Questions to address during the workshop

Tephra deposits: extracting information from the field and cores

1. What should be recorded/observed on the field?
2. Should the uncertainty be recorded?
3. How to distinguish primary from reworked deposit?
4. What is the influence of the environment on the deposit? (e.g. how a tephra layer looks on a lake core vs a sea core vs an ice core vs ground)
5. What is the impact of time on a deposit?
6. General guideline on what to record and how to measure?

Characterizing tephra deposits: mineralogy and geochemistry

1. How to prepare/mount the sample?
2. Pros/cons of the different techniques and when to use them?
3. What should one be careful about (e.g. sodium)?
4. How many minimum measurements should be made?
5. Impact of time on the geochemistry?
6. How to summarize the information (e.g. statistics)?

Dating tephra and tephra-bearing sequences

1. How to prepare sample?
2. Which technique to use: pros/cons and when to use?
3. What should one be careful about?
4. How to report the age (e.g. uncertainties, …)?

Modelling volcanic plumes and tephra dispersal

1. Which model for what? Pros/cons
2. What are the inputs needed?
3. Uncertainties in the results
4. Why are these models used?

Characterizing the eruption from tephra deposits

1. What can we learn about the eruption (e.g. height, style, …)?
2. What inputs are needed (e.g. especially primary vs reworked thickness)?
3. What are the uncertainties?
4. Why is this important?
5. General guidelines?

Correlation

1. How to correlate? Which techniques?
2. Use of statistical tools and use of uncertainties
3. Intercontinental correlation
4. Importance of using the same vocabulary and similar ways to process information
5. Application to archeology

Tephra databases and eruption catalogs

1. Importance of databases and catalogs?
2. What to record in them?
3. How to reference authors?
4. How to link the different databases/catalogs?
5. How to advertise them?