(b) To adjust for mean drainage elevation, determine the mean elevation of the drainage in question. No adjustment is necessary for elevations of 1 830 feet or less. If the mean elevation is greater than 1 830 m, reduce the index PMP from (a) by 9 per cent for every 300 m above the 1 830-m level.
An example of the elevation adjustment is as follows. Take a basin with a mean elevation of 2 650 m, (820 m above 1 830 m). The reduction factor would be 24.3 per cent (2.7 × 9) in this case.

(c) To adjust for durations, the 2.6-km^2 local storm PMP estimates for durations less than 1 hour and up to 6 hours are obtained as a percentage of the 1-hour amount from (b). The PMP of all durations can be obtained by multiplying the results from (b) by the percentage of all durations.

(d) Adjustment for basin area is determined using the percentage reductions at 0.25, 0.50, 0.75, 1, 3, and 6 hours for the area of the basin from Figure 5.43. These are multiplied by the respective results from (c), and a smooth curve drawn for the plotted values in order to obtain estimates for durations not specified.

(e) Temporal distribution is ascertained using reviews of local storm temporal distributions for this region. These show that most storms have durations of less than 6 hours and that the greatest 1-hour amount occurs in the first hour. The recommended sequence of hourly increments is as follows: arrange the hourly increments from largest to smallest as directly obtained by successive subtraction of values and read from the smooth depth–duration curve.

(f) Areal distribution of local storm PMP is derived using the percentages in Figure 5.44 and Table 5.8. In the event of choosing this option, (c) and (d) can be ignored and the results from (b) (or (a), if no elevation adjustment is made) are multiplied by each of the percentage factors in Table 5.8. The results represent the labeled isohyets of the idealized pattern placed over the specific drainage.
Once the labels have been determined for each application, the pattern can be moved to different placements on the basin. In most instances, the greatest volume of PMP will be obtained when the pattern is centred in the drainage. However, peak flows may actually occur with placements closer to the drainage outlet.

5.3.7.8 Example of local-storm PMP estimation

This example shows the application of the above steps to determine the local storm PMP for the White River basin above Mud Mountain Dam (1 041 km^2).

(a) The basin outline is placed on Figure 5.45 and the basin average 2.6-km^2 1-hour PMP is read as 161 mm.

(b) The average drainage elevation is below 1 830 m although higher elevations occur near the border of the basin. No adjustment is needed for this basin.

(c) Durational 2.6-km ^{2} values are obtained as shown in Table 5.9.

(d) The areal reduction factors are obtained from Figure 5.43 for 1 041 km^2 to give basin average PMP at the durations indicated. Multiply the respective factor by the results of (c) as shown in Table 5.10.

(e) The temporal distribution is given by plotting the results of (d) as shown in Figure 5.46 and reading off smoothed hourly values. Note that

Table 5.8. PMP profile values (accumulative percentage of 1-hour 2.6-km^2 amount)

Isohyet	*Duration (hours)*								
	0.25	*0.50*	*0.75*	*1*	*2*	*3*	*4*	*5*	*6*
A	50.0	74.0	90.0	100.0	110.0	112.0	114.0	114.5	115.0
B	32.0	53.0	67.0	74.8	83.5	85.5	87.5	88.0	88.5
C	22.0	37.5	48.0	56.0	63.0	65.0	66.0	66.5	67.0
D	17.0	28.5	38.0	43.0	48.0	49.5	50.5	51.0	51.5
E	12.0	21.0	28.0	32.2	37.0	38.0	38.0	39.0	39.5
F	7.5	14.0	19.0	22.4	25.0	25.7	25.7	26.7	27.2
G	5.0	8.5	12.0	14.0	16.2	16.7	16.7	17.7	18.2
H	2.0	3.5	5.0	6.5	8.3	8.8	8.8	9.8	10.3
I	0.4	0.7	1.0	1.2	2.2	2.7	2.7	3.7	4.2
J	0.2	0.3	0.4	0.5	1.0	1.5	1.5	2.5	3.0