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Are the amplitude, duration and timing of "Arctic interglacials" out of phase with those of lower latitudes ?

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Recent studies based on extinction ages of 230Th ($\sim$ 300 ka) and 231Pa ($\sim$ 150 ka) excesses in Arctic Ridge sediments point to much lower sedimentation rates than currently proposed in literature and led us to revisit the chronostratigraphy of Quaternary marine sequences from the central Arctic Ocean (e.g., Hillaire-Marcel et al., G3, 2017; Not & Hillaire-Marcel, QSR 2010). These studies indicate scavenging processes of Th and Pa isotopes decoupled from sedimentary fluxes and water column depths, specific to the Arctic Ocean, which likely involve the sinking of brines and related compounds during episodes of active sea-ice production over submerged shelves. As a consequence, intervals with high accumulation rates of 230Th- and 231Pa-excesses (230Thxs, 231Paxs) match mostly terminations and early interglacials, as well as some interstadials, whereas important sedimentary gaps mark full glacial intervals. Sequences raised from the Mendeleev and Lomonosov ridges record much shorter interval with active sea-ice formation during Termination (T) 2-early Marine Isotopic Stage (MIS) 5e than during T1-MIS 1 and more particularly T3-MIS 7 (constrained here between the extinction age of 231Paxs and that of 230Thxs). The inferred initial 230Thxs were much higher during the T3-MIS transition than during T2-MIS 2, thus suggesting more active sea-ice formation with intense brine production and sinking during the corresponding deglacial interval. This pattern seems opposed to global records illustrating warmer conditions during MIS 5e than during MIS 7. We hypothesize here that the more open conditions of T3-MIS 7 were linked to higher insolation at high northern latitudes during this transition and throughout the $\sim$ 220-180 ka interval, than during the T2-MIS 5 period, led to sustained warming of North Atlantic Waters in the Northern North Atlantic, prior to their penetration into the Arctic Ocean. This, in turn could have been at least partly responsible for higher rates of sea-ice melting in summer and re-growth during winter resulting in the observed enhanced sedimentary fluxes of 230Thxs.