

## Supporting Information for

### Changes in global teleconnection patterns under global warming and stratospheric aerosol intervention scenarios

Abolfazl Rezaei<sup>1,2</sup>, Khalil Karami<sup>3</sup>, Simone Tilmes<sup>4</sup>, & John C. Moore<sup>5, 6, 7</sup>

<sup>1</sup> Department of Earth Sciences, Institute for Advanced Studies in Basic Sciences, Zanjan 45137–66731, Iran. [arezaei@iasbs.ac.ir](mailto:arezaei@iasbs.ac.ir); [abolfazlrezaei64@gmail.com](mailto:abolfazlrezaei64@gmail.com).

<sup>2</sup> Center for Research in Climate Change and Global Warming (CRCC), Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan 45137–66731, Iran.

<sup>3</sup> Institut für Meteorologie, Stephanstraße 3, 04103 Leipzig, Germany. [khalil.karami@uni-leipzig.de](mailto:khalil.karami@uni-leipzig.de)

<sup>4</sup> National Center for Atmospheric Research, Boulder, CO, USA. [tilmes@ucar.edu](mailto:tilmes@ucar.edu)

<sup>5</sup> College of Global Change and Earth System Science, Beijing Normal University, Beijing, 100875, China. [john.moore.bnu@gmail.com](mailto:john.moore.bnu@gmail.com)

<sup>6</sup> CAS Center for Excellence in Tibetan Plateau Earth Sciences, Beijing, 100101, China.

<sup>7</sup> Arctic Centre, University of Lapland, Rovaniemi, 96101, Finland.

#### Contents of this file:

Figures S1 to S4.

#### Introduction

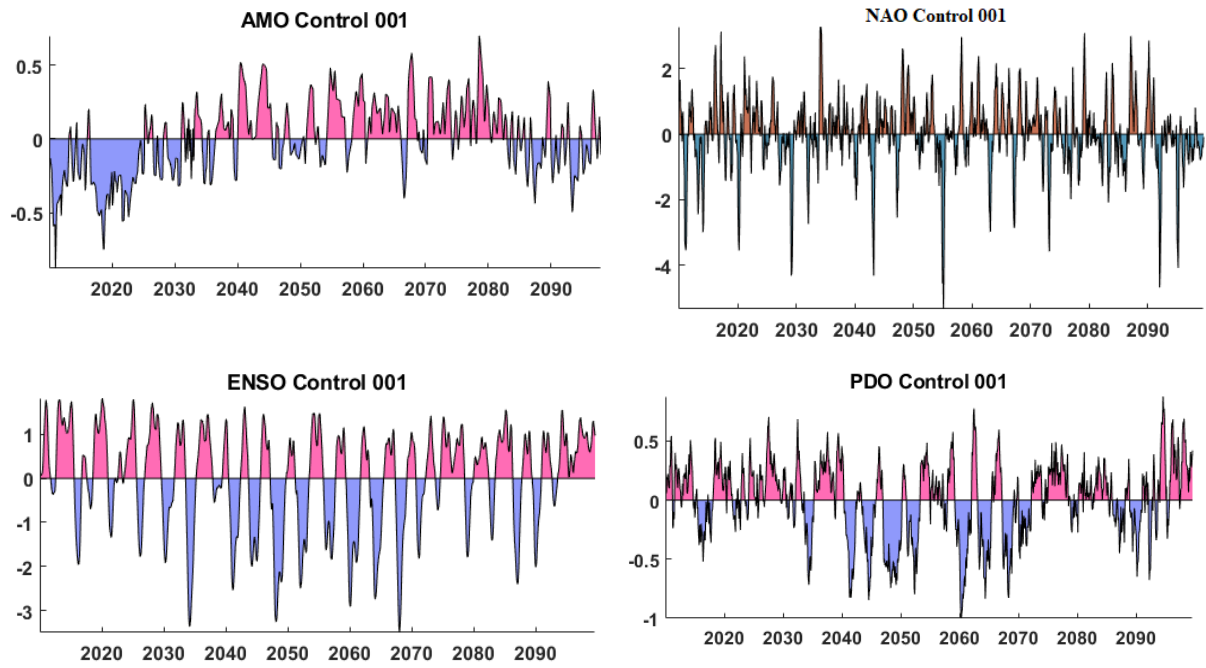
The following figures illustrate the supporting results mentioned in the manuscript as follows:

**Figure S1.** The indices of AMO, NAO, ENSO, and PDO obtained from ensemble 1 of the RCP8.5 (control) scenario. The y-axis shows the index values [dimensionless].

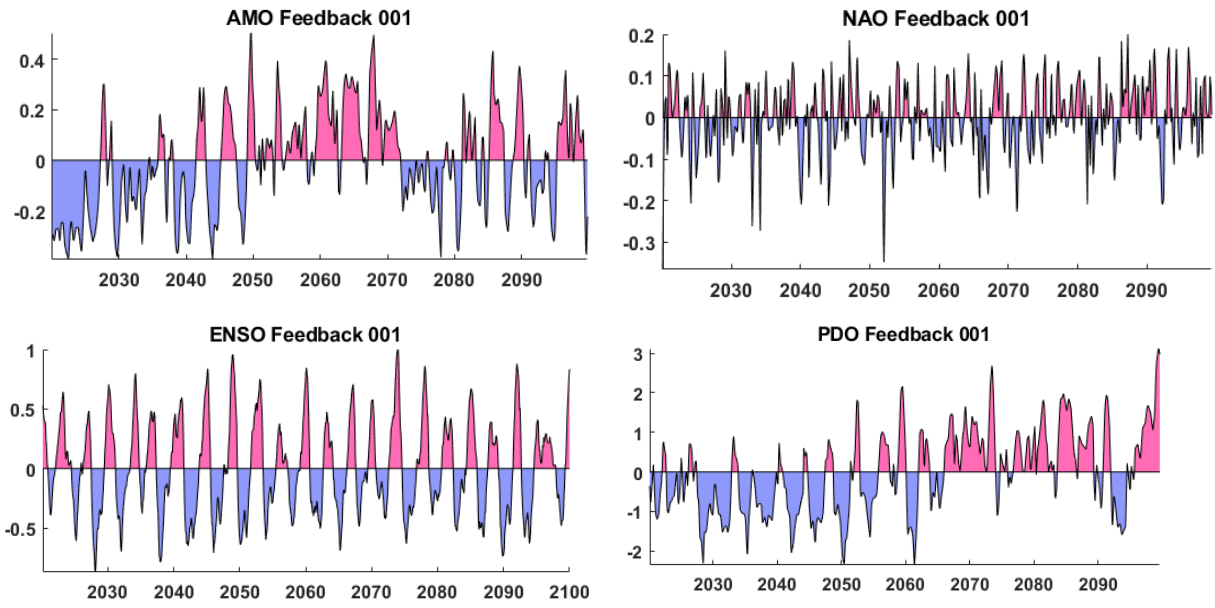
**Figure S2.** Same as Fig. S1 except for the GLENS-SAI (feedback) scenario.

**Figure S3.** Same as Fig. S1 except for variant label r1 of the SSP5-8.5 scenario.

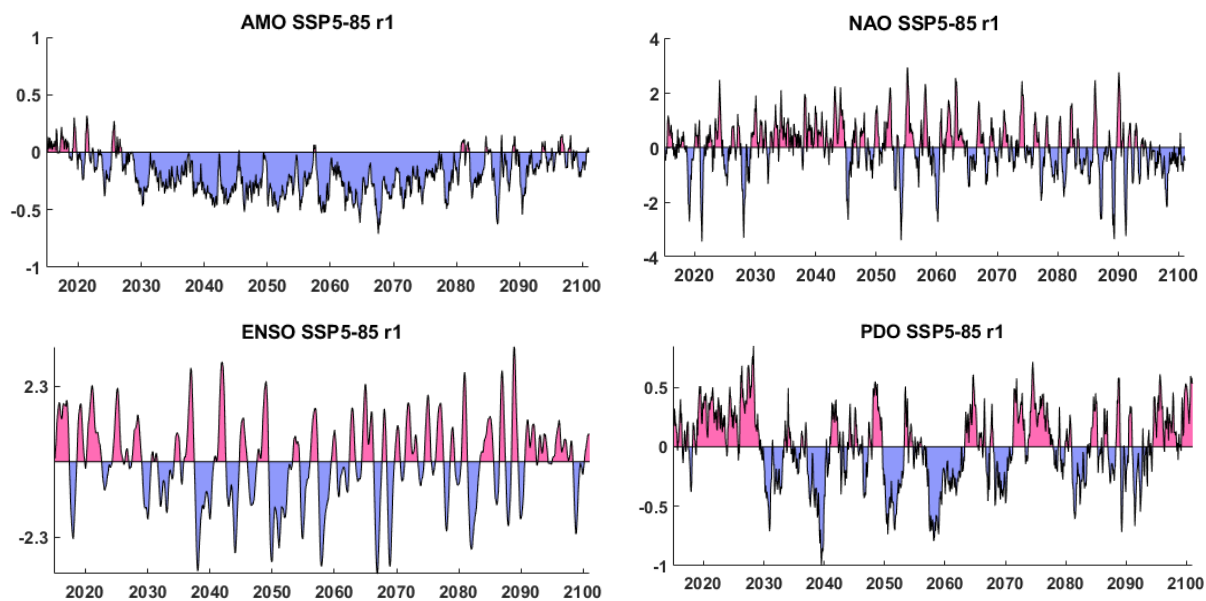
**Figure S4.** Same as Fig. S1 except for the SSP5-8.5-SAI scenario.



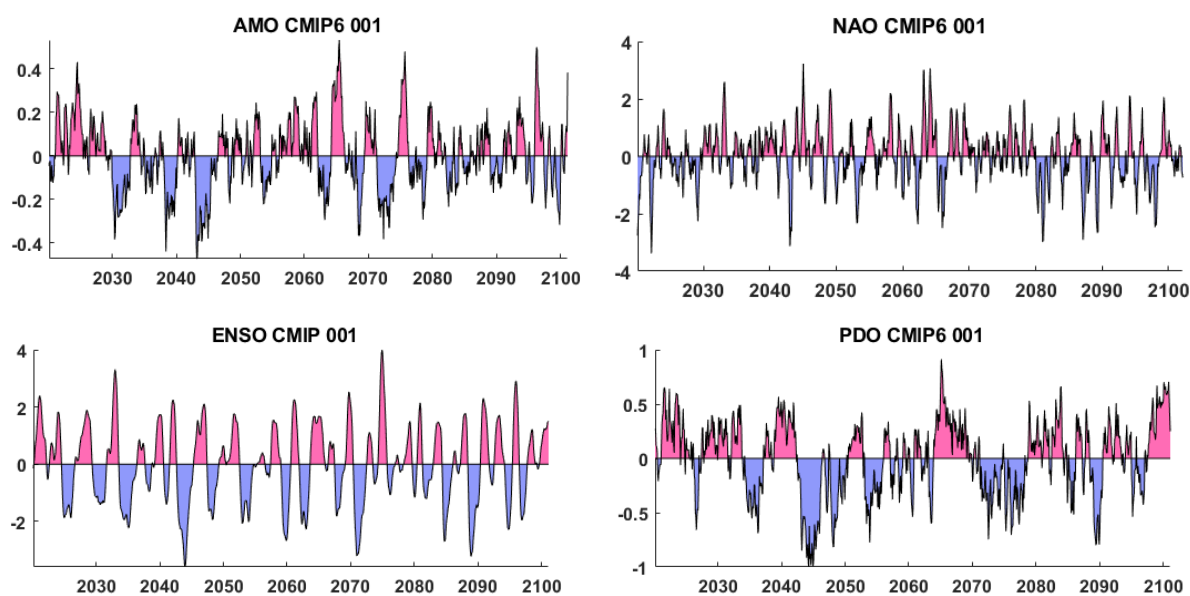
**Figure S1.** The indices of AMO, NAO, ENSO, and PDO obtained from ensemble 1 of the RCP8.5 (control) scenario. The y-axis shows the index values [dimensionless].



**Figure S2.** Same as Fig. S1 except for the GLENS-SAI (feedback) scenario.



**Figure S3.** Same as Fig. S1 except for variant label r1 of the SSP5-8.5 scenario.



**Figure S4.** Same as Fig. S1 except for the SSP5-8.5-SAI scenario.