

The authors have revised the paper according to the comments of the first review. Below are the remarks that I have on this revised version. In general, I agree that the long time series of soil moisture measurements is valuable and worth publishing. However, my concern remains that a) the interpretation and in-depth analysis of the data is restricted by the fact that information on soil properties is lacking and b) the study represents a very specific case and the interpretation of results is limited to these specific conditions at the landfill. I suggest to underline this in the manuscript.

Fig. 6: mark individual figures from a) to g). Is it monthly precipitation? Please add this info in the figure caption. Same with the blue line (mean monthly precipitation?) Explain the discussion of Fig. 6 why uFC is partially >100%?

L185. "...because it is thought to reflect best the processes and moisture dynamics found in natural soils". From the site description you give, it seems that it's not close to a 'natural soil'

L. 189ff: what is meant by discharge here? Discharge measured at the bottom of the soil profile, or movement of water through the soil profile?

L. 192ff: NP5 instead of NP3?

L.201ff: which Figure are you referring to? NP9, NP12 are not shown in Fig. 6; same with MCL of Field 1

L. 209f: "Porosity and hydraulic conductivity is therefore not uniformly distributed over the complete depth of the lysimeter". I think that holds true for most soil profiles. The consistent and very distinct break of soil moisture over the entire measurement period rather suggests that there is a distinct change in porosity and hydraulic conductivity between the two layers (i.e. lower porosity at the top of the lower soil layer

L. 212f: "Settling down of the soil cover in the years after construction may additionally change soil properties over time." The soil moisture break remains consistent over the measurement period. Soil properties may have changes over time, but this is not reflected in the data you present. What about the consistently lower soil moisture values between approx. 100 – 150 cm, and the higher soil moisture at the bottom of the RL? Please discuss this also in the text.

Fig. 7: explain the different lines in upper and lower graph (green-blue line and grey line). What is the data unit at the polar coordinate graph? [%] (as from Eq. 1 / 2)? What do the negative values stand for?

L. 221-225: This new section is more appropriate in the Discussion section. Last sentence is not clear, please rewrite

L. 233: Is there a time lag in the measurements or a lag in the propagation of soil moisture in the profile? Please restructure/clarify this sentence.

L. 251: coefficients

L. 260: add "Resulting slopes with $p > 0.05$ (i.e. soil moisture change is not significant) are indicated..."

Fig. 9: add info that upper graph is for Field 2 and lower for Field 1 in caption

L. 281: months

L. 312: Sentence can be skipped because it was mentioned before: "Measurements at Field 2 (NP 3, NP5, NP6, NP7) have started later compared to Field 1."

L. 377: when a applied