



Supplement of

A compiled soil respiration dataset at different time scales for forest ecosystems across China from 2000 to 2018

Hongru Sun et al.

Correspondence to: Bingrui Jia (jiabingrui@ibcas.ac.cn)

The copyright of individual parts of the supplement might differ from the article licence.



Figure S1. Validation of mean soil respiration rate (*Rs*), soil temperature at 5 cm depth (T₅) and 10 cm depth (T₁₀). The X axis stands for the means directly collected from the original studies, and the Y axis stands for the averaged values from the extracted data with a graphic digitizing software (WEBPLOTDIGITIZER) during the corresponding observation period. *P* value below 0.01 was described by ^{**}. RMSE: Root Mean Square Error. The same as below.

8

9



Figure S2. Exponential relationships of soil respiration rates with soil temperature at 5
cm depth and 10 cm depth in forest ecosystems across China.



13 Figure S3. The relationships of annual soil carbon efflux with (a) mean annual

14 temperature and (b) mean annual precipitation in forest ecosystems across China.

15

16



17

18 Figure S4. Frequency distributions of the length of the individual time series from the

