

MIMU



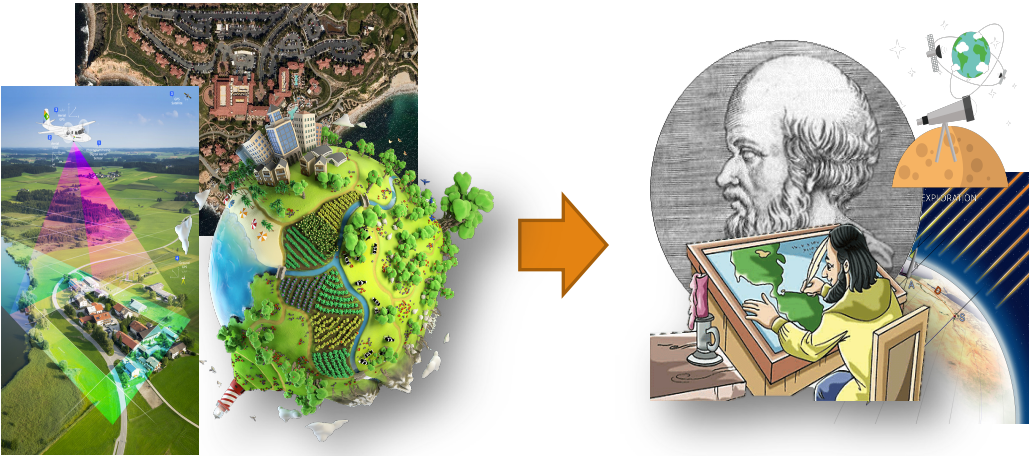
- MapX Basic Concepts

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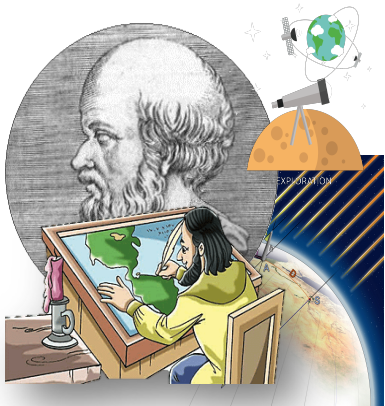
June 2021

# Basic Concepts – Web Mapping

A Web mapping or an online mapping is the process of using the maps delivered by Geographic Information Systems (GIS) on the Internet, more specifically in the World Wide Web (WWW).



Real World



GIS/IT  
Cartographers



Maps

STATIC



Online Maps

INTERACTIVE



# Basic Concepts – MapX

## What is?

- MapX is an online open-source application for spatial data visualization
- It is hosted on a Swiss cloud infrastructure
- It is currently available in five languages (English, French, Spanish, Dari & Pashto)
- No programming capacity is required for accessing geospatial data, conducting data analysis, and building story maps
- MapX has been optimized for low Internet bandwidths and connectivity
- MapX has been developed following interoperability standards



## What can be displayed?

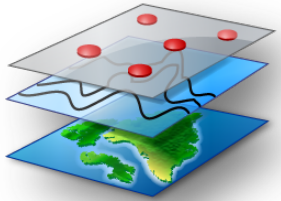
- Spatial data stored in the MapX database (vector)
- Spatial data streamed from external sources (raster and vector)
- Statistical data and charts associated to the geospatial data
- Products for story telling based on spatial data, text, images, videos and whatever other content is needed (story maps)



# Basic Concepts – MapX

## What is a source layer in MapX:

- Spatial data that can be displayed through the use of views
- A source layer can be stored in MapX (vector layer)
- External repositories (vector and raster layers)
- New vector sources are added through MapX UI and their metadata is managed by their publisher



## What is a view in MapX?

- Object that can be selected for visualization through the MapX web interface



## Link between a view and a source layer

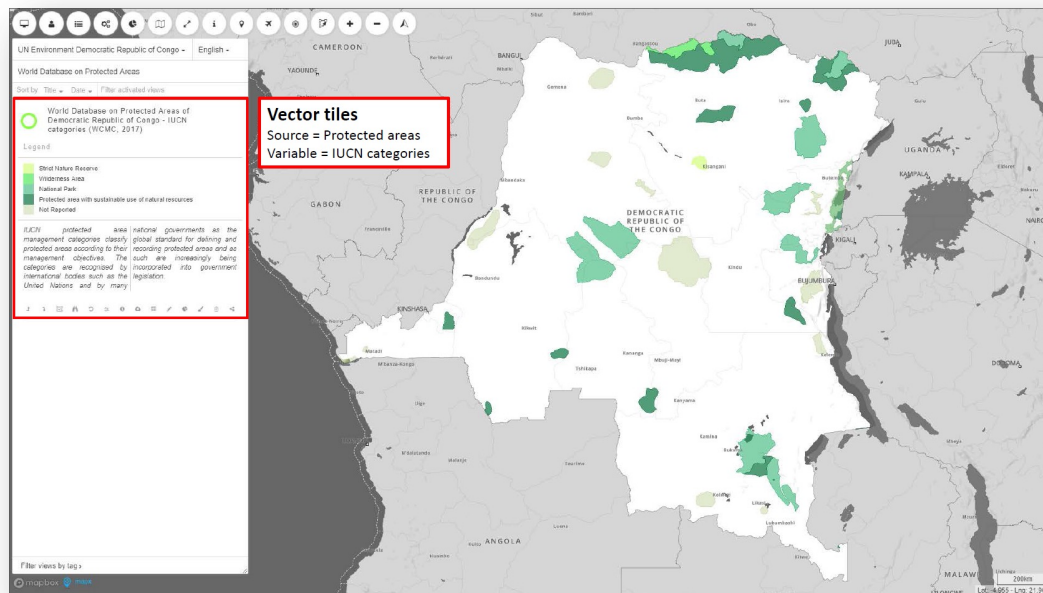
- A view is strictly related to one source layer
- Metadata of the source layer can be consulted from view's properties
- If the license/source permits allows it, the source layer can be downloaded from the view



# Basic Concepts – MapX

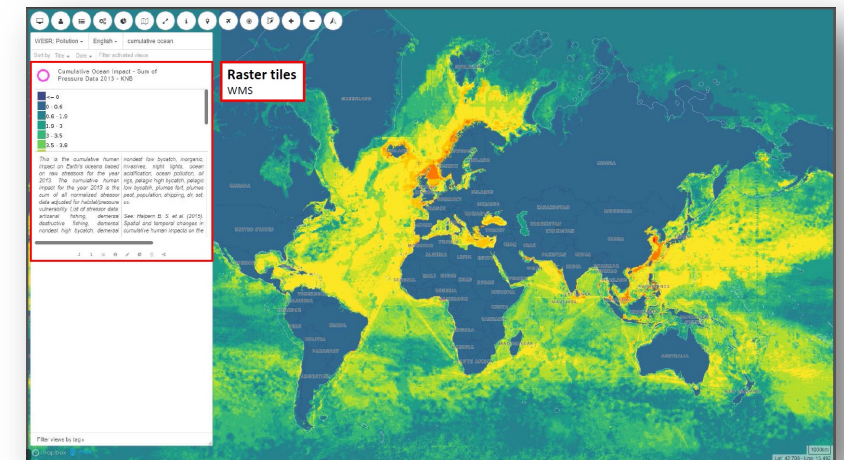
## Vector

- Visualization of a vector source layer stored in the MapX database
- A custom style can be created (& edited) with a quick and easy tool
- Multiple functionalities available: access to the attribute table, data download, overlap analysis, filters, time-slider, transparency



## Raster

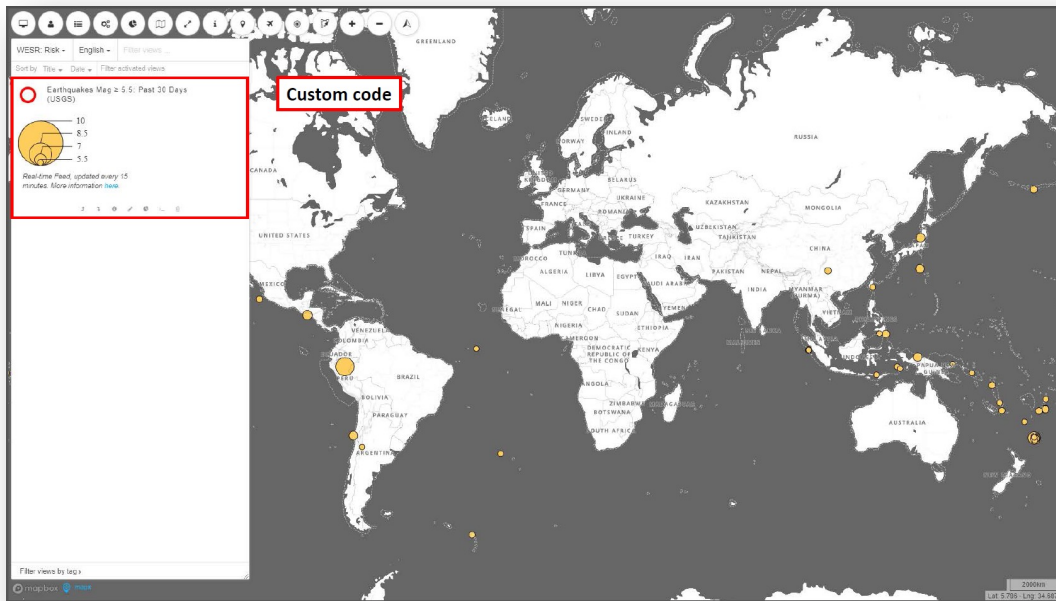
- Raster datasets cannot be stored in the MapX database
- Raster datasets can be fetched via WMS (Web Map Service) or WMTS (Web Map Tile Service) queries
- If available, the legend can be fetched via a GetLegendGraphic query
- Style can not be edited in MapX. Functionalities are considerably reduced for raster tiles compared to vector tiles



# Basic Concepts – MapX

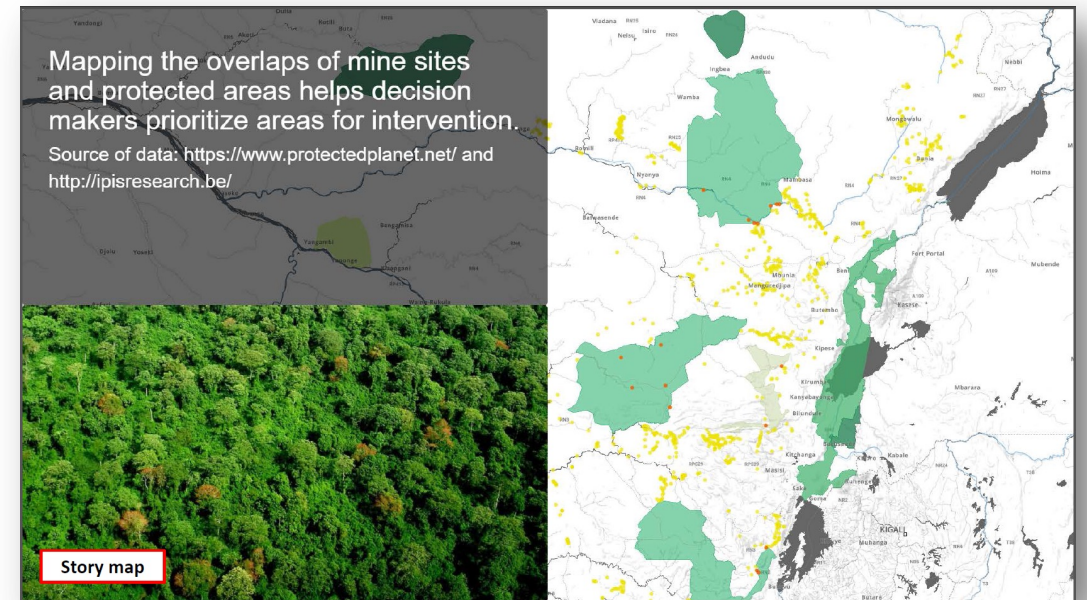
## Custom Code

- Advanced type of view where the user codes its own view and legend
- Requires programming skills (JavaScript, HTML, CSS, Mapbox)
- High flexibility and up-to-date data streaming



## Story Maps

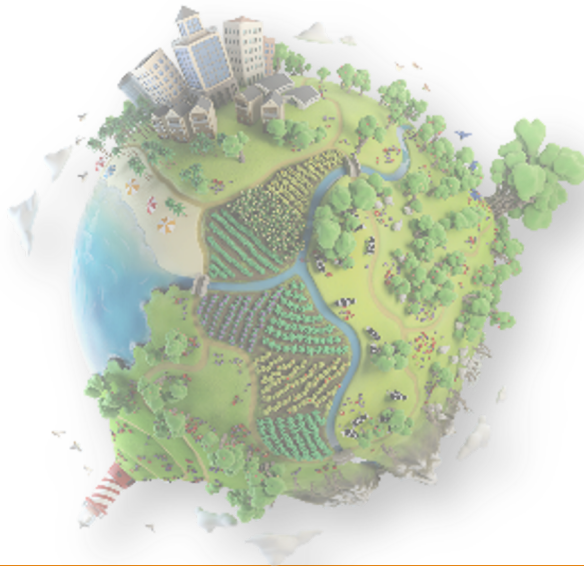
- Visualization of an ensemble of data, among which views, for telling purposes
- Spatial data, text, images & videos can be used to build a story map



# Basic Concepts – MapX

## Projects

- MapX offers dedicated environments called “Projects” where users can find geospatial data
- Related to a theme (e.g. biodiversity), a convention (e.g. Minamata), an institution /organization (e.g. UN Electric) or a specific location (e.g. Haiti)
- Can be directly managed by MapX partners or by the MapX Team and can be public or private
- User rights can be set per project



## Users

- MapX features multiple and flexible user access levels to datasets, analytical tools as well as data sharing and publication features
- The user management system is secure and offers an incremental approach for each user category
- Each user is assigned a role that defines its access to the application's different components
- Roles are assigned by projects: Public Users, Members, Publishers, Administrators



# MIMU - MapX

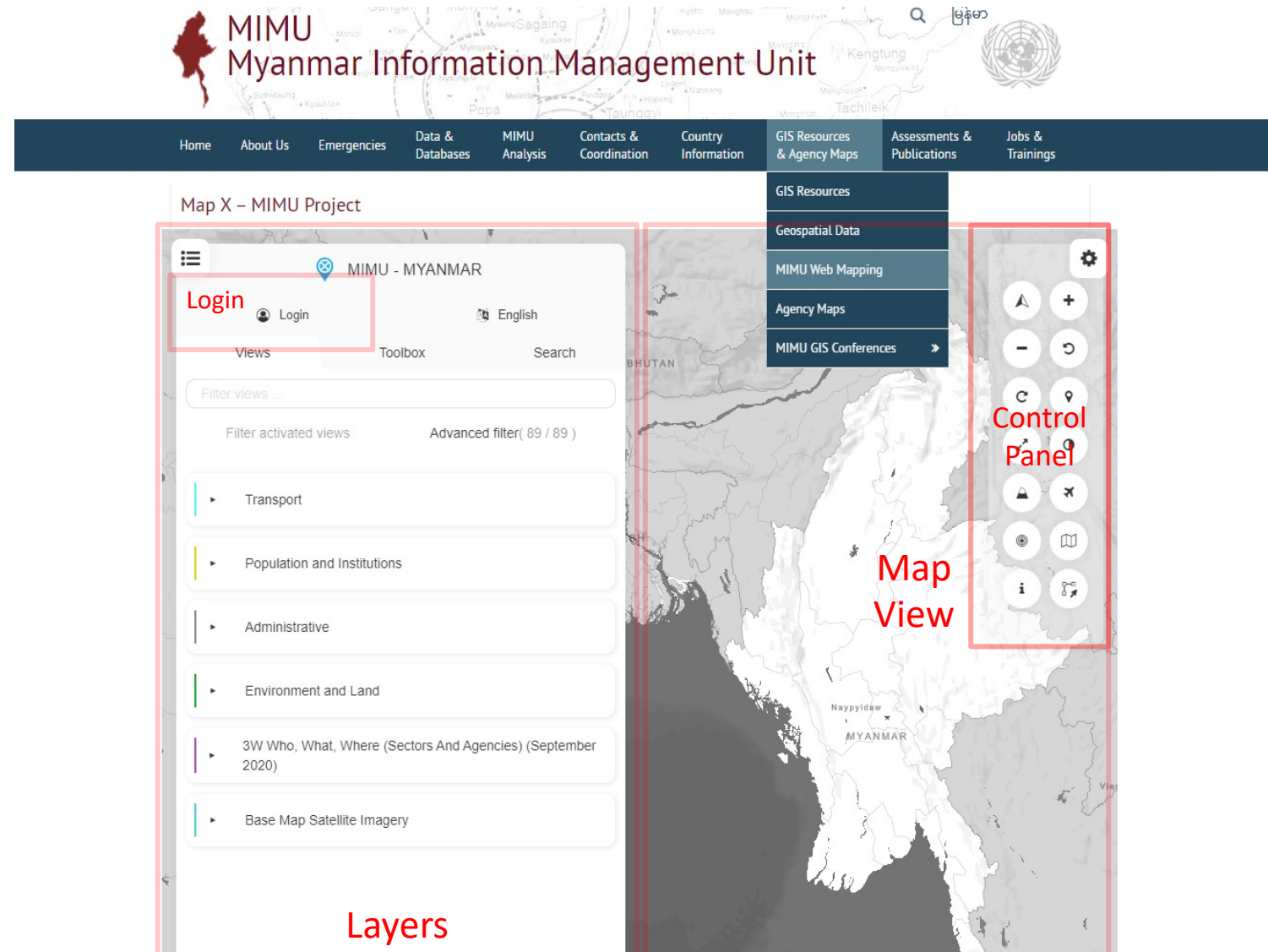
Map X is already integrated into MIMU website

Under the section:

- GIS Resources & Agency Maps
  - MIMU Webmapping

<https://themimu.info/mimu-mapx>

- If the user needs to download available layers, must login
- For that, Click in “Login”, enter the mail account and immediately the user will receive a code in the mailbox to enter



# Basic Concepts – Platform review content

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- Access to MapX into MIMU Website
- Explanation of the panels
  - Layers
  - Map
  - Control Panel
- Panel Layer
  - Explanation Categories
  - Turn on/off layers
  - Tools of layers
- Map composer
- Login. How to login
  - Benefits of login
    - Create of layers (point, line, polygon)
    - Download specific layers. Notification panel and send to mail
    - Where to download geospatial data
- Explanation of Toolbox