a CALL UNPLOT (0) is issued.

REFERENCE

RICHARDSON, R.G. 1985. Hardcopy plotting on the Geological Survey mini-computer (Revision 1). *Unpubl.Rep.Dep.Mines Tasm.* 1985/51

[4 February 1986]