Review of Local evaporation controlled by regional atmospheric circulation in the Altiplano of the Atacama Desert by Lobos-Roco et al. submitted to Atmospheric Chemistry and Physics Discussions.

General remarks

This manuscript provides a detailed analysis of the drivers of evaporation over the Salar del Huasco in the Altiplano of the Atacama Desert, a very shallow saline lake wherein the water within a confined catchment concentrates. Peak evaporation rates reduce the surface of the lake by 75% in only two months. The authors aim to unravel the role of local and regional scale processes by combining observations and detailed numerical model using the WRF model to describe moisture and energy budgets and the interaction of regional circulation and the boundary layer. The manuscript specifically contributes to a better understanding of the strong diurnal variability in evaporation over the lake, from nearly zero in the morning, to large fluxes from noon onward, driven by wind generated by processes governed by thermal and orographic differences at larger spatial scales. The contrast between the water, wet-salt, and dessert surfaces is studied in detail. I am specifically intrigued by the local scale effects of albedo. The authors thoroughly lay out the processes behind the distinct regimes, where despite Rn being very high, E is limited by turbulence in the morning, while E fluxes are high in the afternoon and limited by Rn.

The manuscript is logically organized, the research questions clearly explained, figures are clear, and results and discussion presented with minutious precision. I recommend the manuscript for publication in ACP after very minor revisions.

Specific remarks

I would rephrase the last sentence of the abstract to something like ‘Our research contributes to untangling and linking local and regional scale processes driving evaporation across confined salt lakes in arid regions’.

Could the authors specify the overall depths of the lake in the introduction? Is 15 cm at the SEB station representative?

I suggest a few small textural corrections below.

I suggest the authors to write vpd as VPD.

L9 delete second and third ‘the’

L19 replace ‘and thus’ with ‘they’

L44 insert ‘the’ before ‘diurnal’

L81 replace ‘referred’ with ‘referring’

L307 replace moisty with moist

L467 insert layer after surface

L474 insert ‘air at a’ before ‘saturated specific humidity’