

**Fig. S1. Tree cover in simulations with and without human burning**. Tree cover fraction simulated by LPJ-LMfire using each of the eight GCM LGM climate simulations without human burning (**left panels**) and with human burning (**right panels**). LPJ-LMfire results are also shown for a simulation using the multi-model ensemble mean climate (**GCM mean**), and the mean of all of the individual LPJ-LMfire simulations (**LPJ mean**).