

Table S1. List of research papers concentrated on inventorying and communicating the geodiversity of the Pleistocene glacial and periglacial environments [1,16,23,25,32–33,38–41,44–45,47,49,53–58,59–60,64–66,79,80,83–85,100,132,135–136,143,161,164–324], fetched from Scopus and Web of Science scientific databases (retrieved on 17th February 2025) and filtered.

Reference	Continent	Country	Pleistocene sediments, landforms and events	Research themes	Educational efforts
Abbott and Cook, 2023 [164]	North America	USA	ice-dammed lakes	educational efforts	
Addison, 2020 [165]	Europe	Great Britain	glacial landforms undivided	geodiversity assessment	
Anderson and Brown, 2010 [39]	Europe	Great Britain	depositional forms undivided, erosional features undivided	educational efforts	interpretation facilities, direct geo-education
Antić et al., 2021 [64]	Europe	Serbia	Pleistocene megafauna	geotourism, educational efforts	educational trails
Antić et al., 2023 [53]	Europe	Serbia	loess plateaus, Pleistocene megafauna	geotourism	
Balestro et al., 2015 [166]	Europe	Italy	depositional landforms undivided	geodiversity assessment, educational efforts	educational trails
Balestro et al., 2016 [83]	Europe	Italy		geosites, educational efforts	websites, educational trails
Ballesteros et al., 2021 [167]	Europe	Spain	U-shaped valleys, glacial cirques	geotourism, geoparks	educational trails
Ballesteros et al., 2022 [168]	Europe	Spain	glacial cirques, glacial tills, Pleistocene megafauna	geodiversity assessment, geoparks	
Beerten et al., 2017 [169]	Europe	Belgium	periglacial sediments undivided, dune landscapes, Pleistocene permafrost	geodiversity assessment	
Bollati et al., 2018a [170]	Europe	Italy		geotourism	
Bollati et al., 2020 [171]	Europe	Italy	moraine plateaus	geodiversity assessment, geoconservation	
Bollati et al., 2018b	Europe	Italy	terminal moraines, roches moutonnées,	geosites, geotourism	

[172]			glacial lakes, depressions of glacial erosion, glacio-karst features		
Bollati and Zerboni, 2021 [33]	Europe	Italy	loess plateaus	geodiversity assessment	
Bollati et al., 2017a [173]	Europe	Italy	U-shaped valleys, roches moutonnées, lateral moraines, terminal moraines, rock glaciers, protalus ramparts, polygonal and striated soils	geodiversity assessment	
Bollati et al., 2017b [174]	Europe	Switzerland	lateral moraines, bottom moraines, terminal moraines	geodiversity assessment	
Bollati et al., 2014 [175]	Europe	Italy	roches moutonnées	geotourism	
Bonachea et al., 2023 [55]	Europe	Spain	U-shaped valleys, glacial cirques, moraine ridges, ice-dammed lakes, glacio-lacustrine deposits	geoparks	educational trails, interpretative centers
Bouzekraoui et al., 2018 [176]	Africa	Morocco	U-shaped valleys, cirques, marginal moraines undivided	geosites, geodiversity assessment	
Bradbury, 2014 [16]				geodiversity assessment, land management and nature conservation, review and research at general scale	
Brazier et al., 2017 [177]	Europe	Great Britain	ice-dammed lake shorelines	geoparks	
Breg Valjavec et al., 2022 [178]	Europe	Slovenia, Croatia	glacial moraines	geoconservation	interpretative centers
Bridgland, 2013 [38]	Europe	Great Britain	Pleistocene river terraces	geoconservation, review and research at general scale	
Brocx and Semeniuk, 2007 [80]			sea-level fluctuations	geoconservation, review and research at general scale	

Brocx and Semeniuk, 2011 [179]	Australia		ria coast, sea-level fluctuations	geodiversity assessment	
Burek et al., 2013 [180]	Europe	Great Britain		geoconservation	
Canavese et al., 2018 [181]	Europe	Italy	marginal moraines undivided	educational efforts	educational centres
Cappadonia et al., 2018 [182]	Europe	Malta	sea-level fluctuations, Pleistocene megafauna	geoconservation	
Capps, 2017 [183]	North America	United States of America		protected areas	
Chan and Godsey, 2016 [59]	North America	United States of America	bottom moraines, sea-level fluctuations	geosites, geoconservation	
Chlachula, 2019 [184]	Asia	Kazakhstan	U-shaped valleys, ice-dammed lake shorelines, periglacial sediments undivided, loess-palaeosol sequences, glacial lakes	geotourism	
Chlachula, 2020 [185]	Asia	Kazakhstan	U-shaped valleys, ice-dammed lakes, cirques	geodiversity assessment	
Chlachula and Mychko, 2023 [186]	Europe	Russia	Pleistocene megafauna, glacial tills, terminal moraines, eskers, outwash plains, proglacial lakes	geosites	
Clivaz and Reynard, 2018 [60]	Europe	Switzerland	U-shaped valleys, marginal moraines undivided, erratic blocks, erosional features undivided	geosites, geodiversity assessment	
Collareta et al., 2023 [54]	Europe	Italy	Pleistocene megafauna	geodiversity assessment	
Columbu et al., 2021 [187]	Europe	Italy	climate	educational efforts	educational centres
Comanescu et al., 2011 [188]	Europe	Romania	cirques, U-shaped valleys	geosites	

Coronato and Schwarz, 2022 [189]	South America	Argentina	glacial moraines, periglacial landforms	protected areas	
Coronato et al., 2022 [190]	South America	Argentina	lateral moraines, erratic boulders, ice-wedges, glacial moraines, kames, terminal moraines, kettles, glacial cirques, U-shaped valleys, nunataks, drumlins	geotourism	
Costa-Casais and Alves, 2013 [191]	Europe	Spain	block slopes	geosites, geoconservation	
Cruz et al., 2021 [192]	Europe	Spain	fluvioglacial deposits, erratic blocks, patterned ground, block slopes, periglacial ridges	geosites	
Cunha et al., 2023 [56]	Europe	Great Britain	erratic blocks, Pleistocene megafauna	geoconservation	interpretation facilities, educational centres, educational trails
Cunningham, 2021 [193]	Asia	Mongolia	block fields, patterned ground, tors	geoparks	
Czubla et al., 2024 [194]	Europe	Poland	erratic boulders	geodiversity assessment, geo-cultural heritage	
Demitroff, 2016 [195]	North America	United States of America	ventifacts, pavement einkante, scallops, weathering pits	geodiversity assessment	
Dempster and Enlander, 2023 [57]	Europe	Great Britain	glacial moraines, drumlins, glacial tills	geoconservation, geoparks	
Dong et al., 2014 [196]	Asia	China	loess-palaeosol sequences	geoconservation, geotourism, educational efforts	educational centres, interpretation facilities, educational trails
Ellero et al., 2023 [197]	Europe	Iceland	glacial fjords, moraine plateaus	geodiversity assessment	
Erikstad et al., 2018	Europe	Norway	striations, roches moutonnées	geosites, geoconservation	

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Ferrando et al., 2021 [199]	Europe	Italy	block fields, block streams, periglacial landforms	geosites	
Feuillet and Sourp, 2011 [200]	Europe	France	cirques, U-shaped valleys, striations, moraines, glacial erratics, roches moutonnées, rock glaciers, talus fans, debris flows, avalanche tracks, patterned ground, solifluction lobes, ploughing boulders	geodiversity assessment, educational efforts	interpretation facilities
Filocamo et al., 2019 [201]	Europe	Italy	cirques, periglacial sediments undivided, glacio-karst features	geosites	
Filocamo et al., 2022 [202]	Europe	Italy	cirques, glacial moraines	geotourism, educational efforts	educational trails
Forno et al., 2022 [203]	Europe	Italy	glacial cirques, glacial valleys	educational efforts	viewpoints, digital media
Fuming et al., 2016 [204]	Asia	China	periglacial sediments undivided	geodiversity assessment	
Gajek et al., 2019 [205]	Europe	Poland	glacial tills, glaciofluvial landforms	geosites	
Gatley and Parkes, 2018 [206]	Europe	Ireland	drumlin fields, glacial tills, erratic blocks, eskers	geosites	
Gianotti et al., 2015 [207]	Europe	Italy	lateral moraines, terminal moraines, kame terraces	geodiversity assessment	
Gill et al., 2015 [58]				geoconservation, review and research at general scale	
Giordano et al., 2016 [208]	Europe	Italy	lateral moraines	geo-cultural heritage, educational efforts	educational trails
Gnezdilova et al., 2015 [209]	Europe	Russia	Pleistocene marine terraces, sea-level fluctuations	geosites, geodiversity assessment, geotourism	
Goemaere et al., 2016	Europe	Belgium	periglacial sediments undivided	geodiversity assessment, geo-	

[210]				cultural heritage	
Golfiopoulos et al., 2022 [211]	Europe	Greece	glacial moraines, glacial cirques	geoparks	
Gonzalez-Gutierrez et al., 2017 [212]	Europe	Spain	erratic blocks, glacio-karst landforms	geodiversity assessment, geoconservation	
Gordon and Barron, 2013 [213]	Europe	Great Britain		geoconservation	
Gordon et al., 2016 [214]	Europe	Great Britain	subglacial tunnel valleys, bottom moraines, iceberg ploughmark field	protected areas, geoconservation	
Gordon et al., 2017 [40]	Europe	Great Britain		geosites, geoconservation	
Gordon et al., 2023 [23]			glacial and glaciofluvial deposits	geoconservation	
Górska-Zabielska, 2020 [215]	Europe	Poland	erratic blocks	geodiversity assessment, geotourism	
Górska-Zabielska, 2022 [216]	Europe	Poland	moraine plateaus, ice marginal valleys, erratic boulders	geotourism, geodiversity assessment	interpretation facilities, educational trails
Górska-Zabielska et al., 2020 [217]	Europe	Poland	erratic blocks	geodiversity assessment, geotourism	
Górska-Zabielska and Zabielski, 2019 [218]	Europe	Poland	erratic blocks	geotourism	
Górska-Zabielska and Wachecka-Kotkowska, 2024 [219]	Europe	Poland	erratic boulders	geotourism	
Górska-Zabielska et al., 2024 [220]	Europe	Poland	erratic boulders	geosites, geotourism	
Górska-Zabielska, 2021 [135]	Europe	Poland	erratic blocks	educational efforts	rock gardens

Górska-Zabielska, 2023a [132]	Europe	Poland	erratic boulders	educational efforts	educational trails, rock gardens, interpretation facilities
Górska-Zabielska, 2023b [136]	Europe	Poland	erratic boulders	geosites	educational trails
Górska-Zabielska, 2024a [161]	Europe	Poland	erratic boulders	geodiversity assessment, geo-cultural heritage	
Górska-Zabielska, 2024b [143]	Europe	Poland	erratic boulders	geotourism	
Graniczny et al., 2008 [47]	Europe	Lithuania / Poland	terminal moraines, push moraines, dead-ice moraines, eskers, kames, subglacial tunnel valleys, kettle holes, boulder fields	geoparks, geosites	
Gray et al., 2013 [221]	Europe	Great Britain	depositional landforms undivided	geodiversity assessment, review and research at general scale	
Han et al., 2018 [222]	Asia	China	U-shaped valleys, arêtes, hanging valleys	geoconservation, geotourism, educational efforts	publications, websites, direct geo-education
Hazell et al., 2023 [223]	Europe	Great Britain	pingos	geoconservation	
Hose, 2018 [224]	Europe		periglacial sediments undivided, ice-wedge	educational efforts	educational trails
Huber and Iakovleva, 2021 [225]	Europe	Russia	glacial moraines, erratic boulders	geotourism	
Huber et al., 2021 [226]	Europe	Russia	glacial cirques, erratic boulders	geodiversity assessment	
Huber et al., 2022 [227]	Europe	Russia	U-shaped valleys	geotourism, geodiversity assessment	

Ibáñez Palacios et al., 2012 [228]	South America	Argentina	cryonival landforms	geodiversity assessment	
Ibáñez Palacios et al., 2018 [229]	South America	Argentina	depositional landforms undivided, periglacial sediments undivided	geodiversity assessment, educational efforts	educational trails
Jamorska et al., 2020 [49]	Europe	Poland	terminal moraines, kames, kame terraces, drumlins, eskers, dead-ice moraines, kettle holes, proglacial spillways, outwash plains, outwash fans, glacial tills, glaciofluvial landforms	geodiversity assessment	
Jary et al., 2018 [230]	Europe	Poland	loess-palaeosol sequences, bottom moraines, erratic blocks, periglacial sediments undivided	geosites	
Jon et al., 2020 [231]	Asia	DPR Korea	cirques, U-shaped valleys	geodiversity assessment	
Kiernan, 2019 [232]	Australia		marginal moraines undivided, glaciofluvial landforms	geosites	
Kil et al., 2019 [233]	Asia	Republic of Korea	ice-wedge	geodiversity assessment	
Kim and Ma, 2023 [234]	Asia	South Korea	periglacial block fields, stone runs	geodiversity assessment	
Knight and Harrison, 2013 [235]	Europe	Great Britain	periglacial sediments undivided	geo-cultural heritage	
Krawiec et al., 2022 [236]	Europe	Poland	erratic boulders, outwash plains, tunnel valleys, kettle holes, dead-ice moraines, kames, kame terraces	geosites, geodiversity assessment	interpretation facilities, websites, viewpoints
Last et al., 2013 [45]	Europe	Great Britain		geoconservation, review and research at general scale	
Leng et al., 2023 [237]	Asia	China	loess plateaus	geodiversity assessment	
Lokier, 2013 [238]	Asia	United Arab	dune landscapes	geoconservation	

		Emirates			
Lowe and Brazier, 2020 [239]	Europe	Great Britain	terminal moraines, eskers, kame terraces, kettle holes	geoconservation, geodiversity assessment, geosites	
Lucchesi et al., 2015 [240]	Europe	Italy	terminal moraines, erratic blocks, intermorainic lakes	geo-cultural heritage	
Magagna et al., 2018 [241]	Europe	Italy	marginal moraines undivided	educational efforts	direct geo-education, educational centres
Manyuk and Maniuk, 2023 [242]	Europe	Ukraine	erratic boulders, proglacial lakes	geosites	
Margiotta and Sansò, 2014 [243]	Europe	Italy	Pleistocene marine terraces	geodiversity assessment	
Marković et al., 2014 [244]	Europe	Serbia	loess-palaeosol sequences, Pleistocene megafauna	geoconservation, educational efforts	educational centres, direct geo-education, interpretation facilities
Masseroli et al., 2023 [245]	Europe	Italy	hanging valleys	geosites	
Mateos et al., 2011 [246]	Europe	Spain	dune landscapes, sea-level fluctuations	geosites	
Mazurek et al., 2024 [100]	Europe	Poland	terminal moraines, moraine plateaus, lakes	geosites	
Meakin, 2011 [247]	Australia		Pleistocene megafauna	geodiversity assessment	
Miccadei et al., 2011 [248]	Europe	Italy	cirque, cryonival landforms, bottom moraines, U-shaped valleys, roches moutonnées	geosites, geotourism, educational efforts	interpretation facilities
Migoń, 2011 [249]	Europe	Poland	cirques, bottom moraines	geodiversity assessment	
Migoń et al., 2019 [250]	Asia	Republic of Korea	block fields, block slopes	geodiversity assessment, educational efforts	interpretation facilities, publications,

					educational trails
Migoń and Pijet-Migoń, 2016 [251]	Europe	Poland	block fields, scree slopes, frost-riven cliffs, cryoplanation terraces, tors, solifluction cover deposits, loess-palaeosol sequences	geodiversity assessment, geotourism, educational efforts	publications, interpretation facilities, publications, direct geo-education, educational centres
Migoń and Pijet-Migoń, 2020 [252]	Europe	Poland	block fields	geodiversity assessment	
Migoń and Pijet-Migoń, 2022 [253]	Europe	Czechia, Poland	block fields	educational efforts	viewpoints
Migoń and Pijet-Migoń, 2024a [254]	Europe	Poland	periglacial deposits: solifluction sheets, scree and loess plateaus	geoconservation	
Migoń and Pijet-Migoń, 2024b [255]	Europe	Czechia, Germany, Hungary, Poland, Portugal	glacial cirques, U-shaped valleys, glacial moraines	geoparks	
Migoń and Różycka, 2021 [79]	Europe	Poland	periglacial forms: crags, block fields	geodiversity assessment, geosites	
Migoń, 2024 [1]			block fields, rock glaciers, patterned ground, pingos, yardangs, dunes, loess plateaus, periglacial landforms, cirques, glacial moraines	geosites	
Milligan and McDonald, 2017 [256]	North America	United States of America	glacial lakes, ice-dammed lake shorelines, U-shaped valleys, erratic blocks, lateral moraines, Pleistocene megafauna	geosites	
Mir et al., 2023 [257]	Asia	India	U-shaped valleys, terminal moraines	geosites, geotourism	
Morino et al., 2022			landslides	geosites	

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Motta and Motta, 2007 [44]	Europe	Italy	erratic blocks, honeycomb weathering	geo-cultural heritage, review and research at general scale	
Murphy, 2022a [259]	Europe	Great Britain	glacial scours, limestone pavements	geoconservation	
Murphy, 2022b [25]	Europe	Ireland, Great Britain	erratic boulders, glacial moraines	educational efforts, geoconservation	educational trails
Navarrete et al., 2022 [260]	South America	Ecuador	periglacial landforms, erratic boulders, glacial cirques, hanging valleys, U-shaped valleys, glacial moraines, roches moutonnées	geosites	
Necheş, 2016 [261]	Europe	Romania		geotourism, educational efforts, review and research at general scale	interpretation facilities
Nikolić, 2019 [262]	Europe	Serbia	Pleistocene megafauna	educational efforts	educational centres, interpretation facilities
O'Leary et al., 2020 [263]	Australia		sea-level fluctuations	geoconservation, geo-cultural heritage	
Ortega-Becerril et al., 2017 [264]	Europe	Spain	marginal moraines undivided, arêtes, roches moutonnées, paternoster lakes, potholes, hanging valleys	geoparks	
Ovriu et al., 2019 [265]	Europe	Romania	periglacial sediments undivided	geomorphosite evaluation	
Palacio-Prieto et al., 2016 [266]	North America	Mexico	Pleistocene megafauna	geodiversity assessment, geo-cultural heritage	
Panizza, 2009 [267]	Europe	Italy	cirques, steps, hanging valleys, roches moutonnées, lateral moraines, glacio-karst features	geodiversity assessment	
Panizza, 2011 [268]	Europe	Italy	cirques, hanging valleys, roches	geodiversity assessment	

			moutonnées		
Pavlovskaya, 2004 [269]	Europe	Belarus	Late Pleistocene rivers and drainage, interglacial lake sediments, morainic plains	geosites	
Pellitero et al., 2015 [270]	Europe	Spain	cirques	geodiversity assessment	
Pereira and Pereira, 2020 [271]	Europe	Portugal	U-shaped valleys, cirques, marginal moraines undivided	geodiversity assessment	
Piacentini et al., 2011 [272]	Europe	Italy	cirques, roches moutonnées, moraine ridges, marginal moraines undivided	geotourism	
Perotti et al., 2020 [85]	Europe	Italy	erosional features undivided, cirques, periglacial sediments undivided	geodiversity assessment, educational efforts	educational trails, educational centres, direct geo-education
Pidek and Orłowska, 2017 [273]	Europe	Poland	interglacial deposits	geosites	
Quesada-Román et al., 2019 [274]	Central America	Costa Rica	periglacial sediments undivided, U-shaped valleys, arêtes, riegels, roches moutonnées, striations, lateral moraines, glacial tills, glacial lakes, kettle lake, cirque lake, paternoster lakes, ice-marginal lakes	geodiversity assessment	
Quesada-Roman and Perez-Umana, 2020a [275]	Central America	Costa Rica	periglacial sediments undivided, U-shaped valleys, cirques, arêtes, riegels, roches moutonnées, lateral moraines, glacial tills, glacial lakes	geoconservation	
Quesada-Roman and Perez-Umana, 2020b [276]	Central America	Costa Rica	cirques, U-shaped valleys, arêtes, marginal moraines undivided, glacial tills, glacial lakes	geotourism, educational efforts	educational trails, websites, interpretation facilities
Radley et al., 2013 [41]	Europe	Great Britain	glaciofluvial landforms, depositional	geoconservation, educational	interpretation

			landforms undivided	efforts	facilities
Rasina et al., 2024 [277]	Europe	Latvia	erratic boulders	geo-cultural heritage	
Raska et al., 2019 [278]	Europe	Denmark	U-shaped valleys, cirques, terminal moraines, lateral moraines, erosional features undivided	geodiversity assessment	
Raukas and Stankowski, 2010 [279]	Europe	Estonia	terminal moraines, erratic blocks, fluvioglacial landforms	geoparks, geosites	
Reynard et al., 2017 [280]			kettle holes, erratic blocks, roches moutonnées	geosites, geodiversity assessment, review and research at general scale	
Rodríguez et al., 2022 [84]	Europe	Spain	rock glaciers, periglacial landforms	educational efforts	websites, digital media, viewpoints
Sánchez-Cortez, 2019 [281]	South America	Ecuador	Pleistocene megafauna	geoconservation	
Sanso, 2017 [282]	Europe	Italy	Pleistocene marine terraces, sea-level fluctuations, glacio-karst landforms	geodiversity assessment	
Sanso et al., 2015 [283]	Europe	Italy	Pleistocene marine terraces, sea-level fluctuations	geodiversity assessment	
Santangeolo et al., 2020 [284]	Europe	Italy	sea-level fluctuations	educational efforts	educational trails
Santangelo et al., 2015 [285]	Europe	Italy	sea-level fluctuations, interglacial deposits	educational efforts	educational trails
Santos-Gonzalez and Marcos-Reguero, 2019 [286]	Europe	Spain	cirques, marginal moraines undivided, glacial lakes, rock-glaciers, plowing boulders, nivation hollows	geodiversity assessment, geoconservation	
Sardella et al., 2019 [287]	Europe	Italy	Pleistocene megafauna	geosites	
Satkunas et al., 1999	Europe	Lithuania	depositional forms undivided, eskers,	geosites, geodiversity	

[288]			interglacial deposits	assessment	
Schwarz and Migoń, 2017 [289]	South America	Argentina	marginal moraines undivided, drumlin fields, cirques, U-shaped valleys	educational efforts	educational trails, educational centres
Seijmonsbergen et al., 2010 [290]	South America	Peru	morainic ridges, glaciofluvial deposits	geodiversity assessment	
Sellier and Kerguillec, 2021 [291]	Europe	Norway	block fields	geosites	
Semeniuk and Semeniuk, 2019 [292]	Australia		interglacial deposits	geodiversity assessment	
Serrano et al., 2011 [293]	Europe	Spain	cirques, glaciokarstic depressions, marginal moraines undivided, U-shaped valleys, glacio-karst features	geosites, educational efforts	publications
Sinnyovsky et al., 2020 [294]	Europe	Bulgaria	U-shaped valleys, bottom moraines, block slopes, cirques, arêtes, periglacial sediments undivided, scree cones, riegels, erratic blocks	geosites	
Sinnyovsky et al., 2023 [295]	Asia	Russia	U-shaped valleys, hanging valleys, glacial cirques, strations	geodiversity assessment	
Solarska et al., 2012 [296]	Europe	Poland	loess-palaeosol sequences	educational efforts	educational trails
Stocchi et al., 2017 [297]	Europe	Italy	sea-level fluctuations	geodiversity assessment	
Stroppa et al., 2016 [298]	Europe	Italy		educational efforts	educational trails
Szadkowska et al., 2022 [299]	Europe	Poland	erratic boulders, inselbergs, rock glaciers, block fields, solifluction forms, tors, crags	geodiversity assessment	
Szakács and Chiriță, 2017 [300]	Europe	Romania	glacial cirques, block fields, avalanche couloirs	geosites, protected areas, educational efforts	educational centres

Thakkar et al., 2023 [301]	Asia	India	U-shaped valleys	geodiversity assessment	
Tisdall and Miller, 2023 [302]	Europe	Great Britain	eskers, kame terraces, kettle holes, push moraines, terminal moraines	geoconservation	
Tomić et al., 2015 [65]	Europe / North America	Serbia / United States of America	loess-palaeosol sequences, Pleistocene megafauna	educational efforts	educational centres, direct geo-education, educational trails, interpretation facilities
Urban and Wróblewski, 1999 [303]	Europe	Poland	block fields, Pleistocene megafauna	geosites, geodiversity assessment	
Valentini et al., 2023 [304]	Europe	Italy	glacial cirques, glacial moraines, U-shaped valleys	protected areas	
Vasiljević et al., 2011a [305]	Europe	Serbia	loess-palaeosol sequences	geoconservation, geotourism	
Vasiljević et al., 2011b [306]	Europe	Serbia	loess-palaeosol sequences	geosites, geotourism, educational efforts	interpretation facilities, educational centres
Vasiljević et al., 2014 [32]	Asia	China	loess-palaeosol sequences	geoconservation	
Vergara-Daskam and Estay-Daskam, 2023 [307]	South America	Chile	glacial moraines, U-shaped valleys, rock glaciers, lateral moraines, proglacial lakes	geoparks	
Vieira et al., 2020 [308]	Europe	Portugal	U-shaped valleys	geoparks, geodiversity assessment	
Vidal and Tassara, 2023 [309]	South America	Chile	U-shaped valleys	educational efforts	educational trails
Vinokurov and Komarovsky, 1999 [310]	Europe	Belarus	erratic blocks, interglacial deposits	geosites, geodiversity assessment	

Višnić et al., 2015 [311]	Europe	Serbia	loess-palaeosol sequences	geodiversity assessment, geotourism	
Wang et al., 2015 [312]	Asia	China	sea-level fluctuations	geoconservation	
Warowna et al., 2016 [313]	Europe	Poland	loess-palaeosol sequences	geoparks, geosites, educational efforts	educational trails
Wignall et al., 2018 [314]	Europe	Great Britain	periglacial sediments undivided	geoconservation	
Wolniewicz, 2021 [315]	Europe	Poland	kames, eskers, outwash plains, moraine plateaus	educational efforts	websites, digital media
Wolniewicz, 2022 [316]	Europe	Poland	eskers, kames, kame terraces, dead-ice moraines, push moraines, terminal moraines, moraine plateaus, outwash plains	geotourism, geodiversity assessment	websites, digital media
Wolniewicz, 2024 [317]	Europe	Poland	outwash plains, terminal moraines, kames, subglacial valleys	educational efforts	websites, digital media
Woo et al., 2019 [318]	Asia	Republic of Korea	sea-level fluctuations	geodiversity assessment	
Woodcock et al., 2012 [319]	North America	United States of America	drumlins	geoconservation	
Yan et al., 2016 [320]	Asia	China	terminal moraines, cirques, cirque lake	geodiversity assessment, geoparks	
Yaseen et al., 2024 [321]	Asia	Pakistan	glacial and glaciofluvial deposits	geosites	
Zgłobicki et al., 2019 [322]	Europe		glaciofluvial landforms, marginal moraines undivided, moraine plateaus, proglacial spillways, periglacial sediments undivided	geodiversity assessment, educational efforts	educational trails, interpretation facilities
Zoboli and Pillola, 2021 [66]	Europe	Italy	Pleistocene megafauna	geodiversity assessment	

Zwoliński et al., 2017 [323]	Europe	Poland	erratic blocks, terminal moraines	geosites	
Zwoliński and Stachowiak, 2012 [324]	Europe	Poland	marginal moraines undivided, roches moutonnées, U-shaped valleys, glacial lakes	geodiversity assessment	