

Table 2: Recommended namelist settings for the floating Lagrangian vertical coordinate version of CAM-SE based on $tstep_type = 5$ (RK5), $qsplit = 1$, $hypervis_subcycle = 4$ (maybe 3 is stable at ne30 - 8% change in computational cost; it is not stable for ne120) ($hypervis_subcycle = 1$), and $f_type = 0$ for **CAM** (red) and **WACCM** (blue).

resolution	dtime	se_nsplit	rsplit	hypervis_ subcycle	Δt_{remap} [s]	Δt_{tracer} [s] = Δt_{dyn} [s]	$\Delta t_{hypervis}$ [s]	ν [m ⁴ /s]
ne11np4 ^a	1800 (1800)	1 (5)	2 (2)	3 (1)	1800 (360)	900 (180)	300 (180)	2.0×10^{16} (2.0×10^{16})
ne16np4 ^b	1800 (1800)	1 (5)	3 (3)	3 (1)	1800 (360)	600 (120)	200 (120)	7.0×10^{15} (7.0×10^{15})
ne30np4	1800 (1800)	2 (10)	3 (3)	3 (1)	900 (180)	300 (60)	100 (60)	1.0×10^{15} (1.0×10^{15})
ne60np4	1800 (1800)	4 (20)	3 (3)	4 (1)	450 (90)	150 (30)	37.5 (30)	1.0×10^{14} (1.0×10^{14})
ne120np4 ^c	900 (900)	4 (20)	3 (3)	4 (1)	225 (45)	75 (15)	18.75 (15)	1.0×10^{13} (1.0×10^{13})
ne240np4	600 ^d (600)	5 (25)	3 (3)	4 (1)	120 (24)	40 (8)	10 (8)	1.1×10^{12} (1.1×10^{12})

^auntested

^buntested

^cif winds are maximum 600 m/s; for CAM it is 120 m/s

^d900 works, however, gravity wave noise!