Global Heat Resilience Service

Building the foundation for heat resilient communities
Agenda

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Building the foundation for heat resilient communities

Welcome  15:00 – 15:05  5 mins
1 Introduction / Who is GEO?  15:05 – 15:10  5 mins
2 Opening Remarks  15:10 – 15:15  5 mins
3 Keynote Addresses: why should we be worried about heat & health?  15:15 – 15:35  20 mins
4 Presentations & discussion: the need for a Global Heat Resilience Service

Coffee Break  16:15 – 16:45  30 mins
5 Moderated panel discussion: Mapping existing initiatives, resources, and partnerships  16:45 – 17:45  60 mins
6 Summary and next steps  17:45 – 18:00  15 mins
Welcome
Yana Gevorgyan: Director, GEO Secretariat
What is GEO?

GEO is an intergovernmental partnership for people, nature, and the planet.

GEO draws expertise from an extensive global network that includes 114 governments, 162 private sector and civil society organizations and thousands of world-leading scientists.

GEO promotes open, equitable access to Earth observation information to help decision makers understand and act on the global challenges of climate change, biodiversity loss and pollution, and achieve sustainable development.

The GEO Secretariat is hosted by the World Meteorological Organization (WMO).
Simultaneous heatwaves are occurring across the northern hemisphere. Prolonged daytime temperatures well above 40°C (104°F). Extreme heat is a major hazard, and we must step up (WMO July, 2023)
Born into a climate crisis

Lifetime exposure to extreme events under Paris Agreement pledges for children born in 2020 compared to that of a person born in 1960.
BUILDING THE FOUNDATION FOR HEAT RESILIENT COMMUNITIES
Roundtable on the Global Heat Resilience Service | 31 July 2023

Opening Remarks
Stefan Schweinfest
Director
Statistics Division
UNSD/DESA

Keynote Addresses
Jainey Bavishi, Asst.
Secretary for Oceans and Atmosphere and Deputy Administrator, NOAA

Vicki Cerullo
Acting Executive Director
NYC Mayor’s Office of Climate & Environmental Justice
The need for a Global Heat Resilience Service

Yana Gevorgyan: Director, GEO Secretariat
Twin challenge: climate change and urbanisation

IPCC Climate Change 2022: Impacts, Adaptation, and Vulnerability
The Working Group contribution to the IPCC Sixth Assessment Report
Twin challenge: climate change & urbanisation

<table>
<thead>
<tr>
<th>Region</th>
<th>Urban settlements</th>
<th>Population (millions)</th>
<th>Heat exposure (person days - millions)</th>
<th>Avg GDP 2015 (USD)</th>
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Global urban heat exposure trends (1986 - 2016)
Much of the burden of urban heat exposure is concentrated in the tropics, specifically Asia – with nearly 2/3 of all urban heat exposure (person days)
Global Heat Resilience Service

Building the foundation for heat resilient communities

a co-designed service that will provide every urban area in the world with data and knowledge on the health risks from exposure to extreme heat. These insights will help cities develop plans to adapt to heat and reduce the impact on citizens’ health and local economies.
Global Heat Resilience Service

**Inputs**
- Meteorological and climate models
- Satellite based mapping of people, infrastructure and other assets
- Community-based mapping of heat and social vulnerability
- Socio-economic and public health data

**Outputs**
- Seasonal and sub-seasonal heat forecasts
- Heat vulnerability mapping
- Decision-support platform for heat resilience planning
- Technical support, capacity building and awareness raising tools

**Outcomes**
- Cities can better understand risks from heat
- Cities can better address risks from heat through local solutions
- Cities can better communicate risks from heat to raise awareness
The need for a Global Heat Resilience Service
Priscilla Idele: UNFPA
Recent experience: heat mapping campaigns
Hunter Jones, NOAA
Coffee break
Mapping existing initiatives, resources, and partnerships
Roundtable
# Global Heat Resilience Service

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What needs, opportunities and challenges do we foresee in developing a Global Heat Resilience Service?

- Existing initiatives that could be leveraged?
- Data related challenges?
- Technical capacity / other types of support?
- Resources and sustainability needed for an operational service?
- Governance and partnership arrangements?
- Policy and advocacy?
- Awareness raising and communications?
Summary & next steps
Martyn Clark, GEO Secretariat
Global Heat Resilience Service: minimum requirements?

- Trusted, consistent definition(s) of heat as a hazard
- Sufficient (spatial) information on which to develop heat resilience policies, plans, and projects
- Flexibility to incorporate local data and information
- Modular and extensible approach to understanding risks to match local capabilities
- Licensing and interoperability
- Technical support and capacity building – translation of evidence into action
- Risk knowledge and communication tools
Project design

An articulation of what demand the product will fill

Use cases identified with users

"Product approach": a phased, coherent design and plan for production defined

A scientific and technical approach defined

Seed funding secured
Partnerships
Next steps

- Follow-up consultations and revised concept note
- Identifying potential partners and collaborators - including cities
- Project design team identified
- Promotion at key events in 2023
- Convoking meeting, design workshops in early 2024
Thank you!

For more information contact:
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