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European Regional Development Fund - Instrument for Pre-Accession II Fund
HarmoNIA

Harmonization and Networking for contaminant assessment in the Ionian and Adriatic Seas

Harmonia data vizualization

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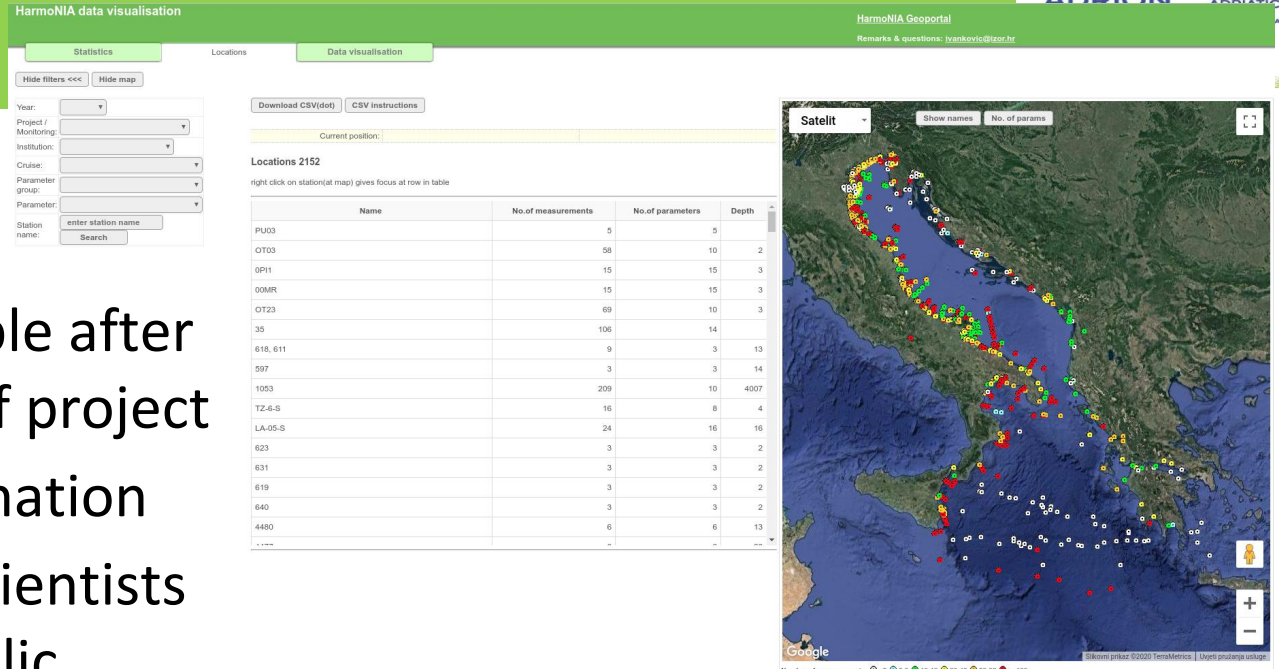
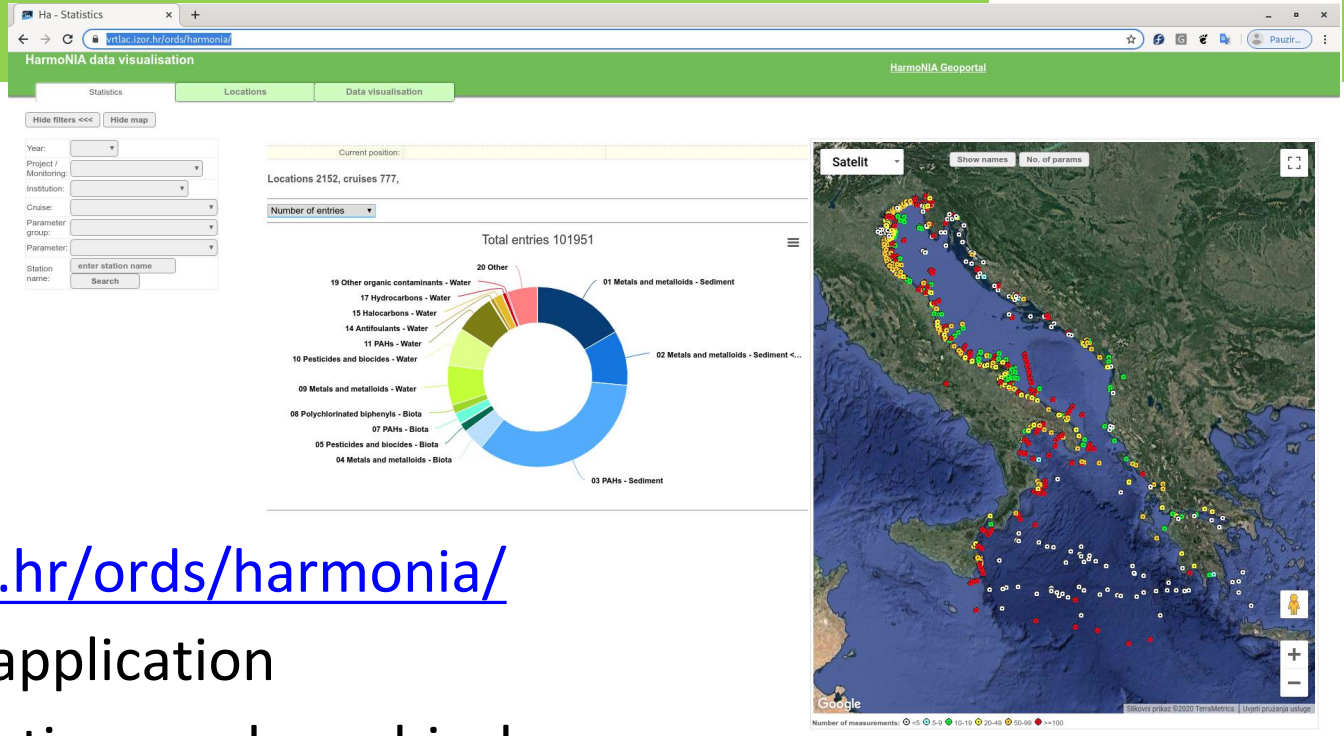
Online Workshop; 15th May, 2020

Introduction

- Focus on online products
- Products avaliable after formal ending of project
- Source of information
- Stakeholders, scientists and general public



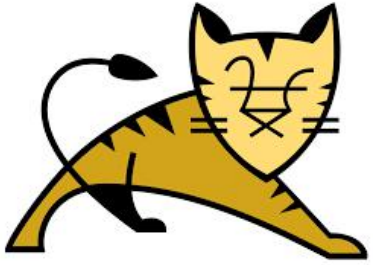
Harmonia data vizualization



- https://vrtlac.izor.hr/ords/harmonia/
- A dedicated web application
- Shows station locations and graphical representations of data

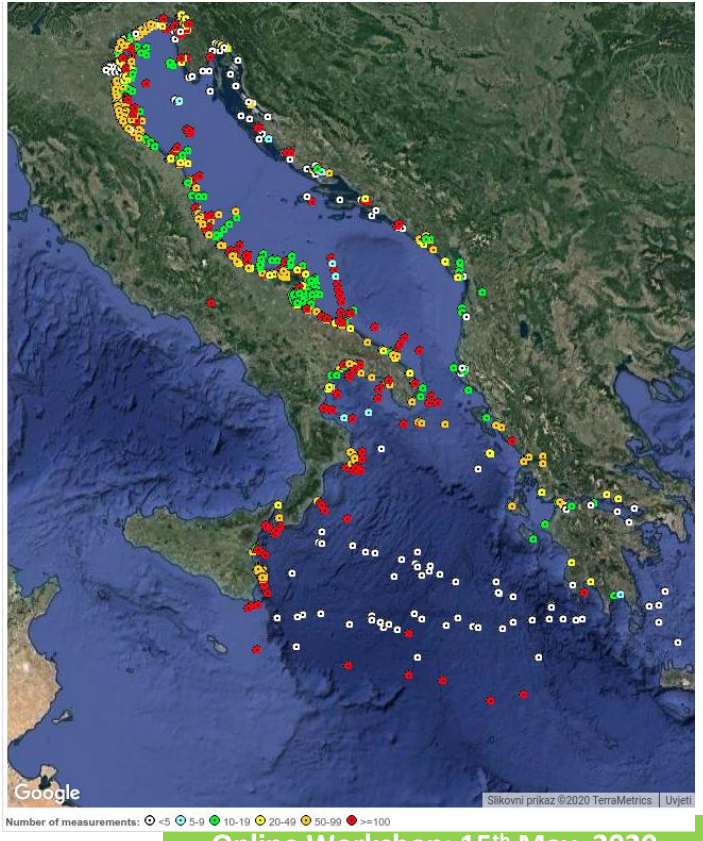
Used technology

- Linux CentOs 7
- Oracle 19.3 database, Standard edition 2
- Oracle ORDS
- Tomcat 9
- Apache 2
- https
- JavaScript, AJAX, JSON



Data set

- Data-sets about hazardous substances in sediment, biota and water column were prepared using the EU initiative EMODnet for the management and supply of fragmented marine data, and in the framework of HarmoNIA project.
- Data-sets cover Adriatic – Ionian Seas and the time frame is 1980-2017. These data derive from 10 different institutions.
- Data were collected in 2152 stations, sampled over 4282 times producing a final number of 101951 data values which are referred to 504 different parameters.
- All data are quality flagged according to a shared approach and quality flags can be used to filter data to visualise.
- Data-sets contain some data with access restrictions (by negotiation or academic - 6010 out of 101953). Those data are not shown as single values but are used for statistics calculations.

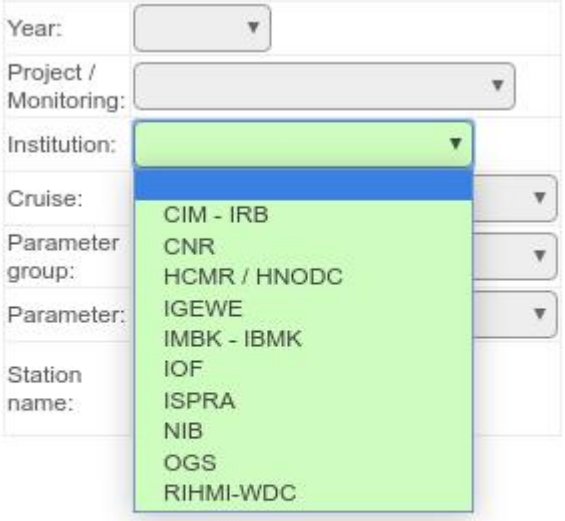


Data filter

Users can filter data by:

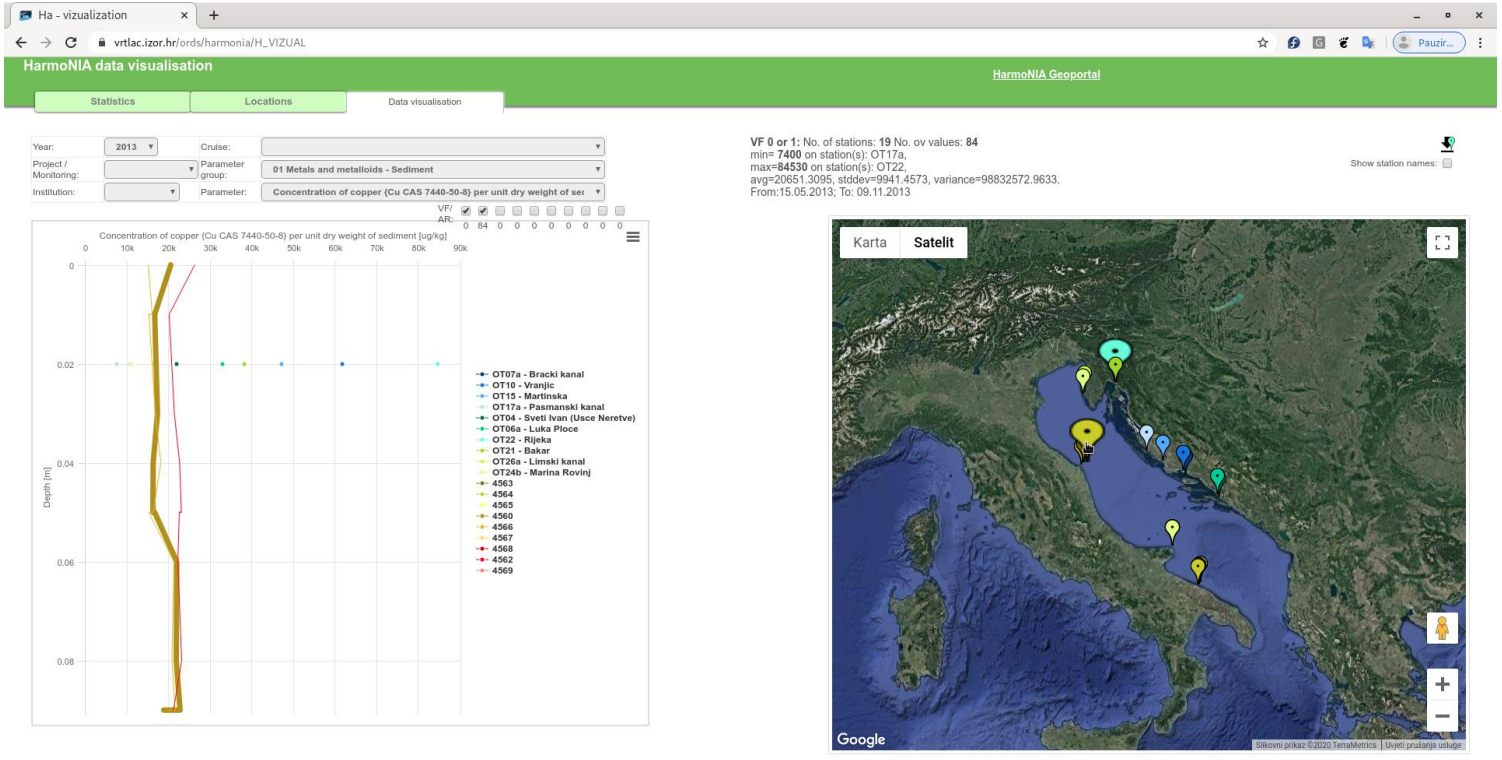
- year
- project
- institution
- cruise
- parameter group
- specific parameter

Data filter is adoptive, that means that changing each category, values in all other categories are re-calculated with values according to the new criteria



Line graph (profile)

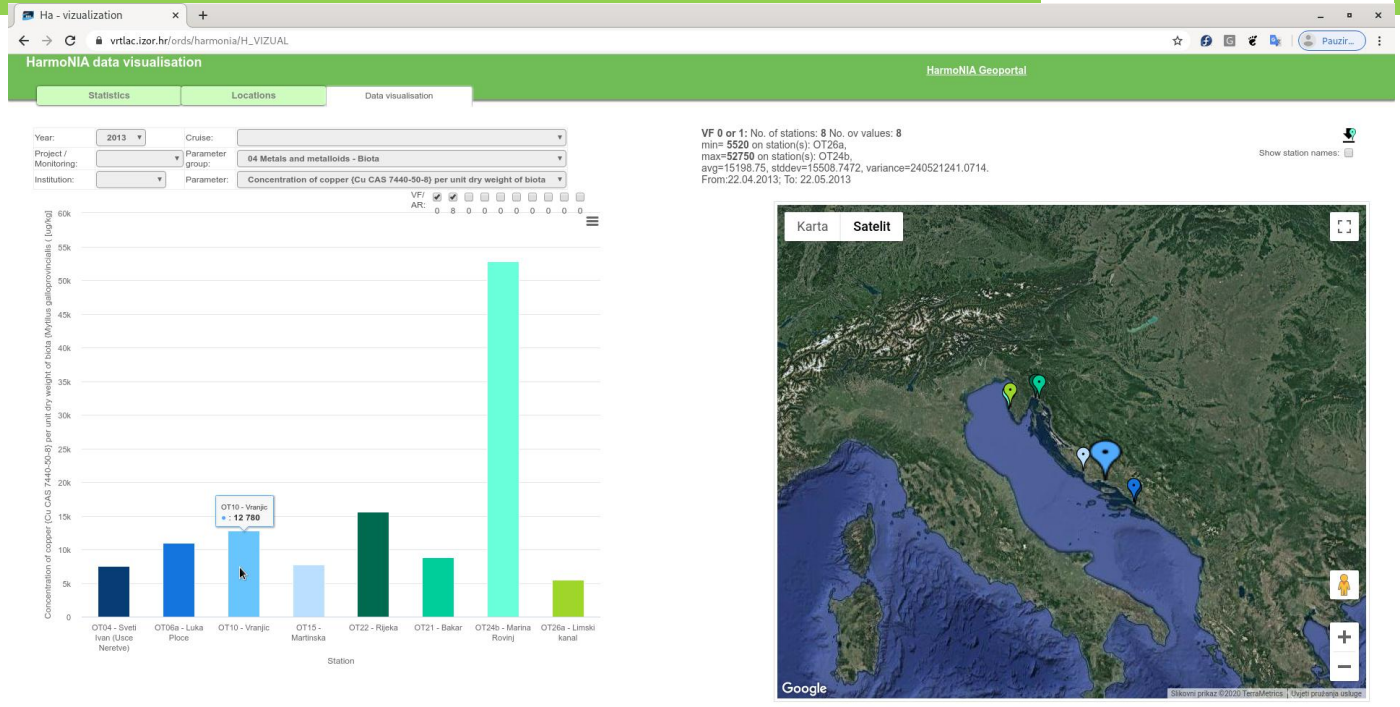
When there are values from different depths, line graph is shown with negative y axis (depth)



Data vizualization - columns

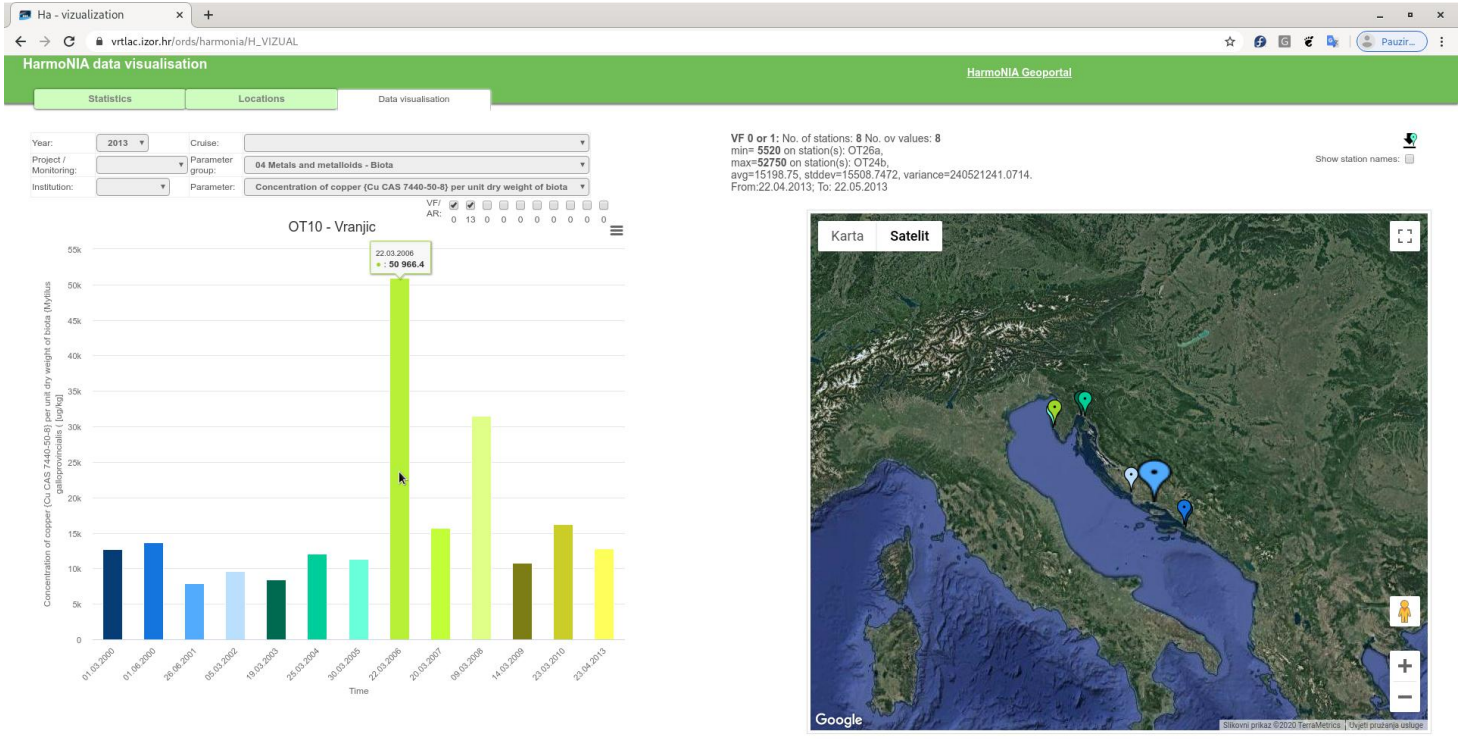
Column graph is used when visualised subset contain only one value per station

Column - location visual synchronization



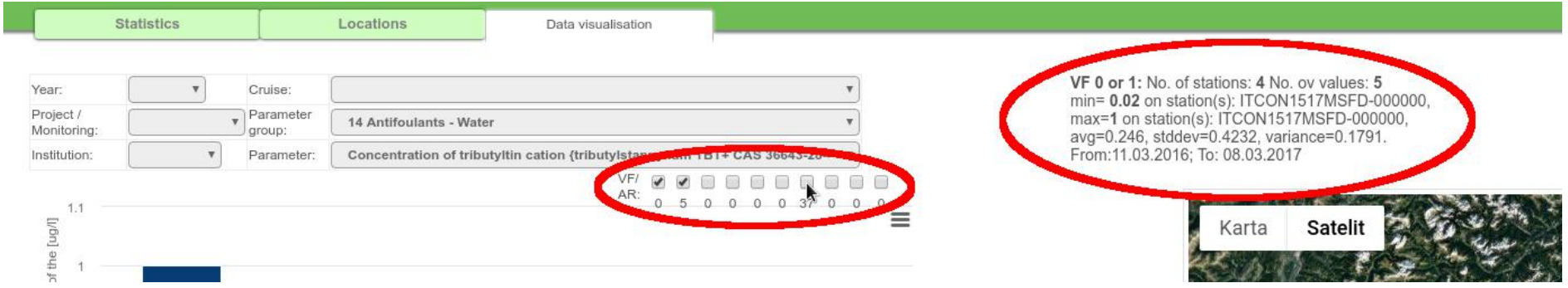
Time series

By clicking on the value in the graph user can see time series for particular station and parameter



Validation factors, access restrictions and statistics

- Validation factor and access restriction filter
- Statistics calculated only for VF 0 (not validated) and VF 1 (good value)



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Thank you for your attention!