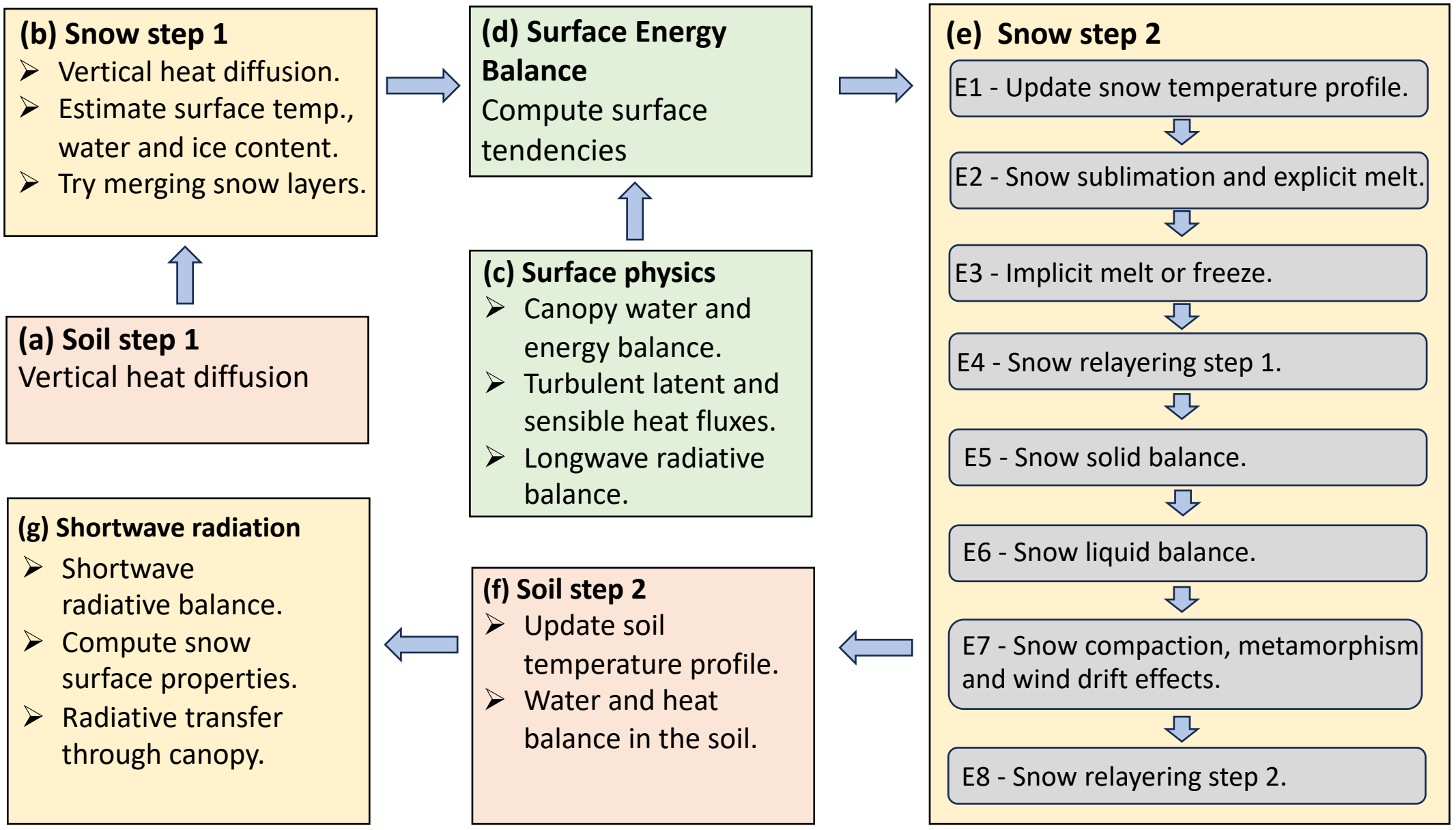
(b) Snow step 1
Vertical heat diffusion.
Estimate surface temp., water and ice content.
Try merging snow layers.
(d) Surface Energy Balance
Compute surface tendencies
(e) Snow step 2
E1 - Update snow temperature profile.
E2 - Snow sublimation and explicit melt.
E3 - Implicit melt or freeze.
E4 - Snow relayering step 1.
E5 - Snow solid balance.
E6 - Snow liquid balance.
E7 - Snow compaction, metamorphism and wind drift effects.
E8 - Snow relayering step 2.
(a) Soil step 1
Vertical heat diffusion
(c) Surface physics
Canopy water and energy balance.
Turbulent latent and sensible heat fluxes.
Longwave radiative balance.
(g) Shortwave radiation
Shortwave radiative balance.
Compute snow surface properties.
Radiative transfer through canopy.
(f) Soil step 2
Update soil temperature profile.
Water and heat balance in the soil.