

This paper studies the meander and formation of eddies by a coastal current that flows along a sloping topographic shelf. Using ROMS to run several numerical simulations they find that there are several different dynamical regimes that can occur: quasi-stable coastal current, the propagation of coastal meanders and the formation of coherent eddies. The particular regime that arises seems to be set by their topographic parameter  $T_p$  and the vertical aspect ratio parameter  $\gamma$ .

The manuscript is well written and presented and suggest it be accepted for publication after the following minor points have been addressed.

- The title should read “Meanders and eddy formation...”
- The vertical structure of the basic state is set by equation (3) and is Gaussian. This is of course a fine choice but is there a physical reason why they choose this over an exponential? A sentence discussing this might be of interest to the reader.
- First line of section 3 says “In this chapter...”. I think you mean section.
- Figure 5 looks odd to me. The figures on the left look ok but the figures on the right are not very interesting. I know that they have rescaled this by a factor of 2.5. Maybe you need to do more to make this figure actually show some information about the flow.
- In Appendix A, the equation that follows A1 and may have a typo. Otherwise there is a nonlinear boundary condition which I do not understand.