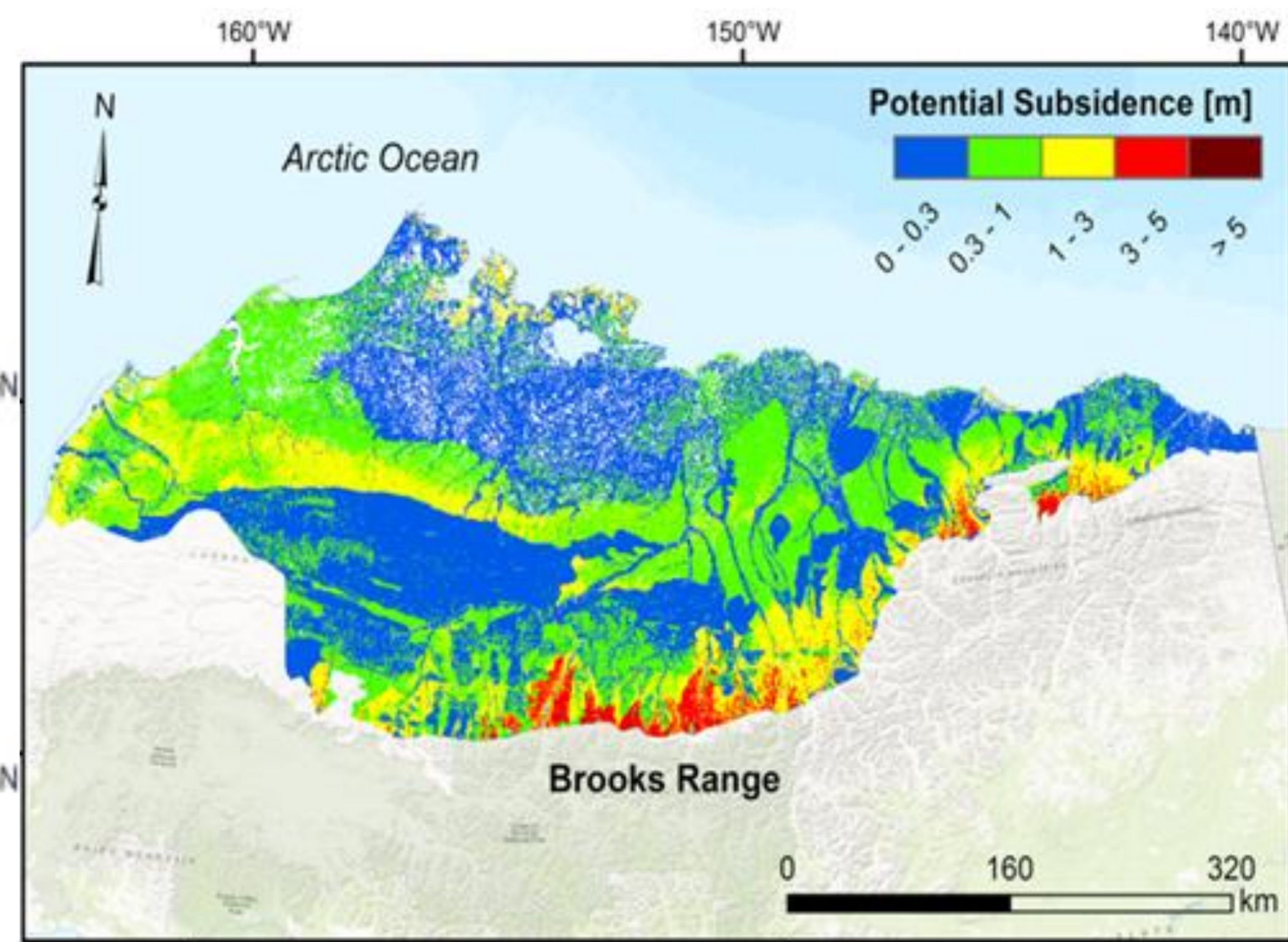
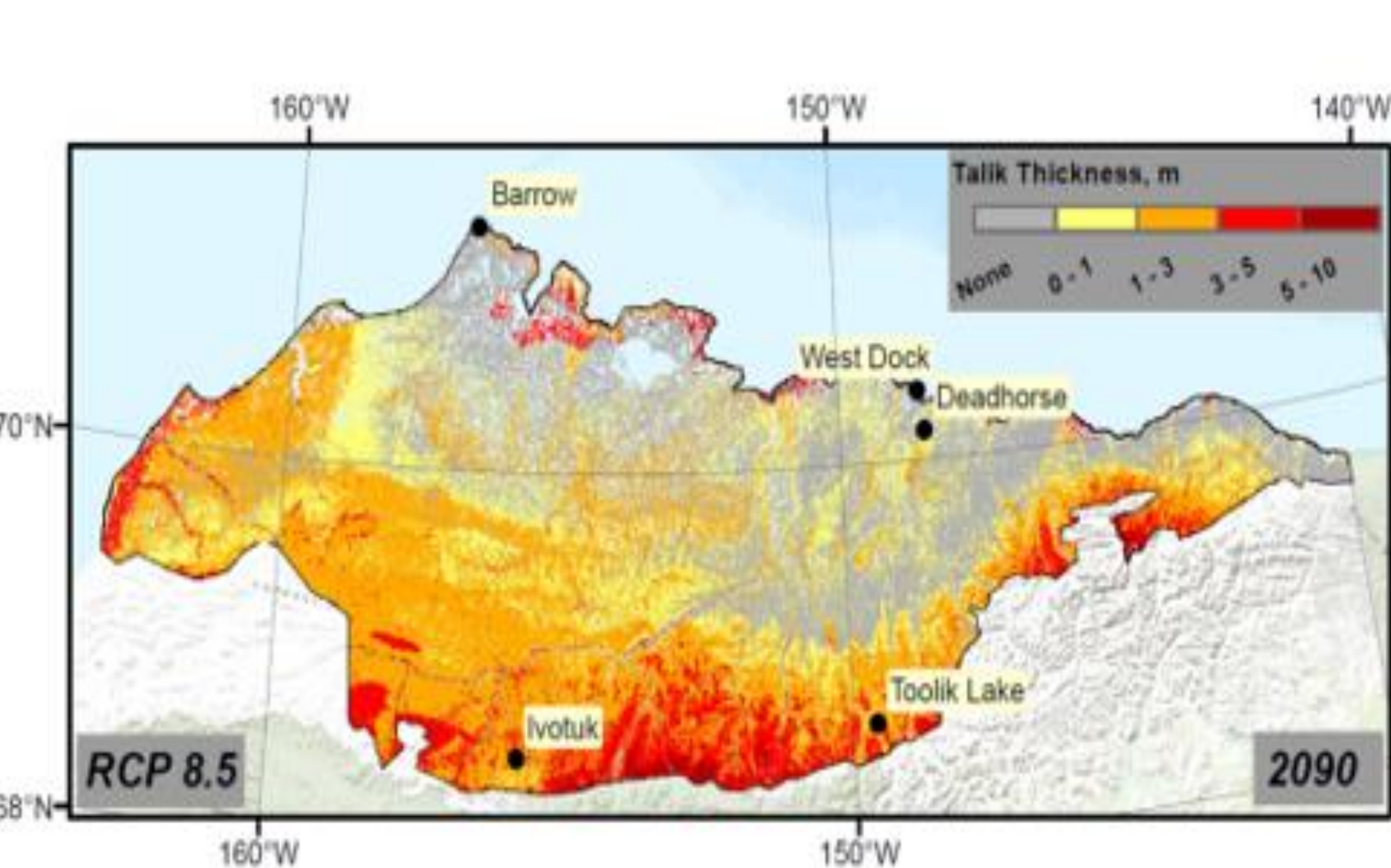
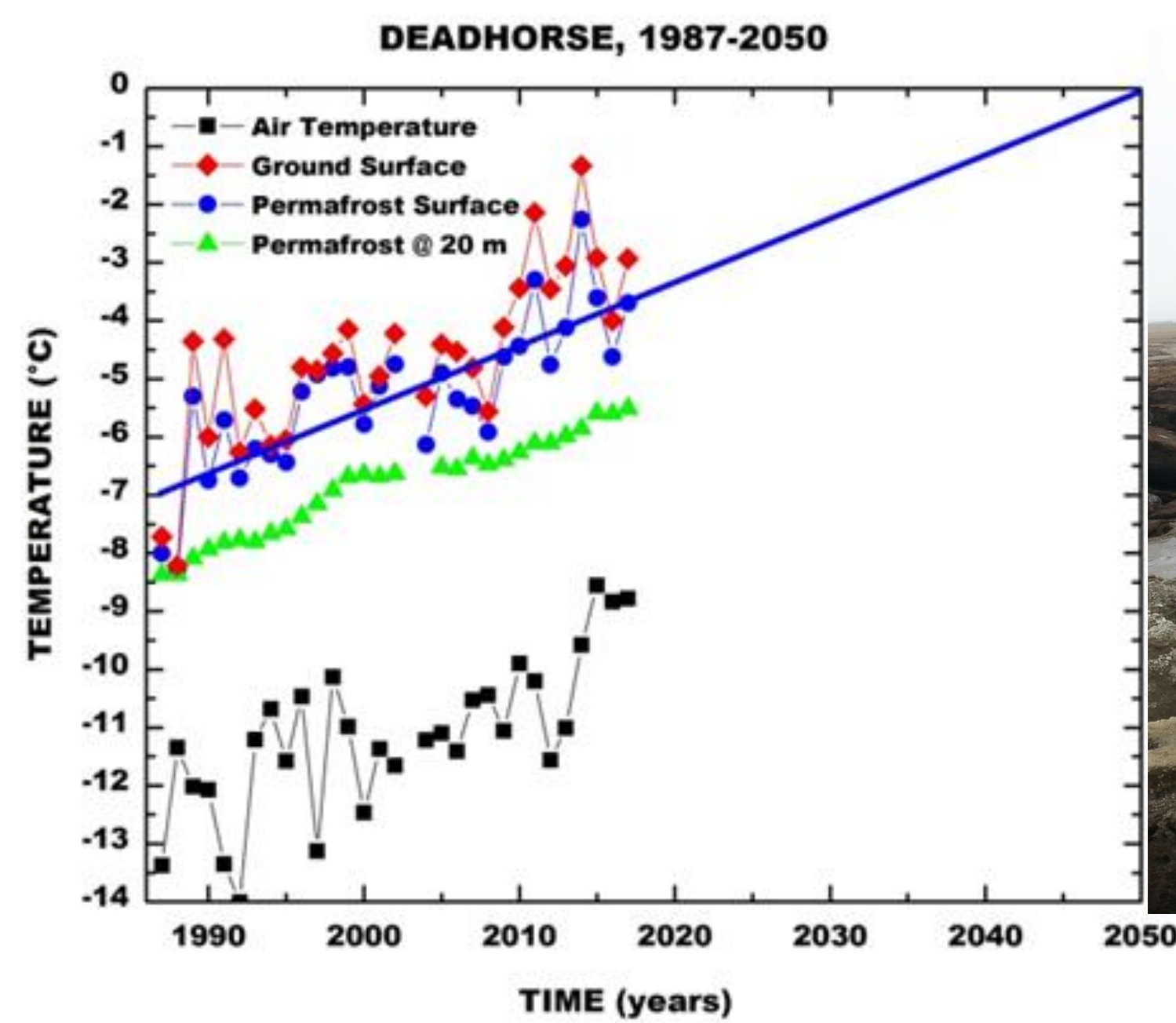
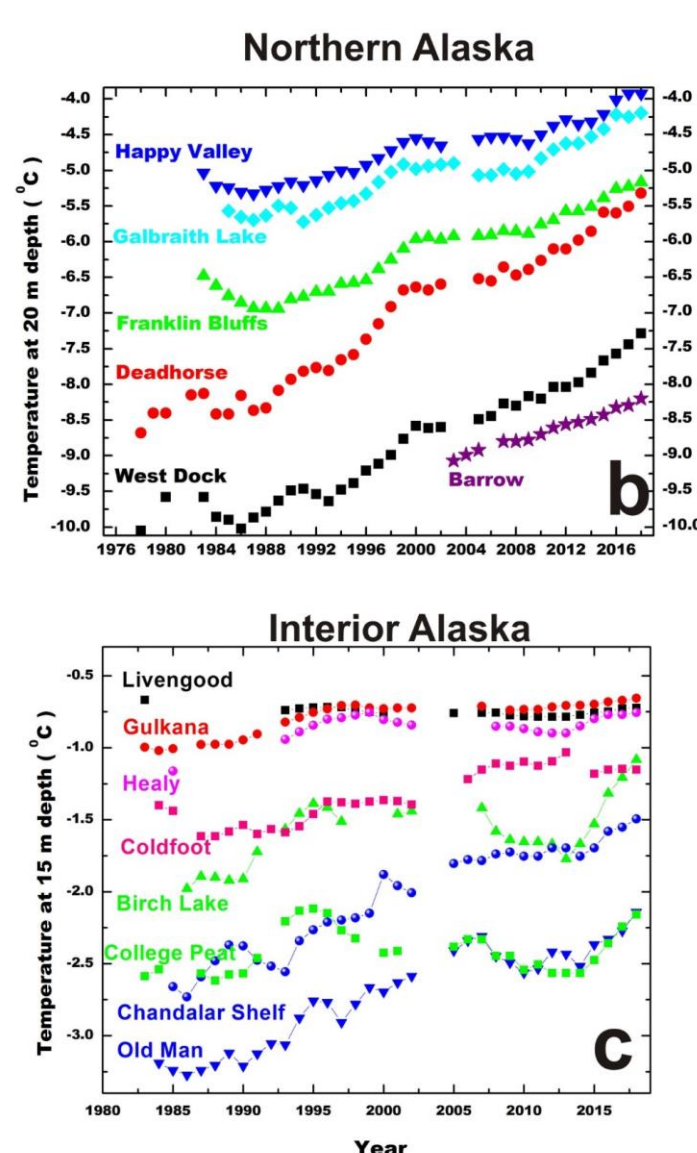
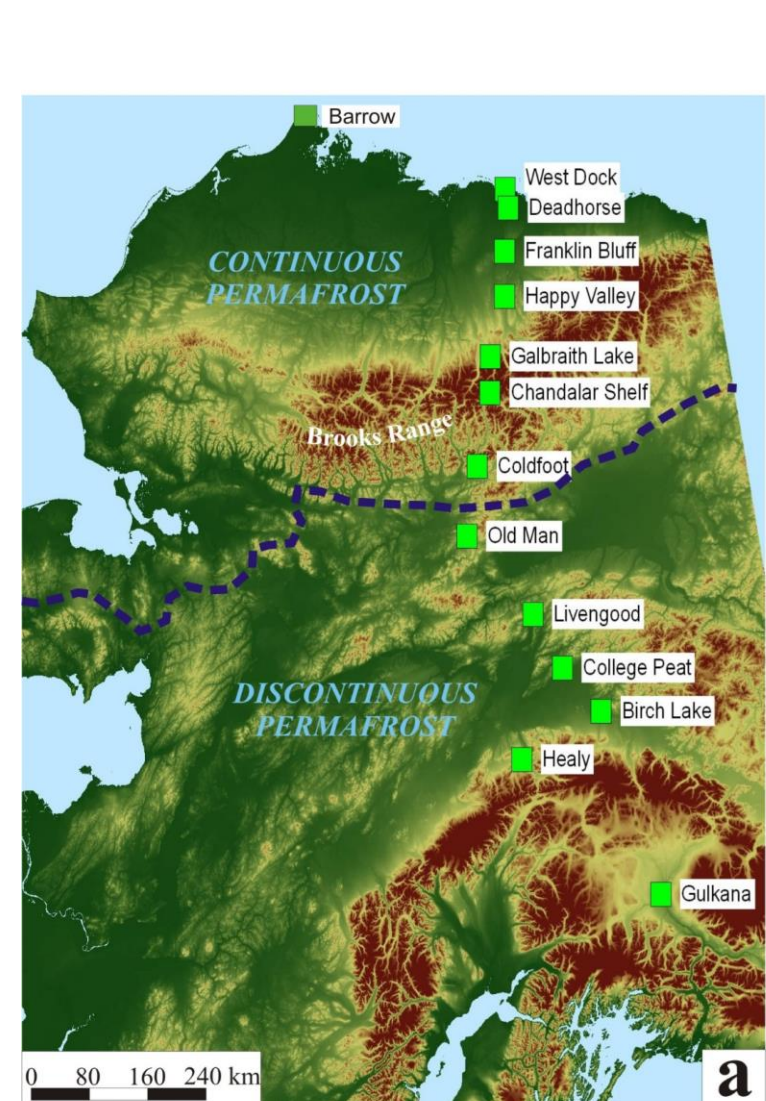


Permafrost on the North Slope of Alaska may start thawing much earlier than previously expected



High-resolution permafrost models are required to properly address the future changes in Arctic ecosystems and carbon cycle and to assess the vulnerability of the Arctic infrastructure. Results of our modeling show that under the RCP8.5 scenario by the end of the 21st century 2/3 of the permafrost area on the North Slope of Alaska may be developing taliks of various depths that will cause severe surface subsidence.

Vladimir Romanovsky, Dmitry Nicolsky, Alexander Kholodov, Sergey Marchenko, Louise Farquharson, Kirill Dolgikh, and William Cable
University of Alaska Fairbanks

