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1985/52.   Screen graphics on the Geological Survey mini-computer

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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 interactively direct graphics
output to the terminal. There is no provision for user prompts but a
prompt may be displayed at the bottom of the graphics screen by the user.
Whenever the screen is to be cleared (either by a CALL TEKCLEAR or a
CALL RSTR(I) command) the terminal beeps and pauses until the user presses
any key.

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 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.
        It does not automatically call TEKCLEAR.
        - 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.

                                        [23 September 1985]