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Poster

A previous study by Meredith and Hogg (2006) found no evidence of an increase in eddy kinetic energy (EKE) in the Southern Ocean between 1992 and 2002. Here, we return to this issue using twenty years of observations and eddy kinetic energy calculated from both crossovers and from AVISO gridded data. We find that the EKE computed from crossovers is substantially larger than that computed from the gridded data, by approximately 40%. Both calculations do indicate a positive trend in the Indian and Pacific Oceans. When converted to relative change from the 1993 to 2000 mean, the change is 6% per decade. Sampling the gridded data to crossover locations does not change the result, suggesting the reduced sampling of crossovers are not to blame for the difference in magnitude. The more likely explanation is attenuation of signal due to the gridding process.

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