Getting Started

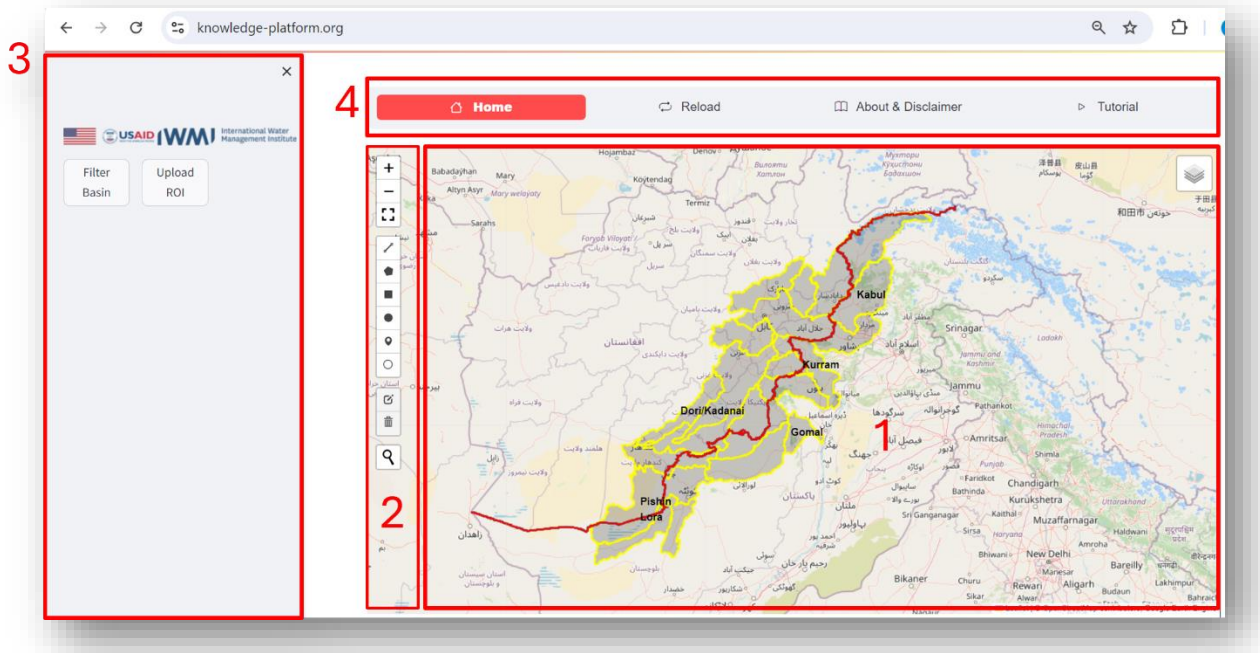
This section will help you take the initial steps to access and utilize the platform.

1- Accessing the Platform

To begin, open your web browser and visit [Knowledge-Platform.org](). Ensure your internet connection is stable for the best experience and wait for the platform to load.

2- Main Interface Overview

When you first access the platform, the main interface will appear as shown in the image below. This section provides a detailed description of each component to help you navigate and utilize the platform effectively.
The interface is divided into four main sections:



Map Area (Label 1):

The central ist of the screen is the **Map Area**, where geographical data and

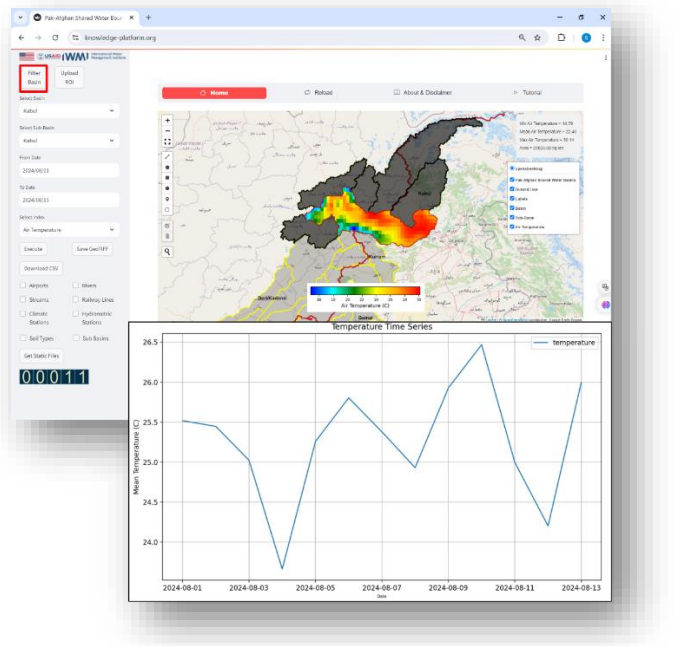
information on the transboundary river basins shared by Pakistan and Afghanistan are displayed. You can interact with the map using the tools available on the left side and the bottom right corner of the map.

Map Navigation Tools (Label 2):
You'll find various Map Navigation Tools on the left side of the **Map Area** window. These tools allow you to zoom in and out, pan the map, and use other functionalities to explore the map in detail:

- **Zooming In/Out**: Use the "+" and "–" buttons to zoom in and out or scroll your mouse wheel.
- **Panning the Map**: Click and drag the map to move it around and explore different areas.
- **Additional Tools**: Other tools include the selection tool, draw tool, and measurement tool, which help in more specific interactions with the map.

Data Overview Section (Label 3)
On the left side of the **Map Navigation Tools**, the bar includes options for:

- **Filter Basin** This panel allows you to select specific data indices, periods, and geographical regions for analysis. Here's how you can interact with it:

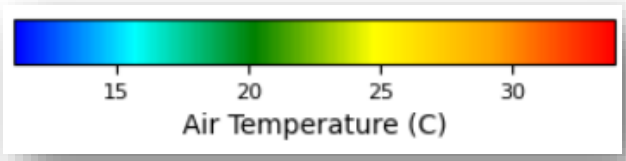


- **Select Basin/Sub-Basin**: Choose the main basin and sub-basin you are interested in by selecting from the dropdown menus. **Set Date Range**: Enter the desired date range to view data for specific periods.

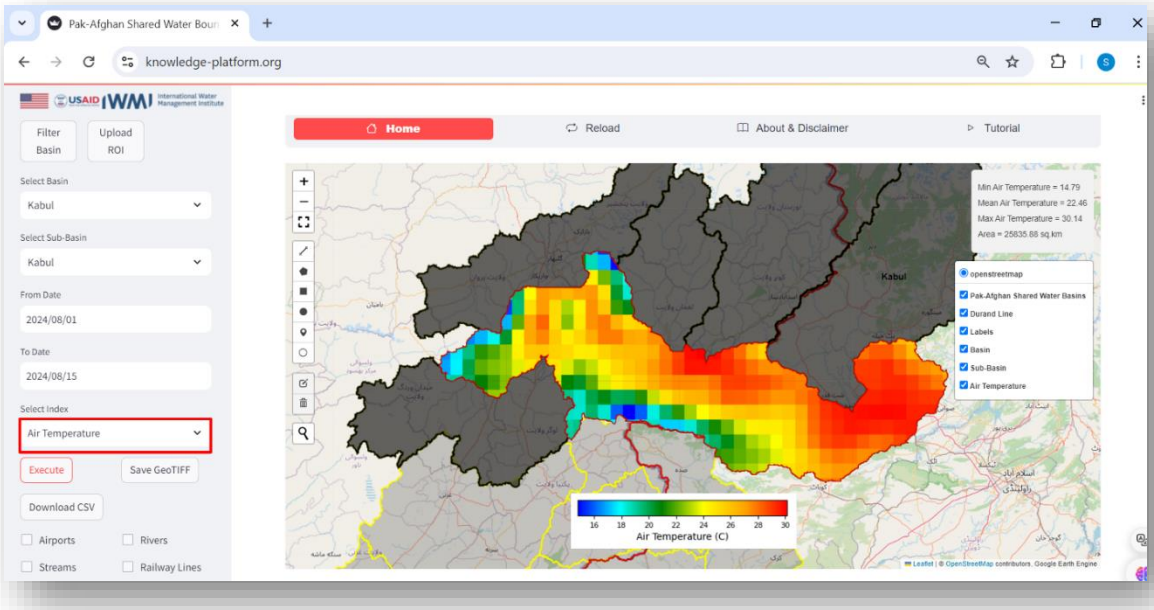
- **Select Index**: Choose the type of data you wish to analyze (e.g., Air Temperature, Enhanced Vegetation Index (EVI), Keech Byram Drought Index, land cover (2020), land surface temperature, latent heat flux (LE), and leaf area index) of the selected basin.
- **Execute Button**: After setting your parameters, click **Execute** to apply your selections and update the map with the relevant data.

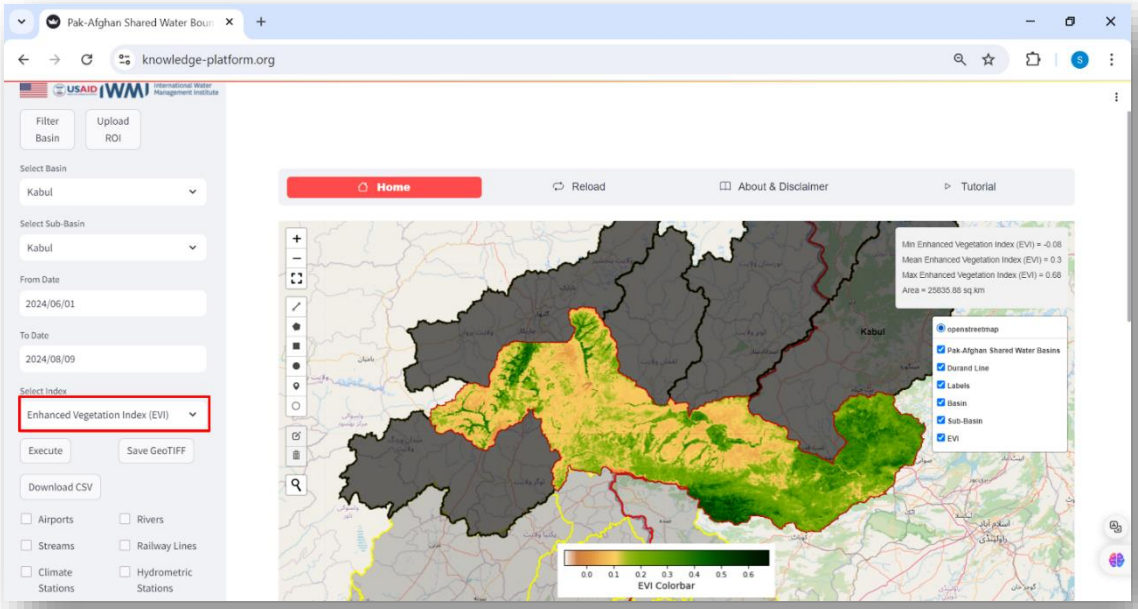
The central **Map Area** now includes a data overlay, which visually represents the selected data index (in this case, Air Temperature). The color scale at the bottom of the map indicates the range of values being displayed. For example:

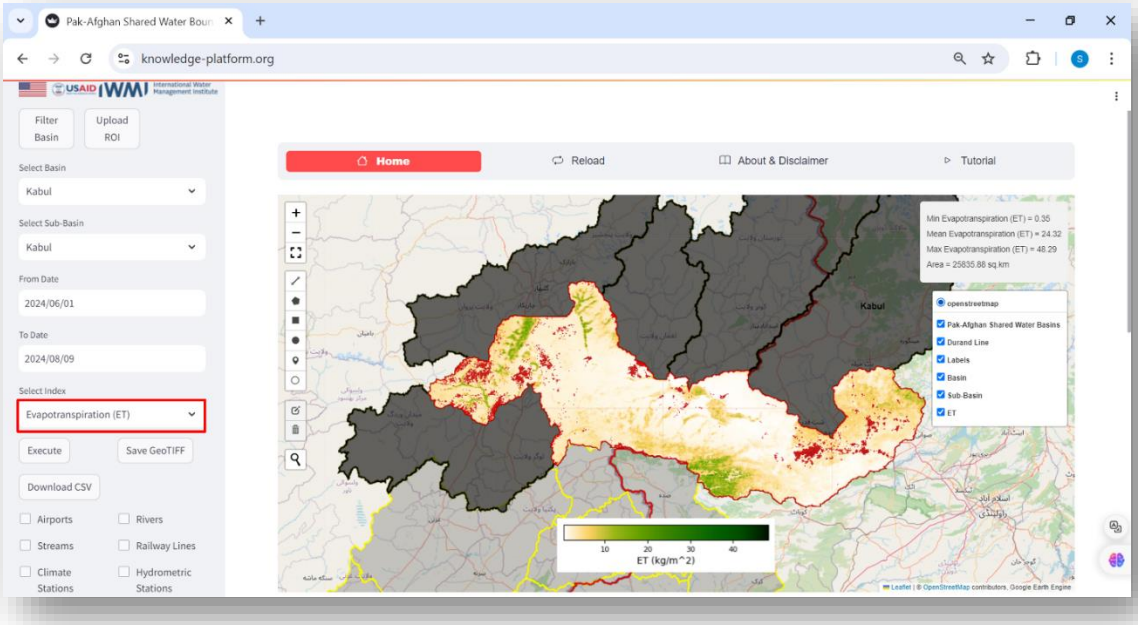
- **Color Gradient**: The color gradient on the map represents the range of temperatures, with each color corresponding to a specific temperature range as shown in the legend.



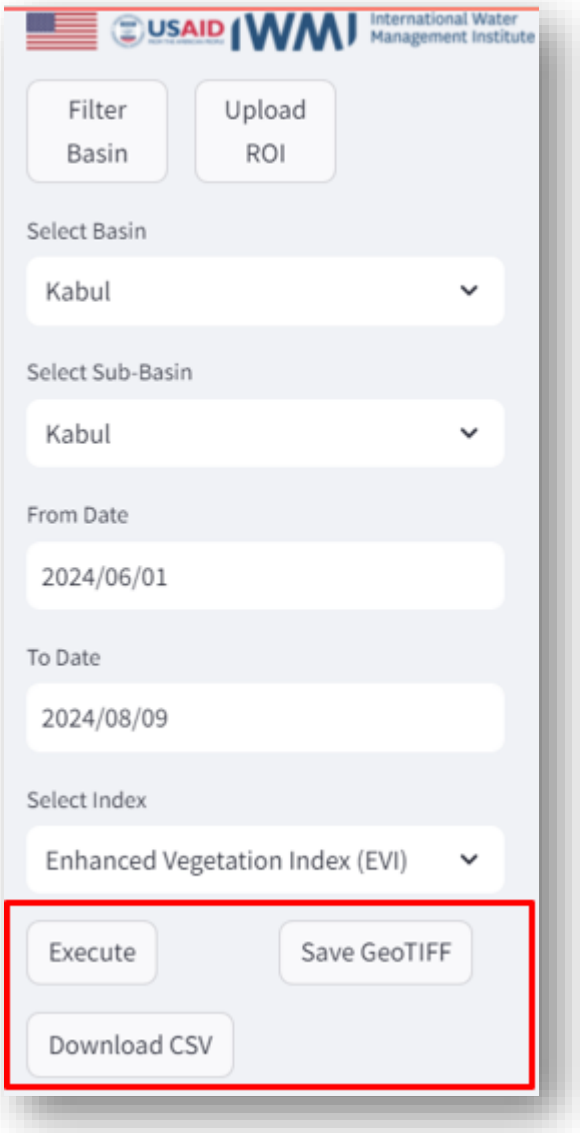
Here are some screenshots of the data analysis based on using different indices.





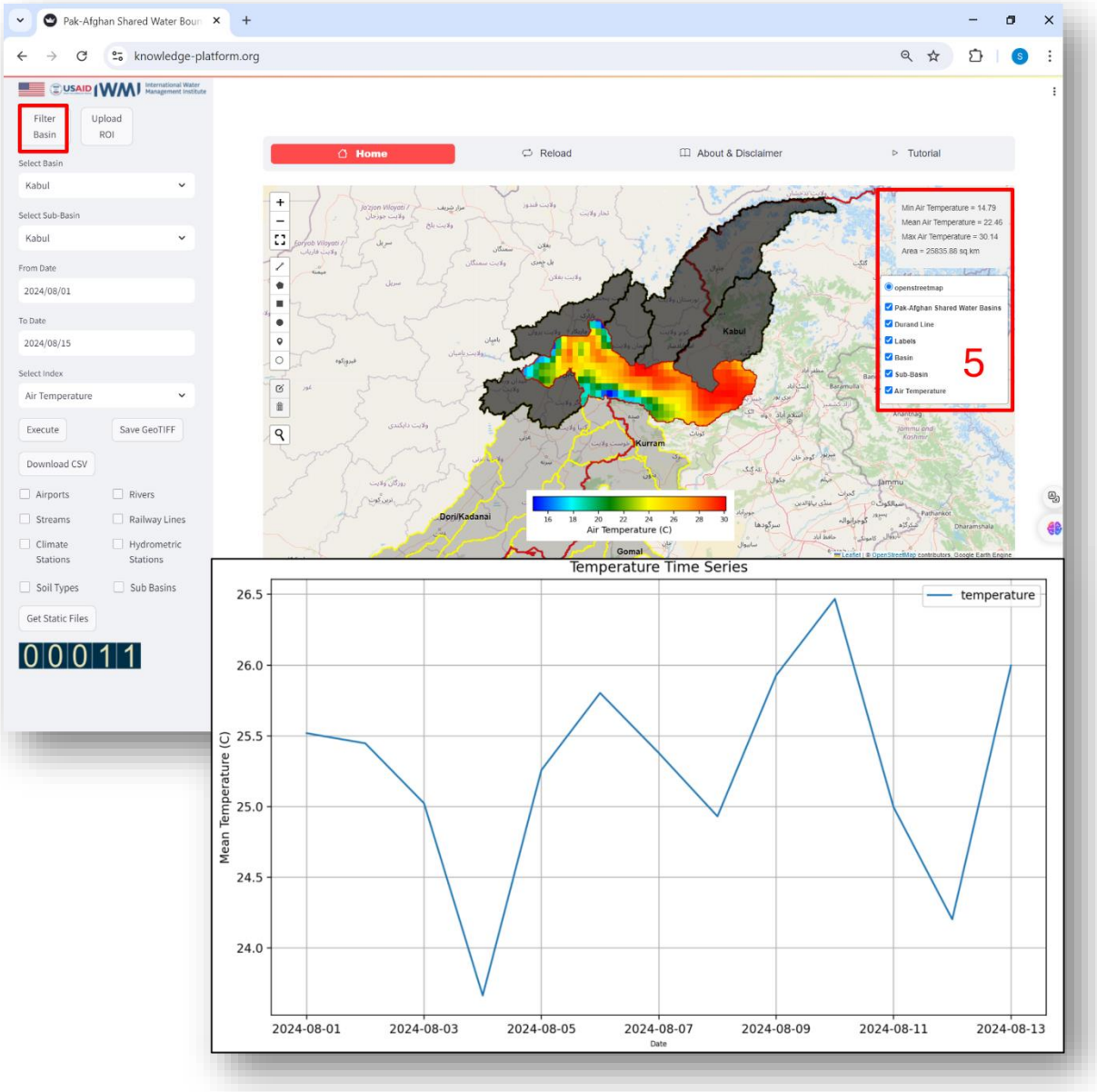


- **Download Options**:
  - **Save GeoTIFF**: Save the visualized data as a GeoTIFF file for further analysis.
  - **Download CSV**: Export the data in CSV format for offline analysis.



Data Legend and Info Box (Label 5)
On the right side of the map, an **Info Box** displays key data metrics for the selected index:

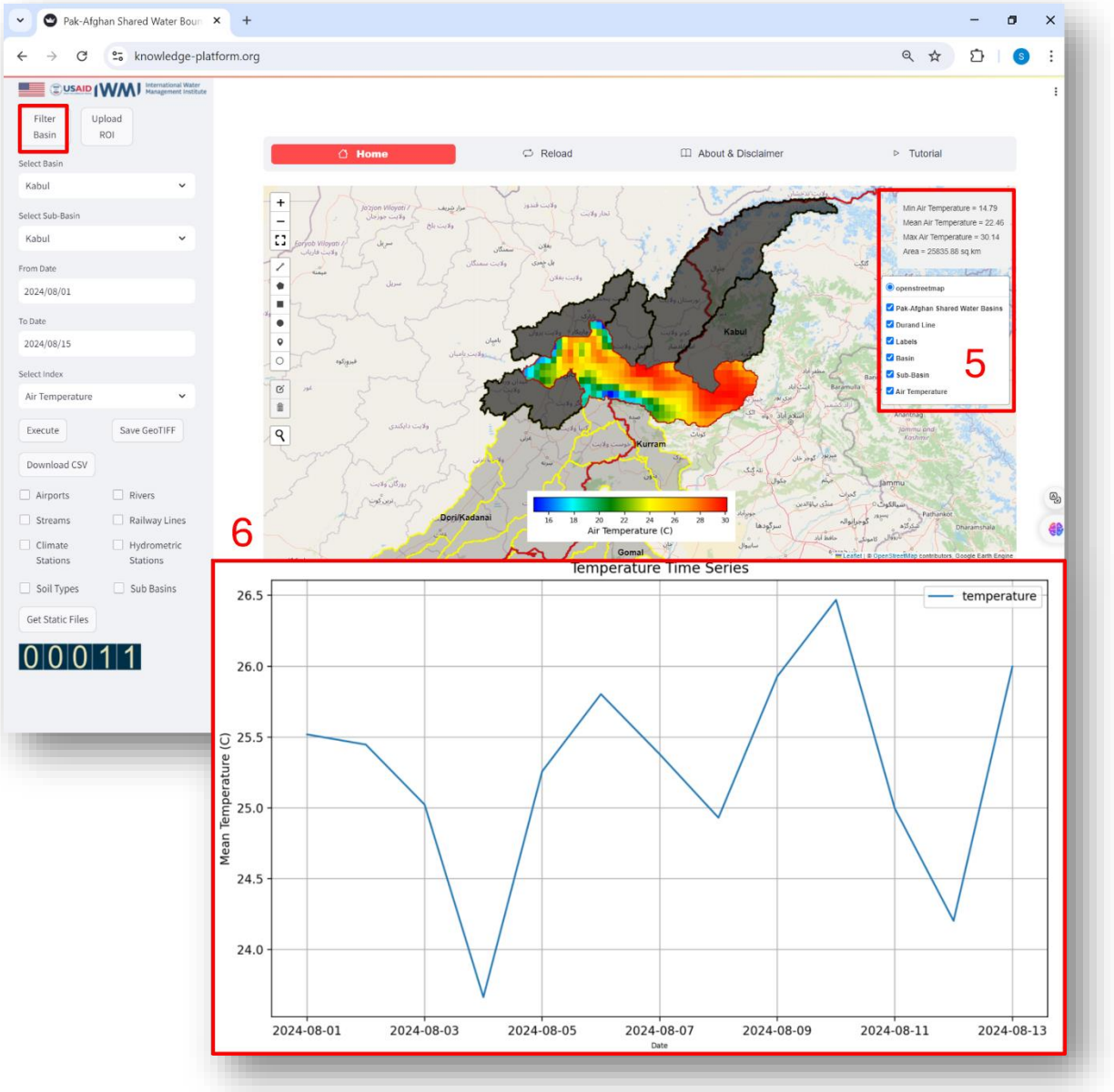
- **Min/Max Air Temperature**: Shows the minimum and maximum temperatures within the selected region.
- **Mean Air Temperature**: Displays the average temperature over the selected period.
- **Area**: Indicates the area of the region being analyzed.



Time Series Graph (Label 6)

A Time Series Graph appears at the bottom of the screen when a time-based index, such as temperature, is selected. This graph visualizes how the data changes over the specified date range:

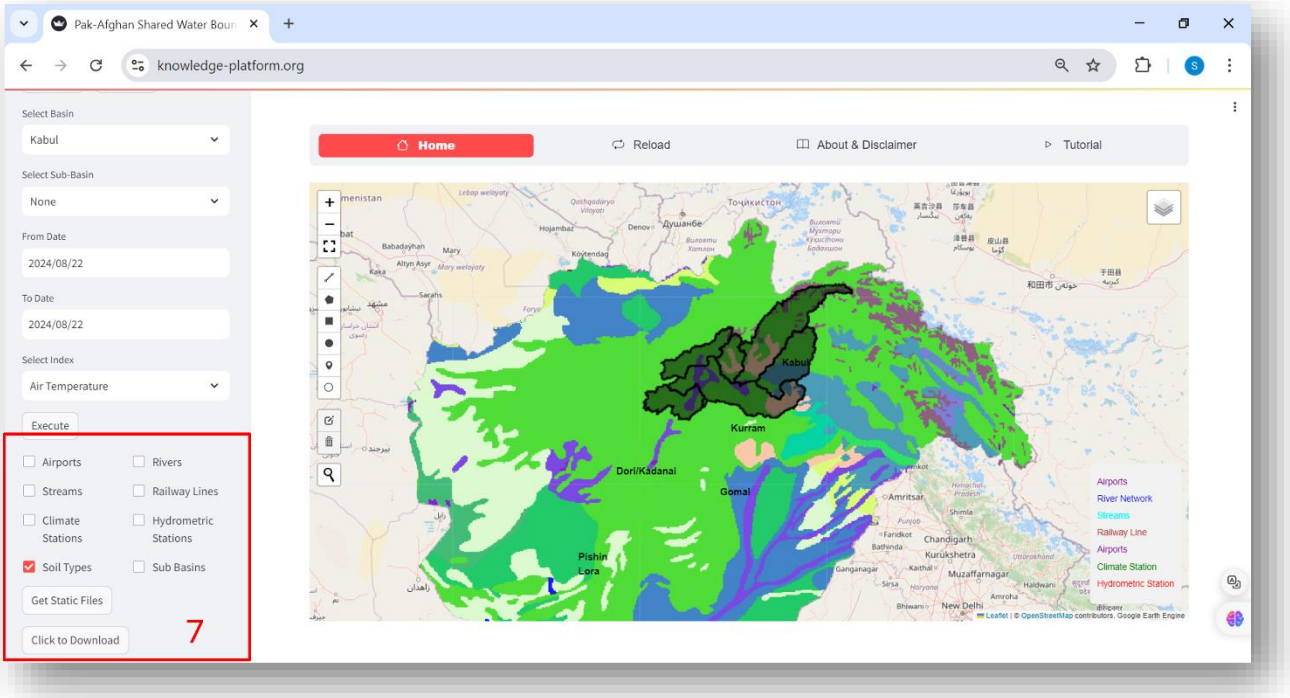
- **X-Axis (Date)**: Represents the timeline for the selected date range.
- **Y-Axis (Temperature)**: Displays the corresponding temperature values.
- **Graph Line**: The line graph shows the trend of the temperature over time, helping you identify patterns or anomalies.



Static Data Layers (Label 7)
Check the boxes to display additional layers on the map, such as:

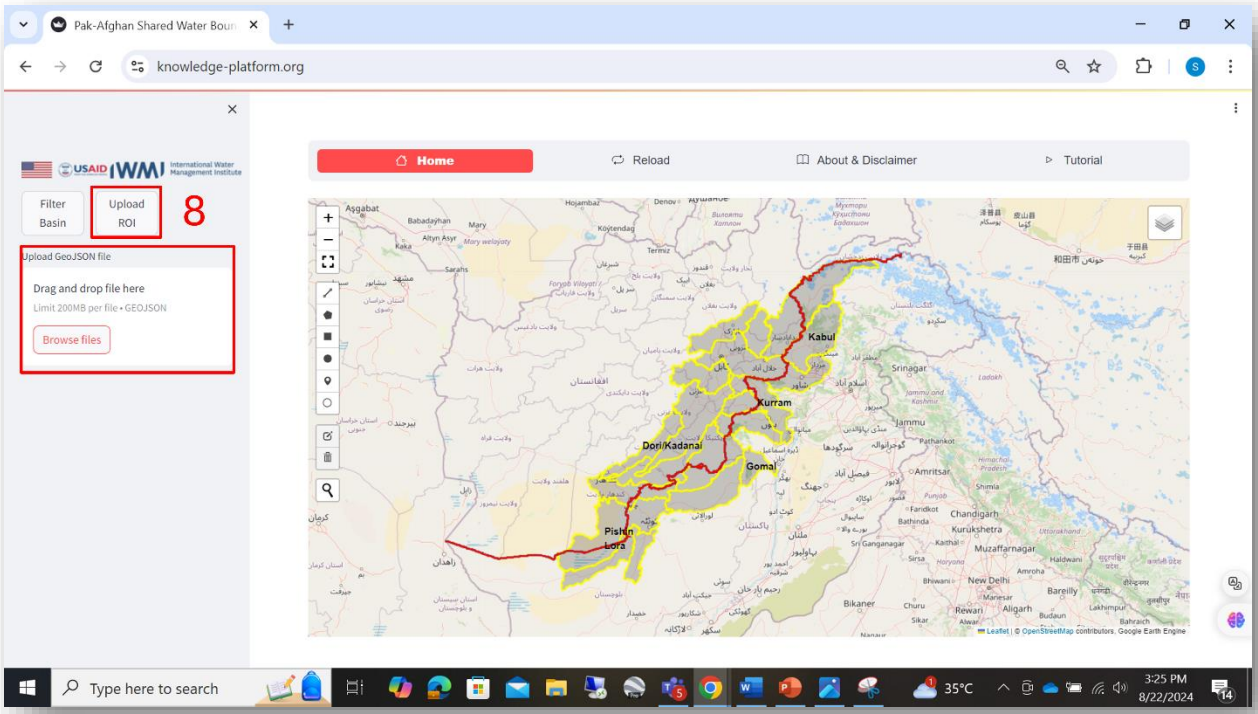
- Airports
- Streams
- Climate Stations
- Soil Types (as selected in the image)
- Rivers
- Railway Lines
- Hydrometric Stations

- Sub Basins

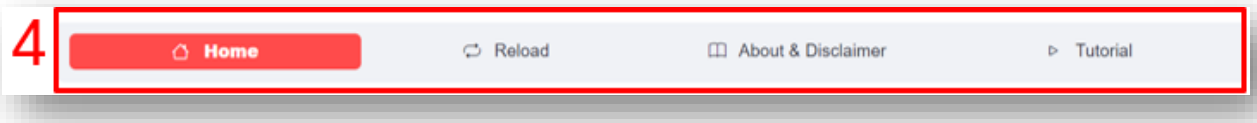


Downloading Data: To download the map data, first click on **"Get Static Files"** and then select the **"Click to Download"** button (as highlighted by the number 7 in the image). This will allow you to save your device's current map view and data.

Upload ROI (Label 8):
Click the **Upload ROI** button, browse your local files for the appropriate region of interest file, and upload it to view it on the map.



Top Navigation Bar (Label 4):



The **Top Navigation Bar** provides quick access to essential features:

- **Home**: Resets the map to the default view.
- **Reload**: Refreshes the map in case it doesn't load properly or if you need the latest data.
- **About & Disclaimer**: Displays information about the platform, including its purpose and legal disclaimers.
- **Tutorial**: Accesses step-by-step guides that explain how to use the platform's features.

Menu Options (Label 9)

The "Menu Options" (indicated by three vertical dots) is a dropdown menu located at the top-right corner of the interface. This menu provides several functionalities:

1. **Rerun (R):** Restarts the current operation or refreshes the current view.
2. **Settings:** Opens the settings panel where you can adjust various configurations related to the tool or application.
3. **Print:** This allows you to print the current view or data displayed on the screen.
4. **Record a Screencast:** This enables the recording of the screen activity, useful for creating video tutorials or capturing specific interactions.
5. **About:** Provides information about the tool, including version details, development credits, and possibly a brief overview of its purpose.

This menu is useful for accessing additional features and customizing the user experience.