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Vertical distribution model of anchovy (*Engraulis encrasicholus*) and sardine (*Sardina pilchardus*) eggs in a turbulent and stratified environment

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The vertical distribution of eggs in the water column is explained by their buoyancy and the wind induced turbulence. In this work, the results obtained with the model developed by Boyra *et al*, (2003) compared with real vertical distributions are shown. Four different environmental scenarios are distinguished, depending on the stratification level of the water column and the wind induced turbulence. The results shows that the model fails in highly stratified environments. In these cases, the eggs are concentrated near the pycnocline, forming sub-surface peaks. As the spawning area of anchovy in the Bay of Biscay is related mostly to the estuaries or river mouths, where water column is stratified, the predictability of the model in those areas is needed to be high. In order to improve the model, measurements with a Microstructure Measuring System are going to be done. This would be useful to better understand the structure of turbulence in those areas and the influence in the vertical distribution of eggs.