

**Experiences from Early Adopters in EOSC
RELIANCE Open challenge for Sustainable Development**

H2020 AS AN EARLY ADOPTER

6th December 2022 – online

<https://webinar22.eoscfuture.eu/registration/>

H2020 AS AN EARLY ADOPTER:

The case Study of the Smart technology for MArinE Litter SusTainable RemOval and Management (MAELSTROM) Project

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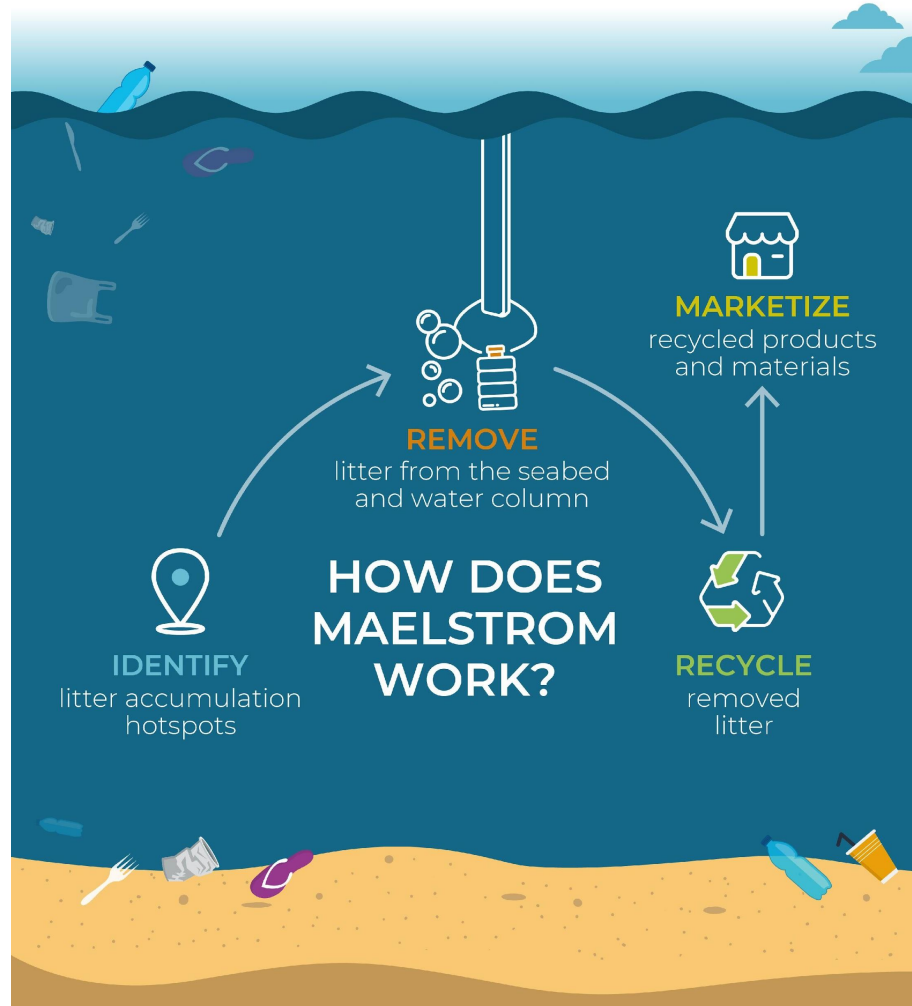
Plenary meeting 6th December 2022



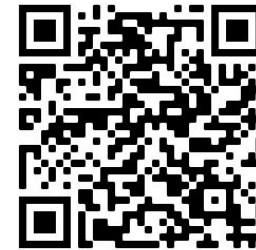
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H2020 MAELSTROM PROJECT IN A NUTSHELL



MULTIDISCIPLINARY COMMUNITY:
 ENVIRONMENTAL SCIENCE, ROBOTICS
 AND ENGINEERING, RECYCLING,
 CIRCULAR ECONOMY



<https://www.maelstrom-h2020.eu/>



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ML HOTSPOT IDENTIFICATION

The screenshot shows a RoHub research object page. At the top left is the RoHub logo. Navigation links include ABOUT, ACTIVITY, EXPLORE, MY ROS, PEOPLE, SUPPORT, and EN. A search bar is present with the text 'Look For The Keywords Or Find Person' and a magnifying glass icon. Below the search bar is a link: 'Need help? Learn how to browse Research Objects.' The main content area features a DOI: 10.24424/W50X-B223 and creation/modification dates: Created: 09.05.2022 (12:55), last modified: 30.08.2022 (16:30). The object is categorized as 'EARTH SCIENCES' and has tags: PUBLIC, MANUAL, SNAPSHOT, WORKFLOW-CENTRIC RESEARCH OBJECT. The title is 'Automatic detection of MLs targets from the bathymetry' by Antonio Petrizzo, Valentina Grande, Vanessa Moschino, and Fantina Madricardo. Below the title is a tabbed interface with 'Overview' selected. The description states: 'A dedicated workflow in ArcGIS was developed to identify targets from the bathymetry within the MAELSTROM Project - Smart technology for MArinE Litter SusTainable RemOval and Management'. A diagram shows a workflow from bathymetry data through Jupyter and ArcGIS Pro to ML target identification. On the right, statistics show 3 Downloads and 14 Views, with a table of metadata: Resources (15), Annotations (52), Events (124), Forks (0), Snapshots (0), Archives (0), and Size (30457.71 KB). The 'AGENTS' section lists Antonio Petrizzo as the Creator.

AN ARCGIS WORKFLOW DEVELOPED WITH THE AIM TO EXTRACT ML TARGETS FROM THE BATHYMETRY SEMI-AUTOMATICALLY

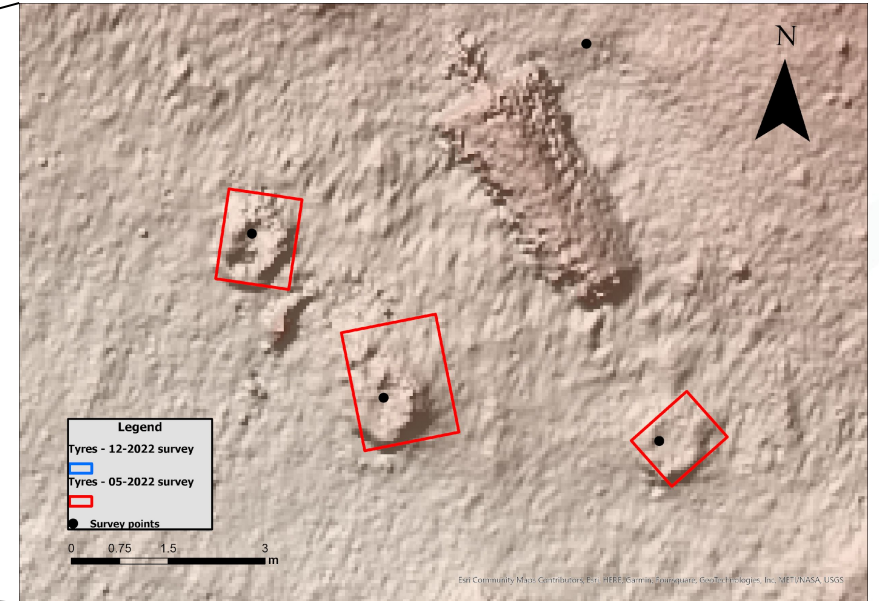
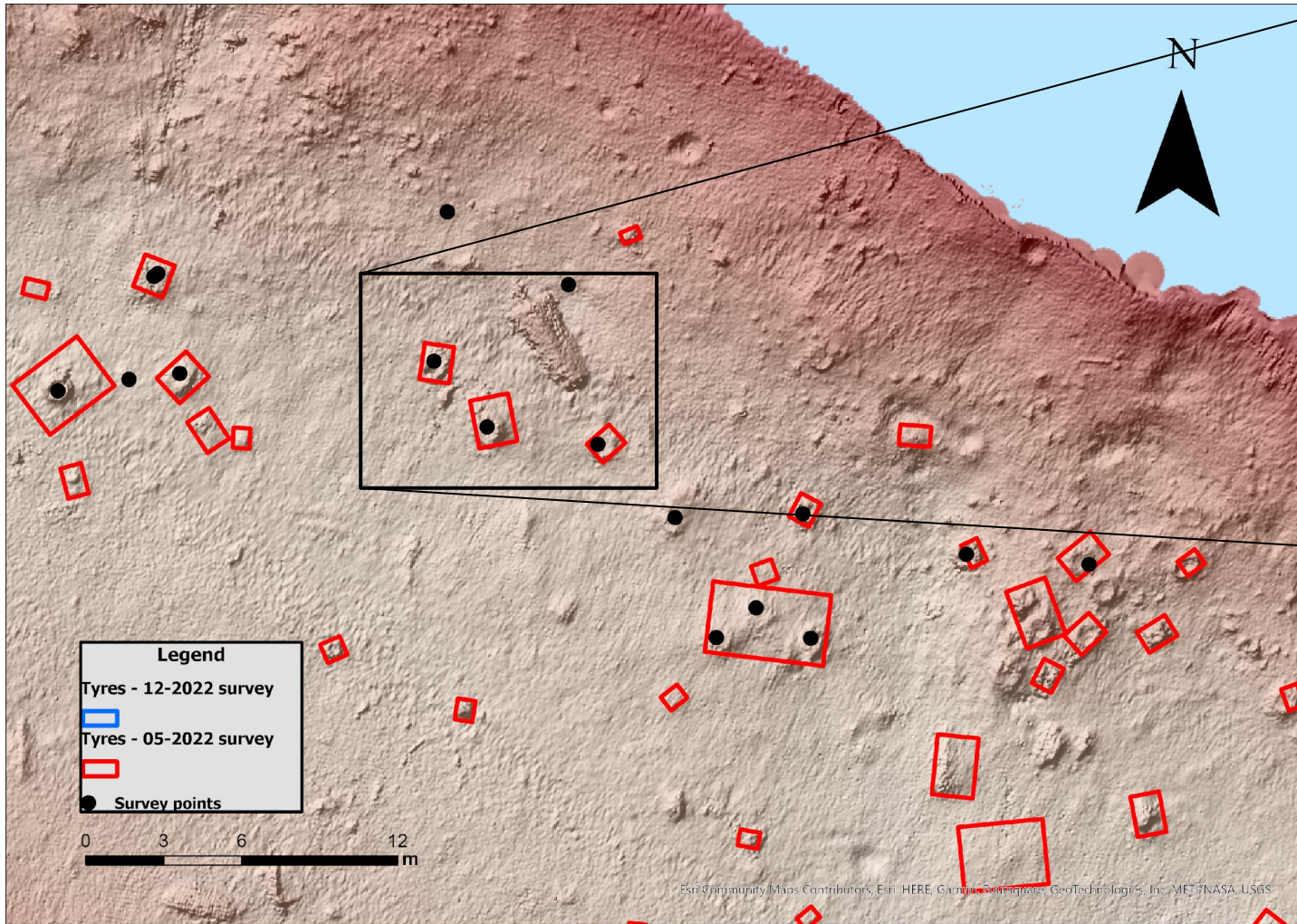
<https://doi.org/10.24424/w5qx-b223>



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RESEARCH OUTCOMES



**AUTOMATIC DETECTION OF MARINE LITTER FROM SEAFLOOR BATHYMETRY DATA IN AN AREA CLOSE TO THE CITY OF VENICE (ITALY):
BEFORE THE CLEANING**



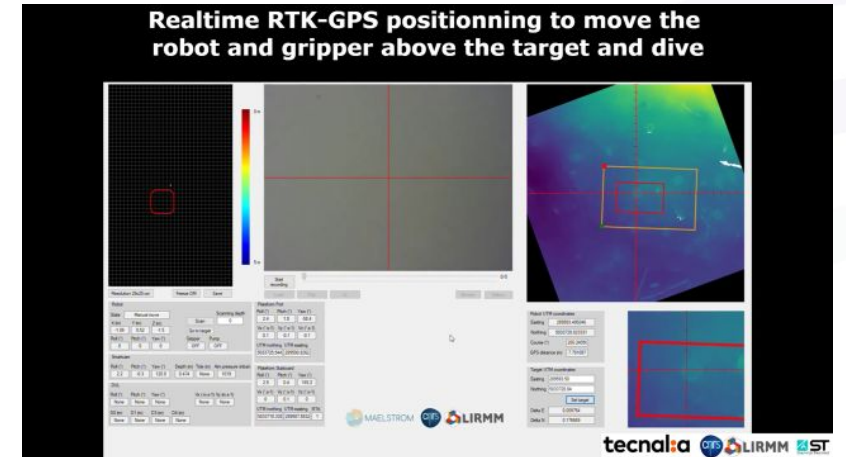
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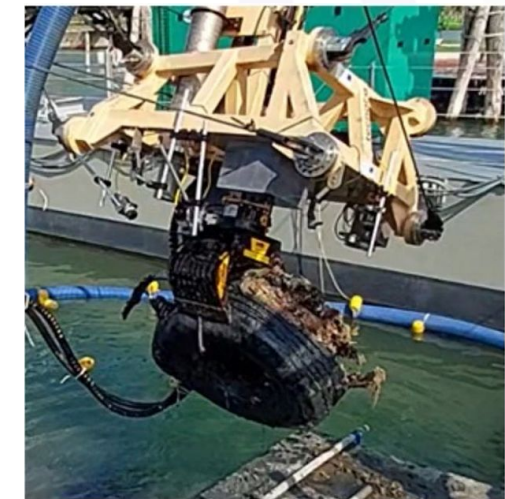
MAELSTROM



RESEARCH OUTCOMES



<https://youtu.be/1EVQm-0yyRY>



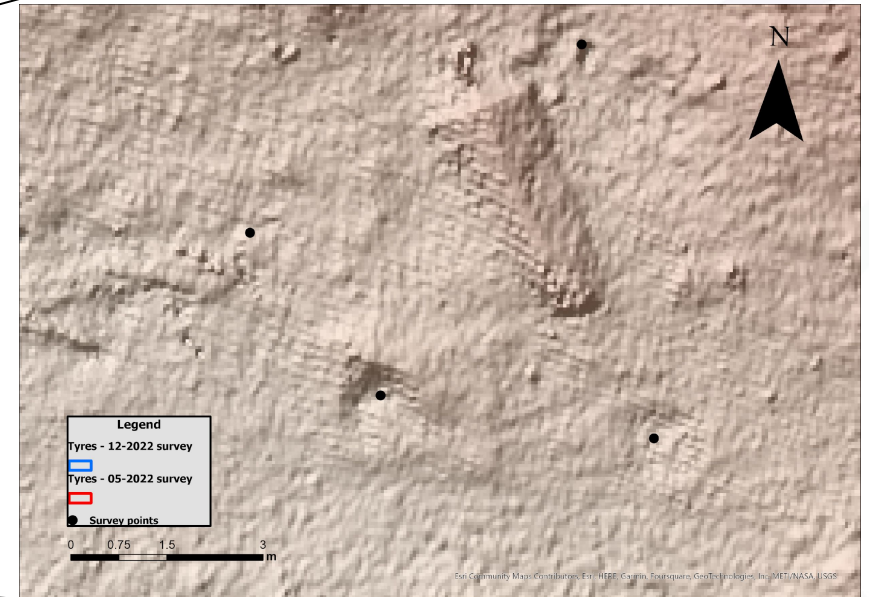
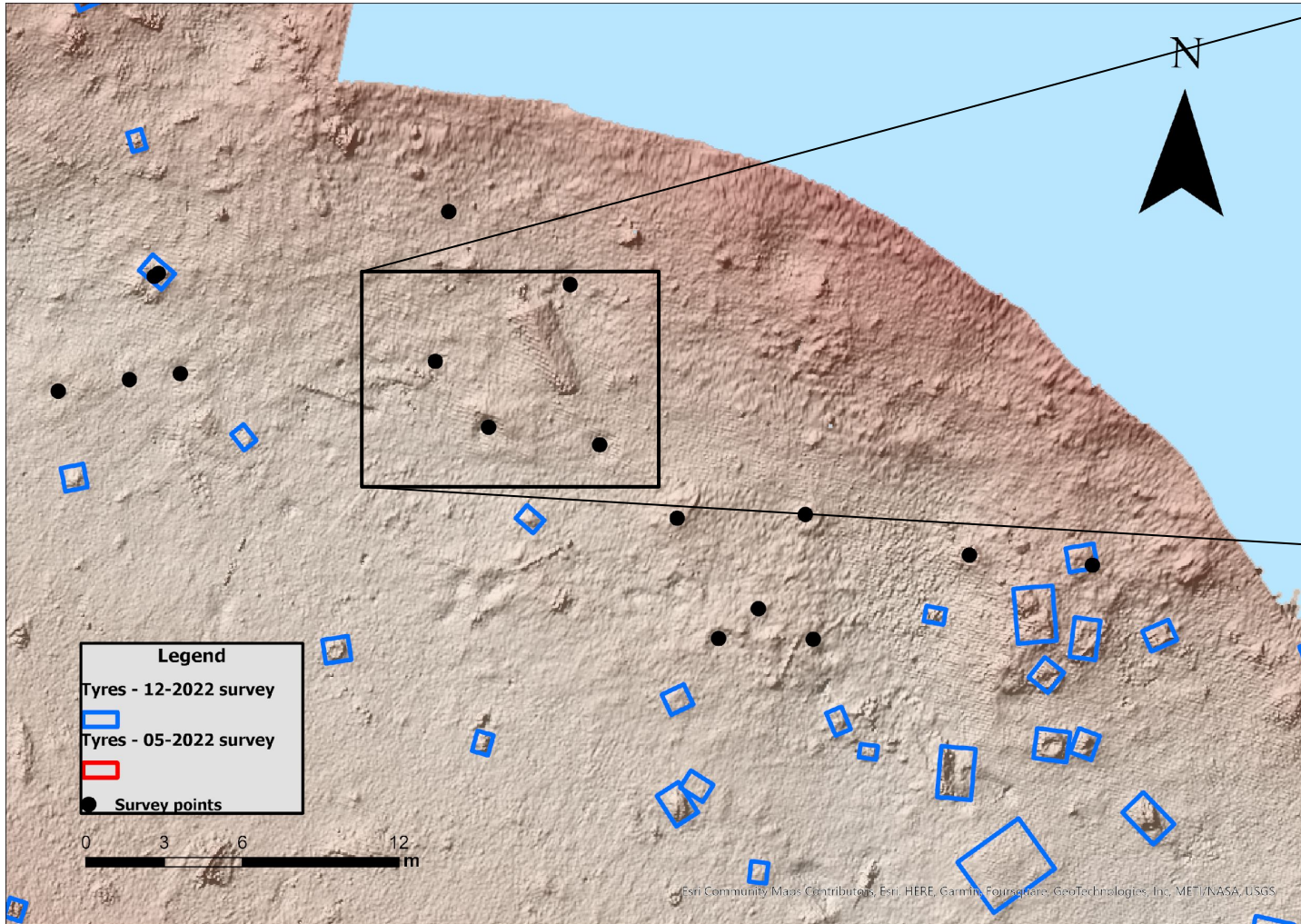
REMOVAL ACTIVITY WITH THE
MAELSTROM SEABED CLEANING PLATFORM
IN SEPTEMBER 2022 IN VENICE



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RESEARCH OUTCOMES



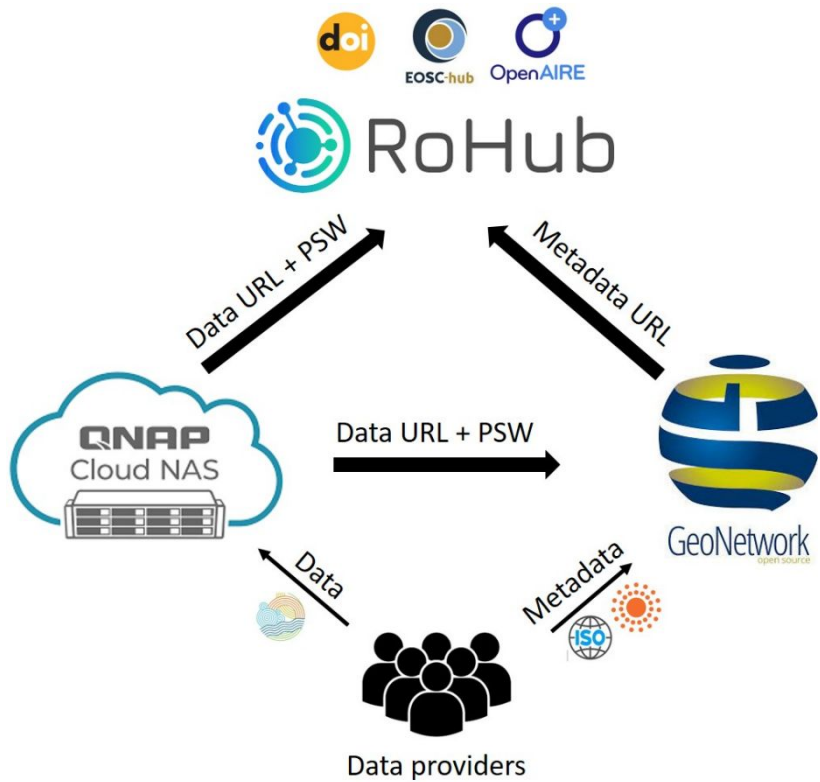
AUTOMATIC DETECTION OF MARINE LITTER FROM SEAFLOOR BATHYMETRY DATA IN AN AREA CLOSE TO THE CITY OF VENICE (ITALY):
AFTER THE CLEANING



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FINAL CONSIDERATIONS AND REMARKS



- INERTIA OF THE DIFFERENT COMMUNITIES TO ADOPT THIS NEW APPROACH
- MAELSTROM IS MAKING ITS DATA FAIR ALSO THANKS TO THE EOSC-RELIANCE SERVICES
- IMPORTANT TO MAKE THE SERVICES EASILY ACCESSIBLE ALSO TO NON COMPUTER EXPERTS
- EASY DOCUMENTATION OF THE WHOLE RESEARCH LIFECYCLE IN EUROPEAN PROJECT



Thank you for your attention!

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