



AS203 August 3:0

Atmospheric Thermodynamics

Instructor

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Teaching Assistant

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Department: Centre for Atmospheric and Oceanic Sciences

Course Time: 11 AM - 12 Noon

Lecture venue: CAOS Seminar Hall

Detailed Course Page:

Announcements

Brief description of the course

This course introduces the thermodynamic structure of the earth's atmosphere, and then details effect of perturbation to the mean structure in terms of stability and convection. Masters and PhD students who has basic background in general thermodynamics can credit this course.

Prerequisites

None.

Syllabus

Vertical Structure of the Atmosphere; First and Second Laws of Thermodynamics; Water Vapour and Its Processes; Thermodynamic Processes in the Atmosphere; Atmospheric Stability; Cloud Microphysics;

Course outcomes

Understanding of the atmospheric processes relating tropical convection and cloud formation.

Grading policy

About 50% for mid-terms (including assignment) and 50% for final.

Assignments

Resources

Atmospheric Thermodynamics by JV Iribarne and WL Godson

Thermodynamics of Atmospheres and Oceans by JA Curry and PJ Webster