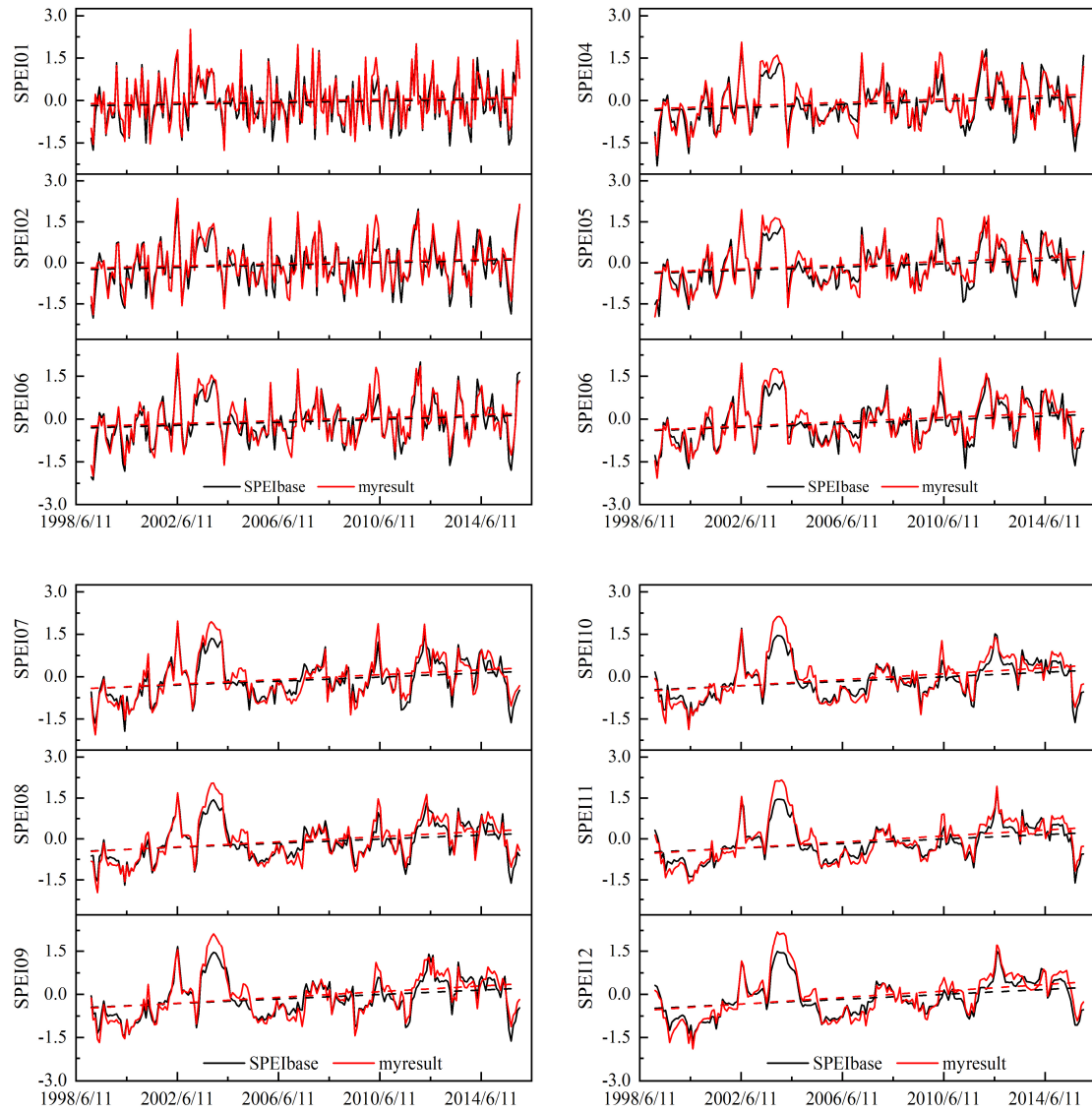


**Figure S1.** Correlation of the drought index results calculated in this study with SPEIbase v2.5.



**Figure S2.** Comparison of the time trends between the drought index results calculated in this paper and SPEIbase v2.5.

**Table S1.** Vegetation cover type re-classification.

Reclassification	Classification	Subclass
Needleleaf forests	Needleleaf forests	Cold-temperate and temperate montane coniferous forests
		Temperate coniferous forests
		Subtropical coniferous forests
		Subtropical and tropical montane coniferous forests
Broadleaf forests	Broadleaf forests	Temperate deciduous broad-leaved forests
		Temperate deciduous small-leaved open forests
		Subtropical deciduous broad-leaved forests
		Subtropical and tropical bamboo forests and bamboo thickets
Shrubs	Shrubs	Temperate deciduous scrub
		Subtropical and tropical broad-leaved evergreen and deciduous
		Subalpine deciduous broad-leaved scrub
		Subalpine sclerophyllous evergreen broad-leaved scrub
		Subalpine evergreen coniferous scrub
Grasses	Grassland	Temperate grassland and mixed grass meadows
		Temperate grass grassland typical grassland
		Temperate dwarf grasses, dwarf semi-shrub desert grasses
		Alpine grassland, tussock grassland
	Grass	Temperate grasses
	Meadow	Subtropical and tropical grasses
		Temperate grasses, miscellaneous grass meadows
		Temperate grasses, mosses and miscellaneous grasses swampy grasses
		Temperate grasses and miscellaneous grasses saline meadows
		Alpine tussock grass, miscellaneous grass meadow
Alpine forests	Alpine forests	Alpine sparse vegetation
Cultivated forests	Cultivated forests	Annual short-fertility cold-tolerant crops (no fruit trees)
		Annual ripening food crops and hardy cash crops
		monocultures and hardy cash crops
		Two years or two years of dry crops and deciduous fruit