
Subject: Displacement of GIS data
Posted by [DHS user](#) on Fri, 15 Feb 2013 14:44:03 GMT
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How are GPS data displaced?

Subject: Re: Displacement of GIS data
Posted by [Sarah-DHS](#) on Fri, 15 Feb 2013 14:46:27 GMT
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GPS clusters are randomly displaced up to 2km for urban clusters and up to 5km for rural clusters, with 1% of rural clusters displaced up to 10km. For more detailed information, see the GPS Data Collection page on the DHS website.

Subject: Re: Displacement of GIS data
Posted by [gmanthalu](#) on Fri, 31 May 2013 11:58:52 GMT
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How does this affect accuracy of results for analysis? For instance if I am linking health care facility information and DHS information to investigate how distance to a health care facility affects utilisation of health care.

Subject: Re: Displacement of GIS data
Posted by [Thea-DHS](#) on Fri, 21 Jun 2013 12:58:51 GMT
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A detailed report on the effect of the displacement on analysis is currently being written and will be released in the coming months. Our recommendation to account for the GPS displacement in your analysis is to use categories of distances instead of measuring direct distances. The categories of distances should be similar to the potential distances applied during the displacement procedure (up to 2km for urban clusters, and up to 5km for rural clusters, with a further 1% of rural clusters displaced up to 10km). For example, a 0-5km distance category would be appropriate, but 0-0.5km would not be appropriate since it does not account for the full potential displacement distance of either urban or rural clusters.

Additionally, displacement will have a large effect on linking clusters to a specific facility (ie closest) versus linking to any facility within a certain distance of the cluster. That is if you are interested in general access to facilities this doesn't matter but if you are using information on quality or type of car from a specific facility this becomes an issue.

Also, please note that many of the surveys include a variable that lists whether women consider distance to a health facility a big problem when seeking medical advice or treatment.

Subject: Re: Displacement of GIS data
Posted by [gmanthalu](#) on Mon, 24 Jun 2013 10:39:05 GMT
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Thanks for that response

Subject: Re: Displacement of GIS data
Posted by [WilmQu](#) on Thu, 03 Oct 2013 14:14:23 GMT
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Does the displacement procedure respect land borders?
I am analysing data from Abidjan, a city consisting of several islands. If I see that a cluster is located on one island, can I be sure that the data was recorded on that island? Or may the displacement procedure displace the GPS data point to another island?
Thank you very much in advance and all the best from Abidjan
Wilm

Subject: Re: Displacement of GIS data
Posted by [Thea-DHS](#) on Mon, 07 Oct 2013 20:01:34 GMT
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It is indeed possible for a cluster to be displaced across a body of water. The displacement of the Cote d'Ivoire 2012 DHS data was restricted at the second administrative level (the department), so if two islands are in the same department and within the maximum displacement distance of each other, then it is possible for a cluster to be displaced from one to the other.

For more information about our geographic displacement procedure, you may be interested in consulting our recent publication in the Spatial Analysis Reports series:
<http://measuredhs.com/publications/publication-SAR7-Spatial-Analysis-Reports.cfm>.
