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Discussions

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Interactive comment on "Seasonal patterns of atmospheric mercury in tropical South America as inferred by a TGM continuous record at the Chacaltaya Station (5240 m) in Bolivia" *by* Alkuin Maximilian Koenig et al.

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Authors response to reviewer 1:

The authors would like to thank the anonymous referee for the time-consuming review of this admittingly quite long manuscript. We thank for the kind words and for the comments, which helped in further improving this work.

Below, we repeat the referees' observations (bold), our comments (normal font) and the according changes made to the manuscript (italic):

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Discussion paper

Line 125: Amazon

The capitalization mistake has been corrected.

Amazon

Line 218: What is IQR?

Inter-quartile-range. We agree that this might not be self-explanatory, and added the following clarification after the equation in line 218:

,where IQR is the inter-quartile-range and n is the number of data points.

Figure 2: "distance in degrees" is quite unusual. What it would be in km?

Although native to the used coordinate system, we acknowledge that "distance in degrees" is not totally intuitive, so we decided to provide a conversion factor. We added the following caption in all relevant figures:

Dashed range circles show the distance to CHC in degrees, convertible to km by using the conversion factor 1° = 108.6 km, with an error below 3% in the whole domain.

Figure 3: The meaning of the black dots is not mentioned in the caption.

We agree that this is not self-explanatory (considering the varying definitions used in literature for the whiskers of a boxplot) and added the following to the caption:

Whiskers extend until the highest/lowest data point within the interval [1st quartile – 1.5 IQR, 3rd quartile + 1.5 IQR], values outside that range are shown as black dots.

We would like to highlight that with the clarification added to the equation in line 218, the term IQR is already defined in the text as "inter-quartile-range".

Figure 6b: The meaning of data vertical lines is not clear.

Comparably to the above case, we added the following to the caption:

Whiskers extend until the highest/lowest datapoint within the interval [1st quartile – 1.5 IQR, 3rd quartile + 1.5 IQR], values outside that range are not shown.