

Interactive comment on “Correlations of mesospheric winds with subtle motion of the Arctic polar vortex” by Y. Bhattacharya and A. J. Gerrard

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I find this paper to be an important contribution to the community, especially as a means to inspire additional measurements and modeling.

I have some thoughts/queries which I would like to see addressed prior to publishing (these are NOT in any order of importance):

- * "OH" is in italics in line 2 of page 16552; it is not italicized anywhere else.
- * Line 13, same page, spell out "Section"
- * Line 19, same page (2nd line of Section 2)... ERWIN should be capitalized.

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* Line 1, page 16553... the accuracy is expressed for our unfounded belief! Line 3 uses the word "excellent" to describe a correlation... this whole paragraph could (and should) be reworded to inspire more confidence!! :-)

* OK, one of my bigger beefs: last paragraph of page 16553, why only look at 2 years??? Instrument drift could explain differences just as well, without a baseline of stability to compare to.

* 1st line of Section 3... you mention 3 years; then only use two??

*Line 7, page 16555; do you mean 95-96 ??

* I found myself wondering, both from a data as well as a physical point-of-view; would you expect any better correlations in this study if you looked at wind COMPONENTS ??

* 1st line of Section 5; I would include the word "suggesting"... correlation does NOT always imply causality.

* Figure 1; the one day averaging does not capture the variance very well... is there any useful information being overlooked here??

* Figure 2... MAKE THEM WHITE CROSSES!!! the whole black on black theme is not working for you!

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 16549, 2009.