Table S2. Summary of the developed independent variables.

	No.	Variable name	Figure	Data source	Method of development	Variable values [unit]
MINING FACTORS	1.	Distance from former open pits	6a	The shapefile presenting the extent of opencast mining excavations, obtained from the Polish Geological Institute	Development of a raster presenting Euclidean distances from the opencast mining excavations in the research area	0 – 1106.4 [m]
	2.	Distance from the underground workings	6b	The set of 67 scanned maps of mining excavations from 1956 to 1973, in scale 1:000, obtained from the State Mining Authority	Development of a raster presenting Euclidean distances from the underground mining excavations in the research area	0 – 882.3 [m]
	3.	Distance from the mining waste heaps	6c	The shapefile presenting the location of the mining dumps, obtained from the Polish Geological Institute	Development of a raster presenting Euclidean distances from the mining waste heaps in the research area	0 – 1755.7 [m]
	4.	Number of shafts per reference unit area	6d	The set of 67 scanned maps of mining excavations from 1956 to 1973, in scale 1:000, obtained from the State Mining Authority	Development of a raster based on the mining shafts layer, digitalised from the source material (*Point to Raster* tool was used. *Sum of objects* was selected during specification of values of raster cells)	0 – 17 [-]
	5.	Average depth of the mining shafts	6e	The set of 67 scanned maps of mining excavations from 1956 to 1973, in scale 1:000, obtained from the State Mining Authority	Development of a raster based on the mining shafts layer, digitalised from the source material (*Point to Raster* tool was used. *Average option* was selected during specification of raster cell values for the *Level field*). The created raster was subtracted from the DEM from 2020 (variable no. 14)	0 – 164.2 [m]
	6.	Average depth of the underground excavations	6f	The set of 67 scanned maps of mining excavations from 1956 to 1973, in scale 1:000, obtained from the State Mining Authority	Development of a raster based on the underground mining excavations layer, digitalised from the source material (*Polygon to Raster* tool was used. *Average option* was selected during specification of raster cell values for the *Level field*). The created raster was subtracted from the DEM from 2020 (variable no. 14)	0 – 113.2 [m]
	7.	Minimum depth of the underground excavations	6g	The set of 67 scanned maps of mining excavations from 1956 to 1973, in scale 1:000, obtained from the State Mining Authority	Development of a raster based on the underground mining excavations layer, digitalised from the source material (*Polygon to Raster* tool was used. *Minimum option* was selected during specification of raster cell values for the *Level field*). The created raster was subtracted from the DEM from 2020 (variable no. 14)	0 – 113.2 [m]
	8.	Area of the underground mining excavations per reference unit area	6h	The set of 67 scanned maps of mining excavations from 1956 to 1973, in scale 1:000, obtained from the State Mining Authority	Development of a raster based on the underground mining excavations layer digitalised from the source material (*Polygon to Raster* tool was used. *Sum option* was selected during specification of raster cell values for the *Area field*)	0 – 5164.8 [m^2]

	No.	Variable name	Figure	Data source	Method of development	Variable values [unit]
GEOLOGICAL FACTORS	9.	Distance from the lignite seams	7a	The shapefile presenting the boundaries of mineral deposits in Poland, available in Polish Geological Institute database	Development of a raster presenting Euclidean distances from the lignite seams in the research area	0 – 865.8 [m]
	10.	Groundwater table elevation	7b	Hydrogeological Map of Poland from 2006 and drawn at scale 1:50000	Development of raster as the difference between DEM from 2020 (variable no. 14) and aquifer's depth layer, digitalised from the source material	102.3 – 163.1 [m a.s.l.]
	11.	Distance from gizers	7c	The shapefile presenting documented locations of gizers in the research area, obtained from the Polish Geological Institute	Development of a raster presenting Euclidean distances from the gizers in the research area	0 – 1382.9 [m]
	12.	Distance from the boundary of glaciotectonic changes	7d	The shapefile presenting extent of the glaciotectonic structures, obtained from the Polish Geological Institute	Development of a raster presenting Euclidean distances from the gizers in the research area	0 – 807.8 [m]
TOPOGRAPHIC FACTORS	13.	DEM (as in year 1911)	8a	German Topographical Map – Messtischblatt from 1911 drawn at the scale 1:25000	Development of DEM based on the contour and point elevation layers, digitalised from the source material	105.0 – 181.9 [m a.s.l.]
	14.	DEM (as in year 2020)	8b	Set of points with XYZ coordinates obtained from aerial laser scanning performed in 2020, available from the Central Office of Geodesy and Cartography	Development of DEM based on acquired point cloud	106.3 – 181.2 [m a.s.l.]
	15.	DEM of Difference (2020 – 1911)	8c	Variables no. 13 and 14	Difference between DEMs from years 2020 and 1911, respectively	-19.6 – 10.7 [m]
	16.	Distance from the anthropogenic lakes	8d	Vector data from Database of Topographical Objects (scale 1:10000), available from the Central Office of Geodesy and Cartography	Development of a raster presenting Euclidean distances from the anthropogenic lakes in the research area	0 – 1158.0 [m]
	17.	Slope of the terrain	8e	Set of points with XYZ coordinates obtained from aerial laser scanning performed in 2020, available from the Central Office of Geodesy and Cartography	Slope of the terrain was determined based on DEM (as in year 2020)	0 – 23.0 [º]
	18.	Aspect of the terrain	8f	Set of points with XYZ coordinates obtained from aerial laser scanning performed in 2020, available from the Central Office of Geodesy and Cartography	Aspect of the terrain was determined based on DEM (as in year 2020)	0 – 360 [º]*

* The value of 0° means North. The increase in the value of the angle, and hence the change of direction, occurs clockwise.