

Supplementary material

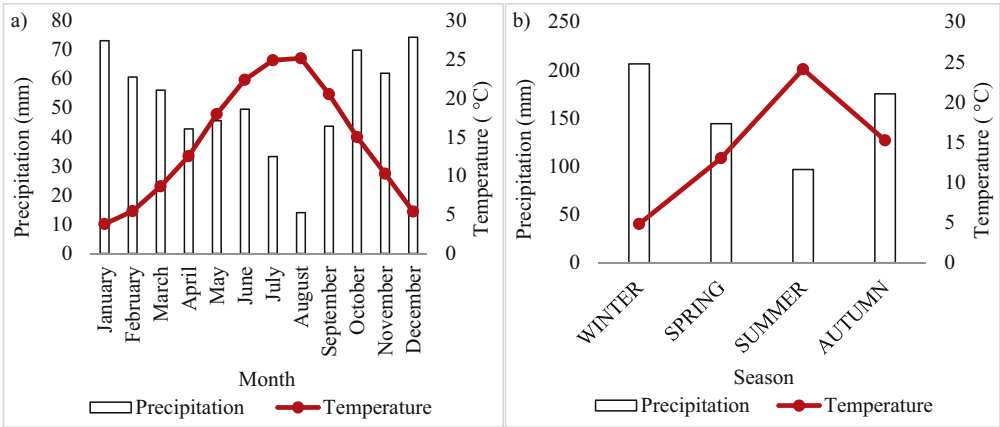


Figure S1: Monthly total average precipitation and average temperatures for the period of 2001-2020 in the basin (a), seasonal average precipitation and seasonal average temperature data (b).

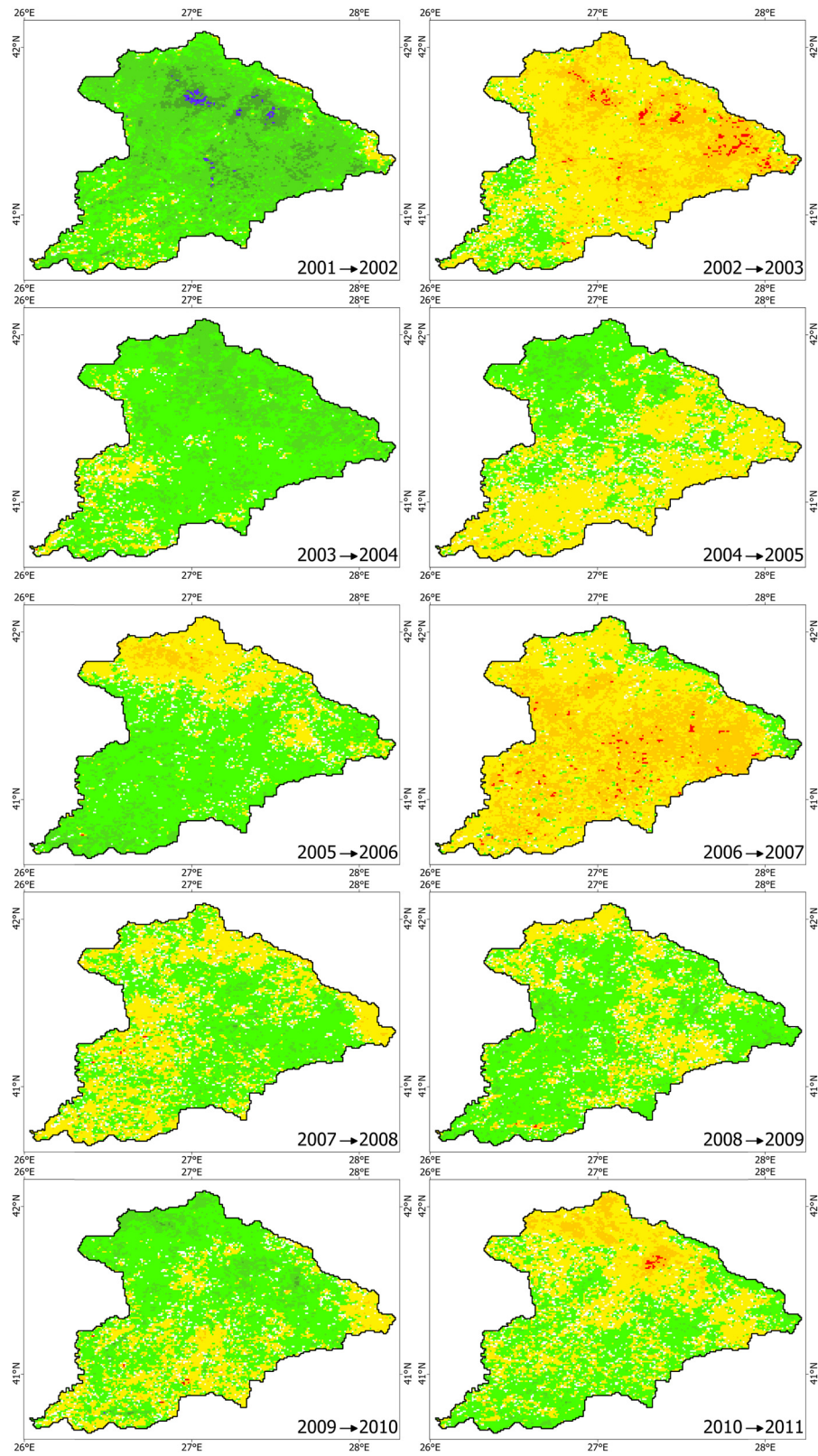


Figure S2: Annual CDI change maps.

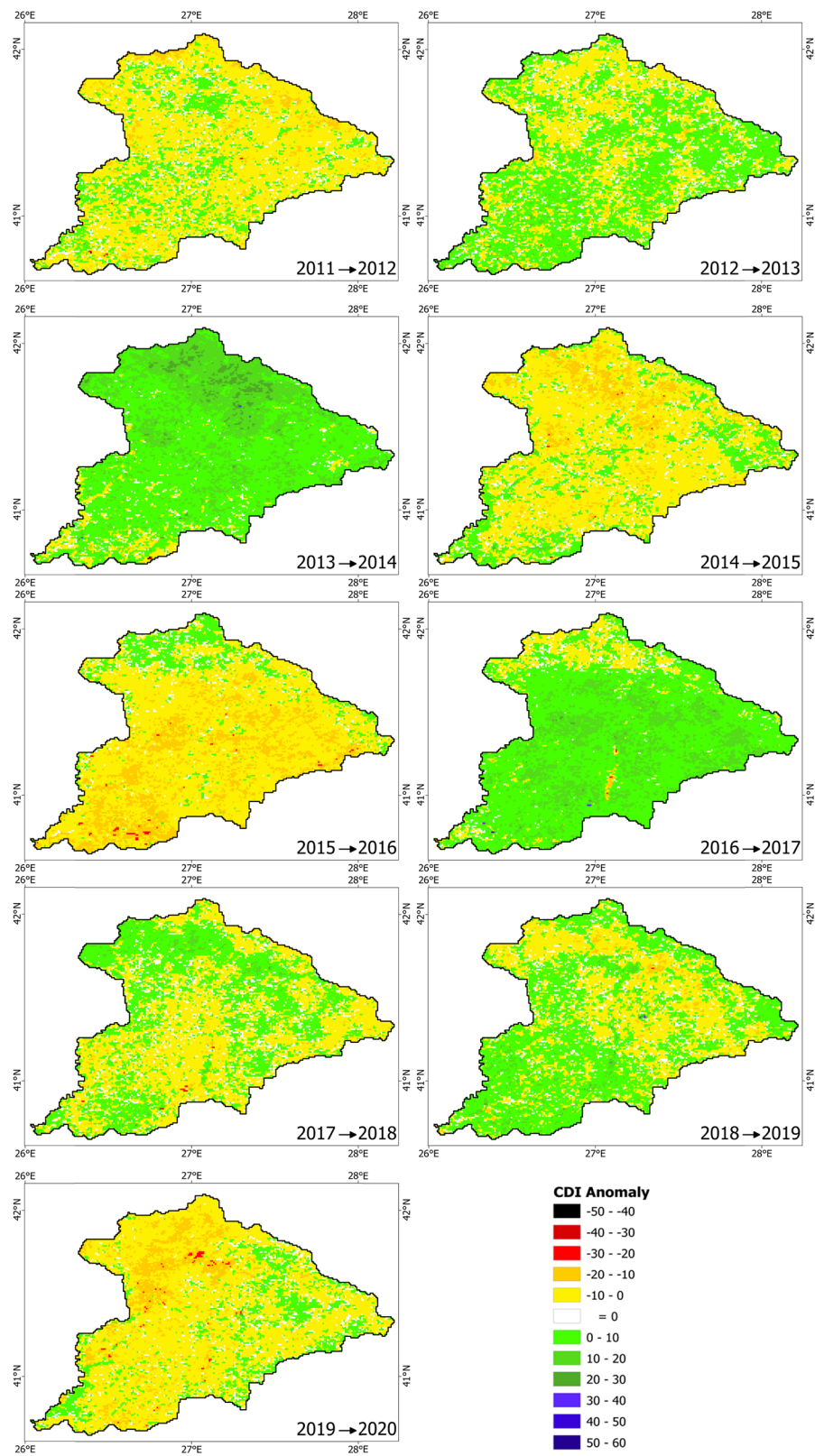


Figure S2: (Continued)

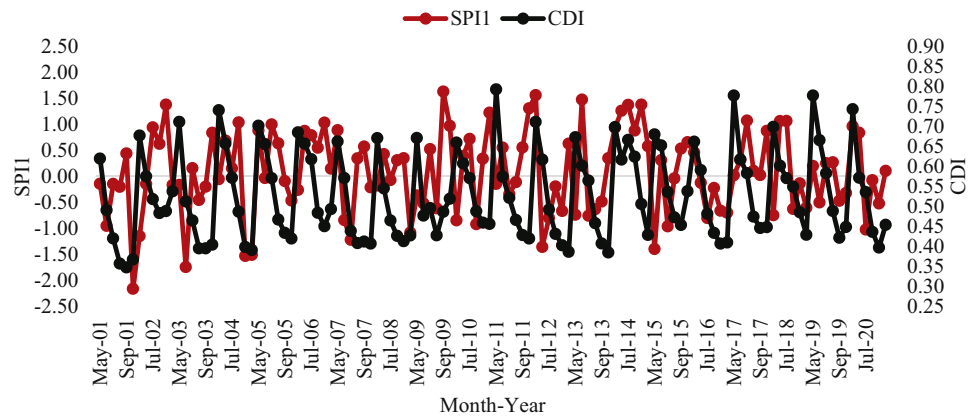


Figure S3: Time series of SPI1-CDI.

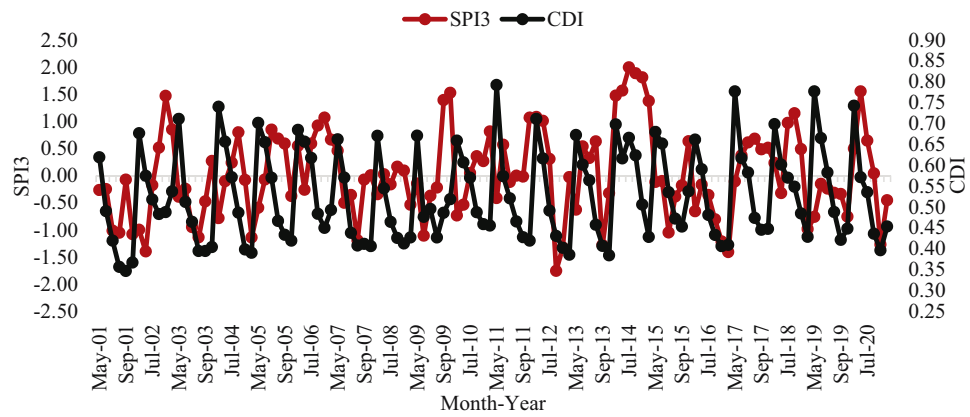


Figure S4: Time series of SPI3-CDI.

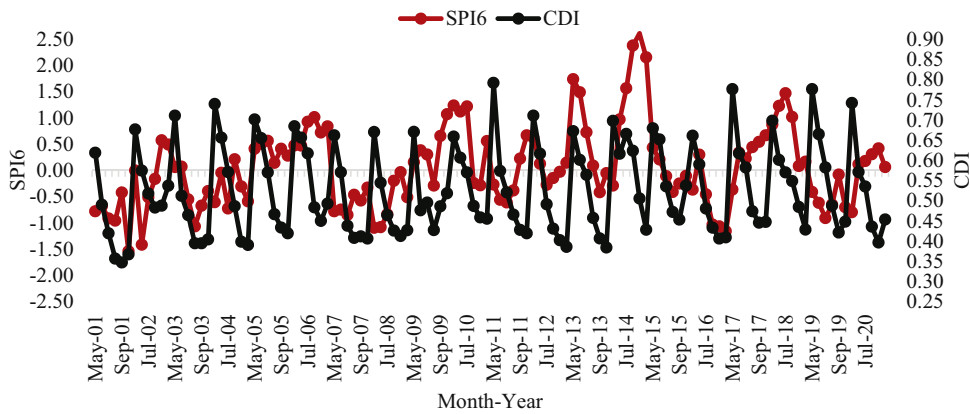


Figure S5: Time series of SPI6-CDI.

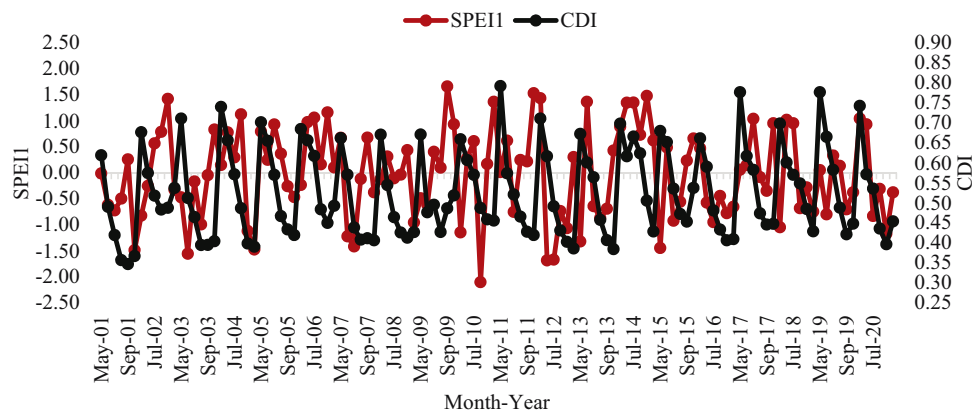


Figure S6: Time series of SPEI1-CDI.

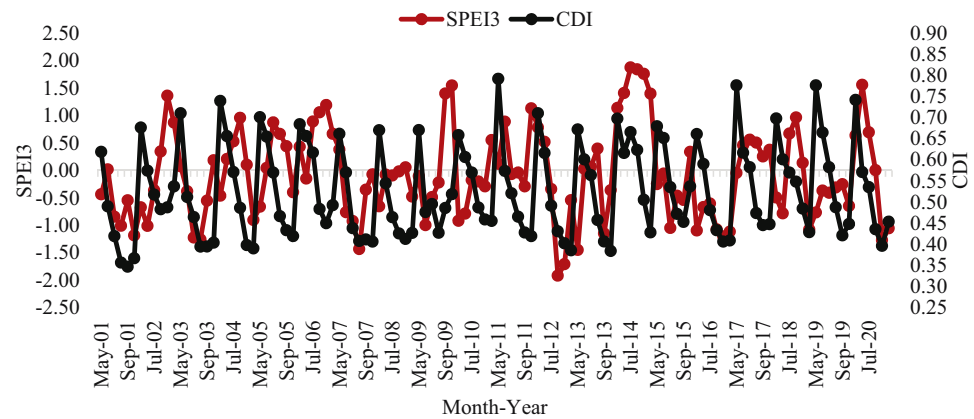


Figure S7: Time series of SPEI3-CDI.

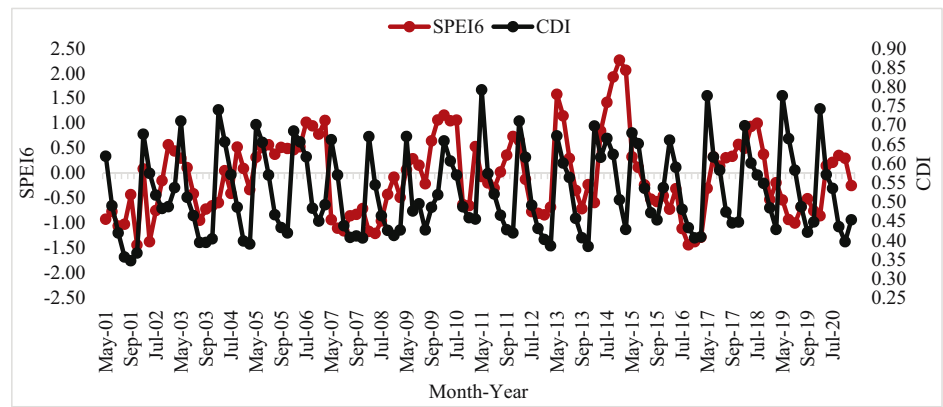


Figure S8: Time series of SPEI6-CDI.

Table S1: Results of principal component analysis (PCA)

	PC1	PC2	PC3	PC4
VCI	0.942268	0.063355	0.002088	0.007607
TCI	0.065296	−0.112430	0.009079	−0.015595
SMCI	0.057123	−0.197033	−0.078929	0.153157
PCI	0.015549	−0.144589	−0.169786	0.042260
Eigenvalue	0.279477	0.048698	0.017885	0.007607
Percent eigenvalue	79.022642	13.769475	5.057037	2.150846

Table S2: Used drought categories for remote sensing drought indices

Drought category	CDI
Extreme	0 – 20
Severe	20 – 30
Moderate	30 – 40
Mild	40 – 50
No drought	50 – 100