Interactive comment on “Variability in the Subtropical-Tropical Cells and its Effect on Near-Surface Temperature of the Equatorial Pacific: a Model Study” by J. F. Lübbecke et al.

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Dear Reviewers,

Because of some mishandling of the review process (certainly by myself), my recommendations to the authors after your reviews were published were not sent to you. Therefore, please find a copy of that message (addressed to the main author) in which I proposed a brief analysis of the reviews, and provided recommendations for the revised manuscript. I consider that this information is necessary for you to comment on the revised manuscript recently submitted. I thank you again for your time and expertise.
Sincerely Yours,

------------- Message Sent to the main author (Dr. Joke Lübbecke):

I have been carefully reading the reviewers comments about your manuscript. Both reviewers agree that your paper contains worth publishing material, but they also expressed criticisms or comments that call for a revision of the manuscript. Therefore, your manuscript is not acceptable for publication in OS as it is now, but from my own reading and my analysis of the reviews, it is clear that it will be so with a reasonable revision.

Since the reviews appear to disagree on a few points, I give my views below on two specific points.

1 - A major critic of Reviewer #2 is that the paper addresses too many issues, and that this prevent an in depth analysis of any of those. This comment is opposite to the opinion of Reviewer #1 who finds that this diversity illuminates the model sensitivity. From my own reading of the manuscript, I tend to agree with Reviewer #1 and I find in particular that the resolution issue is cleverly used in the paper. Reviewer #1 recommends that you improve the discussion of the process of compensation between the interior and western boundary flow (section 4.2). When Reviewer #2 suggests a more in depth analysis of the stream field (his last two specific comments), my understanding is that he raised the same issue. The revised paper should certainly try to improve the discussion of this issue and consider bringing additional material in the discussion.

2 - Both reviewers would like a more precise discussion of the choice of the NST rather than the SST. The argument you provide regarding the limitation imposed by the forcing formulation on the use SST is fully relevant. However, the discussion of the link between the NST and the SST is clearly an issue for both reviewers which likely deserves more in depth description.

To conclude, I encourage you to submit a revised manuscript, and to provide a re-
sponse to the various points raised by the review. Please do not hesitate to contact me if you have any specific questions regarding the review.

Interactive comment on Ocean Sci. Discuss., 4, 529, 2007.