

Supplementary Material

S1. Procedure of bootstrapping method for scaling exponents.

The procedure of the employed bootstrapping method is presented as follows:

1. Resample n annual maximum rainfalls for all employed duration from the observed annual maximum rainfall at the given station with replacement. n is the number of observation at the given station.
2. Calculate the scaling exponent using resampled annual maximum rainfalls.
3. Repeat steps 1 and 2 until estimating 10,000 scaling exponents of resampled annual maximum rainfalls at the given station.
4. Compute standard deviations of the scaling exponents estimates and scaling exponent estimates corresponding to 2.5 and 97.5 percentiles.

S2. The BBS-MK test results of the July-October AM series

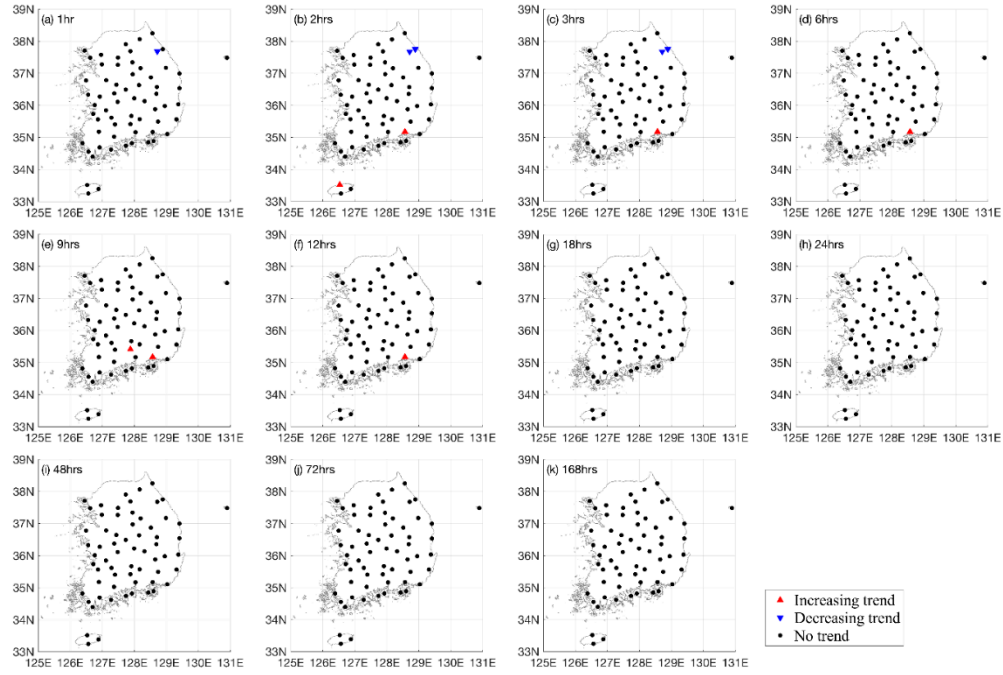


Figure S1. The BBS-MK test results of AM series on May for 1-hour to 168-hour durations at 5% significant level.

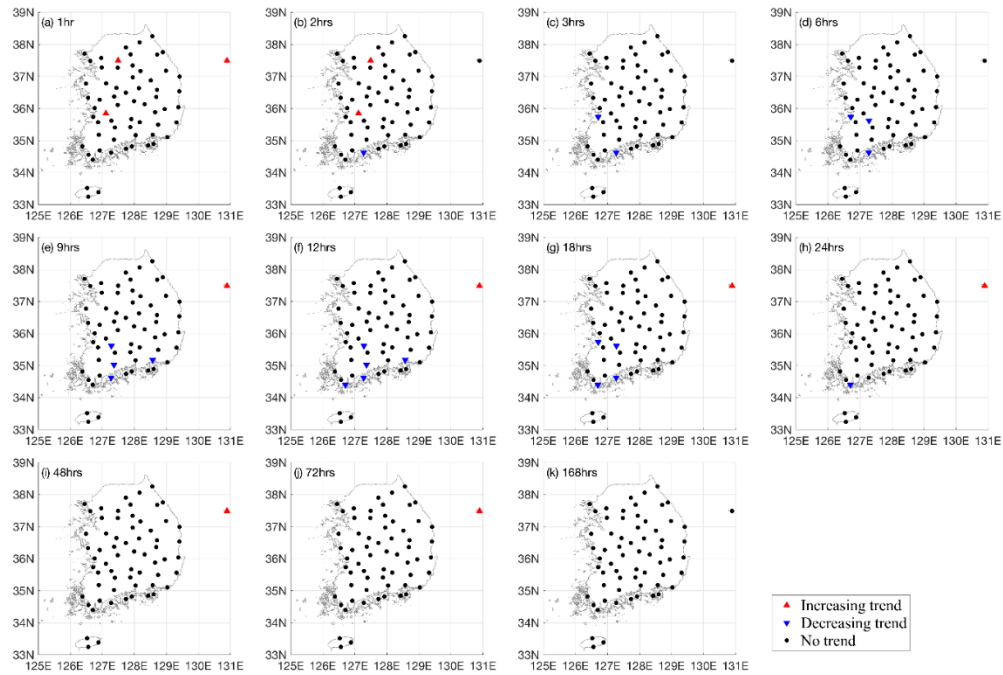


Figure S2. The BBS-MK test results of AM series on June for 1-hour to 168-hour durations at 5% significant level.

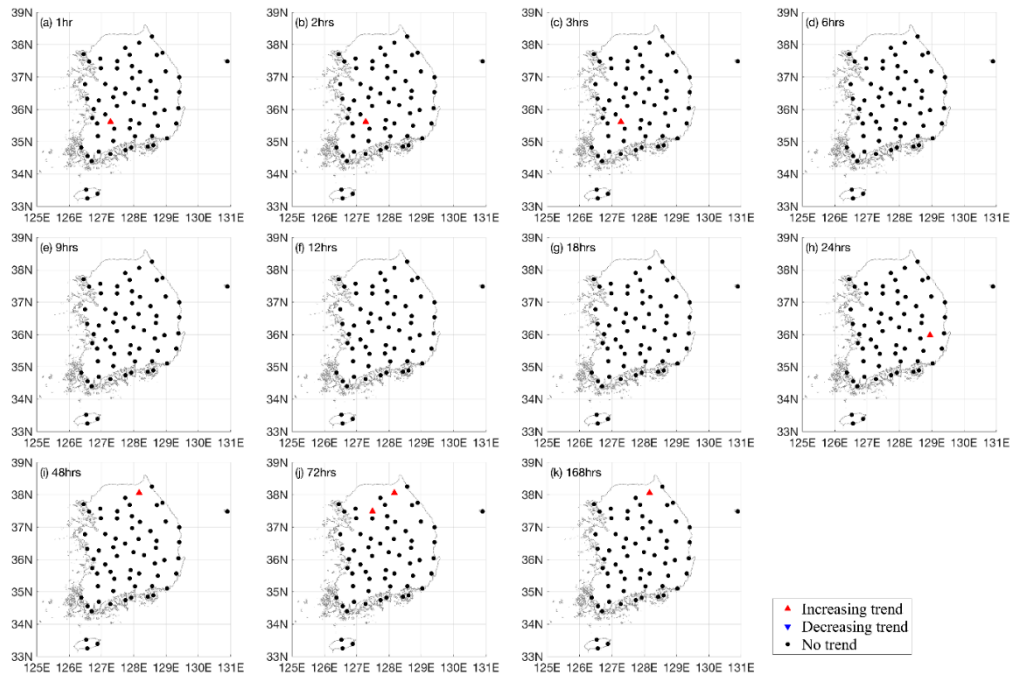


Figure S3. The BBS-MK test results of AM series on July for all employed durations at 5% significant level.

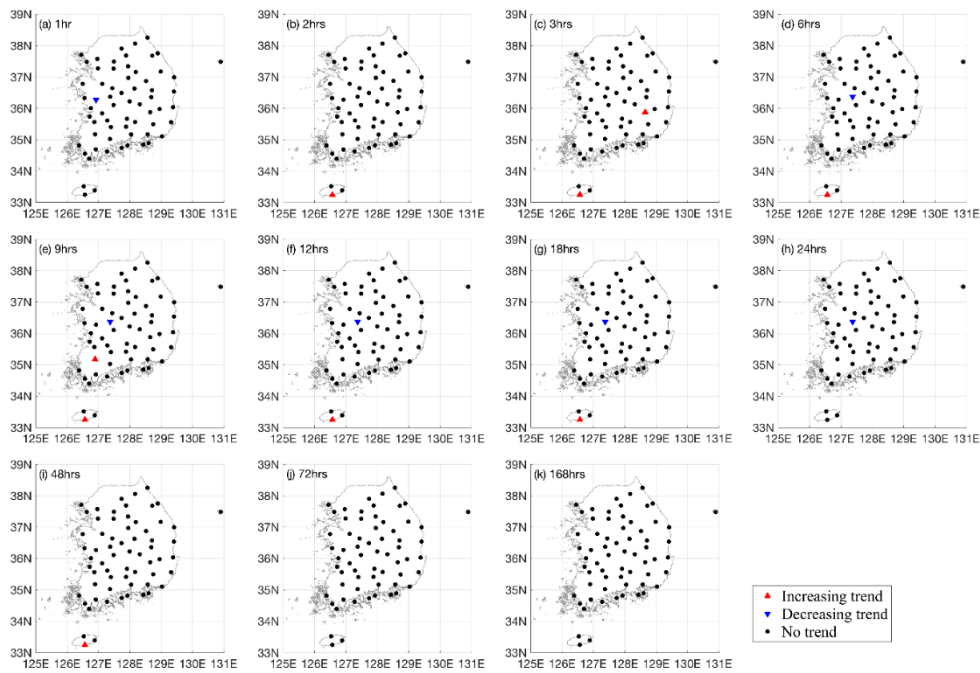


Figure S4. The BBS-MK test results of AM series on August for all employed durations at 5% significant level.

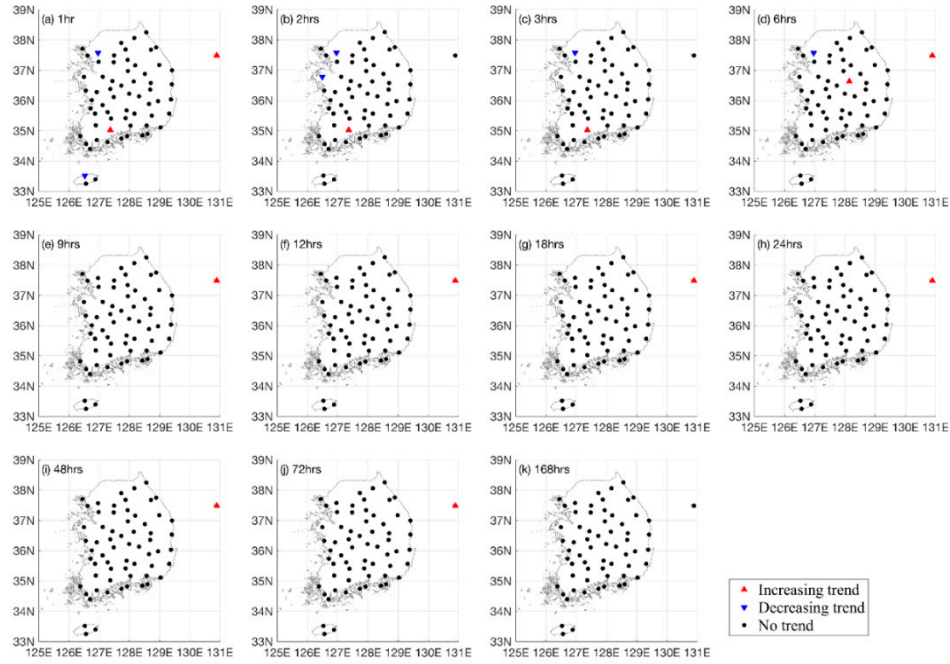


Figure S5. The BBS-MK test results of AM series on September for all employed durations at 5% significant level.

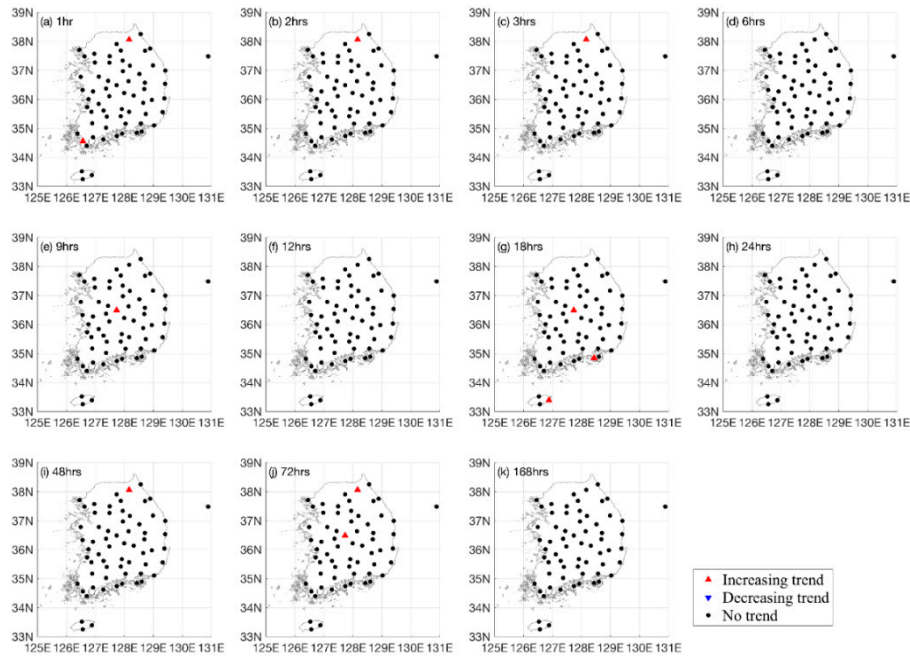


Figure S6. The BBS-MK test results of AM series on October for all employed durations at 5% significant level.

S3. Results of t-Test for unequal variances.

Table S1. Results of t-test between the scaling exponents for two of any employed stations.

Target stations	Similar stations	Target stations	Similar stations
1		33	
2		34	20,24
3	28,29,35	35	3,28,29
4	10	36	
5		37	
6		38	
7		39	
8		40	11
9	16	41	
10	4	42	
11	40	43	25
12		44	
13		45	
14		46	63
15	60	47	21
16	9	48	56
17	64	49	
18		50	
19	26,31	51	
20	34	52	
21	47,63	53	
22		54	
23		55	
24	34	56	48
25	43	57	
26	19,31	58	27
27	58	59	
28	3,29,35	60	15
29	3,28,35	61	
30		62	
31	19	63	21,46
32		64	17