



Correction to: Evaluation and ranking of different gridded precipitation datasets for Satluj River basin using compromise programming and f-TOPSIS

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The original version of this article unfortunately contained mistakes. The proof corrections in Eq. 9 and Tables 3 and 5 were unfortunately not implemented. The corrected data are given below. In addition, affiliations of the 1st author have been updated. The original article has been corrected.

$$C = \frac{DS_Minus}{DS_Minus + DS_Plus} \quad (9)$$

The online version of the original article can be found at <https://doi.org/10.1007/s00704-020-03405-y>

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Table 3 Rank of the different gridded precipitation dataset for each station from Compromise Programming along with its parameter (Lp) and performance indicator payoff matrix (RMSE, CC, and SS)

	Root Mean Square Error (RMSE)					
	CFSR	MERRA	APHRODITE	ERA-Interim	IMD	PFD
Bhakra	0.81	0.78	0.56	0.79	0.59	1.00
Berthin	0.75	0.73	0.50	0.72	0.54	1.00
Daslehra	0.79	0.76	0.54	0.77	0.58	1.00
Kahu	0.80	0.77	0.55	0.77	0.62	1.00
Kasol	0.78	0.75	0.54	0.73	0.53	1.00
Kuddi	0.80	0.78	0.56	0.77	0.59	1.00
Rampur	0.67	0.61	0.49	0.57	0.46	1.00
Suni	0.72	0.69	0.44	0.67	0.49	1.00
	Correlation Coefficient (CC)					
Bhakra	0.01	0.07	0.99	0.46	0.91	0.14
Berthin	0.00	0.05	0.99	0.44	0.93	0.15
Daslehra	0.01	0.06	0.99	0.44	0.92	0.18
Kahu	0.02	0.04	0.99	0.40	0.82	0.14
Kasol	0.02	0.02	0.97	0.46	0.94	0.15
Kuddi	0.02	0.04	0.99	0.44	0.91	0.14
Rampur	0.01	0.01	0.98	0.40	0.94	0.09
Suni	0.01	0.02	0.99	0.38	0.91	0.12
	Skill Score (SS)					
Bhakra	0.94	0.97	0.97	0.88	0.99	0.90
Berthin	0.94	0.97	0.98	0.88	0.98	0.90
Daslehra	0.94	0.98	0.97	0.88	0.94	0.90
Kahu	0.92	0.96	0.94	0.86	0.95	0.97
Kasol	0.94	0.91	0.97	0.87	0.98	0.97
Rampur	0.92	0.91	0.91	0.84	0.93	0.96
Suni	0.93	0.97	0.90	0.85	0.92	0.90
	Lp Matric					
Bhakra	0.34626	0.32585	0.00002	0.18894	0.03201	0.30111
Berthin	0.34206	0.32785	0.00001	0.19103	0.02503	0.29246
Daslehra	0.34210	0.32620	0.00002	0.19228	0.02746	0.28163
Kahu	0.36889	0.36036	0.00006	0.22721	0.06788	0.32355
Kasol	0.33194	0.33289	0.00884	0.18353	0.00001	0.28736
Kuddi	0.34992	0.34309	0.00002	0.20180	0.03232	0.30698
Rampur	0.33652	0.33733	0.00825	0.20445	0.00007	0.30935
Suni	0.34620	0.34051	0.00011	0.21740	0.02980	0.30646
	Rank from Compromise Programming					
Bhakra	6	5	1	3	2	4
Berthin	6	5	1	3	2	4
Daslehra	6	5	1	3	2	4
Kahu	6	5	1	3	2	4
Kasol	5	6	2	3	1	4
Kuddi	6	5	1	3	2	4
Rampur	5	6	2	3	1	4
Suni	6	5	1	3	2	4

Table 5 Rank of the different gridded precipitation dataset for each station from f-TOPSIS along with its parameters (DS_Plus, DS_Minus, and C)

	Positive Ideal value (DS_Plus)					
	CFSR	MERRA	APHRODITE	ERA-interim	IMD	PFD
Bhakra	3.0879	3.0387	2.2420	2.6668	2.2998	3.0456
Berthin	3.0530	3.0583	2.2484	2.7372	2.3056	3.0062
Daslehra	3.0690	3.0212	2.2445	2.7461	2.3028	2.9339
Kahu	3.0599	3.0654	2.1972	2.7251	2.3553	3.0125
Kasol	3.0676	3.0720	2.2844	2.6768	2.2844	2.9404
Kuddi	3.0700	3.0754	2.2324	2.7437	2.2907	3.0260
Rampur	3.0174	3.0261	2.3028	2.7330	2.3028	2.9647
Suni	3.0237	3.0291	2.2779	2.7221	2.3292	2.9711
	Negative Ideal value (DS_Minus)					
Bhakra	0.1621	0.2290	0.9905	0.5650	0.9261	0.2359
Berthin	0.1243	0.1296	0.9223	0.4233	0.8609	0.1888
Daslehra	0.1415	0.2072	0.9571	0.4479	0.8951	0.2852
Kahu	0.1353	0.1408	0.9725	0.4532	0.8221	0.2058
Kasol	0.1385	0.1428	0.9050	0.5097	0.9050	0.2760
Kuddi	0.1438	0.1492	0.9638	0.4537	0.9003	0.2149
Rampur	0.1332	0.1347	0.8300	0.3892	0.8300	0.2007
Suni	0.1324	0.1378	0.8628	0.4037	0.8086	0.2003
	Closeness coefficient (C)					
Bhakra	0.0499	0.0701	0.3064	0.1748	0.2871	0.0719
Berthin	0.0391	0.0407	0.2909	0.1339	0.2719	0.0591
Daslehra	0.0441	0.0642	0.2989	0.1402	0.2799	0.0886
Kahu	0.0424	0.0439	0.3068	0.1426	0.2587	0.0640
Kasol	0.0432	0.0444	0.2837	0.1600	0.2837	0.0858
Kuddi	0.0447	0.0463	0.3015	0.1419	0.2821	0.0663
Rampur	0.0423	0.0426	0.2649	0.1247	0.2649	0.0634
Suni	0.0420	0.0435	0.2747	0.1292	0.2577	0.0631
	Rank from f-TOPSIS					
Bhakra	4	6	1	3	2	5
Berthin	6	5	1	3	2	4
Daslehra	6	5	1	3	2	4
Kahu	6	5	1	3	2	4
Kasol	6	5	1	3	2	4
Kuddi	6	5	1	3	2	4
Rampur	6	5	1	3	2	4
Suni	6	5	1	3	2	4