

Interactive comment on “Plankton in the open Mediterranean Sea: a review” by I. Siokou-Frangou et al.

Anonymous Referee #1

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Review of "Plankton in the open Mediterranean Sea"

Overall: the value of the paper lies mainly in the gathering of the literature. It reads as though different people wrote different sections. Large parts require editing for English.

Publication recommended after revision. Missing entirely is any mention of small planktivorous fish which would have added value to the article. Detailed comments below.

Section 1 Introduction

First paragraph of the Introduction gives no information and is poorly written- should be deleted.

Giving credit where it is due- the introduction could give a short history of the major

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oceanographic studies which provided much of the data described. This would clearly show what was studied and when.

Section 3 Phytoplankton section

- pg 11198- Claim of evidence of climate change is made with a poor foundation- The paper cited merely suggests the possibility.

pg 11200 - the text reads as if one should believe remote sensing estimates of primary production as 'true' compared to the in situ values which are used calibrate satellite color data.

I believe the values of primary production measured in situ are net, not gross primary production in the sense that DOC production & consumption are not measured. "New primary production" is all together different if the authors refer to production based on nutrients from deep waters. The entire paragraph is murky

The sections detailing the distributions and concentrations of various groups of phytoplankton lacks a synthesis- perhaps a table could be added showing major characteristics - E-> W pattern, seasonality, peak values, common taxa, etc. for each group.

Section 4 Microbes Section

Microbe section stand out as providing new data analysis given in the figures.

Section 5 Mesozoplankton section-

This section requires some re-structuring. It seems to go on forever with no real point. Missing are some recent references and discussion concerning mesozooplankton diel vertical migration.

Section 6 'Plankton food webs in the ...

- Nicely written, the point finally comes into focus! Whoever wrote this should write the introduction.

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