EMIMGDSP.DOC

(last update Aug 17, 1987)

EMIMGDSP reads IMAGE data (either BRANDEIS or PURDUE format) from disk and displays it on the raster graphics device. The formats of the two types of IMAGE files (both are SEQUENTIAL, UNFORMATTED) are explained in [TSB.FOR]EMPROGS.DOC. EMIMGDSP lists information about the IMAGE data at the terminal when the file is opened.

```
IMG_BKG = average intensity of the IMAGE perimeter,
NCOL    = # of columns in the IMAGE, and
NROW    = # of rows in the IMAGE
IMG_MIN = minimum (non-zero) data value
IMG_MAX = maximum data value
IMG_AVG = average data value
IMG_STD = standard deviation of the data values
```

Values for IMG_MIN,IMG_MAX,IMG_AVG and IMG_STD are not available for BRANDEIS type IMAGE data.

The user specifies an x,y position for centering the displayed IMAGE (DEFAULT: x=640 y=512 for the LEXIDATA 1280x1024 raster graphics device). Note that it is possible to position the image with a portion extending outside the screen boundary and therefore not displayed. The entire screen may be erased or the new IMAGE written over the existing display. The IMAGE is displayed with the existing COLOR TABLE (CT). The LEXI program may be used to change the CT.

Images may be displayed with the data inverted about X and/or Y. After the IMAGE is displayed you may set the area surrounding the IMAGE data (where ICOL = 0) to IMG_BKG if desired, but this is only a cosmetic feature since nothing is changed in the graphics memory.

If NCOL>1280 or NROW>1024, only the lower-left portion is displayed.

A new option has been added to allow the IMAGE being written to the graphics screen to either overwrite or bleed into the image on the screen. Normally IMAGE data overwrites the graphics memory. The bleed option will only allow memory values to be overwritten where the IMAGE intensity is NOT = 0. This option has limited value, but can be useful, for example, for embedding reconstructed images within original, unprocessed images. You may have to treat

the IMAGE first with option 'K' of the EMIMG program, for example,
to replace intensities outside the box boundaries with zeros.

==========
FORTRAN code: DEXTRO3:[TSB.FOR]EMIMGDSP.FOR,*.S1.
Documentation: DEXTRO3:[TSB.FOR.DOC]EMIMGDSP.DOC   17-Aug-87
