Review report cp-2019-13

I enjoyed reading the manuscript. It is a thoughtful and comprehensive study on a topic of great interest for Climate of the Past's readership. The comments made by the reviewers in the interactive open discussion have been carefully incorporated, especially how different climate forcings are correlated to climatic teleconnections and its drivers for explaining precipitation anomalies in the Lake Chungara pollen record. I'm not an expert on this topic and so I only have suggestions for expanding the strength of modern pollen-environmental relationships to better interpret the fossil record.

How well the fossil pollen assemblages are represented by the surface vegetation types? It would be good to compute an unconstrained multivariate ordination analysis (e.g PCA) projecting the core samples into the ordination defined by modern pollen assemblages. In fact, it'd be even more relevant to carry out an ordination analysis with CCA or RDA constrained to climatic data (i.e. from WorldClim). By doing so, precipitation and/or temperature controls on fossil assemblages shifts could be assessed in a more nuanced way.

Is possible to comment on the idea of Equatorial Atlantic sea-surface temperature gradient variability to explain extra tropical source of moisture in Lake Chungara precipitation anomalies? Also, to what extent is possible to identify change in seasonality of precipitation anomalies in the Lake Chungara record?

Minor changes:
Line 156: "a few years later"
Line 179: It seems a bit contradictory to claim that the climate history of Lake Chungara is not well understood after such a great summary of paleolimnological and paleoclimatological studies carried out in the region over the last 20 years.
Line 198: please indicate which statistical software was used to carry out the CONISS analysis
Line 227: please change ordination by classification
Line 323: please change "periphylic" to "periphytic" (diatoms)
Line 356: replace "in the core" by "in the central"