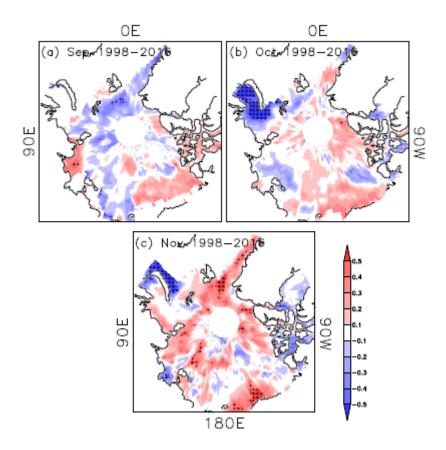


**Figure S1**. The CC between  $SC_{ES}$  and September (a), October (b) and November (c) Arctic sea ice from 1979 to 1997 after detrending. The black dots indicate CC exceeding the 95% confidence level (t test).



**Figure S2.** The CC between  $SC_{ES}$  and September (a), October (b) and November (c) Arctic sea ice from 1998 to 2016 after detrending. The black dots indicate CC exceeding the 95% confidence level (t test).