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Long name: University of Wisconsin-Milwaukee Single Column Model
Acronym: UWM

Type: 1D
domain size z: 2800 m
n gridpts z: 28/280 (coarse/fine)
grid size z: 100/10 m (coarse/fine)
time step: 10 sec

Numerical method: Finite-difference
Advection scheme & order of accuracy: Second-order centered-difference
Time scheme & order of accuracy: Mixed implicit/explicit
Dynamical equations: Anelastic

LW radiation: DYCOMS-RF01 (Stevens, et al.)
SW radiation: EUROCS (Duynkerke, et al.)
Turbulence closure scheme: PDF higher order closure

Model description: see Golaz et al.

References:

Duynkerke, et al, 2004. Observations and numerical simulations of the diurnal cycle of the EUROCS stratocumulus case. QJRMS 130, 3269-3296.

Golaz, et al, 2002. A PDF-based model for boundary layer clouds. Part I: Method and model description. JAS 59, 3540-3551

Stevens, et al, 2005. Evaluation of large-eddy simulations via observations of nocturnal marine stratocumulus. Mon. Wea. Rev 133, 1443-1462.