Step 1: Initialization of lakes

- Aggregation
  - Creation of global maps:
    - Parameters: lake_id & lake_zmean
    - resolution: 1/120°  grid: global

- Integration
  - Integration of lakes in the river network
    - Parameters: lake_id & lake_zmean
    - resolution: 1/120°  grid: input zone

- Mask creation
  - Correction of the river network with lake masks
    - Parameters: lake_id_in, lake_id_nw, z_mean,
      lake_area, frac_lake, weir_z, weir_w
    - Variables: lake_sto
    - resolution: 1/12°  grid: input zone

Step 2: CTRIP

- Preparation
  - Preparation of global CTRIP parameters and variables
    - resolution: 1/12°  grid: global

- Initialization
  - Initialization of CTRIP variables on the study site
    - resolution: 1/12°  grid: input zone

SURFEX

- ISBA: Runoff & Drainage
- FLake: evaporation rate

Resolution

- Numerical resolution and diagnostics
  - Variables: lake_out, lake_in, lake_h, lake_sto
  - resolution: 1/12°  grid: input zone