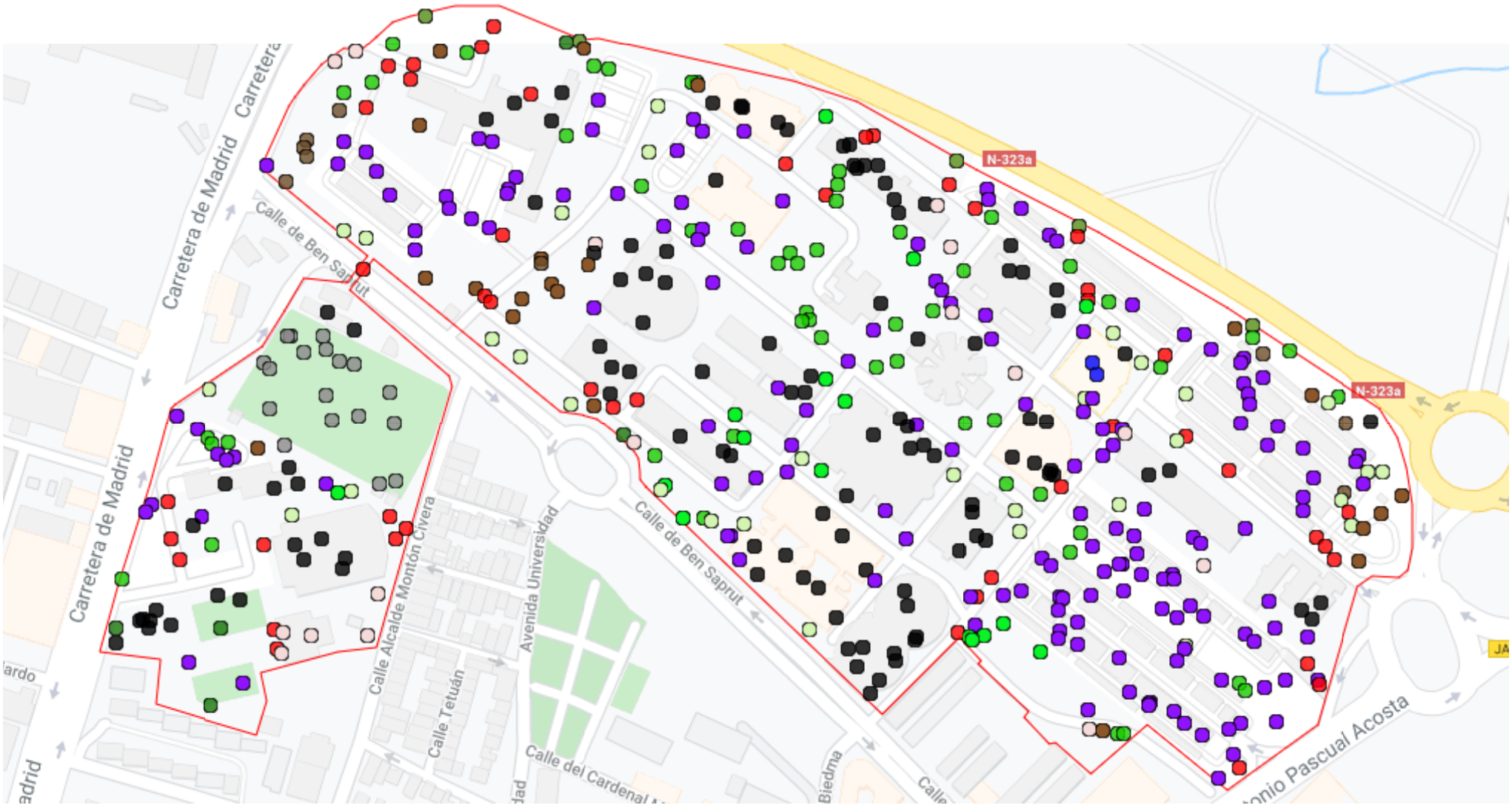
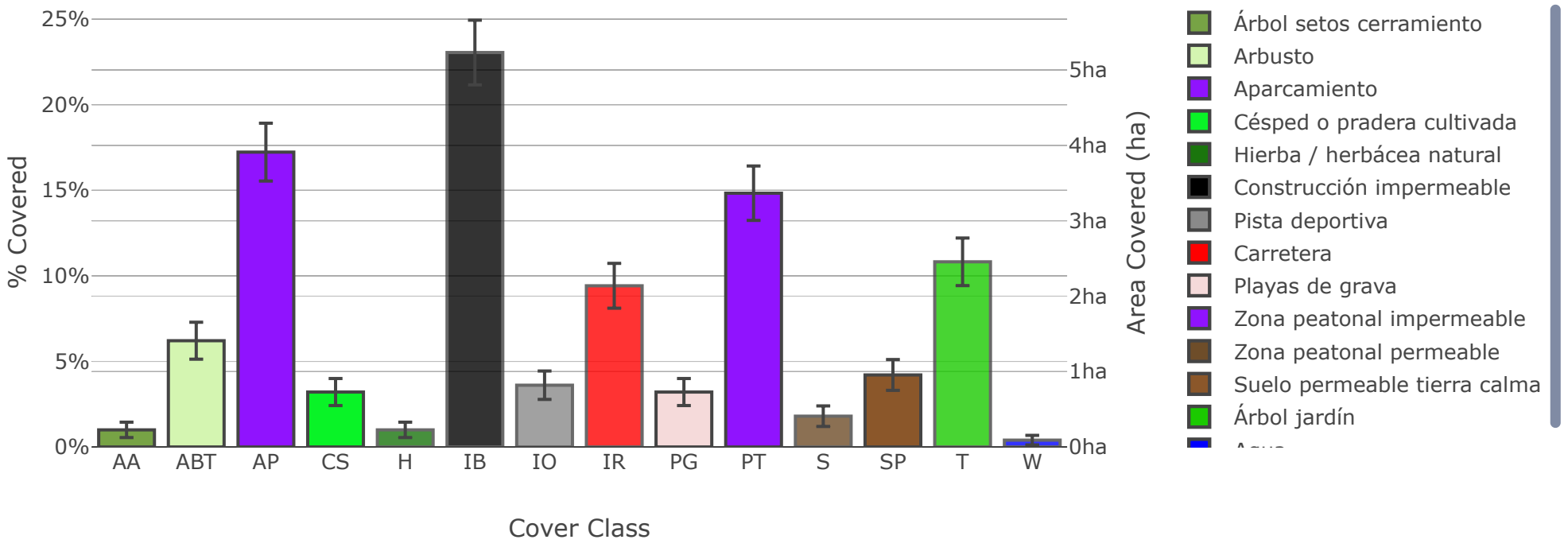
i-Tree Canopy v7.1

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 6/8/2021



Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ha) ± SE
AA	Árbol setos cerramiento		5	1.00 ± 0.45	0.23 ± 0.10
ABT	Arbusto		31	6.21 ± 1.08	1.41 ± 0.25
AP	Aparcamiento		86	17.23 ± 1.69	3.91 ± 0.38
CS	Césped o pradera cultivada		16	3.21 ± 0.79	0.73 ± 0.18
H	Hierba / herbácea natural		5	1.00 ± 0.45	0.23 ± 0.10
IB	Construcción impermeable		115	23.05 ± 1.89	5.23 ± 0.43
IO	Pista deportiva		18	3.61 ± 0.83	0.82 ± 0.19
IR	Carretera		47	9.42 ± 1.31	2.14 ± 0.30
PG	Playas de grava		16	3.21 ± 0.79	0.73 ± 0.18
PT	Zona peatonal impermeable		74	14.83 ± 1.59	3.37 ± 0.36
S	Zona peatonal permeable		9	1.80 ± 0.60	0.41 ± 0.14
SP	Suelo permeable tierra calma		21	4.21 ± 0.90	0.96 ± 0.20
T	Árbol jardín		54	10.82 ± 1.39	2.46 ± 0.32
W	Agua		2	0.40 ± 0.28	0.09 ± 0.06
Total			**499**	**100.00**	**22.70**

Tree Benefit Estimates: Carbon (Metric units)

Description	Carbon (t)	±SE	CO_2 Equiv. (t)	±SE	Value (EUR)	±SE
Sequestered annually in trees	15.73	±1.30	57.68	±4.77	€3,181	±263
Stored in trees (Note: this benefit is not an annual rate)	395.04	±32.68	1,448.48	±119.84	€79,891	±6,610

Currency is in EUR and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 3.060 t of Carbon, or 11.220 t of CO_2, per ha/yr and rounded. Amount stored is based on 76.848 t of Carbon, or 281.776 t of CO_2, per ha and rounded. Value (EUR) is based on €202.23/t of Carbon, or €55.15/t of CO_2 and rounded. (Metric units: t = tonnes, metric tons, ha = hectares)

Tree Benefit Estimates: Air Pollution (Metric units)

Abbr.	Description	Amount (kg)	±SE	Value (EUR)	±SE
CO	Carbon Monoxide removed annually	7.86	±0.65	€9	±1
NO2	Nitrogen Dioxide removed annually	142.99	±11.83	€11	±1
O3	Ozone removed annually	544.57	±45.06	€177	±15
SO2	Sulfur Dioxide removed annually	47.85	±3.96	€1	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	31.38	±2.60	€302	±25
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	140.82	±11.65	€1,504	±124
Total		**915.46**	**±75.74**	**€2,004**	**±166**

Currency is in EUR and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Air Pollution Estimates are based on these values in kg/ha/yr @ €/kg/yr and rounded:
CO 1.528 @ €1.13 | NO2 27.817 @ €0.07 | O3 105.936 @ €0.33 | SO2 9.308 @ €0.01 | PM2.5 6.104 @ €9.63 | PM10* 27.394 @ €10.68 (Metric units: kg = kilograms, ha = hectares)

Tree Benefit Estimates: Hydrological (Metric units)

Abbr.	Benefit	Amount (l)	±SE	Value (EUR)	±SE
AVRO	Avoided Runoff	936,371.05	±77,473.31	€1,777	±147
E	Evaporation	5,691,701.05	±470,919.03	N/A	N/A
I	Interception	5,723,107.16	±473,517.50	N/A	N/A
T	Transpiration	19.26	±1.59	N/A	N/A
PE	Potential Evaporation	30,948,040.93	±2,560,573.93	N/A	N/A
PET	Potential Evapotranspiration	24,509,019.19	±2,027,823.21	N/A	N/A

Currency is in EUR and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in l/ha/yr @ €/l/yr and rounded:
AVRO 182,154.023 @ €0.00 | E 1,107,217.326 @ N/A | I 1,113,326.815 @ N/A | T 3.747 @ N/A | PE 6,020,380.696 @ N/A | PET 4,767,785.668 @ N/A (Metric units: l = liters, ha = hectares)

About i-Tree Canopy

The concept and prototype of this program were developed by David J. Nowak, Jeffery T. Walton, and Eric J. Greenfield (USDA Forest Service). The current version of this program was developed and adapted to i-Tree by David Ellingsworth, Mike Binkley, and Scott Maco (The Davey Tree Expert Company)

Limitations of i-Tree Canopy

The accuracy of the analysis depends upon the ability of the user to correctly classify each point into its correct class. As the number of points increase, the precision of the estimate will increase as the standard error of the estimate will decrease. If too few points are classified, the standard error will be too high to have any real certainty of the estimate.

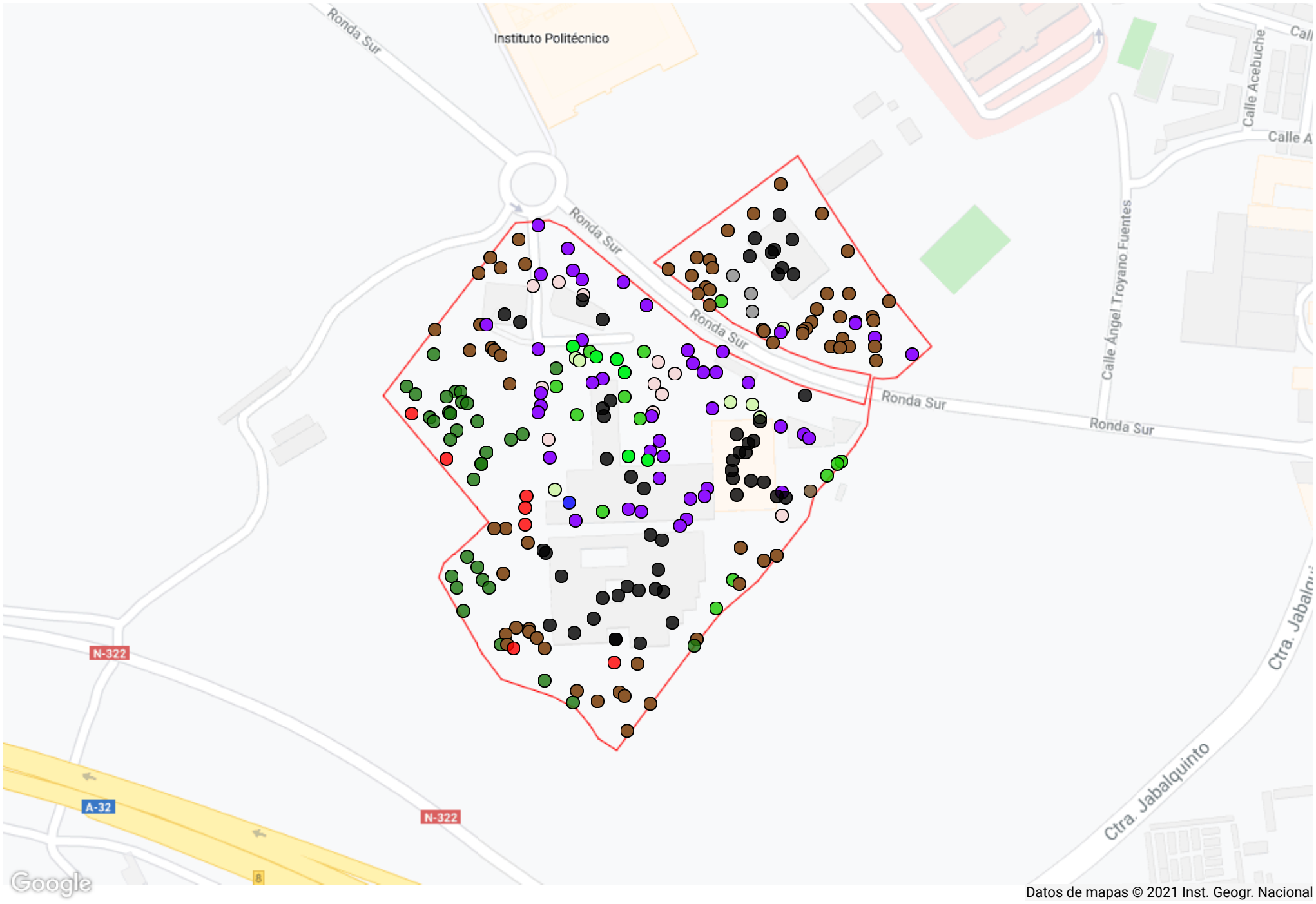
Additional support provided by:

Use of this tool indicates acceptance of the EULA.

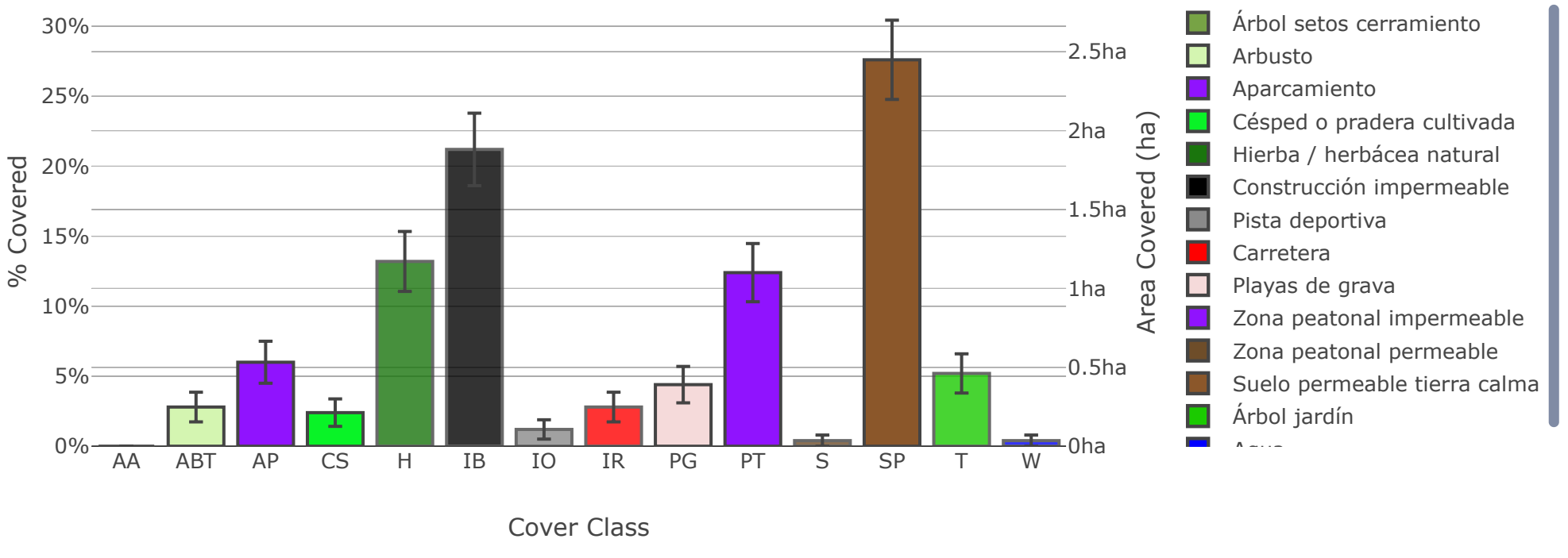
i-Tree Canopy v7.1

Informe de evaluación de cobertura y beneficios de los árboles

Estimado utilizando estadísticas de muestreo aleatorio el 8/6/2021



Land Cover



Abbr.	Clase de portada	Descripción	Puntos	% Cobertura ± SE	Área (ha) ± SE
AA	Árbol setos cerramiento		0	0,00 ± 0,00	0,00 ± 0,00
ABT	Arbusto		7	2,80 ± 1,06	0,25 ± 0,09
AP	Aparcamiento		15	6,00 ± 1,50	0,53 ± 0,13
CS	Césped o pradera cultivada		6	2,40 ± 0,98	0,21 ± 0,09
H	Hierba / herbácea natural		33	13,20 ± 2,14	1,17 ± 0,19
IB	Construcción impermeable		53	21,20 ± 2,59	1,88 ± 0,23
IO	Pista deportiva		3	1,20 ± 0,69	0,11 ± 0,06
IR	Carretera		7	2,80 ± 1,06	0,25 ± 0,09
PG	Playas de grava		11	4,40 ± 1,30	0,39 ± 0,12
PT	Zona peatonal impermeable		31	12,40 ± 2,08	1,10 ± 0,18
S	Zona peatonal permeable		1	0,40 ± 0,40	0,04 ± 0,04
SP	Suelo permeable tierra calma		69	27,60 ± 2,83	2,45 ± 0,25
T	Árbol jardín		13	5,20 ± 1,40	0,46 ± 0,12
W	Agua		1	0,40 ± 0,40	0,04 ± 0,04
Total			**250**	**100,00**	**8,88**

Estimaciones de los beneficios de los árboles: carbono (unidades métricas)

Descripción	Carbono (t)	± SE	CO_2 Equiv. (t)	± SE	Valor (EUR)	± SE
Secuestrado anualmente en árboles	6.52	± 0,73	23,90	± 2,69	1.319 €	± 148
Almacenado en árboles (Nota: este beneficio no es una tasa anual)	163,69	± 18,42	600,20	±67.55	€33,131	±3,729

Currency is in EUR and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 3.060 t of Carbon, or 11.220 t of CO_2, per ha/yr and rounded. Amount stored is based on 76.848 t of Carbon, or 281.776 t of CO_2, per ha and rounded. Value (EUR) is based on €202.40/t of Carbon, or €55.20/t of CO_2 and rounded. (Metric units: t = tonnes, metric tons, ha = hectares)

Tree Benefit Estimates: Air Pollution (Metric units)

Abbr.	Description	Amount (kg)	±SE	Value (EUR)	±SE
CO	Carbon Monoxide removed annually	3.25	±0.37	€4	±0
NO2	Nitrogen Dioxide removed annually	59.25	±6.67	€4	±0
O3	Ozone removed annually	225.65	±25.40	€73	±8
SO2	Sulfur Dioxide removed annually	19.83	±2.23	€0	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	13.00	±1.46	€125	±14
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	58.35	±6.57	€624	±70
Total		**379.33**	**±42.69**	**€831**	**±93**

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CO 1.528 @ €1.13 | NO2 27.817 @ €0.07 | O3 105.936 @ €0.33 | SO2 9.308 @ €0.01 | PM2.5 6.104 @ €9.63 | PM10* 27.394 @ €10.69 (Metric units: kg = kilograms, ha = hectares)

Tree Benefit Estimates: Hydrological (Metric units)

Abbr.	Benefit	Amount (l)	±SE	Value (EUR)	±SE
AVRO	Avoided Runoff	387,996.33	±43,667.55	€737	±83
E	Evaporation	2,358,423.10	±265,431.76	N/A	N/A
I	Interception	2,371,436.59	±266,896.38	N/A	N/A
T	Transpiration	7.98	±0.90	N/A	N/A
PE	Potential Evaporation	12,823,683.82	±1,443,258.00	N/A	N/A
PET	Potential Evapotranspiration	10,155,599.62	±1,142,975.03	N/A	N/A

Currency is in EUR and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in l/ha/yr @ €/l/yr and rounded:

AVRO 182,154.023 @ €0.00 | E 1,107,217.326 @ N/A | I 1,113,326.815 @ N/A | T 3.747 @ N/A | PE 6,020,380.696 @ N/A | PET 4,767,785.668 @ N/A (Metric units: l = liters, ha = hectares)

Acerca de i-Tree Canopy

El concepto y prototipo de este programa fueron desarrollados por David J. Nowak, Jeffery T. Walton y Eric J. Greenfield (USDA Forest Service). La versión actual de este programa fue desarrollada y adaptada a i-Tree por David Ellingsworth, Mike Binkley y Scott Maco (The Davey Tree Expert Company)

Limitaciones de i-Tree Canopy

La precisión del análisis depende de la capacidad del usuario para clasificar correctamente cada punto en su clase correcta. A medida que aumenta el número de puntos, la precisión de la estimación aumentará a medida que disminuirá el error estándar de la estimación. Si se clasifican muy pocos puntos, el error estándar será demasiado alto para tener una certeza real de la estimación.

Soporte adicional proporcionado por:

El uso de esta herramienta indica la aceptación del EULA .