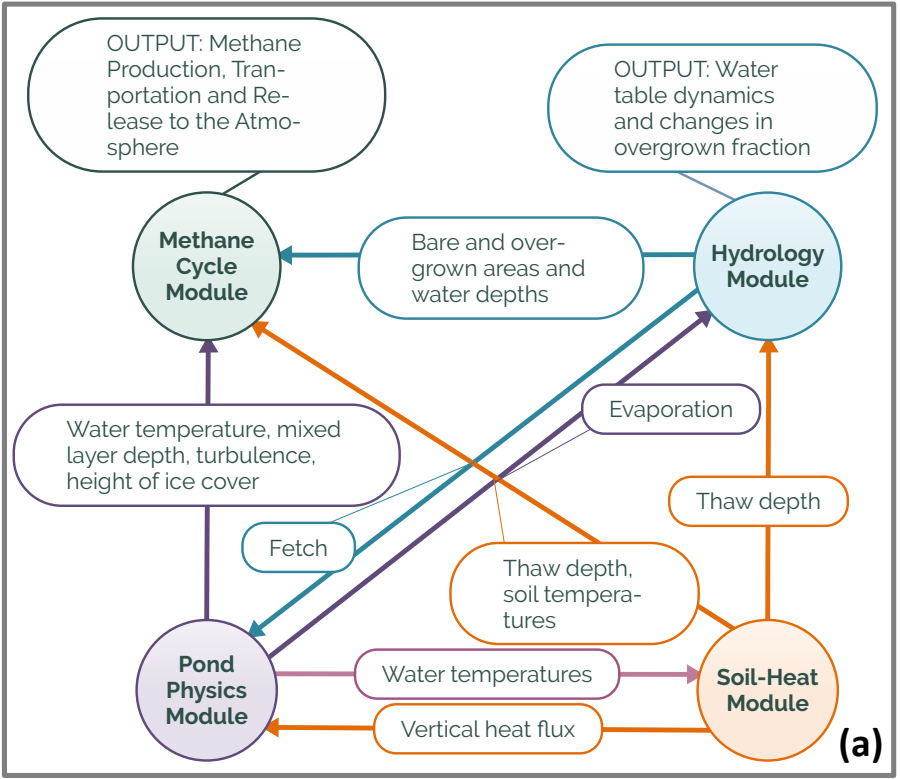
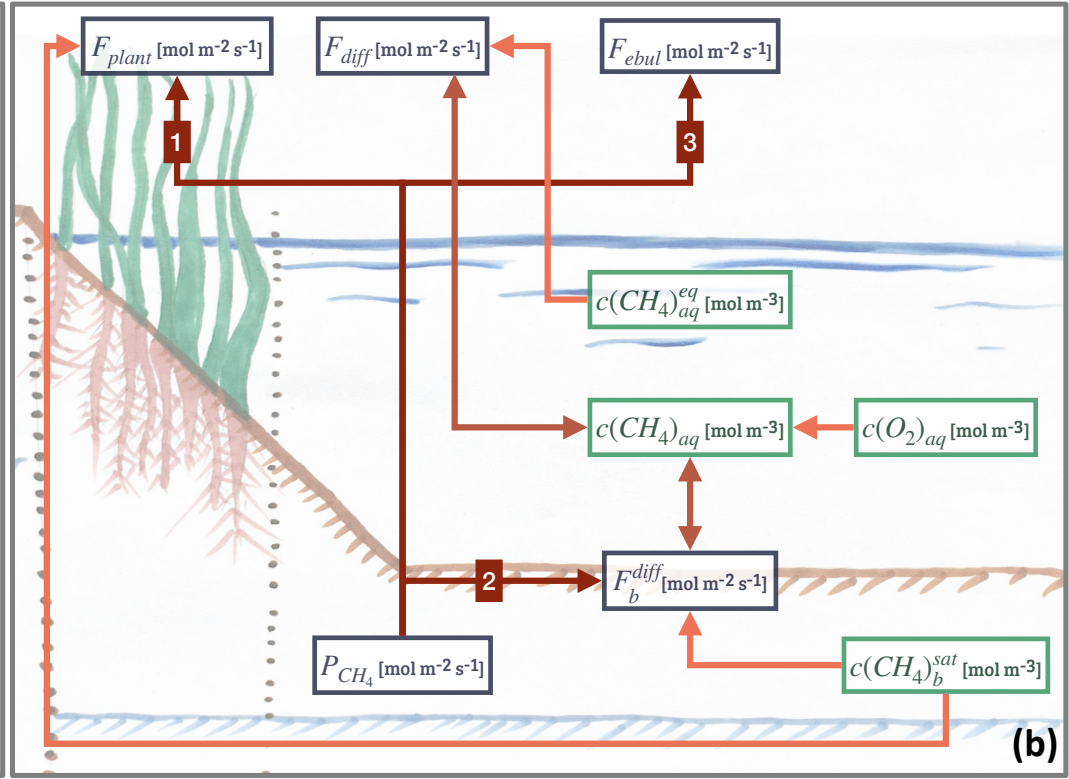

OUTPUT: Methane Production, Tran-portation and Re-lease to the Atmo-sphere
OUTPUT: Water table dynamics and changes in overgrown fraction
Methane Cycle Module
Bare and over-grown areas and water depths
Hydrology Module
Evaporation
Water temperature, mixed layer depth, turbulence, height of ice cover
Thaw depth
Fetch
Thaw depth, soil tempera-tures
Pond Physics Module
Water temperatures
Soil-Heat Module
Vertical heat flux
(a)


F_{plant} [mol m-2 s-1]
F_{diff} [mol m-2 s-1]
F_{ebul} [mol m-2 s-1]
1
3
$c(CH_4)_{aq}^{eq}$ [mol m-3]
$c(CH_4)_{aq}$ [mol m-3]
$c(O_2)_{aq}$ [mol m-3]
2
F_b^{diff} [mol m-2 s-1]
P_{CH_4} [mol m-2 s-1]
$c(CH_4)_b^{sat}$ [mol m-3]
(b)