

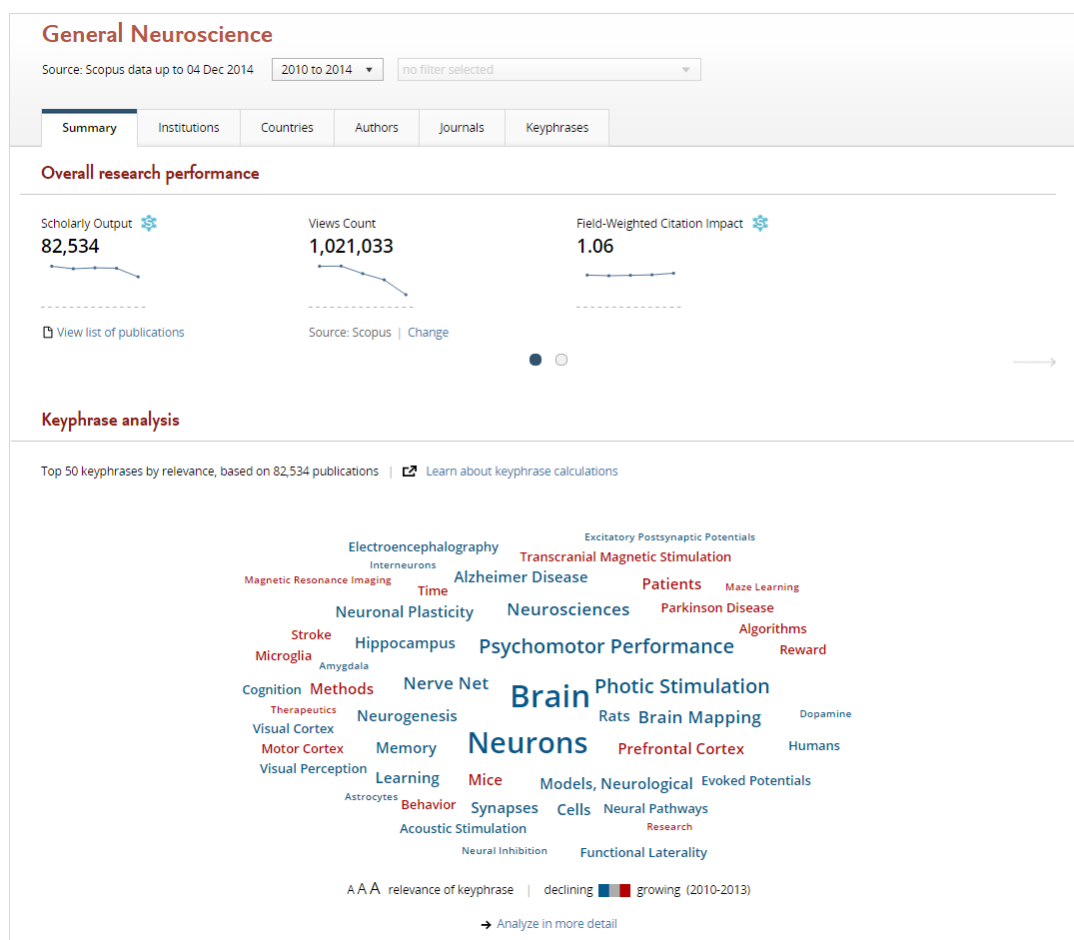
7 The Trends module

7.1 What is the Trends module?

The Trends module is where you can evaluate all aspects of Research Areas. Start with a Research Area you define yourself based on a topic or area of interest, or pick a pre-defined one provided with SciVal. Analyze the developments of the Research Area such as the contributing institutions, authors, countries and journals. The Trends module also allows you to analyze their contribution to the subtopics within the Research Area through a keyphrase analysis.

In addition to citation and publication data the Trends module includes usage data from Scopus and ScienceDirect to complement the analysis.

You can review the underlying list of publications behind every publication count and you can export tables and graph by using the export feature.



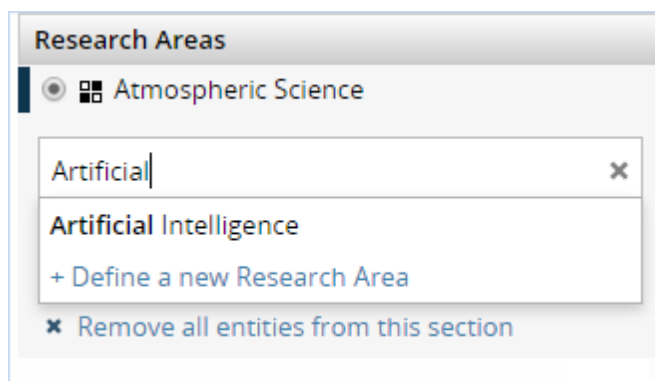
7.2 Working with the Trends module

7.2.1 Selecting a Research Area

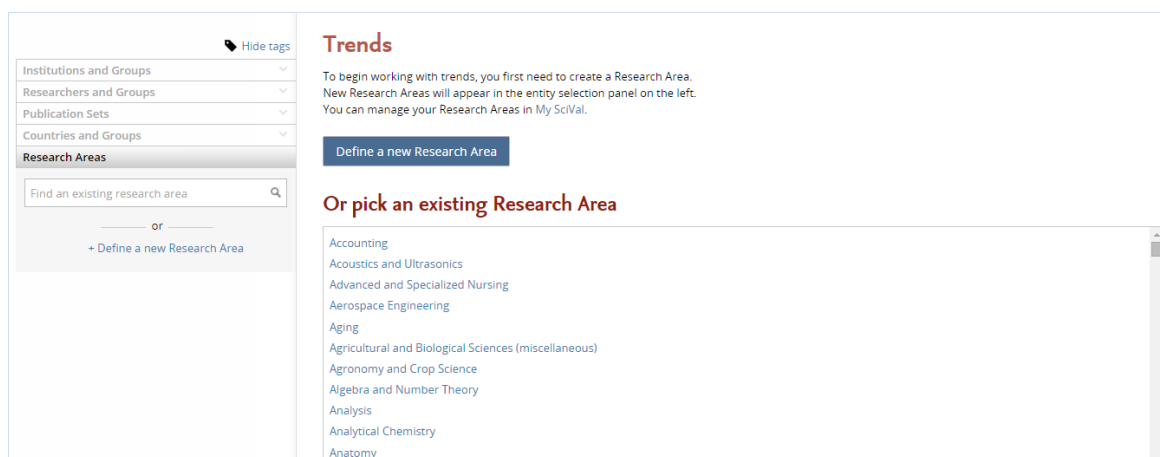
Use the entity selection panel on the left-hand side to select an existing Research Area.

If the Research Area you want is not listed, click on the "Add" link and start typing the name, then

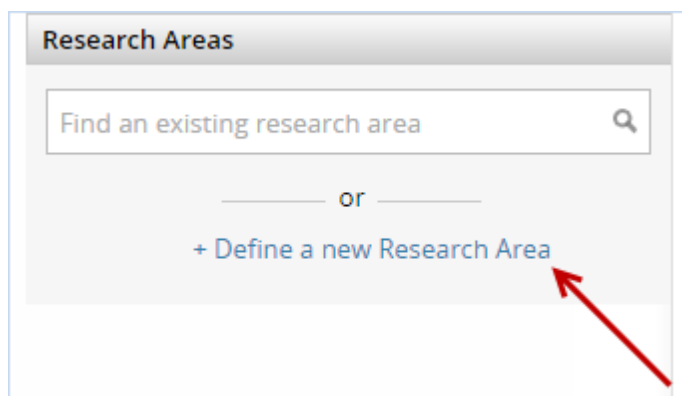
click on the name when it appears in the search results.



If the Research Area section is empty you can select one of the Research Areas provided by SciVal from the list or look them up and add them to the entity selection panel. SciVal provides all the Scopus Journal Categories as Research Areas to help kickstart your analysis.



If you want to [define your own Research Area](#) to use in SciVal, select the option “Define a new Research Area” from the Entity Selection Panel.

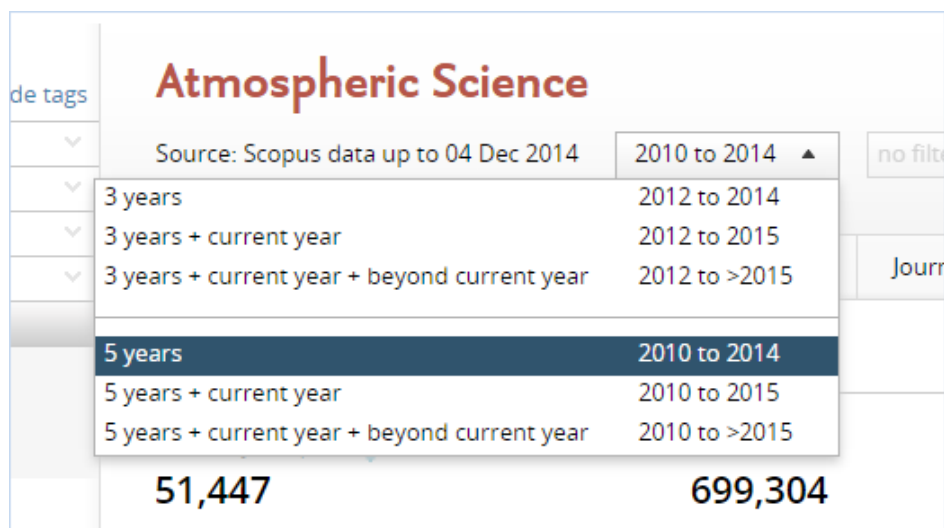


7.2.2 Selecting a Year range

You can view publication and usage data for a period of either three or five years. Use the year range selector at the top of the page to select the desired year range.

Optionally, you can also include the current year and future publications. However, data from the current year may not be complete as Scopus may not have received all of the publisher's journal

content.



7.2.3 Working with the map

The map view is available for countries and institutions. It shows the location and contribution of the institution or country. Up to two variables can be plotted against one another at a time using both shape and color.

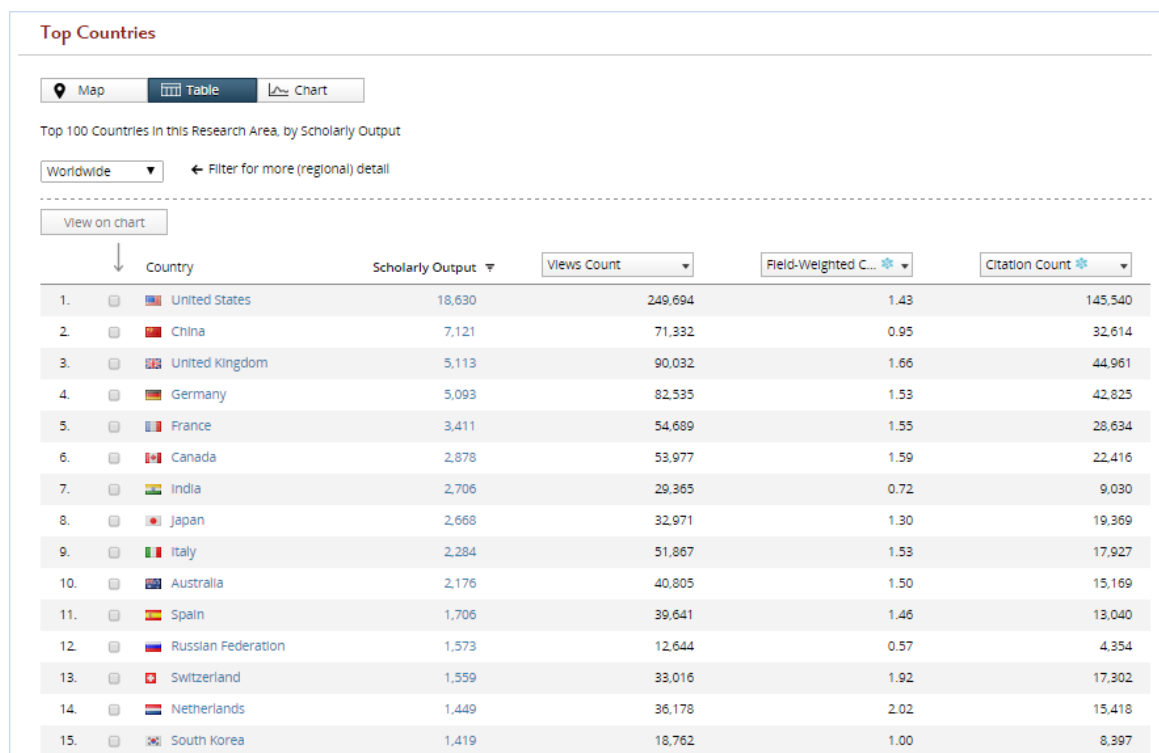
Zooming in and out. You can use the zoom control in the top left corner of the map to zoom in and out. You can also zoom in by double-clicking on the map.

7.2.4 Working with the table

To complement the map view, you also see the contributing institutions, countries, authors and journals in a tabular list view.

For "Institutions", "Countries", "Authors" and "Journals" the table view shows the top 100 contributors by scholarly output. To refine further, use the drop-down menus at the top to view the top 100 contributors in a specific region or country.

- You can change the sort order of the table by clicking on any of the column headings.
- You can use the drop-down menus to switch to view and sort by different metrics.



- Click on the name of an institution, country, author or journal for full details of their contribution to the field.
- Click on the number of publications to view the list of publications

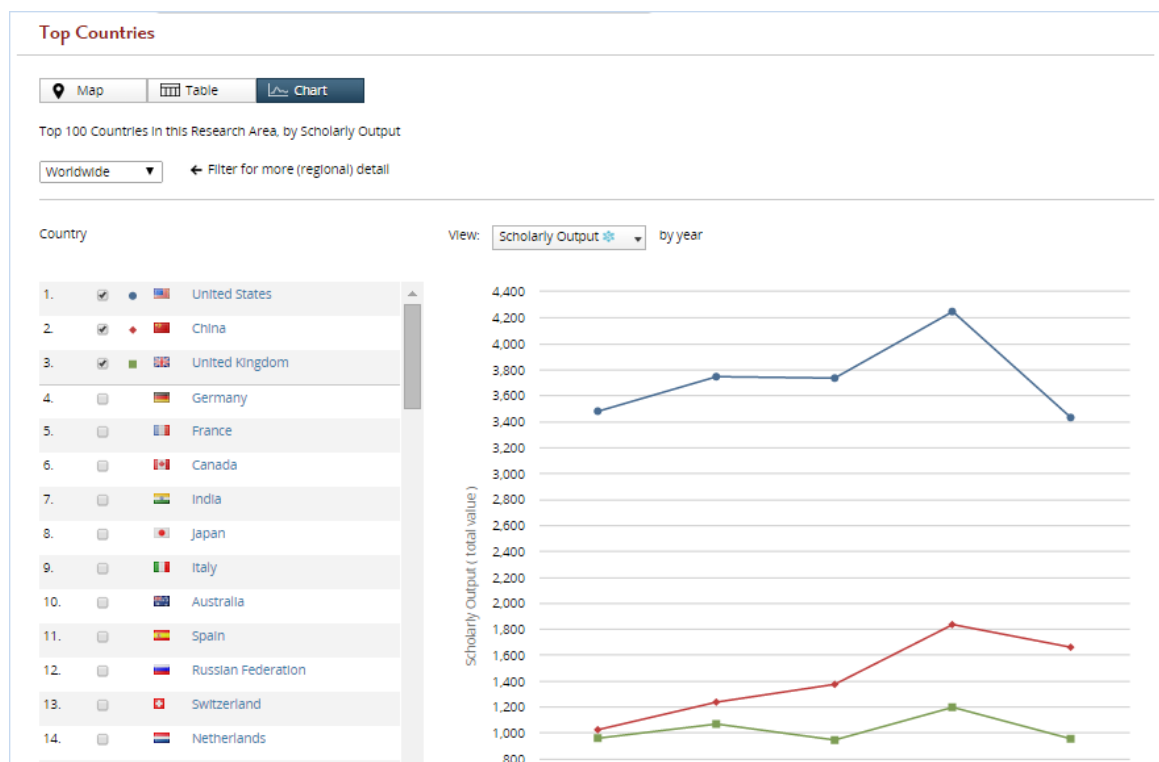
7.2.5 Working with the chart

To complement the map and table view, you also view the contributing institutions, countries, authors and journals plotted over time in the chart view.

For “Institutions”, “Countries”, “Authors” and “Journals” the table view shows the top 100 contributors by scholarly output. You can use the drop-down menus at the top to view the top 100 contributing institutions in a specific region or country.

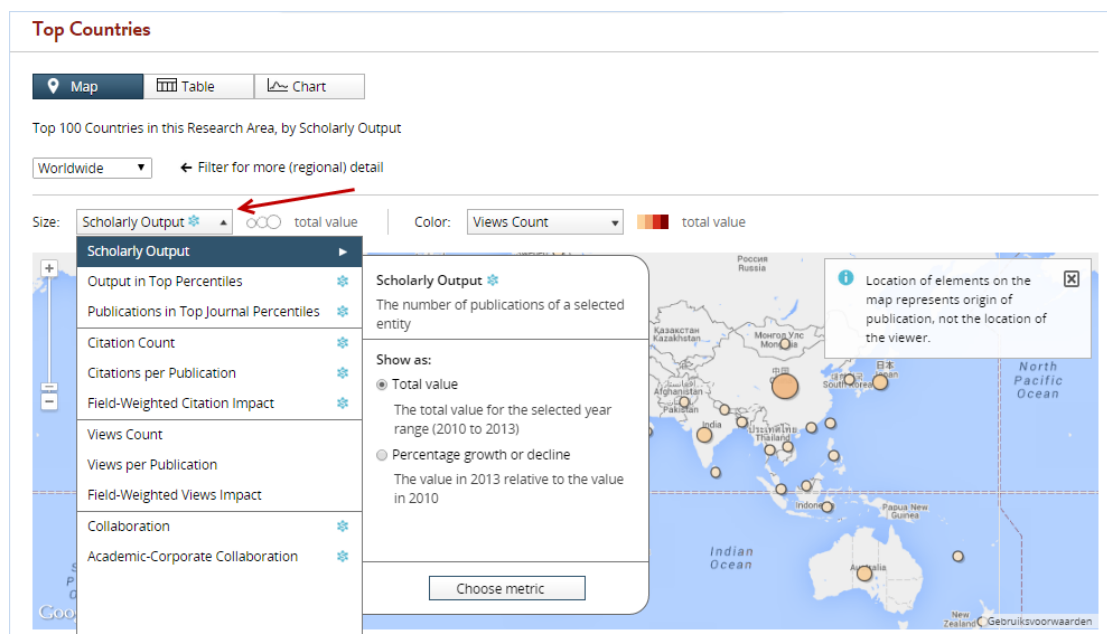
Click the check-boxes next to the contributors in the list to add them to the chart.

You can change the metric on the y-axis by clicking the view drop-down and by using the Metrics details option you can get more information on the metrics you selected.

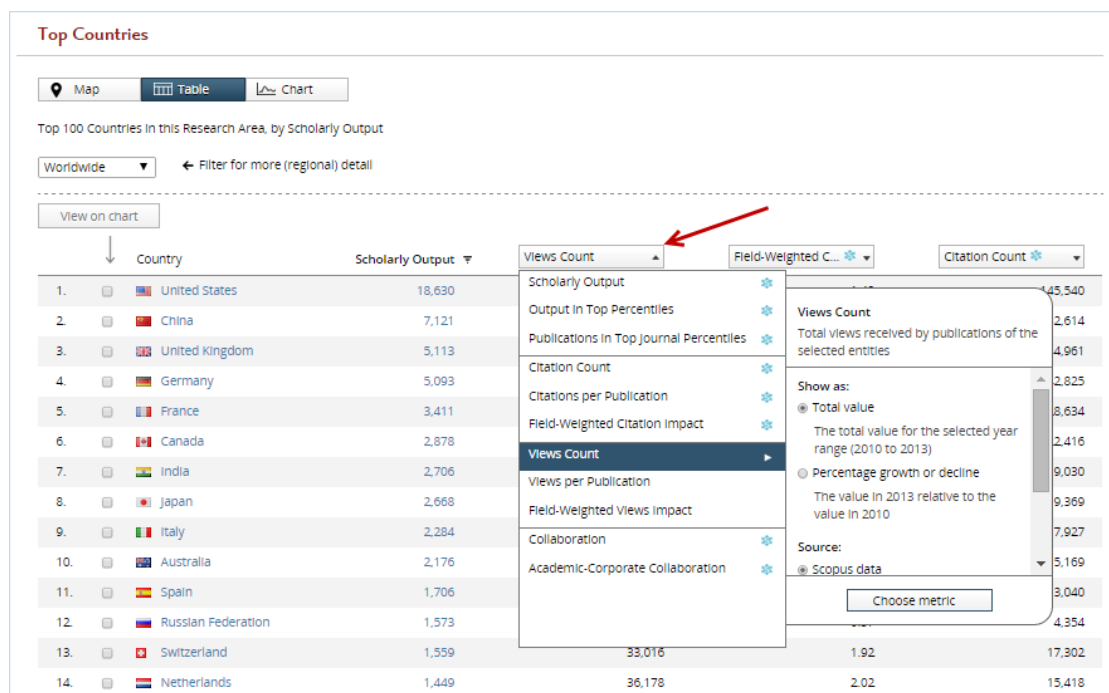


7.2.6 Selecting metrics

Metrics in the Map view. The [Map view](#) allows you to select two metrics and plot them against one another. By default, the metric Scholarly Output (number of publications) is shown as the bubble size and Views Count is shown as the color.



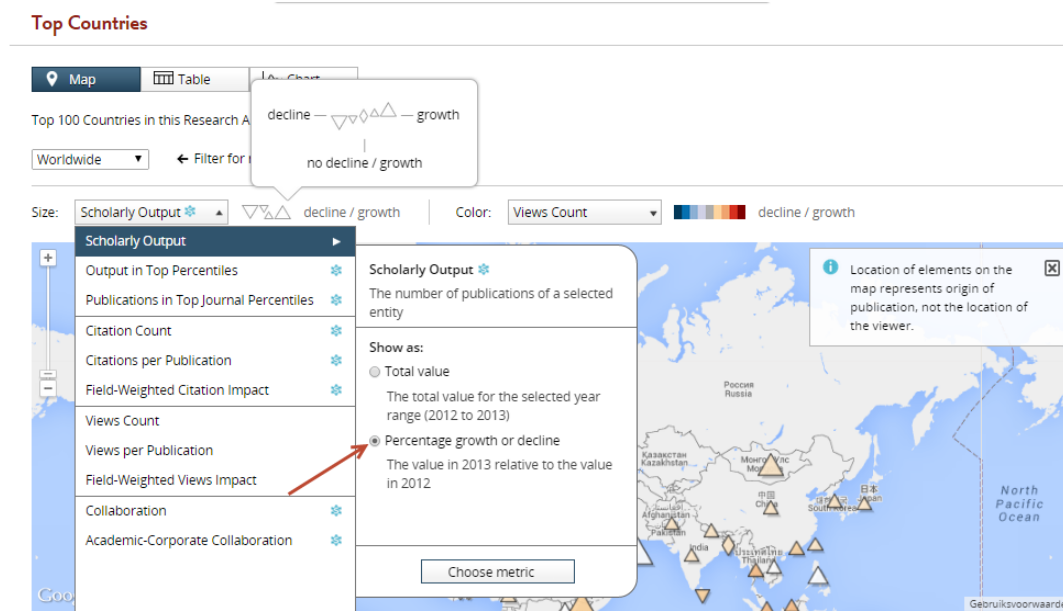
Metrics in the table view. The [Table view](#) allows you to view more metrics depending on the screen size. By default the list is sorted by Scholarly Output with additional columns for Views Count, Field-Weighted Citation Impact and Citation Count.



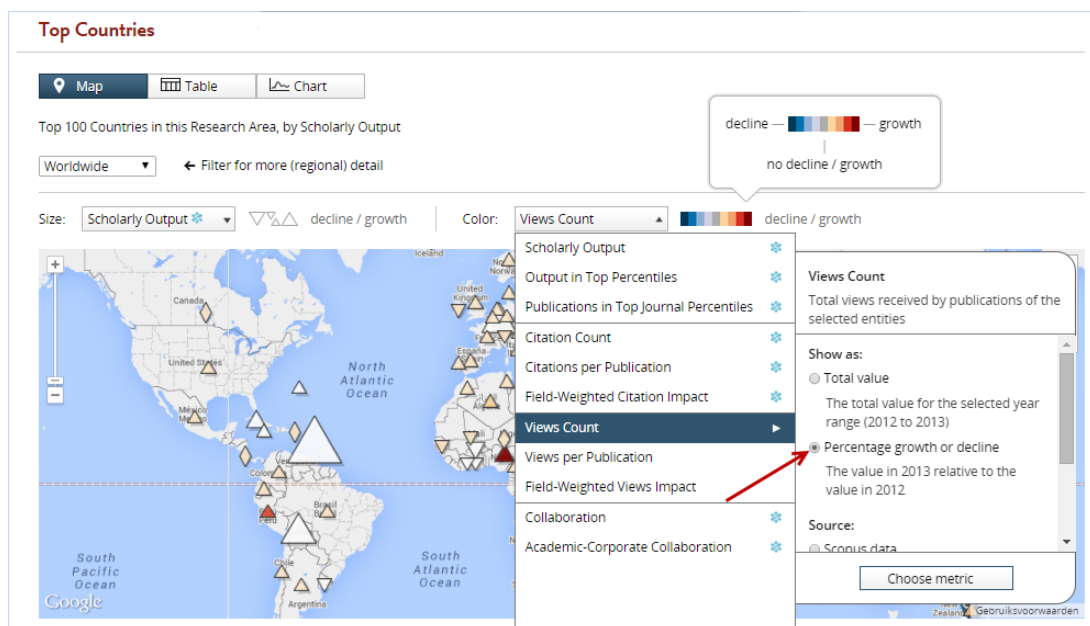
Changing metrics. To view a different metric, click on the button with the metric name you wish to change along the top of the map or in the column headers in the Table view. Select which metric you want to view from the list. Then click on the “Choose metric” button.

Which metrics are available to use in SciVal?

Choose total value or percentage growth or decline. Each metric has different options, for instance, you can choose to show total values or percentage growth or decline during the selected time period. If percentage growth or decline is selected as the first metric in the map view, it is displayed as upward triangles for growth and downward triangles for decline. The size of the triangle is the relative magnitude.



If it is selected as the second metric, negative values are displayed as blue tones and positive values as red tones.



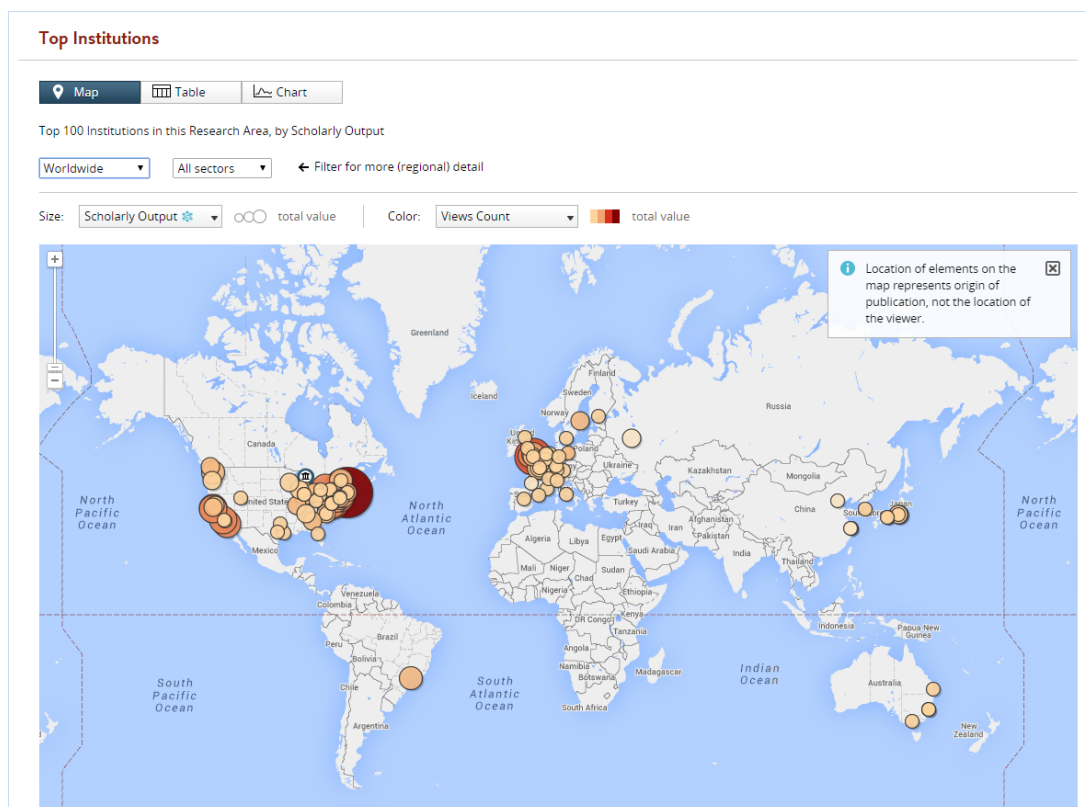
7.4 Identify top performers

Identify the top performers within the Research Area. In the Institutions map view you can get a global overview of the top performing institutions within the Research Area. You can zoom in to a specific region or country, for instance, to see the top performing institutions in Europe in General Neuroscience:

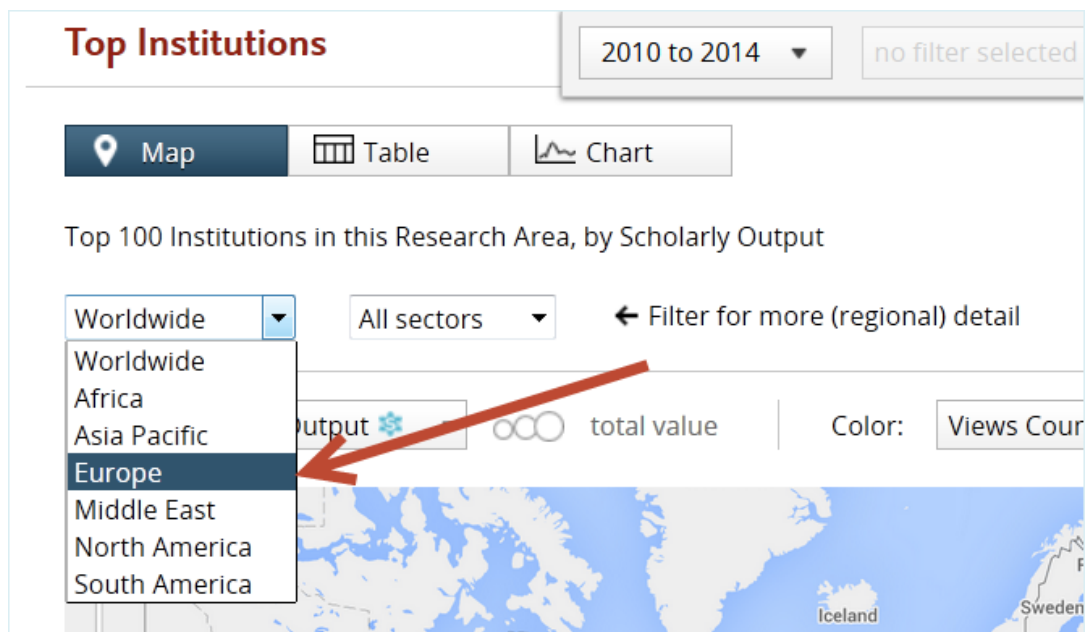
1. Add General Neuroscience by clicking + Add Research Areas at the bottom of the Research Area section in the entity selection panel on the left-hand side and start typing it in until it can be selected from the drop down menu.

The screenshot shows the 'Research Areas' section in the SciVal interface. It features a search bar with the text 'general neu' and a dropdown menu that displays 'General Neuroscience' as a suggestion. Below the search bar, there is a link '+ Define a new Research Area'. The interface also includes a section for 'or' and another '+ Define a new Research Area' link.

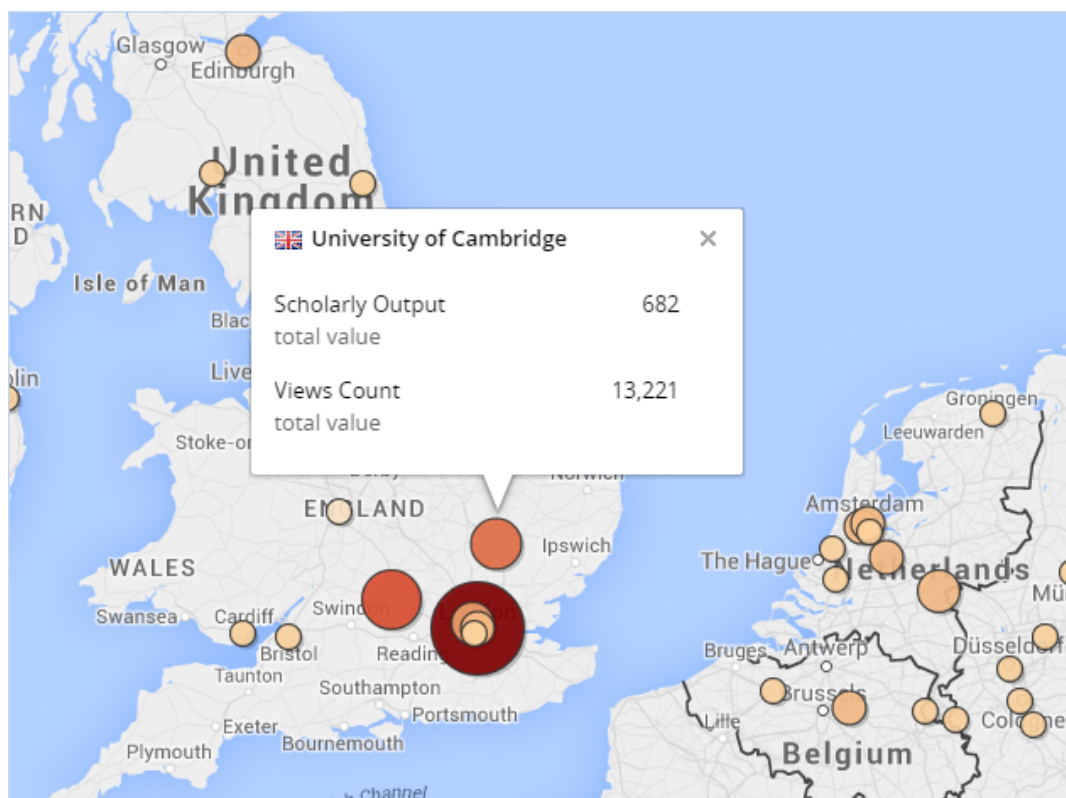
2. Go to "Institutions" and select the Map view.



3. Choose Europe from the region selection drop down to see the contributing institutions in Europe. By default Scholarly Output is visualized as the size of the circle and Views Count is visualized by color. In this view it is easy to spot clusters of activity in a geographic region.



4. Zoom in further using the plus button or the slider to the left on the map. By hovering over the institutions of interest we get more information about their contribution to the field. You can also click on the marker to see a more detailed view about the institution.



5. To get a more detailed view change to the Table view. Here you can see different metrics in tabular format and sort by them. By default, the the table is sorted by Scholarly Output, but you can also see the citation impact instead. Click on one of the metric names and use the drop-down menu to switch to a metric of your choosing, such as number of citations, Citations per Publication or Field-Weighted Citation Impact.

