Networking Event 198 at the World Urban Forum 11

"Novel data for a better urban future:
Ensuring data continuity with the Global Human settlement Layer"

Thursday, 30 June 2022 | 14:00 - 15:30 | ICC Multifunction Room 13

Organized by the European Commission - Joint Research Centre
Unit E.1 Disaster Risk Management

Concept note

This event will host the **launch of the new GHSL data release 2.0**. The sustainability, resilience, and capacity to adapt human settlements to urban futures is essential for our society. Decision makers from the city to the international level use it to take decisions and shape urban futures. **Geospatial information on human settlements** helps making progress towards the New Urban Agenda, the SDGs, the Sendai Framework for Disaster Risk Reduction and the climate agreements. Detailed and updated information on **population**, **building stocks** and **settlement classification by Degree of Urbanisation** produced by the Global Human Settlement Layer GHSL project at the European Commission's Joint Research Centre supports various applications across disaster risk management, sustainable development, urbanisation, environment, and sustainability. GHSL provides analysis ready geospatial data to derive human settlement statistics. When GHSL data were released at Habitat III, it pioneered in the offer of **free and open global information on human settlements** making information integration, harmonisation and redistribution spatially and temporally consistent.

Human settlements will experience the effects of a changing climate, so data driven urban management (planning and governance) can help mitigating forecasted impacts and develop resilient urban futures. The GHSL 2.0 supports this with an improved spatial resolution, thanks to the use of the European Copernicus Sentinel satellites. The new data improve the **thematic mapping of built-up surfaces** separating residential from non-residential surfaces extending the temporal coverage, **from 1975 to 2020 and projections to 2025 and 2030**. To ensure that information is constantly updated and accurate, the **Copernicus Programme** will ensure an operational production of GHSL human settlement data for the future.

Agenda 14.00-15.30

Welcome and introduction		*10'*
Why do we need a GHSL 2.0 release		
JRC Data for Better Urban Futures	*Ms. Alice Siragusa*	*10'*
Geospatial data for the New Urban Agenda and the Urban Monitoring Framework	*Mr. Robert Ndugwa*	*10'*
GHSL 2.0 features and future updates		*10'*
GHSL 2.0 new features and data: built-up areas, population, settlement classification	*Mr. Thomas Kemper*	
Copernicus GHSL: ensuring continued production of GHSL data for the future	*Mr. Michele Melchiorri*	*10'*

Background

The **Global Human Settlement Layer (GHSL)** is a framework of georeferenced layers and tools that supply baseline information on human settlements and population with global coverage. It is produced elaborating historical satellite images and data from open sources. The GHSL is the core dataset supporting the Degree of Urbanisation, and the new component of the Copernicus Exposure Mapping Service.

Copernicus is the European Union's Earth observation programme, looking at our planet and its environment. It offers information services that draw from satellite Earth Observation and in-situ (non-space) data. With the Sentinel suite of satellites, the European Copernicus program provides free and open satellite data for the Copernicus services and the scientific community.

Useful link and documents

- Global Human Settlement Layer (GHSL)   https://ghsl.jrc.ec.europa.eu
- Copernicus Emergency Management Service https://emergency.copernicus.eu/
- Schiavina M., Melchiorri M., Pesaresi M., Politis P., Freire S., Maffenini L., Florio P., Ehrlich D., Goch K., Tommasi P., Kemper T., GHSL Data Package 2022, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-53071-8, doi:10.2760/19817, JRC 129516
- European Commission, Joint Research Centre, Atlas of the Human Planet 2020 – Open geoinformation for research, policy, and action, EUR 30516, European Commission, Luxembourg, 2020, ISBN 978-92-76-27388-2, doi:10.2760/16432, JRC122364

Contact point

Thomas Kemper thomas.kemper@ec.europa.eu