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Supplementary Information

Characterization of Drought Development through Remote Sensing: A Case Study in Central Yunnan, China. *Remote Sensing*, 2014, *6*, 4998–5018

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This supplementary data supports the main text as follows:

Table S1. Regression statistics between TRMM and *in-situ* rainfall estimates.

		Coef.	**SE Coef.**	**t**	**p**	
Regression Statistics	Constant	6.09	2.57	3	0.004	
	Slope	0.80	0.03	30	0.000	
	S	R^2	R			
	14.10	0.94	0.97			
	Source	**DF**	**SS**	**MS**	**F**	**p**
Analysis of Variance (ANOVA)	Regression	1.0	201436.0	201436.0	912.7	0.000
	Residual Error	58.0	12800.0	221.0		
	Total	59.0	214237.0			

Figure S1. Land cover/land use map of the study area.

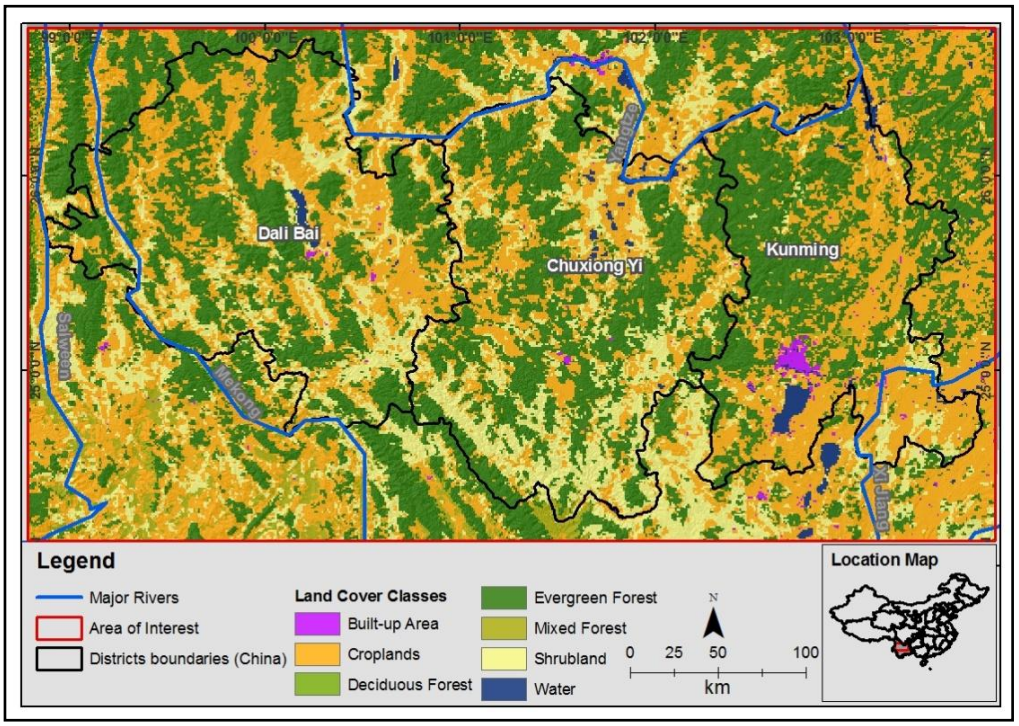


Figure S2. Density scatterplots between NDVI (x-axis) and LST (y-axis), indicating a dominant negative correlation across the year.

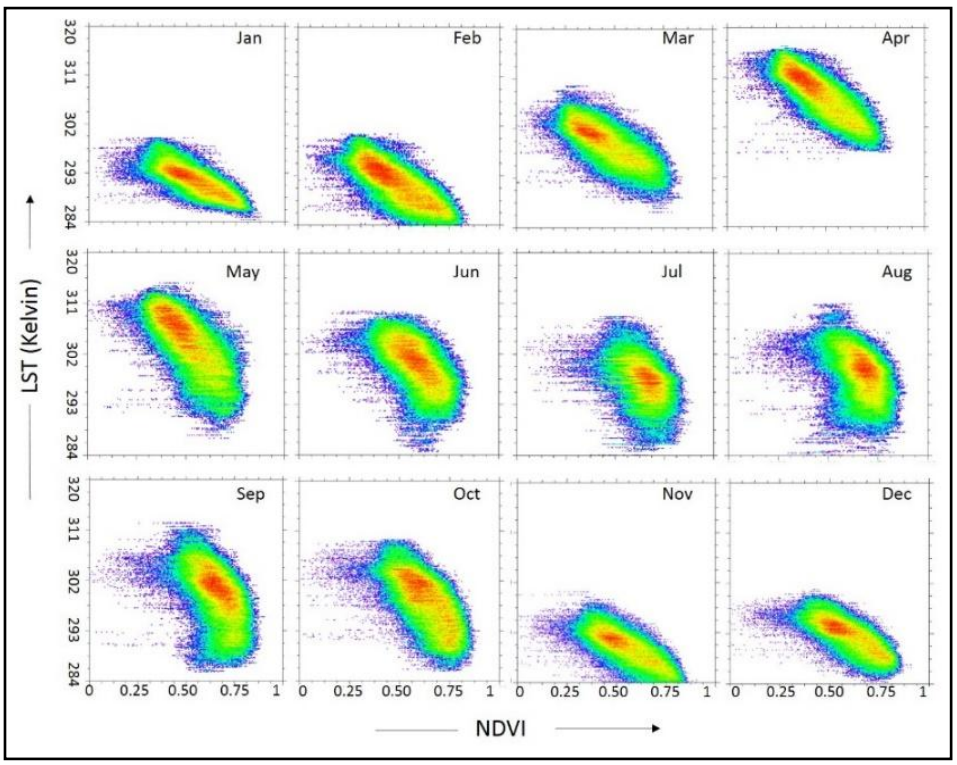
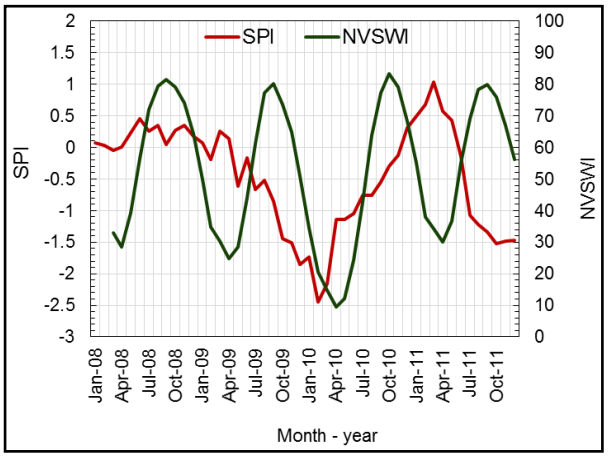


Figure S3. SPI and NVSWI time series plots.



Implementation of the Methodology in the Koshi River Basin in Himalayan Region

In addition to the study area in central Yunnan, the index clearly indicate abnormal dry conditions during the winters 2008 to 2009, which is also known as a moderate drought year in the area.

Figure S4. Location map of the additional study area (the Koshi River Basin).

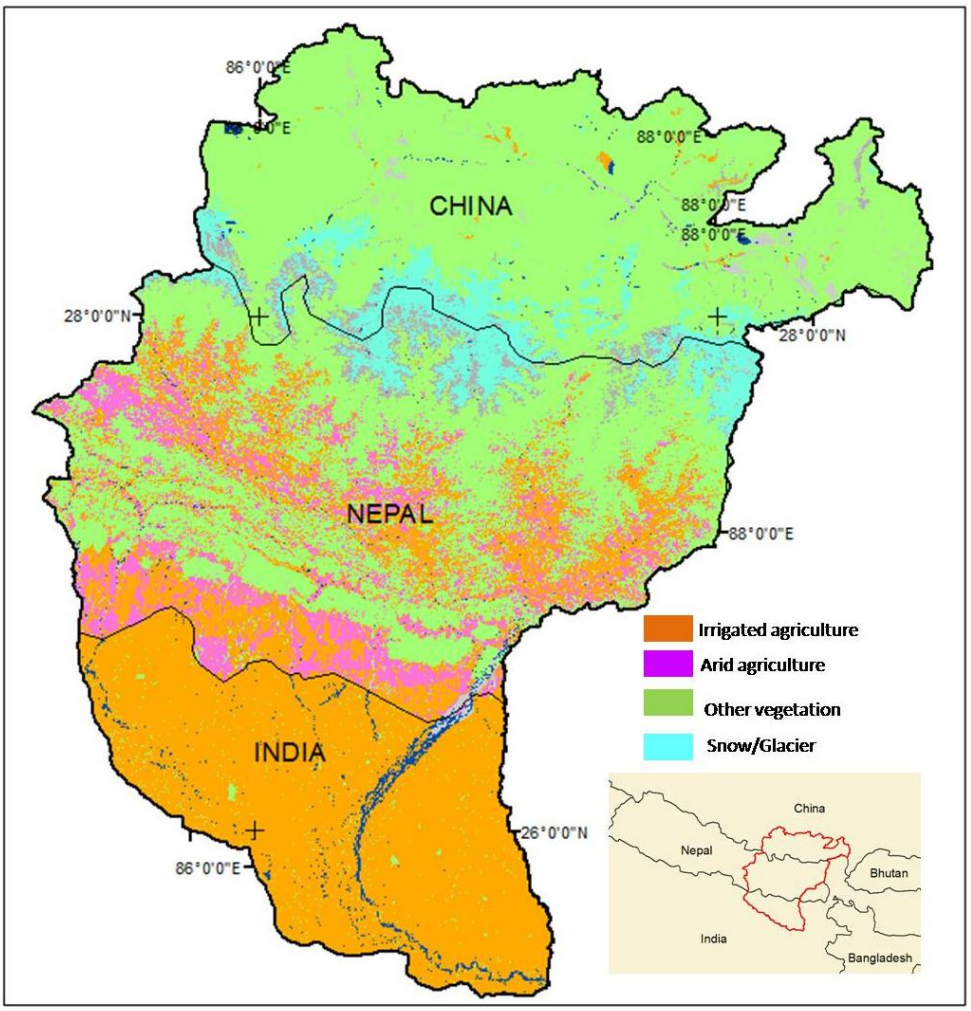


Figure S5. Temporal patterns of moisture conditions in arid agriculture and irrigated agriculture area in the Koshi River Basin.

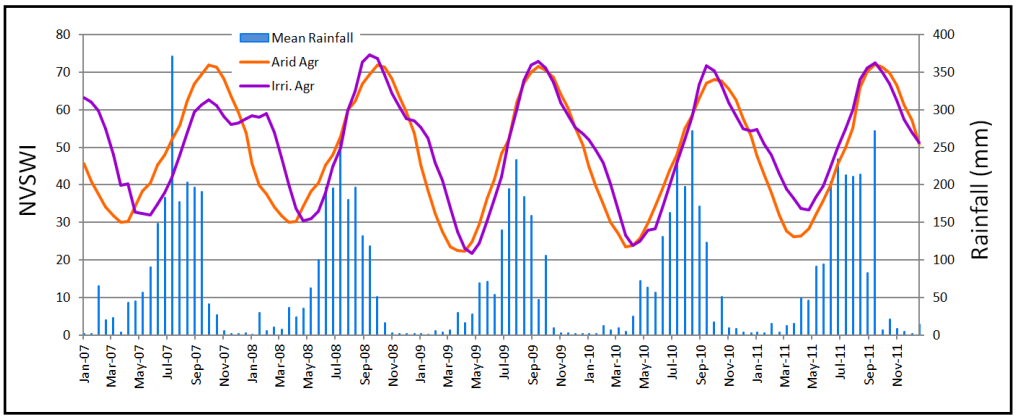


Figure S6. Moisture conditions and rainfall lag time relations in the Koshi River Basin.

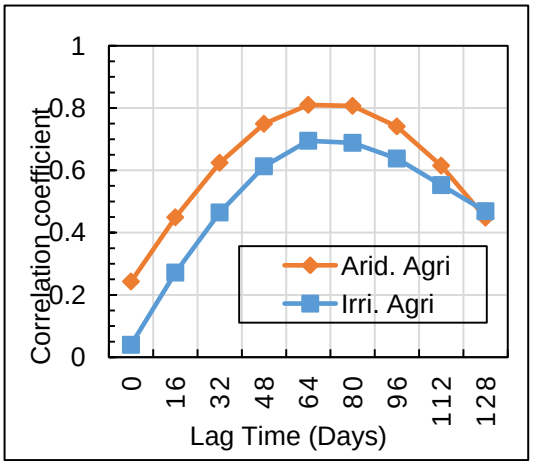


Figure S7. Plots of NRD and SPI time series (**left**), NRD and NVSWI time series (**right**).