The authors presented a valuable work by observing soil properties in Heihe Basin. The data set is well organized and presented, while its strength is also demonstrated by comparing it to other data sets. I think it should be accepted by ESSD. I just have several minor comments about it, such as:

- the authors can compare the spatial distribution of the observed soil texture against HWSD and SoilGriD, to show where these data differ significantly.
- From my understanding, GLDAS does not assimilate land surface information, and then its soil moisture is not improved too much. In contrast, SMAP-L4 is an assimilation product. So, if it is possible, the authors are suggested using some purely-remote sensing product instead of SMAP-L4.