Correction to: investigating regional distribution for maximum daily rainfall in arid regions: case study in Saudi Arabia

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The original version of this paper was published with error. Tables 1, 2 and 3 were incorrectly process and the corresponding author should be “Ayman G. Awadallah”.

The original article has been corrected.

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Table 1 Ranking of the eight distributions based on *AIC* and *BIC* for individual station

Region	No. of rainfall stations	LN3	Gamma	Generalized gamma	GEV	Gumbel	Log-Pearson III	Pareto	Pearson III
Al Jawf	10	6	1	5	7	3	2	8	4
Aseer	25	6	1	5	4	2	3	8	7
Al Baha	8	6	1	4	7	2	3	8	5
Eastern Province	20	6	1	4	7	3	2	8	5
Jazan	29	6	1	5	3	2	4	8	7
Hail	17	7	1	4	5	3	2	8	6
Madinah	32	7	1	5	6	2	3	4	8
Makkah	49	6	1	4	5	2	3	8	7
Northern Border	2	3	2	5	4	6	1	7	8
Najran	4	4	1	3	6	5	2	8	7
Qaseem	20	8	1	6	5	2	3	4	7
Riyadh	43	7	1	4	6	3	2	8	5
Tabouk	10	5	1	3	7	6	2	4	8
Sum of rankings		77	14	57	72	41	32	91	84

Table 2 Number of rainfall stations within each homogeneous group with their corresponding *p* values

Homogeneous group	No. of rainfall stations	P value
Group1 (Hail, Qaseem, Al-Jawf, Northern Border, Eastern Province, Riyadh)	89	0.146
Group 2 (Makkah, Madinah)	49	0.120
Group 3 (Najran, Aseer, Al Baha, Jazan)	51	0.054
Makkah1	22	0.073
Tabouk	14	0.125
Riyadh1	22	0.112
Jazan1	20	0.085
Total	267 ^a	

^a With, as previously mentioned, two stations removed from the total of 269 available rainfall stations

Table 3 Growth curves values and ratios of the various homogeneous groups

Return period (years)	Group name							Ratio of X return period/2-year return period (all groups)			Ratio of X return period/2-year return period (Gr1, Gr2, Gr3, Mak1)		
	Group 1	Group 2	Group 3	Gizan	Makkah 1	Riyadh 1	Tabouk	Av	Std Dev	CoV	Av	Std Dev	CoV
10,000	6.36	5.92	6.70	3.13	5.7	3.96	11.1	7.385	0.784	0.106	7.583	0.748	0.099
2000	5.34	5.20	5.39	2.90	4.8	3.55	8.63	6.189	0.650	0.105	6.361	0.623	0.098
1000	4.90	4.85	4.85	2.78	4.42	3.36	7.63	5.673	0.593	0.105	5.832	0.570	0.098
500	4.46	4.49	4.34	2.66	4.03	3.16	6.67	5.163	0.538	0.104	5.307	0.518	0.098
200	3.87	3.98	3.70	2.47	3.52	2.88	5.47	4.488	0.464	0.103	4.612	0.448	0.097
100	3.42	3.57	3.23	2.32	3.14	2.65	4.61	3.976	0.408	0.103	4.081	0.395	0.097
50	2.97	3.14	2.78	2.14	2.75	2.4	3.8	3.462	0.353	0.102	3.551	0.343	0.097
25	2.52	2.68	2.35	1.95	2.36	2.13	3.05	2.949	0.298	0.101	3.018	0.290	0.096
20	2.37	2.52	2.21	1.88	2.24	2.04	2.81	2.779	0.280	0.101	2.840	0.272	0.096
10	1.92	2.03	1.80	1.65	1.85	1.74	2.12	2.262	0.225	0.099	2.305	0.219	0.095
5	1.46	1.52	1.39	1.39	1.45	1.42	1.49	1.736	0.169	0.097	1.757	0.165	0.094
3	1.12	1.13	1.10	1.16	1.14	1.15	1.05	1.341	0.129	0.096	1.351	0.126	0.093
2	0.826	0.796	0.842	0.935	0.88	0.901	0.718	1.000			1.000		

*Av weighted average, Std Dev weighted standard deviation, CoV weighted coefficient of variation