

Supplementary Materials for

**Regional patterns of vegetation dynamics and their sensitivity to climate variability in the Yangtze River Basin**

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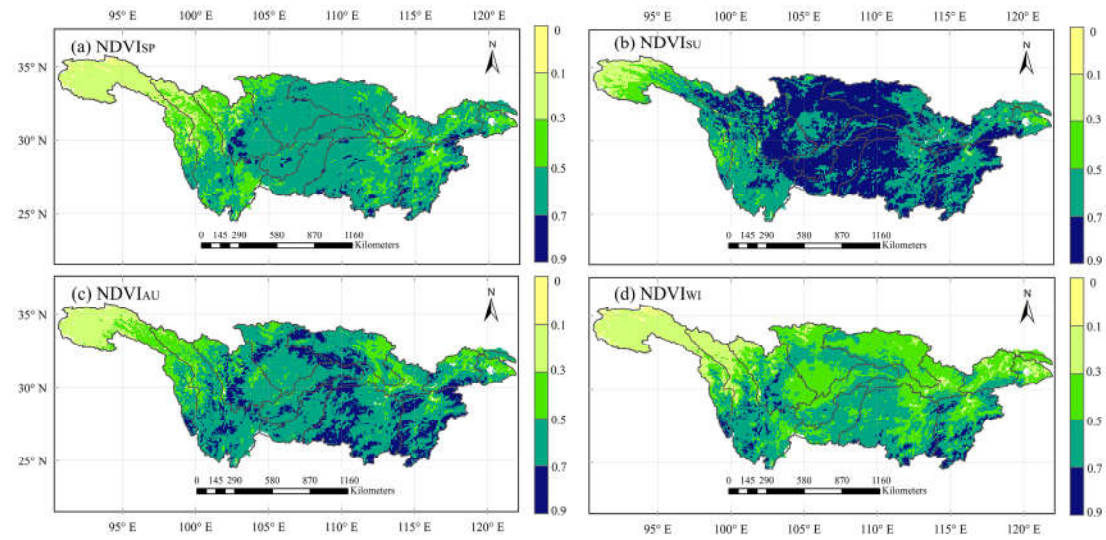
**1 Content**

This supplementary materials file contains additional figures to support the analysis of the results presented in the main manuscript. The methodology used to obtain these results is explained in the main manuscript.

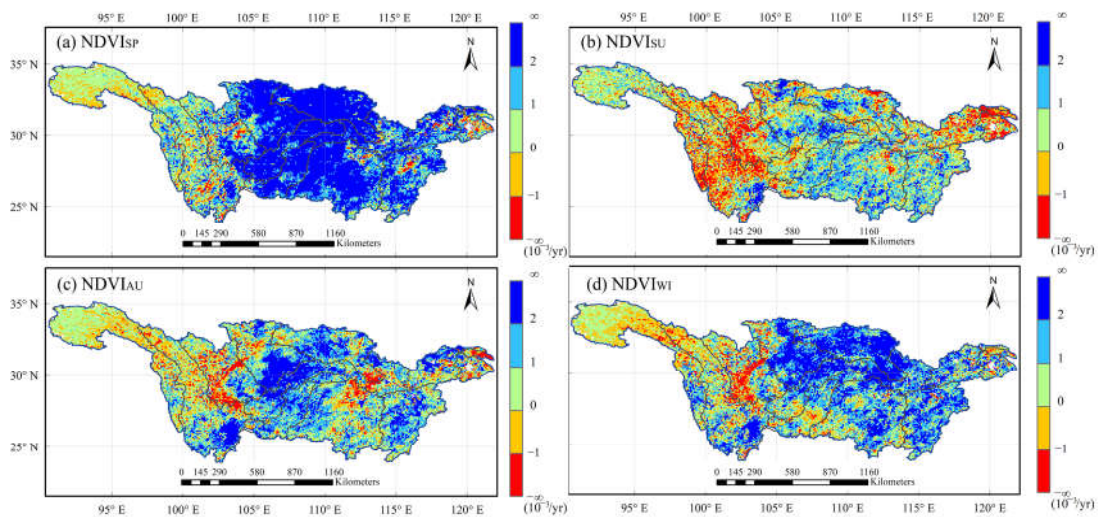
The following sections are presented:

- Section 2: Spatiotemporal variations in vegetation  
Figure S1 to Figure S3
- Section 3: Vegetation sensitivity to climate variability  
Figure S4
- Section 4: Vegetation dynamics and their sensitivity on regional scales  
Figure S5 to Figure S7

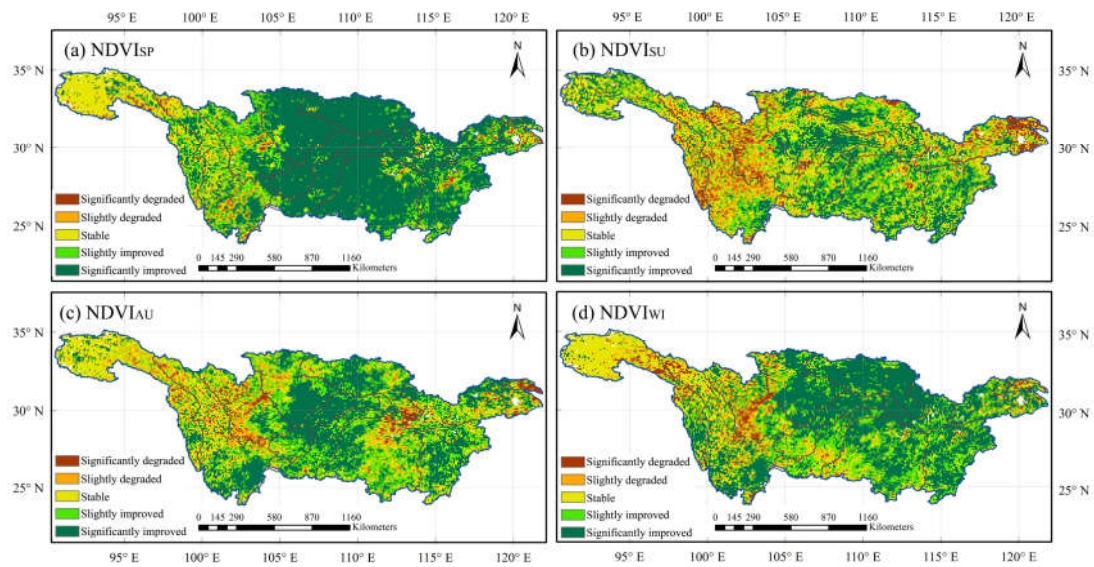
## 2 Spatiotemporal variations in vegetation



**Figure S1.** Spatial distributions of the seasonal mean NDVI from 1982 to 2015: (a) spring, (b) summer, (c) autumn, and (d) winter.

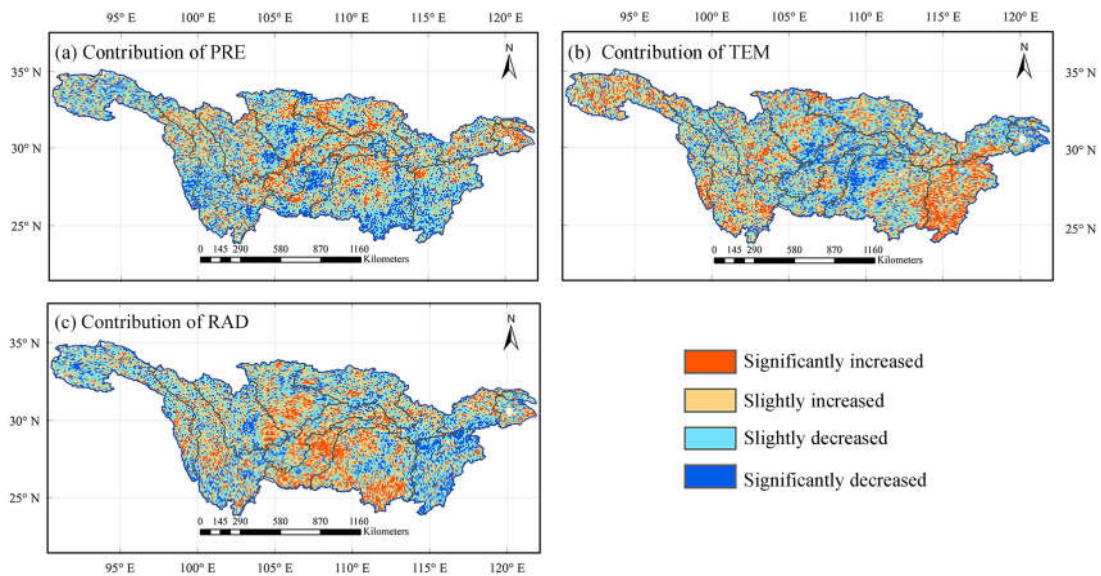


**Figure S2.** Spatial distributions of the seasonal NDVI linear trends from 1982 to 2015: (a) spring, (b) summer, (c) autumn, and (d) winter.



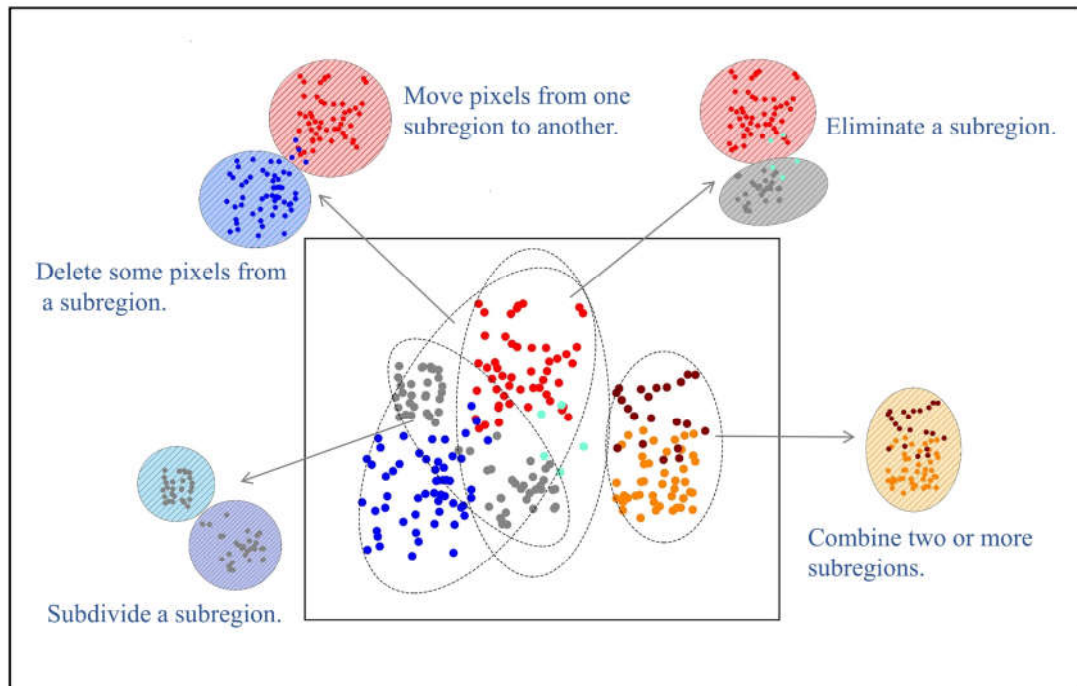
**Figure S3.** Spatial distributions of types of seasonal NDVI changes (statistical significance) from 1982 to 2015: (a) spring, (b) summer, (c) autumn, and (d) winter.

### 3 Vegetation Sensitivity to Climate Variability

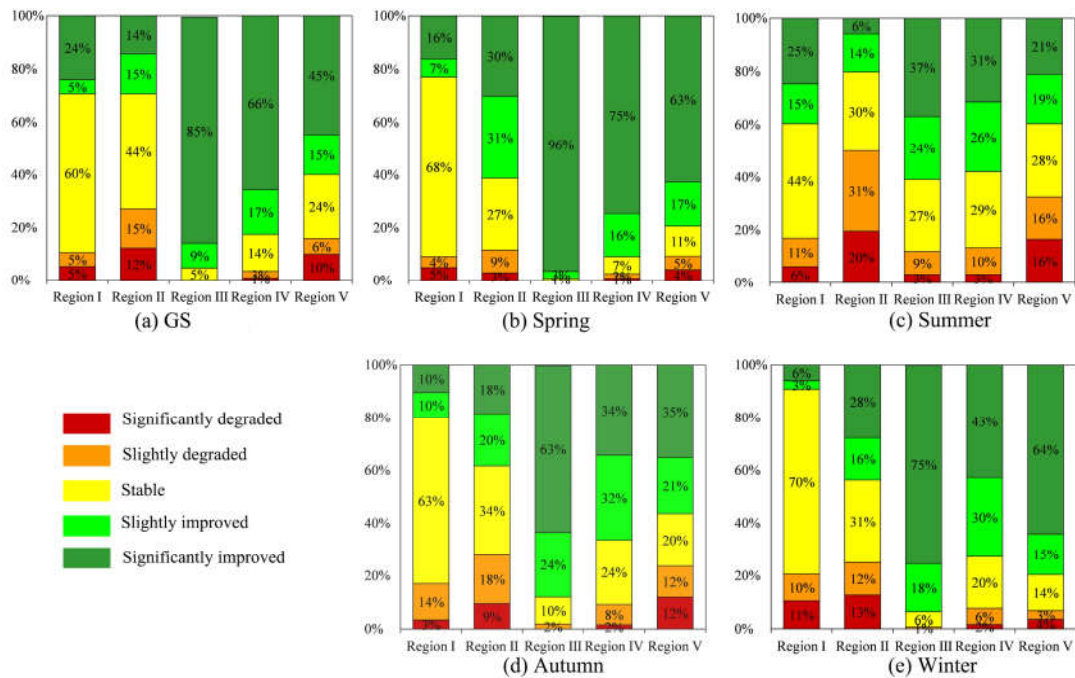


**Figure S4.** Spatial distributions of trend types in the contribution of climate variables to VSI: (a) PRE, (b) TEM, and (c) RAD.

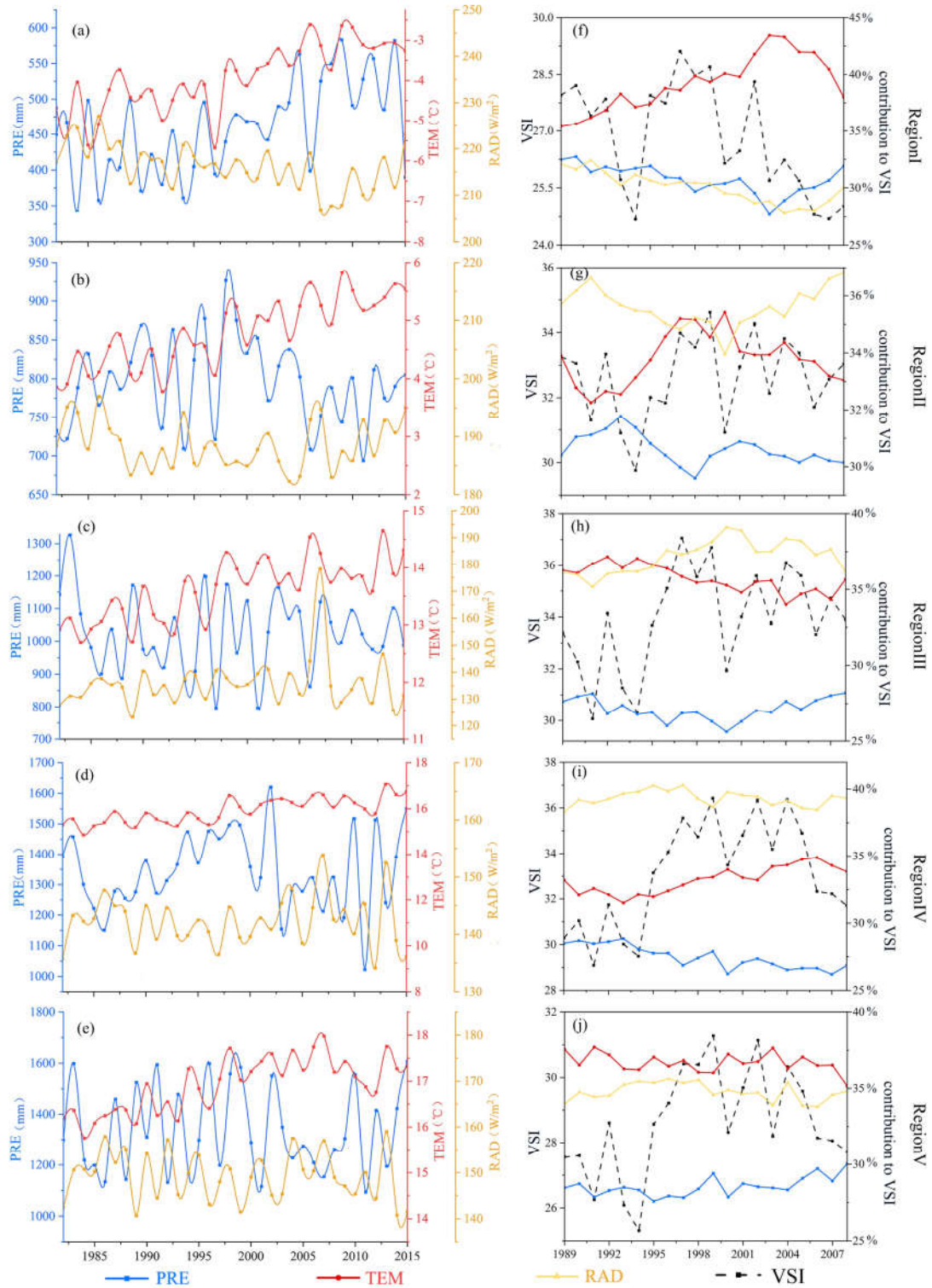
#### 4 Vegetation Dynamics and Their Sensitivity On Regional Scales



**Figure S5.** Schematic of subjective adjustments for the K-means clustering analysis result.



**Figure S6.** Percentage of types of GS and seasonal NDVI changes in subregions: (a) GS, (b) spring, (c) summer, (d) autumn, and (e) winter.



**Figure S7.** Interannual variations in climate variables (a-e, blue solid lines are the regional PRE variations, red solid lines are the regional TEM variations, yellow solid lines are the regional RAD variations) and vegetation sensitivity to climate in subregions (f-j, black dashed lines are the regional VSI variations, blue solid lines are the regional variations in PRE contribution to VSI, red solid lines are the regional variations in TEM contribution to VSI, yellow solid lines are regional variations in RAD contribution to VSI).