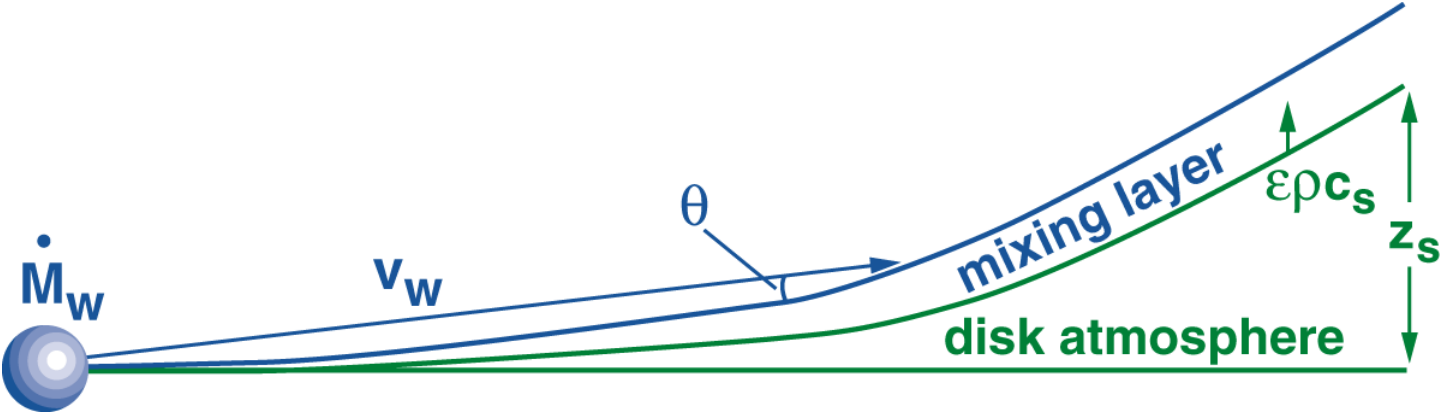
$\dot{M}_w$
v_w
θ
mixing layer
$\varepsilon\rho c_s$
z_s
disk atmosphere