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What We Do

SURVEY TYPES

[Demographic & Health Survey \(DHS\)](#)[AIDS Indicator Survey \(AIS\)](#)[Service Provision Assessment \(SPA\)](#)[Malaria Indicator Survey \(MIS\)](#)[Key Indicators Survey \(KIS\)](#)[Other Quantitative Surveys](#)[Qualitative Research](#)

SURVEY SEARCH

[All by Country](#)[All by Survey Type](#)[All by Year](#)[All by Characteristics](#)[Recent/Ongoing Surveys](#)

METHODOLOGY

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GPS Data Collection

Methodology - Collecting Geographic Data

In most recent DHS surveys, the groupings of households that participated in the survey, known as clusters, are geo referenced. These survey cluster coordinates are collected in the field using GPS receivers, usually during the survey sample listing process. In general, the GPS readings for most clusters are accurate to less than 15 meters. Additional GPS data collection information is available in the [GPS data collection manual](#).

In order to ensure that respondent confidentiality is maintained, we randomly displace the GPS latitude/longitude positions for all surveys, including those that do not have HIV testing. The displacement is randomly carried out so that:

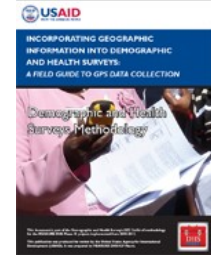
- Urban clusters contain a minimum of 0 and a maximum of 2 kilometers of error.
- Rural clusters contain a minimum of 0 and a maximum of 5 kilometers of positional error with a further 1% of the rural clusters displaced a minimum of 0 and a maximum of 10 kilometers.

The displacement is restricted so that the points stay within the country and within the DHS survey region. In surveys released since 2009 the displacement is restricted to the country's second administrative level where possible.

For clusters without GPS readings, other means are used to determine the coordinates. Coordinates may be extracted from a paper map or a gazetteer of settlement names. For some surveys, cluster coordinates are extracted from preexisting census data provided by the country's census agency/ministry. Regardless of the source, all collected coordinates are always checked for accuracy before they are displaced and then released to the public. The source of the coordinates (GPS, map, gazetteer) is reported in the geographic data file that is released to the public. The [DHS GPS data format](#) provides detailed information about what information is available in each publicly-released geographic data file.

Download Documents

Guidance on how to use Geographic Information



A Field Guide to GPS Data Collection

[DHS GPS Data Format](#)
(pdf, 64 KB)

Resources

[ATLAS REPORTS](#)[GIS BLOG POSTS](#)[GIS FAQ](#)[SDR GALLERY](#)[GIS TUTORIALS](#)[SPATIAL ANALYSIS REPORTS](#)