



## Overview

### PITHIA-NRF Project

*PITHIA-NRF is a Research Infrastructure project funded by the European Commission Horizon 2020 Programme, aiming at building a distributed network that integrates into a unified research environment all key observing facilities, data collections, data processing tools, and prediction models dedicated to ionosphere, thermosphere and plasmasphere research. Through the integration of different assets, the project offers R&D services to expert and early-career researchers and to software and instrument development professionals, enabling leading edge research and fostering innovation.*

*PITHIA-NRF has the ambition to become the European hub that will act as facilitator for coordinated observations, for data processing tools and modelling advances, and for software and data-products standardization, and will advise on the transitioning of models to operations providing e-Science supporting tools so that models can reach the desired accuracy and standards.*

*This e-newsletter aims at communicating to all stakeholders the project developments, specifically regarding the TransNational Access programme, the e-science services, the Training, Dissemination and Communication Activities and potential for collaboration within the Innovation Framework of the project.*

*- Dr. Anna Belehaki, Coordinator of the PITHIA-NRF project*

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### Imprint

Contributors to this issue:

B. Matyjasiak (CBK), A. Thanasou (NOA), T. Verhulst (RMI)

Editor:

T. Verhulst (IRM/KMI)

Final responsible:

N. Bergeot (ORB)

Plasmasphere  
Thermosphere  
Research Environment and  
Access services: a Network of  
Research Facilities

Ionosphere  
Integrated

### PITHIA-NRF Project

PITHIA-NRF aims at building a European distributed network that integrates observing facilities, data processing tools and prediction models dedicated to ionosphere, thermosphere and plasmasphere research.

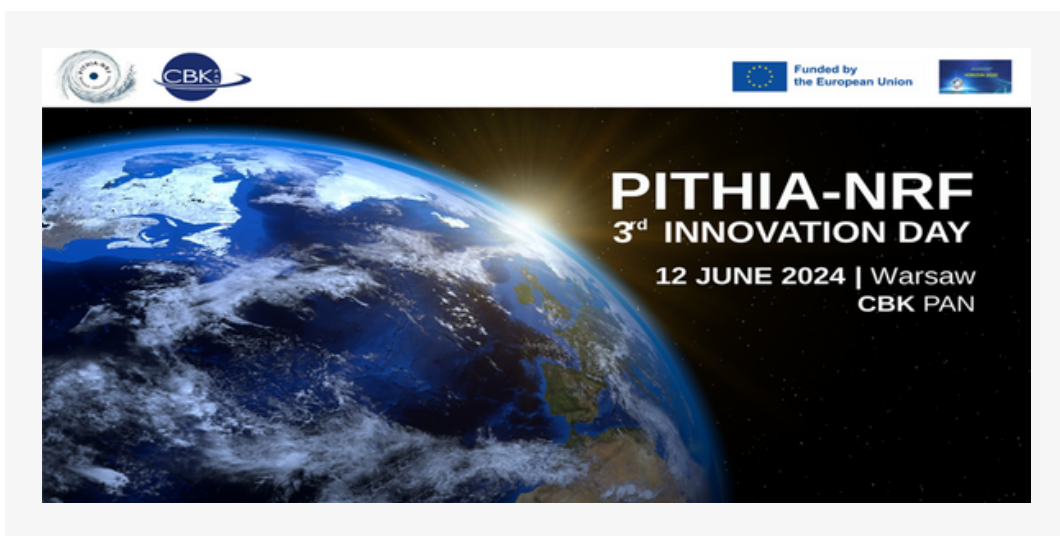
### PITHIA-NRF Newsletter

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### PITHIA-NRF Innovation Day 3: Event Recap

The **Third Innovation Day**, organised by the **PITHIA-NRF consortium**, took place on 12 June 2024 in Warsaw, Poland. The event was hosted by the Space Research Centre (CBK) of Polish Academy of Sciences and marked the final chapter in a series of meetings dedicated to user needs and aimed at fostering connections between industry and other user groups and the scientific community in upper atmospheric research gathered around the PITHIA-NRF concept. A total of seventy participants from seventeen different countries—including researchers, representatives of the private sector, governmental sector, space agency, legal advisors, and others—joined the event either personally or remotely.



#### Event Highlights:

- **Achievements of the PITHIA Project:** Attendees were given an overview of the progress and success stories within the PITHIA-NRF project, highlighting how the initiative is driving innovation and facilitating access to key European research infrastructures.
- **Collaborative Discussions:** During the 3rd Innovation Day, topics such as intellectual property rights (IPRs) and the exchange of information between a research infrastructure such as PITHIA-NRF and the private sector, data quality and format requirements, and ideas for data-model workflows were discussed.
- **PITHIA e-Science Centre:** The event offered a closer look at the e-Science Centre and its state-of-the-art infrastructure, showcasing its opportunities for future research and development in the field.
- **B2B Meetings:** Participants had the opportunity to engage in personalised one-on-one meetings with experts, discussing challenges, sharing ideas, and exploring new avenues for collaboration.

For more information on the event and access to additional materials, or to connect with our team, feel free to visit our website: [pithia-nrf.eu/pithia-nrf-users/innovation/innovation-day-3](http://pithia-nrf.eu/pithia-nrf-users/innovation/innovation-day-3).

The PITHIA-NRF team would like to thank to everyone who participated and contributed to making the Third Innovation Day a success!



### 3rd General Assembly, 4th WOOS and 6th TPW meetings

Together with the 3rd Innovation Day in June at CBK, various internal PITHIA consortium meetings were held. On the 11th June the 3rd General Assembly Meeting, and on the 13th June the 4th Workshop of Optimising Observing Strategies (WOOS) and the 6th Training for Partners Workshop (TPW). These collaborative sessions for project partners focused on advancing the PITHIA-NRF project's goals and aligning efforts to address user needs and technical challenges.



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## Key Highlights:

- **3rd General Assembly Meeting:** Provided a platform for discussing the status of the PITHIA-NRF project, focusing on reporting the progress of different Working Packages and next actions.
- **WOOS and TPW Meetings:** Gave project partners the opportunity to share insights on integrating observational data and enhancing the capabilities of the project's research infrastructure joint operations. Discussions focused on user-oriented solutions and improving data accessibility for a broad range of users. Additionally, the report about the implementation of TNA was presented and ideas for innovation actions based on the feedback from participants of Innovation Days were discussed.

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## Project Achievements

### Recent publications

Here we list only the articles published since the last issue of this newsletter. A full list of publications, presentations and reports related to PITHIA-NRF can be found on the [project website](#).

- B.A. Witvliet, E. van Maanen and R. de Vries, L. Bakker, "Intended signals and ambient electromagnetic noise in HF spectrum management," URSI AT-RASC, Gran Canaria, 19–24 May 2024.
- J.M. Aroca-Farrerons, M. Hernández-Pajares, H. Lyu, D. Roma-Dollase, R. Orus-Perez, A. García-Rigo, V. Graffigna, G. Olivares-Pulido, E. Monte-Moreno, H. Yang, et al. "The Spectrum of Global Electron Content: A New Potential Indicator of Space Weather Activity," Sensors 24(2), 393, doi: [10.3390/s24020393](https://doi.org/10.3390/s24020393).
- V. Pierrard, "Effects of the Sun on the space environment of the Earth," Presses Universitaires de Louvain, ISBN: 978-2-39061-442-5, 208 p., 2024, <https://i6doc.com/en/book/?gcoi=28001100628290>.



## Upcoming Events

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### Seventh TNA call and further activities

The seventh call for trans-national access projects is currently open, until 2 October. Remote access to space weather research infrastructure can be requested by users from academia, as well as the private and public sector. All practical information can be found via the [project website](#).

To finalise the PITHIA-NRF TNA Programme, the TNA Centre is organising the Second Online PITHIA-NRF TNA User Meeting on 20 February 2025, which will provide a great opportunity for the TNA users to present their research realised with the help of PITHIA-NRF. We are looking forward to see you there either as a presenter or in the audience. Details can be found on the [project website](#).

### Upcoming scientific conferences

Important upcoming scientific conferences, where representatives of the consortium partners will present contributions:

- 20th European Space Weather Week, 4–8 November 2024, Coimbra, Portugal.
- AGU24 “What’s Next for Science,” 9–13 December 2024, Washington D.C., USA.

### Final project meetings

The PITHIA-NRF project is coming to a close in March 2025. The final general assembly will be held on March 13, and the second High Profile Meeting on March 14 in Heraklion, Crete, Greece. Watch the [project website](#) for further information regarding these events.

## Imprint

### Coordinator:

Dr Anna Belehaki

National Observatory of Athens (NOA)  
Institute for Astronomy, Astrophysics, Space Applications  
& Remote Sensing (IAASARS)  
Vas. Pavlou & I. Metaxa, GR-152 36 Penteli, Greece

E-mail: [info@pithia-nrf.eu](mailto:info@pithia-nrf.eu)

Telephone: +30 210 8109192

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