

Croatian Forests Data and the LIFE CROLIS Project

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Zagreb, October 3, 2023., Visibility Event



REPUBLIKA HRVATSKA
Ministarstvo gospodarstva
i održivog razvoja



AGENCIJA ZA
PLAĆANJA U
POLJOPRIVREDI,
RIBARSTVU I
RURALNOM
RAZVOJU

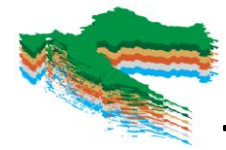


REPUBLIKA HRVATSKA
Državna geodetska uprava



FOND ZA ZAŠTITU OKOLIŠA I
ENERGETSKU UČINKOVITOST

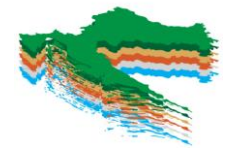




The importance of spatial data for forestry

- Long-term planning in forestry:
 - the basis of sustainable forest management
 - it is necessary to make a spatial and temporal plan of forest management works (forest management)
 - Forest management division - impossible without cartography
- Forest management area – defined by law
- *The forest management area of the Republic of Croatia includes all forests and forest lands in the territory of the Republic of Croatia as a functional unit that is determined to ensure a unique, permanent and sustainable management of forests and forest lands, as well as planning and directing their development. (Article 12 of the Law on Forests)*

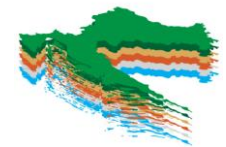




Forest management division

- The forest management area of the Republic of Croatia is divided into:
- Forest management units (a total of 1104 FMU, 649 state forests CF, 37 other state forests, 418 private)
- Compartments
- Subcompartments
- Forest infrastructure

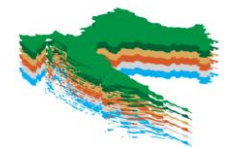




Forest management division - brief descriptions

- **Forest management unit** - a community of forest stands with similar habitat conditions gathered into a geographical and management entity, enabling permanent equal incomes from wood and non-wood products, a 10-year forest management plan is drawn up
- **Compartment** - permanent basic unit of economic division of forests and forest lands within the framework of an individual FMU. Contains one or more forest stands.
- Compartments are established for easier management, supervision and orientation in the field. They are marked with numbers in the direction N-S and W-E.
- The area of the compartment should not exceed 60 ha, except for forest land without trees, scrublands, maquis, garrigue, private forests and barren land (Ordinance on forest management, Article 3.)
- **Subcompartment** is the smallest variable unit of the forest management division within the compartment, which is managed separately as a forest stand.
- **Forest stands differ according to the primary purpose of the forest, silviculture form, type of management, stage of development, main tree species, age, goal of management, ratio of tree species and stand density index.**

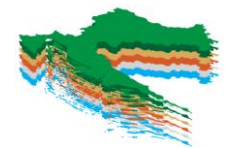




Forest management plans

- forest management plan for the forest management area of the Republic of Croatia
- forest management plan for the forest management unit
- forest management plan for the forest management unit with an ecological network area management plan
- forest management plan for private forest owners
- forest management plan for special purpose forests for the needs of the defense of the Republic of Croatia
- forest seed stands management program
- program of forest protection, tending and restoration
- program for the management of special purpose forests managed by other Legal Entity.

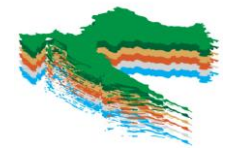




What kind of maps are made for the forest management plan

- 1. basic map of the forest management division with a topographic base (obtained on the basis of cadastral plans and the Croatian basic map) in a scale of 1:5000 or 1:10000, in which the boundaries of compartments, subcompartments, cadastral municipalities, counties, municipalities and existing roads are drawn
- 2. an overview map with a topographic base on a scale of 1:25000 or larger (obtained on the basis of the basic map), in which the boundaries of compartments, subcompartments and existing roads are drawn
- 3. thematic maps based on a topographic map in a scale of 1:25000 or larger:
 - a) map of forest management classes
 - b) map of age classes
 - c) map of existing and planned primary forest infrastructure
 - d) map of planned fellings
 - e) map of the risk of forest fire
 - f) phytocenological map
 - g) soil map
 - h) map of work inaccessible areas
 - i) map of protected areas
 - j) ecological network map
 - k) map of habitat types



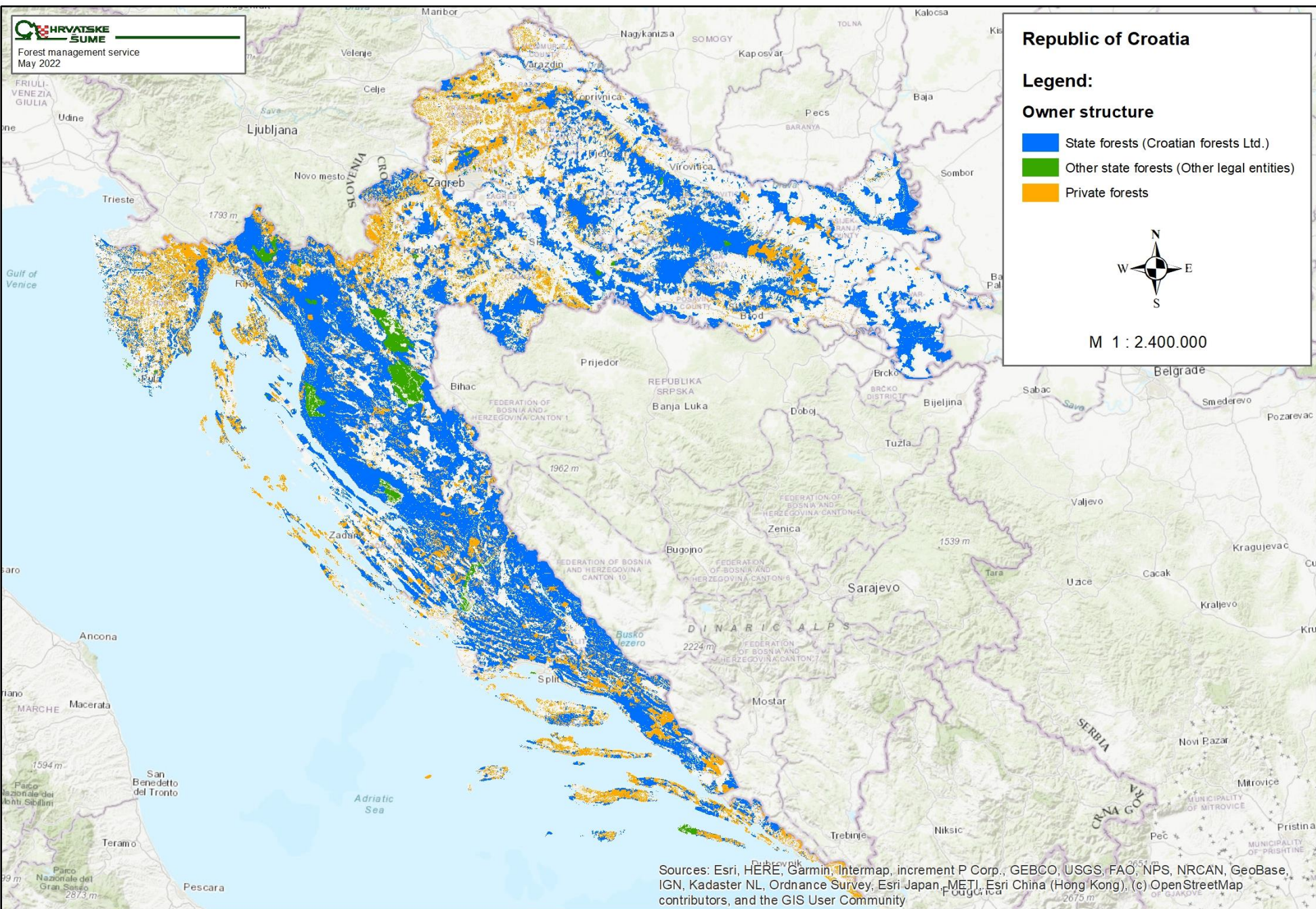
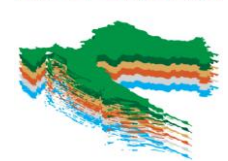


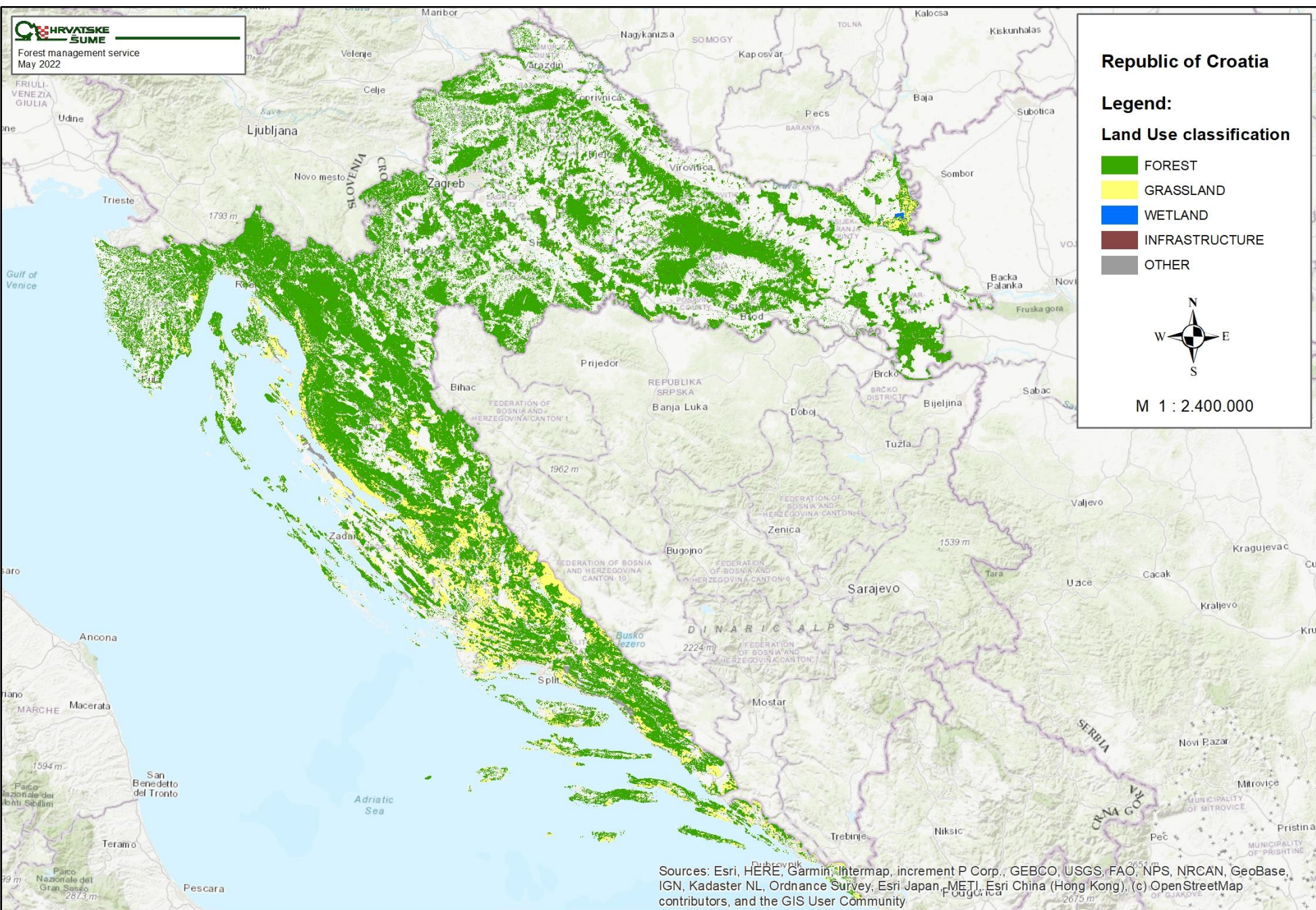
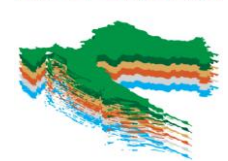
What spatial data have been prepared for the needs of the CROLIS project

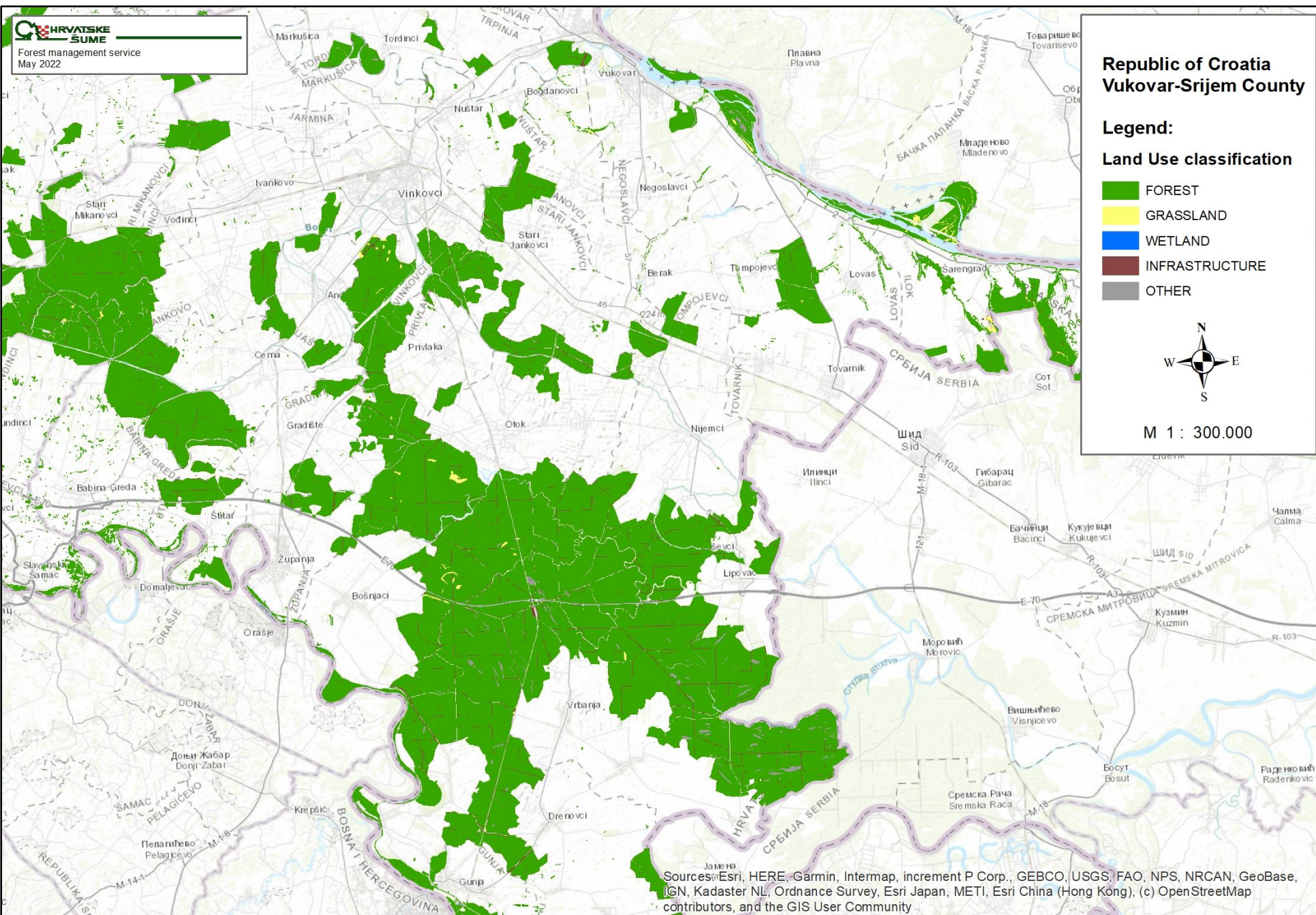
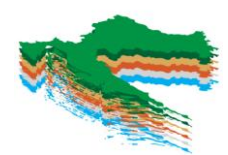
Category	Area		Number of polygons	Remark
	1000 ha	%		
State forests (Croatian forests)	2034.7	70.3%	167703	Included in FMP
Other state forests	24.2	0.8%	1701	Included in FMP
Private forests	763.5	26.4%	44226	Included in FMP
Private forests (restitution)	16.2	0.6%	239	Not included in FMP (temporarily)
Forests in strictly protected areas	54.0	1.9%	3764	Not included in FMP
Total	2892.6	100.0%	217633	

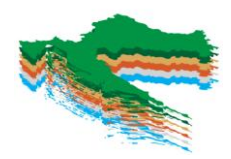
In addition to the preparation of spatial data, the role of Croatian forests in the CROLIS project is the implementation of quality control and field surveys



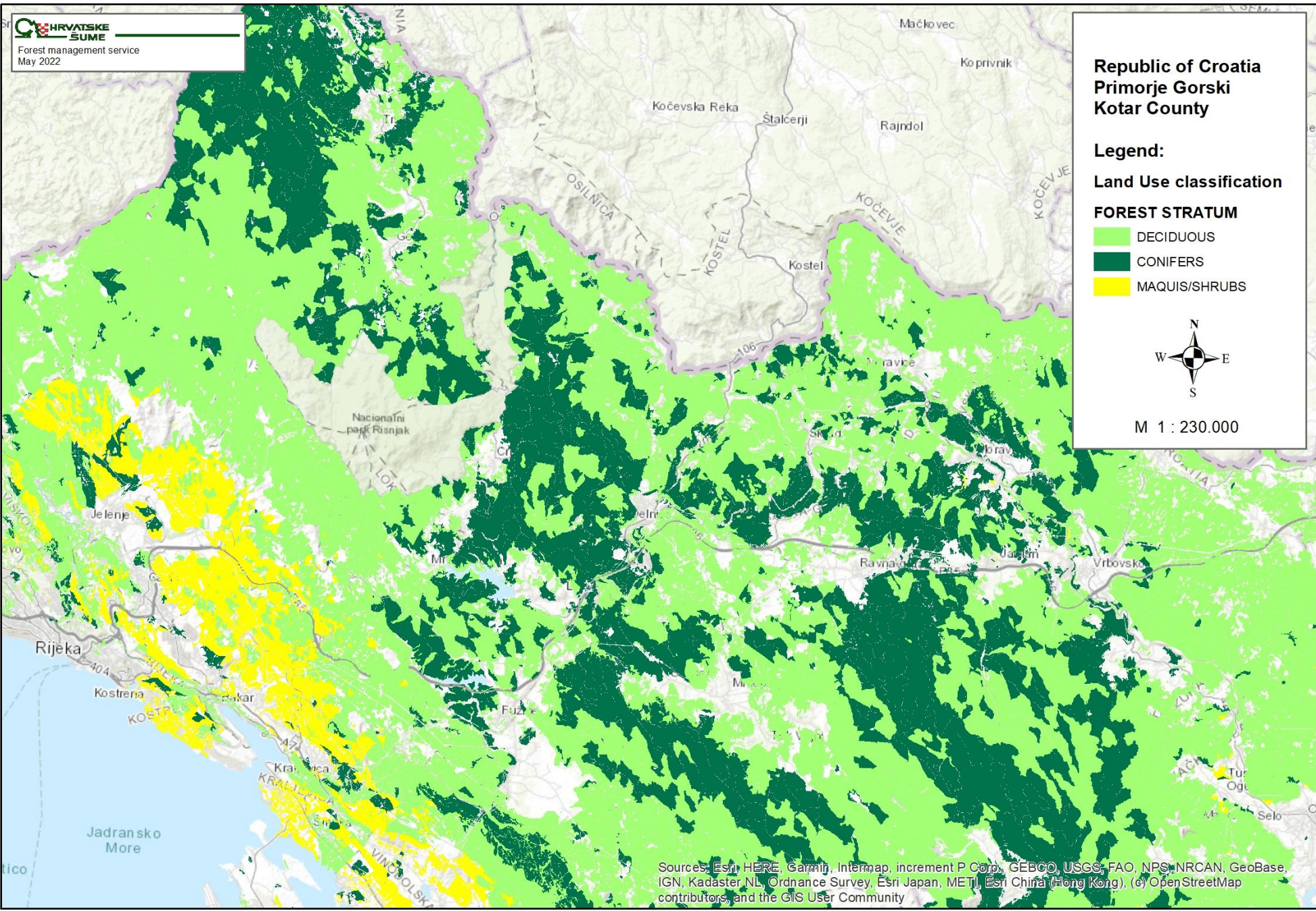


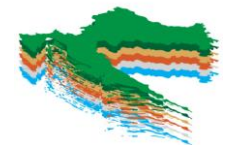






HRVATSKE ŠUME
Forest management service
May 2022





**HRVATSKE
ŠUME**

Forest management service
May 2022



**Republic of Croatia
Lika-Senj County**

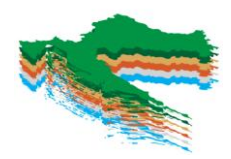
Legend:

DEFORESTATION



M 1 : 10.000



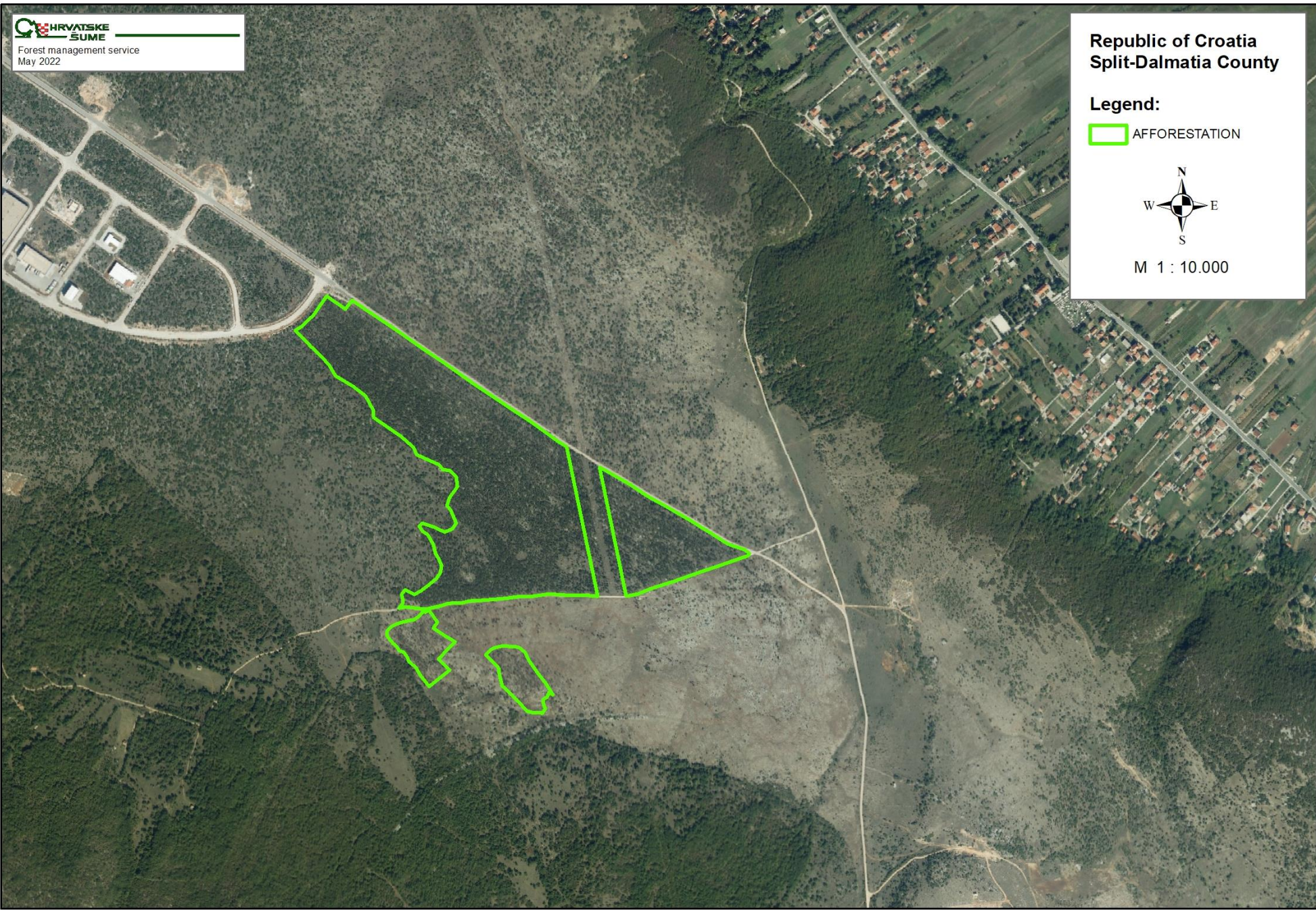


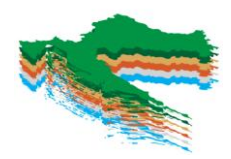
Legend:

 AFFORESTATION

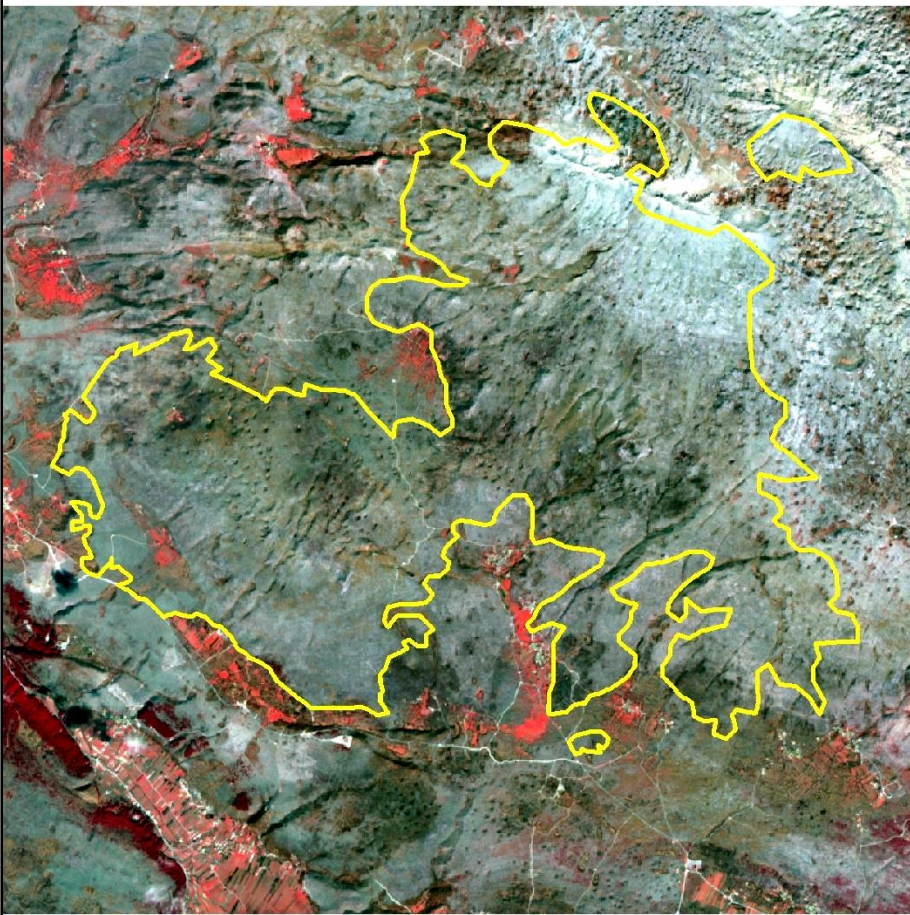


M 1 : 10.000

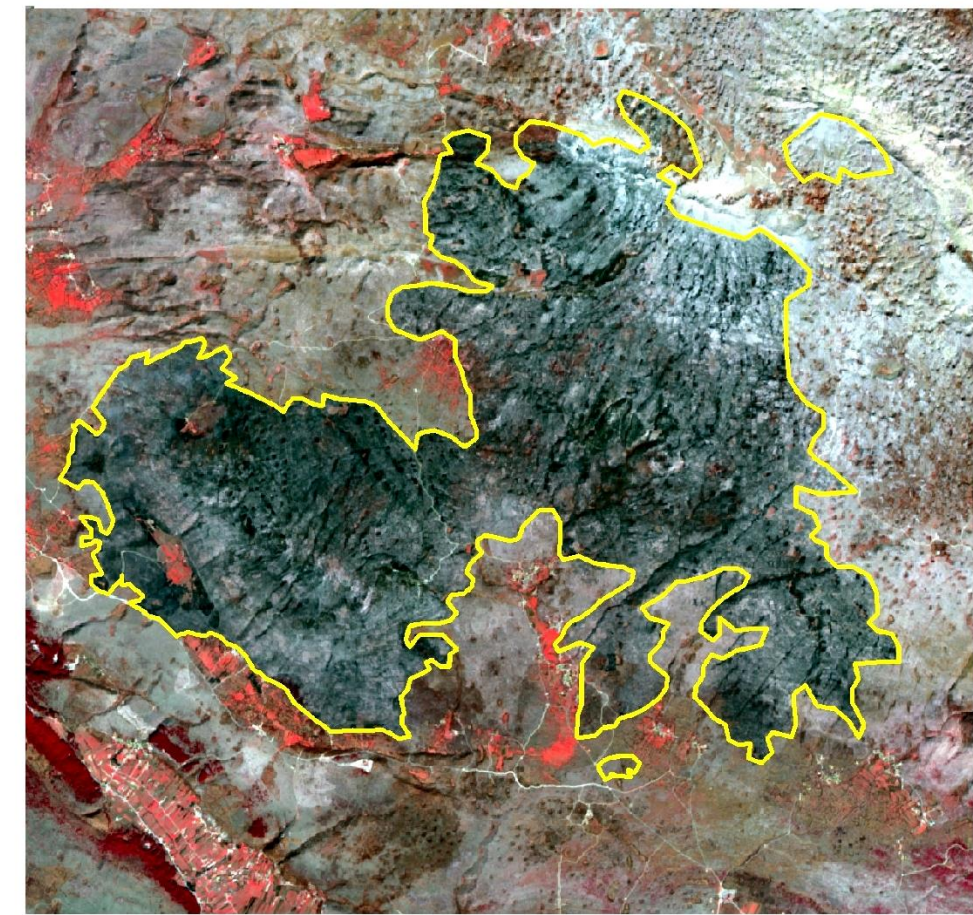




Legend:

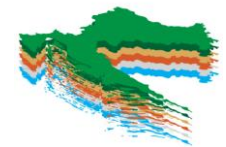


Satellite Sentinel-2 (false color) - before fire on 13 March 2022

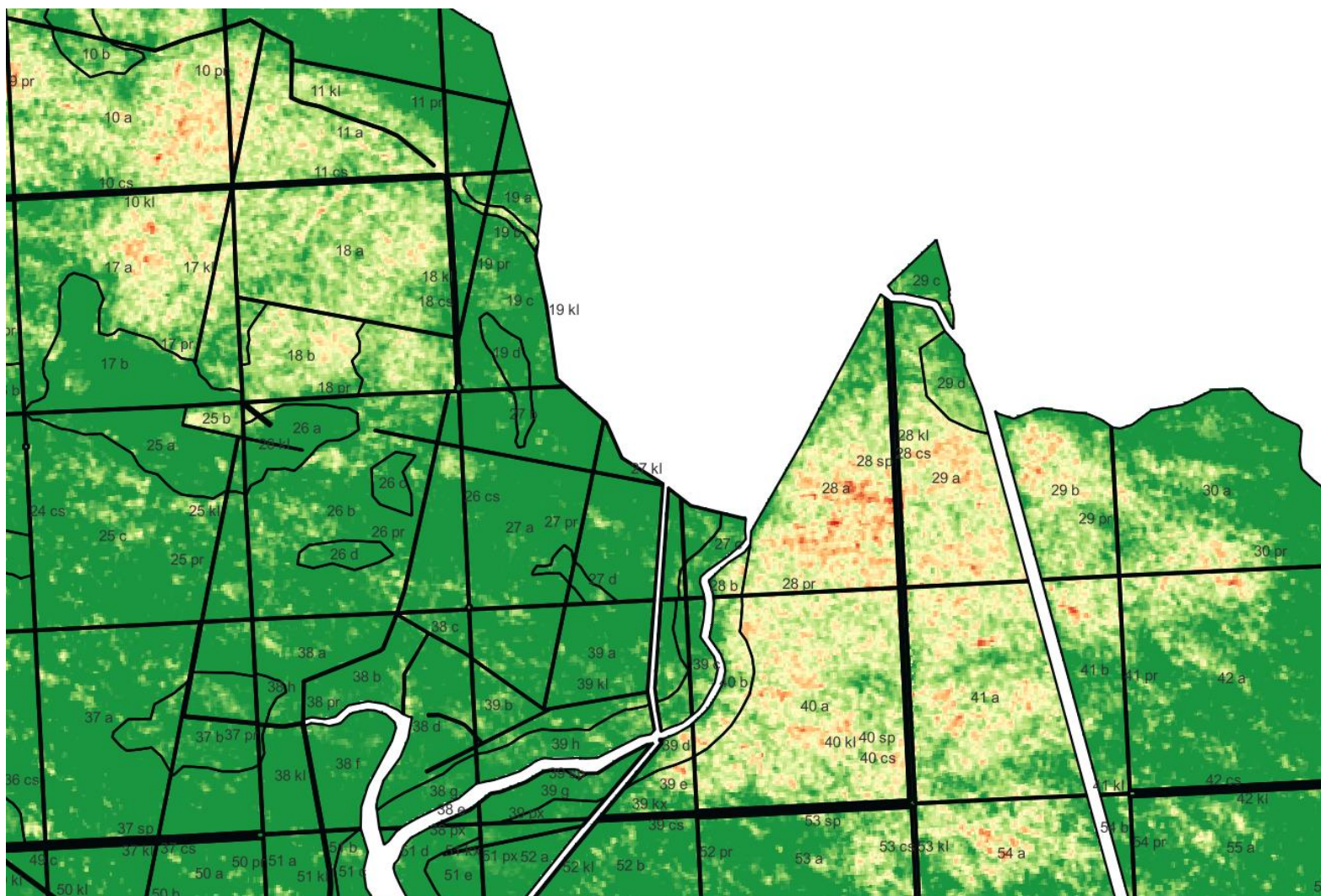


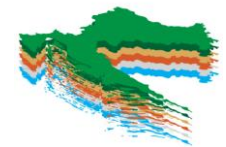
Satellite Sentinel-2 (false color) - after fire on 23 March 2022





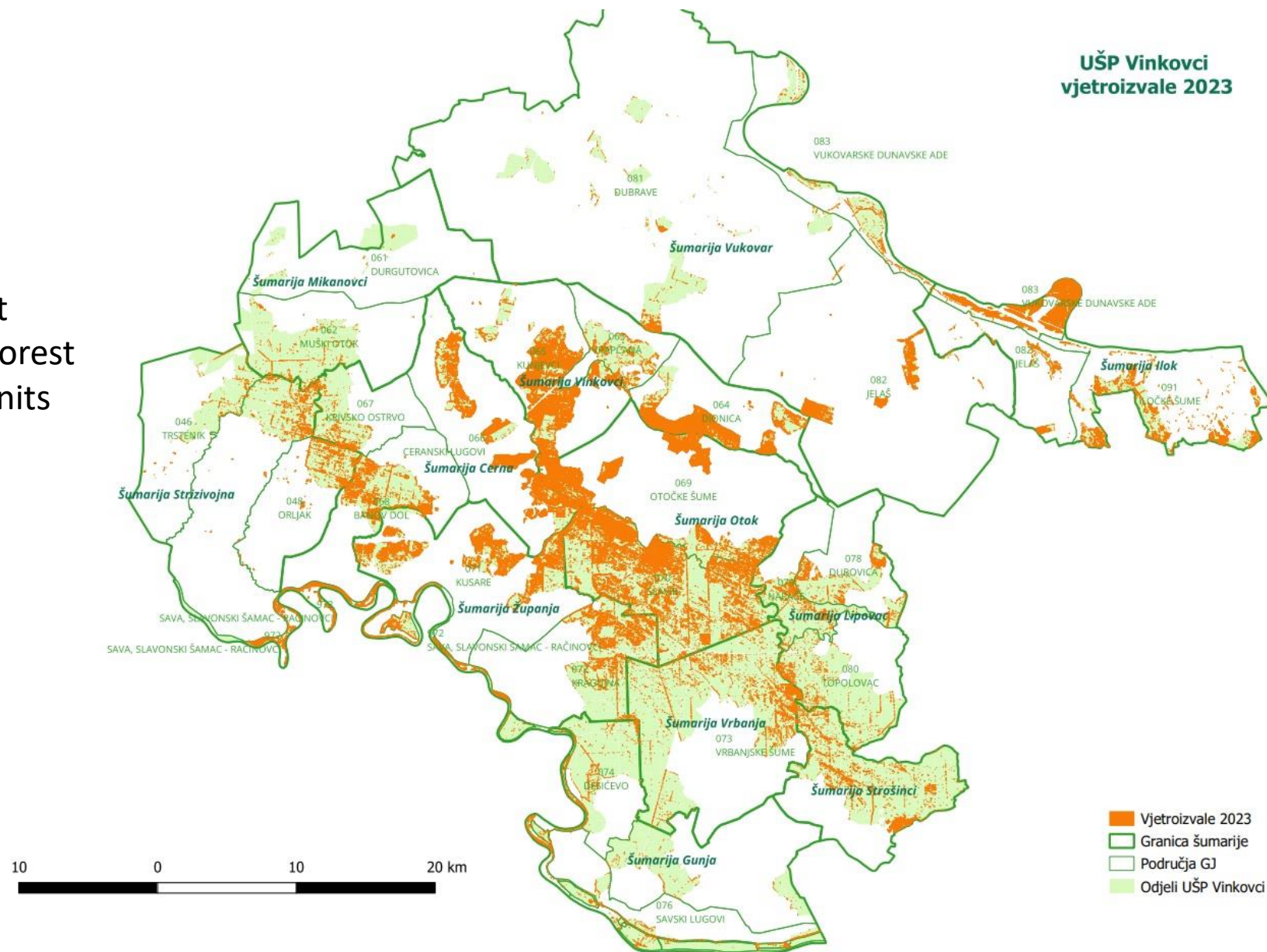
Forest damage after a strong storm, July 2023 - presentation of changes in the NDVI index in the forest management unit SLAVIR

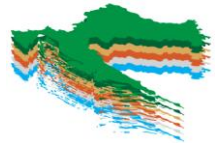




Forest
administration
Vinkovci - forest
damage on all forest
management units

UŠP Vinkovci
vjetroizvale 2023





Thank you for attention!

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