

CL5.1 Geochronological tools for environmental reconstructions

‘Time is everything’

- we focus on the **Quaternary chronology** (last 2.6 Ma)
- Reconstructions of environmental changes using (possibly) precise and accurate chronologies.
- Various dating techniques (dependent on records, time range, and research questions).
 - Varve counting and dendrochronology (high-resolution chronologies)
 - radiometric methods (radiocarbon, cosmogenic in-situ, U-Th) (longer time scales)
 - luminescence (longer time scales)
- Applications
 - chronologies for records of climate change
 - understanding of long-term landscape evolution
 - Quantification of rates of geomorphological processes