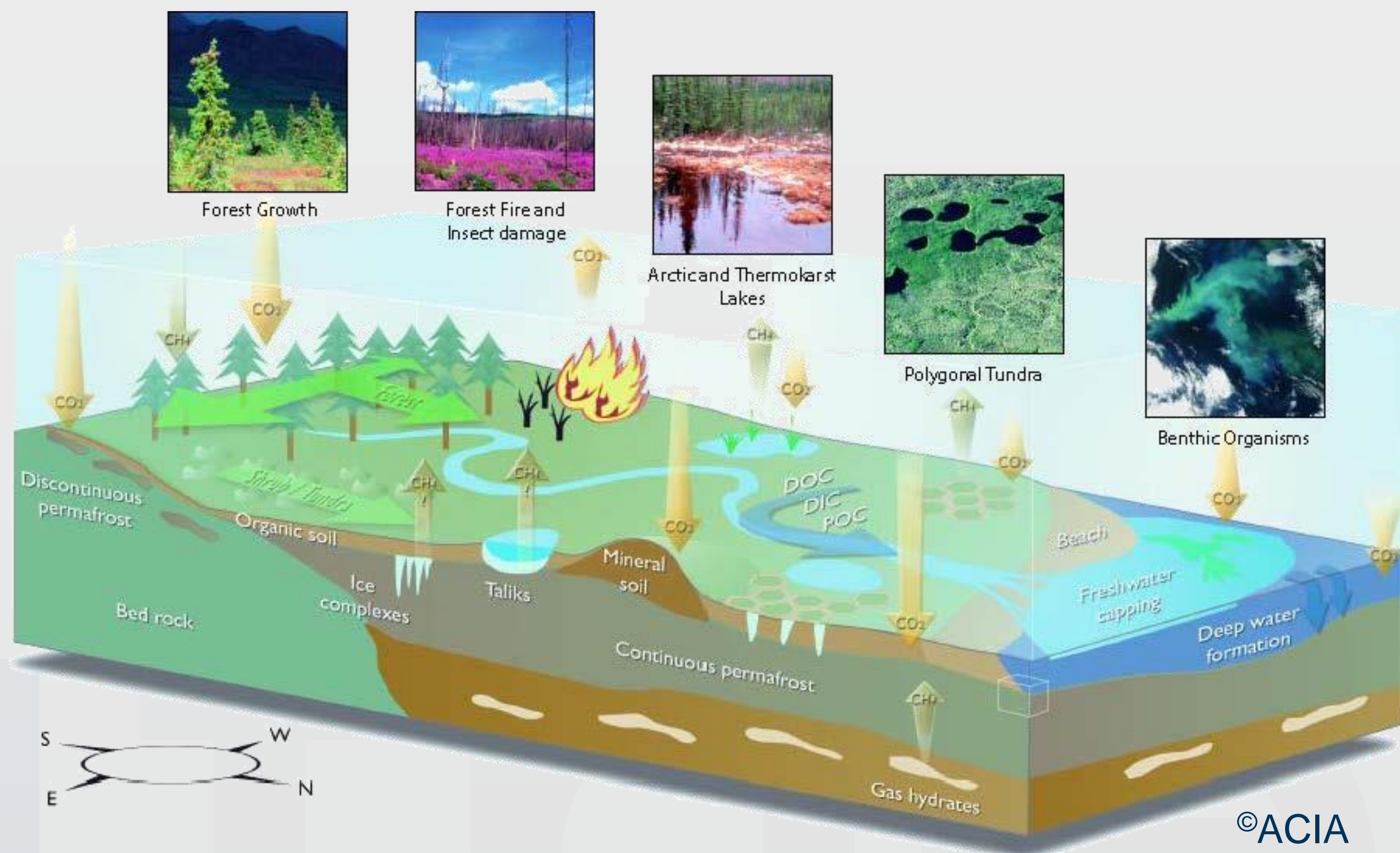


Arctic Ecosystems and Global Change

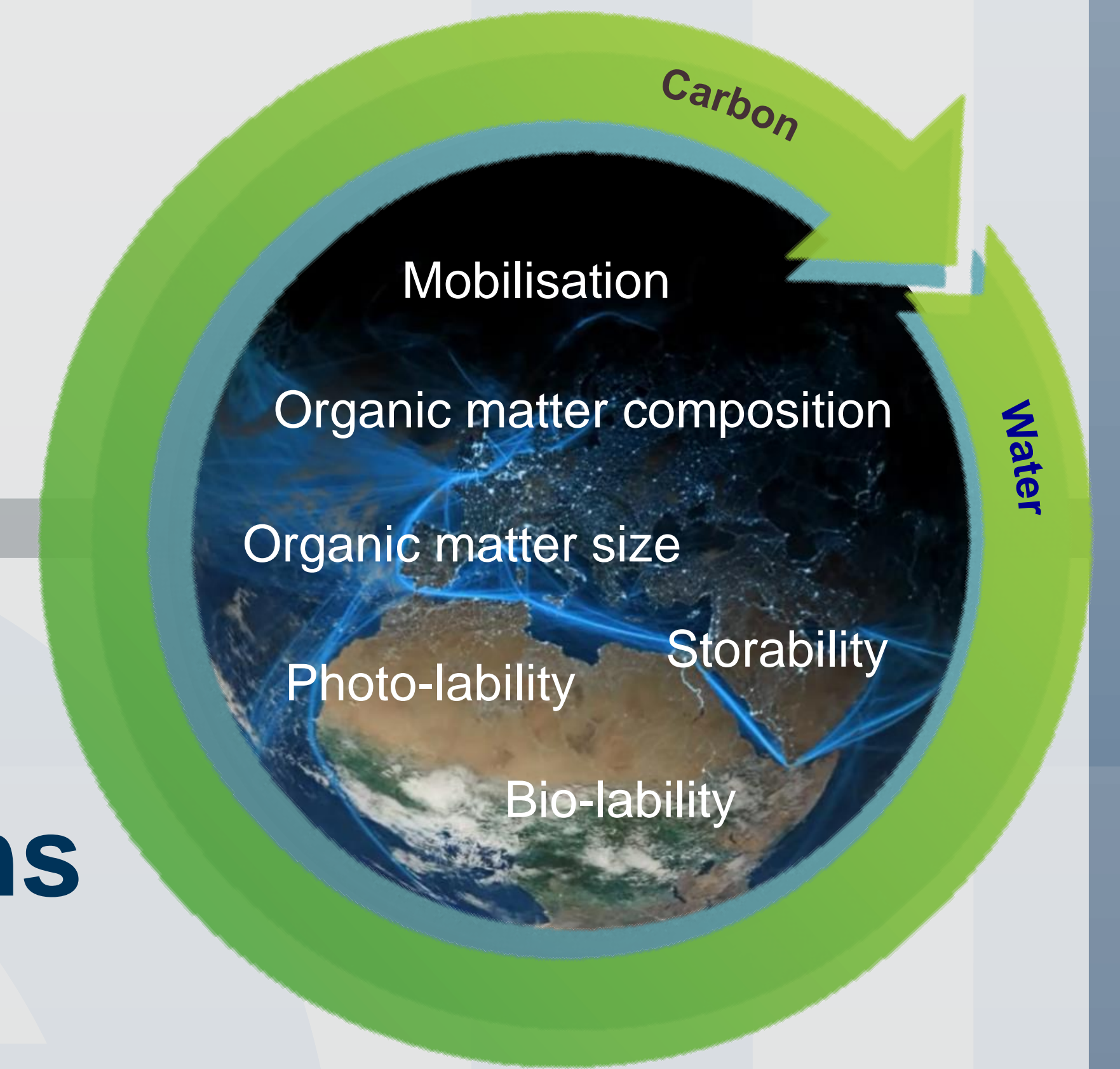
Contacts: Juliane Bischoff (j.bischoff@hw.ac.uk), Phil A. Wookey, Andrew K. Sweetman, Katherine Dunlop, Ryan Pereira and Tom Wagner



Pathways of carbon flux and biotic response across the permafrost-coastal transition.

Our unifying goal

We are working to understand and predict carbon and nutrient fluxes across earth system realms (atmosphere, land, freshwater and marine) in the Arctic, and how climate changes will influence these fluxes and life, and, in turn, be influenced by them.



Key research directions

Greenhouse gas cycling

Carbon dioxide and methane cycling in permafrost, arctic lakes and coastal systems

Ecosystem response to climate change

Shifting in microbial communities, vegetation types and benthic organisms

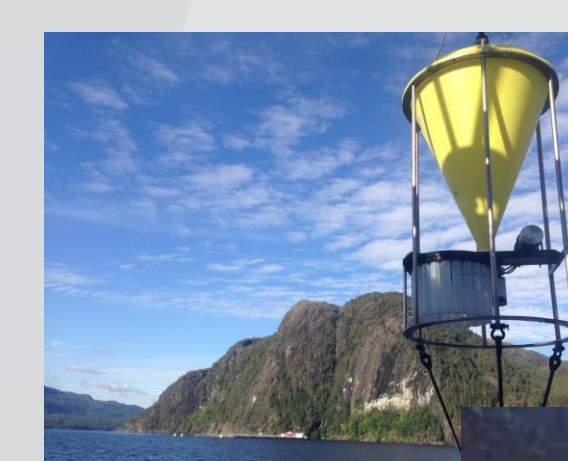
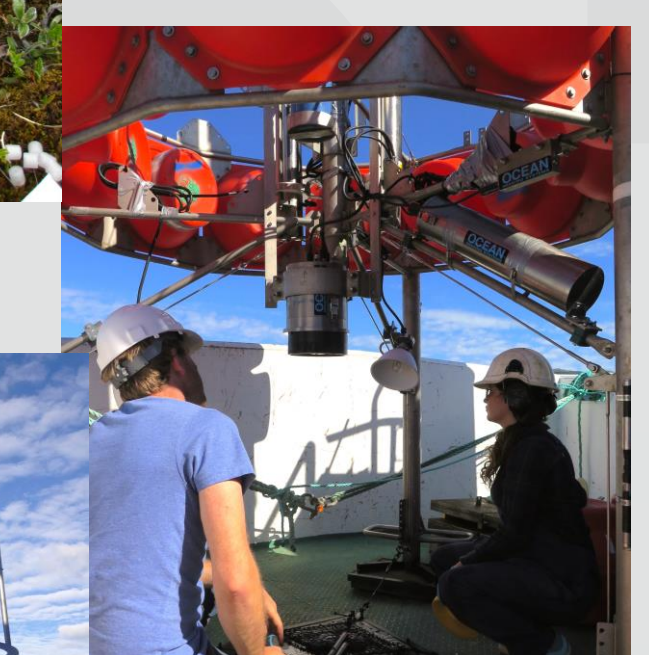
Carbon and nutrient sequestration

Land-Ocean interaction from permafrost to deep Arctic Ocean

Palaeoclimate of the Arctic

Lake sediments and permafrost deposits as archives of the past

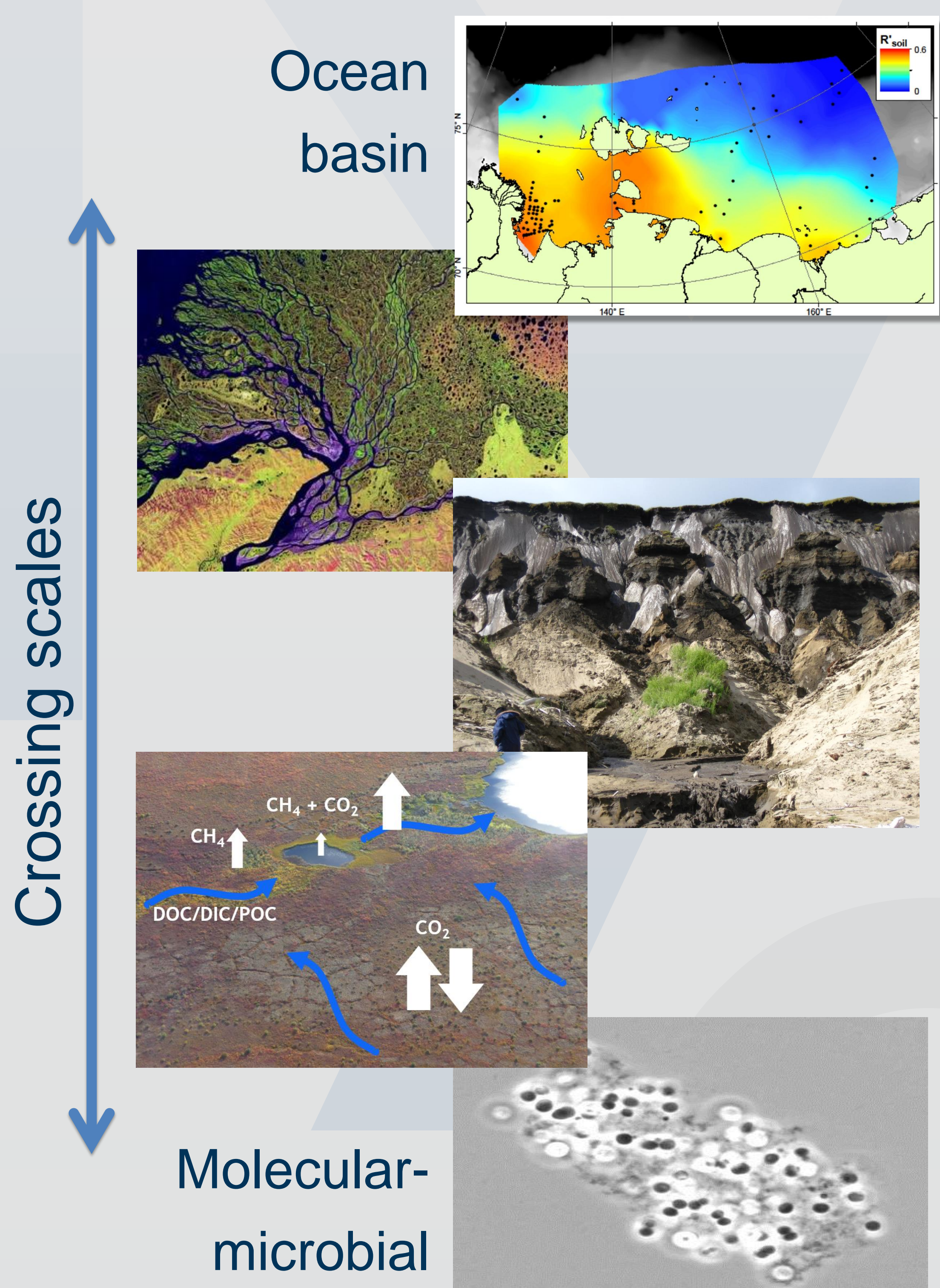
Atmosphere



Deep ocean



Multi - disciplinary



Bischoff *et al.* (2016) *Biogeosciences*, 13
 Bischoff *et al.* (2013) *GBC*, 27
 Hartley, Wookey, *et al.* (2012) *Nature Climate Change*, 2
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