Supplemental material submitted for the paper

A model study of the seasonal and long term North Atlantic surface pCO_2 variability

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10 Introduction:

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- ¹² This supplemental material contains two figures.
- ¹³ Figure 1 shows time-series of sea surface temperature (SST) from both the
- ¹⁴ model and observation over the 2002–2007 periods at the NASPG, NE-ATL,
- ¹⁵ Caribbean, and BATS domains.

Figure 2 shows model simulated net primary production (NPP) for the three
locations in the North Atlantic: sub polar (Nuka domain), sub tropical (Northeast domain), and the tropical (Carribean domain). The model simulations are
plotted together with the observational estimates based on the remote sensing
model, VGPM (Behrenfeld et al., 1997).

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22 References

Behrenfeld, M. J., and Falkowski, P. G.: Photosynthetic rates derived from
 satellite-based chlorophyll concentration, Limnol. Oceanogr., 42(1), 120, 1997.

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Figure 1: Time series of both observed and model simulated sea surface temperature (SST) for the four domains in the North Atlantic: North Atlantic subpolar gyre (NASPG), sub tropical (NE-ATL), Caribbean, and BATS over the 2002–2007 periods.



Figure 2: Time series of model simulated net primary production (NPP) for the three domains in the North Atlantic: sub polar (Nuka), sub tropical (NE-ATL), and tropical (Caribbean) regions over the 2003–2007 periods. The observational estimates from the SeaWiFS remote sensing data are also included.