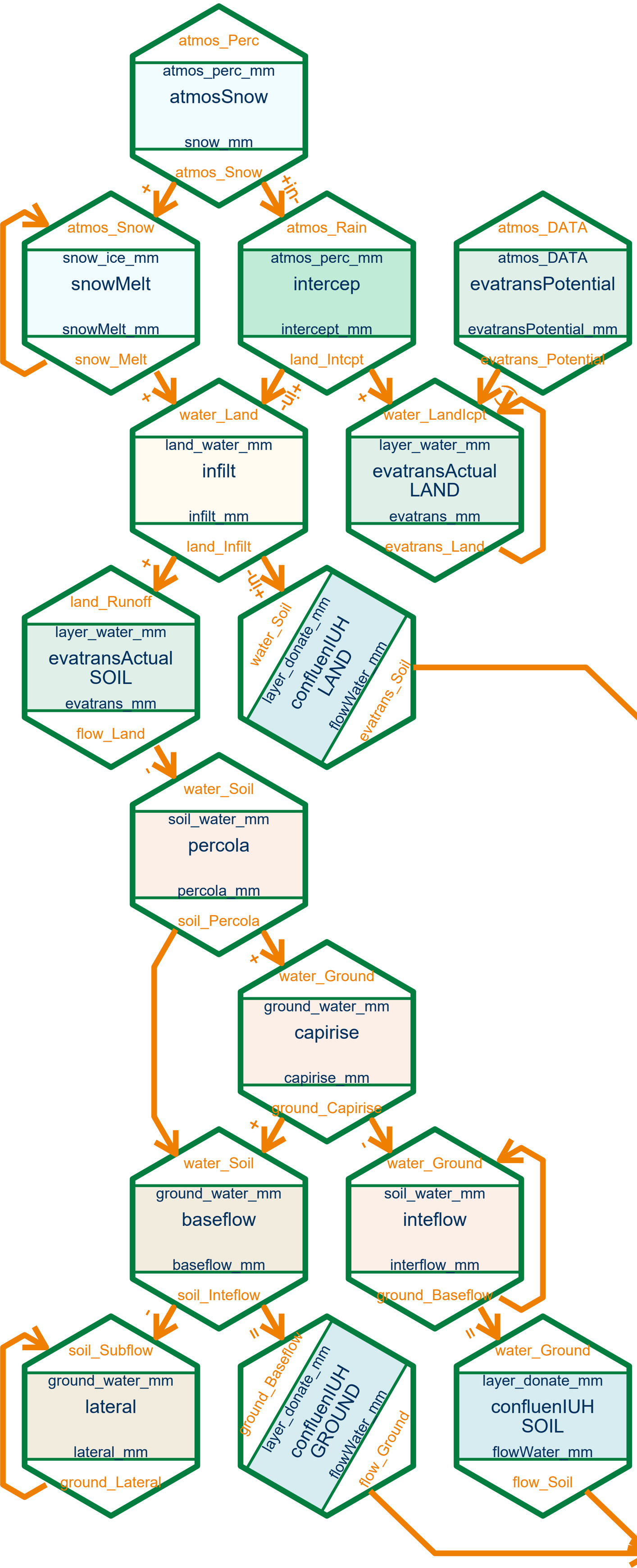

$$P_s = f_{atmosSnow}(P, T, \cdots)$$

$$P_r = P - P_s$$

$$W_{snow} = W_{snow} + P_s$$

$$F_{melt} = f_{snowMelt}(W_{snow}, T, \cdots)$$

$$W_{snow} = W_{snow} - F_{melt}$$

$$F_{itcp} = f_{intercep}(C_{icpt} - W_{icpt})$$

$$W_{icpt} = W_{icpt} + F_{itcp}$$

$$W_{land} = F_{melt} + (P_r - F_{itcp})$$

$$E_p = f_{evatransActual}(D_{atmos})$$

$$E_{icpt} = f_{evatransActual}(E_p, W_{icpt}, \cdots)$$

$$W_{icpt} = W_{icpt} - E_{itcp}$$

$$F_{iflt} = f_{infilt}(W_{land}, W_{soil}, C_{soil}, \cdots)$$

$$F_{roff} = W_{land} - F_{iflt}$$

$$W_{soil} = W_{soil} + F_{iflt}$$

$$E_{soil} = f_{evatransActual}(E_p, W_{soil}, \cdots)$$

$$W_{soil} = W_{soil} - E_{soil}$$

$$F_{prcl} = f_{percola}(W_{soil}, C_{soil}, W_{grnd}, C_{grnd}, \cdots)$$

$$W_{soil} = W_{soil} - F_{prcl}$$

$$W_{grnd} = W_{grnd} + F_{prcl}$$

$$F_{capi} = f_{percola}(W_{grnd}, C_{grnd}, W_{soil}, C_{soil}, \cdots)$$

$$W_{soil} = W_{soil} + F_{capi}$$

$$W_{grnd} = W_{grnd} - F_{capi}$$

$$F_{intf} = f_{inteflow}(W_{soil}, C_{soil}, M_{intf}, \cdots)$$

$$W_{soil} = W_{soil} - F_{intf}$$

$$F_{base} = f_{baseflow}(W_{grnd}, C_{grnd}, M_{base}, \cdots)$$

$$W_{grnd} = W_{grnd} - F_{base}$$

$$F_{ltrl} = f_{lateral}(W_{grnd}, C_{grnd}, \cdots)$$

$$W_{grnd} = W_{grnd} - F_{ltrl}$$

$$u_{land} = u = f_{confluenIUH}(t_{r,land}, \cdots)$$

$$u_{soil} = u = f_{confluenIUH}(t_{r,soil}, \cdots)$$

$$u_{grnd} = u = f_{confluenIUH}(t_{r,grnd}, \cdots)$$

$$Q = F_{roff}u_{land} + F_{intf}u_{soil} + F_{base}u_{grnd}$$