
Subject: Re: Merging point to polygon map
Posted by [Thea-DHS](#) on Mon, 13 May 2013 15:53:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

Each GPS dataset is in shapefile format for use in a Geographic Information System (GIS) software package. QGIS (<http://qgis.org/>) is a good free software option if you do not have access to paid GIS software products. GADM (<http://www.gadm.org/country>) is a good source of administrative shapefiles to use within GIS. You may then perform a spatial join using the GPS data and the administrative shapefiles within GIS to determine the administrative area for each cluster. Please note that 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.

Caution is advised when reclassifying survey clusters to areas that are smaller than DHS regions, as the survey was not designed to be representative below the DHS regions level.

Message #193 (http://userforum.measuredhs.com/index.php?t=msg&th=108&#msg_255) contains specific information about using Nigeria GPS datasets.
