Table 1: The different numerical experiments (first column) and the imposed oceanic boundary conditions, in SST (second column), in sea ice (third column). SST_{clim} refers to the climatological SST, NA_{trend} refers to the 40-year trend in SST in the extratropical North Atlantic. $SICE_{clim}$ refers to the climatological sea-ice extent in the North Atlantic and Arctic Ocean. E_{trend} and W_{trend} refer to the 40-year trend in sea-ice extent, east and west of Greenland, respectively. The fourth column shows the maximum response in 500 hPa geopotential height (in m) in each case.

Experiment name	Monthly SST	Monthly sea-ice extent	Max 500 hPa (m) geopotential response
CTRL	SST_{clim}	$SICE_{clim}$	0
SST+2.5	$SST_{clim} + 2.5 \times NA_{trend}$	$SICE_{clim}$	-21
SST+5	$SST_{clim} + 5 \times NA_{trend}$	$SICE_{clim}$	-30
SST−2.5	$SST_{clim} - 2.5 \times NA_{trend}$	$SICE_{clim}$	42
SST−5	$SST_{clim} - 5 \times NA_{trend}$	$SICE_{clim}$	82
ICE1	SST_{clim}	$SICE_{clim} + W_{trend} + E_{trend}$	52
ICE2	SST_{clim}	$SICE_{clim} + 2 \times (W_{trend} + E_{trend})$	91
ICELAB	SST_{clim}	$SICE_{clim} + 2 \times W_{trend}$	-39
ICEGRN	SST_{clim}	$SICE_{clim} + 2 \times E_{trend}$	106