

probable maximum precipitation - The probable maximum precipitation. Commonly known as PMP. For a region is precipitation resulting from the most critical meteorological combination that are considered possible of occurrence.

$$PMP = \bar{P} + k\sigma$$

\bar{P} = mean of annual max rainfall

σ = Standard deviation

k = freq factor

procedure for determination of max Rainfall -

- ① Arrange the rainfall data in descending order and assign rank number of event being equal to n
- ② Compute recurrence interval (T) for each event.
- ③ determine the expected max rainfall magnitude for any desired value of T from this graph.

procedure for determination of minimum rainfall -

- ① Arrange the rainfall data in ascending order and design design rank number m to each rainfall event the total number of event being equal to N .
- ② Compute recurrence interval (T) for each event -
- ③ Determine the expected min rainfall magnitude for any desired value of T from this graph