



## Corrigendum to “Radiative–convective equilibrium model intercomparison project” published in Geosci. Model Dev., 11, 793–813, 2018

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Corrections are in bold.

There were typos in Tables 4 and 5. In Table 4, the saturated water vapor path variable was named *spwr\_avg* but it should be named ***sprw\_avg***, and the global cloud fraction profile (*cldfrac\_avg*) was listed as a percentage out of 100 but it should be **a fraction between 0 and 1**. In Table 5, the saturated water vapor path variable was named *spwr* but it should be named ***sprw***, and the total cloud fraction of grid column (*cl*) was listed as a percentage out of 100 but it should be **a fraction between 0 and 1**.

It was stated in the text at the start of Sect. 4.2.2 and in Table 6 that two-dimensional moist static energy budget variables (functions of *x*, *y*, and *t*) should be instantaneous hourly outputs. Instead, we clarify that **if these terms are diagnosed online in the model, their values are output as hourly averages. If this is not possible, the variables are diagnosed offline from the instantaneous 3-D output, in which case they are instantaneous 6-hourly snapshots.**

There was also an error in the definition of frozen moist static energy in Sect. 4.2.2. The correct definition is as follows:

Frozen moist static energy is given by  $h = c_p T + gz + L_v q - L_f q_{ice}$ . The values of  $c_p$ ,  $g$ ,  $L_v$ , and  $L_f$  used by the model formulation should be used to compute  $h$ .  $q_{ice}$  is the mass fraction of **all ice-phase condensates (cloud ice, snow, etc.)**. The mass-weighted vertical integral of frozen moist static energy (fmse) is given by

$$\widehat{h} = \int_0^{z_{top}} (c_p T + gz + L_v q - L_f q_{ice}) \rho dz, \quad (7)$$

or, in pressure coordinates,

$$\widetilde{h} = \frac{1}{g} \int_{p_{top}}^{p_{sfc}} (c_p T + gz + L_v q - L_f q_{ice}) dp. \quad (8)$$