

# 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

Resolution

## Numerical resolution and diagnostics Variables : lake\_out, lake\_in, lake\_h, lake\_sto

resolution : 1/12° grid : input zone

SURFEX

ISBA :  
Runoff & Drainage

FLake :  
evaporation rate

