

Table S1. Spearman rank correlation of the pattern in maximum difference between the mean cumulative relative size-frequency distribution (2005-2009) of the various stations. Coding: first four letters of station name (see Fig. 1 and Table 2). Green: significant correlation $p < 0.01$

STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0		0.12	0.14	0.91	0.98	0.89	0.67	0.13	0.16	0.18	0.83	0.34	0.58	0.76	0.40	0.98	-0.08	-0.10	-0.14	-0.13	-0.10
2	VEER	23.3	0.12		0.94	-0.15	0.16	0.24	0.49	1.00	0.98	0.96	0.33	0.83	0.57	0.44	0.78	0.07	-0.87	-0.92	-0.90	-0.89	-0.91
3	RENE	49.5	0.14	0.94		-0.10	0.19	0.32	0.59	0.93	0.91	0.89	0.41	0.86	0.69	0.52	0.81	0.09	-0.85	-0.89	-0.88	-0.87	-0.89
4	KIJK	94.8	0.91	-0.15	-0.10		0.89	0.78	0.53	-0.14	-0.10	-0.08	0.70	0.13	0.41	0.62	0.20	0.94	0.23	0.21	0.14	0.14	0.21
5	NOOR	119.2	0.98	0.16	0.19	0.89		0.92	0.71	0.15	0.19	0.20	0.87	0.36	0.63	0.78	0.41	0.97	-0.09	-0.13	-0.16	-0.15	-0.13
6	EGMO	161.3	0.89	0.24	0.32	0.78	0.92		0.87	0.25	0.27	0.29	0.98	0.49	0.80	0.89	0.55	0.87	-0.25	-0.29	-0.29	-0.28	-0.29
7	TEXE	204.7	0.67	0.49	0.59	0.53	0.71	0.87		0.50	0.54	0.56	0.93	0.79	0.97	0.98	0.84	0.64	-0.41	-0.48	-0.45	-0.44	-0.48
8	BALG	206.0	0.13	1.00	0.93	-0.14	0.15	0.25	0.50		0.98	0.97	0.33	0.82	0.57	0.44	0.79	0.07	-0.88	-0.92	-0.91	-0.90	-0.92
9	EIER	234.8	0.16	0.98	0.91	-0.10	0.19	0.27	0.54	0.98		0.99	0.36	0.89	0.61	0.49	0.84	0.11	-0.83	-0.88	-0.86	-0.85	-0.87
10	NOME	256.4	0.18	0.96	0.89	-0.08	0.20	0.29	0.56	0.97	0.99		0.38	0.89	0.61	0.50	0.87	0.13	-0.82	-0.86	-0.85	-0.84	-0.86
11	AMEL	283.3	0.83	0.33	0.41	0.70	0.87	0.98	0.93	0.33	0.36	0.38		0.59	0.88	0.94	0.65	0.81	-0.29	-0.35	-0.33	-0.32	-0.35
12	SCHI	304.4	0.34	0.83	0.86	0.13	0.36	0.49	0.79	0.82	0.89	0.89	0.59		0.85	0.76	0.98	0.29	-0.65	-0.71	-0.69	-0.68	-0.71
13	ZOLA	324.2	0.58	0.57	0.69	0.41	0.63	0.80	0.97	0.57	0.61	0.61	0.88	0.85		0.94	0.86	0.54	-0.49	-0.55	-0.53	-0.51	-0.55
14	BORK	349.6	0.76	0.44	0.52	0.62	0.78	0.89	0.98	0.44	0.49	0.50	0.94	0.76	0.94		0.80	0.72	-0.33	-0.39	-0.36	-0.34	-0.39
15	NORD	379.9	0.40	0.78	0.81	0.20	0.41	0.55	0.84	0.79	0.84	0.87	0.65	0.98	0.86	0.80		0.35	-0.62	-0.68	-0.65	-0.63	-0.67
16	WANG	427.2	0.98	0.07	0.09	0.94	0.97	0.87	0.64	0.07	0.11	0.13	0.81	0.29	0.54	0.72	0.35		0.01	-0.03	-0.07	-0.06	-0.03
17	NEUW	458.1	-0.08	-0.87	-0.85	0.23	-0.09	-0.25	-0.41	-0.88	-0.83	-0.82	-0.29	-0.65	-0.49	-0.33	-0.62	0.01	0.98	0.96	0.97	0.98	
18	BUSU	492.2	-0.10	-0.92	-0.89	0.21	-0.13	-0.29	-0.48	-0.92	-0.88	-0.86	-0.35	-0.71	-0.55	-0.39	-0.68	-0.03	0.98		0.96	0.95	1.00
19	AMRU	543.0	-0.14	-0.90	-0.88	0.14	-0.16	-0.29	-0.45	-0.91	-0.86	-0.85	-0.33	-0.69	-0.53	-0.36	-0.65	-0.07	0.96	0.96		1.00	0.96
20	ROMO	587.6	-0.13	-0.89	-0.87	0.14	-0.15	-0.28	-0.44	-0.90	-0.85	-0.84	-0.32	-0.68	-0.51	-0.34	-0.63	-0.06	0.97	0.95	1.00		0.95
21	FANO	613.8	-0.10	-0.91	-0.89	0.21	-0.13	-0.29	-0.48	-0.92	-0.87	-0.86	-0.35	-0.71	-0.55	-0.39	-0.67	-0.03	0.98	1.00	0.96	0.95	

Table S2. Maximum difference between the mean cumulative relative size-frequency distribution of the various stations for the years 1999 to 2010. Coding: first four letters of station name (see Fig. 1 and Table 2). Green: significant correlation $p < 0.01$

1999 STATION CODE		DIST CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0																				
2	VEER	23.3																				
3	RENE	49.5																				
4	KIJK	94.8																				
5	NOOR	119.2																				
6	EGMO	161.3																				
7	TEXE	204.7																				
8	BALG	206.0																				
9	EIER	234.8																				
10	NOME	256.4																				
11	AMEL	283.3																				
12	SCHI	304.4																				
13	ZOLA	324.2																				
14	BORK	349.6																				
15	NORD	379.9																				
16	WANG	427.2																				
17	NEUW	458.1																				
18	BUSU	492.2																				
19	AMRU	543.0																				
20	ROMO	587.6																				
21	FANO	613.8																				
2000 STATION CODE		DIST CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0																				
2	VEER	23.3																				
3	RENE	49.5																				
4	KIJK	94.8																				
5	NOOR	119.2																				
6	EGMO	161.3																				
7	TEXE	204.7																				
8	BALG	206.0																				
9	EIER	234.8																				
10	NOME	256.4																				
11	AMEL	283.3																				
12	SCHI	304.4																				
13	ZOLA	324.2																				
14	BORK	349.6																				
15	NORD	379.9																				
16	WANG	427.2																				
17	NEUW	458.1																				
18	BUSU	492.2																				
19	AMRU	543.0																				
20	ROMO	587.6																				
21	FANO	613.8																				
2001 STATION CODE		DIST CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0																				
2	VEER	23.3																				
3	RENE	49.5																				
4	KIJK	94.8																				
5	NOOR	119.2																				
6	EGMO	161.3																				
7	TEXE	204.7																				
8	BALG	206.0																				
9	EIER	234.8																				
10	NOME	256.4																				
11	AMEL	283.3																				
12	SCHI	304.4																				
13	ZOLA	324.2																				
14	BORK	349.6																				
15	NORD	379.9																				
16	WANG	427.2																				
17	NEUW	458.1																				
18	BUSU	492.2																				
19	AMRU	543.0																				
20	ROMO	587.6																				
21	FANO	613.8																				

2002		STATION	CODE	DIST	CADZ	VEER	RENE	KJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO	
1		CADZ	0.0																							
2		VEER	23.3																							
3		RENE	49.5																							
4		KJK	94.8																							
5		NOOR	119.2																							
6		EGMO	161.3																							
7		TEXE	204.7																							
8		BALG	206.0									0.287	0.184	0.377	0.182	0.552	0.375	0.193	0.379	0.935	0.851	0.962	0.961	0.922		
9		EIER	234.8									0.287	0.334	0.116	0.270	0.297	0.106	0.221	0.269	0.932	0.840	0.959	0.957	0.931		
10		NOME	256.4									0.184	0.334	0.431	0.210	0.579	0.437	0.176	0.445	0.947	0.886	0.978	0.980	0.961		
11		AMEL	283.3									0.377	0.116	0.431	0.354	0.249	0.126	0.316	0.315	0.952	0.871	0.979	0.979	0.960		
12		SCHI	304.4									0.182	0.270	0.210	0.354	0.551	0.330	0.136	0.397	0.952	0.886	0.979	0.977	0.950		
13		ZOLA	324.2									0.552	0.297	0.579	0.249	0.551	0.221	0.464	0.192	0.902	0.777	0.945	0.934	0.874		
14		BORK	349.6									0.375	0.106	0.437	0.126	0.330	0.221	0.325	0.209	0.934	0.832	0.961	0.959	0.922		
15		NORD	379.9									0.193	0.221	0.176	0.316	0.136	0.464	0.325	0.327	0.923	0.827	0.957	0.953	0.907		
16		WANG	427.2									0.379	0.269	0.445	0.315	0.397	0.192	0.209	0.327	0.818	0.655	0.914	0.886	0.780		
17		NEUW	458.1									0.935	0.932	0.947	0.952	0.952	0.902	0.934	0.923	0.818	0.347	0.253	0.477	0.096		
18		BUSU	492.2									0.851	0.840	0.886	0.871	0.886	0.777	0.832	0.827	0.655	0.347	0.547	0.577	0.346		
19		AMRU	543.0									0.962	0.959	0.978	0.979	0.979	0.945	0.961	0.957	0.914	0.253	0.547	0.507	0.251		
20		ROMO	587.6									0.961	0.957	0.980	0.979	0.977	0.934	0.959	0.953	0.886	0.477	0.577	0.507	0.525		
21		FANO	613.8									0.922	0.931	0.961	0.960	0.950	0.874	0.922	0.907	0.780	0.096	0.346	0.251	0.525		
2003		STATION	CODE	DIST	CADZ	VEER	RENE	KJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO	
1		CADZ	0.0																							
2		VEER	23.3																							
3		RENE	49.5																							
4		KJK	94.8																							
5		NOOR	119.2																							
6		EGMO	161.3																							
7		TEXE	204.7																							
8		BALG	206.0									0.288	0.269	0.298	0.058	0.187	0.154	0.109	0.277	0.570	0.823	0.932	0.902	0.620		
9		EIER	234.8									0.288	0.054	0.216	0.298	0.101	0.254	0.215	0.059	0.662	0.876	0.958	0.925	0.713		
10		NOME	256.4									0.269	0.054	0.227	0.279	0.092	0.235	0.219	0.098	0.630	0.828	0.936	0.905	0.686		
11		AMEL	283.3									0.298	0.216	0.227	0.329	0.166	0.308	0.235	0.161	0.770	0.928	0.966	0.934	0.744		
12		SCHI	304.4									0.058	0.298	0.279	0.329	0.201	0.124	0.121	0.294	0.519	0.778	0.912	0.881	0.569		
13		ZOLA	324.2									0.187	0.101	0.092	0.166	0.201	0.166	0.140	0.100	0.633	0.836	0.938	0.907	0.684		
14		BORK	349.6									0.154	0.254	0.235	0.308	0.124	0.166	0.091	0.248	0.489	0.685	0.844	0.824	0.541		
15		NORD	379.9									0.109	0.215	0.219	0.235	0.121	0.140	0.091	0.173	0.559	0.756	0.898	0.853	0.610		
16		WANG	427.2									0.277	0.059	0.098	0.161	0.294	0.100	0.248	0.173	0.713	0.874	0.931	0.897	0.764		
17		NEUW	458.1									0.570	0.662	0.630	0.770	0.519	0.633	0.489	0.559	0.713	0.371	0.800	0.780	0.172		
18		BUSU	492.2									0.823	0.876	0.828	0.928	0.778	0.836	0.685	0.756	0.874	0.371	0.546	0.573	0.275		
19		AMRU	543.0									0.932	0.958	0.936	0.966	0.912	0.938	0.844	0.898	0.931	0.800	0.546	0.059	0.644		
20		ROMO	587.6									0.902	0.925	0.905	0.934	0.881	0.907	0.824	0.853	0.897	0.780	0.573	0.059	0.662		
21		FANO	613.8									0.620	0.713	0.686	0.824	0.569	0.684	0.541	0.610	0.764	0.172	0.275	0.644	0.662		
2004		STATION	CODE	DIST	CADZ	VEER	RENE	KJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO	
1		CADZ	0.0																							
2		VEER	23.3																							
3		RENE	49.5																							
4		KJK	94.8																							
5		NOOR	119.2																							
6		EGMO	161.3																							
7		TEXE	204.7																							
8		BALG	206.0									0.158	0.293	0.407	0.257	0.176	0.230	0.331	0.345	0.924	0.960	0.926	0.722	0.662		
9		EIER	234.8									0.158	0.143	0.292	0.126	0.216	0.352	0.270	0.468	0.923	0.965	0.924	0.760	0.664		
10		NOME	256.4									0.293	0.143	0.198	0.241	0.341	0.490	0.388	0.595	0.932	0.973	0.933	0.804	0.742		
11		AMEL	283.3									0.407	0.292	0.198	0.394	0.494	0.623	0.519	0.697	0.921	0.957	0.923	0.827	0.768		
12		SCHI	304.4									0.257	0.126	0.241	0.394	0.101	0.325	0.152	0.530	0.953	0.986	0.959	0.851	0.780		
13		ZOLA	324.2									0.176	0.216	0.341	0.494	0.101	0.325	0.260	0.392	0.324	0.935	0.971	0.937	0.711	0.643	
14		BORK	349.6									0.230	0.352	0.490	0.623	0.325	0.260	0.260	0.465	0.946	0.984	0.948	0.808	0.711		
15		NORD	379.9									0.331	0.270	0.388	0.519	0.152	0.155	0.392	0.586	0.979	0.996	0.978	0.873	0.807		
16		WANG	427.2									0.345	0.468	0.595	0.697	0.530	0.465	0.324	0.586	0.706	0.783	0.778	0.443	0.337		
17		NEUW	458.1									0.924	0.923	0.932	0.921	0.953	0.946	0.935	0.979	0.706	0.224	0.452	0.315	0.378		
18		BUSU	492.2									0.960	0.965	0.973	0.957	0.986	0.984	0.971	0.996	0.778	0.452	0.271	0.355	0.462		
19		AMRU	543.0									0.926	0.924	0.933	0.923	0.959	0.948	0.937	0.978	0.778	0.452	0.271	0.355	0.463		
20		ROMO	587.6									0.722	0.760	0.804	0.827	0.851	0.808	0.711	0.873	0.443	0.315	0.355	0.394	0.190		
21		FANO	613.8									0.662	0.664	0.742	0.768	0.755	0.711	0.641	0.807	0.337	0.378	0.462	0.463	0.190		

2005	STATION	CODE	DIST	CADZ	VEER	RENE	KJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO	
1	CADZ	0.0			0.723	0.729	0.651	0.500	0.179	0.290	0.733	0.365	0.586	0.268	0.177	0.211	0.239	0.475	0.185		0.642	0.836	0.800	0.607	
2	VEER	23.3	0.723		0.213	0.990	0.609	0.785		0.870	0.285	0.375	0.153	0.742	0.685	0.544	0.679	0.266	0.850		0.963	0.996	0.996	0.982	
3	RENE	49.5	0.729	0.213		1.000	0.479	0.788	0.808	0.443	0.388	0.285	0.749	0.706	0.561	0.670	0.254	0.855		0.991	0.996	1.000	0.986		
4	KJK	94.8	0.651	0.990	1.000		0.924	0.761	0.924	0.928	0.816	0.844	0.385	0.551	0.651	0.411	0.801	0.661		0.469	0.849	0.813	0.388		
5	NOOR	119.2	0.500	0.609	0.479	0.924		0.582	0.550	0.707	0.315	0.516	0.609	0.576	0.444	0.557	0.367	0.624		0.946	0.983	0.982	0.957		
6	EGMO	161.3	0.179	0.785	0.788	0.761	0.582		0.370	0.750	0.424	0.645	0.444	0.210	0.251	0.406	0.534	0.147		0.736	0.923	0.902	0.713		
7	TEXE	204.7	0.290	0.870	0.808	0.924	0.550	0.370		0.850	0.501	0.726	0.540	0.409	0.343	0.513	0.604	0.412		0.916	0.978	0.964	0.863		
8	BALG	206.0	0.733	0.285	0.443	0.928	0.707	0.750	0.850		0.423	0.195	0.711	0.639	0.529	0.695	0.377	0.817		0.920	0.954	0.956	0.926		
9	EIER	234.8	0.365	0.375	0.388	0.816	0.315	0.424	0.501	0.423		0.228	0.447	0.331	0.197	0.405	0.152	0.490		0.807	0.903	0.889	0.762		
10	NOME	256.4	0.586	0.153	0.285	0.844	0.516	0.645	0.726	0.195	0.228		0.597	0.535	0.395	0.536	0.199	0.711		0.829	0.871	0.863	0.840		
11	AMEL	283.3	0.268	0.742	0.749	0.385	0.609	0.444	0.540	0.711	0.447	0.597		0.259	0.290	0.094	0.507	0.312		0.376	0.690	0.589	0.366		
12	SCHI	304.4	0.177	0.685	0.706	0.551	0.576	0.210	0.409	0.639	0.331	0.535	0.259		0.160	0.216	0.475	0.213		0.526	0.805	0.769	0.503		
13	ZOLA	324.2	0.211	0.544	0.561	0.651	0.444	0.251	0.343	0.529	0.197	0.395	0.290	0.160			0.252	0.320	0.316		0.642	0.825	0.789	0.590	
14	BORK	349.6	0.239	0.679	0.670	0.411	0.557	0.406	0.513	0.695	0.405	0.536	0.094	0.216	0.252		0.420	0.258		0.403	0.720	0.666	0.401		
15	NORD	379.9	0.475	0.266	0.254	0.801	0.367	0.534	0.604	0.377	0.152	0.199	0.507	0.475	0.320	0.420		0.613		0.792	0.863	0.855	0.795		
16	WANG	427.2	0.185	0.850	0.855	0.661	0.624	0.147	0.412	0.817	0.490	0.711	0.312	0.213	0.316	0.258	0.613		0.652	0.780	0.763	0.609			
17	NEUW	458.1																							
18	BUSU	492.2	0.642	0.963	0.991	0.469	0.946	0.736	0.916	0.920	0.807	0.829	0.376	0.526	0.642	0.403	0.792	0.652		0.427	0.391	0.279			
19	AMRU	543.0	0.836	0.996	0.996	0.849	0.983	0.923	0.978	0.954	0.903	0.871	0.690	0.805	0.825	0.720	0.863	0.780		0.427	0.294	0.631			
20	ROMO	587.6	0.800	0.996	1.000	0.813	0.982	0.902	0.964	0.956	0.889	0.863	0.589	0.769	0.789	0.666	0.855	0.763		0.391	0.294	0.459			
21	FANO	613.8	0.607	0.982	0.986	0.388	0.957	0.713	0.863	0.926	0.762	0.840	0.366	0.503	0.590	0.401	0.795	0.609		0.279	0.631	0.459			
2006	STATION	CODE	DIST	CADZ	VEER	RENE	KJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO	
1	CADZ	0.0			0.844	0.772	0.344	0.218	0.636	0.369	0.938	0.666	0.626	0.655	0.665	0.580	0.610	0.408	0.657	0.989	0.986	1.000	0.993	0.761	
2	VEER	23.3	0.844			0.278	0.967	0.942	0.808	0.944	0.255	0.415	0.635	0.806	0.474	0.623	0.774	0.788	0.957	1.000	1.000	1.000	1.000	0.992	
3	RENE	49.5	0.772	0.278		0.874	0.836	0.593	0.202	0.620	0.412	0.948	0.650	0.609	0.638	0.687	0.586	0.594	0.392	0.447	0.946	0.899	0.974	0.980	0.597
4	KJK	94.8	0.344	0.967	0.874		0.202	0.620	0.412	0.948	0.650	0.609	0.638	0.687	0.586	0.594	0.392	0.447	0.946	0.899	0.974	0.980	0.597		
5	NOOR	119.2	0.218	0.942	0.836	0.202		0.419	0.290	0.933	0.568	0.458	0.444	0.604	0.491	0.397	0.232	0.521	0.970	0.929	0.989	0.993	0.648		
6	EGMO	161.3	0.636	0.808	0.593	0.620	0.419		0.531	0.870	0.420	0.192	0.068	0.347	0.211	0.075	0.228	0.684	0.975	0.967	0.990	0.988	0.801		
7	TEXE	204.7	0.369	0.944	0.879	0.412	0.290	0.531		0.933	0.641	0.555	0.576	0.679	0.592	0.540	0.335	0.626	0.975	0.955	0.989	0.993	0.729		
8	BALG	206.0	0.938	0.255	0.428	0.948	0.933	0.870	0.933		0.451	0.701	0.866	0.647	0.720	0.865	0.822	0.936	1.000	1.000	1.000	1.000	0.976		
9	EIER	234.8	0.666	0.415	0.268	0.650	0.568	0.420	0.641	0.451		0.264	0.415	0.215	0.269	0.414	0.375	0.702	0.981	0.971	0.996	0.993	0.829		
10	NOME	256.4	0.626	0.635	0.440	0.609	0.458	0.192	0.555	0.701	0.264		0.179	0.174	0.058	0.164	0.249	0.658	0.981	0.952	0.996	0.989	0.789		
11	AMEL	283.3	0.655	0.806	0.562	0.638	0.444	0.068	0.576	0.866	0.415	0.179		0.345	0.193	0.052	0.249	0.706	0.982	0.973	0.997	0.993	0.818		
12	SCHI	304.4	0.665	0.474	0.276	0.687	0.604	0.347	0.692	0.647	0.215	0.174		0.345	0.162	0.313	0.394	0.697	0.973	0.945	0.988	0.981	0.828		
13	ZOLA	324.2	0.580	0.623	0.382	0.586	0.491	0.211	0.589	0.720	0.269	0.058	0.193	0.162	0.281	0.225	0.693	0.970	0.955	0.989	0.993	0.814			
14	BORK	349.6	0.610	0.774	0.524	0.594	0.397	0.075	0.540	0.865	0.414	0.164		0.052	0.313	0.151	0.225	0.693	0.970	0.955	0.989	0.993	0.814		
15	NORD	379.9	0.408	0.788	0.618	0.392	0.232	0.228	0.335	0.822	0.375	0.249		0.249	0.394	0.281	0.225	0.515	0.926	0.885	0.950	0.966	0.620		
16	WANG	427.2	0.657	0.957	0.878	0.447	0.521	0.684	0.626	0.936	0.702	0.658	0.706	0.697	0.629	0.693	0.515	0.815	0.756		0.618	0.792	0.879	0.389	
17	NEUW	458.1	0.989	1.000	0.998	0.946	0.970	0.975	0.975	1.000	0.981	0.981	0.982	0.973	0.946	0.970	0.926	0.756	0.219	0.347	0.491	0.341	0.388		
18	BUSU	492.2	1.000	1.000	0.998	0.899	0.929	0.967	0.955	1.000	0.971	0.952	0.973	0.945	0.974	0.989	0.950	0.792	0.347	0.348	0.492	0.301			
19	AMRU	543.0	1.000	1.000	1.000	0.974	0.989	0.990	0.989	1.000	0.996	0.996	0.997	0.988	0.974	0.989	0.950	0.792	0.143		0.561				
20	ROMO	587.6	0.993	1.000	1.000	0.980	0.993	0.988	0.993	1.000	0.993	0.989	0.993	0.981	0.980	0.993	0.966	0.879	0.491	0.492	0.143				
21	FANO	613.8	0.761	0.992	0.952	0.597	0.648	0.801	0.729	0.976	0.829	0.789	0.818	0.828	0.743	0.814	0.620	0.889	0.388	0.301	0.442	0.561			
2007	STATION	CODE	DIST	CADZ	VEER	RENE	KJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO	
1	CADZ	0.0			0.460	0.429	0.109	0.405	0.045	0.087	0.170	0.503	0.369	0.651	0.129	0.414	0.306	0.146	0.522	0.267	0.776	0.791	0.876	0.845	0.763
2	VEER	23.3	0.460		0.093	0.452	0.106	0.508	0.371	0.208	0.182	0.291	0.356	0.078	0.346	0.314	0.220	0.236	0.931	0.952	0.918	0.878			
3	RENE	49.5	0.429	0.093		0.468	0.116	0.501	0.348	0.146	0.097	0.300	0.365	0.130	0.351	0.342	0.170	0.263	0.898</td						

2008		STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1		CADZ	0.0		0.719	0.572	0.585	0.568	0.611	0.783	0.671	0.667	0.581	0.522	0.549	0.574	0.513	0.444	0.191	0.781	0.814	0.765	0.911	0.536	
2		VEER	23.3		0.719		0.558	0.485	0.707	0.565	0.502	0.084	0.144	0.400	0.528	0.223	0.519	0.358	0.602	0.736	0.944	0.995	0.981	0.981	0.923
3		RENE	49.5		0.572	0.558		0.177	0.198	0.051	0.816	0.582	0.467	0.179	0.149	0.383	0.069	0.231	0.179	0.515	0.887	0.983	0.947	0.970	0.821
4		KIJK	94.8		0.585	0.485	0.177		0.376	0.153	0.719	0.508	0.405	0.093	0.234	0.309	0.148	0.157	0.286	0.534	0.878	0.981	0.934	0.970	0.807
5		NOOR	119.2		0.568	0.707	0.198	0.376		0.244	0.870	0.707	0.646	0.343	0.184	0.485	0.227	0.349	0.124	0.450	0.878	0.981	0.926	0.970	0.788
6		EGMO	161.3		0.611	0.565	0.051	0.153	0.244		0.814	0.576	0.485	0.177	0.200	0.374	0.087	0.223	0.225	0.566	0.892	0.988	0.952	0.970	0.826
7		TEXE	204.7		0.783	0.502	0.816	0.719	0.870	0.814		0.432	0.491	0.637	0.762	0.640	0.747	0.591	0.813	0.861	0.969	0.995	0.989	0.985	0.955
8		BALG	206.0		0.671	0.084	0.582	0.508	0.707	0.576	0.432		0.198	0.415	0.533	0.222	0.529	0.363	0.602	0.713	0.890	0.973	0.936	0.962	0.868
9		EIER	234.8		0.667	0.144	0.467	0.405	0.646	0.485	0.491	0.198		0.338	0.462	0.161	0.439	0.297	0.540	0.684	0.867	0.962	0.926	0.952	0.845
10		NOME	256.4		0.581	0.400	0.179	0.093	0.343	0.177	0.637	0.415	0.338		0.201	0.216	0.118	0.072	0.253	0.481	0.860	0.963	0.918	0.962	0.793
11		AMEL	283.3		0.522	0.528	0.149	0.234	0.184	0.200	0.762	0.533	0.462	0.201		0.333	0.129	0.178	0.082	0.374	0.862	0.965	0.911	0.962	0.773
12		SCHI	304.4		0.549	0.223	0.383	0.309	0.485	0.374	0.440	0.222	0.161	0.216	0.333		0.327	0.159	0.387	0.557	0.827	0.923	0.877	0.930	0.762
13		ZOLA	324.2		0.574	0.519	0.069	0.148	0.227	0.087	0.747	0.529	0.439	0.118	0.129	0.327		0.175	0.173	0.479	0.860	0.962	0.919	0.951	0.793
14		BORK	349.6		0.513	0.358	0.231	0.157	0.349	0.223	0.591	0.363	0.297	0.072	0.178	0.159	0.175		0.244	0.453	0.834	0.926	0.878	0.936	0.734
15		NORD	379.9		0.444	0.602	0.179	0.286	0.124	0.225	0.813	0.602	0.540	0.253	0.082	0.387	0.173	0.244		0.353	0.827	0.918	0.870	0.929	0.725
16		WANG	427.2		0.191	0.736	0.515	0.534	0.450	0.566	0.861	0.713	0.684	0.481	0.374	0.557	0.479	0.453	0.353		0.725	0.765	0.716	0.878	0.521
17		NEUW	458.1		0.781	0.944	0.887	0.878	0.878	0.892	0.969	0.890	0.867	0.860	0.862	0.827	0.860	0.834	0.827	0.725		0.271	0.128	0.274	0.363
18		BUSU	492.2		0.814	0.995	0.983	0.981	0.981	0.988	0.995	0.973	0.962	0.963	0.965	0.923	0.962	0.926	0.918	0.765	0.271		0.143	0.540	0.293
19		AMRU	543.0		0.765	0.981	0.947	0.934	0.926	0.952	0.989	0.936	0.926	0.918	0.911	0.877	0.919	0.878	0.870	0.716	0.128		0.397	0.272	0.572
20		ROMO	587.6		0.911	0.981	0.970	0.970	0.970	0.970	0.985	0.962	0.952	0.962	0.962	0.930	0.951	0.936	0.929	0.878	0.274	0.540	0.397		0.572
21		FANO	613.8		0.536	0.923	0.821	0.807	0.788	0.826	0.955	0.868	0.845	0.793	0.773	0.762	0.793	0.734	0.725	0.521	0.361	0.293	0.272	0.572	
2009		STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1		CADZ	0.0		0.305	0.306	0.404	0.740	0.222	0.313	0.217	0.692	0.640	0.447	0.527	0.465	0.662	0.554	0.472	0.289	0.434	0.885	0.597	0.714	
2		VEER	23.3		0.305		0.061	0.658	0.902	0.190	0.160	0.437	0.646	0.526	0.205	0.429	0.227	0.570	0.468	0.275	0.564	0.700	0.968	0.776	0.840
3		RENE	49.5		0.306	0.061		0.678	0.928	0.210	0.126	0.385	0.591	0.493	0.243	0.386	0.273	0.537	0.435	0.292	0.570	0.738	0.981	0.801	0.865
4		KIJK	94.8		0.404	0.658	0.678		0.357	0.487	0.683	0.621	0.913	0.894	0.767	0.817	0.784	0.876	0.803	0.764	0.233	0.169	0.774	0.516	0.614
5		NOOR	119.2		0.740	0.902	0.928	0.357		0.799	0.903	0.918	0.974	0.957	0.897	0.918	0.926	0.926	0.935	0.905	0.564	0.389	0.818	0.529	0.637
6		EGMO	161.3		0.222	0.190	0.210	0.487	0.799		0.212	0.369	0.494	0.429	0.288	0.338	0.309	0.452	0.343	0.285	0.436	0.565	0.929	0.644	0.753
7		TEXE	204.7		0.313	0.160	0.683	0.903	0.212		0.427	0.486	0.417	0.241	0.297	0.271	0.435	0.325	0.265	0.584	0.747	0.959	0.797	0.849	
8		BALG	206.0		0.217	0.437	0.385	0.621	0.918	0.369	0.427		0.828	0.790	0.629	0.671	0.658	0.797	0.699	0.638	0.430	0.601	0.978	0.743	0.841
9		EIER	234.8		0.692	0.646	0.591	0.913	0.974	0.494	0.486	0.828		0.206	0.540	0.218	0.449	0.234	0.198	0.482	0.875	0.944	0.995	0.932	0.968
10		NOME	256.4		0.640	0.526	0.493	0.894	0.957	0.429	0.417	0.790	0.206		0.391	0.136	0.337	0.060	0.110	0.338	0.857	0.929	0.983	0.921	0.956
11		AMEL	283.3		0.447	0.205	0.243	0.767	0.897	0.288	0.241	0.629	0.540	0.391		0.355	0.184	0.420	0.353	0.079	0.707	0.846	0.945	0.846	0.878
12		SCHI	304.4		0.527	0.429	0.386	0.817	0.918	0.338	0.297	0.671	0.218	0.136	0.355		0.231	0.160	0.091	0.301	0.756	0.888	0.966	0.876	0.906
13		ZOLA	324.2		0.465	0.227	0.273	0.784	0.926	0.309	0.271	0.658	0.449	0.337	0.184	0.231		0.381	0.279	0.135	0.737	0.874	0.969	0.874	0.906
14		BORK	349.6		0.662	0.570	0.537	0.876	0.926	0.452	0.435	0.797	0.234		0.060	0.420	0.160	0.381		0.118	0.383	0.841	0.896	0.967	0.884
15		NORD	379.9		0.554	0.468	0.435	0.803	0.935	0.343	0.325	0.699	0.198	0.110	0.353	0.091	0.279	0.118		0.305	0.765	0.858	0.983	0.857	0.905
16		WANG	427.2		0.275	0.292	0.764	0.905	0.285	0.265	0.638	0.482	0.338	0.079	0.301	0.135	0.383	0.305		0.707	0.838	0.948	0.838	0.871	
17		NEUW	458.1		0.289	0.564	0.570	0.233	0.564	0.436	0.584	0.430	0.875	0.857	0.707	0.756	0.737	0.841	0.707	0.211	0.782	0.460	0.586	0.582	
18		BUSU	492.2		0.434	0.700	0.738	0.169	0.389	0.565	0.747	0.601	0.944	0.929	0.846	0.888	0.874	0.896	0.858	0.838	0.211		0.693	0.362	0.474
19		AMRU	543.0		0.885	0.968	0.981	0.774	0.818	0.929	0.959	0.978	0.995	0.983	0.945	0.966	0.969	0.967	0.983	0.948	0.782	0.693		0.334	0.219
20		ROMO	587.6		0.597	0.776	0.801	0.516	0.529	0.644	0.797	0.743	0.932	0.921	0.846	0.876	0.874	0.884	0.857	0.838	0.460	0.334		0.141	
21		FANO	613.8		0.840	0.865	0.614	0.637	0.753	0.849	0.841	0.968	0.956	0.878	0.912	0.906	0.919	0.905	0.871	0.586	0.474	0.219	0.141		
2010		STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1		CADZ	0.0																						
2		VEER	23.3																						
3		RENE	49.5																						
4		KIJK	94.8																						
5		NOOR	119.2																						
6		EGMO	161.3																						
7		TEXE	204.7																						
8		BALG	206.0																						
9		EIER	234.8																						

Table S3. Spearman rank correlation of the pattern in maximum difference between the mean cumulative relative size-frequency distribution of the various stations for the years 1999 to 2010. Coding: first four letters of station name (see Fig. 1 and Table 2). Green: significant correlation $p < 0.01$

1999	STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0																						
2	VEER	23.3																						
3	RENE	49.5																						
4	KIJK	94.8																						
5	NOOR	119.2																						
6	EGMO	161.3																						
7	TEXE	204.7																						
8	BALG	206.0																						
9	EIER	234.8																						
10	NOME	256.4																						
11	AMEL	283.3																						
12	SCHI	304.4																						
13	ZOLA	324.2																						
14	BORK	349.6																						
15	NORD	379.9																						
16	WANG	427.2																						
17	NEUW	458.1																						
18	BUSU	492.2																						
19	AMRU	543.0																						
20	ROMO	587.6																						
21	FANO	613.8																						
2000	STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0																						
2	VEER	23.3																						
3	RENE	49.5																						
4	KIJK	94.8																						
5	NOOR	119.2																						
6	EGMO	161.3																						
7	TEXE	204.7																						
8	BALG	206.0																						
9	EIER	234.8																						
10	NOME	256.4																						
11	AMEL	283.3																						
12	SCHI	304.4																						
13	ZOLA	324.2																						
14	BORK	349.6																						
15	NORD	379.9																						
16	WANG	427.2																						
17	NEUW	458.1																						
18	BUSU	492.2																						
19	AMRU	543.0																						
20	ROMO	587.6																						
21	FANO	613.8																						
2001	STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0																						
2	VEER	23.3																						
3	RENE	49.5																						
4	KIJK	94.8																						
5	NOOR	119.2																						
6	EGMO	161.3																						
7	TEXE	204.7																						
8	BALG	206.0																						
9	EIER	234.8																						
10	NOME	256.4																						
11	AMEL	283.3																						
12	SCHI	304.4																						
13	ZOLA	324.2																						
14	BORK	349.6																						
15	NORD	379.9																						
16	WANG	427.2																						
17	NEUW	458.1																						
18	BUSU	492.2																						
19	AMRU	543.0																						
20	ROMO	587.6																						
21	FANO	613.8																						

2005	STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0			0.08	0.06	0.43	0.46	0.97	0.90	0.10	0.42	0.10	0.74	0.96	0.89	0.80	0.17	0.94	0.08	-0.01	-0.01	0.20	
2	VEER	23.3	0.08		0.98	-0.48	0.68	0.07	0.22	0.97	0.84	0.99	-0.30	0.04	0.38	-0.14	0.96	-0.21	-0.72	-0.69	-0.69	-0.66		
3	RENE	49.5	0.06	0.98		-0.53	0.73	0.05	0.23	0.94	0.84	0.96	-0.34	0.01	0.37	-0.17	0.96	-0.22	-0.74	-0.70	-0.70	-0.70		
4	KIJK	94.8	0.43	-0.48	-0.53		-0.27	0.33	0.09	-0.42	-0.23	-0.46	0.88	0.54	0.21	0.81	-0.41	0.56	0.83	0.65	0.65	0.93		
5	NOOR	119.2	0.46	0.68	0.73	-0.27		0.44	0.62	0.61	0.88	0.66	-0.01	0.36	0.64	0.16	0.82	0.22	-0.59	-0.61	-0.61	-0.50		
6	EGMO	161.3	0.97	0.07	0.05	0.33	0.44		0.92	0.11	0.39	0.10	0.66	0.94	0.88	0.71	0.16	0.94	0.00	-0.07	-0.06	-0.12		
7	TEXE	204.7	0.90	0.22	0.23	0.09	0.62	0.92		0.23	0.50	0.24	0.48	0.85	0.89	0.57	0.32	0.79	-0.22	-0.28	-0.28	-0.11		
8	BALG	206.0	0.10	0.97	0.94	-0.42	0.61	0.11	0.23	0.82	0.99	-0.24	0.09	0.44	-0.10	0.93	-0.17	-0.66	-0.62	-0.62	-0.60			
9	EIER	234.8	0.42	0.84	0.84	-0.23	0.88	0.39	0.50	0.82		0.86	0.01	0.38	0.69	0.17	0.93	0.16	-0.53	-0.52	-0.51	-0.45		
10	NOME	256.4	0.10	0.99	0.96	-0.46	0.66	0.10	0.24	0.99	0.86		-0.28	0.07	0.42	-0.13	0.95	-0.18	-0.70	-0.66	-0.66	-0.63		
11	AMEL	283.3	0.74	-0.30	-0.34	0.88	-0.01	0.66	0.48	-0.24	0.01	-0.28		0.82	0.58	0.97	-0.22	0.82	0.67	0.54	0.55	0.77		
12	SCHI	304.4	0.96	0.04	0.01	0.54	0.36	0.94	0.85	0.09	0.38	0.07	0.82	0.89	0.86	0.13	0.92	0.21	0.11	0.11	0.34			
13	ZOLA	324.2	0.89	0.38	0.37	0.21	0.64	0.88	0.89	0.44	0.69	0.42	0.58	0.89		0.67	0.48	0.76	-0.13	-0.17	-0.17	-0.01		
14	BORK	349.6	0.80	-0.14	-0.17	0.81	0.16	0.71	0.57	-0.10	0.17	-0.13	0.97	0.86	0.67		-0.05	0.83	0.54	0.40	0.41	0.67		
15	NORD	379.9	0.17	0.96	0.96	-0.41	0.82	0.16	0.32	0.93	0.93	0.95	-0.22	0.13	0.48	-0.05		-0.10	-0.67	-0.65	-0.65	-0.60		
16	WANG	427.2	0.94	-0.21	-0.22	0.56	0.22	0.94	0.79	-0.17	0.16	-0.18	0.82	0.92	0.76	0.83	-0.10		0.30	0.23	0.23	0.40		
17	NEUW	458.1																						
18	BUSU	492.2	0.08	-0.72	-0.74	0.83	-0.59	0.00	-0.22	-0.66	-0.53	-0.70	0.67	0.21	-0.13	0.54	-0.67	0.30		0.93	0.93	0.97		
19	AMRU	543.0	-0.01	-0.69	-0.70	0.65	-0.61	-0.07	-0.28	-0.62	-0.52	-0.66	0.54	0.11	-0.17	0.40	-0.65	0.23	0.93	1.00	0.84			
20	ROMO	587.6	-0.01	-0.69	-0.70	0.65	-0.61	-0.06	-0.28	-0.62	-0.51	-0.66	0.55	0.11	-0.17	0.41	-0.65	0.23	0.93	1.00		0.85		
21	FANO	613.8	0.20	-0.66	-0.70	0.93	-0.50	0.12	-0.11	-0.60	-0.45	-0.63	0.77	0.34	-0.01	0.67	-0.60	0.40	0.97	0.84	0.85			
2006	STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0		0.16	0.19	0.94	0.97	0.66	0.96	0.14	0.34	0.60	0.63	0.39	0.60	0.65	0.79	0.61	-0.26	-0.25	-0.33	-0.33	-0.10	
2	VEER	23.3	0.16		0.96	-0.04	0.09	0.47	0.15	0.99	0.86	0.62	0.52	0.82	0.63	0.51	0.36	-0.37	-0.82	-0.81	-0.79	-0.79	-0.91	
3	RENE	49.5	0.19	0.96		0.00	0.13	0.55	0.16	0.94	0.92	0.70	0.60	0.90	0.72	0.50	0.40	-0.33	-0.76	-0.77	-0.76	-0.74	-0.89	
4	KIJK	94.8	0.94	-0.04	0.00		0.93	0.51	0.90	-0.05	0.16	0.43	0.47	0.20	0.43	0.50	0.69	0.81	-0.02	0.00	-0.10	-0.13	0.17	
5	NOOR	119.2	0.97	0.09	0.13	0.93		0.68	0.98	0.08	0.30	0.58	0.65	0.35	0.57	0.67	0.83	0.64	-0.21	-0.21	-0.29	-0.31	-0.06	
6	EGMO	161.3	0.66	0.47	0.55	0.51	0.68		0.70	0.47	0.73	0.95	0.99	0.80	0.93	0.99	0.93	0.24	-0.38	-0.39	-0.42	-0.39	-0.43	
7	TEXE	204.7	0.96	0.15	0.16	0.90	0.98	0.70		0.15	0.34	0.59	0.66	0.36	0.57	0.67	0.85	0.59	-0.27	-0.27	-0.33	-0.36	-0.11	
8	BALG	206.0	0.14	0.99	0.94	-0.05	0.08	0.47		0.15	0.87	0.61	0.52	0.81	0.61	0.51	0.37	-0.35	-0.79	-0.78	-0.76	-0.89		
9	EIER	234.8	0.34	0.86	0.92	0.16	0.30	0.73	0.34	0.87		0.86	0.78	0.97	0.86	0.76	0.62	-0.11	-0.61	-0.59	-0.61	-0.60	-0.75	
10	NOME	256.4	0.60	0.62	0.70	0.43	0.58	0.95	0.59	0.61	0.86		0.96	0.92	0.99	0.96	0.85	0.14	-0.44	-0.44	-0.47	-0.44	-0.53	
11	AMEL	283.3	0.63	0.52	0.60	0.47	0.65	0.99	0.66	0.52	0.78	0.96		0.84	0.95	0.99	0.92	0.19	-0.41	-0.43	-0.46	-0.43	-0.48	
12	SCHI	304.4	0.39	0.82	0.90	0.20	0.35	0.80	0.36	0.81	0.97	0.92	0.84		0.93	0.83	0.65	-0.09	-0.59	-0.58	-0.60	-0.72		
13	ZOLA	324.2	0.60	0.63	0.72	0.43	0.57	0.93	0.57	0.61	0.86	0.99	0.95	0.93	0.95	0.83	0.13	-0.45	-0.45	-0.49	-0.45	-0.55		
14	BORK	349.6	0.65	0.51	0.59	0.50	0.67	0.99	0.67	0.51	0.76	0.96	0.99	0.83	0.95	0.93	0.21	-0.39	-0.41	-0.43	-0.43	-0.46		
15	NORD	379.9	0.79	0.36	0.40	0.69	0.83	0.93	0.85	0.37	0.62	0.85	0.92	0.65	0.83	0.93	0.41	-0.27	-0.29	-0.34	-0.36	-0.28		
16	WANG	427.2	0.61	-0.37	-0.33	0.81	0.64	0.24	0.59	-0.35	-0.11	0.14	0.19	-0.09	0.13	0.21	0.41		0.41	0.46	0.32	0.31	0.58	
17	NEUW	458.1	-0.26	-0.82	-0.76	-0.02	-0.21	-0.38	-0.27	-0.79	-0.61	-0.44	-0.41	-0.59	-0.45	-0.39	-0.27	0.41	0.98	0.98	0.93	0.91		
18	BUSU	492.2	-0.25	-0.81	-0.77	0.00	-0.21	-0.39	-0.27	-0.78	-0.59	-0.44	-0.43	-0.58	-0.45	-0.41	-0.29	0.46	0.98		0.96	0.94	0.93	
19	AMRU	543.0	-0.33	-0.79	-0.76	-0.10	-0.29	-0.42	-0.33	-0.76	-0.61	-0.47	-0.46	-0.60	-0.49	-0.43	-0.34	0.32	0.98	0.96	0.95	0.95	0.86	
20	ROMO	587.6	-0.33	-0.79	-0.74	-0.13	-0.31	-0.39	-0.36	-0.77	-0.60	-0.44	-0.43	-0.56	-0.45	-0.43	-0.36	0.31	0.93	0.94	0.95		0.86	
21	FANO	613.8	-0.10	-0.91	-0.89	0.17	-0.06	-0.43	-0.11	-0.89	-0.75	-0.53	-0.48	-0.72	-0.55	-0.46	-0.28	0.58	0.91	0.93	0.86	0.86		
2007	STATION	CODE	DIST	CADZ	VEER	RENE	KIJK	NOOR	EGMO	TEXE	BALG	EIER	NOME	AMEL	SCHI	ZOLA	BORK	NORD	WANG	NEUW	BUSU	AMRU	ROMO	FANO
1	CADZ	0.0		0.22	0.23	0.98	0.31	1.00	0.94	0.17	0.23	0.14	0.96	0.31	0.79	0.95	0.15	0.73	-0.15	-0.15	-0.19	-0.19	-0.15	
2	VEER	23.3	0.22		0.98	0.19	0.96	0.22	0.27	0.89	0.93	0.88	0.28	0.97	0.48	0.30	0.88	0.56	-0.82	-0.81	-0.78	-0.81		
3	RENE	49.5	0.23	0.98		0.18	0.30	0.98	0.92	0.09	0.17	0.06	0.96	0.29	0.79	0.94	0.07	0.73	-0.07	-0.12	-0.12	-0.08		
4	KIJK	94.8	0.98	0.19	0.18		0.30	0.98	0.92	0.09	0.17	0.06	0.96	0.29	0.79	0.94	0.07	0.73	-0.07	-0.12	-0.12	-0.08		
5	NOOR	119.2	0.31	0.96	0.95	0.30		0.31	0.39	0.82	0.89	0.78	0.38	1.00	0.62	0.41	0.79	0.69	-0.72	-0.72	-0.70	-0.70	-0.72	
6	EGMO	161.3	1.00	0.22	0.22	0.98	0.31		0.94	0.16	0.23	0.14	0.95	0.31	0.78	0.94	0.15	0.72	-0.15	-0.16	-0.19	-0.19	-0.16	
7	TEXE	204.7	0.94	0.27	0.29	0.92	0.39	0.94		0.24	0.31	0.22	0.96	0.39	0.88	0.96	0.22	0.84	-0.17	-0.18	-0.20	-0.20	-0.18	
8	BALG	206.0	0.17	0.89	0.92</																			

Table S4. First and second eigenvector of the PCA of the correspondence the pattern in maximum difference between the mean cumulative relative size-frequency distribution of the various stations for the years 1999 to 2010

Station	1999		2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	PC1	PC2																						
1													-0.660	-3.229	-1.558	2.515	-1.376	2.900	-0.155	2.578	0.314	3.051		
2													4.745	2.016	-2.457	-3.257	-2.733	-2.298	-2.119	-2.785	-2.771	1.751		
3													4.852	2.113	-2.647	-3.015	-2.732	-2.339	-2.866	0.873	-2.797	1.731		
4													-4.028	0.651	-0.294	3.003	-1.101	3.021	-3.035	0.238	5.136	0.704		
5													3.574	-0.347	-1.409	2.671	-2.820	-1.569	-2.371	1.784	5.801	-0.959		
6													-0.437	-3.124	-2.924	0.582	-1.368	2.885	-2.998	0.482	-2.540	1.944		
7													0.770	-2.849	-1.612	2.503	-1.679	2.767	-1.564	-2.879	-3.066	1.335		
8	-1.409	0.093	-3.474	0.120	-2.892	-0.704	-2.769	0.964	-2.037	1.174	-2.797	0.386	4.467	1.792	-2.377	-3.216	-2.479	-2.814	-2.017	-2.841	0.172	3.050	-2.879	-0.833
9	-1.246	0.758	2.205	0.150	-2.831	-0.961	-2.775	-0.432	-2.810	-0.977	-2.895	-0.518	3.763	-0.176	-2.980	-1.867	-2.646	-2.393	-2.329	-2.337	-3.582	-2.215	-2.970	-0.575
10	4.043	0.373	2.208	0.239	-2.926	-0.798	-2.723	0.975	-2.812	-0.901	-2.608	-0.843	4.654	1.839	-3.144	-0.101	-2.406	-2.917	-3.033	0.154	-3.607	-2.247	-2.774	-1.006
11	0.120	-2.064	-3.282	-0.031	-2.287	1.160	-2.637	-0.738	-2.806	-1.323	-2.528	-0.917	-3.303	-1.513	-3.053	0.300	-1.560	2.932	-2.617	1.553	-3.407	0.362	-2.407	0.754
12	-0.501	1.304	2.152	0.683	-2.876	-1.007	-2.787	0.889	-2.011	1.198	-3.053	-0.403	-1.141	-3.133	-3.108	-1.597	-2.826	-1.614	-2.463	-1.800	-3.607	-2.047	-2.618	-1.030
13	-1.008	-0.465	1.656	-0.638	-2.315	1.137	-2.319	-0.950	-2.814	-0.761	-3.022	0.013	0.923	-2.973	-3.154	-0.173	-2.142	2.042	-2.938	0.731	-3.537	-0.049	-2.508	0.772
14			-3.344	-0.005	-2.954	-0.859	-2.621	-0.788	-1.991	1.248	-2.482	1.025	-2.547	-1.998	-3.026	0.422	-1.635	2.887	-2.940	0.121	-3.595	-2.252	-2.491	0.816
15			1.878	-0.518	-2.204	1.217	-2.785	0.902	-2.059	1.140	-3.041	-0.415	4.569	1.325	-2.557	1.541	-2.423	-2.896	-2.382	1.837	-3.608	-2.087	-2.598	0.424
16			-2.192	1.217	-2.286	-0.963	-2.823	-1.150	-0.645	2.160	-2.044	-2.717	2.249	2.727	-2.301	1.677	-0.297	2.861	-3.402	0.365	-2.502	0.818		
17			4.717	-0.098	4.752	0.052	2.248	1.727	4.811	-0.583			6.735	-0.593	6.851	-0.328	7.215	-0.157	4.195	1.672	4.596	-0.043		
18			4.717	-0.079	4.583	-0.124	5.263	-0.242	4.930	-0.644	-4.736	3.021	6.762	-0.540	6.840	-0.354	7.367	-0.440	5.819	-0.014	4.774	-0.052		
19			4.734	-0.116	4.845	0.100	5.290	-1.150	4.870	-0.745	-4.377	3.581	6.895	-1.037	6.856	-0.576	7.235	-0.032	5.825	-2.020	4.793	-0.033		
20			4.671	-0.087	4.787	0.045	5.273	-1.137	4.444	0.482	-4.389	3.566	6.821	-1.147	6.839	-0.623	7.376	-0.565	6.144	-1.027	4.809	0.017		
21			4.638	-0.022	4.734	0.068	4.090	1.154	4.014	1.001	-4.655	2.158	6.837	0.278	6.843	-0.391	6.928	0.626	6.114	-1.049	4.773	-0.029		