

Abstract Submitted
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Internal wave attractors in stratified fluids, robustness to perturbations LEO MAAS, NIOZ-Netherlands Institute for Sea Research, JEROEN HAZEWINDEL, Scripps - UCSD, CHRYSANTHI TSIMITRI, EAWAG - Switzerland, STUART DALZIEL, GK Batchelor lab DAMTP Cambridge UK — Previously, internal wave attractors have been studied in the laboratory in idealized situations. Here, we present a series of experiments in which these conditions are modified. Modifications are made by varying the forcing frequency, by using a non-uniform stratification, by introducing finite amplitude perturbations to the trapezoidal domain and by using a parabolic domain. All these new experiments reveal the persistence of internal wave attractors that remain reasonably well predictable by means of ray tracing. We conclude that the possibility of wave attractors has to be addressed whenever internal waves are found in stratified fluids.

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