



Corrigendum to **“Correction of raindrop size distributions measured by Parsivel disdrometers, using a two-dimensional video disdrometer as a reference” published in Atmos. Meas. Tech., 8, 343–365, 2015**

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There was an error in Table 1 of Raupach and Berne (2015). The instruments at Pradel-Vignes (PV) and Mont-Redon (MR) were first-generation instruments, not Parsivel². The results shown in Table 11 in Raupach and Berne (2015) are for the Parsivel² correction factors applied to these instruments.

It was found that the value of relative humidity used to calculate terminal drop velocities (e.g. $v(D)$ in Eq. 4) was unreasonably high. Testing showed that the effect of the relative humidity value on the calibrated correction factors was negligible, being of the same order of magnitude as variations introduced by random sampling of training values. For completeness we show the updated correction factors, using relative humidity of 0.95, in Tables 1 and 2 here. With these updated factors, gauge-comparison performance for first-generation Parsivels (in terms of $\Delta|r.bias|$ for combined 2012 and 2013 data at 5-minute resolution, excluding MR and PV) was affected by less than 1 percentage point. Gauge-comparison performance for Parsivel² (in terms of $\Delta|r.bias|$ for 2013 data only at 1-hour resolution, excluding MR and PV) was affected by less than 1.5 percentage point. Applying the first-generation filter to MR and PV resulted in a $\Delta|r.bias|$ value of -39.7% (18.7%) at MR (PV).

These two notes do not affect the technique or conclusions presented in Raupach and Berne (2015).

References

Raupach, T. H. and Berne, A.: Correction of raindrop size distributions measured by Parsivel disdrometers, using a two-dimensional video disdrometer as a reference, Atmos. Meas. Tech., 8, 343–365, doi:10.5194/amt-8-343-2015, 2015.

Table 1. Calibrated first-generation Parsivel correction factors for Parsivel-derived intensity classes for the HyMeX 2013 campaign. Each row contains the class number, the centre equivolume diameter for the class (D_i), and the calibrated factors $P(i)$ for each class of Parsivel-derived intensity. Intensity class boundaries are provided in millimetres per hour (mm h^{-1}).

Class (i)	D_i (mm)	[0, 0.5)	[0.5, 1)	[1, 2)	[2, 200)
3	0.31	0.04	0.06	0.08	0.11
4	0.44	0.11	0.14	0.21	0.26
5	0.56	0.36	0.41	0.57	0.60
6	0.69	0.44	0.50	0.66	0.78
7	0.81	0.64	0.71	0.86	1.04
8	0.94	0.68	0.68	0.89	1.00
9	1.06	0.78	0.77	0.95	1.16
10	1.19	0.82	0.77	0.95	1.16
11	1.38	0.78	0.74	0.91	1.11
12	1.62	0.68	0.65	0.80	0.94
13	1.88	0.67	0.53	0.70	0.87
14	2.12	0.60	0.50	0.65	0.80
15	2.38	0.44	0.50	0.56	0.74
16	2.75	0.41	0.40	0.43	0.69
17	3.25	0.39	0.42	0.35	0.65
18	3.75	0.42		0.43	0.49
19	4.25				0.39
20	4.75				0.17
21	5.50				0.34

Table 2. Calibrated Parsivel² correction factors for Parsivel-derived intensity classes for the HyMeX 2013 campaign. Each row contains the class number, the centre equivolume diameter for the class (D_i), and the calibrated factors $P(i)$ for each class of Parsivel-derived intensity. Intensity class boundaries are provided in millimetres per hour.

Class (i)	D_i (mm)	[0, 0.1)	[0.1, 0.25)	[0.25, 0.5)	[0.5, 1)	[1, 2)	[2, 200)
3	0.31	0.02	0.03	0.03	0.04	0.05	0.07
4	0.44	0.03	0.04	0.05	0.06	0.10	0.14
5	0.56	0.10	0.14	0.17	0.20	0.28	0.35
6	0.69	0.19	0.24	0.27	0.33	0.42	0.50
7	0.81	0.34	0.43	0.48	0.49	0.65	0.72
8	0.94	0.50	0.51	0.61	0.61	0.73	0.78
9	1.06	0.80	0.80	0.86	0.82	0.95	0.95
10	1.19	0.67	0.76	0.97	0.80	1.07	0.93
11	1.38	0.95	1.03	1.11	1.02	1.24	1.02
12	1.62	1.00	1.09	1.23	1.08	1.26	1.01
13	1.88	1.04	0.89	1.23	1.07	1.29	0.95
14	2.12			1.15	1.07	1.11	0.88
15	2.38			1.15	1.05	1.28	0.94
16	2.75					1.23	0.96
17	3.25					1.20	0.93
18	3.75					1.25	0.87
19	4.25					0.63	0.66
20	4.75					0.50	0.52
21	5.50					0.33	0.40
22	6.50						0.29