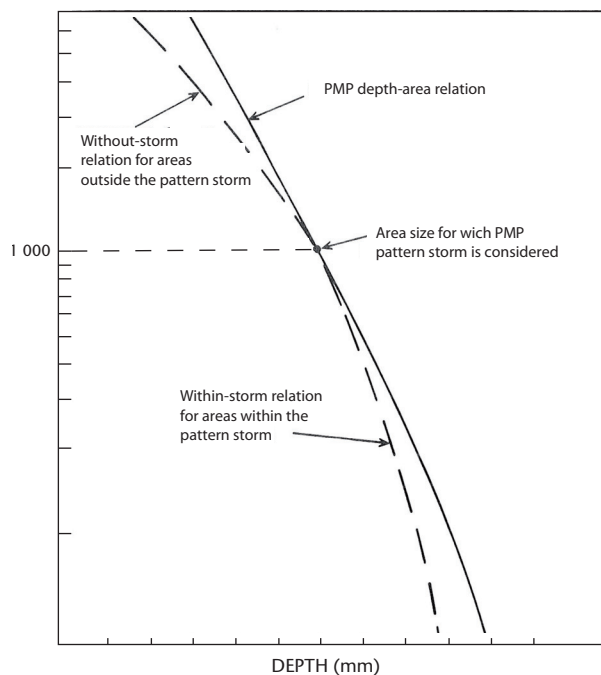


#### 5.2.7.4.1 *Nomogram for isohyetal labels for each of the largest three 6-hour increments*

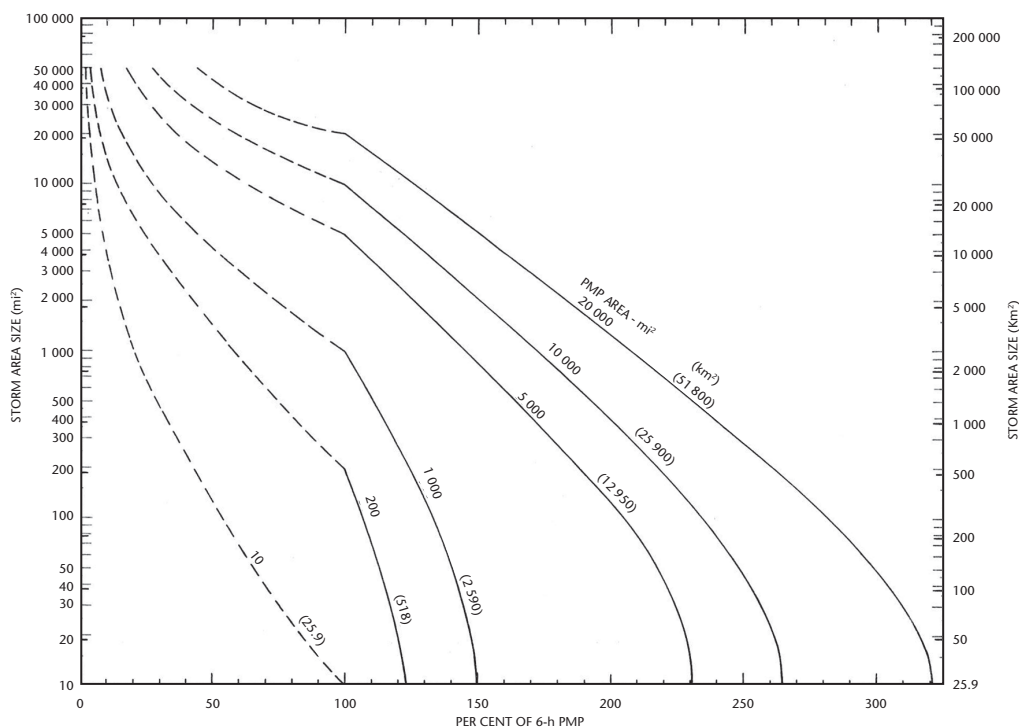
The procedure used to develop nomograms for providing isohyet labels is similar for each of the first three increments. In this section, the procedure used to develop the nomogram to provide isohyet labels for the maximum 6-hour period is discussed. The same procedure can be used for the next two largest increments. In some situations, the nomogram for the third increment is determined by interpolation between the second increment and a single average depth.

The first step is to select the largest storms in the region. Generally, all storms within some fixed percentage of the PMP depths are used, for example those storms with moisture-maximized depths within 10 per cent of the PMP values. Next, depth-area data for these storms are used to form all available ratios of depths. That is, the average precipitation depth for the 25.9-km<sup>2</sup> area is divided by the average precipitation depth for the 25.9-km<sup>2</sup>, 518-km<sup>2</sup>, 2 590-km<sup>2</sup>, 12 950-km<sup>2</sup>, 25 900-km<sup>2</sup> and 51 800-km<sup>2</sup> areas. The first of these ratios is, of course, unity. These within/without-storm average ratios, since they are done individually for each storm, are computed as a percentage of the respective storm area size precipitation amounts. The ratios obtained are then averaged and the average ratio plotted against area size. The relation



**Figure 5.8. Schematic diagram showing the relation between depth-area curve for PMP and the within/without-storm relations for PMP at 1 000 km<sup>2</sup> (Hansen and others, 1982)**

for the storms in the eastern United States (Hansen and others, 1982) is shown in Figure 5.9. The



**Figure 5.9. Six-hour within/without-storm average curves for standard area sizes (Hansen and others, 1982)**