

Figure S1. Spatial distribution of biases for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Barents Sea.

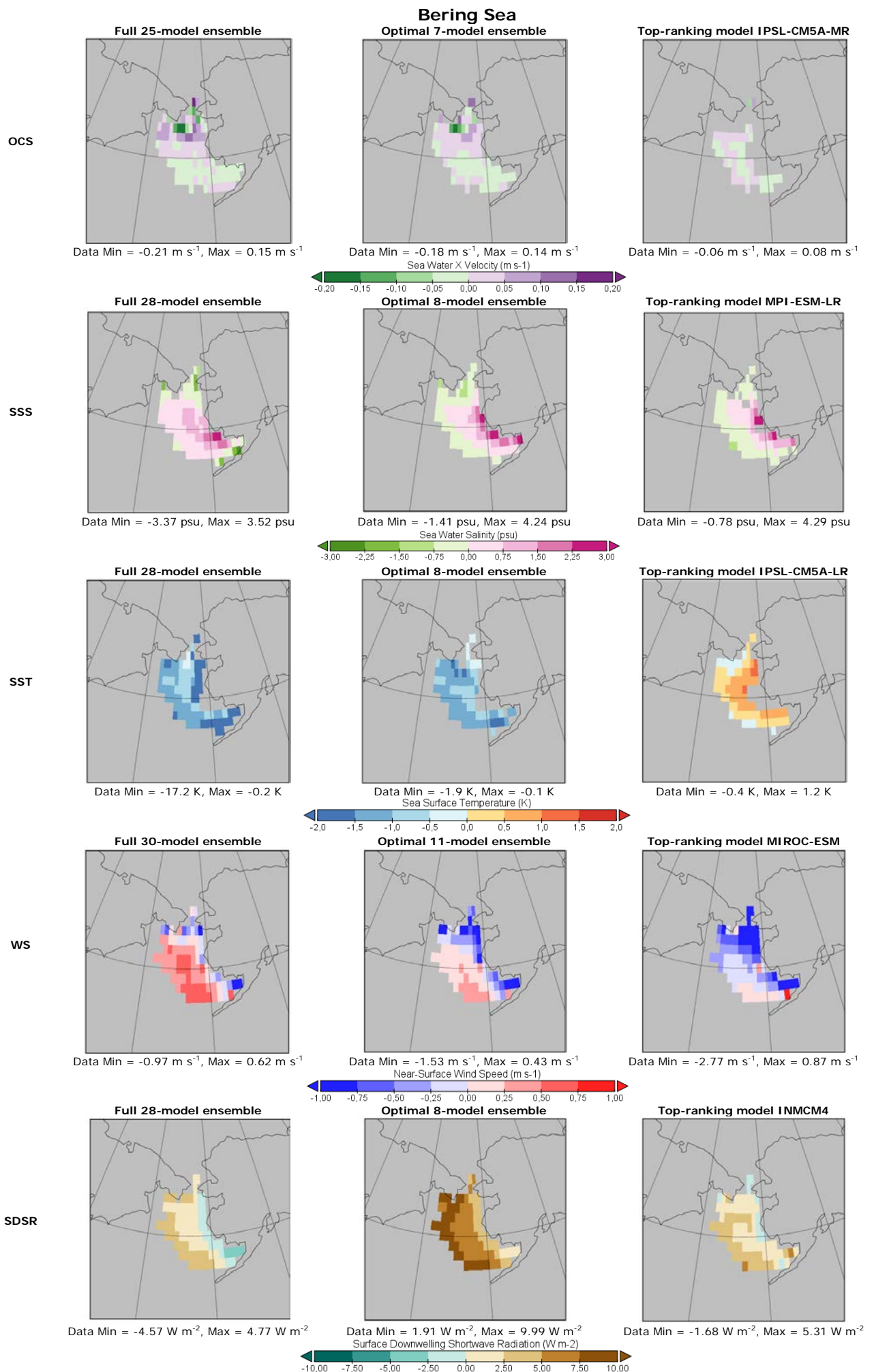


Figure S2. Spatial distribution of biases for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Bering Sea.

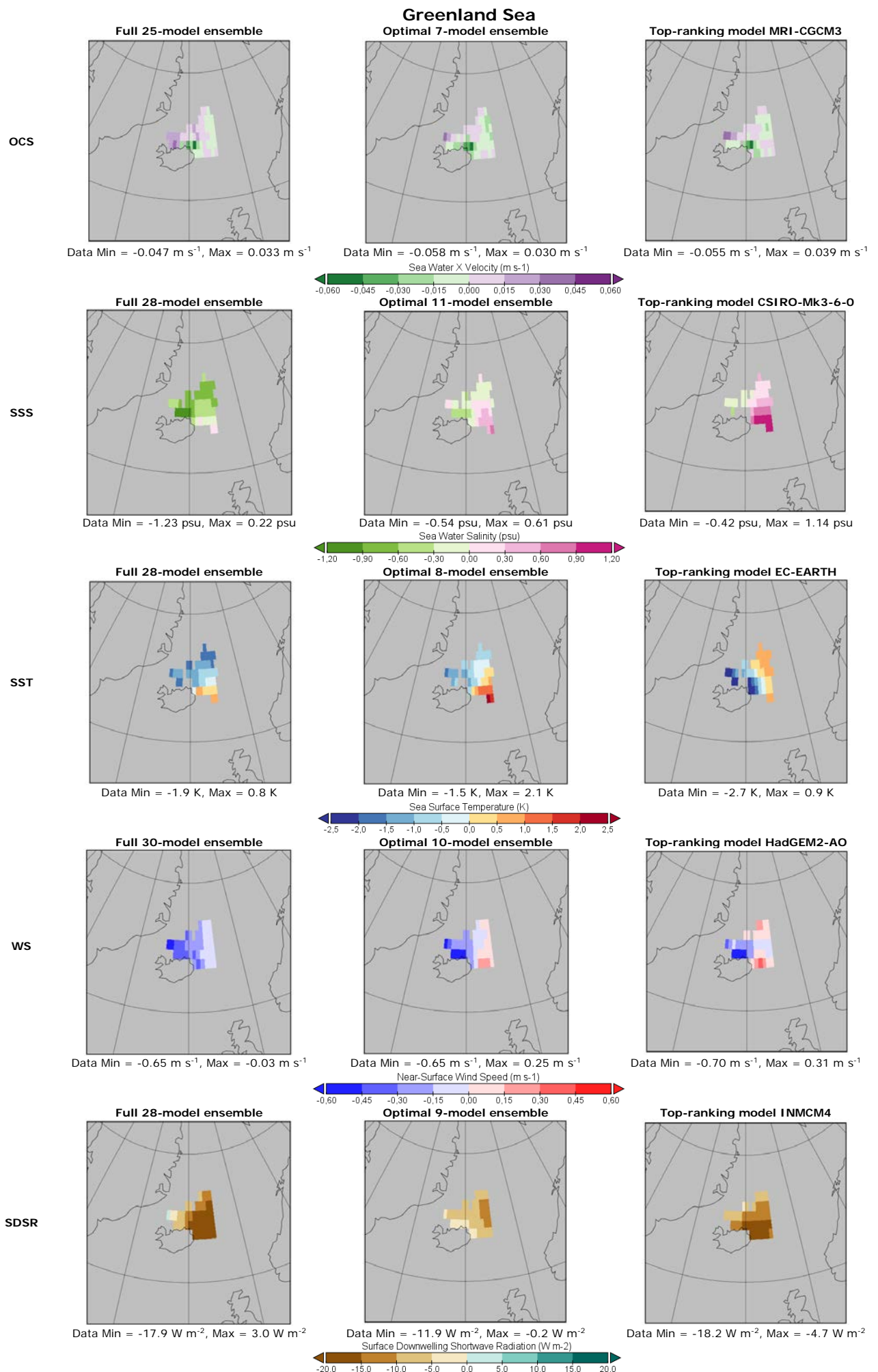


Figure S3. Spatial distribution of biases for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Greenland Sea.

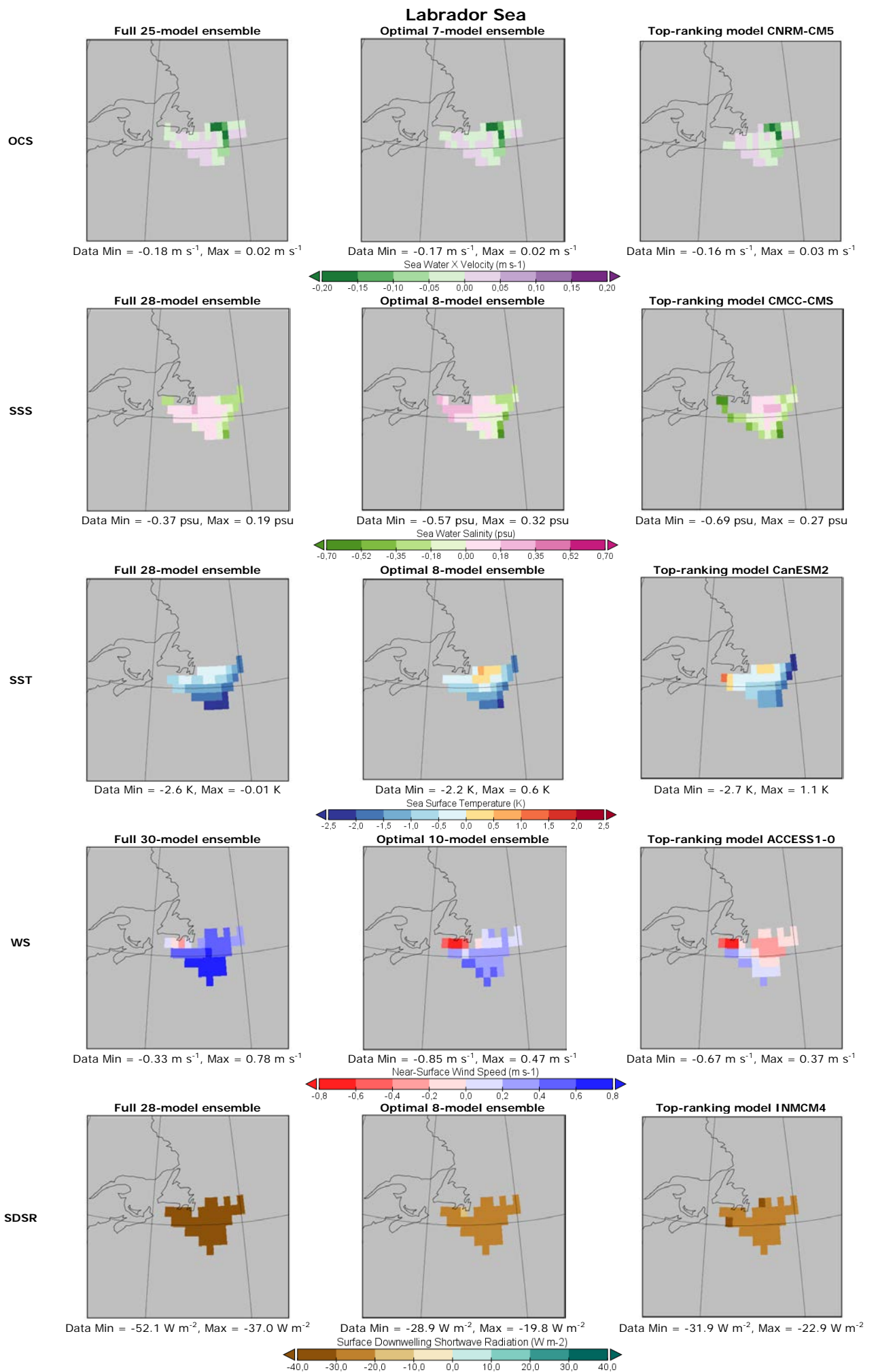


Figure S4. Spatial distribution of biases for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Labrador Sea.

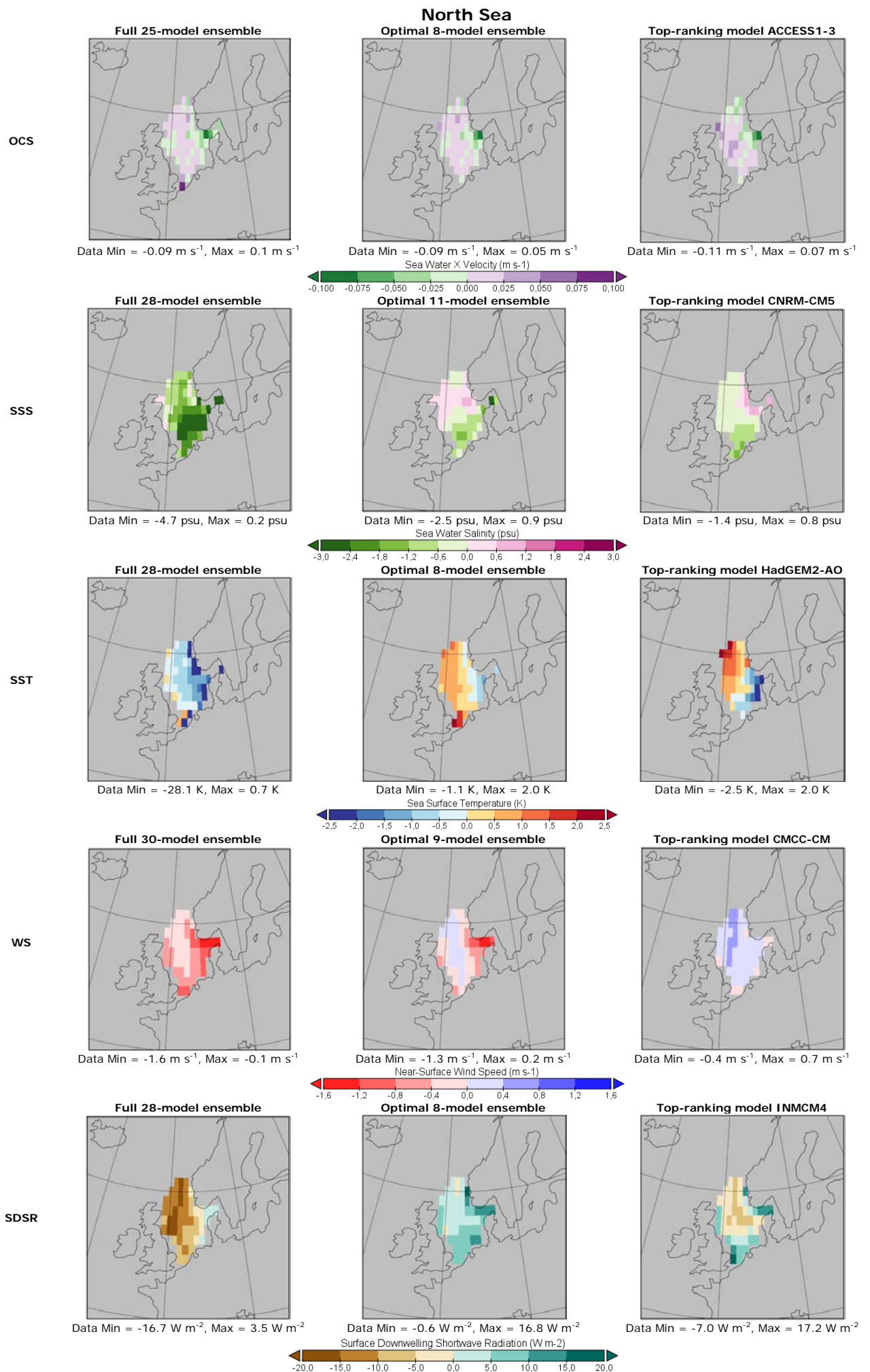


Figure S5. Spatial distribution of biases for the blooming period between models and reanalysis for five forcing factors in the blooming area of the North Sea.

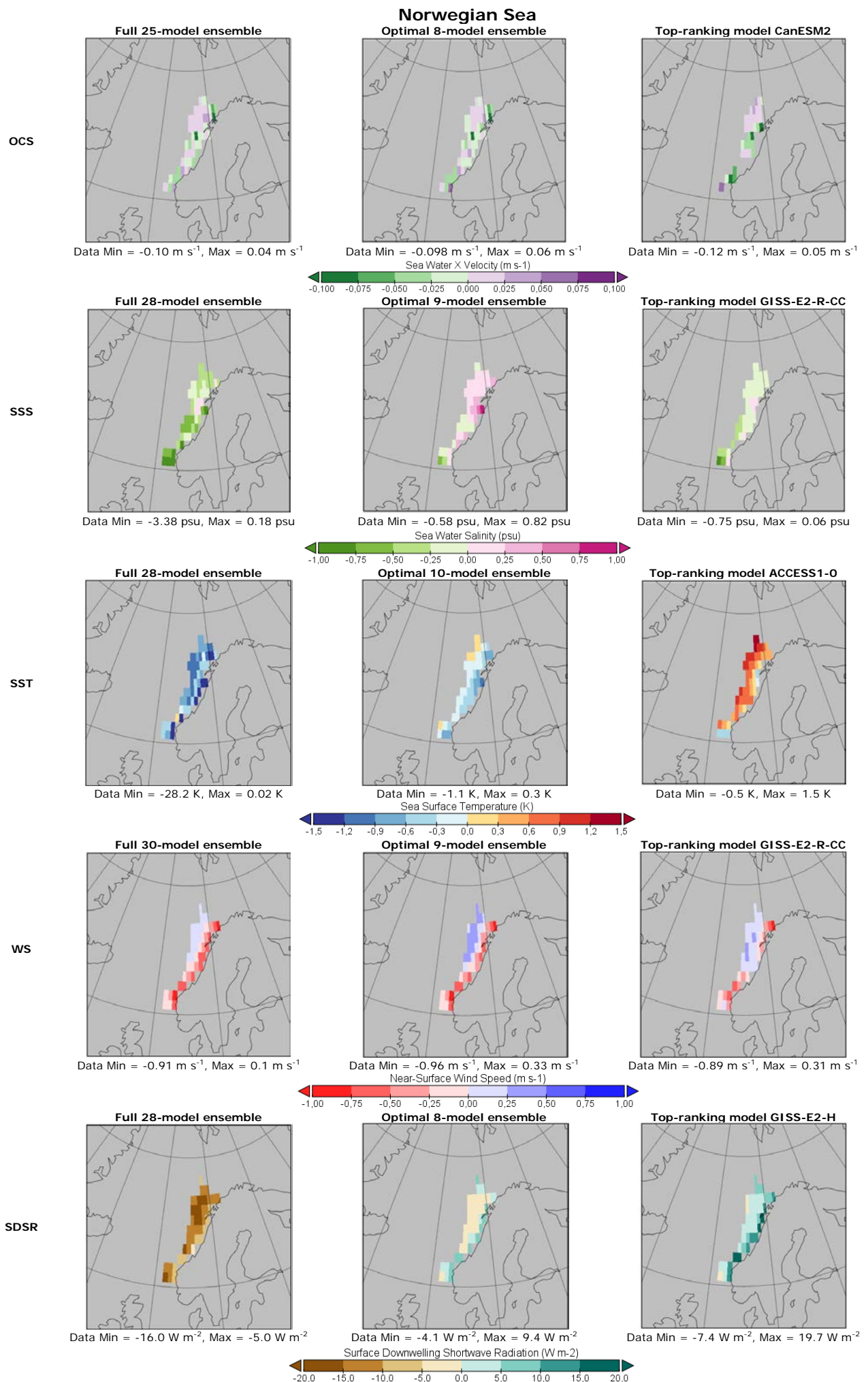


Figure S6. Spatial distribution of biases for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Norwegian Sea.

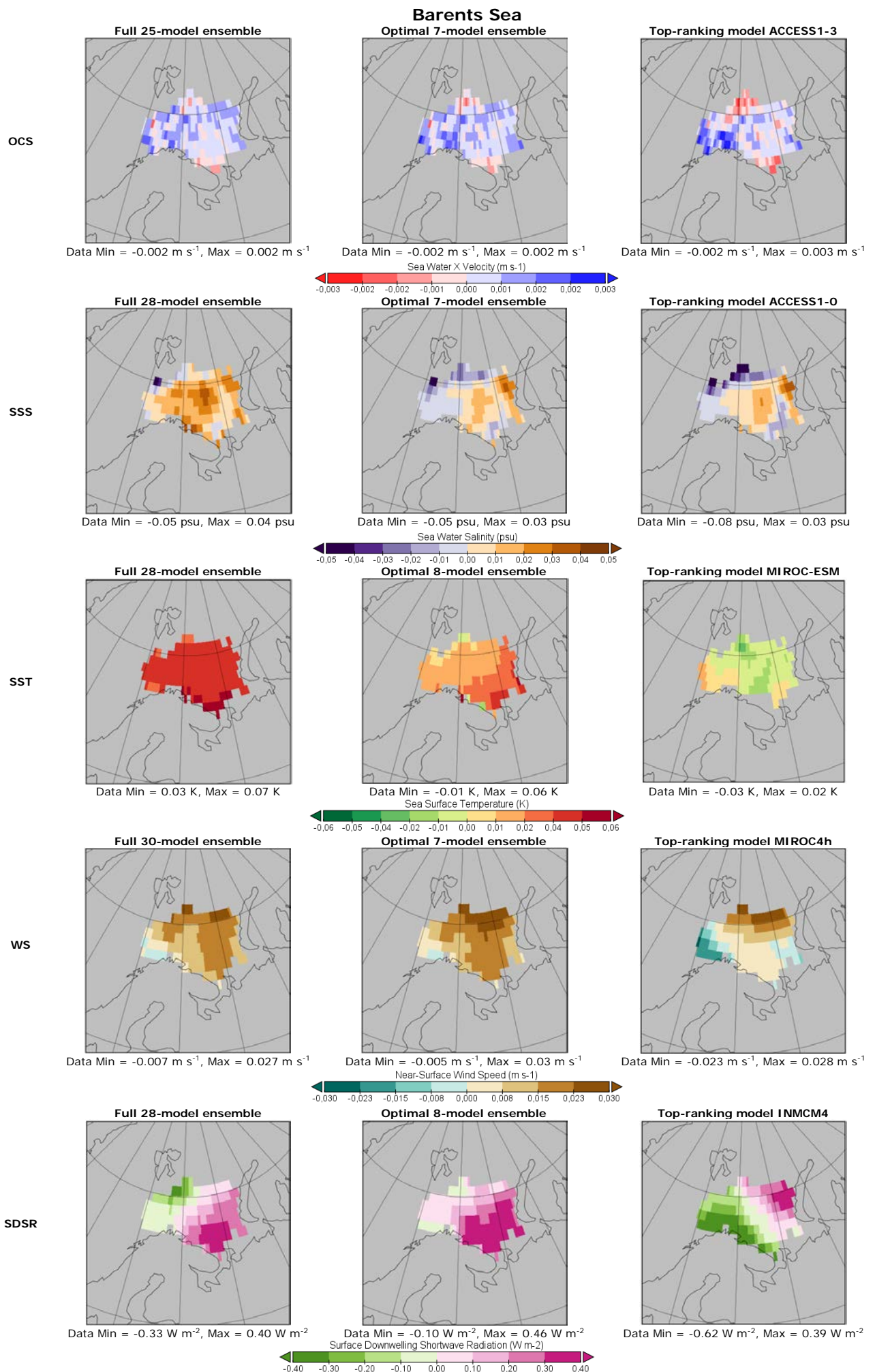


Figure S7. Spatial distribution of errors in annual trends for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Barents Sea.

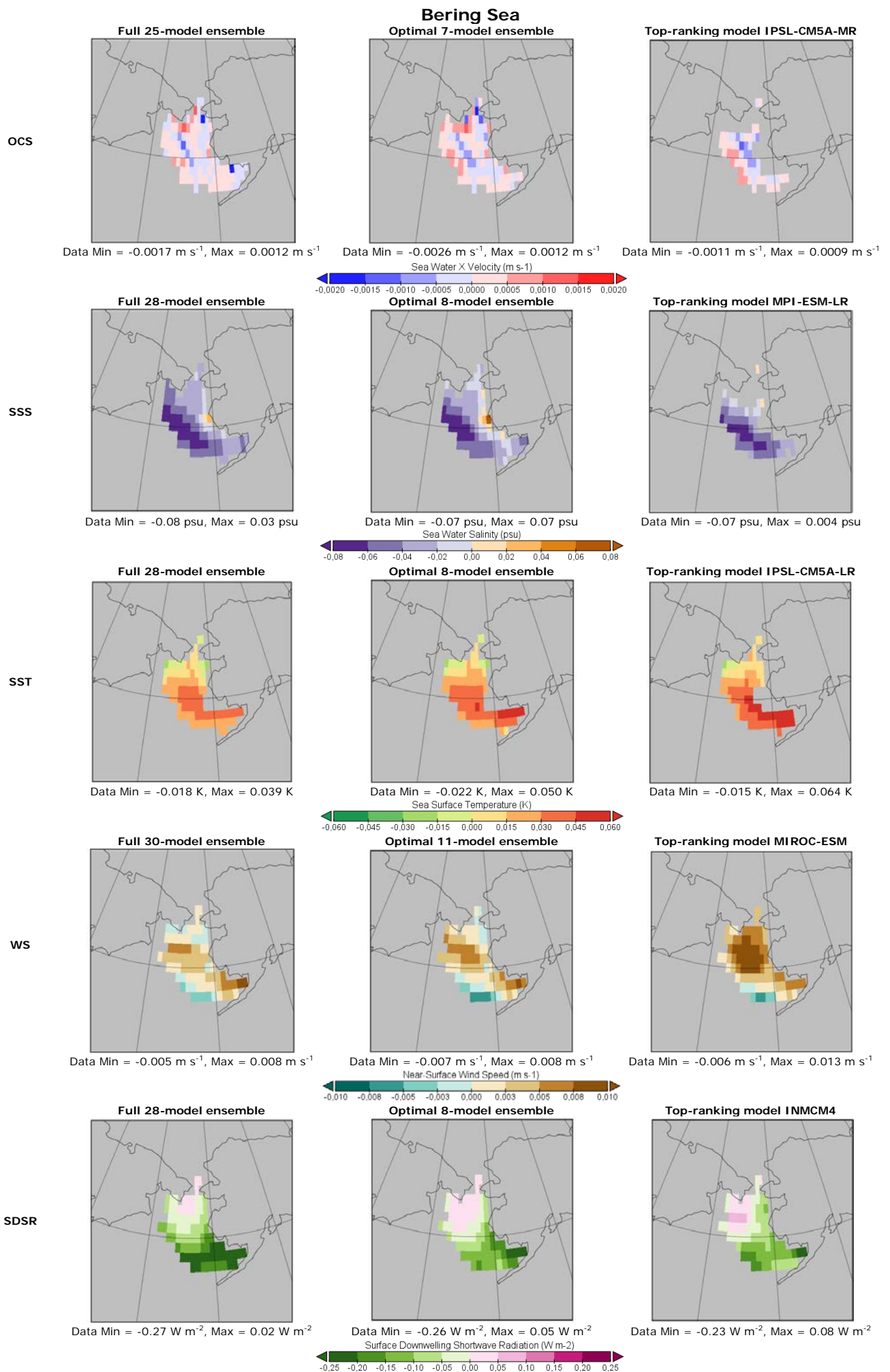


Figure S8. Spatial distribution of errors in annual trends for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Bering Sea.



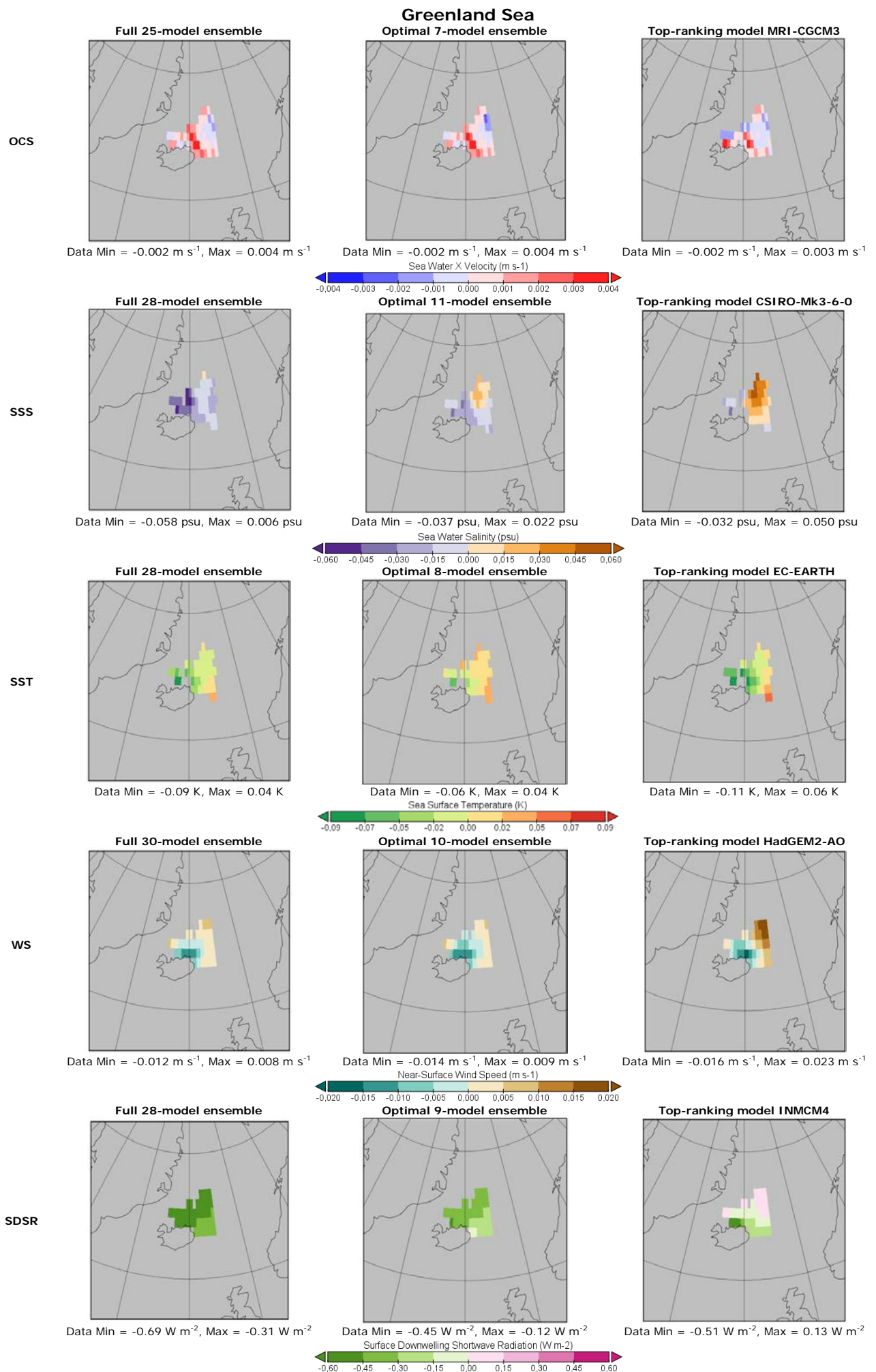


Figure S9. Spatial distribution of errors in annual trends for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Greenland Sea.

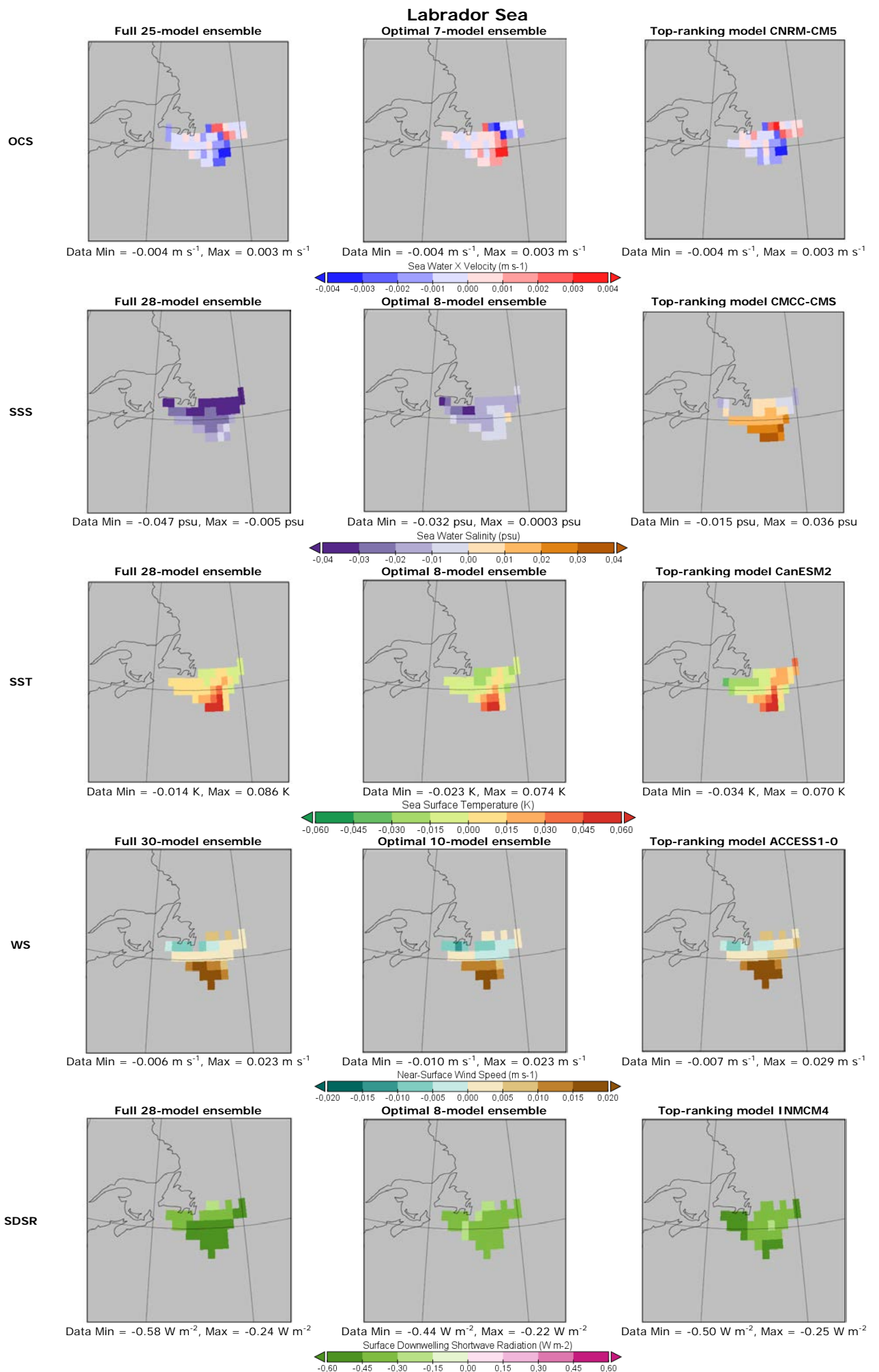


Figure S10. Spatial distribution of errors in annual trends for the blooming period between models and reanalysis for five forcing factors in the blooming area of the Labrador Sea.

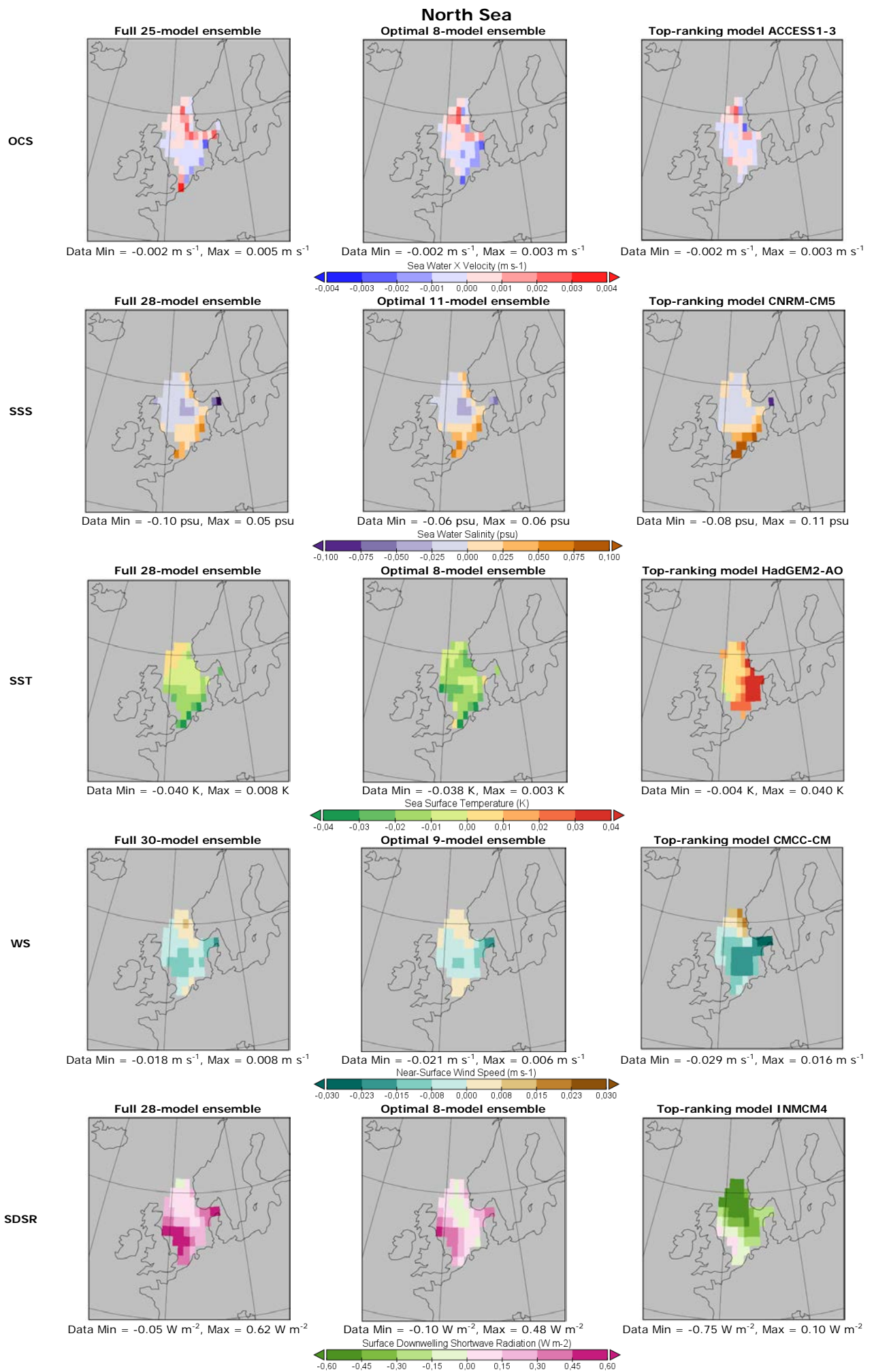


Figure S11. Spatial distribution of errors in annual trends for the blooming period between models and reanalysis for five forcing factors in the blooming area of the North Sea.

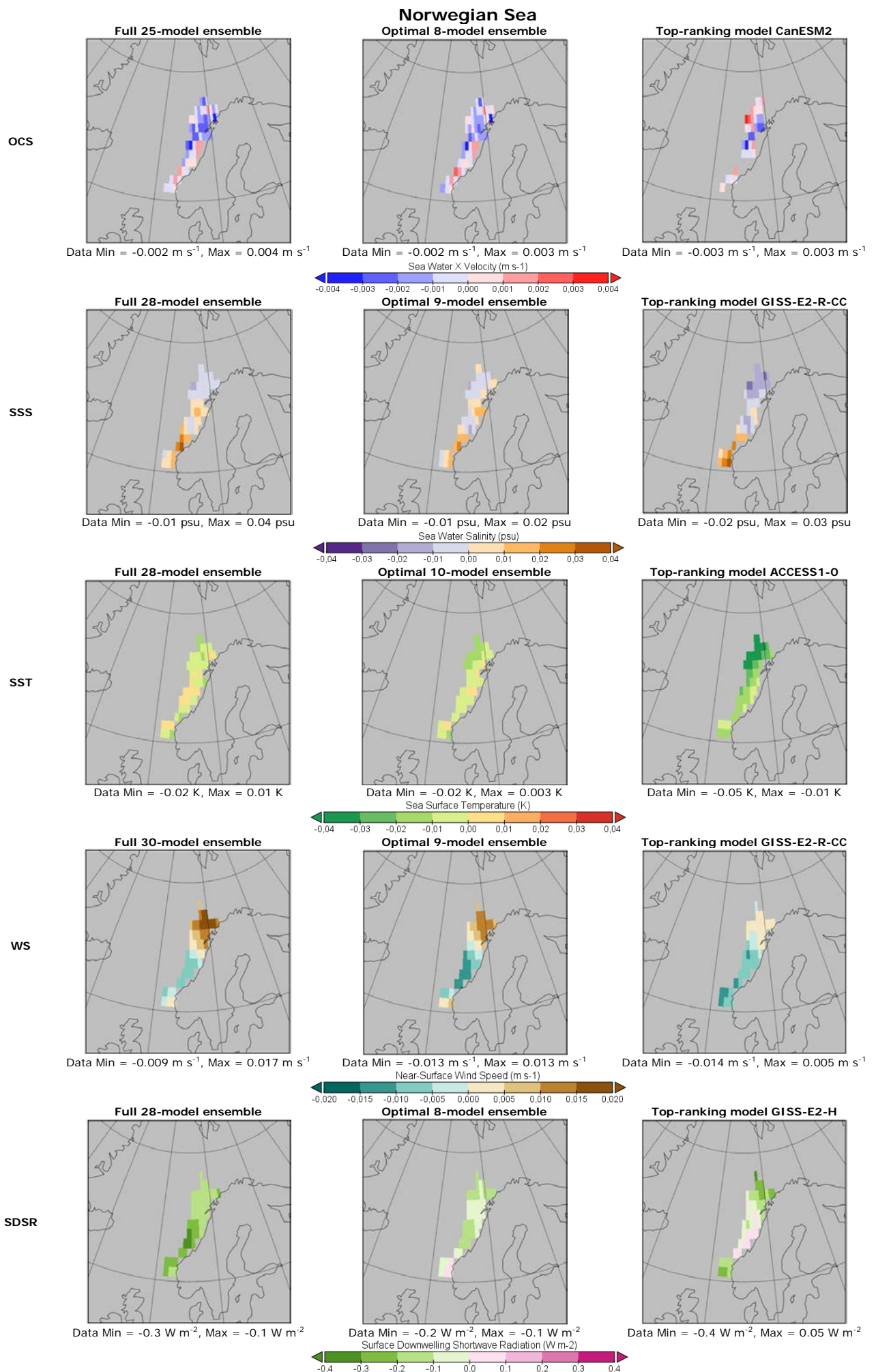


Figure S12. Spatial distribution of errors in annual trends for the blooming period between models and reanalysis for five forcing factors in the blooming area of the North Sea.