



You are kindly invited to the public defence of the doctoral thesis of  
**Ting Wang**

## **Research on Productivity Changes and Carbon Potential in Ili Valley's Mountain Forests**

**Monday, June 3, 2024, 15:00 (CET)**

Follow the livestream of the defence through this link:

<https://ap.lc/DiqZA>

## ● Summary:

Tianshan Forest, the largest mountainous forest area in Xinjiang, is vital to the oasis ecosystem and the region's social stability. The net primary productivity (NPP) of these forests is a key measure of their growth and carbon sequestration capacity, reflecting the health of plant communities under current environmental conditions. Assessing NPP and carbon sequestration potential is crucial in the context of climate change. This research (1) evaluated the use of tree ring width data to estimate historical forest NPP, and (2) calibrated parameters for the 3-PG model based on tree ring data from the Tianshan Mountains. The goal is to provide comprehensive insights into forest growth to inform future forest management policies.

## ● About the author:

- Ting Wang graduated with a master's degree from the University of Chinese Academy of Sciences (UCAS) in 2016, specializing in historical climate reconstruction using tree rings.
- She worked at Beijing Digital Spatial Information Technology Co. from 2016 to 2018.
- In 2019, she began her PhD program at Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (XIEG), specializing in Cartography and Geographic Information System, and started a joint PhD program at Ghent University in 2022. Her research focus is on monitoring forest growth using tree ring data and remote sensing.

## ● Supervisors:

- **Alain De Wulf**, Ghent University, Belgium
- **Anming BAO**, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, China

## ● Members of the Examination Committee:

- Prof. Haosheng Huang (Chair), Ghent University
- Prof. Tom DE MIL, University of LIEGE
- Prof. Hans BEECKMAN, Royal Museum for Central-Africa, Belgium
- Prof. Rudi GOOSSENS, Ghent University
- Prof. Guli Jiapaer, XIEG
- Prof. Tie Liu, XIEG
- Prof. Wenqiang Xu, XIEG

