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Interactive comment

Interactive comment on "The Indian Summer Monsoon in MetUM-GOML2.0: Effects of air-sea coupling and resolution" by Simon C. Peatman and Nicholas P. Klingaman

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We make clear in the text that certain aspects of the propagation are improved and others degraded when the ocean is coupled. The pattern correlation is one diagnostic we use, but we are clear that it does not tell the whole story. By splitting the propagation diagrams into three latitude bands $(20^{\circ}-2.5^{\circ}S, 0^{\circ}-10^{\circ}N \text{ and } 12.5^{\circ}-40^{\circ}N)$, we now see that by far the largest difference in pattern correlation comes from the first (southern hemisphere) band, with the globally-coupled experiment having by far the lowest correlation there. However, in the other bands, where most of the northward branch of the propagation occurs, the picture is more complex and the differences between experi-

Discussion paper



ments are much smaller. For example, of the 90 km experiments listed in table 2, the experiment with coupling in only the Indian Ocean has the highest pattern correlation in the middle latitude band.

We rephrase the abstract (p1 II8–9) to make it clear that some but not all aspects of propagation are improved by coupling, and clarify the relevant sentences in the main text also.

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