The revised version of the manuscript with reference NPG-2015-81-R1 and entitled "Fractal behaviour of soil water storage at multiple depths" authored by W. Ji, M. Lin, A. Biswas, B.C. Si, H.W. Chau, and H.P. Cresswell and submitted to the Special Issue "Multifractal analysis in soil systems" to be published in Nonlinear Processes in Geophysics represents a great improvement from the former version submitted to the journal. Authors have addressed the comments and suggestions made by the reviewers.

However, there are still several minor issues to be corrected prior to an eventual publication in the journal. Pleased, check the following pages for further specifications.

Therefore, I still advice for a minor revision prior to the acceptance of the manuscript.

Specific comments to the authors:

Abstract:

Line 16: "deep layers" instead of "deep layer".

Line 17: "The current study" instead of "Current study".

Lines 24-26: "The dynamic nature of…", this statement is implied in the former two sentences, would you consider removing it, please?

Introduction:

Line 46: "other than that of measurement" instead of "other than the scale of measurement".

Line 47: Remove "scale" after "pedon".

Line 48: Remove "scale" after "large catchment".

Line 55: "of the scaling process".

Line 66: "has" instead of "have".

Lines 72-75: "The scaling properties of surface…", please, consider removing this sentence. If you decide to keep it, please, remove the word "characteristics" after "the same" in line 74.

Line 84: I would use "multifractal approach" instead of "multifractal analysis".

Materials and Methods:

Line 91: "differently-sized" instead of "differently sized".

Line 94: "late summer" instead of "later summer".

Line 96: "Variable water" instead of "Variables water".

Line 107: "while deeper layers down to 140 cm were measured" instead of "while the rest deeper soil down to 140 cm depth was measured".

Lines 109-110: "Soil water content data was then multiplied by" instead of "These measured data of soil water content from either the neutron probe or TDR were then multiplied with".

Line 117: I think it would be useful to add a couple of citations here, at the end of this sentence.

Lines 197-198: "One of the widely used…", please, consider re-writing this sentence to "The generalized dimensions were calculated as".

Line 207: Remove "the" before "D_1" and "D_0".

Line 225: "was" instead of "is".

Line 240: "represent" instead of "represents".

Line 244: It should be "a contour plot" or "a contour map" instead of just "a contour".

Line 249: Please, check this citation, there is no "Biswas and Si, 2012b" in the reference list.

Results:

Are units for soil water storage OK? I mean, usually this variable is given in mm and not in cm.

Line 252: "the five year period" instead of "five year period".

Line 260: "for the surface layer" instead of "for surface".

Lines 261-265: This is not clear. Do you mean increases and decreases over time or in depth?

Line 269: I would use "that" instead of "and".

Line 270: Include "at" before "the deepest layer".

Lines 275-276: "A similar trend was also observed for the minimum SWS at different layers". I would remove this sentence since it is already said in the former one.

Line 296: "The variability also gradually increased with depth". Sure? Looking at the table you indicate (Supplementary Table S.3) it seems that variability decreased with depth.

Line 303: "of three selected dates" instead of "of selected three dates".

Line 305: I do not see what you mean by "SWS trend".

Line 313: I think that "(single fit)" should be without parenthesis.

Lines 321-322: These values are not reported within the supplementary table S.4 as you mentioned

here.

Line 327: Remove "of soil layers".

Line 358: Remove "statistically".

Lines 358-359: I do not understand why you referred table S.7 in here.

Line 363: "with depth" instead of "with depths".

Line 375: Remove "of measurements".

Line 393: "years" instead of "year".

Line 395: "at all depth layers" instead of "at all layers of cumulative depths".

Line 397: Remove "only varied at 3 decimal points".

Lines 398-399: Check the subscripts for D_1.

Lines 409-410: "was also observed at all depth layers" instead of "were also observed at all layers of cumulative depths".

Line 415: "demonstrate" instead of "demonstrates".

Line 417: "those layers" instead of "the layers".

Discussion:

Line 442: "factors" instead of "factor".

Line 473: "Biswas and Si, 2012", there are a couple of them in the reference list, which one are you referring to?

Line 484: Remove "different".

Line 487: "values" instead of "value".

Line 509: "exhibit a longer" instead of "exhibit longer".

Line 519: "from the correlation" instead of "from correlation".

Line 535: "and showed stronger similarity to the surface layers", I would remove this.

Line 537: "due to the dynamic nature" instead of "due to its dynamic nature".

Lines 541-542: I would remove "with less effect from environment factors".

Summary and Conclusions:

I am not sure that this section is needed since it is basically a repetition of the results.

Line 553: "depth" instead of "depths".

Line 560: "those of the deep layers" instead of "that of deep layers".

References:

Lines 583-584: This should be 2012a.

Lines 585-587: Since there is no other Biswas et al. 2012, you should remove b after 2012.

Lines 588-590: This should be 2012b.

Lines 607-609: Why the title of this reference is written in capital letters?

Line 636: The "s" should be capital? "Montero, E.S."?

Lines 648-650: Why the title of this reference is written in capital letters?

Figure captions:

Figure 1: I would say "over the landscape" instead of "in the different section of landscapes".

Figure 11: This should be the caption for figure 12. In fact, there is no caption that corresponds to figure 11. Please, provide it.

Table 1: Please, consider putting "cm" between parentheses in the title of the table, after "soil water storage" and remove it from the columns "average", "maximum", and "minimum".

Table 2: Apart from indicating that the number of data points were the same for all the analyses, you could indicate this number, please.