

ATMOSPHERIC MODELING

- Introduction to atmospheric modeling
- Coordinate systems
- Numerical solution of the primitive equations
- Basic methods of numerical solutions – errors - stability
- Coordinate systems – Equation transformation to coordinate systems
- Process parameterization (solar/terrestrial radiation, surface energy budget, cloud microphysics)
- Regional/mesoscale modeling
- Initial and boundary conditions
- Data assimilation
- Global scale modeling
- Climate modeling
- Model evaluation