

The Thawing Arctic-Boreal Zone Interactive Map

This app shows thawing trends in the Arctic-Boreal zone by highlighting air temperature and frozen ground.

arctic-thaw.org

What does this app do?

This app is designed to show warming trends in the Arctic by location and time.

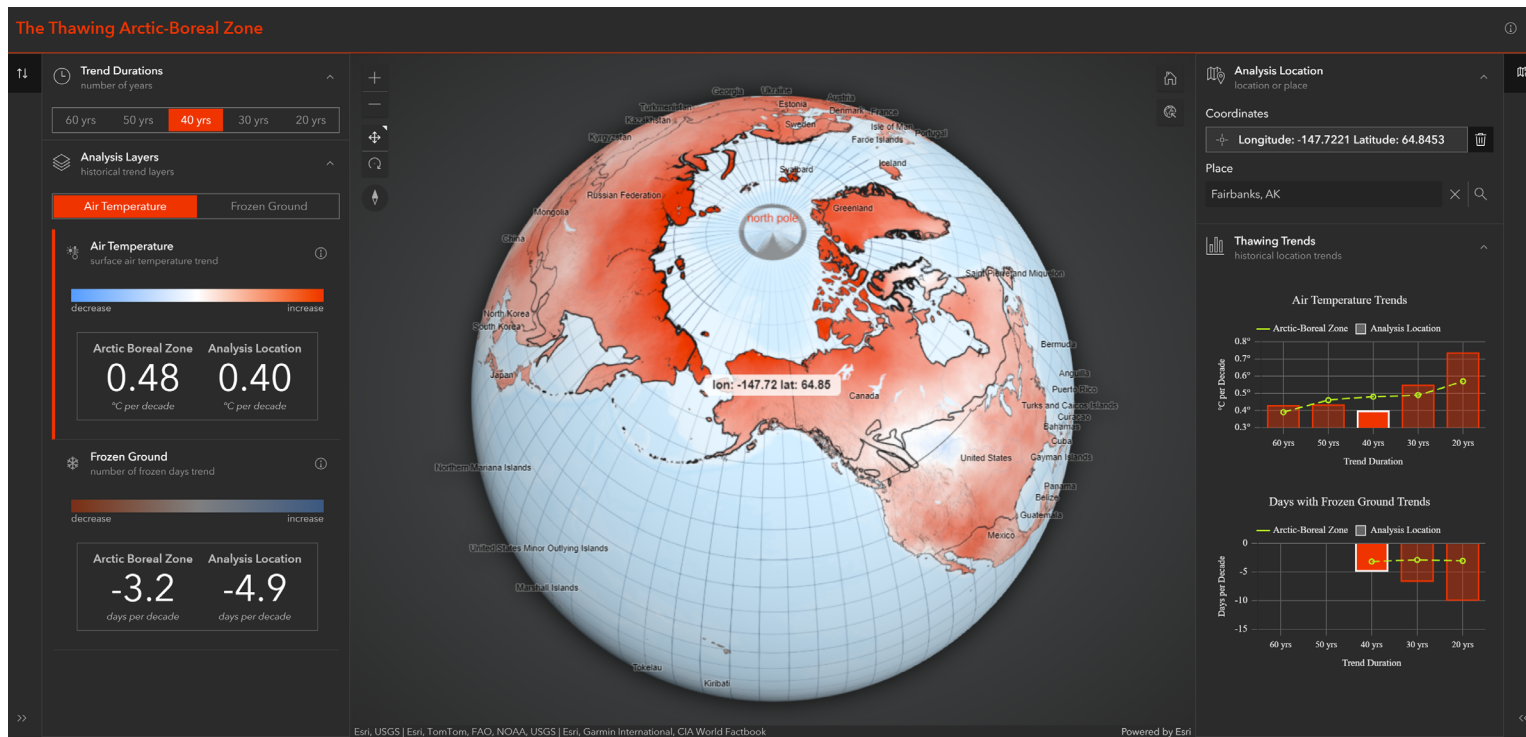
Who is this app for?

This app is for anyone who wants to learn more about warming patterns in the Arctic.

The **purpose** of this user guide is to familiarize the user with the displayed data and different functions of the app.

Air temperature shows air temperature, in degrees Celsius, near the ground. This data comes from both weather stations and satellite imagery.

Frozen ground indicates the number of days per year that the ground surface is frozen. It is derived using microwave emission models from satellites. These satellite sensors detect microwave energy that is related to land temperature and moisture properties. This metric is an indicator of warming environmental conditions above-ground, which affect below-ground layers such as permafrost.



Arctic-Boreal Zone

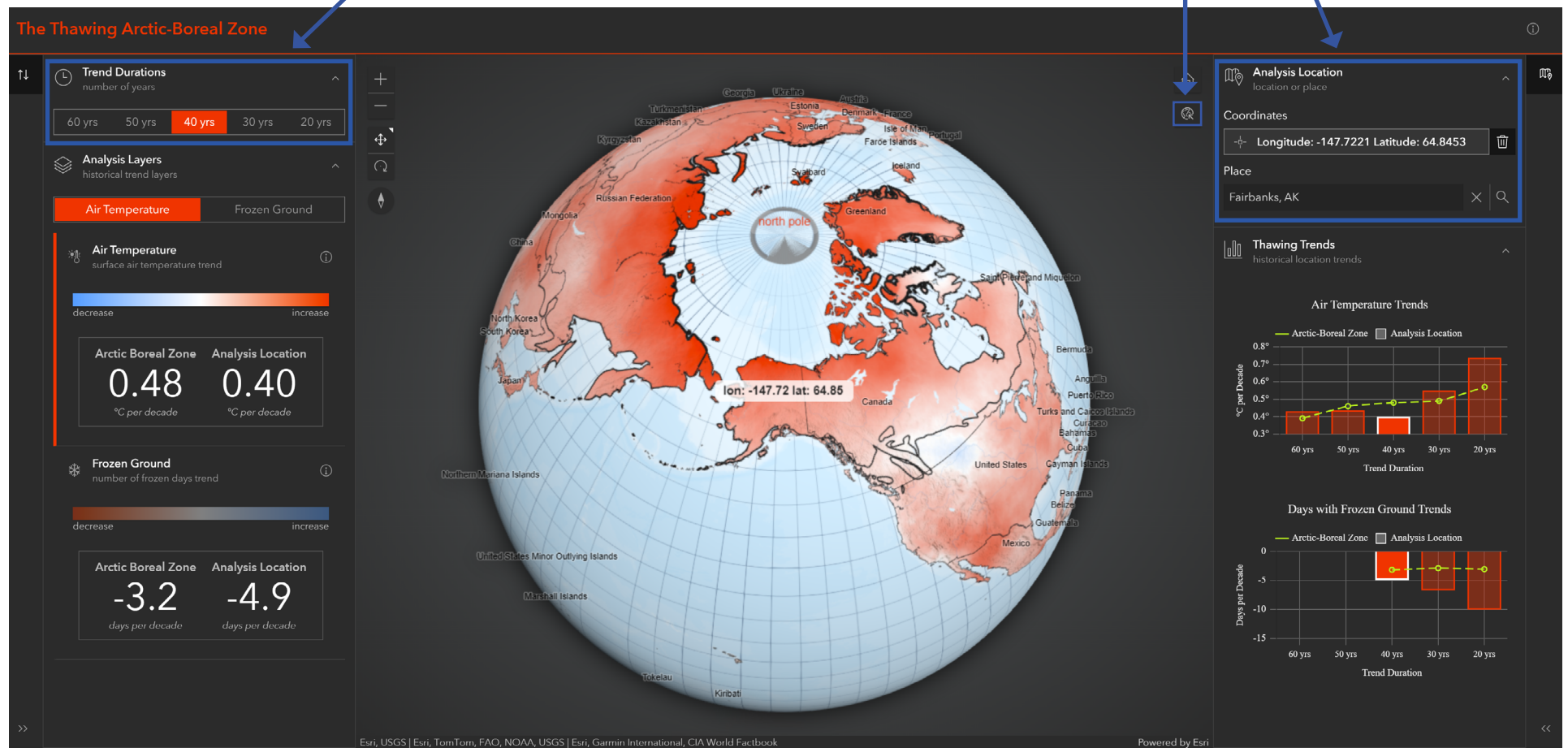
A **Trend** is general change over time. In this app you can choose the length of time you wish to see change.

For example, a 20 yr trend views data from 1999-2019 and a 30 yr trend will show data from 1989-2019.

Choose the time period you want to learn about. You can select between X and X years. The trend length you choose will be displayed on the map and highlighted on the plots.

Choose a place you want to learn more about. You can enter this in the search field using either city name or map coordinates.

Pre-set locations are available here

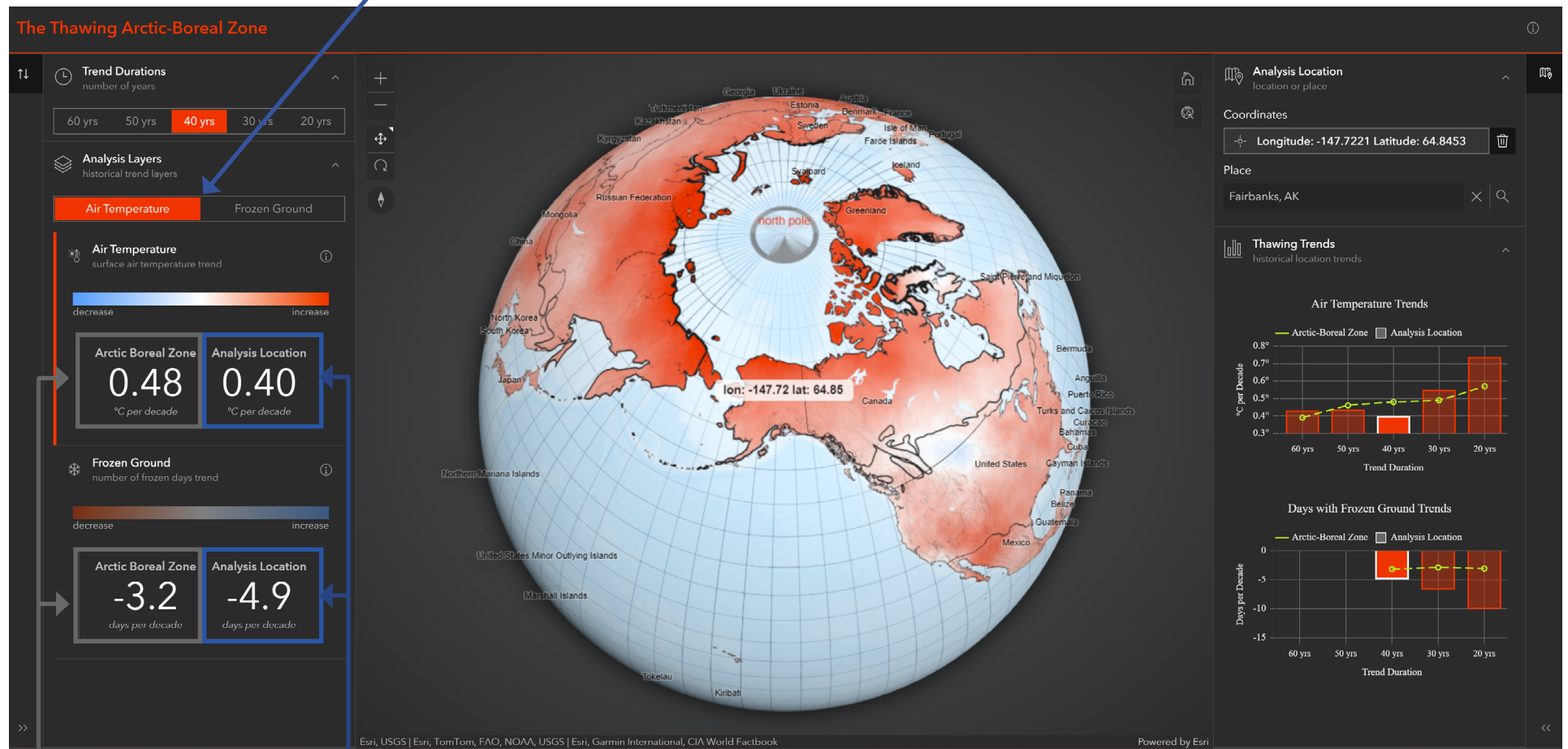


Navigation Tips:

Hover the cursor over an icon to learn about the tool.

Use your mouse to pan across the map to view different locations.

Choose the data layer you want to learn more about, either air temperature or frozen ground. The data you choose will be displayed on the map.



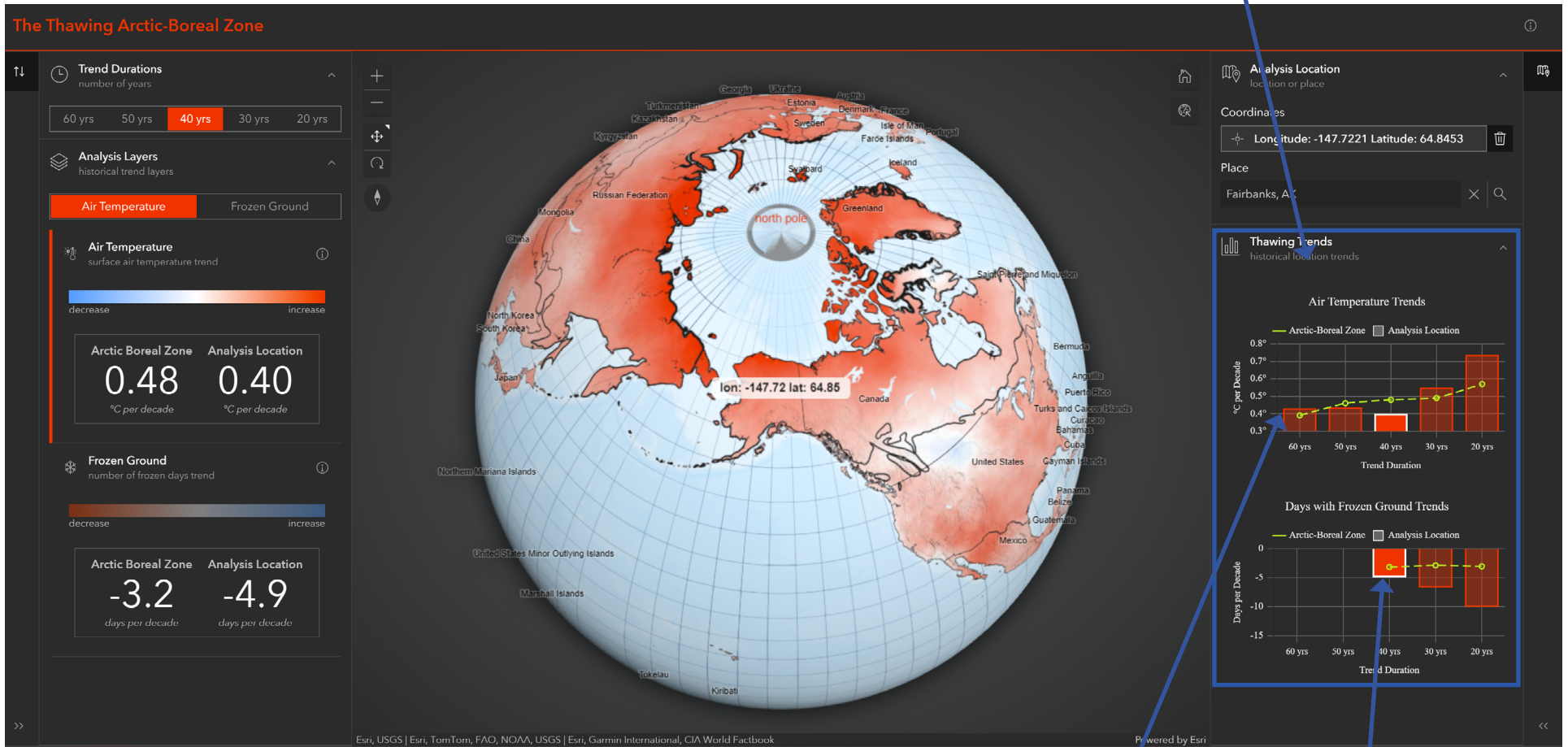
Shows the average trend for the whole Arctic Boreal Zone.

Shows the average trend for the specific location you picked.

Thawing Trends:

These plots show the differences in data for the location you choose (bars) and the average over the entire Arctic-Boreal zone (yellow line). As you change locations, the bars will reflect the data for your new selected location.

Red bars and mapped areas indicate warming.
Blue bars and mapped areas indicate cooling.



Hover over the yellow line or the data bars to view the specific data on either graph.

The trend length you choose will be highlighted on the plots in solid red.