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/

Reliance

H2020 AS AN EARLY ADOPTER:

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

Fantina Madricardo, Antonio Petrizzo
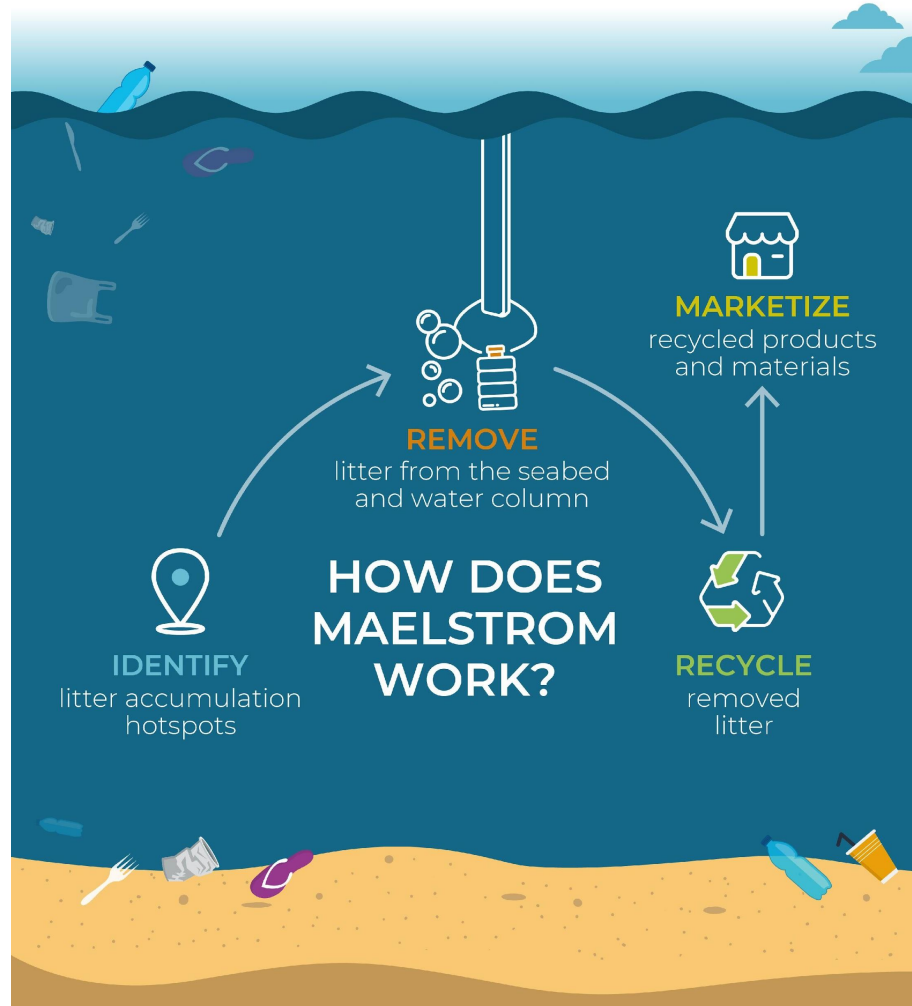CNR – Venice – Italy
fantina.madricardo@cnr.it
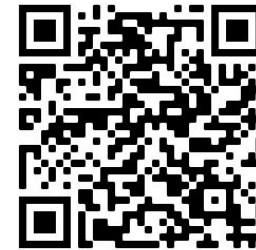
Plenary meeting 6th December 2022

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H2020 MAELSTROM PROJECT IN A NUTSHELL

HOW DOES MAELSTROM WORK?

IDENTIFY
litter accumulation hotspots

REMOVE
litter from the seabed and water column

RECYCLE
removed litter

MARKETIZE
recycled products and materials

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

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

Co-funded by the Horizon 2020 programme of the European Union

ML HOTSPOT IDENTIFICATION

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

https://doi.org/10.24424/w5qx-b223
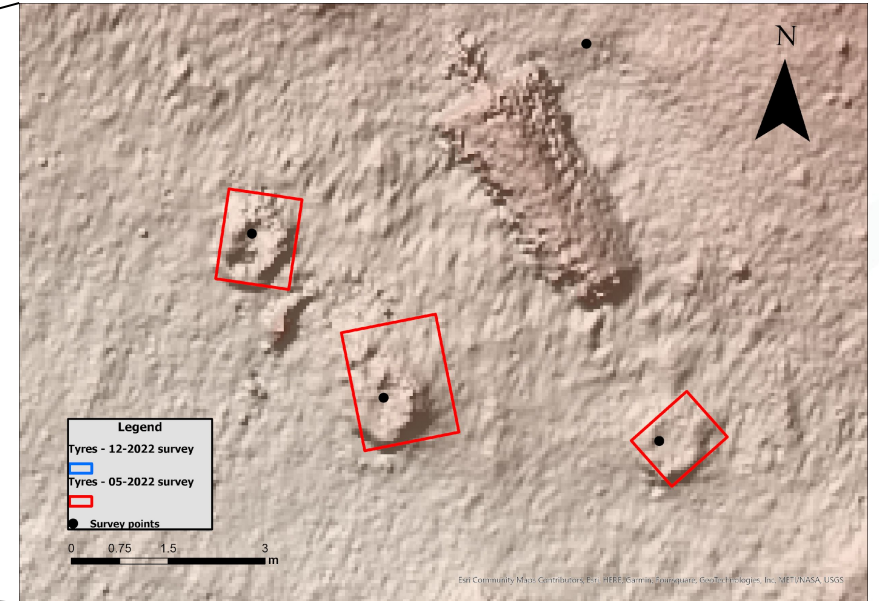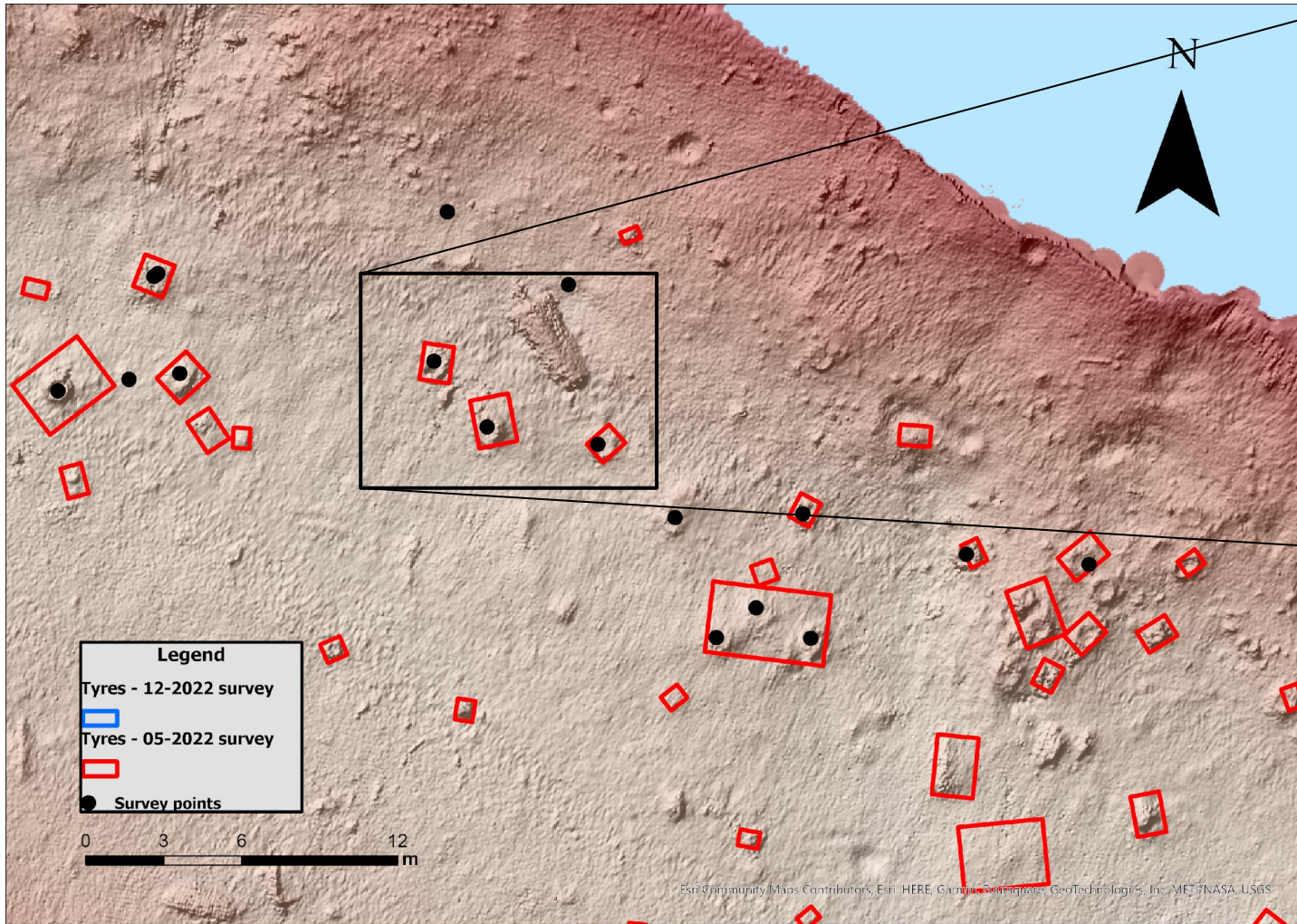
RESEARCH OUTCOMES

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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Realtime RTK-GPS positionning to move the robot and gripper above the target and dive

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

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

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RESEARCH OUTCOMES
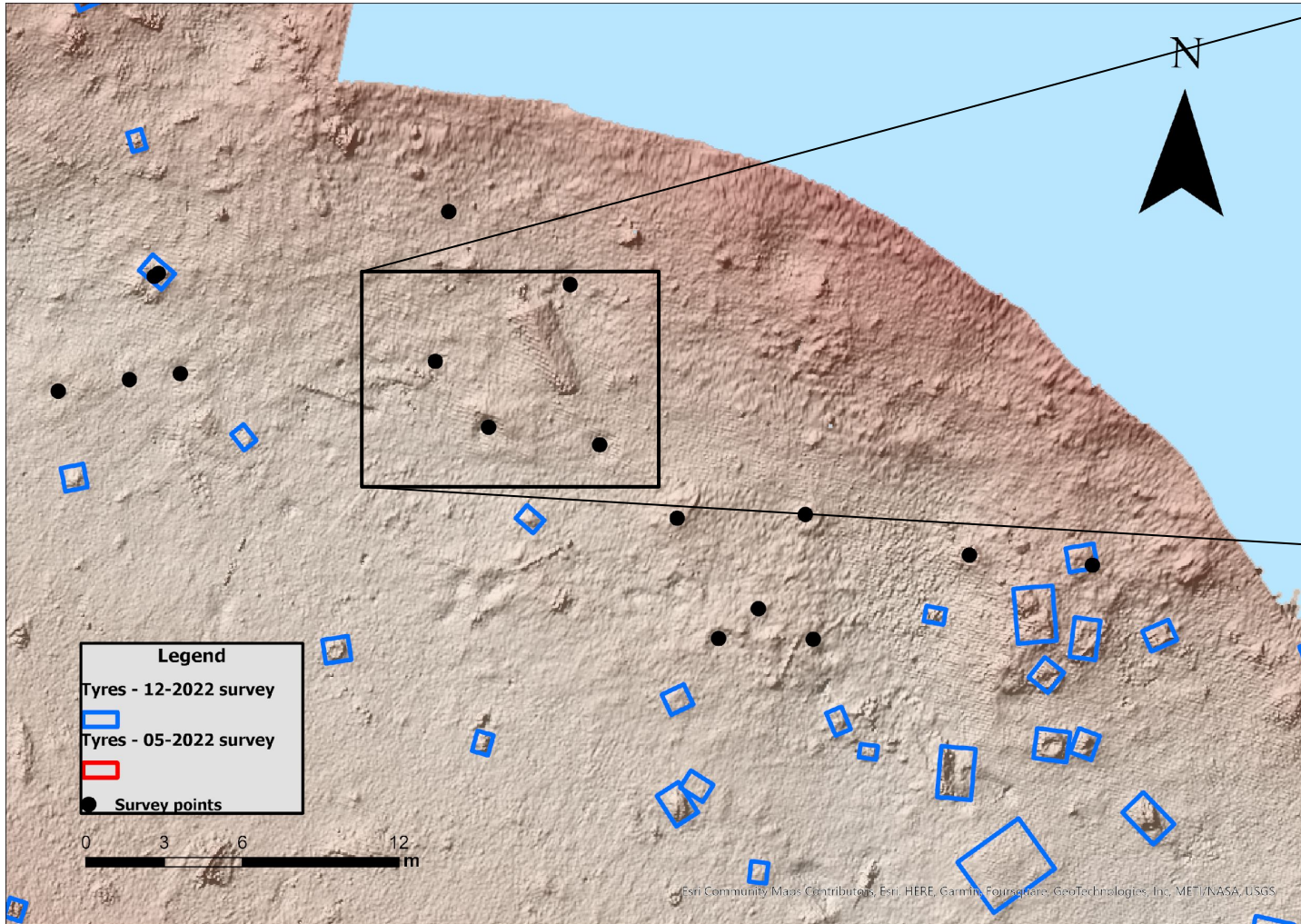
AUTOMATIC DETECTION OF MARINE LITTER FROM SEAFLOOR BATHYMETRY DATA IN AN AREA CLOSE TO THE CITY OF VENICE (ITALY): AFTER THE CLEANING
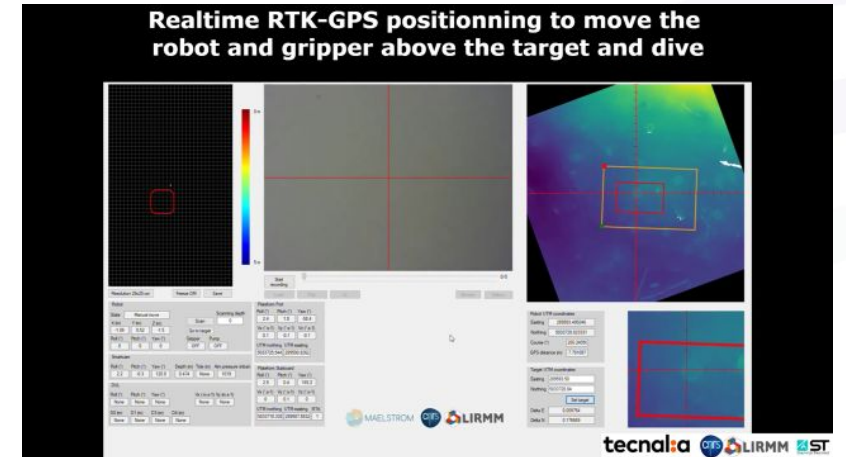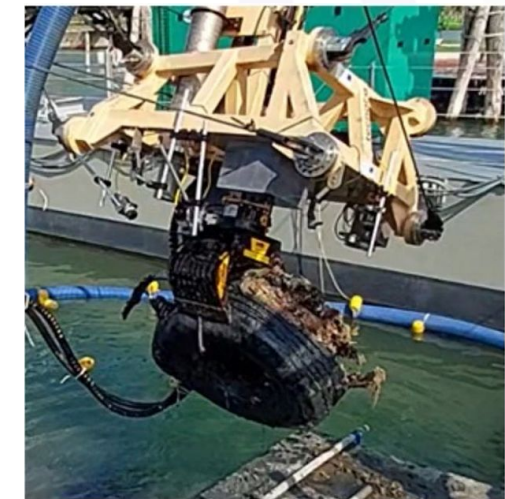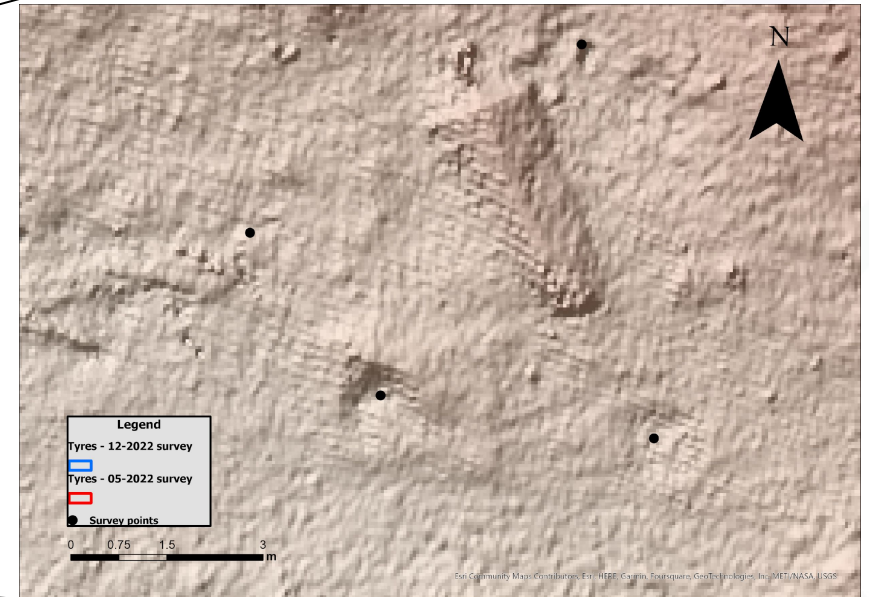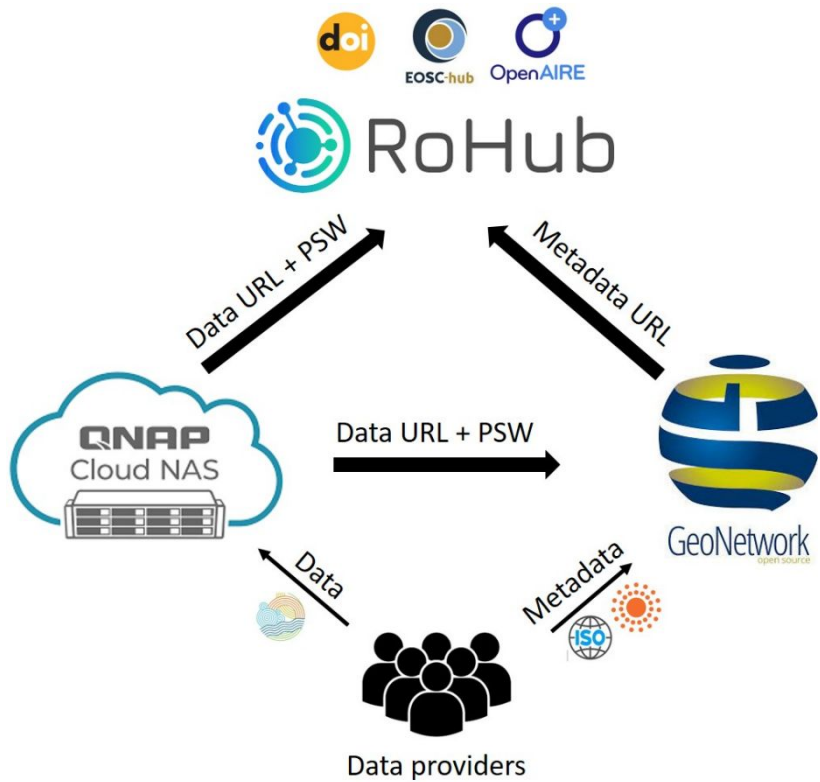
Legend
Tyres - 12-2022 survey
Tyres - 05-2022 survey
Survey points

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- 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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