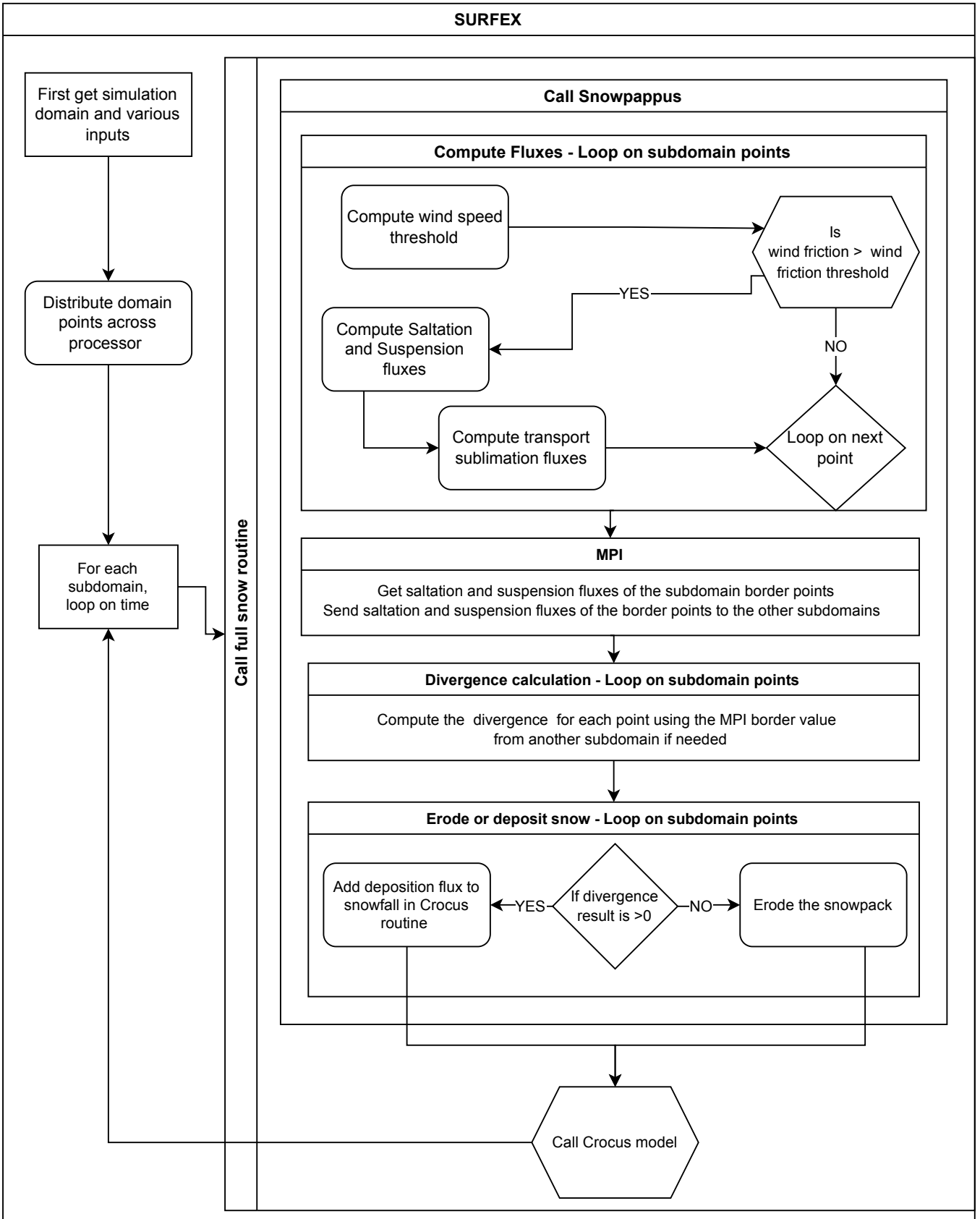
SURFEX
First get simulation domain and various inputs
Distribute domain points across processor
For each subdomain, loop on time
Call full snow routine
Call Snowpappus
Compute Fluxes - Loop on subdomain points
Compute wind speed threshold
Is wind friction > wind friction threshold
YES
NO
Compute Saltation and Suspension fluxes
Compute transport sublimation fluxes
Loop on next point
MPI
Get saltation and suspension fluxes of the subdomain border points
Send saltation and suspension fluxes of the border points to the other subdomains
Divergence calculation - Loop on subdomain points
Compute the divergence for each point using the MPI border value from another subdomain if needed
Erode or deposit snow - Loop on subdomain points
Add deposition flux to snowfall in Crocus routine
YES
If divergence result is >0
NO
Erode the snowpack
Call Crocus model