



AS211 January 2:1

Observational Techniques

Instructor

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Teaching Assistant

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Email: -

Department: CAOS

Course Time: Tu, Th, 11 a.m. -12 noon

Lecture venue: CAOS Class room

Detailed Course Page:

Announcements

Brief description of the course

This course exposes to meteorological measurements starting with principles of measurements, error analysis, response of dynamical systems to different time varying inputs, and instruments for specific variables. Any student with science and engineering background can take this course.

Prerequisites

NIL

Syllabus

Principles of measurement and error analysis, fundamentals of field measurements, in situ measurement of atmospheric temperature, humidity, pressure, wind, radiation, precipitation and aerosols. Tower based techniques and automatic measurement systems. Upper air observations, radiosonde techniques.

Measurements in the ocean, CTD, ADCP and ARGO.

Course outcomes

Get an appreciation of how weather and climate data are collected and disseminated

Grading policy

In-semester: 50

Assignments: 10

Laboratory report+Project: 10

2 tests:30

Final: 50

Assignments

Resources

Guide to Meteorological Measurements and Methods of Observation. World Meteorological Organization
Publication No. 8, 7th Edition, WMO, Geneva.

(available on line at,

<http://www.wmo.ch/pages/prog/www/IMOP/publications/CIMO-Guide/Draft-7-edition.html>)

DeFelice, T. P., An Introduction to Meteorological Instrumentation and Measurement. Prentice Hall, 1998.

Plus

Online materials