

**NC STATE**

Veterinary Medicine

**Population Health  
and Pathobiology**

# VMP 991: Transboundary Animal Disease Spatial Epidemiology

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Downloading data from the Food and Agriculture  
Organization of the United Nations - EMPRES-i database

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# What is EMPRES-i

EMPRES-I is the Food and Agriculture Organization of the United Nations modernized global health intelligence and early warning platform to improve forecasting and enable countries to monitor disease spread and risk of new outbreaks.



*“The world must be alert to new threats from animal diseases, with COVID-19 underlining the need for greater vigilance, the Food and Agriculture Organization of the United Nations (FAO) urged today, as it launched a new global animal disease information system.”*

*“Today’s globalized and hyper-connected world allows the rapid spread of diseases across borders. In this context, disease intelligence systems need to be far more efficient at capturing big data, far more sensitive to detect unusual events, and have the ability to rapidly share information.”*

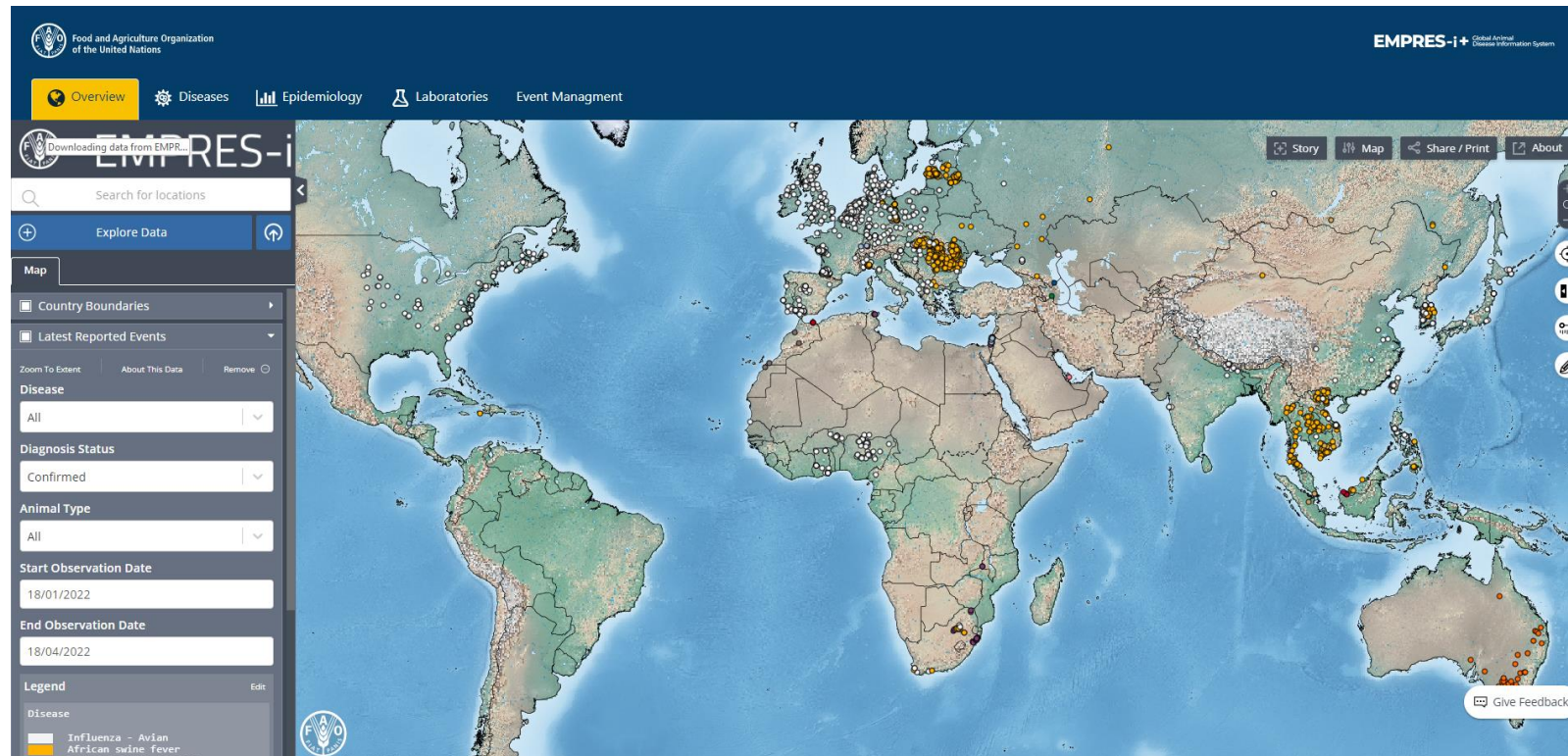
Read the full press release here:

<https://www.fao.org/newsroom/detail/animal-disease--fao-launches-new-information-system-221021/en>

# Downloading data from EMPRES-i

Head over to the EMPRES-i webpage.

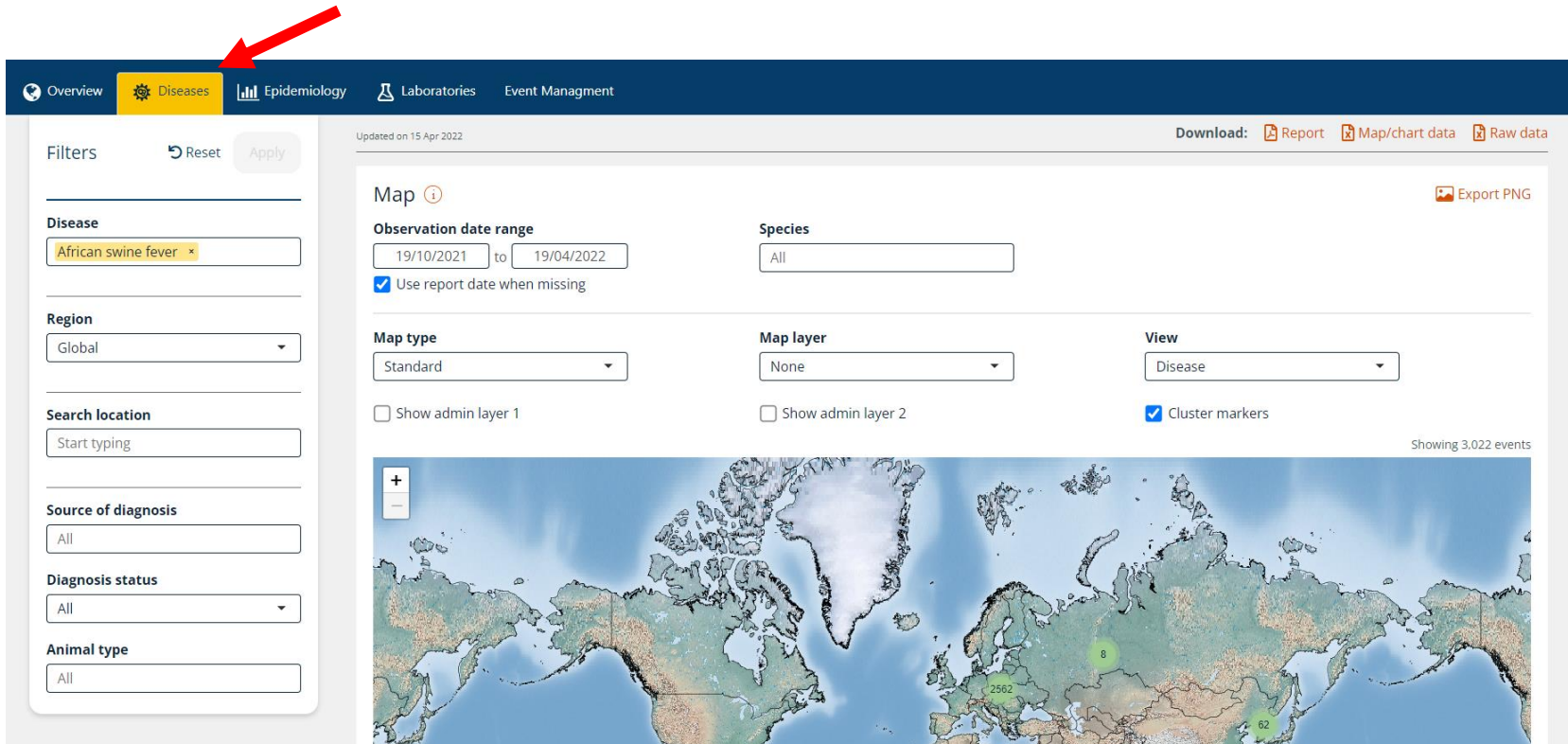
<https://empres-i.apps.fao.org/>



# Downloading data from EMPRES-i

We will be downloading data about African swine fever

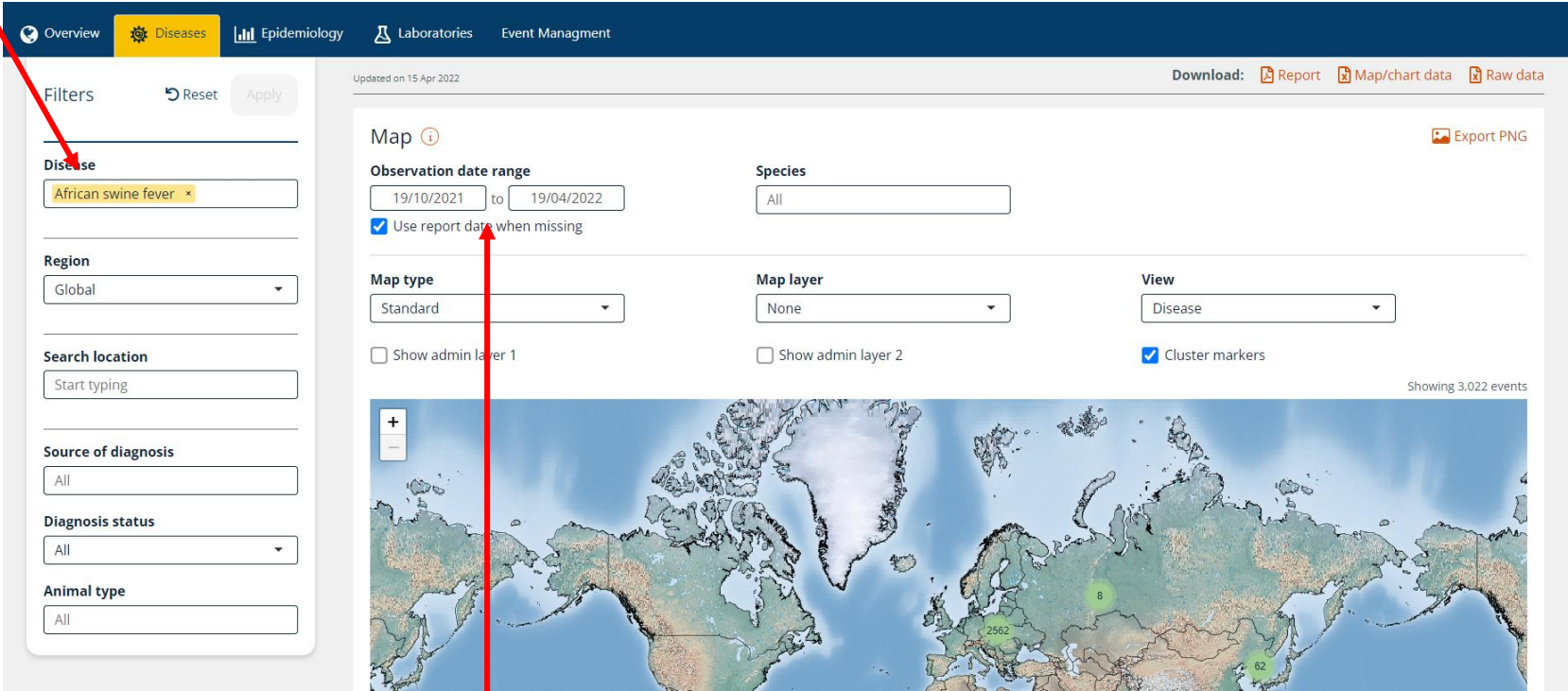
Toggle to the “Diseases” tab



The screenshot displays the EMPRES-i web application interface. A red arrow points to the 'Diseases' tab in the top navigation bar, which is highlighted in yellow. The interface includes a left sidebar with filters for Disease (African swine fever), Region (Global), Search location, Source of diagnosis, Diagnosis status, and Animal type. The main content area shows a map of the world with green markers indicating disease events. The map is titled 'Map' and includes filters for Observation date range (19/10/2021 to 19/04/2022), Species (All), Map type (Standard), Map layer (None), View (Disease), and a checkbox for 'Cluster markers'. The map shows 3,022 events. The top right corner has a 'Download' button with options for Report, Map/chart data, and Raw data. The bottom right corner shows the NC STATE Veterinary Medicine logo.

# Downloading data from EMPRES-i

Select African swine fever from the list. Remove any other diseases included by default.



The screenshot displays the EMPRES-i web application interface. The top navigation bar includes links for Overview, Diseases, Epidemiology, Laboratories, and Event Management. The left sidebar contains a 'Filters' section with the following options:

- Disease:** A dropdown menu showing 'African swine fever' with a red arrow pointing to it.
- Region:** A dropdown menu showing 'Global'.
- Search location:** A text input field with the placeholder 'Start typing'.
- Source of diagnosis:** A dropdown menu showing 'All'.
- Diagnosis status:** A dropdown menu showing 'All'.
- Animal type:** A dropdown menu showing 'All'.

The main content area shows a 'Map' section with the following settings:

- Observation date range:** A date range selector showing '19/10/2021' to '19/04/2022'. A red arrow points to the 'to' date field.
- Species:** A dropdown menu showing 'All'.
- Map type:** A dropdown menu showing 'Standard'.
- Map layer:** A dropdown menu showing 'None'.
- View:** A dropdown menu showing 'Disease'.
- Cluster markers:** A checkbox that is checked.

Below the settings is a world map showing the distribution of events. The map is titled 'Map' and includes a 'Download' button with options for 'Report', 'Map/chart data', and 'Raw data'. The map shows a world map with green markers indicating the location of events. The text 'Showing 3,022 events' is displayed at the bottom right of the map.

Change the date to go from  
01/01/2017 to 19/04/2022



# Downloading data from EMPRES-i

Select the Raw Data button

The screenshot shows the EMPRES-i web application interface. At the top, there is a navigation bar with tabs for Overview, Diseases (selected), Epidemiology, Laboratories, and Event Management. Below the navigation bar, there is a 'Filters' sidebar on the left with sections for Disease (African swine fever), Region (Global), Search location (Start typing), Source of diagnosis (All), Diagnosis status (All), and Animal type (All). The main content area displays a 'Map' section with various filters: Observation date range (19/10/2021 to 19/04/2022), Species (All), Map type (Standard), Map layer (None), View (Disease), and checkboxes for 'Use report date when missing', 'Show admin layer 1', 'Show admin layer 2', and 'Cluster markers'. A red arrow points to the 'Raw data' button in the 'Download' section at the top right of the main content area. The map shows a world map with green markers indicating disease events, with labels like '2562' and '62' visible. The text 'Showing 3,022 events' is displayed at the bottom right of the map area.

This should automatically start the data download.

The file should have a name like:  
overview-raw-data\_202204190644

# Downloading data from EMPRES-i

Rename the raw data file( not necessary) to anything you'd like and move it over to the repository (folder) associated with the GitHub project so we can load it up in R.

Now you are ready to jump into the wonderful world of spatial data in R!