
# Example

$$X(t) = S(X,t) - C(X,t)X(t)$$

Nonlinear kinetics

$$X(t) = BU(t) - A\xi(t)KX(t)$$

Globally Fixed value → $f(\mathrm{PFT})$

Static vegetation distribution → $f(\mathrm{DV})$

Fixed value with vegetation type → $f(\mathrm{trait})$

# Level of complexity

1. Mass balance, rate heterogeneity time-dependent drivers
2. Plant allocation, environmental modifier, donor pool-controlled transfer
3. Mortality rate varies with plant functional type (PFT)
4. Mortality rate varies with dynamic vegetation (DV), such as ED, PPA, FATES
5. Connecting plant and microbial traits to rate of mortality or decomposition