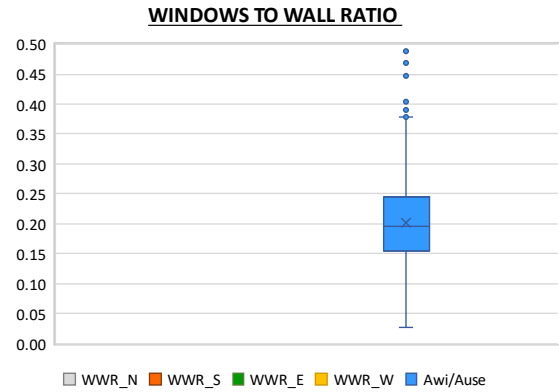
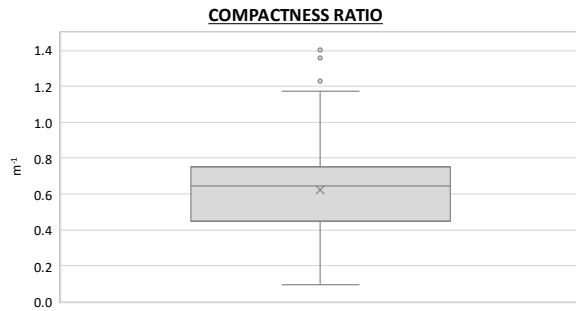


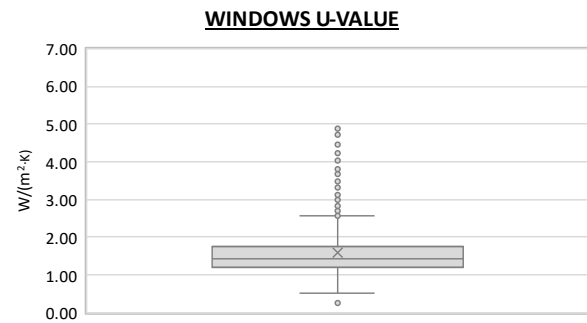
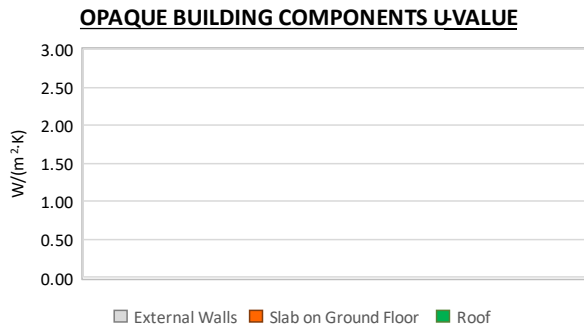
Region:	Piedmont					Archetype code: RES_APPBLOCK_2011- _F_PIE		
Building category:	Residential buildings - Apartments (in multifamily blocks)							
Period of construction:	> 2010							
Climatic zone:	F	Number of records:	1165					
Description (the codes associated with walls and slabs refer to the structures described in UNI/TR 11552:2014): External walls: hollow brick masonry with thermal insulation (cod. MCV02). Roof slabs: reinforced concrete floor slab (cod. SOL04).							Data sources: EPC databases (100%)	
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
BUILDING GEOMETRY	Number of floors	n_f	-	-	-	-	-	-
	Gross height	H_g	m	-	-	-	-	-
	Footprint area	$A_{\text{footprint}}$	m ²	-	-	-	-	-
	Heated gross floor area	$A_{H,g}$	m ²	-	-	-	-	-
	Heated net floor area	$A_{H;n}$	m ²	-	-	-	-	-
	Heated gross volume	$V_{H,g}$	m ³	-	-	-	-	-
	Heated net volume	$V_{H;n}$	m ³	-	-	-	-	-
	Compactness ratio	$A_{\text{env}}/V_{H,g}$	m ⁻¹	0.62	0.24	0.45	0.64	0.75
	WWR – North orientation	WWR_N	-	-	-	-	-	-
	WWR – South orientation	WWR_S	-	-	-	-	-	-
	WWR – East orientation	WWR_E	-	-	-	-	-	-
	WWR – West orientation	WWR_W	-	-	-	-	-	-
	Window to useful floor area ratio	A_{wi}/A_{use}	-	0.20	0.07	0.15	0.20	0.24
	ENVELOPE	Roof type	-					
U-value of the roof		$U_{f;up}$	W/(m ² ·K)	-	-	-	-	-
External walls type		Hollow brick masonry: 73%; Solid Brick masonry: 19%; Unknown: 7%; Prefabricated panels: 1%						
U-value of the wall		U_{wl}	W/(m ² ·K)	-	-	-	-	-
Slab on ground floor type		-						
U-value of the floor		$U_{f;l,w}$	W/(m ² ·K)	-	-	-	-	-
Windows type		-						
U-value of the windows		U_W	W/(m ² ·K)	1.59	0.68	1.20	1.44	1.74
GAINS and VENTILATION	Shading system type	-						
	Occupancy density *	O_C	person/m ²	UNI EN 16798-1 - Table A.19				
	Lighting power density *	W_L	W/m ²	UNI EN 16798-1 - A.8.3				
	Equipment power density *	W_A	W/m ²	UNI EN 16798-1 - A.8.3				
	Type of ventilation	Natural: 100%						
THERMAL SYSTEMS	Air exchange rate *	n	h ⁻¹	0.30	0.00	0.30	0.30	0.30
	Heating system type	Autonomous: 61%; Centralized: 39%						
	Heating generator	-						
	Daily operating time of the heating system *	t_H	h	No limitation				
	Energy carrier	Natural Gas: 57%; Electricity: 25%; District heating: 8%; Solid biomass: 6%; LPG: 2%; Liquid and gaseous biomass: 1%; Gas Oil: 1%						
	Heating emission sub-system	-						
	Cooling system type	-						
	Daily operating time of the cooling system *	t_C	h	-	-	-	-	-
	Cooling emission sub-system	-						
	DHW system type	Autonomous, coupled with heating: 47%; Centralized, coupled with heating: 35%; Autonomous, detached from heating: 17%; Centralized, detached from heating: 1%						
	DHW generator	-						
* These values are derived from UNI EN ISO Standards								

Region:	Piedmont	Archetype code: RES_APPBLOCK_2011- _F_PIE
Building category:	Residential buildings - Apartments (in multifamily blocks)	
Period of construction:	> 2010	
Climatic zone:	F	
Number of records:		1165

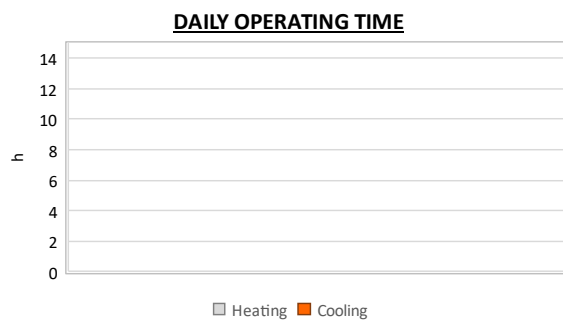
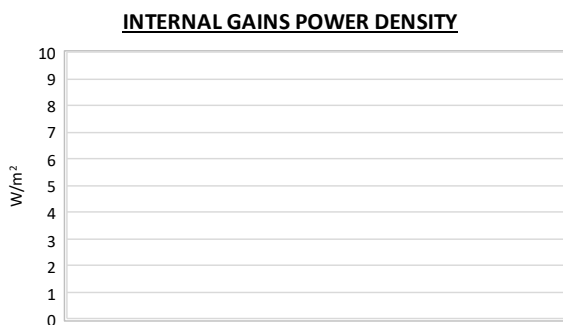
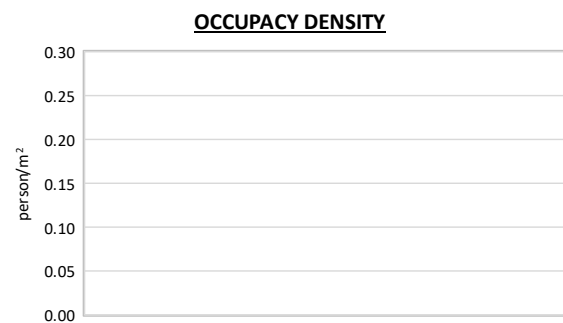
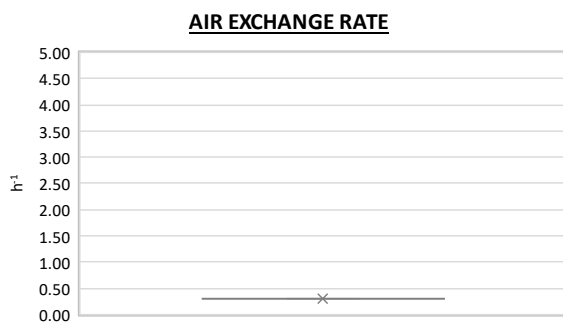
Numerical variables – GEOMETRY



Numerical variables – ENVELOPE



Numerical variables – GAINS, VENTILATION and SYSTEMS USAGE



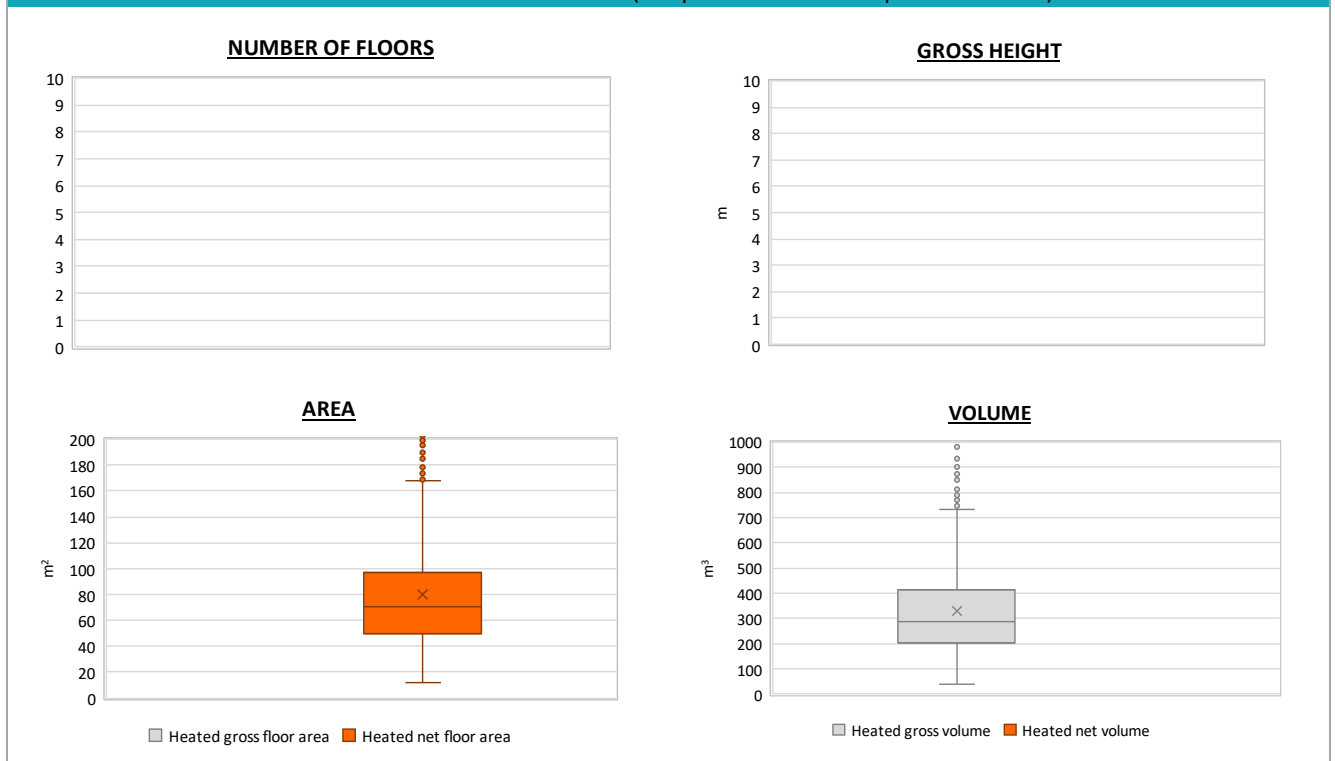
The data can be used for analysis, modeling, and research purposes, as long as it remains unaltered in its original form. Users are free to publish results based on the data, provided they credit the original source.

Region:	Piedmont	Archetype code: RES_APPBLOCK_2011- _F_PIE
Building category:	Residential buildings - Apartments (in multifamily blocks)	
Period of construction:	> 2010	
Climatic zone:	F	
Number of records:		1165

ADDITIONAL DATA								
	Data	Symbol	Unit of measure	Mean value	Standard deviation	Q1 (first quartile)	Median value	Q3 (third quartile)
GEOMETRY: apartments	Inter-storey height	H_n	m	-	-	-	-	-
	Heated gross floor area	$A_{H,g}$	m ²	-	-	-	-	-
	Heated net floor area	$A_{H,n}$	m ²	79.8	40.4	49.8	70.8	97.4
	Heated gross volume	$V_{H,g}$	m ³	330.0	176.7	202.0	287.8	414.6
	Heated net volume	$V_{H,n}$	m ³	-	-	-	-	-
THERMAL SYSTEMS	Heating efficiency or <i>COP</i>	$\eta_{H,gen}$ or $COP_{H,gen}$	-	This value has to be retrieved from suitable datasheets				
	Total heating power *	$P_{H,gen}$	kW	20.7	9.7	11.7	23.7	27.6
	Cooling efficiency or <i>EER</i>	$\eta_{C,gen}$ or $EER_{C,gen}$	-	This value has to be retrieved from suitable datasheets				
	Total cooling power *	$P_{C,gen}$	kW	7.7	3.6	6.6	6.6	6.6
	Temperature of DHW	ϑ_w	°C	40.0	0.0	40.0	40.0	40.0
	DHW system power *	$P_{W,gen}$	kW	20.0	10.8	9.6	24.0	27.7

* These values refer to the apartment scale

Additional data: GEOMETRY (the plots refer to the apartment scale)



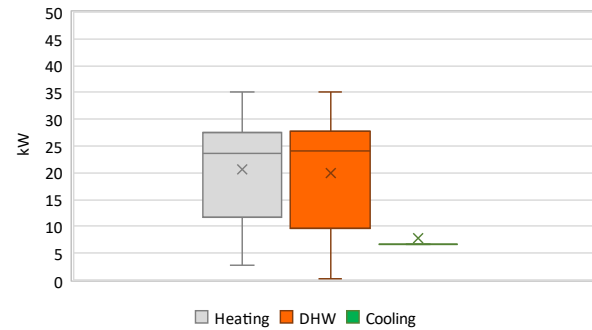
Region:	Piedmont	Archetype code: RES_APPBLOCK_2011- _F_PIE
Building category:	Residential buildings - Apartments (in multifamily blocks)	
Period of construction:	> 2010	
Climatic zone:	F	
Number of records:		1165

Additional data: other numerical variables that are not included in the archetype

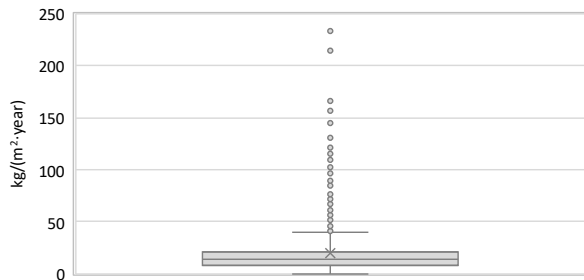
DHW SUPPLY TEMPERATURE



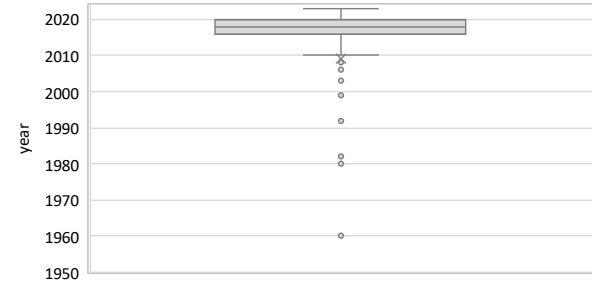
SYSTEM POWER



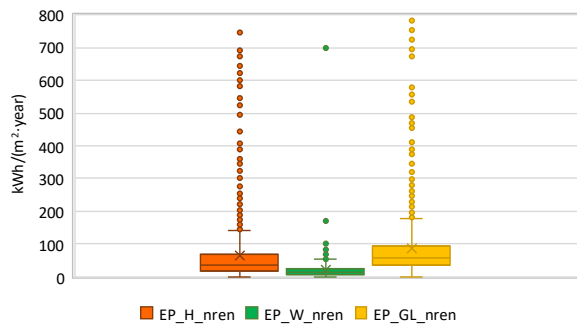
CO₂ EMISSION



HEATING SYSTEM INSTALLATION YEAR



NON-RENEWABLE PRIMARY ENERGY USE



RENEWABLE PRIMARY ENERGY USE

