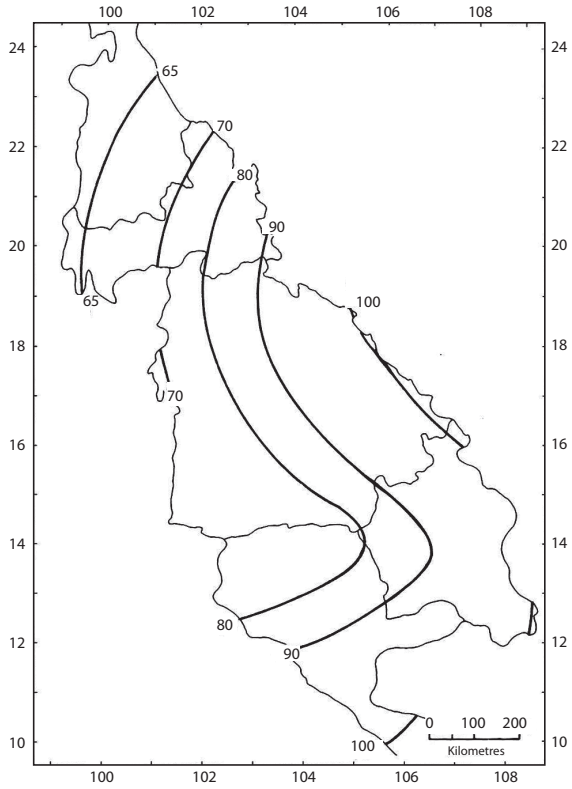

Figure 6.11. Adjustment (percentage) of coastal typhoon rainfall for distance inland (United States Weather Bureau, 1970)

6.2.2.5 Generalized estimates of PMP

The 24-hour 5 000-km^2 coastal PMP values of Figure 6.10 were multiplied by the combined adjustment percentages of Figure 6.15 to obtain the generalized PMP map of Figure 6.16. PMP values for basin sizes between 5 000 and 25 000 km^2 from Figure 6.10 were expressed as percentages of the 24-hour 5 000-km^2 PMP. These percentages were then used to construct the curves of Figure 6.17.

6.2.2.6 Time distribution

Examination of hourly records of intense rainfalls in the Mekong basin showed various sequences of 6-hour increments during a storm period. Those associated with tropical storms, for example, Tilda (September 1964), had rain bursts lasting up to 30 hours with greatest intensities near the centre of the burst. Some stations reported double bursts with an intervening lull of 6 to 18 hours.

Strictly speaking, in order to maintain PMP magnitude no lulls can be allowed in a sequence of 6-hour rainfall increments during the PMP storm. In other words, the greatest, second greatest, etc., down to the twelfth greatest must be arranged in an ascending or descending order such that the highest increments always adjoin. Such a sequence is unrealistic in this region, however, and that described in section 3.4.2.6 was recommended as essentially conforming to requirements for the 72-hour PMP storm.

6.2.2.7 Areal distribution

Isohyetal patterns for 6-hour rainfall increments in observed storms have various configurations. Some approach simple concentric circles or ellipses, while others are complicated, often with centres of high and low rainfall in close proximity to each other. An elliptical pattern, similar to that of Figure 3.26, was recommended for the four greatest 6-hour rainfall increments. Uniform areal distribution was recommended for the remaining 48 hour of the storm.

Within a 3-day period, the isohyetal centre of a major storm usually moves along the storm path. In the most extreme rainfalls, however, the storm may become almost stationary. It is therefore

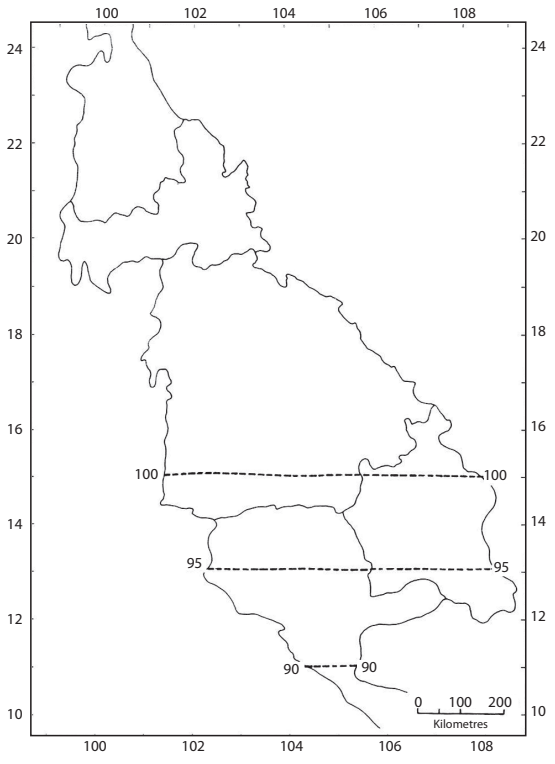

Figure 6.12. Latitude adjustment of typhoon rainfall as percentage of values at 15° N (United States Weather Bureau, 1970)