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Technical Note: Linking climate change and downed woody debris decomposition across forests of the eastern United States

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Supplement Tables

Table S1. Species groups (conifer and hardwood species) and geographic regions considered (northern or southern region in eastern US by state) for determining differences in downed woody debris decomposition dynamics across the eastern US.

Species group					
Conifer species	***n*** †	**Hardwood species**	***n***	**Hardwood species**	***n***
Abies balsamea	527	*Acer negundo*	17	*Oxydendrum arboreum*	14
Abies spp.	8	*Acer pensylvanicum*	6	*Persea borbonia*	16
Juniperus virginiana	51	*Acer rubrum*	167	*Populus balsamifera*	39
Larix laricina	8	*Acer saccharinum*	22	*Populus grandidentata*	44
Picea glauca	28	*Acer saccharum*	113	*Populus tremuloides*	218
Picea mariana	281	*Acer spp.*	29	*Populus spp.*	17
Picea rubens	75	*Betula alleghaniensis*	36	*Prunus serotina*	20
Picea spp.	2	*Betula lenta*	16	*Quercus alba*	84
Pinus banksiana	301	*Betula papyrifera*	219	*Quercus coccinea*	13
Pinus echinata	46	*Betula populifolia*	15	*Quercus ellipsoidalis*	10
Pinus elliottii	36	*Betula spp.*	5	*Quercus falcata*	34
Pinus palustris	11	*Carya glabra*	14	*Quercus nigra*	34
Pinus resinosa	48	*Carya ovata*	14	*Quercus phellos*	9
Pinus strobus	77	*Carya spp.*	24	*Quercus prinus*	40
Pinus taeda	222	*Celtis spp.*	8	*Quercus rubra*	124
Pinus virginiana	132	*Cornus florida*	10	*Quercus stellata*	27
Pinus spp.	24	*Fagus grandifolia*	44	*Quercus velutina*	94
Thuja occidentalis	184	*Fraxinus americana*	17	*Quercus spp.*	65
Tsuga canadensis	13	*Fraxinus nigra*	30	*Rhizophora mangle*	18
Tsuga spp.	2	*Fraxinus pennsylvanica*	13	*Robinia pseudoacacia*	15
Other conifer species	62	*Fraxinus spp.*	3	*Salix nigra*	5
All conifer species	2138	*Juglans spp.*	8	*Sassafras albidum*	27
		Liquidambar styraciflua	48	*Tilia americana*	21
		Liriodendron tulipifera	21	*Ulmus americana*	74
		Nyssa biflora	6	*Ulmus spp.*	5
		Nyssa spp.	6	Other hardwood species	259
		Ostrya virginiana	9	All hardwood species	2246
Geographic region					
Northern US states	***n***	**Southern US states**	***n***		
Illinois	39	Alabama	167		
Indiana	80	Arkansas	186		
Iowa	70	Florida	10		
Maine	662	Georgia	180		
Michigan	396	Kentucky	33		
Minnesota	1235	Louisiana	41		
Missouri	158	North Carolina	91		
Ohio	116	South Carolina	93		
Pennsylvania	100	Tennessee	139		
Wisconsin	373	Virginia	215		
All northern states	3229	All southern states	1155		

† Number of observations (*n*)

Table S2. Ensembles of 17 climate models used.

Model	Name	Institution (Citation)
BCC-CSM1.1	Beijing Climate Center-Climate System Model 1.1	Beijing Climate Center (Xiaoge et al., 2013)
CCSM4	Community Climate System Model 4.0	National Center for Atmospheric Research (Vertenstein et al., 2013)
CESM1-CAM5	Community Atmosphere Model 5.0 (Community Earth System Model 1.0)	National Center for Atmospheric Research (Eaton, 2013)
CSIRO-Mk3.6	CSIRO-Mk3.6	Commonwealth Scientific and Industrial Research Organization (Rotstayn et al., 2012)
FIO-ESM	First Institute of Oceanography-Earth System Model	First Institute of Oceanography, State Oceanic Administration (Qiao et al., 2013)
GFDL-CM3	NOAA Geophysical Fluid Dynamics Laboratory-Climate Model 3	National Oceanic and Atmospheric Administration-Geophysical Fluid Dynamics Laboratory (Griffies et al., 2011)
GFDL-ESM2G	NOAA Geophysical Fluid Dynamics Laboratory-Earth System Model 2G	National Oceanic and Atmospheric Administration-Geophysical Fluid Dynamics Laboratory (Dunne et al., 2012a; Dunne et al., 2012b)
GFDL-ESM2M	NOAA Geophysical Fluid Dynamics Laboratory-Earth System Model 2M	National Oceanic and Atmospheric Administration-Geophysical Fluid Dynamics Laboratory (Dunne et al., 2012a; Dunne et al., 2012b)
GISS-E2-R	NASA Goddard Institute for Space Studies ModelE2	National Aeronautics and Space Administration-Goddard Institute for Space Studies (Schmidt et al., 2006)
HadGEM2AO	Hadley Centre Global Environmental Model version 2 (Atmosphere-Ocean)	Met Office Hadley Centre (Martin et al., 2011)
HadGEM2-ES	Hadley Centre Global Environmental Model version 2 (Earth System)	Met Office Hadley Centre (Martin et al., 2011)
IPSL-CM5A-LR	Institut Pierre Simon Laplace Climate Model for the 5th IPCC Report (Low Resolution)	Institut Pierre Simon Laplace Climate Modelling Centre (Mignot and Bony, 2013)
MIROC5	Model for Interdisciplinary Research on Climate Version 5	Atmosphere and Ocean Research Institute (University of Tokyo), National Institute for Environmental Studies, and Japan Agency for Marine-Earth Science and Technology (Watanabe et al., 2010)
MIROC-ESM-CHEM	Model for Interdisciplinary Research on Climate Earth System Model (Atmospheric Chemistry)	Japan Agency for Marine-Earth Science and Technology, Atmosphere and Ocean Research Institute (University of Tokyo), and National Institute for Environmental Studies (Watanabe et al., 2011)
MIROC-ESM	Model for Interdisciplinary Research on Climate Earth System Model	Japan Agency for Marine-Earth Science and Technology, Atmosphere and Ocean Research Institute (University of Tokyo), and National Institute for Environmental Studies (Watanabe et al., 2011)
MRI-CGCM3	Meteorological Research Institute Chemistry Global Climate Model 3	Meteorological Research Institute (Yukimoto et al., 2012)
NorESM1-M	Norwegian Earth System Model 1	Norwegian Climate Center (Bentsen et al., 2012; Iversen et al., 2013)

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