

Fixed step computational efficiency ($kx = 1.0$, grid = 256)

temporal relative error

 10^1
 10^0
 10^{-1} 10^0 10^2 10^4 10^6 10^8 10^{10}

runtime (sec)

- DIRK2 + Jacobi
- DIRK2 + hypre
- DIRK3 + Jacobi
- DIRK3 + hypre
- SSP-RK-2
- SSP-RK-3
- SSP-RK-4
- RKC-2
- RKL-2