Historical storm The precipitation process of a large flood that occurred before modern rainfall observation stations were set up. A storm process whose certain characteristics (occurrence date, storm magnitude, days of heavy raining and duration) can be determined through researches and analyses on rains and floods recorded in literature as well as records on droughts, floods, high temperatures and gales in surrounding regions.

Hyetograph A map or chart displaying temporal or areal distribution of precipitation, or a graph displaying the intensity of precipitation versus time.

Inferential model method A method of generalizing the 3-D structure of a storm weather system based on principles of synoptic meteorology in order to create a simplified physical equation that generates storms, and performing proper maximization to estimate probable maximum precipitation for the design watershed.

Isohyet Lines of equal value of precipitation during a given time interval.

Isohyetal pattern The pattern formed by the isohyets of an individual storm.

Isohyetal orientation The term used to define the orientation of precipitation patterns of major storms when approximated by elliptical patterns of best fit. It is also the orientation (direction from north) of the major axis through the elliptical PMP storm pattern.

Lapse rate Rate of change of temperature with height, either dT/dh or dT/dP where T is the temperature, h is the height and P is the pressure.

Lift Upward vertical motion. Also the upward vertical displacement required to saturate air by dry-adiabatic lift.

Local model method A method of selecting the process of an actual large storm with severe spatio–temporal distribution in the design watershed and then maximizing it properly to derive probable maximum precipitation for a particular season and a particular duration for the design watershed.

Local storm A storm event that occurs over a small area in a short time period. Precipitation rarely exceeds 6 hours in duration and the area covered by precipitation is less than around 1 300 km^2. Frequently, local storms will last only 1 or 2 hours and precipitation will occur over area sizes up to 500 km^2. Precipitation in local storms will be isolated from general-storm rainfall.

Major temporal and spatial combination method The basic concept of this method is to treat the part of PMP which has the larger influence on PMF temporally (flood hydrograph) and spatially (flood source area) at the design section with hydrometeorological methods (maximization of local storms, storm transposition, storm combination, generalized estimation), and to treat the part of PMP which has the smaller influence with the common correlation method and the typical flood inflow proportional distribution method, in hydrological analysis. Obviously, this method, which can be regarded as a storm combination method, is an application of combination both in time and space. It only makes a detailed computation for the main part while making a rough computation for the secondary part.

Mass curve Curve of cumulative values of precipitation through time.

Mixing ratio (w) Ratio of the mass of water vapour to the mass of dry air in a given sample. The dimensionless ratio of mass of water vapour to the mass of dry air with which it is mixed.

$$w = 0.622 \frac{e}{p - e}$$

where w is the mixing ratio, p the atmospheric pressure, e the vapour pressure and 0.622 is the ratio of the molecular weight of water to the average molecular weight of dry air.

Module A self-contained unit of a complex procedure.

Moisture maximization The process of adjusting observed precipitation amounts upward based on the hypothesis of increased moisture inflow to the storm.

Occluded front Portion of the frontal surface (warm or cold) remaining in contact with the ground after the cold front has overtaken the warm front.

Occlusion Formation of an occluded front; a cyclonic system which has undergone the process of occlusion.

Orographic rain Rain which is caused entirely, or mostly, by the forced lift of moist air over high ground. Sometimes referred to as topographically induced rain.