Table 1. Raster-based independent variables - for extrapolated data and for the survey point locations

Short name	Long name	Measurement unit / scale	Description	Reference	Extrapolated data
X	Longitude	meter	LAEA (Lambert Azimuthal Equal-Area)		Min.:2639031 1st Qu.:4264031 Median:4673031 Mean:4584285 3rd Qu.:5075031 Max.:5949031
Y	Latitude	meter	LAEA (Lambert Azimuthal Equal-Area)		Min.:1467235 1st Qu.:2526235 Median:3106235 Mean:3345820 3rd Qu.:4248235 Max.:5376235
abelow_biom	Above- and below-ground biomass	tons km^{-2}	Pan-European map of living forest above and below-ground biomass produced by JRC (resolution: 1 km).	Barredo Cano et al. (2012)	Min.: 33 1st Qu.: 6199 Median: 9336 Mean:11161 3rd Qu.:15901 Max.:33432
abelow_carbon	Above- and below-ground carbon	tons km^{-2}	Pan-European map of living forest above and below-ground carbon produced by JRC (resolution: 1 km).	Barredo Cano et al. (2012)	Min.: 16 1st Qu.: 3037 Median: 4482 Mean: 5455 3rd Qu.: 7698 Max.:17372
above_biomass	Above-ground biomass	tons km^{-2}	Pan-European map of living forest above-ground biomass produced by JRC (resolution: 1 km).	Barredo Cano et al. (2012)	Min.: 26 1st Qu.: 4972 Median: 7260 Mean: 8858 3rd Qu.:12736 Max.:25610
above_carbon	Above-ground carbon	tons km^{-2}	Pan-European map of living forest above-ground carbon produced by JRC (resolution: 1 km).	Barredo Cano et al. (2012)	Min.: 12 1st Qu.: 2450 Median: 3536 Mean: 4335 3rd Qu.: 6124 Max.:13134

accessibility	Travel time to closest city with population greater than 50,000 in 2000	Minutes	Travel time map from cities greater than 50,000 people produced by JRC and World Bank (resolution: 1 km)	Nelson (2008)	Min.: 0 1st Qu.: 68 Median: 134 Mean: 191 3rd Qu.: 250 Max.:1706
density	Population density (GEOSTAT)	People km^{-2}	Vector map of population density (1km x 1km polygons)	Eurostat (2011)	Min.: 0 1st Qu.: 0 Median: 0 Mean: 67 3rd Qu.: 3 Max.:12187
et	Reference evapotranspiration	mm yr^{-1}	Map of global potential evapotranspiration produced by CGIAR (resolution: 1 km)	Trabucco and Zomer, 2018	Min.: 349 1st Qu.: 658 Median: 807 Mean: 849 3rd Qu.:1005 Max.:1959
gsv	Growing stock volume	m^3 ha^{-1}	Volume of all living trees more than 10 cm in diameter at breast height measured over bark from ground or stump height to a top stem diameter of 0 cm for the year 2010 (resolution: 1 km)	Santoro et al. (2021)	Min.: 0 1st Qu.: 67 Median:143 Mean:153 3rd Qu.:225 Max.:735
increment	Forest biomass increment	ton ha^{-1} yr^{-1}	Pan-European map of forest biomass increment (resolution: 1 km)	Busetto et al. (2014)	Min.: 0.47 1st Qu.: 2.80 Median: 3.61 Mean: 3.64 3rd Qu.: 4.36 Max.:14.54
rainfall	Average annual rainfall (1970-2000)	mm yr^{-1}	Summation of average monthly rainfall for the period 1970-2000 (resolution: 1 km)	Fick et al. (2017)	Min.: 289 1st Qu.: 591 Median: 669 Mean: 744 3rd Qu.: 835 Max.:2955
slope	Average slope	Degrees	Slope computed from the EU-DEM from Copernicus resampled at a 1-km resolution	European Environment Agency, 2021.	Min.: 0.00 1st Qu.: 0.43 Median: 1.34 Mean: 2.85 3rd Qu.: 3.70 Max.:38.00

bearing_cap	Soil bearing capacity JRC data	0-1	0, if the soil is not a constraint, or 1, if the pixel has zero soil bearing capacity (soil type Histosol, Fluvisol, Gleysol and Andosol in layer FAO85lv1	European Soil Data Centre, 2021	Min.:0.00 Mean:0.09 Max.:1.00
access2015	travel time to cities 2015	minutes	New map of global accessibility (resolution: 1 km)	Weiss et al. (2018)	Min.: 0 1st Qu.: 33 Median: 58 Mean: 87 3rd Qu.: 105 Max.:1516
ruggedness	terrain ruggedness	meter	The terrain ruggedness is expressed in meters	Riley et al. (1999)	Min.: 0 1st Qu.: 10 Median: 28 Mean: 56 3rd Qu.: 73 Max.:1028
ownership	Forest ownership	Share of private ownership	Ownership map from EFI, 0 full state ownership, 100 – full private ownership	Pulla et al. (2013)	Min.: 0 1st Qu.: 36 Median: 60 Mean: 57 3rd Qu.: 82 Max.:100
asites_forest	type A sites Natura 2000 (i.e. SPAs),	0/1		Protected Planet, 2020	Min.:0.00 Mean:0.10 Max.:1.00
bsites_forest	B sites Natura 2000 (i.e. SCIs and SACs)	0/1		Protected Planet, 2020	Min.:0.00 Mean:0.13 Max.:1.00
csites_forest	Joint A and B site	0/1		Protected Planet, 2020	Min.:0.00 Mean:0.03 Max.:1.00
Countries (33 variables)	Which country the pixel is in – binary variable	classes		Eurostat, 2021. NUTS administrative units.	See supplementary files
Tree specie family name (e.g. Castanea) (20 variables)	Species distribution rasters for 20 tree species	classes	Percentage share of the respective tree species from land area (0-100)	Brus et al, 2012	See supplementary files
Dominant tree specie (20 variables)		0/1	Binary variable (0/1) showing which tree specie is the dominant one	Brus et al, 2012	See supplementary files

Corine_2018, CLC_Nomenclature and CLC_Forest	Corine Land Cover	classes	Provides pan-European CORINE Land Cover inventory for 44 thematic classes for the 2018 reference year Unit: classes	Kosztra et al, 2019	See below for details
Pathfinder_management	European management map	classes	A map of 5 classes for forest management for Europe in 1x1km resolution	Scherpenhuijzen et al, 2025	See below for details
IIASA_management	Global management map	classes	A map on forest management at a global scale (100x100m) for 2015	Lesiv, 2022	See below for details
Pathfinder_age_class	Age class	classes	Forest (8) age classes are obtained from data by at a 8x8km resolution	Scherpenhuijzen et al, 2023; Pucher et al. (2022)	See below for details
Pathfinder_even_aged	Age structure	Classes 0 – Even-aged 1 – Uneven-aged	Age structure is categorized as even-aged when over 40% of forest area belongs to a single age class obtained from data at a 8x8km resolution. The age structure is categorized as even-aged when over 40% of forest area belongs to a single 20-year age bin, and as uneven if not.	Pucher et al. (2022) Scherpenhuijzen et al, 2023	See below for details
Pathfinder_disturbance_size	Disturbances size	ha/9km^2	Map of average sizes of forest disturbances where natural, semi-natural and management disturbances are not distinguished 30x30m resolution. Number of hectares (size of patches) of disturbed forest per 9km^2 (e.g. 5 ha/9km^2)	Scherpenhuijzen et al, 2025; Senf & Seidl, 2021	See below for details
Pathfinder_disturbance_freq	Disturbances frequency	frequency/year/9km^2	Map of number of forest disturbances that occurs per year, where natural, semi-natural and management disturbances are not distinguished (at 30x30m resolution). Frequency of disturbance occurrences (number of patches) per 9km^2 per year (e.g. 10 patches/year /9km^2)	Scherpenhuijzen et al, 2025; Senf & Seidl, 2021	See below for details
Pathfinder_forest_mask	Forest Mask	Percentage (%)	Forest mask is derived from Senf & Seidl (2021) and CORINE (HRL -TCD) at a 1x1km resolution, each pixel containing a percentage of forest. The percentage (%) of forest present in the pixel cell.	Scherpenhuijzen et al, 2025	See below for details
Pathfinder_primary_forest	Primary Forest	0/1	The European Primary Forests Database (EPFD). Forests where there are no signs of human intervention, or these signs are strongly blurred by decades (60-80 years) of non-intervention at a 1x1km resolution.	Sabatini et al., 2021	See below for details

Some of the variables presented in Table 1 require further explanation:
Corine Land Cover (Kosztra et al, 2019)
There are 3 distinct columns in the dataset that refers to Corine Land Cover data:

- "Corine_2018": shows the correspondent value per land cover class found in the original raster value [From 1 to 48, where 48 is 'NODATA']
- "CLC_Nomenclature": shows the raster values classified into the main 6 category groups according to Corine guidelines (Kosztra et al, 2019)
    - Artificial Surfaces
    - Agricultural areas
    - Forest and semi natural areas
    - Wetlands
    - Water bodies
    - NODATA
- "CLC_Forest": indicates the land cover group 3. Forest and seminatural areas into the more explicit categories (3.1 Forest), which is divided into:
    - broad-leaved forest
    - coniferous forest
    - mixed forest

All the other land cover group which are not classified under the 3.1 Forest category are classified "NaN".

Table 2. European management map classification (Scherpenhuijzen et al, 2025)

Class	Summary	Description
0	Not a forest	Not a forest
1	Unmanaged forest	Forest systems with limited or no anthropogenic disturbance, with its ecological functions largely intact and little-to-no management in place
2	Close-to-nature forestry	Forest systems with limited anthropogenic disturbance, characterized by uneven-aged and mature stand structures, where management activities mostly aim to support biodiversity, resilience, and climate adaptation
3	Combined objective forestry	Forest systems where multiple functions are promoted and no single objective dominates. Functions may include protection, recreation, wood production, among others
4	Intensive forestry	Forest systems managed for wood production. Management activities include frequent and/or large-scale felling
5	Very intensive forestry	Forest systems intensely used for wood production, including short-rotation forestry. Management activities include very frequent and/or large-scale felling, often with even-aged management, and may consist of fast-growing tree species

Global management map (Lesiv, 2022)
Management classes:

- 11 - Naturally regenerating forest without any signs of human activities, e.g., primary forests.
- 20 - Naturally regenerating forest with signs of human activities, e.g., logging, clear cuts etc.
- 31 - Planted forest.
- 32 - Short rotation plantations for timber.
- 40 - Oil palm plantations.
- 53 - Agroforestry.

Age class (Pucher et al, 2022)

Forest age classes are divided into 8 classes of 20 years bins:

- 0 – 0 to 20 years
- 1 – 20 to 40 years
- 2 – 40 to 80 years
- 3 – 80 to 100 years
- 4 – 100 to 120 years
- 5 – 120 to 140 years
- 6 – 140 to 160 years
- 7 – 160 to 180 years
- 8 – 180 to >200 years

DEPENDENT VARIABLES

Q15

- On average, how often do you visit this forest/park?

1	Once a year
2	A few times a year
3	Monthly
4	2-3 times a month
5	Once per week
6	2-3 times per week
7	4-6 times a week
8	Daily

Q17

How long do you need to travel to this forest/park?

- Please enter travel time ____ (in minutes)
- I do not know

Q18

The forest/park you indicated on the map may have several disbenefits. How important are the following disbenefits of this forest/park to you?*

1	…is obscuring views
2	…Is foregone land use opportunity (e.g. less land for industry, housing and businesses)
3	…Causes damage to public infrastructure (e.g. trees falling on electricity lines)
4	…Has a negative impact on the local climate
5	… Is unsafe (e.g. uncontrolled pet dogs, risk of crime, falling branches)
6	…Contributes to air pollution from blocking wind
7	…Is a source of health risks (e.g. wildlife/insect bites, allergies)
8	…Is a cost to society (e.g. costs for planting, maintaining, removal)
9	…Poses a threat to homes and properties (e.g. forest fires, storms)
10	…Causes environmental issues (e.g. spread of invasive species)

Q20
The forest/park you indicated on the map may have certain characteristics. How important are the following characteristics of this forest/park to you?*
Please only rate the characteristics that apply to the forest/park you indicated on the map.

	Characteristics
1	Cleanliness
2	Within close reach (time to get there)
3	Accessibility (e.g. parking space, public transport, secure bike stalls)
4	Light at night
5	Availability of garbage bins
6	Water features (e.g. ponds, fountains, streams, lakes)
7	Soft pathways (blank soils, sand)
8	Hard Pathways (concrete, asphalt)
9	Presence of recreational areas (e.g. sports fields)
10	Presence of road signs and information panels
11	Availability of benches
12	Availability of playgrounds
13	Availability of public toilets
14	Availability of picnic places

Q21
Please specify the reasons why you go to the forest/park you indicated on the map*

	Reasons
1	To physically exercise (running, biking, horse riding, swimming, etc.)
2	To walk the dog(s)
3	To take the children out
4	To be alone & relax
5	For social activities (e.g. to meet friends and family, picnics, BBQs)
6	To get away from everyday life
7	To enjoy its climate
8	To enjoy the beauty
9	To learn about nature

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