Reconstruction of southeast Tibetan Plateau summer cloud cover over the past two centuries using tree ring $\delta^{18}O$

Chunming Shi^{a,b,f}, Valérie Daux^b, Qi-Bin Zhang^{a,*}, Camille Risi^c, Shu-Gui Hou^d, Michel Stievenard^b, Monique Pierre^b, Zongshan Li^e, Valérie Masson-Delmotte^b

^aState Key Laboratory of Vegetation and Environmental Change, Institute of Botany, Chinese Academy of Sciences, Beijing 100093, China

^bLaboratoire des Sciences du Climat et de l'Environnement, UMR8212,

IPSL/CEA/CNRS/UVSQ Bat 701, L'Orme des Merisiers, CEA Saclay, 91 191 Gif sur Yvette Cedex, France

^cCIRES, University of Colorado, 80309 Boulder CO, USA

^dKey Laboratory for Coast and Island Development, Ministry of Education, School of Geographic and Oceanographic Sciences, Nanjing University, 22 Hankou Road, Nanjing 210093, China

^eResearch center For Eco-Environment Change, Chinese Academy of Sciences, Beijing 100085, China

^fGraduate School of Chinese Academy of Sciences, Beijing 100049, China

*Correspondence to: Qi-Bin Zhang (<u>qbzhang@ibcas.ac.cn</u>)

[...]

Acknowledgements: We thank Xiaochun Wang and Chao Zhang for the assistance of field work. The meteorological data of Bomi were obtained from the weather information center of China Meteorological Administration. The support by the Chinese side was from National Natural Science Foundation of China project No. 40631002 and the Chinese Academy of Sciences project KSCX-YW-Z-1022. The support by the French side was provided by the GIS Pluies-Tibet project. The first author is grateful for the financial support by the French Embassy in China. We acknowledge Juliette Jin for the help with administration in the Chinese-French co-supervised PhD program.