

Interactive comment on “A study on distribution of chlorophyll- \vec{a} in the coastal waters of Anzali Port, south Caspian Sea” by S. Jamshidi and N. Bin Abu Bakar

Anonymous Referee #2

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A study on distribution of chlorophyll-a in the coastal waters of Anzali Port, south Caspian Sea

Jamshidi & Bin Abu Bakar

This manuscript presents a series of observations of chlorophyll concentration made at 3 time points during 2008. Unfortunately a simple description of chlorophyll distribution on its own provides no real insight into ecosystem dynamics or function and I cannot see that there is anything novel or exciting about this work which would justify its publication in this format. I would suggest that at the very least there would need to be a detailed parallel investigation of nutrient concentrations and hydrography

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(temperature, salinity, light field) in order to fully describe the physical and chemical environment. Though this would still need to be done with a view to hypothesis testing, or the highlighting of an interesting phenomenon of the phytoplankton community.

Some specific comments:

Chlorophyll concentrations whether they are high or low or not damaging to the marine environment (P436,L5), and the variability of chlorophyll may be an indicator of ecological condition it does not determine the ecological condition (P438,L28). High concentrations may be the result of elevated nutrient concentrations, with follow-on problems (including oxygen depletion) associated with eutrophication, but the high concentration is a symptom of a problem not the cause.

Salinity has no units

No method is presented for the determination of chlorophyll-a concentration. The authors state that “A portable Ocean Seven 316 CTD probe . . . was applied”. From this we should assume that this probe was fitted with an appropriate fluorometer, though no detail is provided as to how this was calibrated to provide absolute values of chlorophyll-a concentration.

The structure of the results section is confusing. First sections AB and CD are described, and then EF and GH. It would be easier to interpret if each section was described independently.

The figures are of a poor quality. To improve them, I would suggest fewer contour levels, and to alter the interpolation values in order to smooth contour lines. It would also be an advantage to see the sample or station positions.

Interactive comment on Ocean Sci. Discuss., 8, 435, 2011.

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