Interactive comment on “Built From the Crater Up – Site Museums in Geosciences Communication and Outreach” by Jaime Urrutia Fucugauchi et al.

Jaime Urrutia Fucugauchi et al.

juf@geofisica.unam.mx

Received and published: 17 August 2020

Thanks very much for the review comments, which are very useful for revising the manuscript. The comments and recommendations are incorporated in the revision, including the title (“..- Chicxulub Museum, Geosciences Communication and Outreach”), mentioning Chicxulub, and the abstract, introduction and the other sections. The revision addresses how a Chicxulub science museum can offer interesting opportunities for presenting and attending outreach, education and geoscience communication. How this unique geological site can be attractive for engaging visitors and how from this, difficult topics on the nature of geologic time, life evolution, fossil record, climate change, etc., can be introduced and how visitors respond to the exhibits and related activities.

The specific comments are taken into consideration for revising the manuscript, re-ordering the way of presenting the museum and research facilities. We add a section providing the background and development of the project and then sections on the presentation on the facilities, exhibits, interactive activities and how visitors, including teachers, students are considered. The reorganization allows to present a comparison with other natural history and geological museums and to discuss advantages and relevance of this museum that focuses on the last major mass extinction and the Cretaceous/Paleogene boundary.

Based on your suggestions, the discussion has been restructured into three separate subsections to address the different topics, in this way, the text gives an orderly and easier reading. Thanks. This also facilitates to discuss how interesting yet difficult concepts are presented, how visitors respond and what strategies and alternatives could be considered. The information on visitors is semi-quantitative. The exhibition on the Chicxulub impact and extinction of dinosaurs” in the Grand Museum of Maya World attracted a larger number of visitors. The “Chicxulub Museum” in the Yucatan Science and Technology Park attended school groups, teachers and researchers, as well as visitors.

Results from related activities are also addressed in the revision. This includes information/results of the museum printed material/publications, interaction with teachers and schools, including two GIFT (Geosciences Information for Teachers) Workshops of the European Geosciences Union held in Merida in 2010 and 2016. The Panamerican GIFT Workshop, part of the new capacity-building program of EGU is scheduled for October 2020 to be held in the Chicxulub Museum in the Yucatan Science and Technology Park. Plans are affected by the worldwide pandemic of coronavirus (COVID-19), but the program is being reprogrammed. Other interesting activities included conferences, seminars and drawing contests for school children in primary schools.

The GIFT Workshops have been organized in collaboration with the Secretaries of Education and Science, Innovation and High Education (SIIES) of the Yucatan gov-
ernment, Universities, Mexican Academy of Sciences and scientific societies. The Chicxulub Institute and Museum are part of the SIIES, which permits close interaction with the research and educational system.

The conclusion section has been shortened with conclusions rewritten and proposals to expand and optimize outreach, educational and science communication activities added. The Chicxulub impact and extinction of the dinosaurs and other species generate considerable interest on their own and being the museum in Yucatan - the impact site – opens interesting opportunities for outreach and geoscience communication.

Thanks for the comment on the figures. We agree and new figures are added on the museum exhibitions and facilities.