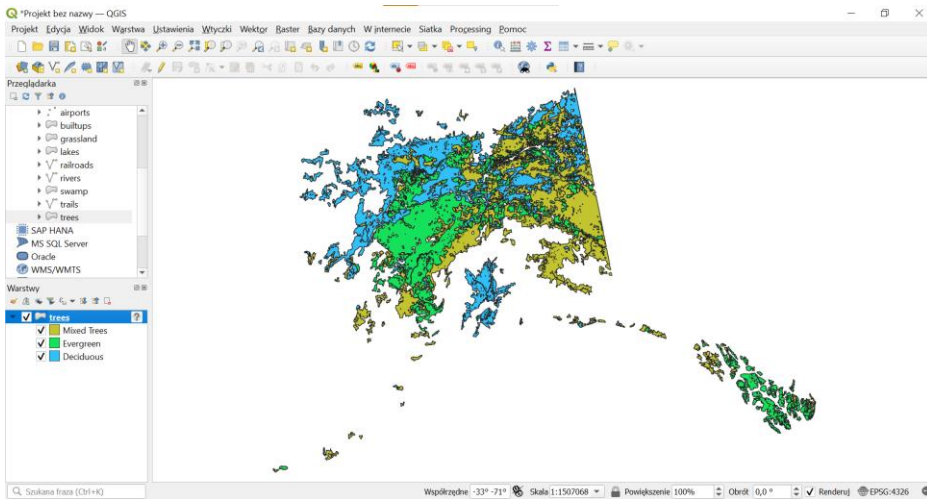


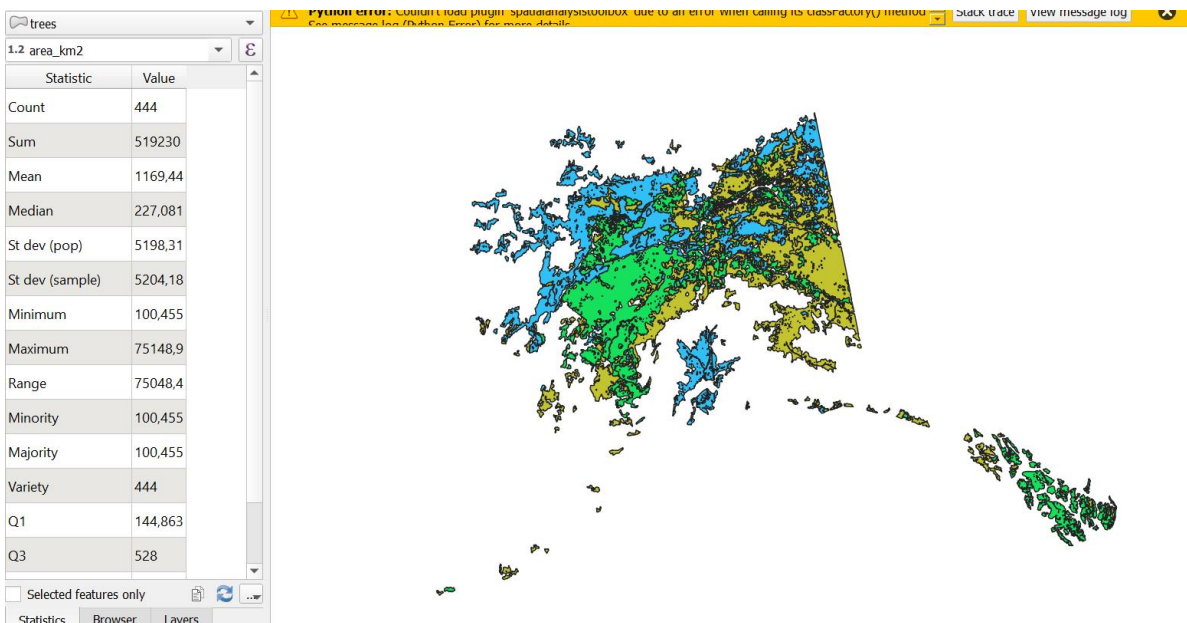
ZADANIE 1

Etykieta	Reguła	Min. skala	Maks. skala	Liczba
<input checked="" type="checkbox"/>	Mixe... vegdesc='Mixed Trees'			
<input checked="" type="checkbox"/>	Everg... vegdesc='Evergreen'			
<input checked="" type="checkbox"/>	Decid... vegdesc='Deciduous'			



Statistics by category — Features Total: 3, Filtered: 3, Selected: 0

	vegdesc	count	unique	empty	filled	min	max	min_length	max_length	mean_length
1	Deciduous	125	1	0	125	Deciduous	Deciduous	9	9	9
2	Mixed Trees	164	1	0	164	Mixed Trees	Mixed Trees	11	11	11
3	Evergreen	155	1	0	155	Evergreen	Evergreen	9	9	9



Statistics

vegdesc_Mixed Trees

1.2 area_km2

Statistic	Value
Count	164
Sum	189273
Mean	1154,11
Median	223,909
St dev (pop)	4060,74
St dev (sample)	4073,17
Minimum	100,455
Maximum	40966
Range	40865,6
Minority	100,455
Majority	100,455
Variety	164
Q1	134,136
Q3	461,943

☐ Selected features only

POLE POWIERZCHNI WSZYSTKICH LASÓW O CHARAKTERZE MIESZANYM WYNOSI : 189273 km2

Group Stats

Data Features Window Help

1	2
1. vegdesc	
2 Deciduous	165378
3 Evergreen	164579
4 Mixed Trees	189273

Control panel

Layers: trees

Fields: min, stand.dev., sum, unique, variance

Filter: Columns

Rows: vegdes, sum, area_km2

Value ☐ use NULL values

☐ Use only selected features

Calculate

Calculate... 100% | generate view...100% | done.

ZADANIE 2

Split Vector Layer

Parameters Log

Input layer
trees-fixed_geometry [EPSG:4326]

☐ Selected features only

Unique ID field
abc-vegdesc

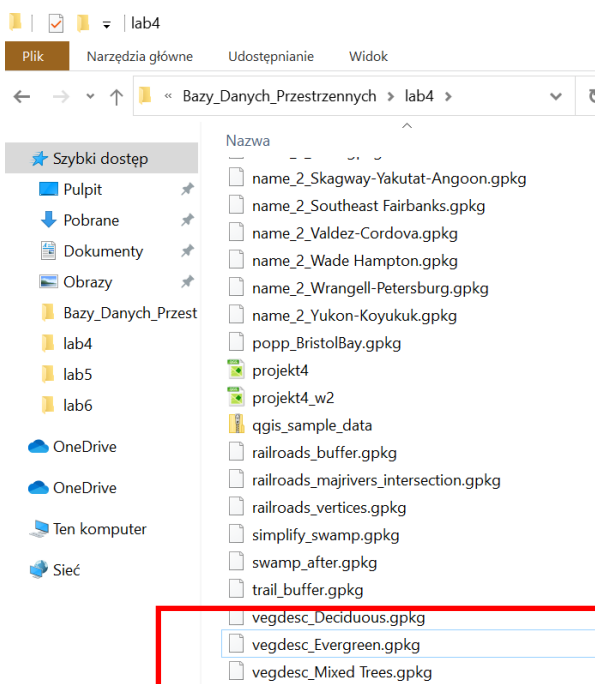
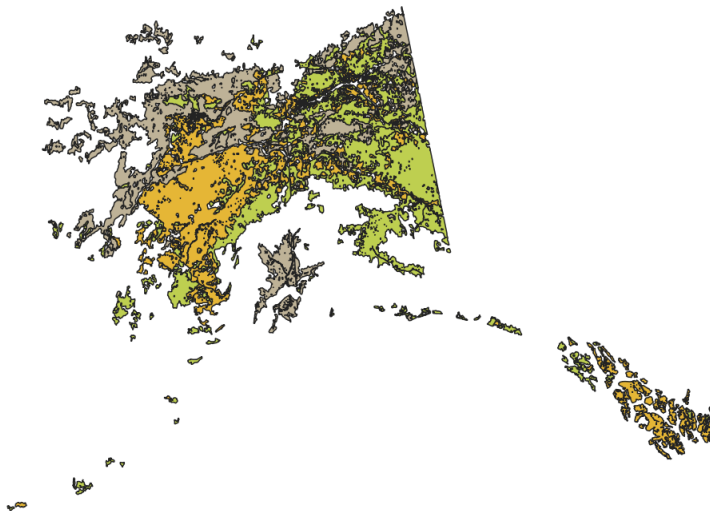
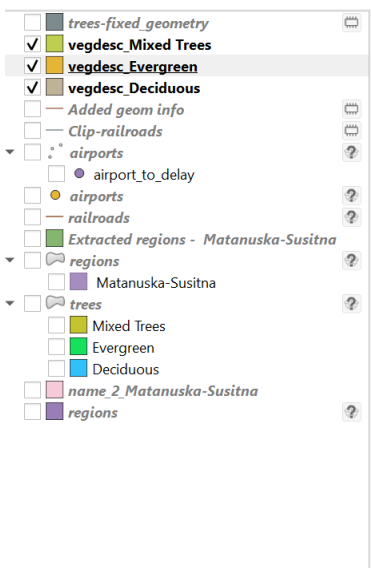
☒ Add field prefix to file names

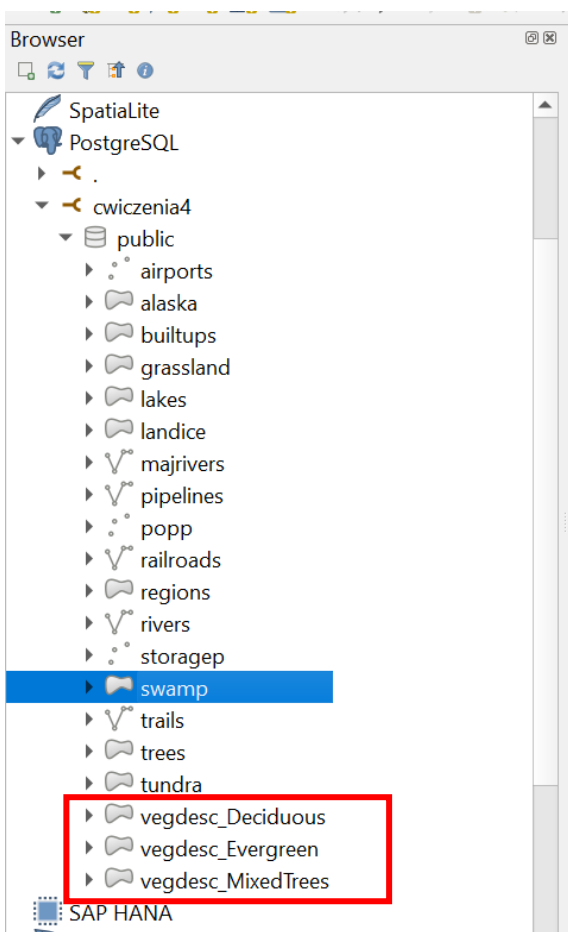
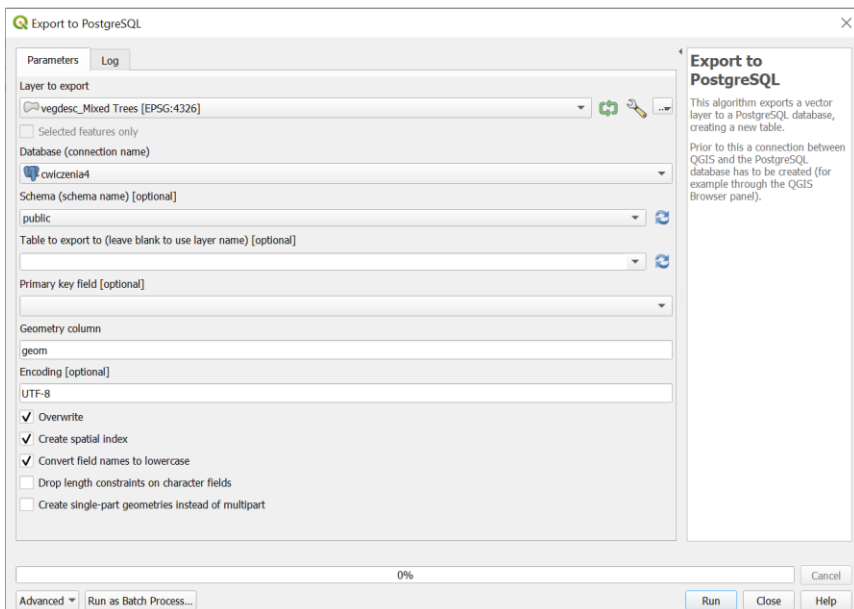
▼ Advanced Parameters

Output file type [optional]
gpkg

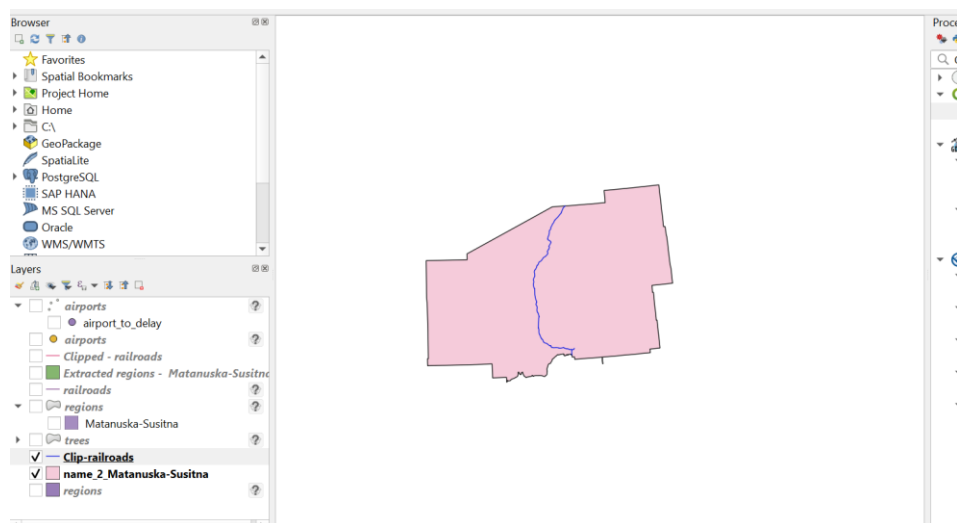
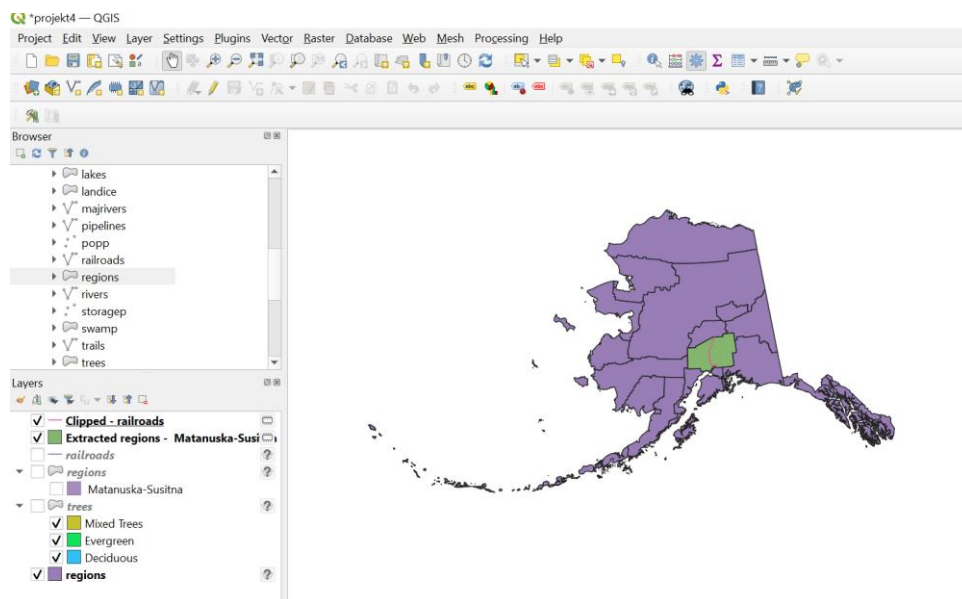
Output directory
[Save to temporary folder]

PODZIAŁ DO PLIKÓW .GPKG I EKSPORT DO BAZY DANYCH :





ZADANIE 3



Add Geometry Attributes

Parameters
Log

Input layer
Clip-railroads [EPSG:4326]

☐ Selected features only

Calculate using
Layer CRS

Added geom info
[Create temporary layer]

☒ Open output file after running algorithm

0%

Advanced
Run as Batch Process...
Run
Close
Help

Add geometry attributes

This algorithm computes geometric properties of the features in a vector layer. It generates a new vector layer with the same content as the input one, but with additional attributes in its attributes table, containing geometric measurements.

Depending on the geometry type of the vector layer, the attributes added to the table will be different.

DŁUGOŚĆ LINII KOLEJOWYCH DLA REGIONU MATANUSKA-SUSITNA: 880924

Statistics

Added geom info

1.2 length

Statistic	Value
Count	22
Sum	880924
Mean	40042
Median	26301,1
St dev (pop)	38617,5
St dev (sample)	39526,3
Minimum	3334,39
Maximum	155781
Range	152447
Minority	3334,39
Majority	3334,39
Variety	22
Q1	13542,3
Q3	52548,3

☐ Selected features only

Statistics
Browser
Layers

ZADANIE 4

LOTNISKA O CHARAKTERZE MILITARNYM SĄ ŚREDNIO POŁOŻONE NA WYSOKOŚCI 593,25 M.N.P.M.

The screenshot shows the QGIS Group Stats window. The main table displays the following data:

	1	2
1	use	
2	Military	593,25

The Control panel on the right shows the following settings:

- Layers: airports
- Fields: id, name, use, average, count
- Filter: "use" = 'Military'
- Columns: (empty)
- Rows: use
- Value: average, elev
- Use only selected features: ☐
- Calculate button

Calculate... 11% | generate view...100% | done.

LOTNISK O CHARAKTERZE MILITARNYM JEST 8.

The screenshot shows the QGIS Group Stats window. The main table displays the following data:

	1	2
1	use	
2	Military	8

The Control panel on the right shows the following settings:

- Layers: airports
- Fields: elev, fk_region, gid, id, name
- Filter: "use" = 'Military'
- Columns: (empty)
- Rows: use
- Value: id, count
- Use only selected features: ☐
- Calculate button

Calculate... 11% | generate view...100% | done.

JEST 1 LOTNISKO O CHARAKTERZE MILITARNYM, KTÓRE JEST DODATKOWO POŁOŻONE POWYŻEJ 1400 m n.p.m :

The screenshot shows the QGIS Group Stats window. The main table displays the following data:

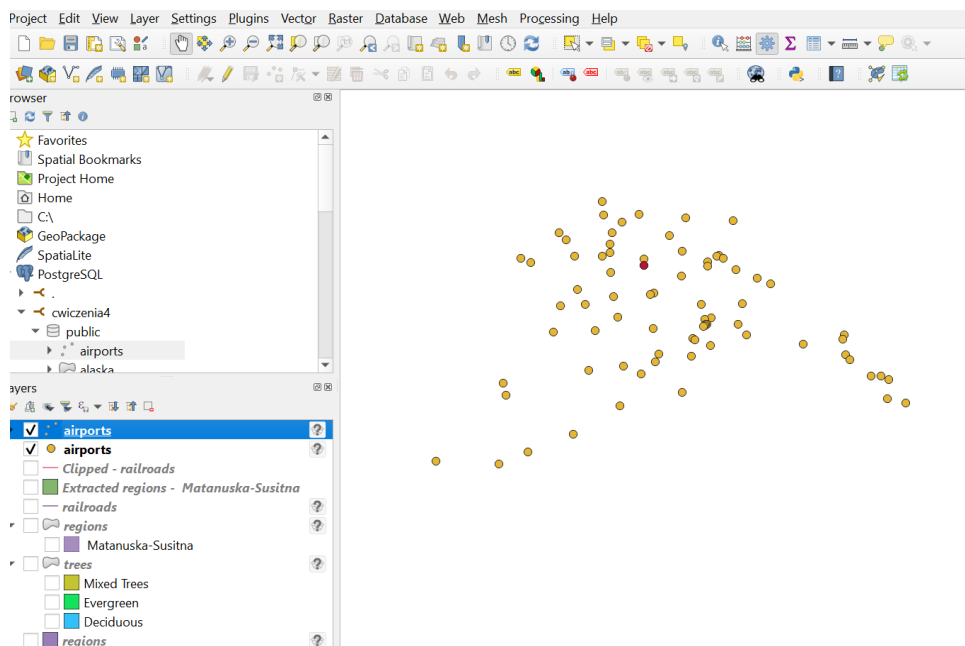
	1	2
1	use	
2	Military	1

The Control panel on the right shows the following settings:

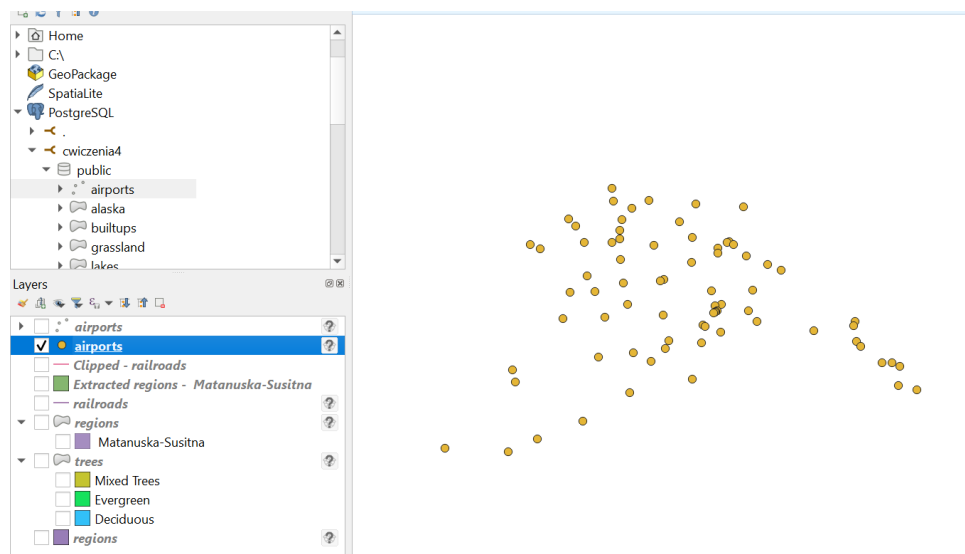
- Layers: airports
- Fields: elev, fk_region, gid, id, name
- Filter: "use" = 'Military' AND "elev" > 1400
- Columns: (empty)
- Rows: use
- Value: id, count
- Use only selected features: ☐
- Calculate button

Calculate... 1% | generate view...100% | done.

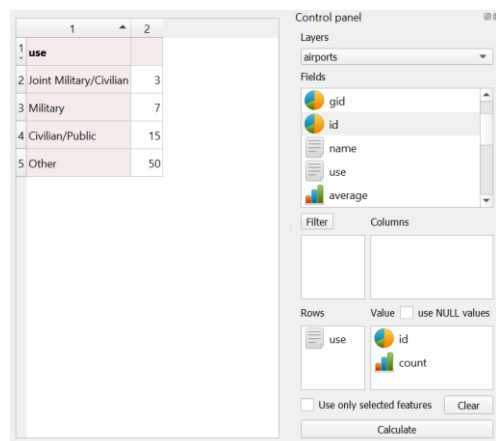
Usuwanie z warstwy airports lotniska o charakterze militarnym, które są dodatkowo położone powyżej 1400 m n.p.m. I - czerwony punktik to lotnisko które trzeba usunąć:



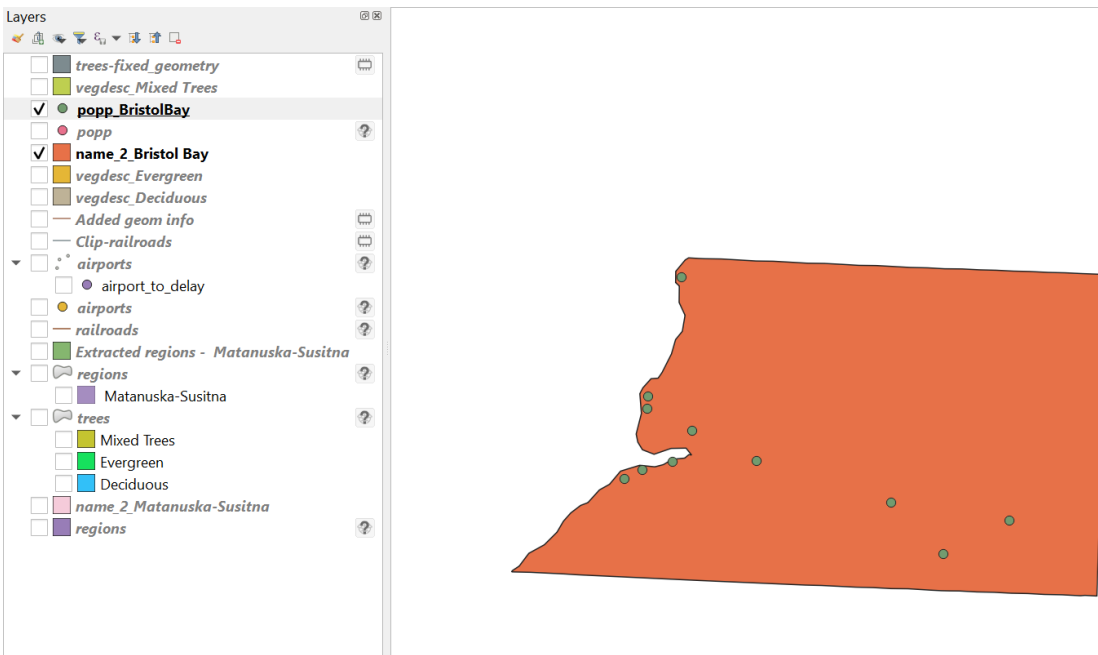
PO USUNIĘCIU:



ILOŚĆ LOTNISK O CHARAKTERZE MILITARNYM PO USUNIĘCIU LOTNISKA (7) :



ZADANIE 5



JEST 11 BUDYNKÓW POŁOŻONYCH W REGIONIE BRISTOL BAY

The screenshot shows the 'Statistics' panel in QGIS. The layer 'popp_BristolBay' is selected. The 'abc type' field is highlighted. The table below shows the count of buildings in the region.

Statistic	Value
Count	11

ZADANIE 6

100km=100000m

Buffer

Parameters

Log

100000,000000

Segments

5

End cap style

Round

Join style

Round

Miter limit

2,000000

☐ Dissolve result

Buffered

C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/buffer_river_100km.gpkg

☒ Open output file after running algorithm

0%

Advanced

Run as Batch Process...

Run

Close

Help

Cancel

Buffer

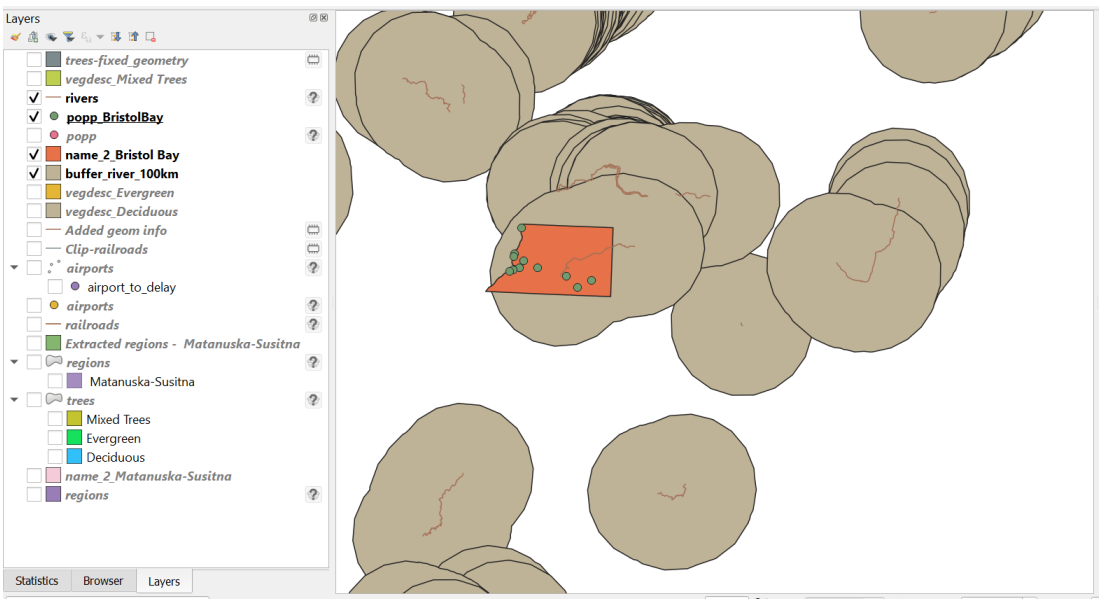
This algorithm computes a buffer area for all the features in an input layer, using a fixed or dynamic distance.

The segments parameter controls the number of line segments to use to approximate a quarter circle when creating rounded offsets.

The end cap style parameter controls how line endings are handled in the buffer.

The join style parameter specifies whether round, miter or beveled joins should be used when offsetting corners in a line.

The miter limit parameter is only applicable for miter join style and controls the



Clip

Parameters

Log

Input layer

popp_BristolBay []

☐ Selected features only

Overlay layer

buffer_river_100km []

☐ Selected features only

Clipped

C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/buffer_river_count.gpkg

☒ Open output file after running algorithm


WEWNĄTRZ BUFORU ZNAJDUJE SIĘ 11 BUDYNKÓW:

Statistics

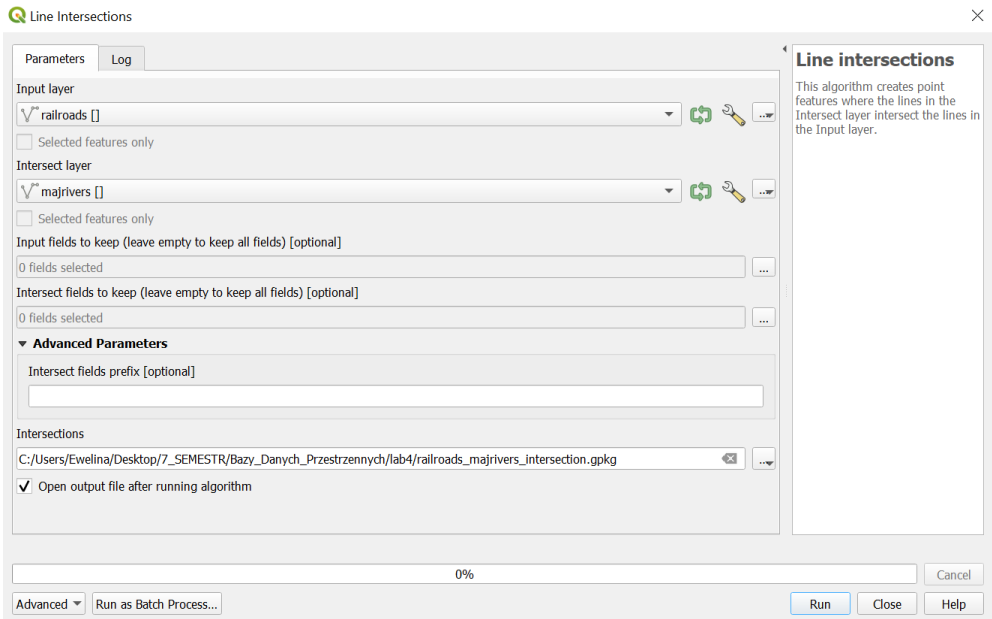
popp_BristolBay

123 fid

Statistic	Value
Count	11



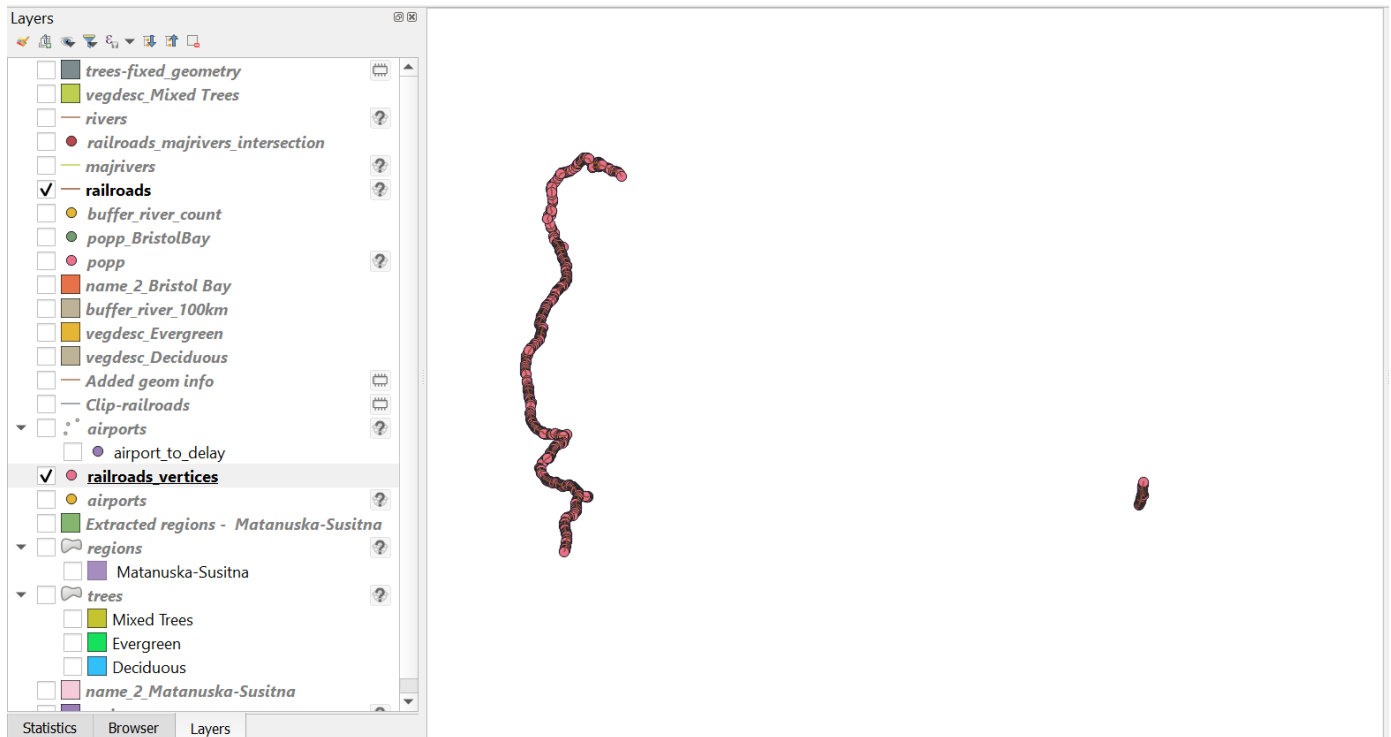
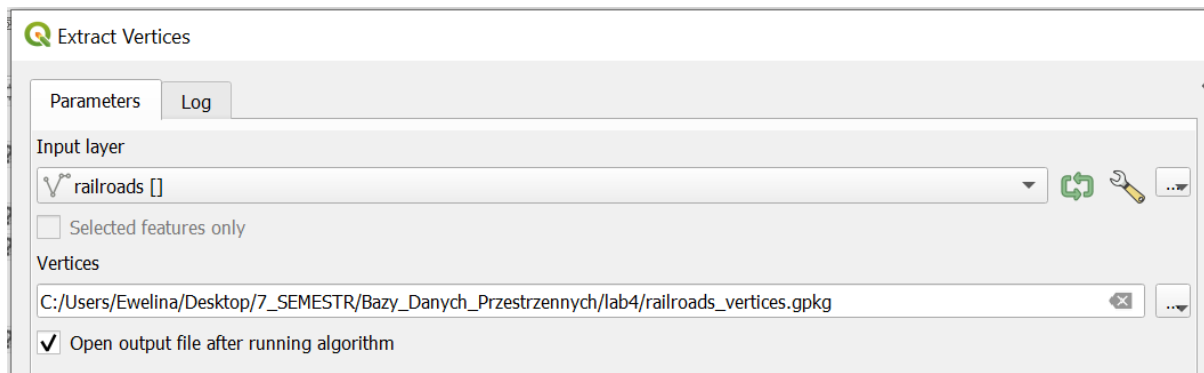
ZADANIE 7



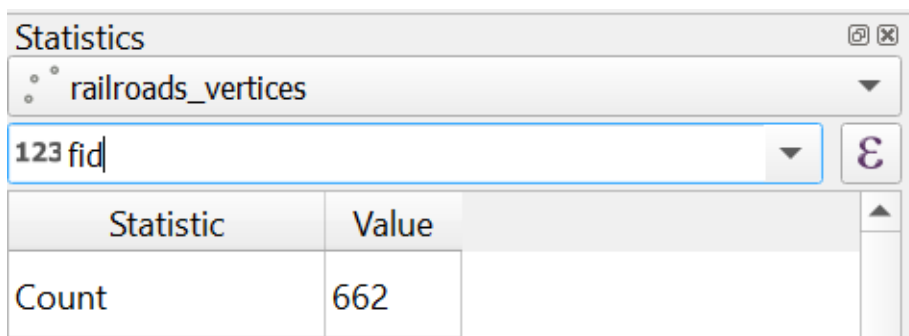
RZeki (MAJRIVERS) Z LINIAMI KOLEJOWYMI (RAILROADS) PRZECINAJĄ SIĘ W 8 MIEJSCACH:

Statistics	
railroads_majrivers_intersection	
123 fid	
Statistic	Value
Count	8

ZADANIE 8



JEST 662 WĘZŁÓW DLA WARSTWY RAILROADS:



ZADANIE 9

Buffer

Parameters

Log

Input layer

airports []

☐ Selected features only

Distance

100000

<unknown>

Segments

5

End cap style

Round

Join style

Round

Miter limit

2,000000

☐ Dissolve result

Buffered

C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/airports_buffer.gpkg

☒ Open output file after running algorithm

0%

Cancel

Advanced

Run as Batch Process...

Run

Close

Help

Buffer

This algorithm computes a buffer area for all the features in an input layer, using a fixed or dynamic distance.

The segments parameter controls the number of line segments to use to approximate a quarter circle when creating rounded offsets.

The end cap style parameter controls how line endings are handled in the buffer.

The join style parameter specifies whether round, mitre or beveled joins should be used when offsetting corners in a line.

The mitre limit parameter is only applicable for mitre join styles, and controls the maximum distance from the offset curve to use when creating a mitred join.

Buffer

Parameters

Log

Input layer

railroads []

☐ Selected features only

Distance

50000

<unknown>

Segments

5

End cap style

Round

Join style

Round

Miter limit

2,000000

☐ Dissolve result

Buffered

C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/railroads_buffer.gpkg

☒ Open output file after running algorithm

0%

Cancel

Advanced

Run as Batch Process...

Run

Close

Help

Buffer

This algorithm computes a buffer area for all the features in an input layer, using a fixed or dynamic distance.

The segments parameter controls the number of line segments to use to approximate a quarter circle when creating rounded offsets.

The end cap style parameter controls how line endings are handled in the buffer.

The join style parameter specifies whether round, mitre or beveled joins should be used when offsetting corners in a line.

The mitre limit parameter is only applicable for mitre join styles, and controls the maximum distance from the offset curve to use when creating a mitred join.

Intersection

Parameters

Log

airports_buffer []

☐ Selected features only

Overlay layer

railroads_buffer []

☐ Selected features only

Input fields to keep (leave empty to keep all fields) [optional]

0 fields selected

Overlay fields to keep (leave empty to keep all fields) [optional]

0 fields selected

Advanced Parameters

Overlay fields prefix [optional]

Grid size [optional]

Not set

Intersection

C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/airports_railroads_intersection.gpkg

☒ Open output file after running algorithm

0%

Cancel

Advanced

Run as Batch Process...

Run

Close

Help

Intersection

This algorithm extracts the overlapping portions of features in the Input and Overlay layers. Features in the output Intersection layer are assigned the attributes of the overlapping features from both the Input and Overlay layers.

HOTELE MUSZĄ LEŻEĆ W ODLEGŁOŚCI MAX 40km od drogi

Buffer

Parameters Log

Input layer
trails []

☐ Selected features only

Distance
40000,000000

Segments
5

End cap style
Round

Join style
Round

Miter limit
2,000000

☐ Dissolve result

Buffered
C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/trail_buffer.gpkg

☒ Open output file after running algorithm

Intersection

Parameters Log

Input layer
airports_railroads_intersection []

☐ Selected features only

Overlay layer
trail_buffer []

☐ Selected features only

Input fields to keep (leave empty to keep all fields) [optional]
0 fields selected

Overlay fields to keep (leave empty to keep all fields) [optional]
0 fields selected

Advanced Parameters

Overlay fields prefix [optional]

Grid size [optional]
Not set

Intersection
C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/best_place_for_hotel.gpkg

☒ Open output file after running algorithm

0%

Run Cancel

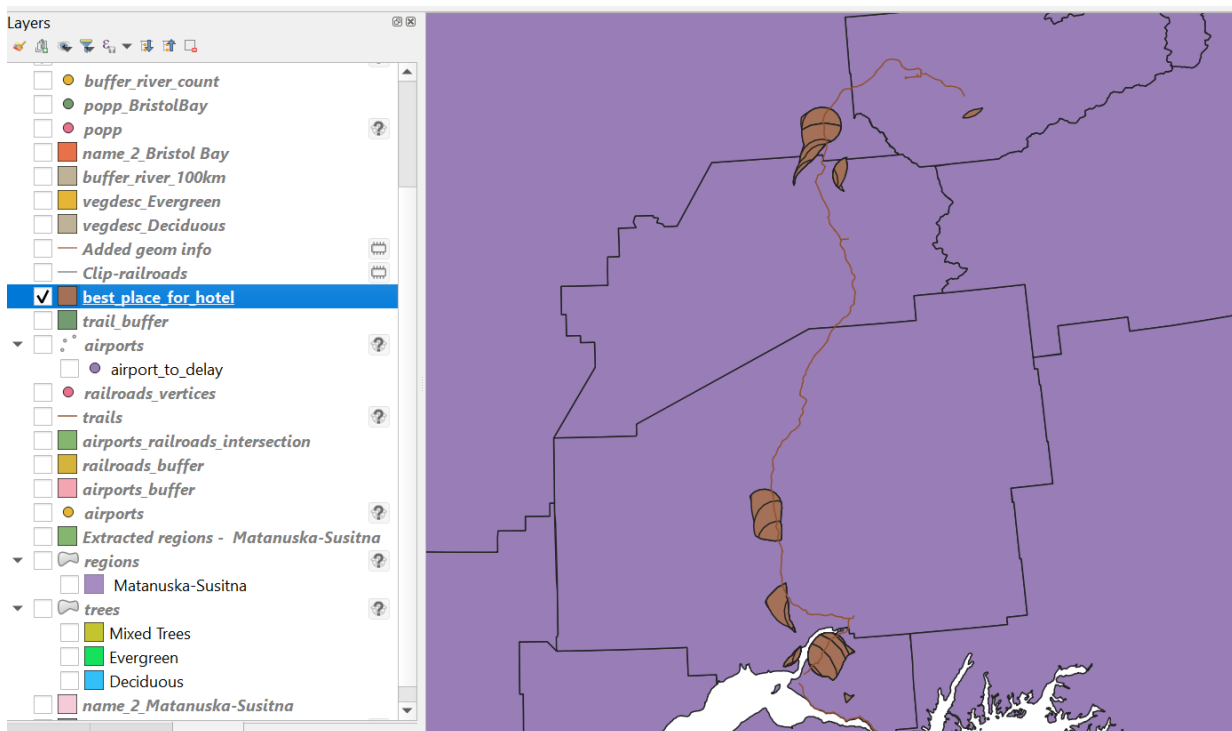
Advanced Run as Batch Process...

Run Close Help

Intersection

This algorithm extracts the overlapping portions of features in the Input and Overlay layers. Features in the output Intersection layer are assigned the attributes of the overlapping features from both the Input and Overlay layers.

OBSZARY, W KTÓRYCH NAJLEPIEJ WYBUDOWAĆ HOTEL:



ZADANIE 10

ZREDUKOWANYCH ZOSTAŁO 808 WIERZCHOŁKÓW:

Extract Vertices

Parameters Log

Input layer
swamp []

☐ Selected features only

Vertices
C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/vertides_swamp_before.gpkg

☒ Open output file after running algorithm

Statistics

vertices_swamp_before

123 vertex_index

Statistic	Value
Count	7469
Sum	965948
Mean	129,328
Median	59
St dev (pop)	163,872
St dev (sample)	163,883
Minimum	0
Maximum	762
Range	762
Minority	697
Majority	0
Variety	763
Q1	27
Q3	162

Simplify

Parameters Log

Input layer
swamp []

☐ Selected features only

Simplification method
Distance (Douglas-Peucker)

Tolerance
100,000000 <unknown>

Simplified
C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/simplify_swamp.gpkg

☒ Open output file after running algorithm

Extract Vertices

Parameters Log

Input layer
simplify_swamp []

☐ Selected features only

Vertices
C:/Users/Ewelina/Desktop/7_SEMESTR/Bazy_Danych_Przestrzennych/lab4/swamp_after.gpkg

☒ Open output file after running algorithm

Statistics	
* swamp_after	
123 vertex_index	
Statistic	Value
Count	6661
Sum	802391
Mean	120,461
Median	54
St dev (pop)	152,705
St dev (sample)	152,717
Minimum	0
Maximum	699
Range	699
Minority	639
Majority	0
Variety	700
Q1	24
Q3	152

POLE POWIERZCHNI CAŁKOWITEJ POLIGONÓW NIE ULEGŁO ZMIANIE:

Statistics	
swamp	
1.2 areakm2	
Statistic	Value
Count	69
Sum	24719,8

Statistics	
simplify_swamp	
1.2 areakm2	
Statistic	Value
Count	69
Sum	24719,8