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# *Interactive comment on* "Seafloor observations at Campeche Knolls, southern Gulf of Mexico: coexistence of asphalt deposits, oil seepage, and gas venting" *by* Heiko Sahling et al.

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We thank Referee #1 for the thorough revision of our manuscript that helped to make it more concise. We followed all of the referee's recommendations and applied changes to the manuscript accordingly. A revised version of the manuscript considering the comments of Referee #1, #2, and #3 as well as the SC3 has been uploaded, including a version with tracked changes.

We shortened the abstract, modified the title, deleted Section 5.6., and omitted Figure 15 which was part of Section 5.6. All of the ambiguous wordings have been rephrased and all spelling mistakes corrected. We re-phrased the paragraph concerning the use of vestimentifera as chronometer and are more careful about its validity. The dates of



the ships cruise and the station work were included in the text and Table 1. The figures were redrawn.

There are two comments by the referee that we considered and applied changes for making the points more clear that we would like to comment explicitly here:

Following the recommendations by Referee #2 we moved and integrated the section Results 4.1 into the Material and Method section. We describe in more detail how flares were traced through the water column analyzing swath by swath manually. Such three dimensional analyses allows to trace the flares through the water column although deviated by currents. We are therefore confident that the fact that flares only appeared above the seafloor in the echosounder records are not due to currents, as suggested by Referee #1.

Referee #1 questions the benefit of the camera sled surveys to the present manuscript. The camera sled surveys as summarized in Table 1 double the locations with evidence for hydrocarbon seepage at Campeche Knolls as shown in Figure 2. It supports the fact that this particular form of hydrocarbon seepage with asphalt deposits at the seafloor is not limited to the sites described in detail by ROV but are more wide spread and, thus, an integral component of seepage at Campeche Knolls. The importance of such observation has also be emphasized by Referee #2 that is why we left these information integrated into the manuscript.

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