$$P_{qflux} = q_{tend\_all} * dz * rho \quad (a)$$

$$P_{qflux} = w_{k+1} * rho_{k+1} * q_{k+1} - w_k * rho_k * q_k \quad (b)$$

$$\frac{\partial q}{\partial t} = \frac{1}{\rho} \frac{\partial (\rho w q)}{\partial z}$$

V1: (a) with unit tendencies in one hour bucket, ext_diag on
V2: (b) un-normalized
V3: (b) normornalized
V4: (a) with unit kg/m^2/second, ext_diag on
V5: (a) with unit kg/m^2/second, ext_diag off
V6/7: same as V1 except , ext_diag off