Supplementary material

Fire in Arctic Tundra of Alaska: past fire activity, future fire potential, and significance for land management and ecology

Nancy H. F. French⁴, Liza K. Jenkins⁴, Tatiana V. Loboda⁵, Michael Flannigan⁶, Randi Jandi⁷, Laura L. Bourgeau-Chavez⁴ and Matthew Whitley⁴

⁴Michigan Technological University, Michigan Tech Research Institute, 3600 Green Court, Suite 100, Ann Arbor, MI 48105, USA.

⁵University of Maryland, Dept of Geographical Sciences, 2181 LeFrak Hall, College Park, MD 20742, USA.

⁶University of Alberta, Department of Renewable Resources, Edmonton, AB T6G 2H1, Canada.

⁷Alaska Fire Science Consortium, University of Alaska, International Arctic Research Building, Fairbanks, AK 99775, USA.

⁸Corresponding author. Email: nhfrench@mtu.edu
**Fig. S1.** Monthly maximum historical and projected Fire Weather Index values (bold points) overlaying the daily FWI (faint points) for: a) the central NS Foothills, b) the western NS Foothills (Noatak river basin), c) Seward Peninsula, and d) SW Alaska. Black represents modelled historical FWI and colours represent modelled future FWI for the three IPCC RCPs evaluated. Compare to Fig. 4 in the main text, which presents the daily FWI over same period.
Fig. S2. Monthly mean historical and projected Fire Weather Index values (bold points) overlaying the daily FWI (faint points) for: a) the central NS Foothills, b) the western NS Foothills (Noatak river basin), c) Seward Peninsula, and d) SW Alaska. Black represents modelled historical FWI and colours represent modelled future FWI for the three IPCC RCPs evaluated. Compare to Fig. 4 in the main text, which presents the daily FWI over same period.
Fig. S3. Monthly maximum historical and projected Fire Weather Index values (bold points) overlaying the daily FWI (faint points) for each climate scenario and region.
Fig. S4. Monthly mean historical and projected Fire Weather Index values (bold points) overlaying the daily FWI (faint points) for each climate scenario and region.
Fig. S5. Decadal mean summer monthly historical and projected FWI for three future climate scenarios for: a) the central NS Foothills, b) the western NS Foothills (Noatak river basin), c) Seward Peninsula, and d) SW Alaska. Black represents modelled historical FWI and colours represent modelled future FWI for the three IPCC RCPs evaluated. Compare to Fig. 4 in the main text, which presents the daily FWI over same period.