



**SDGs-EYES User Uptake Webinar Report**  
**Extreme Temperatures Risk: Advancing SDGs Indicators Monitoring,  
Reporting, and Accounting**  
15 April 2025



On Tuesday, 15 April, [EARSC](#) held the third webinar of the user uptake series within the SDGs-EYES project, which is running from January to May, to engage stakeholders, foster collaboration, and promote Copernicus-based services across five pilot areas. This webinar focused on [Extreme Temperatures Risk: Advancing SDGs Indicators Monitoring, Reporting, and Accounting](#). SDGs-EYES aims to enhance Europe's capacity to monitor SDGs using Copernicus data, aligning with the EU Green Deal. By integrating data from six core services, the project develops accurate SDG indicators and decision-making tools. Continuous user engagement is key, ensuring co-design, adaptability, and successful service uptake adoption throughout the project's duration.

The [Extreme Temperatures Risk: Advancing SDGs Indicators Monitoring, Reporting, and Accounting](#) webinar was attended by 45 online participants from across Europe and beyond, representing a diverse range of user communities - including local authorities, national urban and health agencies, research institutions, and private-sector actors engaged in urban development. It introduced a Copernicus-based service, developed through a [Pilot in the city of Turin](#), designed to **monitor climate hazards and health risks, focusing on the urban heat-health nexus**.

The SDGs-EYES service was introduced by **Marta Elena and Mattia Scalas** from the [Euro-Mediterranean Center on Climate Change \(CMCC\)](#), who form part of the pilot's leading team, together with the [Local Health Authority ASL TO3 of the Piedmont Region](#). Turin was chosen due to its high vulnerability to heat-related mortality and the availability of detailed health and socio-demographic data. The service integrates EO-derived indicators with public health data using the IPCC risk framework, identifying four key indicators which feed into an interactive, user-friendly platform that allows local decision-makers to visualise risk across census tracts, combining hazard, exposure, and vulnerability layers. Developed through a co-design process with local health stakeholders, the platform supports data-driven adaptation planning and is designed to be replicable in other urban contexts.

The session also featured a moderated panel discussion and targeted breakout sessions, offering a space for productive **expert dialogue to refine the service, identify synergies with existing initiatives, and explore opportunities for wider adoption across other European municipalities**. The panel discussion, moderated by **Monica Miguel-Lago from EARSC**, brought together a **broad range of users**, including those from research, statistical and commercial communities:

- **Alison De Luise** Manager on Adaptation to Climate Change at the [Covenant of Mayors](#), presented perspectives from local authorities across Europe and discussed how the latter can effectively integrate EO-based tools into local climate adaptation plans, underlining barriers such as technical capacity, data complexity, and the need for high-resolution data..

- **Francesca de Donato** Climatologist and Environmental Epidemiologist at the [Department of Epidemiology Lazio Regional Health Service \(ASL ROMA 1\)](#), provided insights into integrating EO-derived indicators with demographic data to improve predictive accuracy in public health, drawing from her extensive experience in developing and managing both the Italian national and Lazio regional heat-health adaptation plans, emphasising the need of localised, actionable data for health adaptation planning.
- **Giulia Melis**, Programme Manager for City, Climate & Environment at [LINKS Foundation](#), shared experiences in operationalising EO-based tools within municipalities, emphasising the importance of co-design processes and collaborative approaches to foster adoption and usability.
- **Fredrik Wetterhall**, Senior Scientist in Forecast, Evaluation, and Thematic Applications at [European Centre for Medium-Range Weather Forecasts \(ECMWF\)](#), represented the data provider perspective from the Copernicus Climate Change Service, stressing the importance of providing reliable, high-quality data and user-friendly platforms to bridge the gap between technical data and decision-makers.

Another participant from the audience contributed additional perspectives to the panel:

- **Bernd Eggen**, Senior Environmental Public Health Scientist at the [UK Health Security Agency \(UKHSA\)](#), complemented the health-system perspective by discussing practical experiences using high-resolution satellite-derived data for public health applications, noting the ongoing need for enhanced usability and tailored data services to support health practitioners.



**Alison De Luise,**  
Covenant of Mayors



**Dr. Francesca de' Donato,** Department of  
Epidemiology Lazio Regional Health  
Service - ASL Roma 1



**Giulia Melis,**  
LINKS Foundation



**Dr. Fredrik Wetterhall,**  
European Centre for  
Medium-Range Weather  
Forecasts (ECMWF)



**Mónica Miguel-Lago**  
EARSC (*Moderator*)

## Key Highlights

**Local adaptation requires high-resolution EO data.** Panel experts agreed that effective climate adaptation at the local authority level requires spatially detailed, high-resolution EO data. Given the highly localised nature of heat risks, access to granular data is crucial to support planning, risk mapping, and targeted interventions.

**Integrating EO with demographic and health data improves risk forecasting.** Combining EO-derived indicators with demographic and socioeconomic data enhances the ability to identify vulnerable populations and improve predictive accuracy. This integration supports more effective public health planning, including city-level heat-health action plans and early warning systems. Health agencies show strong interest in such data-driven approaches but require support in accessing the right tools, skills, and training to fully utilise EO-based insights..

**Usability and data complexity limit EO adoption among local authorities.** A shared challenge identified by the panel was the technical barrier for non-experts in interpreting EO datasets. Many local authorities, especially smaller ones, lack the internal capacity to process and act on complex data. Therefore, EO solutions must be simplified, fit into existing systems, and be communicated in language tailored to different user groups, ensuring they are genuinely useful for planners, public health officials, and decision-makers alike.

**Cross-sector collaboration is essential for operational success.** There was strong consensus on the importance of collaboration across sectors - particularly between public health institutions, local authorities, urban planners, and emergency services. Multi-disciplinary cooperation enables more comprehensive and integrated responses to extreme heat and other climate risks.

**Capacity-building and co-design foster long-term adoption.** Co-designing EO solutions with local planners and health services was emphasised as a key success factor, ensuring that tools are practical, trusted, and aligned with user needs. Building trust, strengthening local capacities, and involving users early through co-creation increase both the practical use and sustainability of EO applications. The aim is not just to "scale up" but to **scale smart**, ensuring that solutions are strongly embedded in local contexts.

**EO tools must align with existing local strategies and frameworks.** To ensure relevance and uptake, EO-based solutions need to complement existing municipal and national strategies, such as heat-health warning systems and climate adaptation plans. Tools that build on existing practices, rather than duplicating or complicating them, are more likely to be sustained and scaled.

Following the panel discussion, participants attended two breakout rooms, "Hands-on Technical Demo" and "End-Users' Insights," exploring the practical use of EO-based urban heat monitoring tools.

- In the **technical demo, Alessandro Pugliese (CMCC)** from the Turin pilot team guided participants through the platform's functions used to calculate climate risk indicators, including data resolution choices, validation methods, and scalability across different urban contexts. The session highlighted the platform's open-access code and workflows, and invited participants to contribute

as validation users, testing both the front and back ends of the tool based on technical guidelines developed within the project.

- The **end-users insights** session, involving **Nicol6s Zengarini (ASL TO3)** from the pilot team, explored the practical challenges of implementing EO-based services at the local level. Key challenges discussed included the validation of climate hazard indicators using local data and early warning systems, limited access to disaggregated health data due to privacy constraints, the need for greater accuracy, improved transferability, and enhanced spatial resolution of indicators. Additional concerns involved the localisation of data and inconsistencies in metric definitions, factors that can hinder the effective and coherent use of EO data in local contexts. Participants explored how to align EO indicators with local alert thresholds through statistical comparisons. They also shared experiences from similar initiatives across European cities, underscoring the value of cross-project learning and collaboration. The discussion highlighted the need for locally grounded, methodologically robust approaches to support climate adaptation planning.

## Key Takeaways and Next Steps

The webinar reaffirmed the **critical role of EO-based tools in enhancing climate and health resilience**, particularly within the context of SDG monitoring. The Turin pilot stood out as a robust example of how combining Earth Observation data with public health and socio-demographic indicators can support targeted, local adaptation strategies, especially in cities vulnerable to extreme heat.

Among the most important takeaways was the value of high-resolution, localised data to support planning at the neighbourhood scale, and the importance of making tools accessible for non-experts in smaller municipalities. Participants also highlighted the benefits of co-design in improving usability and uptake, the potential for replication across other European cities, and the need for stronger links between existing initiatives to share methodologies and avoid duplication.

Looking ahead, the SDGs-EYES project will focus on further refining the Turin pilot based on this feedback and deepening collaboration with interested organisations. Mentimeter polling during the webinar confirmed strong interest, with **most respondents finding the tool useful and several expressing interest in participating as validation or exploitation users**. These encouraging signals will guide efforts to identify partners for further testing, support transferability, and promote long-term integration into local planning processes.

**If you missed the live session, you can review the webinar recording [here](#).**

Save the date for the second SDGs-EYES User Uptake Webinar on 28 May 2025, from 14:00 to 16:00 CEST, titled *"Forest cover change and soil erosion: Advancing SDG Indicators Monitoring, Reporting, and Accounting"*. This webinar will offer an in-depth look at innovative Earth Observation-based tools developed to monitor forest dynamics and support sustainable land management in Romania, while also exploring their potential for replication in other European countries.

**To learn more about the SDGs-EYES pilots and future webinars, visit [www.sdgs-eyes.eu](http://www.sdgs-eyes.eu)**



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*The SDGs-EYES Project has received funding from the European Union's Horizon Europe Programme for research and innovation under project number 101082311.*