## Our reply to referee's comments is incorporated in referee's text.

Anonymous Referee #2

Received and published: 20 August 2015

MS "Factors favouring large organic production in the northern Adriatic: Towards the northern Adriatic empirical ecological model"

Manuscript is interesting and the authors attempt to identify mutual factors that affecting primary production and variations of phytoplankton abundance of the northern Adriatic. Their approach to research is original and effective, and the results bring new insights into ecological processes of the study area. In such an environment of high variability reliable conclusions can only be obtained from long term investigations and multidisciplinary approach to the research – this is the merit of the presented paper.

The authors initiate that their approach can be variable to predict the total production of the study area, which could have important economic significance. Thus, my decision is that manuscript can be accepted for publication after minor corrections.

## Comments:

Use of "large organic production" might be misleading as is used in different sense than is usually used. Consider changing it to be more straightforward.

"Large organic production" was used in the title and has been changed to: "Factors favouring phytoplankton blooms in the northern Adriatic: Towards the northern Adriatic empirical ecological model".

Results, "Phytoplankton at the section"-At the eastern part, upper layer is highly stratified only during several 15 months (February–March and October), while the stratification is usual in the west (February–October). Specify what it relates to term "stratified! *The term "stratified" was replaced with "gradient" as it was incorrectly used.* 

In Discussion "4.2 Simultaneous factors inducing blooms"-This part of manuscript is loaded with presentations of the results. The entire second paragraph should be part of the results. **Done.** 

Revise the use of "biomass" and "organic" throughout the manuscript, or give a better explanation when first used.

We changed terms "biomass" and "organic" to phytoplankton as appropriate in the entire ms.