Interactive comment on “Seasonal cycling of phosphorus in the southern bight of the North Sea” by C. van der Zee and L. Chou

Anonymous Referee #2

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Preliminary comments and evaluation

The paper describes the seasonal cycle of phosphorus in the southern bight (Southern Bight?) of the North Sea. This paper is a valuable contribution to the nutrient studies in coastal waters. At least for the North Sea, relatively little attention has been given to the role of inorganic nutrients in coastal eutrophication. Butler et al (J. mar biol. Ass. U.K. 59: 239-250. 1979) already the seasonal cycle of organic and inorganic nutrients in the English Channel. They emphasised the role of phytoplankton utilizing organic nitrogen compounds. Two points below were made by Butler et al and I challenge the authors to comment on this.

Butler et al. noted large fluctuations in inorganic nutrient ratios but a rather stable ratio of TN/TP. Do these observations fit in your results?

From the POP and DOP graphs in the present paper it seems that at times in Summer more total organic phosphorus is present than PO4 in Winter. I would expect lower
values during Summer as found by Butler et al. (1979). Please comment on this.
I look forward to your answers.

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