



FIG. 3. FLOR-simulated layer temperature budgets for (left) the  $2^{\circ}\text{S}$ – $2^{\circ}\text{N}$  band as a climatological annual mean, and (right) the ECT box as a 12-month climatology. The budget extends vertically over (a),(b) the SML ( $H_{0.3a}$ ) and (c),(d) the AL ( $H_{1.4a}$ ). Colors indicate the net surface heat flux minus shortwave penetrating through the layer base (red), parameterized local diffusion due to vertical mixing (green), monthly advection (blue), all submonthly advection including subdaily advection (magenta), and the sum of all remaining terms (gray). Vertical lines in (a) and (c) show the zonal extent of the ECT box.