

Physics Loop ( $\Delta t$ )

**Main Loop ( $\Delta t$ )**

Remapping Loop ( $\Delta t/k_{split}$ )

Acoustic Loop ( $\Delta t/k_{split}/n_{split}$ )

FV<sup>3</sup> Solver

Lagrangian Dynamics

C-grid Solver

Radiation

Physics

Sub-cycled Tracer Transport

Forward Lagrangian Dynamics

Surface Exchange

Consistent Field Update

Vertical Remapping

Forward Delta Z Evaluation

Turbulent Diffusion

Convection

Backward Vertical PGF  
Sound Wave Processes

Convection

Cloud and Precipitation

Backward Horizontal PGF

Orographic Drag

Surface Exchange

Cloud and Precipitation

Turbulent Diffusion

Orographic Drag

