

strategy 2: beware of what's ahead

instantaneous maximization
of $A(g_s)$ depleats soil
moisture *fast*

$$H \equiv A(g_s) - \mathcal{N} \cdot E(g_s)$$

plant should maximize
 $A(g_s)$ over time interval T

$$H = \frac{1}{T} \int_0^T A(g_s) dt - \lambda \cdot E(g_s)$$

Cowan & Farquhar (1977), Mäkelä et al. (1996),
Manzoni et al. (2013), Mrad et al. (2019)

strategy 2: beware of what's ahead

instantaneous maximization
of $A(g_s)$ depleats soil
moisture *fast*

$$H = A(g_s) - \lambda \cdot E(g_s)$$

plant should maximize
 $A(g_s)$ over time interval T

$$H = \frac{1}{T} \int_0^T A(g_s) dt - \lambda \cdot E(g_s)$$

Cowan & Farquhar (1977), Mäkelä et al. (1996),
Manzoni et al. (2013), Mrad et al. (2019)

