$$\int \frac{\partial}{\partial t} \left[\rho^{(d)} \left(1 + \overline{m}^{(wv)} \right) \right] \left(\overline{K} + \overline{\Phi}_s + c_p^{(d)} \overline{T} \right) dz$$
 ("dry mass adjustment" - referred to as dme_adjust in CAM codes)