



Figure S1. Planar transmittance (PAR) profiles at selected wavelengths. Profiles were measured in the water column beneath landfast sea ice with (a) thick snow cover ($h_S = 29$ cm) on 16 May 2015, (b) a thin wet snow cover ($h_S = 11$ cm) on 16 June 2016, (c) bare surface on 27 June 2016 and (d) ponded surface ($h_{MP} = 4$ cm) on 4 July 2016. Note the different transmittance scales.