



AS204 August 3:0

Radiation and climate

Instructor

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Department: Centre for Atmospheric and Oceanic Sciences

Course Time: MWF 10-11

Lecture venue: CAOS seminar Hall

Detailed Course Page:

Announcements

Brief description of the course

This is an introductory course for students who want to understand the impact of radiation budget on earth's climate

Prerequisites

None

Syllabus

Blackbody radiation, radiative properties of surfaces, absorptivity, emissivity, reflectivity, radiative properties of gases and aerosols, infrared spectrum of gases, greenhouse effect, simple energy balance model, feedbacks in the climate system, water vapor and cloud feedback, ice-albedo feedback and ice ages,

Course outcomes

Students will learn the relative importance of greenhouse effect, ice, aerosols, and clouds on earth's climate

Grading policy

50% mid-sem exam 50% Final exam

Assignments

Resources

