Supplementary Figure 1) The SSA reconstruction of the 8-year mode in the time series of variability in sea ice conditions near the Kangerdlugssuaq notch 1979-2012.
Supplementary Figure 2) Climatological winter mean sea-level pressure (contours-mb), 10m wind (vectors-m/s) and 2 m air temperature (shading-°C) from the ERA-I for the period 1979-2012. The thick blue curve represents the climatological winter mean 50% sea ice contour. The domain shown in Figure 1 is indicated.
Supplementary Figure 3) The winter (JFM) mean sea ice concentration (%) along the southeast coast of Greenland from the AMSR-E during the period 2003-2011. The thick black contour is the 400m isobath.
Supplementary Figure 4) The difference in the composites of the sea-level pressure (contours-mb), 10m wind (vectors-m/s) and 2 m air temperature (shading -℃) during high and low periods in the SSA inter-annual reconstruction of winter mean sea ice concentration in the vicinity of the KG notch. The thick red curve represents the winter mean 50% sea ice contour. All fields are from the ERA-I.