

ERMES Local Geoportal

User Guide

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http://ermes.dlsi.uji.es/





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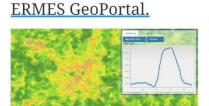


1 How to access ERMES Local Geoportal

Type http://ermes.dlsi.uji.es/ in the navigation bar of your favorite browser (recommended browser: Google Chrome) and click on the link "ERMES GeoPortal"



ERMES - Prototypes.









UJI Team

Figure 1 ERMES Geoportals entry web site





2 Creating an account

To create an account, click on the "Create account" link. (Figure 2)

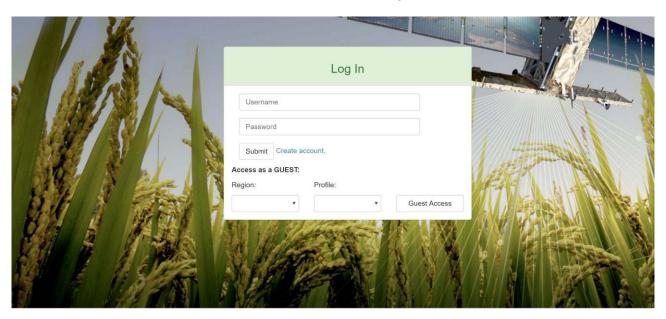
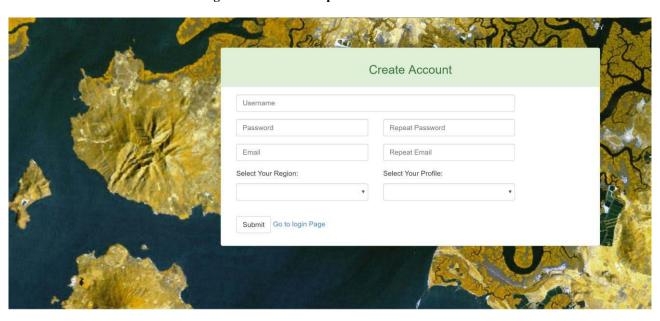


Figure 2 ERMES Geoportals welcome screen







In Figure 3:

- Enter your name and surname.
- Enter a username (choose any username).
- Enter a password (choose any password).
- Enter your email address. The email address needs to be valid; we will send an account activation link to this email address.
- Select the area of your interest (Greece, Spain, Italy).
- Select your profile (Regional, Local).

Once all fields are filled in, click "Submit". Your account needs to be activated. You will receive an email once your account is activated. Go back to the login screen (Figure 2) by clicking on "Go to login page" to enter your user credentials.





3 Logging in

Once again in the login screen (Figure 4), enter your username and password and click "Submit". Guest access without validated user credentials is also allowed for demonstration purpose only. Guest users do not have access to the full range of data products and features of the Geoportal. Select the region of interest (Greece, Spain, Italy, Gambia, Senegal) and profile (Regional, Local), and click "Guest Access"

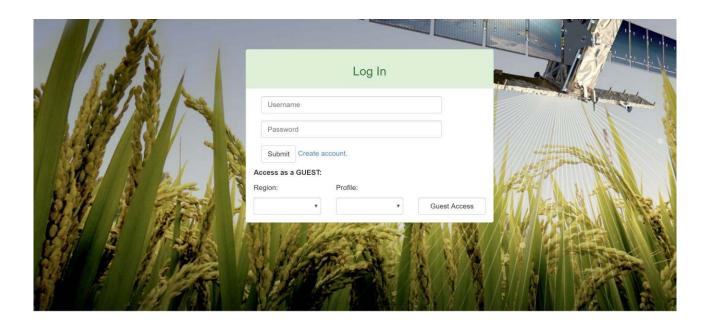


Figure 4 Logging in





4 Initial screen of the Local Geoportal

Once login-in (either as authenticated user or guest user), you are landing in the initial page of the Local Geoportal (Figure 5). The basemap integrates the layer of parcel division, and parcels with thick green border are those that belong to the user. A few icons and widgets are visible to get access to the full list of features of the Regional Geoportal.

- Eye icon (Monitoring): Utility to discover, select, visualize and inspect data products
- Two arrows icon (Comparison): Utility to compare two data products at the same time
- Magnifying glass (Parcel locator). Utility to find a parcel (only on Spanish version)
- Lines icon (Legend): Show graphic legend of the active data product being visualized
- Gear icon (configuration): Access to configuration options.
- Scale widget at the left-bottom corner gives information about the scale of the map
- Location widget at the right-bottom corner allow to "remember" a pair of coordinates
- Zoom widget (+ and symbols) at the top-right corner allows to zoom in and zoom out.
- Info label widget (not represented in Figure 5). When a data product is visible, a label below the Location widget is displayed containing basic information about the current selection.

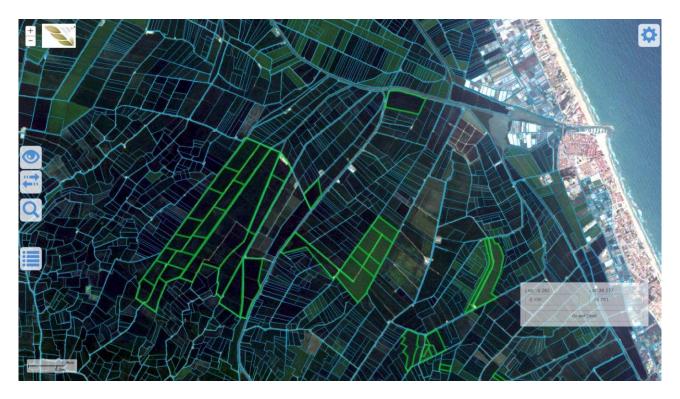


Figure 5 Initial screen of the Local Geoportal





5 Monitoring: access and visualise data products

After clicking on the "eye icon" (Figure 5), a pop-up window is prompted (left part of Figure 6). The blue selectors allow you to select a season year and a data product available for that year.



Figure 6 Monitoring: Access to data products

Once you choose the year and a data product, three actions are triggered:

- 1/ the first map (raster image) of the time-series data product is visualized on the map, becoming the active data product;
- 2/ and a new blue selector (date selector) becomes visible (Figure 7), so you can visualize a map of the data product in that particular date; and
- 3/ alternatively to 2/, a time slide widget appears in the bottom of the main screen to help you browse and select along a temporal axis any map of the series (Figure 7).





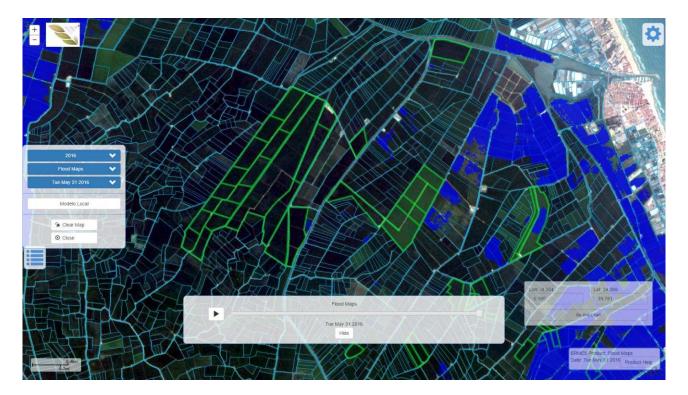


Figure 7 Monitoring: selecting a map of a time-series data product given a date





6 Monitoring: toggle legend graphic

Click on the "Lines" icon situated in the bottom-left part of the main screen to make the legend graphic of the active data product visible (Figure 8). Click on Close button to hide it.

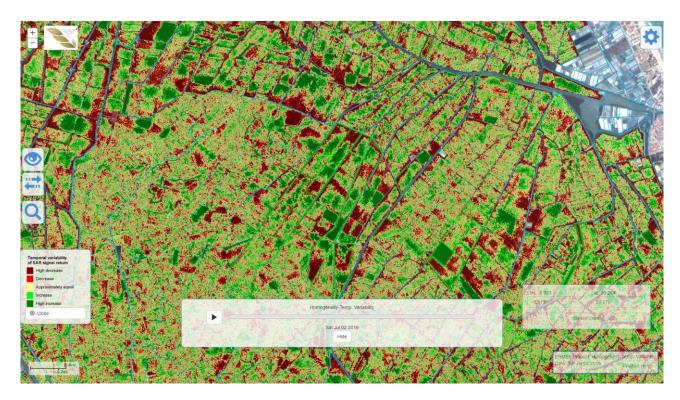


Figure 8 Monitoring: toggle legend graphic





7 Monitoring: Info label widget

When there is an active data product, an info label is displayed at the bottom-right corner of the screen showing basic information (product name, date) of the current solution. Click the "Product Help" option to show up a window help with a brief explanation of the product (Figure 9).



Figure 9 Monitoring: Info label widget





8 Monitoring: locate parcels widget

Click on the magnifying glass icon to pop up a window to allow find a parcel on the map by entering the Town, Polygon and Parcel identifier (Figure 10), which are the required parameter of SIGPAC services (only in Spain). This utility accesses remote services from the SIGPAC server to get the coordinates of the parcel that meets these three parameters.



Figure 10 Monitoring: locator parcel widget





9 Parcel-level management: access all data related to a parcel

By clicking on any location (pixel) of a parcel, a window pops up showing related information to that parcel (Figure 11). This is the way to get access to detail parcel-level information coming from different sources. For convenience, information is grouped in the following categories (tabs in Figure 11).

- Local data: List of user-collected observations using AgriNoteBook.
- Alerts: list of alerts applied to the parcel, if any.
- Model data: outputs resulting from the local model
- Meteo: access to the temporal profile chart of each meteo parameter
- Chart Satellite Time Series: access to the temporal profile chart of the active local product.



Figure 11 Access to categories of parcel-level information





10 Parcel-level management: Access to (user-collected) data

By clicking on the "Local Data" tab, a list of observation types is presented (Figure 12). The number of observation per type is indicated in brackets. Click on the link of an observation type ("Crop info" in Figure 12) to inspect all observations of this type gathered on the field.

In order for the farmers to browse and manage such observations, three buttons help them to perform the following actions:

- Prev (or previous) button goes back and visualise the preceding observation on the list
- Next button goes to and visualise the subsequent observation on the list
- Edit button allows to edit on the fly some descriptors of the observation.



Figure 12 Access to user-collected observations





11 Parcel-level management: Access to alerts

By clicking on the "Alerts" tab, a list of alerts is presented. In case a parcel has not got any alert, a message is shown (Figure 13). In such a case, the colour of the parcel border is set of green, which means no alerts for that parcel. So, a quick shortcut to know whether or not a parcel has an alert is to visually check the border colour of each parcel.



Figure 13 No alerts in parcels

If a parcel has at least one alert, its border colour is set to red (Figure 14). It is an easy and quick way for getting users notified of any active alert that requires their immediate attention.







Figure 14 Active alerts in a parcel (1)

To see an alert, click on the parcel in question, and then on the "Alerts" tab to check the number of alerts (Figure 15), which is indicated in the number in brackets of the link. By clicking in the link ("Alerts (1)" in Figure (15), the details of the alert are shown (Figure 16).

Once all alerts are checked, you can remove them by pressing the button "Remove all alerts" (Figure 15). This action will change the color of the parcel border from red to green







Figure 15 Active alerts in a parcel (2)

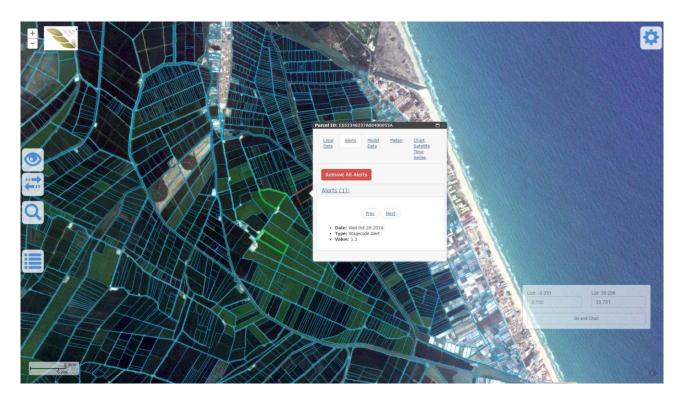


Figure 16 Active alerts in a parcel (3)





12 Parcel-level management: Access to model data

By clicking on the "Model Data" tab, you get access to the list of different results of the model solution applied to the parcel (Figure 17), which are:

- Rice development stage
- Potential risk of blast infection
- Potential risk of clod sterility
- Above ground biomass
- Penicle biomasses

Each of above models outputs is linkable. By clicking on any of them (Rice development stage in Figure 18) a new button labelled as "Show chart" comes out. Press the button to visualise the associate chart (Figure 19), which varies depending on the type of model output being inspecting.

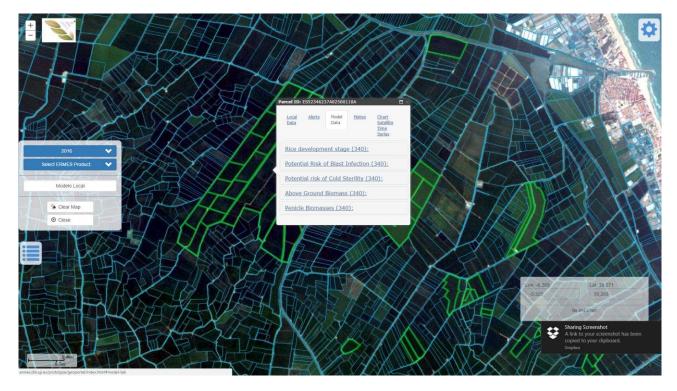


Figure 17 Outputs of local model (1)







Figure 18 Outputs of local model (2)

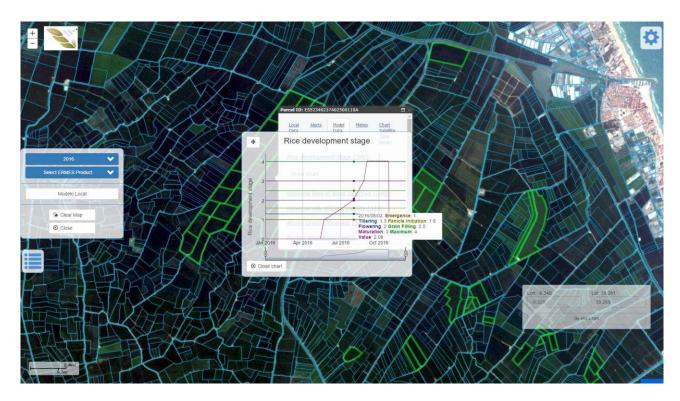


Figure 19 Outputs of local model (3)





13 Parcel-level management: Access to meteo variables

By clicking on the "Meteo" tab, you get access to the list of meteo variables applied to the parcel (Figure 20), which are:

- Radiation
- Rainfall
- Maximum humidity
- Minimum humidity
- Maximum temperature
- Minimum temperature
- Wind speed

Each meteo variable is linkable. By clicking on any of them (Maximum Temperature in Figure 21) a new button labelled as "Show chart" comes out. Press the button to visualise the associate temporal profile chart (Figure 22).



Figure 20 Access to meteo variables (1)







Figure 21 Access to meteo variables (2)



Figure 22 Access to meteo variables (3)





14 Parcel-level management: Access to temporal profile charts

By clicking on the "Chart Satellite Time Series" tab, you can visualize the temporal profile chart of the active data product, if there is an active selection. Otherwise, a message indicates to select first a product (Figure 23).

As usual, click on the eye icon to select a data product form the list (Figure 24). Once there is an active a data product and it is visualised, a shortcut to shoe the temporal profile char tis to sue the Locator widget (bottom-right corner) to directly go to the chart. Press the button "Go and chart" of the widget, and a line chart pops up showing the temporal profile of the parameter of the active data product (Figure 25). The chart is composed of two synchronized charts. The top chart shows the data series of the temporal profile; the number and meaning of data series may vary depending on the data product in question. The bottom chart is interactive through a temporal brush (both edges of the charts), which is a kind of scroll-bar for the temporal dimension, to narrow or enlarge the data series of the top chart.



Figure 23 Chart satellite time series chart (1)





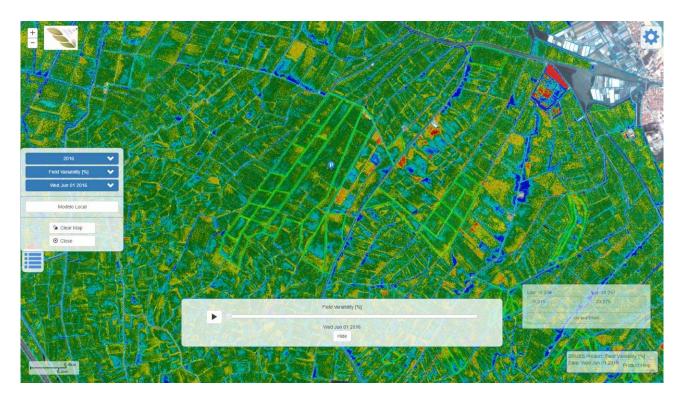


Figure 24 Chart satellite time series chart (2)



Figure 25 Chart satellite time series chart (1)





15 Changing configuration options

By clicking on the "Gear" icon situated at the top-left corner, you can change some configuration options and access to extra features (Figure 26):

- Select Language: preferred language of choice (English, Spanish, Greek, Italian)
- General help: it shows help information on the data product and basic features of the Geoportal
- Split Mode: An alternative to Swipe mode to compare data product (see later)
- Logout: to exit the geoportal
- Close: close the configuration window



Figure 26 Configuration options and extra features





16 Comparison: compare data products in Swipe mode

The active data product can be compared with another data product or map by using the "Two arrows" icon situated in the left part of the main screen. Click it and a window with three blue selectors pops us to allow you to identify a second data product (Figure 27). Select a year, data product, and date.

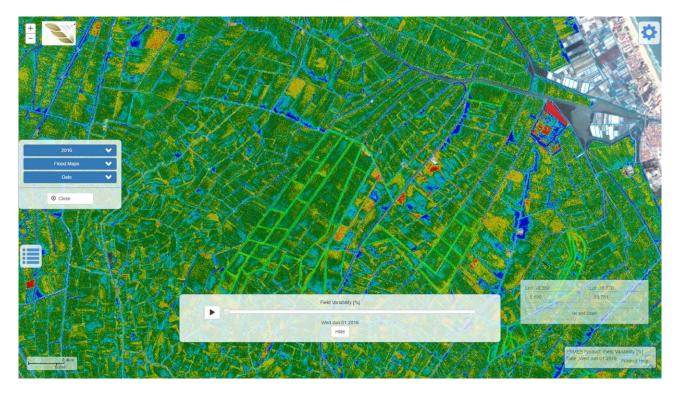


Figure 27 Comparison in Swipe mode (1)

Only when all three parameters (blue selectors) are selected, a "Compare" button makes visible (Figure 28). Click it to load the second data product: the resulting map overlaps the two data products. You can make on data product more visible by moving a vertical bar (Figure 29).





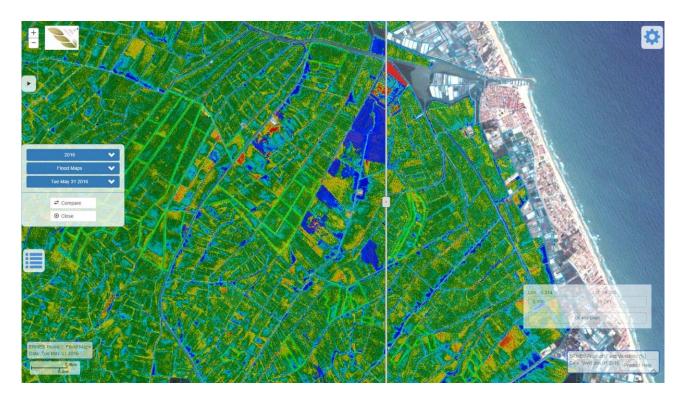


Figure 28 Comparison in Swipe mode (2)

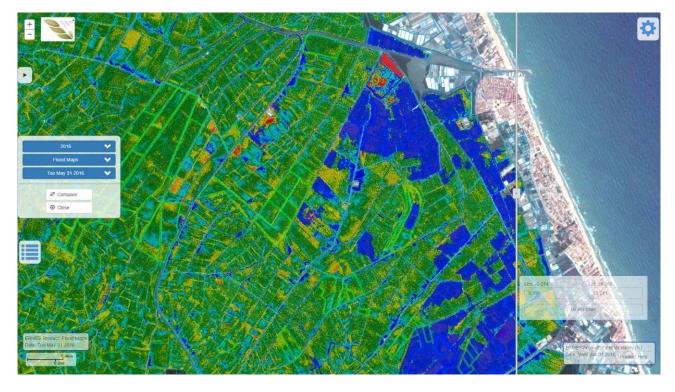


Figure 29 Comparison in Swipe mode (3)





17 Comparison: compare data products in Split mode

An alternative way to comparison in Swipe mode is the Split mode. Click on the "Gear" icon, and the "Split Mode" option (Figure 30). This action splits the screen in two part and launches a second instance of the geoportal (Figure 31). This way, you can interact with each instance independently.

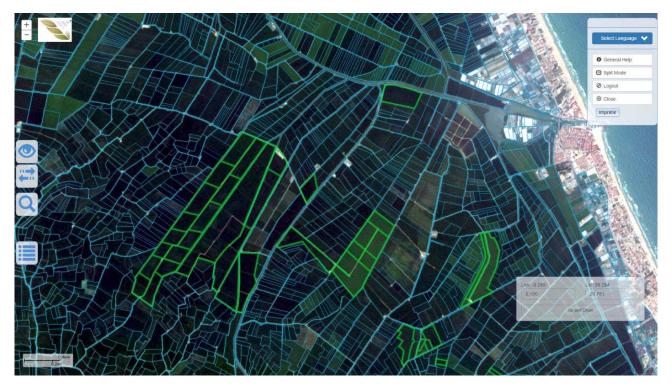


Figure 30 Comparison in Split mode (1)







Figure 31 Comparison in Split mode (2)





18 Logout

Click on the "Gear" button and then select "Logout" (Figure 32).



Figure 32 Logout