

Fig. 4: Temperature (left), density temperature (middle), and condensate mixing ratio (right) for parcel ascents including ice and using reversible (blue) pseudo-adiabatic (red) and intermediate thermodynamics. The intermediate case is calculated by assuming half of the condensate created at a given level is precipitated out. The temperature profiles are plotted as ananomaly from a control parcel assuming conservation of entropy with no ice. Adiabat initialized with (T,r,p) = (298.15 K, 0.02 kg/kg, 950.00 hPa)