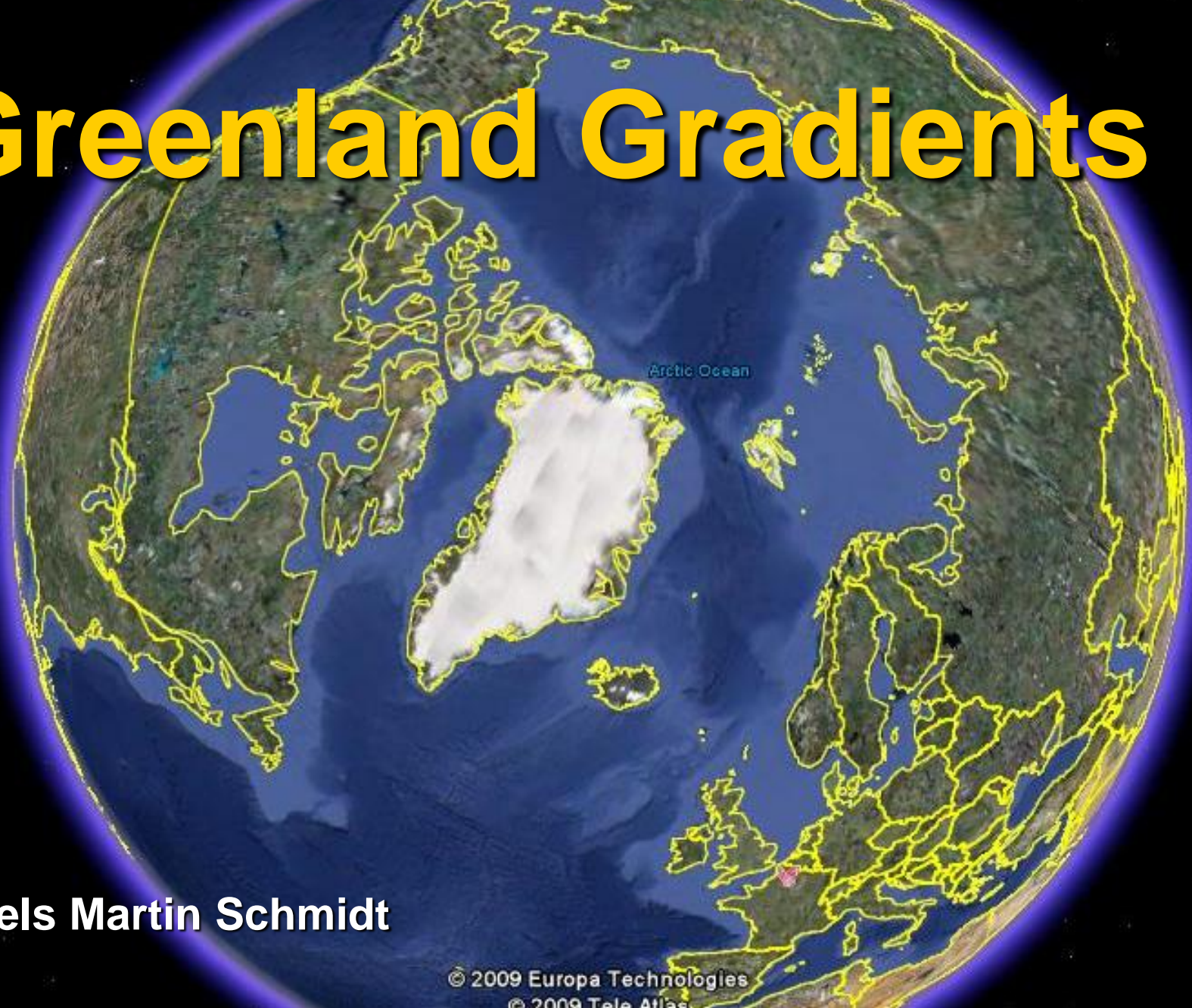


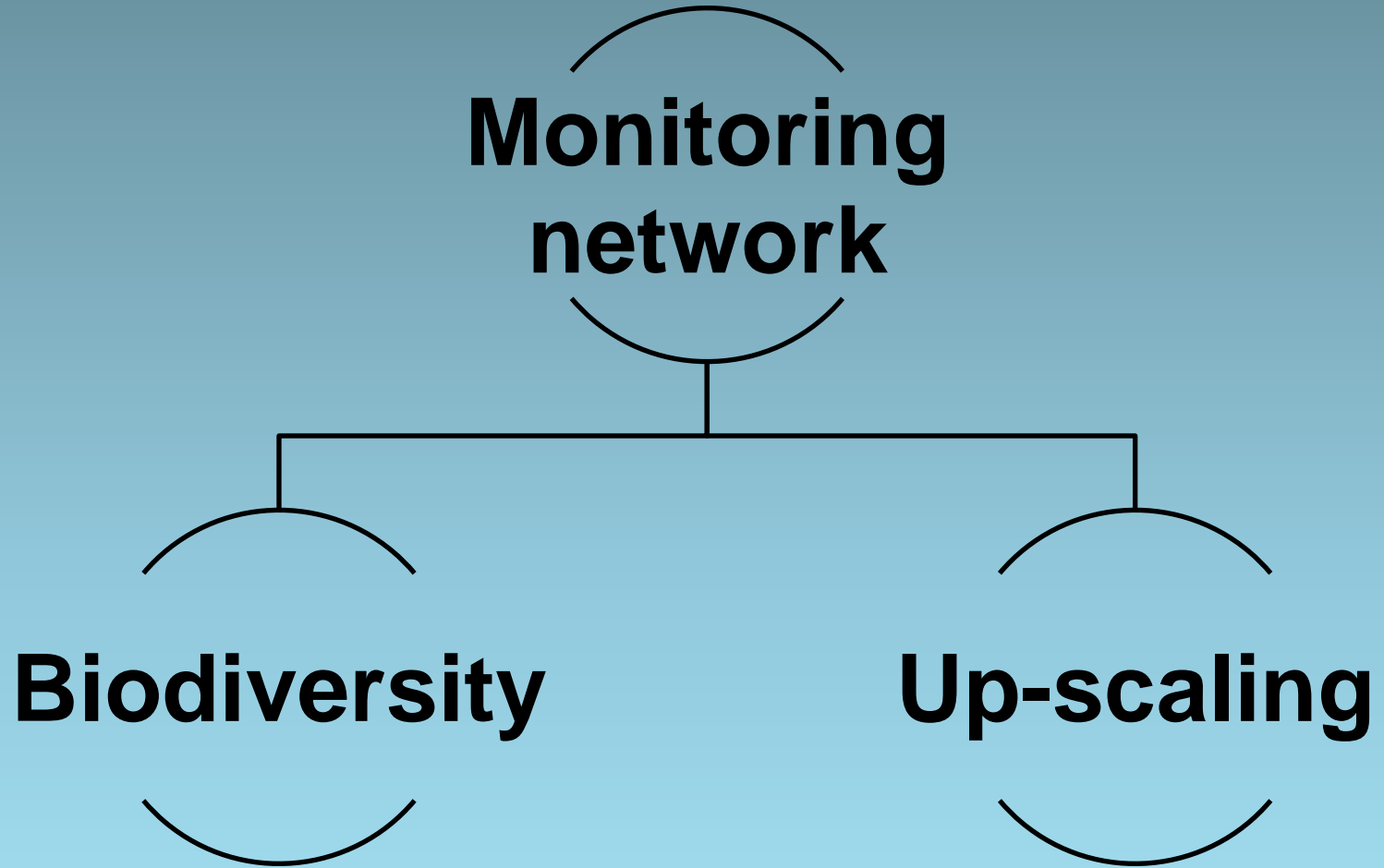
# Greenland Gradients



Niels Martin Schmidt

© 2009 Europa Technologies  
© 2009 Tele Atlas





# Overall objectives

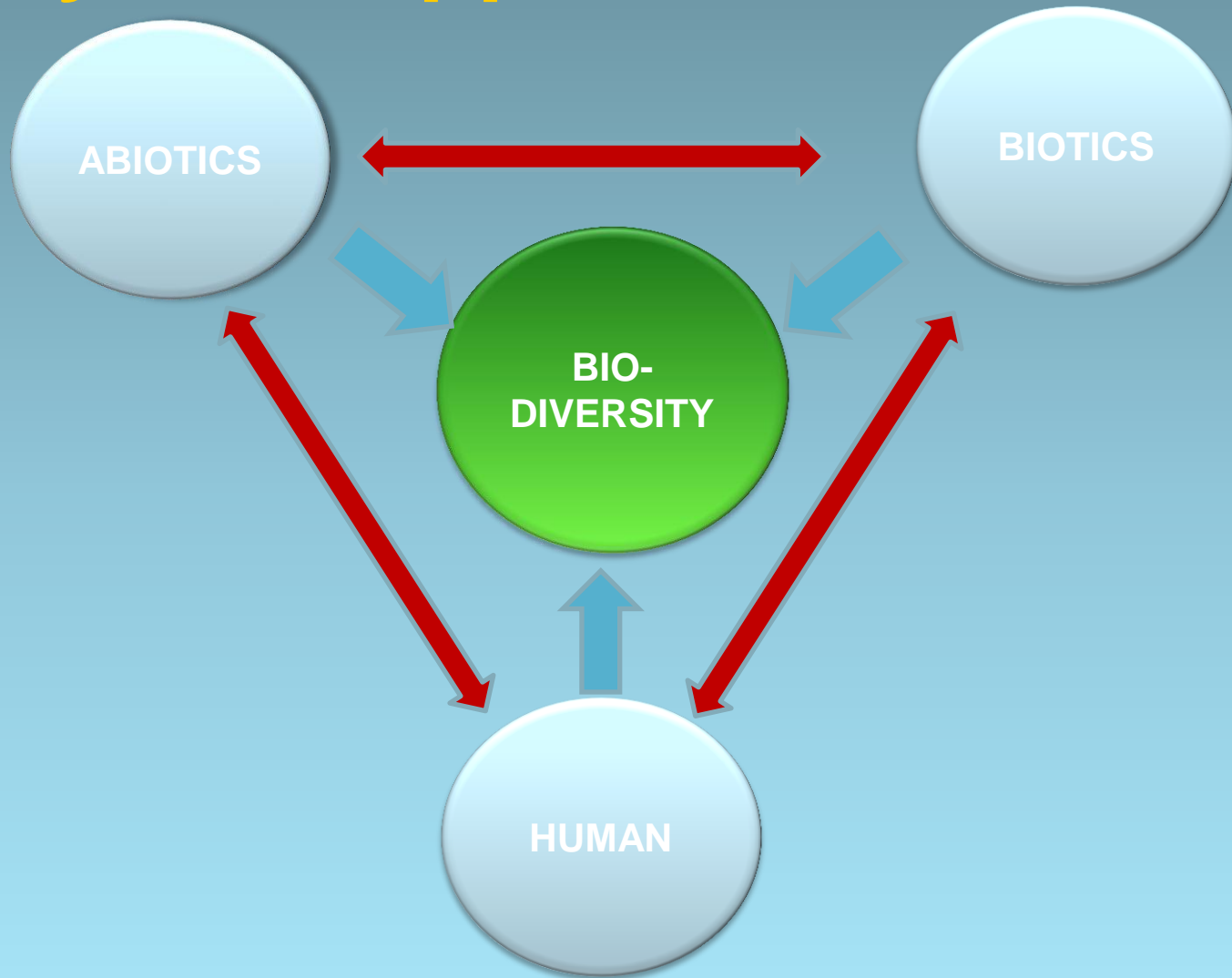
- To document the spatial variation in biodiversity of terrestrial flora and fauna across the climate zones in Greenland
- To verify the relationship between field data and remote sensing ('ground truthing'), and its spatial variability
- To establish a permanent network of monitoring plots and transects
- To scale up central ecosystem parameters spatially
- Quick-and-dirty field approach
- Robust and central parameters





- Scientific value
- Logistics
- Existing data
  
- Un-manned aircrafts

# Ecosystem approach



# Greenland Gradients

## *Non-destructive sampling*

- **Biodiversity of vascular plants and vertebrates (plots and transects)**
- **NDVI in plant communities**
- **Carbon flux in plant communities (light-response curves)**
- **Soil moisture and temperature**

# Greenland Gradients

## *Destructive sampling*

- Harvest of plant material (biomasse, Leaf Area Index, nutrients)
- Soil samples (soil fauna biodiversity, nutrients)
- Collection of arthropods (biodiversity)
- *Stem samples, sediment samples*



