

On the long-term solution of a quasi-geostrophic ocean circulation model: the continuous and the semi-discrete models

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We study in this paper the long-term solutions of a barotropic quasi-geostrophic ocean circulation model and its semi-discrete finite element formulation. We prove the existence of global attractors for the continuous and the finite element semi-discrete models and the convergence of the semi-discrete attractor to the continuous one when the space discretization parameter $h \rightarrow 0$.

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