How to upload data and make graphs of Green Up (Spring Tree Observations)

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Europe and Eurasia
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Aims of the Webinar

- What to do if I want students to upload data – student accounts

- Show graphs from GLOBE Visualization Tool

- Go through Data Entry, incl. setting a data site for Green Up

- Help with the most common troubles

- Show the option of e-training Green Up/Down for teachers who are not trained yet

Author: GLOBE Croatia

PART 1

STUDENTS ACCOUNTS

Let students to enter the data! The only thing you need to do is create a student account for them:

https://www.globe.gov/get-trained/using-the-globe-website/creating-student-accounts

Student Accounts Summary

Any Teacher can create up to 50 student accounts

Students can log in with their student account, and:
- Enter Data on behalf of their teacher
- Post comments and questions to forums
- "Friend" someone and post on their wall

Students can not:
- Change their school page
- Have a My page which they can change
- Change their password, username or any other information about themselves
- Send or Receive email from their account

Student Accounts
- Should not include a student's name
- Are automatically "Friended" to their teacher so the teacher can always see what they post
- Are automatically deleted when the teacher account is deleted

Where I should go to create a student account?

- Sign in, click on your photo (upper right) and select My Page. This will take you to your personal page. Scroll down on the page to see „Create Student Accounts/View Student Account"

PART 2

HOW TO MAKE GRAPHS
AND
WONDERS OF VISUALIZATION TOOL

You can see a graph showing data you collected. Now you can see data for each leaf separately!
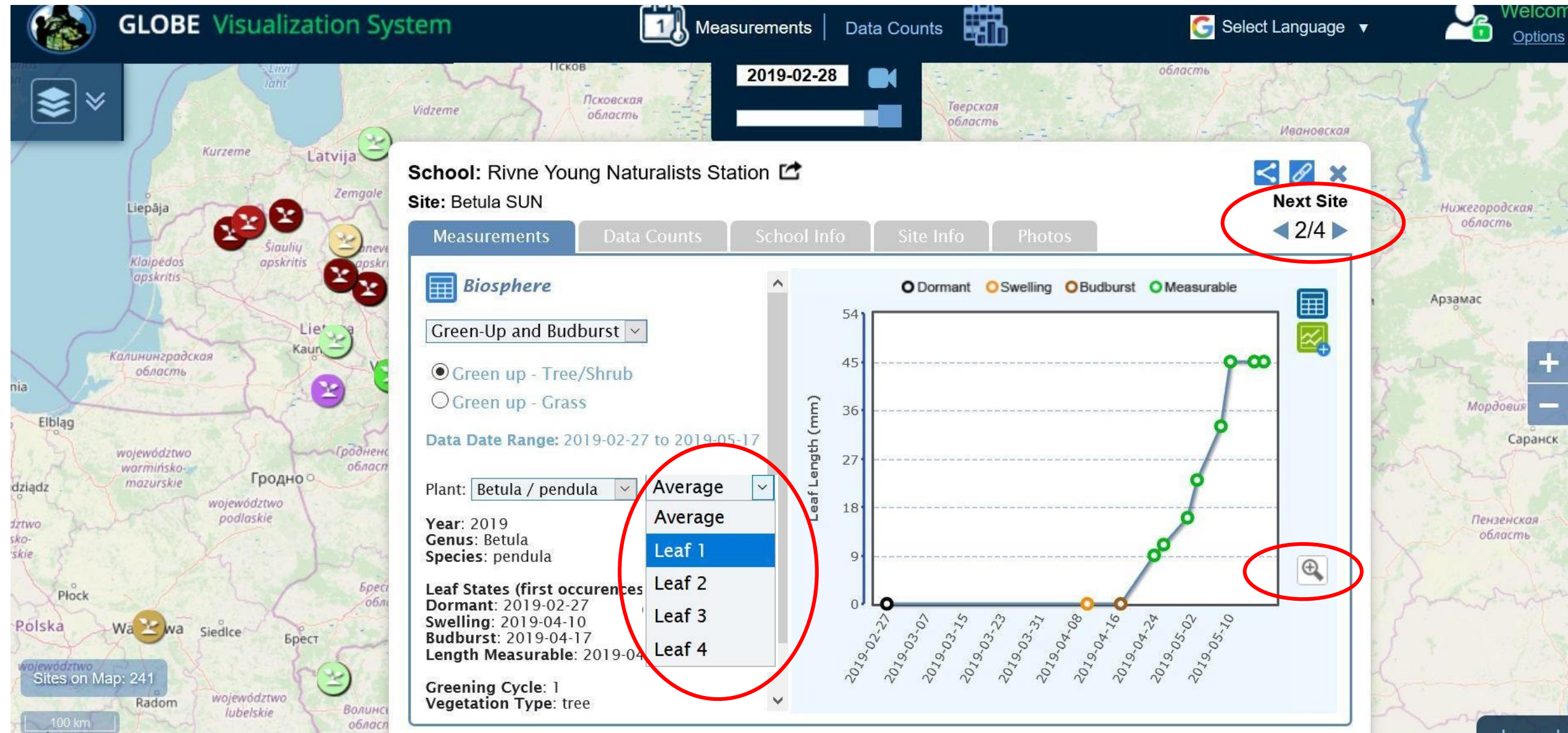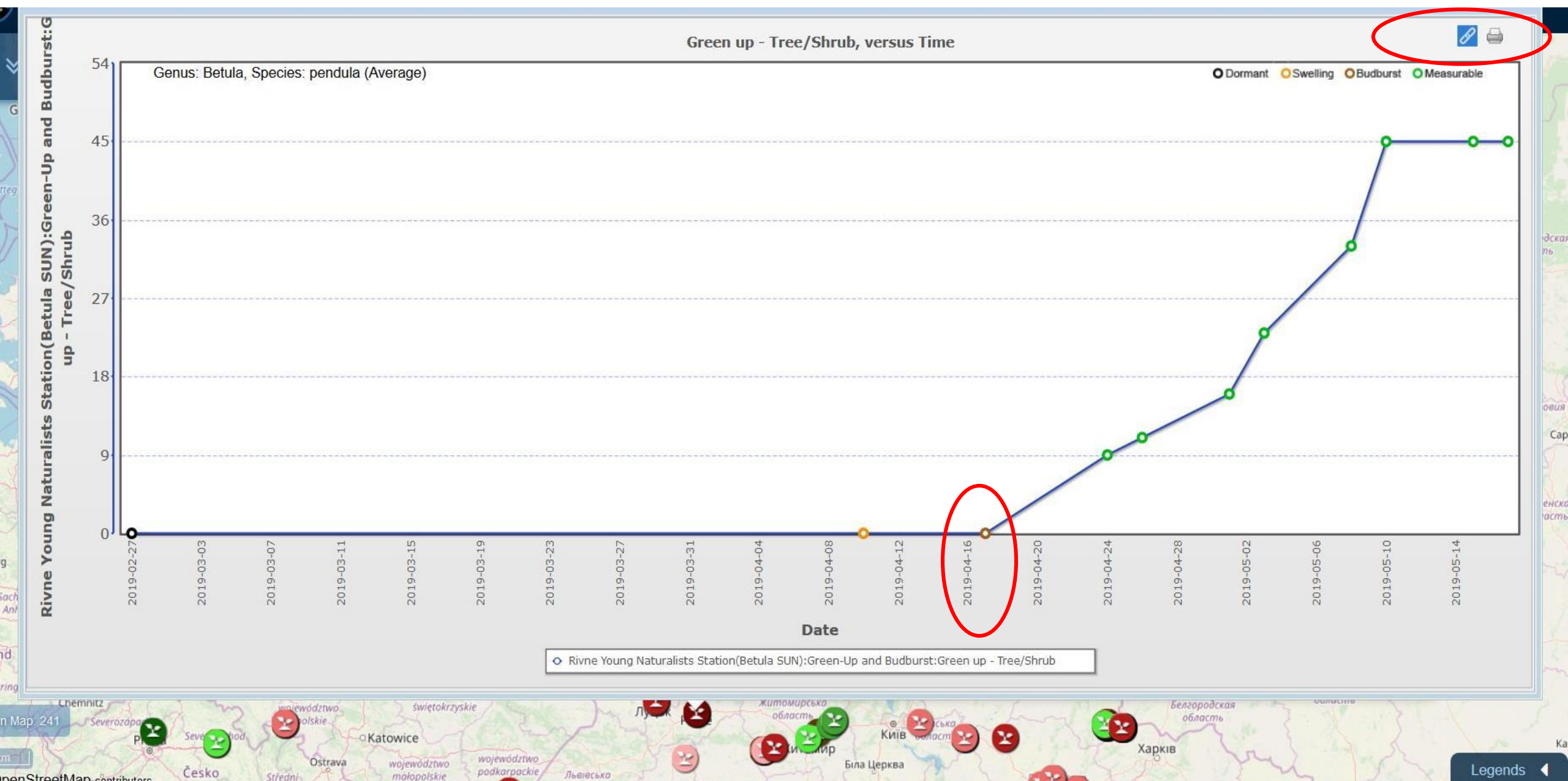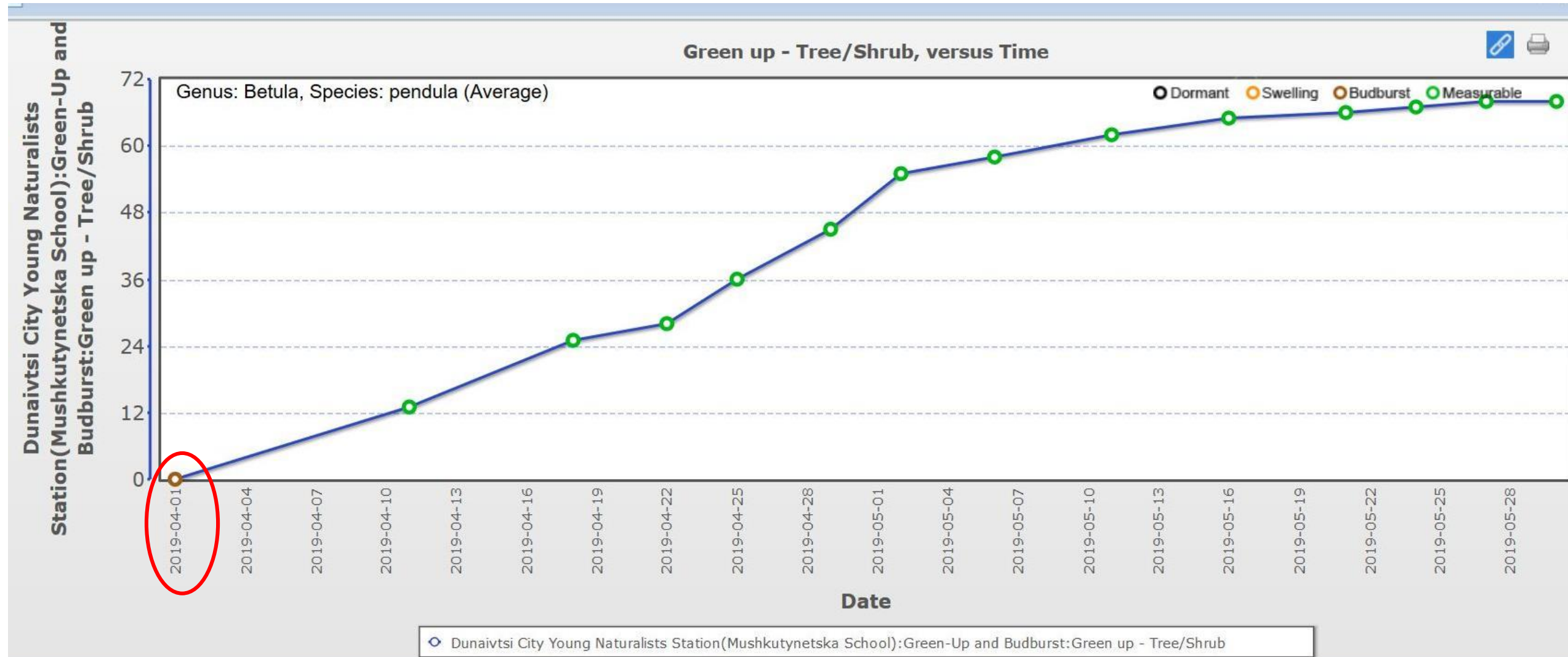
Enlarge, download and print out the graph

The same tree species, but the budburst was reported 17 days earlier at this site than in the previous one!

In the layer, filter out selected tree species

See and download the data in a table

Srednja škola Braća Radić : Škola(gimnazija) Data Table

School Name	Site Name	Userid	Latitude	Longitude	Elevation	Measured On	Year	Greening Cycle Number	Vegetation Type	Genus	Spe
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-13	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-13	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-13	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-13	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-06	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-06	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-06	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-06	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-03	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-03	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-03	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-05-03	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-30	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-30	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-30	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-30	201		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-26	20		tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-26	2019	3	tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-26	2019	3	tree	Ficus	c
Srednja škola Braća Radić	Škola(gimnazija)	11951060	43.5494	16.3406	4	2019-04-26	2019	3	tree	Ficus	c

Column selector (checklist):
- ☑ School Name
- ☑ Site Name
- ☑ Userid
- ☑ Latitude
- ☑ Longitude
- ☑ Elevation
- ☑ Measured On
- ☑ Year
- ☑ Greening Cycle Number
- ☑ Vegetation Type
- ☑ Genus
- ☑ Species
- ☑ In Understory
- ☑ Stage
- ☑ Leaf State
- ☑ Leaf Color List
- ☑ Number Of Leaves

Export .csv

1 - 21 of 72

Click this icon to go to the school page

Click this icon to view the plot data in a table

Click this icon to view data tables for all of your data

Click this icon to add the site to a multi-site time series plot

Data at this site can be found in this date range

Roll-over a plot point to see measurement value and date

Measurement info for the selected data type

Change plot time range

Click the zoom icon for a larger plot view

School: Srednja škola Braća Radić
Site: Škola(gimnazija)

Measurements | Data Counts | School Info | Site Info | Photos

Biosphere

Green-Up and Budburst

● Green up - Tree/Shrub
○ Green up - Grass

Data Date Range: 2015-02-06 to 2019-05-13

Plant: Ficus / carica   Average

Year: 2019
Genus: Ficus
Species: carica
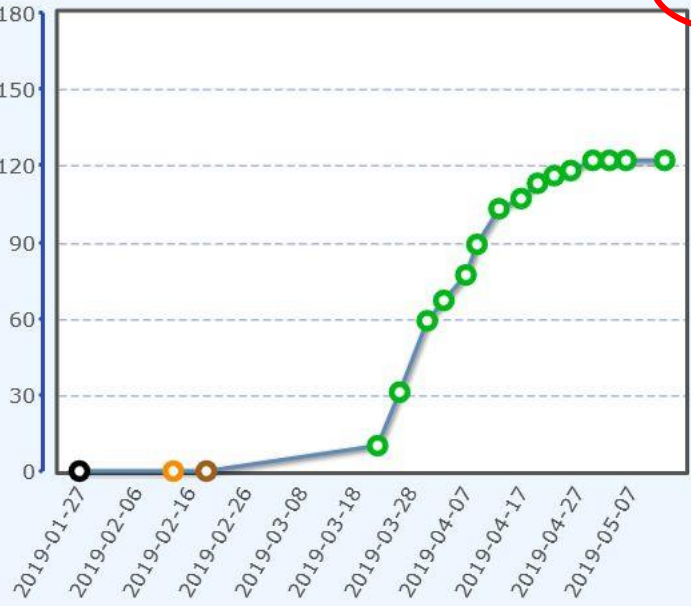
Leaf States (first occurences)
Dormant: 2019-01-27
Swelling: 2019-02-13
Budburst: 2019-02-19
Length Measurable: 2019-03-22

Greening Cycle: 3
Vegetation Type: tree

○ Dormant ○ Swelling ○ Budburst ● Measurable

Leaf Length (mm)

What the site colors say: See the legend
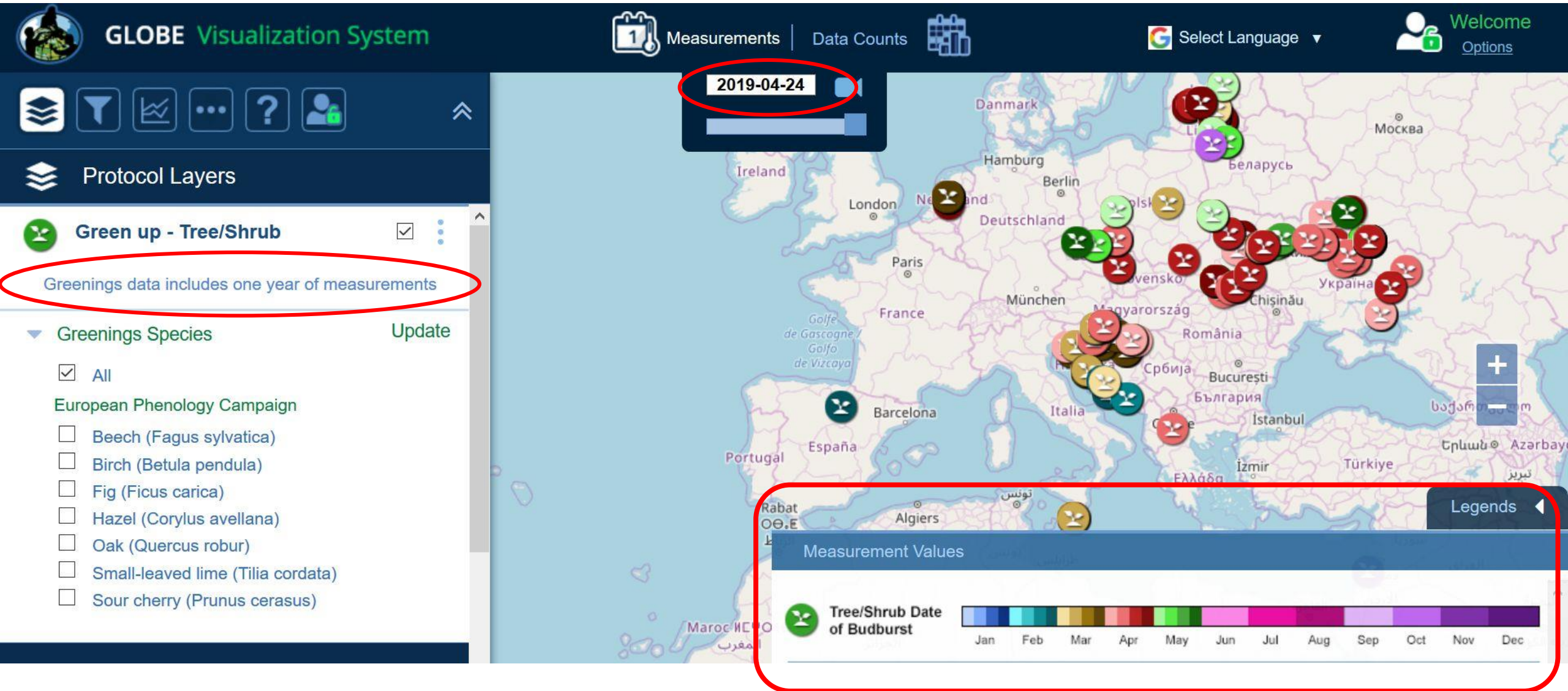
What you can do in Visualization Tool:

- See the data you collected

- Filter data according to tree species

- Select a school and see their data in graph or spreadsheet (table)

- Download and print out the graph or share the link to the graph

- Download or print the spreadsheet and then analyze, sort or filter the data in Excel or similar software

How to get fast to GLOBE visualization tool

Go to Your School Page: You again go to globe.gov (sign in needed), then click on the menu in the upper left corner, click on My Organization and select your **school**. This will bring you to your school page, then scroll down to see either your **School Data Sites** or even more down your **Most Recent Measurements**:

SCHOOL DATA SITES

☑ Include citizen science sites

▲ Site Name	Investigation Area	# Observations	Created	Last Used
35ULQ309213	Atmosphere, Biosphere	11	08/02/2019	09/02/2019
35ULQ310200	Biosphere	3	09/01/2019	09/01/2019

MOST RECENT MEASUREMENTS

☑ Include citizen science sites

▲ Site Name	Protocol	Protocol Set	Date
Phenology 2018	Greening	Green Up/Green Down	04/19/2018

How to get fast to GLOBE visualization tool

Go to Campaign Page and select *Our Measurements*

https://www.globe.gov/web/european-phenology-campaign/overview/our-measurements
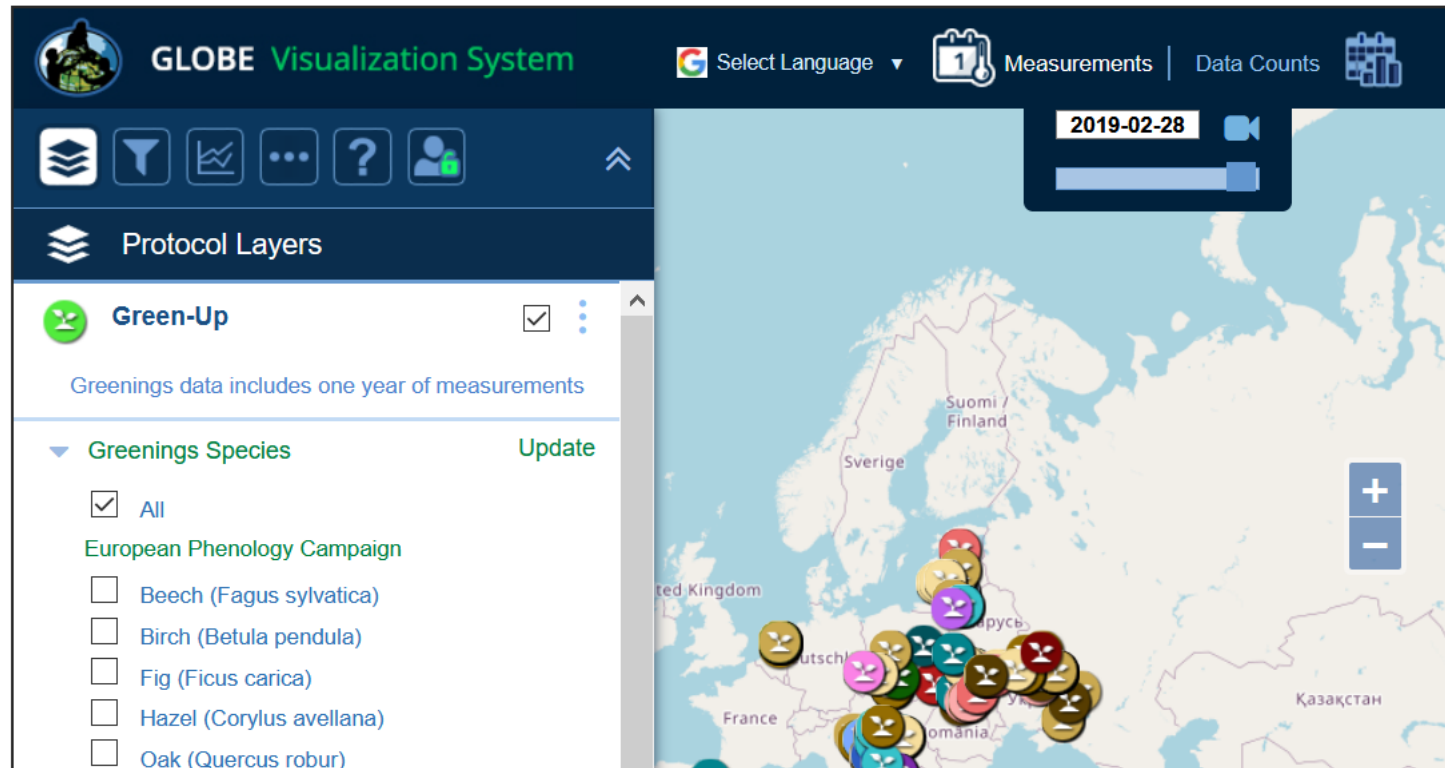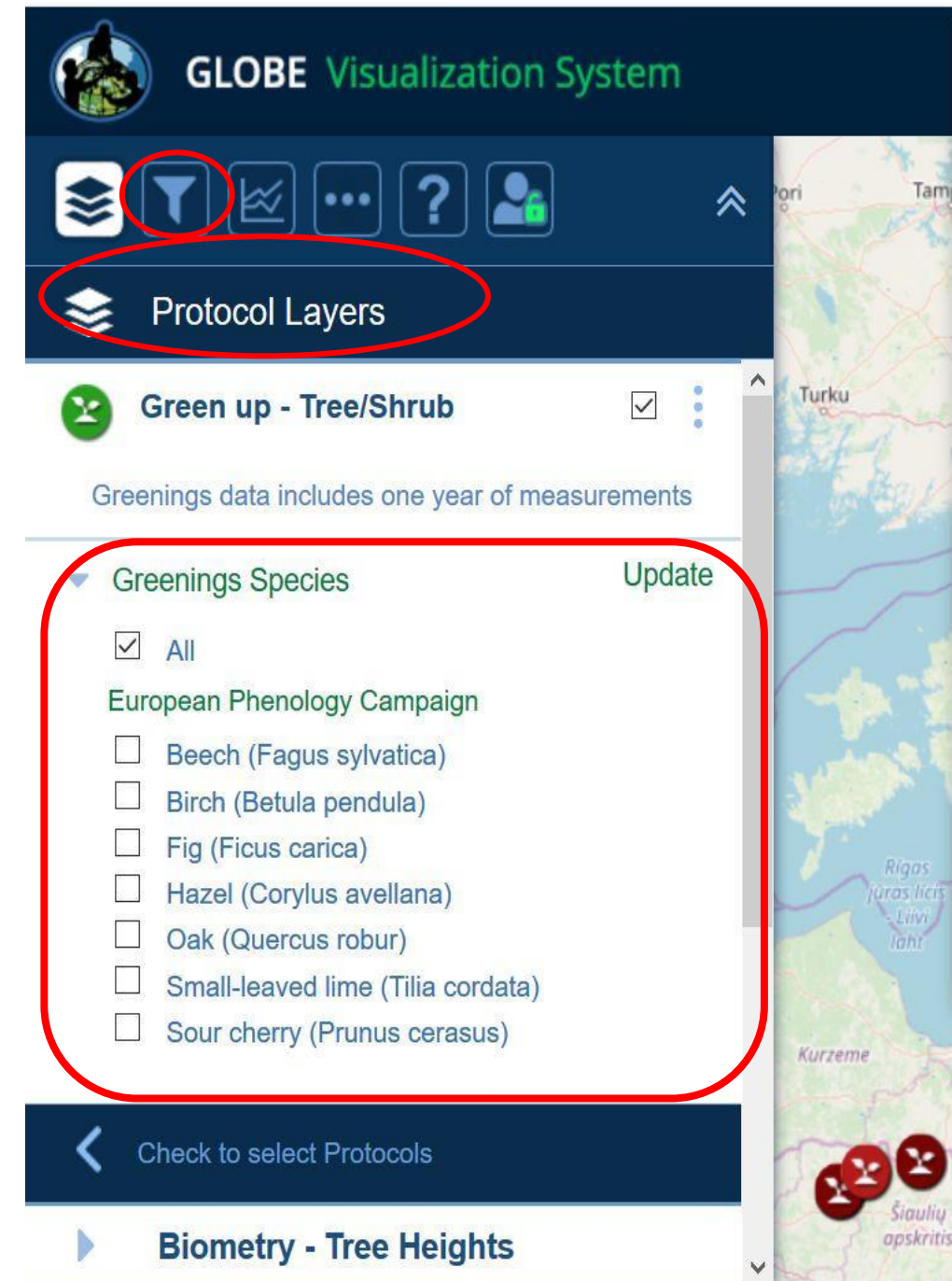
How to start:

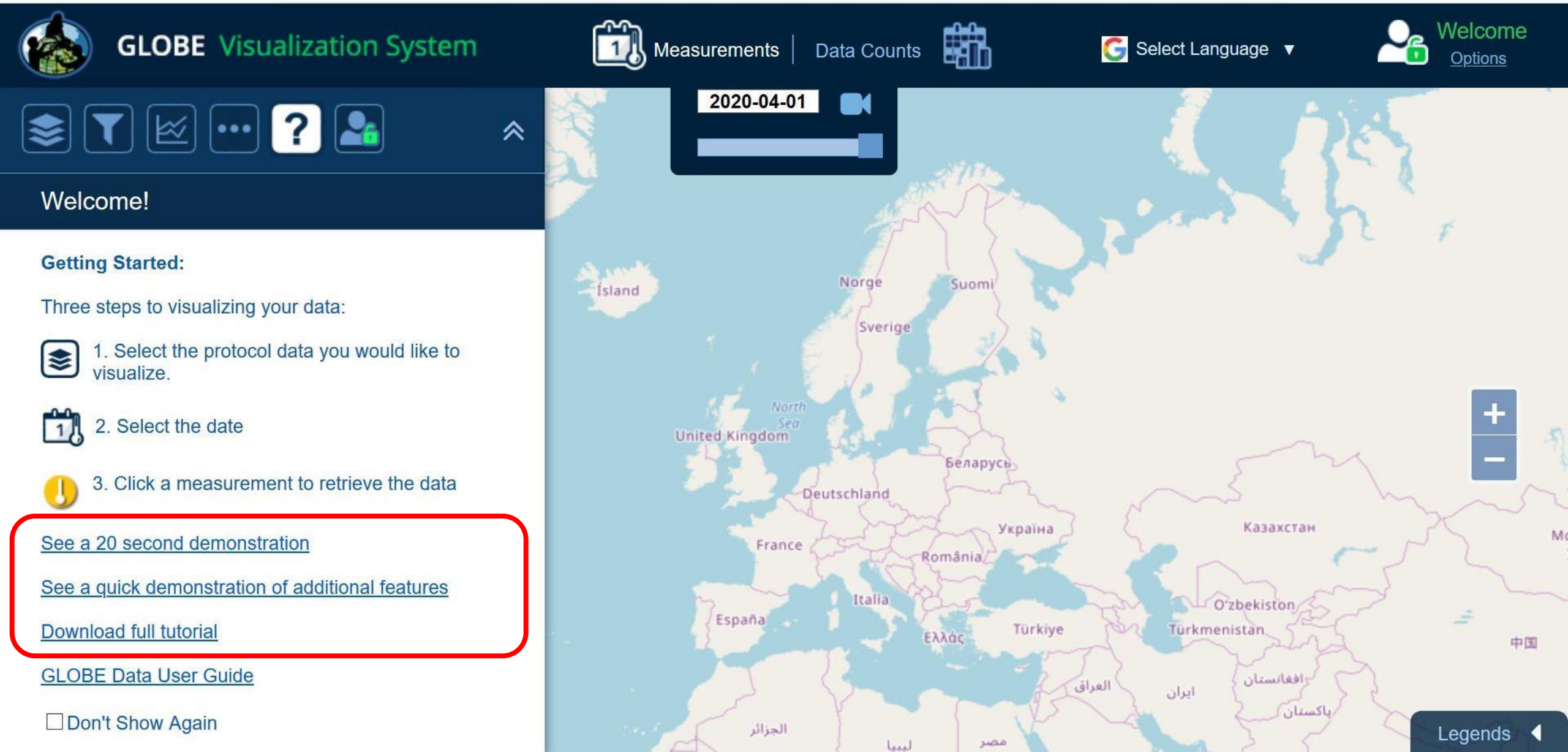In Protocol Layers, select Biosphere and Green Up:

- Then you can see a detail of any site, or

- filter out only the sites with a particular tree, or

- filter out sites according country, altitude and so many other things.

Quick videoguide is right in the Visualization tool – see next slide!

Learn how to do that – see GLOBE guides and tutorials: https://www.globe.gov/get-trained/using-the-globe-website/retrieve-and-visualize-your-data
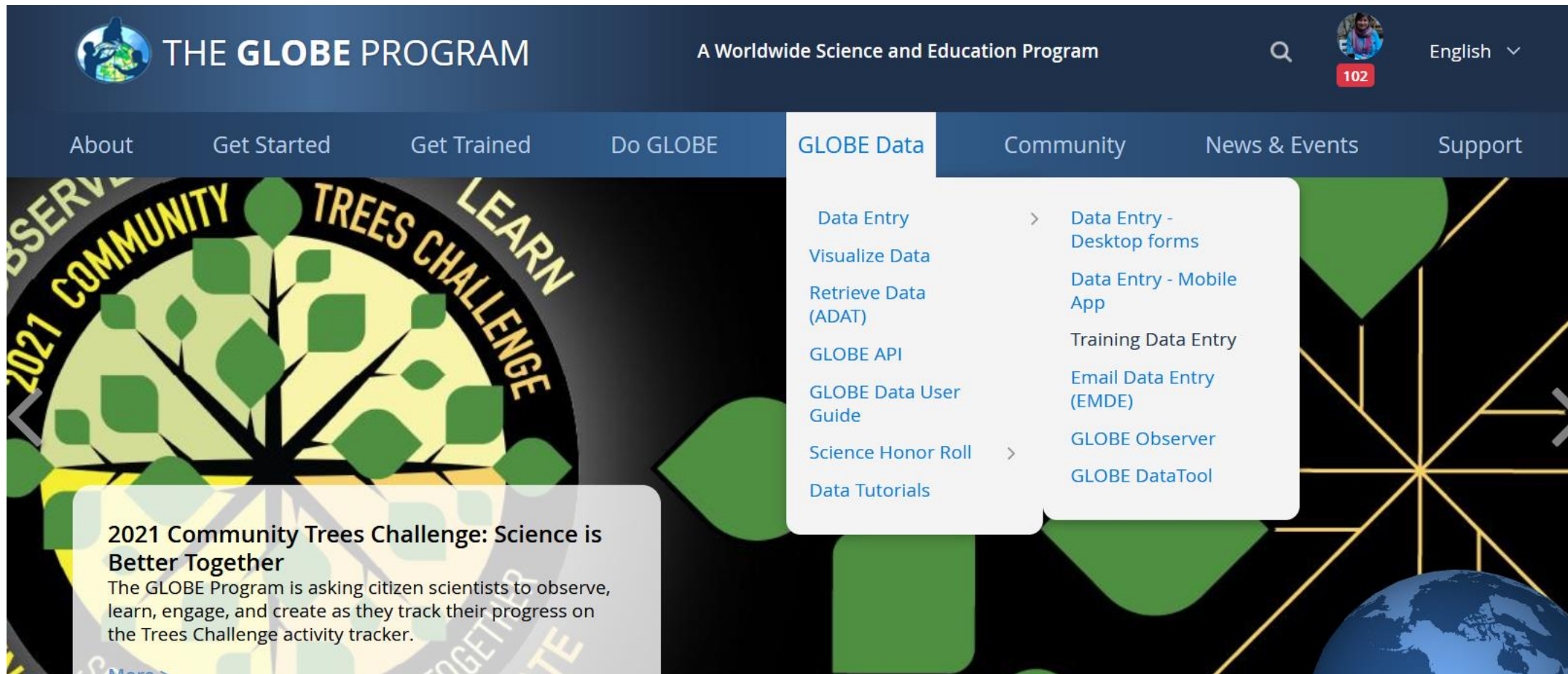
Watch videoguides and download pdf guide

PART 3

HOW TO UPLOAD DATA

Training Data Entry

- To practice data entry always go to:

GLOBE Data / Data Entry / Training Data Entry

Real Data Entry

- To enter real data always go to:

Data Entry from the homepage or from Menu in the upper left corner

This will take you to the list of your data sites (if you do not see any sites, click on the **+** next to the **name of your school**, the sites will unfold down).

As you can see, at my organization (=school), I have already a site called **Phenology 2018**. This is a site where I have 2 trees.

THE **GLOBE** PROGRAM *SCIENCE Data Entry*

English

Welcome Bára Semeráková

My Bookmarks

You have not bookmarked any investigations yet. Expand the organizations and click the stars next to the investigations to create a bookmark.

My Organizations and Sites

− **TEREZA Educational Center**   📍 Add site

− **Phenology 2018**   ✏ Edit site | ✖ Delete site
Latitude 50.056891, Longitude 14.360912, Elevation 352.4m

Greening

Green Up/Green Down ⭐

New observation | Past observations

+ **Vltava - Dvorakovo nabrezi**   ✏ Edit site | ✖ Delete site

Why and how to create a Study Site

- If you never uploaded data for your tree in past, you first need to **create a new site**.

- It is not difficult!

- You just need to add the coordinates (GPS) – this can be easily done on the map

- After that you add the trees you observe.

Study site is important, otherwise how would you see on the map where the trees are located?

My Bookmarks

You have not bookmarked any investigations yet. Expand the organizations and click the stars next to the investigations to create a bookmark.

My Organizations and Sites

– **TEREZA Educational Center**   📍 Add site

– **Phenology 2018**   ✏ Edit site | ✖ Delete site
Latitude 50.056891, Longitude 14.360912, Elevation 352.4m

Greening

Green Up/Green Down ⭐

| New observation | Past observations |

+ **Vltava - Dvorakovo nabrezi**   ✏ Edit site | ✖ Delete site
Latitude 50.09319, Longitude 14.4213, Elevation 200m

+ **test**   ✏ Edit site | ✖ Delete site

Fill in the **Site Name** and the **Coordinates**. The easy way is to use the map: zoom in and scroll until you find the site where your tree grows. Then move the red dot to that place, you already see that the coordinates got filled automatically.
Elevation will be filled automatically as well if you click on **Set elevation**.

Then you have to choose from the menu on the left **Biosphere – Greening**, which means that this site can be used for recording data on Green Up and Green Down protocol. This will pop up:

Fill in the **Vegetation Type** (tree), **Genus** (write in Latin), **Species** (choose name in Latin). Then **label** your tree according to how you call your tree. If you observe more than one tree at the same site, then click on green button **Add Plant** and do the same for your second tree. **If the site has a specific condition, leave a comment.** After you finish this, click on blue button **Create Site**.

☺ **Site created successfully.** ✕

Site Definition ❓

Add site type

Site Name *

                                   * *indicates a field is required*

Atmosphere

☐ Atmosphere

☐ Surface Temperature

Hydrosphere

☐ Hydrology

☹ **Site update failed with 3 error(s).** ✕

- Label can't be blank.
- Vegetation type can't be blank.
- Taxon genus and species must both be selected.

Site Definition ❓

Add site type

Site Name *

                                   * *indicates a field is required*

Atmosphere

☐ Atmosphere

☐ Surface Temperature

Phenology 2018

Site ID 125791

Hydrosphere

☐   **Coordinates**

How to Enter Data

- Once you are back in data entry, click on your phenology (Greening) site. Click on **+** if you can´t see it.
- Two options will pop up: New observation or Past Observations. Click on **New Observation**.
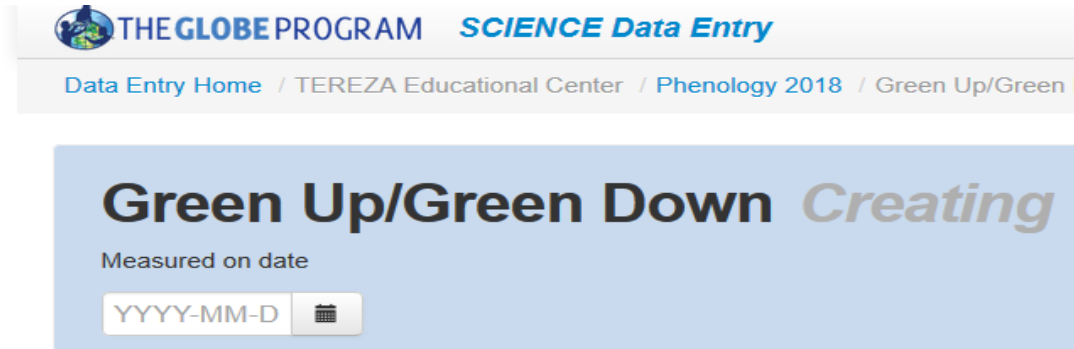
- Select a date (format is year – month – day)

Green Up/Green Down *Creating*

Measured on date

YYYY-MM-D 🗓

Next, the form will expand:

- First select Green Up

- Growing Season Cycle – this depends on how many vegetation cycles are in your country. For most European countries we have only one cycle, so you select 1.

You will see all your trees listed down. For each tree you have 4 leaves.

If you do not observe all the trees listed right now, it is ok. Just fill in the data for the trees that you observe this spring.

Green Up/Green Down *Creating*

Measured on date

2018-04-19 🗓

What Green-Up/Green-Down Measurement Did You Take? *

Green Up

Growing season cycle number *

1

Plants

At least one leaf is required. *

School Tree 1

Leaf	Leaf State
1	
2	
3	
4	

Comments

- Select **Leaf State** from drop down menu for each bud/leaf

- When you select Length Measurable, a field will pop up to record the length of the leaf in mm

Leaf State

Leaf State
Budburst ⌄

Dormant

Swelling

Budburst

Length Measurable

Lost

School Tree 1

Leaf	Leaf State		
1	Budburst ⌄		

Leaf	Leaf State		
2	Budburst ⌄		

Leaf	Leaf State		Leaf length *
3	Length Measurable ⌄		2 mm

Leaf	Leaf State		Leaf length *
4	Length Measurable ⌄		2 mm

Repeat for each leaf

Confirm by click on the blue button **Send Data**

Congratulations!

Data were sent successfully, you can continue

- to send data for another date
- to view your observation and edit if you want to change what you entered earlier
- to delete your past observations

Look at your past observations
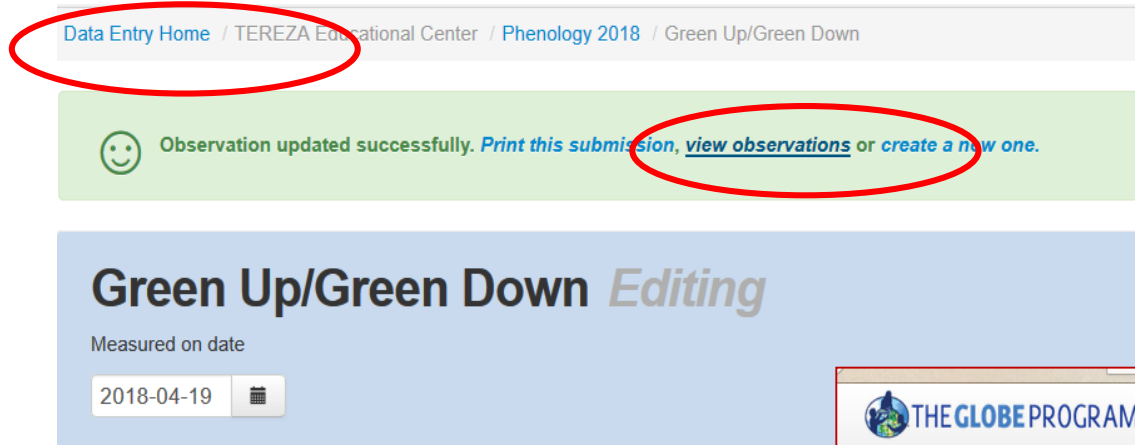
Too see, edit or delete your observations, click on

- *View observations* or go to *Data Entry Home*

- If you are at the Homepage, again click on *Data Entry* (you need to be sign-in!)
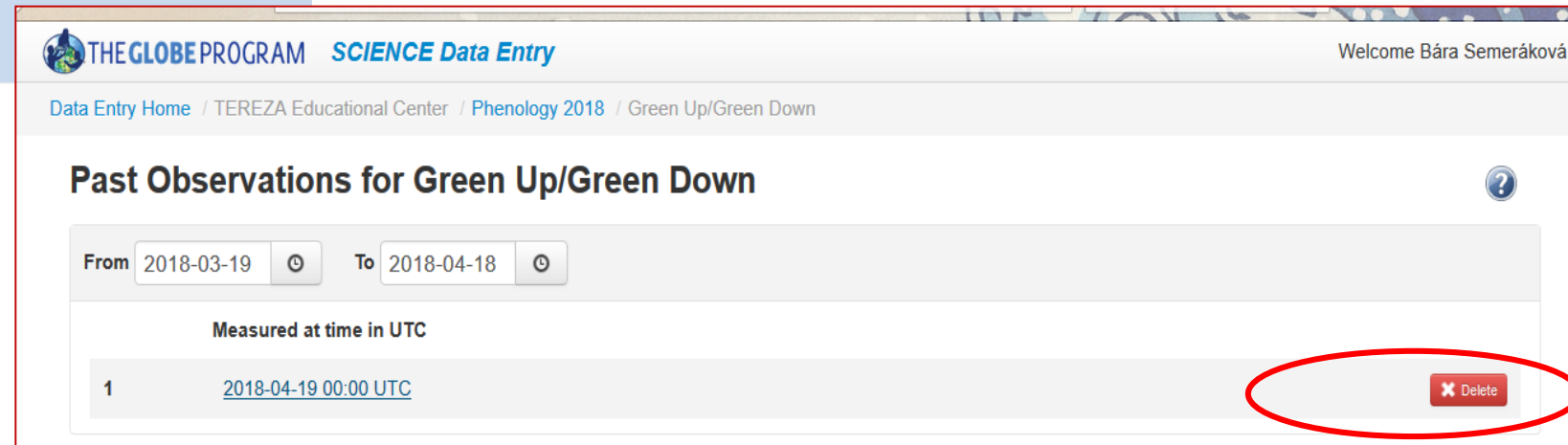
In Data Entry Home, click on the Site and then select „*Past Observations*"

- You will see a list of dates for which you entered data

- If you click on any, you can correct it

- To delete any, click on red button „*Delete*" on the right from the date

GLOBE Videoguides will help you!

If you need more help on **data entry** in general, please watch the video guides here:

- https://www.globe.gov/get-trained/using-the-globe-website/creating-student-accounts
- https://www.globe.gov/get-trained/using-the-globe-website/entering-measurement-data
- https://www.globe.gov/get-trained/using-the-globe-website/setting-up-your-data-site

Photo Courtesy: GLOBE Lithuania

I don´t have permission to enter data

A. If you know that you have been trained, please ask your Country Coordinator to check your account on globe.gov . It must be marked there that you have been „trained"!

B. But mostly you cannot enter data, because you have never been officialy trained in Green Up/Green Down activities! What to do?

1. You can attend a training (ask your coordinator)

2. You can do online **e-training** on globe.gov here:

https://www.globe.gov/get-trained/protocol-etraining (**The Green Up/Down e-training you can find under Biosphere**).

You need to be signed-in to globe.gov. Simply download the module (ppt), learn through it and then go back to the website and do the **Assessment test** for the module.

If you never been trained in any GLOBE activities (protocols), you need to start with the module **Introduction to GLOBE.**

Thank you!

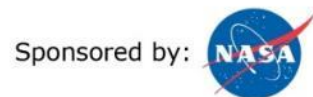https://www.globe.gov/web/european-phenology-campaign

My Tree in Spring (Phenology) Campaign Coordinator: lenka.kleger@terezanet.cz

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Photo Courtesy: GLOBE Ukraine