

# , Atmospheric modelling on the equal-area cubed-sphere

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The Conformal-Cubic Atmospheric Model (CCAM) has been generalized to utilize the equal-area Uniform Jacobian (UJ) version of the cubed-sphere grid. Despite the complications of the non-orthogonal velocity components, most of the CCAM semi-Lagrangian approach may be used, including reversible staggering of the contravariant velocity components to switch between values at cell centres and cell edges. Both versions of CCAM include the Miller-White non-hydrostatic formulation, which provides extremely economical solutions in the context of semi-Lagrangian time differencing. A second dynamical core on the same grid will also be described.