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Ideas and perspectives: why Holocene thermokarst sediments of the Yedoma region do not increase the northern peatland carbon pool

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Supplementary material

The tables below summarize the relative covergae of land cover classes extracted for the Siberian Yedoma Region from four different sources. The table also provides comments on which thematic classes were considered to show peatlands for the purpouse of this study. Please refer to the main article for full references

Reference	Coverage	Class	Comment wether classified as peatland in this study
Lehner and Döll (2004)	3.4%	Lake	
"	1.6%	River	
"	1.9%	Freshwater marsh	
"	0.5%	Coastal wetland	
"	5.7%	Bog , fen, Mire	Peatland

Reference	Coverage	Class	Comment wether classified as peatland in this study
Nilsson et al. (2002)	1.6%	water	
"	1.9%	pastures	
"	23.8%	forest	
"	3.2%	bogs	Peatland
"	19.4%	swamps	not included a speatlands, overlay with Stolbovoi (2002) shows that these are primarily wet mineral soils
"	49.7%	non-forest vegetation	
"	0.4%	unvegetated	

Reference	Coverage	Class	Comment wether classified as peatland in this study
Arino et al. (2012)	0.0%	Closed (>40%) broadleaved deciduous forest (>5m)	
"	40.8%	Open (15-40%) needleleaved deciduous or evergreen forest (>5m)	
"	0.6%	Closed to open (>15%) mixed broadleaved and needleleaved forest (>5m)	
"	6.1%	Mosaic forest or shrubland (50-70%) / grassland (20-50%)	
"	9.6%	Mosaic grassland (50-70%) / forest or shrubland (20-50%)	
"	0.1%	Closed to open (>15%) (broadleaved or needleleaved, evergreen or deciduous) shrubland (<5m)	
"	0.2%	Closed to open (>15%) herbaceous vegetation (grassland, savannas or lichens/mosses)	
"	28.2%	Sparse (<15%) vegetation	
"	4.4%	Closed to open (>15%) grassland or woody vegetation on regularly flooded or waterlogged soil - Fresh, brackish or saline water	Included as peatland, since the thematic reolution of the product does not allow separation of wetlands and peatlands
"	0.0%	Artificial surfaces and associated areas (Urban areas >50%)	
"	5.0%	Bare areas	
"	3.5%	Water bodies	
"	1.6%	Permanent snow and ice	
"	0.0%	No data (burnt areas, clouds,…)	

Reference	Coverage	Class	Comment wether classified as peatland in this study
Bartalev et al. (2003)	9.8%	Unclassified	
"	1.3%	Evergreen Needle-leaf Forest	
"	0.5%	Deciduous Broadleaf Forest	
"	0.2%	Needle-leaf/Broadleaf Forest	
"	0.9%	Mixed Forest	
"	0.1%	Broadleaf/Needle-leaf Forest	
"	33.2%	Deciduous Needle-leaf Forest	
"	0.1%	Broadleaf deciduous shrubs	
"	1.3%	Needle-leaf evergreen shrubs	
"	0.2%	Humid grasslands	
"	0.0%	Steppe	
"	2.5%	Bogs and marches	Peatland
"	2.7%	Palsa bogs	Peatland
"	0.4%	Riparian vegetation	Peatland (may include peatlands along lake or river margins)
"	2.5%	Barren tundra	
"	5.4%	Prostrate shrub tundra	
"	10.9%	Sedge tundra	
"	13.0%	Shrub tundra	
"	0.8%	Recent burns	
"	0.0%	Croplands	
"	4.5%	Forest - Natural Vegetation complexes	
"	0.0%	Forest - Cropland complexes	
"	0.0%	Cropland - Grassland complexes	
"	4.7%	Bare soil and rock	
"	0.0%	Permanent snow/ice	
"	4.6%	Water bodies	
"	0.0%	Urban	
"	0.2%	Salt-march	
"	0.0%	Burns of year 2000	