

## *Interactive comment on* "Multifractal behaviour of the soil water content of a vineyard in NW Spain during two growing seasons" *by* J. M. Mirás-Avalos et al.

## Anonymous Referee #2

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The aim of this paper is to describe soil water dynamics in vineyard and to assess multifractality. This topic is very interesting, because there is no application of multifractality to the temporal evolution of the soil water content in vineyard under two different water supply methods. This paper presents on an interesting subject and well written. The multifractality is analysed using the classical method of moments A question will be if the authors have detected the effects of seasonal trend on the multifractal analysis Specific and technical comments

Page 3 line 18 when calculating the soil water budget would have to take into account both the interception, and surface storage, and consider surface runoff Page Line 16 "0.4 mg of suspended soils", units must be mg/l or other concentration units. Page

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4 line 8 "..the equation provided by the manufactured was used for transforming permittivity data registered by the probes into soil water content" justify this statement , because FDR calibration strongly depends on soil type. Page 7 line 15, add "and soil evaporation" Page 7. Line17 "...Indeed, our results suggest that the water amount applied through irrigation was enough for fulfilling vineyard water requirements over the two growing seasons studied" justify this statement Table 1 Use ETc data, I don't know if the depth of irrigation dose is net or gross. The dose of irrigation calculated seems very low, because if we calculate the approximate dose irrigation as precipitation less than 50% of crop evapotranspiration assuming negligible value interception, surface storage and surface runoff, the value obtained would be much higher than the value shown in table Fig 3 year 2011 around day 230 there is increase in rain-fed treatment in 20 cm depth but this increase is not showed in irrigated plot. Fig 5 and 7. Improve figure quality

Interactive comment on Nonlin. Processes Geophys. Discuss., doi:10.5194/npg-2016-14, 2016.