

CORRIGENDUM

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In Karpechko et al. (2009), the two Screen et al. references were set and thus cited incorrectly. The correct citations are as below:

The influence of the SAM has also been identified in moisture transport and precipitation (Boer et al. 2001), storm track activity and regional rainfall (Brahmananda Rao et al. 2003), sea surface temperature (Mo 2000; Hall and Visbeck 2002; Screen et al. 2009b), ocean circulation (Hall and Visbeck 2002; Sen Gupta and England 2006, hereafter referred to as SGE06), and sea ice concentration (Lefebvre et al. 2004; Liu et al. 2004).

Screen et al. (2009b) also showed that model resolution does not strongly impact the short-term SST response to the SAM in an ocean model run at various horizontal resolutions.

Screen et al. (2009a) showed that the observed negative SST response over the Pacific is associated with negative anomalies in the observed atmosphere-to-ocean heat fluxes, and the observed positive SST response east of Drake Passage is associated with positive anomalies in atmosphere-to-ocean heat fluxes. They suggest that the observed atmosphere-to-ocean heat flux anomalies in these regions are associated with observed zonal asymmetry in the SLP response, which is not simulated by the models.

However, Screen et al. (2009a), studying the initial SST response to the SAM, show that in most of the Southern Ocean the ocean-atmosphere heat fluxes are

associated with SATO anomalies driving SST anomalies rather than the other way round.

Screen et al. (2009a) analyzed the SAM responses in four CMIP3 models and found that in their subset all of the models simulated a too-strong anomalous Ekman flow related to a too-strong zonal wind response. They concluded that the errors in the simulated Ekman heat flux are larger than the other mixed layer heat budget terms over most latitudes within 40°–65°S. North of 40°S, errors in the atmosphere-to-ocean heat fluxes become increasingly important.

This is confirmed by Screen et al. (2009a) who performed a detailed study of the terms of the ocean mixed layer heat budget.

While the simulations only possess limited skill in representing the short-term SST response to the SAM, the long-term response, which is influenced by meso-scale eddies, may be even more questionable (i.e., Screen et al. 2009b).

The staff of the *Journal of Climate* regrets any inconvenience this error may have caused.

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