

GEOF 334: Microwave remote Sensing

Lecturers: Johnny A. Johannessen

Course Material: Measuring the oceans from space:
Principles and methods of satellite
oceanography,
by Ian Robinson, Springer, Praxis
Publishing Ltd, Chichester, UK, 2004.

+ relevant papers

+ handouts of lecture notes

All relevant material will be made available at
<ftp://ftp.nersc.no/geof334>
during the lectures

Microwave Remote Sensing

Provisional course and lecture plan

- **Conceptual overview of satellite oceanography (Satellite orbits, systems and instruments, electromagnetic spectrum, measured geophysical quantities)**
- **Instrument principles and measurement techniques, strengths and limitations, data acquisitions and data processing, retrieval algorithms and applications in oceanography**
 - **Passive microwave radiometer instruments**
 - **Radar altimeter**
 - **Scatterometer**
 - **Synthetic Aperture Radars**
- **Overview of prime data access portals and servers, and examples of interactive visualization and downloading.**
- **Specific exercises on use of satellite data**