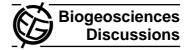
Biogeosciences Discuss., 6, S1–S2, 2009 www.biogeosciences-discuss.net/6/S1/2009/© Author(s) 2009. This work is distributed under the Creative Commons Attribute 3.0 License.



**BGD** 

6, S1-S2, 2009

Interactive Comment

## Interactive comment on "Impact of enhanced vertical mixing on marine biogeochemistry: lessons for geo-engineering and natural variability" by S. Dutreuil et al.

## K. Fennel

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I would like to alert S. Dutreuil, L. Bopp and A. Tagliabue, the authors of "Impact of enhanced vertical mixing on marine biogeochemistry: Lessons for geo-engineering and natural variability" (Biogeosciences Discuss 6, 1-26, 2009), to two recent papers that directly discuss feasibility and impact of open ocean pumping as a carbon mitigation strategy:

(1) Karl DM, Letelier RM, Nitrogen fixation-enhanced carbon sequestration in low nitrate, low chlorophyll seascapes, MEPS 364:257-268 (appeared on July 29, 2008) Available with Open Access at: http://www.int-res.com/articles/theme/m364p257.pdf

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Interactive Discussion

Discussion Paper



(2) Fennel K, Widespread implementation of controlled upwelling in the North Pacific Subtropical Gyre would counteract diazotrophic  $N_2$  fixation, MEPS 371:301-303 (appeared on November 19, 2008)

Available with Open Access at: http://www.int-res.com/articles/meps\_oa/m371p301.pdf

Also note the response to (2):

(3) Letelier RM, Strutton PG, Karl DM, Physical and ecological uncertainties in the widespread implementation of controlled upwelling in the North Pacific Subtropical Gyre, MEPS 371:305-308 (appeared on November 19, 2008)

Available with Open Access at: http://www.int-res.com/articles/meps\_oa/m371p305.pdf

These papers are highly relevant to Dutreuil et al.'s study and warrant discussion in the manuscript.

Sincerely, Katja Fennel

Interactive comment on Biogeosciences Discuss., 6, 1, 2009.

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