**Fig S1:** TS-diagram of water masses recorded each month at Karlskronadjupet in Isfjorden, split into panels according to season: (a) summer 2015, (b) autumn 2015, (c) winter 2015-2016, (d) spring 2016 and (e) summer 2016. *External water masses* (Grey shade): AtW = Atlantic water, ArW= Arctic water; *Local water masses* (135° lines): SW = surface water, LW = Local water, WCW=winter cooled water; *mixed water masses* (45° lines) TAW = Transformed Atlantic water, IW = intermediate water. Dashed grey line indicates freezing point. Solid grey lines show isopycnals at intervals of 1. Water mass definitions based on Skogseth et al. (2020)

**Fig. S2:** Weighted mean depth for (a) Adult females, (b) CV and (c) CIV of *C. finmarchicus* (red) and *C. glacialis* (blue) at Karlskronadjupet, Isfjorden from June 2015 to August 2016.

**Fig. S3:** Seasonal changes in vertical distribution of copepodite stages and adults of *C. finmarchicus* in Isfjorden between June 2015 and August 2016. Note differences in scale of x-axis

**Fig. S4:** Seasonal changes in vertical distribution of copepodite stages and adults of *C. glacialis* in Isfjorden between June 2015 and August 2016. Note differences in scale of x-axis