

Birds Tracking Information System (Web Application)

User Guide for Internal and Public Use

Welcome to Bird Tracking Information system

Bird Tracking Information system developed for the archiving, processing and sharing of telemetry data. System offer secure storage, multi-user support and analysis tools and are a step along the way to improving data access, long-term data preservation and science communication. While this software platform promote data sharing, access to the majority of the data and to the software behind these systems remains restricted.

This help system explains all tasks you can perform using different application functionalities.

Navigating Through Toolbar


The navigation toolbar displayed at the top includes the basic navigation tools necessary for moving from a place to another on the map and for expanding and shrinking the displayed areas.



Panning

The Pan tool is designed to enable you to navigate your way through the map. By using this tool, you keep the same details level but change the centrally displayed area on the screen.


To navigate through the map using the Pan tool

1. In the navigation toolbar, click the **Pan** button .
2. Point anywhere on the map and then drag the mouse to move the map.


Zooming In

The Zoom In tool enables you to magnify any area of interest on the map regardless of its current location. Using this tool, you can define any area you can currently see on the map and have it occupying the whole displayed map area in the application. This will show you more details in the magnified area.

To zoom in to an area on the map

1. Adjust the displayed area of the map on the screen, so that the area you are interested to see much details of is visible on screen.
2. In the navigation toolbar, click the **Zoom In** button .
3. Point to the area you wish to magnify and then drag to draw a box surrounding the area to be magnified.
4. Once you have selected the whole area you want to magnify, release the mouse button.


Note

The **Zoom In** button  will remain selected, enabling you to repeat the action till you get the results you desire.


Zooming Out

The Zoom Out tool enables you to view more areas on the map with fewer details. Through this tool you can select the any area in the currently displayed map to have it displayed at the center of the map along with the surrounding areas with fewer details.

To zoom out from an area on the map

1. Adjust the displayed area of the map on the screen so that the area you are interested to see less details of is visible on screen.
2. In the navigation toolbar, click the **Zoom Out** button .
3. Point to the area you wish to zoom out from and then drag to draw a box surrounding the area to be zoomed out of.
4. Once you have selected the whole area you want to zoom out of, release the mouse button.


Note

The **Zoom Out** button  will remain selected, enabling you to repeat the action till you get the results you desire.

Navigating Between Previous and Next Extents

While navigating through the map and changing views, you may need to move backward and forward through the sequence of views you have been navigating through.

To move from the current view of the previous view

- In the navigation toolbar, click the **Previous Extent** button .

To move from the current view to a next one

- In the navigation toolbar, click the **Next Extent** button .

Zooming Back to Map Full Extent

After navigating the map using different tools, you may need to return to the original map scale. The Full Extent tool enables you to view the whole map centralized on the screen in the default scale.

To view the full extent of the map

- In the navigation toolbar, click the **Zoom to Full Extent** button.

Export to Excel

After plotting data, you may need to save actual tracking records to an Excel file so you can use it later.

To export to Excel

1. Plot the tracking data as required.
2. Click **Export to Excel**.
3. Data will download as CSV
4. Open and Browse to the location where you want to save the file.
5. In the **File name** text box, type the file name.
6. Click **Save**.

Export to Shape

After plotting data, you may need to save the tracking path as shapefile so you can use it later.

To export to Shape

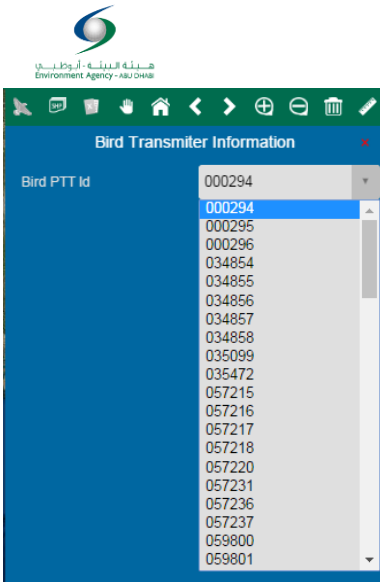
1. Plot the tracking data as required.
2. Click **Export to Shape**.
3. Open and Browse to the location where you want to save the file.
4. In the **File name** text box, type the file name.
5. Click **Save**.

Bird Information

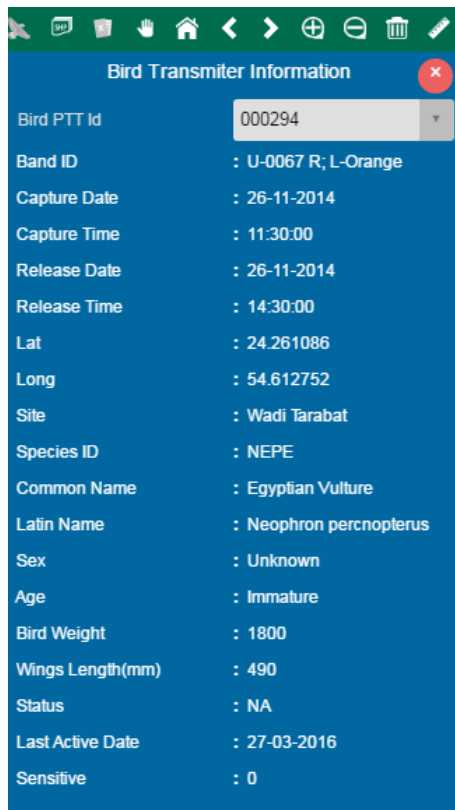
Before plotting the data user may want to know the PTT Id vise information about birds.

To know bird's details

1. Click **Bird Information**.
2. Select PTT Id



3. Window will display information related to bird having selected PTT ID



4. Click  at the top right corner to close the window.

Measure

After plotting data, user may need to measure the distance or area or the user wants to know the coordinated of a tracking point.

To Measure

1. Plot the tracking data as required.
2. Click **Measure**.

- Click **Area**, **Distance** or **Location** and corresponding **Unit** of **Measurement**.



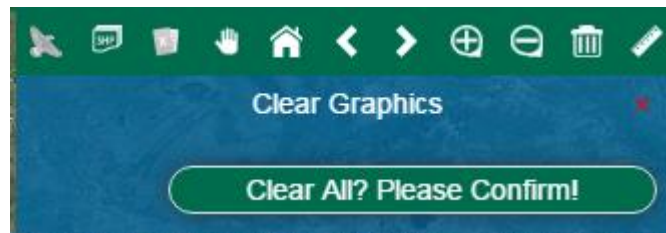
- Click  at the top right corner to close the window.


Clear Graphics

After plotting data, user may need to clear the tracking path to recreate it based on another criteria or different period

To Clear Graphics

- Click **Clear Graphics**.



- Click "Clear All? Please Confirm!".
- Click  at the top right corner to close the window.

Viewing Tracking Data

The User can query and plot tracking records in different ways.

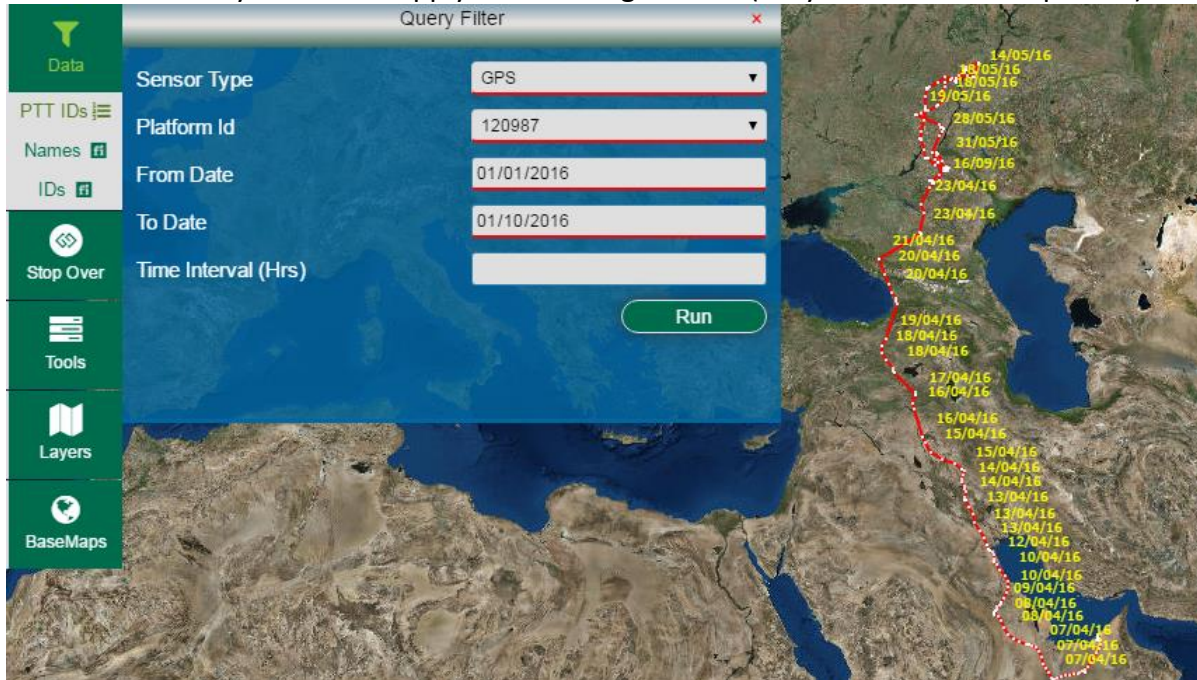
Plotting based on Sensor type

For data review and analysis, users may need to plot tracking records based on sensor type. This tool provide the facility to restrict the number of records plotting based on time period and time interval in the available records.

To plot based on Sensor type

- Click **Data** button.
- Click **PTT IDs**.
- The Query Filter window is displayed.

- Enter the criteria you want to apply for selecting records.(Only time interval is optional)





- Click **Run**.
- Actual tracking path will be displayed.
- If user wants to see data in tabular format click Query Results Window in the lower right corner.
- User can use [Export to Shape](#) or [Export to Excel](#) Functions for further analysis.
- Click Clear graphic button to clear the track

Query Results

Showing 1 to 8 of 1,953 entries

	LAT	LONG	DATE	TIME	SPEED	COURSE	Altitude	gap
120987	24.26700	54.59783	2016-02-29T00:00:00	2016-02-29T00:00:00	0	0	30	0
120987	24.26683	54.59783	2016-02-29T01:00:00	2016-02-29T01:00:00	0	0	40	3600
120987	24.26700	54.59783	2016-02-29T02:00:00	2016-02-29T02:00:00	0	0	50	3600
120987	24.26583	54.59683	2016-02-29T03:00:00	2016-02-29T03:00:00	0	0	80	3600
120987	24.26617	54.59783	2016-02-29T04:00:00	2016-02-29T04:00:00	0	0	70	3600
120987	24.26633	54.59683	2016-02-29T05:00:00	2016-02-29T05:00:00	8	48	60	3600

11. Click  at the top right corner of Query Filter to close Query Filter the window.

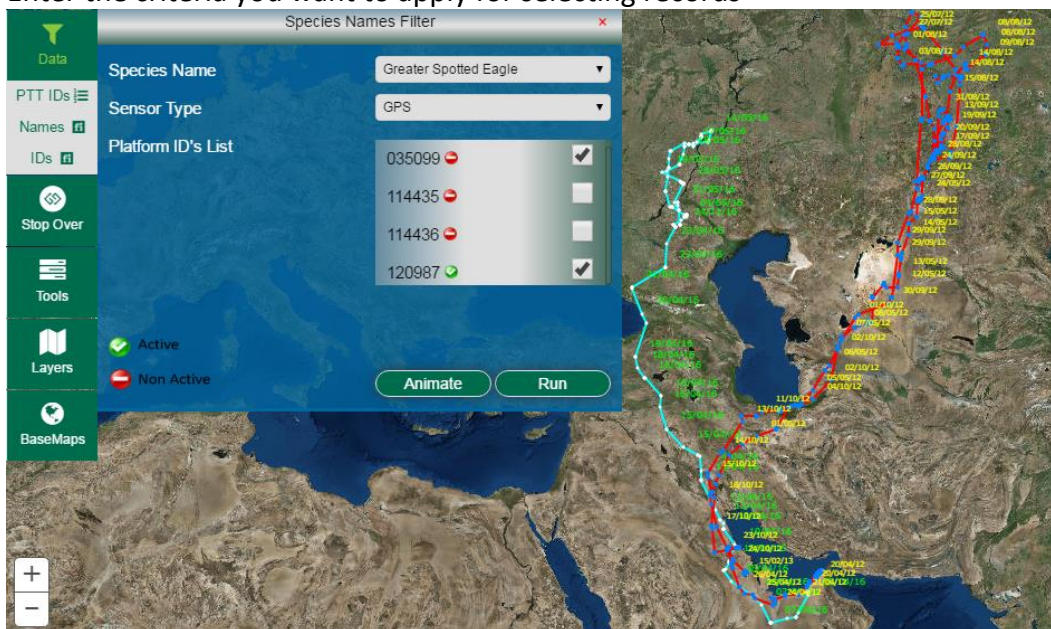
12. Click  to close Query Results window.

Plotting based on Species

For data review and analysis, users may need to plot tracking records based on Species. This tool provide the facility to plot multiple PTT ID at the same time irrespective of PTT status (Active/No active)


To plot based on Species

1. Click Data button.
2. Click **IDs**.
3. The Query Filter window is displayed.
4. Enter the criteria you want to apply for selecting records



5. Click **Run**.
6. Actual tracking path will be displayed.
7. To change Line, Point, Text colour click [Change Symbols](#) Button
8. If user wants to see data in tabular format click Query Results Widow in the lower right corner.
9. User can use [Export to Shape](#) or [Export to Excel](#) Functions for further analysis.
10. Click Clear graphic button to clear the track

11. Click  at the top right corner of Query Filter to close Query Filter the window.

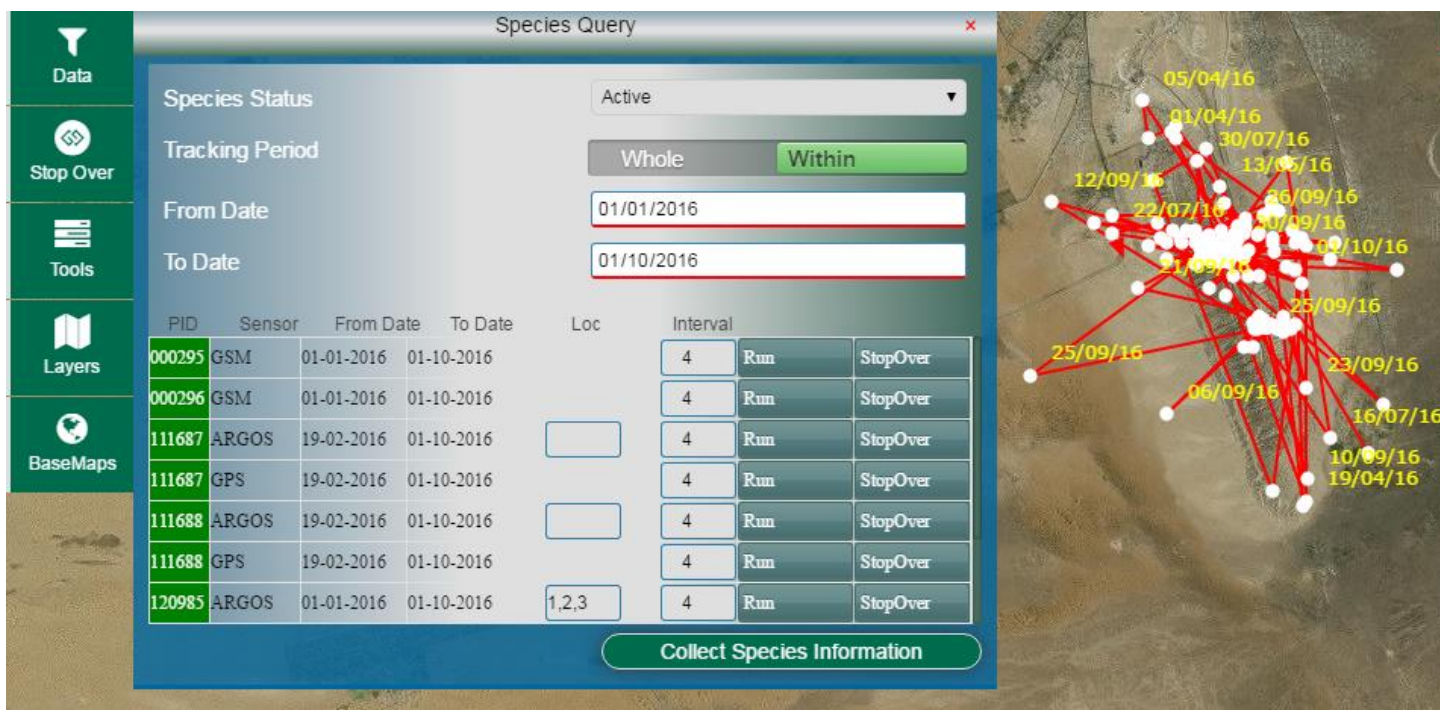
12. Click  to close Query Results window.

Plotting based on Species Status

For data review and analysis, users may need to plot tracking records based on Species. This tool provide the facility to plot multiple PTT ID at the same time based on PTT status (Active/No active) for the whole duration or a user defined period.

To plot based on Sensor type

1. Click Data button.
2. Click **Names**.
3. The Query Filter window is displayed.
4. Enter the criteria you want to apply for selecting records





The screenshot shows the 'Species Query' window with the following details:

- Species Status:** Active
- Tracking Period:** Whole (selected), Within
- From Date:** 01/01/2016
- To Date:** 01/10/2016
- Table:**

PID	Sensor	From Date	To Date	Loc	Interval	Run	StopOver
000295	GSM	01-01-2016	01-10-2016		4	Run	StopOver
000296	GSM	01-01-2016	01-10-2016		4	Run	StopOver
111687	ARGOS	19-02-2016	01-10-2016		4	Run	StopOver
111687	GPS	19-02-2016	01-10-2016		4	Run	StopOver
111688	ARGOS	19-02-2016	01-10-2016		4	Run	StopOver
111688	GPS	19-02-2016	01-10-2016		4	Run	StopOver
120985	ARGOS	01-01-2016	01-10-2016	1,2,3	4	Run	StopOver
- Buttons:** Collect Species Information

To the right, a map displays the tracking path with red lines connecting white dots. Yellow labels indicate specific dates along the path, such as 05/04/16, 01/04/16, 30/07/16, 13/06/16, 12/09/16, 22/07/16, 26/09/16, 30/09/16, 10/10/16, 21/09/16, 25/09/16, 23/09/16, 06/09/16, 16/07/16, 10/09/16, and 19/04/16.

5. Click **Run**.
6. If required click [StopOver](#) to calculate Stop overs
7. Actual tracking path will be displayed.
8. To change Line, Point, Text colour click [Change Symbols](#) Button
9. If user wants to see data in tabular format click Query Results Window in the lower right corner.
10. User can use [Export to Shape](#) or [Export to Excel](#) Functions for further analysis.
11. Click Clear graphic button to clear the track
12. Click  at the top right corner of Query Filter to close Query Filter the window.
13. Click  to close Query Results window.

Change Symbols Colors (Layers Dialog)

Calculate Stop Over