



NEANIAS
**Novel EOSC services for Emerging Atmosphere,
Underwater and Space Challenges**

Deliverable

**Deliverable: D3.3 Atmospheric Thematic Services Release #1
(A1/A2/A3) software**

31/10/2020



NEANIAS is funded by European Union under Horizon 2020 research and innovation programme via grant agreement No. 863448

D3.3 Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Document Info

Project Information			
Acronym	NEANIAS		
Name	Novel EOSC Services for Emerging Atmosphere, Underwater & Space Challenges		
Start Date	1 Nov 2019	End Date	31 Oct 2022
Program	H2020-EU.1.4.1.3. - Development, deployment and operation of ICT-based e-infrastructures		
Call ID	H2020-INFRAEOSC-2018-2020	Topic	H2020-INFRAEOSC-2019-1
Grant No	863448	Instrument	RIA
Document Information			
Deliverable No	D3.3		
Deliverable Title	Atmospheric Thematic Services Release #1 (A1/A2/A3) software		
Due Date	31-Oct-2020	Delivery Date	18/11/2020
Lead Beneficiary	ATHENA		
Beneficiaries (part.)	NOA, MEE0, UNIMIB, UBIWHERE, NKUA		
Editor(s)	S. Rapsomanikis (ATHENA)		
Authors (s)	M. Ntouskos (NKUA), K. Karantzalos (ATHENA), N. Chondros (NKUA)		
Contributor (s)	M. Konstantopoulos (NKUA), R. Vitorino, F. Cardoso (Ubiwhere)		
Reviewer(s)	Angelo Pio Rossi (JACOBSUNI)		
Workpackage No	WP3		
Version	v1.0	Stage	Draft
Version details	Revision: 1. Last save: 2020-11-18, 08:52 Pages: 9. Characters: 6.486		
Distribution	Public	Type	Other
Keywords	Software; Release;		

D3.3 Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Change Record

version	Date	Change Description	Editor	Change Location (page/section)
1.0	2020-11-18	Document version submitted to EC	S. Rapsomanikis (ATHENA)	

D3.3 Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Disclaimer

NEANIAS is a Research and Innovation Action funded by European Union under Horizon 2020 research and innovation programme, via grant agreement No. 863448.

NEANIAS is project that comprehensively addresses the 'Prototyping New Innovative Services' challenge set out in the 'Roadmap for EOSC' foreseen actions. It drives the co-design, delivery, and integration into EOSC of innovative thematic services, derived from state-of-the-art research assets and practices in three major sectors: underwater research, atmospheric research and space research. In each sector it engages a diverse set of research and business groups, practices, and technologies and will not only address its community-specific needs but will also enable the transition of the respective community to the EOSC concept and Open Science principles. NEANIAS provides its communities with plentiful resource access, collaboration instruments, and interdisciplinary research mechanisms, which will amplify and broaden each community's research and knowledge generation activities. NEANIAS delivers a rich set of services, designed to be flexible and extensible, able to accommodate the needs of communities beyond their original definition and to adapt to neighboring cases, fostering reproducibility and re-usability. NEANIAS identifies promising, cutting-edge business cases across several user communities and lays out several concrete exploitation opportunities.



This document has been produced receiving funding from the European Commission. The content of this document is a product of the NEANIAS project Consortium and it does not necessarily reflect the opinion of the European Commission. The editor, author, contributors and reviewers of this document have taken any available measure in order for its content to be accurate and lawful. However, neither the project consortium as a whole nor the individual partners

that implicitly or explicitly participated in the creation and publication of this document may be held responsible for any damage, financial or other loss or any other issue that may arise as a result of using the content of this document or any of the project outputs that this document may refer to.

The European Union (EU) was established in accordance with the Treaty on the European Union (Maastricht). There are currently 28 member states of the European Union. It is based on the European Communities and the member states' cooperation in the fields of Common Foreign and Security Policy and Justice and Home Affairs. The five main institutions of the European Union are the European Parliament, the Council of Ministers, the European Commission, the Court of Justice, and the Court of Auditors (<http://europa.eu.int/>).

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Table of Contents

Document Info	2
Change Record	3
Disclaimer	4
Table of Contents	5
Abstract	6
1. Short deliverable report	7
1.1. Context	7
1.2. Table of Services.....	7
1.3. Further information.....	8
References	9

D3.3 Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Abstract

This deliverable presents the list of the thematic atmospheric services of WP3 released by NEANIAS project in its first release cycle, due in M12 of the project.

D3.3 Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

1. Short deliverable report

1.1. Context

The deliverable D3.3 “Atmospheric Thematic Services Release #1” is produced in the context of WP3 “Atmospheric Research Services” of NEANIAS project. Services released are further detailed in deliverable D3.4 [2].

The deliverable refers to services released under the group of thematic services for the Space Community, namely:

- ✓ A1 - Greenhouse gases flux density monitoring
- ✓ A2 - Monitoring atmospheric perturbations and components in active tectonic regions
- ✓ A3 - Air quality estimation, monitoring and forecasting

This document serves as a short reference to the respective digital artifacts (as the deliverable is of type “OTHER”), presenting a brief enumeration of the services delivered, located in the next subsection 1.2 “Table of Services”.

1.2. Table of Services

The following table presents the services released in this 1st cycle.

Table 1 – Services and software released

Short name	Sector ¹	Lead ²	TRL ³	Version ⁴	Core Integration ⁵	Documentation Status ⁶	Testing Status ⁷	EOSC Registration Status ⁸
Atmo-FLUD	Atmospheric (A1)	ATHENA	TRL7	1.0.0	AAI, Data Sharing Service	complete	In progress	no
Atmo-Stress	Atmospheric (A2)	NKUA	TRL7	1.0.0	AAI	complete	in progress	no
Atmo-Seism	Atmospheric (A2)	ATHENA	TRL7	1.0.0	AAI	complete	in progress	no
Atmo-4CAST	Atmospheric (A3)	UBIWHERE	TRL7	1.0.0	AAI	In progress	In progress	no

¹ Thematic Service Application Domain

² Organization leading implementation

³ TRL level at release. All services start from TRL6.

⁴ Version according to service issuer

⁵ Integration level w.r.t. NEANIAS core services developed in WP6 (AAI, Accounting, Monitoring, FAIRness support ...)

⁶ Level of documentation status: draft, under-update, complete, validated

⁷ Testing status: mention the status w.r.t. unit, integration, user acceptance testing (N/A, in progress, complete, failed)

⁸ Is service listed in Neanias and EOSC catalogue? (yes, in progress, no, n/a)

D3.3 Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

1.3. Further information

All services of the release are available under the NEANIAS development infrastructure. Depending on the service provisioning model, the services may be already available or under delivery within WP7 deployment tasks for their broader availability.

The next full release cycle is planned for M24 of the project, yet several interim releases of services will be scheduled by their respective providers and contributors.

The details about the Atmospheric services architecture and software development plan can be found in D3.1 [1].

The details about the services released will be provided in D3.4 [2].

D3.3 Atmospheric Thematic Services Release #1 (A1/A2/A3) software

Atmospheric Thematic Services Release #1 (A1/A2/A3) software
Atmospheric Thematic Services Release #1 (A1/A2/A3) software

References

- [1] NEANIAS WP3 Collaboration, D3.1 “Atmospheric Research Services Report on requirements, Specifications & Software development Plan” (2020)
- [2] NEANIAS WP3 Collaboration, D3.4 “Report on the Developed and Validated Atmospheric Thematic Services #1” (in preparation)