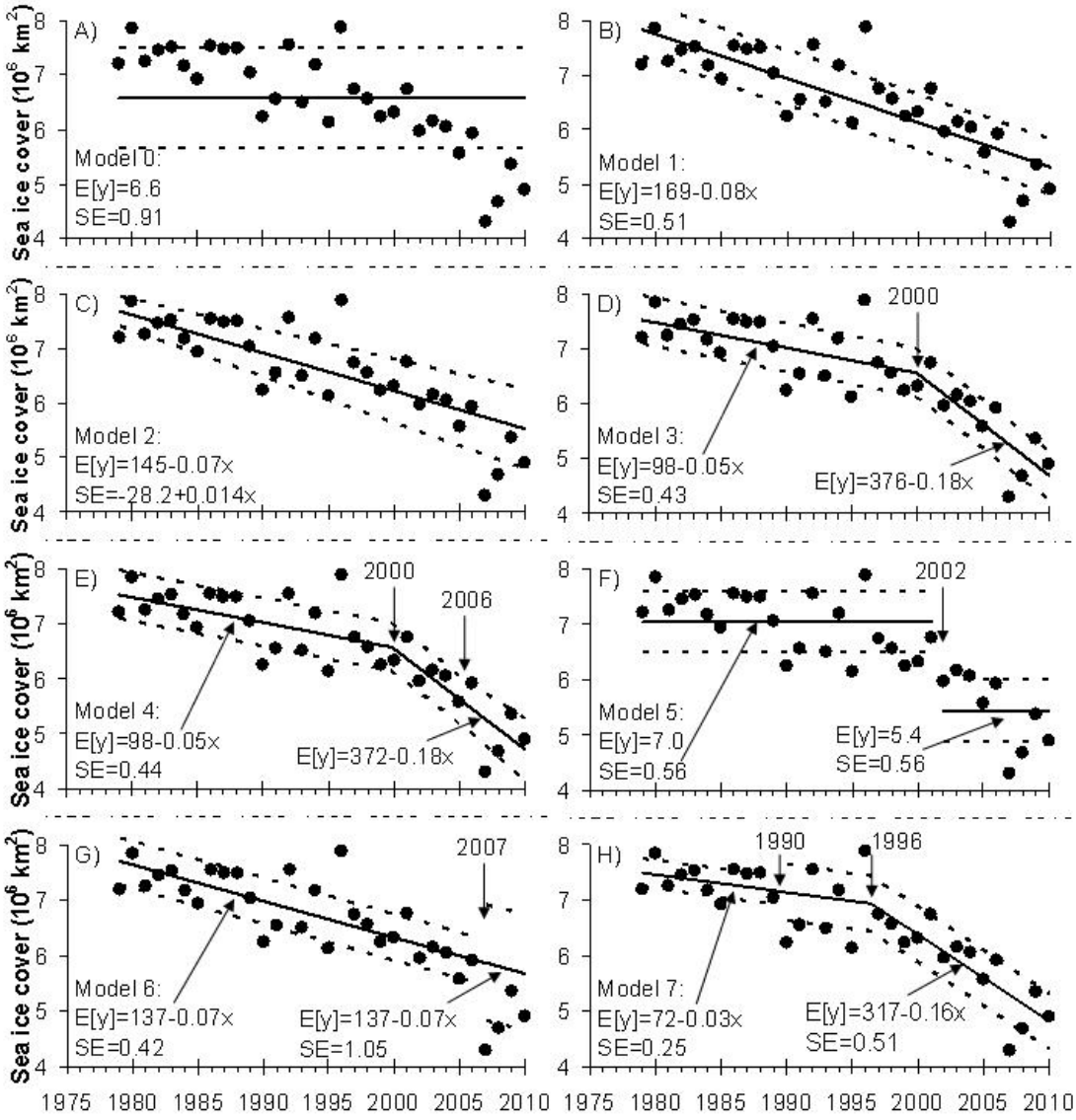

Fig 2.1: Time series models describing the extent of Arctic sea ice (1979-2010). Solid line shows the estimated model and dashed lines the standard error around the mean model.

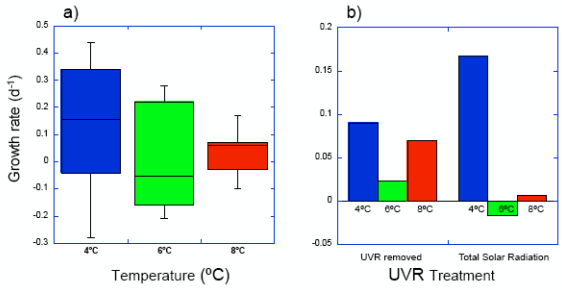

Fig 3.1. Example: P. pouchetii response in growth rate to temperature and UVR treatments observed. a) Maximum, minimum and median values of growth rate observed, and b) Column plot showing data of growth rates measured in the treatments under full solar spectra and when UVR was removed for each temperature case. Blue, green and red columns correspond to the lowest, intermediate and highest temperatures tested, respectively.

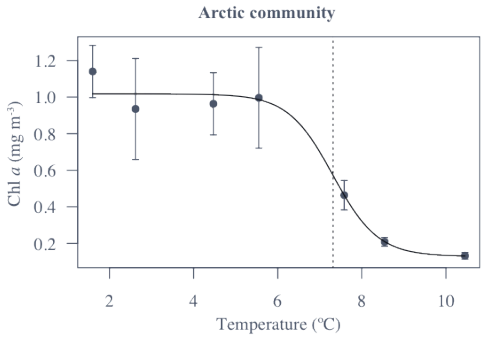

Fig 3.2 Response of phytoplankton to temperature

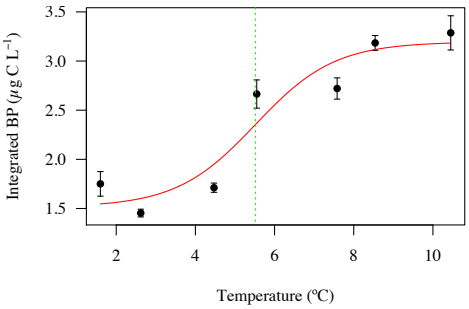

Fig 3.3 Response of bacterial production to increasing temperatures

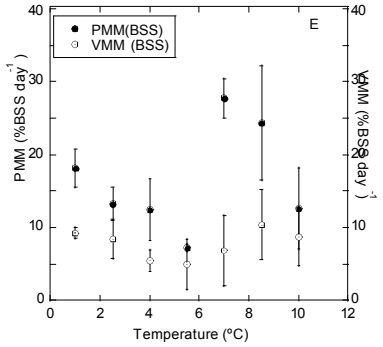

Fig 3.4 Protistan mediated bacterial mortality (PMM, full circles) and Viral mediated mortality (VMM, open circles) in the different temperature treatments

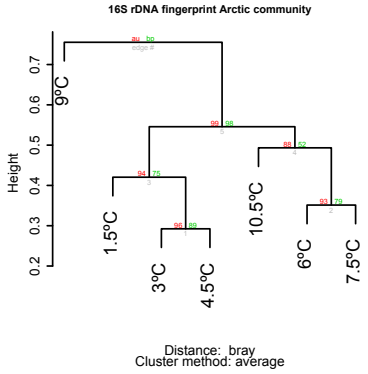

Fig 3.5. Cluster analysis of the microbial communities grown at different temperatures

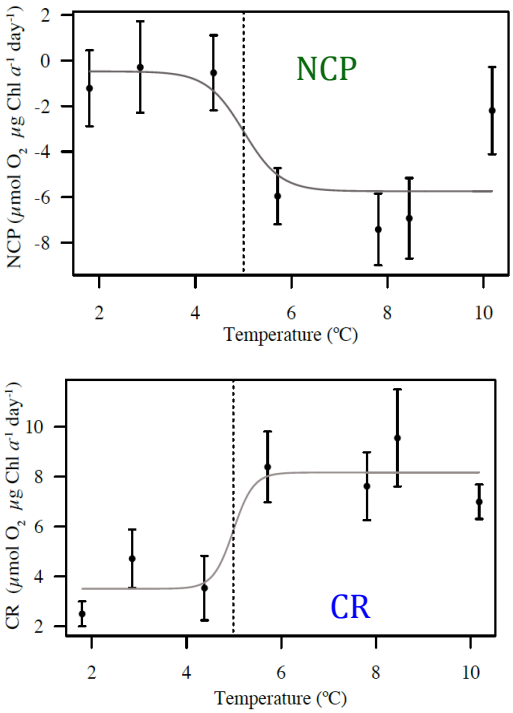

Fig 3.6 Temperature dependent response of Net Community Production and Community Respiration

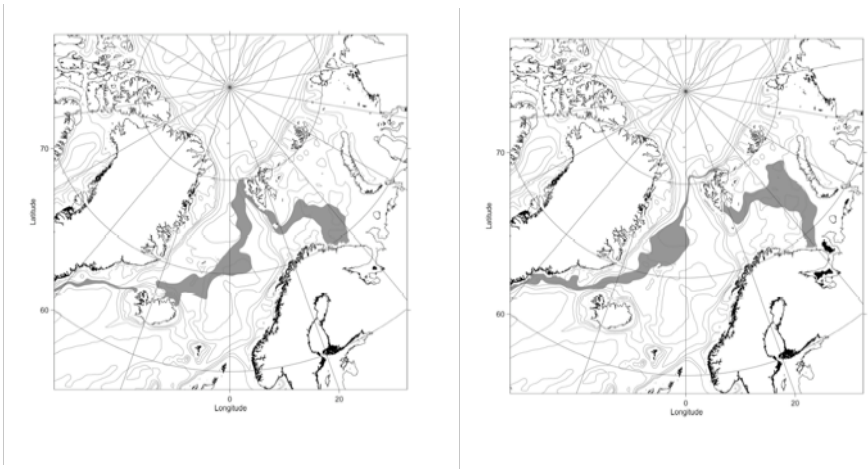

Fig 3.7 Actual (2001) and future (2050) location of the area subjected to temperatures in the 4-6°C range in June. Model results following the IPCC A1B scenario.

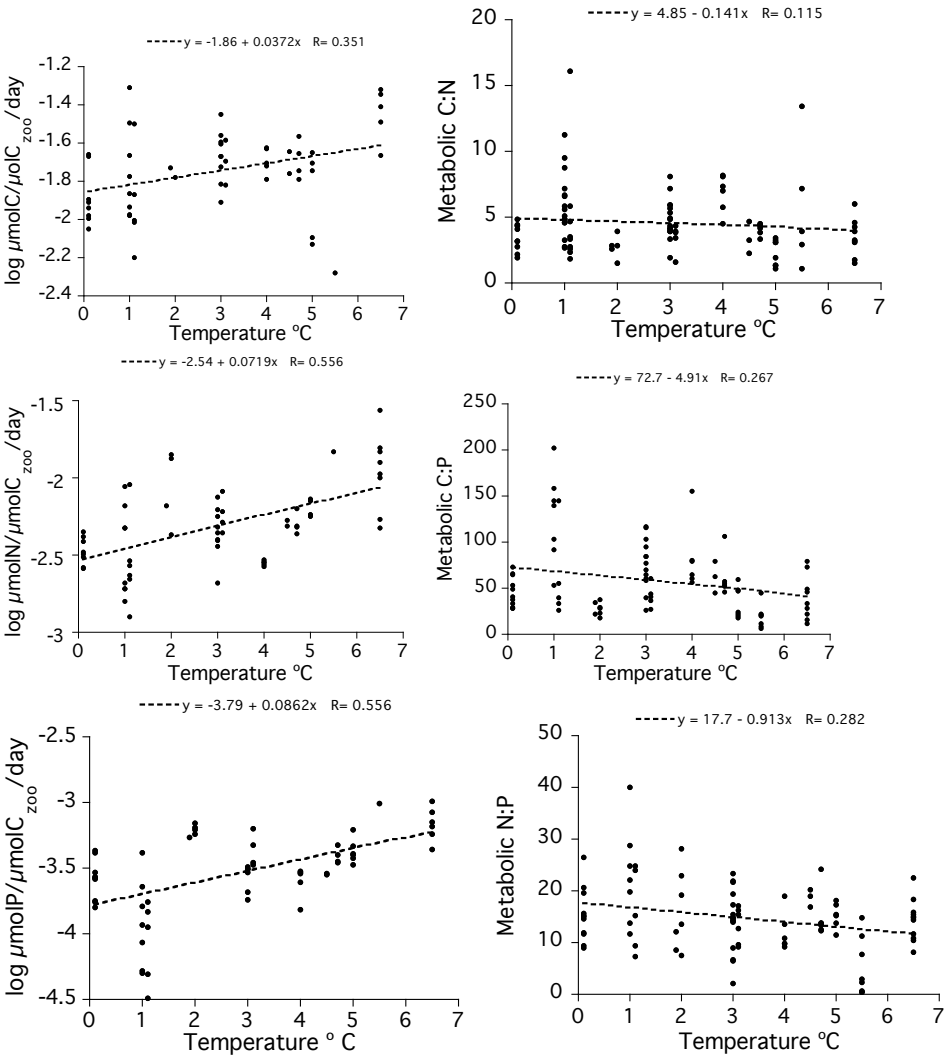

Fig 3.8. Relationships between temperature and metabolic rates (left), and relationships between *in situ* temperature and metabolic quotients (C:N, C:P, N:P) (right). All for mixed mesozooplankton communities

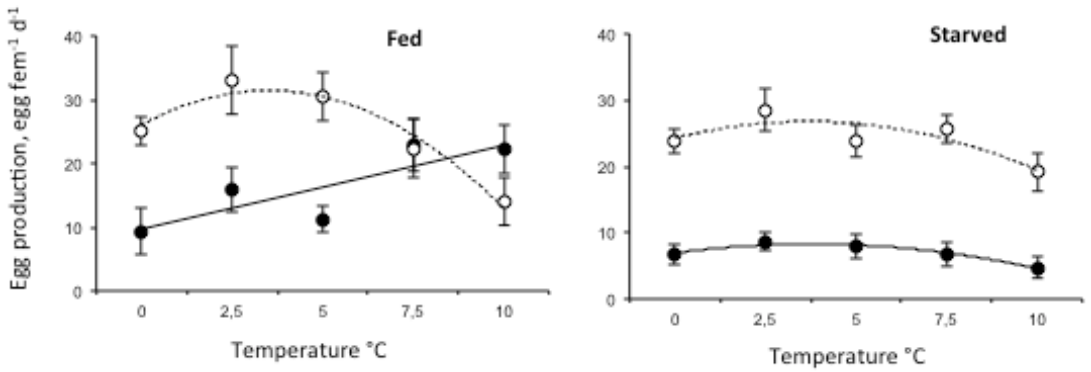

Fig. 3.9. Egg production rates for *Calanus finmarchicus* (filled black circles) and *C. glacialis* (open circles) in April-May, under fed and starved conditions.

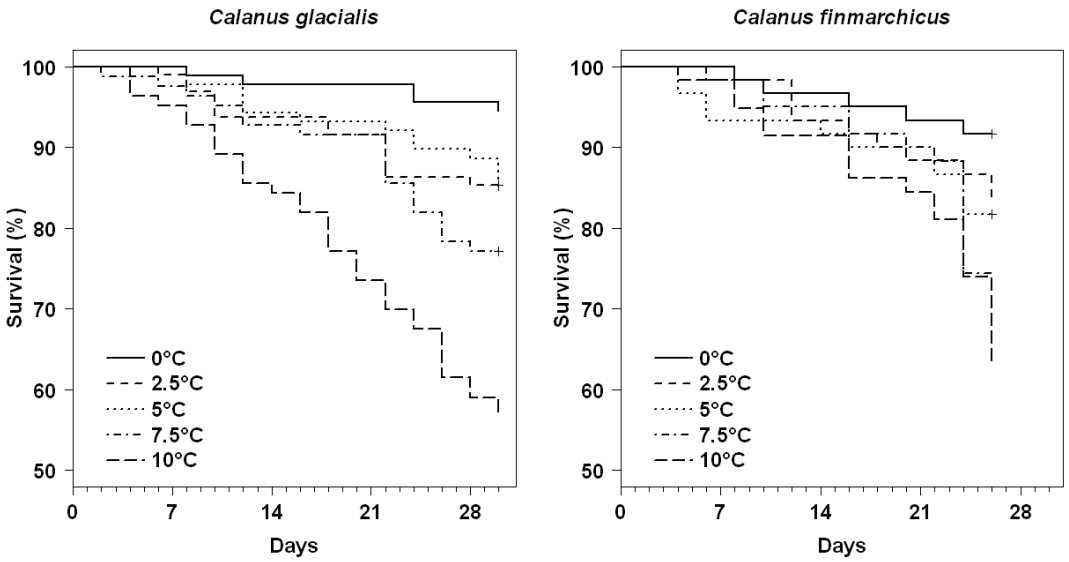

Fig. 3.10. Kaplan-Meier survivorship curves for *Calanus glacialis* and *C. finmarchicus* at five experimental temperatures

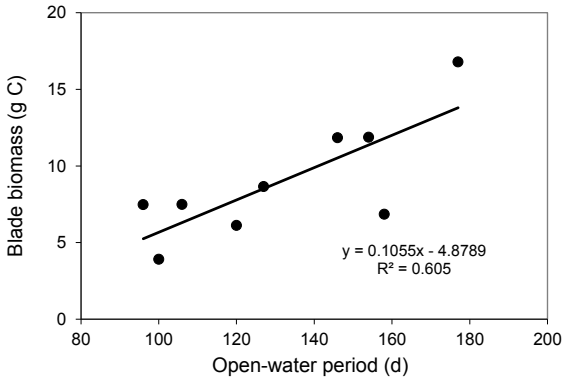

Fig 3.11. Blade size, measured as biomass, representing the annual production of *S. latissima* in Young Sound, northeastern Greenland, as a function of the duration of the open water period (of the preceding year and the current year until the day of sampling). Data represent the years 1999 and 2003-20011 and are fitted by linear regression.

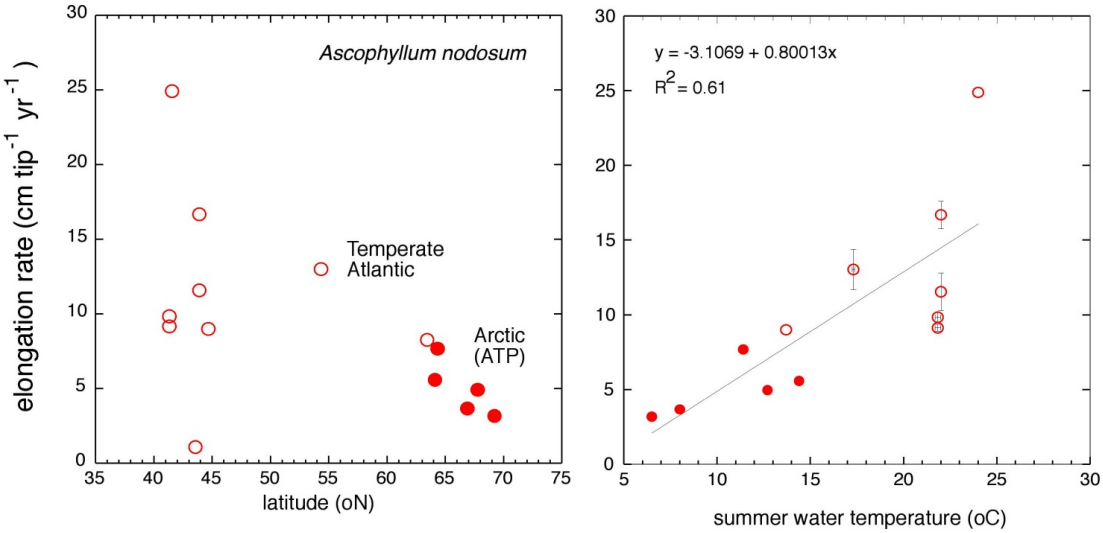

Fig 3.12. Annual tip growth as a function of latitude (left) and sea temperature (right).

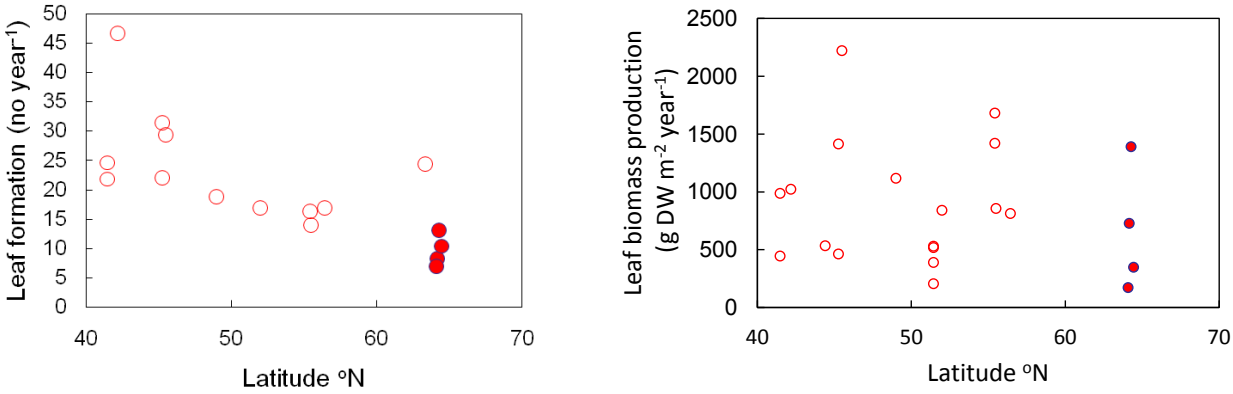

Fig. 3.13 Annual tip growth and leaf biomass production as functions of latitude.