no.	biome	dominant pft	subpft	additional environmental limits
1	Tropical evergreen forest	tropical evergreen trees	-	-
		tropical deciduous trees	-	number of green days > 300
2	Tropical semi-deciduous forest	tropical deciduous trees	-	number of green days between 250 and 300
3	Tropical deciduous forest/woodland	tropical deciduous trees	-	number of green days < 250
4	Temperate deciduous forest	temperate deciduous trees	No temp. broadleaved or boreal evergreen tree present	-
		temperate deciduous trees	Boreal evergreen trees present	$T_{wm} > 21$
		boreal evergreen trees	temp. deciduous trees present	$GDD5 > 900$ and $T_{cm} > -19$, $T_{wm} > 21$
		Boreal deciduous trees	Temp. deciduous trees	
5	Temperate conifer forest	cool conifer	No temp broadl. trees present, no boreal dec. trees subdominant	-
		cool conifer	temperate deciduous trees with nearly similar npp	-
6	Warm mixed forest	temperate broadleaved trees		-
		Temperate deciduous trees	No boreal trees, but temp. broadl-leaved trees present	
		temperate deciduous trees	No boreal trees, but cool conifer present	$T_{cm} > 3$ and $GDD5 > 3000$
		cool conifer	temp. broadleav. trees present	-
7	Cool mixed forest	temperate deciduous trees	boreal evergreen trees present	$T_{wm} < 21$ and $T_{cm} > -15$
		boreal evergreen trees	temp. deciduous trees present	$GDD5 > 900$ and $T_{cm} > -19$, $T_{wm} < 21$
8	Cool conifer forest	boreal evergreen trees	no temp. dec. trees present	$GDD5 > 900$ and $T_{cm} > -19$
9	Cold mixed forest	temperate deciduous trees	boreal evergreen trees present	$T_{wm} < 21$ and $T_{cm} < -15$
		cool conifer	boreal deciduous trees	-
		boreal evergreen trees	temp. deciduous trees present	$GDD5 < 900$ and $T_{cm} < -19$
		boreal deciduous trees	cool conifer	-
		boreal deciduous trees	-	$GDD5 > 900$ and $T_{cm} > -19$
10	Evergreen taiga/montane forest	boreal evergreen trees	no temp dec trees present	$GDD5 < 900$ and $T_{cm} < -19$ and $npp > 350$

		boreal deciduous trees	boreal evergreen trees	-
11	Deciduous taiga/montane forest	boreal deciduous trees	no temp dec. or cool conifers	GDD5 < 900 and Tcm < -19
12	Tropical savanna	shrubs	tropical trees present	woody LAI > 3.5
13	Temperate broadleaved savanna	shrubs	temp. deciduous. trees present	
14	Temperate sclerophyll woodland	shrubs	temp.broadleav. trees present	-
15	Temperate xerophytic shrubland	woody desert	-	grass LAI>1.2 and Tmin < 0
16	Tropical xerophytic shrubland	woody desert	-	grass LAI > 1.2 and Tmin > 0
		shrubs	tropical trees present	woody LAI<3.5
17	Open conifer woodland	shrubs	cool conifer present	-
18	Boreal parkland	boreal evergreen trees	-	GDD5 < 900 and Tcm < -19 and npp < 350
		shrubs	boreal trees present	Twm < 21
		Boreal deciduous trees	-	NPP < 250
19	Tropical grassland	C4 tropical grass	-	-
20	Temperate grassland	C3/C4 temperate grass	-	GDD0 > 800
21	Desert	woody desert	-	grass LAI < 1.2
		temp. or trop. Trees or conifer	-	NPP < 100
		C3/C4 temperate grass	no boreal trees possible	-
22	Steppe tundra	C3/C4 temperate grass	-	GDD0 < 800
		cold herbaceous	-	-
23	Shrub tundra	tundra shrub	-	GDD0 > 650
24	Dwarf shrub tundra	tundra shrub	-	400 < GDD0 < 650
25	Prostrate shrub tundra	tundra shrub	-	GDD0 < 400
26	Cushion forb lichen moss tundra	lichen / forb	-	-
27	Barren	no pft possible	-	-
28	Land ice	all	all	Twm<2