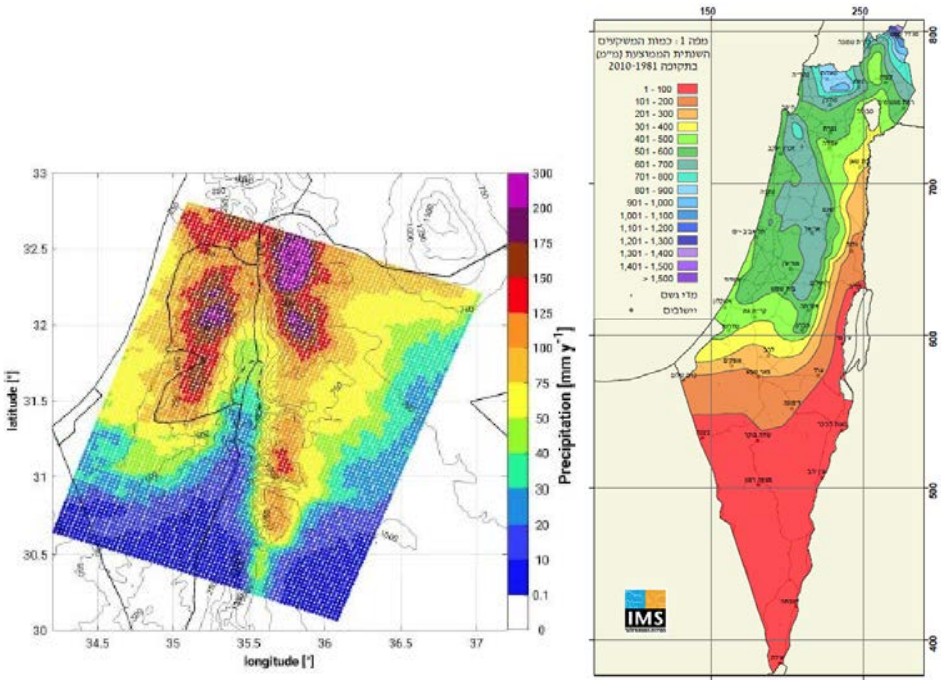
I have read the author response to the comments. I understand there are limitations related to possibility to repeat simulations and availability of simulation data. But in the present state, the main message of this work, in my opinion, is basing on simulations that are not representing reality in few ways, that are already mentioned in my previous major comments (4 out of 5) and are summarized below:

1) Precipitation totals are substantially underestimated by the REF simulation, especially on the shore but also in other regions. The authors show the same situation also when comparing to other datasets. They can further check it using stations from the Israeli Meteorological Service (IMS) which is freely available and includes many stations. Please see below the 1981-2010 mean annual rainfall from IMS (right) compared to the REF climatological run (left). My worry is that this underestimation may indicate a problem with the main moisture source for the precipitation in the Dead Sea.

I am not clear how this discrepancy is handled. The authors refer to Rostkier-Edelstein 2014 paper, but in this work the fit with observations is much better and at the coast there is actually an overestimation of precipitation rather than underestimation.



2) Lake evaporation: If I understood correctly, the lake evaporation is handled as regular sea water. But the Dead Sea is much more saline than sea water! Therefore, evaporation at the REF run should be lower than the simulated for regular sea.

The authors refer to Metzger et al. 2017 claiming that vapor pressure deficit being an important factor, rather than salinity, but exactly here salinity is considered, because saturated vapor pressure near the water is multiplied by the water activity that is reduced with salinity, and thus affecting the deficit.

A good way to check the reference run would be to compare the simulated the annual lake evaporation with values published by Hamdani et al. (2018) [about 1130 mm/year for 2016-2017]. It seems that lake evaporation is computed, and is painted in magenta in Figure 5a, but this presents a range of 500-2000 mm/year, so it is hard to tell. I suggest to provide the annual lake evaporation and check how does it fit with observations. If it well fits, this is a very good indication for the model ability to represent this process, but otherwise, it would be a serious problem for the main claim of this study.

3) The elevation of 405 and missing exposed steep slopes of the empty lake: I could not understand the authors reply. Yes, the lake area would be a bit smaller when is filled by soil, but not a lot, since the lake bottom is wide and the lake slopes are steep (e.g., Sirota et al., 2017). Yes, the bottom would not be at 720 mbsl (I did not claim it will) due to precipitation of NaCl, but surely not at 405 mbsl, which is already 25 m higher than present day lake level. I did not find an answer to why an elevation of 405 mbsl was selected and what about the exposed steep slopes and their potential effect on precipitation generation.

4) Separating real effects from noise: the authors write in response to this comment that they obtained the same result in two different machines and that they "observe the same results in the 10-year long simulations and in the events simulated for several days, furthermore in many different events confirms that the effects presented in this paper are not random errors or noise". I would appreciate showing this in more details. What do you mean – the same result in 10-years? do you get this pattern for each year separately?

Also, the authors did not answer why we do not see the expected larger effect on the eastern side comparing to the western side.

In summary – based on my understanding – at its present state, the paper shows:

Comparison of modeled precipitation in the Dead Sea region under two different <u>hypothetical</u> land use scenarios: 1) The Dead Sea is a lake with regular sea water, 2) The lake area is filled by soil to a level of 405 mbsl

Unless it is proved otherwise: scenario 1 is <u>not</u> representing the present conditions (points 1 and 2 above) and scenario 2 is <u>not</u> representing Dead Sea drying (point 3 above).

If this is the case, it is ok to leave the results as they are BUT the title, the "story" told in this paper, the objectives and the conclusions must be adjusted.