

Spatially based reconstruction of daily precipitation instrumental data series

Roberto Serrano-Notivoli*, Martín de Luis, Miguel Ángel Saz, Santiago Beguería

*Corresponding author: rs@unizar.es

Climate Research 73: 167–186 (2017)

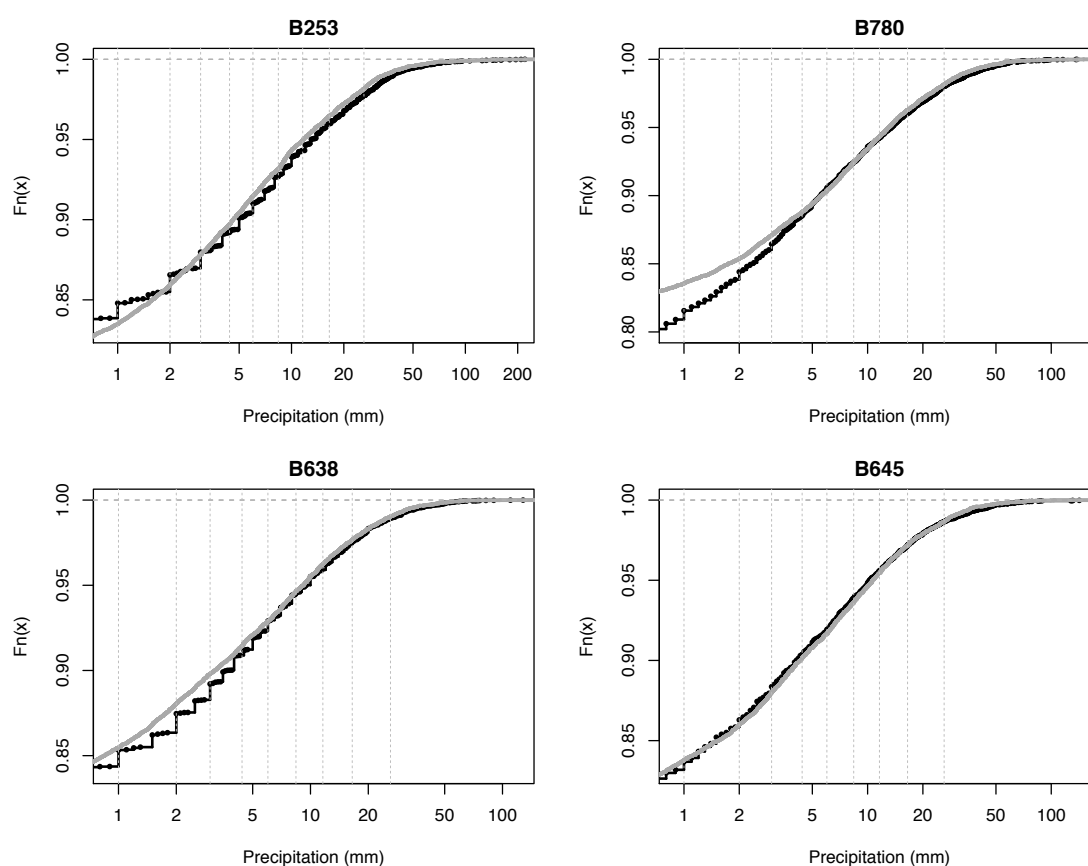


Figure S1. Empirical cumulative distribution functions (ECDF) of four stations comparing observed (black line) and predicted (grey line) values. Vertical dashed lines show upper limits of global deciles.

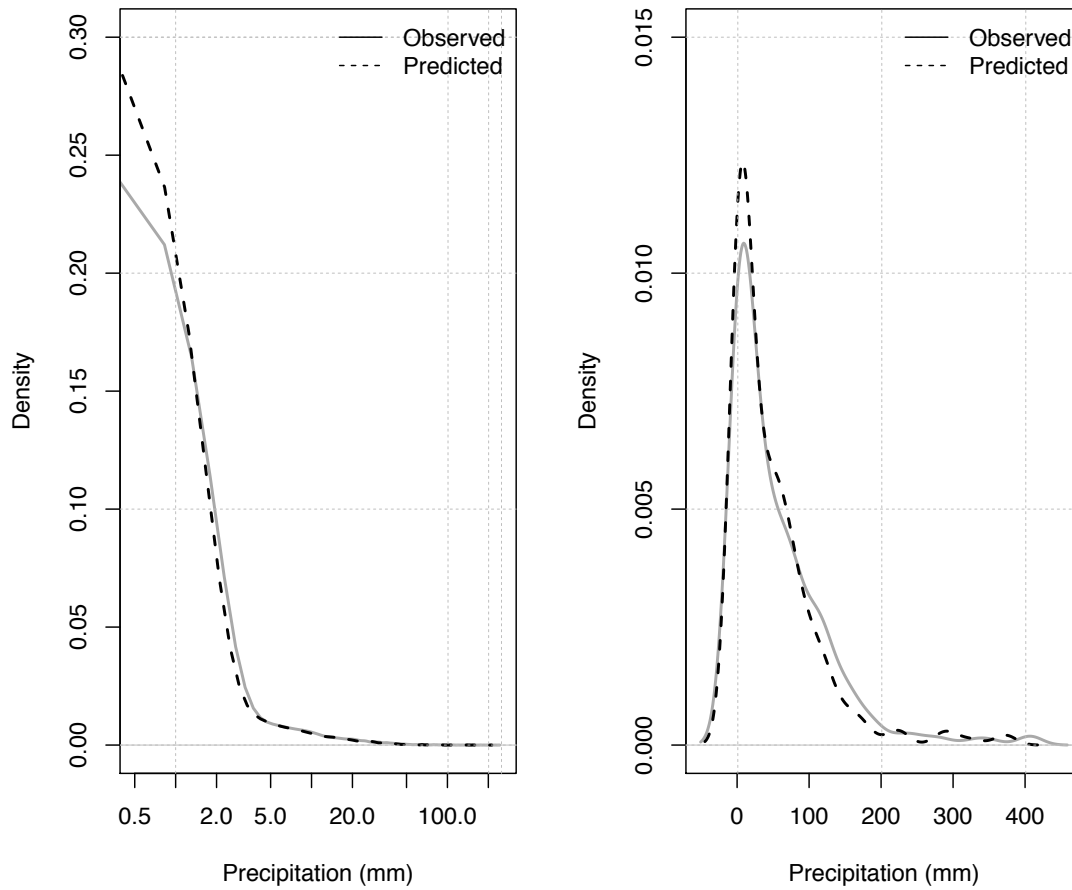


Figure S2. Density curves of daily (left) and monthly (right) data of reconstructed stations.

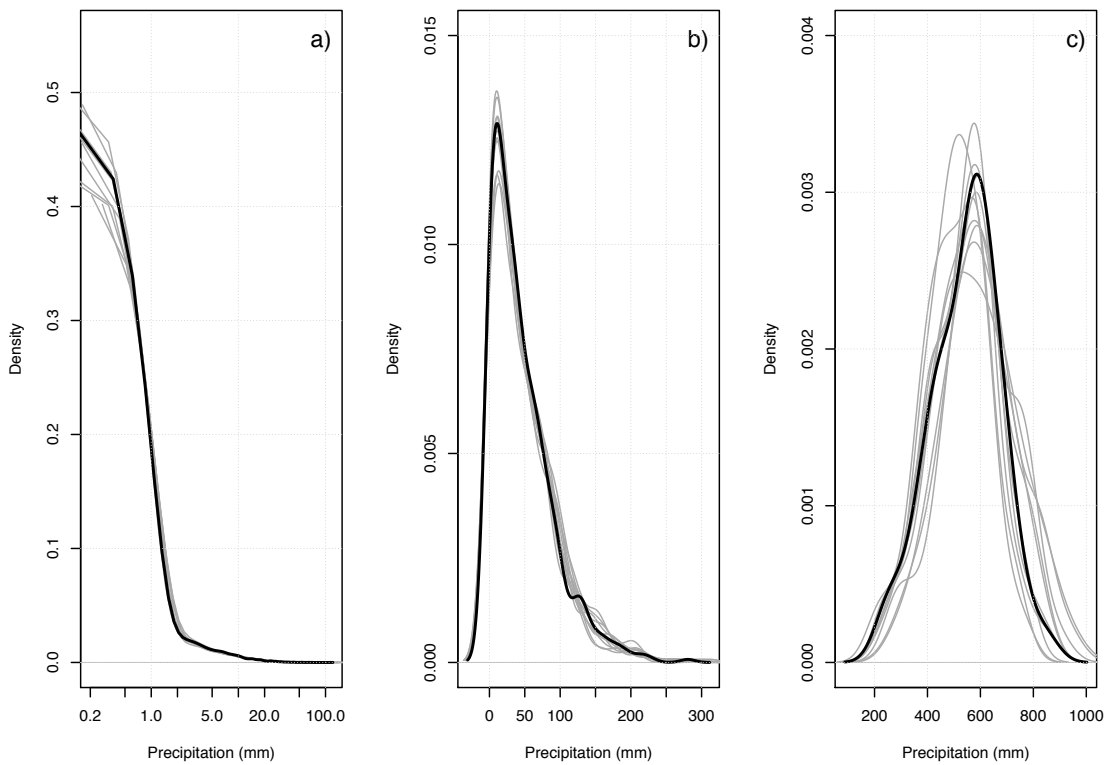


Figure S3. Density curves of the new series (bold black) and of the ten NNS (grey): a) daily values; b) monthly totals; c) annual totals.

Table S1: Example of precipitation situations in three different days for the station B007 (in italics). The table shows the data observed at the station plus those of its ten NNS. Binomial Prediction (BP) and Magnitude Prediction (MP) values and the final Reference Values (RV) are shown in the table below.

Observed data							
ID	1971- 01-06	1971- 01-04	1971- 01-02	Dist. (km)	Lon. (°E)	Lat. (°N)	Alt. (m)
<i>B007</i>	<i>15.5</i>	<i>0</i>	<i>1.9</i>	<i>0</i>	<i>2.92311</i>	<i>39.86956</i>	<i>392</i>
B739	16	0	0	0.929	2.93393	39.86983	331
B019	3.3	0	1.2	3.457	2.88782	39.85456	480
B742	30.1	0	0	4.061	2.97004	39.87428	122
B745	26.5	0	1.4	5.135	2.98283	39.87261	85
B014	10.5	0	0	5.476	2.87199	39.84011	343
B013	13.3	0	2.1	5.917	2.88587	39.82483	490
B694	18.8	0.4	4.6	6.619	2.96061	39.81761	124
B696	17.3	1	2.9	7.174	2.97254	39.81761	112
B012	12.0	30	5	7.533	2.88254	39.80956	654
B724	25.0	0	0	7.756	3.01227	39.85817	53
Predicted data							
	1971- 01-06	1971- 01-04	1971- 01-02				
BP	1	0	0.46				
MP	15.6	0.6	0.33				
RV	15.6	0	0				