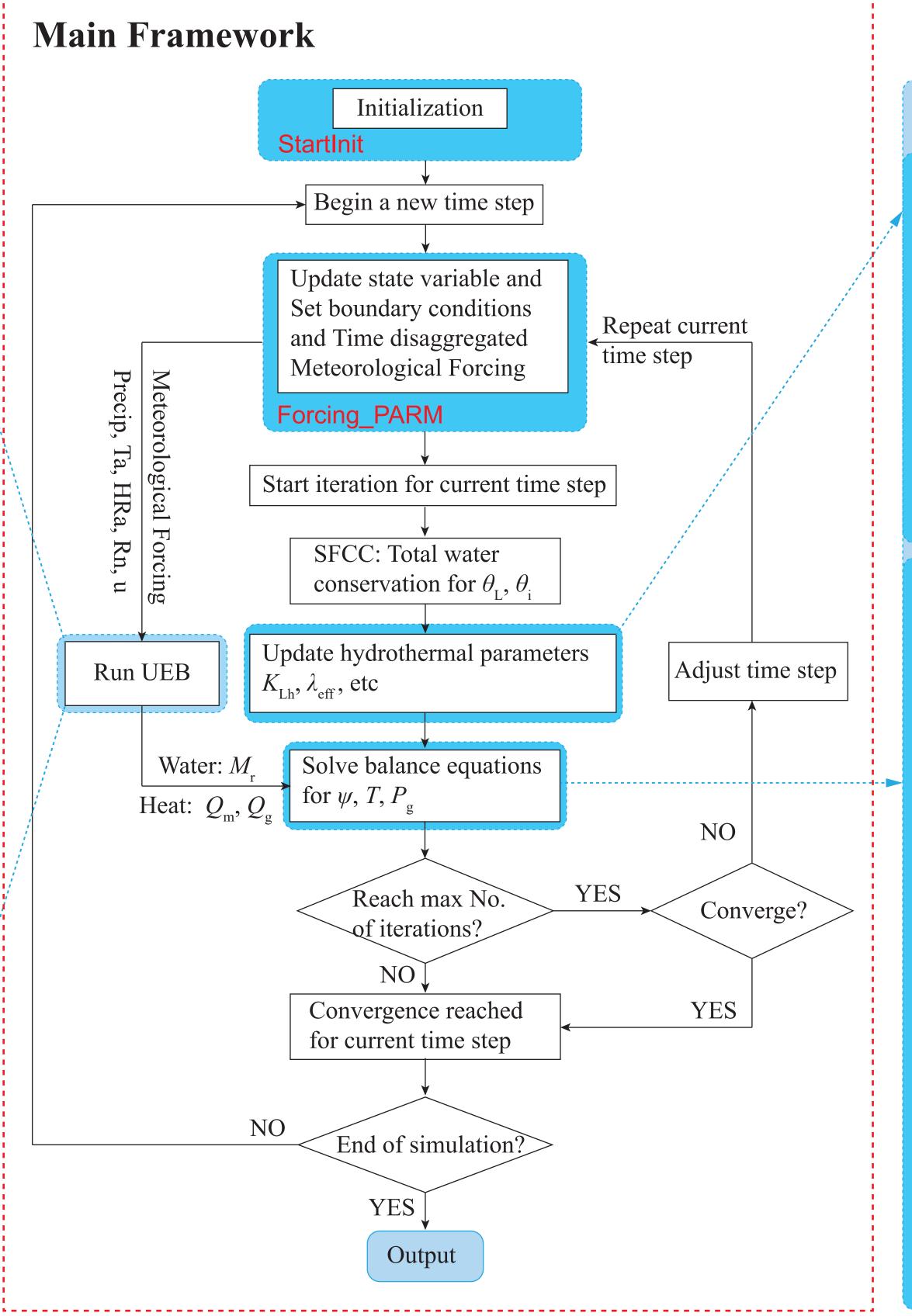
UEB snow module **Set Constants** Estimate radiation components, considering horizontal measurement, cloud cover, vegetation canopy adjustment Partition Precip into rain and snow **PARTSNOW** Calculate snow albedo **ALBEDO** Solve snow energy/mass balance equations; Update state variables (U, SWE, and τ) **PREDICORR** Update snow albedo; temperature Update mass balance components



STEMMUS-FT soil module

Update hydrothermal parameters

- 1. Soil hydraulic conductivity K; thermal properties C, λ_{eff} CondL_h, CondT_coeff, EfeCapCond
- 2. Vapor density, $\rho_{\rm V}$; diffusivity, $D_{\rm V}$; dispersivity, $D_{\rm Vg}$ Density_V, CondV_DE, CondV_DVg
- 3. Transport coefficient for adsorbed liquid flow (heat of wetting), $D_{\rm TD}$ CondL_Tdisp
- 4. Dry air density, $\rho_{\rm da}$; Gas conductivity, $k_{\rm g}$ Density_DA, Condg_k_g

Solve balance equations for ψ , T, P_{g}

