Leipzig University
Institute for Meteorology
Summer term 2023

Announcement of Lectures and Practical Work

Data assimilation

(Master Elective Module T6)

Lecturer: J. Quaas

Location: Seminar room Stephanstr. 3 and CIP-Pool, Talstraße 35

Time: Wednesday 13.15 – 15.30

(8 Lectures, 5 April – 31 May; 4 courses Practical work 7 – 28 June;

2 Presentations, 5 – 12 July 2023)

Start: Wednesday, 5 April 2023

Topics: Combination of modelling and observations, Statistical basics,

Objective analysis, cost function, Kalman filter, Variational assimilation

Remark: Some or all of the lectures will be taught in English, depending on the

attendants

Exams: The exam for this class is an oral presentation about the practical work and a

short written report.

Moodle: https://moodle2.uni-leipzig.de/course/view.php?id=42832

Literature: Evensen, Data Assimilation, Springer, 2009, 307pp.

Kalnay, Atmospheric Modeling, Data Assmilation and Predictability,

Cambridge University Press, 2003, 341 pp.

Talagrand, O., Assimilation of Observations, an Introduction, J. Meteorol. Soc.

Japan, 75, 191-209, 1997.

Data Assimilation Research Testbed (DART),

http://www.image.ucar.edu/DAReS/DART/