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Discussions

Interactive comment on "Winter phytoplankton blooms in the offshore south Adriatic waters (1995–2012) regulated by hydroclimatic events: Special emphasis on the exceptional bloom of 1995" *by* Mirna Batistić et al.

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Answers on Referee#3 comments: The general observation of the Reviewer#3 is lack of the data of phytoplankton abundance and composition in the open South Adriatic. Yes, this is the truth, and one of the important reasons why we wanted to present these unique data, of the high winter phytoplankton abundance in the midlle of the 90's in the open South Adriatic (OSA), to scientific community. The second reason was that winter in the oligotrophic OSA generally has been considered a non-productive season with no significant phytoplankton abundances. So we tried to verify if this statement is true

or maybe high phytoplankton abundance and Chl-a are regular events during the winter in the open South Adriatic. Therefore, we used data on the phytoplankton abundance in winter of 1994, 1995 and all available already published data (our own and from other authors) from 2007 to 2012 which are presented in Table 2. To fullfill the gaps in the data of winter phytoplankton we used satelite Chla-a (which is widely accepted in scientific literature) for providing insights into phytoplankton biomass. These data are presented using Hoevmoller diagrams and cover period from 1997 to 2012, and show as follows: a) whole annual period, from which everybody can clearly see high values in the begining of the year (winter); and b) winter time in each year with detail presentation of Chl-a distribution in the OSA during winter months (Dcember – March). Reviewer's comments that Hoevmoller diagrams are too small, can be easily edited. But, this can not be the problem in reading images because it can be enlarged by magnifing on the screen and every detail can become visible. This can also be applied in hard copy edition. Figures of hydrographical, chemical and biological parameters are presented in two ways (linear and by curves) and if presentations in curves are not so clear, linear presentations are very simple and clear. Anyhow, we can improve mentioned figures. Many thanks to Reviewer's comments, but we would appreciate if she/he would be so kind and give us detail explanation what is superficial in our analyses of the presented data. So we can improve our paper. We hope that our work is not discredited because of the lack of in situ data in the area during the past times. We can not change this fact but in spite of that, our explanations of registered winter bloom events in the OSA by coupling of bilogical and physical processes give a new cognitions that could be check in the future by targeting in situ data collection.

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