

Data Release Notes

Name of the dataset	GRID3 COD - Settlement Names v4.0
Name of the file	<i>GRID3_COD_settlement_names_v4_0.gpkg</i>
Date of data release	February 25, 2025
File format	OGC Geopackage
Dataset version	4.0
Abstract	<p>This document outlines the methodology and data sources used during the production of the GRID3 COD - Settlement Names v4.0 dataset. The dataset consists of settlement points with name and attributes for fourteen provinces in the Democratic Republic of the Congo (COD). Limitations and use constraints are provided.</p> <p>The current version supersedes the GRID3 COD - Settlement Names v3.0. The following changes were made:</p> <ul style="list-style-type: none"> • Updated data for the provinces of Haut-Katanga, Kasai, Kasai-Oriental, Tshopo and Mongala • Data for Sankuru Province have been added. • A data sources table has been included as part of the metadata
Dataset citation	Center for Integrated Earth System Information (CIESIN), Columbia University, Ministère de la Santé Publique, Hygiène et Prévention, Democratic Republic of the Congo, and GRID3. 2025. GRID3 COD - Settlement Names v4.0. New York: Columbia University. https://doi.org/10.7916/fxmb-rg07 . Accessed <DAY MONTH YEAR>.
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Contacts and data queries	The authors of this dataset appreciate feedback regarding the data, including suggestions, discovery of errors, difficulties in using the data, and format preferences. For dataset-related questions, please send an email to: info@ciesin.columbia.edu

I. Data inputs / methodology

To create this dataset, CIESIN designed a consistent data schema and methodology to harmonize information from fourteen provinces, organized into seven groups. These groups are based on the order in which the original data were collected, though the sequencing may not be consistent across all groups.

- Province group 1: Haut-Katanga, Kasai, Kasai-Oriental, Kinshasa, and Lomami
- Province group 2: Haut-Lomami and Tanganyika
- Province group 3: Ituri and Kwilu
- Province group 4: Maniema
- Province group 5: Kasai-Central
- Province group 6: Tshopo and Mongala
- Province group 7: Haut-Katanga, Kasai, and Kasai-Oriental (updates); Sankuru

Province Group 1: Haut-Katanga, Kasai, Kasai-Oriental, Kinshasa, and Lomami

From January to July 2021 with the support of provincial and national health authorities, local healthcare workers (“head nurses”, “health zone management staff”, and “head doctors of the health zones”) and GRID3 GIS specialists (“mappers” and “provincial coordinators”) engaged in a participatory mapping process in Haut-Katanga, Kasai, Kasai-Oriental, Kinshasa, and Lomami. This mapping process occurred at the level of the health zone (an operational unit made up of approximately 15-20 health areas).

Mappers were deployed to health zones in teams of two for approximately nine days where they trained the health area head nurses on data collection using the Geospatial Tracking System (GTS), an Open Data Kit (ODK)-based application. The head nurses routinely work in their respective areas and have a good understanding of the names and location of health facilities, settlements, and points of interest (POIs, such as schools and religious centers) within their health (or catchment) areas.

While the head nurses collected data, the GRID3 mappers worked with the health zone management team to validate and modify data in the field. The GRID3 mappers engaged in a participatory mapping process which included reviewing satellite images with the health zone management team to ensure that the settlement points collected in the field were properly identified, spelled, and in the correct location. They also verified that no settlements were missing. The mappers worked to clean and refine the settlement layer and then presented all of the layers to the health zone head doctor.

Mappers worked with provincial coordinators to consolidate all of the health zones in a provincial settlement layer. These data were sent back to GIS specialists at CIESIN for review province by province between March 2021 and July 2021. GIS specialists identified health areas and health zones with missing settlement information, removed duplicate points, and ensured the attribute table was correct and consistent.

From July 2021 through October 2022, the mappers and provincial coordinators worked with CIESIN staff to consolidate the data (spelling, gaps and overlaps, topology, etc). These data were used to produce health area level basemaps that were shared back with each health zone and province authorities for a second round of validation.

Mappers working from the GRID3 office in Kinshasa filled in missing information and corrected any identified errors by communicating directly with health zone management staff over the phone and checking original field data. The mappers also compared existing data to the GRID3 settlement extents and in cases where large settlement extents had no associated spatial point, they coordinated with the health zones to find a name for the settlement. Duplicate settlement information and settlement points in areas where too many points were collected for the same settlement (usually in urban areas) were removed. Finally, the mappers compared the settlement points to the microplans to try to identify and locate any missing points.

From November 2022 through January 2023, the in-country GIS team worked with CIESIN staff to integrate these corrections into a final geodatabase.

This work was also done with the participation and supervision of the Direction du Système National d'Information Sanitaire (DSNIS). The Agence Nationale d'Ingénierie Clinique, de l'Information et de l'Informatique de Santé (ANICiS) also played an important role in the area of data governance. This work was part of the GRID3 Mapping for Health project.

Province Group 2: Haut-Lomami and Tanganyika

Haut-Lomami and Tanganyika settlement data were originally created through an extensive fieldwork exercise spanning from July to September 2019 and supplemented with additional data from the National Malaria Elimination Programme in the DRC (PNLP).

Table 1: Data sources

Source	Description
PNLP IMA	Programme National de Lutte contre le Paludisme (National Malaria Elimination Programme) of the DRC
CIESIN MSPHP	DRC's Ministry of Public Health (Ministère de Santé Publique) and the Center for International Earth Science Information Systems)

Phase 1: 2019 Field data collection

With the support of provincial and national health authorities, local healthcare workers and GRID3 GIS specialists engaged in a participatory mapping process in Haut-Lomami and Tanganyika from July to September 2019. This mapping process occurred at the health zone level.

Mappers deployed to the health zones organized participatory mapping meetings with local healthcare workers, and trained head nurses to collect settlement, health facility, and other points of interest in their respective health areas using an ODK-based smartphone application. Mappers then used this information to delineate health area boundaries. These data were then sent back to CIESIN for additional quality checks.

Phase 2: Integration of data from the PNLP

In October 2021, GRID3 received access to a large geospatial point dataset collected during a bednet distribution campaign by IMA World Health and owned by PNLP. This dataset was combined and consolidated with GRID3's previous settlement data from these two provinces. Only data from PNLP and GRID3 were used. In total, the PNLP data added more than 3,500 points.

Province Group 3: Ituri and Kwilu

Ituri and Kwilu settlement data were created using settlement point data from the PLNP and combining it with additional data sources (see table 2).

Between 2021 and 2022, GRID3 received PLNP data covering the provinces of Ituri and Kwilu. These data consisted of household-level GPS points with village, health area, and health zone attributes. It had been collected by IMA World Health, an implementing partner of the PNLP, during province-wide bed net distribution campaigns. In Ituri, over 1,165,000 household points were received from a bed net distribution campaign conducted in June 2021. In Kwilu, over 1,191,000 household points were received from a bed net distribution campaign conducted in July 2022. These household points were processed and mapped against the GRID3 settlement extents datasets as a way of validation. Further, the summarized locations of settlements from the PNLP were combined with other data sources in order to compile a geodatabase as complete as possible.

Table 2: Data sources

Acronym	Source Name
OMS GPEI	Initiative Mondiale pour l'éradication de la Poliomyélite (GPEI) & Organisation Mondiale de la Santé (OMS)
PNLP IMA	Programme National de Lutte contre le Paludisme (PNLP)
ESPK	Ecole de Santé Publique de Kinshasa (ESPK) / Enquête de Couverture Vaccinale (ECV)
RGC	Référentiel Géographique Commun
ESPK UCLA	Programme de Recherche et de Formation en Santé, University of California, Los Angeles (UCLA)
CIESIN MSPHP	Center for International Earth Science Information Network (CIESIN)

In Kwilu, the data were verified through fieldwork organized in October 2022. Two GRID3 mappers traveled to Kikwit and Bandudu, respectively, to present the cartographic improvements driven by the use

of the PNLP data and to verify that the boundaries were correctly delineated. The majority of this work was carried out in collaboration with both antenna and provincial level staff.

In Ituri, the data were verified through fieldwork also in October 2022. Four GRID3 mappers traveled to Bunia and Aru, respectively, to validate the health area boundary data in all health zones. GRID3 mappers worked with local health teams, where boundary layers were validated and edited.

All data modifications from both provinces were sent back to CIESIN for final verification before publication. CIESIN ensured that the final layers were free of spelling and topological errors.

Province Group 4: Maniema

The Maniema data were created through an extensive fieldwork data collection conducted by the Kinshasa School of Public Health (Ecole de Santé Publique de Kinshasa, ESPK) and supplemented with additional data from the PLNP.

Table 3. Data sources

Name	Data type/ format	Input data year	Source Acronym
Fieldwork data collected by the Kinshasa School of Public Health (ESPK) in collaboration with GRID3 and CIESIN.	Spatial points	2024	ESPK
Pre-Distribution Registration Survey (PDRS) from the National Malaria Control Programme (PNLP) collected as part of the anti-malaria campaigns in the Democratic Republic of the Congo	Spatial points	2023	PNLP IMA

Phase 1: Integration of data from the PNLP

In October 2021, CIESIN received access to a large settlement point dataset collected during a bednet distribution campaign by IMA World Health. This dataset was explored, cleaned, and matched against pre-existing microplans from Maniema. Unmatched settlement names (i.e. villages in the microplans but not within the PLNP dataset) were marked as priority settlements to collect during fieldwork to obtain their geographic locations.

Phase 2: Field data collection and data processing

ESPK with the support of provincial and national health authorities, local healthcare workers and GRID3 GIS mappers engaged in data collection from October 2023 to January 2024. Teams of enumerators were deployed to collect settlement, health facility, and POI data using an ODK-based tool. GRID3 GIS

specialists then used this information to delineate health area and health zone boundaries. These data were then sent back to CIESIN for final processing and quality checks.

Province Group 5: Kasai-Central

A comprehensive geospatial survey was conducted by ESPK between March and May 2024 in collaboration with GRID3 and partners. Similar as in Maniema, the survey team collected names, geospatial locations, and relevant attribute information of settlements serviced by health authorities of the Kasai-Central province.

Table 4 - Data inputs

Source Name/ description	Data type/ format	Input data year	Source Acronym
Fieldwork data collected by the Kinshasa School of Public Health (ESPK) in collaboration with GRID3 and CIESIN.	Spatial points	2024	ESPK

CIESIN proceeded with data processing, integration, and harmonization steps to create a clean settlement names dataset. Data processing steps included standardization of settlement names and types, as well as clustering to detect anomalies in spatial accuracy and/or attribute information. Visual inspection using Maxar's satellite imagery (2022-2024) was conducted when relevant.

A consistent data schema prioritizing information preservation was also developed to include data fields as per common use cases. A standardized data schema enables seamless integration across subsequent versions of GRID3 settlement names datasets in the DRC.

Province Group 6: Tshopo and Mongala

A comprehensive geospatial survey was conducted by ESPK between March and May 2024 in collaboration with GRID3 and partners. Similar as in Maniema, the survey team collected names, geospatial locations, and relevant attribute information of settlements serviced by health authorities of the Tshopo and Mongala provinces

Phase 1: Integration of data from the PNL

CIESIN extracted and cleaned settlement locations and names contained in the Pre-Distribution Registration Survey (PDRS) data from the National Malaria Control Programme (PNLP), collected in Tshopo and Mongala provinces in 2021 and 2023 respectively. We utilized this preliminary dataset as the baseline during fieldwork.

Table 5 - Data inputs

Source Name/ description	Data type/ format	Input data year	Source Acronym
Pre-Distribution Registration Survey (PDRS) from the National Malaria Control Programme (PNLP) and Soins de Santé primaires en milieu Rural (SANRU) and IMA World Health (IMA), collected as part of the anti-malaria campaigns in the Democratic Republic of the Congo	Spatial points	2021-2023	Tshopo: PLNP SANRU Mongala: PLNP IMA
Data collected in the field between March - May 2024 by the Kinshasa School of Public Health in collaboration with GRID3 and CIESIN.	Spatial points	2024	ESPK

Phase 2: Field data collection and data processing

A comprehensive geospatial survey was conducted by ESPK between March and May 2024 in collaboration with GRID3 and partners. The survey team collected names, locations and other attribute information about settlements serviced by health authorities in both Tshopo and Mongala provinces.

CIESIN conducted data processing, integration, and harmonization to create an enhanced settlement names dataset. Data processing steps included standardization of names and types, as well as clustering to detect anomalies in spatial accuracy and/or attribute information. Visual inspection using satellite imagery was conducted as needed.

Phase 3: Data validation and further data processing

Between October and November 2024, a team of GRID3 mappers returned to the field to present preliminary outputs of the data collected in the first half of 2024. Provincial workshops with local health authorities were conducted. Data gaps and corrections in some health zones were completed during this round, as security concerns prevented fieldwork to take place in those areas.

Both GRID3 and CIESIN conducted further data processing, integration, and harmonization of data corrections received from the field. A consistent data schema prioritizing information preservation was followed to include data fields as per common GRID3 protocol.

Province Group 7: Haut-Katanga, Kasai, Kasai-Oriental, Mongala, Tshopo and Sankuru

The following data sources were used to create the GRID3 COD - Haut-Katanga, Kasai, Kasai-Oriental, Sankuru - Settlement Names - Unpublished dataset.

Table 6- Data sources

Source Name/ description	Data Type/Format	Input Year
1- GRID3 COD - Settlement Names v3.0	OGC Geopackage	2022-2024
2- GRID3 COD - Haut-Katanga - Settlement Names v1.1L	OGC Geopackage	2024
3- Field data collected between March and May 2024 by GRID3 mappers.	Spatial points	2024
4 - Pre-Distribution Registration Survey (PDRS) from the National Malaria Control Programme (PNLP) collected as part of the anti-malaria campaigns in the Democratic Republic of the Congo between 2022 and 2023.	Spatial points	2022- 2023
5 - Field data collected as part of routine surveillance performed by the Elongated Programme of Immunization (EPI/PEV) with the support of Acasus. Includes instances of settlement names and points of interest (POI) data collected in hard-to-reach areas.	Spatial points	2018- 2024

A data gap analysis was conducted in Haut-Katanga, Kasai, and Kasai-Oriental to guide fieldwork plans in these three provinces using existing data from 2021–2022. The Sankuru data collection, completed by GRID3, was incorporated through extensive fieldwork and further supplemented with additional data from the PLNP.

Phase 1: Data Preprocessing

PNLP's pre-distribution registration data were processed and integrated to improve the spatial coverage and attributes of settlement name datasets in Haut-Katanga and Kasai Provinces (i.e., [GRID3 COD - Settlement Names v3.0](#) and GRID3 COD - Haut-Katanga - Settlement Names v1.1L). For Sankuru Province, settlement names were produced for the first time using these data, ensuring alignment with the established methodology. In the case of Kasai-Oriental, the baseline dataset was derived directly from [GRID3 COD - Settlement Names v3.0](#).

Phase 2: Field Data Collection

Between March and May 2024, GRID3 mappers collected geographic locations, names, and other relevant information about settlements in Haut-Katanga, Kasai, Kasai-Oriental, and Sankuru. Priority was given to settlements with no prior data, especially those in hard-to-access areas or challenging terrain. Data collected by EPI's local health teams as part of the polio special strategies (targeting inaccessible villages not covered by routine vaccination activities) were also received between June and October 2024. During this period, GRID3 consolidated and processed all field data before submitting it to CIESIN for final integration. Comprehensive sanity checks and spatial consistency controls were conducted, with regular consultations with field teams to resolve conflicts and ambiguities.

Phase 3: Data Integration and Quality Checks

CIESIN performed rigorous quality checks to ensure consistency in geographic locations and attributes across the spatial data layers for all four provinces. All data were standardized to align with the GRID3 data schema, enabling seamless integration with previously released settlement name datasets. Maxar/ESRI satellite imagery was utilized to address ambiguities and resolve inconsistencies as needed.

II. Dataset Description

The GRID3 COD - Settlement Names v4.0 dataset consists of spatial point data with attribute information (see table 7). The data are available for download in OGC Geopackage format contained in a zip file; a metadata file in XML format and a Data Sources table in CSV format are also included.

Table 7: Codebook

Variable Names	Type	Definition
OBJECTID	numeric	Software- generated unique code
pays	text	Country name: République démocratique du Congo
iso3	text	ISO3 code: COD
province	text	DHIS2 province name
prov_uid	text	DHIS2 province code
antenne	text	Antenna name
zonestante	text	DHIS2 health zone name
zs_uid	text	DHIS2 health zone code
airesante	text	DHIS2 health area name
as_uid	text	DHIS2 health area code
localite	text	Settlement name
localitytype	text	Type of administrative entity (locality, avenue, block, etc.)

Variable Names	Type	Definition
enclav	text	Site isolation at certain times of the year
enclavdate	text	If isolated, during which quarter of the year?
date	text	Year of data collection or last edit/modification
source_acronym	text	Acronyms of the organizations, institutions or programs who were involved in the creation of the data input.
sourceid	text	Unique identifier referring to each specific data input. The sourceid allows users to link each data record with the corresponding source reference in the Data Sources table (included as a separate file).
lat	numeric	Latitude in decimal degrees
lon	numeric	Longitude in decimal degrees
precision	numeric	Precision of GPS coordinates indicating the tolerance in meters.
grid3id	text	Internal GRID3 ID

III. Known Data Limitations and Disclaimer

The spatial accuracy of the settlement names data are dependent on both the accuracy of the input data as well as on the correctness of the edits made throughout the validation process. In general, it was assumed that the field-collected data were more accurate than secondary sources. Temporal mismatches may exist among this dataset and the satellite imagery used to perform quality checks. This may lead to settlements not being identified or the inclusion of abandoned settlements. Likewise, spelling mistakes and/or mismatches may have occurred due to colloquial variations on how data points are referred to in the field.

This dataset should be considered operational; it has not been fully validated by government officials.

CIESIN, Columbia University, and its co-authors follow procedures designed to ensure that data disseminated by the project are of reasonable quality. If, despite these procedures, users encounter apparent errors or misstatements in the data, they should contact CIESIN, info@ciesin.columbia.edu.

CIESIN, Columbia University, its co-authors, and their sponsors do not guarantee the accuracy, reliability, or completeness of any data provided. We provide these data without warranty of any kind whatsoever, either expressed or implied, and shall not be liable for incidental, consequential, or special damages arising out of the use of any data provided.

IV. Acknowledgments

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Caritas.
Centers for Disease Control and Prevention (CDC).
Direction d'Etudes et Planification (DEP).
Direction des Soins de Santé Primaires (DSSP).
Division du Système National d'Informations Sanitaires (DSNIS).
Division Provinciale de la Santé (DPS) de Haut-Katanga, Haut-Lomami, Ituri, Kasai, Kasai-Central, Kasai-Oriental, Kinshasa, Kwilu, Lomami, Maniema, Mongala, Sankuru, Tanganyika, et Tshopo.
Ecole de Santé Publique de Kinshasa (ESPK).
Gavi, the Vaccine Alliance.
Geospatial Evaluation and Observation Lab (geoLab), College of William & Mary.
Global Affairs Canada (GAC).
Global Good.
IMA World Health,
Initiative Régionale de Documentation et d'Accompagnement Communautaire au Développement (IDRAC Sarl).
International Federation of Red Cross and Red Crescent Societies (IFRC).
International Medical Corps (IMC).
Médecins Sans Frontières (MSF).
Ministère de l'Environnement et Développement Durable (MEDD).
Ministère de la Santé publique, Hygiène et Prévention,
Novel-T.
Open Street Map (OSM).
PATH.
Programme Elargi de Vaccination (PEV).
Programme National de Lutte contre le Paludisme (PNLP).
Référentiel Géographique Commun (RGC).
Soins de Santé Primaires en Milieu Rural (SANRU).
The International Organization for Migration (IOM).
United Nations Children Fund (UNICEF).
United Nations Development Programme (UNDP).
United Nations Office for Project Services (UNOPS). Denmark and CO
United Nations Office for the Coordination of Humanitarian Affairs (OCHA).
United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO).
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VillageReach.

World Health Organization (WHO) - HQ, AFRO, CO.

World Resources Institute (WRI).

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V. Appendix 1 - Data Sources Table

Table 8: Data Sources

Source Acronym	Sourceid	Citation
BLSQ	BLSQ_001	Bluesquare (compiled by) Health facilities. 2022. Bluesquare - IASO. Accessed on 2022.
CIESIN MSPHP	CIESIN_MSPHP_001	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Haut-Katanga. 2021. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on July 2021.
CIESIN MSPHP	CIESIN_MSPHP_002	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Lualaba. 2021. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on July 2021.
CIESIN MSPHP	CIESIN_MSPHP_003	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Kasai-Oriental. 2021. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on July 2021.
CIESIN MSPHP	CIESIN_MSPHP_004	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Kasai. 2021. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on July 2021.
CIESIN MSPHP	CIESIN_MSPHP_005	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Kinshasa. 2021. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on July 2021.
CIESIN MSPHP	CIESIN_MSPHP_006	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Lomami. 2021. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on July 2021.
CIESIN MSPHP	CIESIN_MSPHP_007	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Kwilu. 2021. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on 2022.
CIESIN MSPHP	CIESIN_MSPHP_008	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlement names and health facilities - Ituri. 2022. GRID3 - Cartographie pour la Santé/ Mapping for Health (M4H). Accessed on 2022.
CIESIN MSPHP	CIESIN_MSPHP_009	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: health facilities - Haut-Lomami and Tanganyika. 2019. GRID3 - Mapping Portfolio Accessed on August 9, 2019

CIESIN MSPHP	CIESIN_MSPHP_010	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlements - Haut-Lomami. 2019. GRID3 - Mapping Portfolio Accessed on 2019.
CIESIN MSPHP	CIESIN_MSPHP_011	Center for International Earth Science Information Network (CIESIN) and Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Fieldwork data: settlements - Tanganyika. 2019. GRID3 - Mapping Portfolio Accessed on 2019.
DSNIS	DSNIS_001	Direction du Système National d'Information Sanitaire (DSNIS). Health facilities. n.d. Bluesquare - IASO. Accessed on March 16, 2022.
DSNIS	DSNIS_002	Direction du Système National d'Information Sanitaire (DSNIS). District Health Information System 2 (DHIS2) - Health facilities. 2024. Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Accessed on November 11, 2024.
ESPK	ESPK_001	École de Santé Publique de Kinshasa (ESPK). Enquête de la Couverture Vaccinale (ECV) Chez les Enfants de 6-23 mois - Liste des établissements de santé (2020). 2020. Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Accessed in 2022.
ESPK	ESPK_002	Ecole de Santé Publique de Kinshasa (ESPK). Enquête de la Couverture Nationale de Vaccination (2021-2022). 2021-2022 Ministère de la Santé Publique, Hygiène et Prévention (MSPHP). Accessed on 2023.
ESPK	ESPK_003	École de Santé Publique de Kinshasa (ESPK). Fieldwork data: settlement names, health facilities, and points of interest - Maniema. 2024. GRID3 - Phase 2 Accessed on February 2024.
ESPK	ESPK_004	École de Santé Publique de Kinshasa (ESPK). Fieldwork data: settlement names, health facilities, and points of interest - Mongala. 2024. GRID3 - Fonds Accélérateur d'Equité (FAE) en RDC. Accessed on November 2024.
ESPK	ESPK_005	École de Santé Publique de Kinshasa (ESPK). Fieldwork data: settlement names, health facilities, and points of interest - Tshopo. 2024. GRID3 - Fonds Accélérateur d'Equité (FAE) en RDC. Accessed on November 2024.
ESPK	ESPK_006	École de Santé Publique de Kinshasa (ESPK). Fieldwork data: settlement names, health facilities, and points of interest - Kasai-Central. 2024. GRID3 - Phase 2 Accessed on July 2024.
ESPK GRID3 CIESIN	ESPK_GRID3_CIESIN_001	École de Santé Publique de Kinshasa (ESPK), GRID3, and Center for Integrated Earth Science Information (CIESIN). Fieldwork data: settlement names, health facilities, and points of interest - Kasai-Central. 2024. GRID3 - Phase 2 Accessed on July 2024.
ESPK GRID3 CIESIN	ESPK_GRID3_CIESIN_002	École de Santé Publique de Kinshasa (ESPK), GRID3, and Center for Integrated Earth Science Information (CIESIN). Fieldwork data: settlement names, health facilities, and points of interest - Maniema. 2024. GRID3 - Phase 2 Accessed on January 2024.
ESPK GRID3 CIESIN	ESPK_GRID3_CIESIN_003	École de Santé Publique de Kinshasa (ESPK), GRID3, and Center for Integrated Earth Science Information (CIESIN). Fieldwork data: settlement names, health facilities, and points of interest - Mongala. 2024. GRID3 - Fonds Accélérateur d'Equité (FAE) en RDC. Accessed on June 2022.
ESPK GRID3 CIESIN	ESPK_GRID3_CIESIN_004	École de Santé Publique de Kinshasa (ESPK), GRID3, and Center for Integrated Earth Science Information (CIESIN). Fieldwork data: settlement names, health facilities, and points of interest - Tshopo. 2024. GRID3 - Fonds Accélérateur

		d'Équité (FAE) en RDC. Accessed on June 2022.
ESPK UCLA	ESPK_UCLA_001	École de Santé Publique de Kinshasa (ESPK) and University of California, Los Angeles. Villages - Kwilu. 2017. Accessed in 2018.
ESPK UCLA	ESPK_UCLA_002	École de Santé Publique de Kinshasa (ESPK) and University of California, Los Angeles. Boundaries - Vaccination Health Areas 2018. Accessed on October 2018.
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