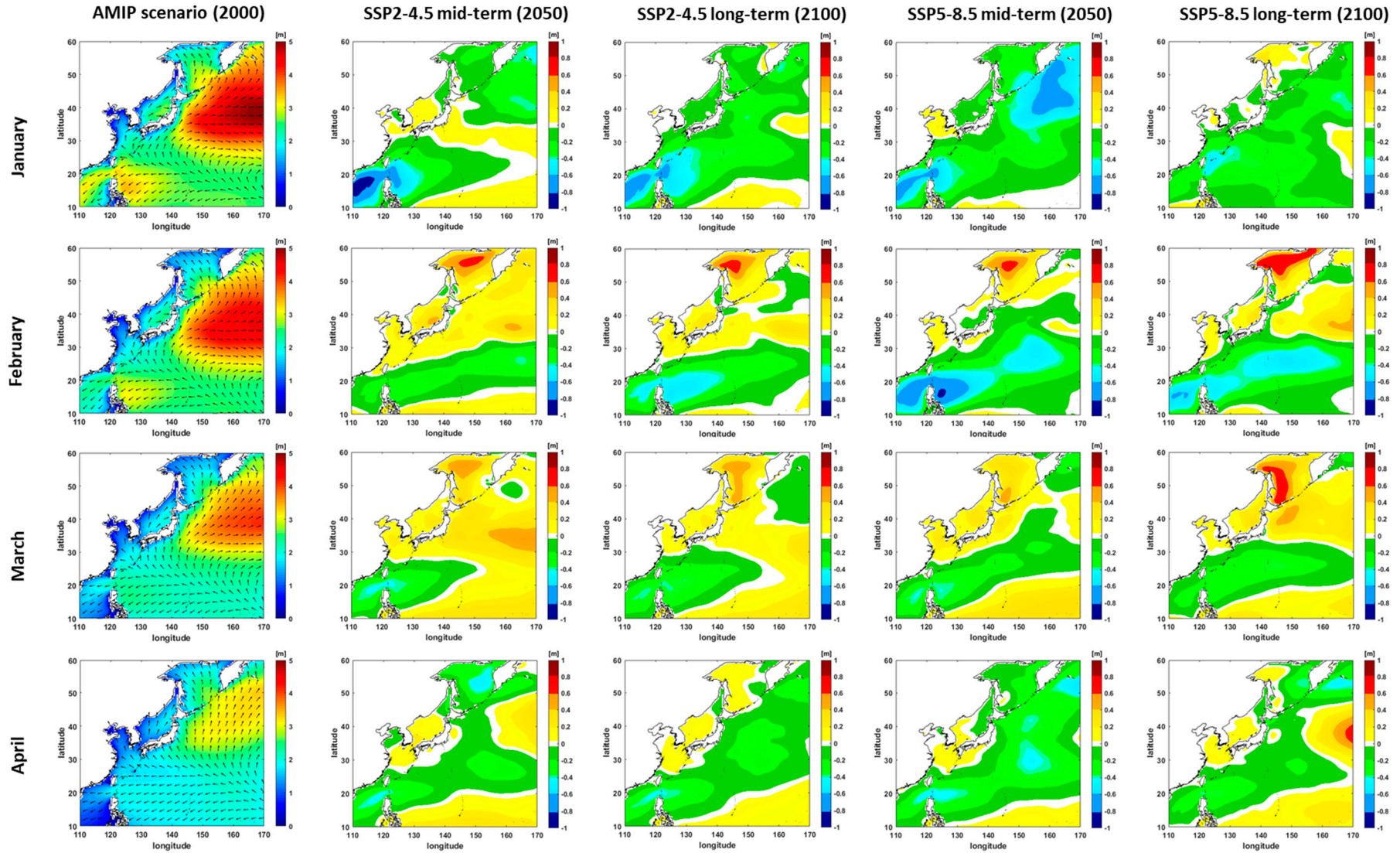


## Supplementary Material:

Projected monthly and seasonal wave characteristics.



**Figure S1.** Mean significant wave height ( $H_s$  in m) results for AMIP scenario and the differences between each future scenario and the AMIP scenario for January-April. Positive (negative) value indicates increasing (decreasing) wave height in the future relative to AMIP values.

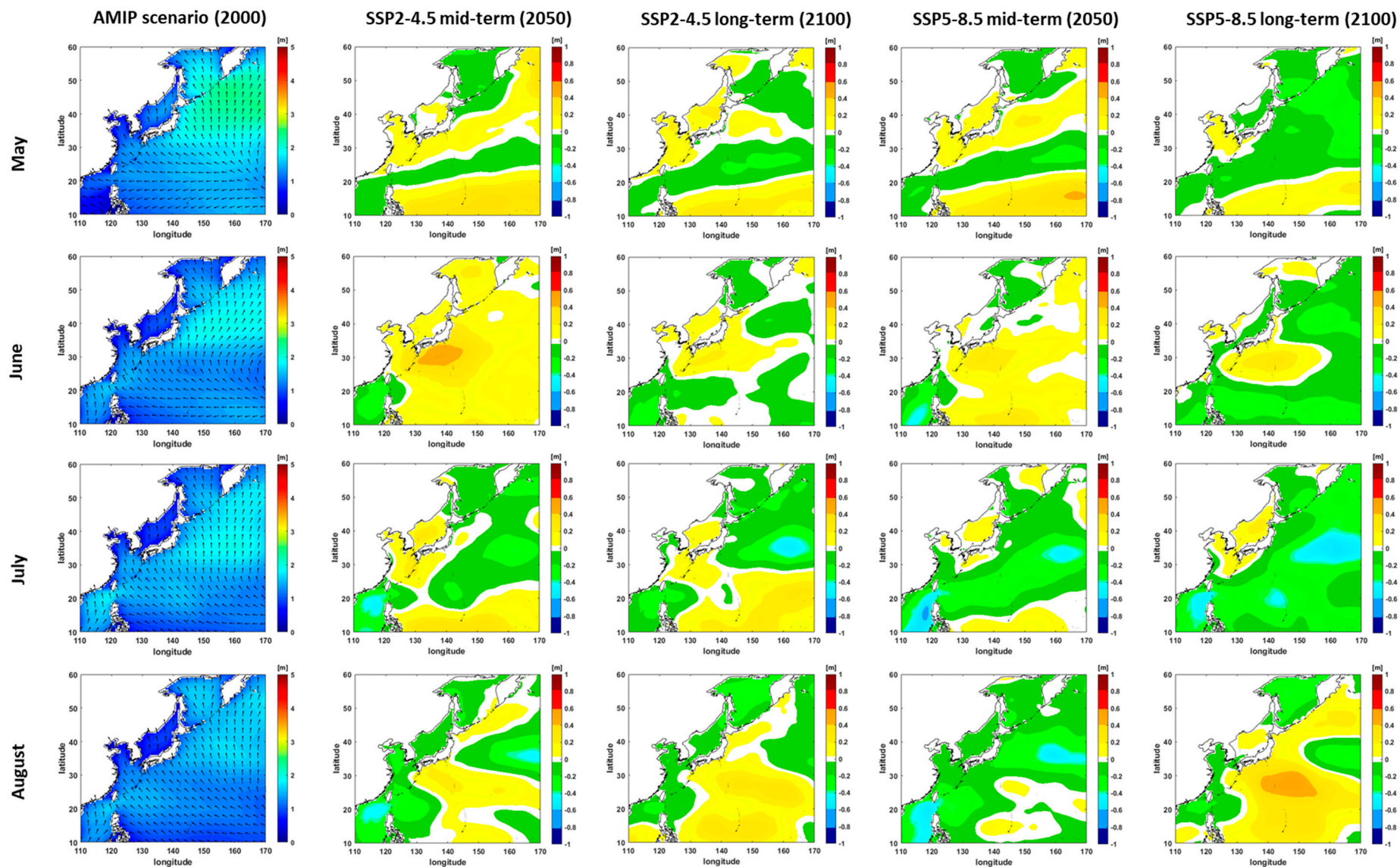


Figure S2. The same as Figure 1, but for May-August



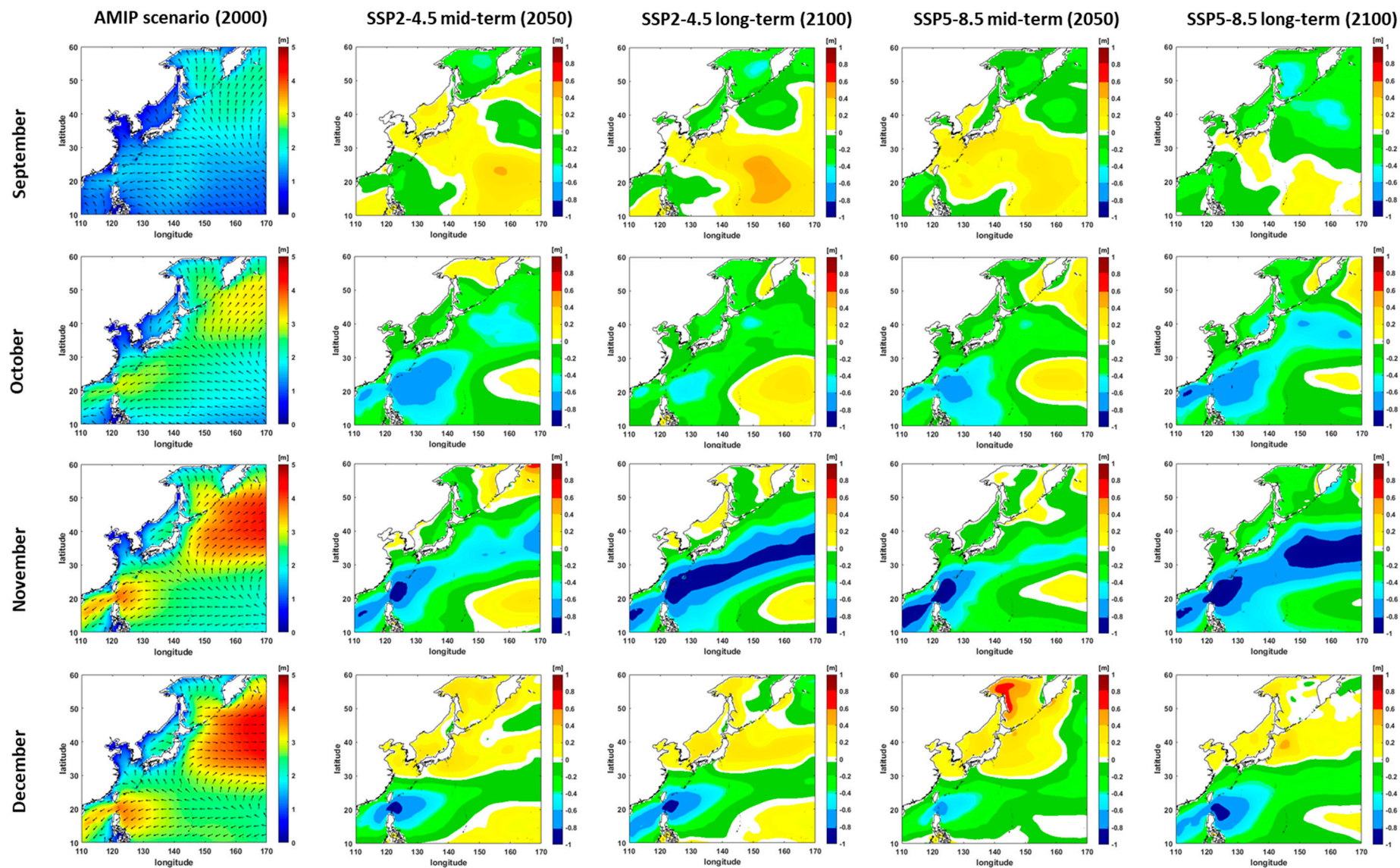
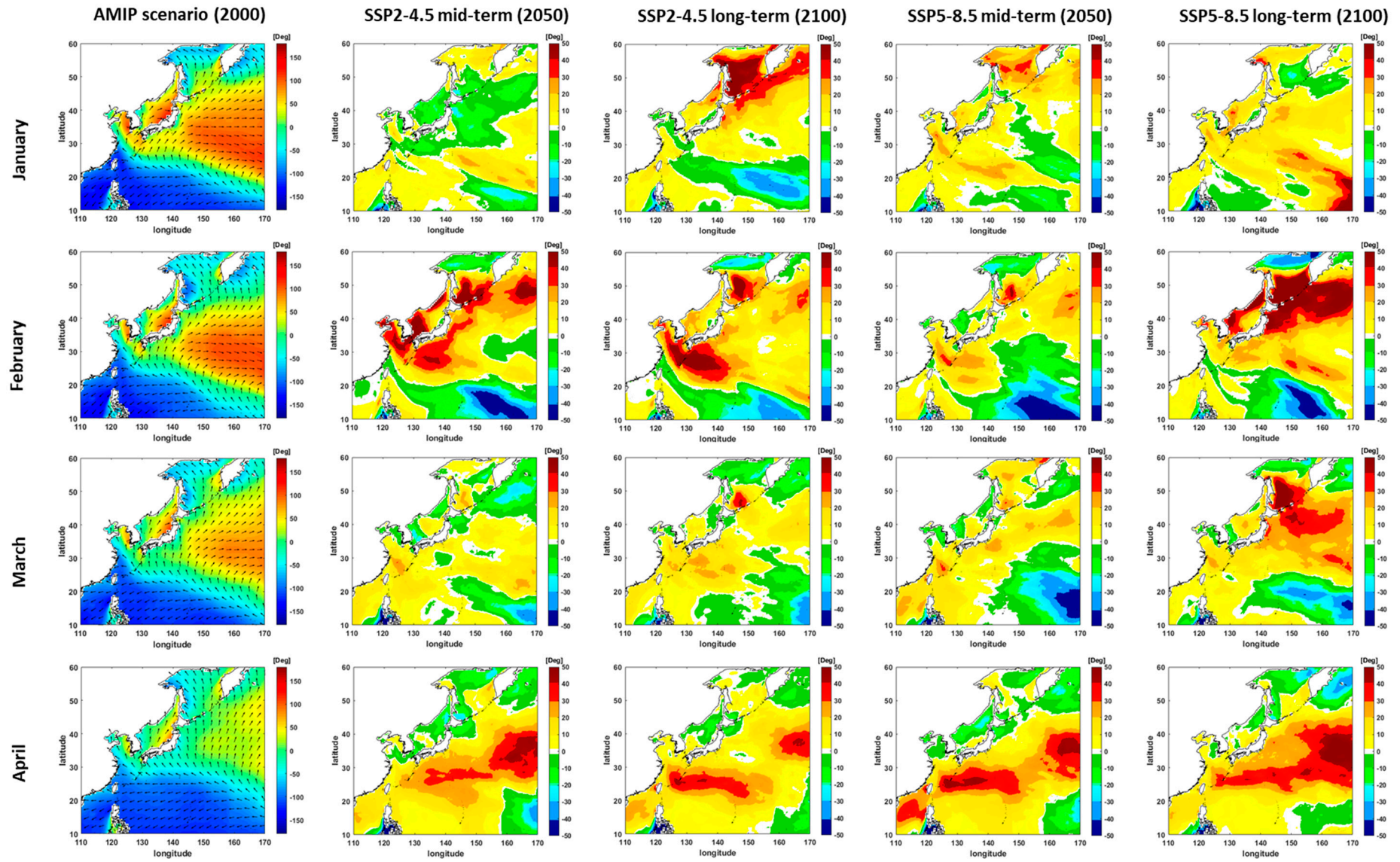


Figure S3. The same as Figure 1, but for September-December



**Figure S4.** Mean wave direction ( $\theta$  in degree) results for AMIP scenario and the differences between each future scenario and the AMIP scenario for January-April. Positive (negative) value indicates wave direction shifting clockwise (counter clockwise) in the future relative to AMIP values.



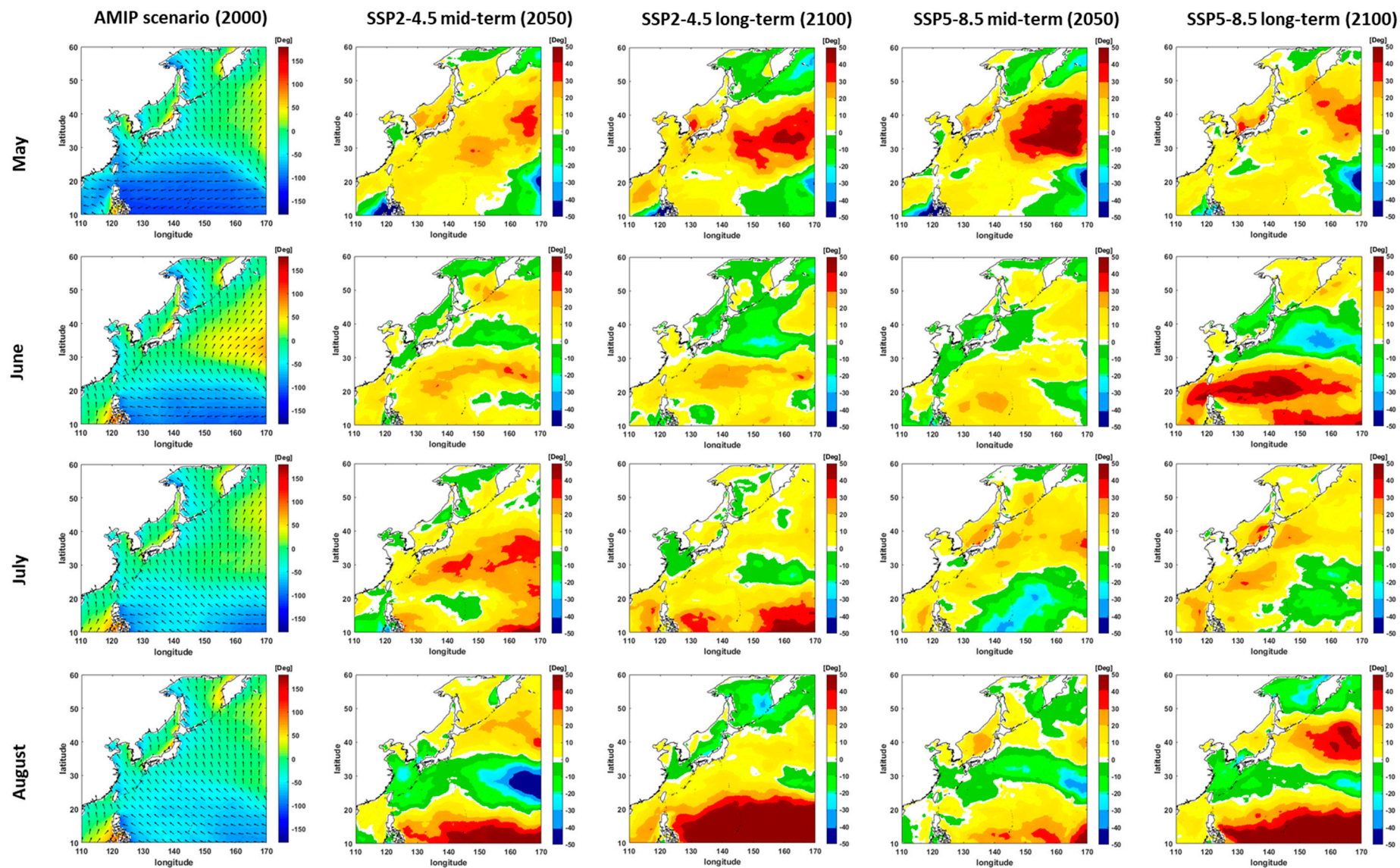


Figure S5. The same as Figure 4, but for May-August

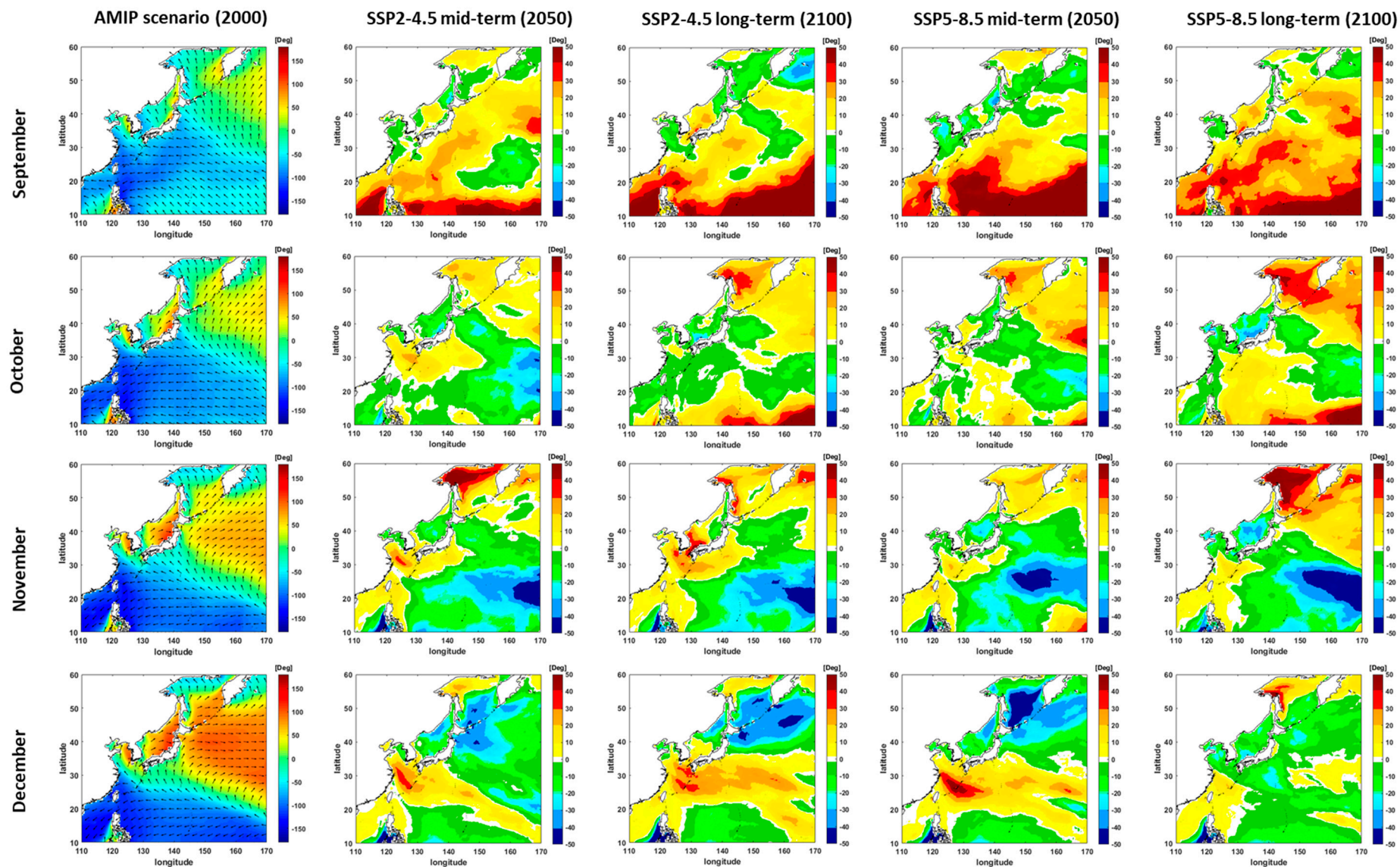
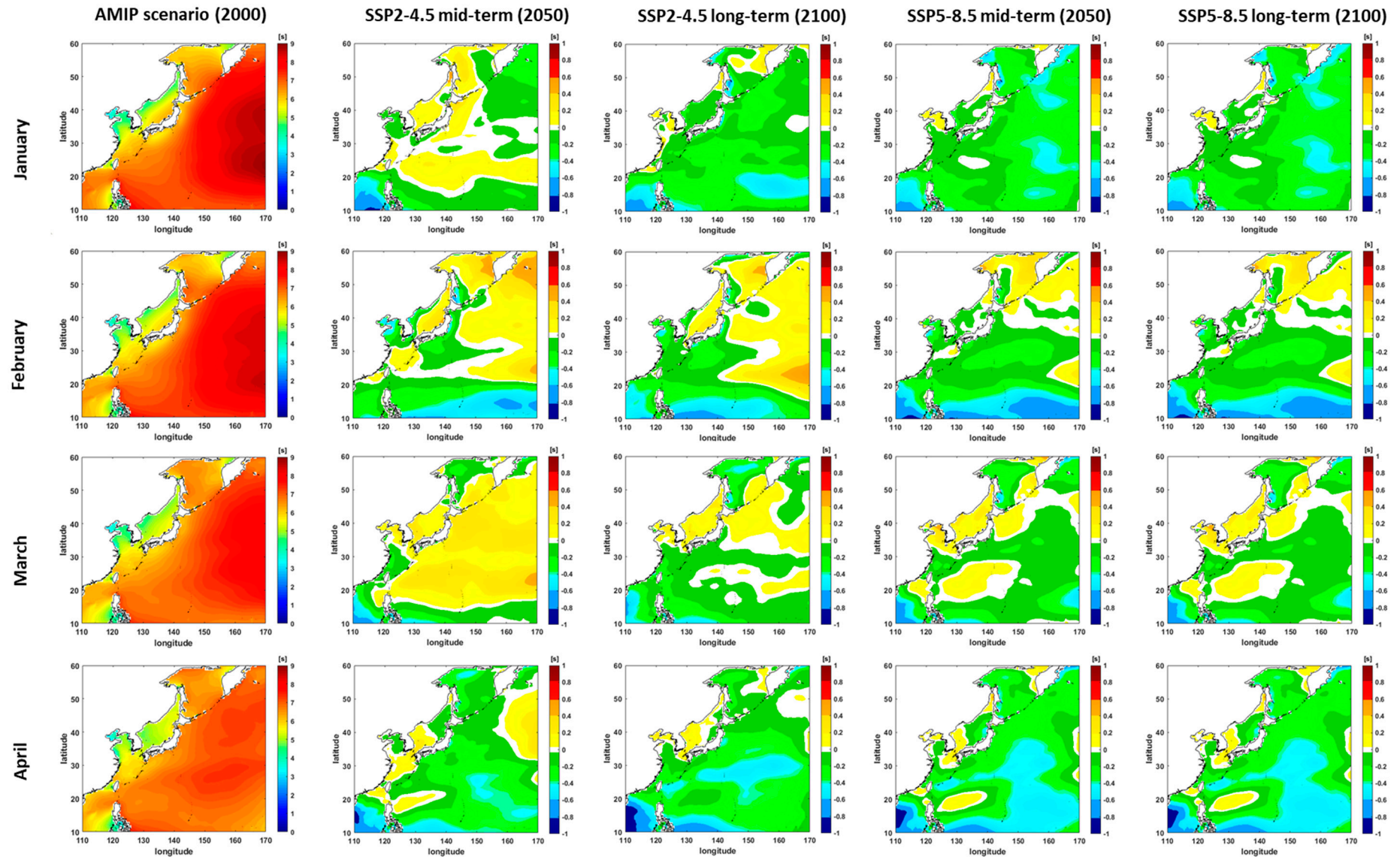


Figure S6. The same as Figure 4, but for September-December.





**Figure S7.** Mean wave period ( $T$  in second) results for AMIP scenario and the differences between each future scenario and the AMIP scenario for January-April. Positive (negative) value indicates increasing (decreasing) wave period in the future relative to AMIP values.

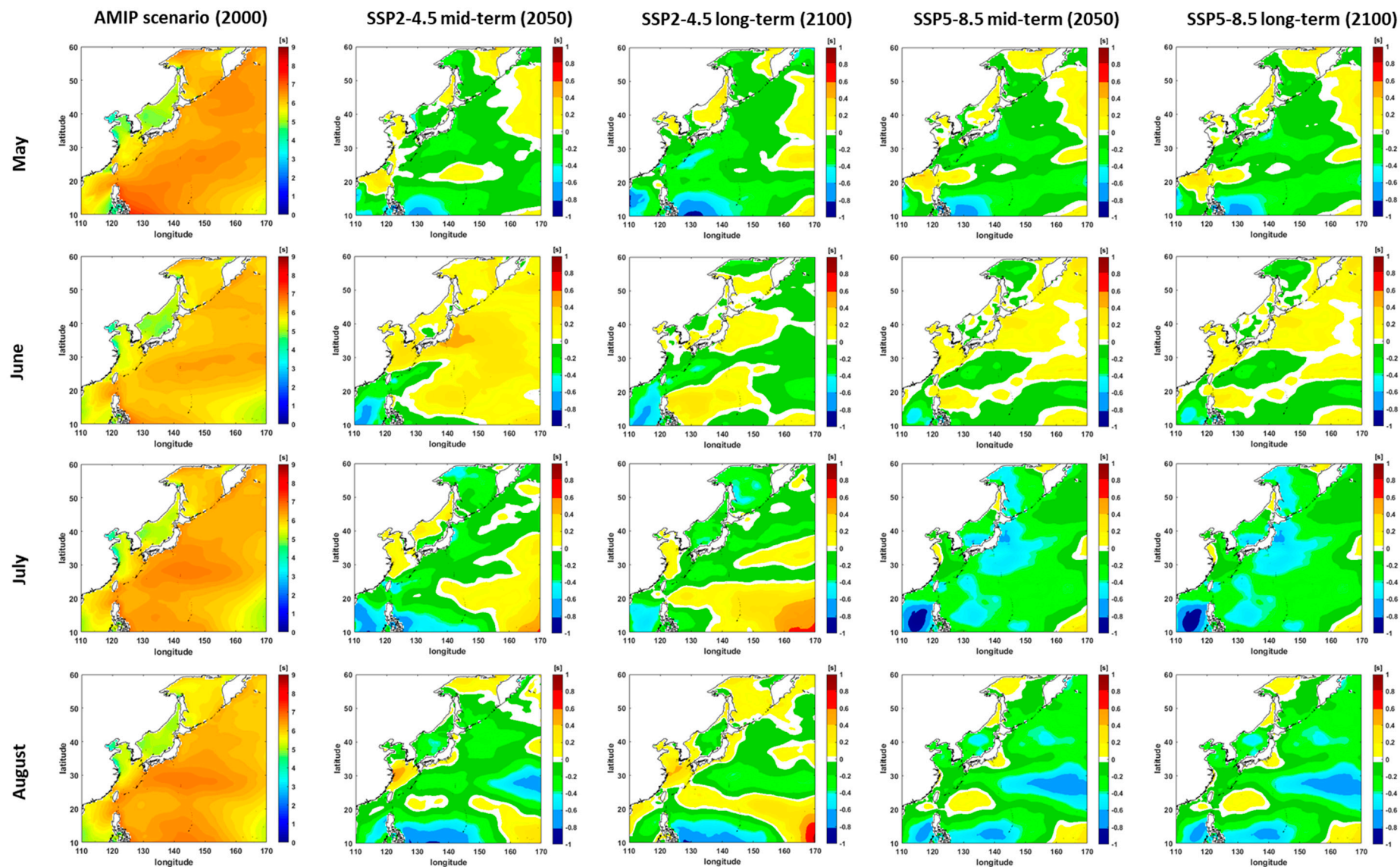


Figure S8. The same as Figure 7, but for May-August



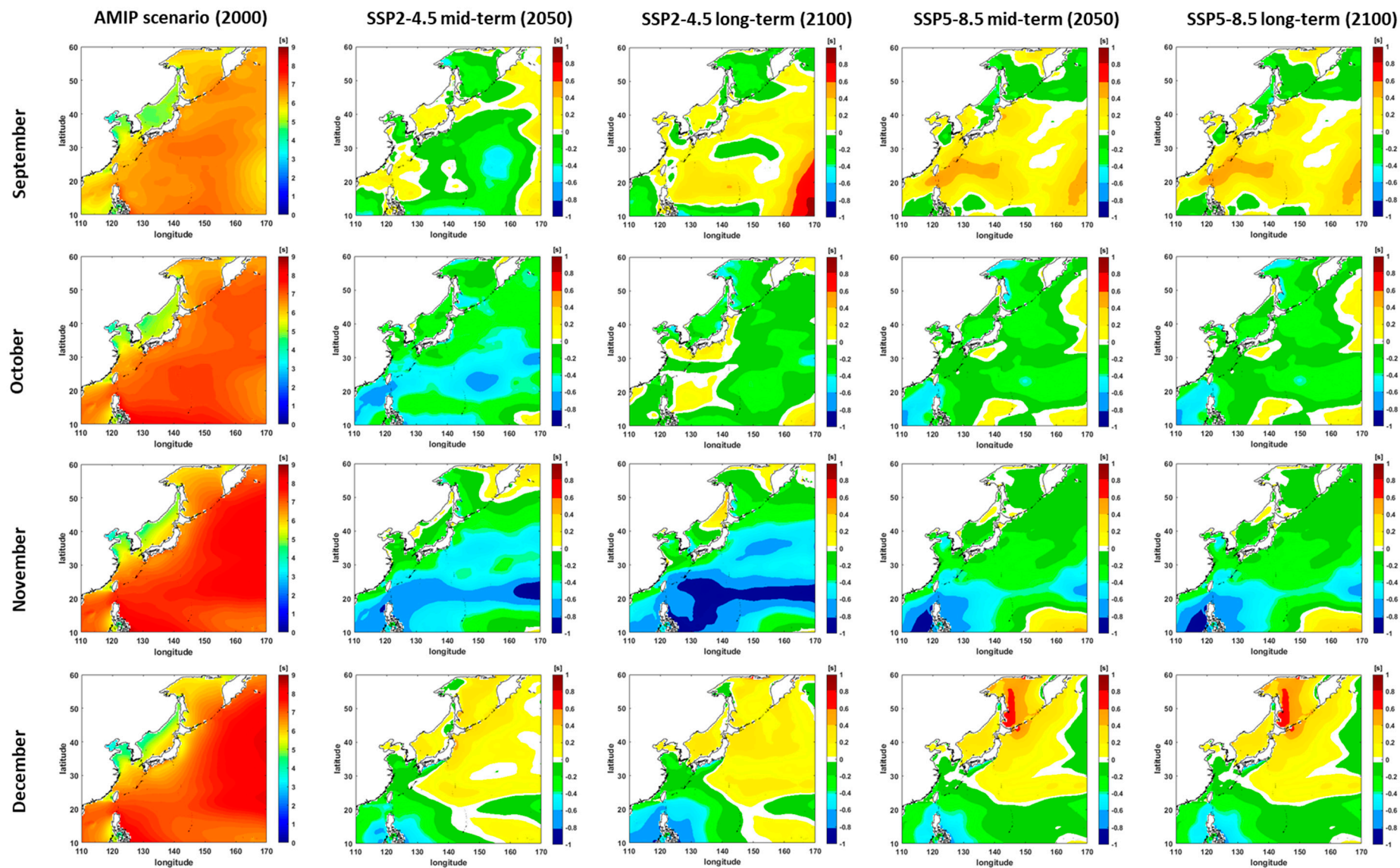
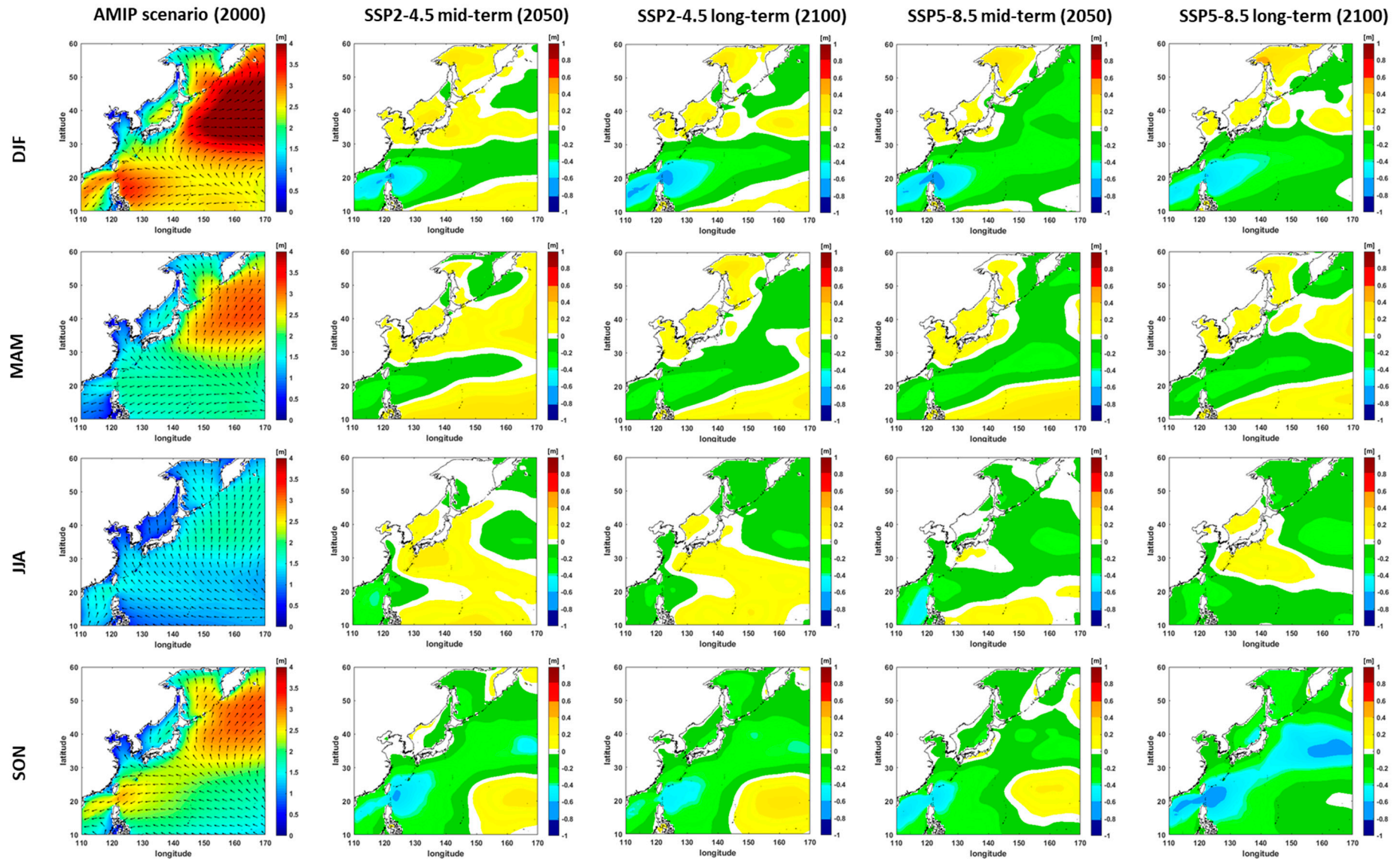
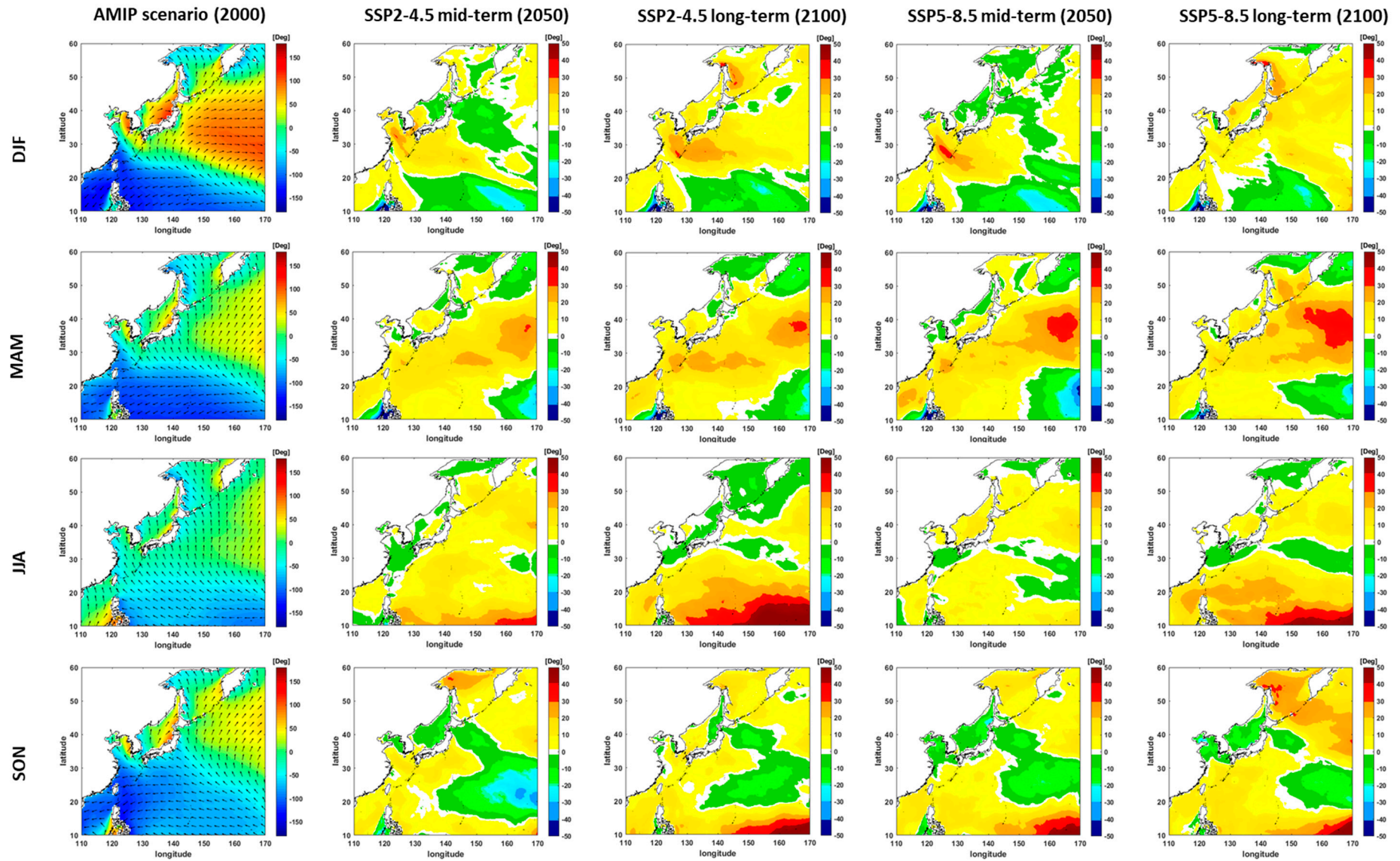


Figure S9. The same as Figure 7, but for September-December

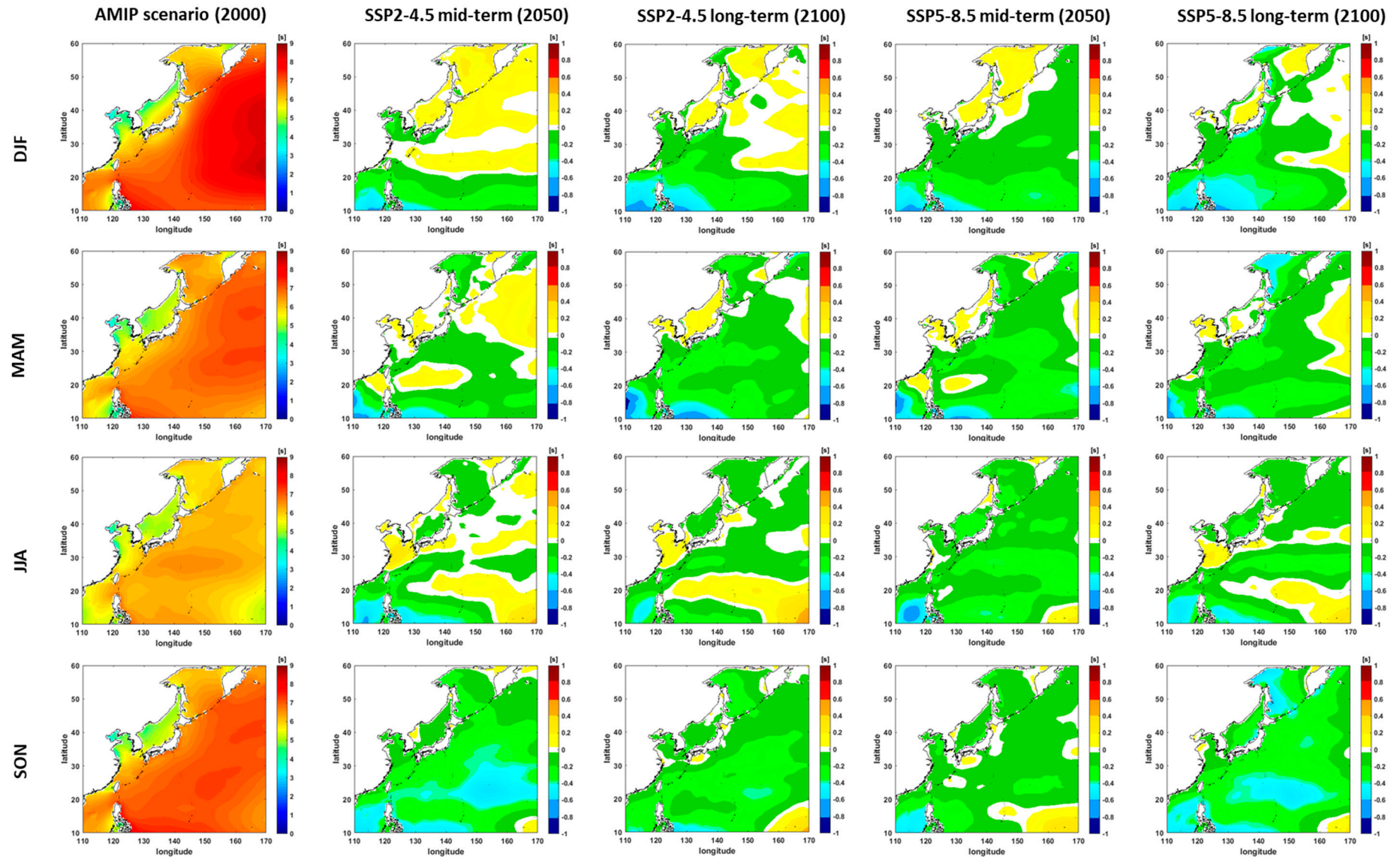


**Figure S10.** Mean significant wave height ( $H_s$  in m) results for AMIP scenario and the differences between each future scenario and the AMIP scenario for each season. Positive (negative) value indicates increasing (decreasing) wave height in the future relative to AMIP values.





**Figure S11.** Mean wave direction ( $\theta$  in degree) results for AMIP scenario and the differences between each future scenario and the AMIP scenario for each season. Positive (negative) value indicates wave direction shifting clockwise (counter clockwise) in the future relative to AMIP values.



**Figure S12.** Mean wave period ( $T$  in second) results for AMIP scenario and the differences between each future scenarios and the AMIP scenario for each season. Positive (negative) value indicates increasing (decreasing) wave period in the future relative to AMIP values.