

Polar bear (*Ursus maritimus*) Migration from Maternal Dens in Western Hudson Bay

Meredith Yee,¹ Jody Reimer,² Nicholas J. Lunn,³ Ron R. Togunov,¹ Nicholas W. Pilfold,^{1,4}
Alysa G. McCall^{1,5} and Andrew E. Derocher^{1,6}

APPENDIX 1

FIG. S1. Straightness index values for cluster 1 and cluster 2 behaviour over time for 10 adult female polar bears during migration from dens to the Hudson Bay coast. Cluster 1 (red) behaviour represents non-directed movement; cluster 2 (blue) represents directed, goal-oriented movement. The vertical line denotes the mid-point between the last date a bear was in cluster 1 and the first date it was assigned to cluster 2. **Page S2**

FIG. S2. Step lengths for cluster 1 and cluster 2 behaviour over time for 10 adult female polar bears during migration from dens to the Hudson Bay coast. Details as in Figure S1. **Page S3**

FIG. S3. Turning angles for cluster 1 and cluster 2 behaviour over time for 10 adult female polar bears during migration from dens to the Hudson Bay coast. Details as in Figure S1. **Page S4**

¹ Department of Biological Sciences, University of Alberta, Edmonton, Alberta T6G 2E9, Canada

² Mathematical and Statistical Sciences, University of Alberta, Edmonton, Alberta T6G 2G1, Canada

³ Wildlife Research Division, Science and Technology Branch, Environment and Climate Change Canada, University of Alberta, Edmonton, Alberta T6G 2E9, Canada

⁴ Applied Animal Ecology, Institute for Conservation Research, San Diego Zoo Global, San Diego, California 92112, USA

⁵ Polar Bears International, Winnipeg, Manitoba R2W 5K8, Canada

⁶ Corresponding author: derocher@ualberta.ca

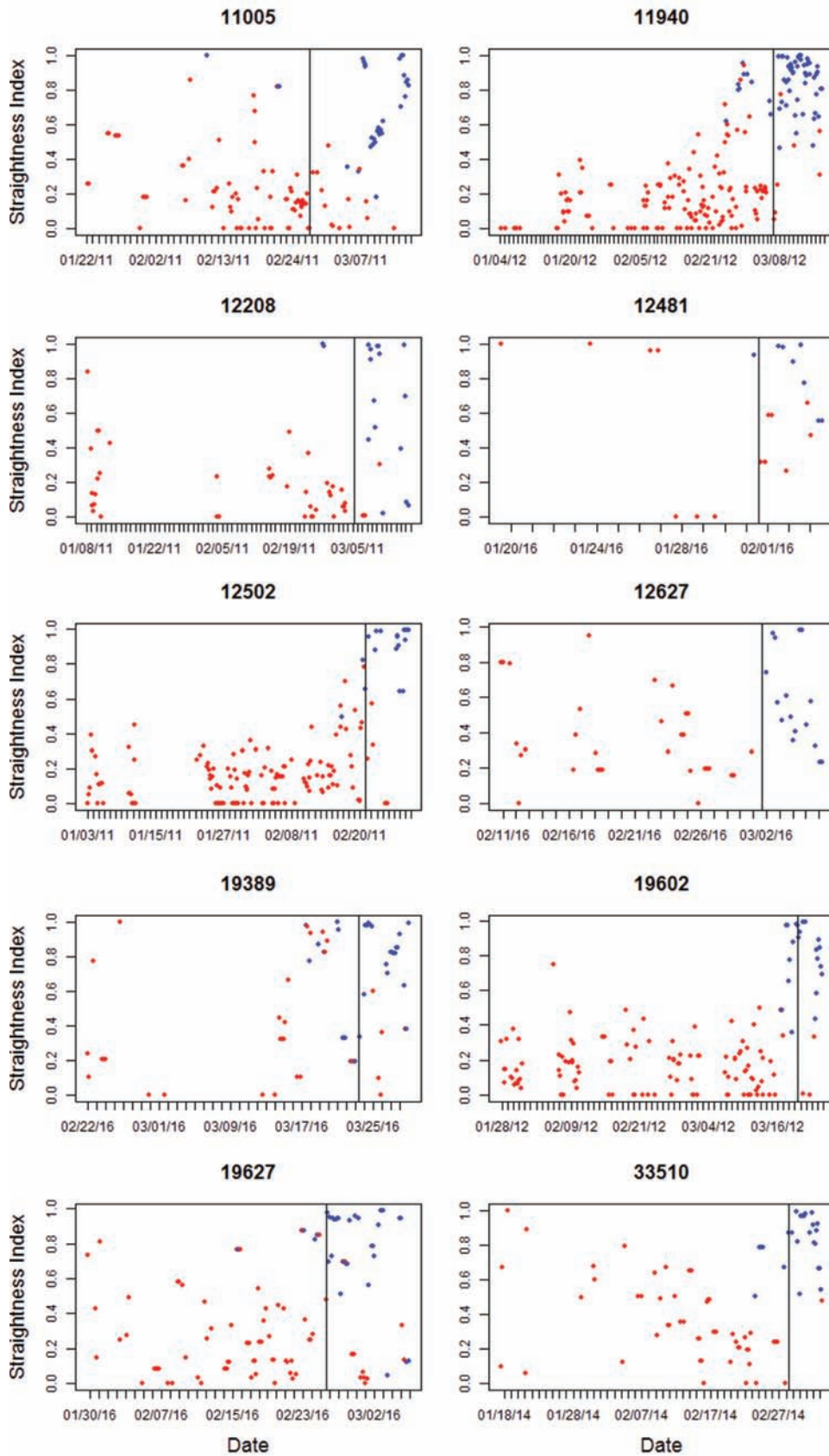


FIG. S1. Straightness index values for cluster 1 and cluster 2 behaviour over time for 10 adult female polar bears during migration from dens to the Hudson Bay coast. Cluster 1 (red) behaviour represents non-directed movement; cluster 2 (blue) represents directed, goal-oriented movement. The vertical line denotes the mid-point between the last date a bear was in cluster 1 and the first date it was assigned to cluster 2.

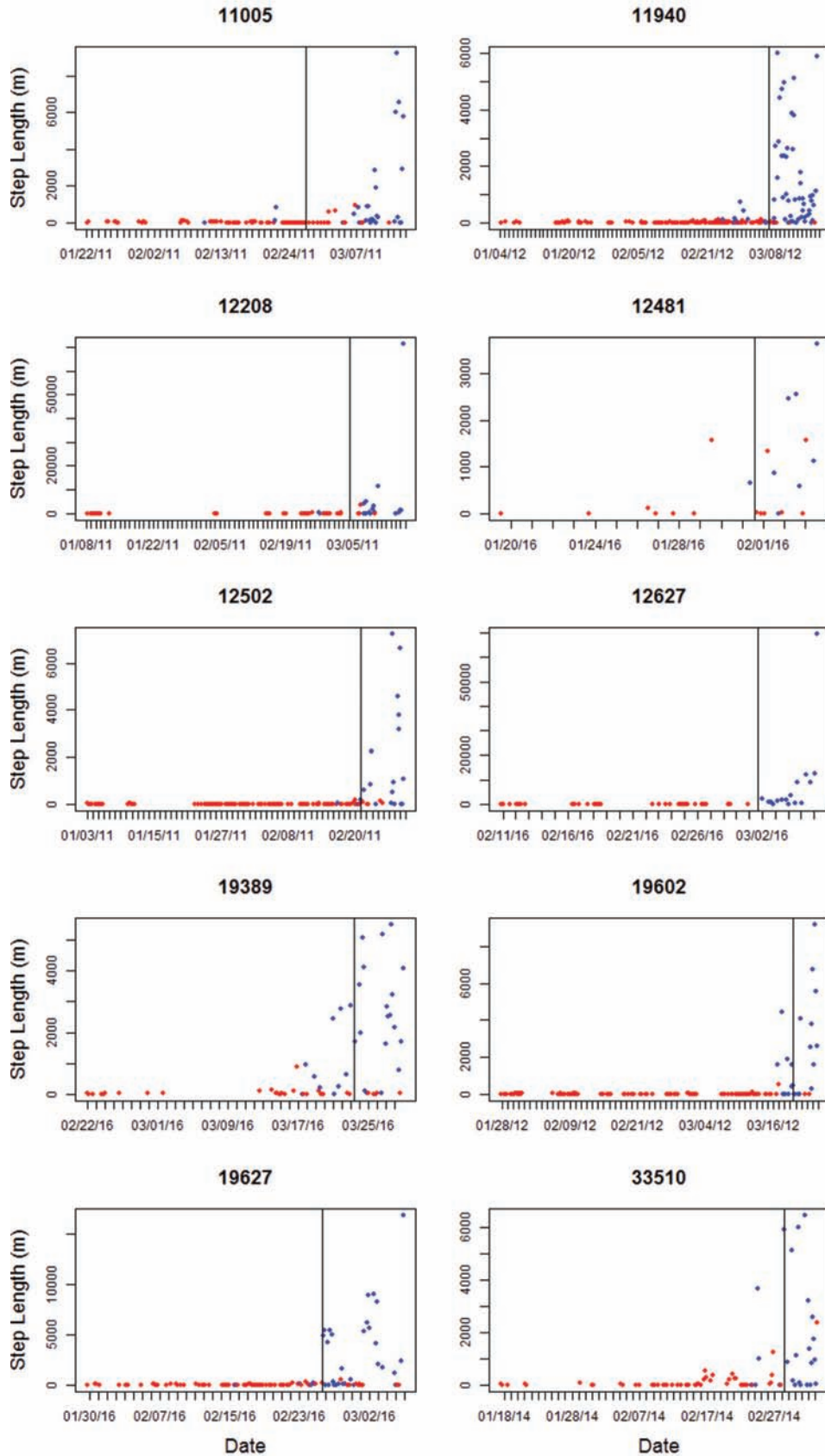


FIG. S2. Step lengths for cluster 1 and cluster 2 behaviour over time for 10 adult female polar bears during migration from dens to the Hudson Bay coast. Details as in Figure S1.

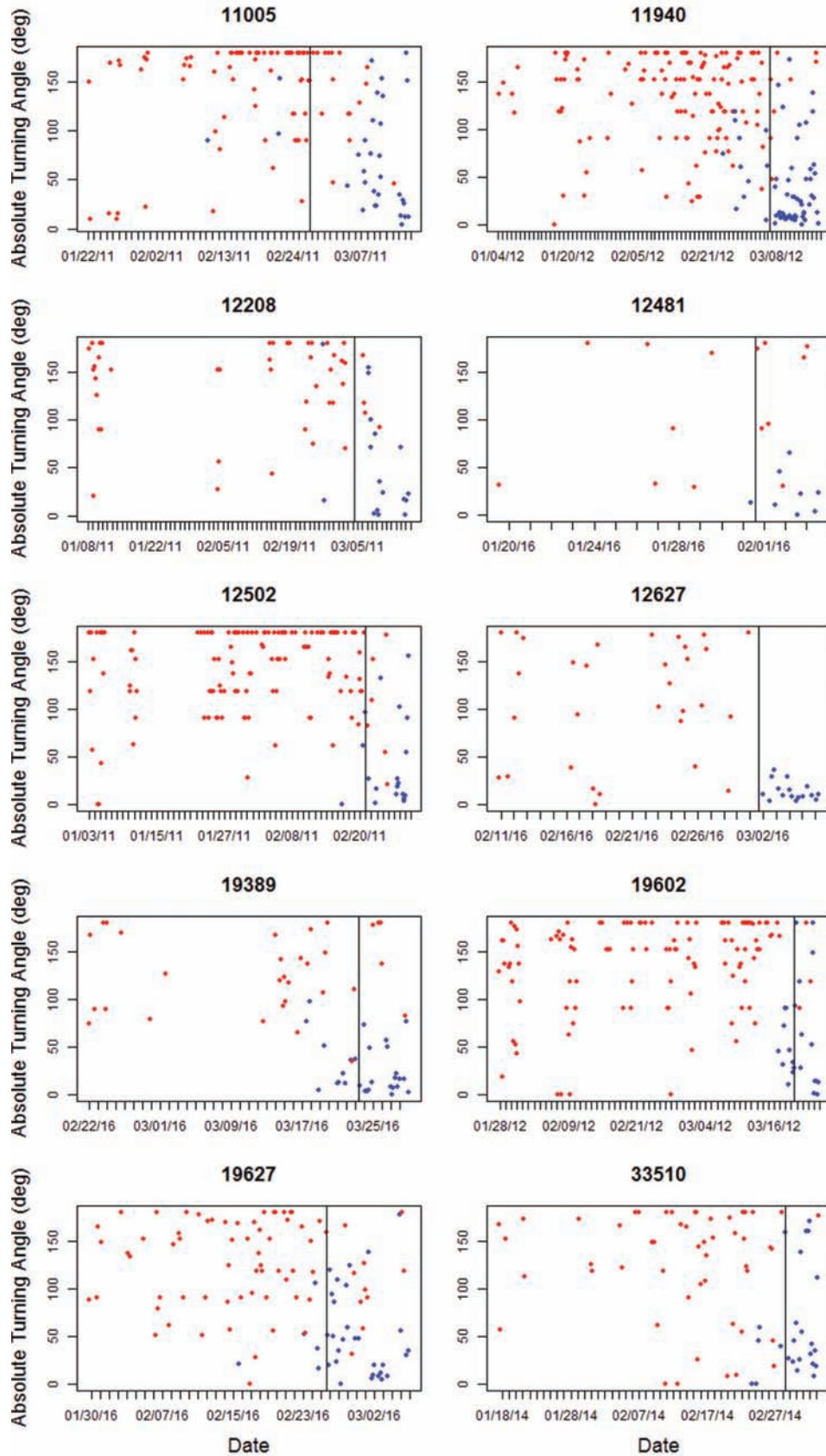


FIG. S3. Turning angles for cluster 1 and cluster 2 behaviour over time for 10 adult female polar bears during migration from dens to the Hudson Bay coast. Details as in Figure S1.