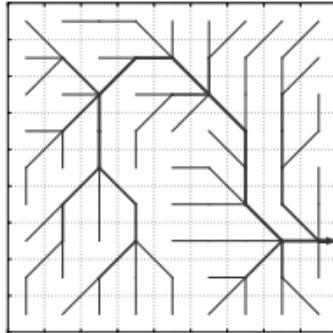


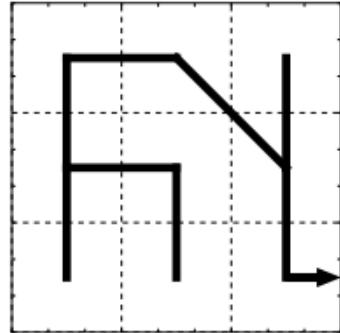
# Inputs

High-resolution river network



# Processing

Upscaled river network



Grid specific runoff



# Outputs

Kinematic wave solver

$$Q(x_{j+1}, t_{i+1}) = C_1 Q(x_j, t_{i+1}) + C_2 Q(x_j, t_i) + C_3 Q(x_{j+1}, t_i)$$

Streamflow at every reach

