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Supplement of

The PRISM4 (mid-Piacenzian) paleoenvironmental reconstruction

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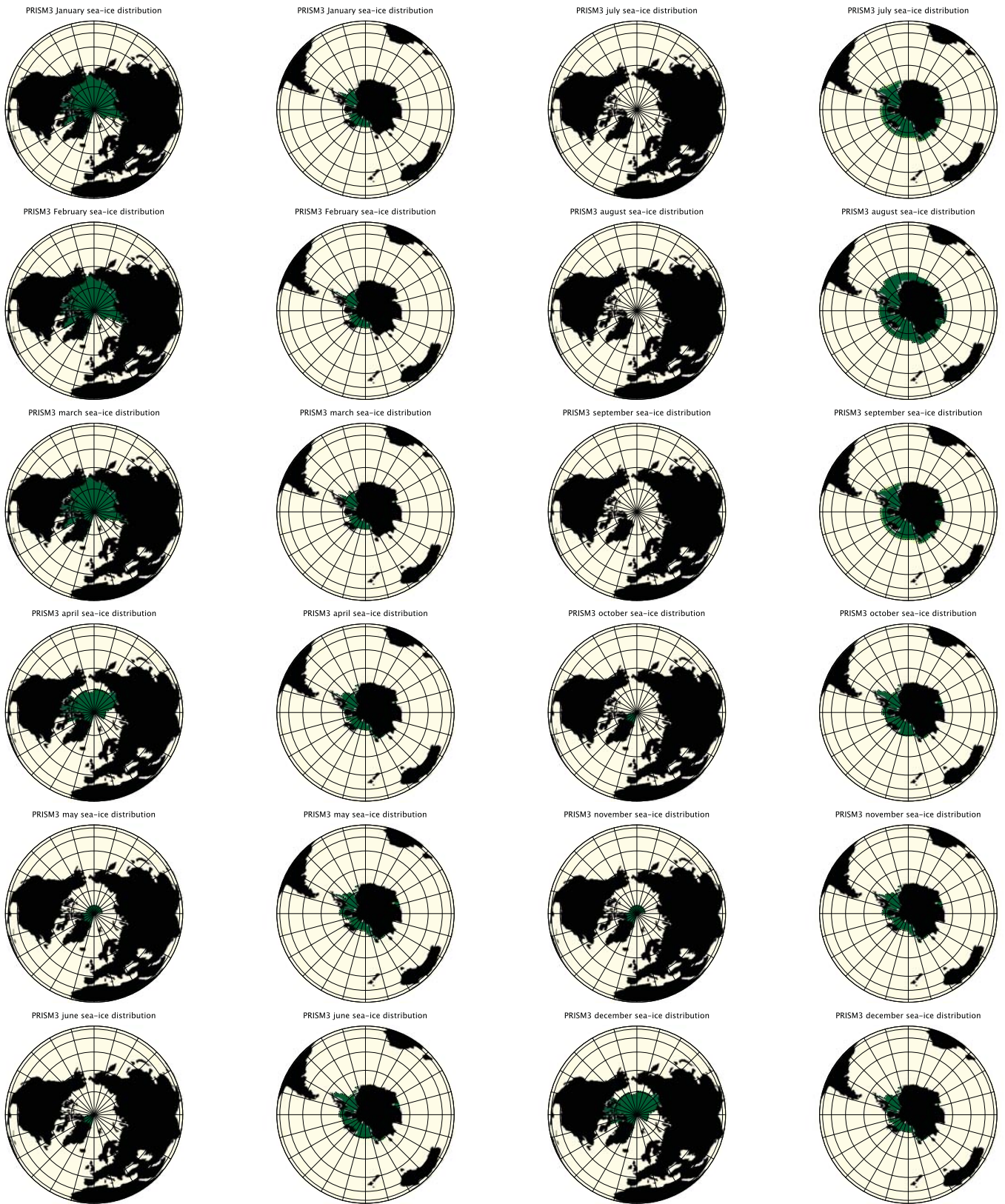


Figure S1. PRISM3 monthly sea-ice distribution.

ODP Site 982

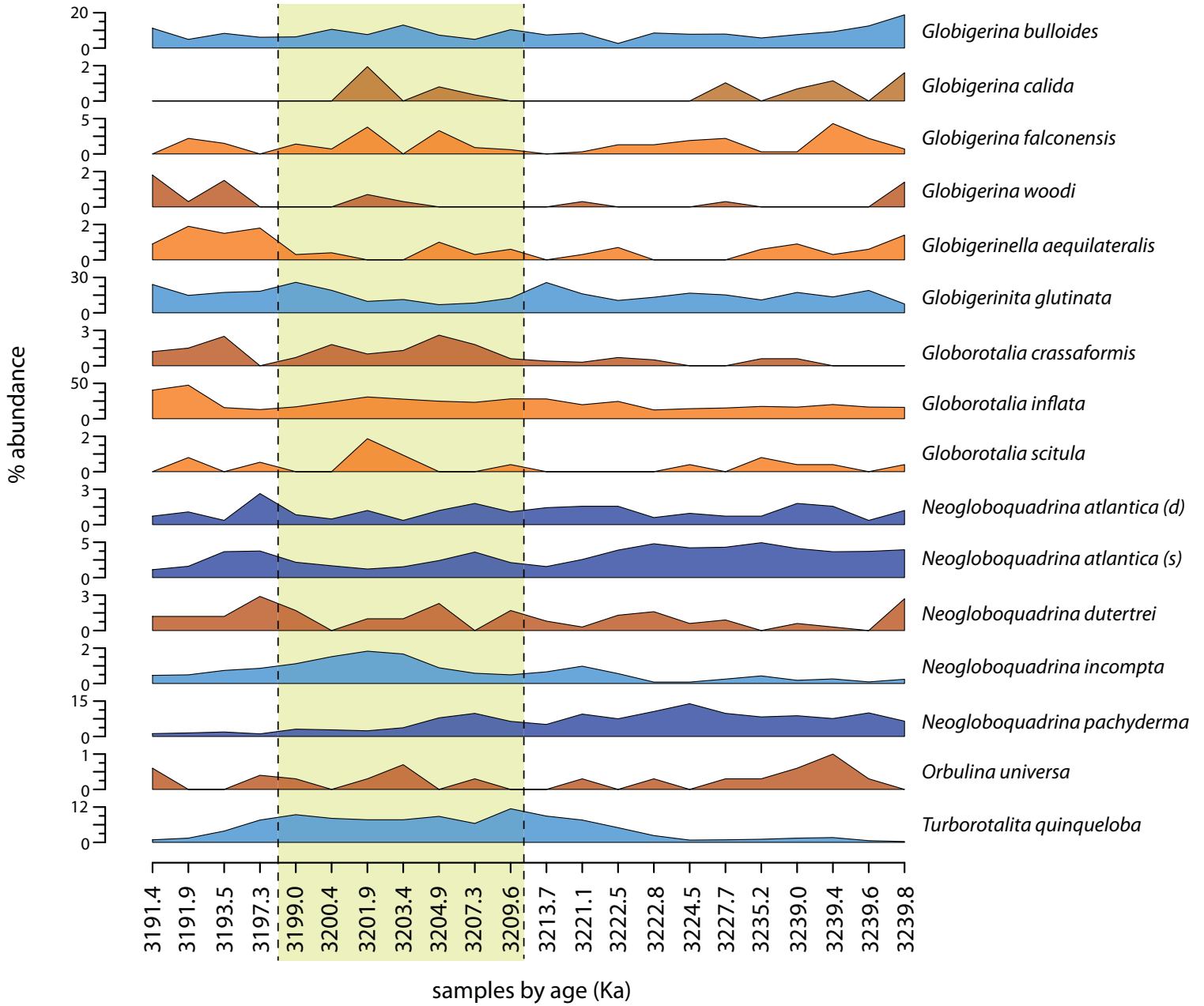


Figure S2. Planktonic foraminifer abundance data for part of North Atlantic ODP Site 982. Yellow vertical band indicates position of MIS KM5c. Color of abundance curves indicates taxon is a primary contributor to the Polar (dark blue), Subpolar (light blue), Subtropical (orange), or other (brown) assemblage.

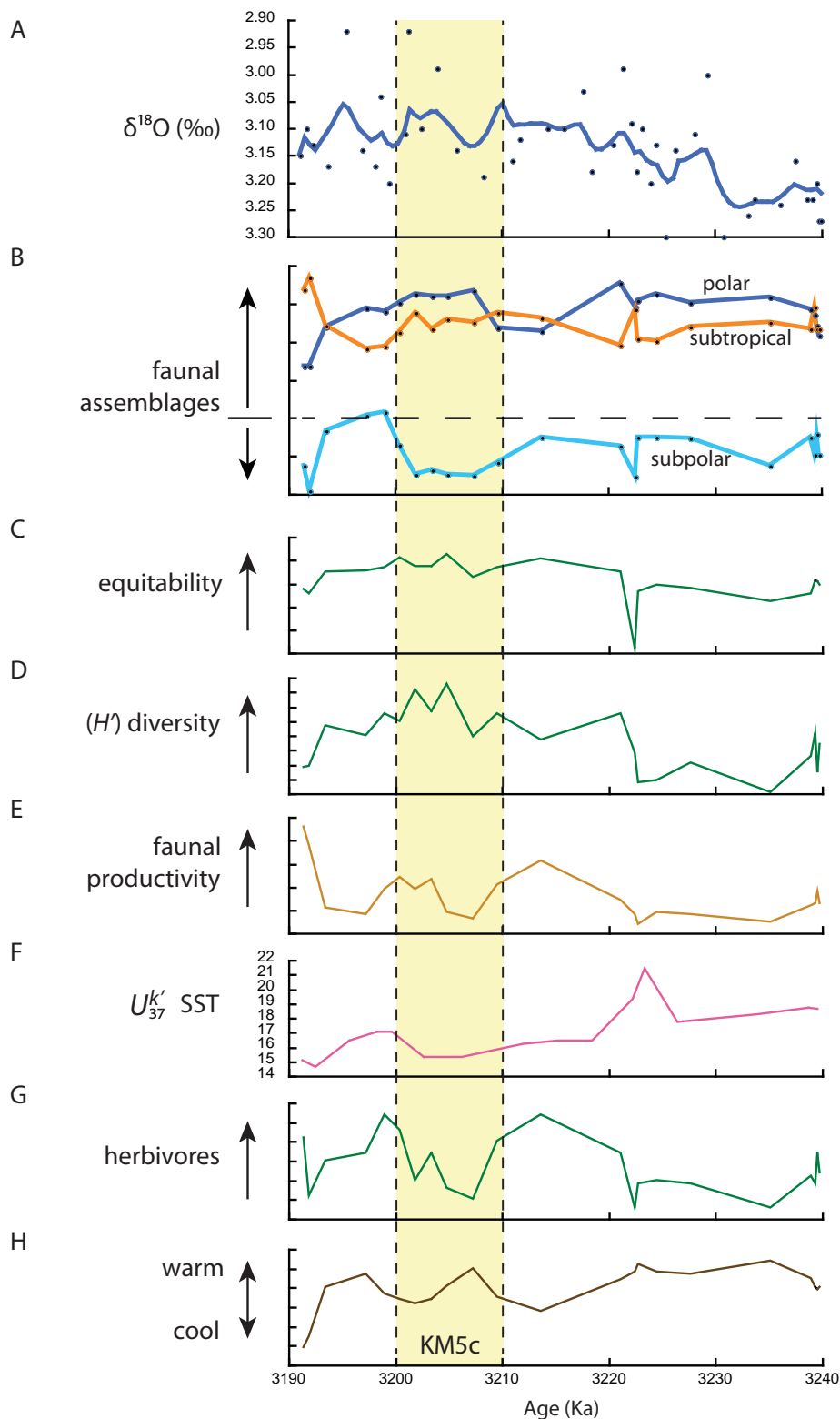


Figure S3. Example of palaeoenvironmental indicators for ODP Site 982. Vertical yellow band indicates position of MIS KM5c, chosen as a target for data-model comparison by PlioMIP2 (Haywood *et al.*, 2016). (A) Oxygen isotope data from Khelifi *et al.* (2012). (B) Relative contributions to the fauna from polar (blue), sub-polar (light blue) and sub-tropical (orange) assemblages. (C) Biodiversity using the Equitability Index. (D) Biodiversity using Shannon diversity (H'). (E) Faunal productivity index based upon relative abundance of select taxa. (F) Alkenone SST. (G) Relative abundance of herbivorous planktic foraminifers. (H) Relative change in taxa indicative of warmer water temperatures. An understanding of direction of change, variability and processes can be generated from data such as these.

Table S1. Color and textures for soil orders used in PRISM4 (Pound et al., 2014).

Soil	Color	Texture	Albedo
Gelisol	Intermediate	Medium	0.17
Histosol	Dark	Fine	0.11
Spodosol	Intermediate	Medium/Coarse	0.17
Oxisol	Intermediate	Fine/Medium	0.17
Vertisol	Dark	Fine	0.11
Aridisol	Light	Coarse	0.35
Ultisol	Intermediate	Fine/Medium	0.17
Mollisol	Dark	Medium	0.35
Alfisol	Intermediate	Medium	0.17

Supplement References

Khelifi, N., Sarnthein, M., and Naafs, B. D. A.: Technical note: Late Pliocene age control and composite depths at ODP Site 982, revisited, *Climate of the Past*, 8, 79-87, 10.5194/cp-8-79-2012, 2012.

Pound, M. J., Tindall, J., Pickering, S. J., Haywood, A. M., Dowsett, H. J., and Salzmann, U.: Late Pliocene lakes and soils: a global data set for the analysis of climate feedbacks in a warmer world, *Climate of the Past*, 10, 167-180, 10.5194/cp-10-167-2014, 2014.

Haywood, A. M., Dowsett, H. J., Dolan, A. M., Rowley, D., Abe-Ouchi, A., Otto-Bliesner, B., Chandler, M. A., Hunter, S. J., Lunt, D. J., Pound, M., and Salzmann, U.: The Pliocene Model Intercomparison Project (PlioMIP) Phase 2: scientific objectives and experimental design, *Climate of the Past*, 12, 663-675, 10.5194/cp-12-663-2016, 2016.