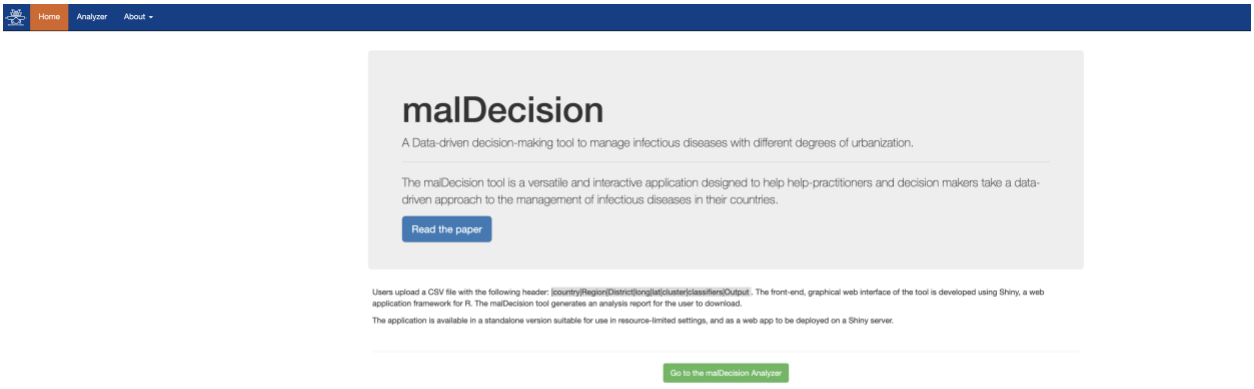
malDecision
Interactive Tool for informed-decision-making

malDecision user guide

Table of Contents

What is malDecision?

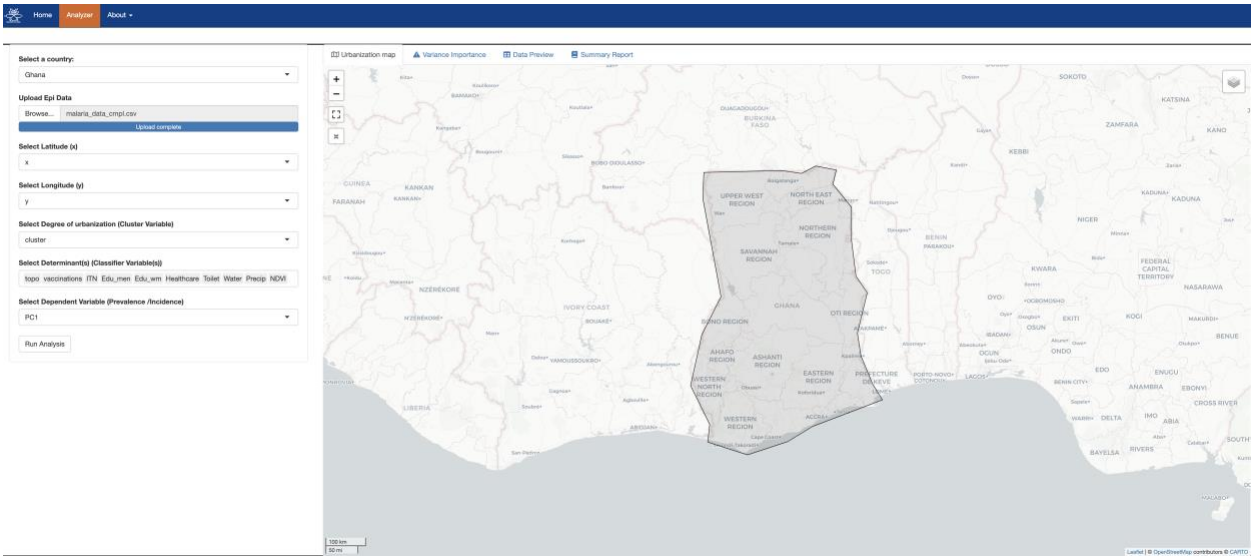
Data-driven decision-making to manage infectious diseases throughout the country with different degrees of urbanization. This tool is versatile and interactive.
The home page of malDecision briefly presents the tool and introduces the reference paper where the tool has been introduced.



How to use the app?

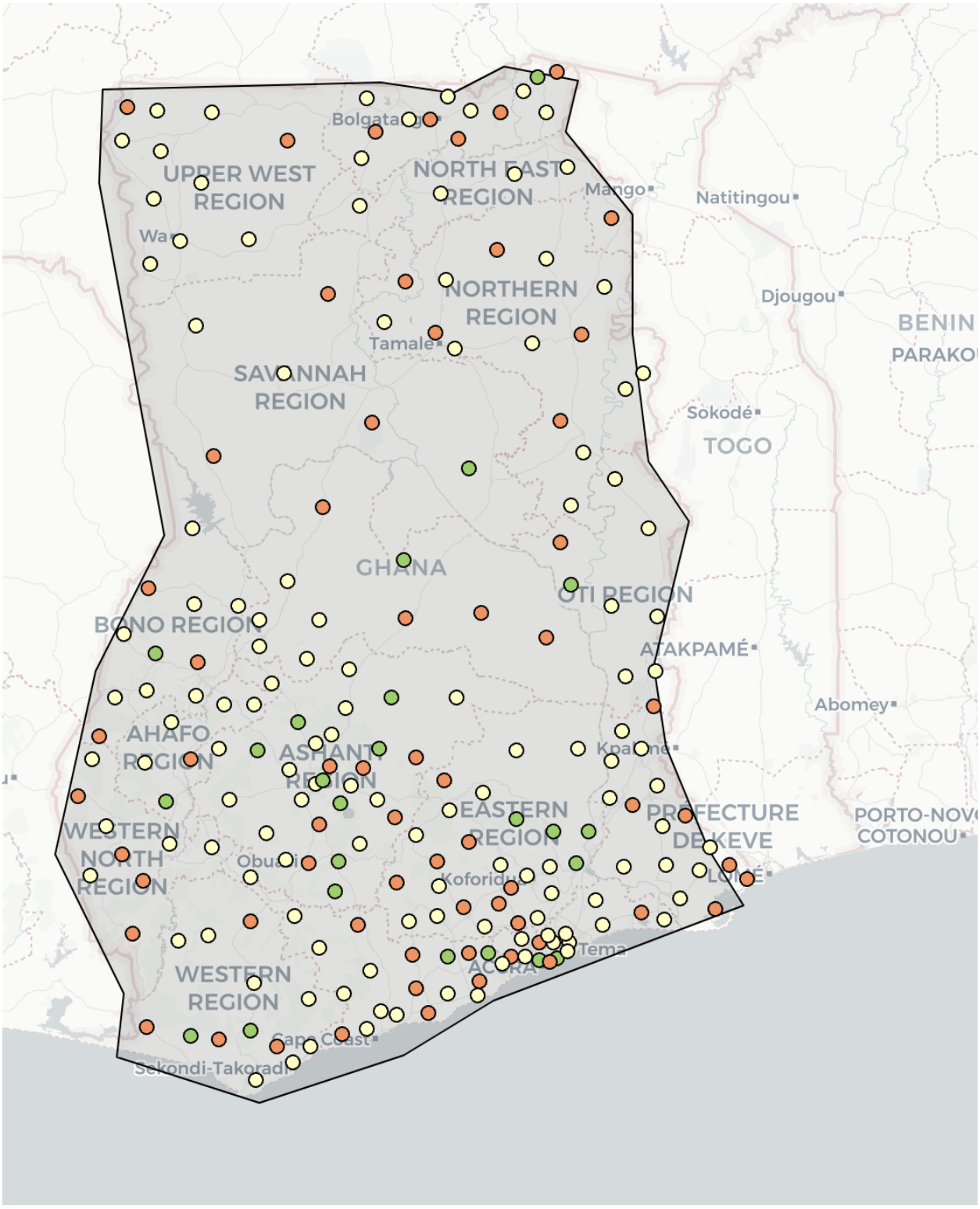
Please insert a CSV file formatted as follows. A template of the file can be downloaded here.
|country|Region|District|long|lat|cluster| classifiers| Output
Clusters represent the degree of urbanization of the area and classifiers represent the factors that determine access. The output variable represents the variable to be predicted, such as prevalence or incidence.

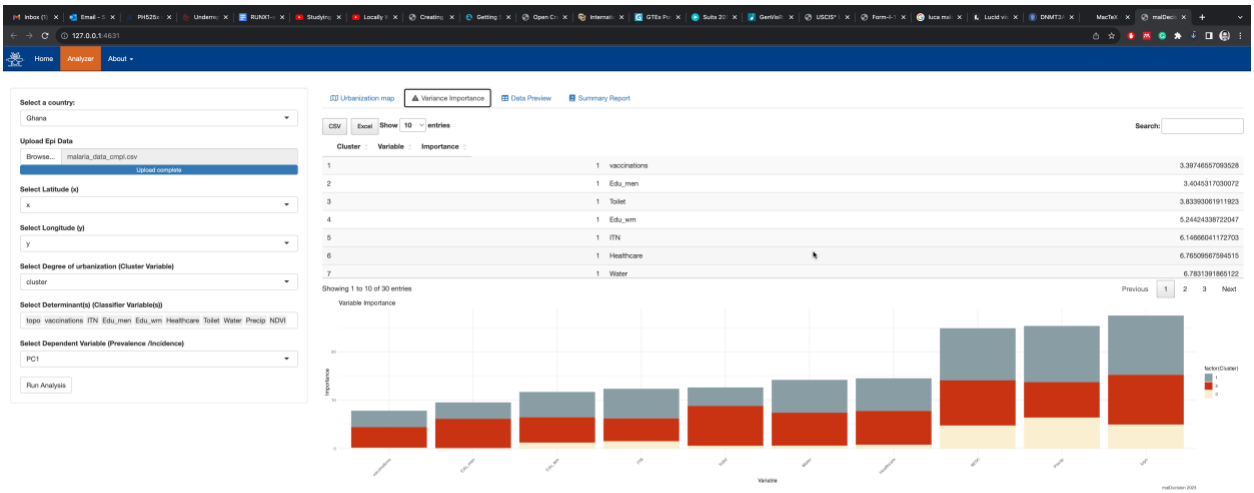
After choosing the country, the study areas were selected. In the left panel, the user can upload his dataset and select his variables.



After selecting the variables of interest for the users and clicking on the button run analysis, results are shown starting from the interactive map to the list of variables ordered by importance for each degree of urbanization.

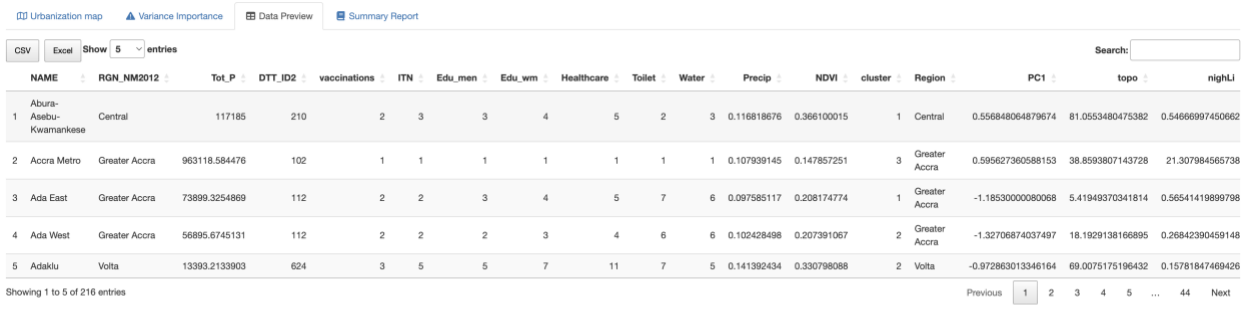
1. Load the file.
2. Choose a variable cluster that represents the degree of urbanization.
3. Select the classifiers (topo, precipitation, etc.) that represent the determinants.
4. Choose the output variable (PC1)
5. With a single click, you can run the analysis.


UPPER WEST REGION
NORTH EAST REGION
NORTHERN REGION
SAVANNAH REGION
BONO REGION
AHAFO REGION
ASHANTI REGION
EASTERN REGION
WESTERN NORTH REGION
WESTERN REGION
GHANA
OTI REGION
PREFECTURE DE KEVE
Bolgatanga
Wa
Tamale
Mango
Natitingou
Djougou
BENIN
Sokodé
TOGO
ATAKPAMÉ
Abomey
Kpalimé
PORTO-NOVO
COTONOU
Obuasi
Koforidua
Tema
ACCRA
Cape Coast
Sekondi-Takoradi



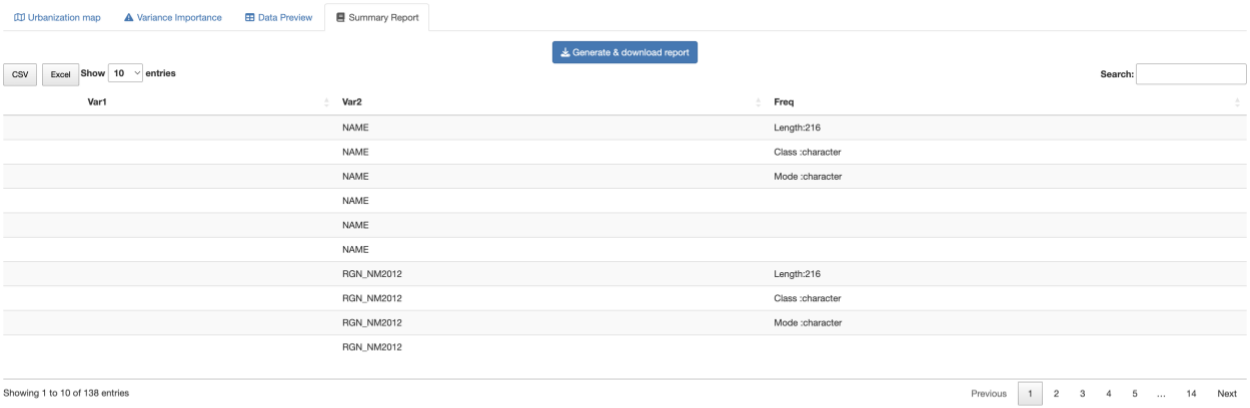
127.0.0.1:4631/#tab-1713-2

Urbanization map
Variance Importance
Data Preview
Summary Report
CSV
Excel
Show 10 entries
Search:
Cluster Variable Importance
1 1 vaccinations 3.39746557093528
2 1 Edu_men 3.4045317030072
3 1 Toilet 3.83393061911923
4 1 Edu_wm 5.24424338722047
5 1 ITN 6.14666041172703
6 1 Healthcare 6.76509567594515
7 1 Water 6.7831391865122
Showing 1 to 10 of 30 entries
Previous 1 2 3 Next
Variable Importance
Importance
Variable
factor(Cluster)



	NAME	RGN_NM2012	Tot_P	DTT_ID2	vaccinations	ITN	Edu_men	Edu_wm	Healthcare	Toilet	Water	Precip	NDVI	cluster	Region	PC1	topo	nighLi
1	Abura-Asebu-Kwamankese	Central	117185	210	2	3	3	4	5	2	3	0.116818676	0.366100015	1	Central	0.556848064879674	81.0553480475382	0.54666997450662
2	Accra Metro	Greater Accra	963118.584476	102	1	1	1	1	1	1	1	0.107939145	0.147857251	3	Greater Accra	0.595627360588153	38.8593807143728	21.307984565738
3	Ada East	Greater Accra	73899.3254869	112	2	2	3	4	5	7	6	0.097585117	0.208174774	1	Greater Accra	-1.18530000080068	5.41949370341814	0.56541419899798
4	Ada West	Greater Accra	56895.6745131	112	2	2	2	3	4	6	6	0.102428498	0.207391067	2	Greater Accra	-1.32706874037497	18.1929138166895	0.26842390459148
5	Adaklu	Volta	13393.2133903	624	3	5	5	7	11	7	5	0.141392434	0.330798088	2	Volta	-0.972863013346164	69.0075175196432	0.15781847469426

Moreover, users can download a custom pdf report showing the results of the analysis. Besides, users can download the Excel sheet showing the importance of the variables by the degree of urbanization.



Var1	Var2	Freq
	NAME	Length:216
	NAME	Class :character
	NAME	Mode :character
	NAME	
	NAME	
	NAME	
	RGN_NM2012	Length:216
	RGN_NM2012	Class :character
	RGN_NM2012	Mode :character
	RGN_NM2012	