

$$\int c_p^{(d)} (T - T_{00}) \frac{\partial}{\partial t} [\bar{\rho}^{(d)} \bar{n}^{(H_2O)}] dz - \bar{F}^{(H_2O)} c_p^{(d)} (\bar{T}_s - T_{00}) = \Delta \hat{I}_{\partial m(H_2O)/\partial t}^{(h)}$$