

EO-me Usage Instructions

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Contents

1	Create or Edit Metadata Filter	3
1.1	Name your filter	3
1.2	Filter metadata via GUI	4
1.2.1	Satellite	4
1.2.2	Sensing time	4
1.2.3	Spatial Filter	5
1.3	Filter metadata via Attribute Filters	7
2	Apply your filter	9
2.1	Results per page	9
2.2	Apply filter	9
2.3	Result table	9
2.3.1	Back to filter	9
2.3.2	Export all as...	10
2.3.3	Export selected as...	10
2.3.4	Show on map	10
2.3.5	Right click menu	10
3	All filters - Your filter manager	11
3.1	Add new filter	12
3.2	Delete selected filter	12
3.3	Download selected filter	12
3.4	Upload filter	12
3.5	Edit filter or filter again via doubleclick	12
4	Location search	13



5 Help and Documentation

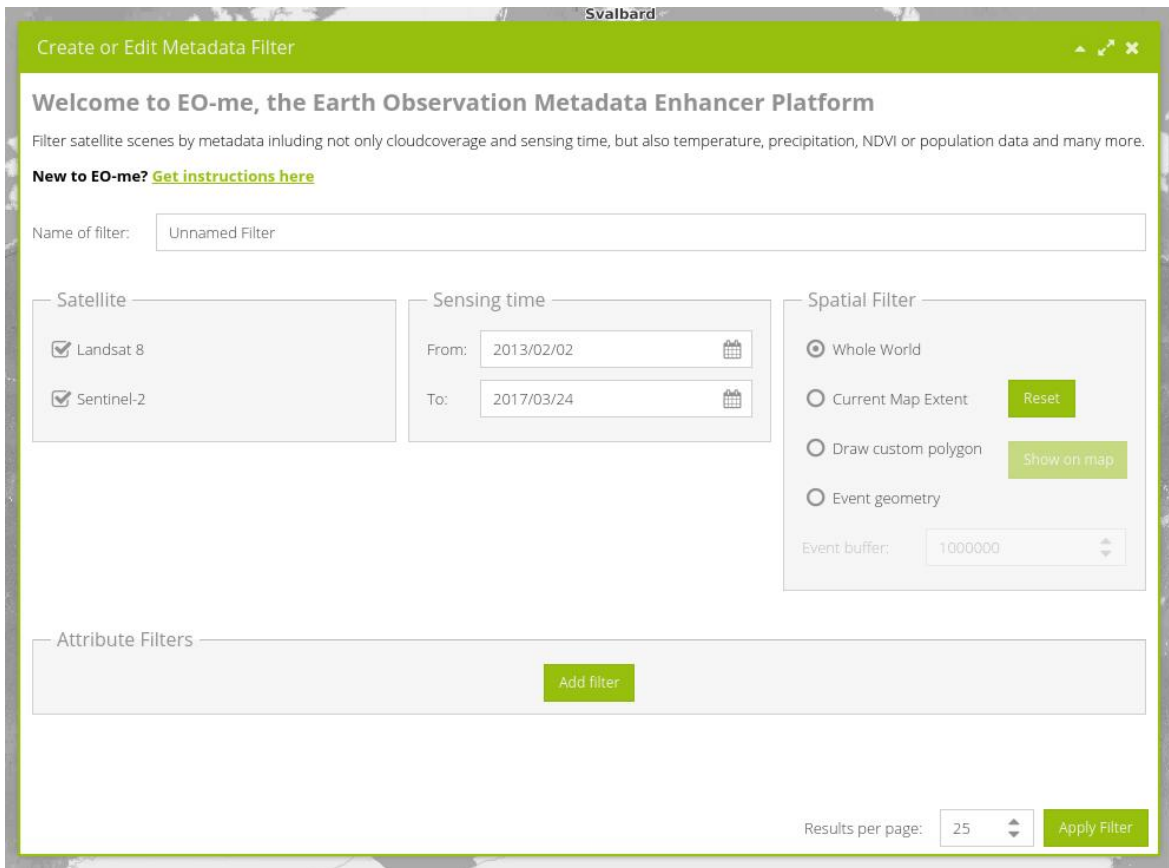
14

6 Imprint

15

1 Create or Edit Metadata Filter

In the start view of the webclient available at eome.mundialis.de/eome the user can immediately see the main window with which to create new metadata filter. The title of the window is “Create or Edit Metadata Filter” and from here a name for the filter can be given, one or more satellite system(s) can be chosen as well as the start and end of the sensing time. It is also possible to limit the geographical extent. Let's start to create the first filter!



1.1 Name your filter

Name of filter:

My first warm and wet filter



In the text field behind the words "Name of filter" let's put the description "My first warm and wet filter". We will create a filter of regions at global scale where it is warm and wet.

1.2 Filter metadata via GUI

1.2.1 Satellite

Satellite

Landsat 8

Sentinel-2

Next we can choose the satellite systems we want to include in our search. By default, all supported satellites, i.e. Landsat-8 and Sentinel-2 are available. Let's leave the selection as-is.

1.2.2 Sensing time

Sensing time

From: 2016/10/01 

To: 2017/02/01 

Next to the satellite filter there is a time filter. In our example, we only want to see results taken from the satellites between the 1st of October 2016 and the 1st of February 2017 so we set the time filter accordingly.

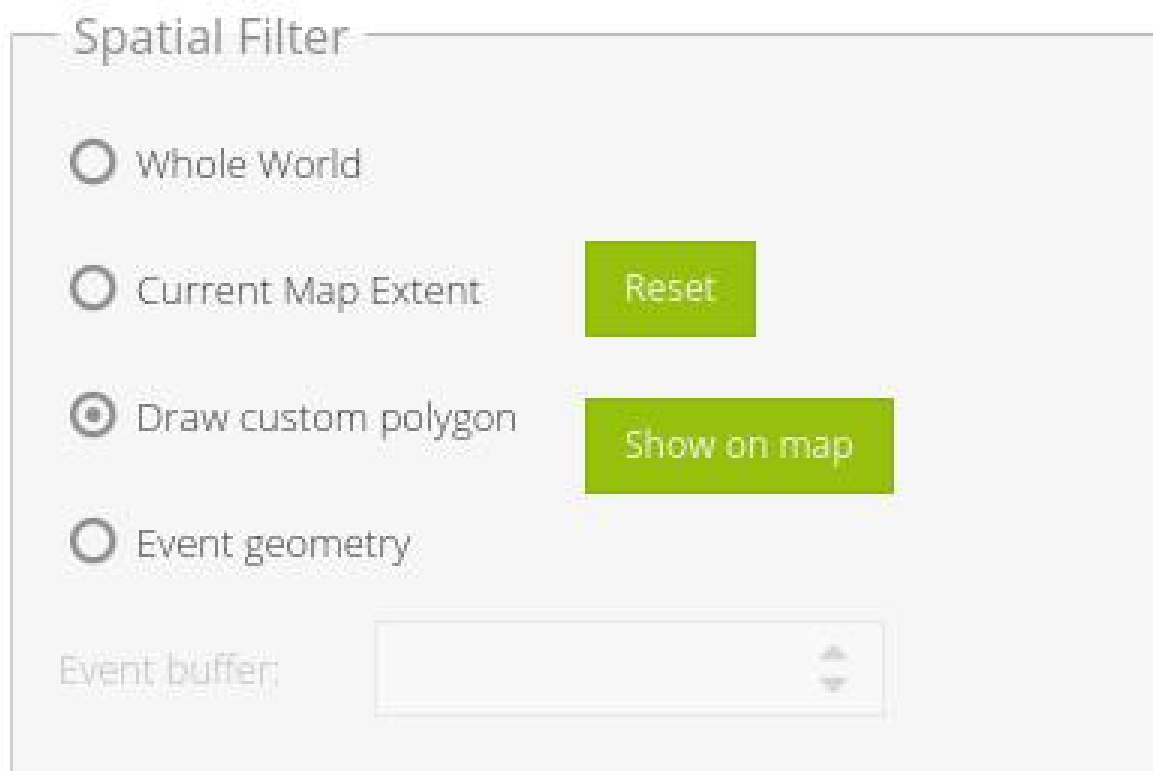


1.2.3 Spatial Filter

In this section we will add a spatial filter. Options are

- Whole World
- Current Map Extent
- Draw custom polygon
- Event geometry

The first option sets a global spatial extent, i.e. it returns results from the whole world. With the current map extent option you can zoom on your map and get results from only what you see then. The third option allows you to draw a custom polygon which we will do now. Choose the option “Draw custom



polygon” and the filter window will collapse. In our example, we want to see satellite scenes from South America, so we draw a polygon around this continent. Start drawing by a mouse click and continue to digitize the polygon points by further clicking. Finish your polygon with a double-click. You can have a look at it later by pushing the button “Show on map”.

There is another option in the Spatial Filter with which you can choose a geometry from an event. When choosing this option, a window opens and you receive a list of earthquakes which happened in the time



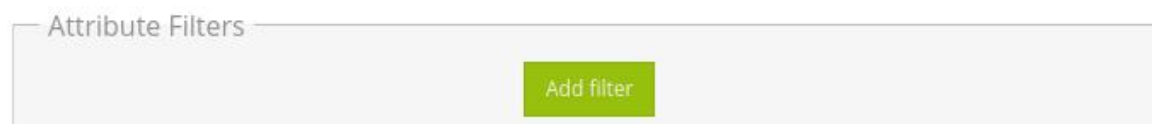
you selected before. In this window you can also select the magnitude of the event. If you choose a hazard event either by selecting an event with one click and pressing the “Apply Hazard” Button, or directly via double-click on the event. When one is selected, you can have a look at it on the map or when one is



applied and the hazard window is closed via the button “Show on map”. When a hazard event is applied, the time filter will be set automatically from one day before the event to one day after the event. All Spatial Filters can be undone with the Reset button.

1.3 Filter metadata via Attribute Filters

Now we selected the satellites, the sensing time and a geometry filter. We also gave our filter a name, but there is more we can do to filter our search results. Below the settings we explored there is another with which you can define Attribute filters. Simply click on the “Add filter” button.



Let’s add some more filters! A drop-down menu appeared where we can choose a property. All of them are explained in the data documentation. As we want our filter results to be in a warm and wet area, we choose the property temp_cmean, which is the annual average temperature. We want it to be larger than or equal to 27°C and set these values. Then we add a new filter and choose the property prec_cmean which is



the annual average precipitation. But which values may we enter? For more information we click on the “?” symbol and a list with sample values appears. From those we can assume that a value of 2000 must correspond to high precipitation sums and enter it with the larger than operator. In the help window also appears a link to receive more specific information about the chosen property and the underlying datasets. Our Attribute filter settings should now look like this:

Attribute Filters

Property:	Operator:	Value:		
temp_cmean	≥	27	Remove WFS filter	?
prec_cmean	>	2000	Remove WFS filter	?

Add filter

If we would like to use the “Is Like”-Filter, we need to add “*” around our search string. E.g. if we want to find datasets with a title containing the string “MSIL1C” we need to enter “*MSIL1C*” in the value field.

2 Apply your filter

Now it is time to see the results!

2.1 Results per page

At the bottom of the window there is a field where you can select the count of the results per page. Default is 25 rows and the allowed maximum is 100 results per page.

2.2 Apply filter

Next to this field is the “Apply filter” button which we press now. For each click on this button in the



“Create or Edit Metadata Filter” window, a new filter is created in the panel “All filters” to which we will come in the next section.

2.3 Result table

We can see the filtered results in a new window in a table. All properties which we could choose in the Attribute filter are listed for each returning satellite scene. The results you can see in the table (up to 100 as set before in Results per page) are also drawn on the map. Hovering over the items will color them on the map. From here you have different options:

2.3.1 Back to filter

Return to the filter window and close the result table.



The screenshot displays the Mundialis web interface. At the top, there is a search bar and a filter menu. Below the filter menu is a table with columns: id, title, platform, sensing_ti..., cloudcover, area, processingl..., productide..., producttype, resolution, sensormode, snowcover, published, collection, and compl. The table contains 20 rows of data. Below the table, there are buttons for 'Back to filter', 'Export all as...', 'Export selected as...', and 'Show on map'. On the left side, there is an 'Attribute Filters' panel with two filter rules: 'temp_mean >= 27' and 'prec_mean > 2000'. On the right side, there is a map of South America with a blue shaded area indicating the location of the filtered results.

2.3.2 Export all as...

Export all results (if your filter settings are similar, you should have around 20) in different file formats and download them. Export is possible for up to 2000 features. One option is as download script, which you can run in a terminal and which will download all filtered satellite scenes from different servers.

2.3.3 Export selected as...

If you are only interested in some results you can select multiple with the checkbox option and download only the selected features.

2.3.4 Show on map

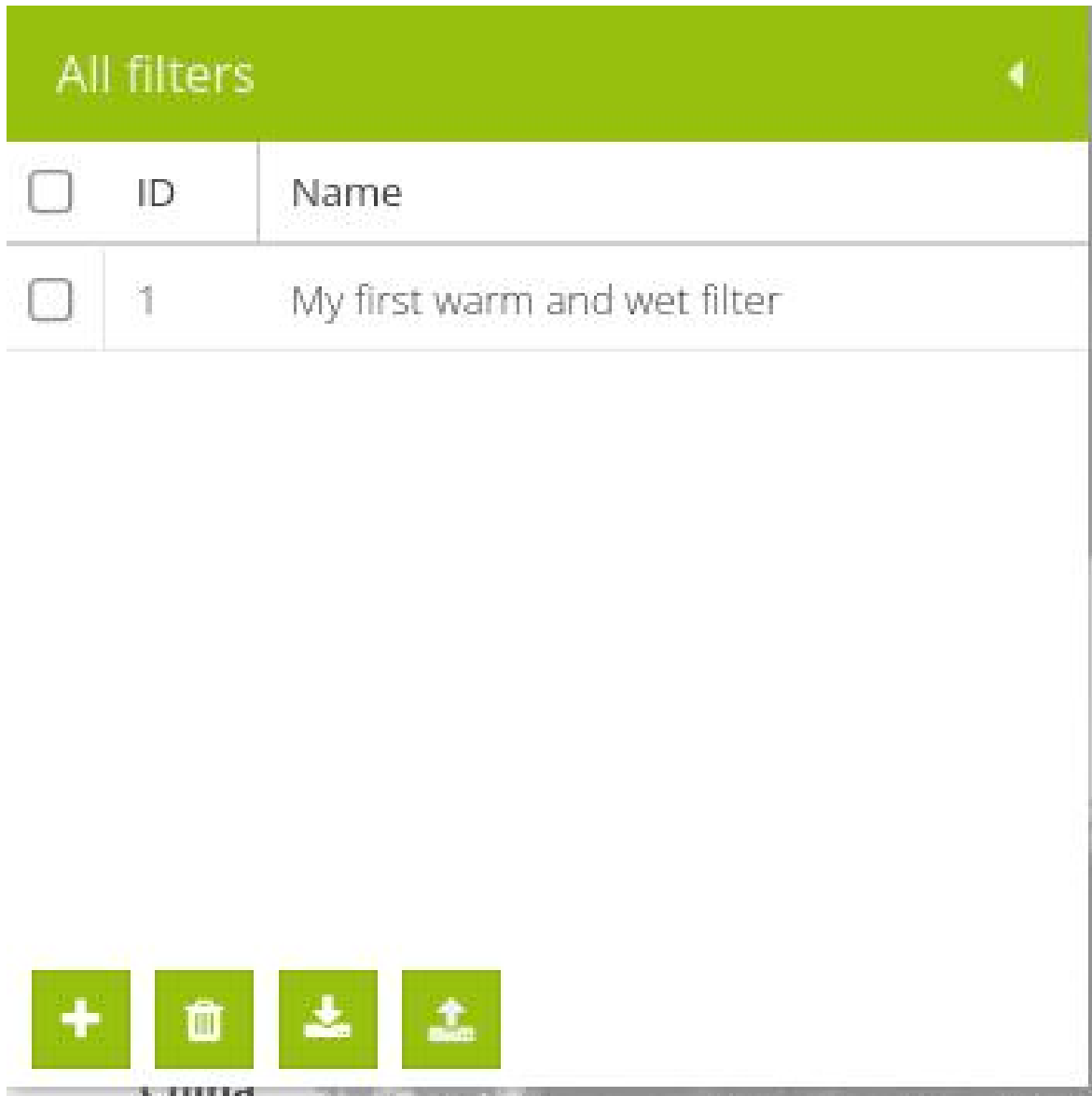
See all results on the map, not only the ones you can see in the current page of the result table. This is possible for up to 2000 features.

2.3.5 Right click menu

If you are interested in a certain value, you can right-click on a value and copy the value or the row. Downloading of this one scene metadata is also possible.

3 All filters - Your filter manager

We saw before, that when we applied our filter, it was added to the panel “All filters”. Each time we apply a filter it will be added to this panel but we have to distinguish between the “Create or Edit Metadata Filter” window, which will add each filter and the Filter Settings Window of a certain filter which is already in the manager panel. In this case, the filter will be overwritten.



<input type="checkbox"/>	ID	Name
<input type="checkbox"/>	1	My first warm and wet filter



3.1 Add new filter

If we closed out main filter window we can reopen it with the + button. It will open a new window in which we can create a filter.

3.2 Delete selected filter

If we have created many filters but don't want to keep them all, we can select multiple filters with the checkbox option and click on the trash bin.

3.3 Download selected filter

If we want to keep and share a filter, we can download it to the own computer. Let's download our warm and wet filter. Click on it, so that the checkbox is ticked and press the download button. The resulting filter file you can send to a friend or colleague!

3.4 Upload filter

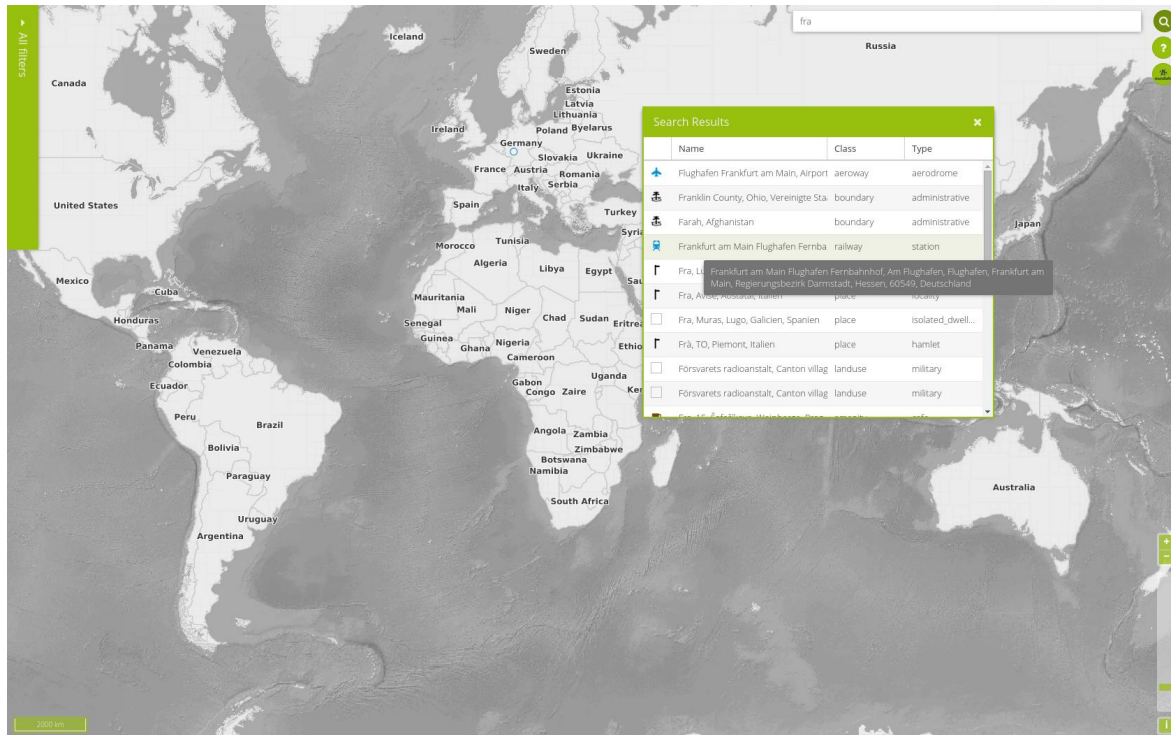
Once your friend or colleague has received the filter they can use it like this: They need to click on the upload button and select the filter from file. Through this it will become available to their system.

3.5 Edit filter or filter again via doubleclick

When the filter is visible in the panel "All filters" the settings window can be opened by double-clicking the filter in the list. This window looks like the "Create or Edit Metadata Filter" window but when the filter is applied, the filter is edited and not a new one is created. Unless settings are not changed and the apply button is used, they should see the same result table as you got before on your own system.

4 Location search

When you are interested in a certain place on earth while not being sure where it is, use the location search on top. It accepts both location names or comma-separated latitude/longitude values (e.g. 50.7409291,7.0968584).



5 Help and Documentation

From the webclient there are many possibilities to reach the documentation. The easiest way is to click on the button with the question mark in the top right toolbar.



6 Imprint

List of Figures



List of Tables