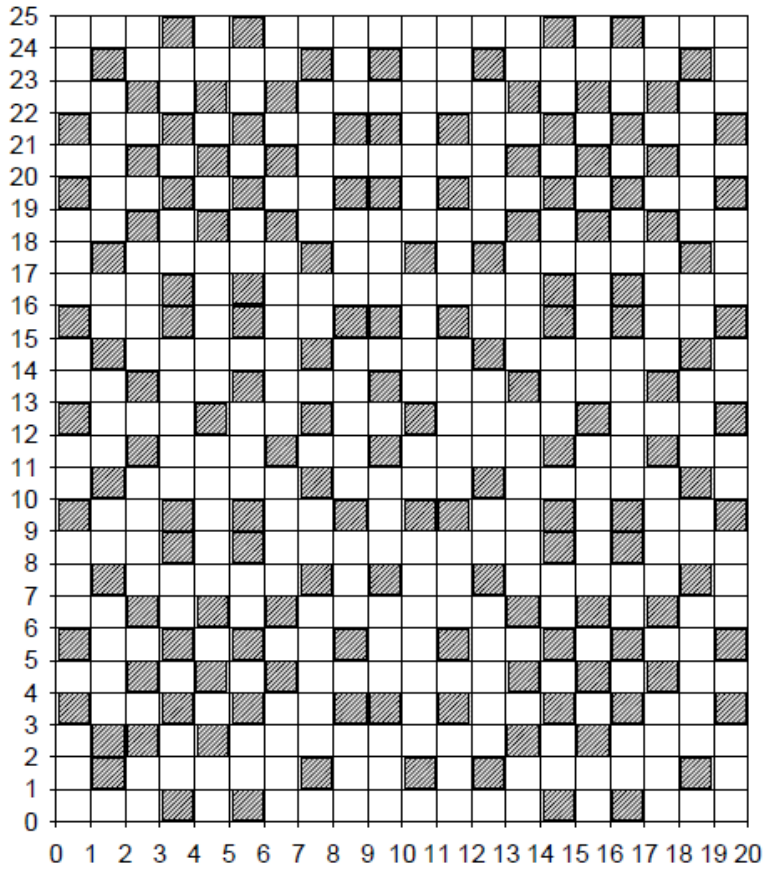
Appendix 1

Tab. S1 - Soil respiration rate measured above termite nest in the Xishuangbanna tropical seasonal rainforest. Units are μmol m^{-2} s^{-1}.

Points	nest 1	nest 2	nest 3	nest 4	nest 5	nest 6	nest 7	nest 8
Point 0	1.53	0.62	6.83	2.76	6.21	2.91	1.51	3.08
Point 1	1.46	0.96	6.62	2.47	4.68	1.64	1.48	2.49
Point 2	1.54	0.92	6.49	2.51	4.00	1.36	1.03	2.28
Point 3	0.99	0.95	6.39	2.43	1.76	1.40	0.99	1.63
Point 4	5.43	1.23	6.15	2.60	1.63	1.87	3.17	1.58
Point 5	0.82	1.18	5.69	2.49	1.58	1.91	1.08	0.12
Point 6	0.71	1.06	2.54	2.44	1.87	1.87	1.27	1.48
Point 7	0.70	2.41	2.74	2.09	1.72	3.55	1.32	1.41
Point 8	0.65	2.56	2.74	2.13	1.72	3.45	1.08	1.32
Point 9	1.59	2.62	1.93	2.11	2.09	3.39	1.05	1.52
Point 10	1.54	2.44	1.89	3.18	2.11	0.76	1.17	1.53
Point 11	1.46	3.53	1.88	1.21	2.09	0.78	1.34	1.51
Point 12	2.16	3.24	1.95	3.89	3.80	0.75	0.28	1.60
Point 13	2.19	2.92	1.93	2.78	3.44	2.22	1.65	1.68
Point 14	2.30	2.45	1.86	2.57	3.44	1.03	0.22	1.72
Point 15	2.09	2.47	2.71	2.07	4.90	0.99	7.64	1.32
Point 16	1.70	2.48	2.71	2.09	3.86	3.17	1.84	1.38
Mean	1.70	2.00	3.71	2.46	2.99	1.94	1.65	1.63
CV(%)	64.94	46.45	55.49	22.75	47.19	51.63	100.94	37.40

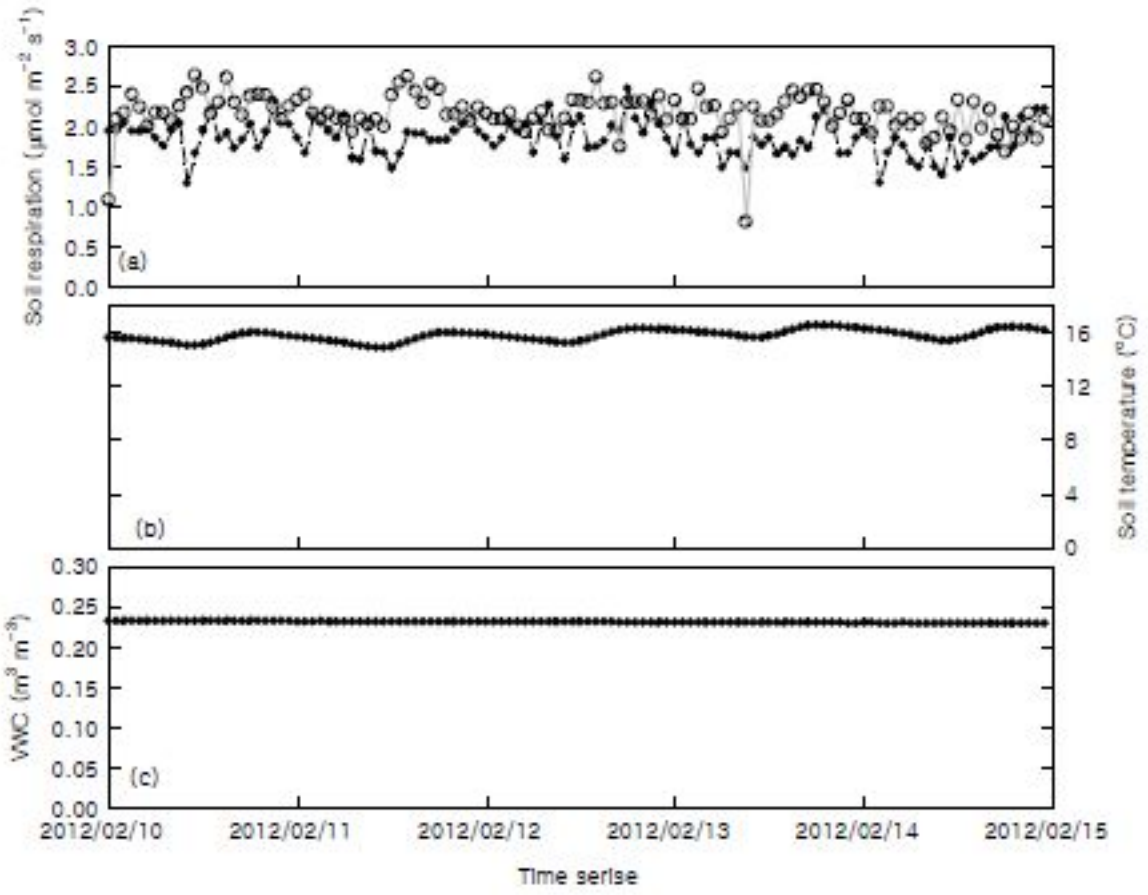
Appendix 1

Fig. S1 – The 400 x 500 m plot was divided into 500 subplots of 20 x 20 m. Some 151 (dashed squares) of the 500 subplots were selected for litterfall collection and soil respiration measurements.



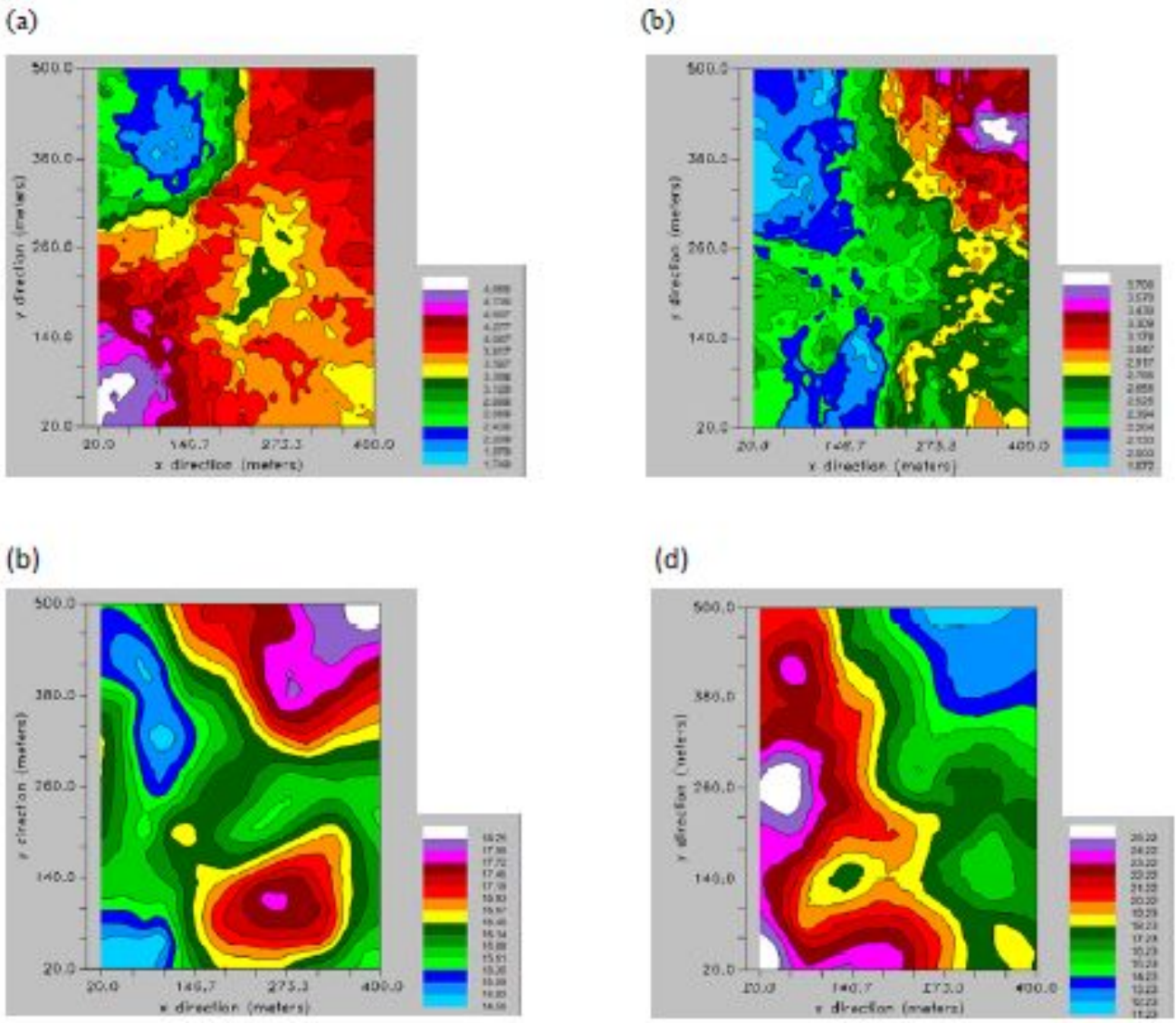
Appendix 1

Fig. S2 – The temporal variance of soil respiration (a), soil temperature at 5 cm (b) and soil water content at 5 cm (c) monitored by an automatic respiration measurement system developed by one of the authors of this study – Dr. Naishen Liang.



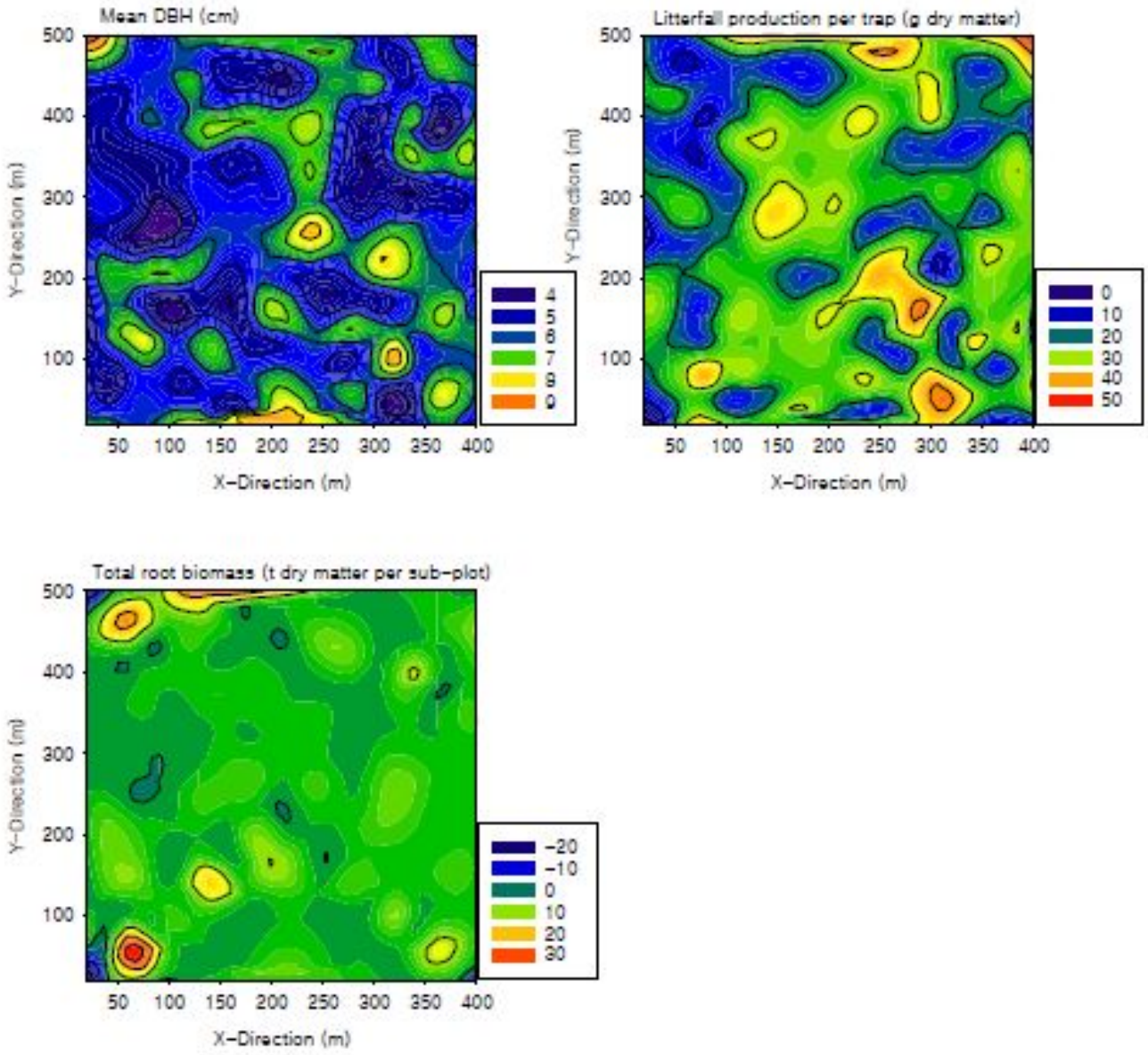
Appendix 1

Fig. S3 – Kriging maps based on semivariance analysis showing the spatial variance of the following parameters: (a) soil respiration in the rainy season ; (b) soli respiration in the dray season; (c) soil temperature in the dry season; (d) soil water content in the dry season. Soil respiration is expressed in μmol m^{-2} s^{-1}, soil temperature is in Celsius degrees, soil water content is in m^3 m^{-3}.



Appendix 1

Fig. S4 – Contour maps of the stand parameters in a tropical rainforest of Xishuangbanan, China.



Appendix 1

Fig. S5 – Contour maps of the soil and chemical properties of a tropical rainforest of Xishuangbanan, China.