

WorldPop

June 2024



Welcome to our new newsletter!

Pictured: Senior Research Fellow Dr Sarchil Qader and Research Fellow Dr Aubrey Steingraber with participants at a Data for Development workshop in Mbankomo, Cameroon.

Making decisions count everyone, everywhere

Welcome to our June 2024 newsletter. Every few months we keep you up to date with what's happening in our innovative, open, geospatial, demographic [research programme](#).

WorldPop produces estimates of populations with age/sex breakdowns for each 100m x 100m grid square on the planet. These are used as default, open access datasets for NGOs planning humanitarian and development interventions, and help governments fill census gaps.

This month we congratulate our director, Professor Andy Tatem on being appointed to advise the UK government on big data, machine learning and AI, and focus on our recent co-development and capacity strengthening work, we update our progress on our [Global 2 project](#), review the recent global [impact of our open population data](#) and list recent [academic journal articles](#) produced by our team.

This year marks our 10th anniversary which we are planning to celebrate on 9th

October at the National Oceanography Centre, Southampton, UK. More details will follow later this year.

WorldPop Director appointed UK government advisor



Professor Tatem speaking at the UN World Data Forum, Dubai, UAE

Our director, Professor Andy Tatem has been appointed 'Big data, machine learning and AI' expert on the UK Foreign, Commonwealth & Development Office Research Advisory Group – a significant new role at the heart of an important government ministry. Professor Tatem will join other internationally recognised academic experts to discuss FCDO science and research priority areas, guiding principles, and exploratory research.

[Read more...](#)

Co-development and Capacity strengthening February



Dr Sarchill Qader leading a preEa workshop. Mbankomo, Cameroon

Our Foreign and Commonwealth Development Office-funded project, *Data for Development*, had its first in-person workshop run by Dr Sarchill Qader and Dr Aubrey Steingraber in Mbankomo, Cameroon. Workshop participants from Cameroon's National Institute of Statistics and National Institute of Cartography improved their understanding and use of the preEA Tool package for enumeration area mapping and acquired a variety of geospatial analysis skills using the open-source *QG/S* application.

[Read more...](#)

April

Kristine and Winfred from @WorldPopProject demonstrating to the #CAM2024 participants how to use maps, an excellent tool for showing geographical context.

@aphrc @theGFF @WorldBank @JHUGlobalHealth @RwandaHealth @CKyobutungu @CwKabiru @dibabay @Sidze_APHRC @RatemoJuliet



X social media post from Countdown to 2030

Dr Kristine Nilsen and Dr Winfred Dotsie-Gborgbortsi presented and led discussions at the Annual Countdown to 2030 Meeting in Kigali, Rwanda. More than 200 participants from health agencies, universities and ministries of health across Sub-Saharan Africa took part in the gathering, which included a 4 day workshop on equity analysis in health.

Drs Nilsen and Dotsie-Gborgbortsi led a workshop on spatial analysis where they guided participants as they mapped their country's health indicators using an *R Shiny App* collaboratively developed by colleagues in WorldPop and the African Population and Health Research Center. The WorldPop team also assisted participants from Ghana produce an analytical report of key Reproductive, Maternal, Newborn, Child, Adolescent Health (RMNCAH) indicators to measure coverage and equity.



Julieth Sebba Bilakwate, MD
@JuliethSebbaMD



A very insightful week at [#CAM2024](#) in Kigali, Rwanda. Extensive hands on activities on data analysis, discussions and networking with experts across 26 African countries.

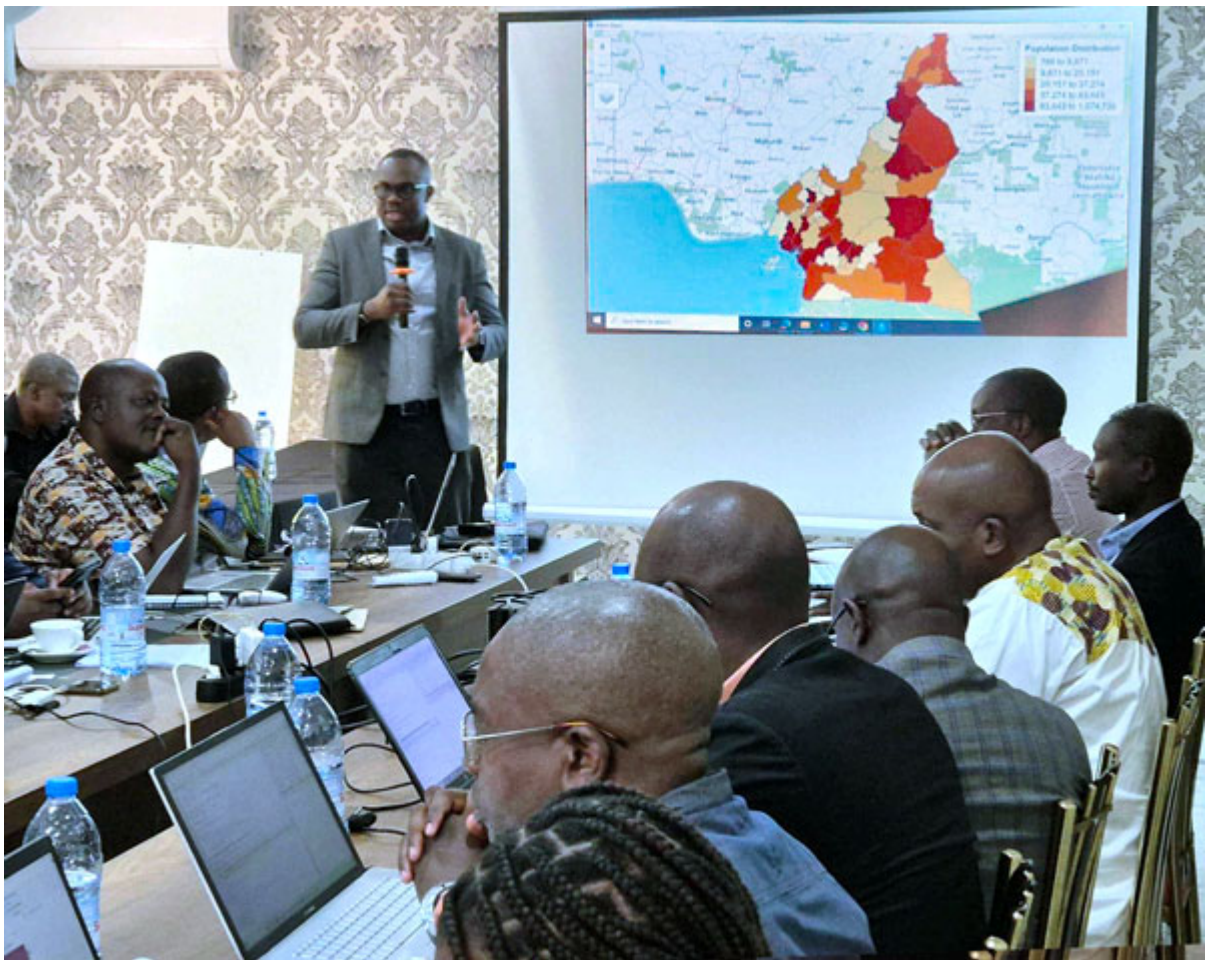
Congratulations to [@aphrc](#) [@RwandaHealth](#) [@theGFF](#) [@WorldBank](#) [@WorldPopProject](#) [@Countdown2030](#) and partners.



X social media post from Doctor Rafiki Africa podcaster, Dr Julieth Sebba Bilakwate, MD

[Read more...](#)

May



Dr Chris Nnanatu leading a population estimation workshop. Mbankomo, Cameroon

Dr Chris Nnanatu and Dr Ortis Yankey travelled to Mbankomo, Cameroon for a follow up 8-day Data for Development workshop. This time, participants from Cameroon's National Institute of Statistics were guided through methods for modelled population estimates in the production of bespoke high-resolution population data. Focussing on the key theoretical basis and R programming skills required to successfully design and implement population estimation models, the workshop also explored spatial and statistical modelling and analysis methods as well as spatial data processing and visualisation using R software. The team are currently planning a similar in-person workshop for the Ethiopia Statistical Service in Addis Ababa in the coming months.

[Read more...](#)

Choosing the right WorldPop population data for you

We produce many different types of small area open population datasets to meet a wide range of needs and applications and often get asked about what data is most suitable for to meet our users' needs. To help guide you towards the right WorldPop data and tools to meet your needs we have produced this handy guide (click the image below):

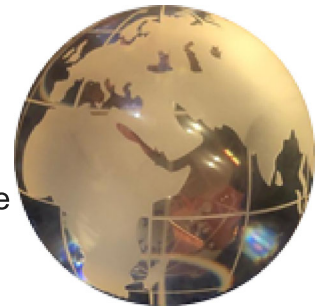


Image by Geoscéntricos using WorldPop open population data

Global 2 update

Our Global 2 project is making good progress updating our open, gridded population estimates to 2030, incorporating the latest round of census data, and refining methods. We continue to work at pace and expect to release the first tranche of updated country datasets by August this year.

[Read more...](#)



Conferences and workshops February



Dr Chris Nnanatu attended a Population Denominator Workshop in Nairobi, convened by the Global Fund, AFRO, AMP, RBM and PATH. The workshop brought together researchers, policymakers, UN agencies and other governmental and non-governmental organizations to discuss issues around population denominators for disease programs and share information. The overarching aim of the meeting was to assist in finalising the outline and key sections of a new set of guidelines relating to population denominators for public health data applications and decision making, and provided a unique opportunity to build important new networks.



Professor Tatem and Ian Coady attended the UN Statistical Commission in New York to develop stakeholder engagement, and met with Center for International Earth Science Information Network (CIESIN) colleagues, Associate Director for Science Applications, Dr Dana R Thomson and GRID3 Deputy Director, Paola Kim-Blanco. [Read more...](#)



Rhino at GRID3 team retreat, Nairobi, Kenya

Senior Enterprise Fellow Graeme Hornby travelled to Kenya to represent the learning and capacity development aspects of GRID3/WorldPop activities at a GRID3 team retreat in Nairobi. Valuable time was spent exploring the detail of ongoing work plans and reflecting on past achievements and areas for improvement. The retreat was a great opportunity for the team to meet in person and connect with new recruits, including geospatial consultants and trainers from Nigeria and the DRC. Teambuilding exercises involved a ½ day safari in Nairobi National Park, a huge and protected area uniquely situated very close to the urban centre of Nairobi. [GIS Data Preparation and Management online course](#)

March



World Health Organisation HQ, Geneva, Switzerland

Senior Enterprise Fellow Heather Chamberlain participated in a multi-partner workshop focussed on geospatial data use to support polio elimination programme in Afghanistan. The workshop was organised by the WHO GIS Centre at WHO Headquarters, Geneva.

April



Dr Natalia Tejedor Garavito speaking at GISUK, Leeds, UK

Dr Natalia Tejedor Garavito delivered the opening keynote speech at The Geographical Information Science Research UK (GISRUK) international conference hosted by the University of Leeds. She shared insights of the great work that WorldPop does which encouraged discussions among fellow GIS enthusiasts. Dr Ortis Yankey presented his latest research work on uncertainty quantification for population disaggregation with a talk entitled: “Disaggregating Census Data For Population Mapping Using A Bayesian Additive Regression Tree Model”. Wole Ademola, a WorldPop PhD student, presented a poster on a novel approach for building classification into residential, non-residential and mixed use in Lagos, Nigeria.

May



Heather Chamberlain and Ian Coady speaking at SatSummit

Ian Coady and Heather Chamberlain attended the [SatSummit conference](#) in Washington DC for 2 days of presentations and in-depth conversations on solving

the world's most critical development challenges with satellite data. Heather took part in a panel discussion about AI-derived building datasets and their impact on traditional and crowdsourcing approaches, and Ian spoke on "Finding the 140,000 impacted by Hurricane Iota in Honduras" at a lightning talk session.

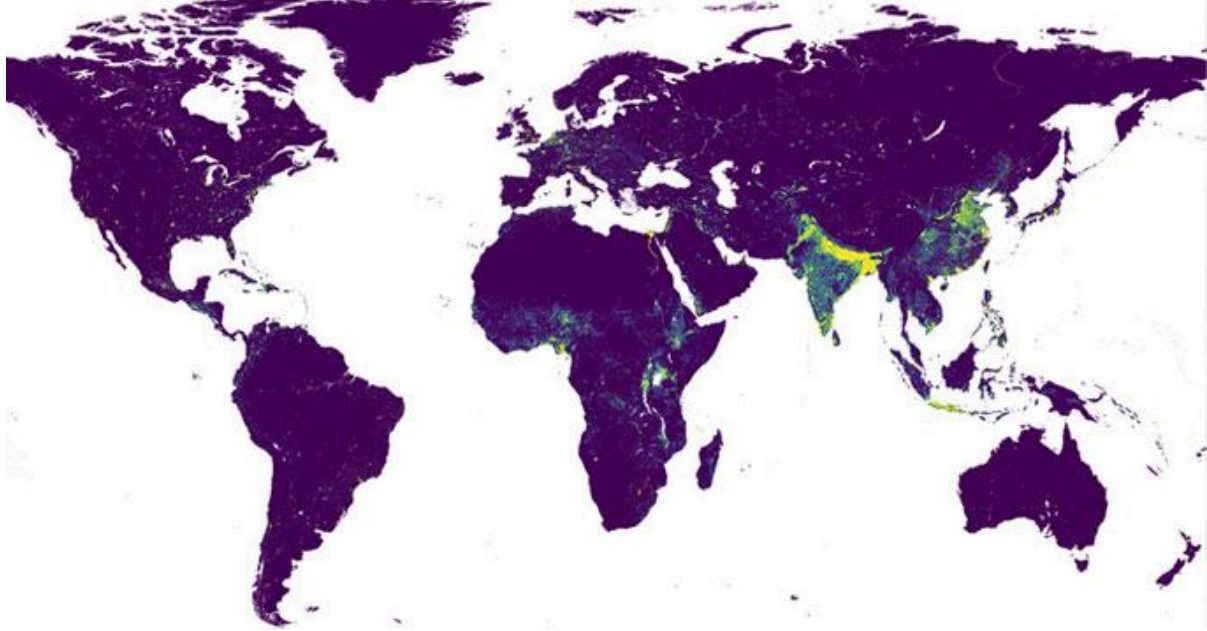


Dr Chris Nnanatu (right) with UNFPA delegates at the 9th African Population Conference. Lilongwe, Malawi

Dr Chris Nnanatu joined the panel of the Computational approaches to population studies in Africa session at the 9th African Population Conference in Lilongwe, Malawi. He spoke on *Integrating Multiple Household-Based Data with Satellite-Based Observations to Produce High-Resolution Population Estimates in LMICs Using Inla-Spde* - a methodology successfully applied to produce small area population estimates for Cameroon.

[Extended abstract](#)

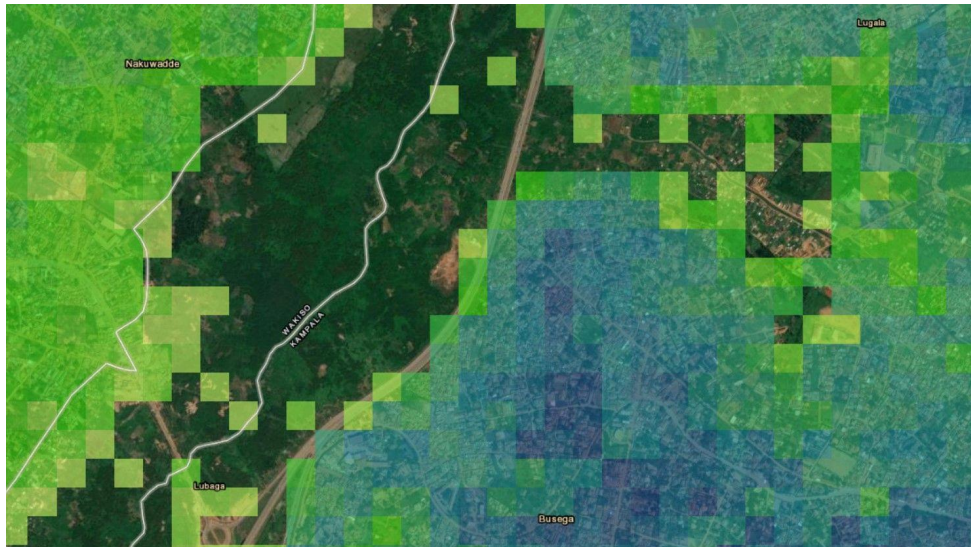
Impact



Our open population data are widely used by researchers and organisations around the world. Here are some recent examples:

- [Save the Children: Sudan's year of war: one in two children in the line of fire](#). WorldPop/ACLED data have been used to analyse the demographic and geographic characteristics of populations affected by conflict.
- [Esri: Nigeria Applies Advanced Geospatial Technology for Census Preparations](#). A report on how Nigeria's National Population Commission is using our data and methods to delineate enumeration areas.
- [United Nations Satellite Centre \(UNOSAT\): Cumulative Satellite Detected Waters and Impact in Kenya between 24 to 28 April 2024](#). UNOSAT regularly use our data to measure the potential impact of natural disasters.
- [Esri: Pacific GeoPortal](#). Our open global gridded population data are now a part of this platform offering geospatial cloud infrastructure, free tools, and access to open data libraries.
- [UNICEF MICS: MICS GIS: Harnessing the power of geolocation data \(YouTube video\)](#). Nazim Gashi, UNICEF GIS Consultant presents our vaccination coverage mapping in Nigeria as an example application of their Multiple Indicator Cluster Survey (MICS) data use.

Our latest publications



In the past 3 months our team have authored or co-authored significant papers on:

- [Building footprint data for countries in Africa: To what extent are existing data products comparable?](#)
- [Inter-district and Wealth-related Inequalities in Maternal and Child Health Service Coverage and Child Mortality within Addis Ababa City.](#)

See our [publications list](#) and search more than 200 highly cited papers published since 2004.

We hope you enjoyed our newsletter.

If you did, please share it with your friends and colleagues.

Our next edition will be published in Autumn 2024.

Subscribe to our newsletter



The WorldPop research programme, based in the School of Geography and Environmental Science at the University of Southampton, is a multi-sectoral team of researchers, technicians and project specialists that produces data on population distributions and characteristics at high spatial resolution.

