

# Summary of on-going IFU research projects in China

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# MAGIM

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## An Interdisciplinary Sino-German Research Project on Effects of Grazing on Matter Fluxes in Grasslands of Inner Mongolia

Speaker: Prof. Dr. Klaus Butterbach-Bahl

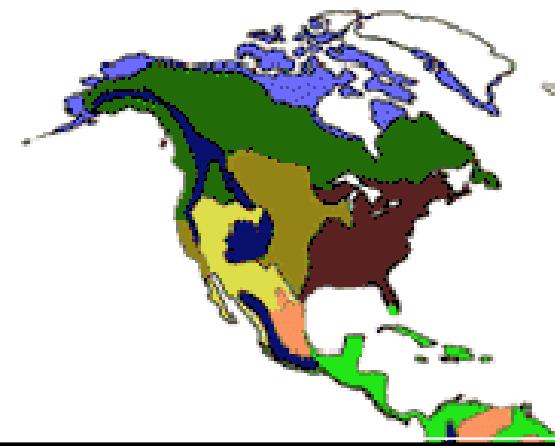
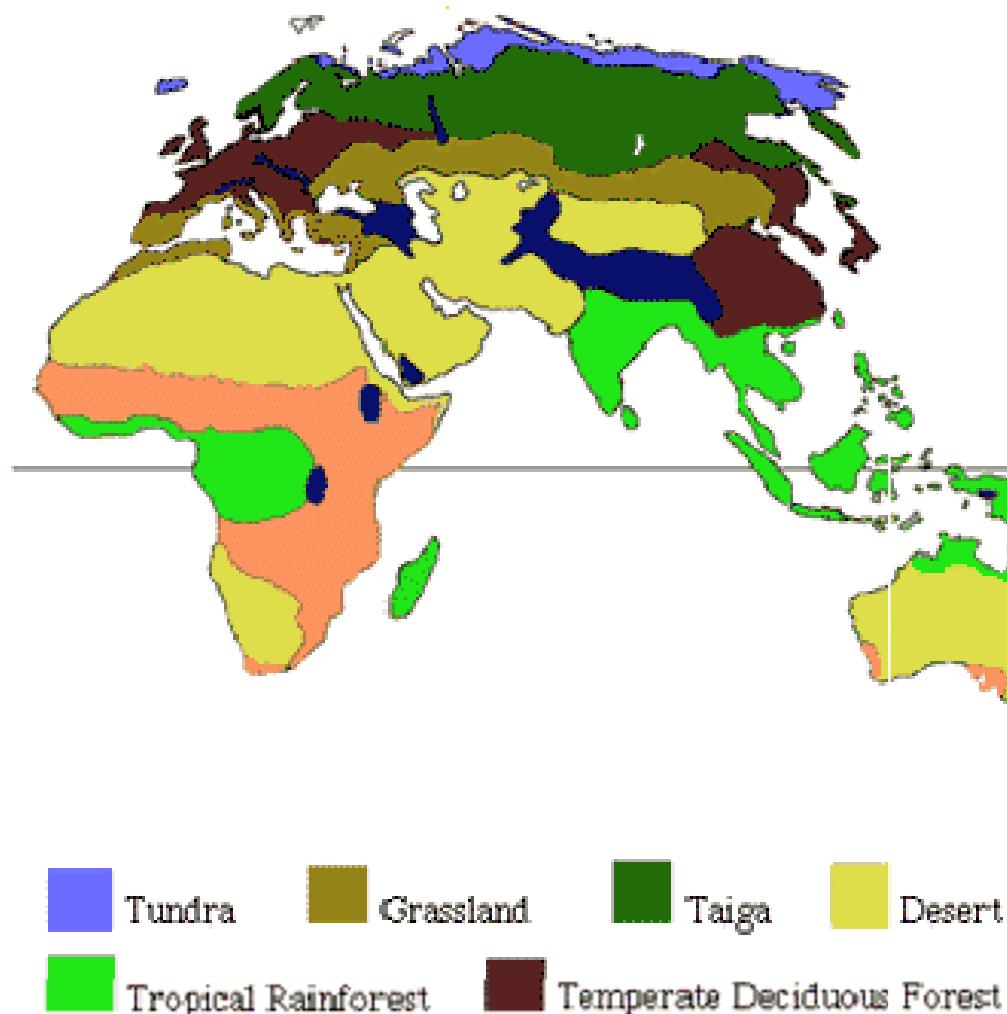
Co-Speaker: Prof. Dr. Hans-Georg Frede

Speaker Chinese cooperation partners: Prof. Dr. Xingguo Han

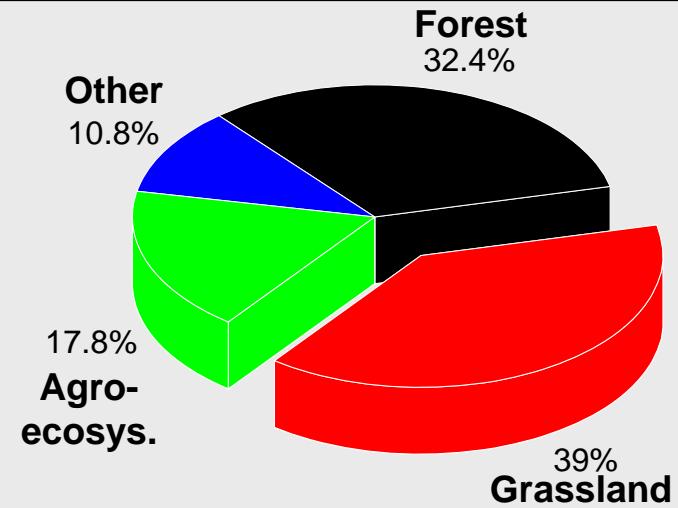
# Research teams within MAGIM

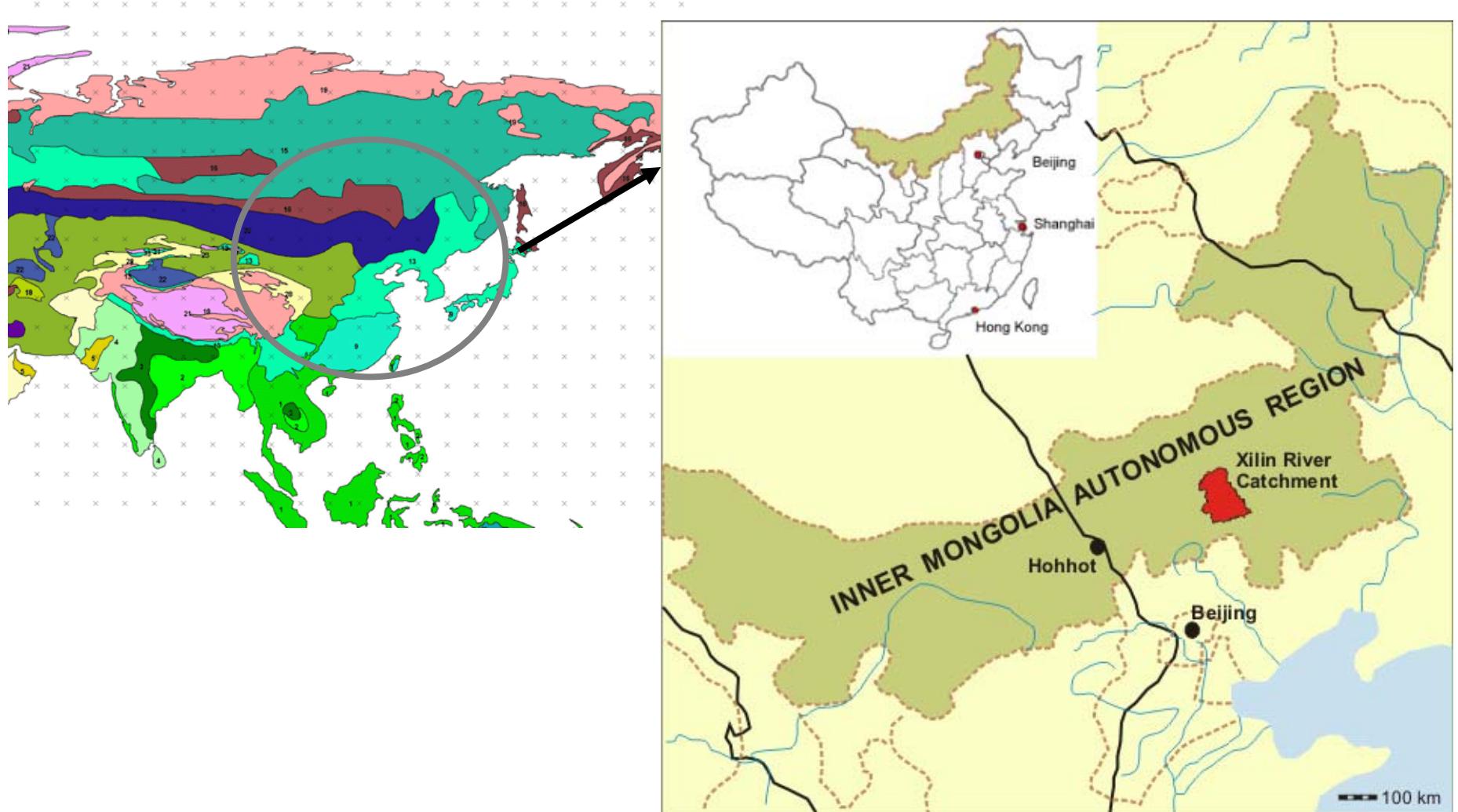
	<b>Forschungszentrum Karlsruhe</b> Institute for Meteorology & Climate Research (IMK-IFU), Garmisch-P.	<ul style="list-style-type: none"> <li>• Microbial turnover</li> <li>• Trace gas exchange</li> </ul>	 
	<b>Technical University Munich</b>		
	<b>Lehrstuhl für Bodenkunde</b>	<ul style="list-style-type: none"> <li>• SOC dynamics</li> <li>• Soil aggregation</li> </ul>	
	<b>Lehrstuhl für Grünlandlehre</b>	<ul style="list-style-type: none"> <li>• Ecophysiology</li> <li>• Isotopic signatures</li> </ul>	
	<b>Christian Albrechts University</b>		
	<b>Institute for Plant Nutrition and Soil Science</b>	<ul style="list-style-type: none"> <li>• Plant production</li> <li>• H<sub>2</sub>O/N interactions</li> </ul>	
	<b>Institute for Plant Nutrition and Soil Science</b>	<ul style="list-style-type: none"> <li>• Soil hydrology</li> <li>• Soil physics</li> </ul>	
	<b>Institute of Crop Science and Plant Breeding</b>	<ul style="list-style-type: none"> <li>• Grassland science</li> <li>• Feed quality</li> </ul>	
	<b>Institute of Animal Nutrition and Physiology</b>	<ul style="list-style-type: none"> <li>• Animal production</li> </ul>	
	<b>Justus-Liebig University</b> Department of Agriculture and Environmental Protection, Giessen	<ul style="list-style-type: none"> <li>• Regional hydrology</li> <li>• Central database</li> </ul>	
	<b>Technical University of Dresden</b> Institute for Hydrology and Meteorology, Dresden	<ul style="list-style-type: none"> <li>• CO<sub>2</sub>/H<sub>2</sub>O exchange</li> <li>• Remote sensing</li> </ul>	
	<b>Leibniz-Centre for Agricultural Landscape Research (ZALF)</b> Institute of Soil Landscape Research, Müncheberg	<ul style="list-style-type: none"> <li>• Wind erosion on local and regional scales</li> </ul>	
	<b>German Meteorological Service</b> Meteorological Observatory Lindenberg	<ul style="list-style-type: none"> <li>• Remote sensing</li> <li>• Precipitation</li> </ul>	 

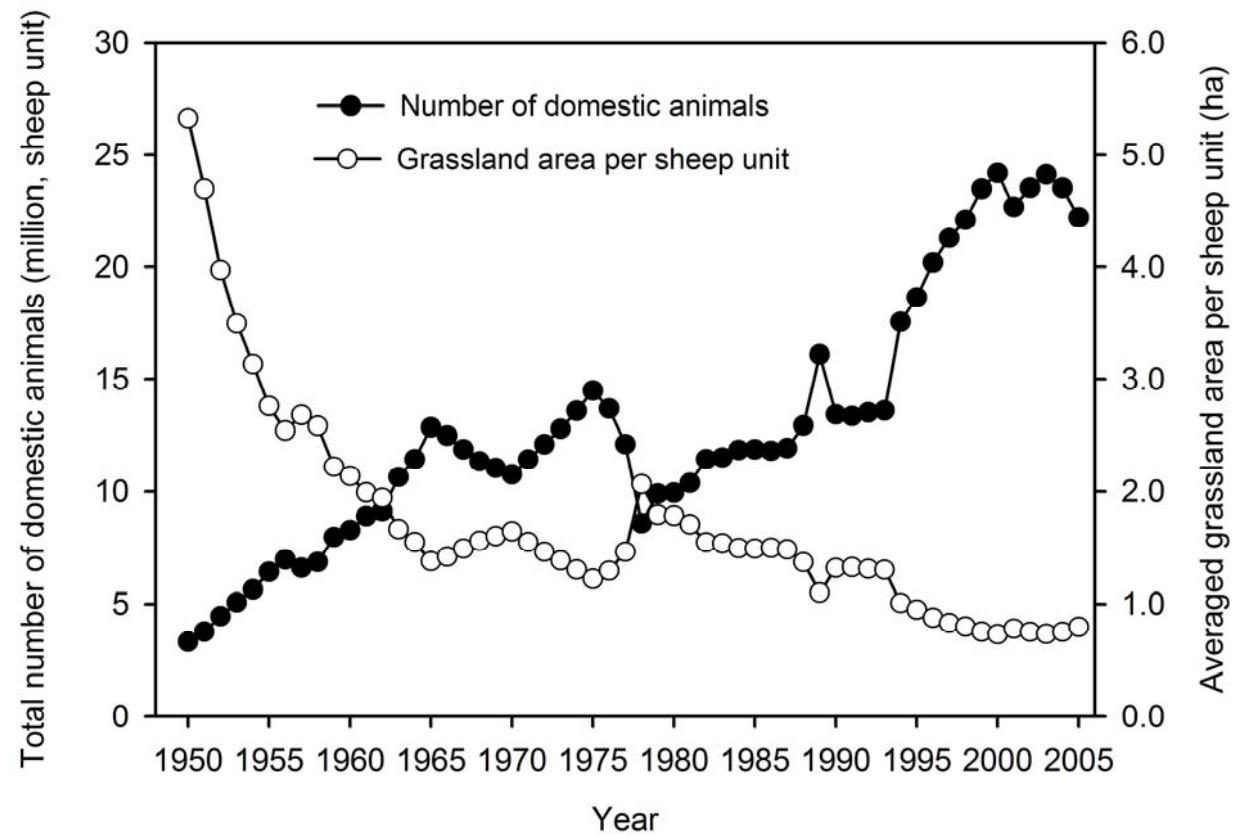
# Grassland Systeme und der globale C Kreislauf



## Terrestische C-Speicherung







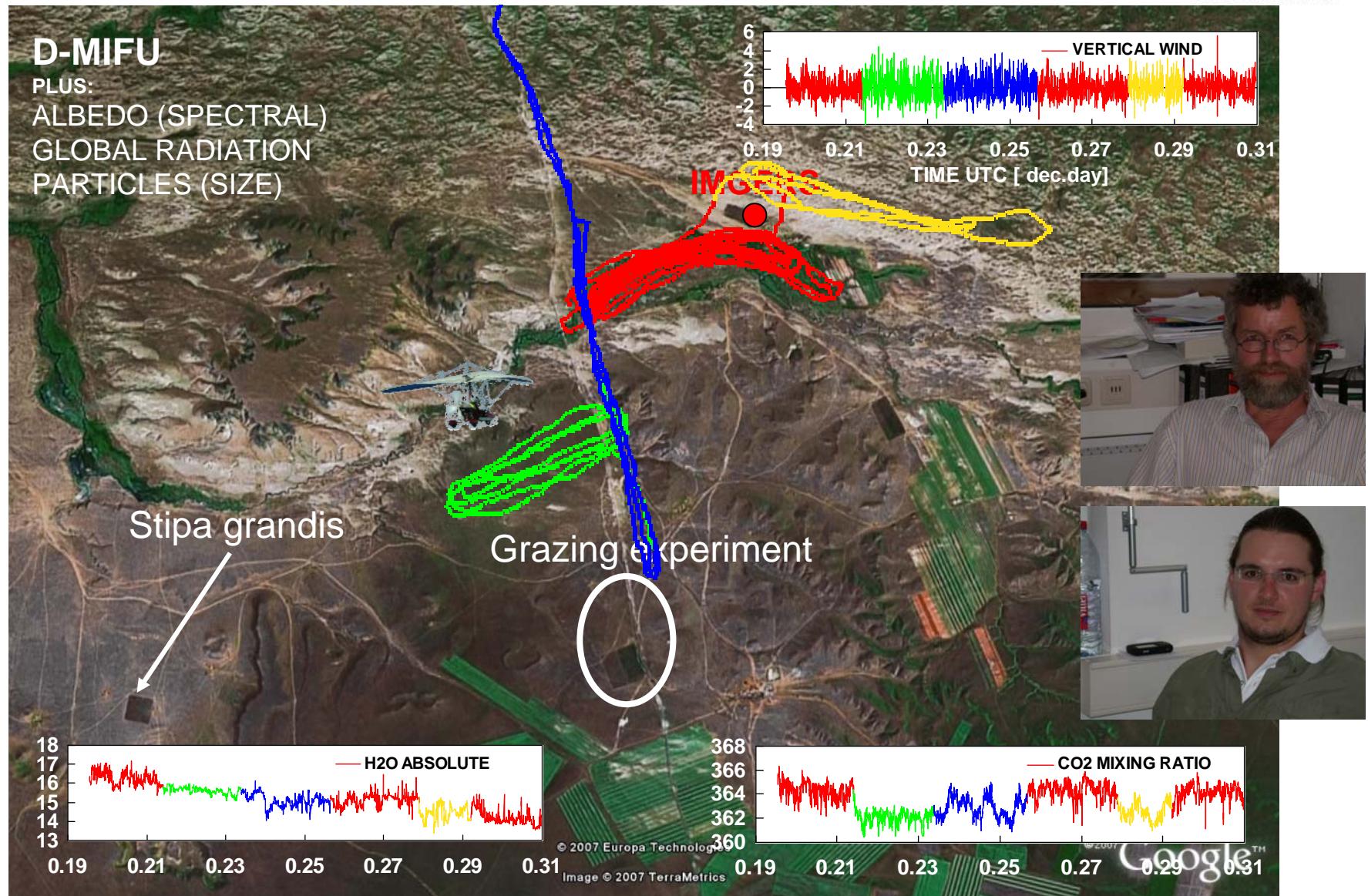


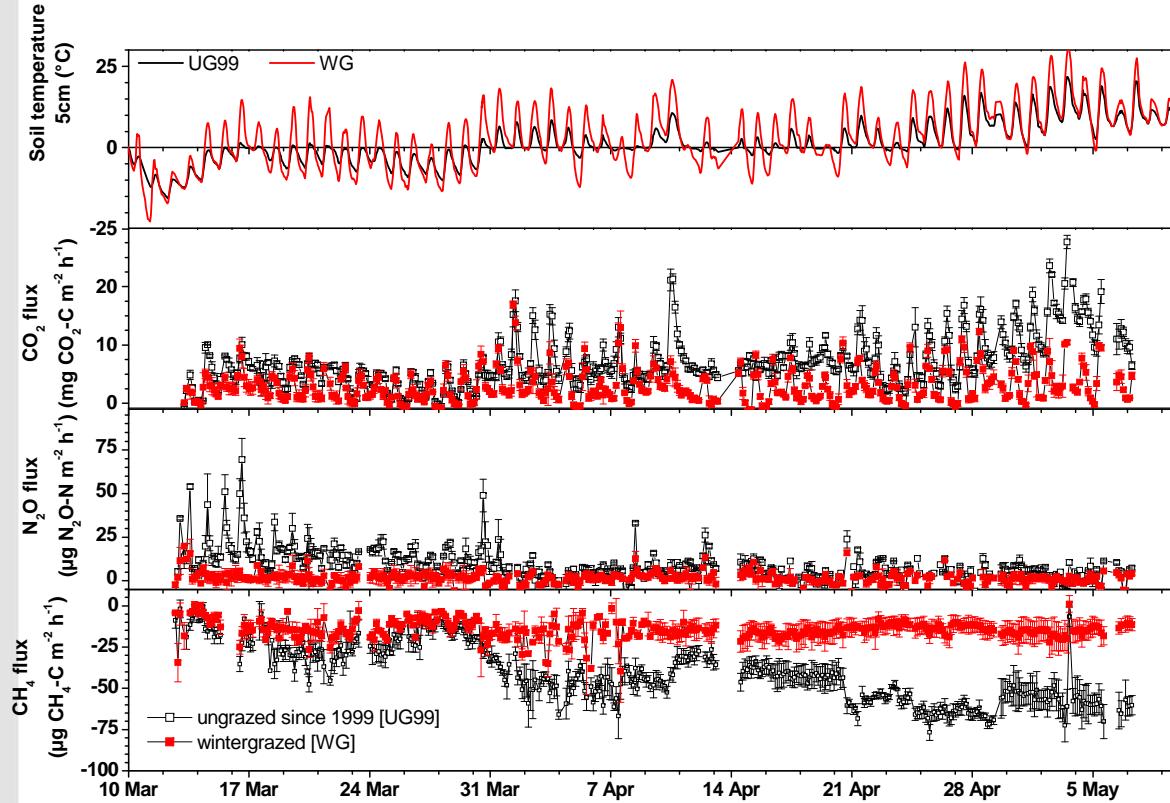
Matter fluxes in grasslands of Inner Mongolia as influenced by stocking rate

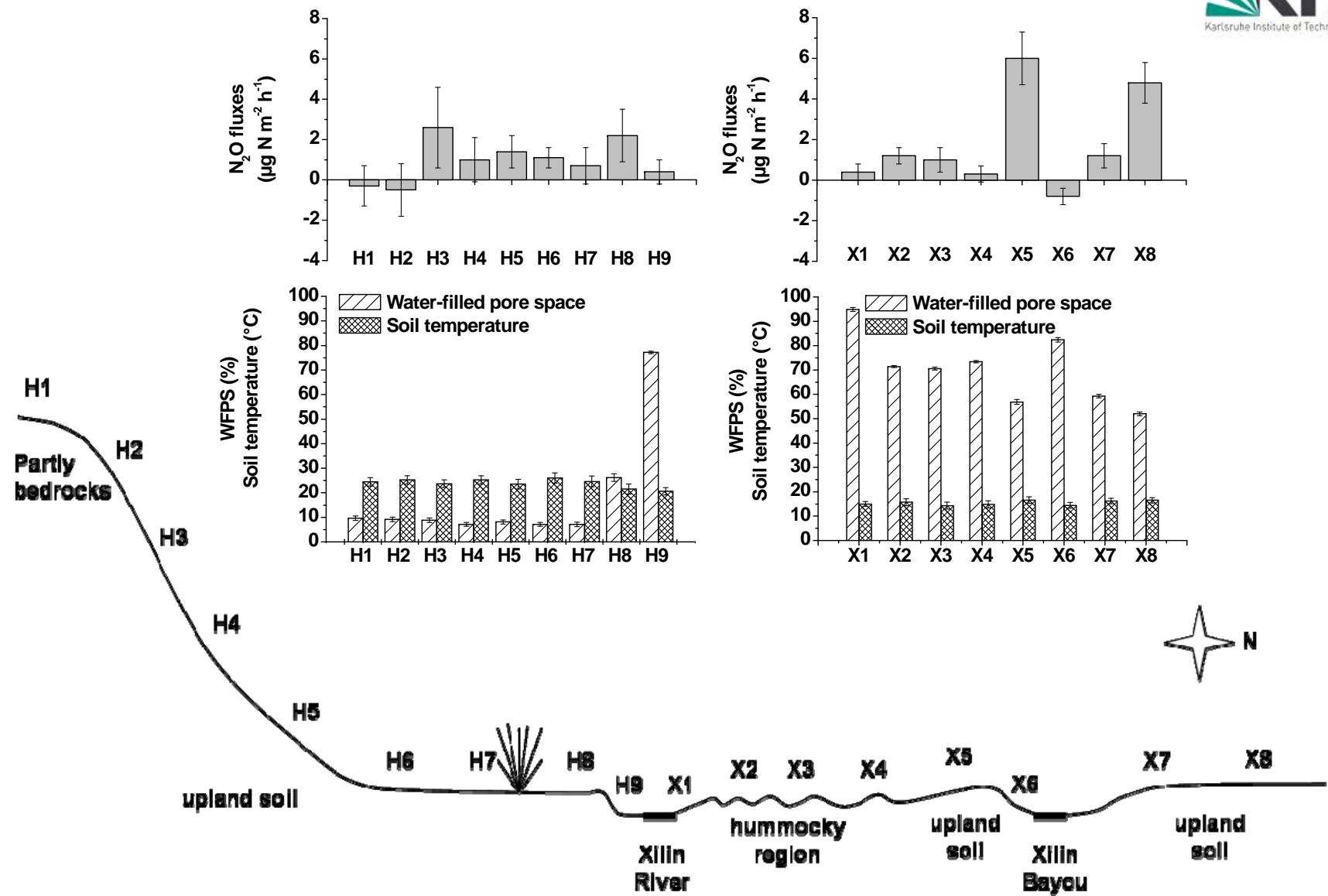
## Objectives IMK-IFU-IAP-CAS:

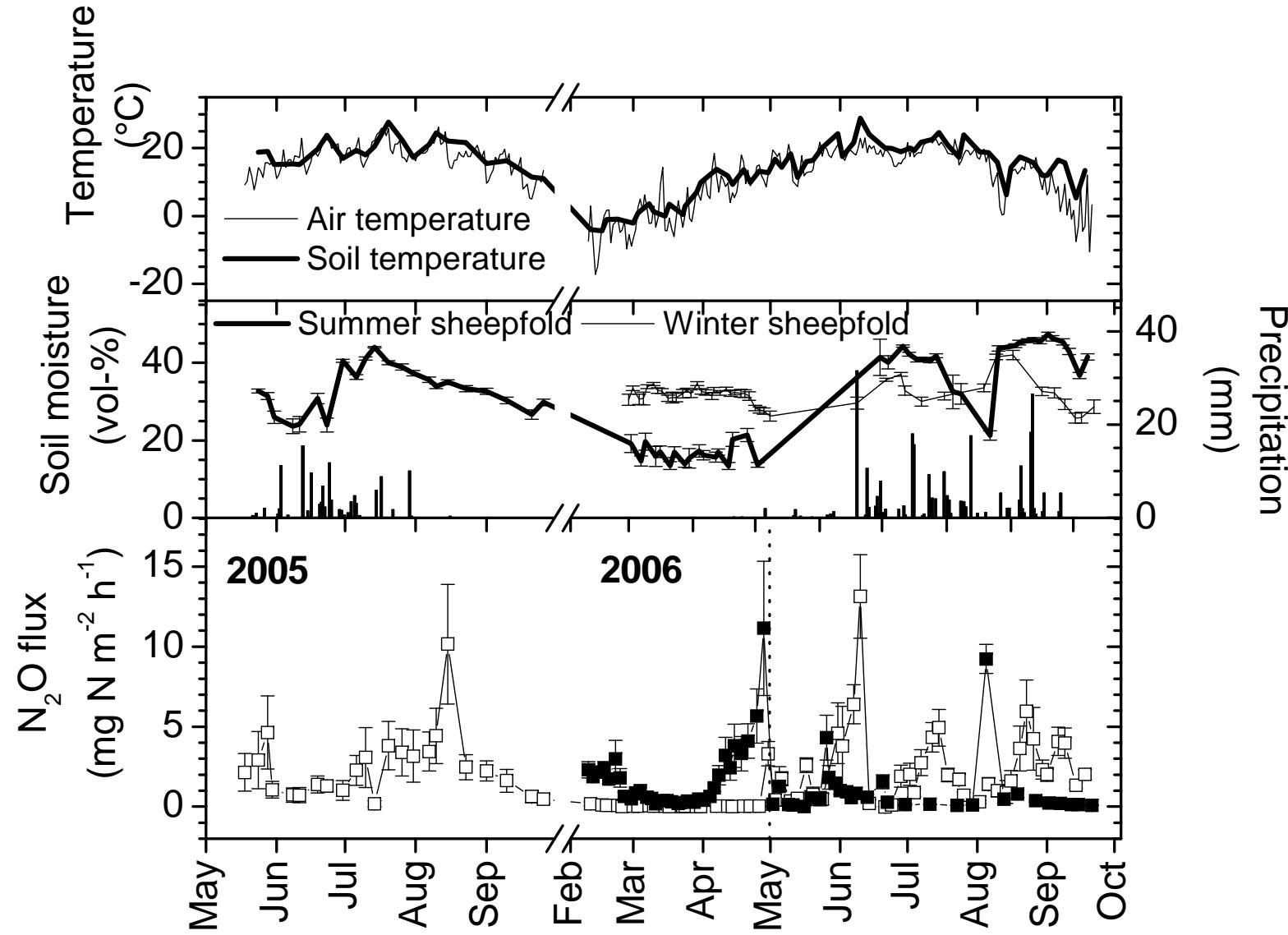
- Full annual cycles
  - GHG exchange
  - Gas permeability
  - temperature, moisture, etc.
  - microbial N-turnover, microb. biomass
- Simulation of C/N turnover
- Regionalisation and scenarios

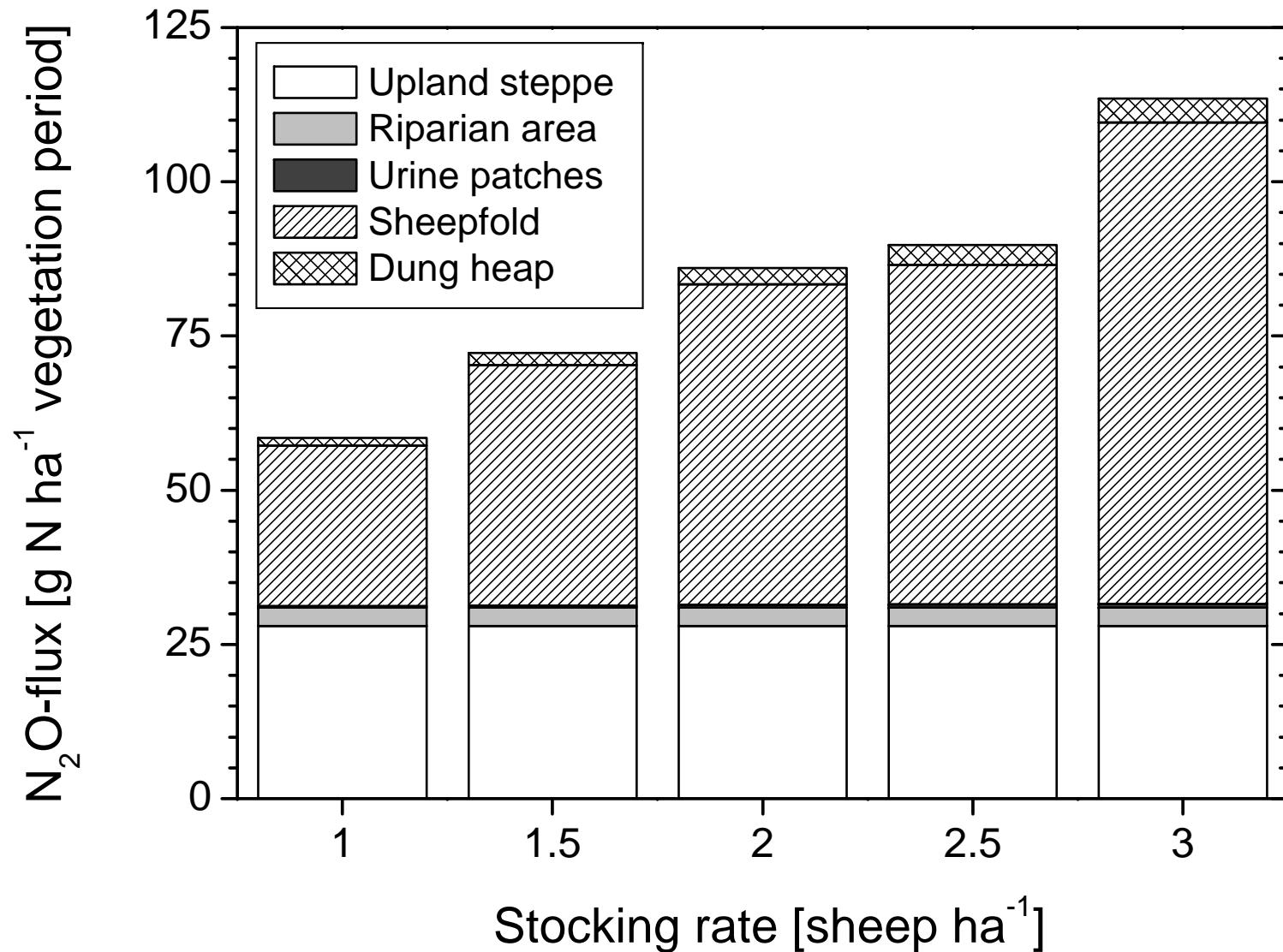












# ENvironmental TRANSition of China's Ecosystems under predicted global changes (ENTRANCE)

