Introduction to Population Grids and their Integration with Remote Sensing Data for Sustainable Development and Disaster Management

Tuesdays, March 30th and April 6th, 2021

10:00-12:00 or 15:00-17:00 EDT (UTC-4)

Population distribution data are essential for planning and decision-making in regions faced by crisis or conflict. They are also useful for monitoring progress towards the sustainable development goals (SDGs). Decision-makers need to know where people are located, what conditions they are facing, what infrastructure is available, and what basic services they can access. We also need to ensure that no one is left off the map in pursuit of the SDGs or in response to disasters.

This training will focus on the different global population grids and their application to a range of topics related to development planning and monitoring of the SDGs (e.g., environment, hazards, and access to resources). Attendees will learn about the latest data and methods used to produce global grids, how the grids incorporate remote sensing inputs, and how population grids can be used in conjunction with other types of data.

Part 1: Introduction to Population Grids and Their Uses

This session will introduce participants to the POPGRID Data Collaborative, background on the origins of gridding, and its evolution from the Earth sciences to present day application areas in health, humanitarianism, development, and disaster risk reduction. Approaches to gridding, global to near-global products and their strengths and limitations, and a tour of the online platform (POPGRID Viewer) will be covered. It will be followed by a question and answer period.

Part 2: Population Grid Application Areas

In this session we will present common research areas and uses of population grids. Topics will include sustainable development and in particular SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation and how population datasets are used in disaster risk reduction efforts. The session will end with a question and answer period.

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