

DOWNLOAD SPATIAL DATA FROM OPEN SOURCE

Presenter : WAFA ABDULSAKHI

**TRAINING DELIVERY 2022
(IDeAMapSudan)**

INTEGRATED DEPRIVATION AREA MAPPING SYSTEM FOR DISPLACEMENT DURABLE SOLUTIONS AND
SOCIOECONOMIC RECONSTRUCTION IN KHARTOUM, SUDAN

228323620





(1)

OPEN STREET
MAP

(2)

CENTRE FOR
HUMANITARIA
N DATA

(3)

WORLD POP

Index

OPEN STREET MAP (OSM)

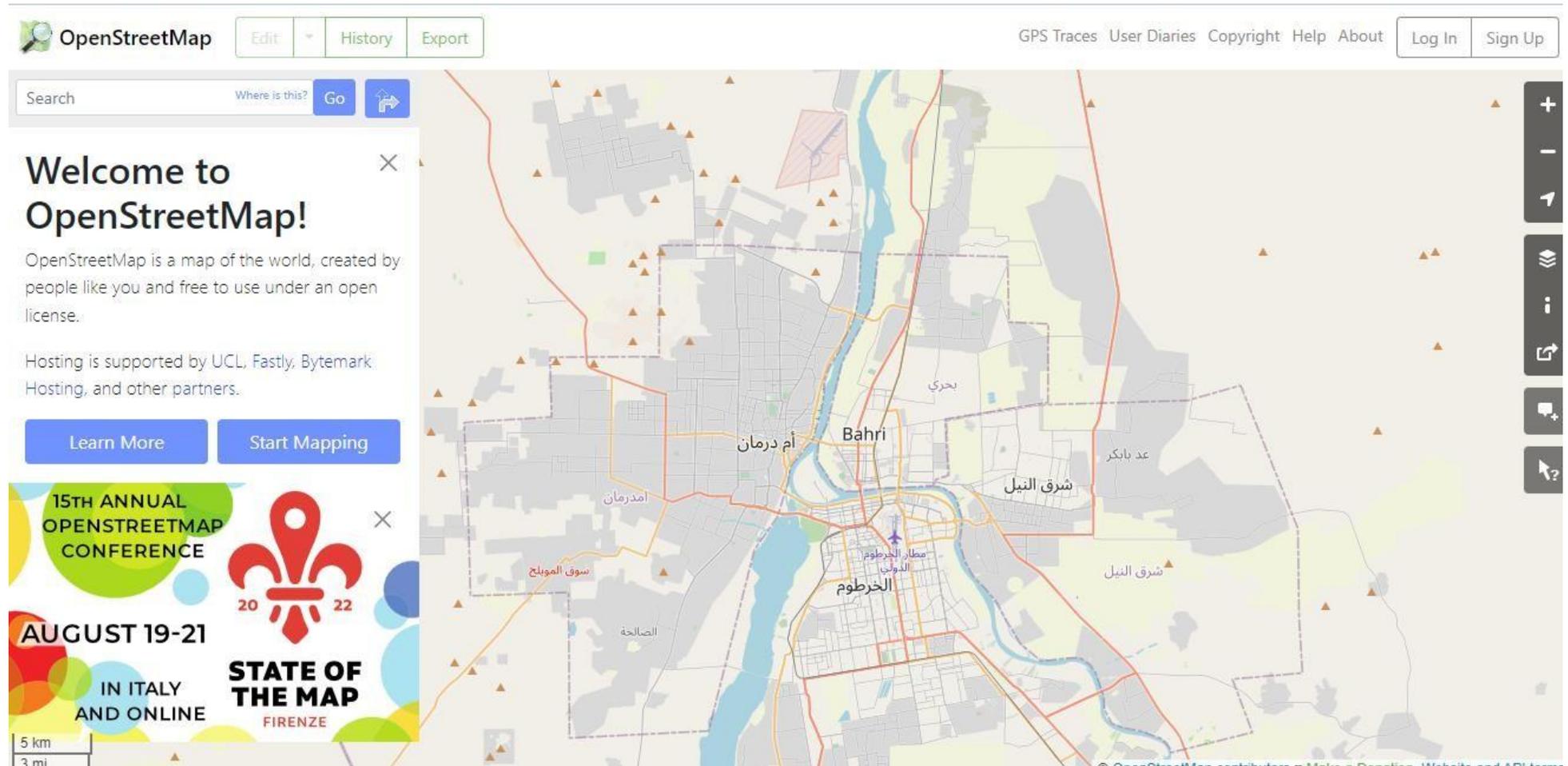
- Open Street Map is possibly the largest repository of geo-data in vector format.
- Founded in 2006, it is currently the largest crowdsourcing project in the geo-world
- (more than 5 million registered users as of November 2018)
- **Don't be a passive user! Contribute!**



- Open Street Map هو أكبر مستودع للبيانات الجغرافية بصيغة المتجهات vector format
- تأسس في عام 2006 ، وهو حاليًا أكبر مشروع **crowdsourcing project** في العالم الجغرافي
- (أكثر من 9 ملايين مستخدم مسجل اعتبارًا من نوفمبر 2022)
- لا تكن مستخدمًا غير فعال! ساهم!

HOW TO DOWNLOAD

- from **OpenStreetMap** website (flow link <https://www.openstreetmap.org>)



- Click on Export tab, you can Zoom to area of interest or manually enter the extent coordinates.
- If the area is large this message will appear

- If not, you can essay download data by clicking
- **Export** button.

- The data will download in (.osm) format which can easy open and convert to shapefile in GIS software

This area is too large to be exported as OpenStreetMap XML Data. Please zoom in or select a smaller area, or use one of the sources listed below for bulk data downloads.

Licence

OpenStreetMap data is licensed under the [Open Data Commons Open Database License \(ODbL\)](#).

[Export](#)

OpenStreetMap [Edit](#) [History](#)

Search Where is this? [Go](#) [Home](#)

Export

	15.6746	
32.2644		32.5995
	15.4752	

[Manually select a different area](#)

- from geofabrik server (flow link <https://download.geofabrik.de/index.html>)

GEOFABRIK de downloads

OpenStreetMap Data Extracts

The OpenStreetMap data files provided on this server do **not** contain the user names, user IDs and changeset IDs of the OSM objects because these fields are assumed to contain personal information about the OpenStreetMap contributors and are therefore subject to data protection regulations in the European Union.
[Extracts with full metadata](#) are available to OpenStreetMap contributors only.

Welcome to Geofabrik's free download server. This server has data extracts from the [OpenStreetMap project](#) which are normally updated every day. Select your continent and then your country of interest from the list below. (If you have been directed to this page from elsewhere and are not familiar with OpenStreetMap, we highly recommend that you read up on OSM before you use the data.) This open data download service is offered free of charge by Geofabrik GmbH.

Willkommen auf dem Geofabrik-Downloadserver. Hier gibt es Daten-Auszüge aus dem [OpenStreetMap-Projekt](#), die normalerweise täglich aktualisiert werden. Wählen Sie aus dem Verzeichnis unten den Kontinent und ggf. das Land, für die Sie Daten benötigen. (Wenn Sie von anderswo auf dieser Seite gelandet sind und von OpenStreetMap nichts wissen, dann ist es empfehlenswert, sich mit dem Projekt vertraut zu machen, bevor Sie mit den Daten arbeiten.) Diese Downloads werden von der Geofabrik GmbH kostenlos angeboten.

Click on the region name to see the overview page for that region, or select one of the file extension links for quick access.

Sub Region	Quick Links		
	.osm.pbf	.shp.zip	.osm.bz2
Africa	[.osm.pbf] (5.4 GB)	✘	[.osm.bz2]
Antarctica	[.osm.pbf] (31.0 MB)	[.shp.zip]	[.osm.bz2]
Asia	[.osm.pbf] (11.0 GB)	✘	[.osm.bz2]
Australia and Oceania	[.osm.pbf] (999 MB)	✘	[.osm.bz2]
Central America	[.osm.pbf] (554 MB)	✘	[.osm.bz2]
Europe	[.osm.pbf] (25.4 GB)	✘	[.osm.bz2]
North America	[.osm.pbf] (11.6 GB)	✘	[.osm.bz2]



Not what you were looking for? Geofabrik is a consulting and software development firm based in Karlsruhe, Germany specializing in OpenStreetMap services. We're happy to help you with data preparation, processing, server setup and the like. [Check out our web site](#) and contact us if we can be of service.

Nicht das Richtige dabei? Die Geofabrik ist ein auf OpenStreetMap spezialisiertes Beratungs- und Softwareentwicklungsunternehmen in Karlsruhe. Gern

Sub Region	Quick Links		
	.osm.pbf	.shp.zip	.osm.bz2
Africa	[.osm.pbf] (5.4 GB)	✘	[.osm.bz2]
Antarctica	[.osm.pbf] (31.0 MB)	[.shp.zip]	[.osm.bz2]
Asia	[.osm.pbf] (11.0 GB)	✘	[.osm.bz2]
Australia and Oceania	[.osm.pbf] (999 MB)	✘	[.osm.bz2]
Central America	[.osm.pbf] (554 MB)	✘	[.osm.bz2]
Europe	[.osm.pbf] (25.4 GB)	✘	[.osm.bz2]



Malawi	[.osm.pbf] (106 MB)	[.shp.zip]	[.osm.bz2]
Mali	[.osm.pbf] (137 MB)	[.shp.zip]	[.osm.bz2]
Mauritania	[.osm.pbf] (24.2 MB)	[.shp.zip]	[.osm.bz2]
Mauritius	[.osm.pbf] (6.1 MB)	[.shp.zip]	[.osm.bz2]
Morocco	[.osm.pbf] (178 MB)	[.shp.zip]	[.osm.bz2]
Mozambique	[.osm.pbf] (175 MB)	[.shp.zip]	[.osm.bz2]
Namibia	[.osm.pbf] (40.8 MB)	[.shp.zip]	[.osm.bz2]
Niger	[.osm.pbf] (54 MB)	[.shp.zip]	[.osm.bz2]
Nigeria	[.osm.pbf] (401 MB)	[.shp.zip]	[.osm.bz2]
Rwanda	[.osm.pbf] (35.9 MB)	[.shp.zip]	[.osm.bz2]
Saint Helena, Ascension, and Tristan da Cunha	[.osm.pbf] (456 KB)	[.shp.zip]	[.osm.bz2]
Sao Tome and Principe	[.osm.pbf] (879 KB)	[.shp.zip]	[.osm.bz2]
Senegal and Gambia	[.osm.pbf] (68 MB)	[.shp.zip]	[.osm.bz2]
Seychelles	[.osm.pbf] (2.4 MB)	[.shp.zip]	[.osm.bz2]
Sierra Leone	[.osm.pbf] (36.4 MB)	[.shp.zip]	[.osm.bz2]
Somalia	[.osm.pbf] (111 MB)	[.shp.zip]	[.osm.bz2]
South Africa	[.osm.pbf] (263 MB)	[.shp.zip]	[.osm.bz2]
South Sudan	[.osm.pbf] (102 MB)	[.shp.zip]	[.osm.bz2]
Sudan	[.osm.pbf] (66 MB)	[.shp.zip]	[.osm.bz2]
Swaziland	[.osm.pbf] (24.9 MB)	[.shp.zip]	[.osm.bz2]
Tanzania	[.osm.pbf] (578 MB)	[.shp.zip]	[.osm.bz2]
Togo	[.osm.pbf] (43.9 MB)	[.shp.zip]	[.osm.bz2]
Tunisia	[.osm.pbf] (71 MB)	[.shp.zip]	[.osm.bz2]
Uganda	[.osm.pbf] (268 MB)	[.shp.zip]	[.osm.bz2]
Zambia	[.osm.pbf] (209 MB)	[.shp.zip]	[.osm.bz2]
Zimbabwe	[.osm.pbf] (158 MB)	[.shp.zip]	[.osm.bz2]

Special Sub Regions

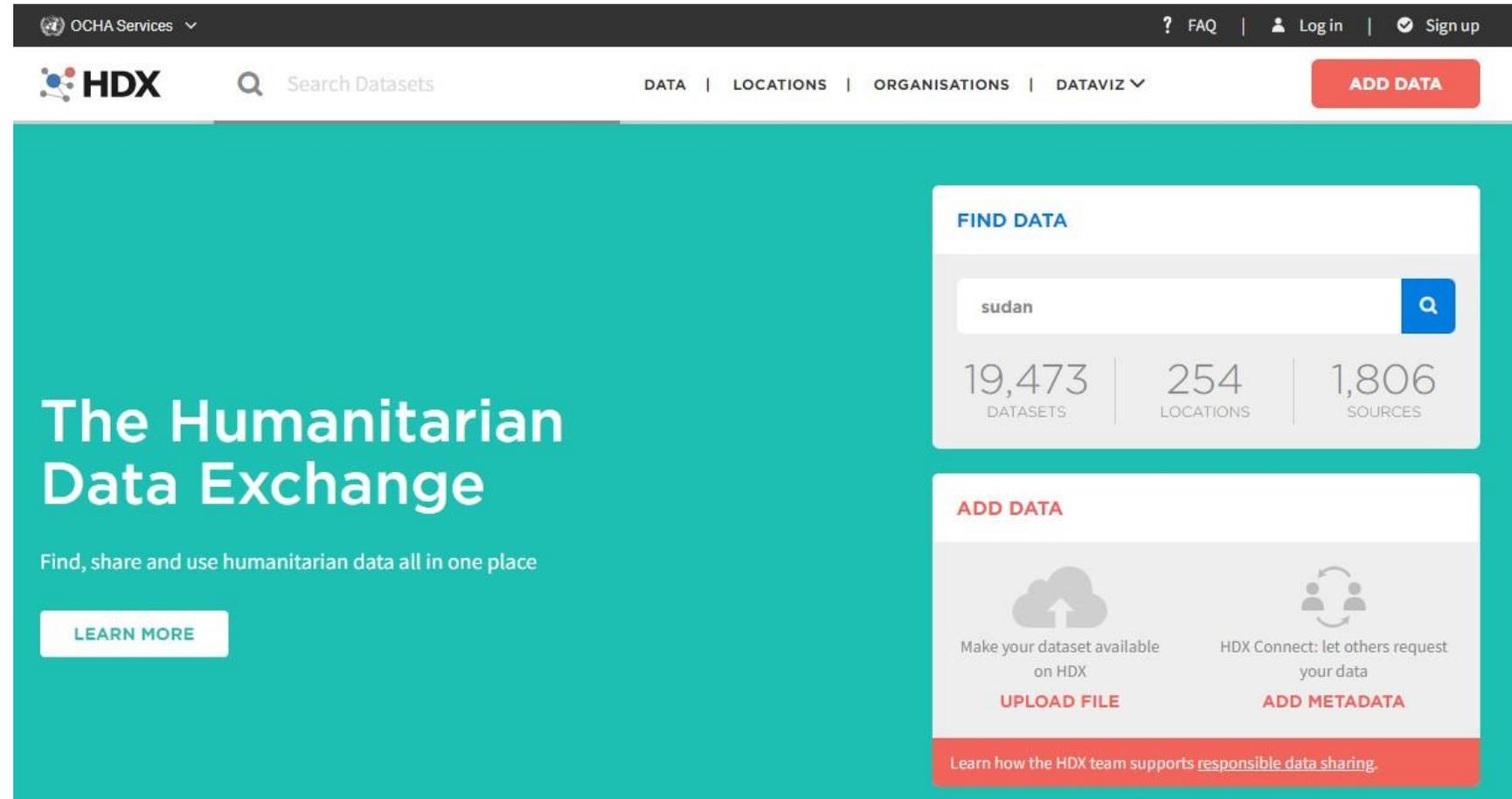
Commonly Used Formats

- [sudan-latest.osm.pbf](#), suitable for Osmium, Osmosis, imposm, osm2pgsql, mkgmap, and others. This file was last modified 9 hours ago and contains all OSM data up to 2022-08-16T20:21:25Z. File size: 66 MB; MD5 sum: [cbbc5c822d4e09befb919862542e31a](#).
- [sudan-latest-free.shp.zip](#), yields a number of ESRI compatible shape files when unzipped. ([Format description PDF](#)) This file was last modified 8 hours ago. File size: 157 MB; MD5 sum: [71babfa00e01f7d87709a52a85325629](#).



CENTRE FOR HUMANITARIAN DATA

The Humanitarian Data Exchange (HDX) is an open platform for sharing data across crises and organizations. Launched in July 2014, the goal of HDX is to make humanitarian data easy to find and use for analysis. Our growing collection of datasets has been accessed by users in over 200 countries and territories.



The screenshot shows the HDX website interface. At the top, there is a navigation bar with "OCHA Services" on the left and "FAQ", "Log in", and "Sign up" on the right. Below this is the HDX logo and a search bar labeled "Search Datasets". The main navigation menu includes "DATA", "LOCATIONS", "ORGANISATIONS", and "DATAVIZ". A red "ADD DATA" button is positioned in the top right corner.

The main content area features a large teal banner with the text "The Humanitarian Data Exchange" and the tagline "Find, share and use humanitarian data all in one place". A "LEARN MORE" button is located at the bottom left of this banner.

On the right side, there is a "FIND DATA" section with a search bar containing the word "sudan". Below the search bar, statistics are displayed: 19,473 DATASETS, 254 LOCATIONS, and 1,806 SOURCES.

Below the statistics is an "ADD DATA" section with two options: "UPLOAD FILE" (Make your dataset available on HDX) and "ADD METADATA" (HDX Connect: let others request your data).

At the bottom of the page, a red banner contains the text: "Learn how the HDX team supports [responsible data sharing](#)."

CENTRE FOR HUMANITARIAN DATA

- to download data start by searching. You can search for specific **country**, or you can write the **data type** which you look for. For example, **health facilities**.

FIND DATA



Sudan health facilities

19,473 DATASETS | 254 LOCATIONS | 1,806 SOURCES

FEATURED: -

- CODs [3]
- Sub-national [645]
- Geodata [662]
- Administrative Divisions [3]
- Datasets on request (HDX Connect) [0]
- Datasets with Quick Charts [143]
- Datasets with Showcase [15]
- Datasets with HXL tags [47]
- Datasets with SADD tags [0]

LOCATIONS:

The results will show different data format, for better result and to show just the spatial data please check Geodata

Sudan-healthsites

Global Healthsites Mapping Project

1700+ Downloads

Updated 15 July 2022 | Dataset date: July 15, 2022-July 15, 2022

This dataset updates: Every month

from the FEATURED list. Select Sudan from Location list.

CENTRE FOR HUMANITARIAN DATA

- Then click on **Sudan-healthsites**, new window will open content basemap with health data.
- Scroll down you find available format. Then click on desire format e.g., Shapefile.

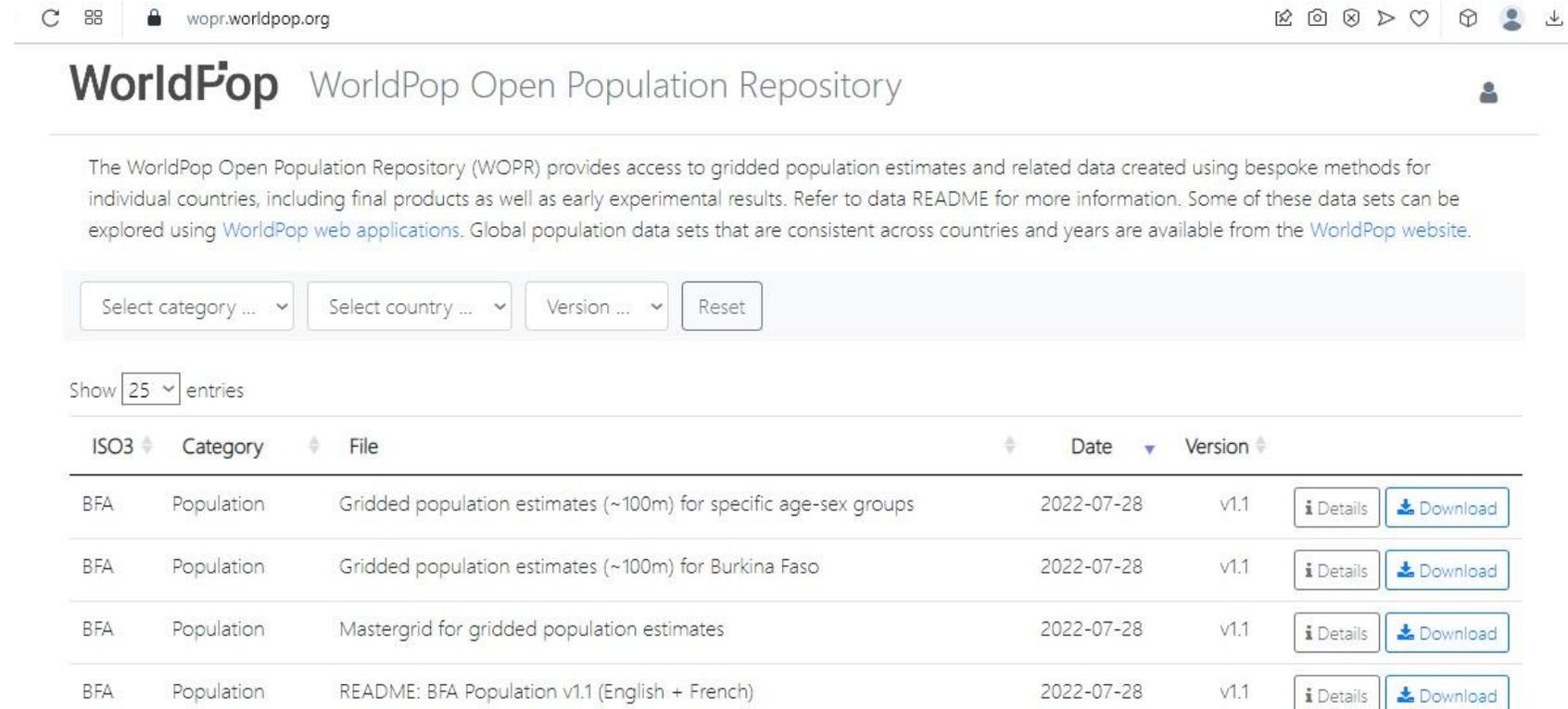


The screenshot displays the IDEAMAP Sudan interface. On the left, a map of Sudan is shown with several red dots representing health sites. A red arrow points from the map to a list of data formats. The list includes:

- Sudan-healthsites-geojson** (1.3M)
Updated: 15 July 2022
Sudan healthsites geojson
[DOWNLOAD](#)
- Sudan-healthsites-csv** (252.8K)
Updated: 15 July 2022
Sudan healthsites csv
[DOWNLOAD](#) [MORE](#)
- Sudan-healthsites-shp** (88.0K)
Updated: 15 July 2022
Sudan healthsites shapefiles
[DOWNLOAD](#)
- Sudan-healthsites-hxl-csv** (251.7K)
Updated: 15 July 2022
Sudan healthsites with hxl tags
[DOWNLOAD](#) [MORE](#)

WORLD POP

The worldPop Open population repository (WOPR) provides access to gridded population estimates and related data created using bespoke methods for individual countries, including final products as well as early experimental results.



WorldPop WorldPop Open Population Repository

The WorldPop Open Population Repository (WOPR) provides access to gridded population estimates and related data created using bespoke methods for individual countries, including final products as well as early experimental results. Refer to data README for more information. Some of these data sets can be explored using [WorldPop web applications](#). Global population data sets that are consistent across countries and years are available from the [WorldPop website](#).

Select category ... Select country ... Version ... Reset

Show 25 entries

ISO3	Category	File	Date	Version	
BFA	Population	Gridded population estimates (~100m) for specific age-sex groups	2022-07-28	v1.1	Details Download
BFA	Population	Gridded population estimates (~100m) for Burkina Faso	2022-07-28	v1.1	Details Download
BFA	Population	Mastergrid for gridded population estimates	2022-07-28	v1.1	Details Download
BFA	Population	README: BFA Population v1.1 (English + French)	2022-07-28	v1.1	Details Download

For Buildings data:

⇒ select category = Buildings

WORLD POP

For Buildings data:

⇒ select category = Buildings

- ⇒ then select country **SDN**
- ⇒ two results will appear **the 2nd is README** pdf file provides information about the data included in the data release, how it was produced, source data that were used, and known assumptions and limitations of the results.
- ⇒ **1st for grided map of building patterns.** To download data, click on Download button.

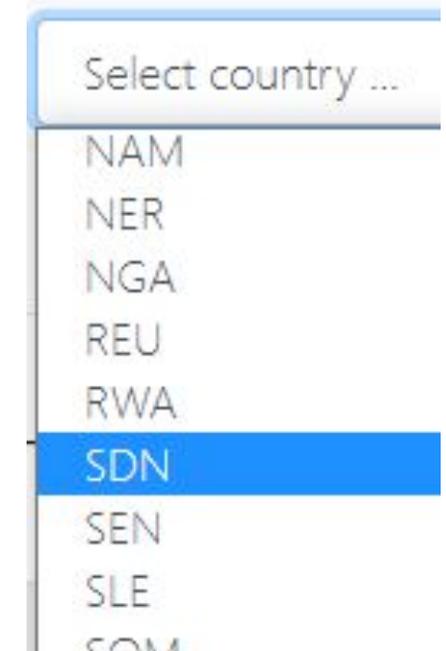
Buildings ▾ SDN ▾ Version ... ▾ Reset

Show entries

ISO3	Category	File	Date	Version	
SDN	Buildings	Gridded maps of building patterns	2020-07-08	v1.1	Details Download
SDN	Buildings	README: SDN Buildings v1.1	2020-07-08	v1.1	Details Download

Showing 1 to 2 of 2 entries

Previous Next

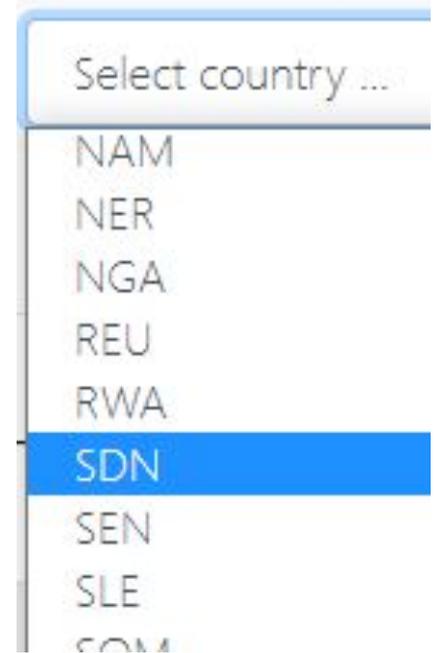


WORLD POP

For Buildings data:

⇒ select category = Buildings

- ⇒ then select country **SDN**
- ⇒ two results will appear **the 2nd is README** pdf file provides information about the data included in the data release, how it was produced, source data that were used, and known assumptions and limitations of the results.
- ⇒ **1st for grided map of building patterns.** To download data, click on Download button.



Buildings ▾ SDN ▾ Version ... ▾ Reset

Show entries

ISO3	Category	File	Date	Version	
SDN	Buildings	Gridded maps of building patterns	2020-07-08	v1.1	Details Download
SDN	Buildings	README: SDN Buildings v1.1	2020-07-08	v1.1	Details Download

Showing 1 to 2 of 2 entries

Previous Next

WORLD POP

For Population data:

⇒ Click on WorldPop website in main page. **WorldPop Hub** will open



The screenshot shows the 'Repository' page of the WorldPop website. The text in the repository section states: 'dded population estimates and related data created using bespoke methods for results. Refer to data README for more information. Some of these data sets can be at are consistent across countries and years are available from the [WorldPop website](#).' A red box highlights the link 'WorldPop website'. Below this is the 'WorldPop Hub' banner with a navigation menu containing 'DATA' and 'CONTACT'. The main content area features a dark blue background with a map and the text 'Population Counts'.

WorldPop produces different types of gridded population count datasets, depending on the methods used and end application. Please make sure you have read our [Mapping Populations](#) overview page before choosing and downloading a dataset.

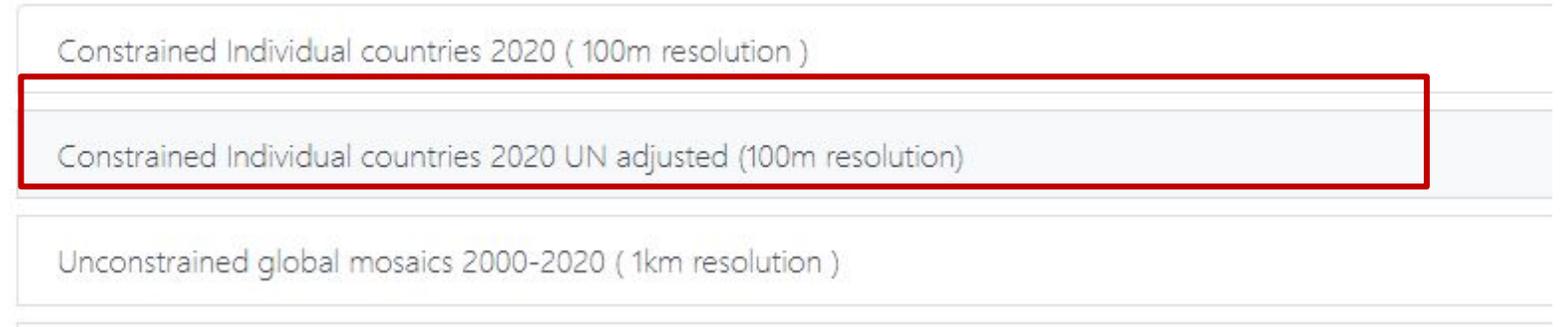
Bespoke methods used to produce datasets for specific individual countries are available through the [WorldPop Open Population Repository \(WOPR\)](#) link below. These are 100m resolution gridded population estimates using customized methods ("bottom-up" and/or "top-down") developed for the latest data available from each country. They can also be visualised and explored through the [woprVision](#) App.

The remaining datasets in the links below are produced using the "top-down" method, with either the unconstrained or constrained top-down disaggregation method used. Please make sure you read the [Top-down estimation modelling overview](#) page to decide on which datasets best meet your needs. Datasets are available to download in Geotiff and ASCII XYZ format at a [resolution of 3 and 30 arc-seconds \(approximately 100m and 1km at the equator, respectively\)](#):

- Unconstrained individual countries 2000-2020 (1km resolution): Consistent 1km resolution population count datasets created using unconstrained top-down methods for all countries of the World for each year 2000-2020.
- Unconstrained individual countries 2000-2020 (100m resolution): Consistent 100m resolution population count datasets created using unconstrained top-down methods for all countries of the World for each year 2000-2020.

WORLD POP

⇒ Scroll down and select
**Constrained individual countries
 2020 UN adjusted** (100m
 resolution)



Constrained Individual countries 2020 (100m resolution)

Constrained Individual countries 2020 UN adjusted (100m resolution)

Unconstrained global mosaics 2000-2020 (1km resolution)

⇒ on search tab write **Sudan** **Click
 on Data& Resources**



Show entries

Continent	Country	Year	Geo Type	RES
Africa	South Sudan	2020	Population	100m
Africa	Sudan	2020	Population	100m

Showing 1 to 2 of 2 entries (filtered from 234 total entries)

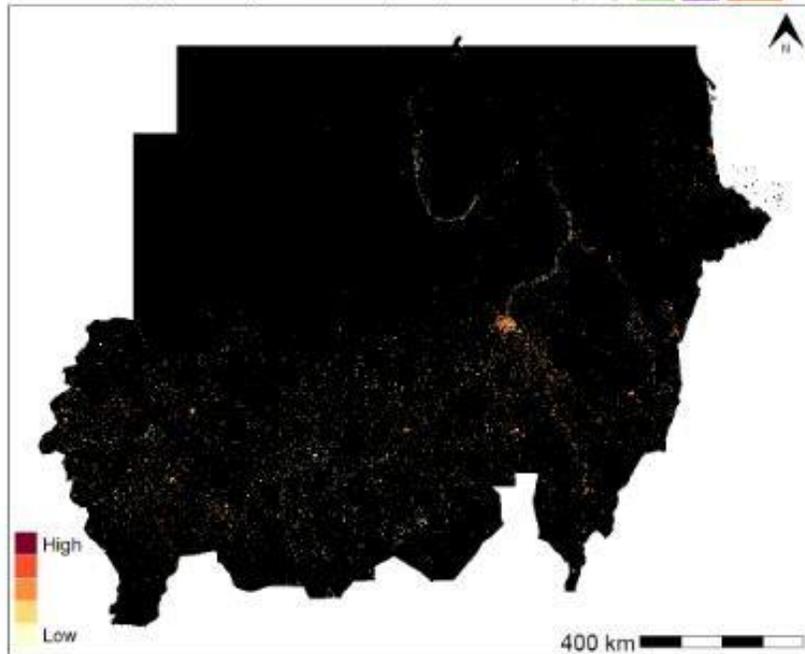
Prev **1** Next

WORLD POP

⇒ Scroll Down and click **Download Entire Dataset**

Sudan population 2020

Estimated total number of people per grid-cell at a resolution of 3 arc seconds (approximately 100m at the equator)



WorldPop (worldpop.org - School of Geography and Environmental Science, University of Southampton)
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WorldPop Hub

DATA | CONTACT

- Ecopia.AI and Maxar Technologies, 2020. Digitize Africa data. <http://digitizeafrica.ai>

Region : Sudan

DOI : 10.5258/SOTON/WP00683

Date of production : 2020-09-12

Recommended citation

Bondarenko M., Kerr D., Sorichetta A., and Tatem, A.J. 2020. Census/projection-disaggregated gridded population datasets, adjusted to match the corresponding UNPD 2020 estimates, for 51 countries across sub-Saharan Africa using building footprints. WorldPop, University of Southampton, UK. doi:10.5258/SOTON/WP00683

Pdf file : [Get pdf file](#)

Data Files :

[Download Entire Dataset / 23.85 MB](#)

THANK YOU FOR YOUR ATTENTION!