

SUBROUTINE timeloop

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it=itau0+1,itau0+itaumax

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(it==itau0+1 .OR. MOD(it,itau\_sync)==0)

send\_message(f\_ps,req\_ps0)

wait\_message(req\_ps0)

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stage=1,nb\_stage

caldyn  
((stage==1) .AND. (MOD(it,itau\_out)==0), &  
f\_phis,f\_ps,f\_mass,f\_theta\_rhodz,f\_u, f\_q, &  
f\_hflux, f\_wflux, f\_dps, f\_dmass, f\_dtheta\_rhodz, f\_du)

(rk4) rk\_scheme(stage, coef\_rk4)

(scheme) (rk25) rk\_scheme(stage, coef\_rk25)

DEFAULT STOP

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(update q and rhodz after RK step)

advect\_tracer(f\_hfluxt,f\_wfluxt,f\_u, f\_q,f\_rhodz)

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(MOD(it,itau\_check\_conserv)==0)

check\_conserve(f\_ps,f\_dps,f\_u,f\_theta\_rhodz,f\_phis,it)

(MOD(it,itau\_physics)==0)

physics(it,f\_phis, f\_ps, f\_theta\_rhodz, f\_u, f\_wflux, f\_q)

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END SUBROUTINE timeloop