



The "Global Deep Soil 2100" network - an update

Michael W. I. Schmidt, Department of Geography, University of Zurich, Switzerland and the Global Deep Soil 2100 network

Background

"Global Deep Soil 2100" is an emerging network for whole-ecosystem warming experiments.

The focus

The year '2100' was chosen because IPCC scenarios run until 2100. We welcome whole ecosystem manipulations, warming down to one meter or the bedrock, with or without other manipulations such as water and carbon dioxide concentrations, and studying responses of plants, soil biogeochemistry, ecology, etc.

History

There are less than a dozen whole-ecosystem warming experiments but not all researchers know about each other. To introduce experiments and involved scientists, we started video meetings end of 2020. This effort brought together experimentalists, modelers and data users into this "whole-ecosystem warming network", to share practical experience on field experiments, data reporting, discuss observations and results and explore synergies regarding tools, knowledge, and data sharing and interpretation. Pprevious meeting recordings: https://tube.switch.ch/channels/ed725365

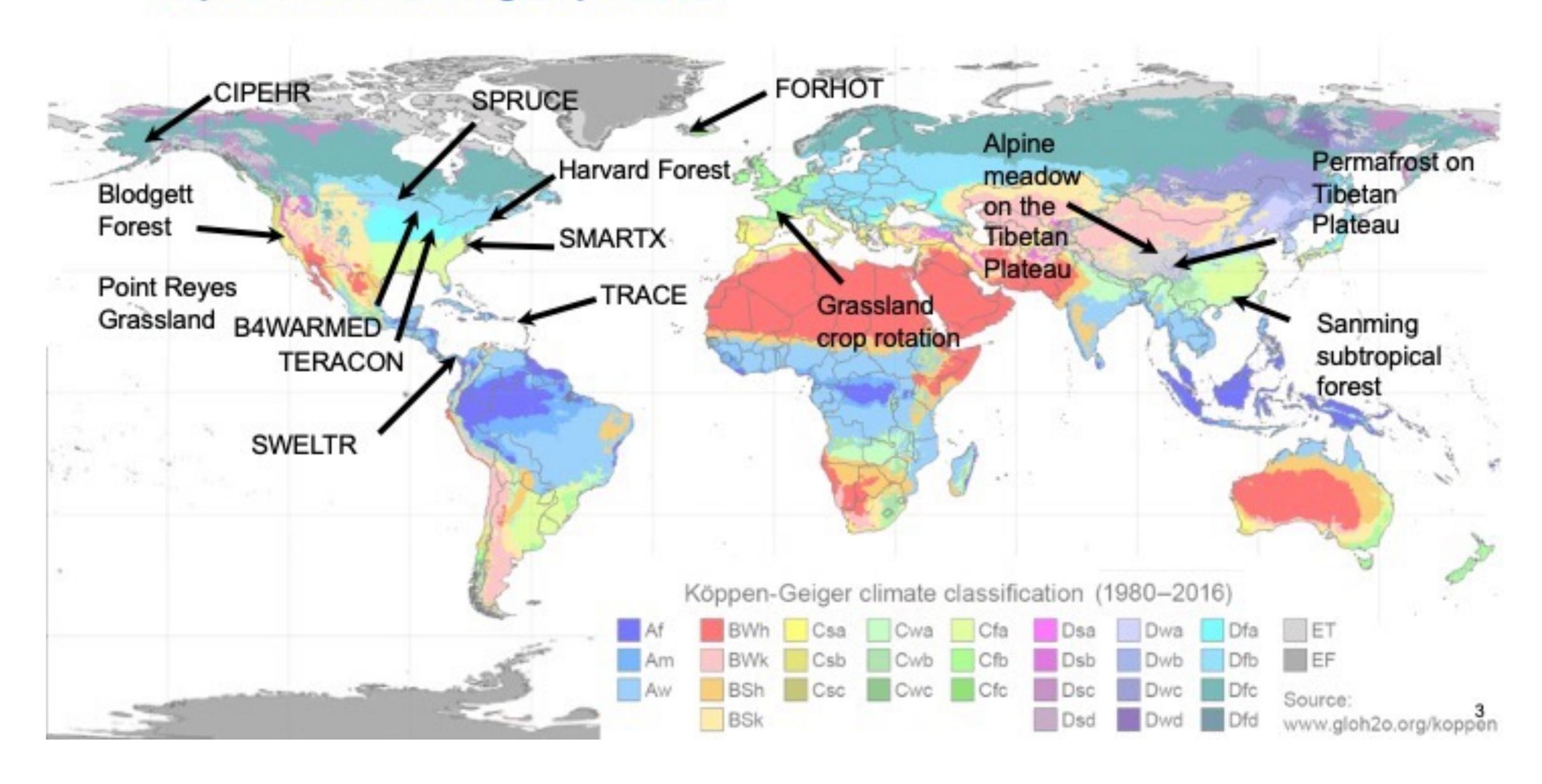
A first workshop to further data compilation and meta analysis and modeling was held in Paris (March 2023, picture) and Vienna at EGU (April 2023).



Further details and contact can be found on the webpage of the "International Soil Carbon Network" https://iscn.fluxdata.org/network/partner-networks/deepsoil2100/



Experiments running or planned



Individuals involved

Boreal: Paul Hanson hansonpj@ornl.gov. Iceland (ForHot): Andreas Richter andreas.richter@univie.ac.at, Ivan Janssens ivan.janssens@uantwerpen.be, Bjarni Sigurdsson bjarni@lbhi.is. Tibet permaforst: Yuan-He Yang yhyang@ibcas.ac.cn. Tibet grassland: Biao Zhou biaozhu@pku.edu.cn, Jin-Sheng He jshe@pku.edu.cn. Northern hardwood forest: Serita Frey Serita.Frey@unh.edu. Temperate forest + grassland: Margaret Torn mstorn@lbl.gov, Elaine Pegoraro elainepegoraro@lbl.gov. Subalpine meadow: John Harte jharte@berkeley.edu, Lara Kueppers Imkueppers@berkeley.edu. Temperate Marshland: Patrick Megonigal megonigalp@si.edu, Roy Rich richr@si.edu, Genevieve Noyce NoyceG@si.edu, Melissa Pastore Melissa.Pastore@uvm.edu. Temperate Agriculture: Abad Chabbi abad.chabbi@inrae.fr. Subtropical Forest China Yusheng Yang & Zhijie Yang zhijieyang@fjnu.edu.cn. Tropical Forest Puerto Ricco: Tana Wood tanawood@fs.fed.us, Sasha Reed screed@usgs.gov, Molly Cavaleri macavale@mtu.edu Tropical Forest Panama: Andrew Nottingham andrewtnottingham@googlemail.com. and Caitlin.Hicks.Pries@dartmouth.edu, Cyrill.zosso@geo.uzh.ch, Nicholas.Ofiti@geo.uzh.ch, Guido.Wiesenberg@geo.uzh.ch, Jennifer Soong Jennifer.Soong@colostate.edu