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Comment

***Interactive comment on* “The sea surface CO<sub>2</sub>  
fugacity and its relationship with environmental  
parameters in the subpolar North Atlantic 2005”  
by A. Olsen et al.**

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This manuscript provides insight into the surface fCO<sub>2</sub> variability throughout the year in the subpolar North Atlantic and discusses the use of several predictive parameters such as SST, chlorophyll and mixed layer depth (MLD). The work is of high quality and provides interesting results that are relevant and timely. Overall, I only have two general comments which I thought should be discussed in more detail. 1. What is the predictive capability of combining SST, chl and MLD instead of looking at single equations? Since each parameter features certain characteristics which are vital to the fCO<sub>2</sub> cycle - SST is the thermodynamic component, chl the biological etc - it would be

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useful to include all three parameters in an algorithm. 2. The manuscript reports data for the year 2005 - how representative is this year compared to previous or later years?

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Interactive comment on Biogeosciences Discuss., 4, 1737, 2007.

**BGD**

4, S695–S696, 2007

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