

Figure 2.14. Maximization of a pattern storm by the sliding technique for a 5 000 km² basin, the point of first contact occurs on the 72-hour curves between about 2 000 and 4 500 km²

of a basin just upstream from a dam may prove most critical for peak flow. This can only be determined by hydrological trials.

In the general case, hypothetical isohyets are drawn more or less congruent to the basin boundaries (Figure 2.16), and the rain values, or labels, for the isohyets are determined by a procedure that is essentially a reversal of the usual DAD

analysis. For example, given the 6-hour PMP and within-storm DAD curves of Figure 2.15, the isohyetal values for the critical storm pattern superimposed on the outline of the 3 000 km² basin of Figure 2.16 can be determined. Table 2.3 shows how the isohyetal profile is computed, and the results are shown in Figure 2.17. The required isohyetal values are obtained as shown in Table 2.4.

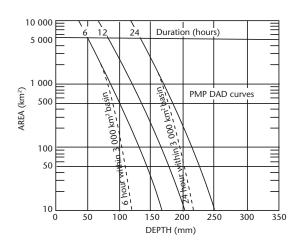


Figure 2.15. Example of enveloping DAD curves of PMP and within-storm rainfall depths

2.12 TIME DISTRIBUTION OF PMP

2.12.1 **Order of presentation**

An appropriate chronological time sequence of rainfall increments is needed for application of PMP estimates. PMP values, whether presented in tabular form or by DAD curves, are generally given with the maximum accumulated amounts for any duration preceding all other values for the specified duration. In other words, the 6-hour PMP amount given is the maximum 6-hour increment to be found anywhere in the PMP sequence. Similarly, the amounts for 12, 18, 24 hours and longer are the maximum for the sequence. This order of presentation, however, is rarely representative of the chronological order found in actual storms, and