Physical Drivers of the November 2023 Heatwave in Rio de Janeiro

Catherine Ivanovich, Adam Sobel, Radley Horton, Ana Nunes, Rosmeri Rocha, and Suzana Camargo

Editor's Comments

Dear Catherine, many thanks. I am satisfied with the responses and new manuscript. For completeness, I think you may decide to cite the following paper https://www.frontiersin.org/journals/climate/articles/10.3389/fclim.2025.1529082/full in which the large scale conditions behind the heat waves of winter and spring 2023 are discussed. I kindly ask you to see if this paper is appropriate to support your results and reference it appropriately. Then, I'll be ready to accept the manuscript for publication.

We are glad to hear that the Editor is satisfied with the changes we made to the last draft of the manuscript. We appreciate them bringing the paper above to our attention, which we have included as a citation in our manuscript when discussing the effects of large scale circulation patterns potentially associated with El Niño on the November 2023 heatwave in Rio de Janeiro. The new text citing this paper starting on P16L363 reads (new text in bold):

"The SST anomalies associated with the El Niño could have been responsible for initiating the wave train which set off the geopotential height anomalies over Rio de Janeiro, ***consistent with the results of a recent analysis exploring spring and winter heatwaves throughout South America during 2023 (Marengo et al. 2025).***"