Ghana Meteorological Maproom Critique

Abib Duut

February 12, 2016

Introduction

This document is a critique of the Ghana Meteorological Agency (GMet) Maproom which was setup in June 2015 with support from the International Research Institute for Climate and Society (IRI) under Tufa Dinku's ENACTS, and the CASCAID project. The project is to provide access to IRI's data library, to help developing countries make use of their data, and to help improve the quality of data and analysis. I will herein discuss under four main headings: products,content, usability,call to action and navigation the current implementation of the Ghana Meteorological Maproom, and would compare it where useful with some or all of the other maprooms implemented in other countries in Africa including Madagascar, Gambia, Rwanda and Tanzania.

The Ghana Meteorological Maproom

The GMet maproom is an arm for the ENACTS programme which seeks to improve data access, and climate information for informed decision making in Africa.

The Maproom provides access to IRI's data library which give users a rich source of grided and satellite data that users can download data, it provides access to climate analysis and also it provides access to applications of climate information in particular, Health.

The Maproom also provides access to SERVIR GLOBAL's web portal.SERVIR GLOBAL is a joint initiative by NASA and USAID to *help make developing countries use information provided by Earth observing satellites and geo-spatial technologies for managing climate risks and land use.*

The SERVIR GLOBAL portal offers there main services via is portal. First, is a data catalog that give access to satellite data for download in a variated formats. Second, a geo-portal where users can , access, display, animate data layers, they can also explore data layers by overlaying them with other datasets for analysis.Third, it provides users with training information and training materials which is particularly useful for meteorological service officers and climatic enthusiasts.

Currently, SERVIR is in South America, East - South Africa and some parts of Asia.

Naming Conventions

Though a minor detail there is an inconsistency in the spelling of Maproom sometimes it is spelled "maproom" other times "map room".

Recommendation

I think changing the name from Maprooms to Interactive Maprooms would at least make a user want to interact with the maps.

Content

Section Labels

The section labels are the labels assigned to a section on the pages of the maproom. For example,Climate is a section label to one of the three main sections of the GMet maproom. As shown in the figure below.

There is a good use of color in the section labeling which helps user to identify what is *clickable* and what is not. This is consistent within a maproom and across maprooms, this is good use of color is consistent across maprooms in Madagascar, Gambia, and Tanzania.

Though there is consistent good use of color this is not true for the labeling itself; this is not a general case it only for Ghana and Gambia where **Climate and Malaria** are used instead of a more general term: Health. Using a more general term would allow for easy extensions of climate products, so for example if one wanted to add how climate related with Cholera or Meningitis this would go on the
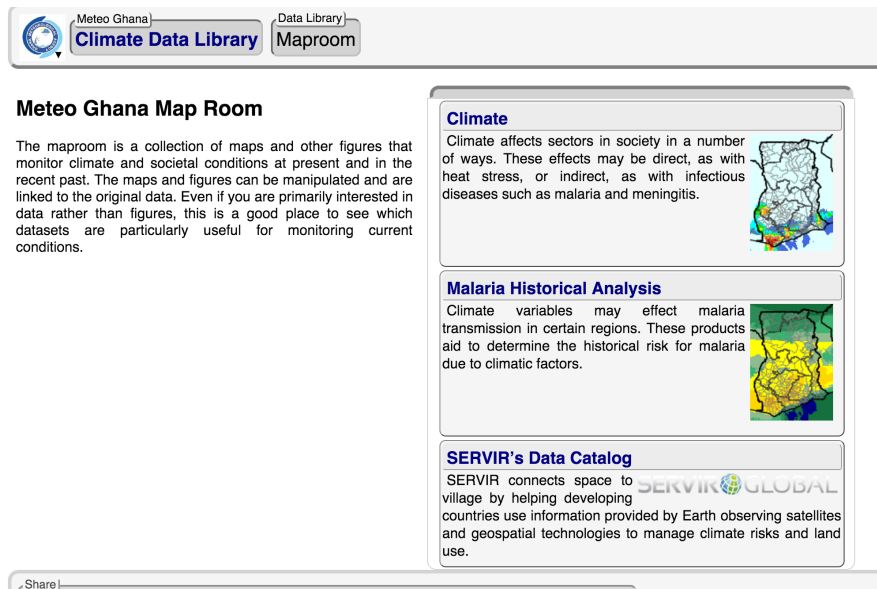
subpage of **Climate and Health** instead of creating another section for Meningitis or Cholera or both. Eventually the page would be overwhelmed with information that it would not be appealing to a user.

Madagascar and Ethiopia meteorological services have adopted this neat form of labeling which would be useful in the future in terms of organization.

Animation

The use of animation of the maps is an nice feature that adds gives hint at the the interactiveness of maps though these maps in themselves are not interactive.

Despite its usefulness there is not a consistent use of the animation feature on the pages of the maproom almost across all maprooms. Madagascar's maproom does not use this feature; in this sense there is a consistent use(no animation), and user would not *wonder why?*. This inconsistent use takes away from the formal look and feel of the maproom.

Recommendation

There should be some consistency to the use of animation for the GMet Maproom.

The Interactive Maps

The interactive maps are generally fine. They provide analysis per grid or for a region on the map of Ghana; though being able to do this for daily data would be more desirable.

Currently, the Tabs of options, and options boxes that are used with these maps seems rather hidden and secluded. ;Particularly for the options tabs for downloads and sharing of the user chosen maps which are active on cursor movement; it would be better if they were not, and were always visible to the user. This current implementation could be confusing for a user who for instance reads the instructions in the left panel of the window before using the maps.

This is perhaps a minor detail; and it is a note on terminology; however; it would make a world of difference : the use of interactive maprooms instead of maprooms would make it easier for users to interact with the maprooms.

Recommendation

Accompanying Text

The accompanying text for the different maps are the same for the different Met stations including Tanzanian Meteorological Service, Kenya Meteorological Service.

Recommendation

Apart from the years that are different for the meteorological stations the text is the same, thus there is not personalization of the text across maprooms. However, country specific information on the climate where relevant could be shared. Another area it suffers is the time scale of data for analysis. Currently all its analysis is done on 10 daily.

Usability

The webpage user interface is clear and easy to use; and the IRI uses a clear, consistent structure and layout across maprooms; this off course means that users of

familiar with maprooms from another country can easily use maprooms of another country. So meteorological services officers of Ghana skilled in the use of maproom can easily use the maproom of that of Gambia's.

Recommendation

Also here, there is little to do by way of improvement.

Navigation

The navigation is consistent and easy to follow on a maproom and across maprooooms. This is the by far the strongest feature of the maproom.

The pages do not take too long to load, there are not many unnecessary sub pages before an actual analysis or product of interest.

Recommendation

The is little to do here by way of improvement. Perhaps, another look would reveal something.

Call to Action

There is absolutely nothing on this on the maproom page. Neither is there anything for feedback. It makes it seem the maproom is a playground where users interact with maps and download their results.

Recommendation

This link could lead to contact pages where users would get in touch with service officers for more information or to request a products.

There could also be feedback links that allow users to suggest products they would like to see, or ways the *maproom service* could serve them better.

Products

The current implementation of the maproom offers a good blend of products and services namely data from the IRI data catalog and a range of climate information and analysis. So a user has at a click of a button climate information for every point of the grid in Ghana or Tanzania, Gambia or Madagascar. This is main feature of the maproom is provided by all the meteorological services with this current implementation.

There is also information on how climate relates to health as an example of an application. But there are other applications of climate information including construction, and energy for which nothing is shown.

Recommendation

This is the biggest area of further work. Thus it would be useful then to consider work in this ares so that we can reach a wider consumer base different from those in agriculture and health.

Conclusion

In summary the GMet maproom offers a users information on some relevant application as well. However, it has little to offer to the broader public working in construction, and energy for example.