

Data Management Plan Deliverable 1.3 WP1: Project Management

Authors: Eleni Toli, Panagiota Koltsida (ATHENA RC) Date: 31/03/2022



This project has received funding from the European Union's Horizon H2020 innovation action programme under grant agreement 101037424.



Deliverable Number and Name	D1.3 – Data Management Plan_1	
Work Package	WP1 – Project Management	
Dissemination Level	Public	
Author(s)	Eleni Toli, Panagiota Koltsida (ATHENA RC)	
Primary Contact and Email	Eleni Toli (elto@athenarc.gr)	
Date Due	31/03/2022	
Date Submitted	31/03/2022	
File Name	ARSINOE_D1.3	
Status	Final	
Reviewed by (if applicable)	Giannis Adamos (UTH), Lydia Vamvakeridou-Lyroudia (KWR)	
Suggested citation	Toli, E. & Koltsida, P. (2022) Data Management Plan. ARSINOE Deliverable 1.3, H2020 grant no. 101037424	

© ARSINOE Consortium, 2022

This deliverable contains original unpublished work except when indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both. Reproduction is authorised if the source is acknowledged.

This document has been prepared in the framework of the European project ARSINOE. This project has received funding from the European Union's Horizon 2020 innovation action programme under grant agreement no. 101037424.

The sole responsibility for the content of this publication lies with the authors. It does not necessarily represent the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.



TABLE OF CONTENTS

EXECUTIVE SUMMARY
LIST OF ACRONYMS
1.0 INTRODUCTION
2.0 DATA SUMMARY6
 2.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?
3.0 FAIR DATA
4.0 ALLOCATION OF RESOURCES
5.0 DATA SECURITY
5.1 Long term preservation of data10
6.0 ETHICAL ASPECTS
7.0 CONCLUSIONS - NEXT STEPS
ANNEX: DATASETS INFORMATION



EXECUTIVE SUMMARY

Deliverable D1.3 is the Data Management Plan (DMP) of the ARSINOE project. ARSINOE is an H2020 project that will shape the pathways to resilience by bringing together Systems Innovation Approach (SIA) and Climate Innovation Window (CIW) with the purpose to build an ecosystem for climate change adaptation solutions. Within the ARSINOE ecosystem, pathways to solutions are co-created and co-designed by stakeholders. Nine (9) Case Studies will demonstrate the ARSINOE three-tier approach as a proof-of-concept regarding its applicability, replicability, potential and efficacy and will co-develop sustainable solutions.

The Data Management Plan is a living document and describes the lifecycle of all datasets that will be used, processed, and generated throughout the project lifetime. Four (4) iterations are planned to be made available in the form of a report in months 6, 18, 36 and 48 of the project, while a machine actionable DMP will be created and constantly being updated to facilitate information sharing among the involved stakeholders and offer an automated process for sharing and linking the DMP with research artifacts. The Argos tool [4] (https://argos.openaire.eu), provided by OpenAIRE [3], is used for achieving this.

Related Deliverable: Deliverable 1.2 (M4): Scientific quality assurance plan and ethical considerations.

Relevant EU policies:

- Guidelines on FAIR Data Management in Horizon 2020, v3.0 2016 [1]
- European Data Act: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1113
- General Data Protection Regulation (GDPR) (EU) 2016/679





LIST OF ACRONYMS

DMP	Data Management Plan	
FAIR	Findable Accessible Interoperable Reusable	
GA	Grant Agreement	
ORDP	Open Research Data Pilot	
WP	Work Package	



1.0 INTRODUCTION

ARSINOE Project participates in the EU Open Research Data Pilot (ORDP) [2] and as such it will undertake all activities needed to enable open access and reuse of research data generated by the project.

Open access to research data refers to the right to access and re-use digital research data under the terms and conditions set out in the Grant Agreement. Openly accessible research data can typically be accessed, mined, exploited, reproduced, and disseminated under defined and clearly specified terms and conditions (either free of charge or at a cost for the user).

The Data Management Plan (DMP) is not a fixed document; it evolves and gains more precision and substance during the lifespan of the project. In total 4 iterations are foreseen during the ARSINOE project, to be published on months 6, 18, 36 and 48 of the project. This first version of the DMP, delivered in month 6, will also function as a guiding document for the proper data management during the project, whereas the DMP versions delivered towards the end of the project will also be a good preparation activity for the exploitation of ARSINOE's digital assets.

2.0 DATA SUMMARY

2.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

The main objective of the project is to build an ecosystem for solutions to climate change adaptation that will be showcased in nine widely varied case studies by developing demonstrators as a proof of concept, paving the way towards a green, digital, inclusive, resilient, and sustainable future. To implement this, each case study will exploit different datasets, based on their needs and requirements, and will exploit the solutions developed / offered in Work Package (WP)3: "Dynamic Multi-Sectoral Resilience Modelling and Assessment Framework", WP4: "Environmental Intelligence Management and Services" and WP5: "Portfolio of Innovations and Support Schemes". In this process, ARSINOE project is on the one hand exploiting open datasets, processes them and creates new datasets and on the other hand, it generates new primary datasets during the operation and implementation of the case studies' solutions. Additional datasets are planned to be generated from WP7 and WP8 in terms of reports and other media formats, as described in project's Grant Agreement (GA).

A Systems Innovation Approach (SIA) is followed throughout the lifetime of the project and the case studies will evolve and further be enhanced during time. This approach will be also reflected in the DMP, where we expect additional datasets to be part of its upcoming versions.

ARSINOE relevant objectives Related activities Through the data collection, **Objective 3**: To support communities and scientists in efficiently data driven decision making will evaluating environmental and economic effects of climate be facilitated. change and understanding the impact of possible interventions by citizens and multidisciplinary scientists by introducing The implementation of the VR collaborative design and/or implementation of interventions via experiences will rely on the Living Labs and through the use of advanced social Virtual Reality collection and exploitation of (VR) experiences and VR workshops. relevant data.

Table 2-1 Data activities in relation to the objectives of the project



ARSINOE relevant objectives	Related activities
Objective 4 : To offer advanced Environmental Intelligence services and tools, through an interactive platform allowing multiple stakeholders to collaborate in environmental management and co-derive adaptation solutions to strengthen multi-sectoral climate resilience, supported by the Collective Environmental Intelligence (CEI) Data Hub (DH) and Knowledge Graph (KG) (CEI-DH-KG), for efficiently collecting, storing, integrating, analysing and linking structured and unstructured data and concepts from multiple sources. Advanced Data Fusion and Artificial Intelligence techniques will decrease uncertainty and generate new knowledge from various disciplines, including social/behavioural, environmental and economic aspects, to be used by citizens and scientists.	Delivery of WP3 and WP4 tools, models and services.
Objective 5 : To quantify, model and manage climate risk in a systematic way through resilience analysis (that takes into account natural and built systems and their interactions, thus exploring cascading effects) and is co-created and co-designed with the stakeholders. A Multi-System Dynamic Resilience Modelling Framework will be developed to integrate tools, methods and techniques from different academic disciplines and facilitate a holistic analysis of results	Multi-System Dynamic Resilience Modelling Framework will be supported by the WP3 models and underlying data.

2.2 What types and formats of data will the project generate/collect?

Due to the different objectives of the case studies and the work performed in WP3 and WP4 various formats and types of data are exploited by the project. In Table 2-2, a summary of the different types and formats are shown. Detailed information, for each dataset, is available through the actionable DMP, in Argos.

Category	Туре	Format	Origin	Expected Size
Case studies datasets	text, images, numeric, statistical, geospatial, tabular, scripts	csv, tsv, jpeg, tiff, geotiff, grib, shapefile, xlsx, NetCDF, sql	primary and secondary (Open datasets)	from Kb to Gb
WP2 (VR experiences and choice experiments)	spatiotemporal, tabular, text	csv, json	primary and secondary	some Kb
WP3	models, scripts	various formats	primary and secondary	from Kb to Mb

Table 2-2 Datasets Summary Information



Category	Туре	Format	Origin	Expected Size
WP4	software	various formats	-	unknown yet
WP7	text, textual reports	pdf	primary	few Mb
WP8	text, images, videos,	pdf, various formats	primary	Mb

2.3 Will you re-use any existing data and how?

In some of the case studies, existing datasets are useful and will be exploited for the implementation of the resilience to climate change solutions each will deliver based on their objectives. The full list of currently identified datasets that will be reused by the project can be found in the machine actionable version of the DMP, accessible through the Argos tool. The exported information can also be found as an appendix to this deliverable.

2.4 To whom might it be useful?

ARSINOE activities span across multiple layers and focus on the functions of the cross-sectoral system as a whole and on the variety of its actors. Data collected or exploited within the project serve this broad range of actors, with the most prominent ones being researchers, research performing organizations, policy makers, public sector, local authorities, funders, innovation agencies, local businesses, environmental service providers.

The machine actionable version of the DMP on the Argos tool specifies the potential users for each data set.

3.0 FAIR Data

ARSINOE follows the ORDP principle: "as open as possible, as closed as necessary" and focuses on encouraging sound data management as an essential part of research best practice. Every dataset that will be generated will clearly state if it is open, restricted, or closed and will define a specific license for accessing it as part of its metadata. For existing datasets, the license and accessing conditions are already defined.

As part of WP4 and the Task 4.2 "ARSINOE Collective Intelligence Data Hub", a data catalogue will be developed and made available. All datasets will be part of this catalogue and a minimal set of metadata will be required for each one. The metadata will be based on widely used metadata standards (e.g. Dublin Core [9]) and will reuse terms from known vocabularies where appropriate. The catalogue will provide unique identifiers and offer advanced search and filtering functionality, facilitating the identification of useful datasets. Specific domain metadata that may exist, will be also stored into the catalogue as part of the dataset.

Publications and other open datasets are foreseen to be uploaded to Zenodo [5], a general-purpose openaccess repository developed under the European OpenAIRE program and operated by CERN, which promotes Open Science and the collaboration among researchers and other communities. A dedicated Zenodo community will be created to serve and promote ARSINOE's work and outputs.

Finally, an interoperable web service is planned to be developed to allow exchange of information among the catalogue and other external repositories. The service will be built using a widely accepted interoperable standard, like the OAI-PMH [6] one.



The DMP recommends the adoption of structured solutions for the clarification of licenses of generated datasets and makes available related license clearance tools.

4.0 ALLOCATION OF RESOURCES

Table 4-1 responds to all questions concerning the allocation of resources in ARSINOE.

Table 4-1 Allocation of resources aspects

Question	Answer
	According to OpenAIRE, there are two main cost categories, which be taken into account by the ARSINOE project: Infrastructure costs and Skills costs.
What are the costs for making data FAIR in your project?	Infrastructure costs: Digitisation, Storage, Licensing and Security, Sharing and Re-use, Archiving.
	Skills costs: Data wrangling, Description and Documentation, Metadata generation, Formatting and Cleaning, Consent and Anonymisation
How will these be covered? Note that costs related to open access to research data are eligible as part of the Horizon 2020 grant (if compliant with the Grant Agreement conditions).	For the runtime of the project costs related to fairness of data are covered by the project partners who deal with this and partners who have person months allocated in the related WP3 and WP4 activities, although data from other WPs may also be included, as needed.
Who will be responsible for data management in your project?	The Project Data Officer, Dr Martin Drews (DTU) The Data Management Leader, Ms Eleni Toli (ATHENA RC) The Project Coordinator, Prof. Chrysi Laspidou (UTH) Assistance will be provided where needed by the Innovation and IPR officer, Dr Svetlana Klessova (CAG)
Are the resources for long term preservation discussed (costs and potential value, who decides and how what data will be kept and for how long)?	The resources for long term preservation have not been discussed yet. Information will be made available in the 3 rd iteration of the DMP.

5.0 DATA SECURITY

Data security is an important parameter of the Data Management Plan. As already described, ARSINOE will use and generate different types of datasets, none of them are sensitive though. Each partner organization, which is collecting, processing, and storing data in its local repositories and/or storage, for



accomplishing its tasks, is responsible to have set the appropriate procedures in place for ensuring the confidentiality and protection of personal data, as also described in D1.2 deliverable [7].

Beside the local repositories, if any, all data, and a minimal set of metadata will be made available through the project's data catalogue. The catalogue will implement the appropriate mechanisms to support different authorization schemes aiming to support both the cases where data should remain closed or restricted and the open ones, while it will strongly suggest the openness of a minimal set of metadata.

From a technological perspective the catalogue, the data hub, and the knowledge graph (WP4) will exploit an on-premises cloud infrastructure, where every file stored is maintained and encrypted. HTTPS protocol and a valid certificate will be used for securing the communication between endpoints and other services. In addition, backup plans will ensure the appropriate backup of data, avoiding any unexpected loss.

Non research datasets, including the source code of the developed software will be stored in the most suitable repositories, e.g. a Github [8] repository for source code and the website's storage for the dissemination material.

5.1 Long term preservation of data

To ensure long term preservation of data and for those data where no restrictions exist, will be uploaded to Zenodo, where all files are stored in CERN's EOS service in an 18 petabytes disk cluster. Each file copy has two replicas located on different disk servers. For each file they store two independent MD5 checksums. One checksum is stored by Invenio [10], used to detect changes to files made from outside of Invenio. The other checksum stored by EOS, is used for automatic detection and recovery of file corruption on disks. Zenodo's policies are available through: <u>https://about.zenodo.org/policies/</u>, where the current plan ensures at least 20 years of preservation, data versioning, replication, and file preservation.

6.0 ETHICAL ASPECTS

The ARSINOE project does not collect, analyse, or preserve sensitive data. As such, there are no major ethical implications related to the data management activities. The participation of humans takes place mostly through the nine use cases, which also account for the bulk of data collection activities. For this reason, procedures and guidelines that ensure an ethics compliant involvement of humans in the project activities have been defined and are described in the Deliverable D1.2 "Scientific quality assurance plan and ethical considerations". Special attention is given to the protection of personal data, and all provisions foreseen by the General Data Protection Regulation (GDPR) (EU) 2016/679 have been considered. The anonymization of data collected will take place either at the source (e.g. aggregated and anonymous answers to surveys) or with the use of anonymization techniques (e.g. for the Knowledge Hub). In any case, the data security measures described above will prevent from non-authorized access to data. The whole process will be overseen by the ARSINOE Ethics Officer (Prof. E. Vavalis - UTH) and the Data officer (Dr Martin Drews - DTU).

7.0 CONCLUSIONS - NEXT STEPS

This deliverable is the first version of a series of four. The Data Management Plan is a living document and will be updated during the lifetime of the project. This first version provided a brief overview of the data lifecycle and the FAIR data management practices that will be realised for all the used, existing datasets and the newly generated ones. The detailed list of datasets is available through Argos and the initial list of them is attached to the appendix of this document. The next version of this document is due in month 18.



REFERENCES

- 1. Guidelines on FAIR Data Management in Horizon 2020, v3.0 2016: <u>https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf</u>.
- 2. Open Research Data Pilot in H2020: <u>https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/data-management_en.htm</u>
- 3. OpenAIRE: <u>https://www.openaire.eu/about</u>.
- 4. Argos Application: https://argos.openaire.eu.
- 5. Zenodo: https://zenodo.org/.
- 6. OAI-PMH: Open Archives Initiative Protocol for Metadata harvesting: <u>https://www.openarchives.org/pmh/</u>.
- 7. Vamvakeridou-Lyroudia, L.S. (2022) Scientific quality assurance plan and ethical considerations. ARSINOE Deliverable 1.2, H2020 grant no. 101037424.
- 8. Github: <u>https://github.com/about</u>.
- 9. Dublin Core metadata schema: https://www.dublincore.org/specifications/dublin-core/.
- 10. Invenio: https://inveniosoftware.org/.



ANNEX: Datasets Information

ARSINOE project has a machine actionable DMP through the ARGOS tool. Information for all datasets are inserted there. In thisAnnex, we attach the information for all the current datasets exported automatically from ARGOS.

Data Management Plan Information

ARSINOE Data Management Plan

The Data Management Plan of the H2020 ARSINOE (Climate Resilient Regions Through Systemic Solutions and Innovations) Project.

ARSINOE is funded by the EC under G.A. 101037424

Funder

European Commission | | EC

Grant

CLIMATE RESILIENT-REGIONS THROUGH SYSTEMIC SOLUTIONS AND INNOVATIONS (101037424)

Organisations

Athena Research and Innovation Center In Information Communication & Knowledge Technologies, PANEPISTIMIO THESSALIAS (UNIVERSITY OF THESSALY)

Researchers

Datasets

Title: SDG6Greece

Template: Horizon 2020

CSV file for Sustainable Development Goal (SDG) 6 data series data for Greece

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To obtain information

1.1.2 What are the types of the described generated/collected data?

observational (e.g., sensor data, data from surveys), Other

1.1.3 What are the formats of the described generated/collected data?

Other

1.1.4 What is the origin of the described data?

Primary data

1.1.5 What is the expected size of the described data?

• KB (kilobyte)



• 256

2.1 Reused Data

- 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.2 Please provide URL/Location describing the used metadata schema

http://metadata.un.org/sdg/6?lang=en

3.1.1.3 Will your metadata use standardised vocabularies?

• Yes

http://metadata.un.org/thesaurus/?lang=en

3.1.1.5 Will you make the metadata available free-of-charge?

Yes

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Comma Separated Values
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools are required

3.1.2 Making data openly accessible

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.3 How will the data be made available?

Repository of Archive



Title: Flood data for Torbay area

Template: Horizon 2020

.asc files with height of flood at given time on a grid of 1m squares

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- flood depth data
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- Textual with the extension .asc
 - 1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)
- 30 000kb per file approximately
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.3 Will your metadata use standardised vocabularies?

No

3.1.1.10 Will you provide persistent identifiers for the described data?

No

3.1.1.12 Will you provide searchable metadata for the described data?

No

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - STL (Standard Tessellation Language) ASCII
- 3.1.1.18 Are the file formats you will use open?





Yes

- 3.1.1.20 Do supported open-source tools exist for accessing the data?
 - Yes
- qgis, python and julia scripts

Title: Sea level rise

Template: Horizon 2020

In La Palma we will study the capital, which houses the port and airport, as well as most of the island's population. In El Hierro we will study the area of Valle del Golfo.

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
 - Geospatial
- 1.1.3 What are the formats of the described generated/collected data?
 - Other
 - jpeg
- 1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - MB (megabyte)

• 200

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?

Delft3D + SMC + IPCC + IOLE SMC (IH Cantabria)

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.2 Please provide URL/Location describing the used metadata schema

https://www.grafcan.es/



- 3.1.1.3 Will your metadata use standardised vocabularies?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.4 Please provide URL/Description of used vocabularies
- https://www.grafcan.es
- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - JPEG File Interchange Format
- 3.1.1.18 Are the file formats you will use open?
- Yes
- 3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

- 3.1.2 Making data openly accessible
 - 3.1.2.6 Are there any methods or tools required to access the described data?

No

- 3.1.3 Making data interoperable
 - 3.1.3.1 Will you use a controlled vocabulary for the described data?

Yes

- 3.1.4 Increase data reuse
 - 3.1.4.4 What internationally recognised licence(s) will you use for the described data?
- CC BY Attribution-NonCommercial
- 6.1 Ethical aspects
 - 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing? No

Title: Canary hydro geodatabase

Template: Horizon 2020

Hydrogeological database including geological, groundwater data and hydrochemical analysis

Dataset Description

1.1 Data Summary



1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

- Other
- Research purposes
- 1.1.2 What are the types of the described generated/collected data?
 - Other
 - tabular
- 1.1.3 What are the formats of the described generated/collected data?
 - Other
- jpeg, shapefile, CSV, TSV, XLSX

1.1.4 What is the origin of the described data?

Primary data

- 1.1.5 What is the expected size of the described data?
 - GB (gigabyte)

• 30

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.3 Will your metadata use standardised vocabularies?

No

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - JPEG Extended Range
 - Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

jpeg, shapefile, CSV, TSV, XLSX

3.1.1.18 Are the file formats you will use open?

No

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes



3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.2 Will the described data be openly accessible?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

No

4.1 Allocation of resources

4.1.2 Will you identify a data manager to manage the described data? If not who will be responsible for the management of the data?

• Yes

• Responsible researchers involved in the project.

Title: CS4 Ohrid Prespa Lakes

Template: Horizon 2020

Data related to Ohrid Prespa Lakes for Greece, North Macedonia and Albania

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
- a. Textual,
- b. Geospatial and
- c. Tabular
 - 1.1.3 What are the formats of the described generated/collected data?

Other

- 1. docx,
- 2. odt,
- 3. jpeg

4. png

5. CSV



6. TSV

7. XLSX

1.1.4 What is the origin of the described data?

Primary data

- 1.1.5 What is the expected size of the described data?
 - MB (megabyte)

• 1

2.1 Reused Data

- 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually
 - 3.1.1.16 Provide information about used standardised formats
 - docx, odt, jpeg, png, CSV, TSV, XLSX
 - 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

- Open Office
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.
- No proprietary tools are required
- 3.1.2 Making data openly accessible
 - 3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?
 - Yes
- ND of data provided from some stakeholders

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No



Title: CRCM5 large ensemble

Template: Horizon 2020

Regional single-model initial-condition large ensemble based on the Regional Climate Model CRCM5. 50 climate simulations of historical and rcp85 scenario exist. Multiple variables are available in hourly to daily temporal resolution, all data have a spatial resolution of 0.11degrees and cover the European domain. A list of variables can be found here: https://www.climex-project.org/wp-content/uploads/2021/10/ClimEx_CRCM5-LE_documentation_v2.1-1.pdf A full description of the dataset can be found here:

Leduc, M., A. Mailhot, A. Frigon, J. Martel, R. Ludwig, G.B. Brietzke, M. Giguère, F. Brissette, R. Turcotte, M. Braun, and J. Scinocca, 2019: The ClimEx Project: A 50-Member Ensemble of Climate Change Projections at 12-km Resolution over Europe and Northeastern North America with the Canadian Regional Climate Model (CRCM5). J. Appl. Meteor. Climatol., 58, 663-693, https://doi.org/10.1175/ JAMC-D-18-0021.1

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- Climate Model Outputs
 - 1.1.3 What are the formats of the described generated/collected data?
 - Models
- NetCDF-4
 - 1.1.4 What is the origin of the described data?
 - Secondary data
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?

https://www.climex-project.org/en/data-access/

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
 - 3.1.1.2 Please provide URL/Location describing the used metadata schema
 - http://cfconventions.org/



• cf conventions

3.1.1.12 Will you provide searchable metadata for the described data?

Yes

- 3.1.1.13 What services will you use to provide searchable metadata?
 - Metadata repository
 - Couldn't find it? Insert it manually

3.1.1.14 Please provide URL/Name for the used searchable metadata

https://www.climex-project.org/en/data-access

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.2 Making data openly accessible

3.1.2.2 Will the described data be openly accessible?

• Yes

• Some variables are publicly available here: <u>https://www.climex-project.org/en/data-access/</u> Other variables are stored elsewhere and access can be granted.

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

- CC BY Attribution-NonCommercial
- 6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

Yes

Title: CS4 Ohrid Prespa Lakes, second dataset in line 8

Template: Horizon 2020

CSV file for Greece, North Macedonia and Albania

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
- a. Textual,
- b. Geospatial,



c. Tabular

1.1.3 What are the formats of the described generated/collected data?

• Text files, Other

- 1. docx,
- 2. odt,
- 3. jpeg,
- 4. png,
- 5. CSV,
- 6. TSV,
- 7. XLSX

1.1.4 What is the origin of the described data?

Primary data

1.1.5 What is the expected size of the described data?

• MB (megabyte)

• 1

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?

• Yes

• To compare and combine with other data, To follow-up research on a specific area

3.1.1 Making data findable, including provisions for metadata

3.1.1.12 Will you provide searchable metadata for the described data?

No

3.1.1.15 Will you use standardised formats for the described data?

• Yes

- Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

docx, odt, jpeg, png, CSV, TSV, XLSX



3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

• the CSV file can be open by various open source tools (e.g. Open source)

3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools are required

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: LIDAR DTM Time Stamped Tiles

Template: Horizon 2020

The LIDAR DTM (Digital Terrain Model) Time Stamped Tiles product is an archive of raster elevation data produced by the Environment Agency. Site specific LIDAR surveys have been carried out across England since 1998, with certain areas, such as the coastal zone, being surveyed multiple times. Data is available at varying resolutions of 25cm, 50cm, 1m and 2m, depending on project requirements.

Dataset Description

1.1 Data Summary

1.1.2 What are the types of the described generated/collected data?

• observational (e.g., sensor data, data from surveys)

Sensor

1.1.3 What are the formats of the described generated/collected data?

- Other
- shapefile
- 1.1.5 What is the expected size of the described data?
 - MB (megabyte)



• 700

2.1 Reused Data

- 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area
- 2.1.2 Where do the described data reside?
- European Environment Agency, Datasets
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
 - 3.1.1.2 Please provide URL/Location describing the used metadata schema
 - https://data.gov.uk/dataset/8275e71e-1516-42a1-bb0c-4fa73807fe2b/lidar-dtm-time-stamped-

tiles

3.1.1.15 Will you use standardised formats for the described data?

• Yes

- Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

shapefile

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

• QGIS, GRASS GIS, SAGA GIS, etc.

3.1.1.21 Please describe if data require proprietary tools to access the data.

Proprietary software is not necessary for accessing this data

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

Any limitation arises from the UK EA's terms of use

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

6.1 Ethical aspects



6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

Any limitation arises from the UK EA's terms of use

6.1.3 Are the described data personal?

No

Title: Durum Evaluation Trials Benatzu Site (DETBS)

Template: Horizon 2020

Dataset of performance of durum wheat cultivars

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

- Other
- Dataset of performance of durum wheat cultivars
- 1.1.2 What are the types of the described generated/collected data?
 - observational (e.g., sensor data, data from surveys)
- Tabular

1.1.3 What are the formats of the described generated/collected data?

- Other
- XLSX

1.1.4 What is the origin of the described data?

Primary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)
- 200
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.3 Will your metadata use standardised vocabularies?

No



3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

XLSX

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools required

3.1.2 Making data openly accessible

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

No

Title: CORDEX regional climate model data on single levels (Europe)

Template: Horizon 2020

Regional Climate Model (RCM) data on single levels from a number of experiments and models for the European domain at a horizontal resolution of 0.11 degrees

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
 - Geospatial
- 1.1.3 What are the formats of the described generated/collected data?
 - Models
- NetCDF-4

1.1.4 What is the origin of the described data?

Secondary data



- 1.1.5 What is the expected size of the described data?
 - MB (megabyte)
- 146Mb (for 1 variable, 1 year for the European domain)
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes

• https://cds.climate.copernicus.eu/cdsapp#!/dataset/projections-cordex-domains-single-levels?tab=overview

2.1.2 Where do the described data reside?

Copernicus

2.1.3 Which data will be re-used?

10.24381/cds.bc91edc3

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - CF (Climate and Forecast) Metadata Conventions
- 3.1.1.10 Will you provide persistent identifiers for the described data?

Yes

3.1.1.11 Persistent identifiers

DOI

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats
- CF (Climate and Forecast) Metadata Conventions
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.2 Will the described data be openly accessible?

Yes



3.1.2.6 Are there any methods or tools required to access the described data?

No

Title: CAMS European air quality reanalyses

Template: Horizon 2020

This dataset is used to provide the boundary conditions of air pollution for the chemistry transport model simulations.

Dataset Description

- 1.1 Data Summary
 - 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Models
- NetCDF-4
 - 1.1.4 What is the origin of the described data?
 - Secondary data
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
- https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-europe-air-qualityreanalyses?tab=overview
 - To follow-up research on a specific area
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.10 Will you provide persistent identifiers for the described data?

No

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats
 - •

https://confluence.ecmwf.int/display/CKB/CAMS+Regional%3A+European+air+quality+reanalyses+data +documentation#CAMSRegional:Europeanairqualityreanalysesdatadocumentation-Dataaccess

- NetCDF-4
- 3.1.1.18 Are the file formats you will use open?

Yes



3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.6 Are there any methods or tools required to access the described data?

No

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• Yes

• All users of data uploaded on the Atmosphere Data Store (ADS) must provide clear and visible attribution to the Copernicus programme and are asked to cite and reference the dataset provider.

Title: EPISODE-CityChem predictions

Template: Horizon 2020

Hourly outputs of air pollution over Athens from the numerical simulations performed with the CTM EPISODE-CityChem

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)

• Hourly outputs of air pollution over Athens from the numerical simulations performed with the CTM EPISODE-CityChem

1.1.3 What are the formats of the described generated/collected data?

Models

• Geospatial, NetCDF-4

1.1.4 What is the origin of the described data?

Secondary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area



- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - No
 - 3.1.1.3 Will your metadata use standardised vocabularies?
 - No

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

NetCDF-4

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

- 3.1.2.3 How will the data be made available?
 - Other

• After the publication (Scientific Journal) of the scientific research dependent on the data, the dataset will be made accessible

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.2.9 Will you also make auxiliary data that may be of interest to researchers available?

after publication

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

No

3.1.4 Increase data reuse

3.1.4.1 When do you plan to make the described data available for reuse?



after article publication

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

7.1 Other

7.1.1 Do you make use of other procedures for data management?

Yes

Title: ERA5 hourly data on pressure levels from 1979 to present

Template: Horizon 2020

ECMWF atmospheric reanalysis of the global climate and weather. ERA5 provides hourly estimates of a large

number of atmospheric, land and oceanic climate variables. The data cover the Earth on a 30km grid and resolve

the atmosphere using 137 levels from the surface up to a height of 80km. ERA5 includes information about uncertainties for all variables at reduced spatial and temporal resolutions

Dataset Description

- 1.1 Data Summary
 - 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Models
- grib

1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - GB (gigabyte)

• 270

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://cds.climate.copernicus.eu/api/v2
 - To compare and combine with other data, To follow-up research on a specific area



2.1.2 Where do the described data reside?

Copernicus

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.10 Will you provide persistent identifiers for the described data?

Yes

3.1.1.11 Persistent identifiers

DOI

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

Grid

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No



Title: WRF output

Template: Horizon 2020

Meteorological parameters fields for the area and time period of interest. They will be generated for the project's needs.

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Models
- NetCDF-4
 - 1.1.4 What is the origin of the described data?

Secondary data

1.1.5 What is the expected size of the described data?

- TB (terabyte)
- 1.2 TB
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - To compare and combine with other data, To follow-up research on a specific area

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

NetCDF-4

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?



Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools are required.

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

- 3.1.2.3 How will the data be made available?
 - Other
 - Local server
- 3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

No

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: CAMS-REG

Template: Horizon 2020

Copernicus Atmosphere Monitoring Service regional emission inventory. These contain annual total emissions at grid level for 2000- 2020 for Europe. This dataset is used to provide the gaseous emissions of air pollutants for the chemistry transport model simulations.

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

• Other

• This dataset is used to provide the gaseous emissions of air pollutants for the chemistry transport model simulations.

• Copernicus Atmosphere Monitoring Service regional emission inventory. These contain annual total emissions at grid level for 2000- 2020 for Europe.

1.1.2 What are the types of the described generated/collected data?



- Other
- Geospatial

1.1.3 What are the formats of the described generated/collected data?

- Models, Other
- NetCDF-4, and csv

• : Official emission reporting (UNECE/UNFCCC), GAINS, EDGAR (15 sectors using the GNFR classification). But also Model & Report

1.1.4 What is the origin of the described data?

Primary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://eccad3.sedoo.fr/

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.2 Please provide URL/Location describing the used metadata schema

https://eccad3.sedoo.fr/

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.10 Will you provide persistent identifiers for the described data?

Yes

3.1.1.11 Persistent identifiers

DOI

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Comma Separated Values
- Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

NetCDF-4, and csv

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?



Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

• No

• The User shall take all relevant steps to maintain the rights of the various Licensors including those of the CNRS-INSU and CNES. In particular, he shall clearly mark on all communications and distributed documents, the name and identification of the various Licensors, whose list is provided in the metadata files, and refer to the ECCAD-AERIS portal as the service provider. The manner how each product has to be referenced is explicitly written in the metadata file of the ECCAD-AERIS product. It's expressly agreed that the User shall refrain from any commercial use whatsoever, direct or indirect, of products provided by ECCAD-AERIS

3.1.2.2 Will the described data be openly accessible?

3.1.2.6 Are there any methods or tools required to access the described data?

No

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• No

• The User shall take all relevant steps to maintain the rights of the various Licensors including those of the CNRS-INSU and CNES. In particular, he shall clearly mark on all communications and distributed documents, the name and identification of the various Licensors, whose list is provided in the metadata files, and refer to the ECCAD-AERIS portal as the service provider. The manner how each product has to be referenced is explicitly written in the metadata file of the ECCAD-AERIS product. It's expressly agreed that the User shall refrain from any commercial use whatsoever, direct or indirect, of products provided by ECCAD-AERIS.

Title: European Settlement Map

Template: Horizon 2020

The European Settlement Map is a spatial raster dataset that is mapping human settlements in Europe based on Copernicus Very High Resolution optical coverage for reference year 2015 (VHR_IMAGE_2015). It follows-up on the previous ESM2012 R2016 and ESM2012 R2017 derived from 2.5 m resolution SPOT-5/6 images acquired in the context of the pan-European GMES/Copernicus (Core_003) dataset for the reference year 2012. ESM 2015 Release 2019 is published in two layers: 2 of Built-up areas at а spatial resolution meters Classification of the built-up areas into residential and non-residential at a spatial resolution of 10 meters

Dataset Description

1.1 Data Summary


- 1.1.2 What are the types of the described generated/collected data?
 - Other
- •
- Geospatial
- 1.1.3 What are the formats of the described generated/collected data?
 - Other
- images
 - geotiff
 - 1.1.4 What is the origin of the described data?
 - Secondary data
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://land.copernicus.eu/pan-european/GHSL/european-settlement-map/esm-2015-
- release-2019
 - To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?
 - Copernicus
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?

Not sure

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Geographic Tagged Image File Format (GeoTIFF)
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?



No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: Natura 2000 network

Template: Horizon 2020

Natura 2000 is the key instrument to protect biodiversity in the European Union. It is an ecological network of protected areas, set up to ensure the survival of Europe's most valuable species and habitats. Natura 2000 is based on the 1979 Birds Directive and the 1992 Habitats Directive. This version covers the reporting in 2020

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

• To obtain information, Other

• Natura 2000 is based on the 1979 Birds Directive and the 1992 Habitats Directive. This version covers the reporting in 2020

• Natura 2000 is the key instrument to protect biodiversity in the European Union. It is an ecological network of protected areas, set up to ensure the survival of Europe's most valuable species and habitats.

1.1.2 What are the types of the described generated/collected data?

• observational (e.g., sensor data, data from surveys)

- Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Other
 - shapefile
 - 1.1.4 What is the origin of the described data?

Secondary data

2.1 Reused Data

2.1.1 Are you re-using the described data and how?

• Yes



- https://www.eea.europa.eu/data-and-maps/data/natura-12
- To compare and combine with other data, To follow-up research on a specific area
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?

Not sure

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.10 Will you provide persistent identifiers for the described data?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

shapefile

- 3.1.1.18 Are the file formats you will use open?
- Yes
- 3.1.1.20 Do supported open-source tools exist for accessing the data?
- Yes
- 3.1.1.21 Please describe if data require proprietary tools to access the data.

No

- 3.1.2 Making data openly accessible
 - 3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

- 3.1.3 Making data interoperable
 - 3.1.3.1 Will you use a controlled vocabulary for the described data?

Not sure

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

Other

- 6.1 Ethical aspects
 - 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?



No

Title: OpenStreetMap

Template: Horizon 2020

OpenStreetMap is built by a community of mappers that contribute and maintain data about roads, trails, cafés, railway stations, and much more, all over the world.

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

• To keep on record, To develop a product

• OpenStreetMap is built by a community of mappers that contribute and maintain data about roads, trails, cafés, railway stations, and much more, all over the world.

- 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Other
- shapefile
 - 1.1.4 What is the origin of the described data?

Primary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://www.openstreetmap.org/#map=7/38.355/25.730

• To compare and combine with other data, To follow-up research on a specific area, To develop new products/ services

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

Not sure

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually



- 3.1.1.16 Provide information about used standardised formats
 - https://www.openstreetmap.org/#map=7/38.355/25.730
 - Open Street Map Website
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

• Yes

• The freedom to map the world in OpenStreetMap has limitations where it violates the privacy of people living in this world.

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

Not sure

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• Yes

• The freedom to map the world in OpenStreetMap has limitations where it violates the privacy of people living in this world.

Title: Satellite derived Land Surface Temperatures (LST) from Terra MODIS and Landsat.

Template: Horizon 2020

Land Surface Temperature (LST) measures the Earth's surface temperature (units Kelvin) and is an important geophysical parameter in global energy balance studies and hydrologic modeling. Surface temperature is also useful for monitoring extreme heat events such as natural disasters (e.g., volcanic eruptions, wildfires), and urban heat island effects. - Landsat Collection 2 includes scene-based global Level-2 LST data with a 100 m spatial resolution. - The MOD11A1 Version 6 product provides daily per-pixel Land Surface Temperature and Emissivity (LST&E) with 1 kilometer (km) spatial resolution in a 1,200 by 1,200 km grid



Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

• To obtain information

• Land Surface Temperature (LST) measures the Earth's surface temperature (units Kelvin) and is an important geophysical parameter in global energy balance studies and hydrologic modeling. Surface temperature is also useful for monitoring extreme heat events such as natural disasters (e.g., volcanic eruptions, wildfires), and urban heat island effects.

Landsat Collection 2 includes scene-based global Level-2 LST data with a 100 m spatial resolution.

The MOD11A1 Version 6 product provides daily per-pixel Land Surface Temperature and Emissivity (LST&E) with 1 kilometer (km) spatial resolution in a 1,200 by 1,200 km grid

- 1.1.2 What are the types of the described generated/collected data?
 - Other
 - Satellite images

1.1.3 What are the formats of the described generated/collected data?

- Other
- geotiff and NetCDF-4

1.1.4 What is the origin of the described data?

Secondary data

1.1.5 What is the expected size of the described data?

The size of a single landsat L2 scene is 1Gb and that of MODIS \sim 5 Mb (depends on number of missing pixels due to clouds).

2.1 Reused Data

- 2.1.1 Are you re-using the described data and how?
 - Yes

• To reproduce and validate findings, To compare and combine with other data, To follow-up research on a specific area

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.10 Will you provide persistent identifiers for the described data?



Yes

3.1.1.11 Persistent identifiers

DOI

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Geographic Tagged Image File Format (GeoTIFF)
- Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

geotiff and NetCDF-4

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

None required

- 3.1.2 Making data openly accessible
 - 3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

- 3.1.2.3 How will the data be made available?
 - Domain-specific database
- 1. https://www.usgs.gov/landsat-missions/landsat-collection-2-level-2-science-products
- 2. https://lpdaac.usgs.gov/products/mod11a1v006/
- 3. https://climate.esa.int/en/projects/land-surface-temperature/

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

No

- 6.1 Ethical aspects
 - 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• No



• There is a trade-off between the spatial and temporal resolution. This implies that no satellite data with high spatial and temporal resolution available. MODIS acquires 1 km LST twice per day, while Landast 100 m LST data biweekly.

Title: WRF Preprocessing System (WPS) Geographical Input Data

Template: Horizon 2020

Static geographical data required to run WPS (WRF Preprocessing System) and WRF (Weather Research and

Forecasting model).

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
 - Geospatial
- 1.1.3 What are the formats of the described generated/collected data?
 - Models
- bin
 - 1.1.4 What is the origin of the described data?

Secondary data

1.1.5 What is the expected size of the described data?

• GB (gigabyte)

• 29

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://www2.mmm.ucar.edu/wrf/src/wps_files/geog_high_res_mandatory.tar.gz
 - To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?

National Center for Atmospheric Research

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.15 Will you use standardised formats for the described data?



• Yes

• Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

bin

3.1.1.18 Are the file formats you will use open?

Not sure

3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools are required.

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.3 How will the data be made available?

• Domain-specific database

• Downloaded to local server

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

Not sure

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: Top 20 ports - passengers embarked and disembarked in each port, by direction (mar_mp_aa_pphd)

Template: Horizon 2020

The maritime transport domain contains quarterly and annual data.

Maritime transport data refer to gross weight of goods (in tonnes), passenger movements (in number of passengers) as well as for vessel traffic (in number of vessels and in gross tonnage of vessels). Data for transport of goods transported on Ro-Ro units or in containers are also expressed in number of units or number of TEUs (20 foot equivalent units).



Data at regional level (NUIS 2, 1 and 0) are also a	available.
---	------------

The statistics on maritime transport are collected within Directive 2009/42/EC and Commission Decision 2008/861/EC, as amended by Commission Decision 2010/216/EU of the European Parliament and of the Council of 14 April 2010, by Regulation 1090/2010 of the European Parliament and of the Council of 24 November 2010 and by Commission Delegated Decision 2012/186/EU of 3 February 2012.

Data are collected by the national competent authorities in the reporting countries using a variety of data sources, such as port administration systems, national maritime databases, customs databases or questionnaires to ports or shipping agents (see section 18.1).

The maritime transport data have been calculated using data collected at port level. The data are displayed at port level, regional level, Maritime Coastal Area (MCA) level and country level.

The data are presented in six collections, displaying main annual results, short sea shipping, passengers, goods vessel traffic and regional statistics.

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To share information

1.1.2 What are the types of the described generated/collected data?

• observational (e.g., sensor data, data from surveys)

- Statistical
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- Tabular: CSV, TSV, XLSX
 - 1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)
- 39
- 1.1.6 To whom might it be useful ('data utility')?

The public, Industry

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=mar_mp_aa_pphd&lang=en



• To reproduce and validate findings, To compare and combine with other data, To follow-up research on a specific area

2.1.3 Which data will be re-used?

eurostat

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - SDMX (Statistical Data and Metadata Exchange)
- Euro SDMX Metadata Structure (ESMS)
 - 3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Comma Separated Values
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

CSV, TSV, XLSX

3.1.1.18 Are the file formats you will use open?

Yes

- 3.1.1.20 Do supported open-source tools exist for accessing the data?
 - Yes
- Many tools exist for opening csv and xslx files
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary s/w is required for accessing this dataset

- 3.1.2 Making data openly accessible
 - 3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

• Yes

• Any limitation arises from the Eurostat's Terms of Use

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?





CC BY Attribution

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• No

• Any limitation arises from the Eurostat's Terms of Use

6.1.3 Are the described data personal?

No

Title: Short Sea Shipping - Top 20 ports - Gross weight of goods transported to/from main ports (mar_sg_am_pw)

Template: Horizon 2020

The maritime transport domain contains quarterly and annual data.

Maritime transport data refer to gross weight of goods (in tonnes), passenger movements (in number of passengers) as well as for vessel traffic (in number of vessels and in gross tonnage of vessels). Data for transport of goods transported on Ro-Ro units or in containers are also expressed in number of units or number of tells (20 foot equivalent units).

Data at regional level (NUTS 2, 1 and 0) are also available.

The statistics on maritime transport are collected within Directive 2009/42/EC and Commission Decision 2008/861/EC, as amended by Commission Decision 2010/216/EU of the European Parliament and of the Council of 14 April 2010, by Regulation 1090/2010 of the European Parliament and of the Council of 24 November 2010 and by Commission Delegated Decision 2012/186/EU of 3 February 2012.

Data are collected by the national competent authorities in the reporting countries using a variety of data sources, such as port administration systems, national maritime databases, customs databases or questionnaires to ports or shipping agents (see section 18.1).

The maritime transport data have been calculated using data collected at port level. The data are displayed at port level, regional level, Maritime Coastal Area (MCA) level and country level.

The data are presented in six collections, displaying main annual results, short sea shipping, passengers, goods vessel traffic and regional statistics.

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To obtain information, To share information, To keep on record, To make informed decisions

1.1.2 What are the types of the described generated/collected data?



- observational (e.g., sensor data, data from surveys), Other
- Statistical
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- Tabular: CSV, TSV, XLSX

1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)
- 76
- 1.1.6 To whom might it be useful ('data utility')?
- Researchers, Research communities, The public, Industry
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=mar_sg_am_pw
- To reproduce and validate findings, To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?

Eurostat

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - SDMX (Statistical Data and Metadata Exchange)
- Euro SDMX Metadata Structure (ESMS)
 - 3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Comma Separated Values
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

CSV, TSV, XLSX

3.1.1.18 Are the file formats you will use open?



Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

- Yes
- Many tools exist for opening csv and xslx files
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools are required for accessing this dataset

- 3.1.2 Making data openly accessible
 - 3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

• Yes

• Any limitation arises from the Eurostat's Terms of Use

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

Not sure

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

- CC BY Attribution
- 6.1 Ethical aspects
 - 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• No

• Any limitation arises from the Eurostat's Terms of Use

Title: Passengers transported to/from main ports by direction and type of traffic (national and international) - quarterly data (mar_pa_qm)

Template: Horizon 2020

The maritime transport domain contains quarterly and annual data.

Maritime transport data refer to gross weight of goods (in tonnes), passenger movements (in number of passengers) as well as for vessel traffic (in number of vessels and in gross tonnage of vessels). Data for transport of goods transported on Ro-Ro units or in containers are also expressed in number of units or number of TEUs (20 foot equivalent units).

Data	at	regional	level	(NUTS	2,	1	and	0)	are	also	available



The statistics on maritime transport are collected within Directive 2009/42/EC and Commission Decision 2008/861/EC, as amended by Commission Decision 2010/216/EU of the European Parliament and of the Council of 14 April 2010, by Regulation 1090/2010 of the European Parliament and of the Council of 24 November 2010 and by Commission Delegated Decision 2012/186/EU of 3 February 2012.

Data are collected by the national competent authorities in the reporting countries using a variety of data sources, such as port administration systems, national maritime databases, customs databases or questionnaires to ports or shipping agents (see section 18.1).

The maritime transport data have been calculated using data collected at port level. The data are displayed at port level, regional level, Maritime Coastal Area (MCA) level and country level.

The data are presented in six collections, displaying main annual results, short sea shipping, passengers, goods vessel traffic and regional statistics.

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

- To obtain information, To share information
- Reporting
 - 1.1.2 What are the types of the described generated/collected data?
 - observational (e.g., sensor data, data from surveys)
- Statistical
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- CSV, TSV, XLSX
 - 1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)
- 700
 - 1.1.6 To whom might it be useful ('data utility')?
 - Researchers, Research communities, Decision makers, The public, Industry
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=mar_pa_qm&lang=en



• To reproduce and validate findings, To compare and combine with other data, To follow-up research on a specific area

2.1.2 Where do the described data reside?

Eurostat

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
 - 3.1.1.2 Please provide URL/Location describing the used metadata schema
 - Euro SDMX Metadata Structure (ESMS)
 - 3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Comma Separated Values
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

CSV, TSV, XLSX

3.1.1.18 Are the file formats you will use open?

Yes

- 3.1.1.20 Do supported open-source tools exist for accessing the data?
 - Yes
- Many tools exist for opening csv and xslx files
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools is required for accessing this dataset

- 3.1.2 Making data openly accessible
 - 3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

• Yes

• Any limitation arises from the Eurostat's Terms of Use

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse



3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY AttributionCC

- 6.1 Ethical aspects
 - 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?
 - Yes
- Any limitation arises from the Eurostat's Terms of Use

Title: Gross weight of goods transported to/from main ports by direction and type of traffic (national and international) - quarterly data [mar_go_qm]

Template: Horizon 2020

The maritime transport domain contains quarterly and annual data.

Maritime transport data refer to gross weight of goods (in tonnes), passenger movements (in number of passengers) as well as for vessel traffic (in number of vessels and in gross tonnage of vessels). Data for transport of goods transported on Ro-Ro units or in containers are also expressed in number of units or number of TEUs (20 foot equivalent units).

Data at regional level (NUTS 2, 1 and O) are also available.

The statistics on maritime transport are collected within Directive 2009/42/EC and Commission Decision 2008/861/EC, as amended by Commission Decision 2010/216/EU of the European Parliament and of the Council of 14 April 2010, by Regulation 1090/2010 of the European Parliament and of the Council of 24 November 2010 and by Commission Delegated Decision 2012/186/EU of 3 February 2012.

Data are collected by the national competent authorities in the reporting countries using a variety of data sources, such as port administration systems, national maritime databases, customs databases or questionnaires to ports or shipping agents (see Section 18.1).

The maritime transport data have been calculated using data collected at port level. The data are displayed at port level, regional level, Maritime Coastal Area (MCA) level and country level.

The data are presented in six collections, displaying main annual results, short sea shipping, passengers, goods vessel traffic and regional statistics.

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To obtain information, To make informed decisions

1.1.2 What are the types of the described generated/collected data?



• reference or canonical (e.g., static, peer-reviewed data sets, likely published or curated, such as gene sequence databanks or chemical structures)

- statistical
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- tabular
 - 1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)

• 800

1.1.6 To whom might it be useful ('data utility')?

Decision makers, Economy, Industry

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=mar_go_qm&lang=en
 - 2.1.2 Where do the described data reside?

Eurostat

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
 - 3.1.1.2 Please provide URL/Location describing the used metadata schema
 - Euro SDMX Metadata Structure (ESMS)
 - 3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Comma Separated Values
- Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

CSV, TSV, XLSX

3.1.1.18 Are the file formats you will use open?



```
Yes
```

- 3.1.1.20 Do supported open-source tools exist for accessing the data?
 - Yes
- Many tools exist for opening csv and xslx files
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools is required for accessing this dataset.

- 3.1.2 Making data openly accessible
 - 3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?
 - No
- No personal data are included in this dataset
 - 3.1.2.2 Will the described data be openly accessible?

Yes

- 3.1.2.3 How will the data be made available?
 - Repository of Archive
 - Eurostat
- This dataset is available through Eurostat. It can also be downloaded in various formats.
 - 3.1.2.6 Are there any methods or tools required to access the described data?
 - No
- No proprietary tools is required for accessing this dataset
- 3.1.3 Making data interoperable
 - 3.1.3.1 Will you use a controlled vocabulary for the described data?

Not sure

- 3.1.4 Increase data reuse
 - 3.1.4.4 What internationally recognised licence(s) will you use for the described data?
- CC BY Attribution
- 6.1 Ethical aspects
 - 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?
 - Yes
- Any limitation arises from the Eurostat's Terms of Use.
 - 6.1.3 Are the described data personal?

No



Title: BBR

Template: Horizon 2020

Dataset Description

1.1 Data Summary

1.1.2 What are the types of the described generated/collected data?

observational (e.g., sensor data, data from surveys)

- 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- Tabular: shapefile
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://datafordeler.dk/dataoversigt/bygnings-og-boligregisteret-bbr/bbr/
 - To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?

institution's infrastructure

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

shapefile

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

- QGIS
- 3.1.2 Making data openly accessible
 - 3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

• Yes

• Data is personally identifiable

3.1.2.6 Are there any methods or tools required to access the described data? Yes



3.1.2.7 Please provide information about the method(s) needed to access the data

QGIS

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• Yes

• Data is personally identifiable

6.1.3 Are the described data personal?

Yes

Title: River Runoff Gauging Data

Template: Horizon 2020

All official gauging stations measuring river runoff within the Case Study Region. Observational data with additional information on the gauging sites.

Dataset Description

1.1 Data Summary

1.1.2 What are the types of the described generated/collected data?

observational (e.g., sensor data, data from surveys)

1.1.3 What are the formats of the described generated/collected data?

• Text files

- Tabular: CSV, TSV
 - 1.1.4 What is the origin of the described data?

Primary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://www.gkd.bayern.de/de/fluesse/abfluss
 - To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?

On the servers of the provider

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Comma Separated Values
 - Couldn't find it? Insert it manually



3.1.1.16 Provide information about used standardised formats

CSV, TSV

3.1.1.18 Are the file formats you will use open?

Yes

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

• No

- Has not been declared
- 3.1.4 Increase data reuse
 - 3.1.4.4 What internationally recognised licence(s) will you use for the described data?
- CC BY Attribution
- 6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: 3D Soil Hydraulic database of Europe at 1Km and 250m resolution

Template: Horizon 2020

A consistent spatial soil hydraulic database at 7 soil depths up to 2 m calculated for Europe

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
- Geospatial
 - Geotiff
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- .tif

1.1.4 What is the origin of the described data?

Secondary data



- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)
- 300
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes

https://esdac.jrc.ec.europa.eu/content/3d-soil-hydraulic-database-europe-1-km-and-250-m-resolution

• To compare and combine with other data, To follow-up research on a specific area

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.2 Please provide URL/Location describing the used metadata schema

https://esdac.jrc.ec.europa.eu/content/3d-soil-hydraulic-database-europe-1-km-and-250-m-resolution

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Tagged Image File Format
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

- The .tif file can be open by various open-source tools (e.g. QGIS)
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.

Non proprietary tools are required

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

• No

• Restricted Application needed.



3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

- CC BY Attribution
- 6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: ERA5-Land hourly data from 1950 to present

Template: Horizon 2020

ERA5-Land is a reanalysis dataset providing a consistent view of the evolution of land variables over several decades.

Dataset Description

- 1.1 Data Summary
 - 1.1.2 What are the types of the described generated/collected data?
 - Other
 - Grib
 - 1.1.3 What are the formats of the described generated/collected data?
 - Other
 - .grib
 - 1.1.4 What is the origin of the described data?

Secondary data

1.1.5 What is the expected size of the described data?

450

2.1 Reused Data

- 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-land?tab=overview
 - To compare and combine with other data, To follow-up research on a specific area
- 2.1.2 Where do the described data reside?

Copernicus

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No



3.1.1.10 Will you provide persistent identifiers for the described data?

Yes

- 3.1.1.11 Persistent identifiers
- DOI
- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Gridded Binary
- 3.1.1.18 Are the file formats you will use open?

Yes

- 3.1.1.20 Do supported open-source tools exist for accessing the data?
 - Yes
- The .grib file can be open by various open-source tools (e.g. Vortex)
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.

Non proprietary tools are required

- 3.1.2 Making data openly accessible
 - 3.1.2.2 Will the described data be openly accessible?

• No

- Restricted: Registration needed
- 3.1.4 Increase data reuse
 - 3.1.4.4 What internationally recognised licence(s) will you use for the described data?
- CC BY Attribution
- 6.1 Ethical aspects
 - 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?
 - No
- Registration needed

Title: Corine land cover

Template: Horizon 2020

Corine land cover provides consistent and thematically detailed information on land cover and land cover changes across Europe.

Dataset Description



1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
- Resource Type: GeoPackage
 - Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Other
 - .gpkg
 - 1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - MB (megabyte)

• 100

2.1 Reused Data

- 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://land.copernicus.eu/pan-european/corine-land-cover/clc2018?tab=download
 - To compare and combine with other data, To follow-up research on a specific area
- 2.1.2 Where do the described data reside?

Copernicus

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.2 Please provide URL/Location describing the used metadata schema

https://land.copernicus.eu/pan-european/high-resolution-layers/imperviousness/status-maps/imperviousness-density-2018?tab=metadata

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

.gpkg

3.1.1.18 Are the file formats you will use open?

Yes



3.1.1.20 Do supported open-source tools exist for accessing the data?

- Yes
- The .gpkg file can be open by various open-source tools (e.g. QGIS)

3.1.1.21 Please describe if data require proprietary tools to access the data.

Non proprietary tools are required.

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

• No

• Restricted: Registration needed

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

- CC BY Attribution
- 6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: Pan-European High resolution layers

Template: Horizon 2020

HRL provide information on specific land cover characteristics, complementary to corine land cover

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
- Geospatial
 - Geotiff
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files



• .tif

1.1.4 What is the origin of the described data?

Secondary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://land.copernicus.eu/pan-european/high-resolution-layers
 - To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?

Copernicus

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
- 3.1.1.2 Please provide URL/Location describing the used metadata schema

https://land.copernicus.eu/pan-european/high-resolution-layers/imperviousness/statusmaps/imperviousness-density-2018?tab=metadata

3.1.1.15 Will you use standardised formats for the described data?

• Yes

- Tagged Image File Format
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

The .tif file can be open by various open source tools (e.g. QGIS)

3.1.1.21 Please describe if data require proprietary tools to access the data.

Non proprietary tools are required.

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

• No

• Restricted: Registration needed



3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: EU-DEM v1.1

Template: Horizon 2020

EU-DEM is a digital surface model of EEA39 contries representing the first surface as illuminated by the sensors

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
- GeoTiff
 - Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- .tif
 - 1.1.4 What is the origin of the described data?

Secondary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)

• 200

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://land.copernicus.eu/imagery-in-situ/eu-dem/eu-dem-v1.1
 - To compare and combine with other data, To follow-up research on a specific area
 - 2.1.2 Where do the described data reside?



Copernicus

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - Couldn't find it? Insert it manually
 - 3.1.1.2 Please provide URL/Location describing the used metadata schema

https://land.copernicus.eu/imagery-in-situ/eu-dem/eu-dem-v1.1?tab=metadata

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Tagged Image File Format
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

- The .tif file can be open by various opensource tools (e.g. QGIS)
 - 3.1.1.21 Please describe if data require proprietary tools to access the data.

Non proprietary tools are required

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

• No

- Restricted: Registration needed
- 3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing? No



Title: HEC-HMS

Template: Horizon 2020

Designed to simulate the complete hydrologic processes of dendritic watershed systems

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To develop a product

- 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- Geospatial
 - 1.1.3 What are the formats of the described generated/collected data?
 - Software
- .sql
 - 1.1.4 What is the origin of the described data?

Primary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://www.hec.usace.army.mil/software/hec-hms/downloads.aspx
 - To develop new products/ services
 - 2.1.2 Where do the described data reside?
 - U.S. Army Corps of Engineers
- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?

No

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - MySQL Table Definition Format
- 3.1.1.20 Do supported open-source tools exist for accessing the data?
 - Yes
 - The software is open-source
- 3.1.1.21 Please describe if data require proprietary tools to access the data.



Non proprietary tools are required

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution-ShareAlike

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: QGIS

Template: Horizon 2020

Desktop geographic information system (GIS) application that supports viewing, editing, and analysis of geospatial data

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
 - Geospatial
- 1.1.3 What are the formats of the described generated/collected data?
 - Software

• .qgz

1.1.4 What is the origin of the described data?

Primary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://qgis.org/en/site/forusers/download.html

• To compare and combine with other data, To follow-up research on a specific area, To develop new products/ services



- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.1 Will you use metadata to describe the data?
 - No
 - 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

.qgz

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

- Yes
- The software is open-source
- 3.1.1.21 Please describe if data require proprietary tools to access the data.

Non proprietary tools are required

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution-ShareAlike

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing? No

Title: Sentinel-2 data Template: Horizon 2020



Sentinel-2 MSI imagery acquisition

Dataset Description

- 1.1 Data Summary
 - 1.1.2 What are the types of the described generated/collected data?
 - simulation (e.g., climate modeling data)
- Satellite images
 - 1.1.3 What are the formats of the described generated/collected data?
 - Other
- png, shapefile
 - 1.1.4 What is the origin of the described data?
 - Secondary data
 - 1.1.5 What is the expected size of the described data?

One satellite image has between 350 to 900 MB, shapefiles have for map confection around 20 MB each

2.1 Reused Data

2.1.1 Are you re-using the described data and how?

- Yes
- https://scihub.copernicus.eu/dhus/#/home
- To compare and combine with other data, To follow-up research on a specific area, To develop new products/ services

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No

3.1.1.15 Will you use standardised formats for the described data?

- Yes
- Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

png, shapefile

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

All software used are open source

3.1.2 Making data openly accessible



3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

Other

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: GRprespa_remo2009.xls

Template: Horizon 2020

Climate model data (temperature, precipitation over Prespa)

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To obtain information, To keep on record

- 1.1.2 What are the types of the described generated/collected data?
 - observational (e.g., sensor data, data from surveys), simulation (e.g., climate modeling data)
- Tabular
 - 1.1.3 What are the formats of the described generated/collected data?
 - Models

• XLSX

1.1.4 What is the origin of the described data?

Secondary data

1.1.5 What is the expected size of the described data?

• KB (kilobyte)

• 80

2.1 Reused Data

2.1.1 Are you re-using the described data and how?



- Yes
- To follow-up research on a specific area
- 2.1.2 Where do the described data reside?

National Observatory of Athens

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Microsoft Excel Add-In
 - Couldn't find it? Insert it manually
- 3.1.1.16 Provide information about used standardised formats

XLSX

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

Excel

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

• No

• Restricted: Requested after communication with owner

3.1.2.6 Are there any methods or tools required to access the described data?

Yes

3.1.2.7 Please provide information about the method(s) needed to access the data

Excel

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution-NonCommercial-ShareAlike

6.1 Ethical aspects


- 6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?
 - No
- Provider by partner upon request

Title: DHI FloodRisk tool

Template: Horizon 2020

Tool for creating dynamic Flood Scenarios created by DHI

Dataset Description

- 1.1 Data Summary
 - 1.1.2 What are the types of the described generated/collected data?
 - Other
- Scripts
 - 1.1.3 What are the formats of the described generated/collected data?
 - Models
- model is accessed online
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://www.dhigroup.com/business-applications/dhi-floodrisk
- To compare and combine with other data, To follow-up research on a specific area, To develop new products/ services
 - 2.1.2 Where do the described data reside?

DHI

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually
 - 3.1.1.16 Provide information about used standardised formats

Scripts: Model is accessed online

- 3.1.2 Making data openly accessible
 - 3.1.2.2 Will the described data be openly accessible?

• No

• Restricted: accessed through login

3.1.2.6 Are there any methods or tools required to access the described data?



- No
- Do not know
- 3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data? Other

Title: The Danish Elevation Model

Template: Horizon 2020

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other
 - Geospatial
- 1.1.3 What are the formats of the described generated/collected data?
 - Models
- geoTIFF
 - 1.1.4 What is the origin of the described data?
 - Secondary data
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://datafordeler.dk/dataoversigt/danmarks-hoejdemodel/dhm-wms/
 - 2.1.2 Where do the described data reside?

Danish State, The Danish Agency for Data Supply and Efficiency

- 3.1.1 Making data findable, including provisions for metadata
 - 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Geographic Tagged Image File Format (GeoTIFF)
 - 3.1.1.20 Do supported open-source tools exist for accessing the data?

Yes

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data? No



3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

• No

• Do not know

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

Other

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Title: Ocean surface wave time series for the European coast from 1976 to 2100 derived from climate projections

Template: Horizon 2020

The dataset presents time series of the coastal wave climate based upon ocean surface wave parameters computed for a European-wide domain. This dataset provides an understanding of the wave climate under the impact of climate change for the Northwest European Shelf and Mediterranean Sea. It provides added value for various coastal sectors and studies such as port, shipping, and coastal management.

The ocean surface wave fields are computed using the ECMWF's Wave Model (SAW) forced by surface wind and accounting for ice coverage in polar latitudes. The wave climate is defined by means of the integrated wave spectral parameters such as the significant wave height and the peak wave period. In order to assess the impact of climate change on the ocean's surface wave field, the SAW model is run for three different climate scenarios: the current climate (also termed historical), and two Representative Concentration Pathway (RCP) scenarios that correspond to an optimistic emission scenario where emissions start declining beyond 2040 (RCP4.5) and a pessimistic scenario where emissions continue to rise throughout the century often called the business-as-usual scenario (RCP8.5). The wave climate in these scenarios are simulated using wind forcing from a member of the EURO-CORDEX climate model ensemble - the HIRHAM5 regional climate model downscaled from the global climate model EC-EARTH. Given that the projections of these climate scenarios are based on a single combination of the regional and global climate models, users of these data should take in consideration that there is an inevitable underestimation of the uncertainty associated with this dataset. In addition to the three climate scenarios, the time series are also computed using ERA5 reanalysis wind forcing. This provides the recent historical wave climate that may be used, for example, to look at specific events in the past.

This dataset was produced on behalf of the Copernicus Climate Change Service.

Dataset Description

1.1 Data Summary

- 1.1.2 What are the types of the described generated/collected data?
 - Other



- Point Data
- 1.1.3 What are the formats of the described generated/collected data?
 - Models
- ECMWF's Wave Model (SAW): NetCDF-4
 - 1.1.4 What is the origin of the described data?

Secondary data

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://cds.climate.copernicus.eu/cdsapp#!/dataset/10.24381/cds.572bf382?tab=overview

• To reproduce and validate findings, To compare and combine with other data, To follow-up research on a specific area

2.1.2 Where do the described data reside?

Copernicus

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

• Yes

- CF (Climate and Forecast) Metadata Conventions
- 3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.10 Will you provide persistent identifiers for the described data?

Yes

3.1.1.11 Persistent identifiers

DOI

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

NetCDF-4

3.1.1.18 Are the file formats you will use open?

Yes

- 3.1.1.20 Do supported open-source tools exist for accessing the data?
 - Yes
- Many tools exist for opening NetCDF-4 files



3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools are required for accessing this dataset

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

- 3.1.2.3 How will the data be made available?
 - Domain-specific database, Repository of Archive
 - European Centre for Medium-Range Weather Forecasts
- 3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• No

• Any limitation arises from the Copernicus's Licence - Terms of Use

6.1.3 Are the described data personal?

No

Title: Temperature statistics for Europe derived from climate projections

Template: Horizon 2020

This dataset contains temperature exposure statistics for Europe (e.g. percentiles) derived from the daily 2 metre mean, minimum and maximum air temperature for the entire year, winter (DJF: December-January-February) and summer (JJA: June-July-August). These statistics were derived within the C3S European Health service and are available for different future time periods and using different climate change scenarios.

Temperature percentiles are typically used in epidemiology and public health when defining health risk estimates and when looking at current and future health impacts, and they allow to identify a common threshold and comparison between different cities/areas.

The temperature statistics are calculated, either for the season winter and summer or for the whole year, based on a bias-adjusted EURO-CORDEX dataset. The statistics are averaged for 30 years as a smoothed average from 1971 to 2100. This results in a timeseries covering the period from 1986 to 2085. Finally, the timeseries are averaged for the model ensemble and the standard deviation to this ensemble mean is provided.



Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To combine with other data

1.1.2 What are the types of the described generated/collected data?

• reference or canonical (e.g., static, peer-reviewed data sets, likely published or curated, such as gene sequence databanks or chemical structures)

• Gridded

1.1.3 What are the formats of the described generated/collected data?

• Text files

Tabular: NetCDF

1.1.4 What is the origin of the described data?

Secondary data

1.1.6 To whom might it be useful ('data utility')?

- Other
- Public health
- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?
 - Yes
 - https://cds.climate.copernicus.eu/cdsapp#!/dataset/sis-temperature-statistics?tab=overview

• To reproduce and validate findings, To compare and combine with other data, To follow-up research on a specific area

2.1.2 Where do the described data reside?

Copernicus

3.1.1 Making data findable, including provisions for metadata

- 3.1.1.1 Will you use metadata to describe the data?
 - Yes
 - CF (Climate and Forecast) Metadata Conventions
- 3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Gridded Binary



• Couldn't find it? Insert it manually

3.1.1.16 Provide information about used standardised formats

NetCDF

3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

• Many tools exist for opening NetCDF files

3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools is required for accessing this dataset

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

• No

- No proprietary tools are required for accessing this dataset
- 3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

Not sure

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

• No

• Any limitation arises from the Copernicus's Licence - Terms of Use

6.1.3 Are the described data personal?

No



Title: Heat waves and cold spells in Europe derived from climate projections

Template: Horizon 2020

The dataset contains the number of hot and cold spell days using different European-wide and national/regional definitions developed within the C3S European Health service. These heat wave and cold spell days are available for different future time periods and use different climate change scenarios.

A heat wave or cold spell is a prolonged period of extremely high or extremely low temperature for a particular region. However, there is a lack of rigorous definitions for heat waves and cold spells. This dataset combines multiple definitions and allows the user to compare European-wide definitions with national/regional definitions.

First, the temperature statistics are calculated, either for the season winter and summer or for the whole year, based on a bias-adjusted EURO-CORDEX dataset. Then, the statistics are averaged for 30 years as a smoothed average from 1971 to 2100. This results in a timeseries covering the period from 1986 to 2085. Finally, the timeseries are averaged for the model ensemble and the standard deviation to this ensemble mean is provided.

Dataset Description

1.1 Data Summary

1.1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

To share information, To make informed decisions, To combine with other data

1.1.2 What are the types of the described generated/collected data?

- simulation (e.g., climate modeling data), Other
- Gridded

1.1.3 What are the formats of the described generated/collected data?

- Text files
- Tabular: NetCDF-4

1.1.4 What is the origin of the described data?

Secondary data

1.1.6 To whom might it be useful ('data utility')?

Researchers, Research communities, Decision makers, The public

2.1 Reused Data

2.1.1 Are you re-using the described data and how?

• Yes

 https://cds.climate.copernicus.eu/cdsapp#!/dataset/eu.copernicus.climate.sis-heat-and-coldspells?tab=overview

• To reproduce and validate findings, To compare and combine with other data, To follow-up research on a specific are



2.1.2 Where do the described data reside?

Copernicus

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

- Yes
- CF (Climate and Forecast) Metadata Conventions
- 3.1.1.3 Will your metadata use standardised vocabularies?

Not sure

3.1.1.15 Will you use standardised formats for the described data?

• Yes

- Gridded Binary
- 3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.20 Do supported open-source tools exist for accessing the data?

• Yes

• Many tools exist for opening NetCDF-4 files

3.1.1.21 Please describe if data require proprietary tools to access the data.

No proprietary tools are required for accessing this dataset

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.3 Making data interoperable

3.1.3.1 Will you use a controlled vocabulary for the described data?

Not sure

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

CC BY Attribution

6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?



• No

• Any limitation arises from the Copernicus's Licence - Terms of Use

6.1.3 Are the described data personal?

No

Title: Meteorological_Florina_NOA

Template: Horizon 2020

Meterological data (mean temperature, precipitation, wind speed, days of rainfall for the station of Florina 2007-2020

Dataset Description

- 1.1 Data Summary
 - 1.1.2 What are the types of the described generated/collected data?
 - observational (e.g., sensor data, data from surveys)

• Sensor

- 1.1.3 What are the formats of the described generated/collected data?
 - Text files
- Tabular: XLSX
 - 1.1.4 What is the origin of the described data?

Primary data

- 1.1.5 What is the expected size of the described data?
 - KB (kilobyte)

• 200

- 2.1 Reused Data
 - 2.1.1 Are you re-using the described data and how?

• Yes

- http://meteosearch.meteo.gr/stationInfo.asp
- To follow-up research on a specific area
- 2.1.2 Where do the described data reside?

Meteo.gr

3.1.1 Making data findable, including provisions for metadata

3.1.1.1 Will you use metadata to describe the data?

No

- 3.1.1.15 Will you use standardised formats for the described data?
 - Yes
 - Microsoft Excel Macro-Enabled



3.1.1.18 Are the file formats you will use open?

Yes

3.1.1.21 Please describe if data require proprietary tools to access the data.

No

3.1.2 Making data openly accessible

3.1.2.1 Are there ethical or legal issues that can impact sharing the described data?

No

3.1.2.2 Will the described data be openly accessible?

Yes

3.1.2.6 Are there any methods or tools required to access the described data?

No

3.1.4 Increase data reuse

3.1.4.4 What internationally recognised licence(s) will you use for the described data?

- CC BY Attribution
- 6.1 Ethical aspects

6.1.1 Are there any ethical or legal issues that can have an impact on data sharing?

No

Systems Innovation Approach (SIA) addresses the growing complexity, interdependencies and interconnectedness of modern societies and economies, focusing on the functions of the crosssectoral system as a whole and on the variety of actors. The Climate Innovation Window (CIW) is the EU reference innovations marketplace for climate adaptation technologies. ARSINOE shapes the pathways to resilience by bringing together SIA and CIW, to build an ecosystem for climate change adaptation solutions. Within the ARSINOE ecosystem, pathways to solutions are co-created and codesigned by stakeholders, who can then select either existing CIW technologies, or technologies by new providers (or a combination) to form an innovation package. This package may be designed for implementation to a specific region, but its building blocks are transferable and re-usable; they can be re-adapted and updated. In this way, the user (region) gets an innovation package consisting of validated technologies (expanding the market for CIW); new technologies implemented in the specific local innovation package get the opportunity to be validated and become CIW members, while the society (citizens, stakeholders) benefits as a whole. ARSINOE applies a three-tier, approach: (a) using SIA it integrates multi-faceted technological, digital, business, governance and environmental aspects with social innovation for the development of adaptation pathways to climate change for specific regions; (b) it links with CIW to form innovation packages by matching innovators with endusers/regions; (c) it fosters the ecosystem sustainability and growth with cross-fertilization and replication across regions and scales, at European level and beyond, using specific business models, exploitation and outreach actions. The ARSINOE approach is show-cased in nine widely varied demonstrators, as a proof-of-concept with regards to its applicability, replicability, potential and efficacy.





This project has received funding from the European Union's Horizon H2020 innovation action programme under grant agreement 101037424.