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Corrigendum: Impact of climate change and rubber (*Hevea brasiliensis*) plantation expansion on reference evapotranspiration in Xishuangbanna, Southwest China

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KEYWORDS

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A Corrigendum on

Impact of climate change and rubber (*Hevea brasiliensis*) plantation expansion on reference evapotranspiration in Xishuangbanna, Southwest China

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In the published article, [Tables 3–5](#), [Table 4](#) should be moved to become [Table 3](#), and [Table 5](#) should be moved to become [Table 4](#). There was an error in [Table 3](#) as published. There was a mistake in the “Average relative humidity” data of correlation coefficients of ET_0 : “5” was written as “3” in the correlation coefficient of “Average relative humidity” in meteorological stations in ET_0 . The corrected tables appear below.

In the published article, several errors were made in **Results and Analysis** “Attribution Analysis of ET_0 Change of in Xishuangbanna”. We have deleted the below sentence:

“Wind speed in Xishuangbanna showed the largest change which is followed by sunshine duration, average relative humidity, and air temperature with 11.71%, 4.39%, 4.32%, and 2.84%, respectively.”

We have also corrected the following sentences:

Incorrect sentence:

“According to formula (1), we selected six meteorological factors for correlation analysis with the annual ET_0 in the rubber plantation area of Xishuangbanna, as shown in Table 5.”

The corrected sentence:

“According to formula (1), we selected six meteorological factors for correlation analysis with the annual ET_0 in the rubber plantation area of Xishuangbanna, as shown in Table 4.”

Incorrect sentence:

“It was significantly negatively correlated with RH, and the correlation coefficients of 0.52–0.89 (shown in Table 5).”

The corrected sentence:

“It was significantly negatively correlated with RH, and the correlation coefficients of 0.52–0.89 (shown in Table 4).”

Incorrect sentence:

“The sensitivity coefficients of different station meteorological variables on ET_0 variation in Xishuangbanna region are shown in Table 6.”

The corrected sentence:

“The sensitivity coefficients of different station meteorological variables on ET_0 variation in Xishuangbanna region are shown in Table 5.”

Incorrect sentence:

“It was significantly negatively correlated with RH, the correlation coefficients of 0.52–0.89 (as shown in Table 5). In

addition to T_{max} , sunshine duration and average relative humidity in Menghai, Jinghong, and Pu'er were negatively correlated with precipitation with correlation coefficients of 0.29, 0.07, and 0.36, respectively. The ET_0 decreased because the more precipitation leads to higher average relative humidity and less sunshine duration. Menghai, Jinghong, and Lancang were significantly and positively correlated with wind speed with the correlation coefficients of 0.49, 0.59, and 0.37, respectively.”

The corrected sentence:

“It was significantly negatively correlated with RH, the correlation coefficients of 0.52–0.88 (as shown in Table 4). In addition to T_{max} , sunshine duration and average relative humidity in Menghai, Jinghong, and Pu'er were negatively correlated with precipitation with correlation coefficients of 0.29, 0.07, and 0.37, respectively. The ET_0 decreased because the more precipitation leads to higher average relative humidity and less sunshine duration. Menghai, Jinghong, and Lancang were significantly and positively correlated with wind speed with the correlation coefficients of 0.49, 0.59, and 0.12, respectively.”

A correction has also been made in **Results and Analysis** “Characterization of Meteorological Elements in Rubber Plantation Areas in Xishuangbanna”. This sentence previously stated:

“Temperature, sunshine duration, and average wind speed increased, whereas average relative humidity and precipitation decreased in Xishuangbanna from 1970 to 2017, as shown in Table 4.”

The corrected sentence appears below:

“Temperature, sunshine duration, and average wind speed increased, whereas average relative humidity and precipitation decreased in Xishuangbanna from 1970 to 2017, as shown in Table 3.”

TABLE 3 Interannual variation trend of meteorological elements at each meteorological station.

Station Name	Precipitation (mm yr ⁻¹)	Sunshine Duration (h d ⁻¹ yr ⁻¹)	Average Relative Humidity (% yr ⁻¹)	Average Wind Speed (m s ⁻¹ yr ⁻¹)	Maximum Temperature (°C yr ⁻¹)	Minimum Temperature (°C yr ⁻¹)
Menghai	-0.005	0.016	-0.120	0.005	0.035	0.051
Mengla	-0.015	0.011	-0.959	0.012	0.030	0.031
Jinghong	-0.034	0.015	-0.137	0.012	0.033	0.030
Jiangcheng	-0.019	-0.00003	-0.089	-0.009	0.028	0.039
Pu'er	-0.019	0.013	-0.162	-0.002	0.030	0.061
Lancang	-0.014	0.017	-0.083	0.006	0.017	0.041
Mean	-0.018	0.012	-0.258	0.004	0.029	0.042

TABLE 4 Linear correlation coefficient between ET_0 of each station and annual mean meteorological elements.

Sites	Maximum Temperature	Minimum Temperature	Average Relative Humidity	Wind Speed	Sunshine Duration	Precipitation
Menghai	0.35*	0.49**	-0.55**	0.49**	0.69**	-0.29*
Mengla	0.47**	0.20	-0.52**	0.15	0.86**	-0.02
Jinghong	0.62**	0.42**	-0.57**	0.59**	0.09	-0.07*
Jiangcheng	0.49**	0.34*	-0.52**	-0.19	0.37*	-0.15
Pu'er	0.73**	0.77**	-0.88**	-0.13	0.71**	-0.37*
Lancang	0.51**	0.32*	-0.64**	0.12	0.59*	-0.08

*Significance at 0.05; **Significance at 0.01.

TABLE 5 Correlation coefficients of ET_0 and meteorological variables

Station	Average Temperature	Average Relative Humidity	Sunshine Duration	Wind Speed
Menghai	0.27	-0.32	0.53	0.09
Jinghong	0.34	-0.38	0.51	0.06
Mengla	0.31	-0.36	0.54	0.07
Jiangcheng	0.37	-0.32	0.5	0.11
Pu'er	0.31	-0.35	0.51	0.12
Langcan	0.28	-0.38	0.49	0.11
Mean	0.31	-0.35	0.51	0.09

A correction has been made in “Response of Climate Change and Rubber Plantation Expansion to ET_0 ”, paragraph 3. This sentence previously stated:

“During 2000, it was 1.08%/10a from 1970 to 2000 and 1.97/10a from 2000 to 2017 with a significant decrease trend of 45.18% in average relative humidity.”

The corrected sentence appears below:

“During 2000, it was 1.08%/10a from 1970 to 2000 and 1.97%/10a from 2000 to 2017 with a significant decrease trend of 45.18% in average relative humidity.”

A correction has been made in “Contributions of Climate Change and Rubber Plantation Expansion to ET_0 Trends”,

paragraph 1. We will delete “which is 0.018 mm/a” from the below sentence:

“The positive contribution of rising sunshine duration and decreasing average relative humidity in Xishuangbanna caused the increase of ET_0 , which is 0.018 mm/a over the past 47 years.”

The corrected sentence:

“The positive contribution of rising sunshine duration and decreasing average relative humidity in Xishuangbanna caused the increase of ET_0 over the past 47 years.”

A correction has been made in “Contributions of Climate Change and Rubber Plantation Expansion to ET_0 Trends”, paragraph 2. We will delete “in 2.3.5” from the below sentence:

TABLE 6 Sensitivity coefficient of meteorological elements in Xishuangbanna, their relative changes over the years and their contributions to ET_0 change.

Meteorological factor	Sensitivity coefficient	Multiyear relative change (%)	Contribution (%)
Air temperature	0.31	4.76	1.47
Average relative Humidity	-0.35	-4.7	1.65
Sunshine duration	0.51	6.68	3.41
Wind speed	0.09	14.84	1.34
ET_0		9.18	7.87

“Based on assessment of ET_0 change in rubber plantation expansion in 2.3.5,”

The corrected sentence:

“Based on assessment of ET_0 change in rubber plantation expansion,”

In the published article, we have corrected the correspondence email address in the published manuscript from “13108502978@163.com” to “shizhengtao@163.com”.

The authors apologize for these errors and state that these do not change the scientific conclusions of the article in any way. The original article has been updated.

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