

Table 2.4. Evaluation of isohyet labels of Figure 2.16

<i>Isohyet^a</i>	<i>Enclosed area (km²)^b</i>	<i>Equivalent radius (km)^c</i>	<i>Isohyet value (mm)^d</i>
A	10	1.78	122
B	200	7.98	89
C	500	12.65	77
D	750	15.50	70
E	2 000	25.20	55
F	3 000	30.98	48

^a Column 1: refers to isohyets of Figure 2.16

^b Column 2: areas enclosed by isohyets of Figure 2.16

^c Column 3: radii of circles equivalent in area to enclosed areas in Column 2

^d Column 4: labels for isohyets of Figure 2.16 as indicated by entering Figure 2.17 with radii of Column 3

When it is thought that there might be more critical possible arrangements of rainfall increments than indicated by observed storms, various other realistic arrangements are examined, and the more likely ones are specified. In developing different arrangements of 6-hour increments, the standard practice in the United States is to maintain PMP magnitude for all durations, that is, the two highest increments in order of magnitude adjacent, the

countries, this practice is not always followed and different temporal distributions based on mass curves for observed severe storms are provided. This practice does not always provide PMP magnitude rain for all durations. It is the responsibility of the meteorologist and hydrologist to determine which arrangement is appropriate for a particular region and will result in the critical design storm for a basin.

Table 2.5. Chronological distribution of probable maximum precipitation (PMP) for a hypothetical 3 000 km² basin

<i>Duration (hours)</i>	<i>PMP (mm)</i>	<i>6-hour increments</i>		<i>Maximum accumulation</i>
		<i>PMP</i>	<i>Arranged^a</i>	
6	284	284	16	284
12	345	61	28	345
18	384	39	20	384
24	419	35	12	419
30	447	28	39	431
36	467	20	61	451
42	483	16	284	479
48	495	12	35	495
54	505	10	5	500
60	513	8	8	508
66	521	8	10	518
72	526	5	8	526

^a Increments in this column are assumed to be arranged according to the sequence of increments in a critical storm producing maximum runoff in the project basin.

Note that maximum accumulation for any given duration may be less than or equal to, but not more than, the summation of PMP increments for the same duration. Thus, for example, the maximum 24-hour accumulation is equal to the PMP value of 419 mm (39.0 + 61.0 + 284 + 35.0). The maximum 30-hour value is only 431 mm (12.0 + 39.0 + 61.0 + 284 + 35.0), whereas the 30-hour PMP value is 447 mm. In this example, only the 6-, 12-, 18-, 24-, 48 and 72-hour accumulations are equal to the PMP values.

three highest adjacent, etc. In Australia and other