



中国科学院大学
University of Chinese Academy of Sciences



Mid-term meeting report to “Creep of Geomaterials”

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Cold & Arid Regions Env. & Eng. Resch. Institute
Chinese Academy of Sciences

Agenda

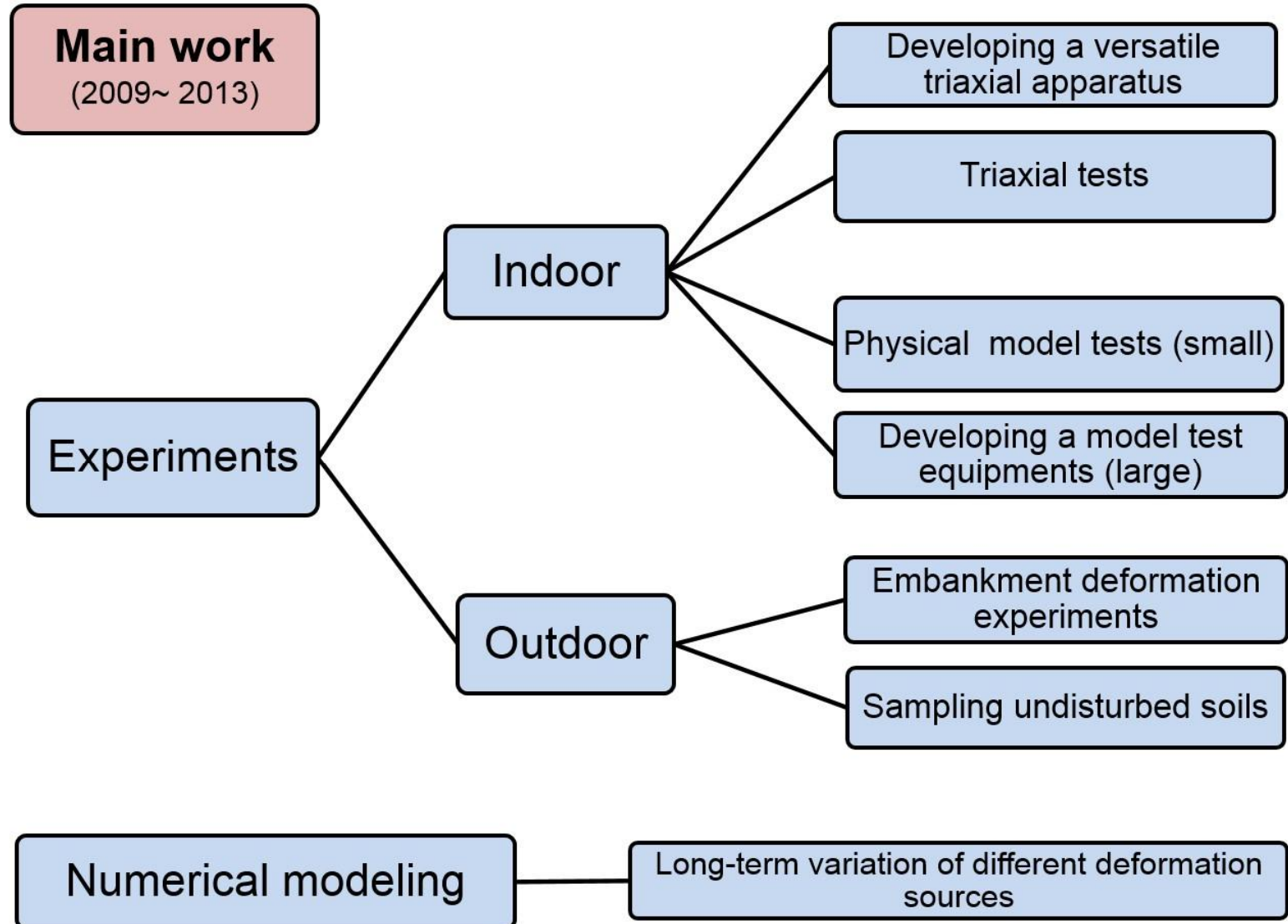
1. About myself
2. What I have done during Ph. D period
3. What I am doing and will do in NGI

1. About myself



- Ph. D. on Geotechnical Engineering, University of Chinese Academy of Sciences (08~13)
- B.Eng. on Civil Engineering, Xi'an University of Science and Technology (04~08)

2. What I have done



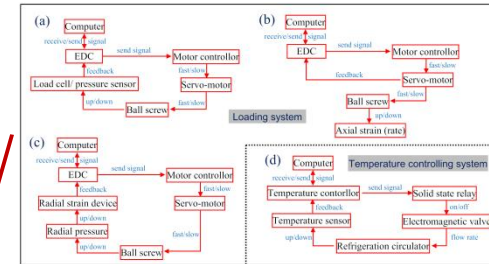
Triaxial apparatus for frozen soils



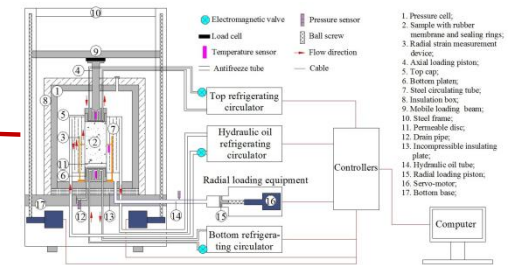
Developing



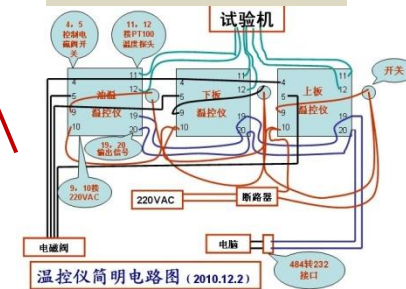
Controlling principle



Structure



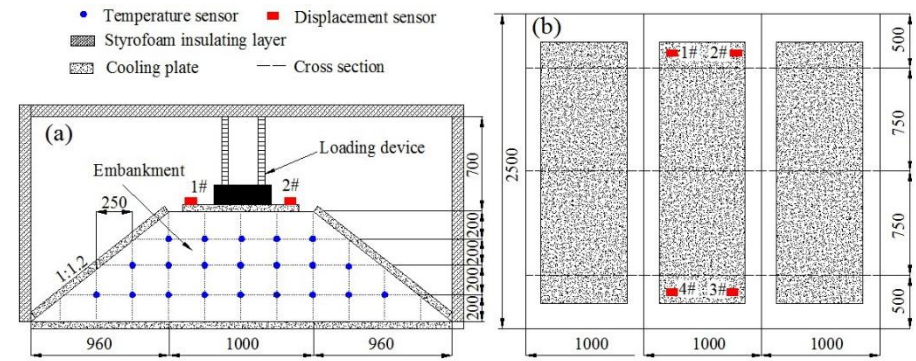
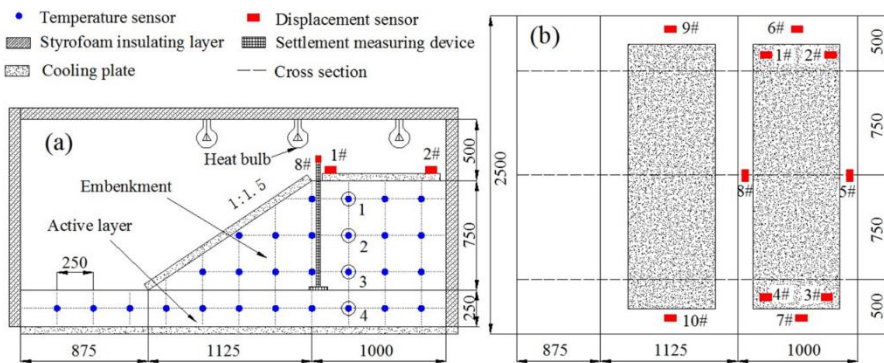
Simple circuit



Triaxial tests: CSR; Constant temp.; Constant stress; k_0

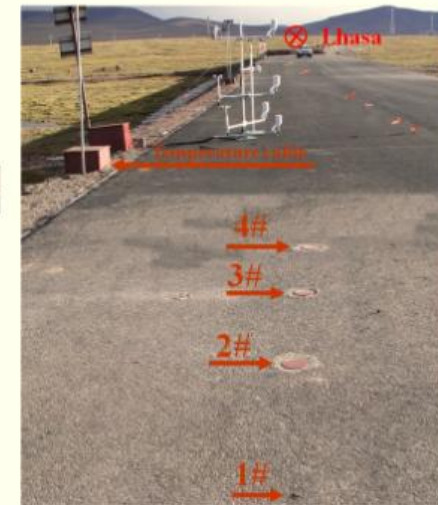
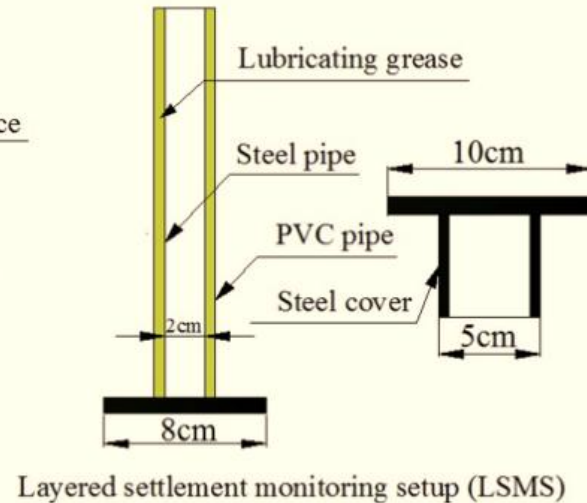
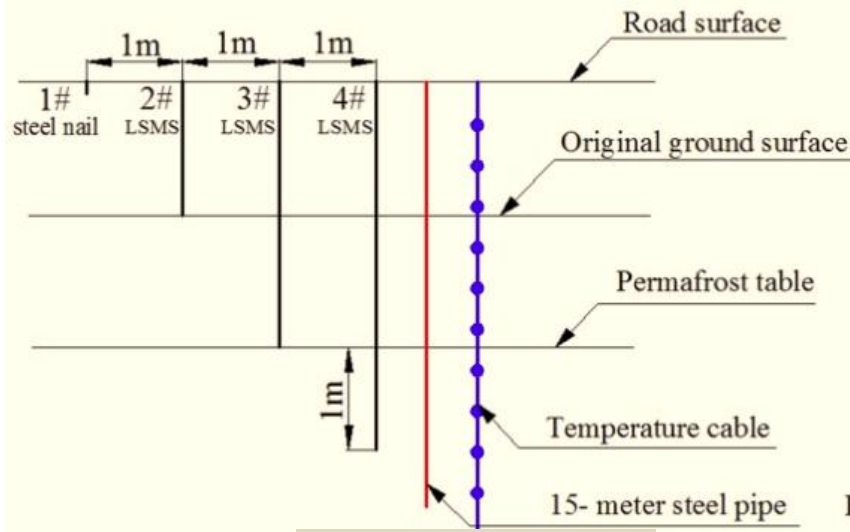
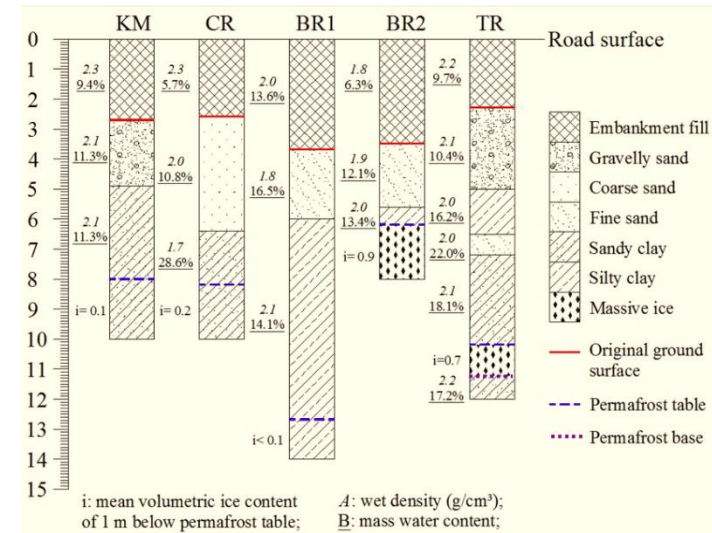
Xiaoliang Yao, Jilin Qi, Fan Yu. Ling Ma. A versatile triaxial apparatus for frozen soils. Cold Regions Sciences and Technology, 2013, 92: 48-54;

Embankment model tests



Fan Yu, Jilin Qi, Xiaoliang Yao. Analysis on the settlement of roadway embankments in permafrost regions. Journal of Earth Science, 2013.(In press)

Field tests: embankment deformation

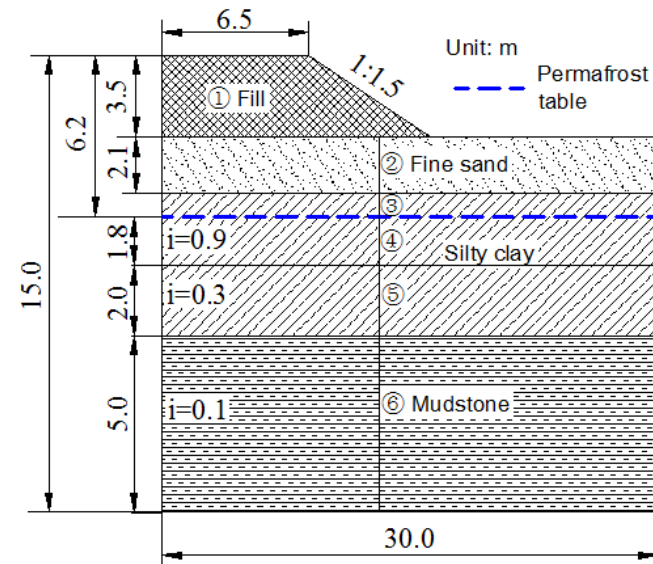


Fan Yu, Jilin Qi, Xiaoliang Yao, Yongzhi Liu. In-situ monitoring of settlement at different layers under embankments in permafrost regions on the Qinghai-Tibet Plateau, *Engineering Geology*, 2013,160:44-53.

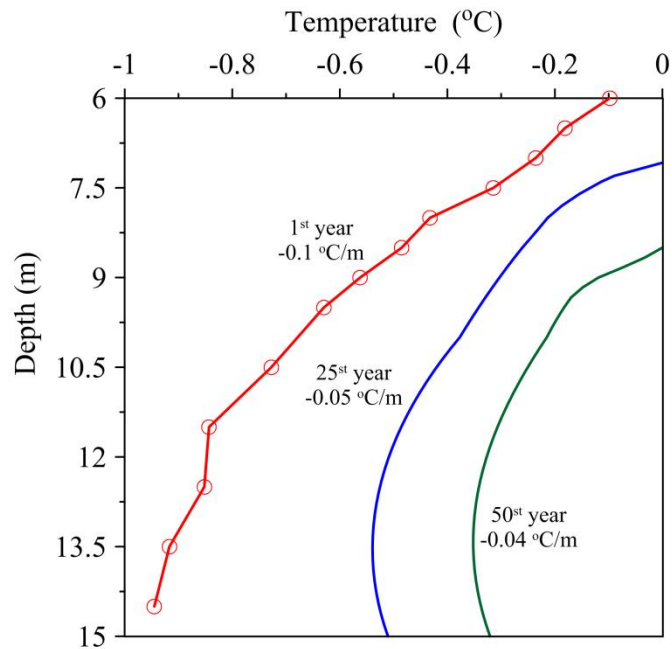
Numerical modeling



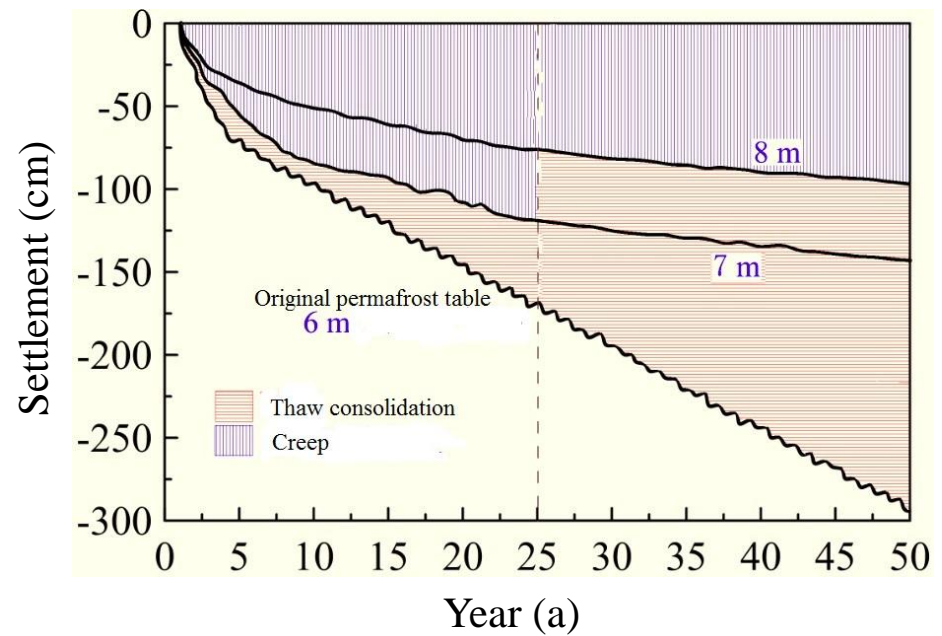
Test road (length 300 m)



Geological condition



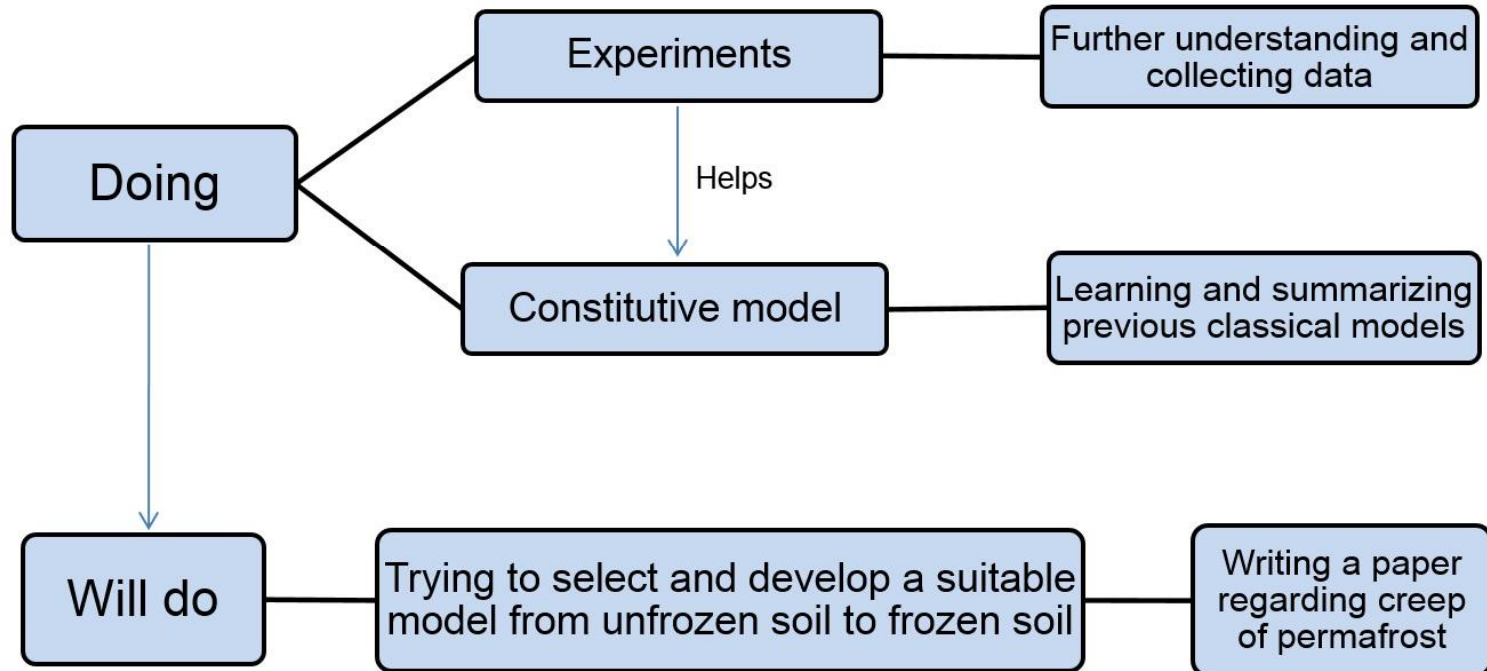
Ground temperature



Embankment settlement

3. What I am doing and will do in NGI

Main work
(15 Oct. 2013~ 15 Jul. 2014)





Thanks !