

Minor comments:

L1: In the title you write “land weakly coupled data assimilation”, while in the abstract you write “weakly coupled land data assimilation (WCLDA)” please be consistent.

L18: Skip “initial” in “With and initial..”

L59: Rephrase to skip “and so on”

L59: Skip “much higher”

L61: Skip “dedicated”

L61-63 Please rephrase, this is not what you are doing since you assimilate model data. This is what DA is used for in e.g. NWP.

L63: Add “uses both uncoupled DA...”?

L82: Not “observational information” in your case.

L104: Please revise what is done in Laloyaux et al., 2016, it is not a 3D-VAR for the whole system.

L123: Why not refer to these studies?

L124: “..or land reanalysis data”

L265: Skip “major” in “..major conclusions”

L305: “ELMv2” as defined earlier in the text

L332: What do you mean here with “independence between yi samples”?

L335: The localization methodology should be explained in more detail. Do you mean vertically or horizontally? I assume that there is no need for horizontal localization since you assimilate a model derived product which has values everywhere your model has values? Please elaborate on this.

L424: Perhaps use “constraints”?

L432-437: Should perhaps be put in Sect 2. when presenting the GLDAS product you assimilate?

L456-57: This is already mentioned, please remove

L463: Remove “to”

L496: To the best of my knowledge I don't think you have specified the value you use for the observation error covariance matrix R throughout this manuscript?

L503: Do you here use the first guess from the Assim experiment or the analysis value?

L549: You need to introduce the MODIS data you use for validation, please do so in Sect 2.

L701-2: Please rephrase as you are not assimilating observations but model data.

L726: Please rephrase “the system is conducted...”

L776-80: Please rephrase. There are globally gridded surface soil moisture products that could have been assimilated as easily as the land product you used.