

SENSITIVE MAPPING FOR PRESERVE THE BIODIVERSITY IN CASE OF OIL SPILL POLLUTION IN NOTHERN ADRIATIC.

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UL FPP

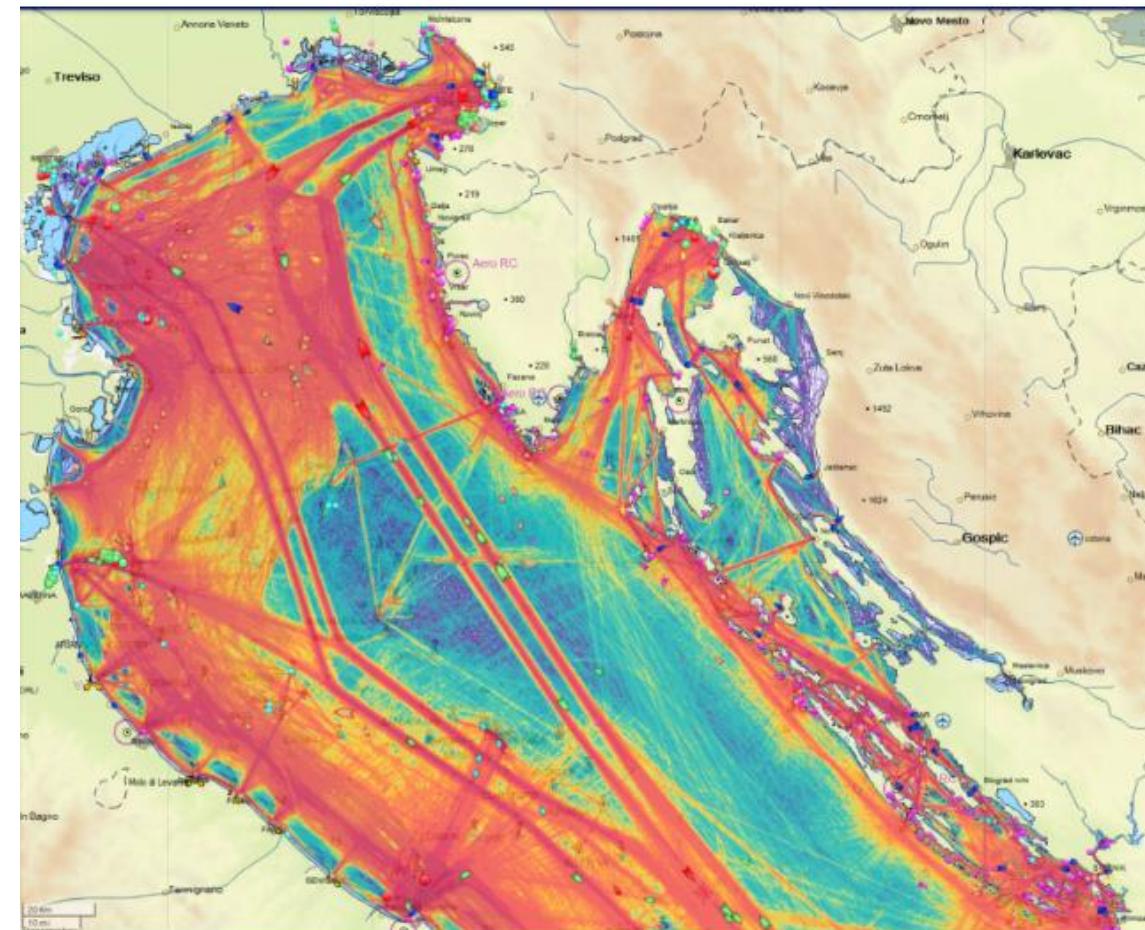
IZOLA 21. 09.2023

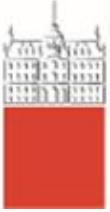


- Navigation (Marine) Risk Assessment identifies and assesses the hazards and risks affecting vessel navigation, before considering current controls to mitigate risks and further controls that could be adopted to minimize risk as low as reasonably practicable (ALARP).

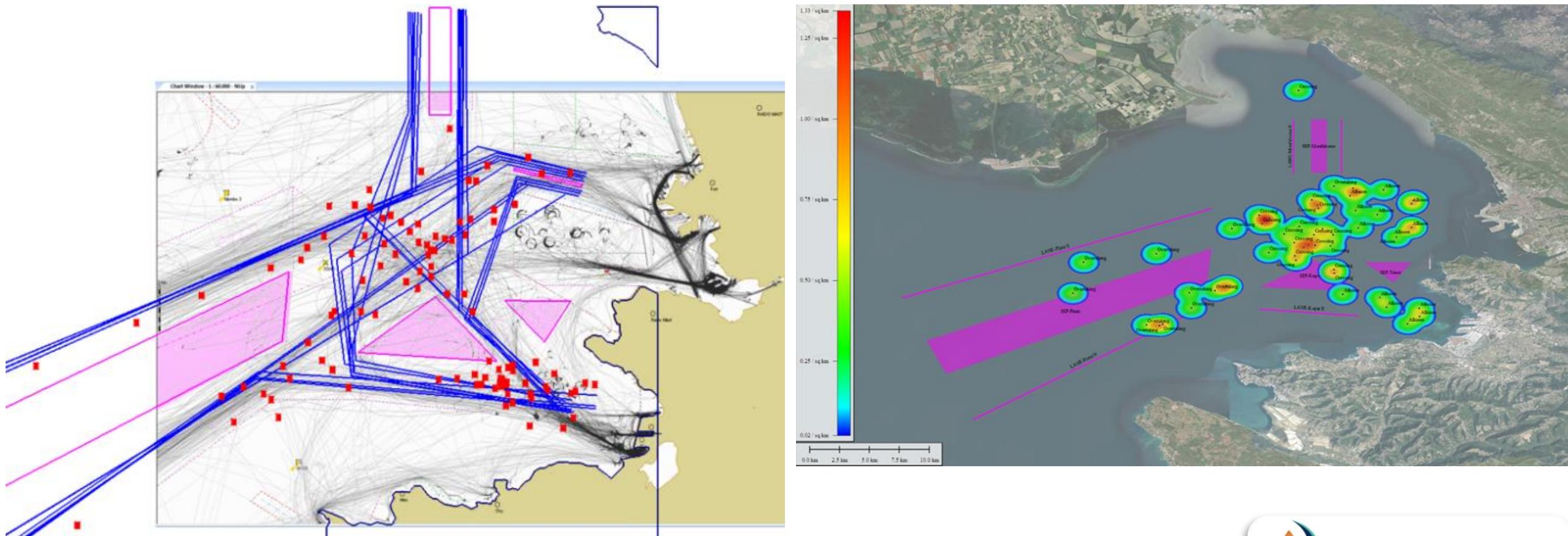
- **IALA RISK MANAGEMENT TOOLS**

- IWRAP
- PAWSA
- SIRA
- Simulation



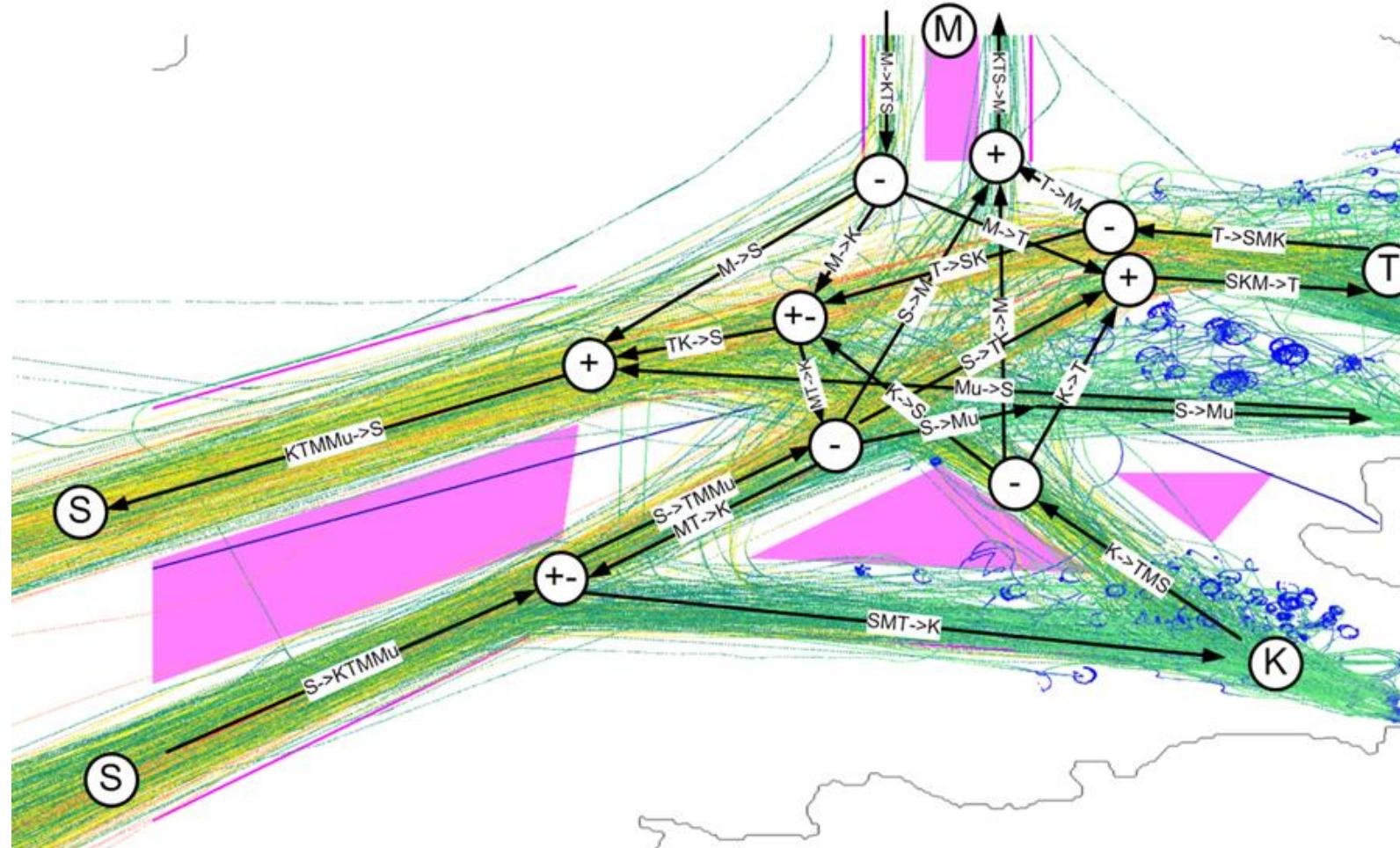
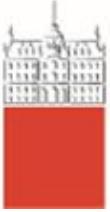


Stochastic Risk Assessment



The model showed that the highest density of collisions in the area is located between the separation lines - the so-called 'precautionary zone'

Quantitative assessment IWRAP - (IALA) Waterway Risk Assessment Program



Based on the 2019 traffic analysis, one collision occurs every **273 years**. However, the probability of a collision in 2020 decreases to every **365 years**.

The expected powered **grounding event** is expected to occur every 1657 years and drifting grounding every 13.62 years.

Powered **allision situation** at anchorage area is expected every 146 years and drifting allision event every 125.1 years.

Position and type of accidents

LONGITUDE	LATITUDE	Type of accident	Bunker Oil (HFO & LSFO)	Crude Oil	Product (diesel)
14.48815016° E	43.64815717° N	Crossing	1500	15000	15000
14.11154590° E	43.68319013° N	Crossing	1500	15000	15000
13.54751533° E	43.69720331° N	Allision	1000		5000
13.66837902° E	43.73573956° N	Crossing	1500		15000
13.69465374° E	43.94243399° N	Crossing	1500		15000
14.25868431° E	43.97571530° N	Overtaking	500	5000	5000
13.74720317° E	44.00199001° N	Crossing	1500		15000
13.78048448° E	44.06154604° N	Allision	1000		5000
13.04128914° E	44.10533723° N	Allision	1000	10000	5000
13.20944732° E	44.18591302° N	Crossing	1000		5000
13.06931550° E	44.22269763° N	Allision	1500		15000
14.02921846° E	44.22620092° N	Overtaking	500	5000	5000
13.14288471° E	44.31553496° N	Crossing	1000		5000
13.70800006° E	44.35407121° N	Overtaking	500		



Protected areas

- Environmental VF group
- National Parks-MPA
- regional-landscape parks
- N2K and special protection areas
- protected species and habitats
- unprotected areas



Geomorfology

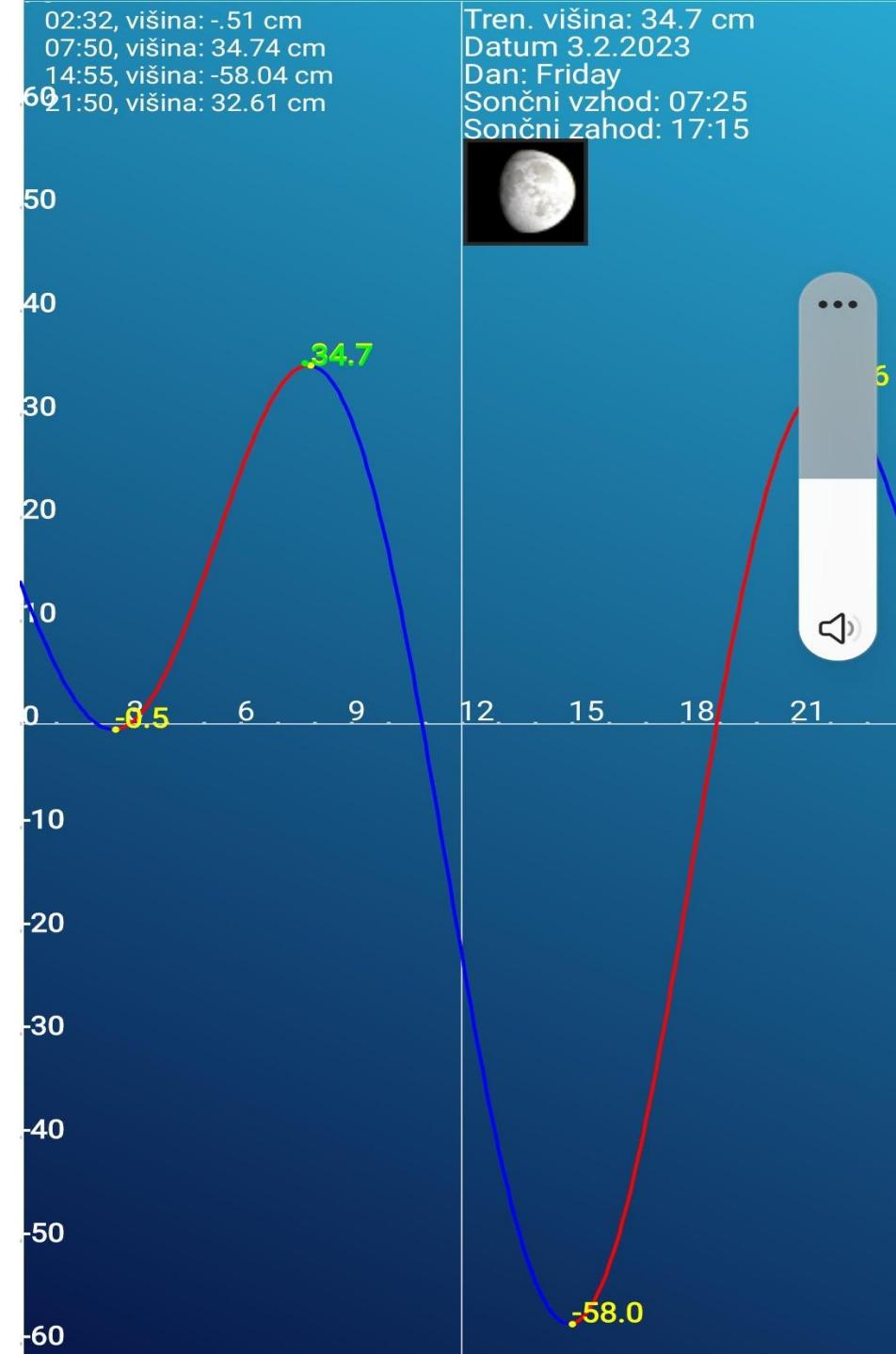
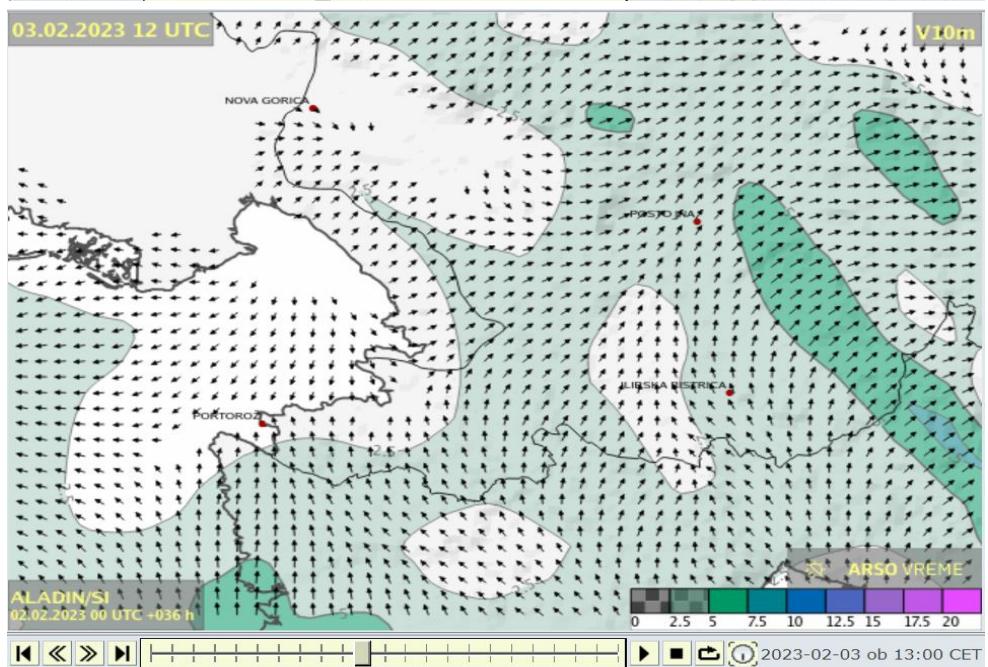
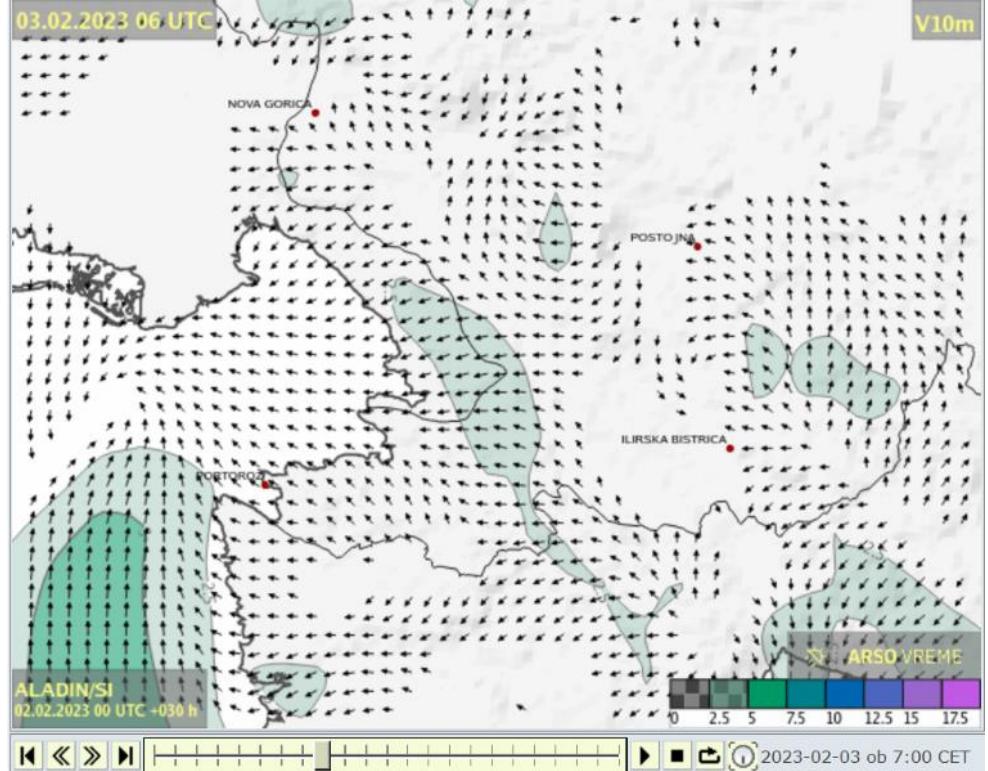




Gulf of
Trieste

Total value





Value of this part of the coast?

- Environment
- Society
- Economy





Zaporedna št. Odseka	Začetna koordinata	Končna koordinata	Opis odseka	Dolžina odseka (m)	social criteria													
					cultural heritage	recreation						infrastructure important to society						
57	45°32'24.6"N 13°36'47.3"E	45°32'13.5"N 13°36'06.5"E	Mesečev zaliv	1060.7	Official beach (baywatch, showers)	recreation						infrastructure important to society						
58	45°32'13.5"N 13°36'06.5"E	45°31'56.6"N 13°36'02.3"E	Plaža Strunjan-FKK	537.1		swiming			walking			other water sports	pet beaches	individual relaxation	access to the coast	access for disabled		
59	45°31'56.6"N 13°36'02.3"E	45°31'45.1"N 13°36'09.2"E	Plaža Strunjan	409.2		regular paths	non-regulated paths	forbiden	regular paths	non-regulated paths	forbiden				public beach	bench for sitting		
60	45°31'45.1"N 13°36'09.2"E	45°31'41.2"N 13°36'11.9"E	Pasja plaža v Strunjani	151.4	Environment													
61	45°31'40.4"N 13°36'11.2"E	45°31'33.3"N 13°36'05.7"E	Krajinski park Strunjan	237.4	nature conservation													
62	45°31'33.3"N 13°36'05.7"E	45°31'31.2"N 13°35'58.9"E	Plaža	152	natural coast	artificial coast				general care		litter	sewage	vandalism				
63	45°31'31.2"N 13°35'58.9"E	45°31'33.5"N 13°35'53.0"E	Plaža Sv. Duš	168.5		rip-rap	concrete	gravel	saltplants									
64	45°31'33.5"N 13°35'53.0"E	45°31'32.0"N 13°35'25.9"E	/	603	Economy													
65	45°31'32.0"N 13°35'25.9"E	45°31'32.1"N 13°35'23.4"E	Plaža Pacug	69	Ports				Tourism				Employment		mariculture			
66	45°31'32.1"N 13°35'23.4"E	45°31'33.6"N 13°35'01.5"E	/	535.3	Port of Koper	marinas	Local ports	Other ports	Hotels	loungers	eat & drink	water sports	medical tourism					
67	45°31'33.6"N 13°35'01.5"E	45°31'31.1"N 13°34'49.2"E	Plaža Fiesa	278.2														
68	45°31'31.1"N 13°34'49.2"E	45°31'45.3"N 13°34'14.7"E	Pešpot Fiesa-Piran	922.2														
69	45°31'45.3"N 13°34'14.7"E	45°31'49.1"N 13°33'58.4"E	Plaža pod Obzdijem	321.8														

KRITERIJI

INDIVIDUAL APPROACH

KRITERIJI					OCENA - Ocena socialni vidik	OCENA - Ocena okoljevarstveni vidik	OCENA - Ocena ekonomski vidik				
Zaporedna št.	Začetna koordinata	Končna koordinata	Opis odseka	Dolžina odseka (m)							
57	45°32'24.6"N 13°3'	45°32'13.5"N 13°	Mesečev zaliv	1060.7	2	9	1	4.000	2121.400	9546.300	1060.700
58	45°32'13.5"N 13°3'	45°31'56.6"N 13°	Plaža Strunjan-FKK	537.1	3	7	1	3.667	1611.300	3759.700	537.100
59	45°31'56.6"N 13°3'	45°31'45.1"N 13°	Plaža Strunjan	409.2	6	2	6	4.667	2455.200	818.400	2455.200
60	45°31'45.1"N 13°3'	45°31'41.2"N 13°	Pasja plaža v Strunjani	151.4	4	3	1	2.667	605.600	454.200	151.400
61	45°31'40.4"N 13°3'	45°31'33.3"N 13°	Krajinski park Strunjan	237.4	5	7	4	5.333	1187.000	1661.800	949.600
62	45°31'33.3"N 13°3'	45°31'31.2"N 13°	Plaža	152	3	4	1	2.667	456.000	608.000	152.000
63	45°31'31.2"N 13°3'	45°31'33.5"N 13°	Plaža Sv. Duh	168.5	5	3	6	4.667	842.500	505.500	1011.000
64	45°31'33.5"N 13°3'	45°31'32.0"N 13°	/	603	1	9	1	3.667	603.000	5427.000	603.000
65	45°31'32.0"N 13°3'	45°31'32.1"N 13°	Plaža Pacug	69	5	3	5	4.333	345.000	207.000	345.000
66	45°31'32.1"N 13°3'	45°31'33.6"N 13°	/	535.3	2	9	1	4.000	1070.600	4817.700	535.300
67	45°31'33.6"N 13°3'	45°31'31.1"N 13°	Plaža Fiesa	278.2	6	3	5	4.667	1669.200	834.600	1391.000
68	45°31'31.1"N 13°3'	45°31'45.3"N 13°	Pešpot Fiesa-Piran	922.2	7	7	1	5.000	6455.400	6455.400	922.200
69	45°31'45.3"N 13°3'	45°31'49.1"N 13°	Plaža pod Obzdijjem	321.8	4	7	1	4.000	1287.200	2252.600	321.800

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AHP WEIGHTS

