Accepted Manuscript

Changeability of Soil Erosion Variables in Small Field Plots from Different Rainfall Durations with Constant Intensity

Azadeh Katebikord, Abdulvahed Khaledi Darvishan, Seyed Jalil Alavi

PII:	S1464-343X(17)30093-6
DOI:	10.1016/j.jafrearsci.2017.02.026
Reference:	AES 2827
To appear in:	*Journal of African Earth Sciences*
Received Date:	07 May 2016
Revised Date:	13 February 2017
Accepted Date:	16 February 2017

Please cite this article as: Azadeh Katebikord, Abdulvahed Khaledi Darvishan, Seyed Jalil Alavi, Changeability of Soil Erosion Variables in Small Field Plots from Different Rainfall Durations with Constant Intensity, *Journal of African Earth Sciences* (2017), doi: 10.1016/j.jafrearsci.2017.02.026

Highlights

- The experimental rainfall duration must be long enough based on the design IDF of the study area
- Even 5 minutes difference in rainfall duration can significantly change the results at plot scale
- The average SDR was from 0.41% and 13.03% for 5 and 30 minutes rainfall duration respectively
- Even at plot scale, a significant part of the eroded soil particles does not transport to the outlet
- Hydrological responses were studied using Generalized Linear and Additive Models (GLM and GAM)