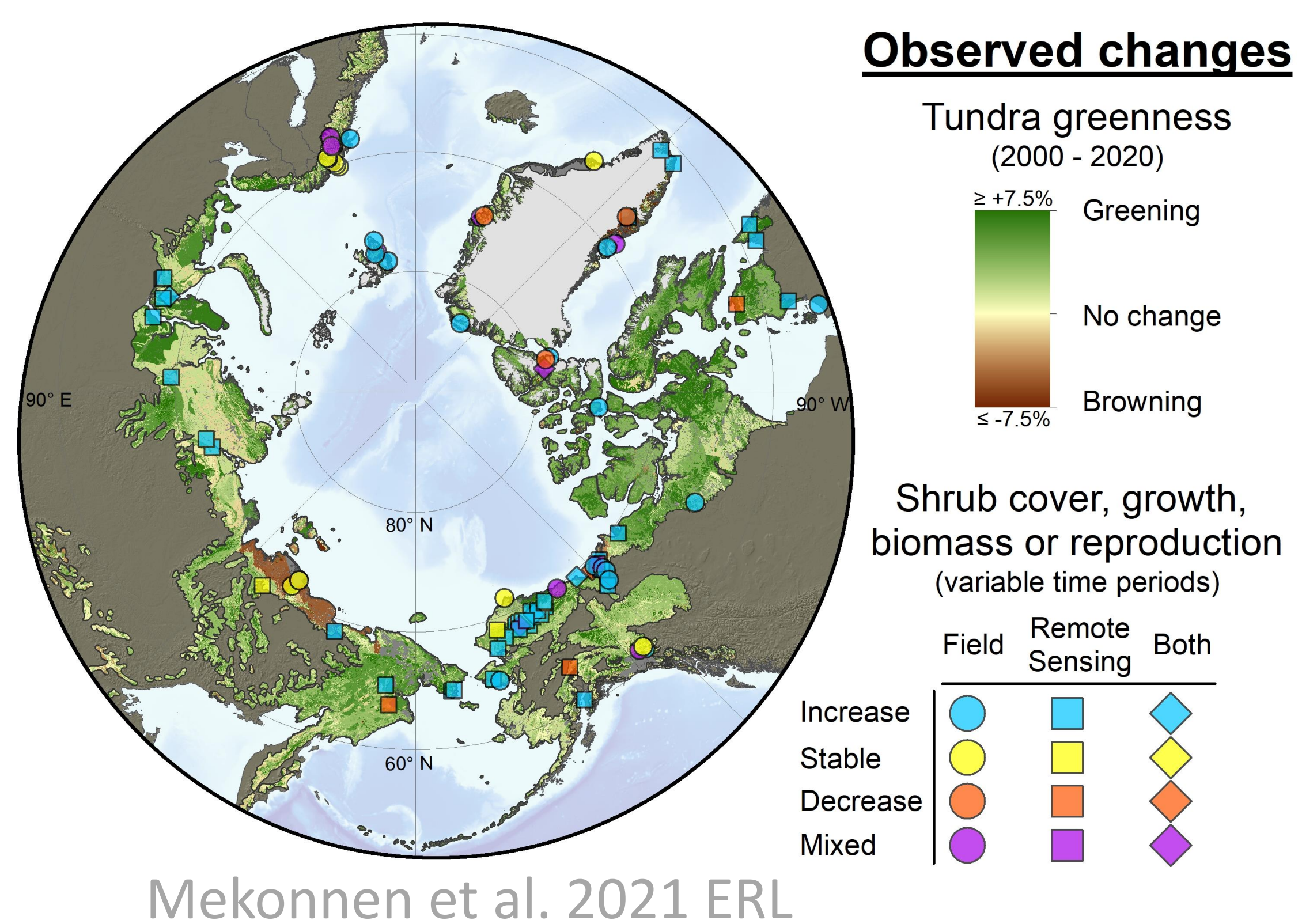
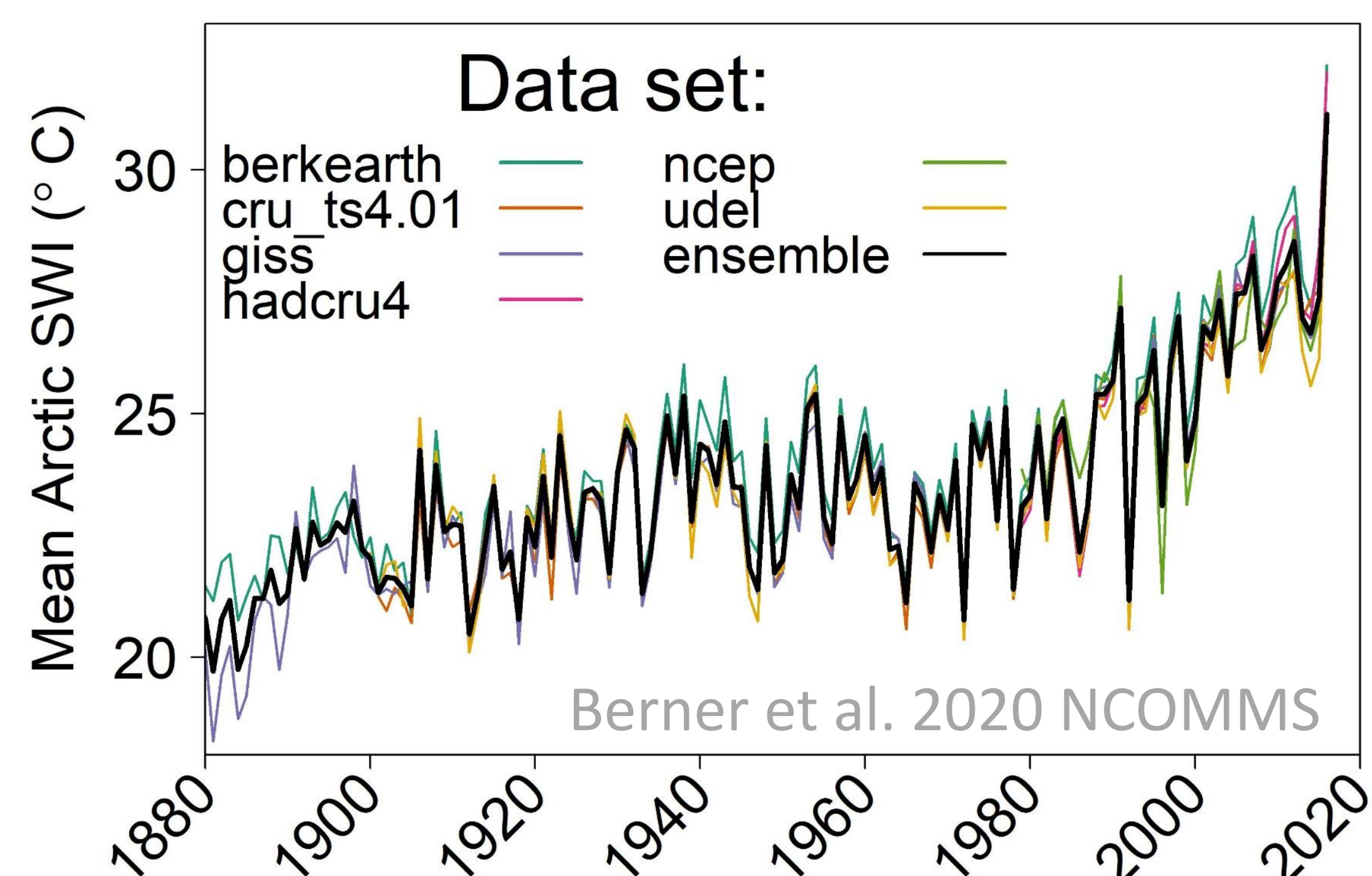


# Mapping plant biomass distribution and change across the rapidly warming Arctic tundra biome

Logan Berner<sup>1</sup>, Kathleen Orndahl<sup>1</sup>, Pat Burns<sup>1</sup>, Matt Macander<sup>2</sup>, Scott Goetz<sup>1</sup>, and many data contributors

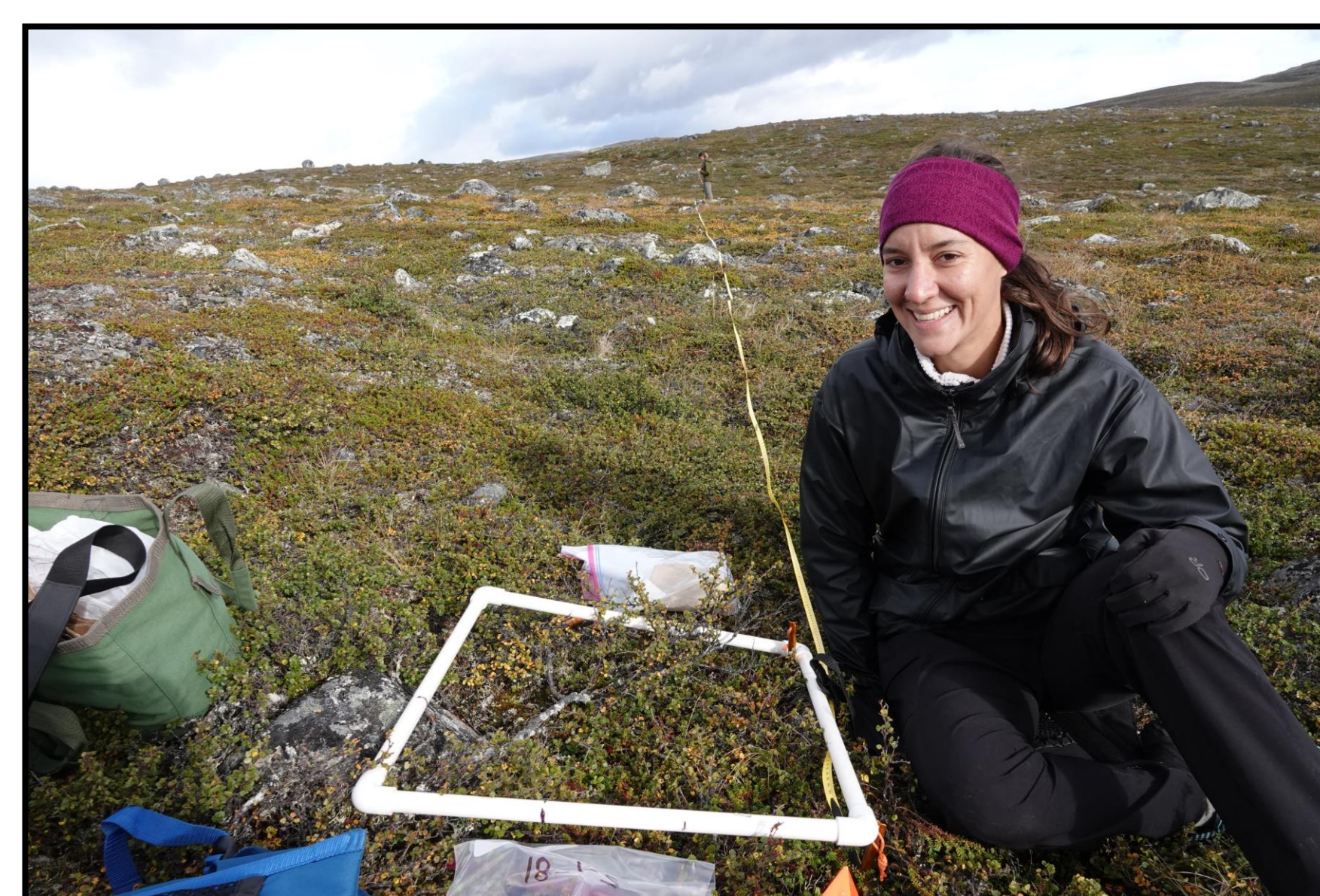
1. Northern Arizona University, 2. Alaska Biological Research Inc.

The Arctic is rapidly becoming warmer, shrubbier, and greener

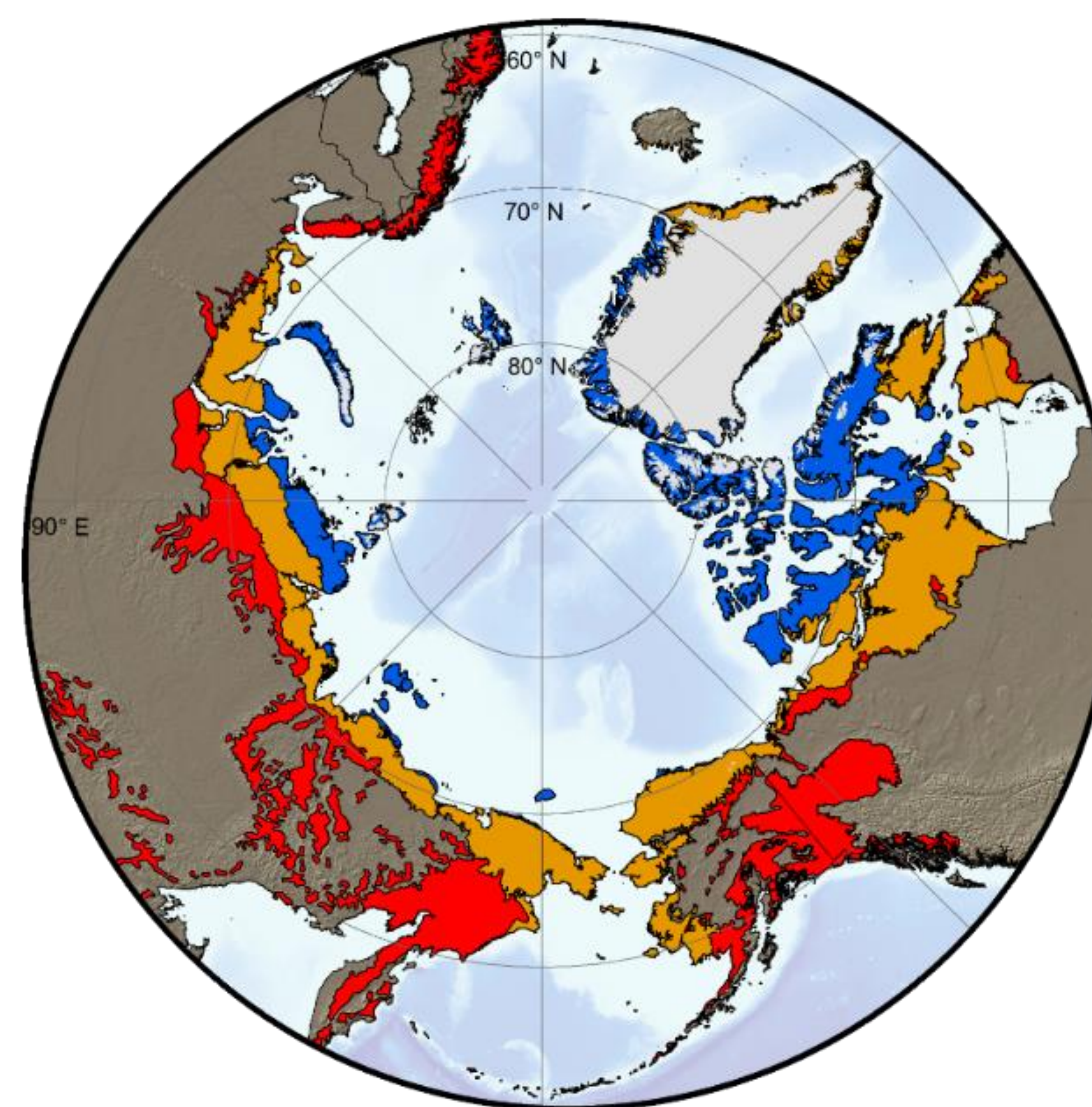
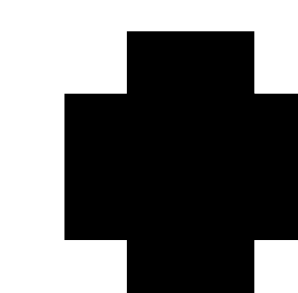
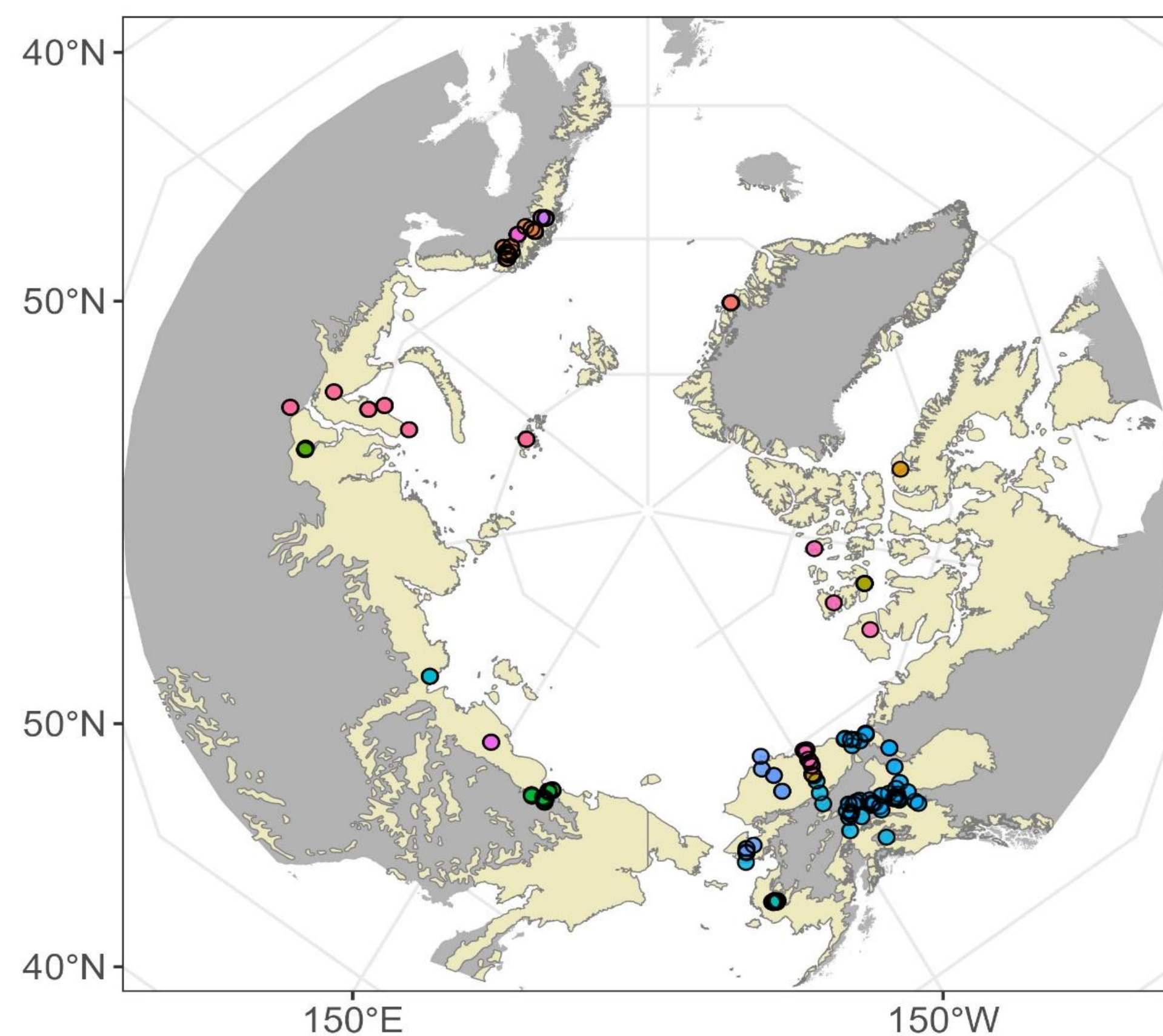


Goal: Model plant and shrub biomass across the Arctic for 2000 and 2020

Biomass harvests

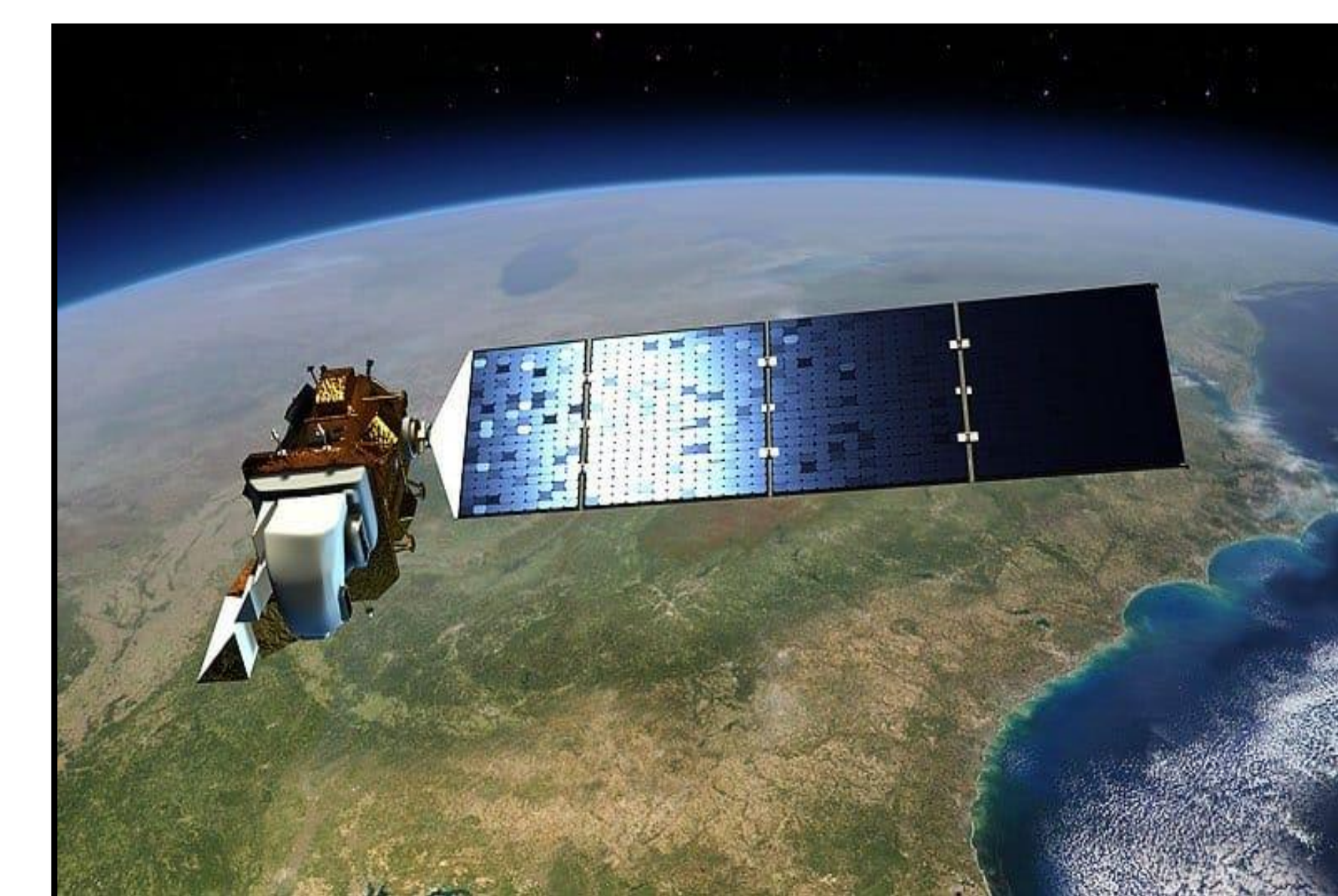


New synthesis dataset

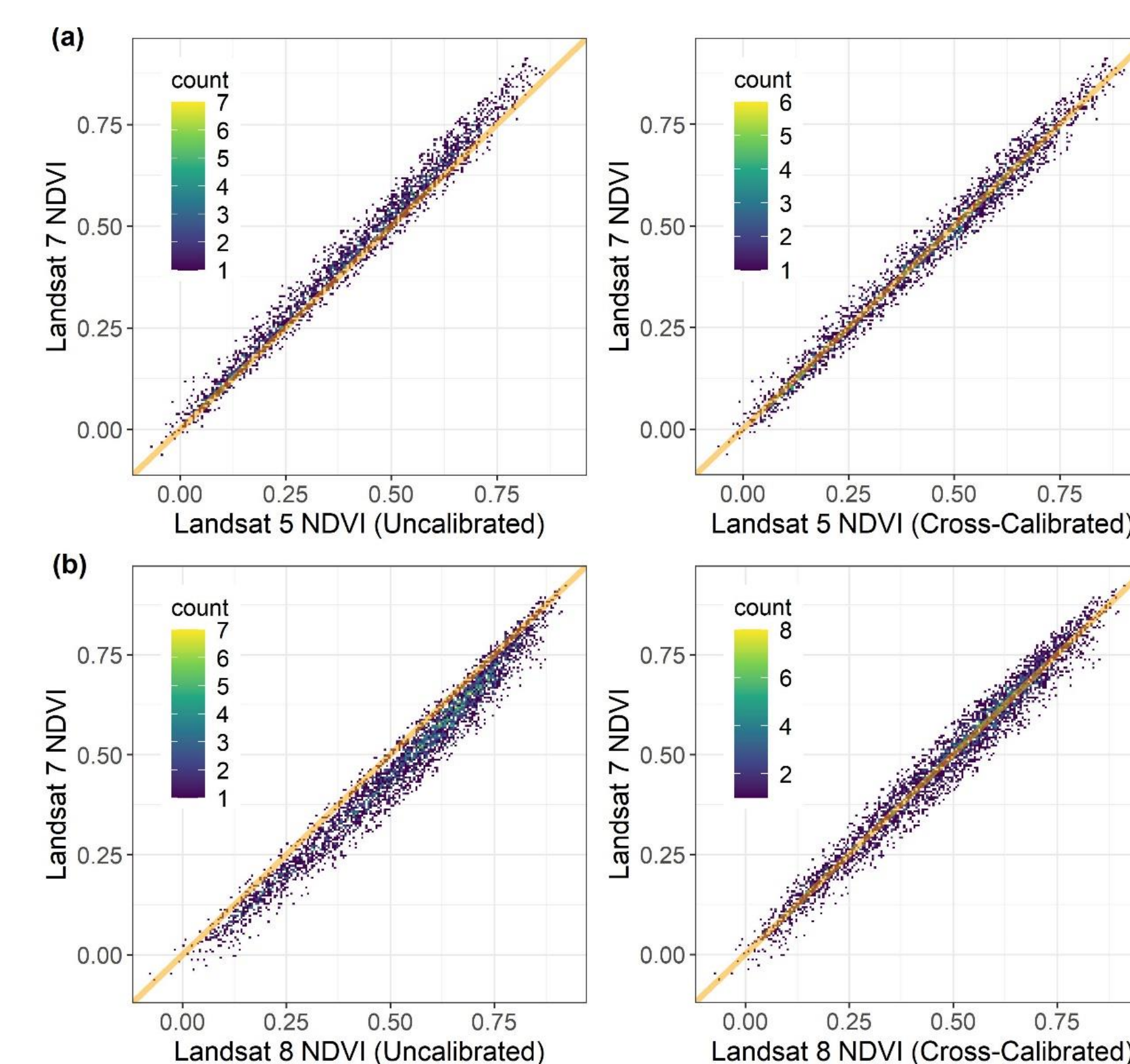


CCDC seasonal mosaics

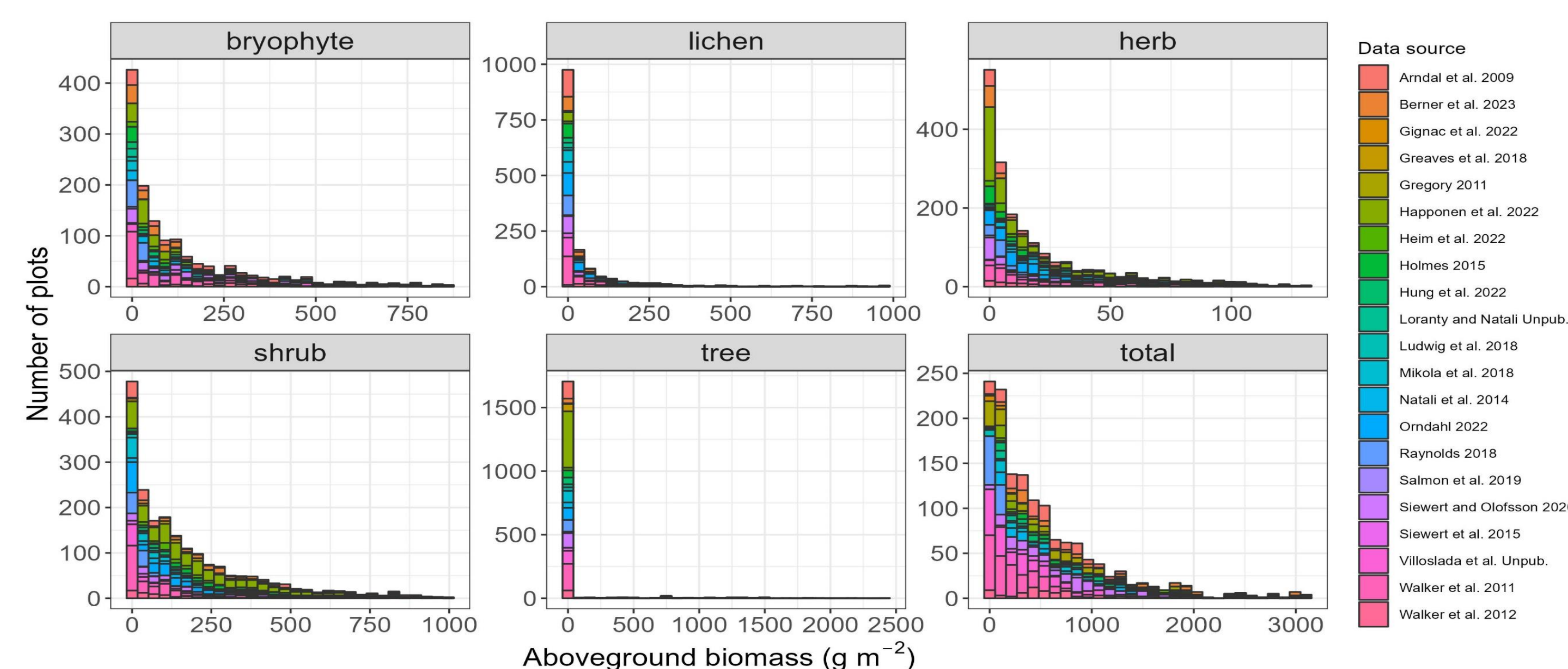
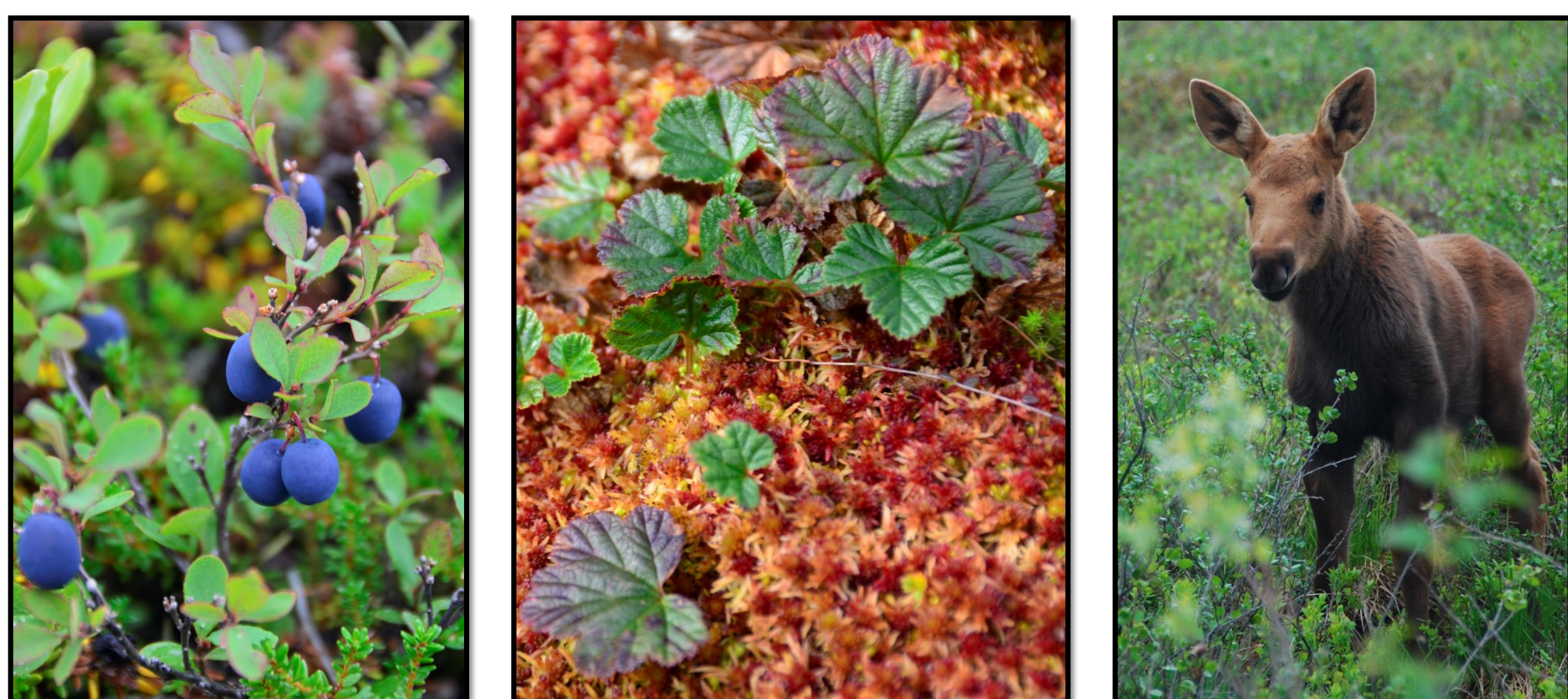
Landsat time series



Cross-sensor calibration



...but plant biomass highly uncertain



Spring

Peak summer

Autumn

