

Second review of the paper:

“Influence of ENSO on entry stratospheric water vapor...”

written by Chaim I Garfinkel et al.

General:

The paper improved. However there is still one important point which needs clarification. See below.

Major points

- You write in your abstract: “the only aspect of the entry water vapor response with consensus is that La Nina leads to moistening in winter relative to neutral ENSO”. What you see is only a positive correlation between the moistening at 82 hPa and the La Nina index at the surface! You should take into account that the propagation of the La Nina signal (e.g. from the main convective outflow around 200 hPa) to the lower stratosphere around 80 hPa needs time of the order of few months (tape-recorder). Typically, this time is between 3 and 5 months so your interpretation that the enhanced water vapor in the lower stratosphere at the begin of the boreal winter is caused by La Nina is not correct. This error repeats many times in your paper, especially in relation to your non-linear correlation between the ENSO index and water vapor in the lower stratosphere. The correlation itself does not explain the formation of this relation!