Biogeosciences Discuss., 11, C4021–C4022, 2014 www.biogeosciences-discuss.net/11/C4021/2014/ © Author(s) 2014. This work is distributed under the Creative Commons Attribute 3.0 License.



BGD 11, C4021–C4022, 2014

> Interactive Comment

Interactive comment on "Riding on the fast lane: how sea turtles behave in post-nesting migration" *by* Y.-H. Wang et al.

F. Ascani

fascani@hawaii.edu

Received and published: 2 August 2014

- 1. It would have been nice if the investigators would have considered the use of surface drifter data to strengthen their results and construct confidence intervals.
 - The first use of this dataset would have been to estimate the probability that
 a surface drifter passing nearby Lanyu Island could have also veered off
 to the east. I predict that this probability will be low and it will strengthen
 and quantify more the conclusion concerning the swimming behavior of the
 turtles. (If the investigators want to do that, I suggest to use only surface
 drifters that pass near Lanyu Island at about the same period of the year as
 the start dates of the three turtles, in order to avoid biases.)
 - If there are surface drifters that did veer off to the east, the investigators C4021



could potentially use this subset to construct confidence interval for their correlation coefficient and PCA analysis with their estimated swimming velocity. How? Just re-do the analysis concerning the swimming velocity with the surface drifter subset. That will provide you with, for instance, the amplitude of correlation coefficient that you might expect *without swimming behavior* and *considering the error in the estimated ocean current velocity*. In other words, it will enable the investigators to reject or not the null hypothesis that the signal observed in the swimming velocity is only due to a combination of passive behavior and error in the ocean current estimates.

2. Fossettle et al. (2012) is not referenced

Sincerely

Francois Ascani Assistant Professor, Marine Science University of Hawaii at Hilo

Interactive comment on Biogeosciences Discuss., 11, 11481, 2014.

BGD

11, C4021–C4022, 2014

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

