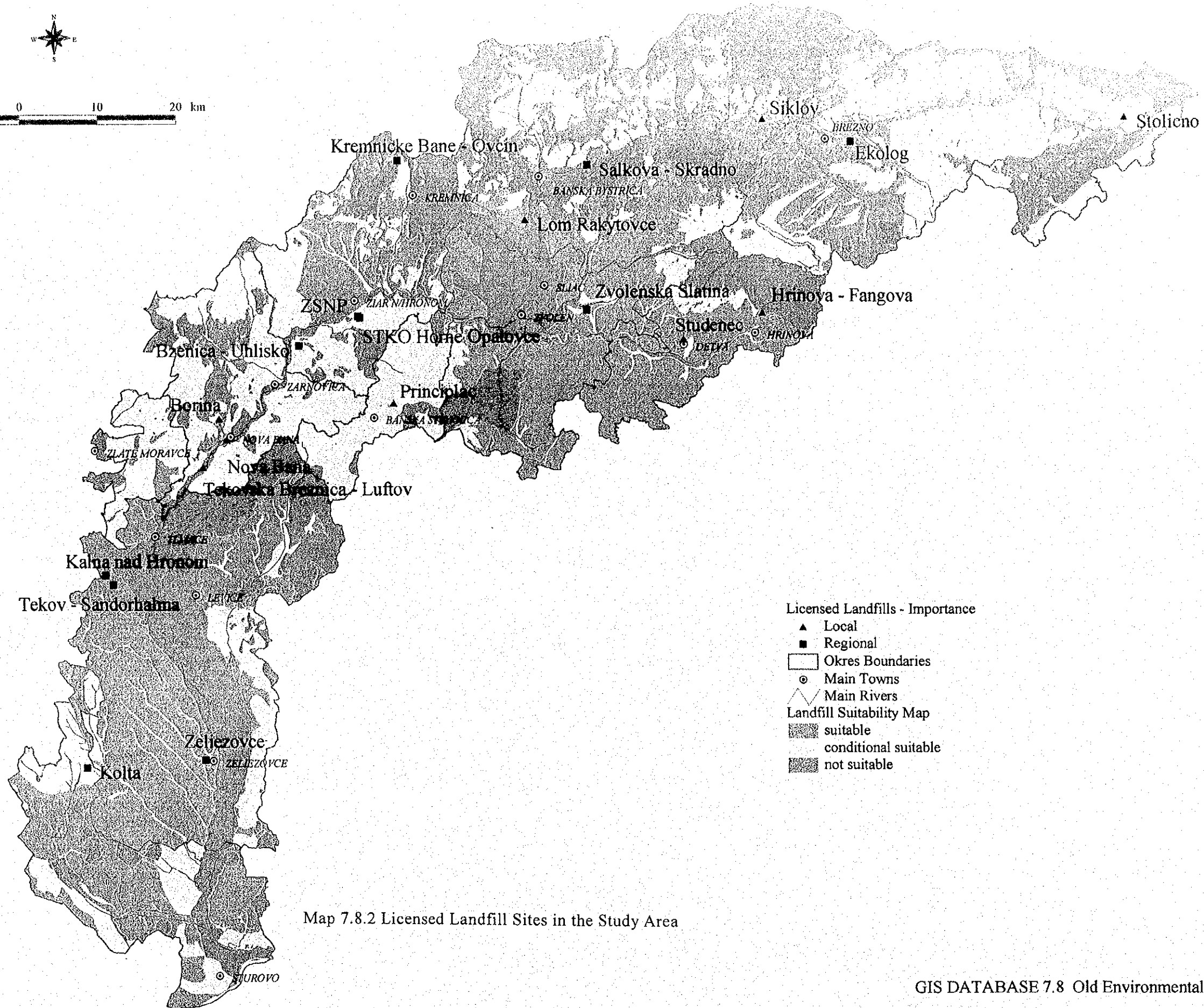
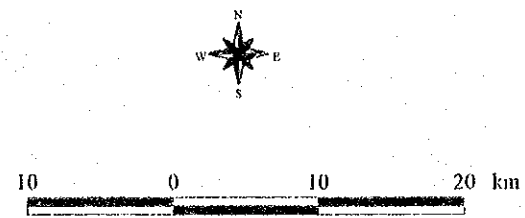
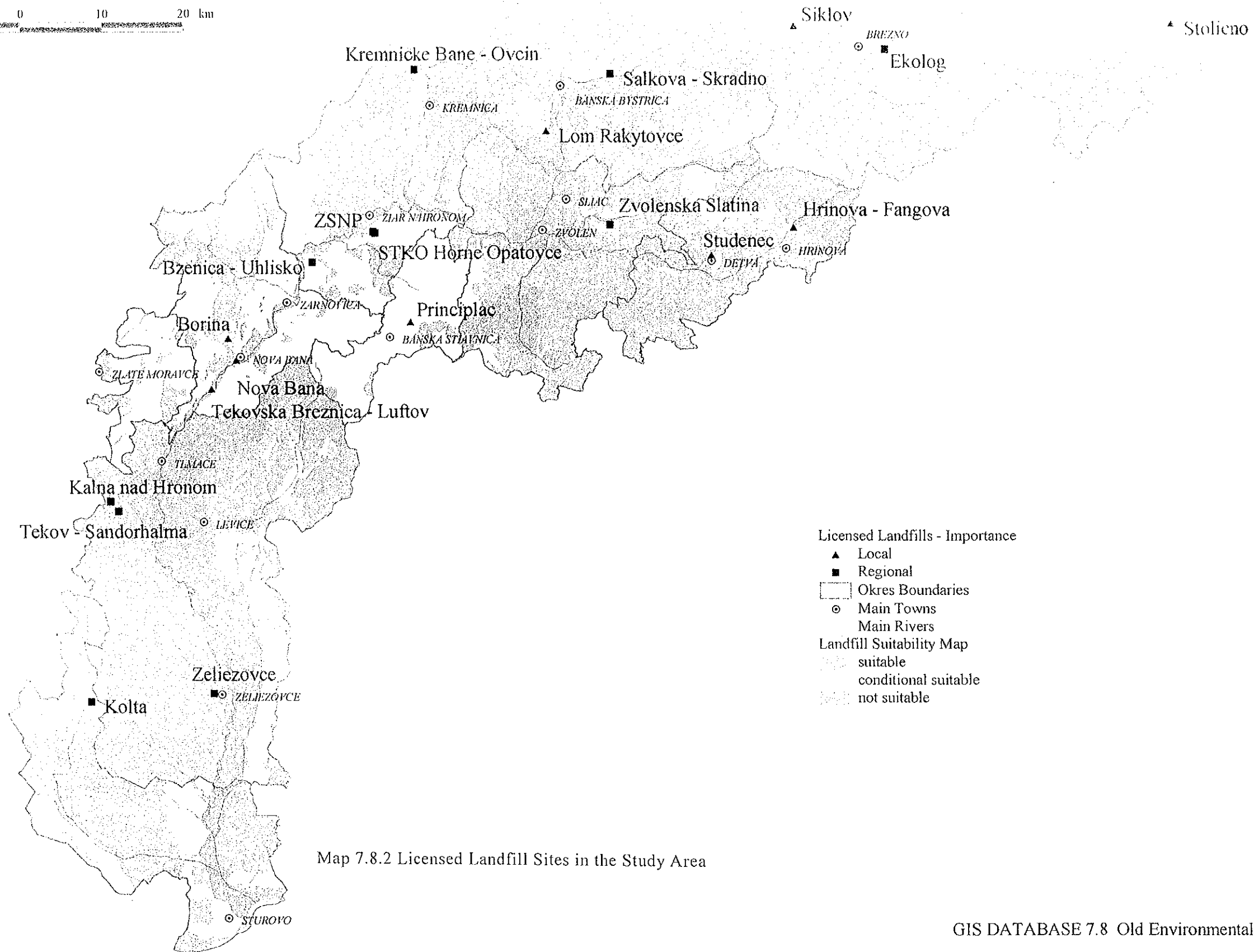


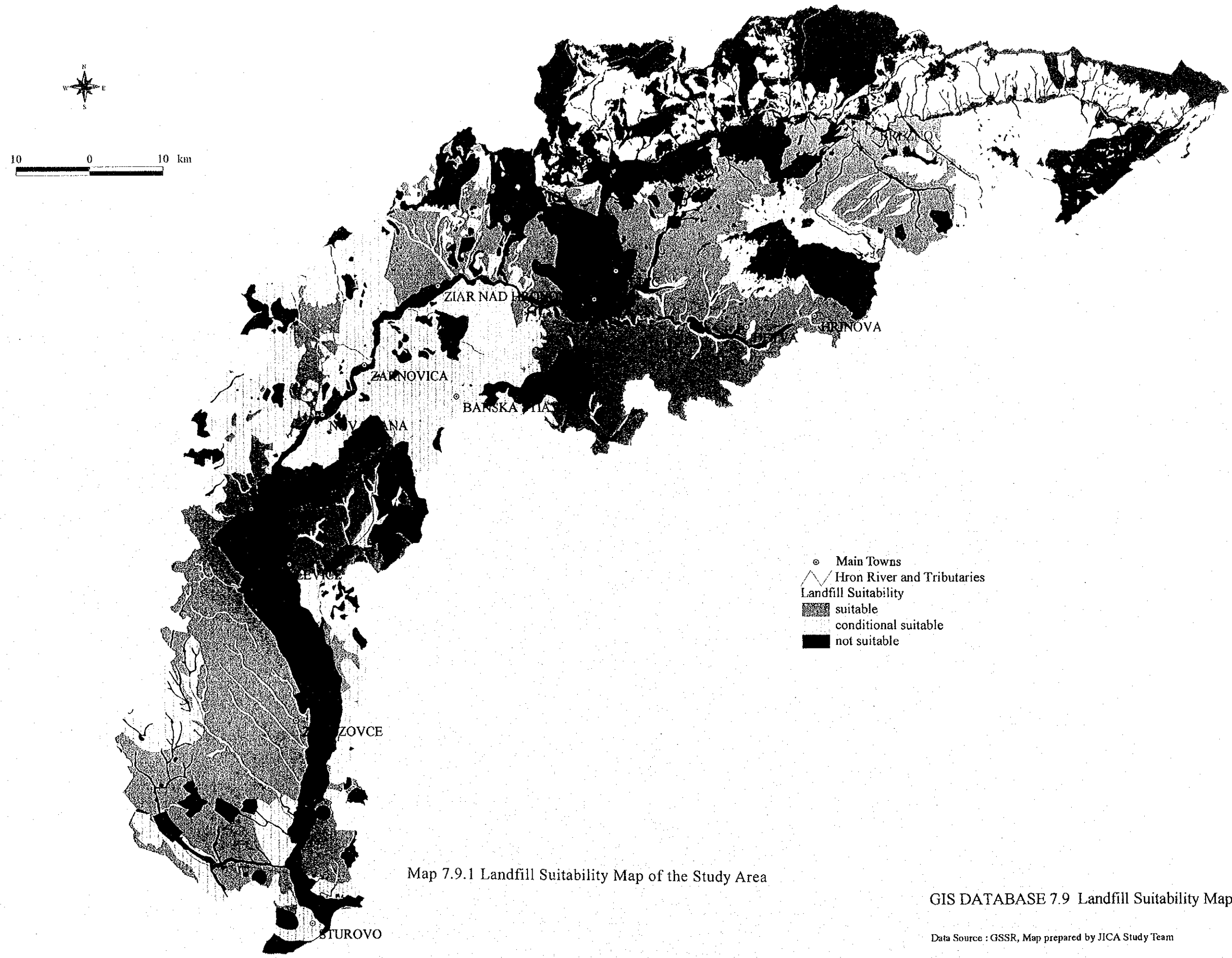
Map 7.8.1 Old Environmental Loads in the Study Area





10 0 10 20 km

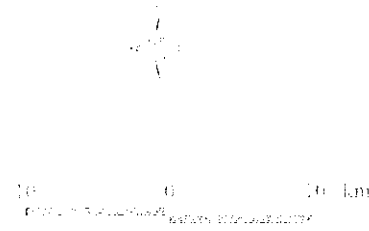


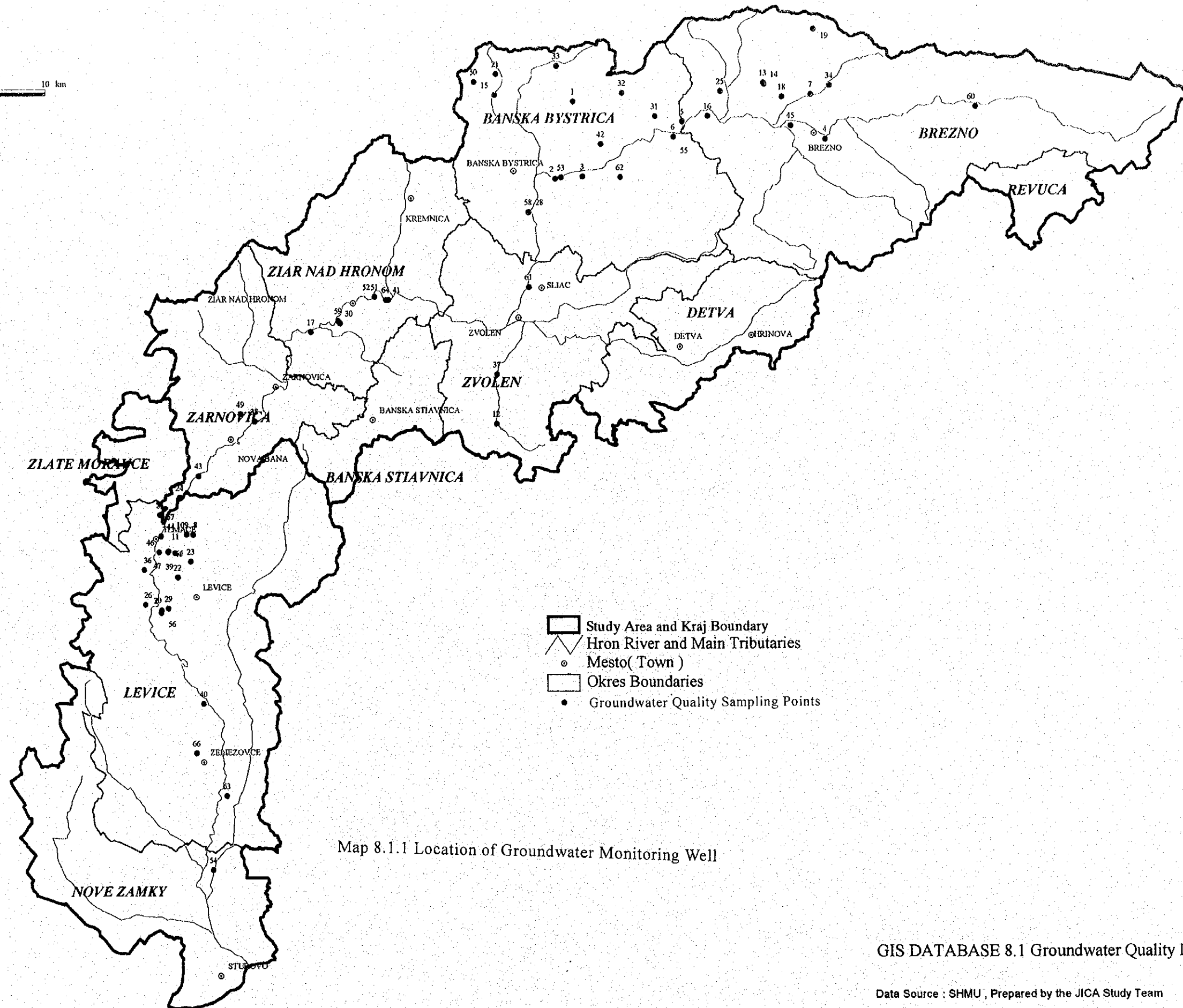
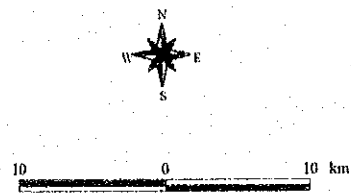


Map 7.9.1 Landfill Suitability Map of the Study Area

GIS DATABASE 7.9 Landfill Suitability Maps

Data Source : GSSR, Map prepared by JICA Study Team

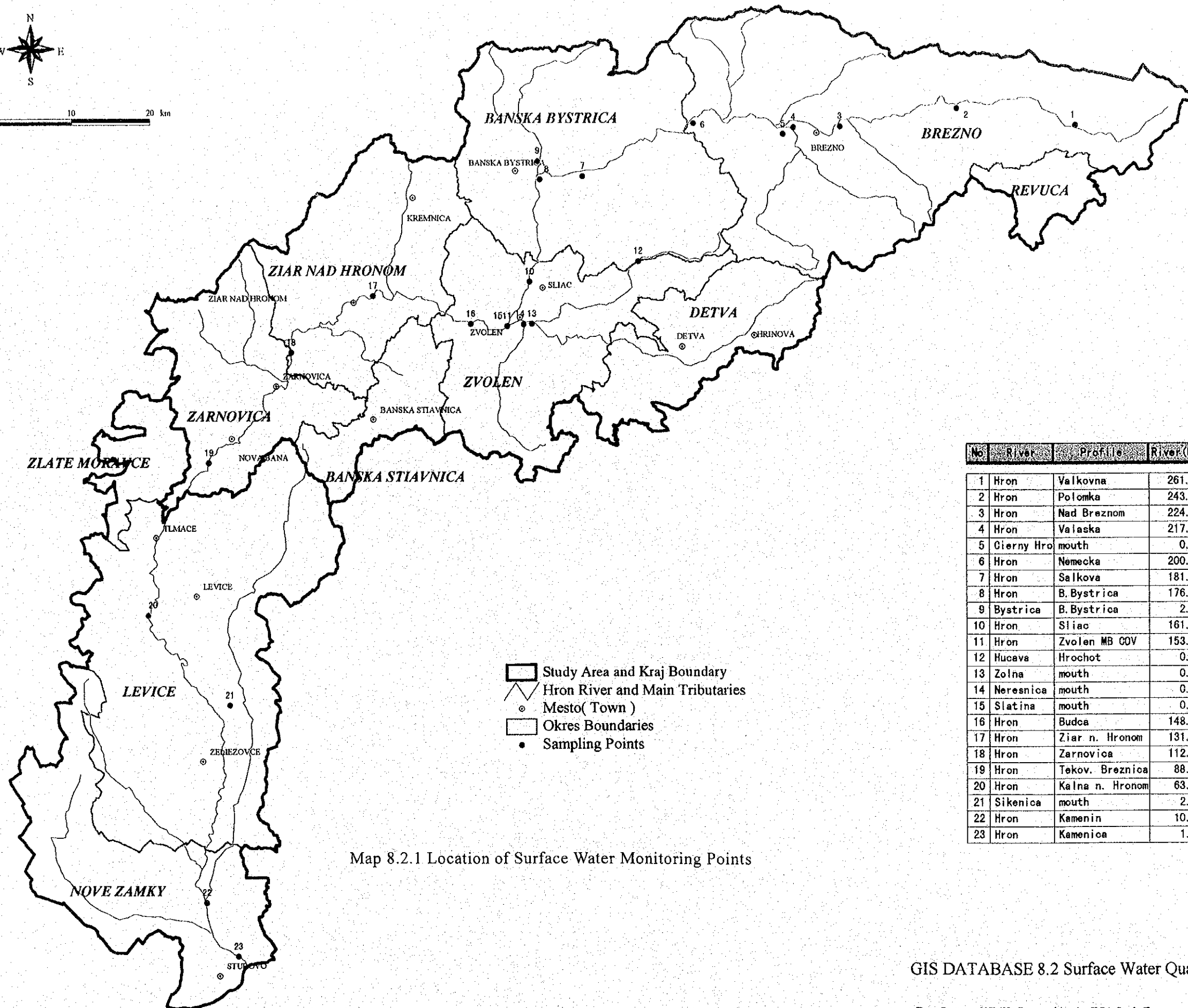
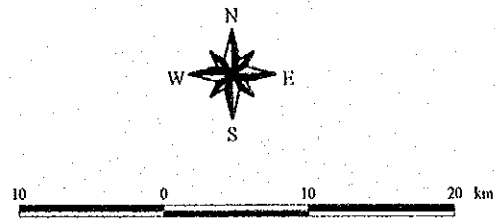




Map 8.1.1 Location of Groundwater Monitoring Well

GIS DATABASE 8.1 Groundwater Quality Data

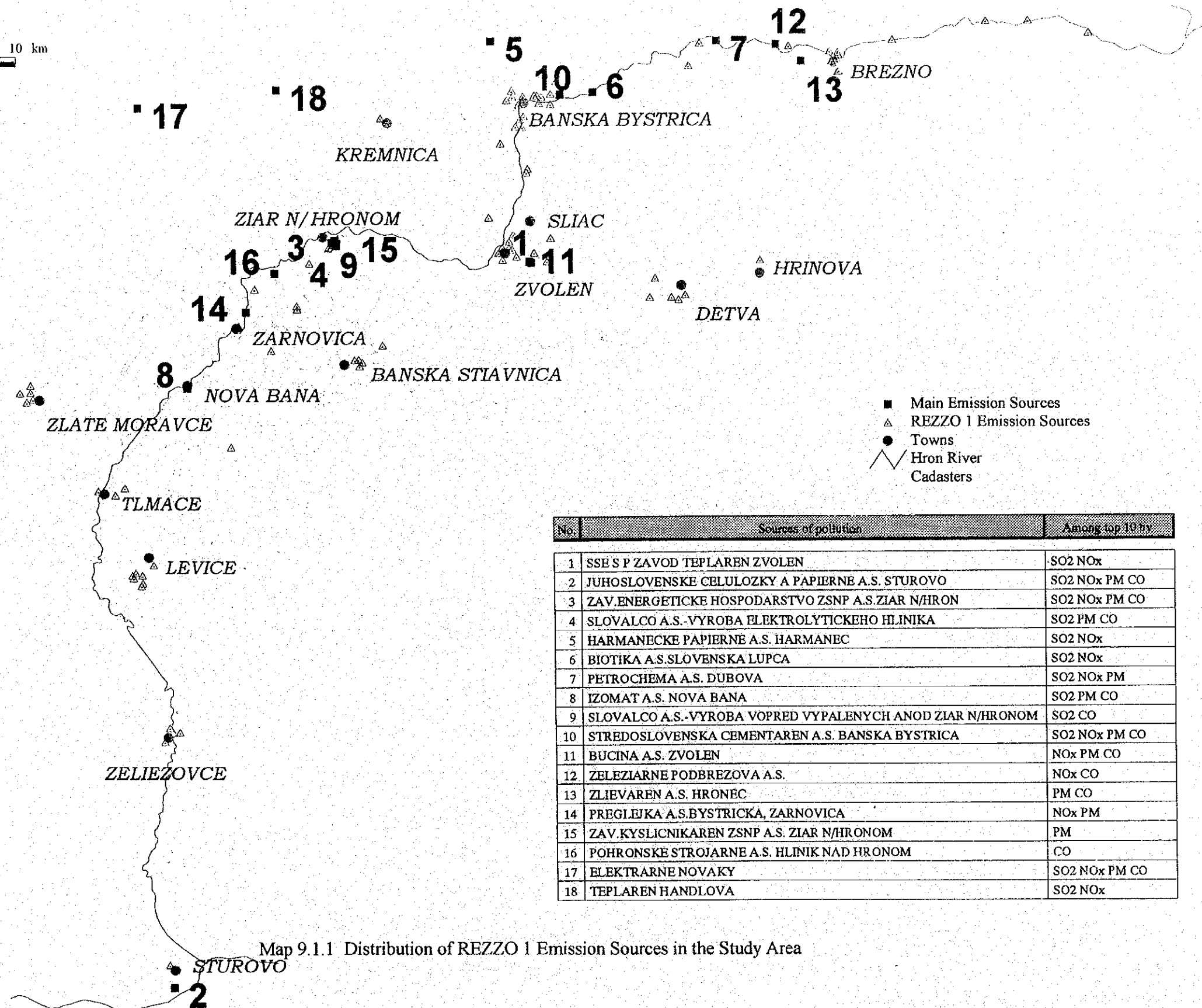
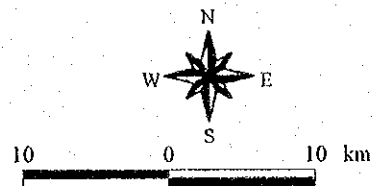
Data Source : SHMU , Prepared by the JICA Study Team



- Study Area and Kraj Boundary
- Hron River and Main Tributaries
- Mesto(Town)
- Okres Boundaries
- Sampling Points

No	River	Profile	River (km)
1	Hron	Valkovna	261.30
2	Hron	Polomka	243.40
3	Hron	Nad Breznom	224.80
4	Hron	Valaska	217.00
5	Cierny Hro	mouth	0.05
6	Hron	Nemecka	200.80
7	Hron	Salkova	181.40
8	Hron	B. Bystrica	176.80
9	Bystrica	B. Bystrica	2.10
10	Hron	Sliac	161.10
11	Hron	Zvolen MB COV	153.60
12	Hucava	Hrochot	0.50
13	Zolna	mouth	0.05
14	Neresnica	mouth	0.05
15	Slatina	mouth	0.30
16	Hron	Budca	148.20
17	Hron	Ziar n. Hronom	131.50
18	Hron	Zarnovica	112.00
19	Hron	Tekov. Breznica	88.90
20	Hron	Kalna n. Hronom	63.70
21	Sikenica	mouth	2.70
22	Hron	Kamenin	10.90
23	Hron	Kamenica	1.70

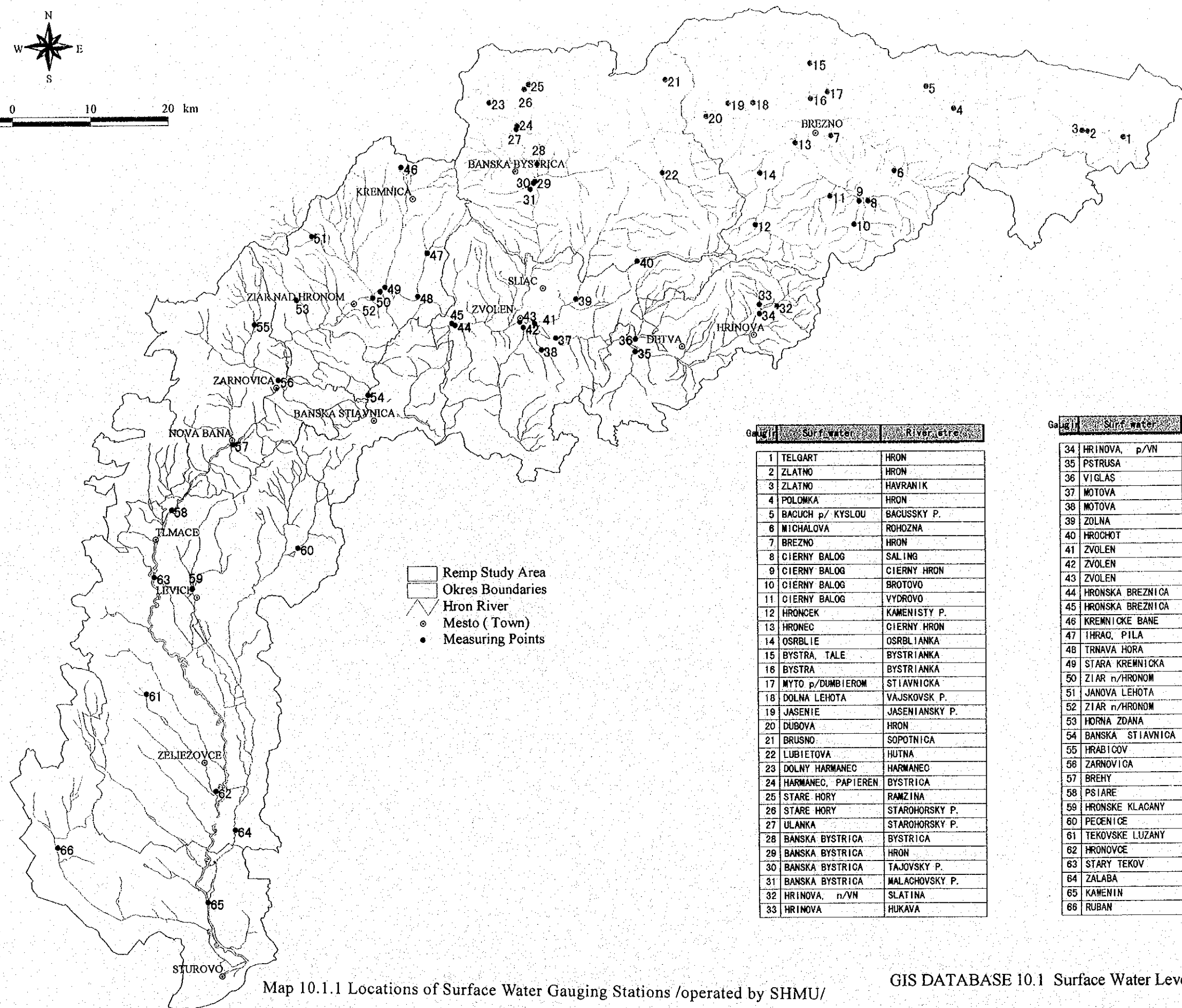
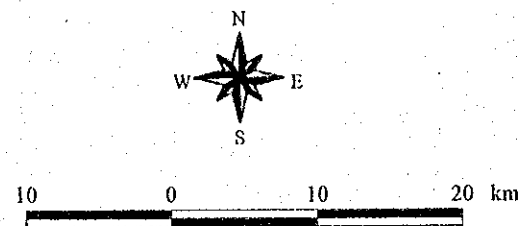
Map 8.2.1 Location of Surface Water Monitoring Points



- Main Emission Sources
- △ REZZO 1 Emission Sources
- Towns
- Hron River
- Cadasters

No.	Sources of pollution	Among top 10 by
1	SSE S P ZAVOD TEPLAREN ZVOLEN	SO2 NOx
2	JUHOSLOVENSKE CELULOZKY A PAPIERNE A.S. STUROVO	SO2 NOx PM CO
3	ZAV.ENERGETICKE HOSPODARSTVO ZSNP A.S. ZIAR N/HRON	SO2 NOx PM CO
4	SLOVALCO A.S.-VYROBA ELEKTROLYTICKEHO HLINIKA	SO2 PM CO
5	HARMANECKE PAPIERNE A.S. HARMANEC	SO2 NOx
6	BIOTIKA A.S.SLOVENSKA LUPCA	SO2 NOx
7	PETROCHEMA A.S. DUBOVA	SO2 NOx PM
8	IZOMAT A.S. NOVA BANA	SO2 PM CO
9	SLOVALCO A.S.-VYROBA VOPRED VYPALENYCH ANOD ZIAR N/HRONOM	SO2 CO
10	STREDOSLOVENSKA CEMENTAREN A.S. BANSKA BYSTRICA	SO2 NOx PM CO
11	BUCINA A.S. ZVOLEN	NOx PM CO
12	ZELEZIARNE PODBREZOVA A.S.	NOx CO
13	ZLIEVAREN A.S. HRONEC	PM CO
14	PREGLEJKA A.S.BYSTRICKA, ZARNOVICA	NOx PM
15	ZAV.KYSLICNIKAREN ZSNP A.S. ZIAR N/HRONOM	PM
16	POHRONSKE STROJARNE A.S. HLINIK NAD HRONOM	CO
17	ELEKTRARNE NOVAKY	SO2 NOx PM CO
18	TEPLAREN HANDLOVA	SO2 NOx

Map 9.1.1 Distribution of REZZO 1 Emission Sources in the Study Area



- Remp Study Area
- Okres boundaries
- Hron River
- Mesto (Town)
- Measuring Points

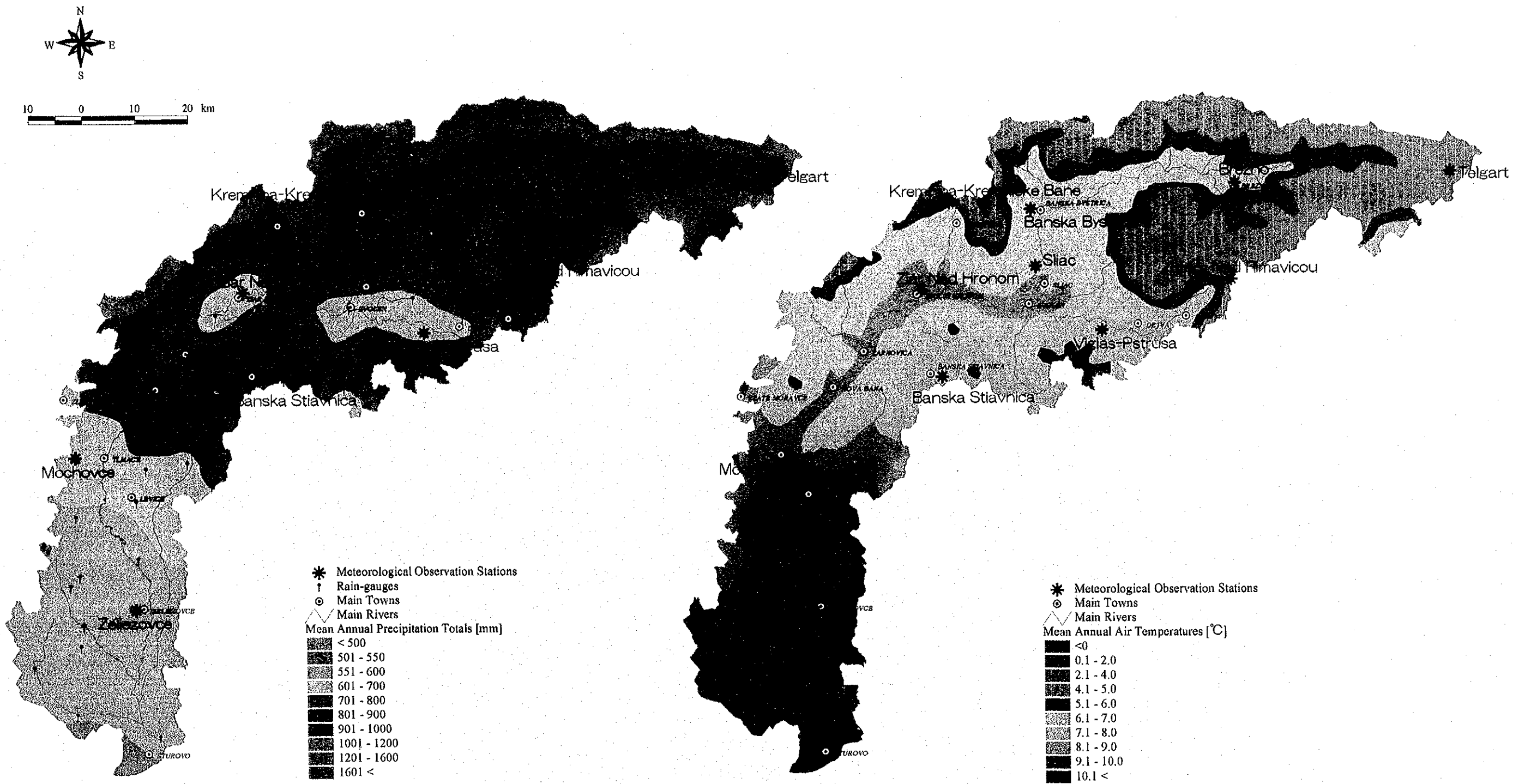
Gauging	Surf. water	River stre.
1	TELGART	HRON
2	ZLATNO	HRON
3	ZLATNO	HAVRANIK
4	POLOMKA	HRON
5	BACUCH p/ KYSLOU	BACUSSKY P.
6	MICHALOVA	ROHOZNA
7	BREZNO	HRON
8	CIERNY BALOG	SALING
9	CIERNY BALOG	CIERNY HRON
10	CIERNY BALOG	BROTOVO
11	CIERNY BALOG	VYDROVO
12	HRONEC	KAMENISTY P.
13	HRONEC	CIERNY HRON
14	OSRBLIE	OSRBLIANKA
15	BYSTRA, TALE	BYSTRIANKA
16	BYSTRA	BYSTRIANKA
17	MYTO p/DUMBIEROM	STIAVNICKA
18	DOLNA LEHOTA	VAJSKOVSK P.
19	JASENIE	JASENIANSKY P.
20	DUBOVA	HRON
21	BRUSNO	SOPOTNICA
22	LUBIETOVA	HUTNA
23	DOLNY HARMANEC	HARMANEC
24	HARMANEC, PAPIEREN	BYSTRICA
25	STARE HORY	RAMZINA
26	STARE HORY	STAROHORSKY P.
27	ULANKA	STAROHORSKY P.
28	BANSKA BYSTRICA	BYSTRICA
29	BANSKA BYSTRICA	HRON
30	BANSKA BYSTRICA	TAJOVSKY P.
31	BANSKA BYSTRICA	MALACHOVSKY P.
32	HRINOVA, n/VN	SLATINA
33	HRINOVA	HUKAVA

Gauging	Surf. water	River stre.
34	HRINOVA, p/VN	SLATINA
35	PSTRUSA	KOCANSKY P.
36	VIGLAS	DRAVSKY P.
37	MOTOVA	SLATINA
38	MOTOVA	SEKIERSKY P.
39	ZOLNA	ZOLNA
40	HRCHOT	HUCAVA
41	ZVOLEN	ZOLNA
42	ZVOLEN	NERESHICA
43	ZVOLEN	SLATINA
44	HRONSKA BREZNICA	HRON
45	HRONSKA BREZNICA	JASENICA
46	KREMNICKE BANE	PREVOD Z TURCA
47	THRAC, PILA	VAPENNY P.
48	TRNAVA HORA	IHRACSKY P.
49	STARA KREMNICKA	KREMNIC P.
50	ZIAR n/HRONOM	KREM. DED.
51	JANOVA LEHOTA	LUTILSKY P.
52	ZIAR n/HRONOM	HRON
53	HORNA ZDANA	PROCHOTSKY P.
54	BANSKA STIAVNICA	VYHNANSKY P.
55	HRABICOV	KLAK
56	ZARNOVICA	KLAK
57	BREHY	HRON
58	PSIARE	HRON
59	HRONSKÉ KLACANY	PODLUZIANKA
60	PECENICE	JABLONOVKA
61	TEKOVSKE LUZANY	LUZIANKA
62	HRONOVCÉ	LUZIANKA
63	STARÝ TEKOV	PEREC
64	ZALABA	PEREC
65	KAMENIN	HRON
66	RUBAN	PARIZ

Map 10.1.1 Locations of Surface Water Gauging Stations /operated by SHMU/

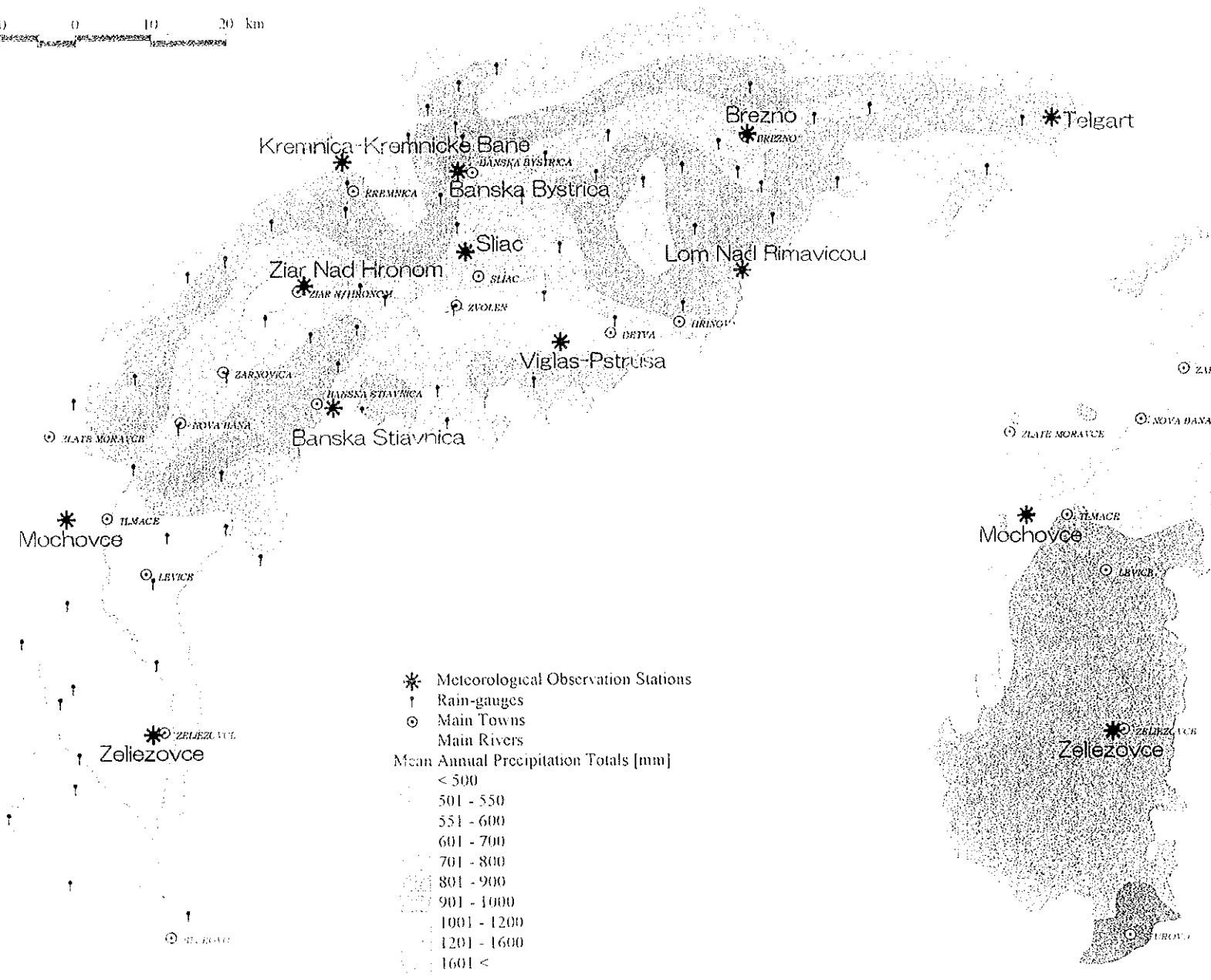
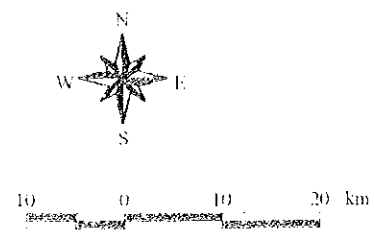
GIS DATABASE 10.1 Surface Water Level Data

Data Source : SHMU, Map prepared by JICA Study Team

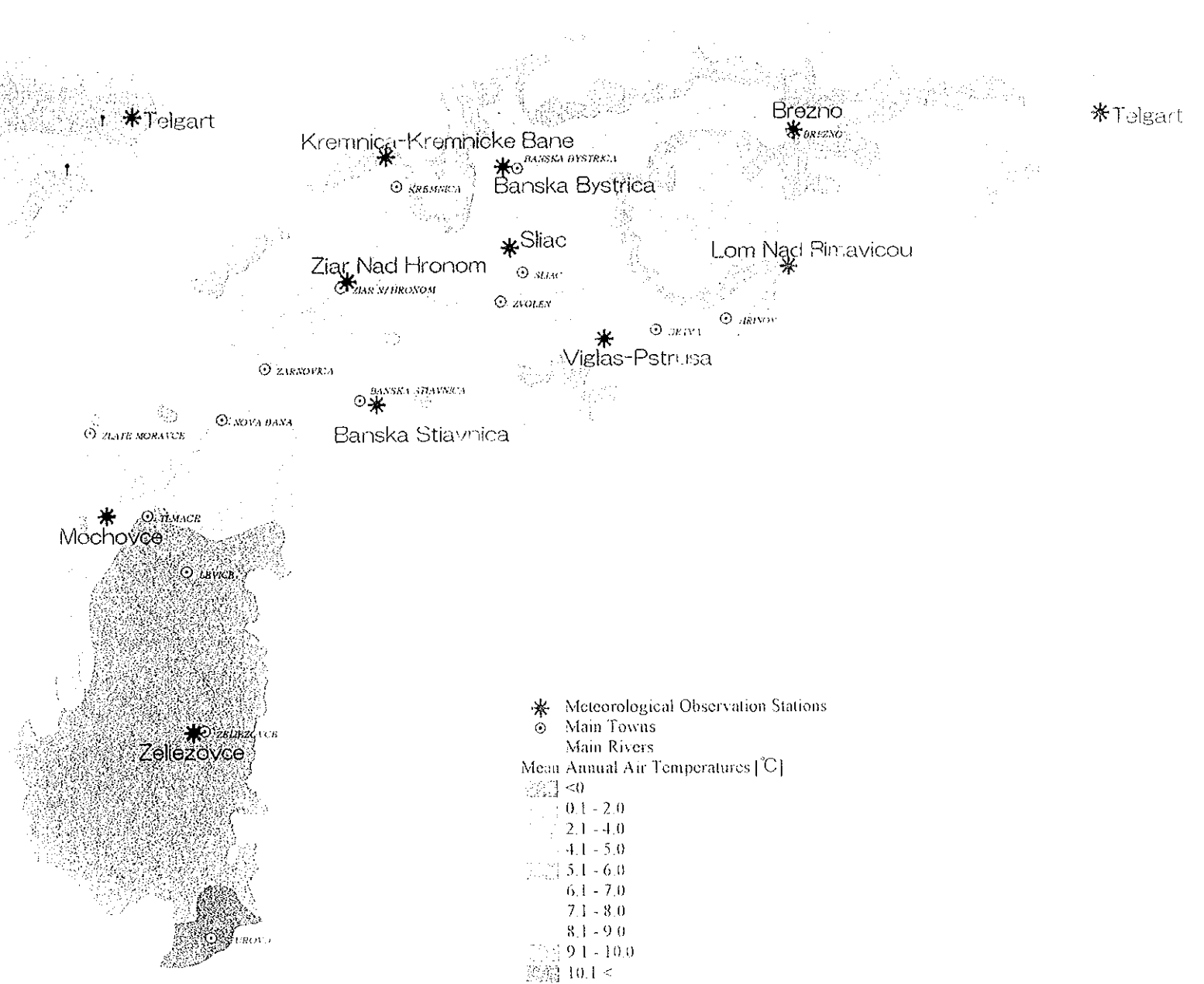


Map 11.1.1 Areal Distribution of Mean Annual Precipitation Totals [mm] calculated for the period of 1951-1980 by SHMU

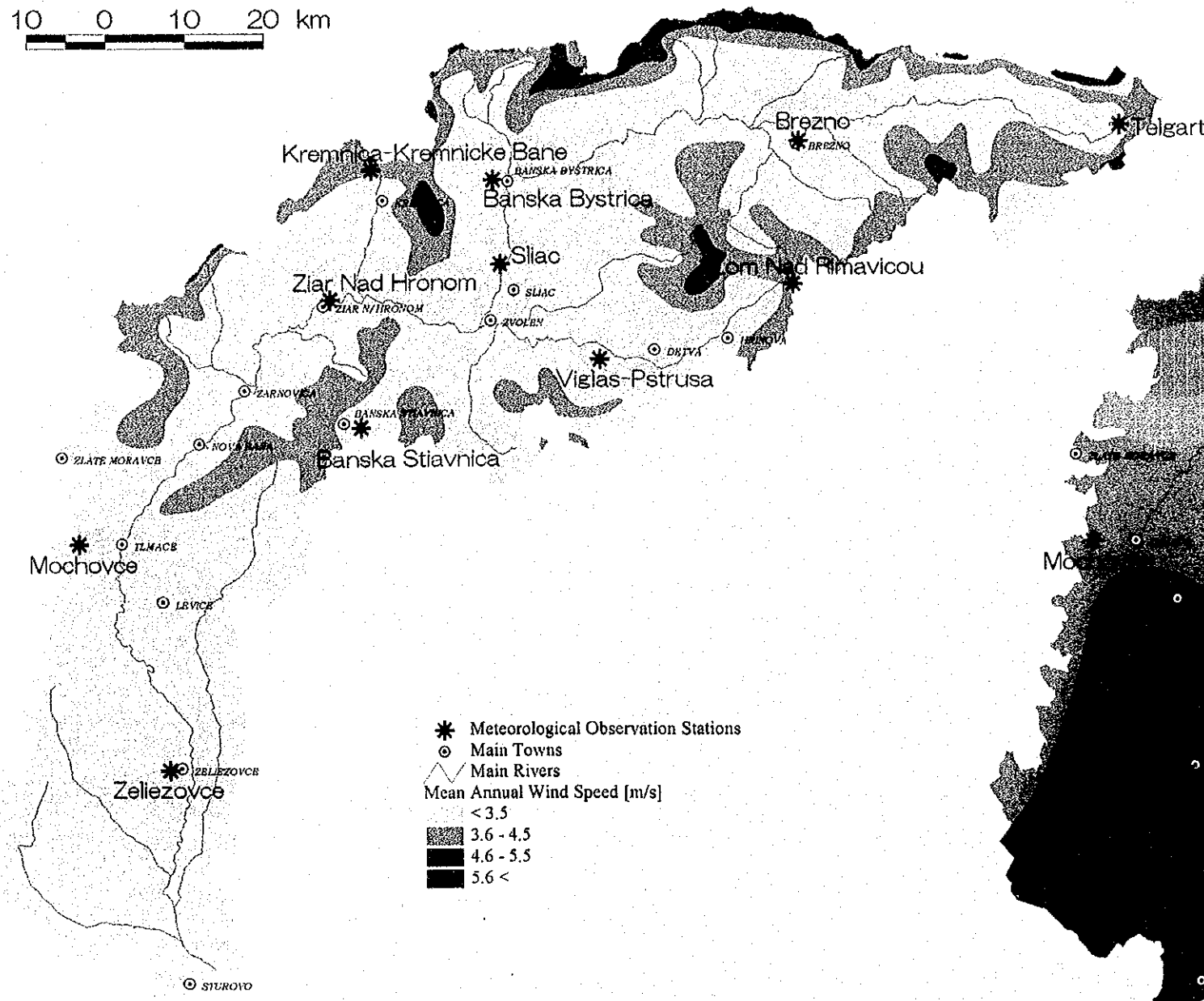
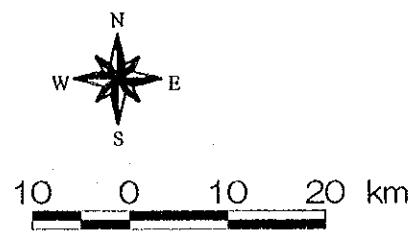
Map 11.1.2 Areal Distribution of Mean Annual Air temperatures [°C] calculated for the period of 1951-1980 by SHMU



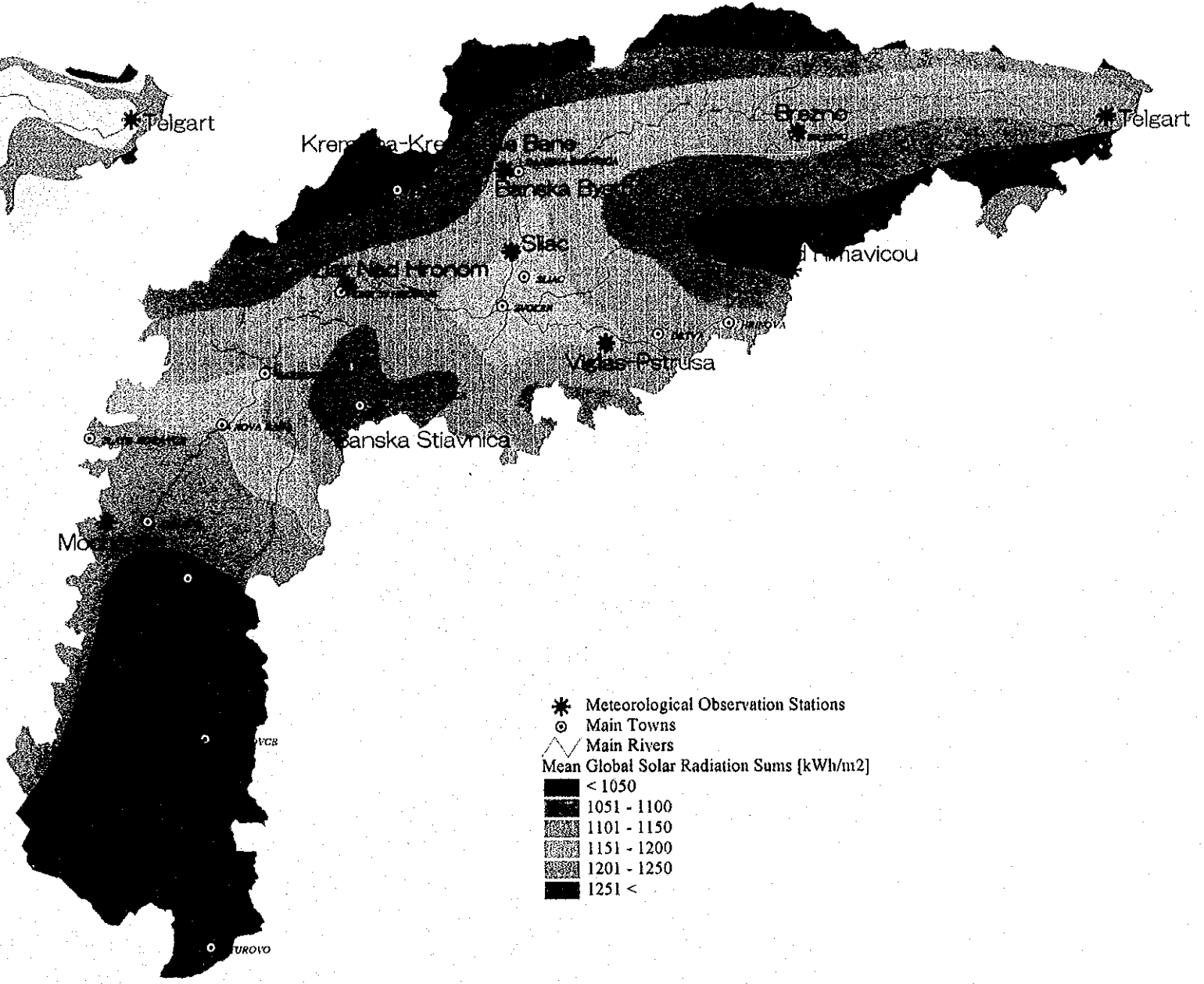
Map 11.1.1 Areal Distribution of Mean Annual Precipitation Totals [mm] calculated for the period of 1951-1980 by SHMU



Map 11.1.2 Areal Distribution of Mean Annual Air temperatures [°C] calculated for the period of 1951-1980 by SHMU



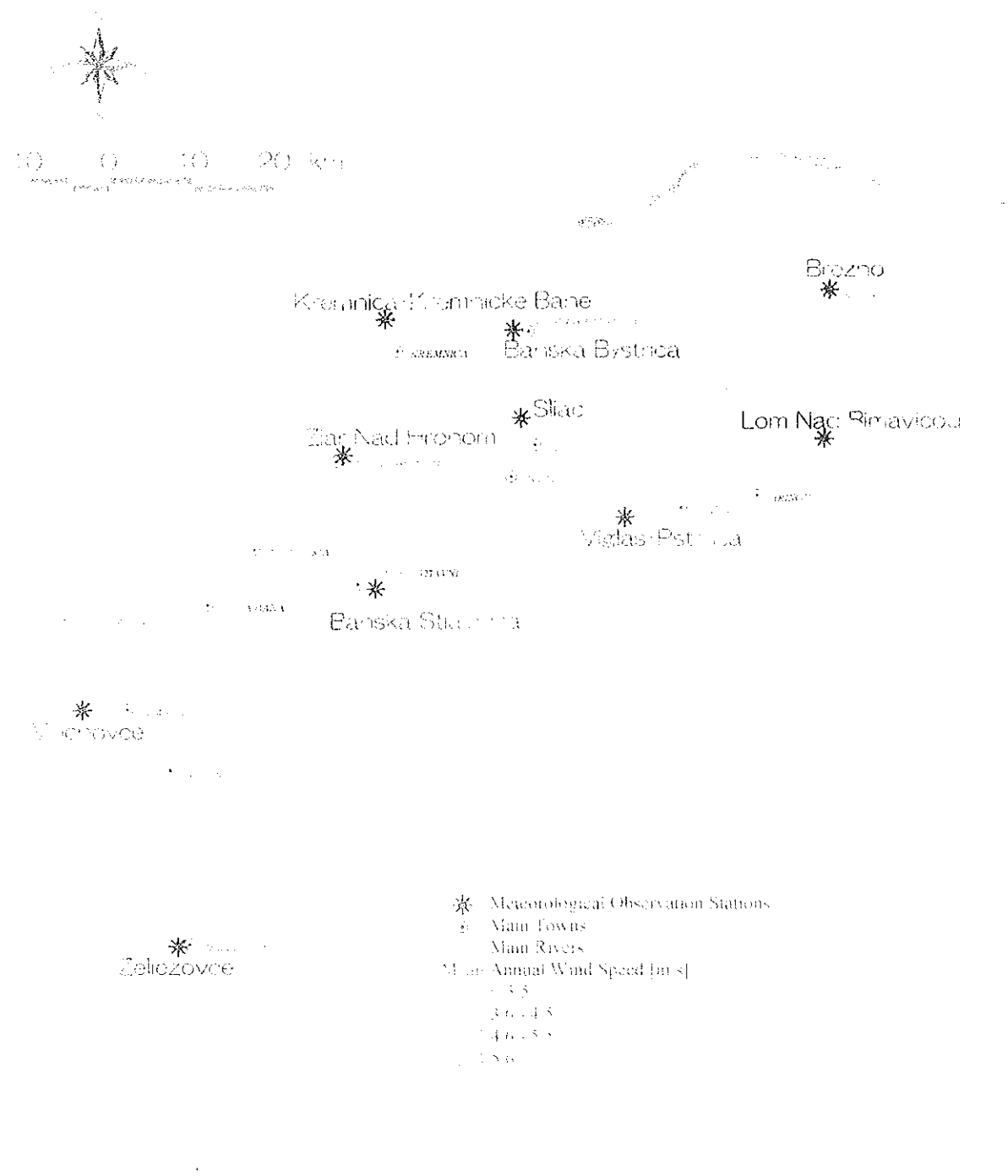
Map 11.1.3 Areal Distribution of Mean Annual Wind Speed [m/s] at 10 m above Terrain calculated for the period of 1971-1990 by SHMU



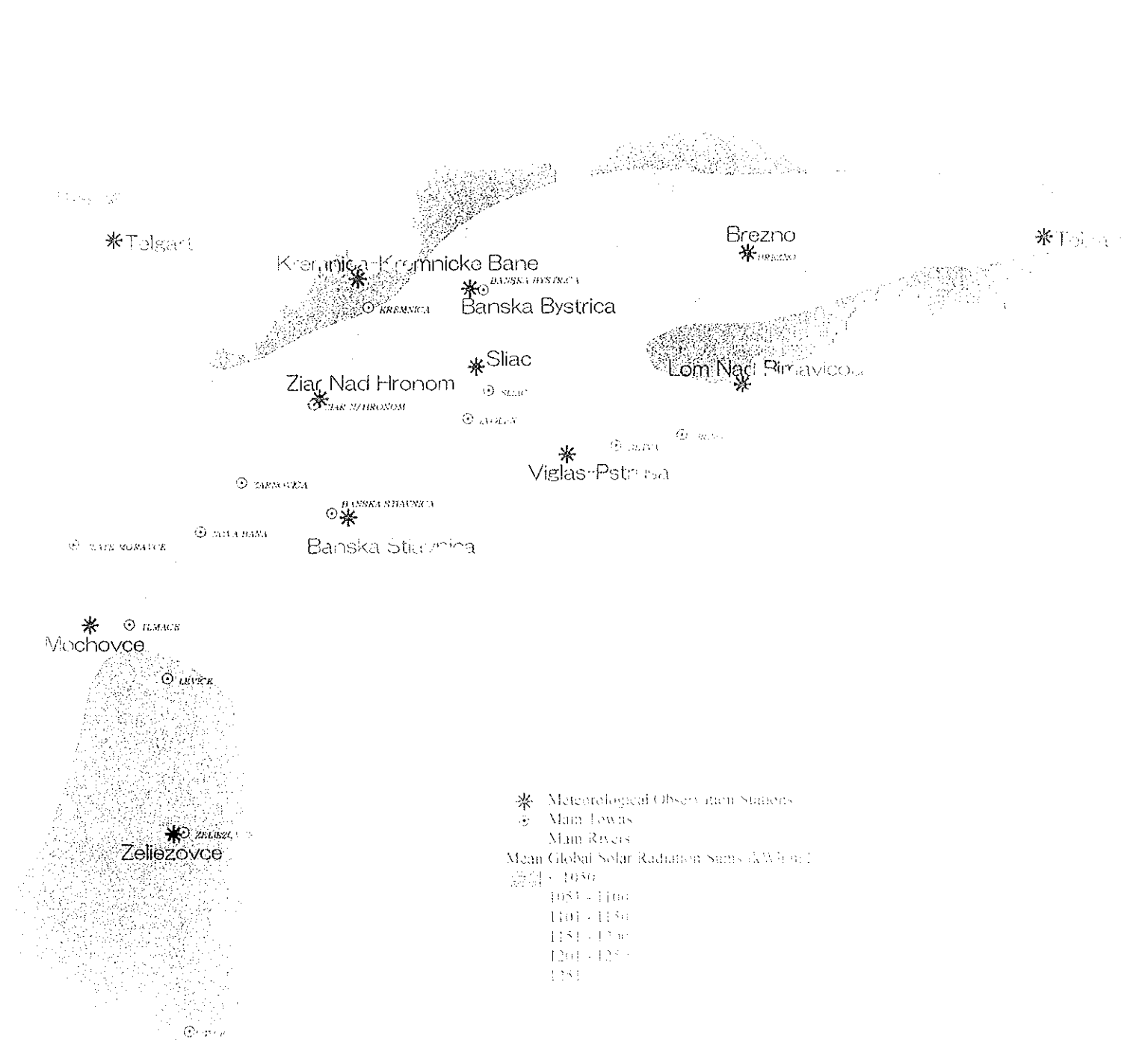
Map 11.1.4 Areal Distribution of Mean Global Solar Radiation Sums [kWh/m2] calculated for the period of 1951-1980 by SHMU

GIS DATABASE 11.1 Meteorological Data Including Rain-Gauge Data

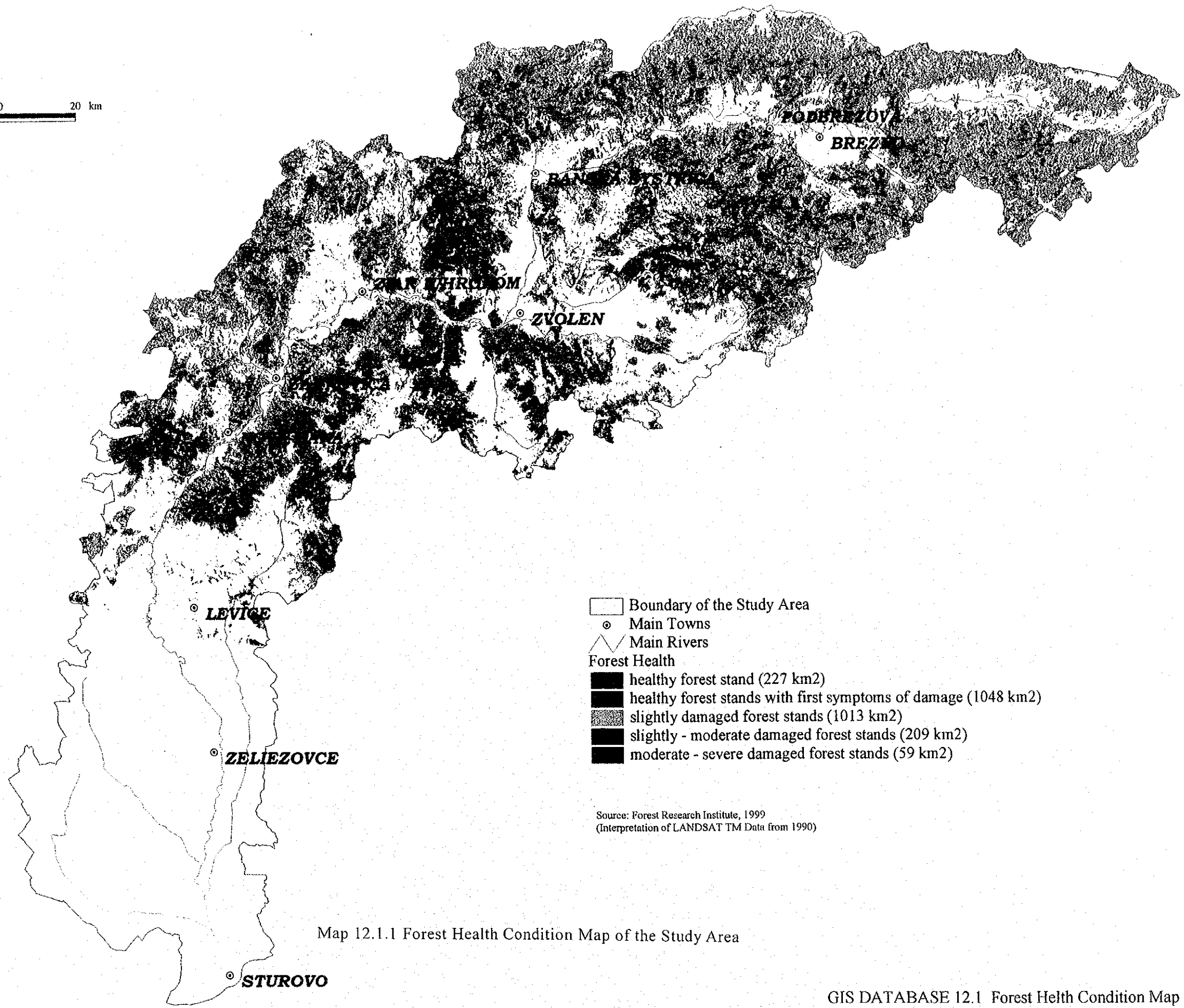
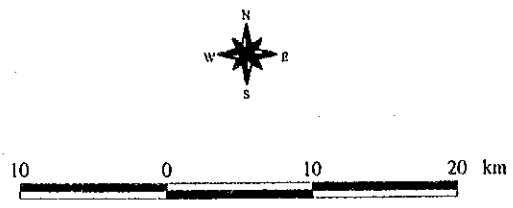
Data Source : SHMU, Map prepared by JICA Study Team



Map 11.1.3 Areal Distribution of Mean Annual Wind Speed [m/s] at 10 m above Terrain calculated for the period of 1971-1990 by SLM1



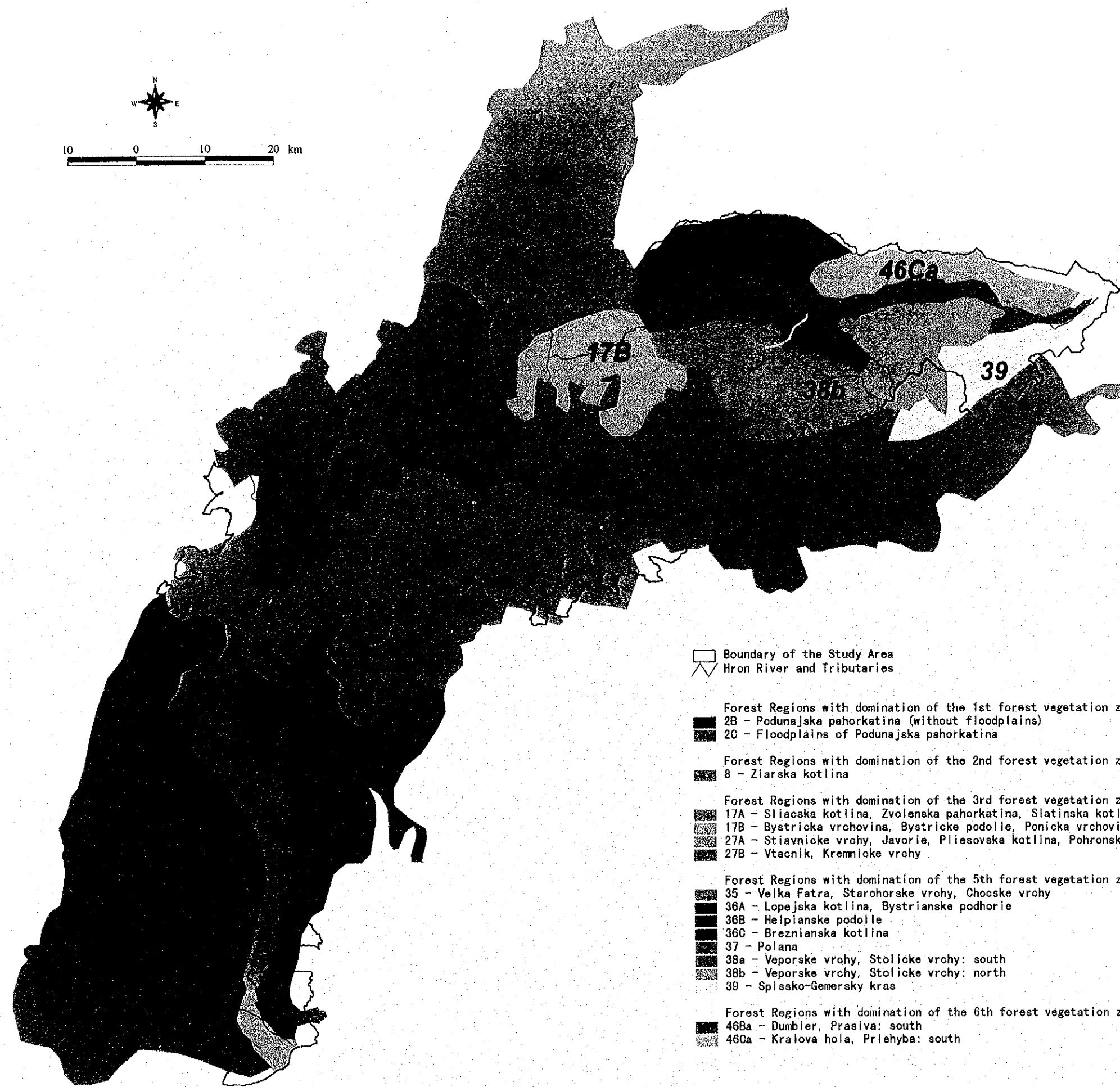
Map 11.1.4 Areal Distribution of Mean Global Solar Radiation [kWh/m²] calculated for the period of 1951-1981 by SLM1



- Boundary of the Study Area
- Main Towns
- △ Main Rivers
- Forest Health**
- healthy forest stand (227 km²)
- healthy forest stands with first symptoms of damage (1048 km²)
- slightly damaged forest stands (1013 km²)
- slightly - moderate damaged forest stands (209 km²)
- moderate - severe damaged forest stands (59 km²)

Source: Forest Research Institute, 1999
 (Interpretation of LANDSAT TM Data from 1990)

Map 12.1.1 Forest Health Condition Map of the Study Area



- Boundary of the Study Area
- ▤ Hron River and Tributaries

- Forest Regions with domination of the 1st forest vegetation zone
 - 2B - Podunajska pahorkatina (without floodplains)
 - 2C - Floodplains of Podunajska pahorkatina

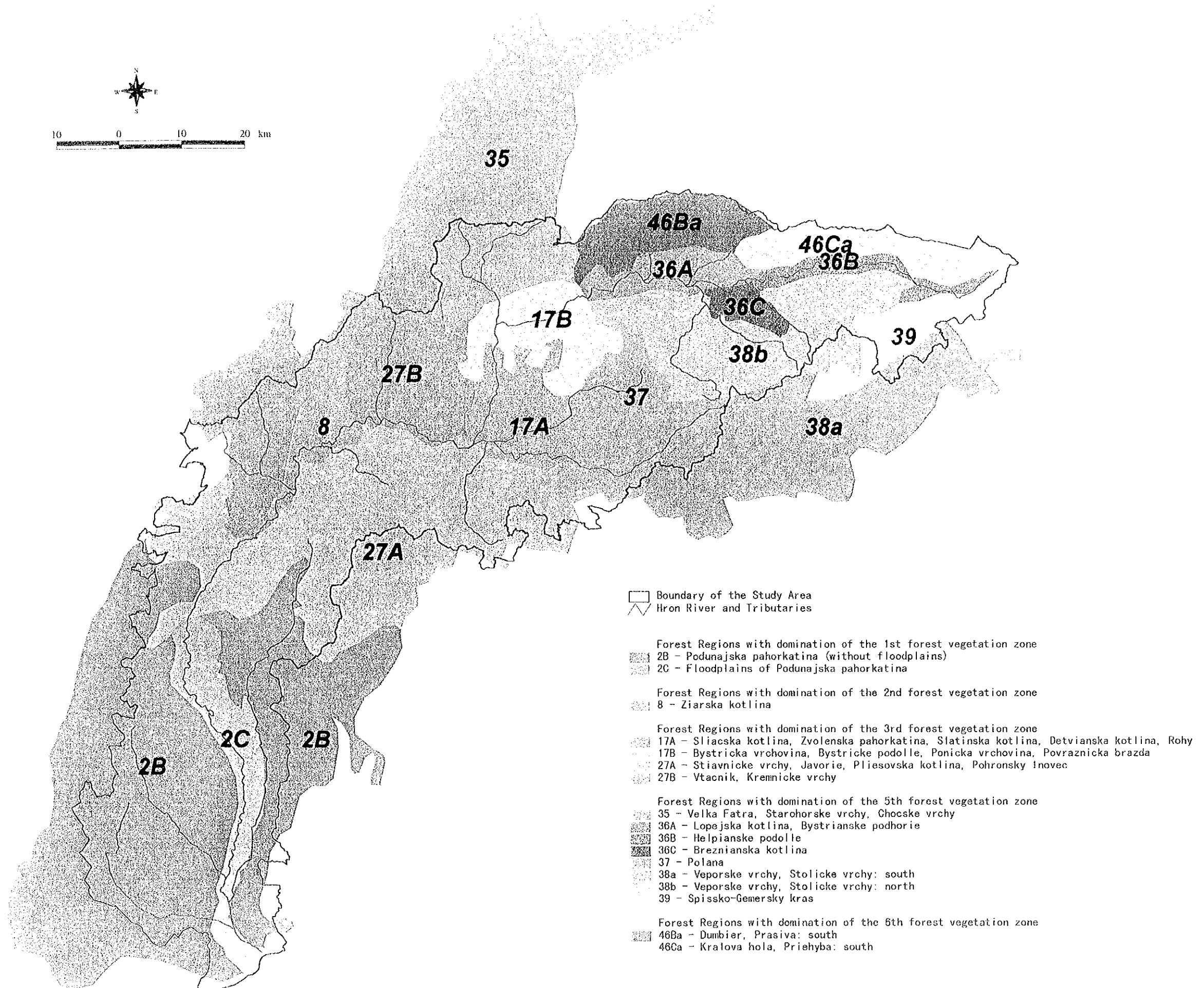
- Forest Regions with domination of the 2nd forest vegetation zone
 - 8 - Zlarska kotlina

- Forest Regions with domination of the 3rd forest vegetation zone
 - 17A - Sliacska kotlina, Zvolenska pahorkatina, Slatinska kotlina, Detvianska kotlina, Rohy
 - 17B - Bystricka vrchovina, Bystricke podolie, Ponicka vrchovina, Povraznicka brazda
 - 27A - Stiavnicke vrchy, Javorie, Pliesovska kotlina, Pohronsky Inovec
 - 27B - Vtacnik, Kremnicke vrchy

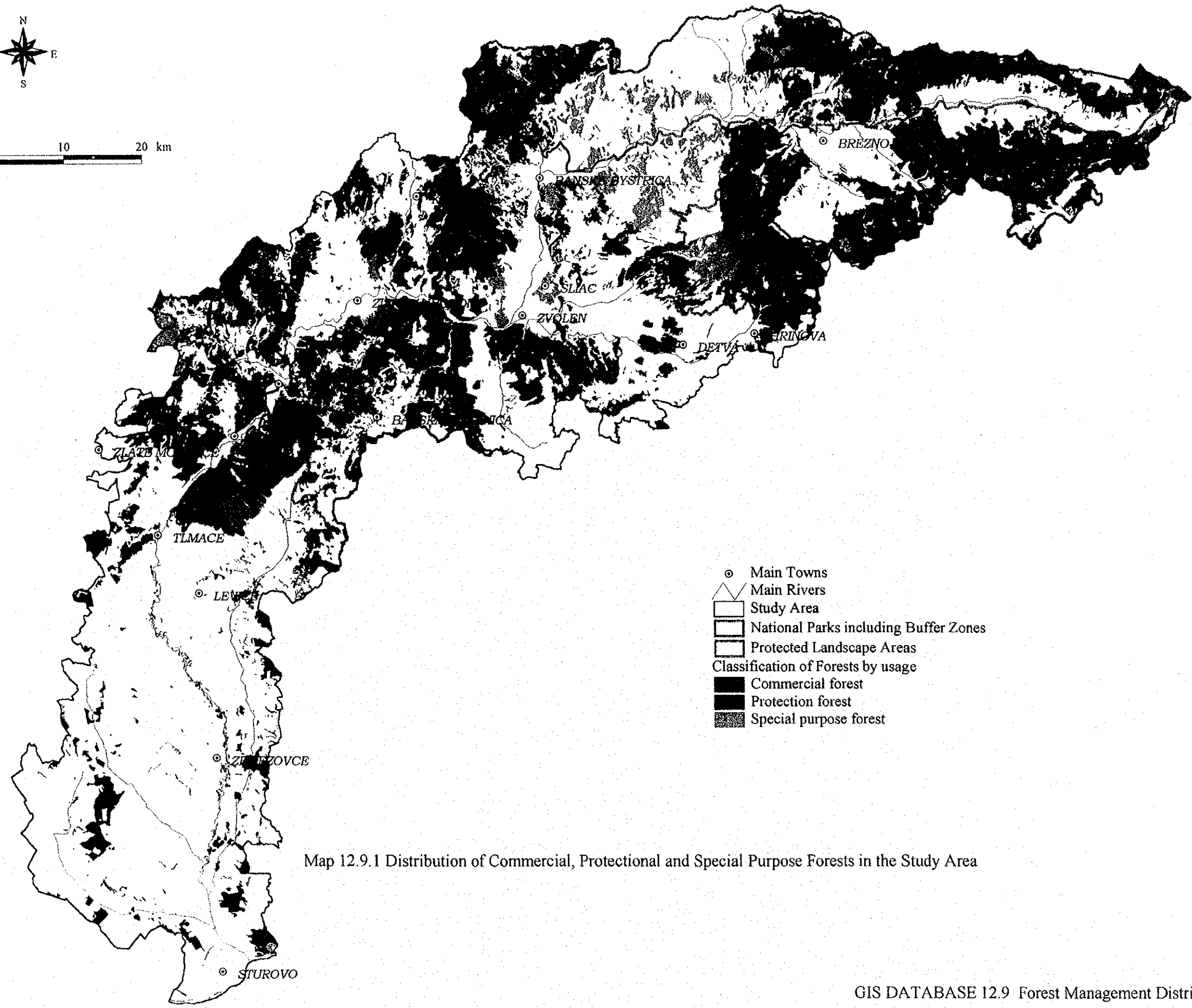
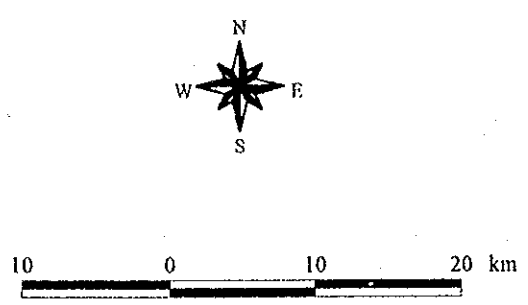
- Forest Regions with domination of the 5th forest vegetation zone
 - 35 - Velka Fatra, Starohorske vrchy, Chocske vrchy
 - 36A - Lopejska kotlina, Bystrianske podhorie
 - 36B - Helpianske podolie
 - 36C - Breznianska kotlina
 - 37 - Polana
 - 38a - Veporske vrchy, Stolicke vrchy: south
 - 38b - Veporske vrchy, Stolicke vrchy: north
 - 39 - Spissko-Gemersky kras

- Forest Regions with domination of the 6th forest vegetation zone
 - 46Ba - Dumbier, Prasiva: south
 - 46Ca - Kraiova hola, Priehyba: south

Map 12.6.1 Forest Regions

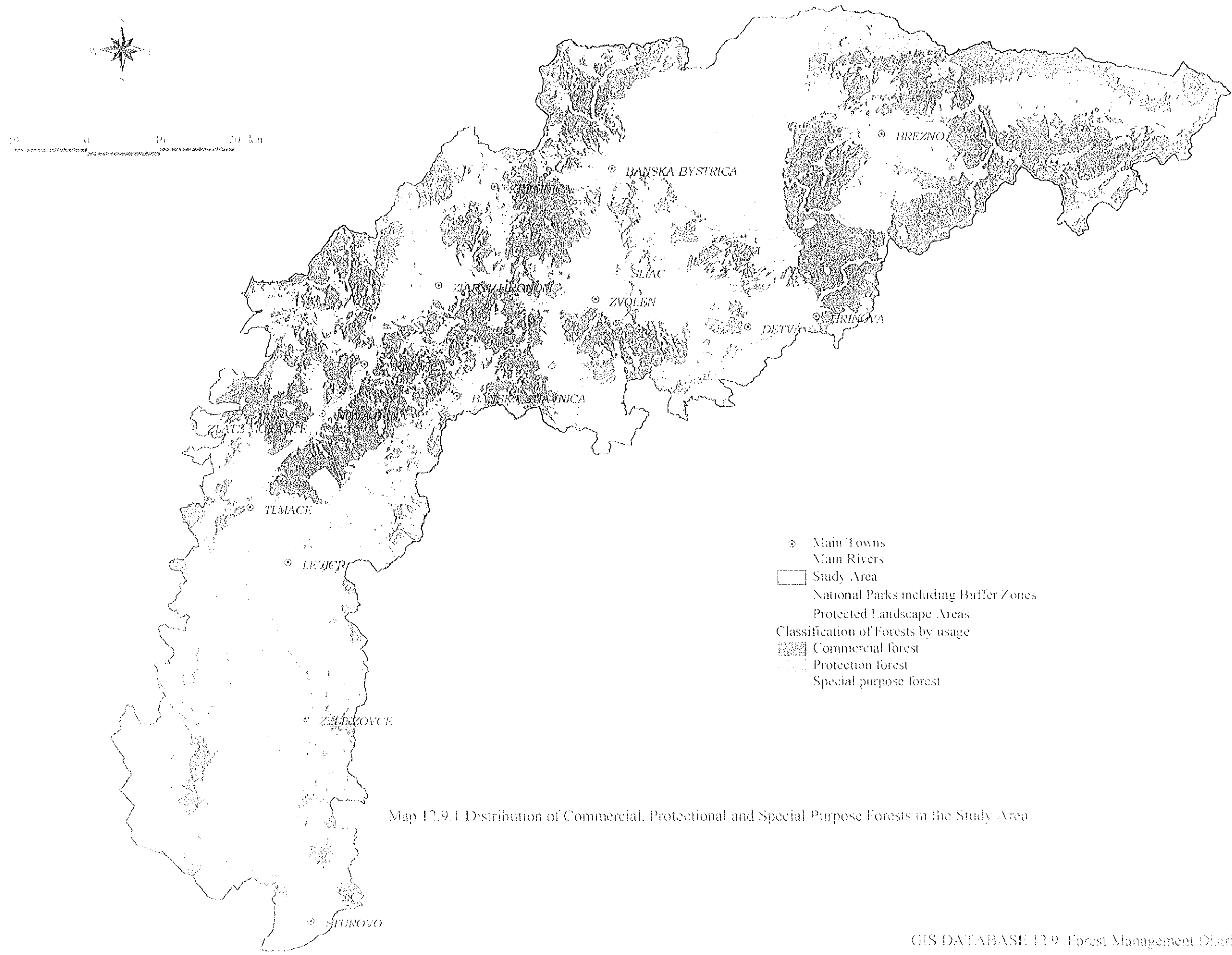


Map 12.6.1 Forest Regions



- ⊙ Main Towns
- Main Rivers
- Study Area
- National Parks including Buffer Zones
- Protected Landscape Areas
- Classification of Forests by usage
- Commercial forest
- Protection forest
- Special purpose forest

Map 12.9.1 Distribution of Commercial, Protectional and Special Purpose Forests in the Study Area



Map 12.9.1 Distribution of Commercial, Protectional and Special Purpose Forests in the Study Area