

# MapX



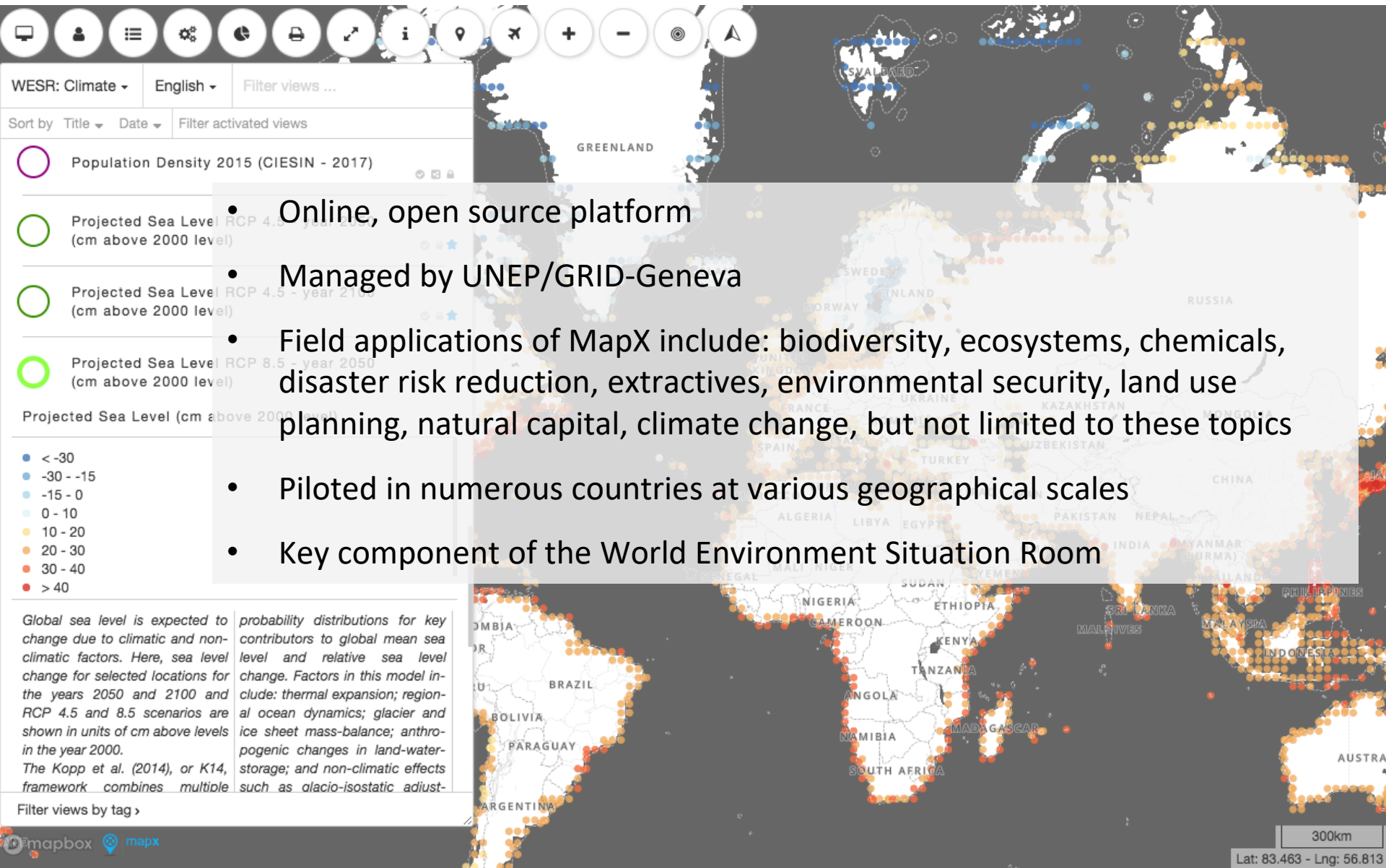
mapx

An open geospatial platform to manage, analyze and visualize data on natural resources and the environment

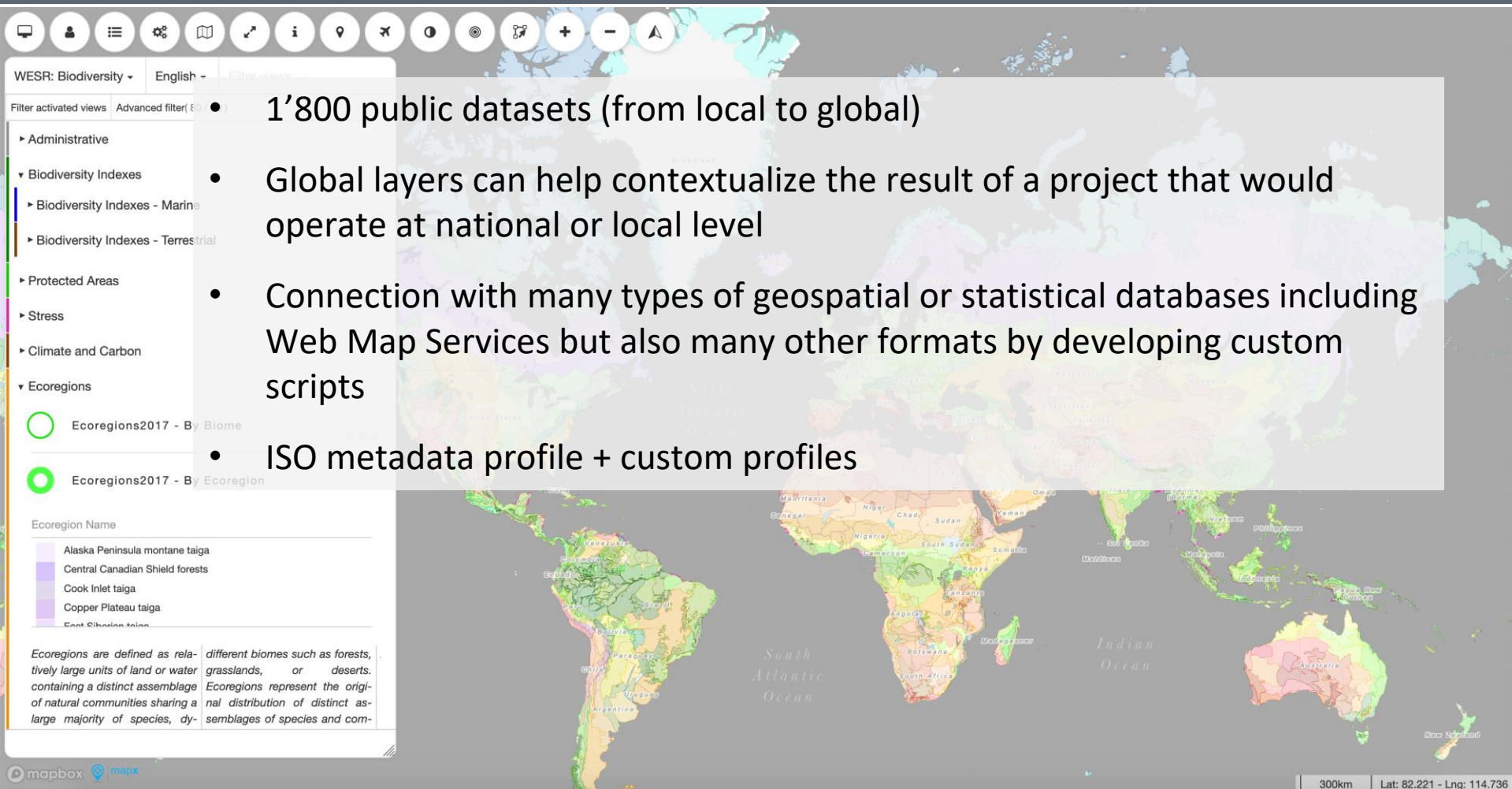
*Photo credits: Ludovic Bernaudat*



# Online open source platform for environmental data



- Online, open source platform
- Managed by UNEP/GRID-Geneva
- Field applications of MapX include: biodiversity, ecosystems, chemicals, disaster risk reduction, extractives, environmental security, land use planning, natural capital, climate change, but not limited to these topics
- Piloted in numerous countries at various geographical scales
- Key component of the World Environment Situation Room



WESR: Biodiversity ▾ English ▾ Filter views

Filter activated views Advanced filter (80)

- Administrative
- Biodiversity Indexes
  - Biodiversity Indexes - Marine
  - Biodiversity Indexes - Terrestrial
- Protected Areas
- Stress
- Climate and Carbon
- Ecoregions
  - Ecoregions2017 - By Biome
  - Ecoregions2017 - By Ecoregion

Ecoregion Name

- Alaska Peninsula montane taiga
- Central Canadian Shield forests
- Cook Inlet taiga
- Copper Plateau taiga
- East Siberian taiga

Ecoregions are defined as relatively large units of land or water containing a distinct assemblage of natural communities sharing a large majority of species, different biomes such as forests, grasslands, or deserts. Ecoregions represent the original distribution of distinct assemblages of species and communities.

- 1'800 public datasets (from local to global)
- Global layers can help contextualize the result of a project that would operate at national or local level
- Connection with many types of geospatial or statistical databases including Web Map Services but also many other formats by developing custom scripts
- ISO metadata profile + custom profiles

mapbox mapx

300km Lat: 82.221 - Lng: 114.736



# Tools and functions

## Bhutan

While the country's natural landscape is beautiful, the pressures of economic growth pose major threats to environmental resources. One example is Bhutan's largest export product – hydropower energy.

How did TEEB Bhutan bring the hydropower energy and the conservation sector together in a process to place nature at the heart of achieving economic prosperity?

Source picture: NASA 2006, glacial lakes Bhutan

- Temporal sliders to monitor environmental information over time
- Interactive dashboards for prioritization and decision-making => supports vector, raster and statistical data
- Customizable map composer => export to PDF => insert into report –useful for national reporting to Conventions
- Export vector data in a dozen well-known GIS formats
- Advanced cartographic mapping functions
- Story maps



# Demo : dashboard



<https://app.mapx.org/static.html?project=MX-XVK-HPH-OGN-HVE-GGN&views=MX-OU7NG-ZNZGA-ZX3K0&zoomToViews=true&language=en&>

# Demo: story map



A screenshot of the mapx application interface. The main area displays a world map with a dark background and light-colored landmasses. The map is centered on the Atlantic Ocean, with labels for 'North Atlantic Ocean', 'South Atlantic Ocean', and 'Indian Ocean'. On the left side, there is a sidebar with a menu icon at the top. Below the menu, the title 'WESR: POLLUTION' is displayed. Underneath the title, the user 'pierre.lacroix@unige.ch - Administrator' is shown, along with a language selector set to 'English'. There are three tabs: 'Views', 'Toolbox', and 'Search'. Below the tabs, there is a 'Filter views ...' section with 'Filter activated views' and 'Advanced filter( 50 / 50 )'. A list of filters is shown, each with a colored bar and a right-pointing arrow: 'Story maps' (grey), 'High atmospheric' (purple), 'Low atmospheric' (orange), 'Freshwater' (blue), 'Land' (green), 'Coastal' (light green), 'Ocean' (dark blue), and 'Contextual: background' (grey). On the right side of the map, there is a vertical toolbar with various icons for map navigation and interaction. At the bottom left, there is a notification bell icon and the 'mapbox' and 'mapx' logos. At the bottom right, there is a scale bar for '300km' and coordinates 'Lat: 82.390 - Lng: -167.290'.

<https://app.mapx.org?project=MX-JOJ-8ME-I4T-G9M-I9E&views=MX-KO063-HNB57-OSADC>



# Collaborations



- Piloted in dozens of countries
- Academic collaborations and scientific publications
- Group on Earth Observations (GEO) (in-situ data)
- Minamata and Stockholm conventions
- Environmental country fiches for 33 countries
- Long-term anchorage into the World Environment Situation Room

## Supporting the Kuwait Environment Public Authority (KEPA) in managing geospatial information

Biodiversity, Reporting

MapX has helped KEPA to carry out a data inventory of biodiversity and conservation data, compile available data, create a platform for data sharing and management, increase spatial literacy and build capacity to manage, analyze and visualize data going forward.

Land Use Planning, Natural Hazards

multiple agencies effort to share spatial data information on global risk from natural hazards. The PREVIEW system onto the MapX platform.

## Stockholm Convention on Persistent Organic Pollutants

To help eliminate PCBs from the environment, MapX supports the Stockholm Convention on Persistent Organic Pollutants by managing spatial data for countries reporting to the Convention.

## DR Congo: Extractive Industries Transparency Initiative Support

Extractives, Land Use Planning

As the extractives sector embraces increasing transparency, stakeholders face a series of new challenges. These relate to avoiding data fragmentation, duplicating and dispersing available data, and providing access to actionable information for evidence-based decision making.

## Earth Observation Data Cube on Demand for Monitoring Land Degradation by Mining Activities

Biodiversity, Extractives

## The World Environment Situation Room

Biodiversity, Chemicals, Environmental Security, Extractives, Land Use Planning, Natural Hazards

## Nigeria: support to the Hydrocarbon Pollution Remediation Project (HYPREP)

Extractives

## Niger Disaster Risk Information System

Natural Hazards



# Thank you



[www.mapx.org](https://www.mapx.org)

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