Applied Numerical Methods for Partial Differential Equations by Carl L. Gardner

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Clarifications

p 130, 2nd paragraph: Requiring $\Delta t \leq h/c$ for stability is an example of the CFL condition: ...

p 132, 2nd paragraph: *FTCS for* $u_t + cu_x = 0$ satisfies the CFL condition for $r \leq 1$ but is unconditionally unstable: ...

Add after sentence with (8.149) on p 160: In (8.149), the forward-in-time $\Delta w/\Delta t$ is a shorthand for any consistent and stable (explicit) timestepping scheme like RK3.

p 169, 3rd paragraph: ...two copies of the 1D code (see (8.149)), one for the x sweep for evaluating $f(w)_x$ and one for the y sweep for evaluating $g(w)_y$.

p 172, 3rd paragraph: ...two copies of the 1D WENO3 method (see (8.149)): an x sweep for calculating $f(w)_x$ and a y sweep for calculating $g(w)_y$.

p 192 after (9.40): ... $\Delta \mathbf{u}/\Delta t$ is a shorthand for any consistent and stable (explicit) timestepping scheme ...