

Interactive comment on “Photophysiological state of natural phytoplankton communities in the South China Sea and Sulu Sea” by W. Cheah et al.

T. Smyth

tjism@pml.ac.uk

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This paper presents a comprehensive set of measurements (physical, chemical and biological - although the latter inferred by HPLC techniques in general) in the South China Sea and Sulu Sea. The authors look at the different drivers behind the different physiological stresses on the phytoplankton in these regional seas. In terms of description of the area and its attendant hydrography, nutrient stresses and the like it is a useful contribution to the field: indeed I think there are few studies of this particular area that I am aware of. However, on p12118 and line 4 the authors state that: "... the exclusion of photoadaptation information in the model resulted in a 35% underestimation of primary production in the northern SCS." I think that what is missing from this paper is a wider application of the results to modelling studies of the area. This would then

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give the reader more of a feel for "what have we learnt from this study" rather than a simple presentation of results with only an attempt statistically (in univariate space) to determine correlation and "drivers". This might be an unrealistic criticism as the physical oceanography and biogeochemistry are highly complex in this region and there may be little or no ecosystem model skills amongst the authors. If the authors are to develop this work further beyond the (albeit good) descriptive stage, this is where I would suggest they take things.

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