(a) H_{max} vs DBH

(b) D^*_{crown} vs DBH

(c) H_{con}

(d) $D_{crown,con}$

(e)

$\psi_{l,daymin} > \psi_{lk}$? — No →

- **Case 1 (Eq. 7a):**
  Allocate biomass to stem for radial growth and above-ground root. The DBH will increase without height growth according to Eq. (1). However, if DBH reached DBH_{max}, Case 2 will be applied.

- **Case 2 (Eq. 7b):**
  Allocate biomass to fine and coarse roots.

Yes ↓

$C_{grow} > N_{grow}CN_l$? — No →

- **Case 3 (dLAI < dLAI$_{max}$ or D_{crown} < min(D^*_{crown}, $D_{crown,con}$)):**
  Allocate biomass to leaf. The dLAI or crown diameter will be increased depending on D_{crown} relative to D^*_{crown} and $D_{crown,con}$.

- **Case 4 (dLAI > dLAI$_{max}$ and D_{crown} > min(D^*_{crown}, $D_{crown,con}$)):**
  Allocate biomass to stem for height growth. The H will increase without radial growth according to Eq. (1). However, if H reached H_{max} or H_{con}, Case 6 will be applied.

Yes ↓

$PAR_{top} > PAR_k$? — Yes →

No ↓

- **Case 5 (H < min(H_{max}, H_{con})):**
  Allocate biomass to stem for height growth. The H will increase without radial growth according to Eq. (1).

- **Case 6 (H > min(H_{max}, H_{con})):**
  Allocate biomass to stem for radial growth. The DBH will increase without height growth according to Eq. (1). However, if DBH reached DBH_{max}, Case 3 will be applied. If Case 3 is not applicable, Case 2 will be applied.