<u>Preliminary plan field course/excursion Southern Norway:</u>

- 24.8. Travel to Finse (8.00), Jomfrunut/surroundings, travel
- 25.8. Excursion Midtdalsbre/Blåisen, evening, lesson
- 26.8. ExcursionFlåm/Aurland/Lærdal/Sogndal
- 27.8. Nigardsbreen/Fåbergstølen, Skjolden
- 28.8. Skjolden-Sognefjell-Juvvass
- 29.8. Field work Juvvass/Storbreen
- 30.8. Field work Juvvass/Storbreen
- 31.8. Field work Juvvass/Storbreen (afternoon visit Jetta in nice weather), travel to Tronsvangen
- 1.9. Field visit and work Tron
- 2.9. Field visit and work Tron, summary.
- 3.9. Travel home

Every second evening: 2 hours lecture about general topics and glacial/periglacial geomorphology or student presentations of topics prepared before trip.

Potential Field projects (2 students)

- 1. Temperature monitoring and 1D modelling
- 2. Resistivity tomography boreholes
- 3. Glacial/periglacial landforms Juvvass distribution, type etc.
- 4. Deglaciation of Storbreen since LIA- (mapping of different forms)
- 5. Erosional and depositional forms in Storbreen forefield
- 6. Hydrology of Storbeen
- 7. Mass balance Storbreen (stakes, AWS, soundings, pits etc.)
- 8. Dynamics of Storbreen (GPS, crevasse pattern)

Preparation each student:

Write an essay about a relevant theme we visit during the excursion and the field sites. The essay is presented in a 15 min lecture during the trip. Max 2 students together:

- 1. Mountain permafrost distribution in Norway and the role of block fields
- 2. Local glaciations in southern Norway, west-east gradients in mass balance
- 3. Glacial landforms and glacial thermal regime interaction glaciers and permafrost
- 4. Modelling permafrost distribution concepts and principles
- 5. Patterned ground
- 6. Solifluction and gelifluction in southern Norway mapping, distribution and monitoring
- 7. Geomophogenesis of southern Norway Bedrock geomorphology and principle deglaciation pattern
- 8. Holocene climate and glacier variability
- 9. Current and recent past glacier development in South Norway.