Indis

International conference on Marine Data and Information Systems



27-29 May 2024 🏪





H2020 Eurofleets+ Data Management: an integrated data stewardship approach across multidisciplinary Transnational **Access cruises**

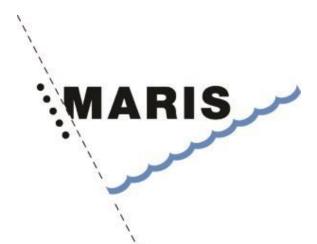
Hong Minh Le (RBINS), Sissy Iona (HCMR), Elena Partescano (OGS), Dick Schaap (MARIS)













THE EUROFLEETS+ PROJECT

- Eurofleets+ is an INFRAIA H2020 project started in 2019 and ended in Oct 2023 (57 months)
- It facilitated open free of charge access to a unique fleet of state-of-the-art Research Vessels from European and international partners which has been arranged by competitive Transnational Access (TA) calls.
- The EF+ project funded 28 cruises which took place between 2021 and 2023







THE EF+ DATA MANAGEMENT STRATEGY

- A Data Policy has been defined and applies the FAIR and Open research data principles of the H2020 framework.
- A dedicated Work Package Task has been set up with the objective of optimizing the management of scientific data generated during the funded cruises
- EF+ deployed an integrated and uniform DM approach over the 28 funded research projects.
- It has been implemented in synergy with SeaDataNet, a leading pan-European infrastructure for marine data management, involving 3 NODCs as core partners.
- The cruises DM has been centralized and coordinated by the Responsible Data Centers in close collaboration with the PIs.



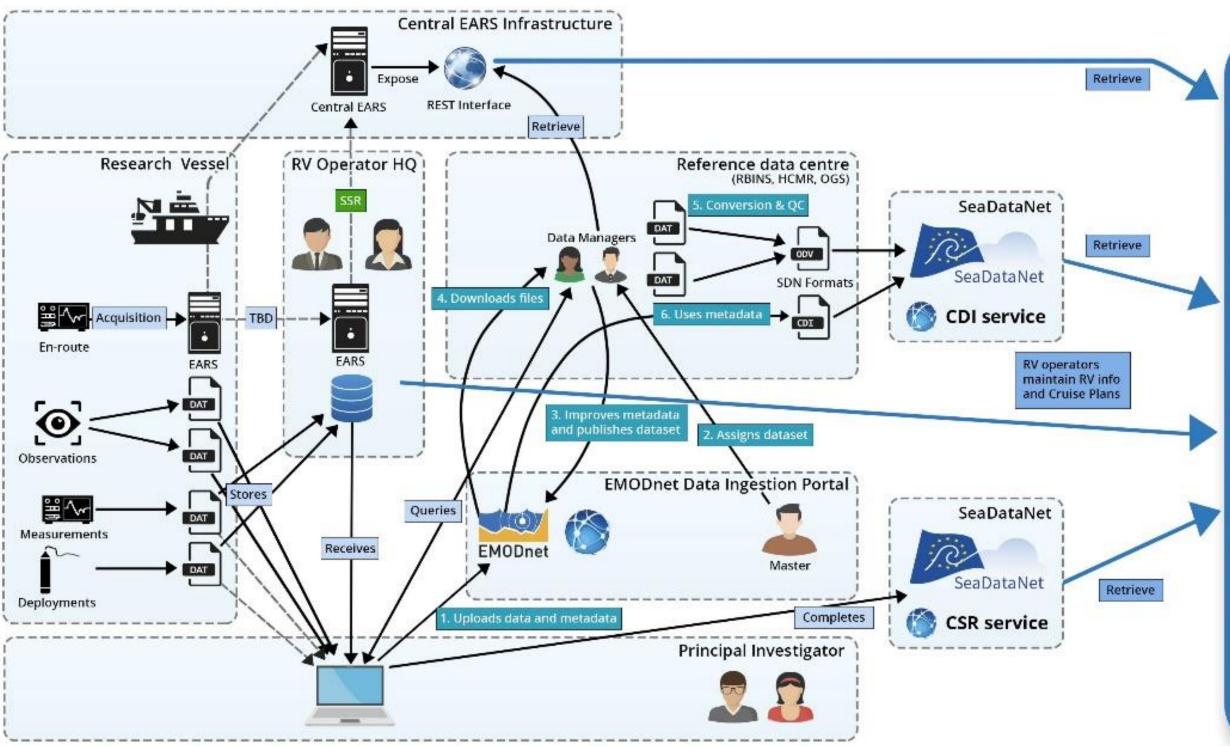








DATA HANDLING CHAIN OF THE EUROFLEETS+ PROJECT





EF+ EVIOR portal with Interfaces for:

- EF+ data sets catalogue with research data
- RV-tracks db with en-route data
- RV db
- Cruise Plan db
- CSR db



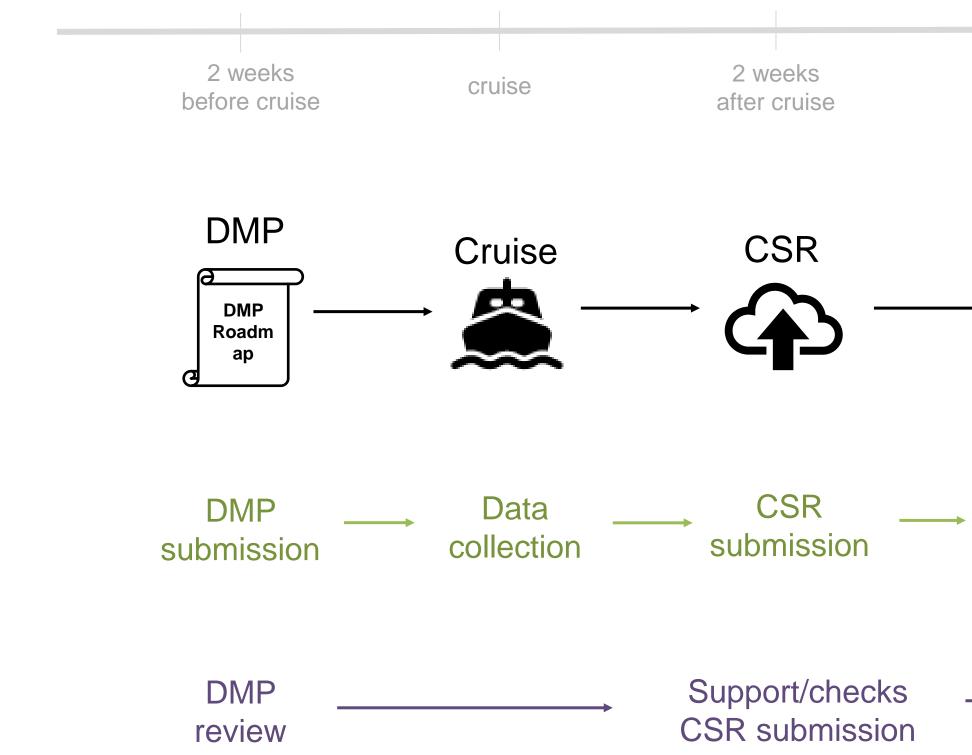
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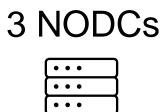
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THE EF+ DATA MANAGEMENT PROCESS

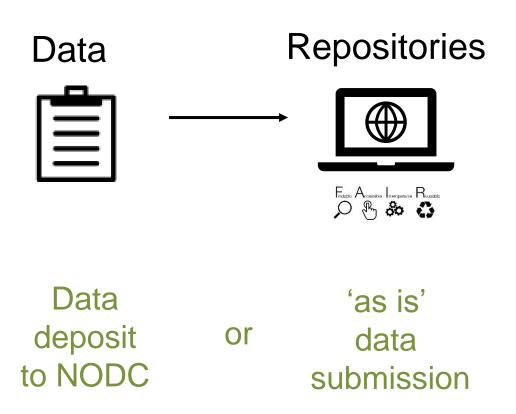








2 months after cruise



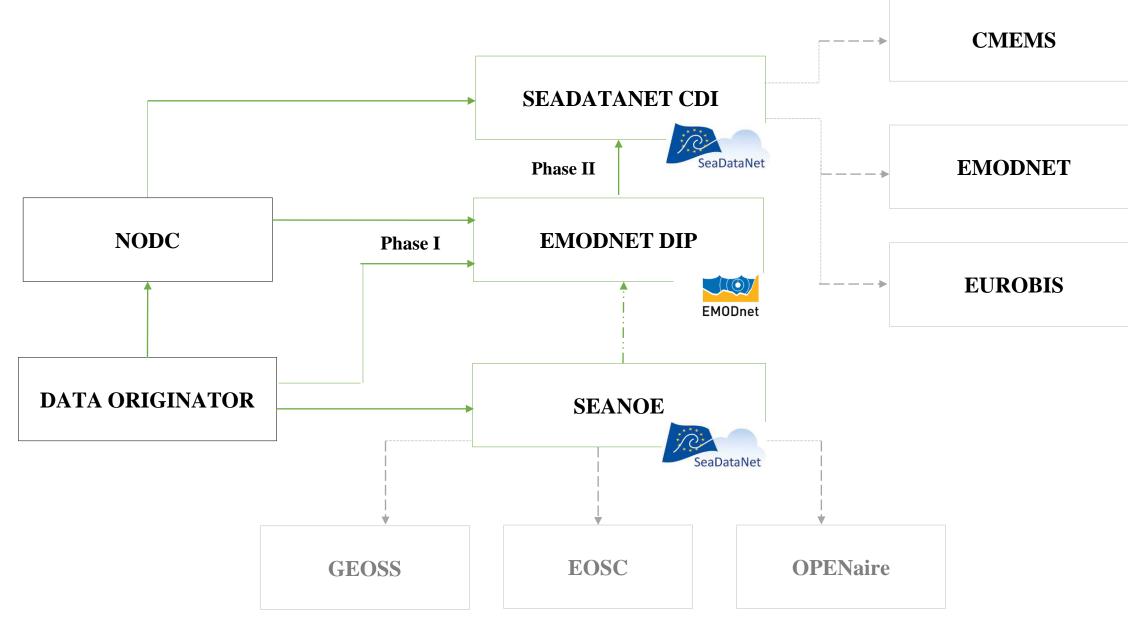
Data validation, standardization, publication





DATA MANAGEMENT WORKFLOWS

WORKFLOW FOR "COMMON" DATA WITHOUT EMBARGO







FAIRNESS INDICATORS

EMODNET DIP SEANOE



SEADATANET CDI

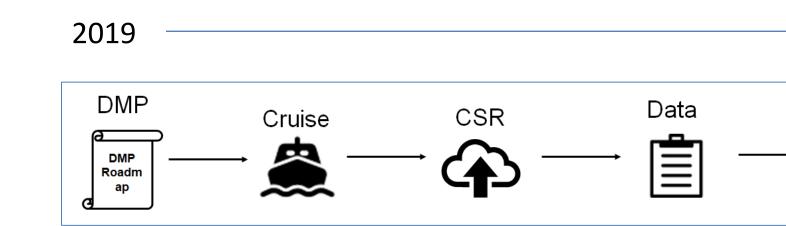




Follow-up of

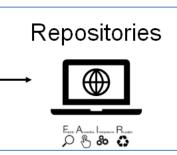
28 cruises

EF+ TA CRUISE DATA MANAGEMENT OUTCOMES





2023



Responsible NODCs: HCMR : 8 cruises OGS: 10 cruises **RBINS: 10 cruises**

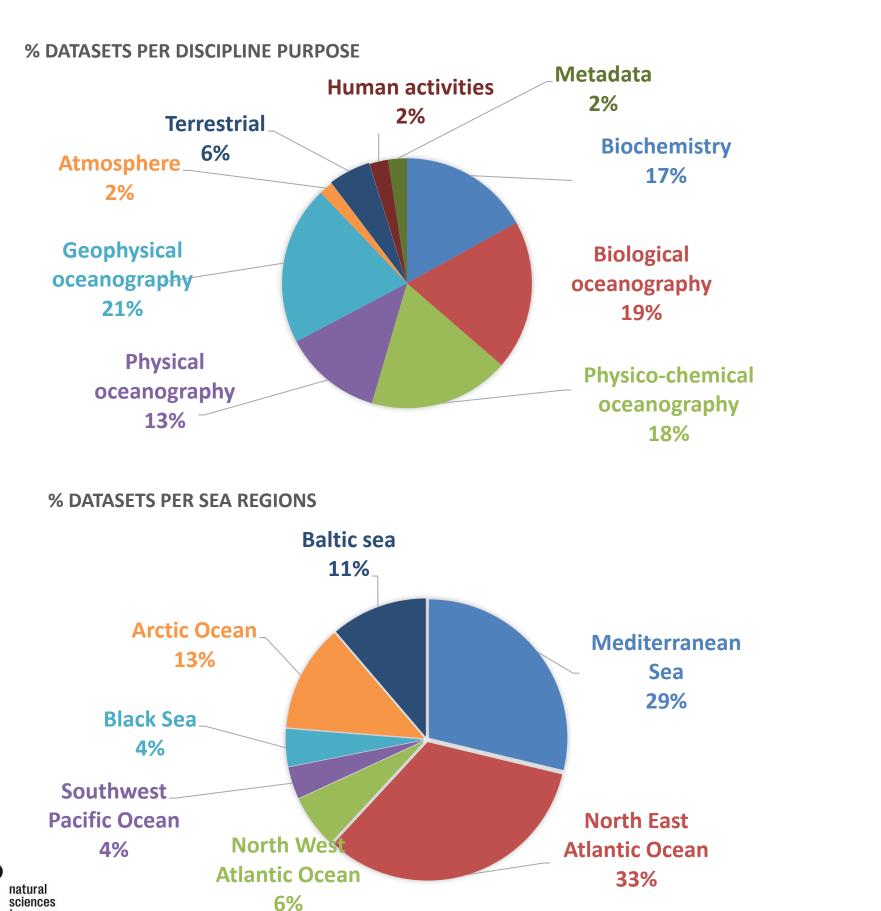
Data

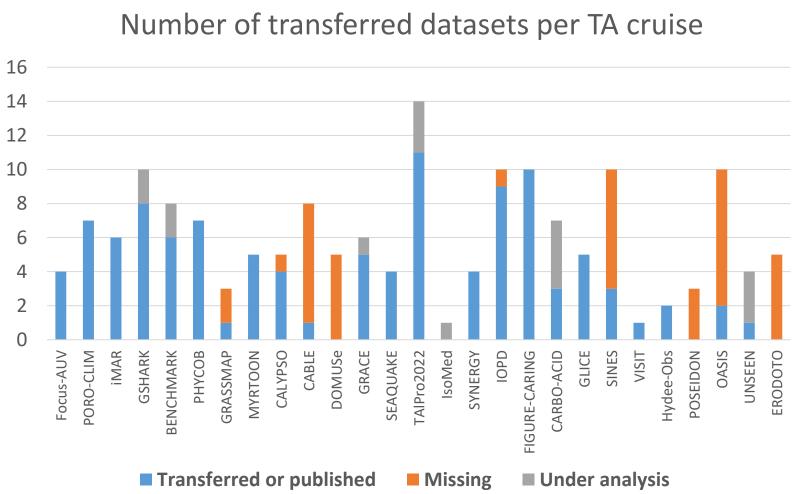
<u>CSRs</u>

portal

164 datasets generated, 66% datasets deposited, Published datasets available on: EMODnet DIP (21%) SeaDataNet SEANOE (14%) SeaDataNet CDI service (30%) and via Eurofleets+ EVIOR portal

SYNTHESIS OF THE TA CRUISES DATA MANAGEMENT



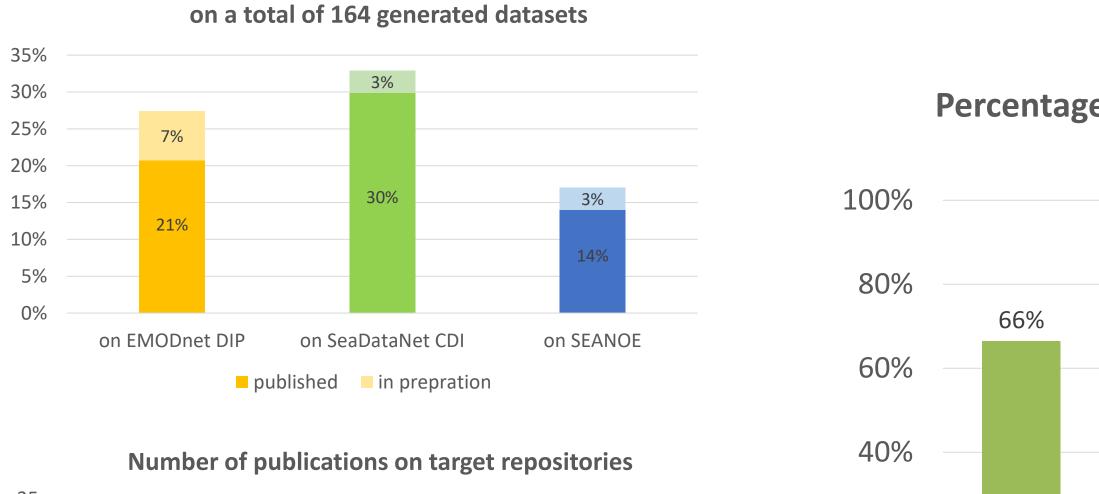


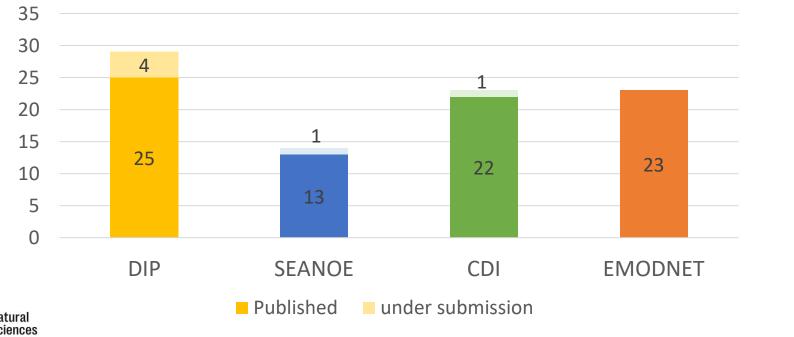
EF+ TA funded cruises generated 164 datasets

66% datasets deposited

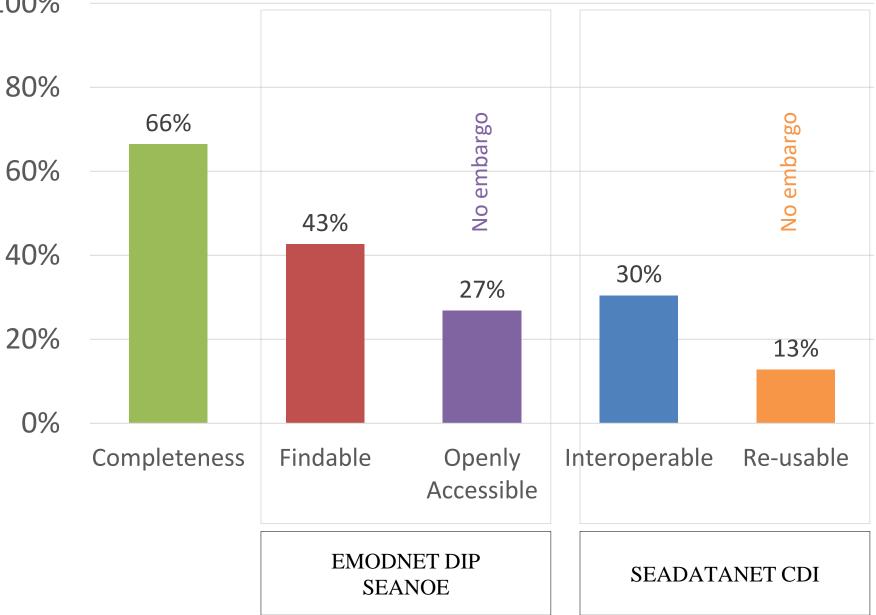


SYNTHESIS OF THE TA CRUISES DATA MANAGEMENT





% of datasets published on the target repositories







Percentages of Eurofleets+ datasets achieving FAIRness



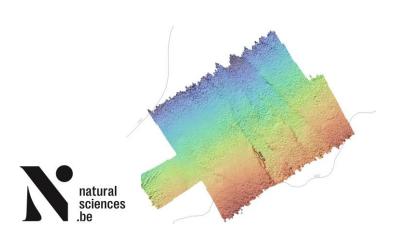
CONCLUSIONS

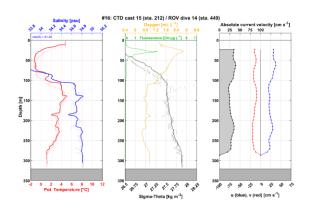
- 164 datasets generated •
 - ✓ 66% deposited for preservation
 - \checkmark 30% eventually F.A.I.R at the end of their moratorium.

Given the scale of the project, the amount of generated data and the time scale involved achieving present scores is considered as a very satisfactory rate.

To achieve these results, the main data management activities were:

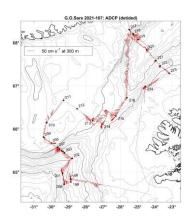
- describing guidelines and giving training to scientists on the cruises data management requirements ullet
- a continuous **communication** between PIs and NODCs to provide the necessary datasets (meta)data lacksquareinformation
- the **data curation** process performed by the NODCs to publish interoperable and re-usable datasets ullet









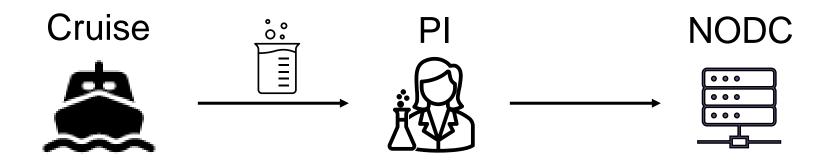






MAIN LESSONS LEARNED

1. The complete cruise data handling chain has been a lengthy process, inevitably extending beyond the EF+ project timeframe. FAIRness indicators reached was what could be expected to be achievable given the scale of the project.



2. Successful DM is the result of a close cooperation between scientists and data managers as they are complementary. Achieving data FAIRness means bringing awareness to scientists on DM good practices and fostering collaboration and communication between data managers and data-originators.







Repositories



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