

The C3S NCP initiative for Italy: A multidisciplinary national cooperation to address key climate hazards

Stefano Mariani and Antonella Tornato

ISPRA-Italian Institute for Environmental Protection and Research, Rome, Italy (Lead Institution), on behalf of the Italian partnership



National Needs and Approach

Implementing and testing environment & hydro-climate products, up to local scale, by feeding (downscaled) C3S products into operational workflows, assisted by potential sectoral users and stakeholders (collecting users' requirements/feedback) and **defining potential follow-up actions to operationalise the C3S NCP products into the national services.**

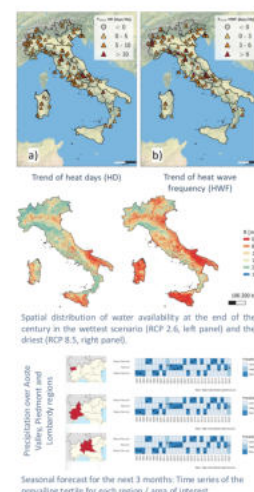


Promoting communication actions, with the support of ECMWF/C3S, to increase the uptake of C3S and C3S-derived products, through websites and social accounts of the Italian Copernicus National User Forum and partners and **co-designing approaches for effective data visualization by involving national and local user and stakeholders.**



Example of outputs

- ☐ Downscaling over Italy seasonal forecasts and projections.
- ☐ Future assessment/projections of HW at national/subnational levels.
- ☐ Future assessment/projections of water resource availability and droughts via the BIGBANG national water balance model.
- ☐ Climate bulletins designed to support local stakeholders.
- ☐ Assessment of forest fire risk.
- ☐ GHG product utilization.



Facilitating the use of C3S and C3S-derived products through **dedicated training initiatives**, by capitalizing previous local, national & international experiences (e.g., FPCUP Copernicus4SNPA, EUMETSAT trainings).

Ensuring **coordination with the other Italians NCP initiatives** (currently, Phase II of CAMS NCP and CLMS NCP) **and the Italian Copernicus National User Forum.**



The **Hackathon "SpazioCulturale"**, held on 9-11 May 2025 in Bologna and hosted by ECMWF premises at the Tecnopolo di Bologna, was a blue-sky thinking event aimed at stimulating the development of innovative solutions based on **Copernicus C3S and CAMS products**, bringing together University students, PhD, recent graduates and early Post-doc to address real-world challenges for **Cultural Heritage** through space-based data applications.

The event originates within the **cooperation activities outlined in the ECMWF-Italy MoU** and in the **Italian initiatives for C3S and CAMS NCPs**. It has been organized by the National Copernicus Users Forum, ISPRA, and ECMWF, with support and sponsorship from the Horizon Europe project SD-WISHEES (grant agreement No.101095322), and Italian private partners.

