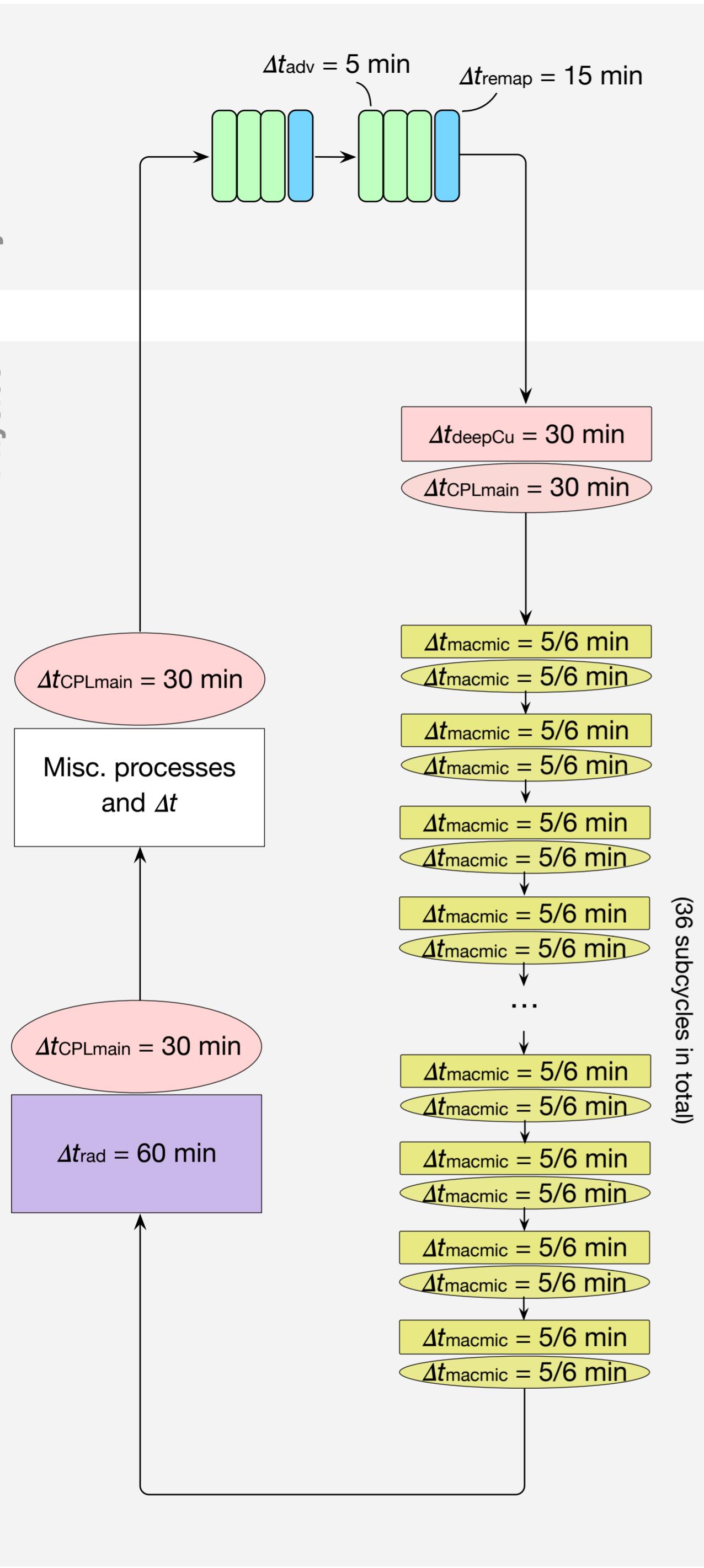**(a) v1_MacMic_Shorter**

**(b) v1_All_Except_MacMic_Shorter**

**Dynamics**

$\Delta t_{adv} = 5$ min
$\Delta t_{remap} = 15$ min

$\Delta t_{adv} = 5/6$ min
$\Delta t_{remap} = 15/6$ min

**Physics**

$\Delta t_{deepCu} = 30$ min

$\Delta t_{CPLmain} = 30$ min

$\Delta t_{CPLmain} = 30$ min

Misc. processes and $\Delta t$

$\Delta t_{macmic} = 5/6$ min
$\Delta t_{macmic} = 5/6$ min

$\Delta t_{macmic} = 5/6$ min
$\Delta t_{macmic} = 5/6$ min

$\Delta t_{macmic} = 5/6$ min
$\Delta t_{macmic} = 5/6$ min

$\Delta t_{macmic} = 5/6$ min
$\Delta t_{macmic} = 5/6$ min

$\Delta t_{CPLmain} = 30$ min

$\Delta t_{rad} = 60$ min

...

$\Delta t_{macmic} = 5/6$ min
$\Delta t_{macmic} = 5/6$ min

$\Delta t_{macmic} = 5/6$ min
$\Delta t_{macmic} = 5/6$ min

$\Delta t_{macmic} = 5/6$ min
$\Delta t_{macmic} = 5/6$ min

(36 subcycles in total)

$\Delta t_{deepCu} = 30/6$ min

$\Delta t_{CPLmain} = 30/6$ min

$\Delta t_{CPLmain} = 30/6$ min

Misc. processes and $\Delta t$. Constant $\Delta t$ values reduced to 1/6

$\Delta t_{CPLmain} = 30/6$ min

$\Delta t_{rad} = 60/6$ min

$\Delta t_{macmic} = 5$ min

$\Delta t_{macmic} = 5$ min

**Legend for the physics part:**

$\Delta t = x$ min — Tendency calculation with step size $\Delta t$

$\Delta t = x$ min — State update with step size $\Delta t$

**Legend for the dynamics part:**

$\Delta t = x$ min — Tendency calculation *and* state update with step size $\Delta t$