

**Table S1. Sources of species occurrence records.**

Sources	Type
CAS. Chinese Virtual Herbarium (CVH). Chinese Academy of sciences (CAS). Available online: <a href="http://www.cvh.org.cn/">http://www.cvh.org.cn/</a> (accessed on 21 June 2013).	Online database
CAS. Specimen Resources Sharing Platform for Education (SRSPE). Chinese Academy of sciences (CAS). Available online: <a href="http://mnh.scu.edu.cn/">http://mnh.scu.edu.cn/</a> (accessed on 5 April 2013).	Online database
Chen, H.B. Flora of Shandong. Qingdao Press: Qingdao, China, 1997.	Flora
Chen, H.Y. Flora of Hainan. Science Press: Beijing, China, 1965.	Flora
Collaboration of Flora of Anhui. Flora of Anhui. China Prospect Press: Beijing, China, 1987.	Flora
Ding, B.Z; Wang, S.Y. Flora of Henan. Henan Science and Technology Press: Zhengzhou, China, 1997.	Flora
Editorial Committee of Flora Guizhouensis. Flora Guizhouensis. Guizhou People Press: Guiyang, 1982.	Flora
Editorial Committee of Flora of Sichuan. Flora Sichuanica. Sichuan Minority Press: Chengdu, China, 1990.	Flora
Fang, J.Y; Wang, Z.H; Tang, Z.Y. Atlas of woody plants in China – distribution and climate. Higher Education Press: Beijing, China, 2009.	Flora
Guangdong Institute of Botany. Flora of Hainan. Science Press: Beijing, China, 1974.	Flora
Guangxi Institute of Botany. Flora of Guangxi. Guangxi Science and Technology Press: Nanning, China, 2005.	Flora
Jiangsu Institute of Botany. Flora of Jiangsu. Jiangsu Science and Technology Press: Nanjing, China, 1982.	Flora
Liu, Y.H. Flora of China. Science Press: Beijing, China, 1985.	Flora
Qiu, B.L. Flora of Zhejiang. Zhejiang Science and Technology Press: Hangzhou, China, 1993.	Flora
Yunnan Institute of Botany. Flora Yunnanica. Science Press: Beijing, China, 1977.	Flora
Zheng, W.J. Tree Species of China. China Forest Press: Beijing, China, 2004.	Flora

**Table S2. General Circulation Models (GCMs) used in this study.**

<b>GCMs</b>	<b>Code</b>	<b>Modeling Center (or Group)</b>
ACCESS1-0	AC	Commonwealth Scientific and Industrial Research Organization (CSIRO) and Bureau of Meteorology (BOM), Australia
BCC-CSM1-1	BC	Beijing Climate Center, China Meteorological Administration
CCSM4	CC	National Center for Atmospheric Research
CNRM-CM5	CN	Centre National de Recherches Météorologiques / Centre Européen de Recherche et Formation Avancée en Calcul Scientifique
GFDL-ESM2G	GD	NOAA Geophysical Fluid Dynamics Laboratory
GFDL-CM3	GF	NOAA Geophysical Fluid Dynamics Laboratory
GISS-E2-R	GS	NASA Goddard Institute for Space Studies
HadGEM2-AO	HD	National Institute of Meteorological Research/Korea Meteorological Administration
HadGEM2-ES	HE	Met Office Hadley Centre (additional HadGEM2-ES realizations
HadGEM2-CC	HG	contributed by Instituto Nacional de Pesquisas Espaciais)
INMCM4	IN	Institute for Numerical Mathematics
IPSL-CM5A-LR	IP	Institut Pierre-Simon Laplace
MIROC5	MC	Atmosphere and Ocean Research Institute (The University of Tokyo), National Institute for Environmental Studies, and Japan Agency for Marine-Earth Science and Technology
MRI-CGCM3	MG	Meteorological Research Institute
MIROC-ESM-CHEM	MI	Japan Agency for Marine-Earth Science and Technology, Atmosphere
MIROC-ESM	MR	and Ocean Research Institute (The University of Tokyo), and National Institute for Environmental Studies
MPI-ESM-LR	MP	Max-Planck-Institut für Meteorologie (Max Planck Institute for Meteorology)
NorESM1-M	NO	Norwegian Climate Centre