

1 Supplementary Information

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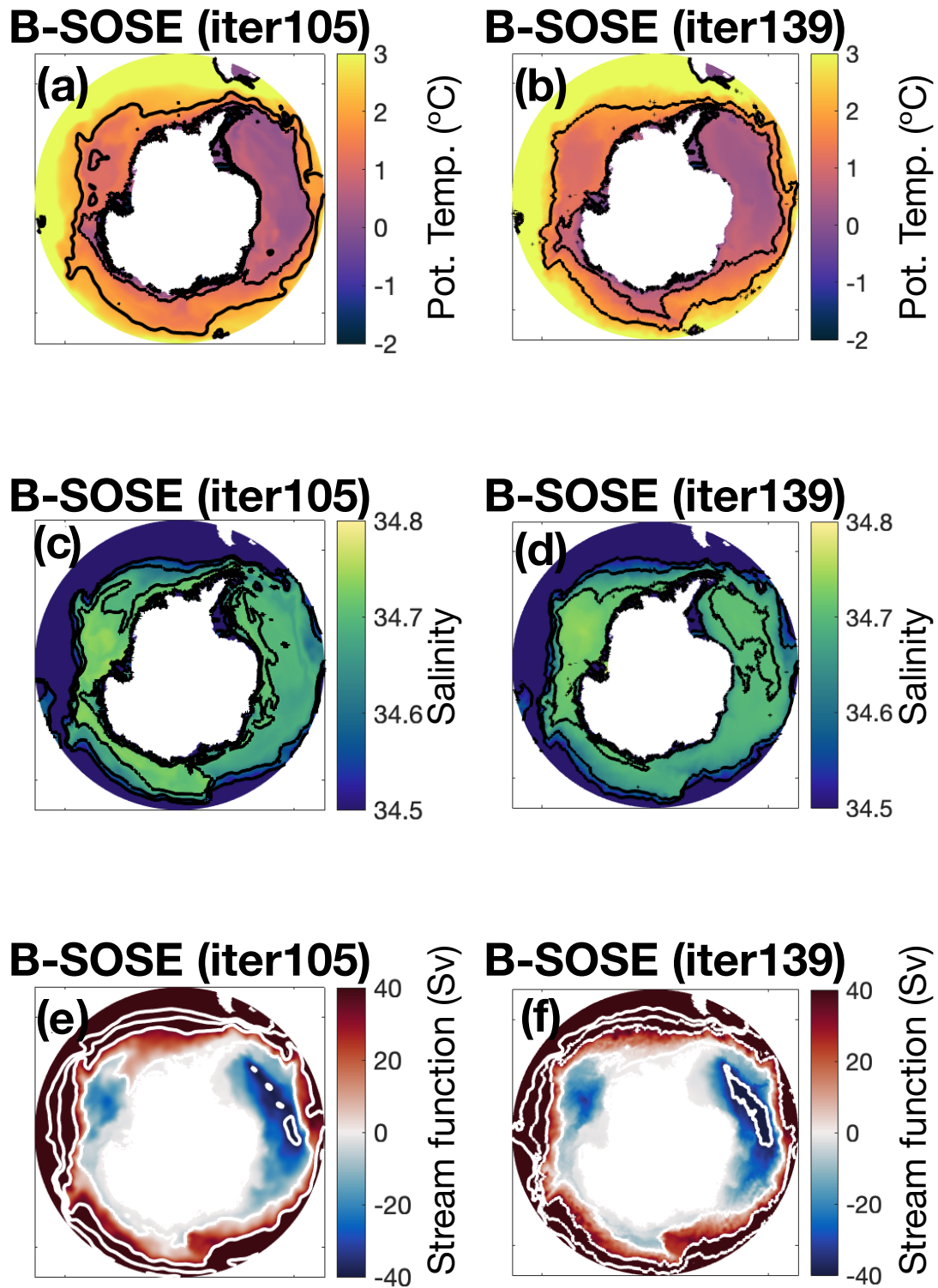
3 Evaluation of MITgcm-based ocean reanalysis for the Southern Ocean

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5 Nakayama et al.

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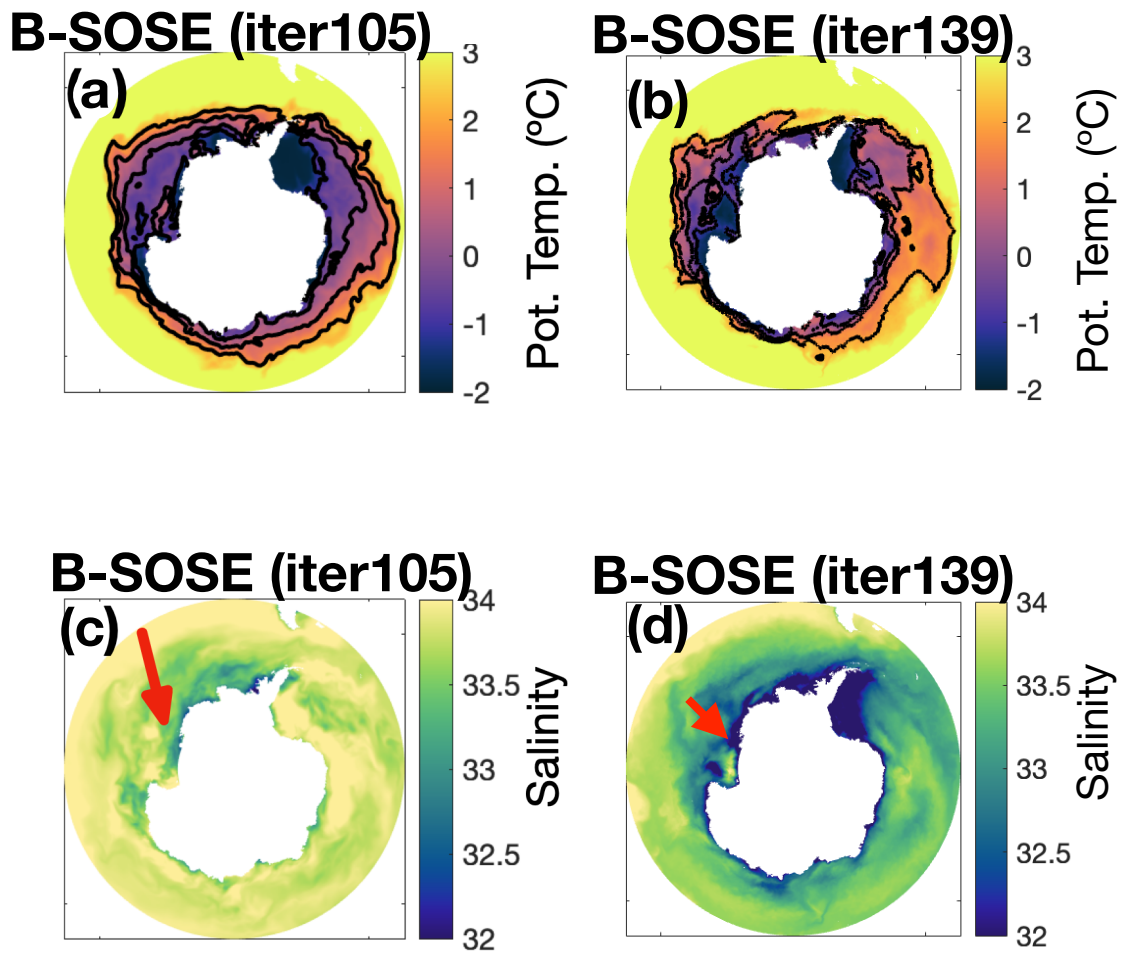
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9 **Supplementary Figure 1.** Same as Fig. 4 but for SOSE iterations 105 and 139.

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12 **Supplementary Figure 2.** Same as Fig. 5 but for SOSE iterations 105 and 139.

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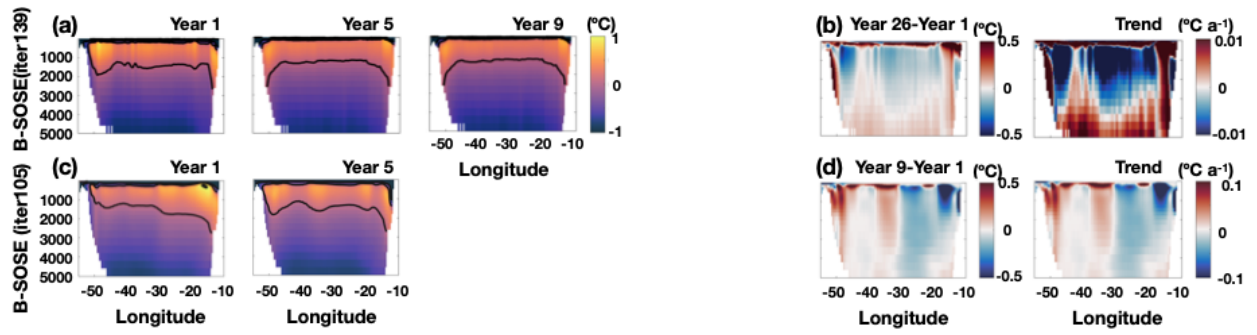
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20 **Supplementary Figure 3.** Same as Fig. 9 but for SOSE iterations 105 and 139. Note that color

21 scale for SOSE trends are different compared to other figures in Fig. 9.

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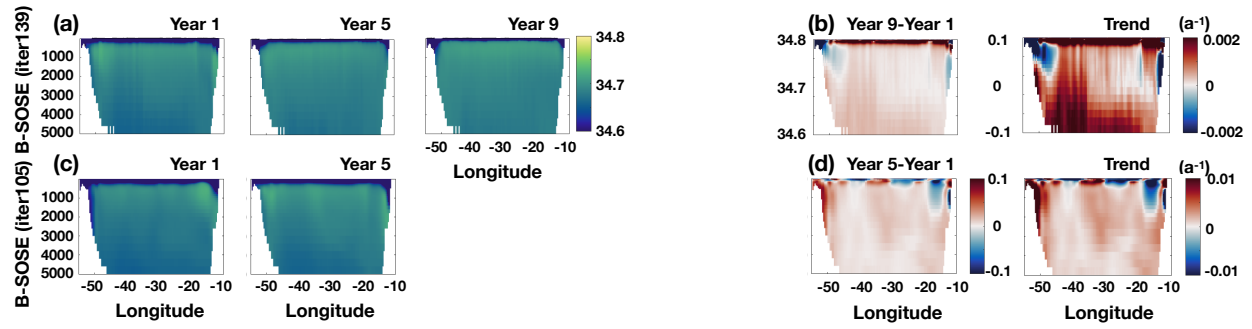
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36 **Supplementary Figure 4.** Same as Fig. 10 but for SOSE iterations 105 and 139. Note that the

37 color scale for SOSE trends is different compared to other figures in Fig. 10.

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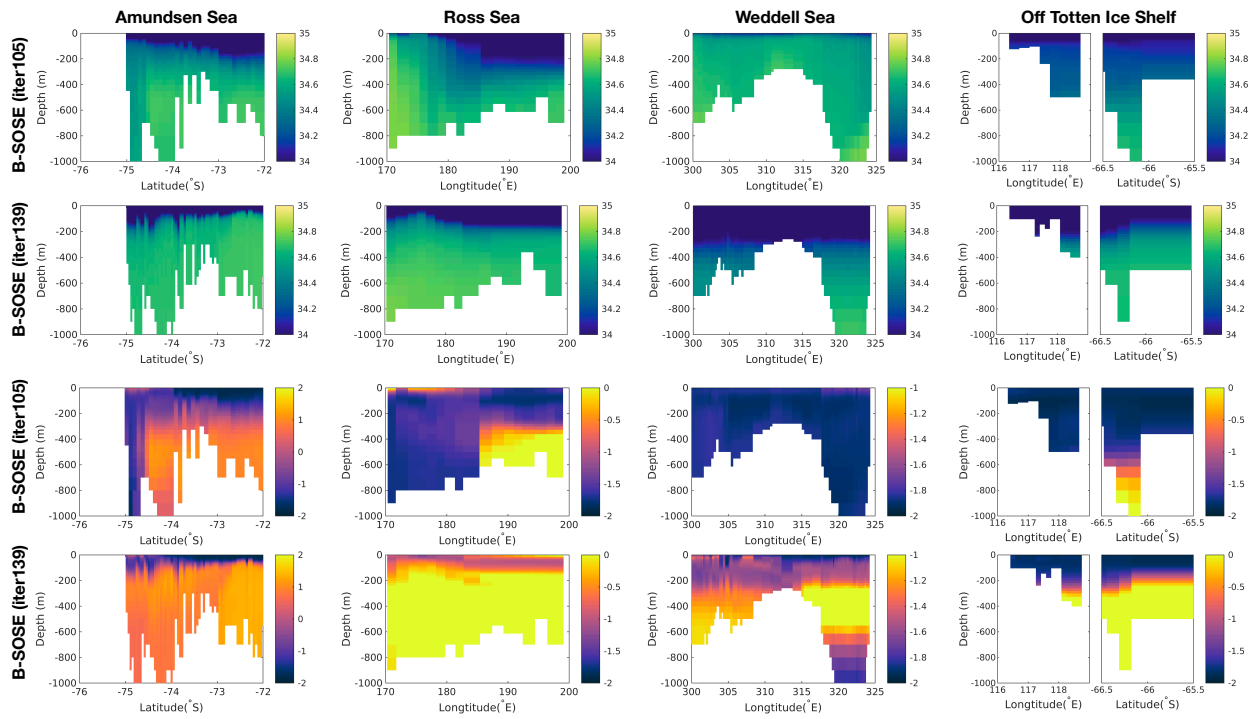
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47 **Supplementary Figure 5.** Comparisons between SOSE iterations 105 and 139 for all

48 temperature and salinity sections shown in Figures 15 and 16.