$$\Delta \mathcal{I}_{m_{tn}^{(H_2O)}}^{(CAM)} = \int \left[ \rho^{(d)} \left( \sum_{\ell \in \mathcal{L}_{cond}} \overline{m}_{tn}^{(\ell)} \right) \right] \frac{\partial}{\partial t} \left( \overline{K} + \overline{\Phi}_s + c_p^{(d)} \overline{T} \right) dz$$