CORRIGENDUM

Slow mixed convection in rectangular containers

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Journal of Fluid Mechanics, vol. 471 (2002), pp. 203-217

Dr Stuart Norris, Bioengineering Institute, University of Auckland, has pointed out that, while checking our results against those from his finite difference code, he found serious discrepancies for one of the cases considered in our paper, Case D. A check showed that a single character was in error in our code for this case. Figure 7 on page 215 of the original paper should be replaced by the corrected version given below. These calculations incorporate the correction to the code, together with a correction for non-homogeneous corner data which helps to speed up the convergence of the relevant series near the corners. These results invalidate the explanation given on page 214 on how the quiescent field in a stably stratified liquid in a shallow container is achieved through a series of weak counter-rotating eddies. As can be seen from the corrected figure 7(a), there is only a single pair of counter-rotating eddies, just as in the other two cases. We thank Dr Norris for pointing out the error.



FIGURE 7 (corrected). Streamline patterns in buoyancy-induced convection when the top wall is heated and the bottom wall cooled with respect to the sidewalls at ambient temperature (Case D). (a) D = 0.25, (b) D = 1.0, (c) D = 4.0.