Addendum

FORTRAN IV Program for Grey-Level Mapping of Spatial Data

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The program as published (Howarth, 1971) could give rise to slight scaling errors in the production of *large* maps owing to the use of an integer value in the calculation of the *x*- and *y*-axis scaling factors in the subroutine PSCALE. A truncation error would arise in subsequent calculation of the true-scale-plot-scale conversions via the subroutines RCONVR and PCONVR. The following modifications to the program are suggested to remove this source of error.

1. Main program (PLTLPI):

Replace lines 1870, 1880, 1950, and 1960 by the following:

```
CALL ICØNVR(2,XINCH,LINTØT,RLINT,IERR)  PLTO1870
CALL ICØNVR(1,YINCH,KØLTØT,RKØLT,IERR)  PLTO1880
CALL PSCALE(XMIN,XMAX,1,RLINT,XA,XB)    PLTO1950
CALL PSCALE(YMIN,YMAX,1,RKØLT,YTA,YTB)  PLTO1960
```

2. Subroutine ICØNVR:

Replace line 10 by the following:

```
SUBRØUTINE ICØNVR(M,DIST,LENGTH,RLENGH,IERR)
                                                    ICØO0010
```

Insert the following statements after statements 220, 380, and 430:

```
C   *RLENGH* = TRUE (FLØATING PØINT) NUMBER ØF
    LINES ØR CØLS                                ICØO0221
    RLENGH = 10.*DIST                             ICØO0381
    RLENGH = 6.*DIST                             ICØO0431
```

3. Subroutine PSCALE:

Replace statements 10, 130, 190, and 200 by the following:

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	SUBROUTINE PSCALE(XO,X1,YO,Y1,A,B)	PSCO0010
C	CALL PSCALE(XO,X1,YO,Y1,A,B)	PSCO0130
C	*YO* FL. PT. PLOT SCALE COORDINATE CORRESPOND-	
	ING TO *XO*	PSCO0190
C	*Y1* FL. PT. PLOT SCALE COORDINATE CORRESPOND-	
	ING TO *X1*	PSCO0200

Omit lines 250 and 260.

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REFERENCE

Howarth, R. J., 1971, FORTRAN IV program for grey-level mapping of spatial data: Jour. Intern. Assoc. Math. Geol., v. 3, no. 2, p. 95-121.