

Interactive comment on “Coastal gradients south of Cape Town: what insights can be gained from mesoscale reanalysis?” by Mark R. Jury

Anonymous Referee #1

Received and published: 26 August 2020

There are some inconsistencies throughout the paper: 1) line 94 in-situ line 130 in-situ line 101 insitu line 120 insitu line 347 in situ

2) line 37 et al line 90 et al the rest of the entries are et al.

3) line 216 very (is underlined)

References: 1) line 45, Jacobson's thesis: Jacobson, M. 2014. The influence of a spatially varying wind field on the circulation and thermal structure of False Bay during summer: a numerical modelling study. MSc Thesis, University of Cape Town.

2) line 52, de Vos' thesis: De Vos, M. 2014. The Inshore Circulation at Fish Hoek and Potential Impacts on the Shark Exclusion Net. MSc Thesis, University of Cape Town.

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3) line 56, sandy beaches: JP Fourie et al. 2015. The influence of wave action on coastal erosion along Monwabisi Beach, Cape Town. South African Journal of Geometrics. Volume 4, Number 2.

4) the article uses a few thesis results, have the students published any of the data in a peer-reviewed journal? If they have not, I believe it is acceptable to use their data from reputable universities or institutional reports. Finding peer-reviewed data for False Bay has been scares from the mid '90 up until recently. -Coleman 2019 -de Vos 2014 -Gilljam 2002 -Nicholson 2011 -Jacobson 2014

Question: 1) The paper says, 'Validations have been done for the HYCOM reanalysis, and errors for many variables are < 10%'. Were there any critical variables that fell outside of this 10% error for the paper's model? Can you elaborate if these validations were explicitly for the HYCOM model for this paper or where these validations from a prior HYCOM reanalysis with possibly different boundary conditions?

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