

# The Spatio-Temporal Changes of Small Lakes of the Qilian Mountains from 1987 to 2020 and Their Driving Mechanisms

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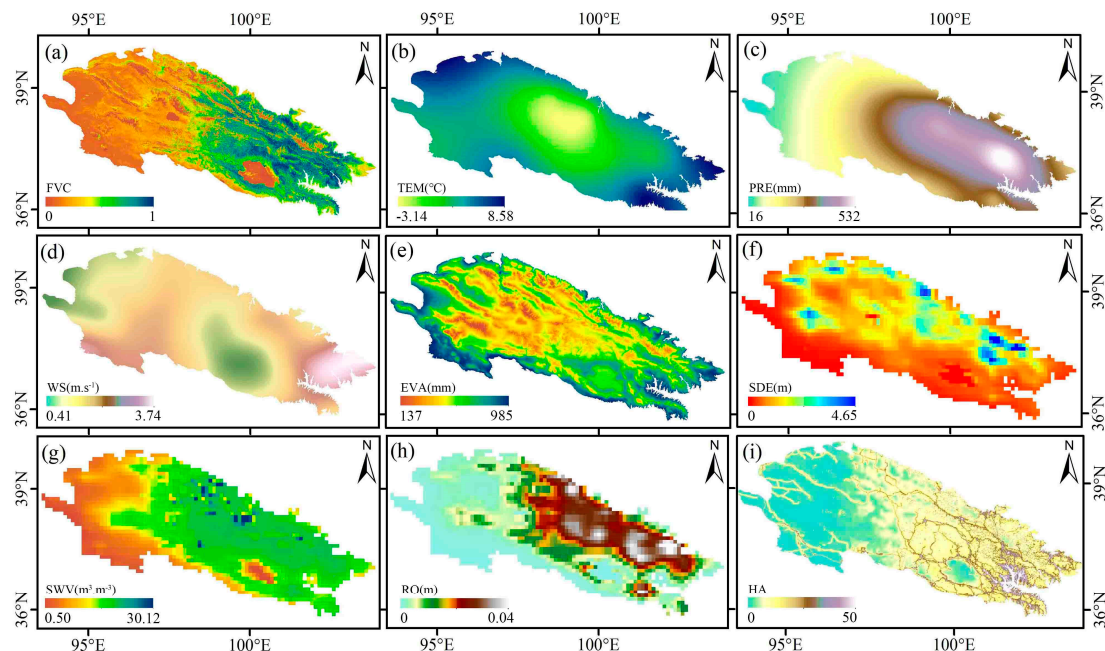
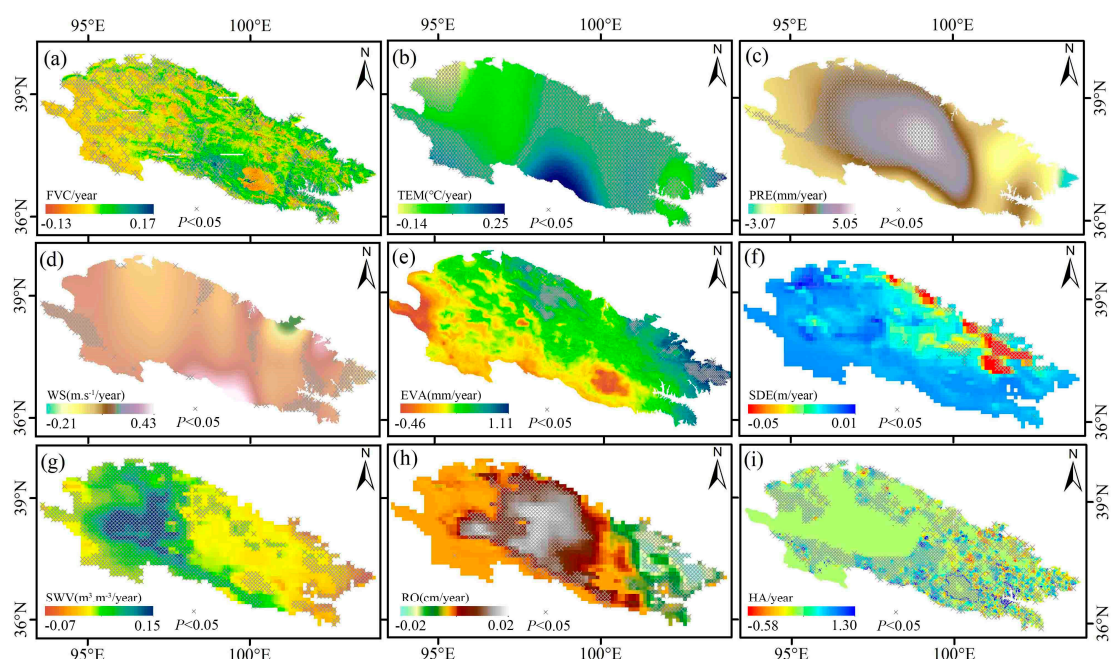
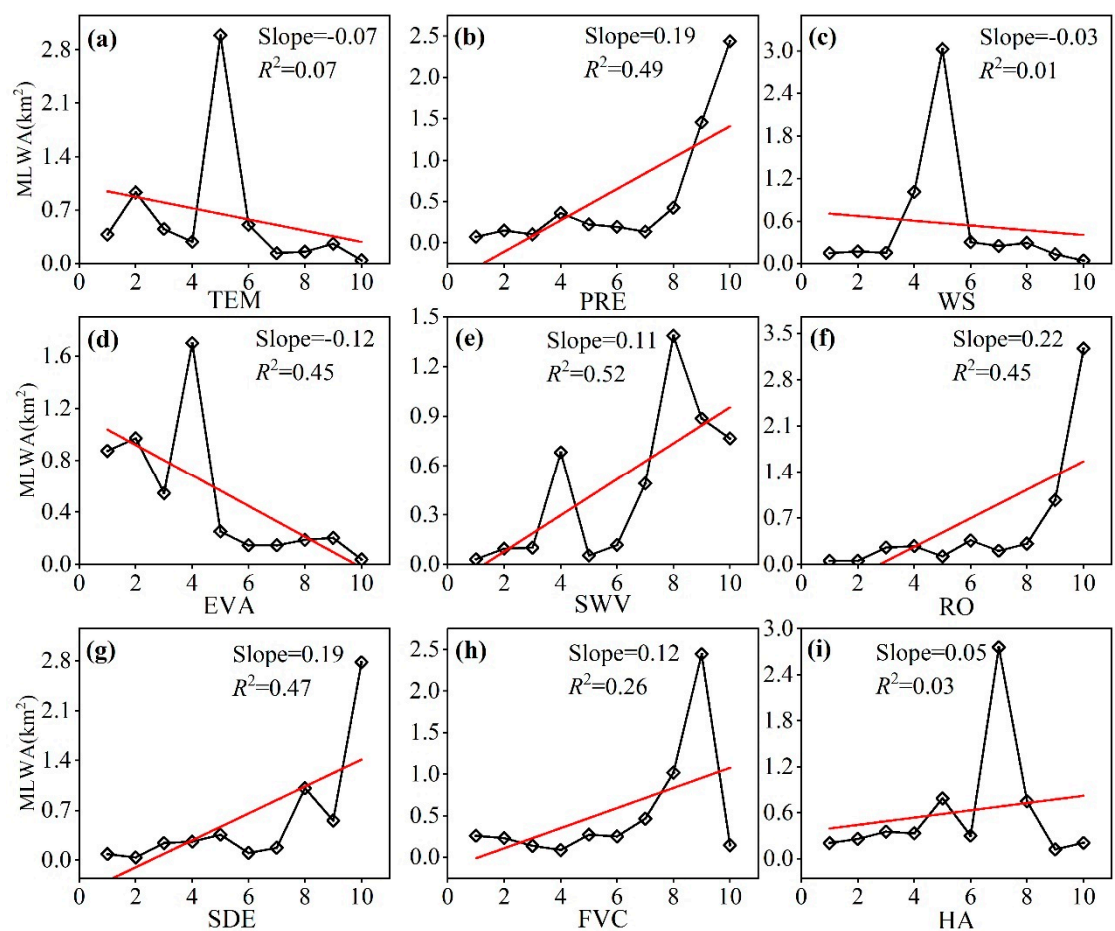


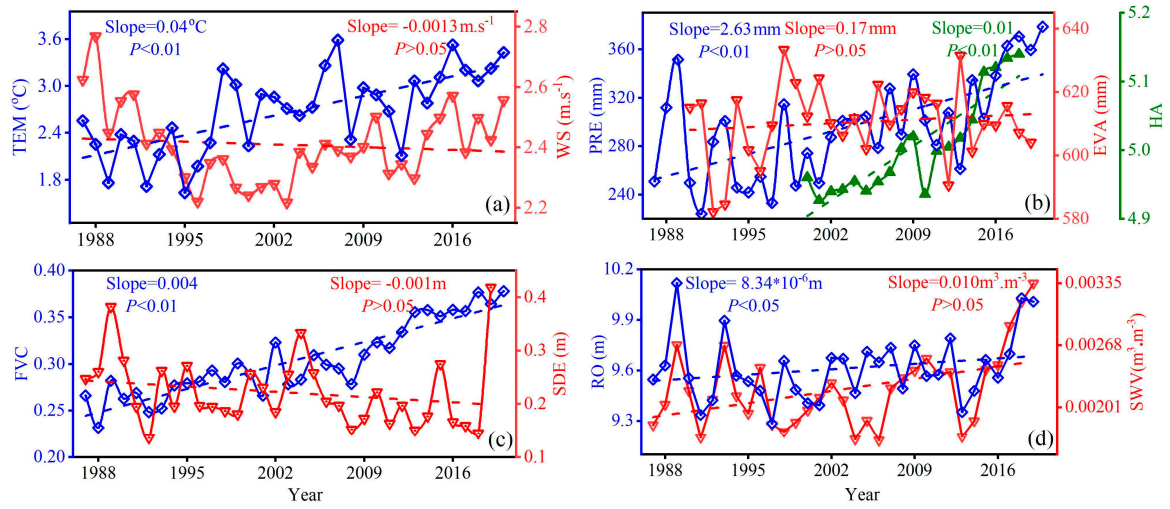
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**Figure S2.** Spatial trends of the nine factors of water body change in small lakes.



**Figure S3.** Relationships between MLWA and the nine factors in the QMR.



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**Table S1.** Suitable ranges of the driving factors in the different subregions (95% confidence level).

Basin	Factor	Suitable scope	MLWA (km <sup>2</sup> )	Basin	Factor	Suitable scope	MLWA (km <sup>2</sup> )
BHB	TEM/°C	-0.22–0.89	0.80	DSB	TEM/°C	-1.76–0.68	1.01
	PRE/mm	340–399	0.74		PRE/mm	248–320	1.02
	WS/m.s <sup>-1</sup>	1.88–1.96	0.51		WS/m.s <sup>-1</sup>	1.92–2.02	0.63
	EVA/mm	542–556	0.66		EVA/mm	345–399	1.56
	SWV/m <sup>3</sup> .m <sup>-3</sup>	17.1–18.0	0.15		SWV/m <sup>3</sup> .m <sup>-3</sup>	14.06–15.89	0.47
	RO/m	0.02–0.03	0.91		RO/m	0.007–0.014	1.93
	SDE/m	1.03–1.12	0.78		SDE/m	1.07–1.29	0.60
	FVC	0.43–0.47	0.89		FVC	0.15–0.17	0.54
HBB	HA	5.29–5.91	0.15	HLB	HA	1.93–2.94	0.60
	TEM/°C	2.15–2.68	3.55		TEM/°C	-0.21– -0.17	5.69
	PRE/mm	232–276	3.56		PRE/mm	286–302	5.68
	WS/m.s <sup>-1</sup>	1.87–1.94	3.82		WS/m.s <sup>-1</sup>	1.80–1.85	4.39
	EVA/mm	424–471	4.12		EVA/mm	386–414	5.65
	SWV/m <sup>3</sup> .m <sup>-3</sup>	11.58–13.87	3.28		SWV/m <sup>3</sup> .m <sup>-3</sup>	14.76–15.66	5.66
	RO/m	0.005–0.006	4.15		RO/m	0.004–0.006	5.33
	SDE/m	0.63–0.83	3.92		SDE/m	0.66–0.67	5.67
QLB	FVC	0.18–0.26	4.41	SDB	FVC	0.09–0.11	5.67
	HA	1.64–2.32	2.16		HA	2.37–2.69	5.68
	TEM/°C	1.07–2.07	14.16		TEM/°C	4.47–4.78	0.65
	PRE/mm	47–520	8.45		PRE/mm	362–391	0.68
	WS/m.s <sup>-1</sup>	1.85–1.94	11.12		WS/m.s <sup>-1</sup>	0.74–0.79	0.70
	EVA/mm	607–642	7.82		EVA/mm	590–617	0.46
	SWV/m <sup>3</sup> .m <sup>-3</sup>	17.3–17.8	5.51		SWV/m <sup>3</sup> .m <sup>-3</sup>	18.0–18.2	0.50
	RO/m	0.026–0.031	11.43		RO/m	0.02–0.03	0.70
	SDE/m	1.46–2.28	13.54		SDE/m	0.89–1.56	0.70
	FVC	0.61–0.65	7.68		FVC	0.28–0.30	0.59
	HA	9.73–11.29	10.46		HA	8.51–9.40	0.56