Editor's comments are *italicized*; authors' responses are in regular (upright) text.

Final Editor's Corrections

Comments to the Author: The authors should address the following points:

Abstract: Introduce acronyms for ppbv and ppmv here. Do this for the main text as well when first introduced.

Since each term is used only once in the abstract, we have spelled them out there, and introduced the acronyms the first time each is used in the main text.

L. 114: Consider merging this paragraph with the next one to avoid 1-sentence paragraphs. Consider this as well elsewhere in the paper where you have 1-sentence paragraphs.

This doesn't really work in this case, since this sentence/paragraph is about MLS and CALIPSO, and the following two paragraphs are about MLS and CALIPSO individually. It is thus a separate "thought". We have, however, moved the one-sentence paragraph that was on lines 403–404, at the end of section 3, so that it leads off the first paragraph of section 4.1.

L. 289: Do you need "clearly"? Same for L. 486 (for "clear").

These have been deleted as suggested.

L. 313: Perhaps "precipitously" is a little bit hyperbolic? Maybe use another term, e.g., "strongly"?

We have replaced "precipitously" with "rapidly".

L. 604: Hitherto you use US spelling in the text, but here you have "modelled". Please be consistent.

We have changed this to "modeled".

L. 629: Is "dramatically" perhaps a bit hyperbolic?

We have replaced "dramatically" with "substantially" (though we think "dramatically" is actually accurate here).

Fig. 3 caption: I suggest you include a comment on what the end points of the

colour scale signify. Suggest you do the same for other similar figures.

The Figure 3, 7, 8, 9, and 10 captions now indicate the color bar ranges for each panel.

Fig. 15: I think it should be "Unusually cold".

We believe "unusual cold", as we have it, is consistent with the style in the other boxes (e.g., "disturbed vortex" implying "there was a distrubed vortex" and "unusual cold" implying "there was unusual cold").