

MARUM / GLOMAR Basic Knowledge Course

Stratigraphic Methods and Age Models

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12 – 14 March 2018, MARUM, Bremen

Objectives

This course will give an introduction into stratigraphic methods with a focus on radiometric dating and orbital tuning. It will offer exercises on how to apply the techniques, and will provide more sophisticated approaches how to handle dating uncertainties.

Programme

Monday, 12 March 2018

09:00-09:15 Introduction (T. Bickert)
09:15-10:30 Orbital tuning - principles (Thomas Westerhold)
11:00-12:30 Exercise orbital tuning
13:30-15:00 Combined exercise tuning - magnetostratigraphy
15:30-17:00 continued

Tuesday, 13 March 2018

09:00-10:30 Radiometric dating - principles (Manuel Perez Mayo)
11:00-12:30 Pb-210 sediment chronology, exercise
13:30-15:00 C14 dating (Gesine Mollenhauer)
15:30-17:00 C14 exercise

Wednesday, 14 March 2018

09:00-10:30 Calibration of a single radiocarbon date with R (Stefan Mulitza)
11:00-12:30 Assessing downcore age/proxy uncertainty with Monte Carlo Resampling
13:30-15:00 Bayesian age-depth modelling with BACON
15:30-17:00 continued

Target group

People who work with age models

Location and Time

MARUM, University of Bremen, Leobener Str. 8, 28359 Bremen, Germany
Room 2070
09.00 – 17.00 hrs.
Coffee breaks 10.30 – 11.00 and 15.00 – 15.30; lunch 12.30 – 13.30 hrs.

Requirements

Laptop with the following software

- MATLAB (part of the MARUM software package)
- R (download links: <https://cran.r-project.org/mirrors.html>)

We will provide laptops with the software installed on them. If you prefer to bring your own laptop, you are welcome to do so but you are responsible to make sure that your computer and the software are running properly by the beginning of the course.

During the course, support can only be given for laptops provided by us.

Registration

To register for this course, please visit the [course webpage](#).

Please note that your registration will be binding.

The registration deadline for this course is **5 March 2018**.

Any enquiries regarding the course should be addressed to early-career@marum.de.