Supplemental Figure Captions

- **Figure S1:** Down depth (cm) plots of (a) sediment facies, (b) bulk carbonate as $CaCO_3$ (%), (c) coarse fraction (% >150 μ m), and (d) $\delta^{18}O$ in *N. pachyderma* (s) from core Hu97048-07 (Barber, 2001). This core was collected at 938 m water depth from the SE Baffin Slope. ¹⁴C-AMS dates (Table 2) are used to identify H1 and H2.
- **Figure S2:** Down depth (cm) plots of (a) bulk carbonate as CaCO₃ (%), (b) coarse fraction (% >150 μm), and (c) δ^{18} O in *N. pachyderma* (s) from core Hu91045-94 (Hillaire-Marcel et al., 1994). This core was collected at 3448 m water depth from the Orphan Knoll of the southern Labrador Sea. ¹⁴C-AMS dates (Table 2) are used to identify of H1 and H2.
- Figure S3: Down depth (cm) plots of (a) bulk carbonate as CaCO₃ (%), (b) coarse fraction (% >150 μm), and (c) δ¹⁸O in *N. pachyderma* (s) from core Hu90013-26 (Khodabakhsh, 1998; Rashid and Piper, 2007). This core was collected at 2895 m water depth from the NW Labrador Basin. ¹⁴C-AMS dates (Table 2) are used for the identification of H1 and H2.

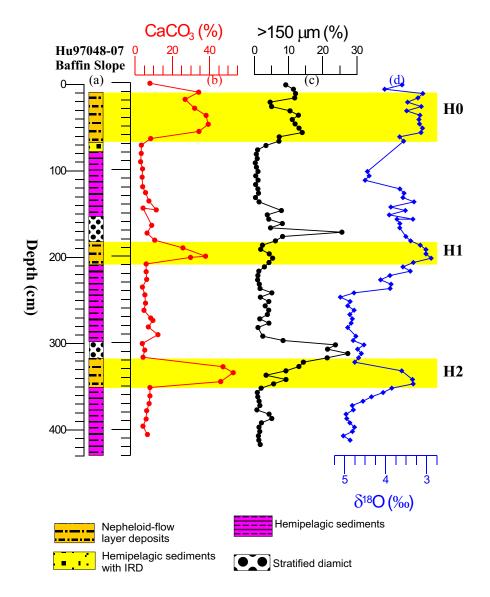


Figure S1 Rashid, Saint-Ange, Barber, Smith and Devalia (2012)

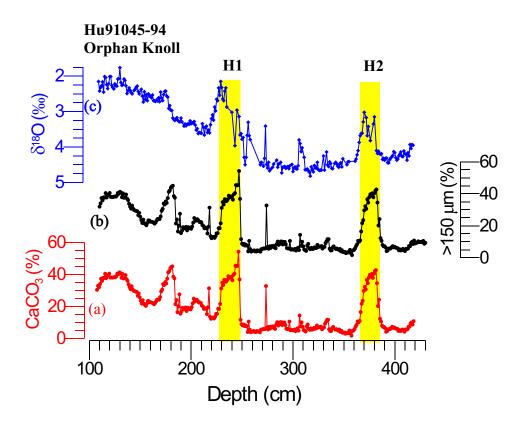


Figure S2 Rashid, Saint-Ange, Barber, Smith and Devalia (2012)

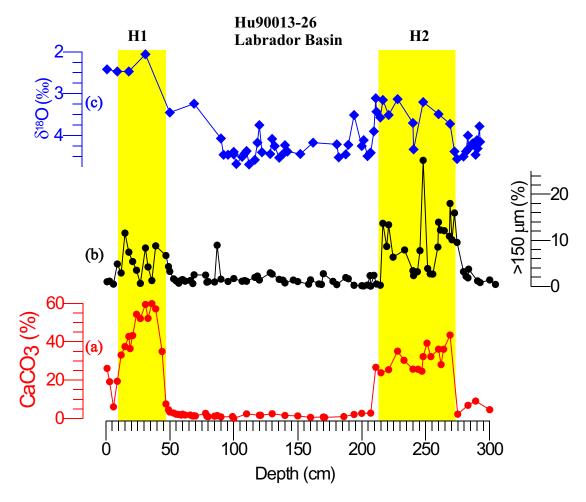


Figure \$3 Rashid, Saint-Ange, Barber, Smith and Devalia (2012)