

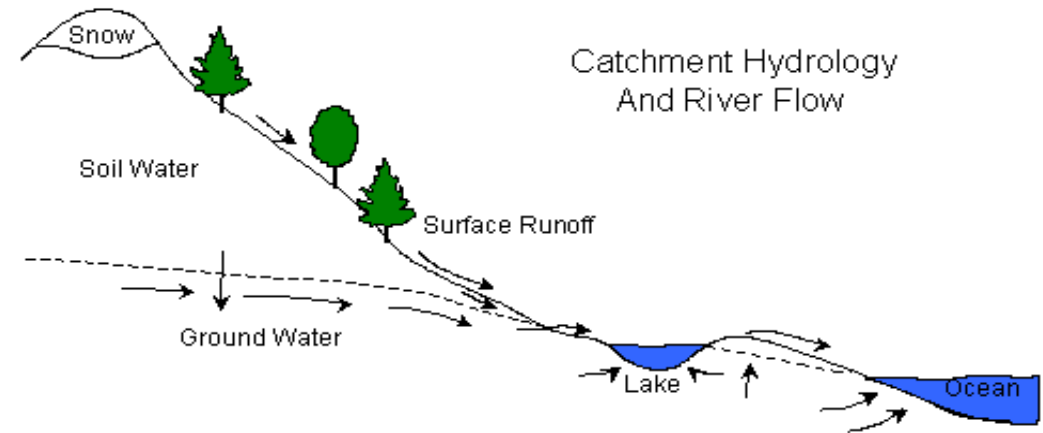
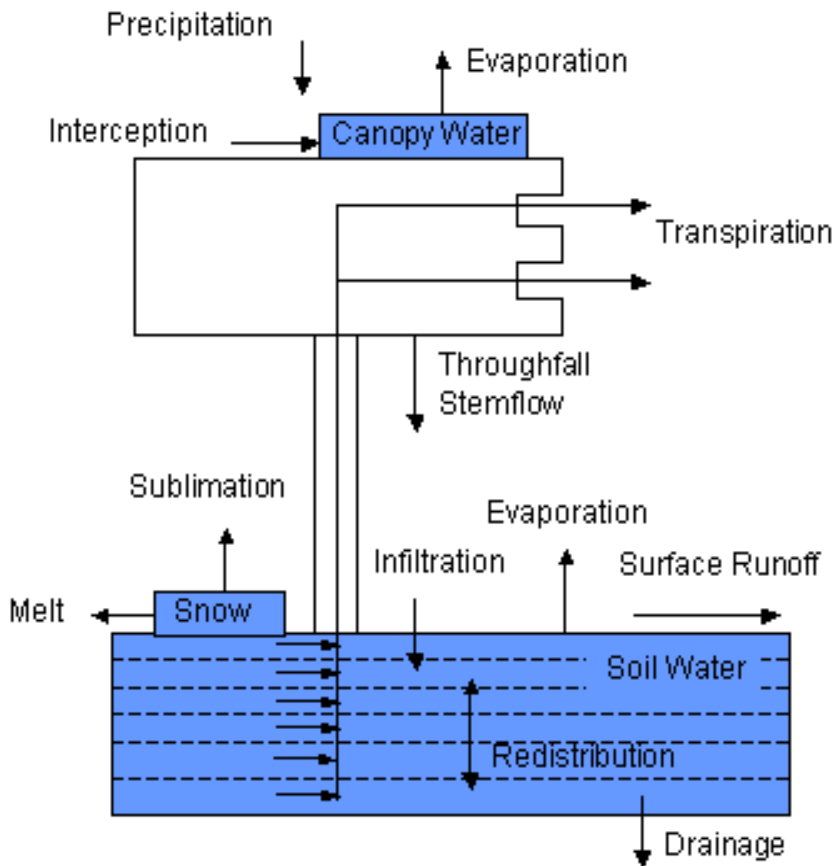
Incorporation of Water Isotopes in CLM4

Tony Wong
with

David Noone, Jesse Nusbaumer (CU/CIRES),
Bill Riley, Jinyun Tang (LBL),
Chuck Bardeen (NCAR)

CLM Hydrology

Hydrology



Community Land Model Water Balance

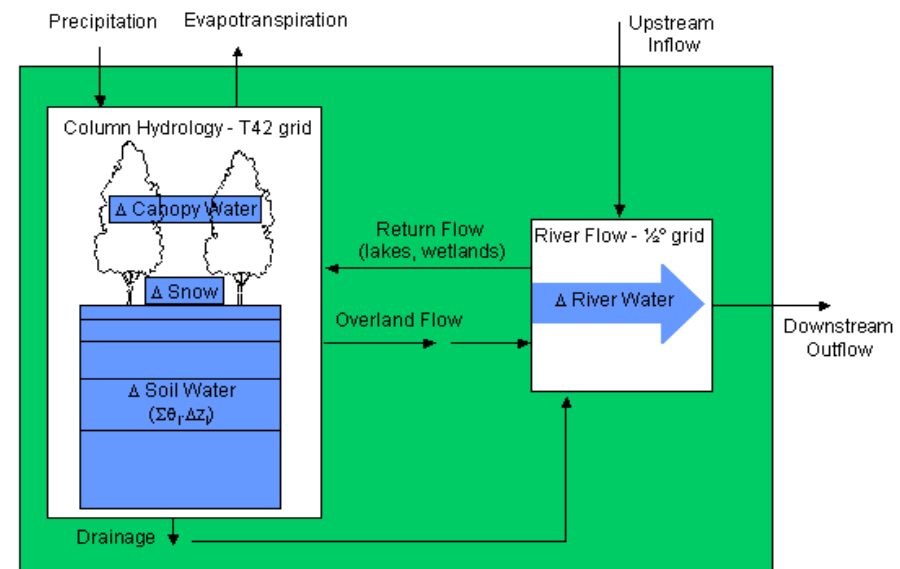


Image credits: Bonan, G.B. (2002) Ecological Climatology: Concepts and Applications and NCAR CLM website (<http://www.cgd.ucar.edu/tss/clm/components/hydrocycle.html>)

CLM-BeTR

- Bill Riley and Jinyun Tang (LBL)

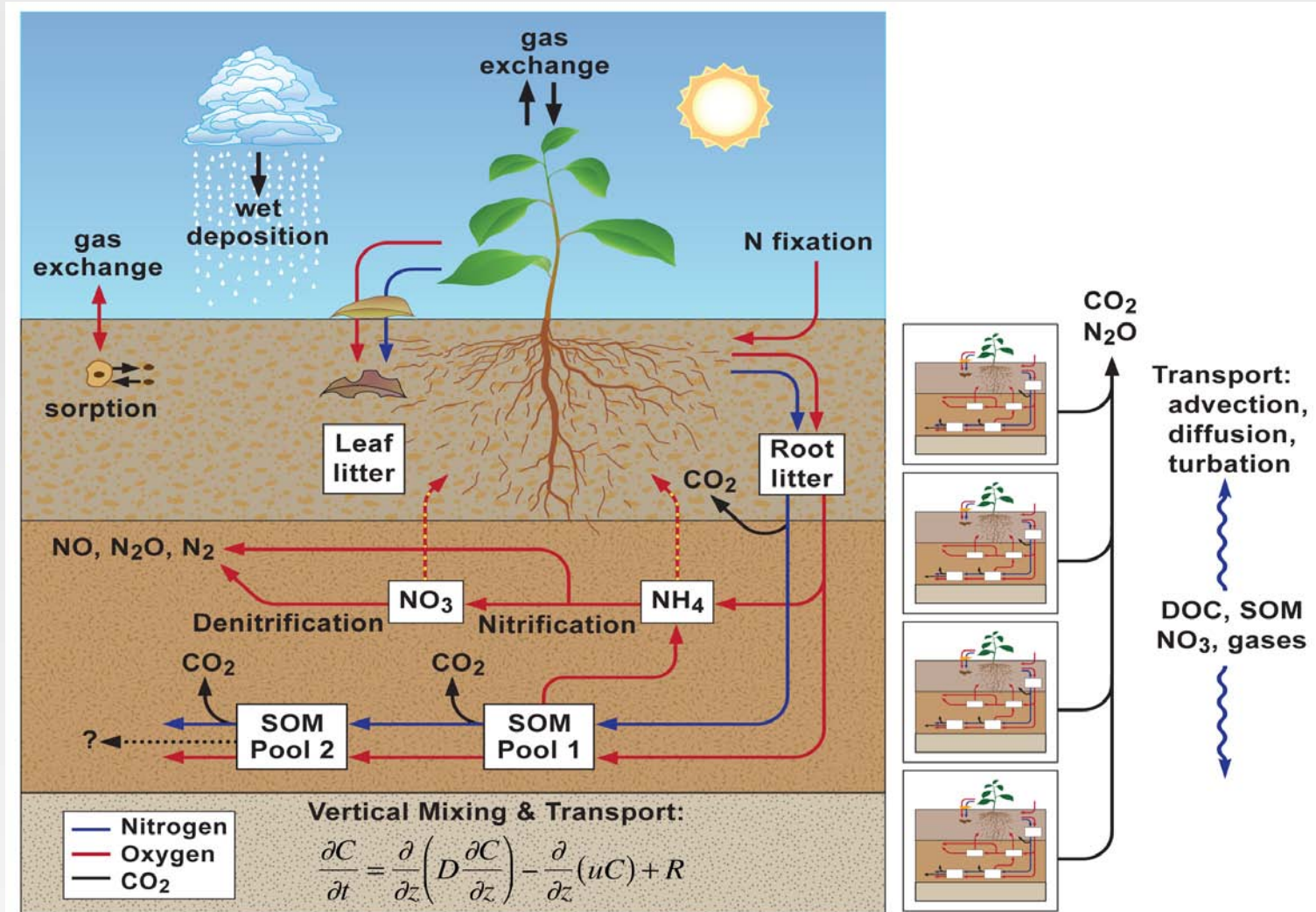


Image credit: Riley et al. (2011)

ISOCLM

- Current state:
 - folding ISOLSM into CLM-BeTR
 - testing constant ratios = 1
- Later:
 - different ratios
- Much later:
 - sensitivity and optimization (like ISOLSM tests)
- End goal:
 - CLM-BeTR with generic tracer (isotope) hydrology, coupled to isotope-enabled CESM (Jesse/Chuck, Jiayu, others?)