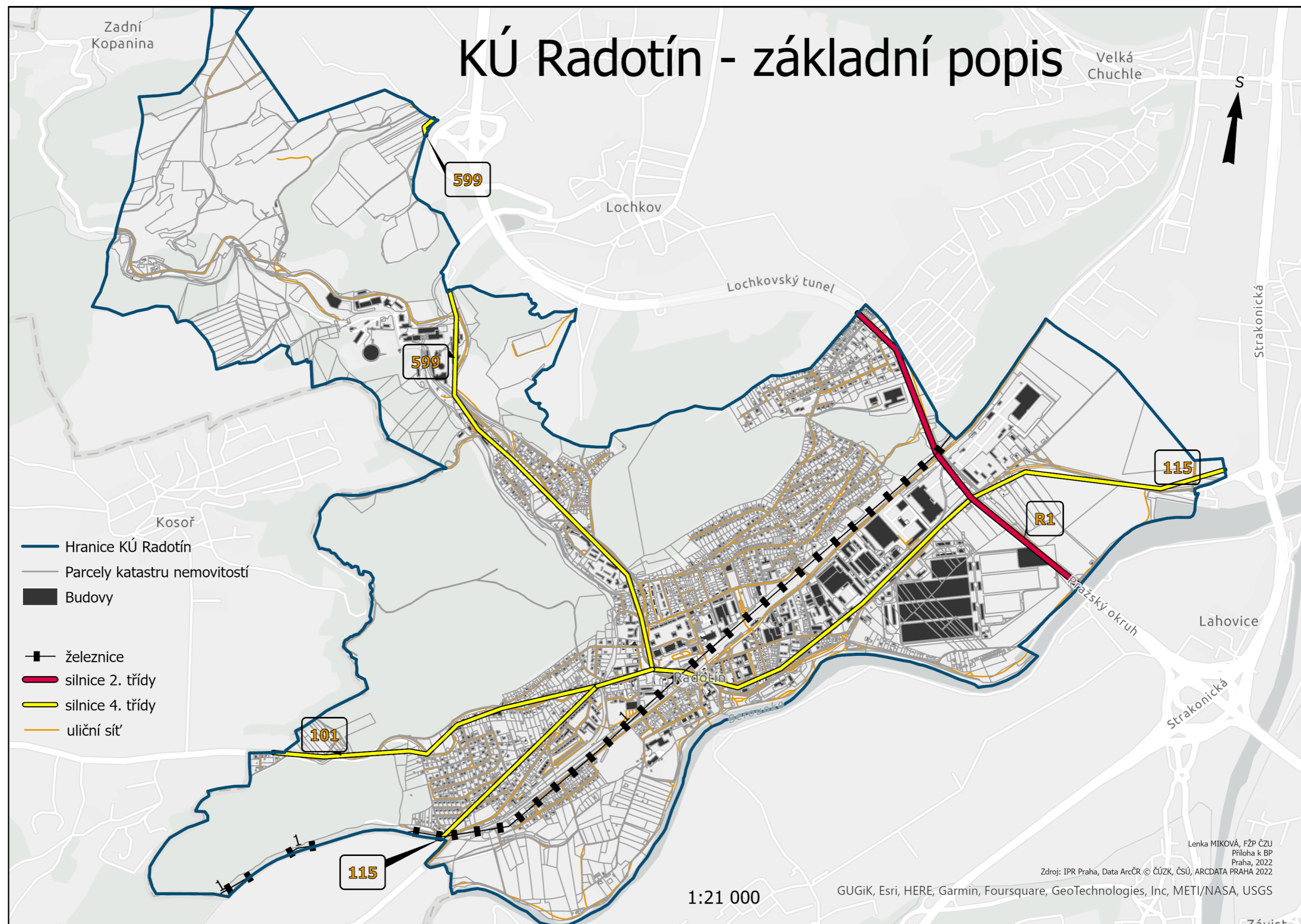


Příloha 1: Základní popis oblasti KÚ Radotín z pohledu dopravy a zástavby.



Příloha 2: Model znázorňující práci s daty v Pythonu.

```
# -*- coding: utf-8 -*-
```

```
Generated by ArcGIS ModelBuilder on : 2023-03-06 09:56:49
```

```
import arcpy
```

```
from sys import argv
```

```
def BP(Attributes_To_Join="ALL", Output_Type="INPUT", Cellsize_10_="10",  
Build_raster_attribute_table=True): # BP
```

```
    # To allow overwriting outputs change overwriteOutput option to True.
```

```
    arcpy.env.overwriteOutput = False
```

```
    # Check out any necessary licenses.
```

```
    arcpy.CheckOutExtension("3D")
```

```
    arcpy.CheckOutExtension("spatial")
```

```
    arcpy.CheckOutExtension("ImageAnalyst")
```

```
KATASTRALNI_UZEMI_P = "KATASTRALNI_UZEMI_P"
```

```
RAD_MZCR_Ln = "RAD_MZCR_Ln"
```

```
RAD_IPR_Ln = "RAD_IPR_Ln"
```

```
    # Process: Create Fishnet [10x10] (Create Fishnet) (management)
```

```
    RAD_Fishnet = "E:\\Skola\\BP\\GIS\\BP\\BP.gdb\\RAD_Fishnet"
```

```
    RAD_Fishnet_label = arcpy.management.CreateFishnet(out_feature_class=RAD_Fishnet, origin_coord="-  
751549,69 -1055107,6", y_axis_coord="-751549,69 -1055097,6", cell_width=10, cell_height=10,  
number_rows=None, number_columns=None, corner_coord="-746115,65 -1050699,78", labels="LABELS",  
template="-751549,69 -1055107,6 -746115,65 -1050699,78 PROJCS[\"S-  
JTSK_Krovak_East_North\",GEOGCS[\"GCS_S_JTSK\",DATUM[\"D_S_JTSK\",SPHEROID[\"Bessel_1841\",  
6377397.155,299.1528128]],PRIMEM[\"Greenwich\",0.0],UNIT[\"Degree\",0.0174532925199433]],PROJECTI  
ON[\"Krovak\"],PARAMETER[\"False_Easting\",0.0],PARAMETER[\"False_Northing\",0.0],PARAMETER[\"Pse  
udo_Standard_Parallel_1\",78.5],PARAMETER[\"Scale_Factor\",0.9999],PARAMETER[\"Azimuth\",30.288139  
75277778],PARAMETER[\"Longitude_Of_Center\",24.83333333333333],PARAMETER[\"Latitude_Of_Center\  
\",49.5],PARAMETER[\"X_Scale\",-  
1.0],PARAMETER[\"Y_Scale\",1.0],PARAMETER[\"XY_Plane_Rotation\",90.0],UNIT[\"Meter\",1.0]]\",  
geometry_type="POLYGON")[0]
```

```
    # Process: Clip Fishnet label (Clip) (analysis)
```

```
    RAD_Fishnet_label_Clip = "E:\\Skola\\BP\\GIS\\BP\\BP.gdb\\RAD_Fishnet_label_Clip"
```

```
    arcpy.analysis.Clip(in_features=RAD_Fishnet_label, clip_features=KATASTRALNI_UZEMI_P,  
out_feature_class=RAD_Fishnet_label_Clip, cluster_tolerance="")
```

```
    # Process: Clip Fishnet (Clip) (analysis)
```

```
    RAD_Fishnet_Clip = "E:\\Skola\\BP\\GIS\\BP\\BP.gdb\\RAD_Fishnet_Clip"
```

```
    arcpy.analysis.Clip(in_features=RAD_Fishnet, clip_features=KATASTRALNI_UZEMI_P,  
out_feature_class=RAD_Fishnet_Clip, cluster_tolerance="")
```

```
    # Process: Erase MZCR (Erase) (analysis)
```

```
    erase_MZCR = "E:\\Skola\\BP\\GIS\\BP\\BP.gdb\\erase_MZCR"
```

```
    arcpy.analysis.Erase(in_features=KATASTRALNI_UZEMI_P, erase_features=RAD_MZCR_Ln,  
out_feature_class=erase_MZCR, cluster_tolerance="")
```

Process: Erase IPR (Erase) (analysis)

```
erase_IPR = "E:\Skola\BP\GIS\BP\BP.gdb\erase_IPR"
```

```
arcpy.analysis.Erase(in_features=KATASTRALNI_UZEMI_P, erase_features=RAD_IPR_Ln,  
out_feature_class=erase_IPR, cluster_tolerance="")
```

Process: Merge (Merge) (management)

```
erase_IPR_MZCR = "E:\Skola\BP\GIS\BP\BP.gdb\erase_IPR_MZCR"
```

```
arcpy.management.Merge(inputs=[erase_MZCR, erase_IPR], output=erase_IPR_MZCR,  
field_mappings="ID \"ID\" true false false 40 Text 0  
0,First,#,E:\Skola\BP\GIS\BP\BP.gdb\clip_MZCR,ID,0,40,E:\Skola\BP\GIS\BP\BP.gdb\clip_IPR,ID,0,40  
;ID_2 \"ID_2\" true false false 40 Text 0  
0,First,#,E:\Skola\BP\GIS\BP\BP.gdb\clip_MZCR,ID_2,0,40,E:\Skola\BP\GIS\BP\BP.gdb\clip_IPR,ID_2  
,0,40;TYPPPD_KOD \"TYPPPD_KOD\" true false false 7 Text 0  
0,First,#,E:\Skola\BP\GIS\BP\BP.gdb\clip_MZCR,TYPPPD_KOD,0,7,E:\Skola\BP\GIS\BP\BP.gdb\clip_  
IPR,TYPPPD_KOD,0,7;KATUZE_KOD \"KATUZE_KOD\" true false false 6 Long 0  
6,First,#,E:\Skola\BP\GIS\BP\BP.gdb\clip_MZCR,KATUZE_KOD,-1,-  
1,E:\Skola\BP\GIS\BP\BP.gdb\clip_IPR,KATUZE_KOD,-1,-1;Shape_length \"Shape_length\" true true  
false 0 Double 0 0,First,#,E:\Skola\BP\GIS\BP\BP.gdb\clip_MZCR,Shape_length,-1,-  
1,E:\Skola\BP\GIS\BP\BP.gdb\clip_IPR,Shape_length,-1,-1;Shape_area \"Shape_area\" true true false 0  
Double 0 0,First,#,E:\Skola\BP\GIS\BP\BP.gdb\clip_MZCR,Shape_area,-1,-  
1,E:\Skola\BP\GIS\BP\BP.gdb\clip_IPR,Shape_area,-1,-1", add_source="NO_SOURCE_INFO")
```

Process: Erase MZCR_erase (Erase) (analysis)

```
RAD_MZCR_correct = "E:\Skola\BP\GIS\BP\BP.gdb\RAD_MZCR_Ln_Erase"
```

```
arcpy.analysis.Erase(in_features=RAD_MZCR_Ln, erase_features=erase_IPR_MZCR,  
out_feature_class=RAD_MZCR_correct, cluster_tolerance="")
```

Process: Intersect (MZCR) Ln (Intersect) (analysis)

```
MZCR_Ln_Fishnet = "E:\Skola\BP\GIS\BP\BP.gdb\RAD_MZCR_Ln_Fishnet"
```

```
arcpy.analysis.Intersect(in_features=[[RAD_Fishnet_Clip, ""], [RAD_MZCR_correct, ""]],  
out_feature_class=MZCR_Ln_Fishnet, join_attributes=Attributes_To_Join, cluster_tolerance="",  
output_type=Output_Type)
```

Process: Polygon to Raster (MZCR Ln) (Polygon to Raster) (conversion)

```
RAD_MZCR_Ln_Raster = "E:\Skola\BP\GIS\BP\BP.gdb\RAD_MZCR_Ln_Raster"
```

```
arcpy.conversion.PolygonToRaster(in_features=MZCR_Ln_Fishnet, value_field="DB_High",  
out_rasterdataset=RAD_MZCR_Ln_Raster, cell_assignment="CELL_CENTER", priority_field="NONE",  
cellsize=Cellsize_10_, build_rat=Build_raster_attribute_table)
```

Process: Erase IPR_erase (Erase) (analysis)

```
RAD_IPR_correct = "E:\Skola\BP\GIS\BP\BP.gdb\RAD_IPR_Ln_Erase"
```

```
arcpy.analysis.Erase(in_features=RAD_IPR_Ln, erase_features=erase_IPR_MZCR,  
out_feature_class=RAD_IPR_correct, cluster_tolerance="")
```

Process: Intersect (IPR) Ln (Intersect) (analysis)

```
IPR_Ln_Fishnet = "E:\Skola\BP\GIS\BP\BP.gdb\IPR_RAD_Ln_Fishnet"
```

```
arcpy.analysis.Intersect(in_features=[[RAD_Fishnet_Clip, ""], [RAD_IPR_correct, ""]],  
out_feature_class=IPR_Ln_Fishnet, join_attributes=Attributes_To_Join, cluster_tolerance="",  
output_type=Output_Type)
```

Process: Polygon to Raster (IPR Ln) (Polygon to Raster) (conversion)

```
RAD_IPR_Ln_Raster = "E:\Skola\BP\GIS\BP\BP.gdb\RAD_IPR_Ln_Raster"
```

```
arcpy.conversion.PolygonToRaster(in_features=IPR_Ln_Fishnet, value_field="DB_HI",
out_rasterdataset=RAD_IPR_Ln_Raster, cell_assignment="CELL_CENTER", priority_field="NONE",
cellsize=Cellsize_10_, build_rat=Build_raster_attribute_table)
```

```
# Process: Minus (Minus) (3d)
```

```
RAD_MZ_IPR = "E:\\Skola\\BP\\GIS\\BP\\BP.gdb\\RAD_MZ_IPR"
```

```
with arcpy.EnvManager(scratchWorkspace=r"D:\\Skola\\BP\\GIS\\SHM_Praha\\SHM_Praha.gdb",
workspace=r"D:\\Skola\\BP\\GIS\\SHM_Praha\\SHM_Praha.gdb"):
```

```
arcpy.ddd.Minus(in_raster_or_constant1=RAD_MZCR_Ln_Raster,
in_raster_or_constant2=RAD_IPR_Ln_Raster, out_raster=RAD_MZ_IPR)
```

```
RAD_MZ_IPR = arcpy.Raster(RAD_MZ_IPR)
```

```
# Process: Raster to Point (Raster to Point) (conversion)
```

```
RAD_Rozdil_B = "E:\\Skola\\BP\\GIS\\BP\\BP.gdb\\RAD_Rozdil_B"
```

```
with arcpy.EnvManager(outputMFlag="Disabled", outputZFlag="Disabled"):
```

```
arcpy.conversion.RasterToPoint(in_raster=RAD_MZ_IPR, out_point_features=RAD_Rozdil_B,
raster_field="Value")
```

```
# Process: Raster to Polygon (Raster to Polygon) (conversion)
```

```
RAD_Rozdil_P = "E:\\Skola\\BP\\GIS\\BP\\BP.gdb\\RAD_Rozdil_P"
```

```
with arcpy.EnvManager(outputMFlag="Disabled", outputZFlag="Disabled"):
```

```
arcpy.conversion.RasterToPolygon(in_raster=RAD_MZ_IPR, out_polygon_features=RAD_Rozdil_P,
simplify=Build_raster_attribute_table, raster_field="Value",
create_multipart_features="SINGLE_OUTER_PART", max_vertices_per_feature=None)
```

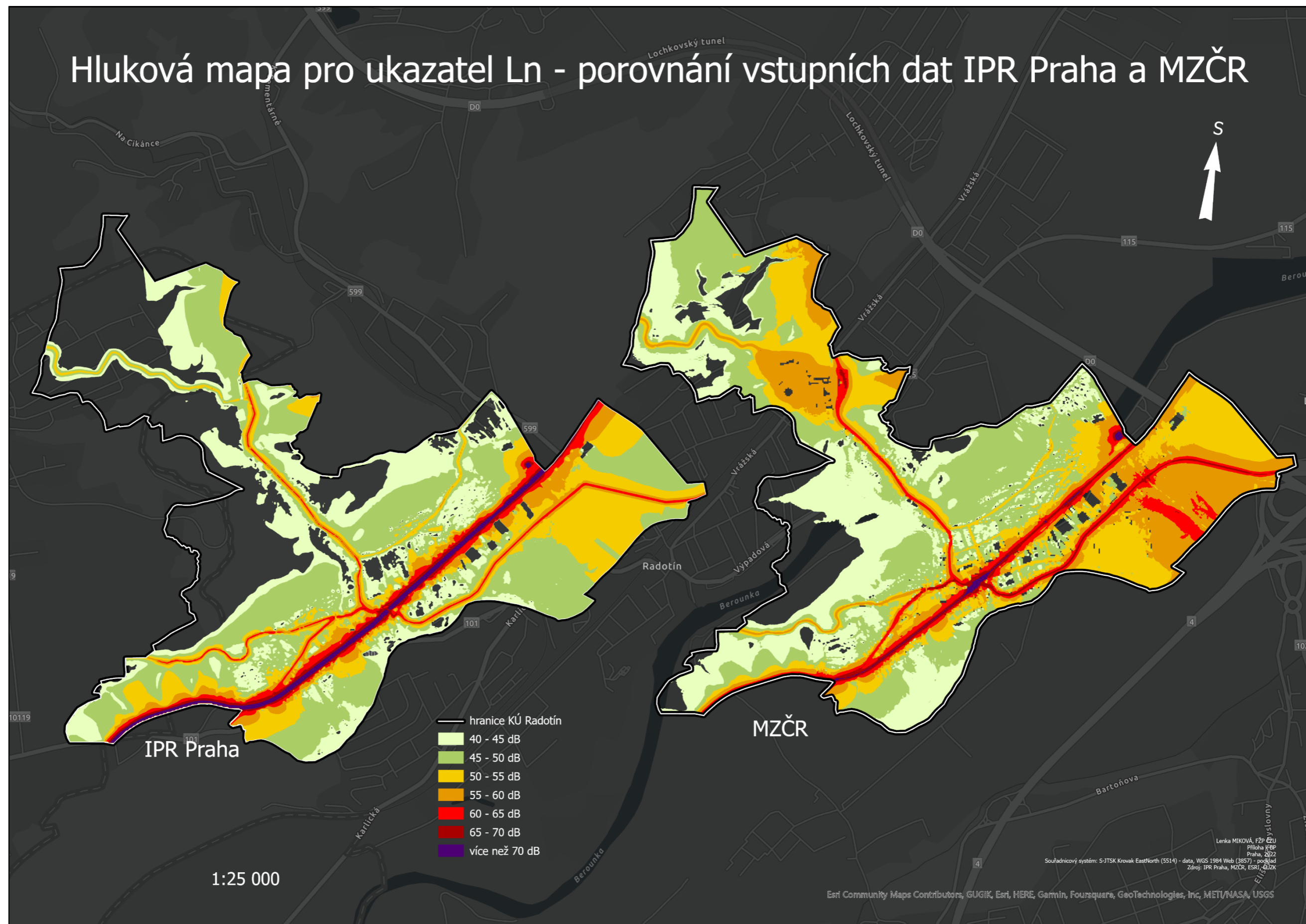
```
if __name__ == '__main__':
```

```
# Global Environment settings
```

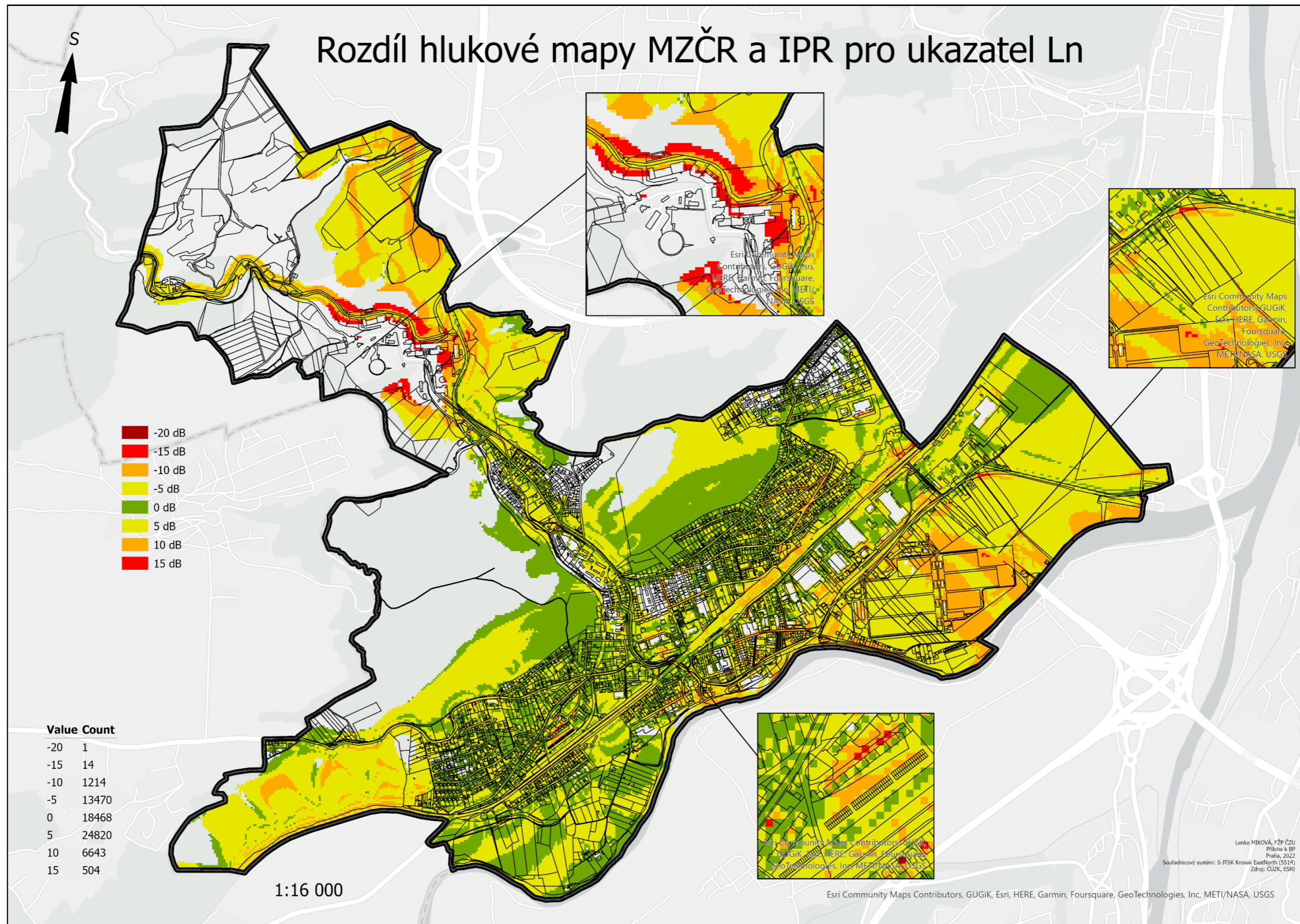
```
with arcpy.EnvManager(scratchWorkspace=r"E:\\Skola\\BP\\GIS\\BP\\BP.gdb",
workspace=r"E:\\Skola\\BP\\GIS\\BP\\BP.gdb"):
```

```
BP(*argv[1:])
```

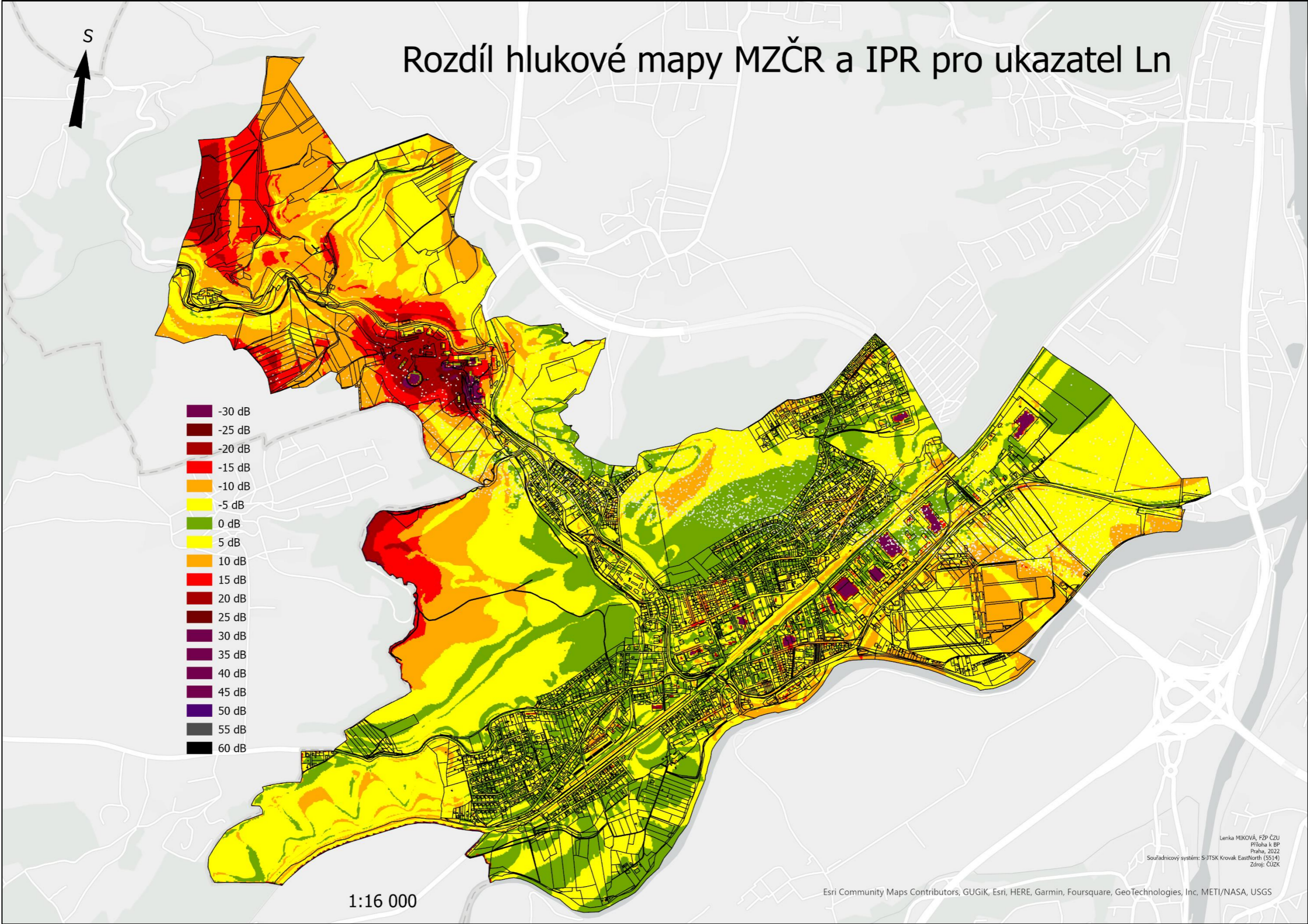
Příloha 3: Hluková mapa pro ukazatel L_n (porovnání vstupních dat IPR Praha a MZČR ve shodných hlukových intervalech).



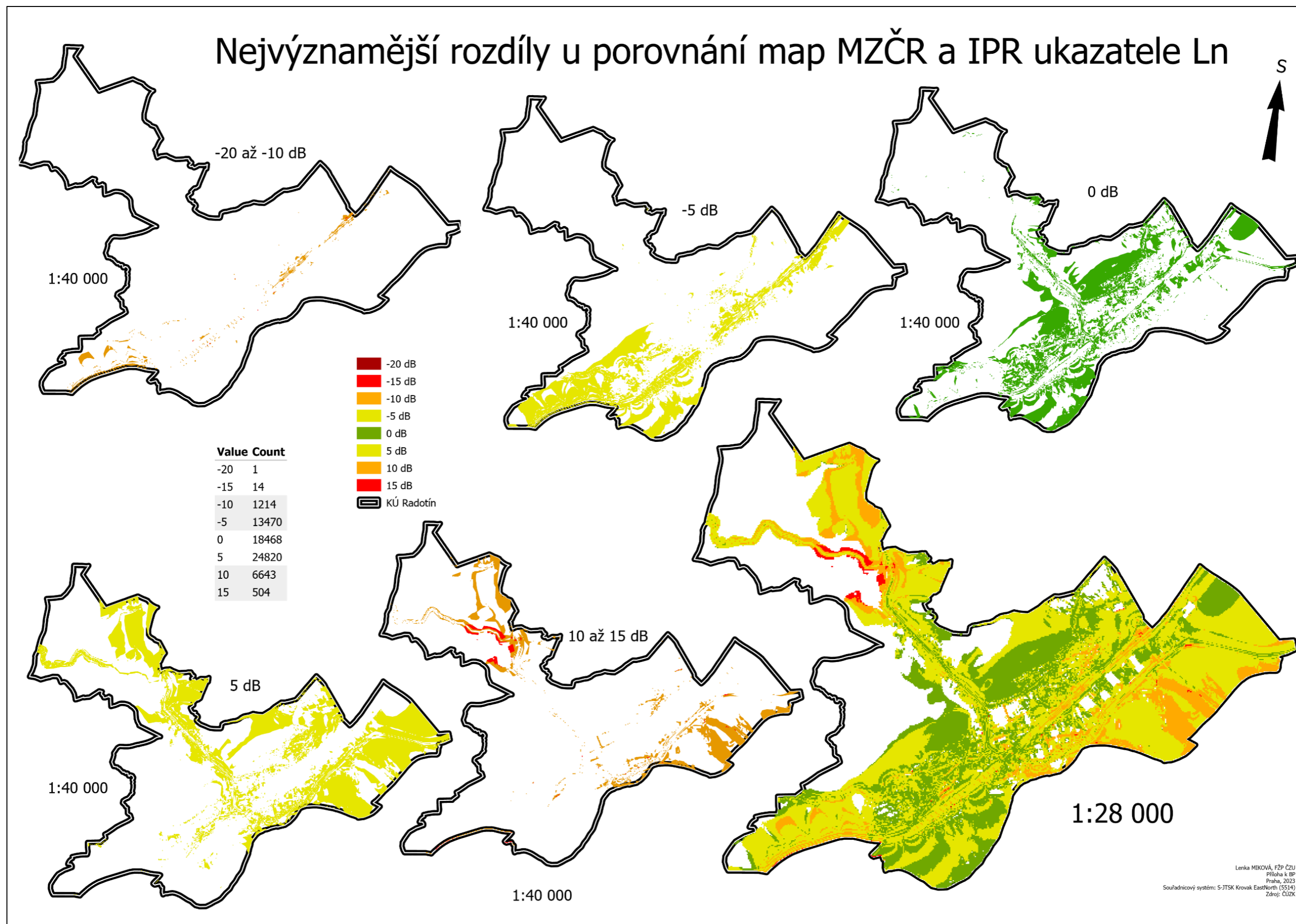
Příloha 4a: Rozdíl u hlukových map MZČR a IPR pro ukazatel L_n – varianta ořezu.



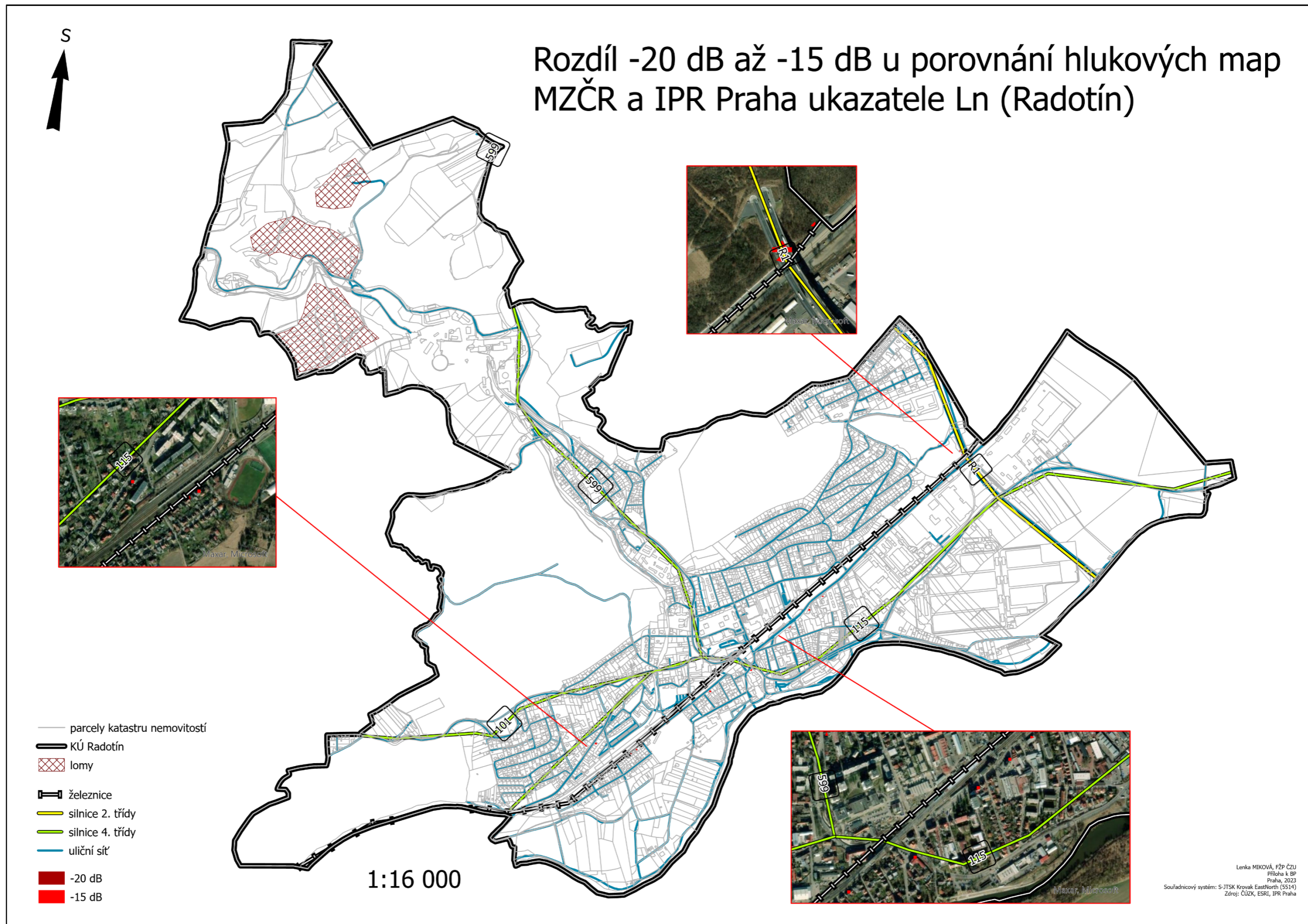
Příloha 4b: Rozdíl u hlukových map MZČR a IPR pro ukazatel L_n – varianta doplnění intervalů na celé území.



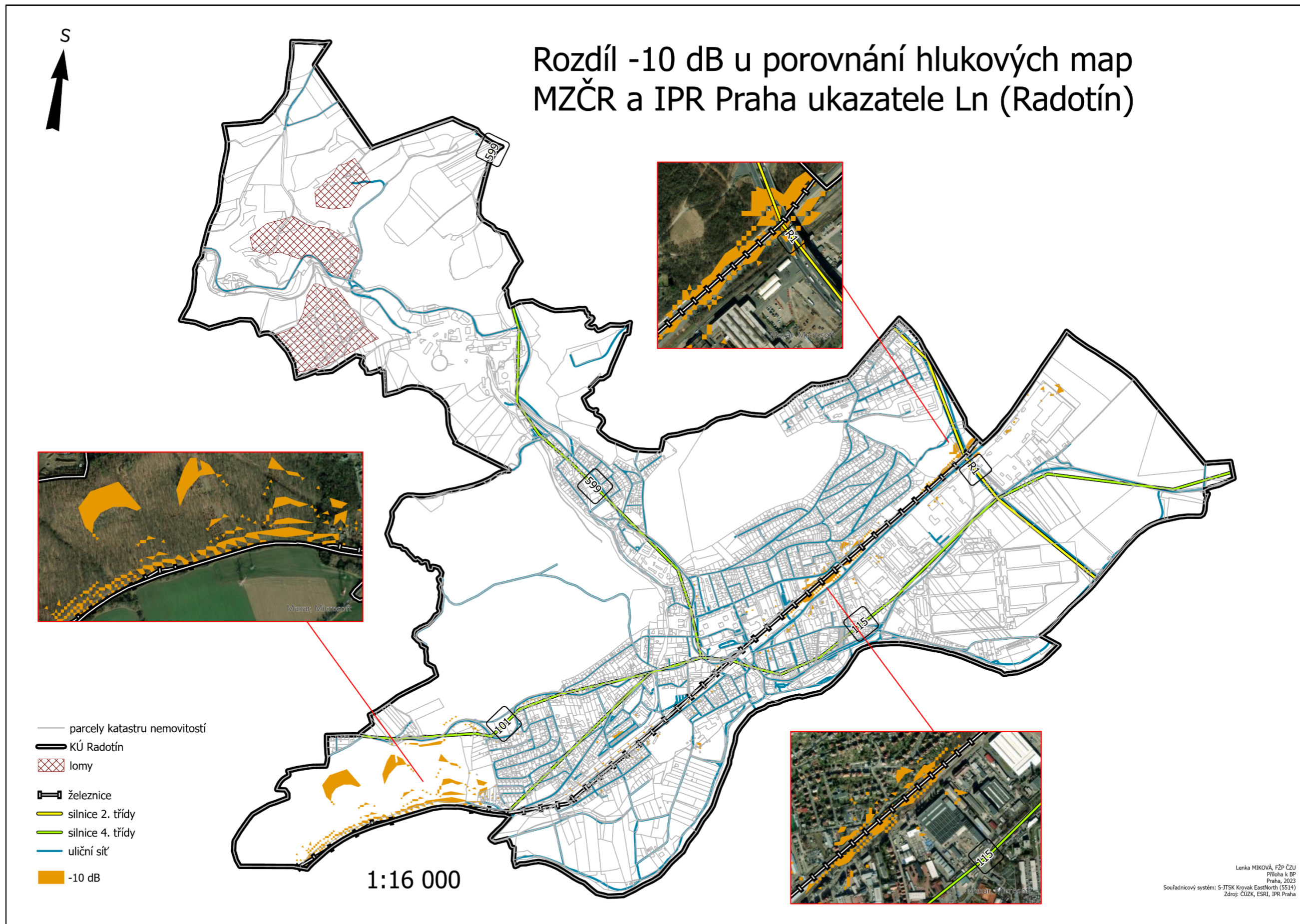
Příloha 5a: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n – varianta s ořezem.



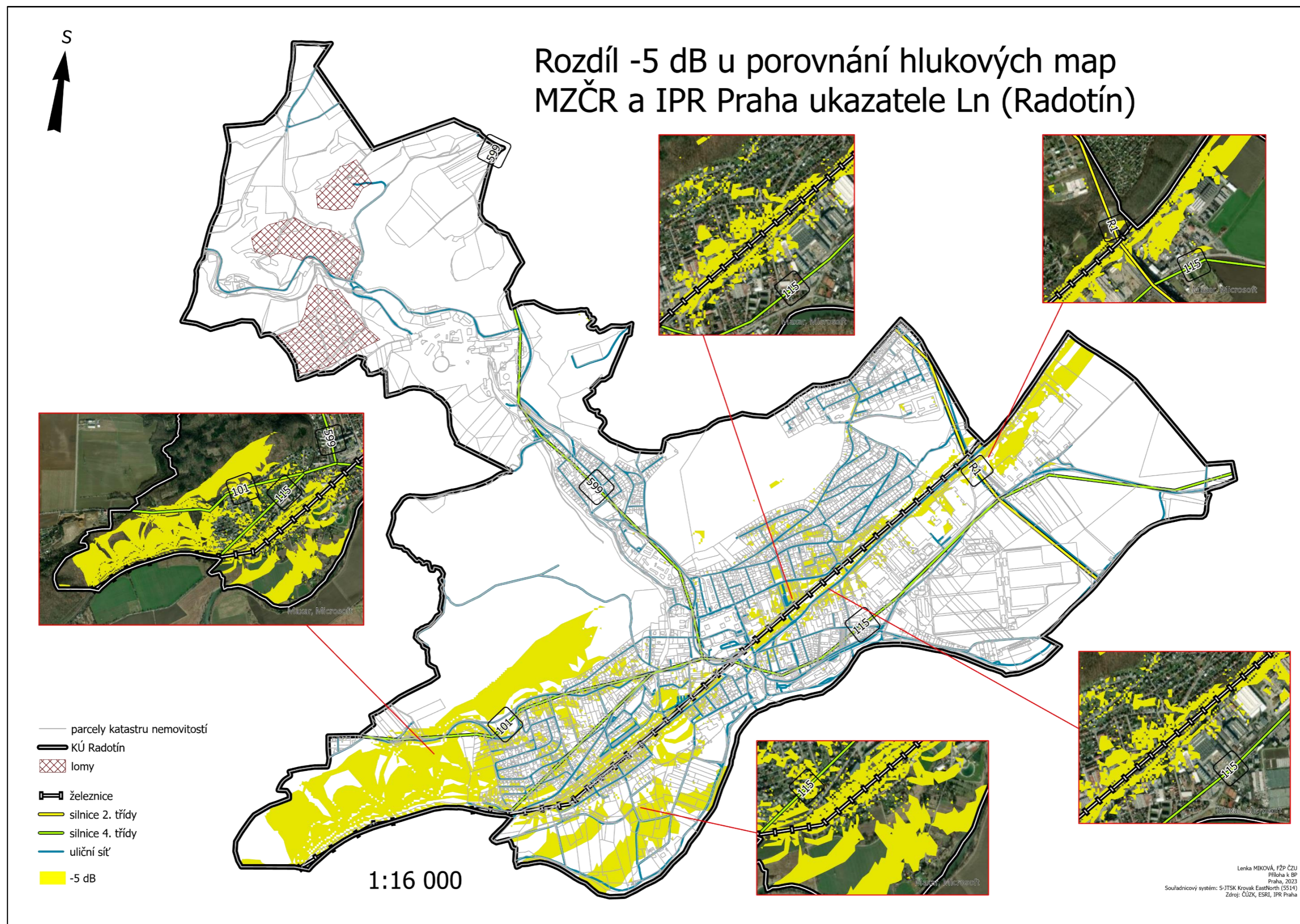
Příloha 5b: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n (rozdíl -20 dB až -15 dB).



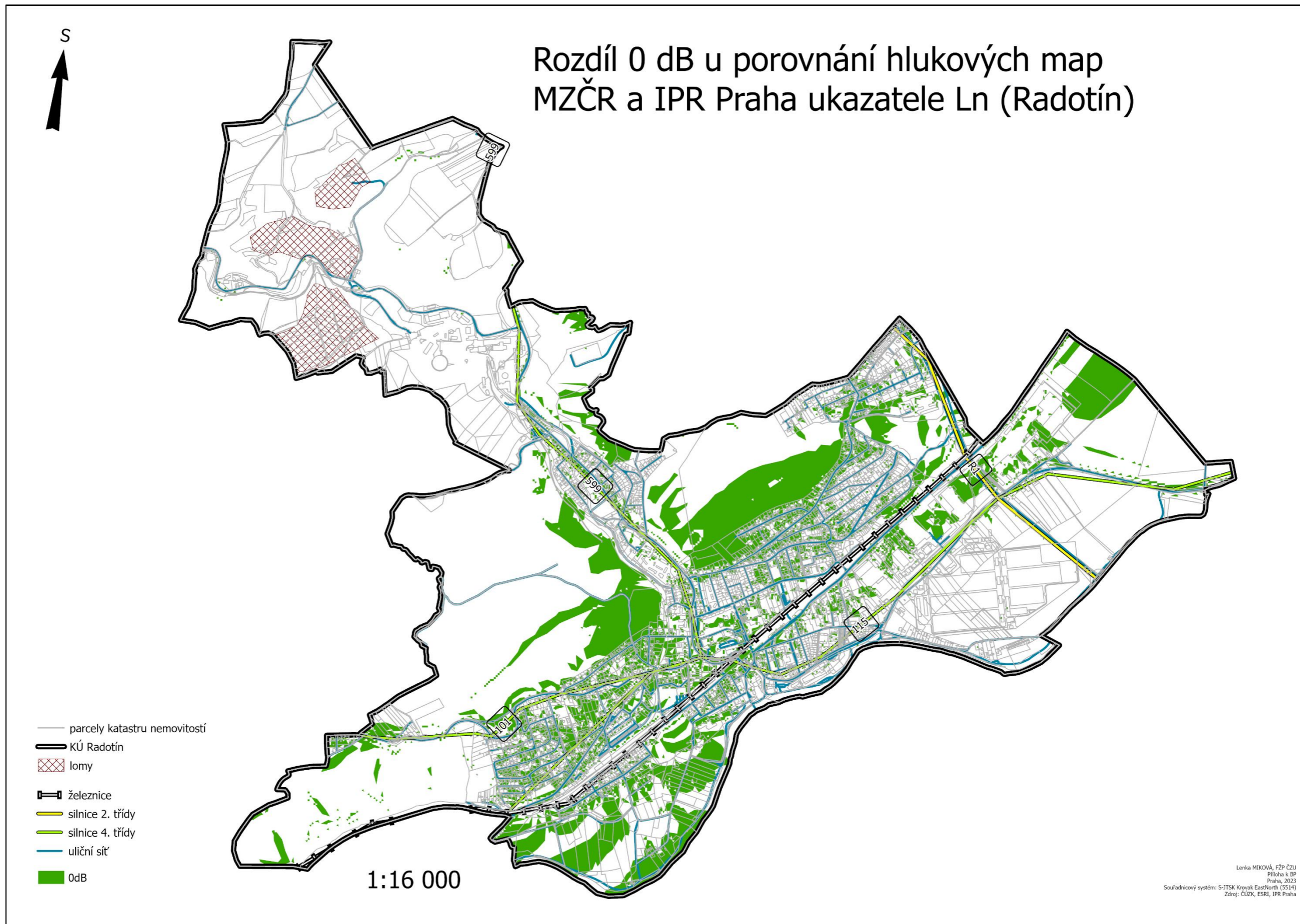
Příloha 5c: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n (rozdíl -10 dB).



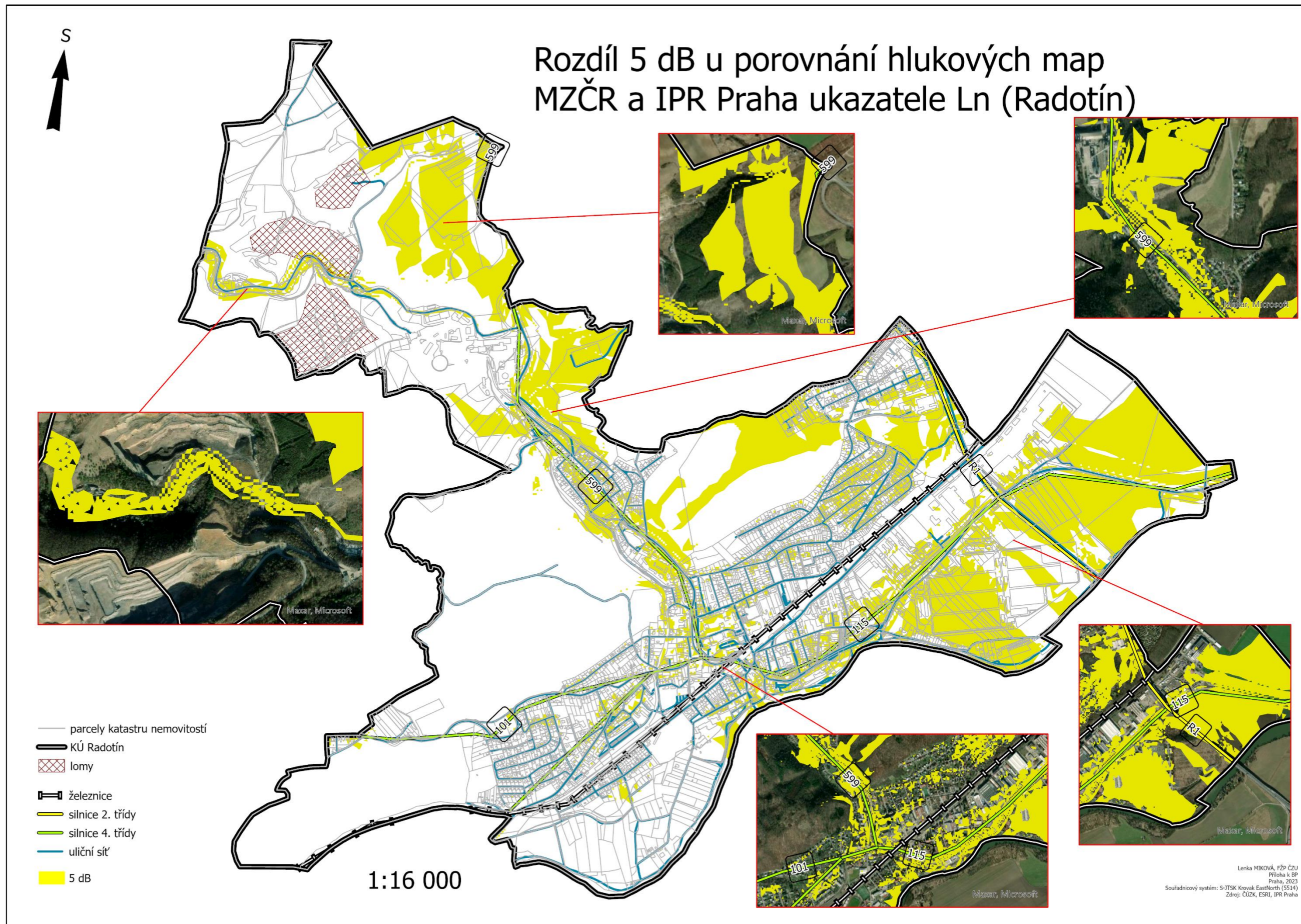
Příloha 5d: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n (rozdíl -5 dB).



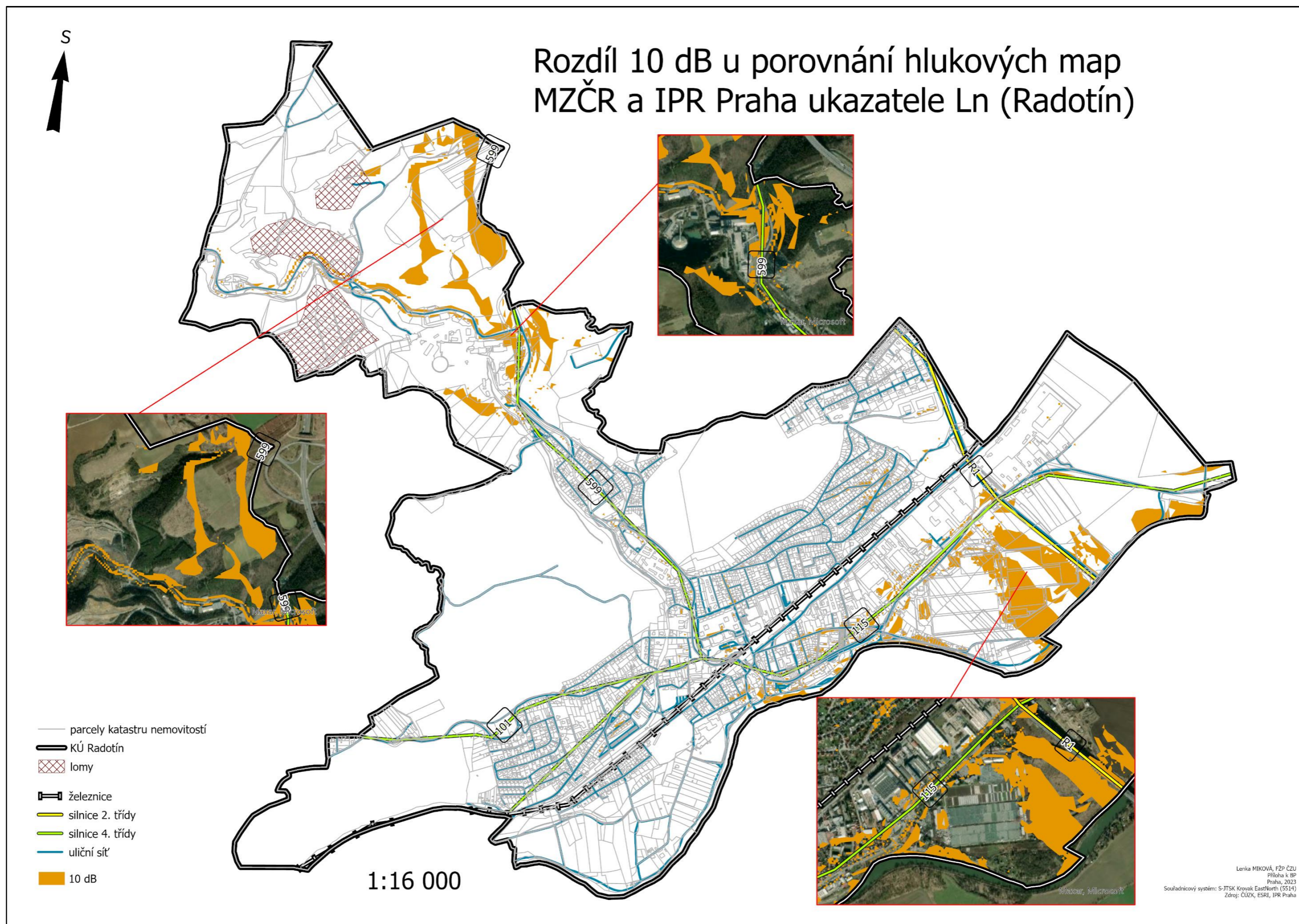
Příloha 5e: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n (rozdíl 0 dB).



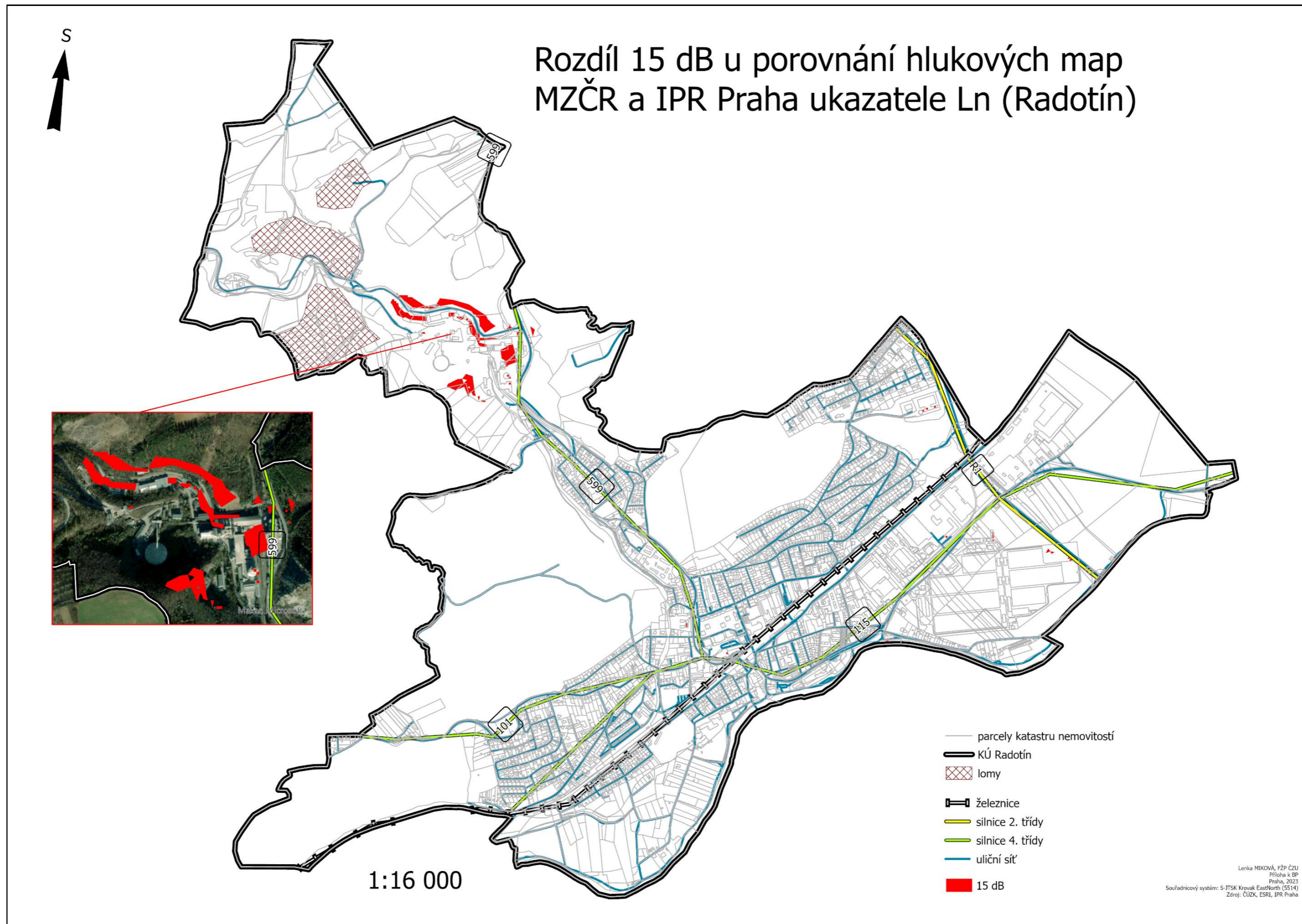
Příloha 5f: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n (rozdíl 5 dB).



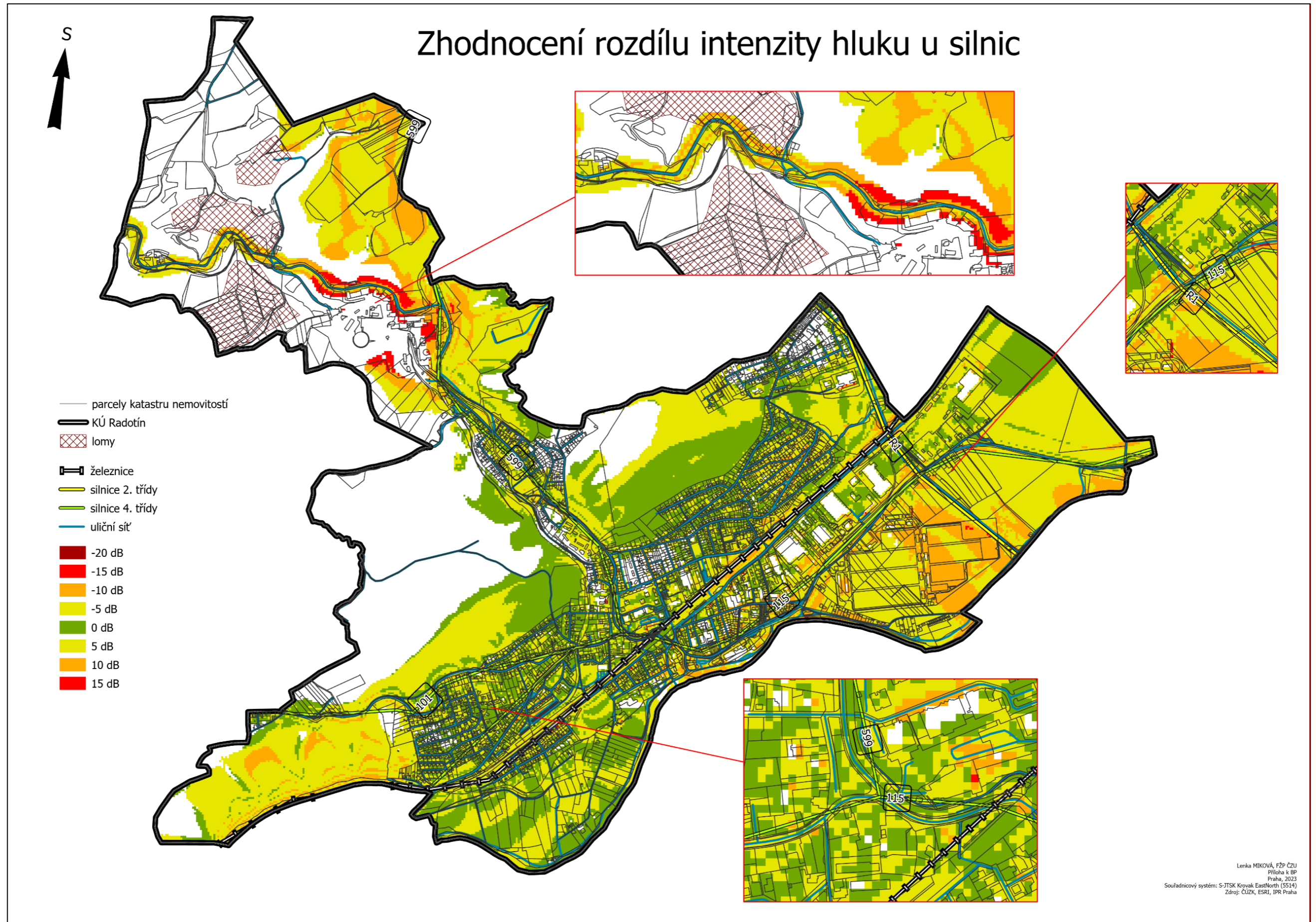
Příloha 5g: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n (rozdíl 10 dB).



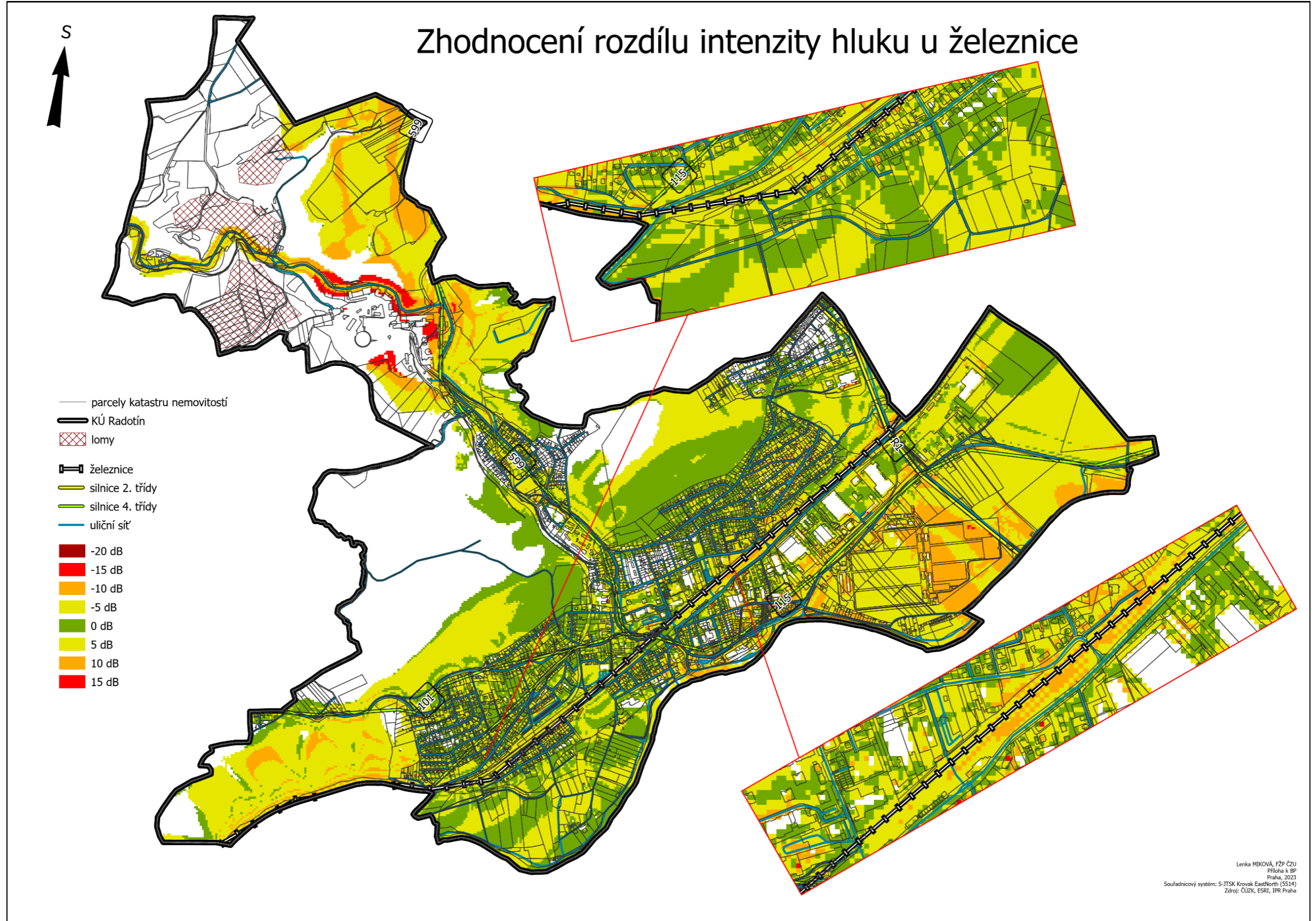
Příloha 5h: Rozdíly u porovnání hlukových map MZČR a IPR pro ukazatel L_n (rozdíl 15 dB).



Příloha 6a: Zhodnocení rozdílu intenzity hluku u silnic.



Příloha 6b: Zhodnocení rozdílu intenzity hluku u železnice.



Příloha 6c: Zhodnocení rozdílu intenzity hluku u zastavěných oblastí.

