

*Geophysical Research Letters*

Supporting Information for

**Atmospheric Forcing of Sea Surface Temperature Decadal Variability in the Subtropical  
Northeastern Pacific**

Yu Zhang<sup>1,2</sup>, Shi-Yun Yu<sup>1,3\*</sup>, Dillon J. Amaya<sup>4,5</sup>, Yu Kosaka<sup>6</sup>, Malte F. Stuecker<sup>7</sup>, Jun-Chao Yang<sup>1,2</sup>,  
Kai-Yuan Li<sup>3</sup>, Lei Fan<sup>1,3</sup>, and Xiaopei Lin<sup>1,2\*</sup>

<sup>1</sup> Frontiers Science Center for Deep Ocean Multispheres and Earth System and Physical Oceanography Laboratory,  
Ocean University of China, Qingdao, China

<sup>2</sup> Qingdao National Laboratory for Marine Science and Technology, Qingdao, China

<sup>3</sup> College of Oceanic and Atmospheric Sciences, Ocean University of China, Qingdao, China

<sup>4</sup> Cooperative Institute for Research in Environmental Sciences, University of Colorado Boulder, Boulder, Colorado

<sup>5</sup> Department of Atmospheric and Oceanic Sciences, University of Colorado Boulder, Boulder, Colorado

<sup>6</sup> Research Center for Advanced Science and Technology, The University of Tokyo, Tokyo, Japan

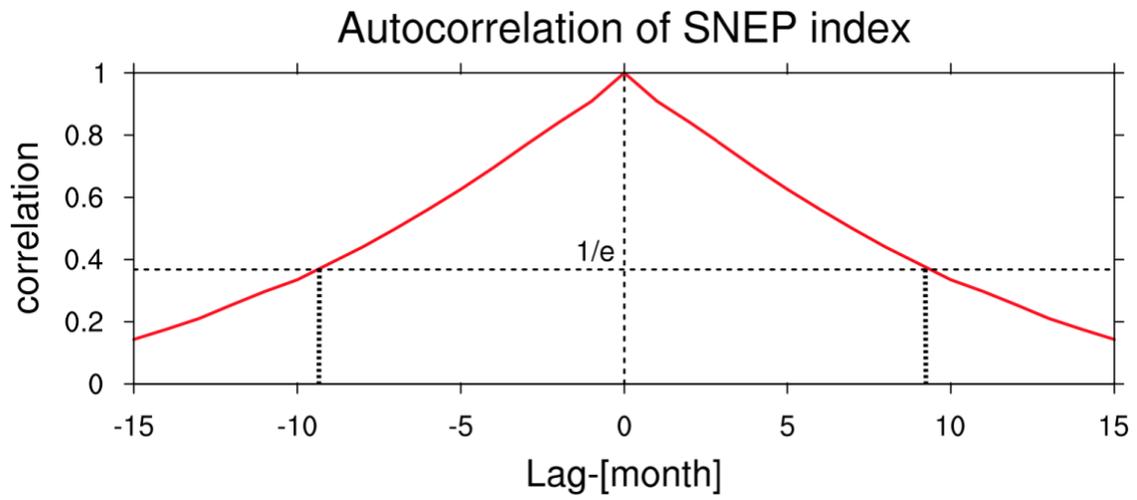
<sup>7</sup> Department of Oceanography and International Pacific Research Center, School of Ocean and Earth Science and  
Technology, University of Hawai'i at Mānoa, Honolulu, Hawai'i

**Contents of this file**

Figures S1 to S4

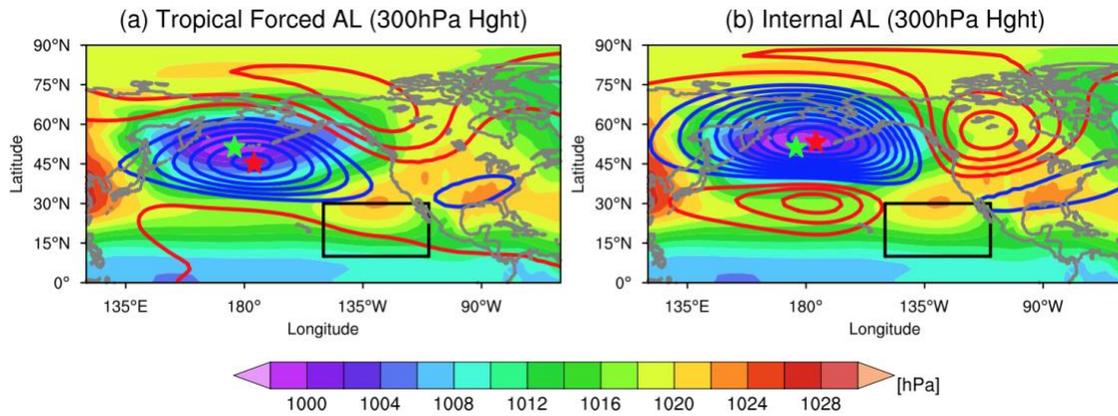
**Additional Supporting Information (Files uploaded separately)**

None

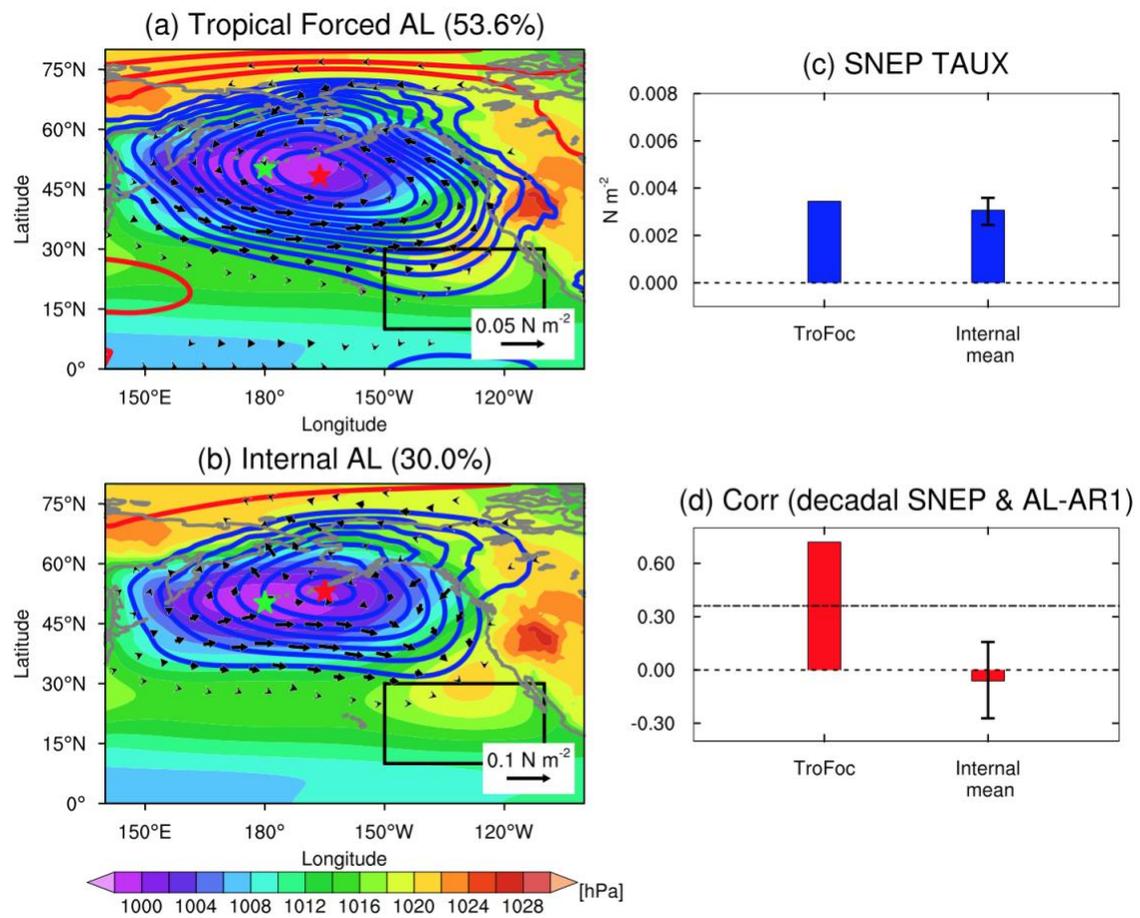


**Figure S1. Autocorrelation of the observed SNEP index.** Autocorrelation at  $e^{-1}$  is marked.





**Figure S3. 300hPa height anomalies associated with the tropical Pacific-forced and internal AL variability in the CM2.1 POGA experiment.** Contours denote the regressed 300hPa height anomalies (m) against the normalized PC1 of (a) tropical Pacific-forced and (b) internal AL variability, respectively. Contour interval in (a) is 2.5m and in (b) is 6m. Shadings denote the climatological SLP in December-February, as in Fig. 4a and 4b.



**Figure S4. Tropical Pacific-forced and internal AL variability in the CESM POGA experiment.** As in Fig. 4, but for the results from the CESM POGA experiment. Note that vectors here denote regressed wind stress anomalies ( $\text{N m}^{-2}$ ).