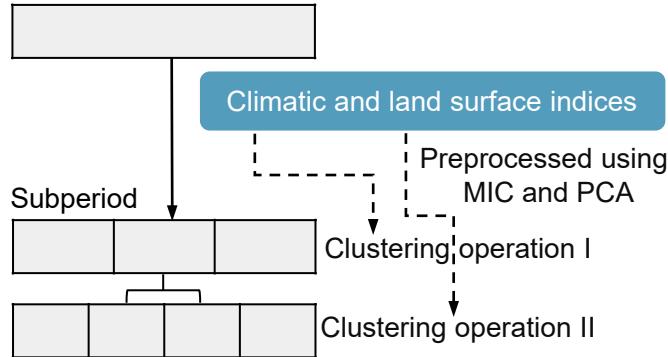


## Framework

### Key points

#### Calibration period

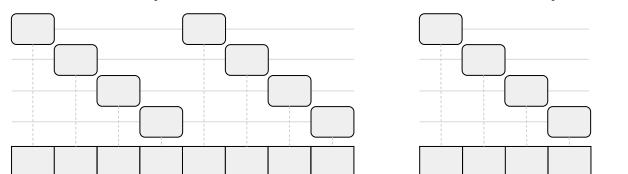


- Indices are specified with dynamic catchment characteristics.

#### Extraction of dynamic catchment characteristics

- Multiple clustering operations based on different index systems.

#### Calibration period

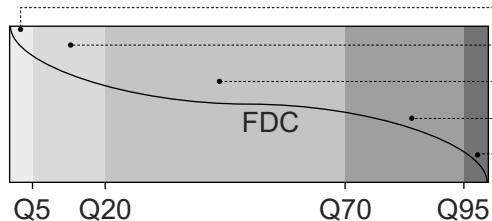


#### Validation period

- The effects of the potential correlation between the parameters on the subperiod calibration.

Linear and nonlinear correlation between parameter parameters

#### Different subperiod for objective function



#### Assessment of model performance

- RMSE\_Q5
- RMSE\_Q20
- RMSE\_Qmid
- RMSE\_Q70
- RMSE\_Q95
- NSE
- LNSE

- The effects of the number of multiplying parameters on the subperiod calibration.
- The effects of the temporal memory in the model states between two adjacent subperiods on the subperiod calibration.