Measurements:
- rainfall depth,
- flows

Separation of rainfall events in time series (DWA A – 118)

According to precipitation genesis

- Determination of empirical and theoretical distributions: precipitation characteristic number of events of appropriate i-th genesis

- Simulation of $M_i$, number of rainfall events of $i$-th genetic type by MC methods

- Simulation of number of synthetic rainfall series for $M_i$ of $i$-th genetic type using MC methods

- Simulation of the number of overflows for individual $i$-th genetic type

- Determination of CDF (calculation of percentile values)

Construction of the logit model

- Identification of independent variables in the logit model

- Assessment of the compatibility of calculation results with measurements

Logit model for rainfall

$p = f(x_1, x_2, x_3, ..., x_j)$

- No division into types

- Determination of empirical and theoretical distributions: precipitation characteristic number of events

- Simulation of $M_i$, number of rainfall events in a year using MC methods

- Simulation of synthetic rainfall annual rainfall series using MC methods

- Simulation of the number of overflows in the year based on synthetic rainfall series

- Determination of CDF (calculation of percentile values)