Vegetation classes used in this paper	JSBACH	JULES	CLM	ORCHIDEE
Broadleaf evergreen trees (*EvgTr*)	*Tropical broadleaf evergreen* are placed in grid cells with tropical climate[a]; *Extra-tropical evergreen* populate the remaining vegetated areas.	*Broadleaf trees*	*Broadleaf evergreen trees*	*Tropical broadleaf evergreen* are placed in grid cells with tropical climate[a]; *Temperate broadleaf evergreen* populate the remaining vegetated areas.
Broadleaf deciduous trees (*DecTr*)	*Tropical broadleaf deciduous* are placed in grid cells with tropical climate[a]; *Extra-tropical broadleaf deciduous* populate the remaining vegetated areas.	*Broadleaf trees*	*Broadleaf deciduous trees*	*Tropical broadleaf deciduous* are placed in grid cells with tropical climate[a]. *Temperate broadleaf summergreen* are placed in grid cells with arid and temperate areas[a]. *Boreal broadleaf summergreen* populate the remaining vegetated areas.
Needleleaf trees (*NedTr*)	*Coniferous deciduous* are placed in grid cells where they are dominant according to the default PFT distribution[b]. *Coniferous evergreen* populate the remaining vegetated areas.	*Needleleaf trees*	*Needleleaf trees*	*Boreal needleleaf summergreen* trees are placed in grid cells where they are dominant according to the default PFT distribution[b] *Boreal needleleaf evergreen* populate the remaining boreal and polar areas[a]. *Temperate needleleaf evergreen* populate the remaining tropical, temperate and arid areas[a].
Shrubs (*Shrub*)	*Deciduous shrubs* are placed in grids where they are dominant in the default PFT distribution[b]; *Raingreen shrubs* populate the remaining vegetated areas.	Shrubs	Shrubs	No PFTs are available.
Grasses (*Grass*)	Grid cell assigned either *C_3 grass* or *C_4 grass*, based on the dominant photosynthetic pathway at grid cell level[b].	C_4 grass	Grid cell assigned either *C_3 crop* or *C_4 crop*, based on the dominant photosynthetic pathway at grid cell level[b]	Grid cell assigned either *C_3 grass* or *C_4 grass*, based on the dominant photosynthetic pathway at grid cell level[b].
Crops (*Crops*)	Grid cell assigned either *C_3 crop* or *C_4 crop*, based on the dominant photosynthetic pathway at grid cell level[b].	C_3 grass	Standard *C_3 crop* (representing wheat)	Grid cell assigned either *C_3 crop* or *C_4 crop*, based on the dominant photosynthetic pathway at grid cell level[b].