remote sensing

MDPI

Article

Rain Microstructure Parameters Vary with Large-Scale Weather Conditions in Lausanne, Switzerland

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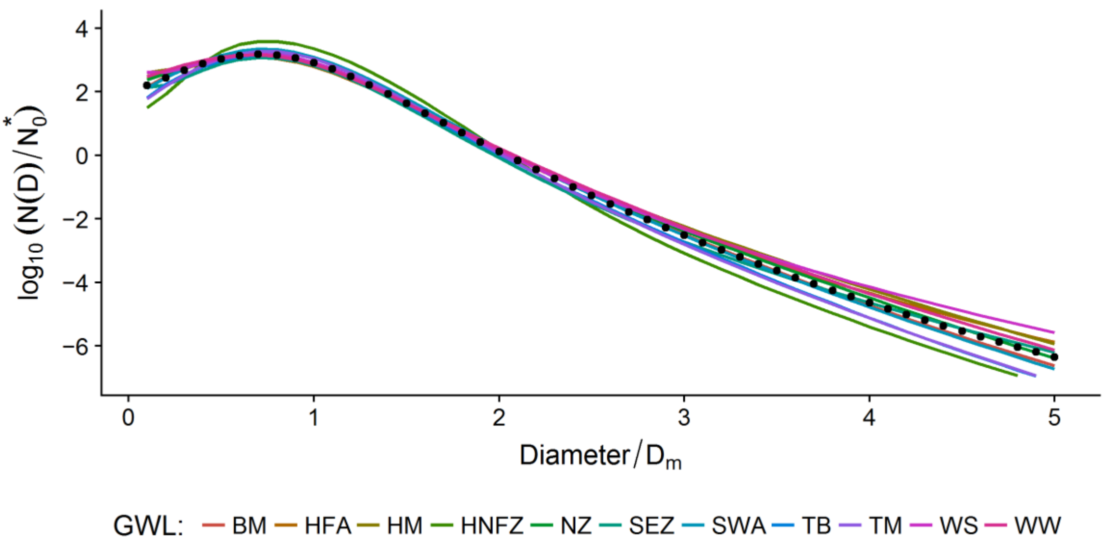
1. Accumulated Rain Duration and Rain Amount per Disdrometer

Table S1. Accumulated rain duration in hours, accumulated rain amount in mm, beginning and end date of measurements by each of the 16 disdrometers [1] after applying the filtering procedure (see Section 2.4).

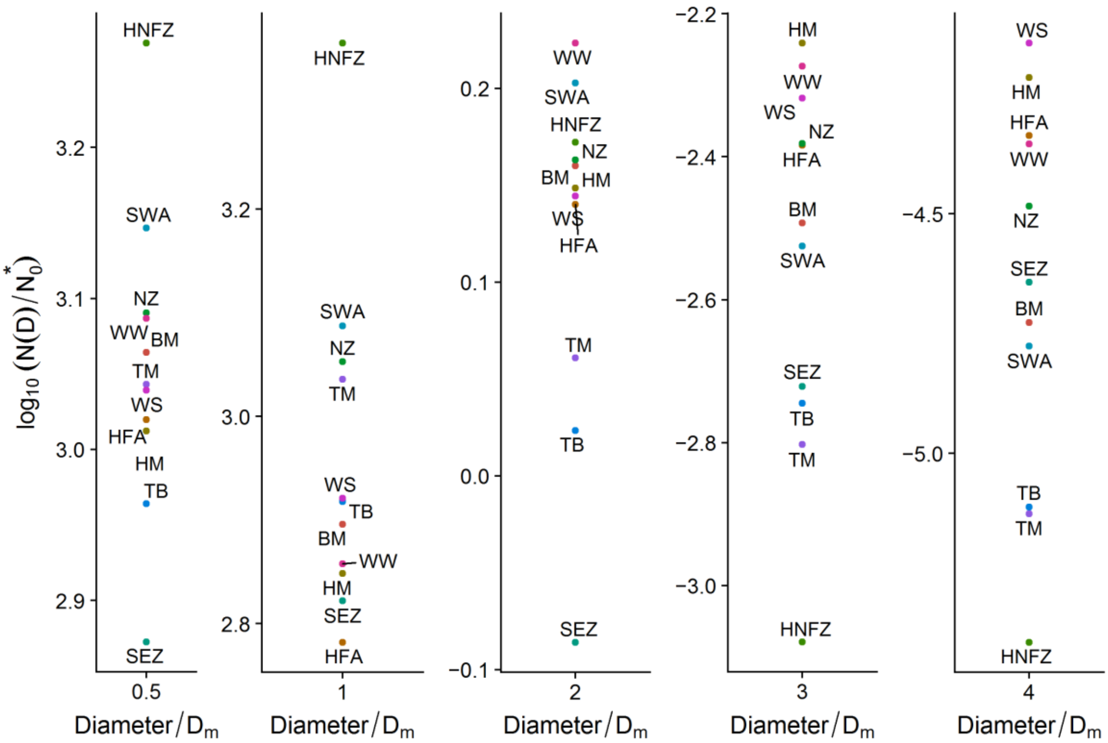
Device id	Start Date	End Date	Accumulated rain duration (h)	Accumulated rain amount (mm)
10	17 December 2008	25 September 2010	671.4	1057.2
11	1 February 2009	25 September 2010	655.9	1057.5
12	6 February 2009	25 September 2010	643.9	1092.2
13	30 December 2008	17 September 2010	597.0	1023.2
20	19 December 2008	17 September 2010	710.6	1027.6
21	19 December 2008	17 September 2010	645.2	1001.9
22	19 December 2008	17 September 2010	523.3	792.7
23	1 March 2009	20 June .2010	568.2	979.0
30	24 March 2009	25 September 2010	638.2	1136.1
31	24 March 2009	25 September 2010	611.7	973.2
32	24 March 2009	25 September 2010	599.2	1076.0
33	24 March 2009	25 September 2010	594.8	1157.2
40	17 December 2008	25 September 2010	682.4	1111.5
41	17 December 2008	20 June 2010	607.1	981.3
42	17 December 2008	20 June 2010	517.1	839.5
43	29 November 2008	17 September.2010	711.9	1133.0

2. Normalized Rain DSD for a Selection of GWLs

Figures S1 and S2 provide DSD variations among a selection of GWLs in stratiform and convective rain, respectively. These figures are based on the method of Testud et al. [2]. To ease the reading of this plot, panel (**b**) contains the detailed values of the normalized N(D) for five values over the normalized D.

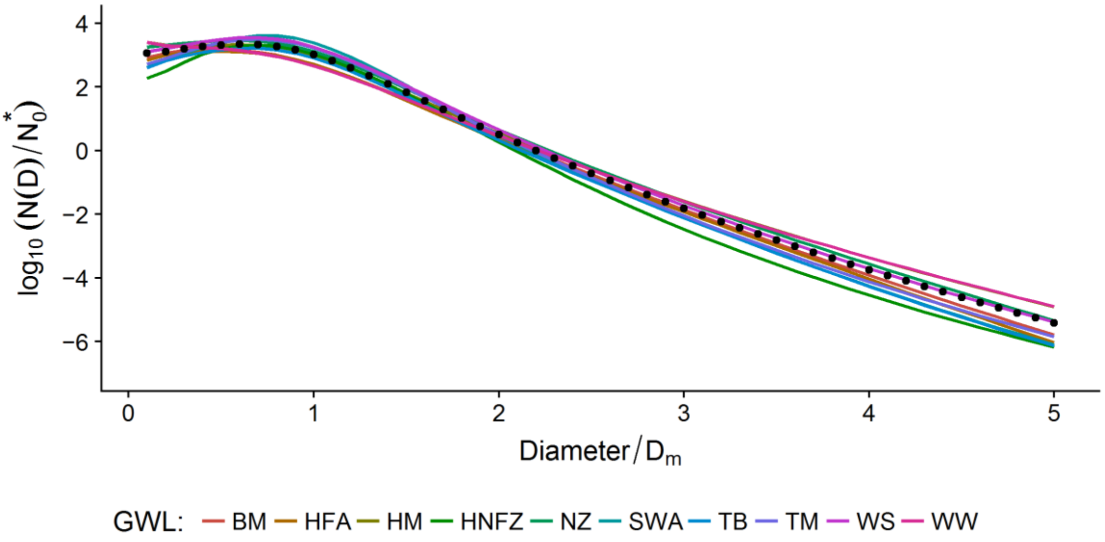


(**a**)

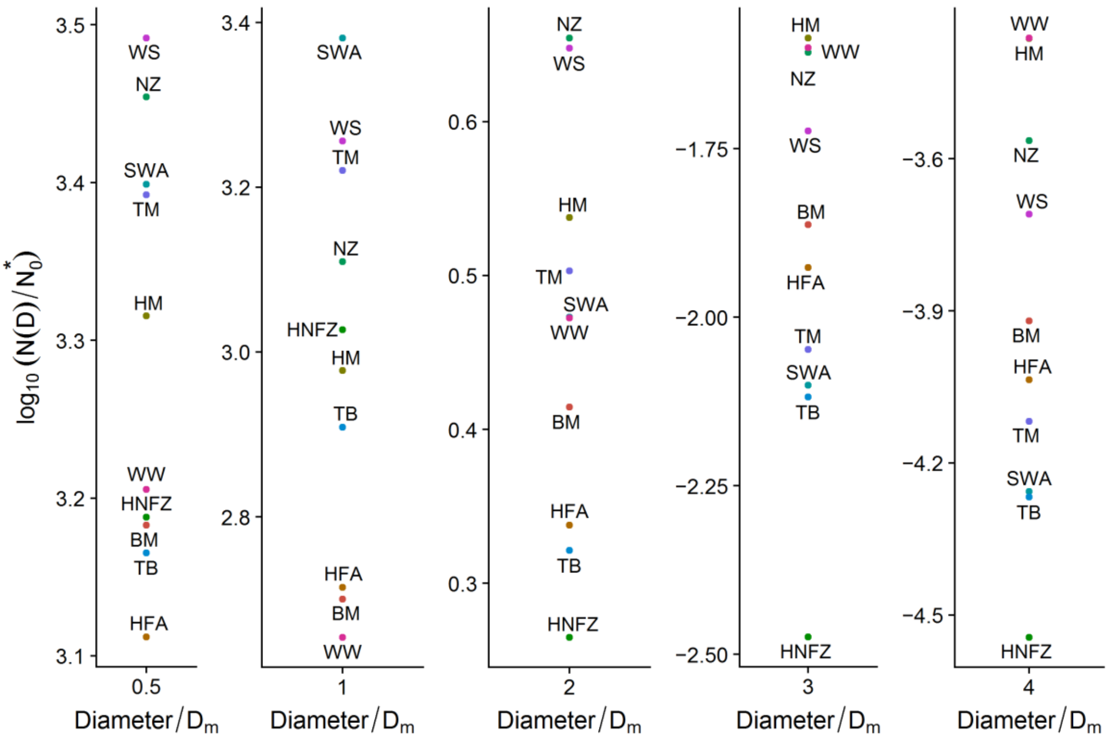


(**b**)

Figure S1. (**a**) Normalized stratiform rain DSD for a selection of GWLs by the method of Testud et. al [2]; (**b**) five vertical sections in the normalized rain DSD corresponding to the values (0.5, 1, 2, 3, 4) of the normalized D_m.



(**a**)



(**b**)

Figure S2: (**a**) Normalized convective rain DSD for a selection of GWLs by the method of Testud et al. [2]; (**b**) five vertical sections in the normalized rain DSD corresponding to the values (0.5, 1, 2, 3, 4) of the normalized D_m.

References

1. Berne, A.; Jaffrain, J. *GPM Ground Validation NASA EPFL-LTE Parsivel DSD Data Lausanne, Switzerland;* NASA Global Hydrology Resource Center DAAC: Huntsville, Alabama, U.S.A, 2016. Available online: http://dx.doi.org/10.5067/GPMGV/EPFL/DATA201 (accessed on 22 May 2018)
2. Testud, J.; Oury, S.; Black, R.A.; Amayenc, P.; Dou, X. The Concept of "Normalized" Distribution to Describe Raindrop Spectra: A Tool for Cloud Physics and Cloud Remote Sensing. *J. Appl. Meteor.* **2001**, *40*, 1118–1140, doi:10.1175/1520-0450(2001)040<1118:TCONDT>2.0.CO;2.