

Interactive comment on “Community-weighted mean traits but not functional diversity determine the changes of soil properties during wetland drying on the Tibetan Plateau” by Wei Li et al.

Anonymous Referee #2

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This study is an interesting piece of work, which tested the relationships between community-level trait responses and functional diversity, and soil properties during wetland drying. Authors included four important functional trait values for 42 common species along a water gradient. Methods seems technically corrects, e.g. soil collection and plant functional traits measurements and analytical techniques are appropriate (e.g. correlations analysis and a PCA). Overall, the text of the manuscript is fairly well-organized but there are several areas that require further clarity. Below, I provide more detailed minor comments. I hope my comments are helpful to the authors in revising their manuscript. Abstract P2 Line 32 it should be community-weighted mean (CWM) traits..... P2 Line 34 please add comma after swamp meadow P2 Line 34 change

C1

comma to period after typical meadow. P2 Line 48 Change ‘and our results’ to “Our results” Introduction P3 Line 63 it should be “play a very important role.....” P3 Line 63 change “resources” to “resource” P4 Line 104 change “thereby improving biomass production and nutrient cycling” to “thereby increasing biomass production and nutrient retention” P4 Line 112 please add comma after leaf area (LA) P4 Line 114 change “it is closely related with...” to “it is closely related to...” Materials and methods P6 Line 176 please rewrite this sentence “Soil organic carbon was determined by wet oxidation with potassium dichromate (K₂Cr₂O₇), both dichromate oxidation and dry combustion,” Check this sentence to make sure it is correct. Do you use the carbon analyser for both the wet oxidation and the dry combustion? P7 Line 181 please add “2.4” before “Plant functional trait measurements” right? Please check it. P7 Line 186 please change individuals to individual P7 Line 196 please change this title P7 Line 208 please add comma after “FEve” P8 Line 216 it should be “a principal components analysis” Results and Analysis P8 Line 223 please delete “the” P8 Line 224-228 These sentences don’t make sense. Just present the % increase from swamp to typical meadow, assuming that swamp meadow is somewhere in between. P9 Line 257 change between to among P9 Line 262 “There were....” P9 Line 266 it should be “there were significantly negative correlations” P9 Line 267 it should be “significantly positive correlations” P9 Line 269 please add a before negative relationship P9 Line 271 it should be “single functional traits level may play a crucial role in...” Discussions P10 Line 275 it should be “and that there were also significant differences in species...” P10 Line 285 change forbs to forb, Please correct other places. P11 Line 303 please delete “first of all”, and change ‘functional diversity’ to “Functional diversity” P11 Line 304 you mean “differences of species” right? P11 Line 305 please rewrite this sentence. P11 Line 311 please change this sentence to “the responses of functional diversity to fertilization and grazing are relative stable....” P11 Line 319 it should be delete P12 Line 357 do you mean “some ecosystem models ...” P13 Line 360 please delete positive P13 Line 377 It should be “these results also suggested that functional diversity (traits taken in aggregate) may not be directly to...” Conclusions P14 Line 393 please change “for” to

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“related to” Tables and Figures are ok.

Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-149, 2016.