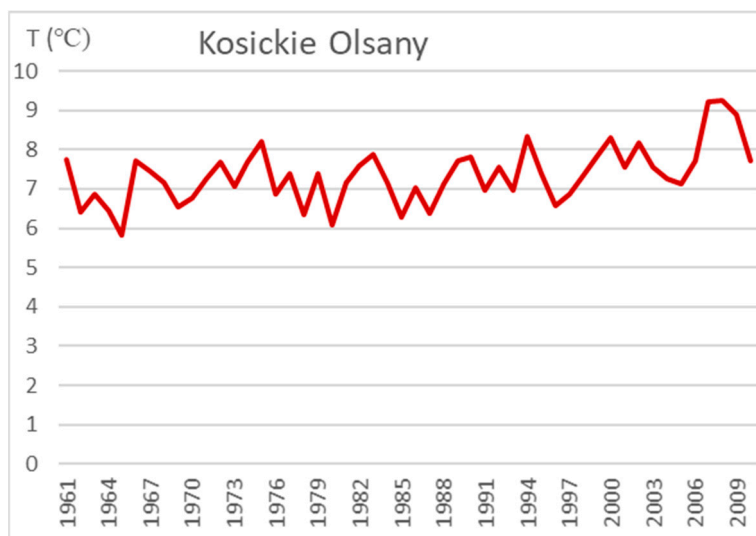
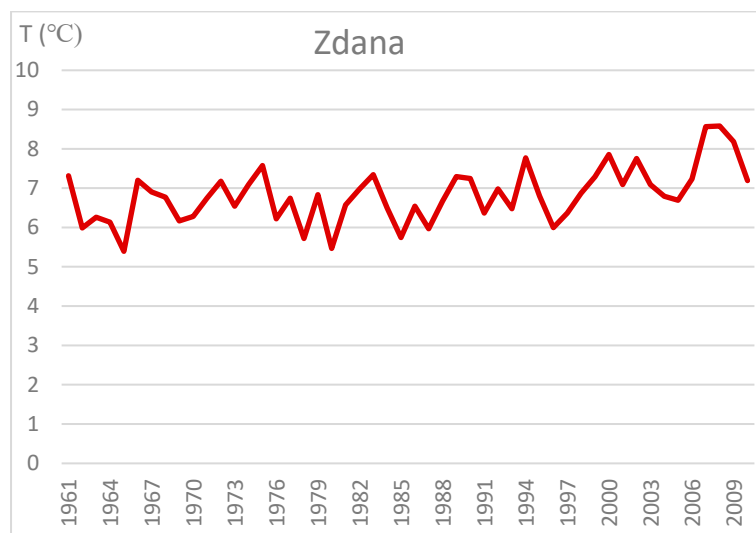
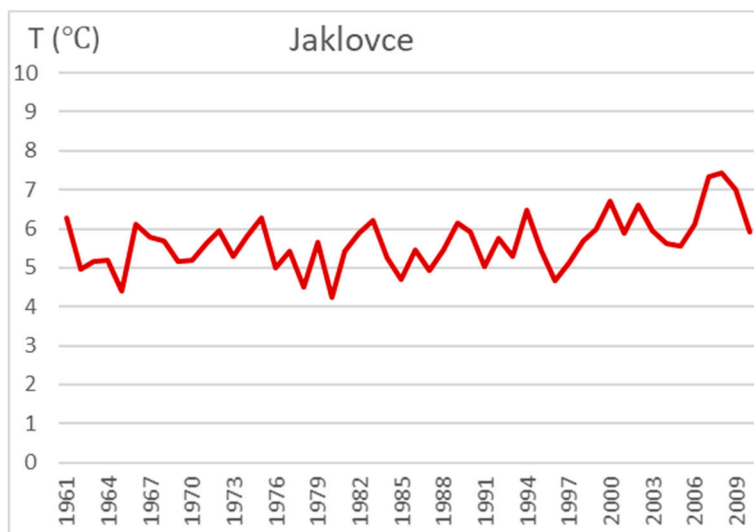
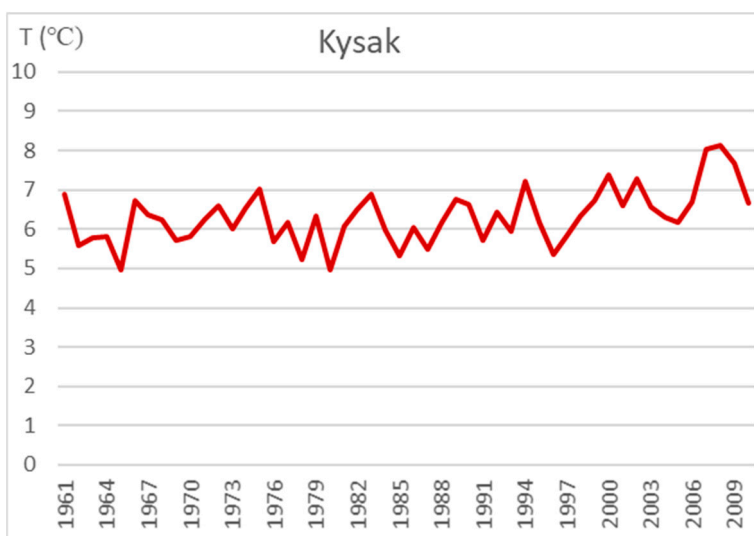
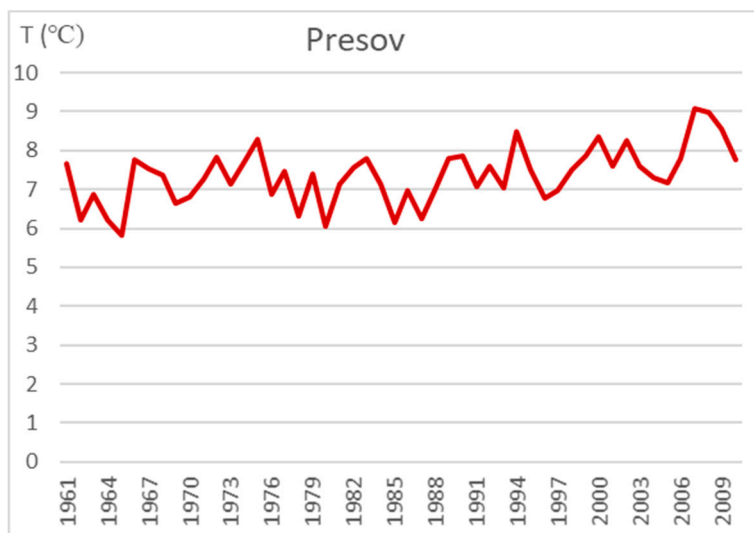


Figure S1. Annual precipitation totals (P) in particular years in the multiannual period 1961–2010





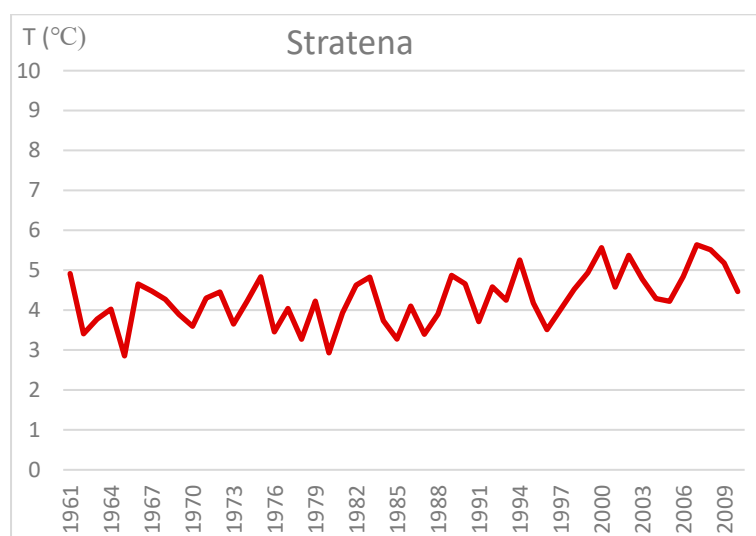
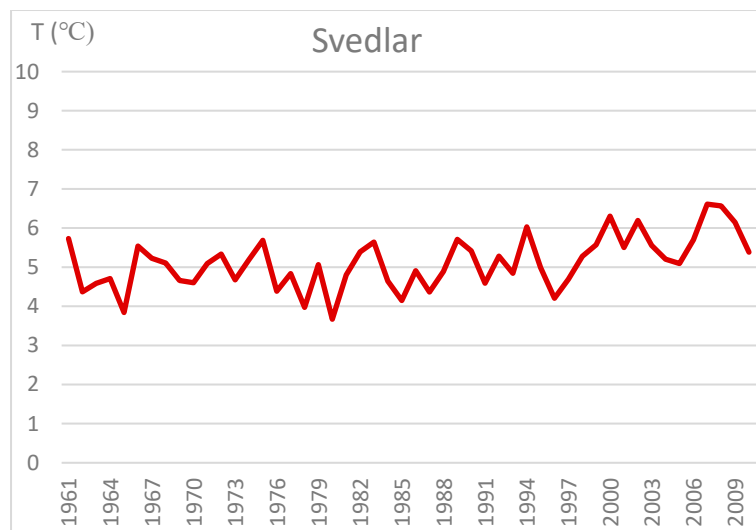
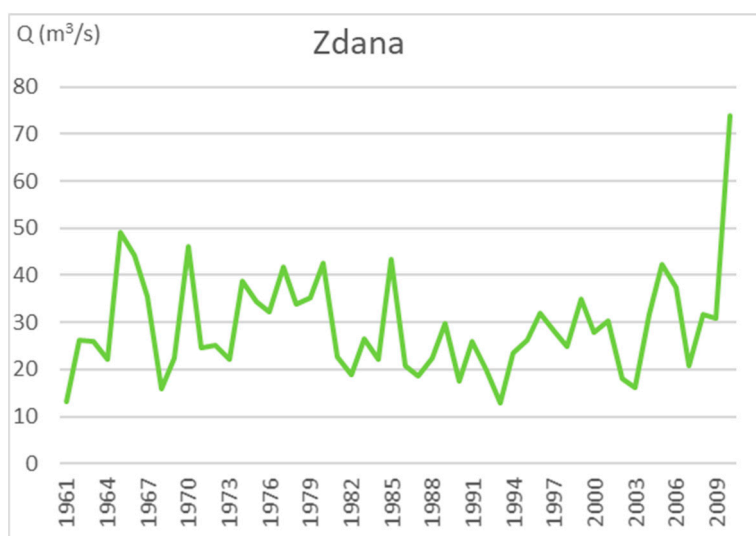
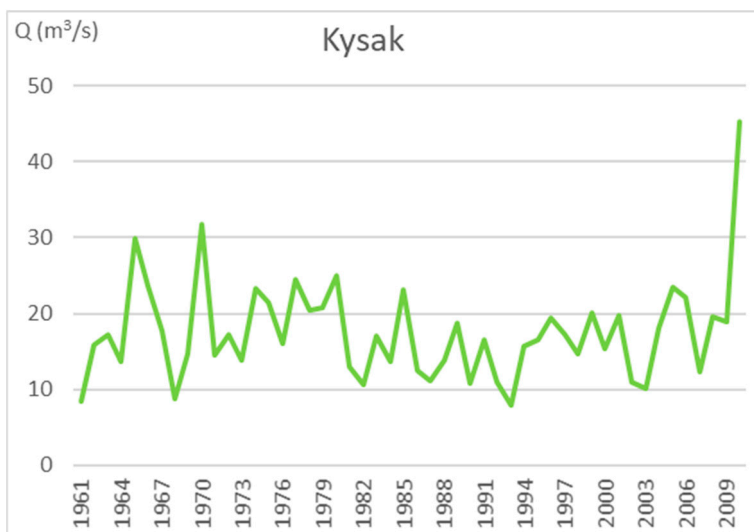
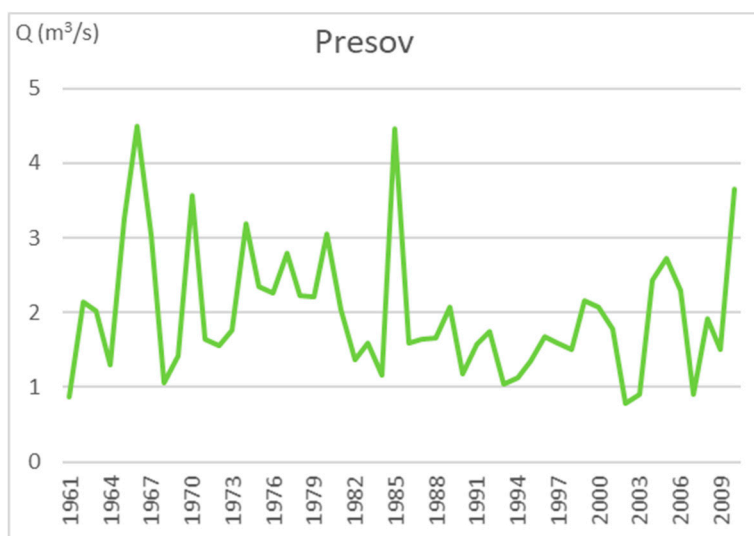
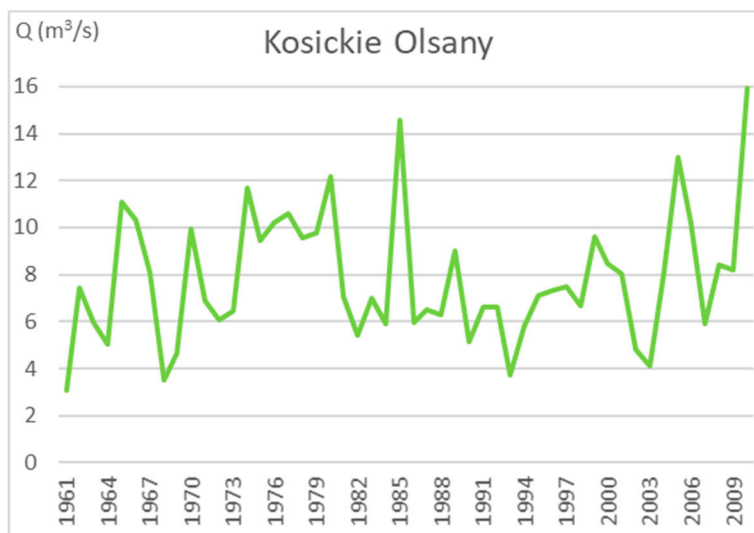


Figure S2. Average annual air temperature (T) in particular years in the multiannual period 1961–2010





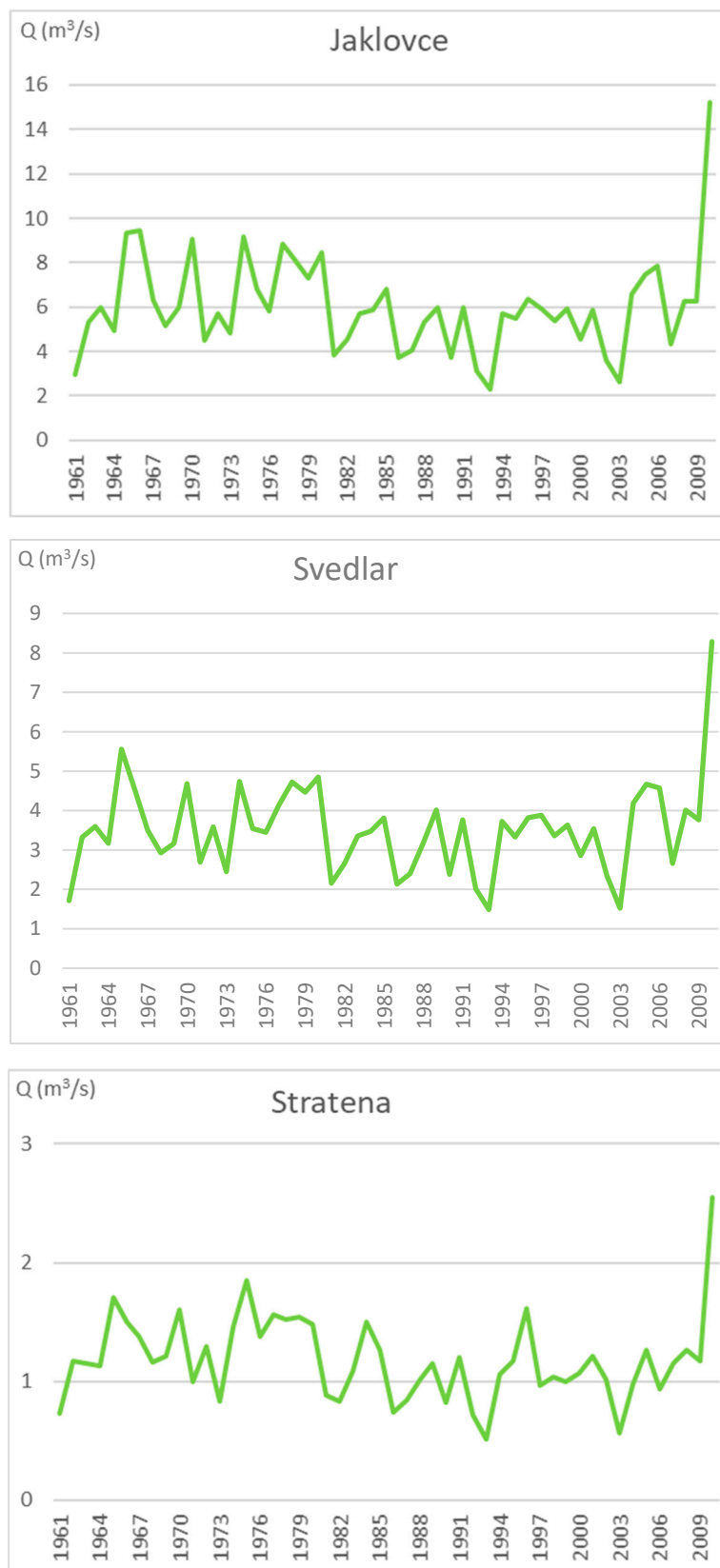


Figure S3. Annual flows (Q) in particular years in the multiannual period 1961–2010 as well as 1961–1985 and 1986–2010.

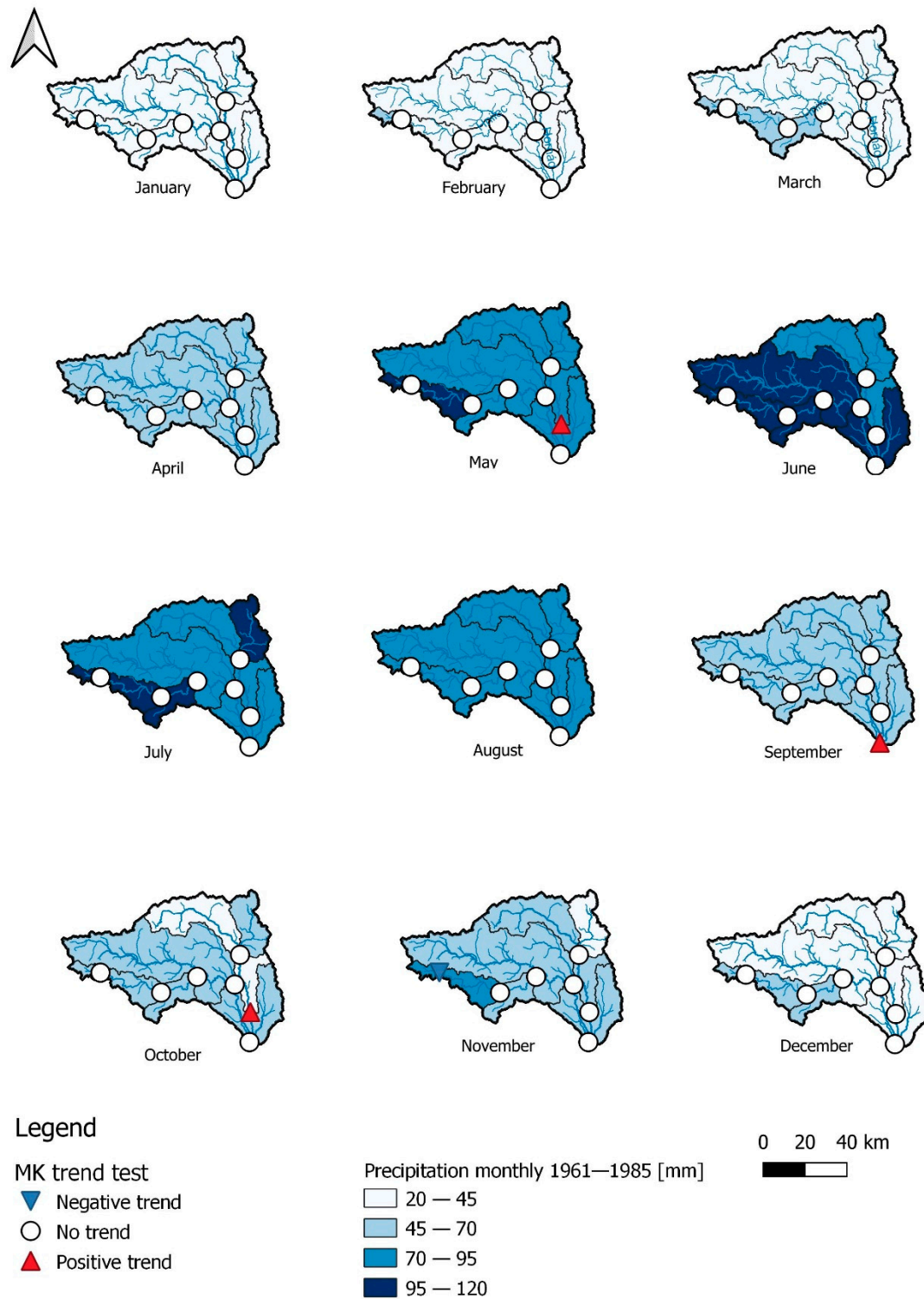


Figure S4. Monthly trends in the precipitation during the years 1961-1985

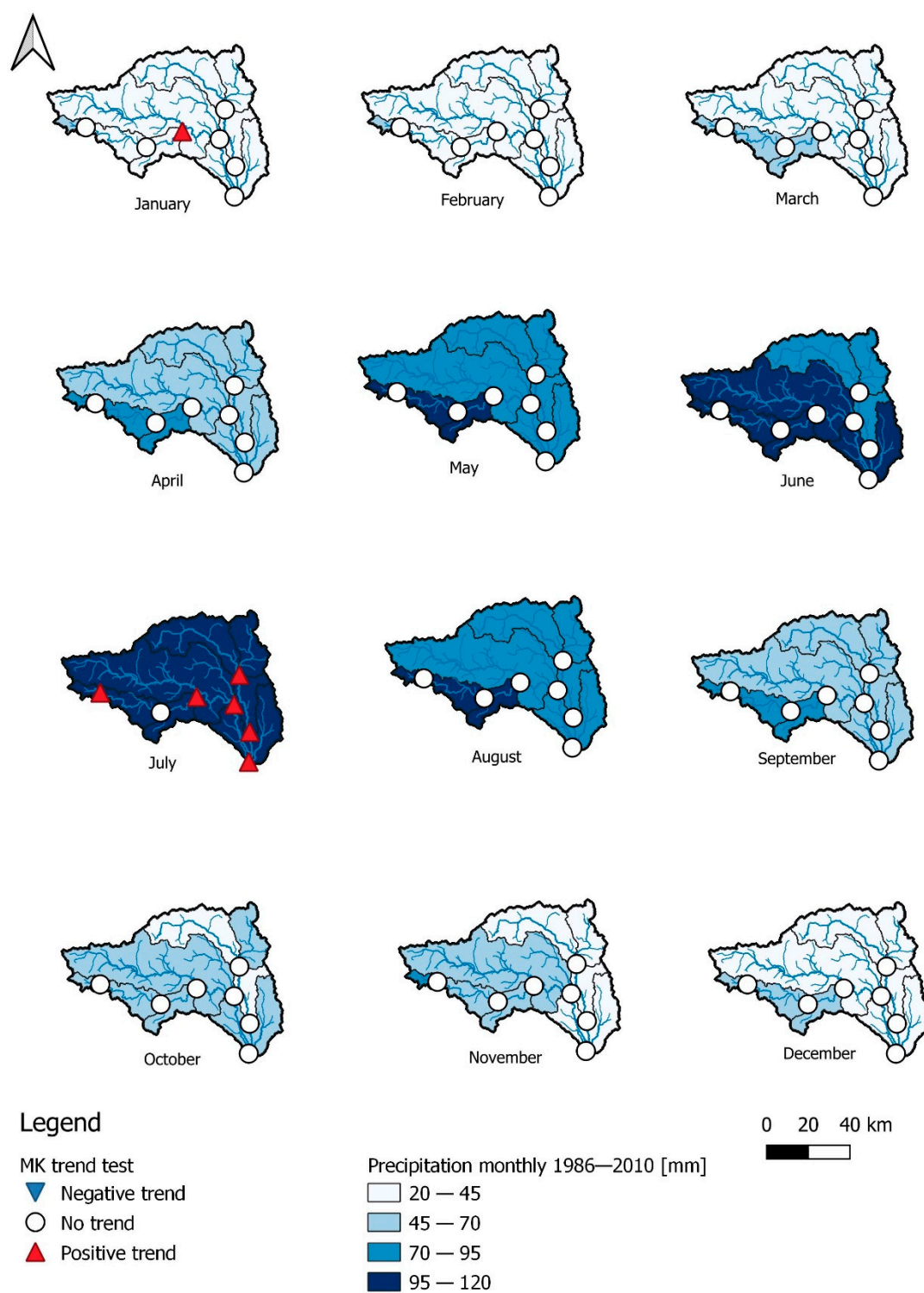


Figure S5. Monthly trends in the precipitation during the years 1986-2010

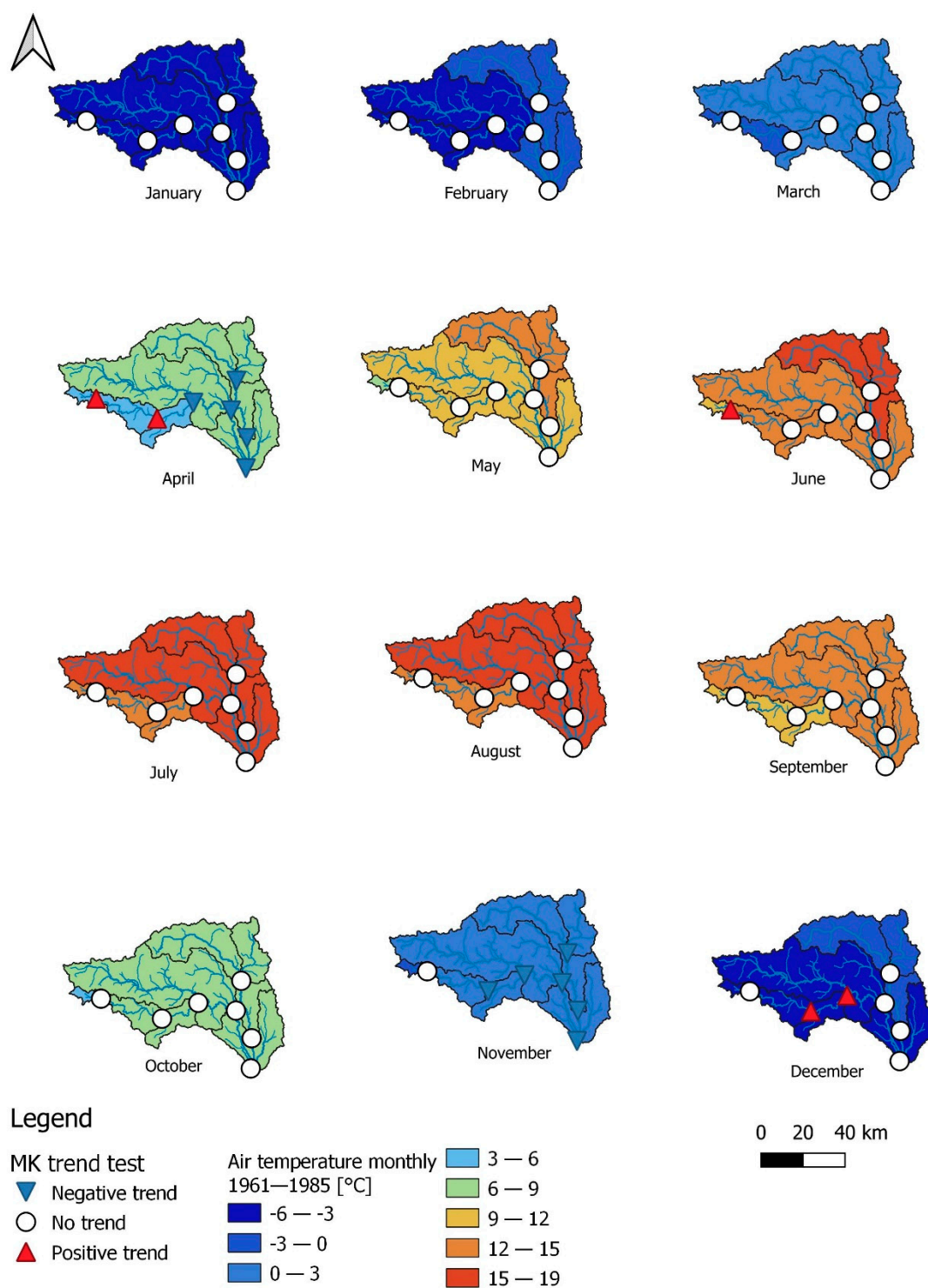


Figure S6. Monthly trends in the air temperature during the years 1961-1985

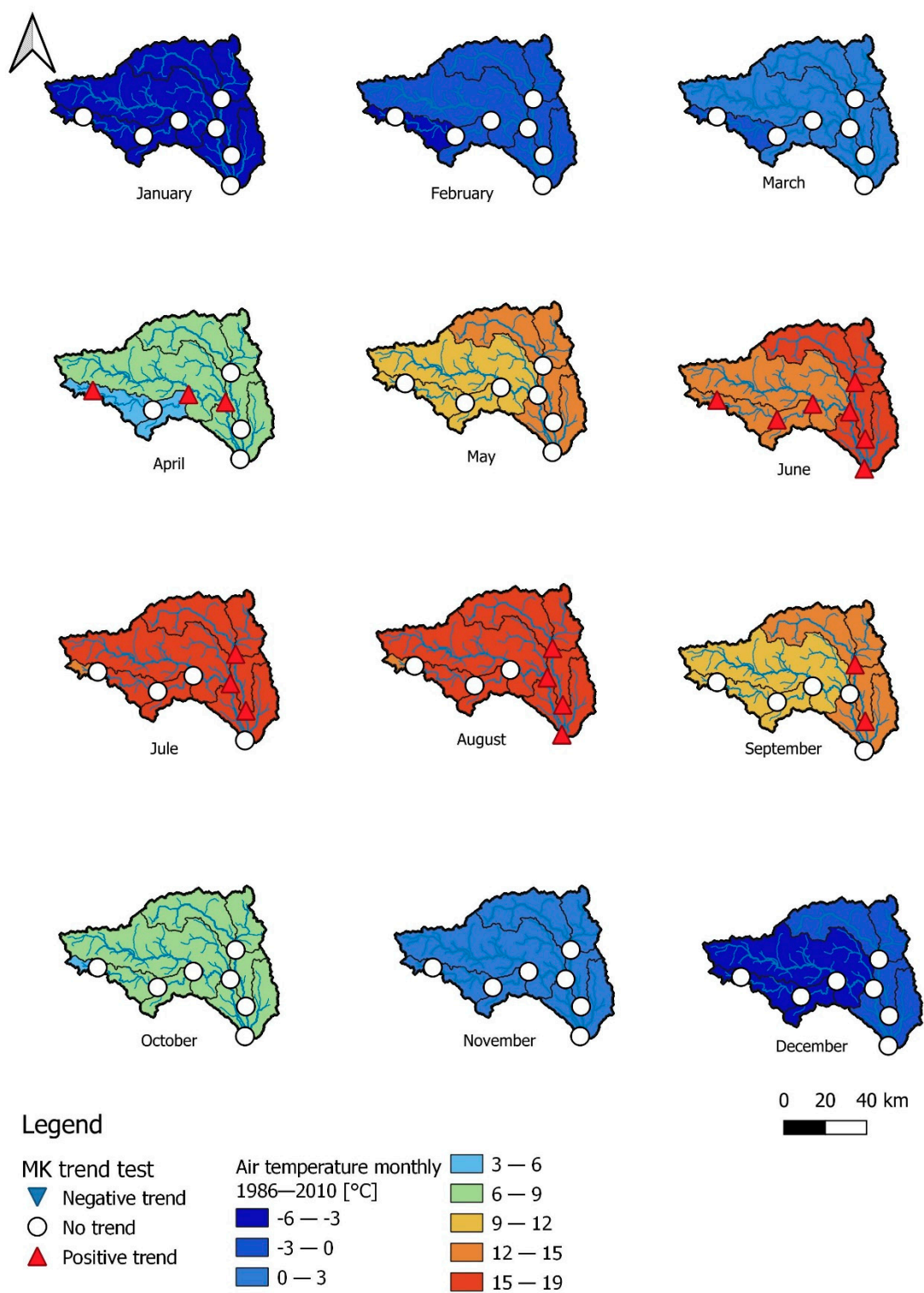


Figure S7. Monthly trends in the air temperature during the years 1986-2010

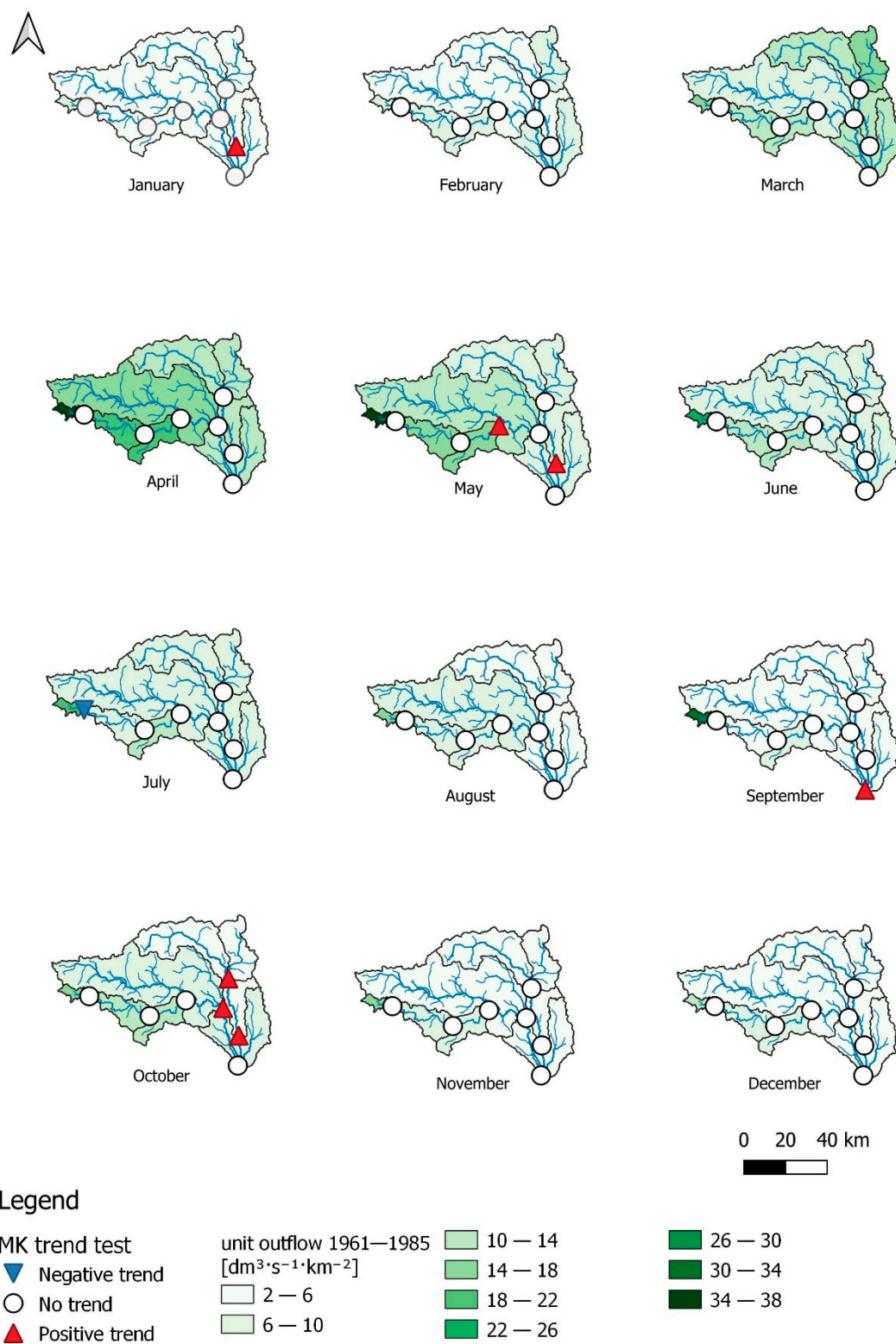


Figure S8. Monthly trends in flow during the years 1961-1985

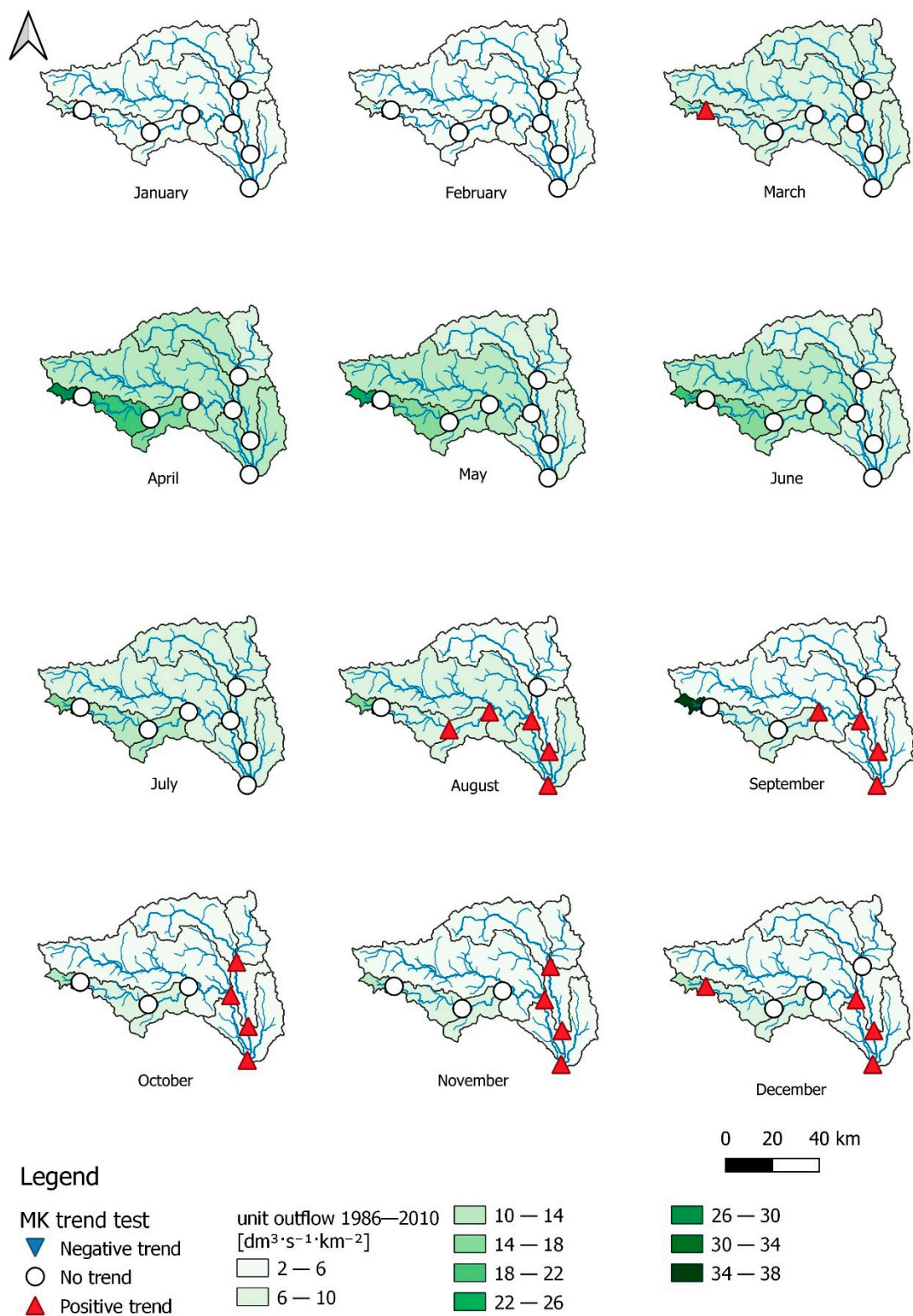


Figure S9. Monthly trends in flow during the years 1986-2010

Table S1. Results of trend analysis in precipitations

Stations	Parameters	Years		
		1961–2010	1961–1985	1986–2010
Zdana	Z	1.8240	0.7240	3.3400
	S	219.0000	32.0000	144.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.0682	0.4690	0.0008
	Sen's slope	1.9930	2.2050	8.1040
Kosické Olsany	Z	1.8240	1.3780	2.6860
	S	219.0000	60.0000	116.0000
	Var S	14290.0000	1833.3333	1833.3333
	p-value	0.0682	0.1682	0.0072
	Sen's slope	1.9204	3.4245	6.5628
Presov	Z	2.0410	0.7240	2.9190
	S	245.000	32.000	126.000
	Var S	14291.670	1833.3333	1833.3333
	p-value	0.0413	0.4691	0.0035
	Sen's slope	2.0211	2.1309	8.6840
Kysak	Z	1.7060	0.5372	3.4800
	S	205.0000	24.0000	150.0000
	Var S	14290.0000	1833.3333	1833.3333
	p-value	0.0879	0.5912	0.0005
	Sen's slope	2.2103	1.3042	8.8045
Jaklovce	Z	2.141	0.8170	3.6670
	S	257.0000	36.0000	158.0000
	Var S	14290.0000	1833.3333	1833.3333
	p-value	0.0322	0.4137	0.0002
	Sen's slope	2.6718	1.7374	9.9027
Svedlar	Z	2.4260	0.8640	3.3400
	S	291.0000	38.0000	144.0000
	Var S	14291.6670	1833.3333	1833.3333
	p-value	0.0153	0.3875	0.0008
	Sen's slope	3.2358	1.6311	9.6907
Stratena	Z	2.5930	0.2100	3.2000
	S	3110.0000	10.0000	138.0000
	Var S	14290.0000	1833.0000	1833.3333
	p-value	0.0095	0.8335	0.0014
	Sen's slope	3.8809	1.5205	12.0445

* Calculations in bold are statistically significant at the significance level of 0.05

Table S2. Results of trend analysis in air temperature

Stations	Parameters	Years		
		1961–2010	1961–1985	1986–2010
Zdana	Z	3.1619	0.1168	2.5924
	S	379.0000	6.0000	112.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.0016	0.9070	0.0095
	Sen's slope	0.0230	0.0032	0.0521
Kosicke Olsany	Z	2.9612	0.3503	2.4526
	S	355.0000	16.0000	106.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.0031	16.0000	0.0142
	Sen's slope	0.0230	0.0110	0.0525
Presov	Z	3.2958	0.3970	2.6858
	S	395.0000	18.0000	116.0000
	Var S	14291.6666	1833.3333	1833.3333
	p-value	0.0010	0.6913	0.0072
	Sen's slope	0.0239	0.0058	0.0473
Kysak	Z	2.9277	-0.0701	2.7325
	S	351.0000	-4.0000	118.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.0034	0.9441	0.0063
	Sen's slope	0.0204	-0.0010	0.0549
Jaklovce	Z	2.8775	-0.1168	2.7325
	S	345.0000	-6.0000	118.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.0040	0.9070	0.0063
	Sen's slope	0.0197	-0.0036	0.0560
Svedlar	Z	3.2288	-0.3503	2.5924
	S	387.0000	-16.0000	112.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.0012	0.7261	0.0095
	Sen's slope	0.0216	-0.0044	0.0498
Stratena	Z	3.1619	-0.5372	2.4056
	S	379.0000	-24.0000	104.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.0016	0.5912	0.0162
	Sen's slope	0.0218	-0.0097	0.0467

* Calculations in bold are statistically significant at the significance level of 0.05

Table S3. Results of trend analysis in flow

Stations	Parameters	Years		
		1961–2010	1961–1985	1986–2010
Zdana	Z	0.0836	0.5372	2.7325
	S	1.1000	24.0000	118.0000
	Var S	1.4292	1833.3333	1833.3333
	p-value	0.9333	0.5912	0.0063
	Sen's slope	0.0058	0.1649	0.6206
Kosicke Olsany	Z	0.8198	1.5181	2.5457
	S	99.0000	66.0000	110.0000
	Var S	4291670000.0000	1833.333	1833.3333
	p-value	0.4124	0.1290	0.0109
	Sen's slope	0.0244	0.1388232	0.1340
Presov	Z	-1.0874	0.3036	1.1444
	S	-131.0000	14.0000	50.0000
	Var S	14291.6667	1833.3333	1833.3333
	p-value	0.2768	0.7614	0.2525
	Sen's slope	-0.0099	0.0065	0.0211
Kysak	Z	0.1004	0.4905	2.4523
	S	13.0000	2.20000	106.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.9200	0.6238	0.0142
	Sen's slope	0.0081	0.1140	0.3565
Jaklovce	Z	-0.5354	0.3036	2.2654
	S	-65.0000	14.0000	98.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.5924	0.7614	0.0235
	Sen's slope	-0.0106	0.0213	0.1015
Svedlar	Z	0.2008	0.4437	2.1253
	S	25.0000	20.0000	92.0000
	Var S	14291.6700	1833.3333	1833.3333
	p-value	0.8409	0.6572	0.0336
	Sen's slope	0.0030	0.0158	0.0642
Stratena	Z	-2.0243	0.0000	2.1720
	S	243.0000	0.0000	94.0000
	Var S	14291.6667	1833.3333	1833.3333
	p-value	0.0429	1.0000	0.0299
	Sen's slope	-0.0063	-0.0005	0.0123

* Calculations in bold are statistically significant at the significance level of 0.05