Supplementary Information

Title：Inter- and intra-annual wind speed variabilities in wide valley regions of the middle reaches of the Yarlung Tsangpo River, China

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Figure S1. (a) Sen's slope of the Mann-Kendall test and (b) LSLR's slope applied to the time series of monthly wind speed at Tsetang, Lhasa and Nyêmo stations for the periods of 1960–2015, 1960–2015 and 1974–2015, respectively.

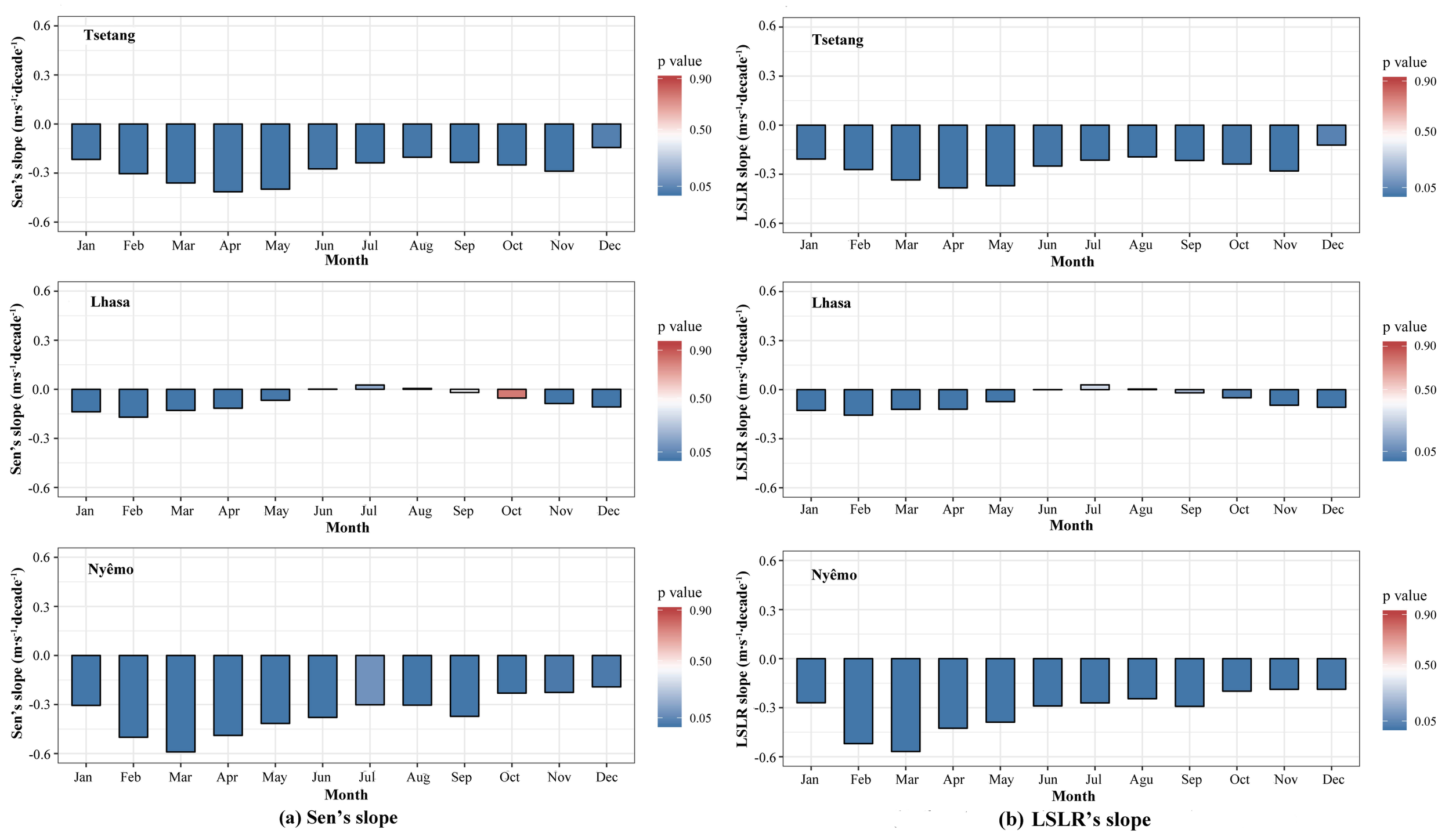
Tsetang
Lhasa
Nyêmo
Sen's slope (m·s⁻¹·decade⁻¹)
LSLR slope (m·s⁻¹·decade⁻¹)
0.6
0.3
0.0
-0.3
-0.6
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Agu
Sep
Oct
Nov
Dec
Month
p value
0.90
0.50
0.05
(a) Sen's slope
(b) LSLR's slope

Table S2. Spearman correlation coefficients estimated between influence variables in the period 1960-2015. Values in italic & bold and in bold represent the correlation coefficient were statistically significant at 0.01 and 0.05 confidence level, respectively. ΔT_1 and ΔT_2 present $\Delta T_{\text{LL-ML}}$ and $\Delta T_{\text{HL-ML}}$, respectively; ΔP_1 and ΔP_2 present $\Delta P_{\text{LL-ML}}$ and $\Delta P_{\text{HL-ML}}$, respectively. UR is abbreviation of urbanization rate. Values in italic & bold and in bold represent the correlation coefficient were statistically significant at 0.01 and 0.05 confidence level, respectively.

Variables	***u***	***v***	**TPM**	***T***	**ΔT_1**	**ΔT_2**	**ΔP_1**	**ΔP_2**	**AO**	**NAO**	**PDO**	**NDVI**	**UR**
u	1.000												
v	0.150	1.000											
TPM	**-0.277**	***-0.379***	1.000										
T	0.015	-0.222	***0.515***	1.000									
ΔT_1	***0.576***	**0.269**	***-0.394***	-0.038	1.000								
ΔT_2	**-0.304**	0.125	-0.206	0.122	-0.121	1.000							
ΔP_1	***0.484***	0.120	**-0.313**	***-0.605***	0.196	**-0.315**	1.000						
ΔP_2	***0.595***	0.128	-0.211	-0.231	***0.398***	***-0.510***	***0.549***	1.000					
AO	-0.249	0.100	-0.074	0.147	**-0.269**	***0.634***	-0.110	***-0.420***	1.000				
NAO	-0.212	0.195	-0.252	-0.091	-0.064	***0.431***	-0.006	***-0.346***	***0.724***	1.000			
PDO	**-0.268**	-0.010	0.018	-0.087	0.057	0.235	-0.144	***-0.413***	-0.144	0.149	1.000		
NDVI	0.056	-0.244	0.358	**0.422**	0.019	-0.151	-0.051	0.250	0.024	-0.064	-0.217	1.000	
UR	***-0.407***	***-0.367***	0.246	***0.601***	-0.253	***0.376***	***-0.694***	***-0.577***	0.240	0.029	0.162	0.189	1.000