Copernicus Health Hub

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ECMWF

@NEREUS Space data & services for Health

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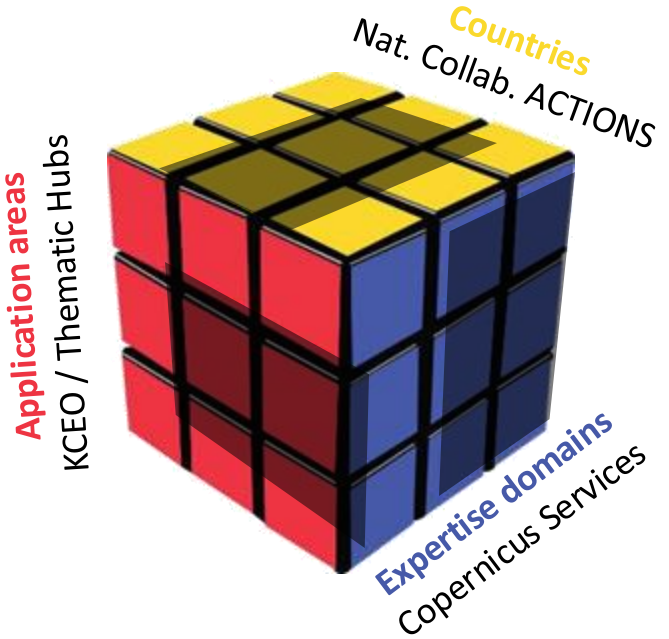
The Copernicus Thematic Hubs: A new approach towards the users

1. **COORDINATE**: Improve coordination and information flow between Copernicus components, related projects and initiatives.
2. **CONNECT**: Create a user community by bridging scientific knowledge // technical expertise // specific user needs.
3. **GAIN USER INTELLIGENCE**: Invest time to listen and understand users, develop value propositions, and collect user requirements.
4. **INSPIRE**: Showcase how data can be integrated with other data/information through user stories and new demonstrators, foster ideas for further research and applications.
5. **COLLABORATE**: Leverage the collaboration/interactions with other Copernicus entities and external stakeholders.



ARCTIC HUB | HEALTH HUB

COASTAL HUB | ENERGY HUB

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MERCATOR OCEAN INTERNATIONAL

IMPLEMENTED BY ECMWF

What is the Copernicus Health Hub?

The Copernicus Health Hub is a **centralised platform providing Earth Observation data, products, and information to support activities related to human health protection.** It serves a broad user base—including policymakers, researchers, private sector, NGOs and the general public—by offering tools, datasets, and insights for health-related applications.

The Copernicus Health Hub embraces the definition of the World Health Organisation (WHO): **"Health is a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity.“**

The products offered by Copernicus Services comprehensively address these diverse aspects of health:

Physical health

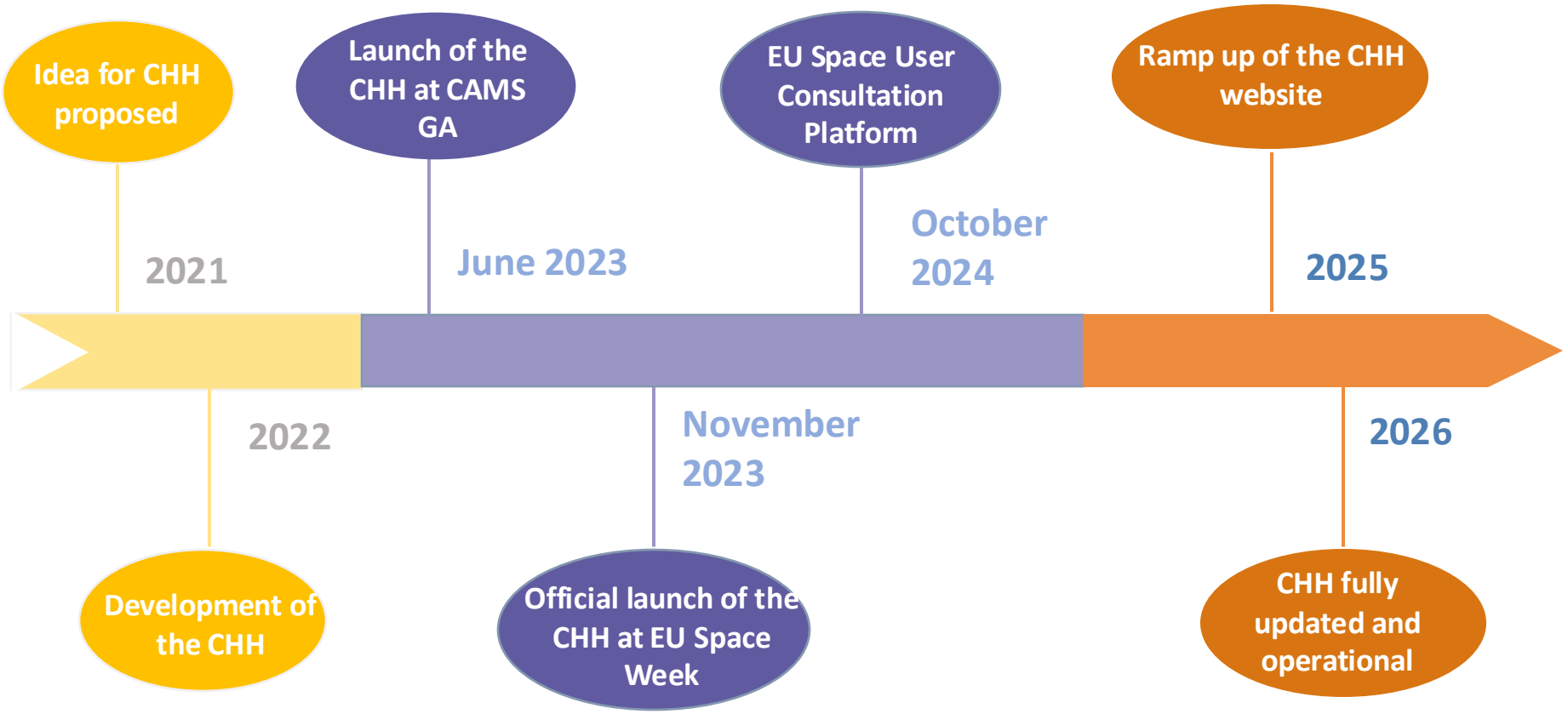
+

Mental health

+

Wellbeing

Timeline of the Copernicus Health Hub



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Datasets

Free, full, and open access

Atmosphere
- UV index
- Air quality: PM, NO_2, Ozone
- Pollens

Marine
- Ocean temperature and currents
- Chlorophyll-a concentration
- Dissolved oxygen
- Ocean acidification

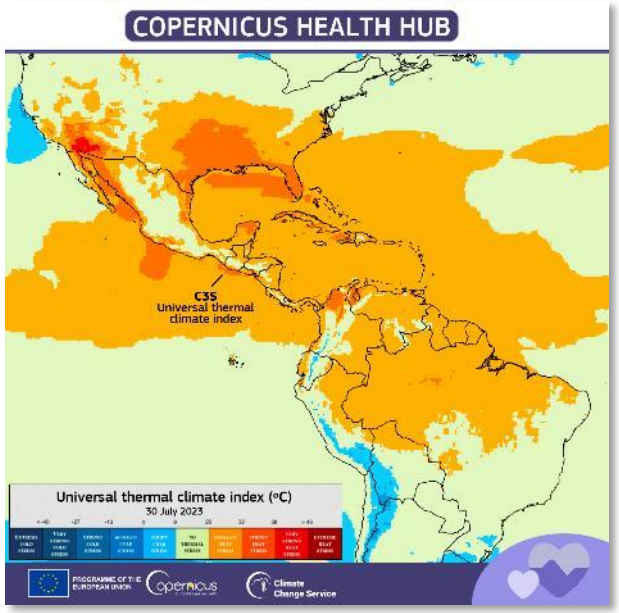
Climate Change
- Heat & cold stress
- Climate extreme value indices
- Heat waves

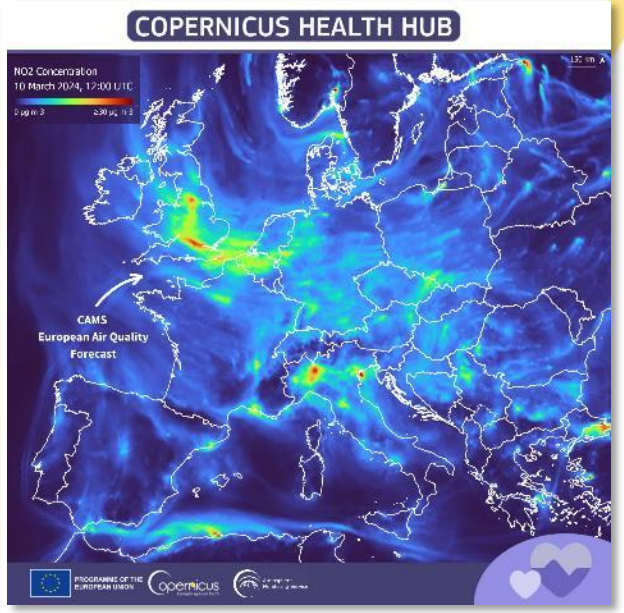
Land
- Land cover
- Burnt area
- Lake water quality
- Land Surface Temperature

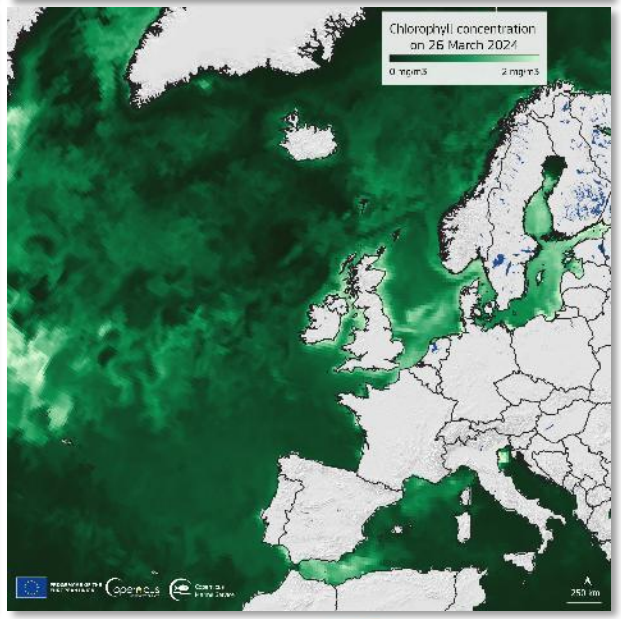
Regulated access

Emergency
- Global Flood Monitoring
- Droughts
- Wildfires

Security
- Critical Infrastructure Analysis
- Road network status/accessibility
- Traffic monitoring
- Pre-frontier Monitoring Service







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Copernicus Health Hub Ecosystem

Data from the Copernicus Services

CAMS

CMEMS

C3S

CLMS

CEMS

CSS

Knowledge Centre on Earth Observation

ECMWF

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Health Hub

Advisory Board

Institutional

International Bodies

Member States

Health Entities

Academia

Press & media

Citizens

NGOs

HEALTH HUB

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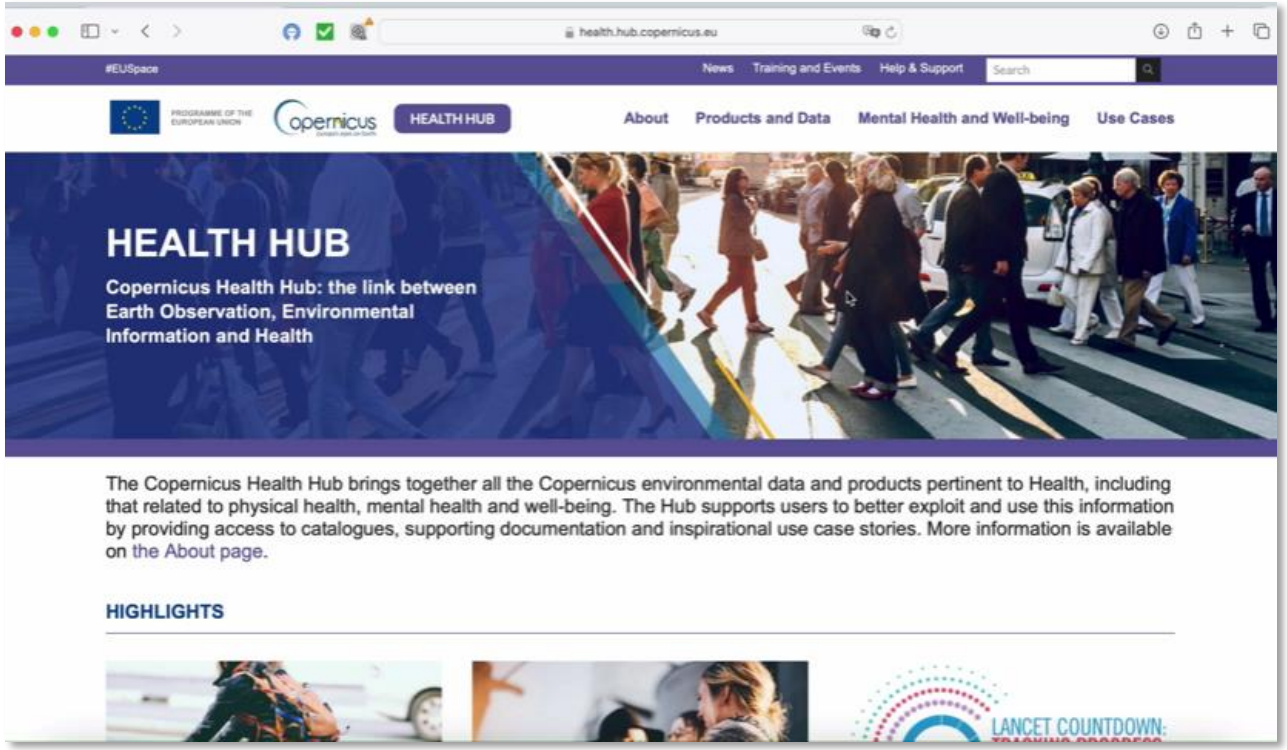
What is currently available

- 26 Use Cases and User Stories
- Information on EU projects linked to health sector
- Access to 27 datasets
- Help and support



https://health.hub.copernicus.eu

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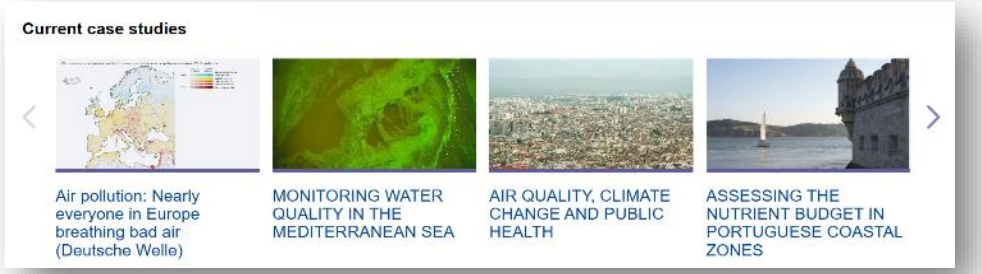
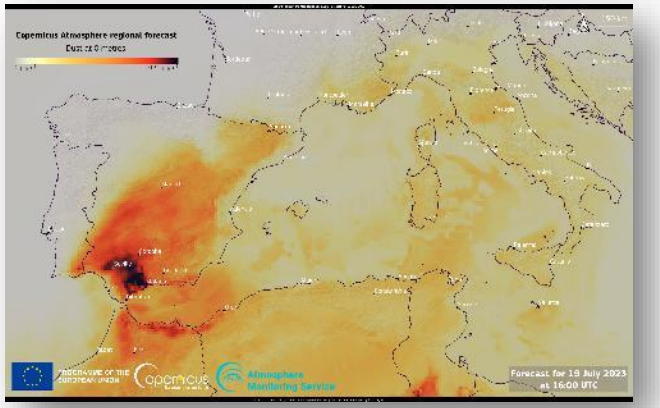
What’s coming up

- Continuous development of the website, including the addition of new:
  - Articles
  - Use cases
  - Data visualisations
  - Infographics

- Future events and opportunities





There’s much more to come!

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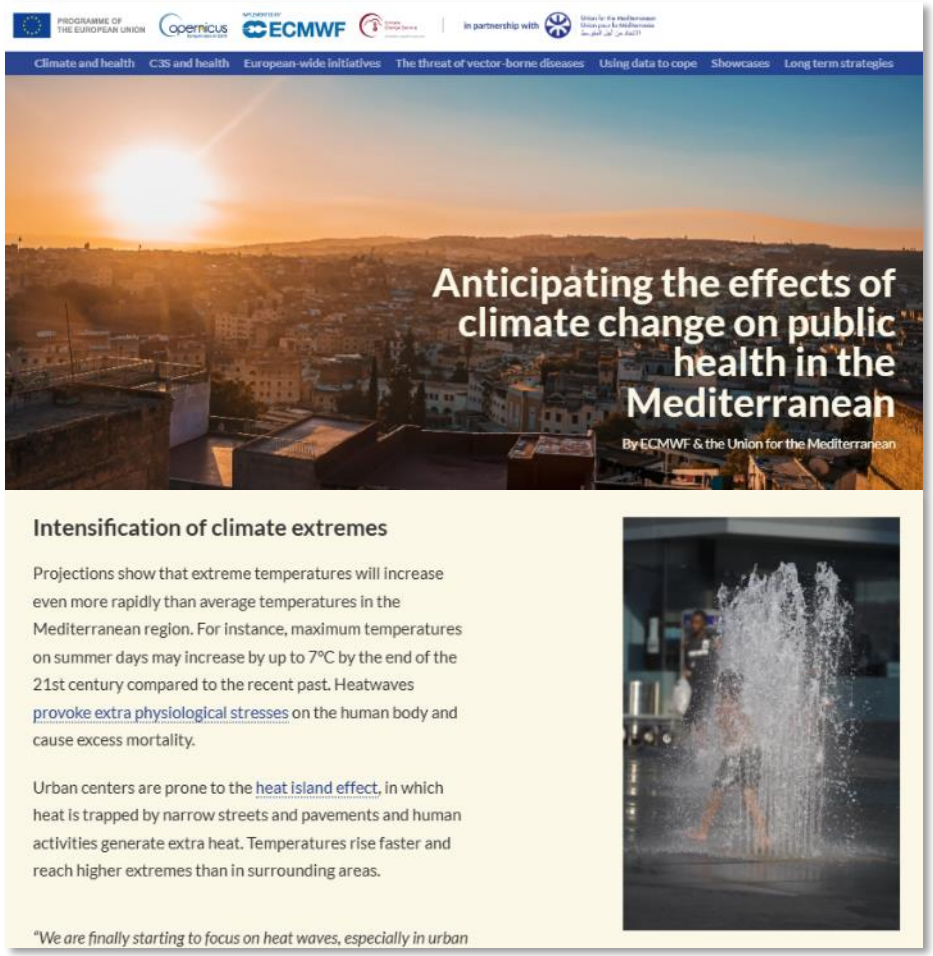
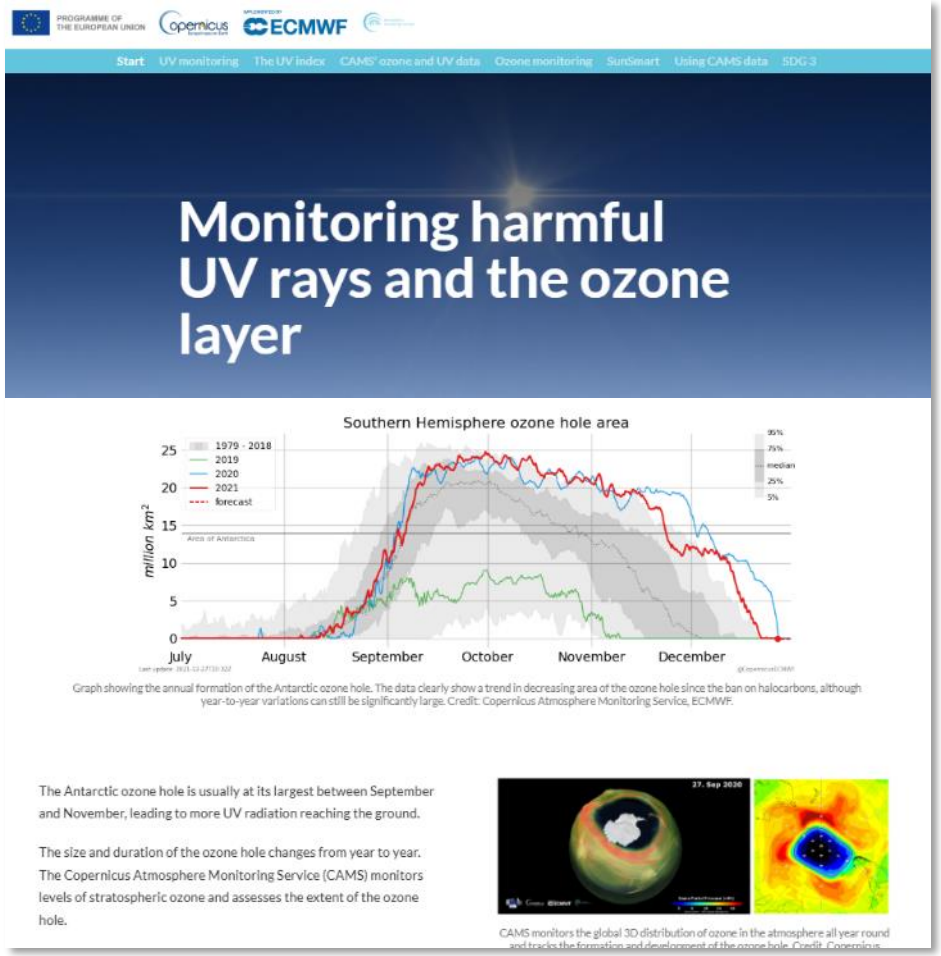
Examples of uses cases available





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SOLUTIONS FOR MITIGATING CLIMATE-INDUCED HEALTH THREATS

trigger

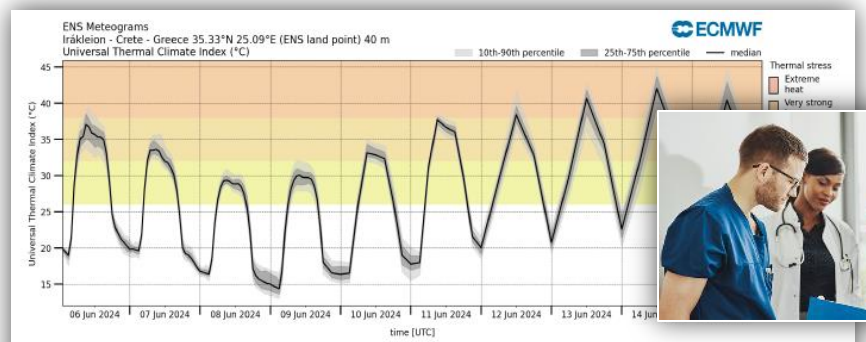
Horizon Europe (2022-2027)

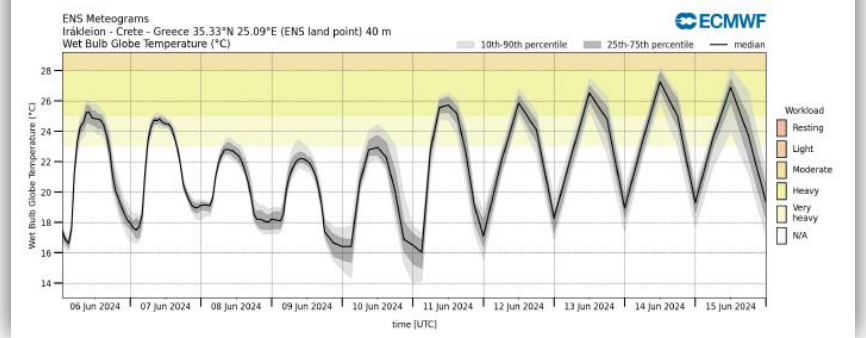
- Living labs to study climate and weather impacts on human health
- Part of the European Climate-Health Cluster

ECMWF: Process, quality control and store:

- Observations collected at the labs
- Forecasts (e.g. upcoming extreme weather event, such as heatwaves)

Universal Thermal Climate Index





Wet Bulb Globe Temperature

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We are eager to hear your voice!

Share your stories on how you combine Copernicus data and health information.

Questions? Contact us!