

Legulus



tartu
loodus
maja



KESKKONNAINVESTEERINGUTE
KESKUS



Ühinenud Rahvaste
Hariduse, Teaduse ja
Kultuuri Organisatsioon

Riiklik koordinaator
Eesti



UNESCO
ühendkoolid



Läänemere Projekt

Telia 4G10:3586%

≡

Add observation

🏠

LOCATION

Tartu maakond, Tartu

58.3743478 26.7179456 (± 1414 m)

START DATE

25. Feb 2020 at 10:35

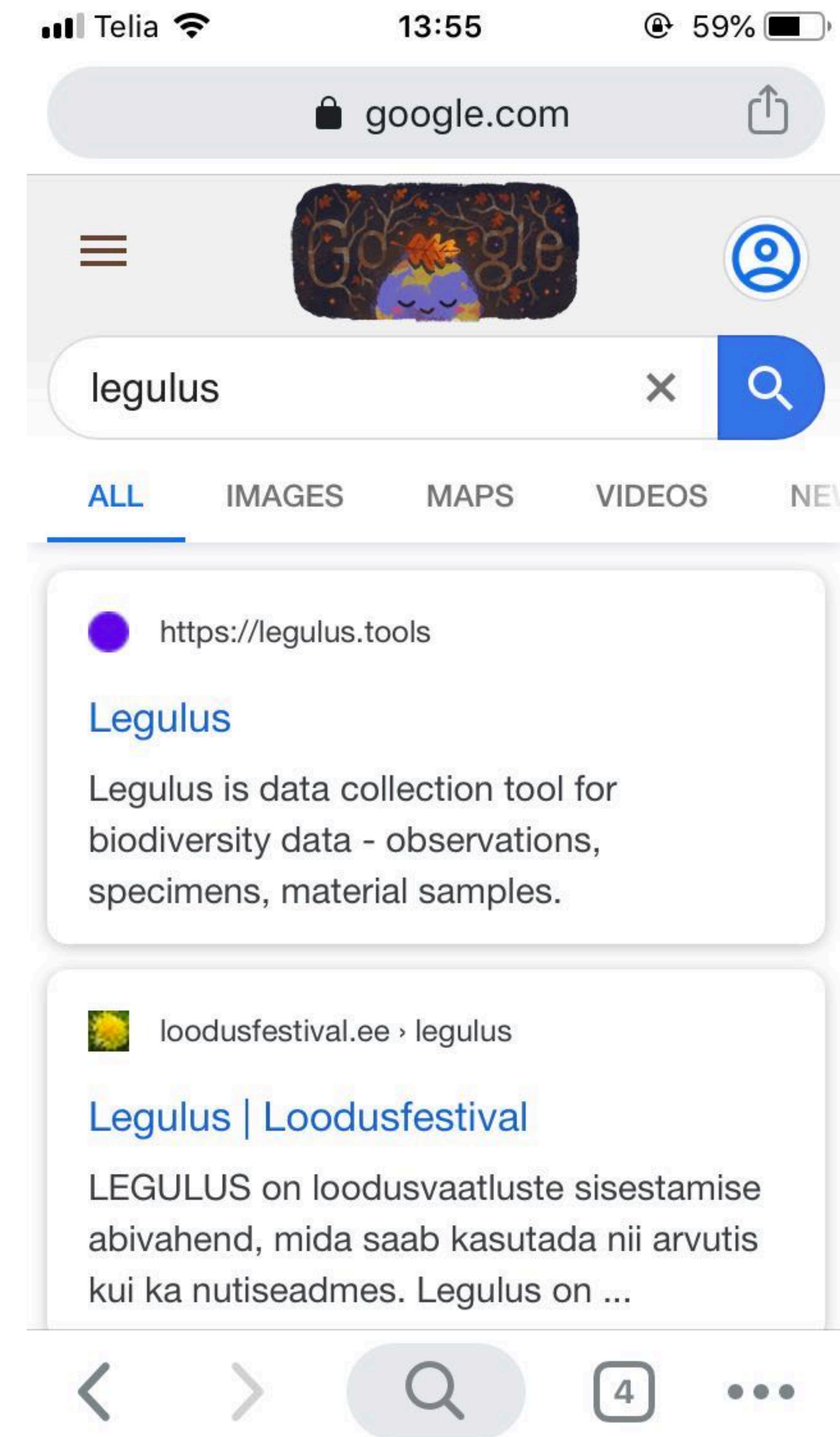
CANCEL

NEW

SAVE

Install application

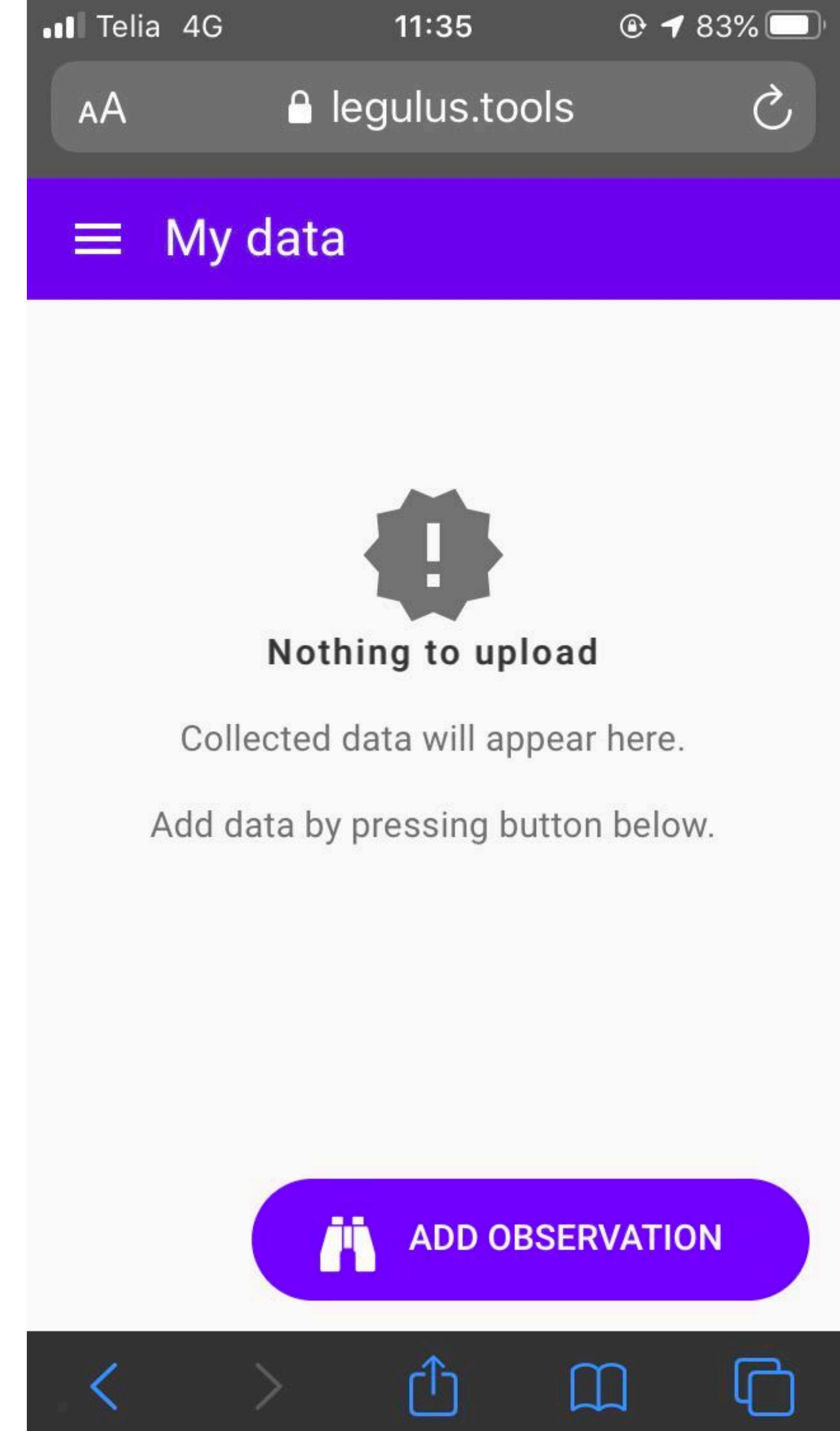
Open web browser



Install application

Open web browser

Insert address <https://legulus.tools>

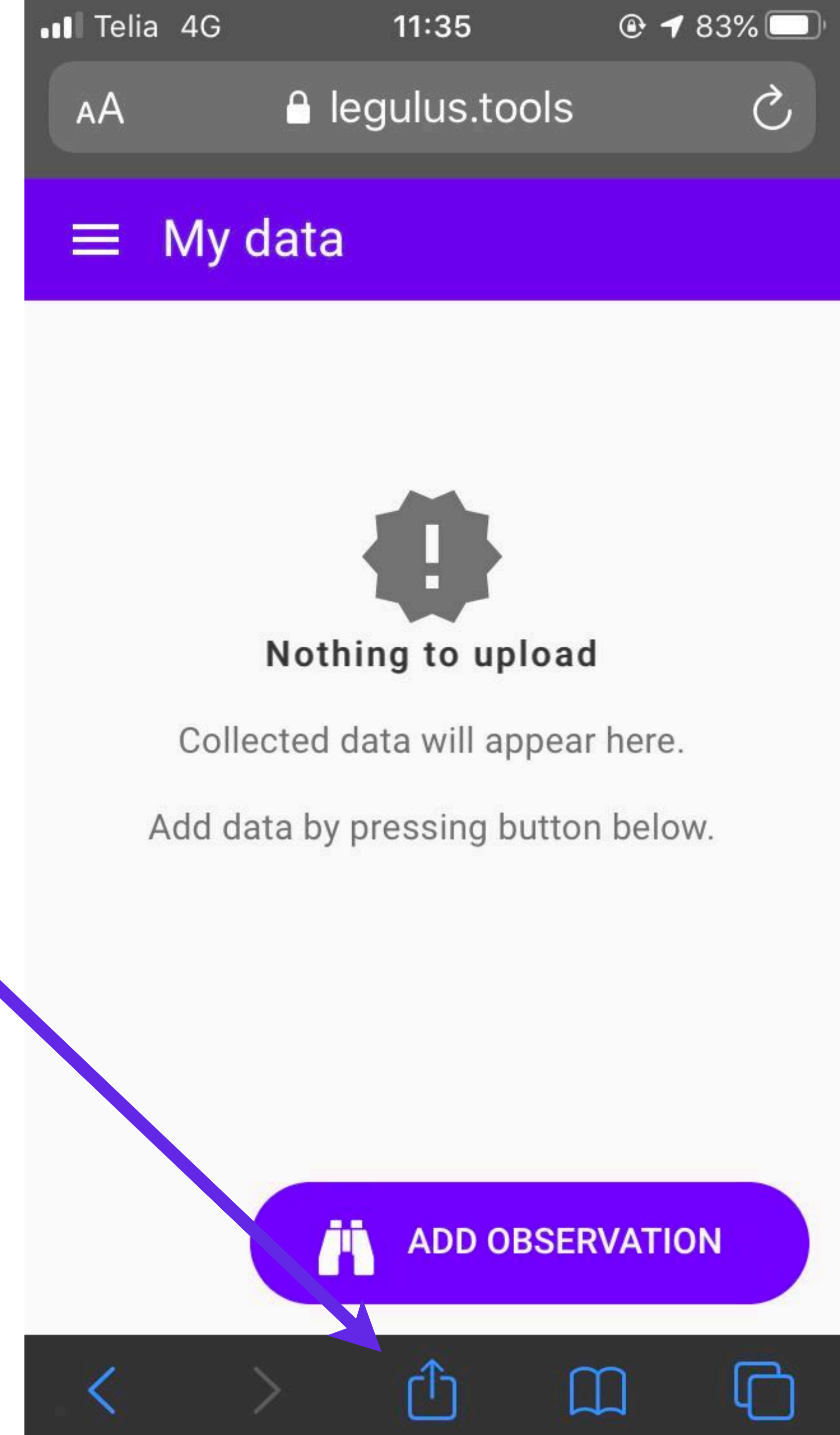
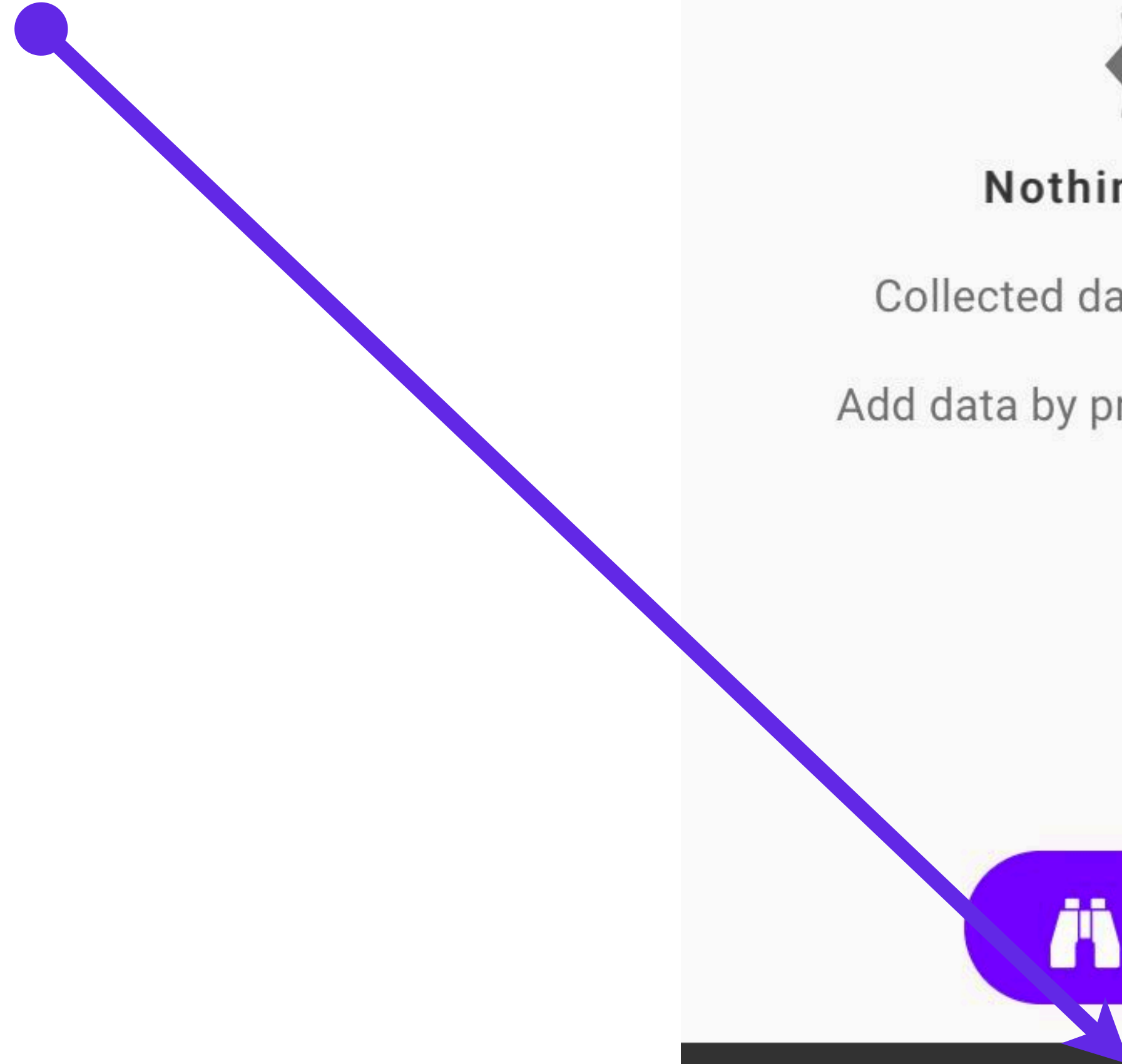


Install application

Open web browser

Insert address <https://legulus.tools>

Save shortcut to Home Screen

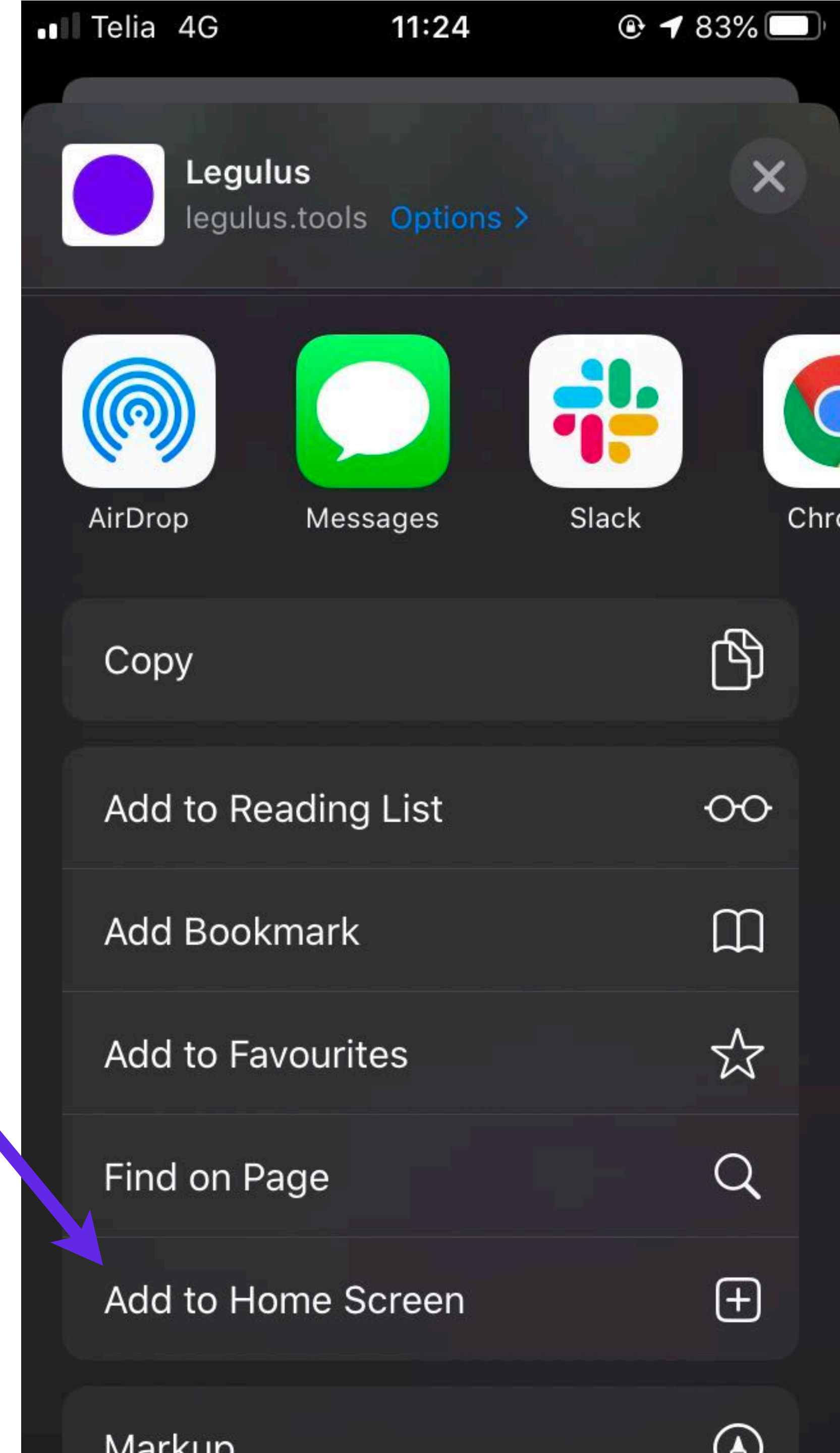


Install application

Open web browser

Insert address <https://legulus.tools>

Save shortcut to Home Screen

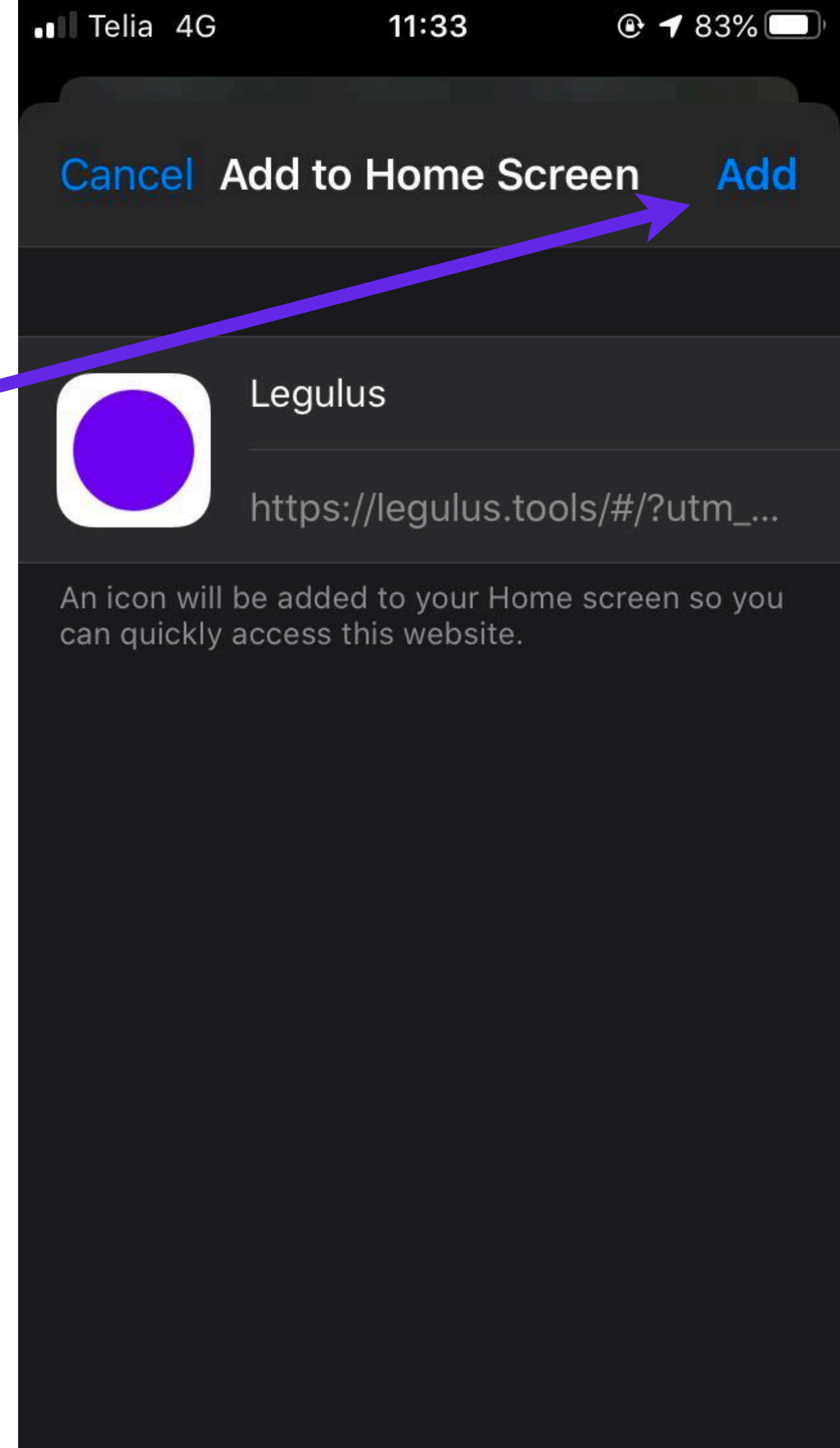


Install application

Open web browser

Insert address <https://legulus.tools>

Save shortcut to Home Screen

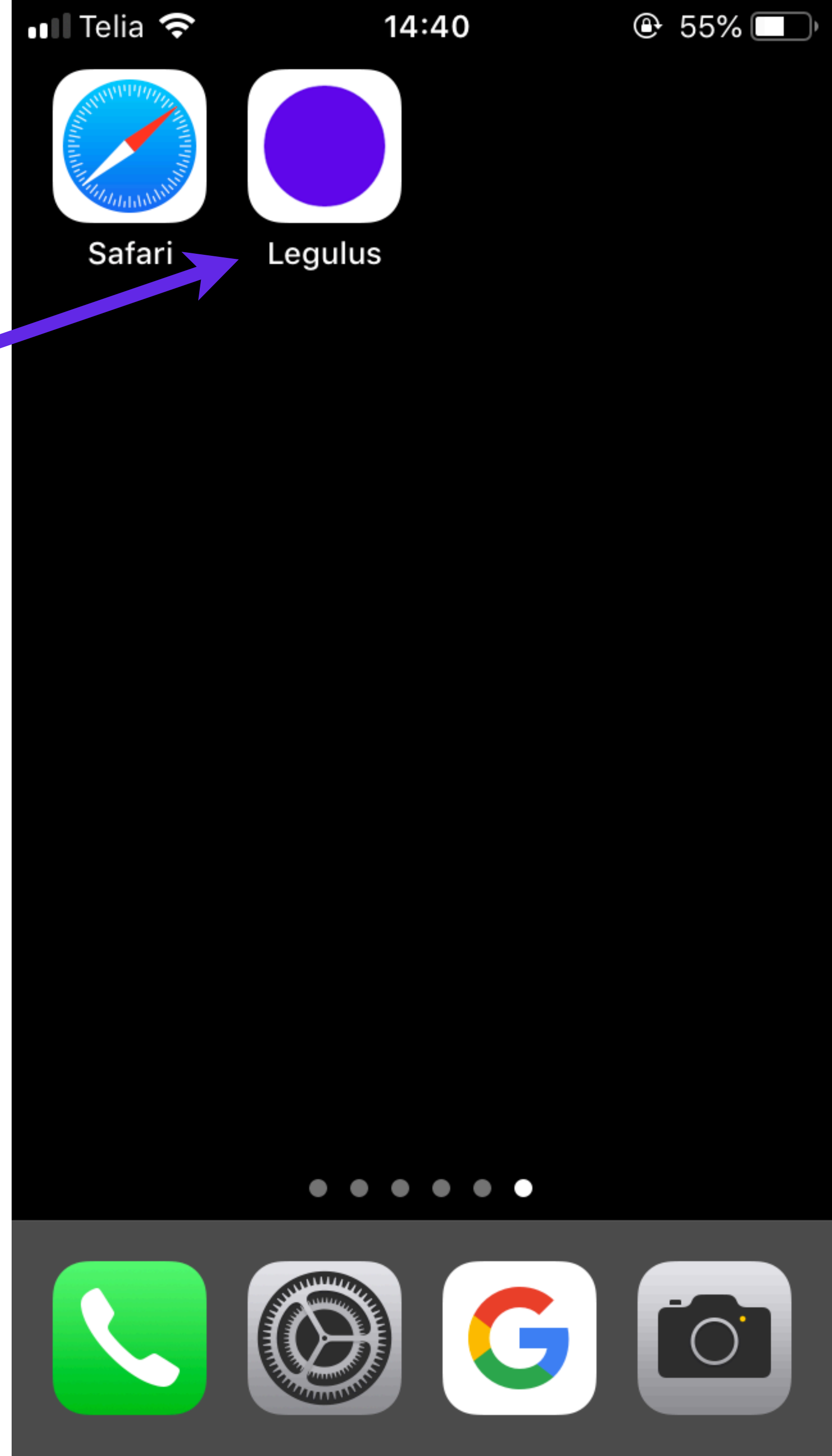


Install application

Open web browser

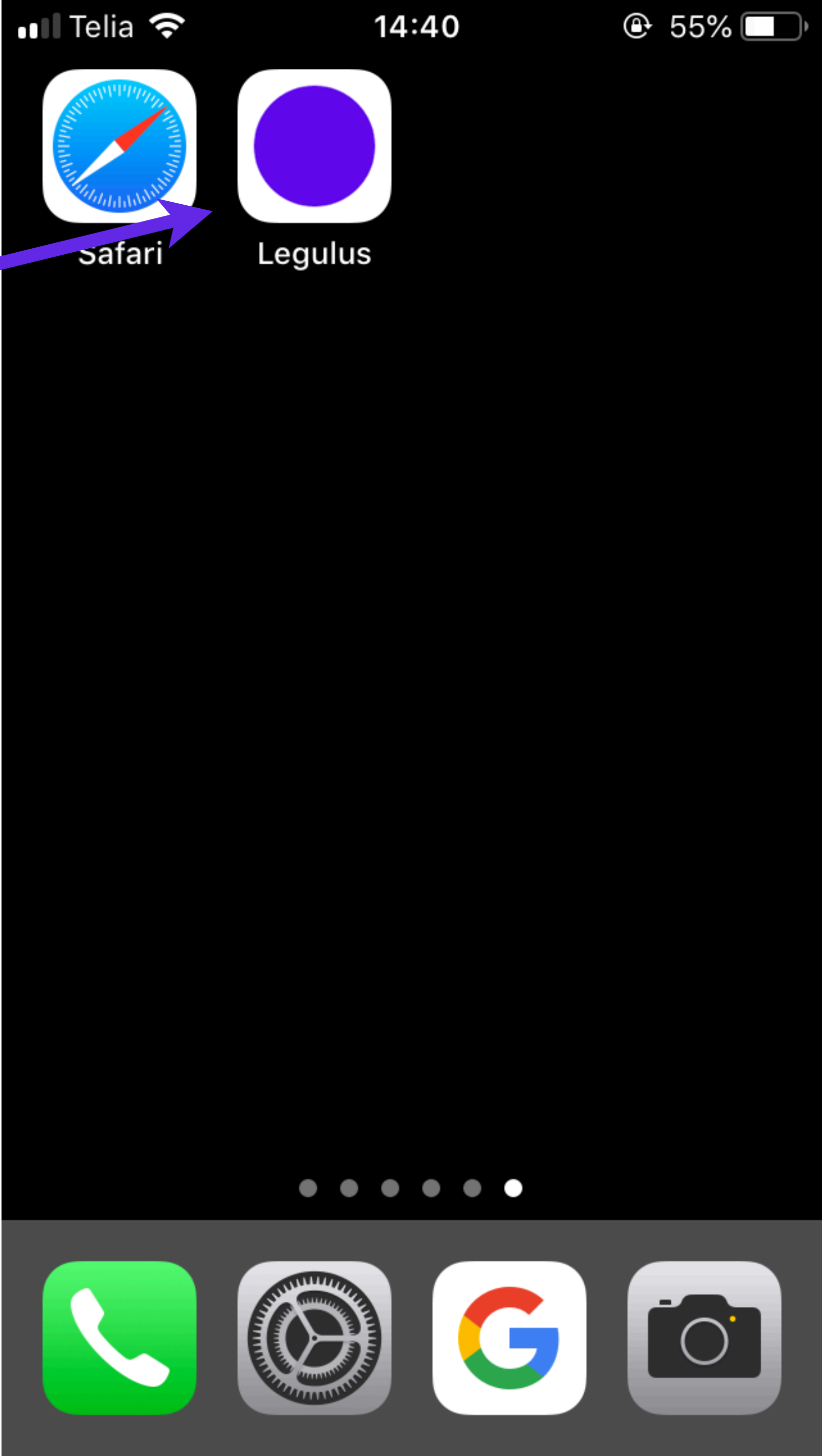
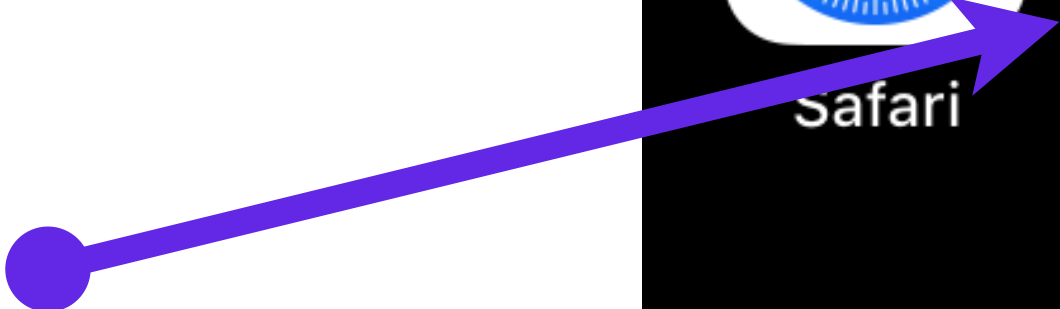
Insert address <https://legulus.tools>

Save shortcut to Home Screen



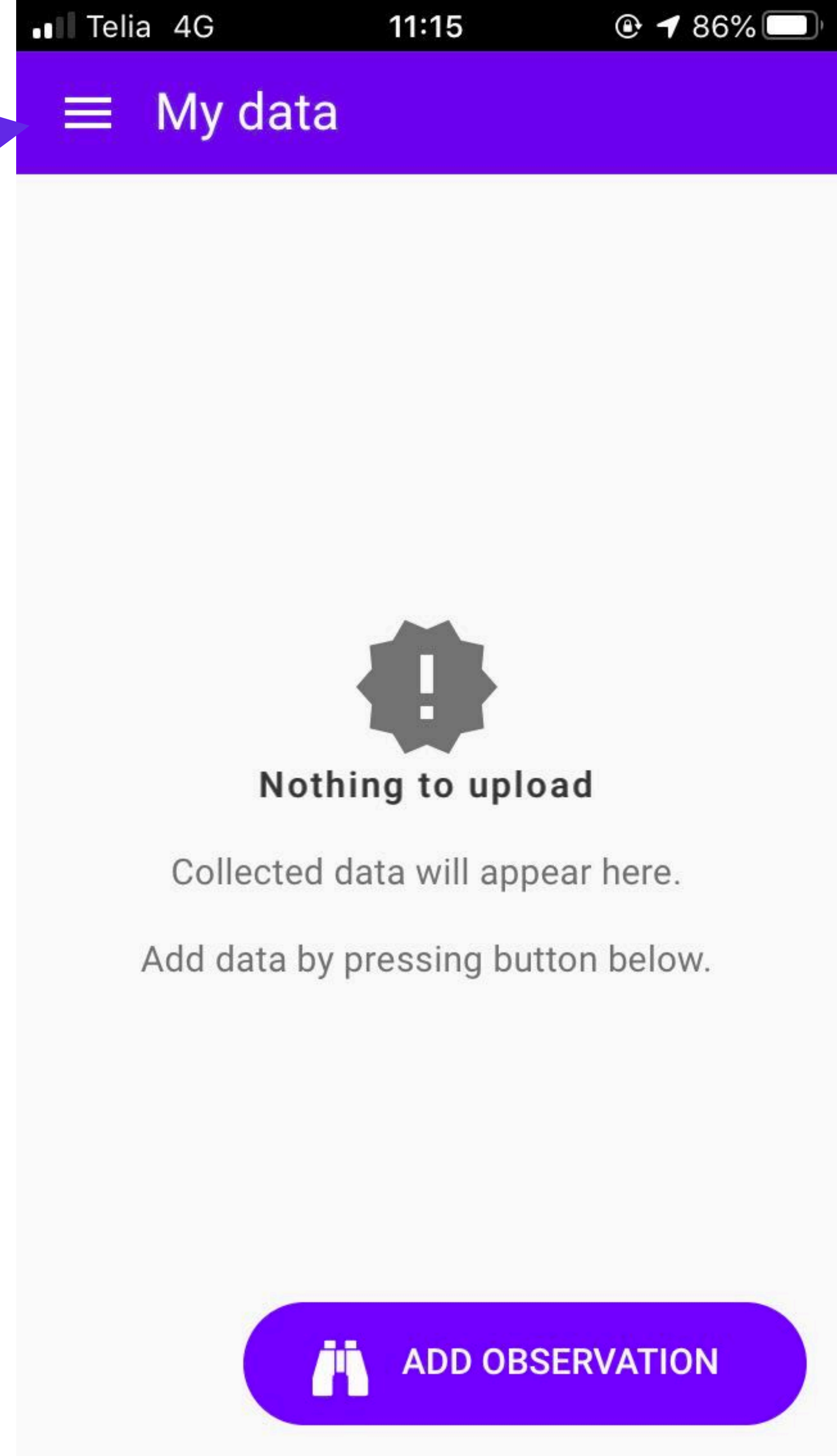
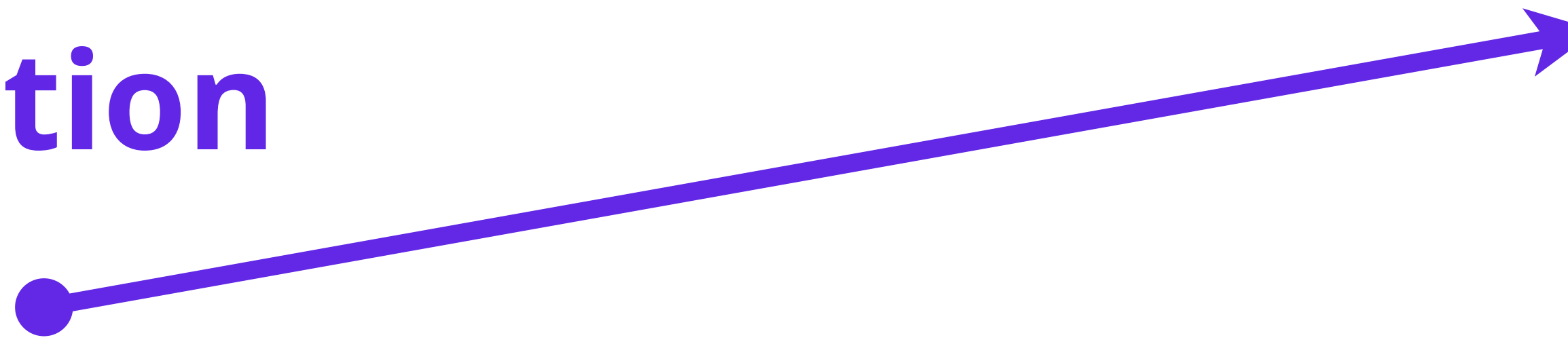
Open application

Open application from Home Screen



Registration

Open menu

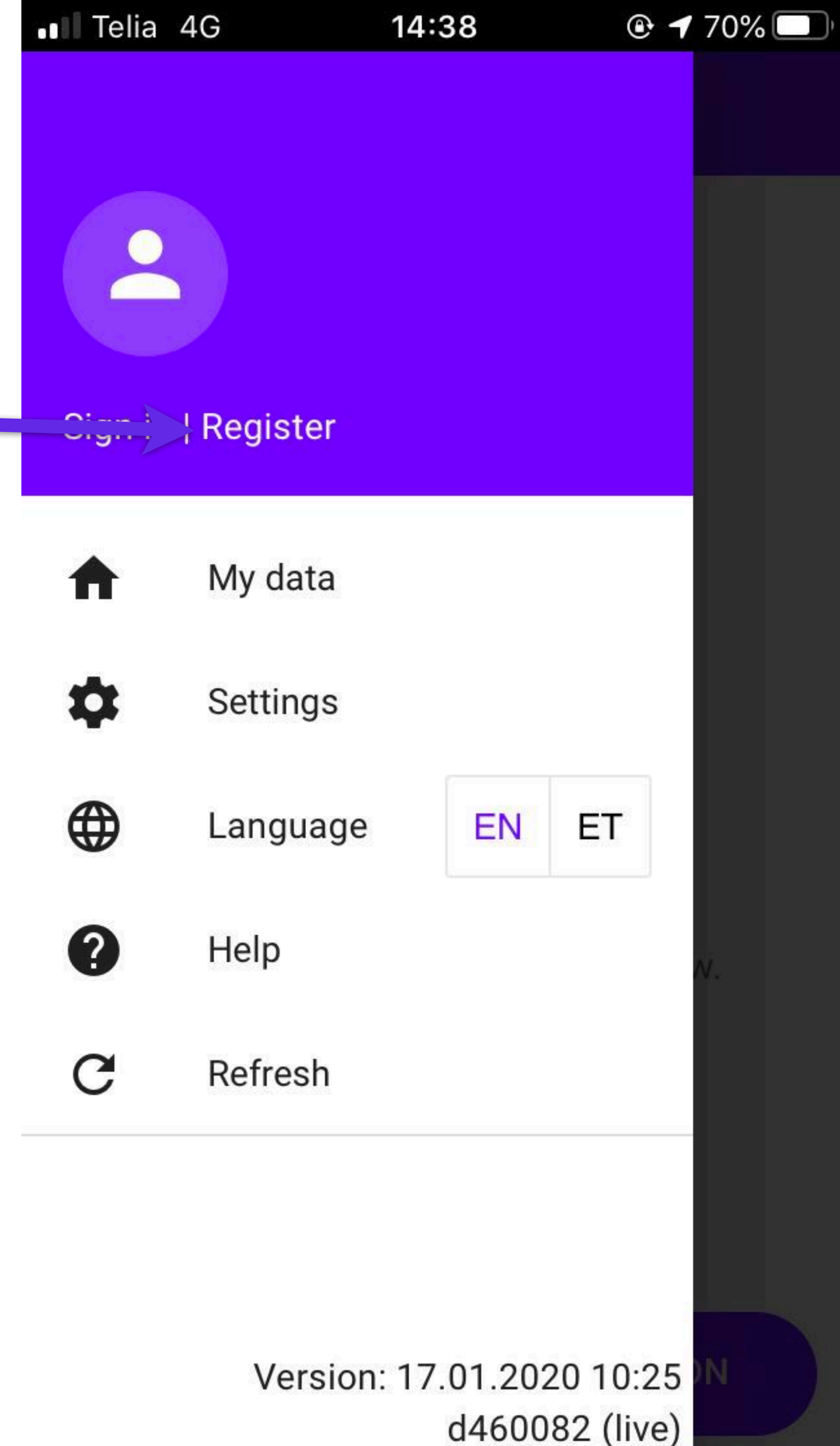


(Upon registration, a PlutoF platform user account will be created. If you already have a PlutoF account, you should not create a new one. Please use an existing one.)

Registration

Open menu

Open the registration form



(Upon registration, a PlutoF platform user account will be created. If you already have a PlutoF account, you should not create a new one. Please use an existing one.)

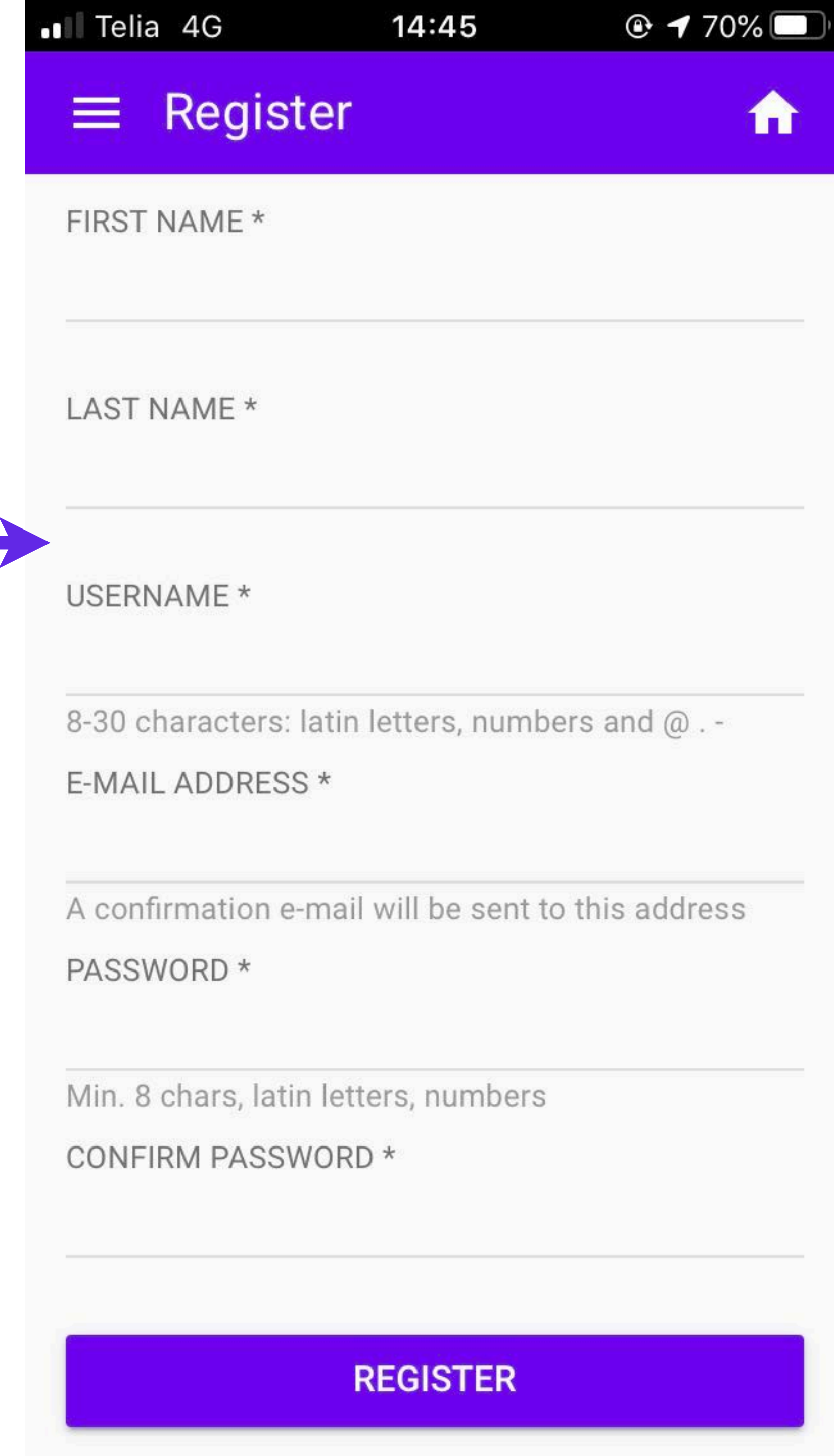
Registration

Open menu

Open the registration form

Entering user information and creating an account

(Correct information should be entered. The email address will be verified. NB! Duplicate and fake accounts are deleted by system administrators.)



The screenshot shows a mobile application interface for user registration. At the top, a purple header bar contains a hamburger menu icon, the text "Register", and a home icon. Below the header, the form consists of several input fields with labels: "FIRST NAME *", "LAST NAME *", "USERNAME *", "E-MAIL ADDRESS *", and "PASSWORD *". The "E-MAIL ADDRESS *" field has a sub-label "8-30 characters: latin letters, numbers and @ . -". The "PASSWORD *" field has a sub-label "Min. 8 chars, latin letters, numbers". Below the password field is a "CONFIRM PASSWORD *" field. A note "A confirmation e-mail will be sent to this address" is positioned between the email and password fields. At the bottom of the form is a large blue button with the text "REGISTER". A purple arrow points from the text "creating an account" in the instructions to the "USERNAME *" field.

Telia 4G 14:45 70%

Register

FIRST NAME *

LAST NAME *

USERNAME *

8-30 characters: latin letters, numbers and @ . -

E-MAIL ADDRESS *

A confirmation e-mail will be sent to this address

PASSWORD *

Min. 8 chars, latin letters, numbers

CONFIRM PASSWORD *

REGISTER

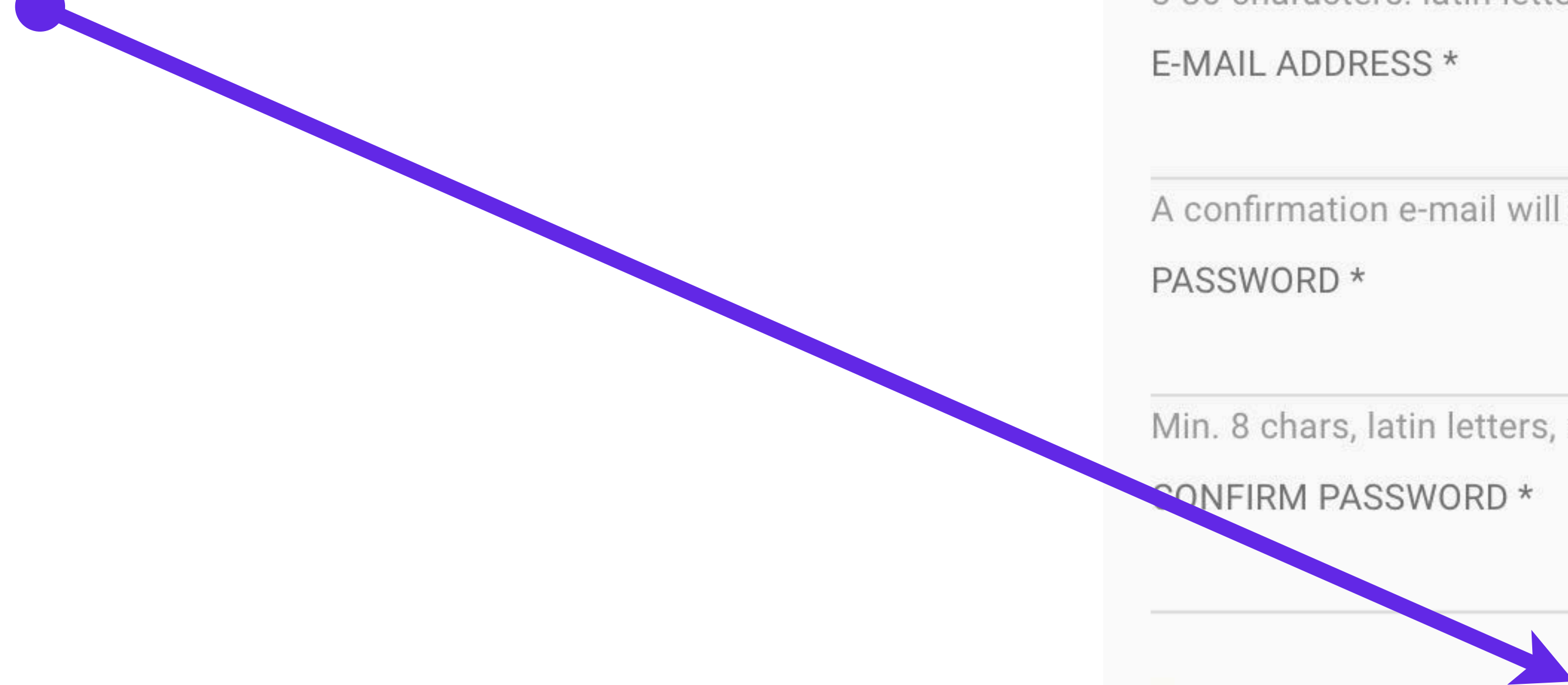
Registration

Open menu

Open the registration form

Entering user information and creating an account

Create an account



Telia 4G 14:45 70%

Register

FIRST NAME *

LAST NAME *

USERNAME *

8-30 characters: latin letters, numbers and @ . -

E-MAIL ADDRESS *

A confirmation e-mail will be sent to this address

PASSWORD *

Min. 8 chars, latin letters, numbers

CONFIRM PASSWORD *

REGISTER

Registration

Open menu

Open the registration form

Entering user information and creating an account

Create an account

A message has been sent to the user's email address containing the verification link.

(The user must be sure to click on the link before logging in. Otherwise, the user account will not be opened.)

Telia 4G 14:45 70%

Register

FIRST NAME *

LAST NAME *

USERNAME *

8-30 characters: latin letters, numbers and @ . -

E-MAIL ADDRESS *


A confirmation e-mail will be sent to this address

PASSWORD *

Min. 8 chars, latin letters, numbers

CONFIRM PASSWORD *


REGISTER



Nothing to upload

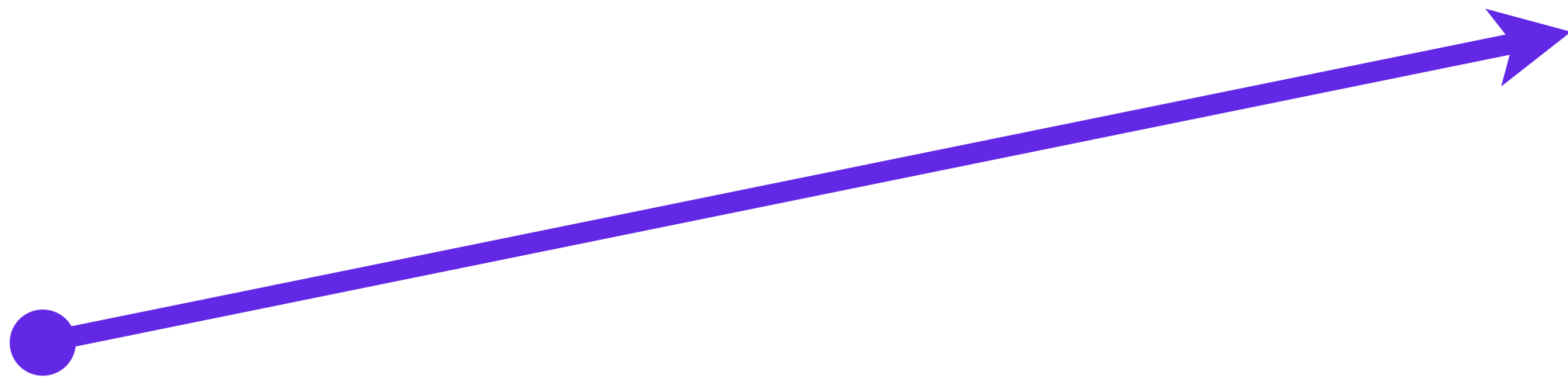
Collected data will appear here.

Add data by pressing button below.

 **ADD OBSERVATION**

Sign in

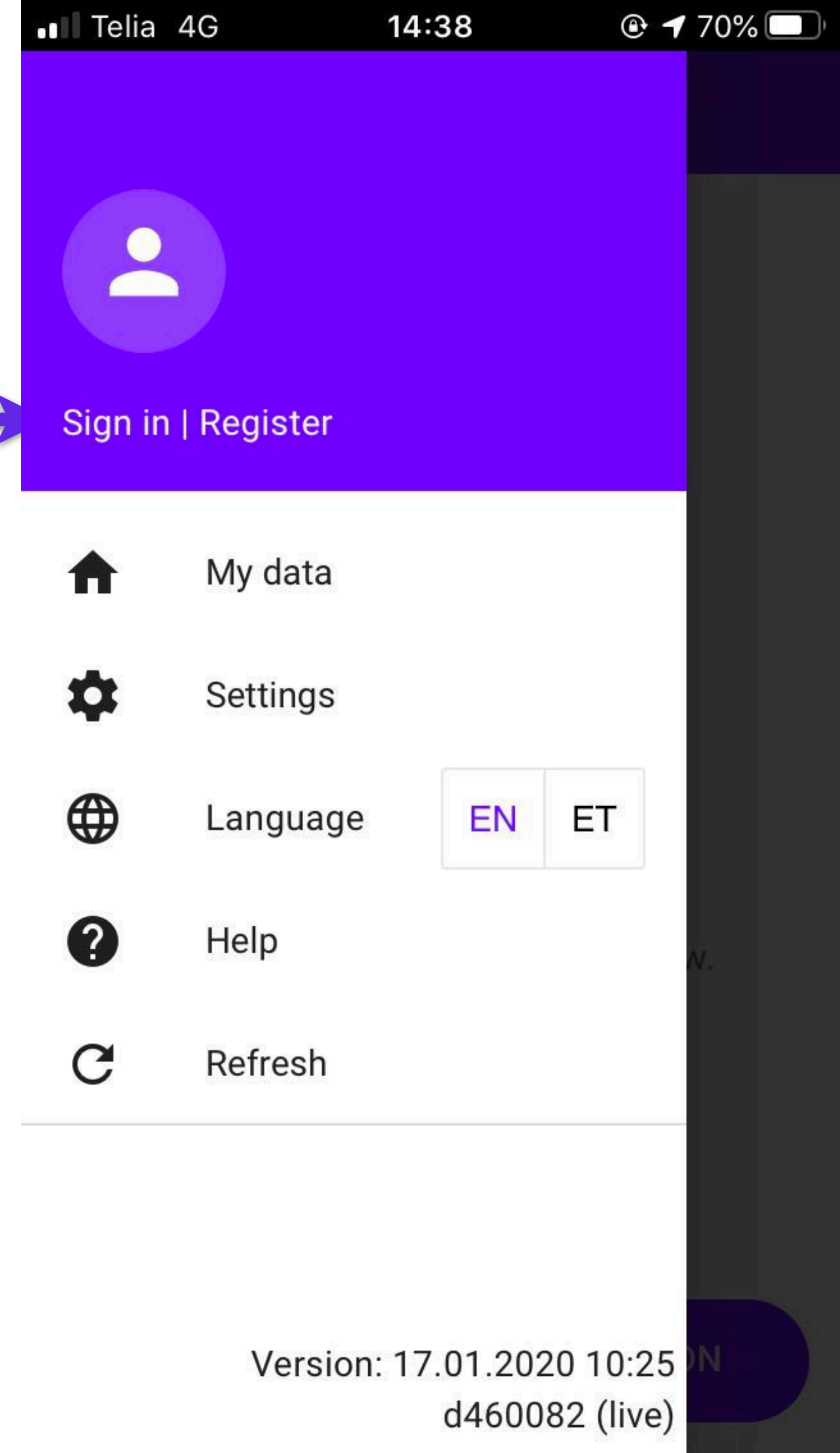
Open the menu



Sign in

Open the menu

Open the login form

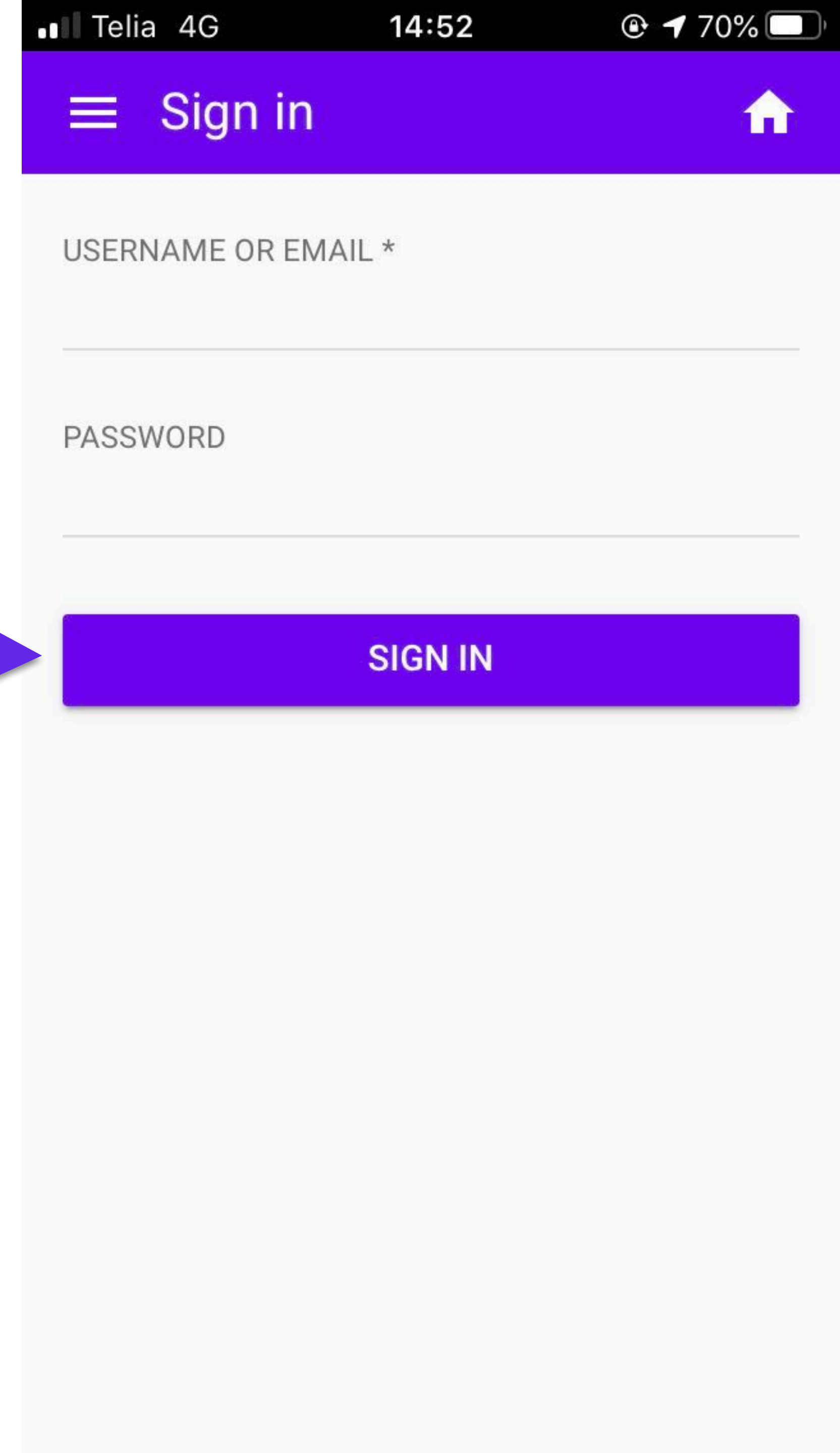
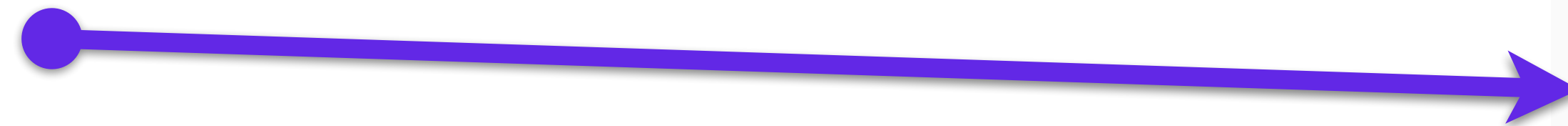


Sign in

Open the menu

Open the login form

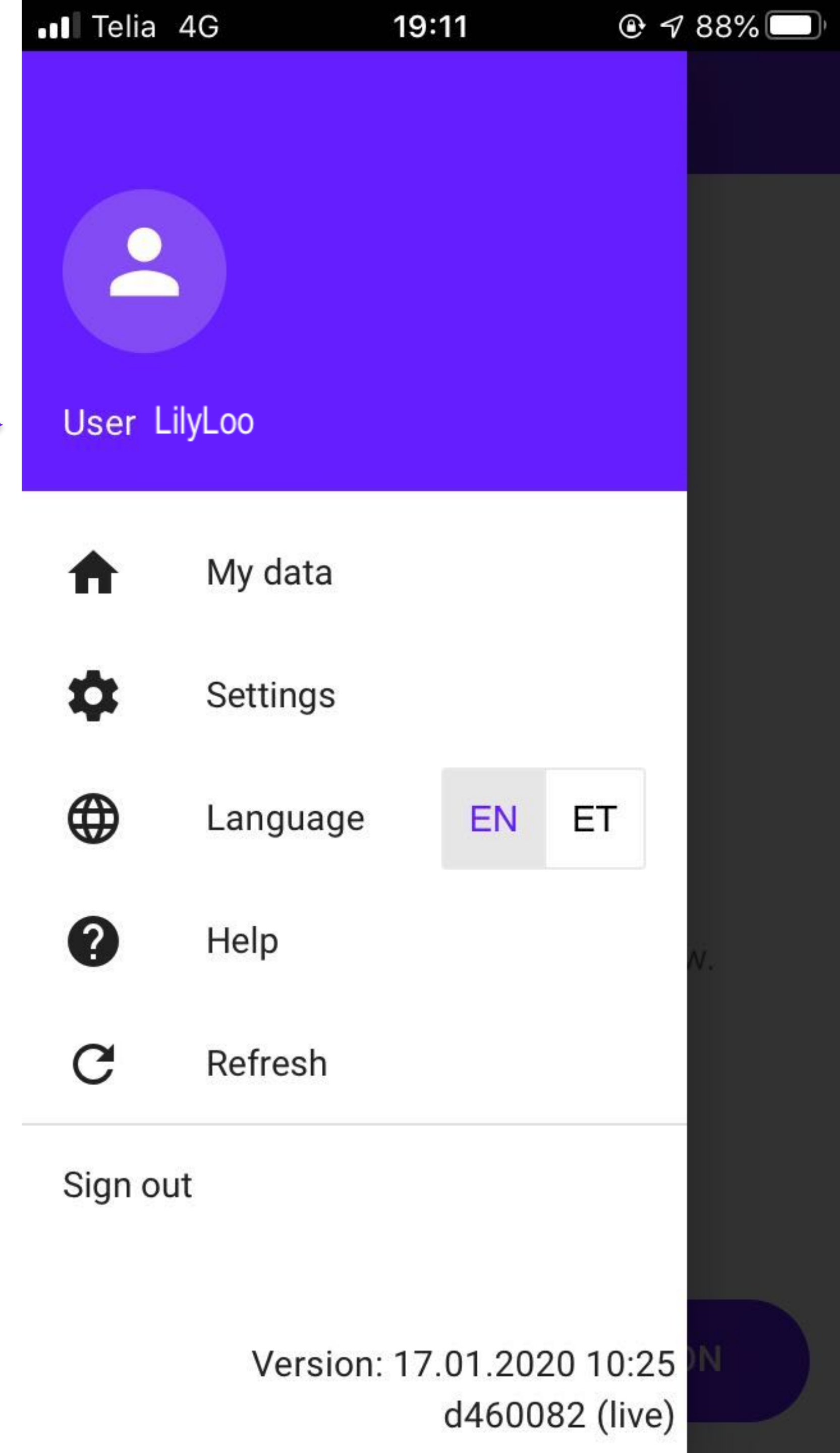
Fill in your username / password
and sign in



The image shows a mobile application interface for signing in. At the top, there is a status bar with 'Telia 4G', the time '14:52', and a 70% battery level. Below this is a purple header bar with a hamburger menu icon, the text 'Sign in', and a home icon. The main content area is white and contains two input fields: 'USERNAME OR EMAIL *' and 'PASSWORD'. Below these fields is a large purple button with the text 'SIGN IN' in white capital letters.

Settings

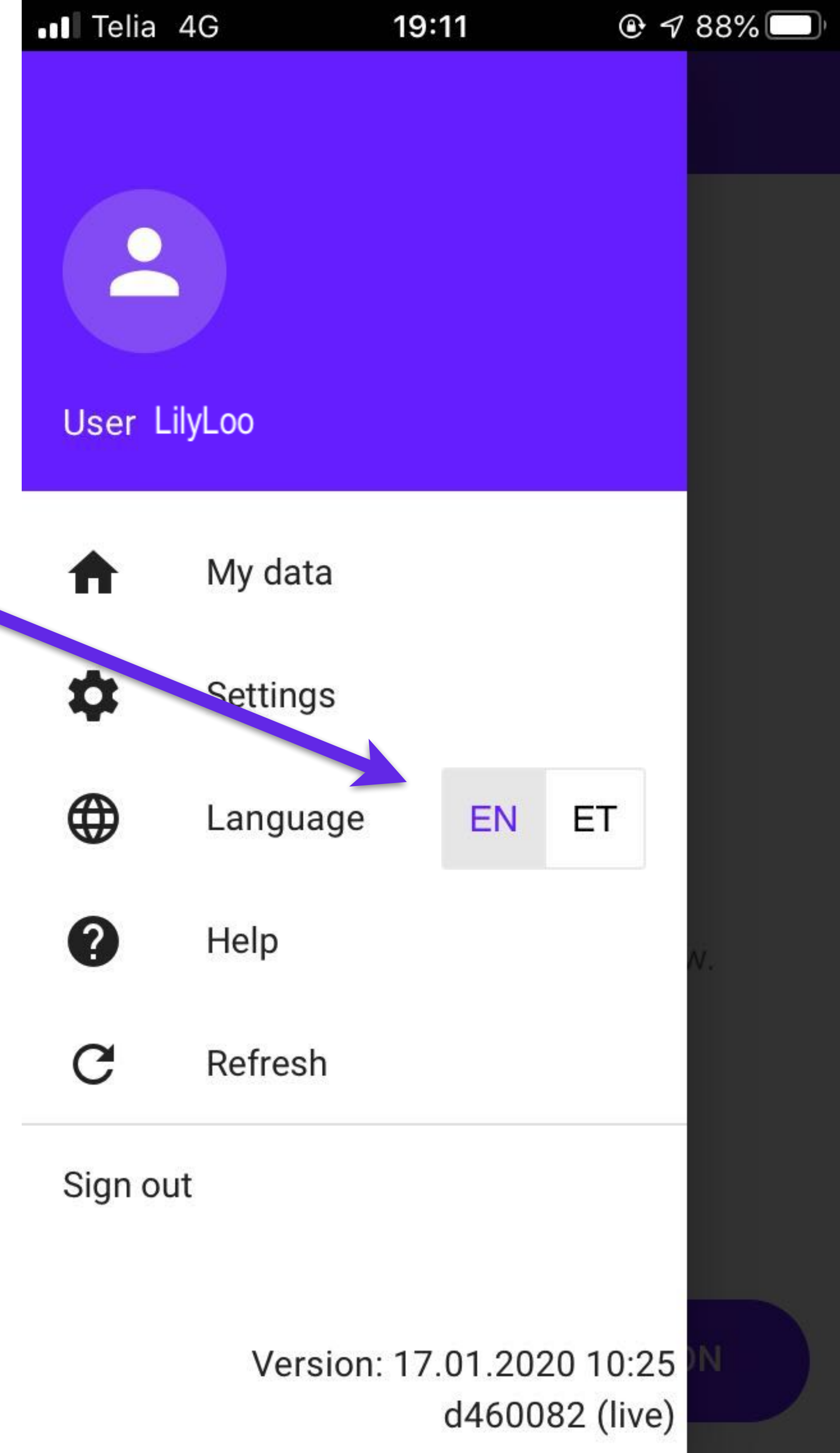
The user is logged in when they see their username in the menu



Settings

The user is logged in when they see their username in the menu

Change the language of the application

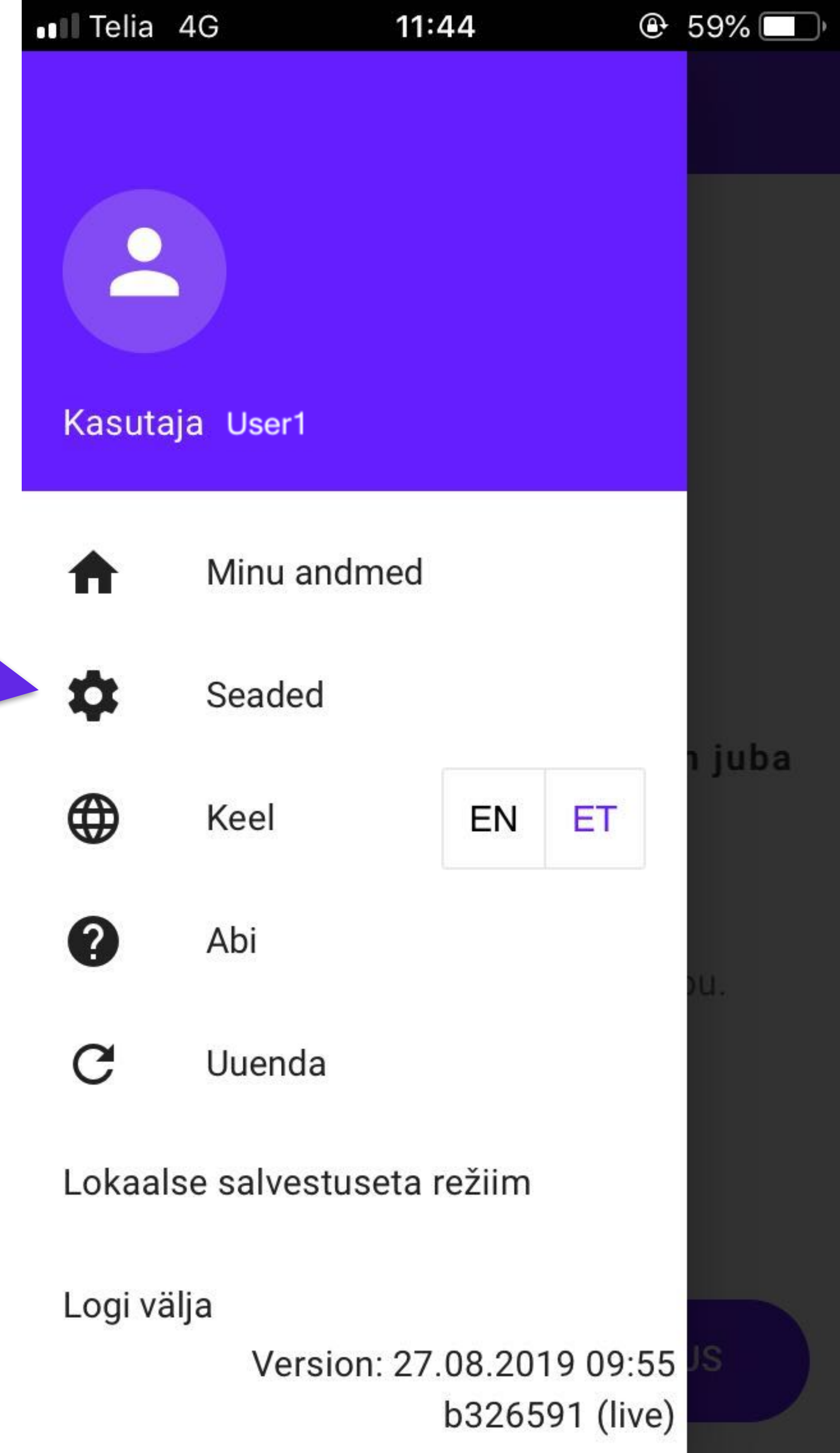
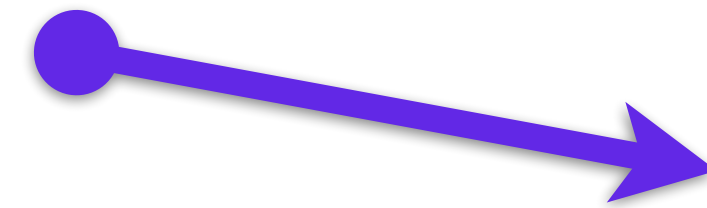


Settings

The user is logged in when they see their username in the menu

Change the language of the application

Access the application settings page



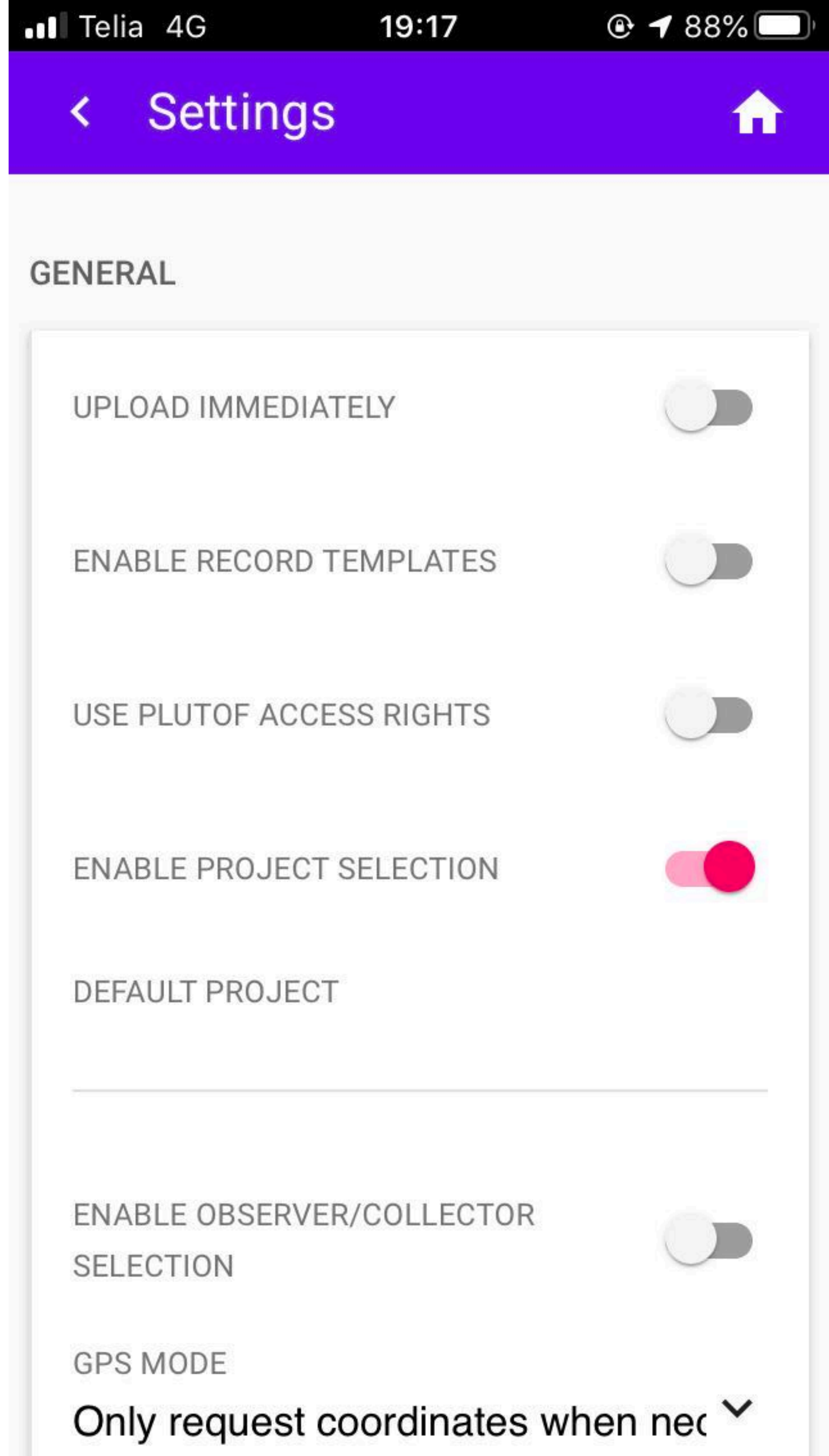
Settings

The user is logged in when they see their username in the menu

Change the language of the application

Access the application settings page

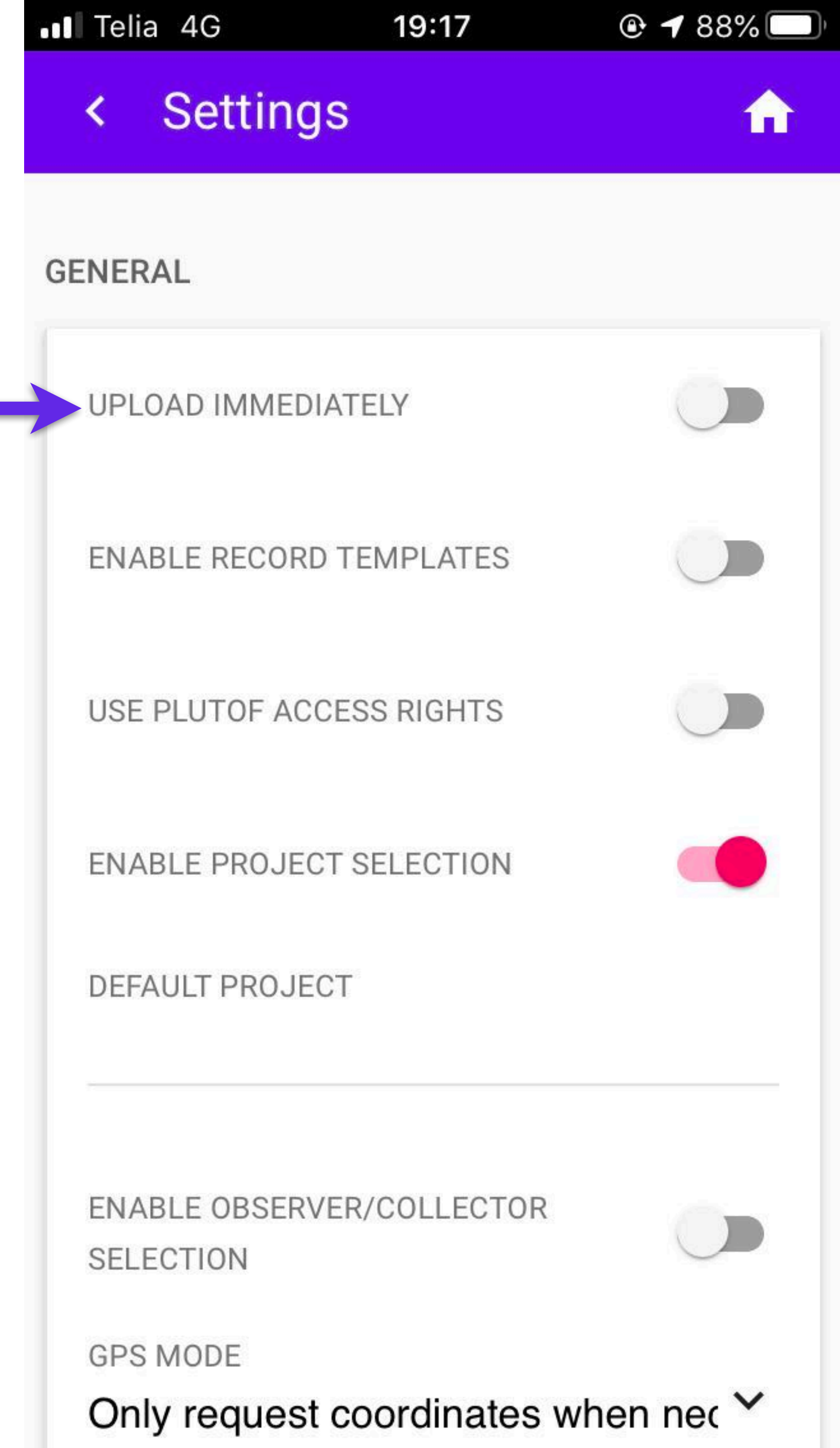
General application settings 



General Settings - Upload

Observations and related images are automatically sent to the PlutoF desktop after saving

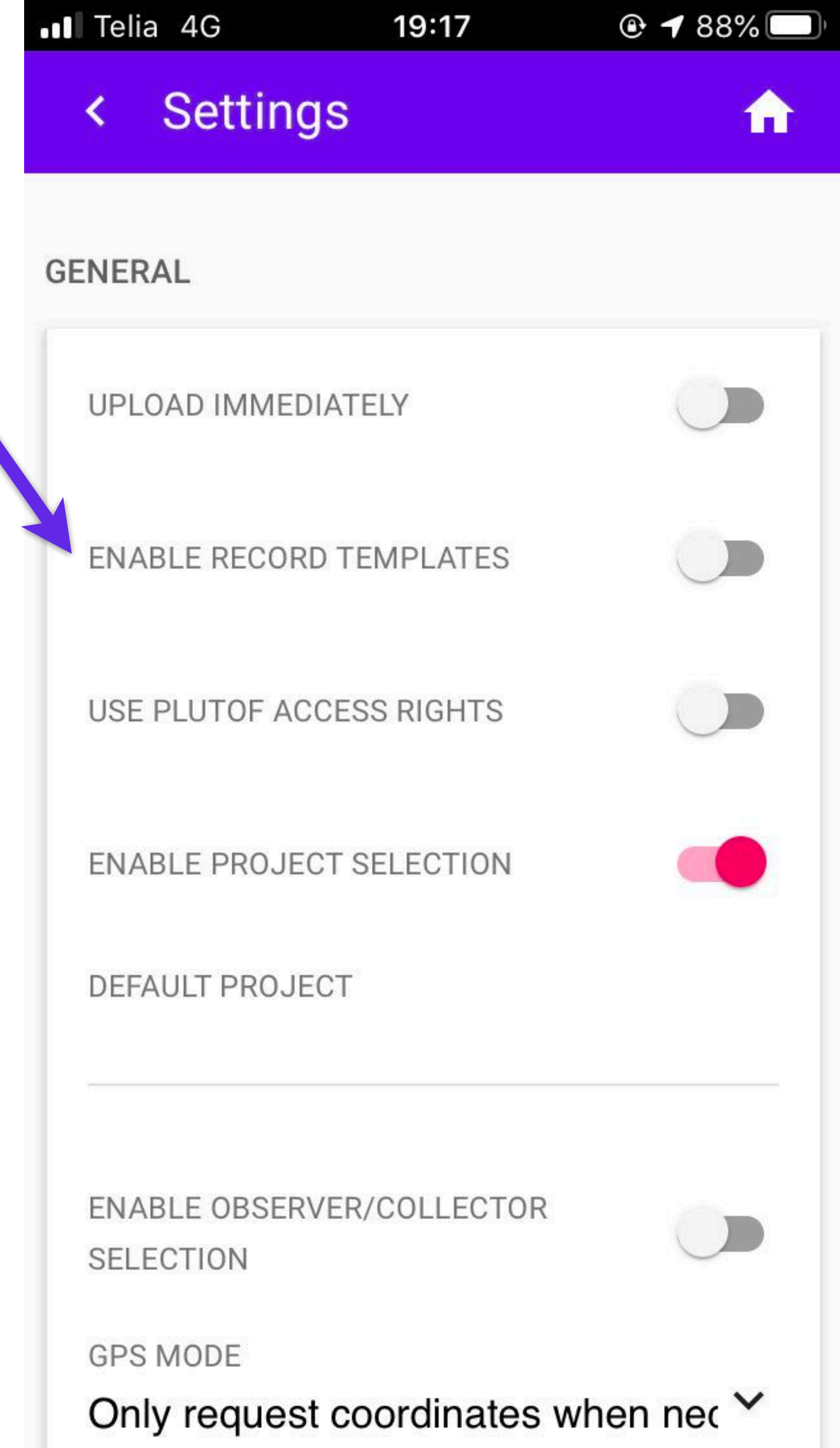
(This option is used when there is not enough room on the user's phone to hold video or multi-image observation.)



General Settings - Templates

An observation saved in Legulus (but not yet sent to PlutoF) can be marked as a template

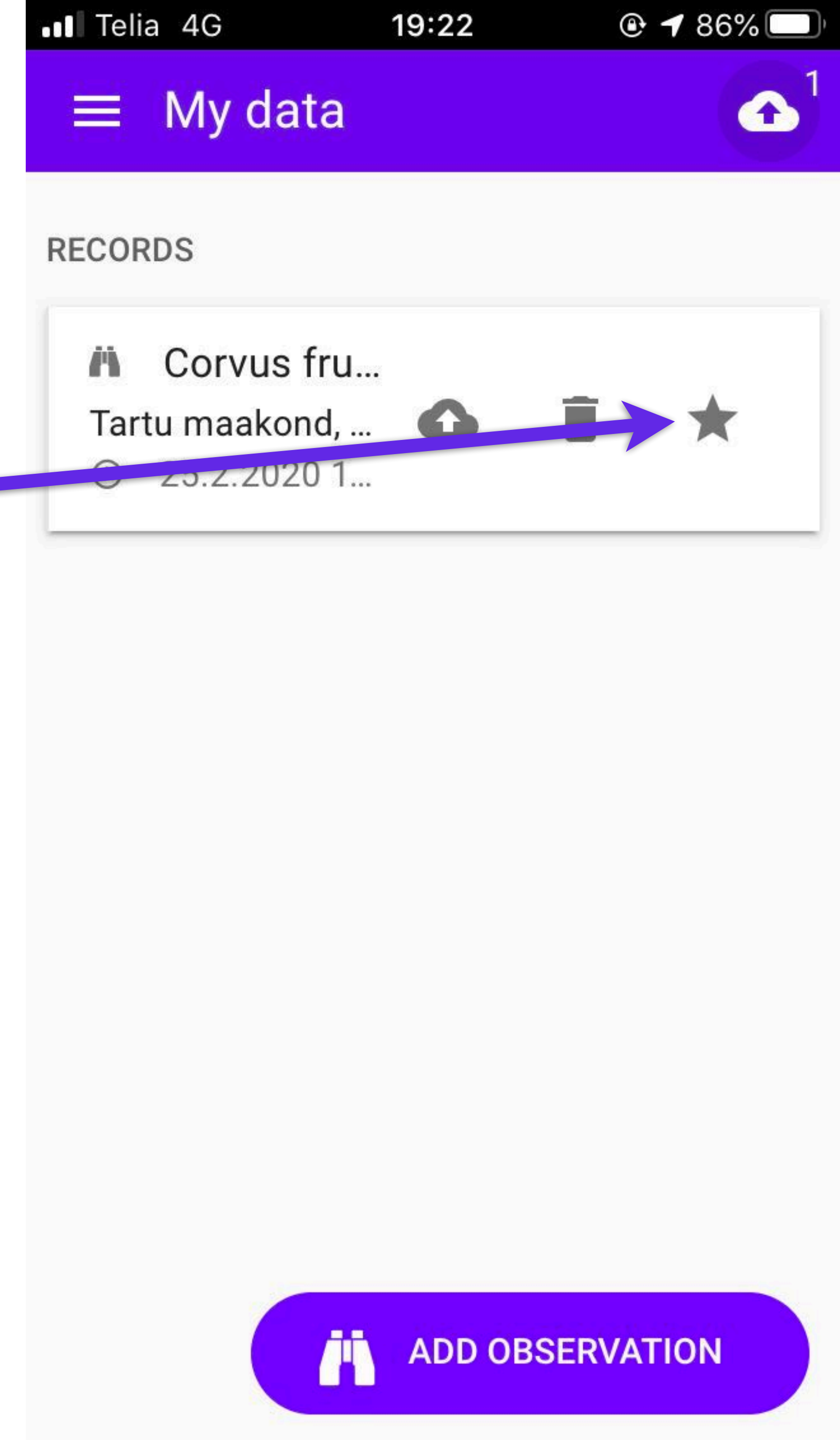
(*Advanced option. Choosing a template is useful if you want to enter multiple observations in the same location. Only the content of the taxon / species field should be changed.)



General Settings - Templates

An observation saved in Legulus (but not yet sent to PlutoF) can be marked as a template

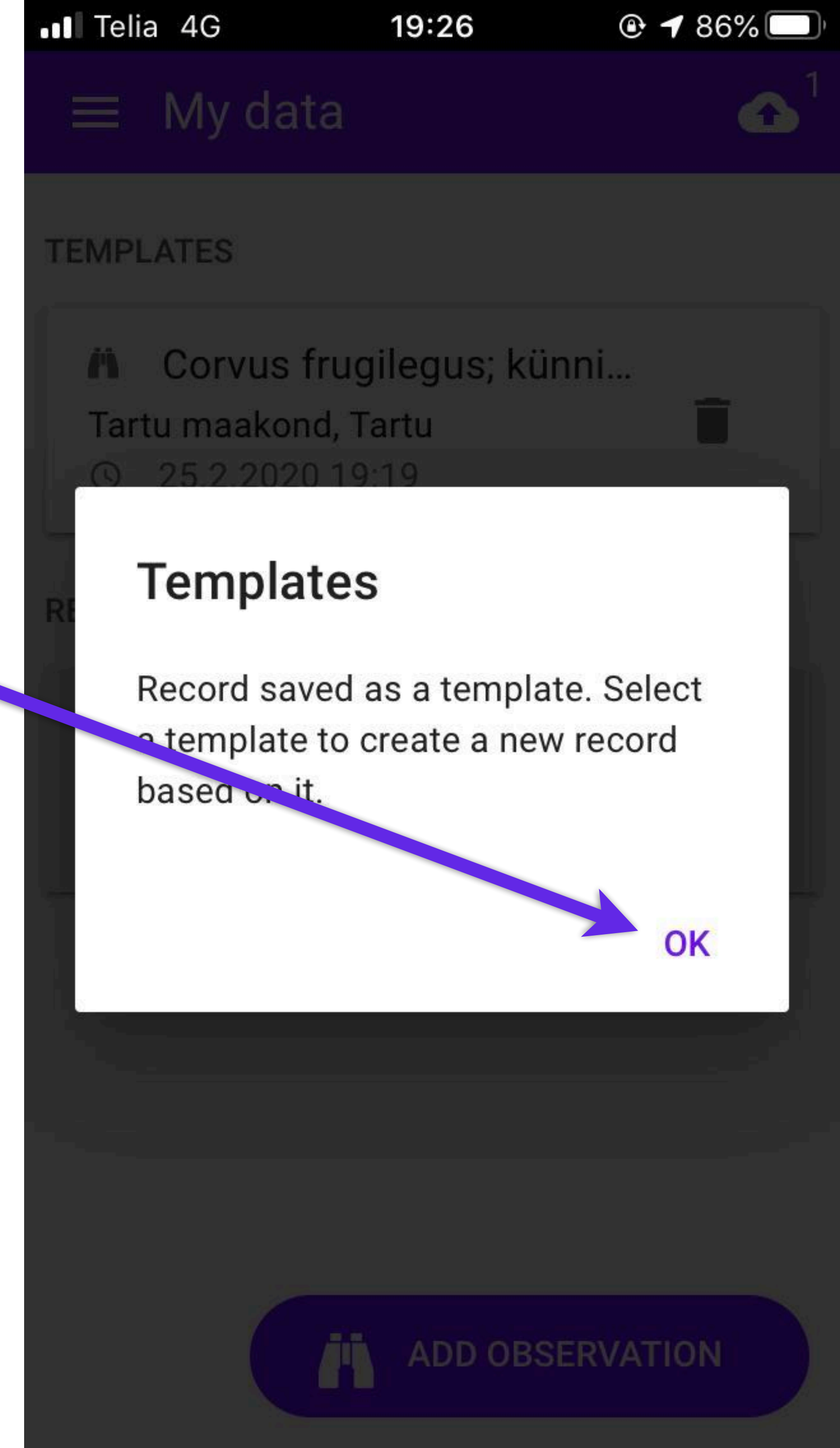
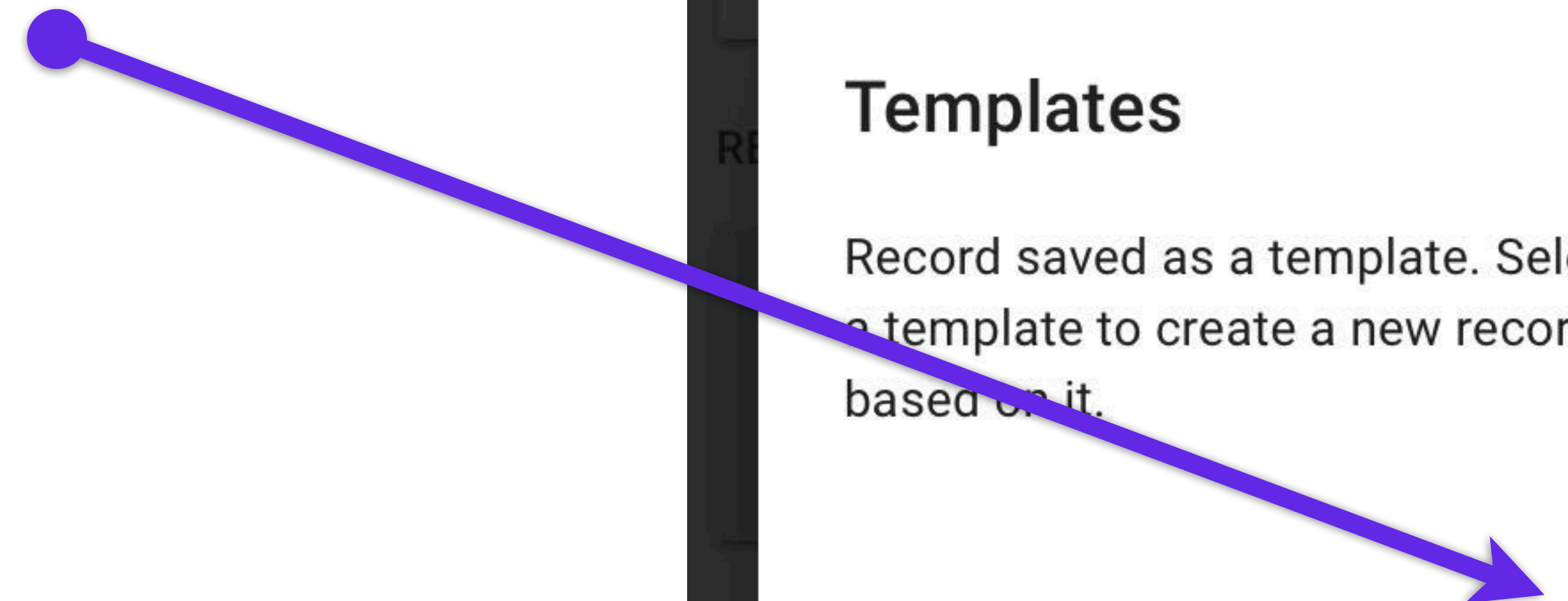
Mark observation as a template



General Settings - Templates

An observation saved in Legulus (but not yet sent to PlutoF) can be marked as a template

Mark observation as a template

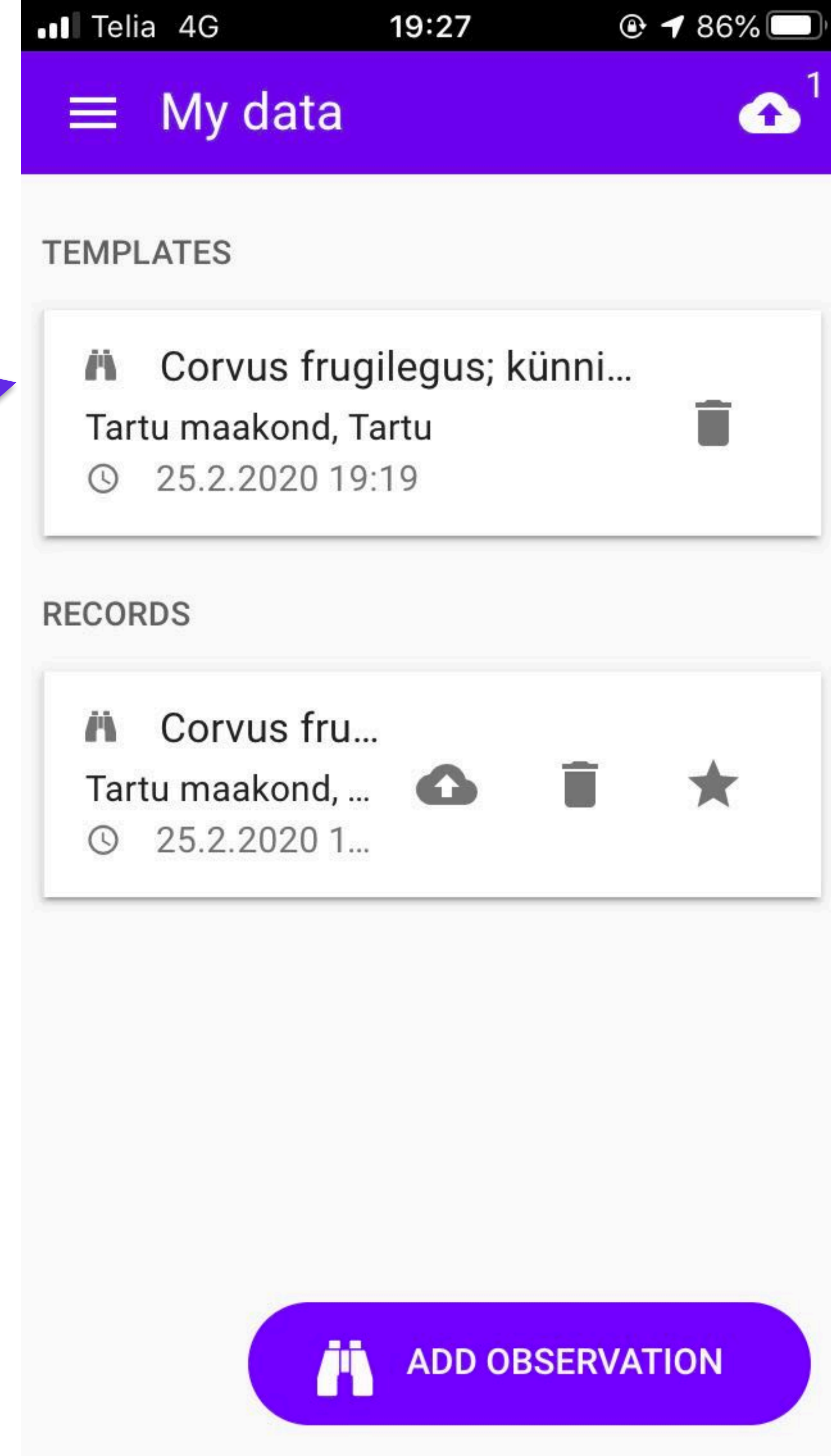
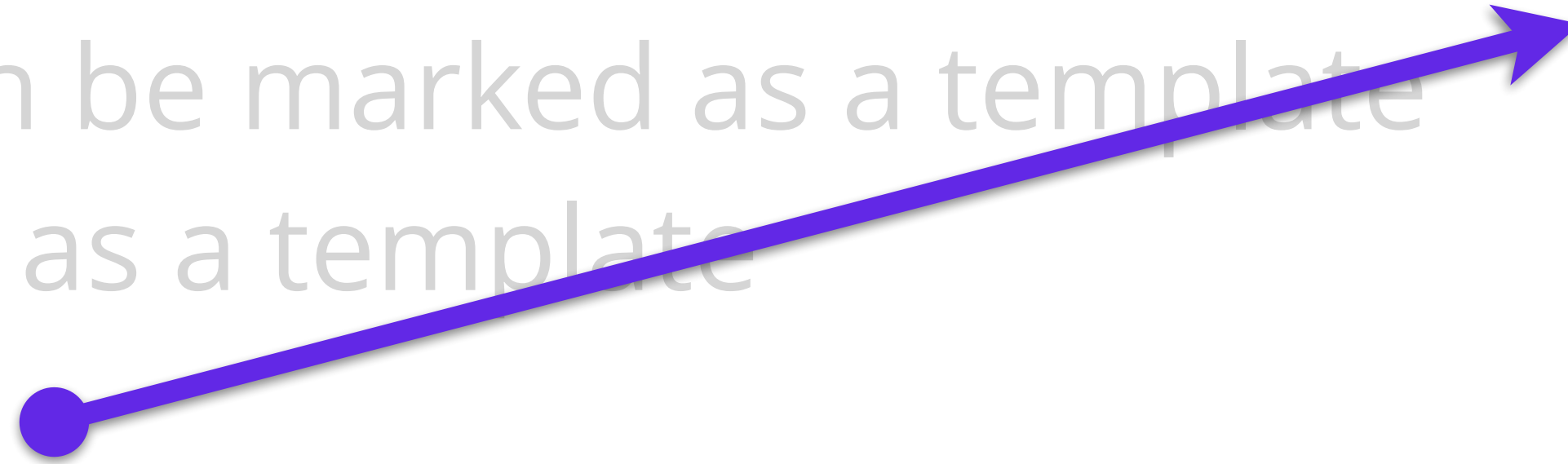


General Settings - Templates

An observation saved in Legulus (but not yet sent to PlutoF) can be marked as a template

Mark observation as a template

Template created



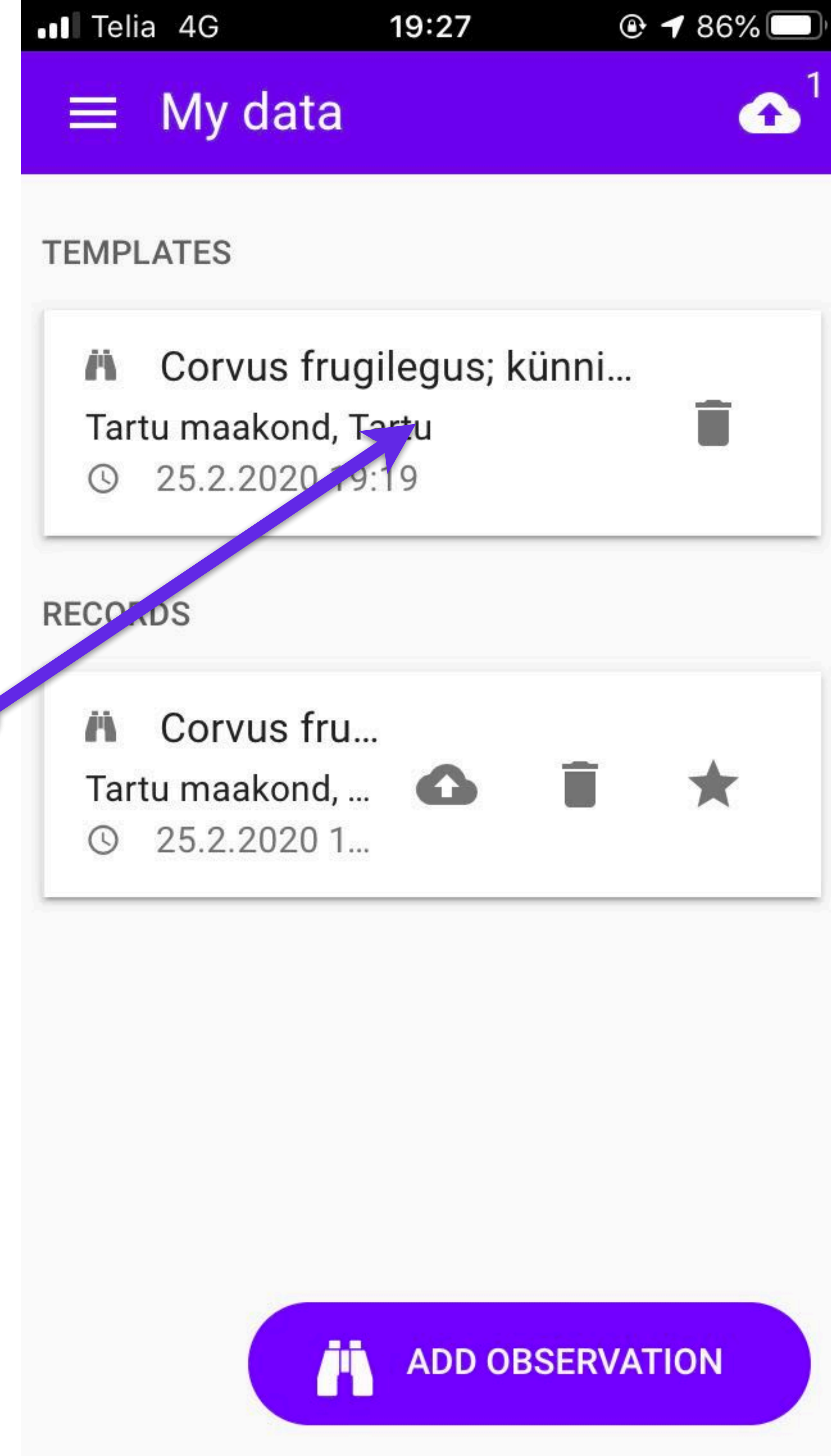
General Settings - Templates

An observation saved in Legulus (but not yet sent to PlutoF) can be marked as a template

Mark observation as a template

Template created

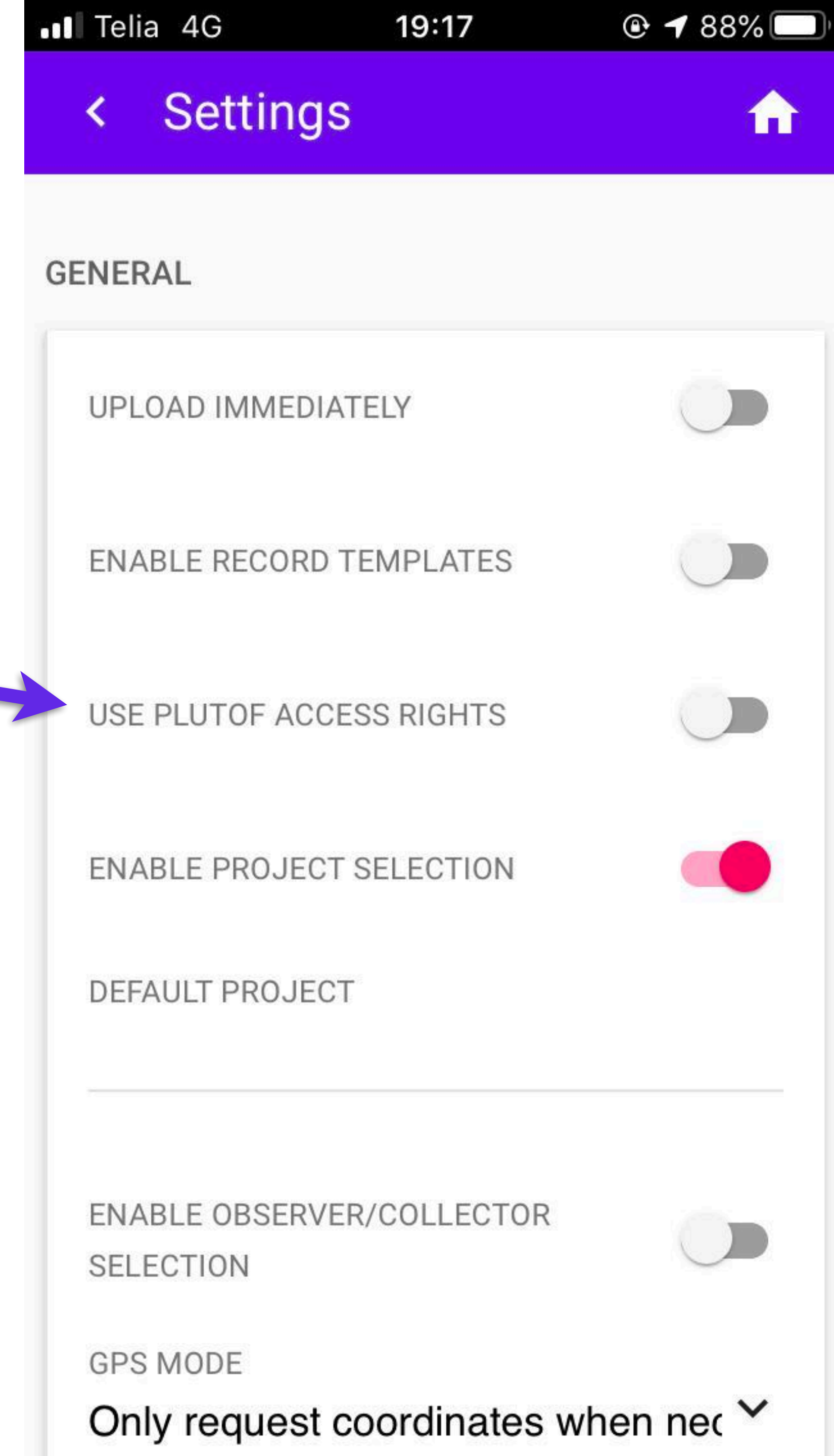
Create a new observation from the template



General Settings - Access Rights

This option allows user to assign special permissions to the entries (private, visible to the group, etc.)

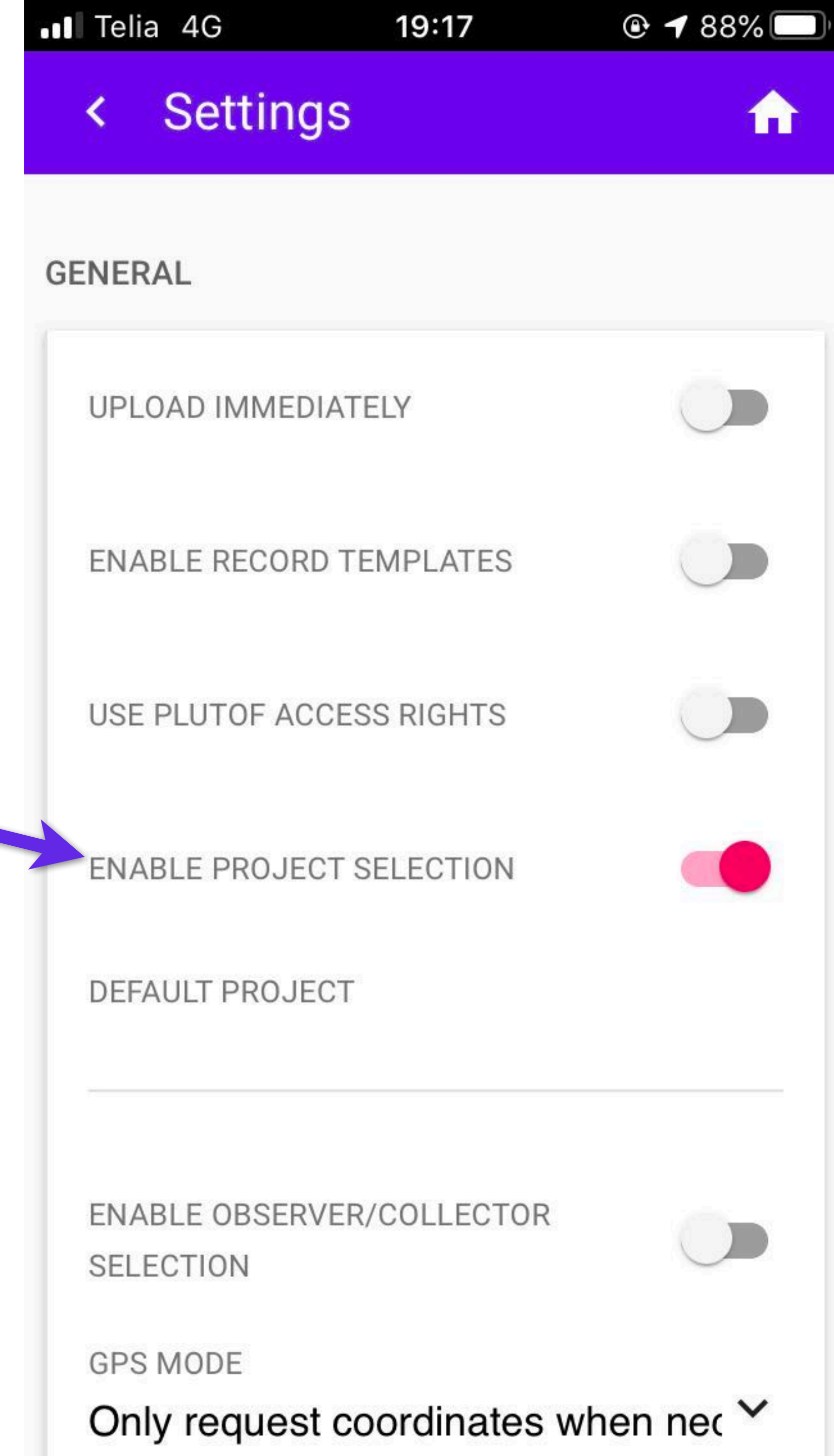
(*Advanced option. Assumes that more complex permissions are pre-configured in PlutoF.)



General Settings - project selection

"Enable project selection" makes the project selection field visible in the observation input form

(*An important option when collecting data in a pre-planned joint project. Eg Loodusvaatluste maraton or UNESCO BSP projects.)

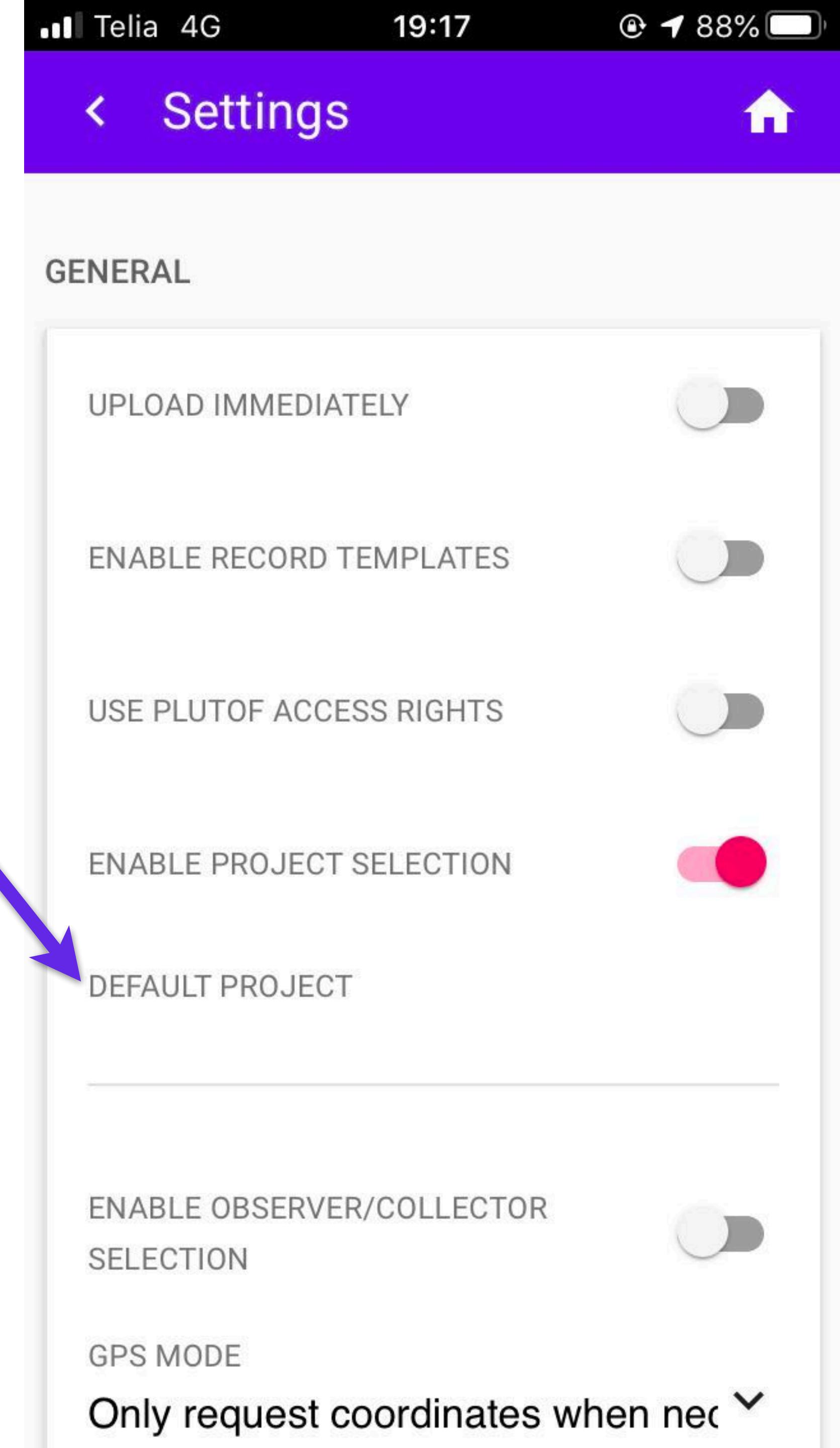


General Settings - default project

The "default project" should be used if you know in advance that you are entering all entries under one specific project. This field is used to find previously created projects in PlutoF

(Option enhances user comfort - avoids filling project field at every entry.

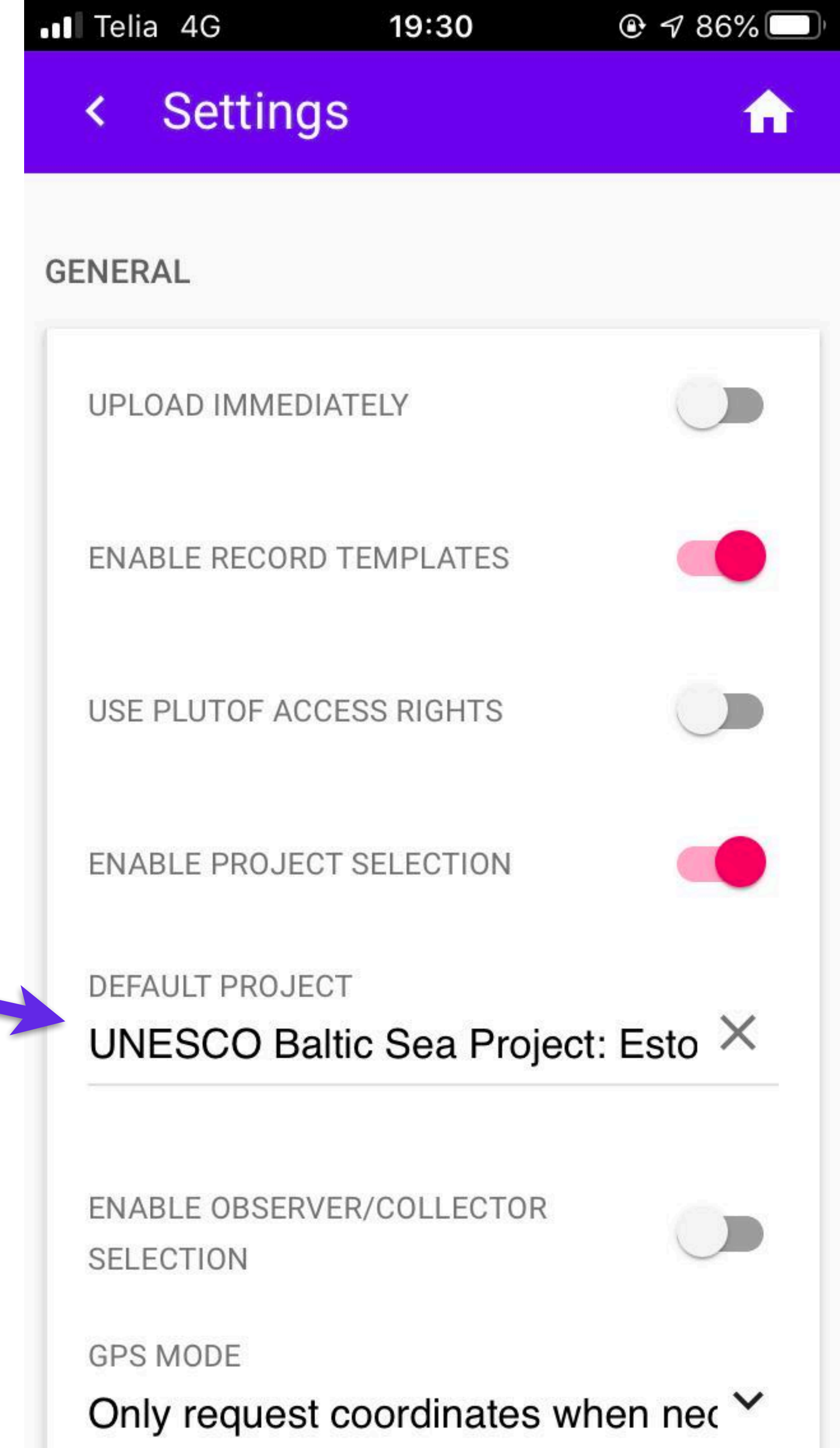
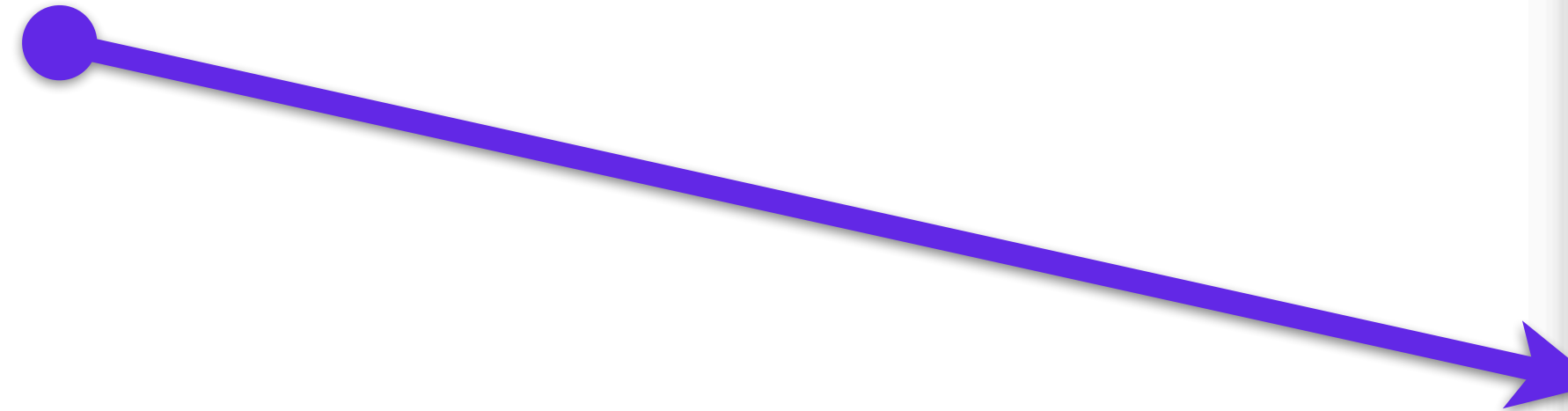
Data can only be added to a user's own project or to projects that allow linking.)



General Settings - default project

The "default project" should be used if you know in advance that you are entering all entries under one specific project. This field is used to find previously created projects in PlutoF

Default project is set



General Settings - default project


The "default project" should be used if you know in advance that you are entering all entries under one specific project. This field is used to find previously created projects in PlutoF



Default project is set

The project field is automatically pre-filled in the observation input form

Telia 4G 19:31 86%

≡ Add observation 🏠



LOCATION  

Tartu maakond, Tartu

58.38612301 26.73247681 (± 383 m)






START DATE

25. Feb 2020 at 19:31

PROJECT

UNESCO Baltic Sea Project: Estoniá ✕

FORM

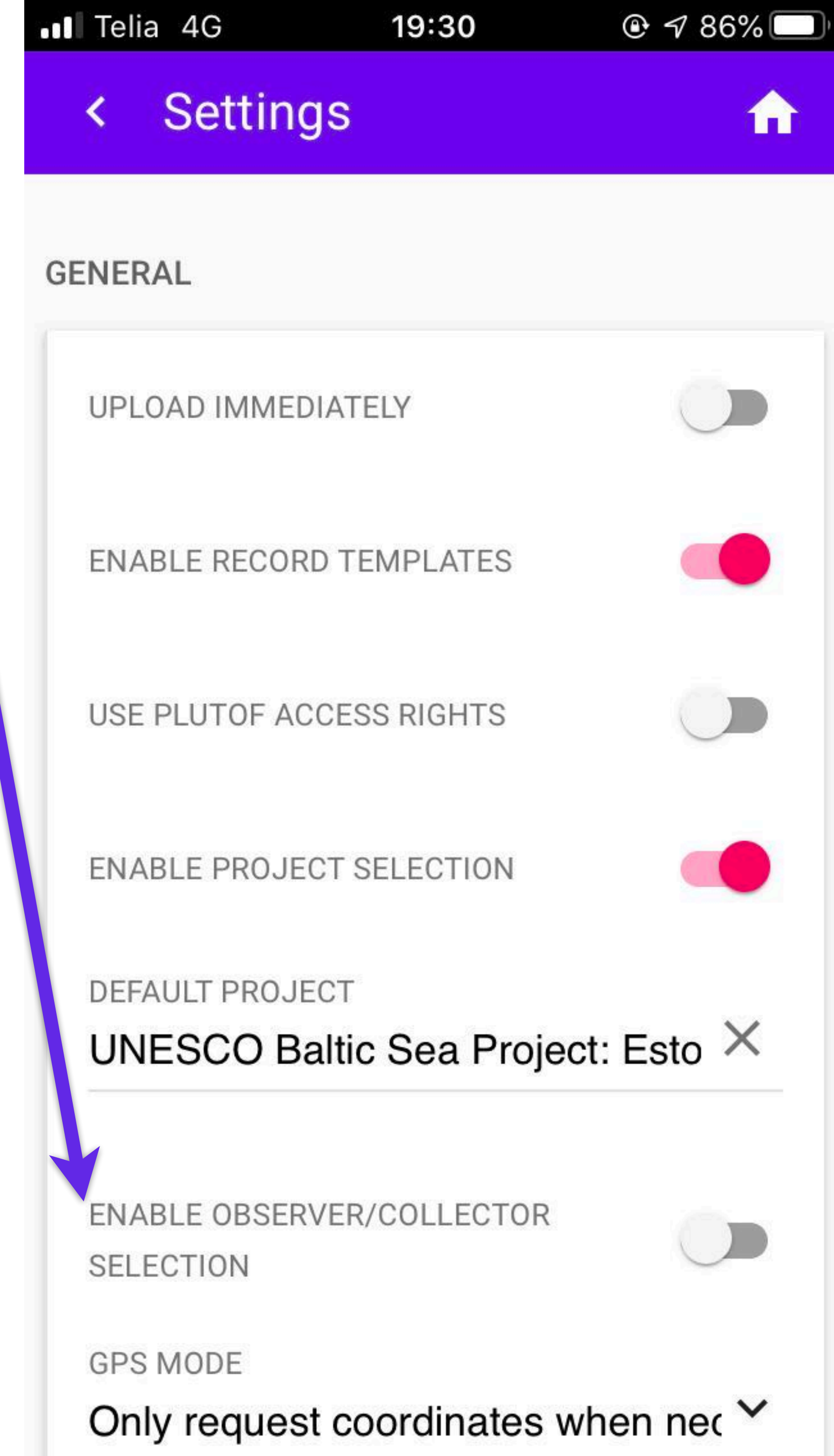
 Bird  Plant  Animal  Fungus  Insect B

CANCEL NEW SAVE

General Settings - selection of observers

The "Enable observer/collector selection" option allows user to mark multiple individuals as observers when entering a nature observation

(By default, the owner of PlutoF user account is marked as a observer. Users don't have to fill in this field every time they add observation. If multiple observers are to be entered then the option should be enabled.)

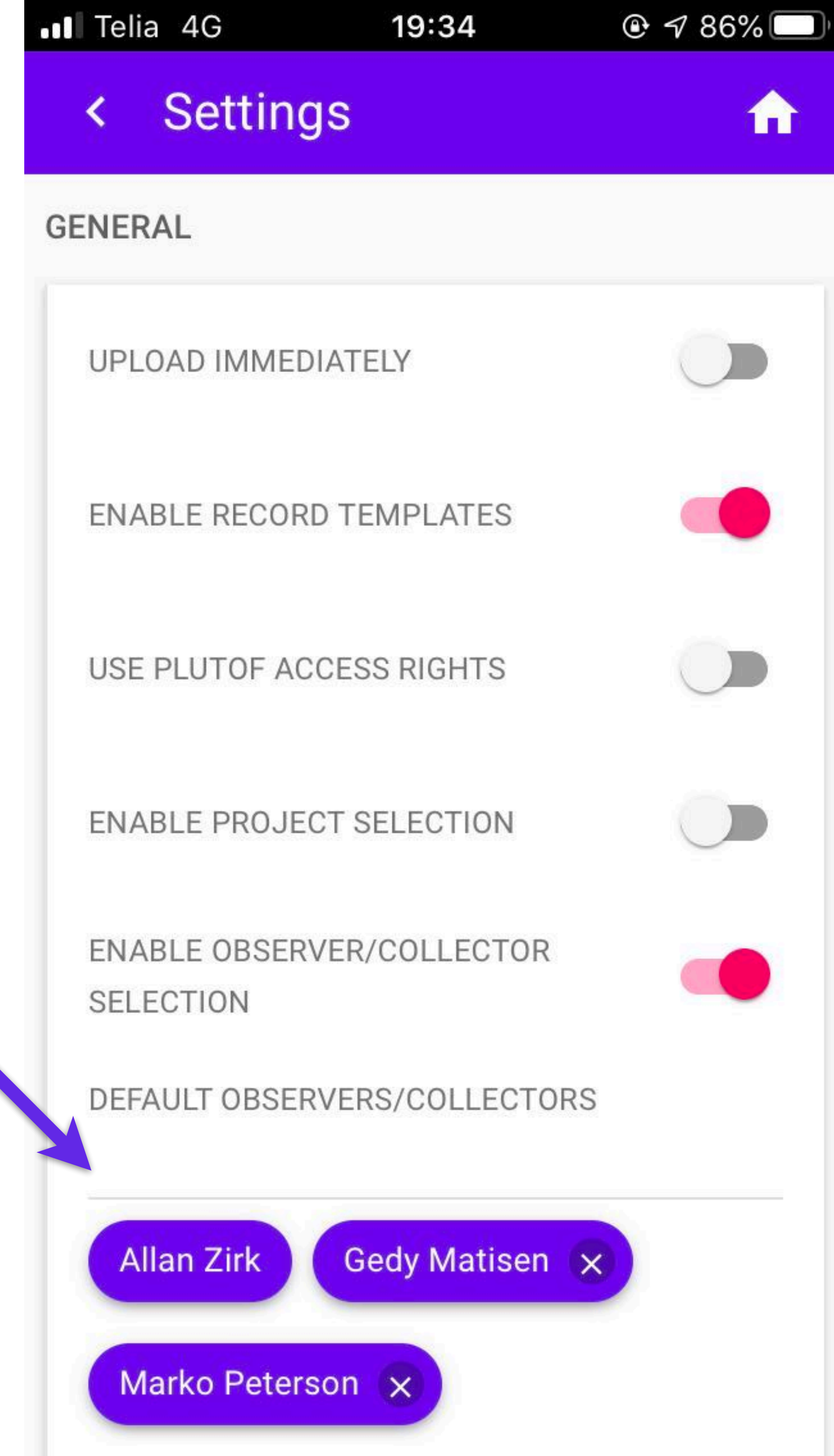


General Settings - selection of observers

The "Allow observer / collector selection" option allows you to mark multiple individuals as observers when entering a nature observation

E.g. three default observers added

(Only persons who have previously entered to PlutoF can be added.)



General Settings - selection of observers

The "Allow observer / collector selection" option allows you to mark multiple individuals as observers when entering a nature observation

E.g. three default observers added

The Observer field is automatically pre-filled in the observation input form

(The "x" icon removes the observer.)

Add observation

Bird Plant Animal Fungus Insect B

TAXON *
Rubus sibiricus X >
Plantae

COUNT *
1 + -

REMARKS

OBSERVERS

Allan Zirk X Gedy Matisen X

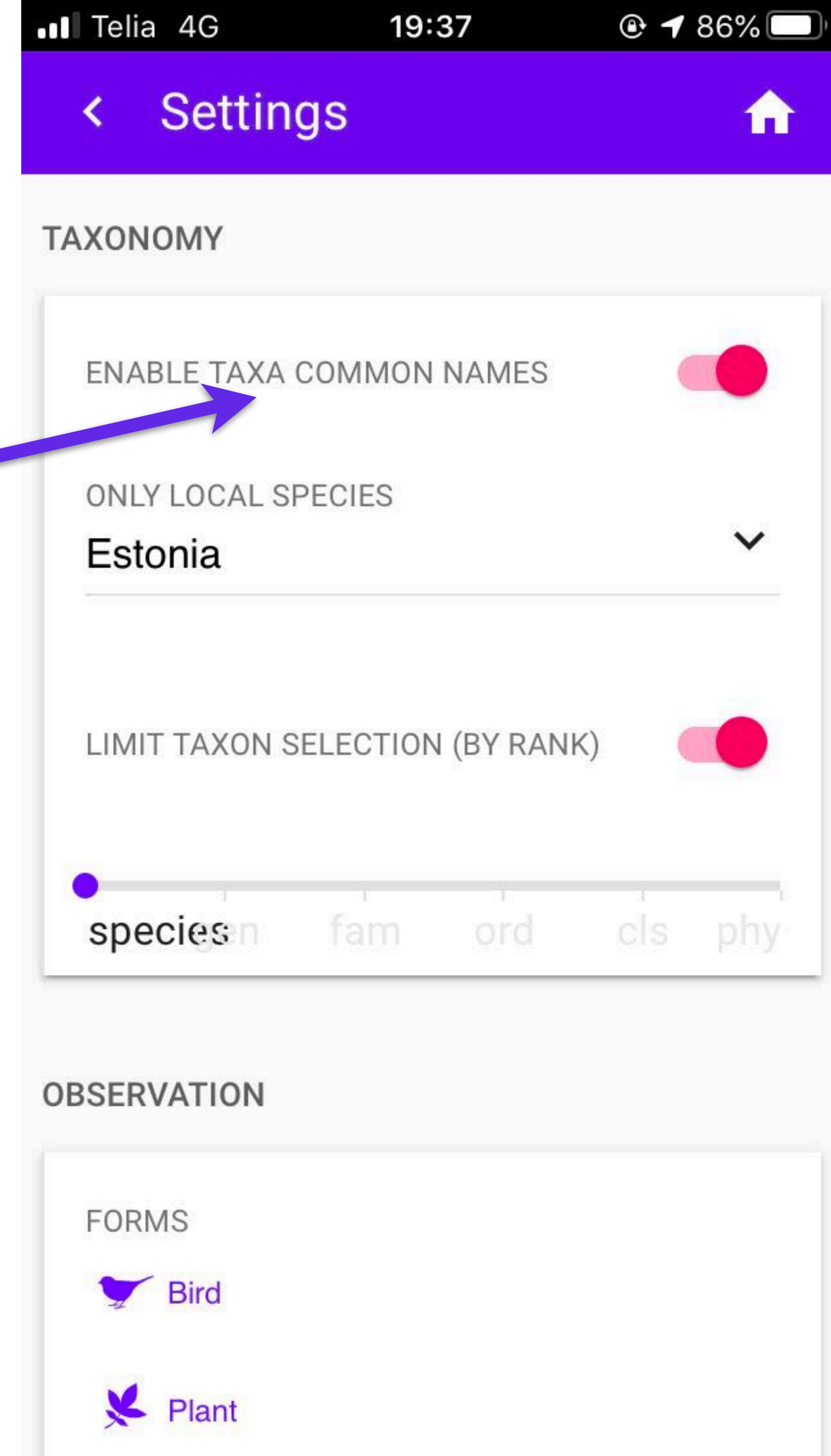
Marko Peterson X

CANCEL NEW SAVE

General Settings - Taxonomy

The "Allow Common Name Input" option allows you to select taxa / species by common name when entering an observation

(NB! Not all species always have a common name in the database. In this case, the scientific name should be used.)



General Settings - Taxonomy


The "Allow Common Name Input" option allows you to select taxa / species by common name when entering an observation



Select a taxon / species by common name when entering nature observation

(VIDEO! Adding multiple taxons in the same location <https://www.youtube.com/watch?v=a6jUx7tjyZw>.)

Telia 4G 19:40 86%

≡ Add observation 🏠



LOCATION  







Tartu maakond, Tartu

58.386123 26.7324768 (± 383 m)

START DATE

25. Feb 2020 at 19:38

FORM

Bird Plant Animal Fungus Insect B

TAXON *

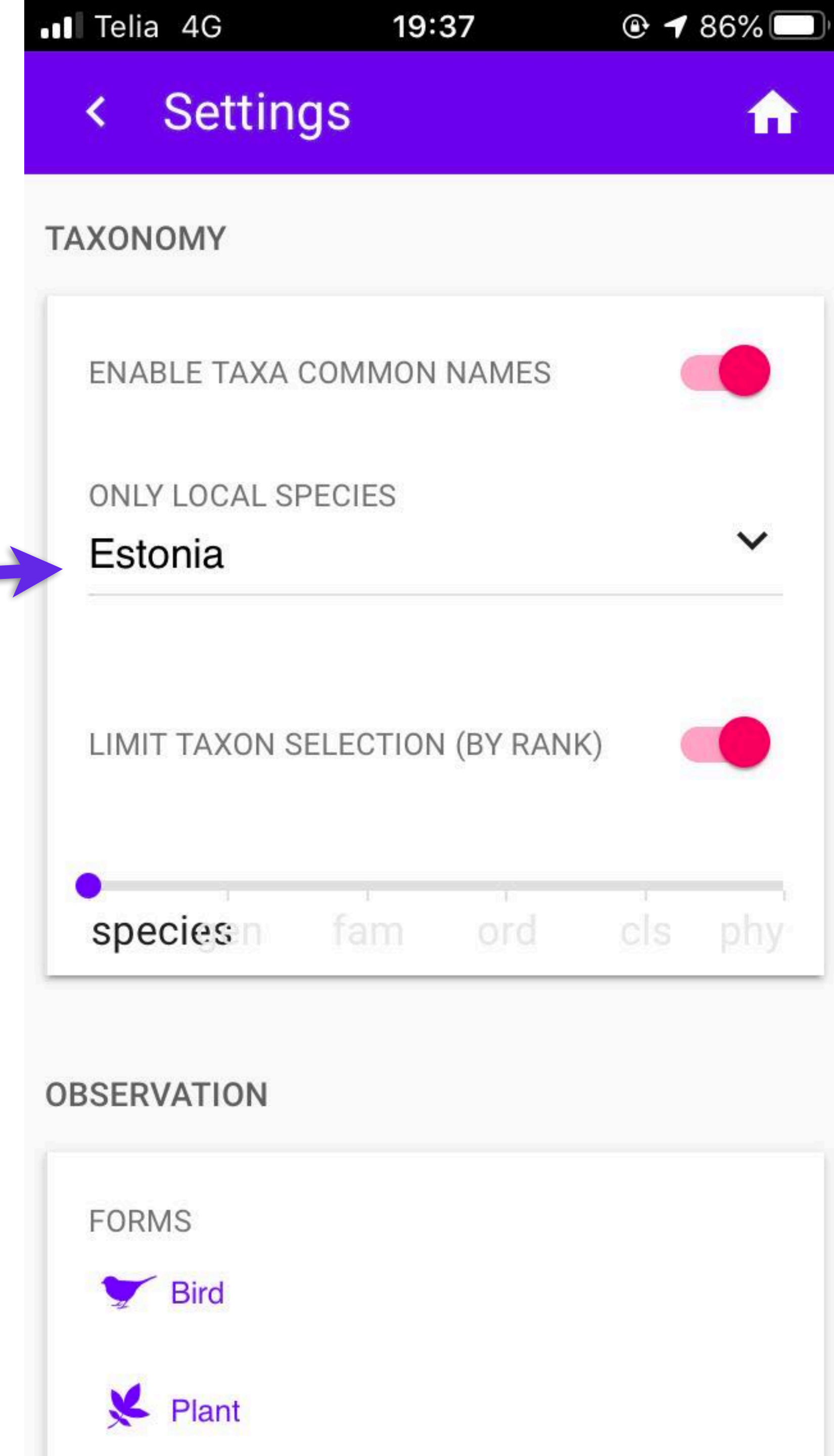
Common Magpie

Aves

CANCEL NEW SAVE

General Settings - Taxonomy

The "only local species" option allows user to restrict the list of taxa. E.g. the option "Estonia" restricts the list to only species found in Estonia

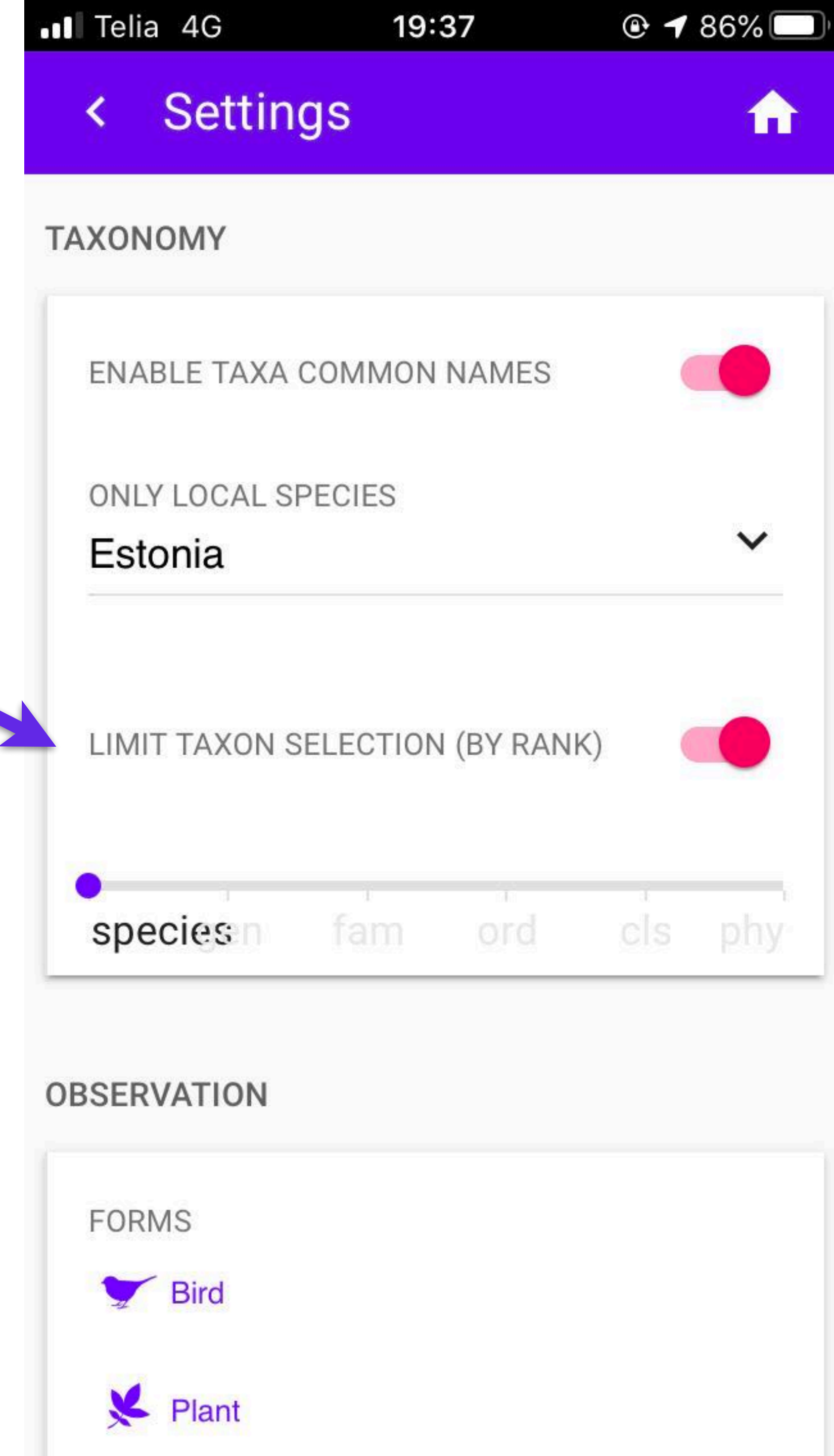


(Selection enhances user comfort by removing unlikely taxons from the selection list.)

General Settings - Taxonomy

"Limit taxon selection" allows user to limit or expand the taxon selection list in the entry form - according to the taxon rank

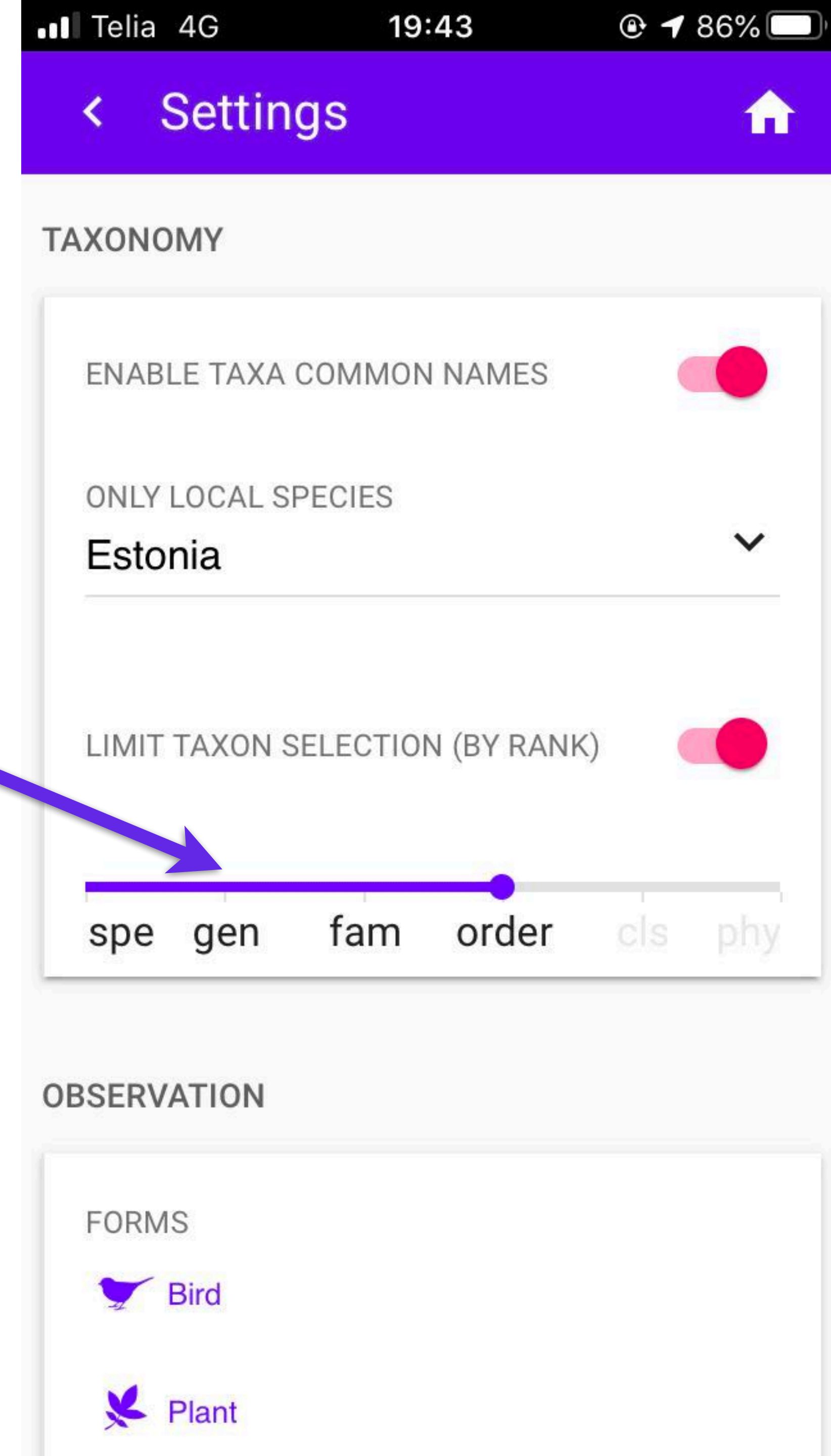
(E.g. at this time the selection limits the entry to the species level only.)



General Settings - Taxonomy

"Limit taxon selection" allows user to limit or expand the taxon selection list in the entry form - according to the taxon rank

E.g. now the option allows you to enter the level of species, genus, family, and order

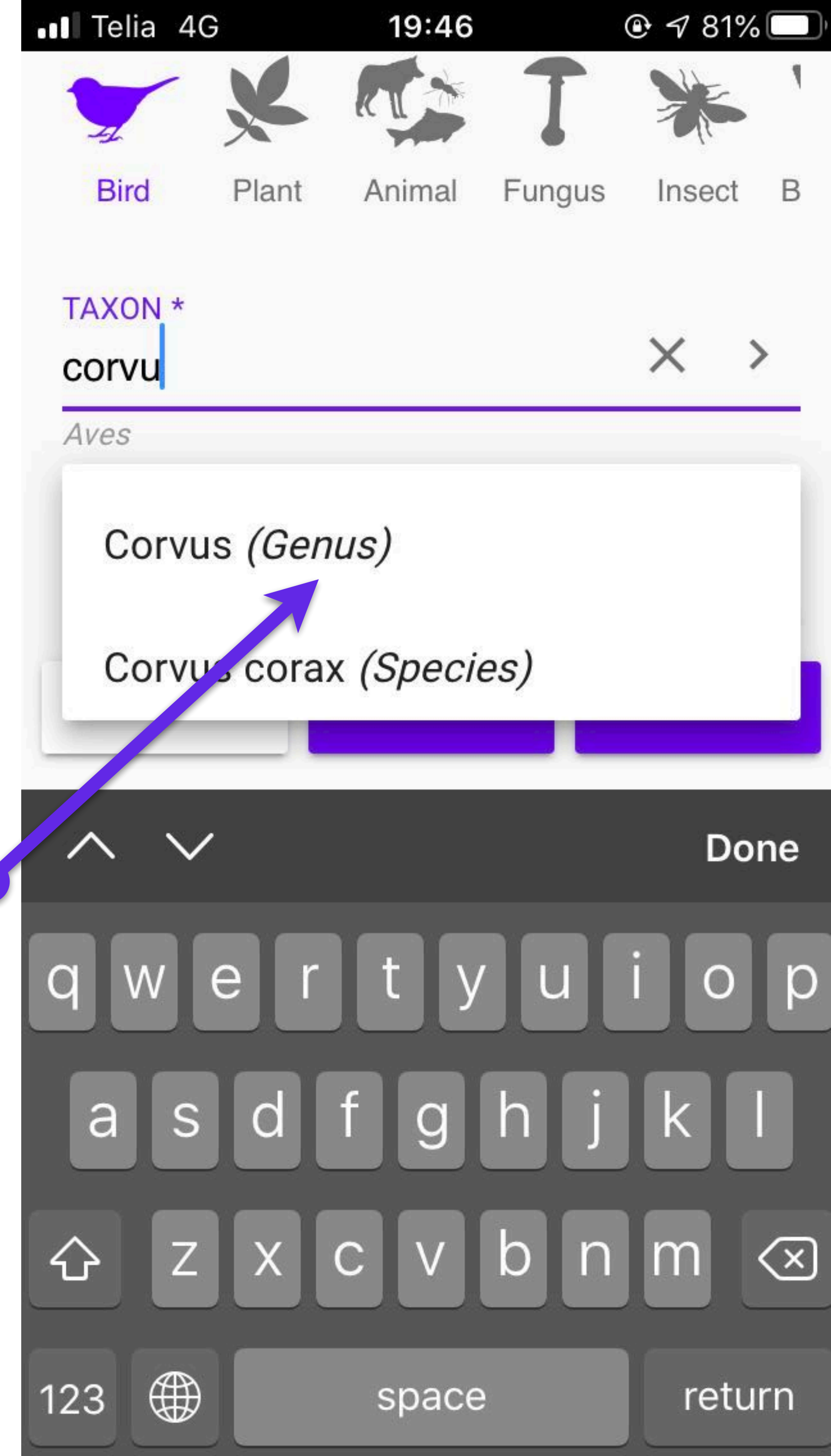


General Settings - Taxonomy

"Limit taxon selection" allows user to limit or expand the taxon selection list in the entry form - according to the taxon rank

E.g. now the option allows you to enter the level of species, genus, family, and order

E.g. when filling observation form - the option allows user to select different taxon levels

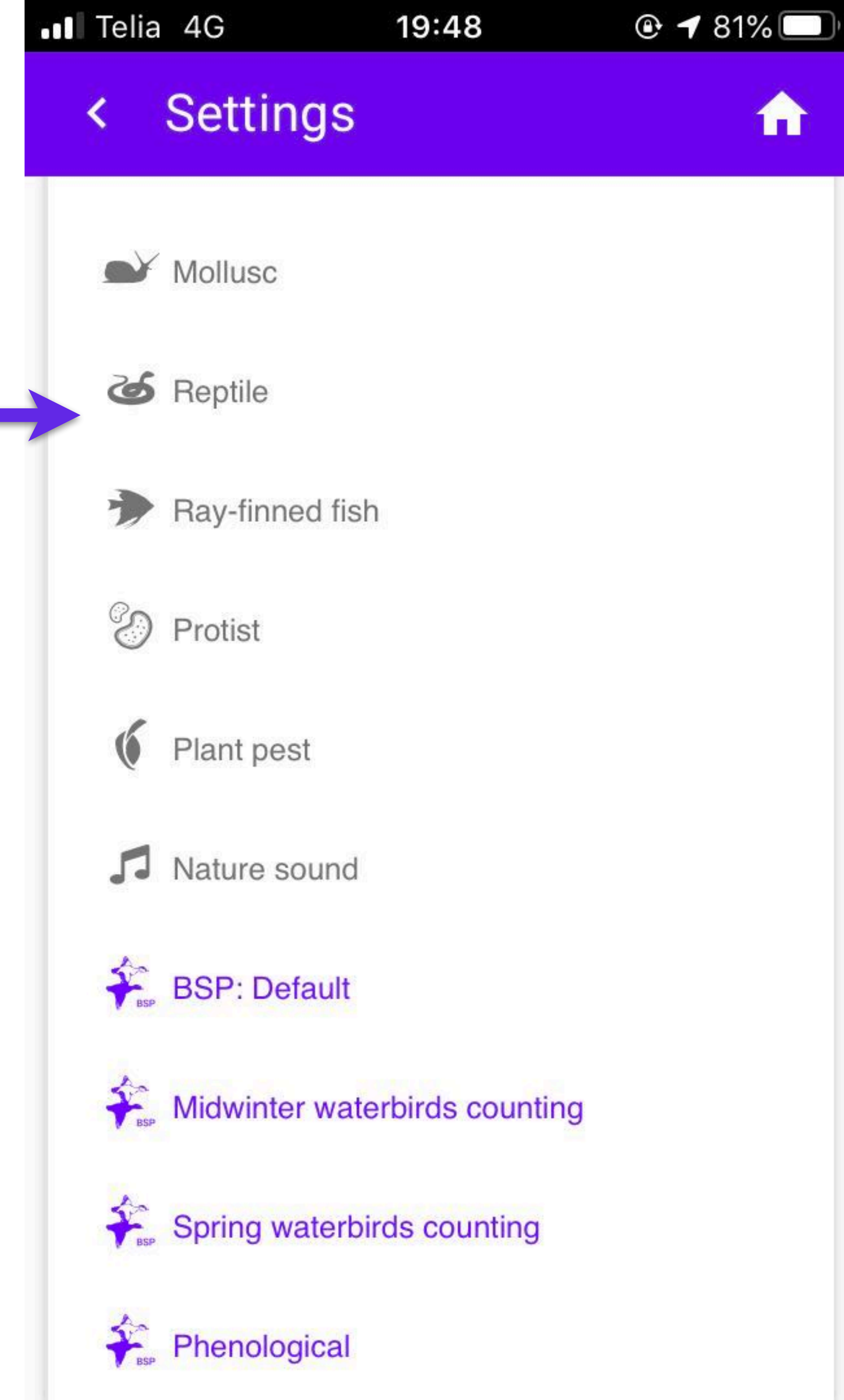


General Settings - Forms

The "Forms" list allows user to toggle (add or remove) form selections from observation entry form



(E.g. only UNESCO BSP forms are currently allowed in the entry form: BSP: Default, Midwinter waterbirds counting, Spring waterbirds counting, Phenological.)



General Settings - Forms


The "Forms" list allows user to toggle (add or remove) form selections from observation entry form



E.g. there are currently three forms to choose from when entering nature observation



Telia 4G 19:51 81%

≡ Add observation 🏠



LOCATION  




Tartu maakond, Tartu

58.386123 26.7324768 (± 383 m)

START DATE

25. Feb 2020 at 19:51

FORM

 BSP Midwi...  BSP Spring...  BSP Pheno...

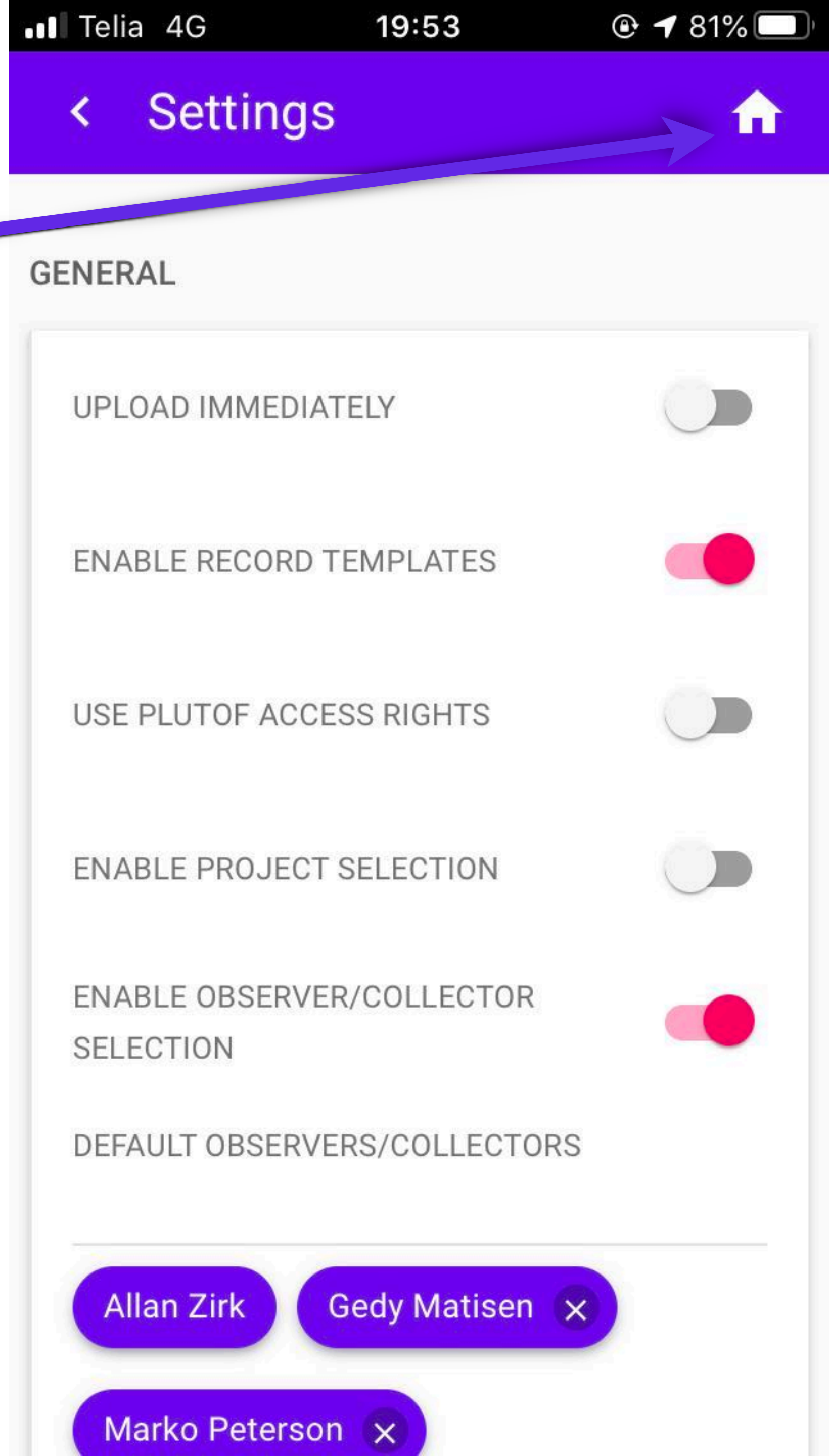
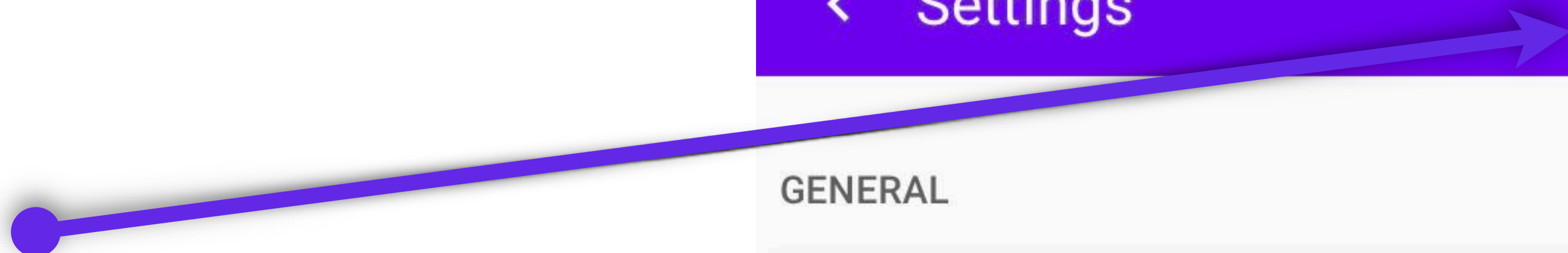
TAXON *

Midwinter waterbirds counting

CANCEL NEW SAVE

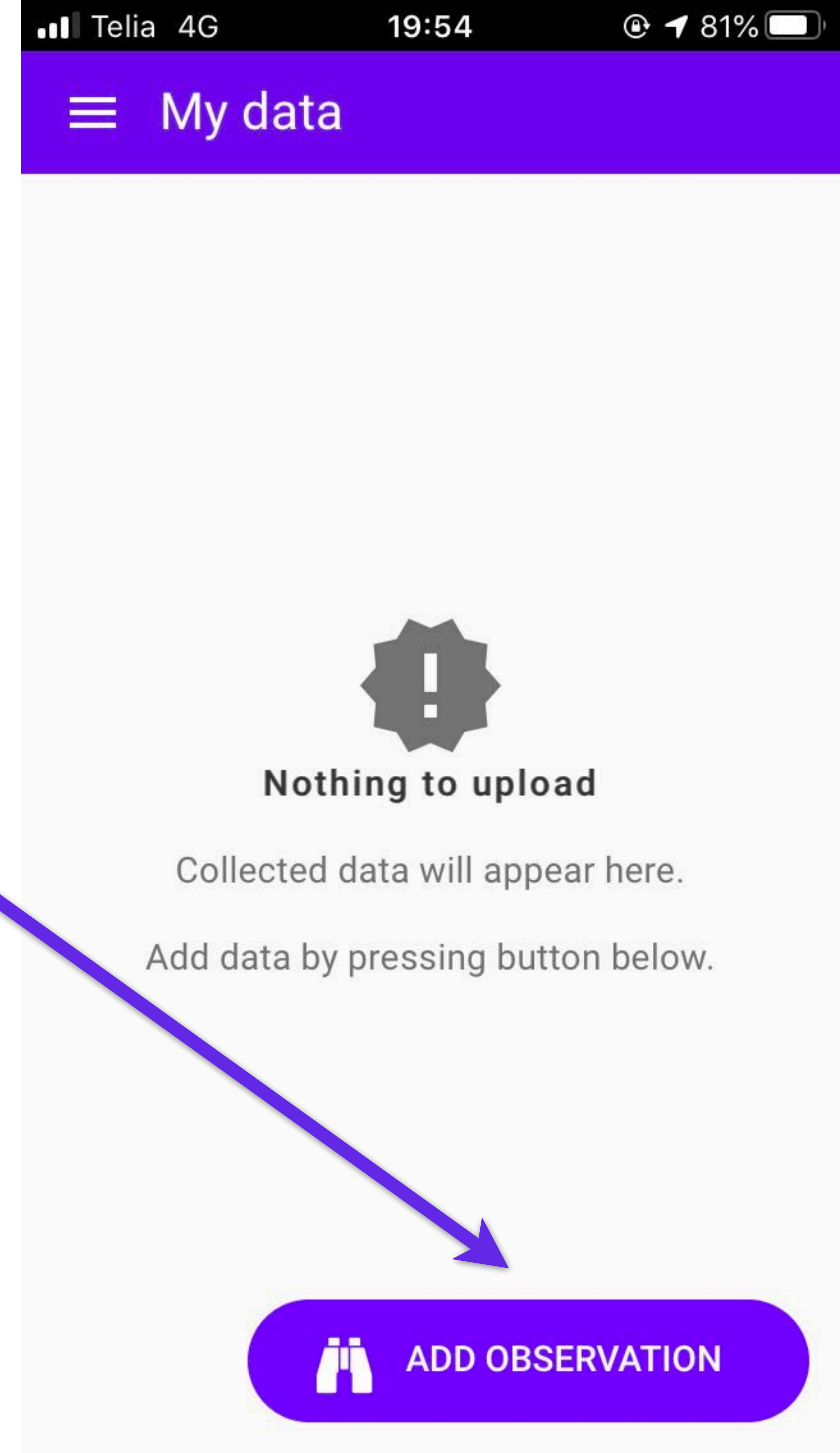
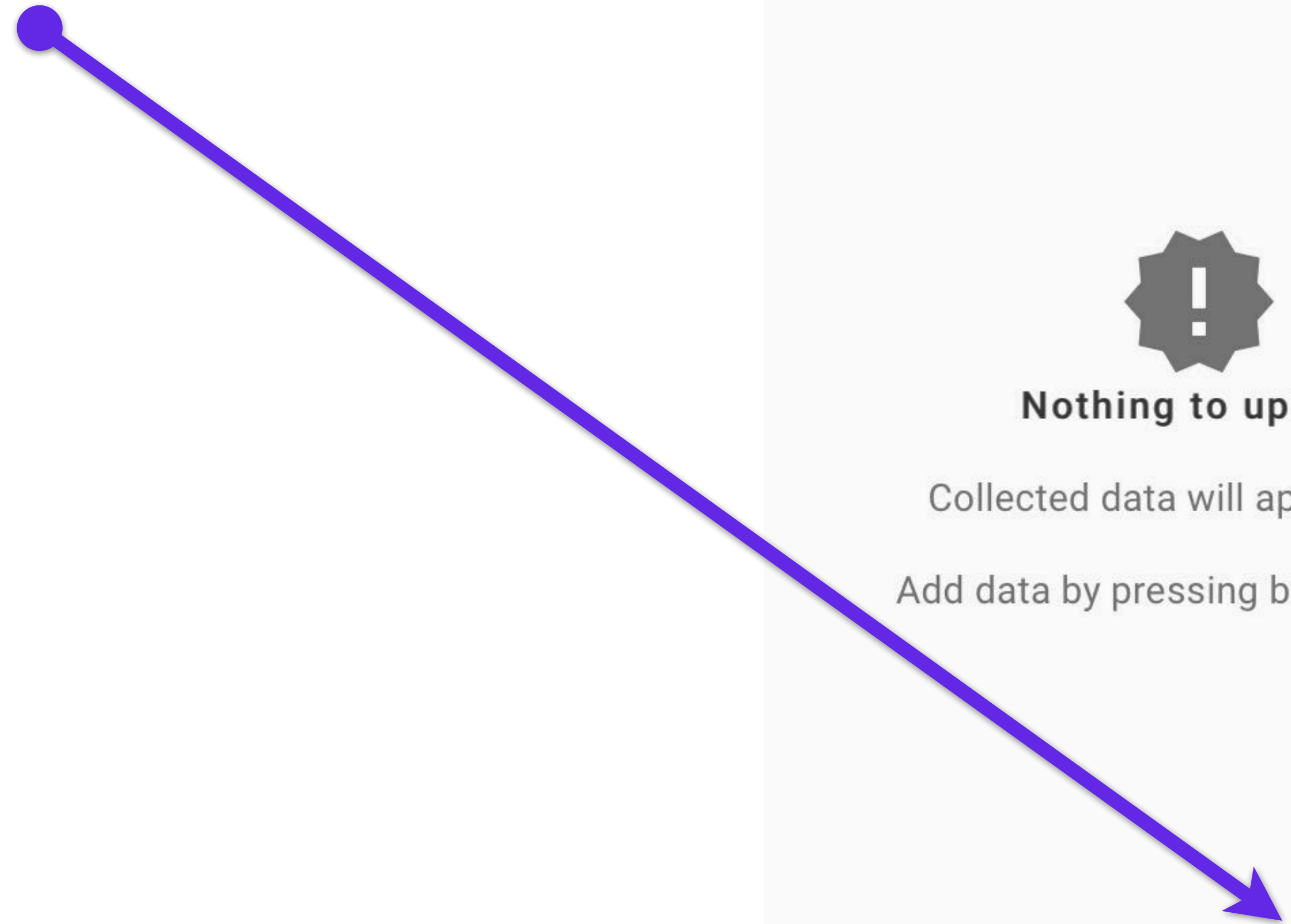
Add observation

Open the “My Data” view.



Add observation

Open the "My Data" view
Select "Add Observation"



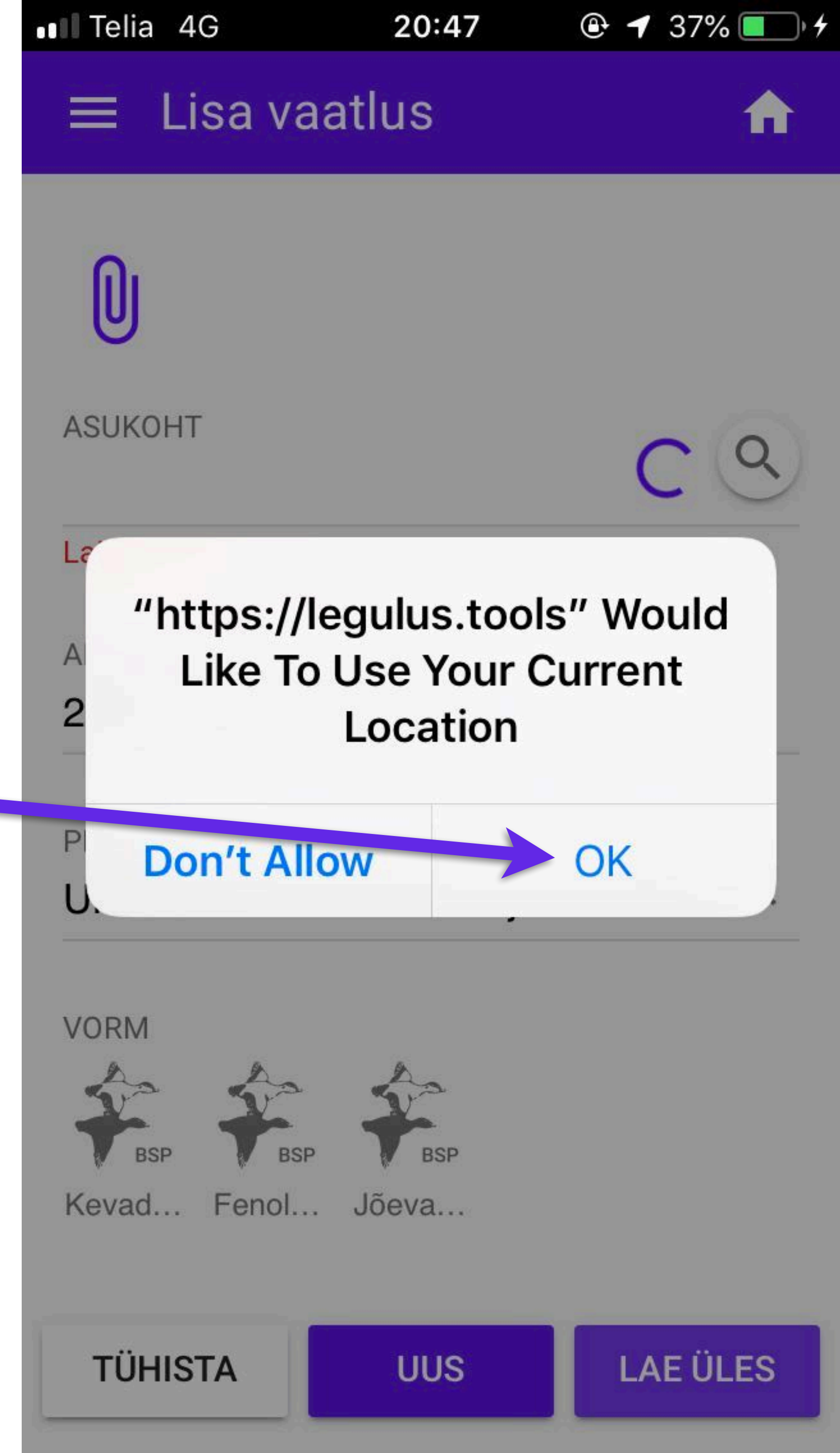
Add observation

Open the "My Data" view

Select "Add Observation"

When opening entry form, the phone asks for permission to use GPS information - please allow

(Legulus can also be successfully used without GPS. We will introduce this feature later.)



Add observation

Open the "My Data" view

Select "Add Observation"


When opening entry form, the phone asks for permission to use GPS information - please allow



Autofill fields: location, start date and the project

(Autofill fields can be modified and refined.)

Telia 4G 19:58 75%

≡ Add observation 🏠






LOCATION  
Tartu maakond, Kakumetsa, Al
58.3831905 26.86964192

START DATE
25. Feb 2020 at 19:57

PROJECT
UNESCO Baltic Sea Project: Estoni ✕

FORM

 BSP  BSP  BSP
Midwi... Spring... Pheno...

CANCEL NEW SAVE

Add observation - add media

A photo, audio or video can be attached to the observation

(Media files are mainly used to identify a species or to better documenting of a rare finding.)

Telia 4G 19:58 75%

≡ Add observation 🏠

📎

LOCATION

Tartu maakond, Kakumetsa, Al 🔍

58.3831905 26.86964192

START DATE

25. Feb 2020 at 19:57

PROJECT

UNESCO Baltic Sea Project: Estoni ✕

FORM

🦉 BSP 🦉 BSP 🦉 BSP

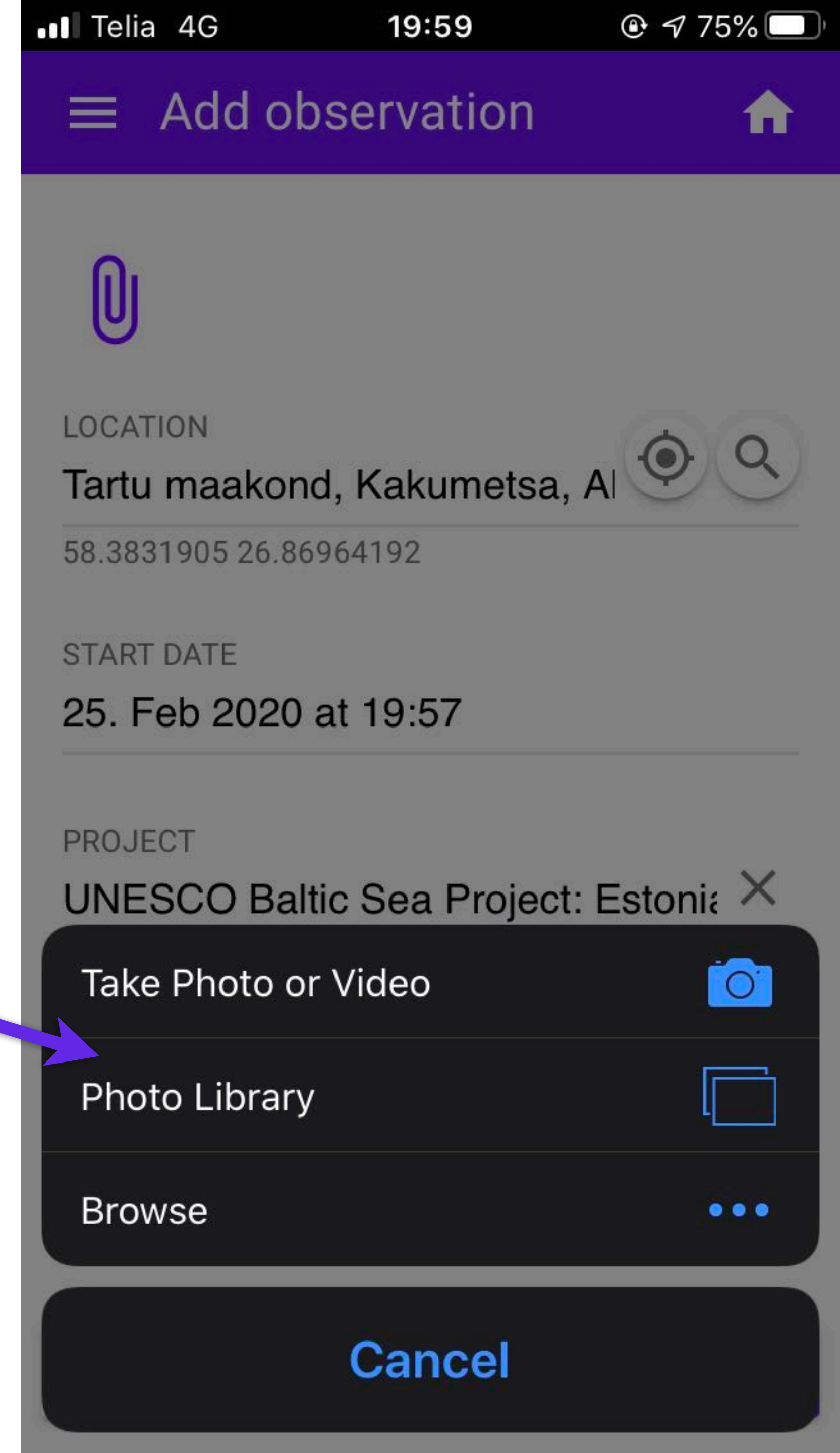
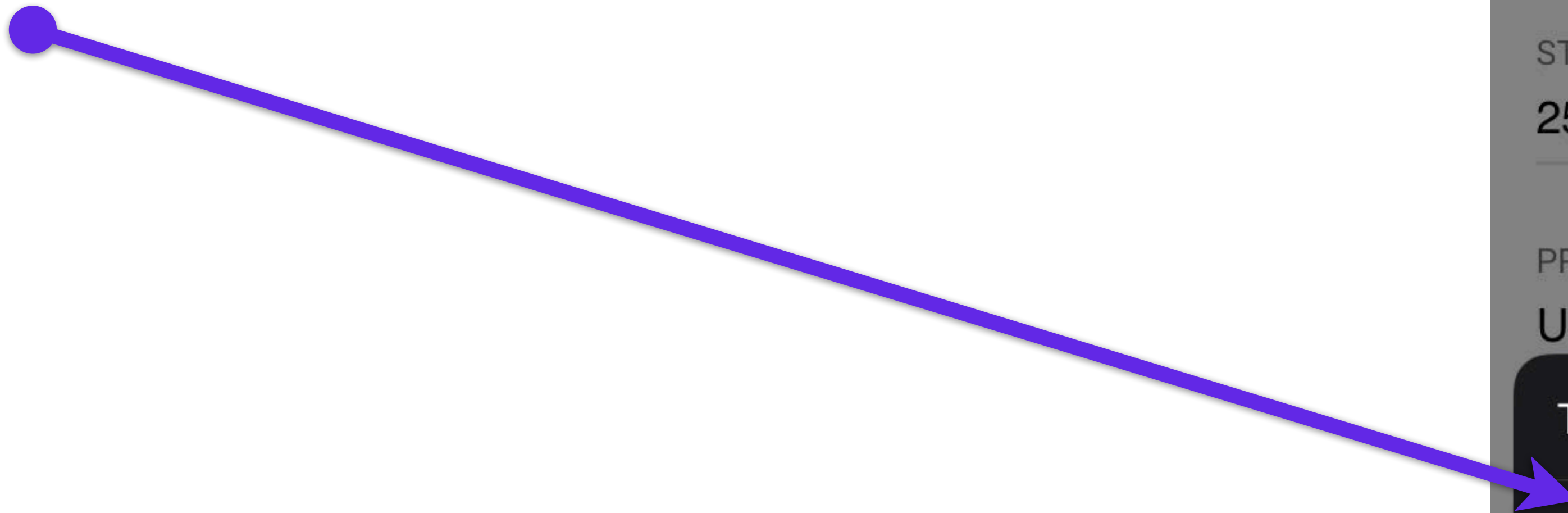
Midwi... Spring... Pheno...

CANCEL NEW SAVE

Add observation - add media

A photo, audio or video can be attached to the observation

E.g. select a photo from your phone's photo gallery

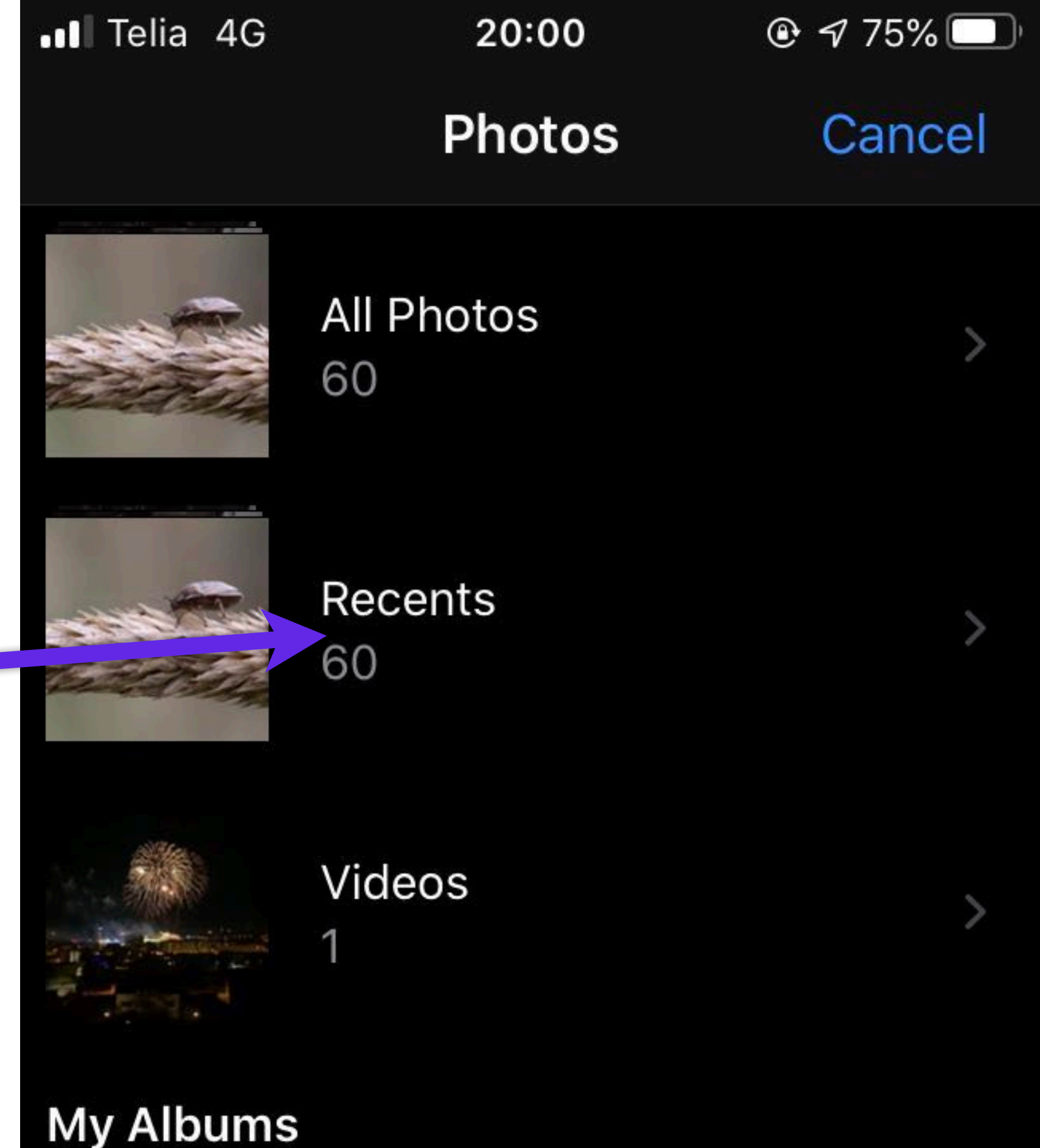


Add observation - add media

A photo, audio or video can be attached to the observation

E.g. select a photo from your phone's photo gallery

Select "Done" link the photo with the observation



Add observation - add media

A photo, audio or video can be attached to the observation

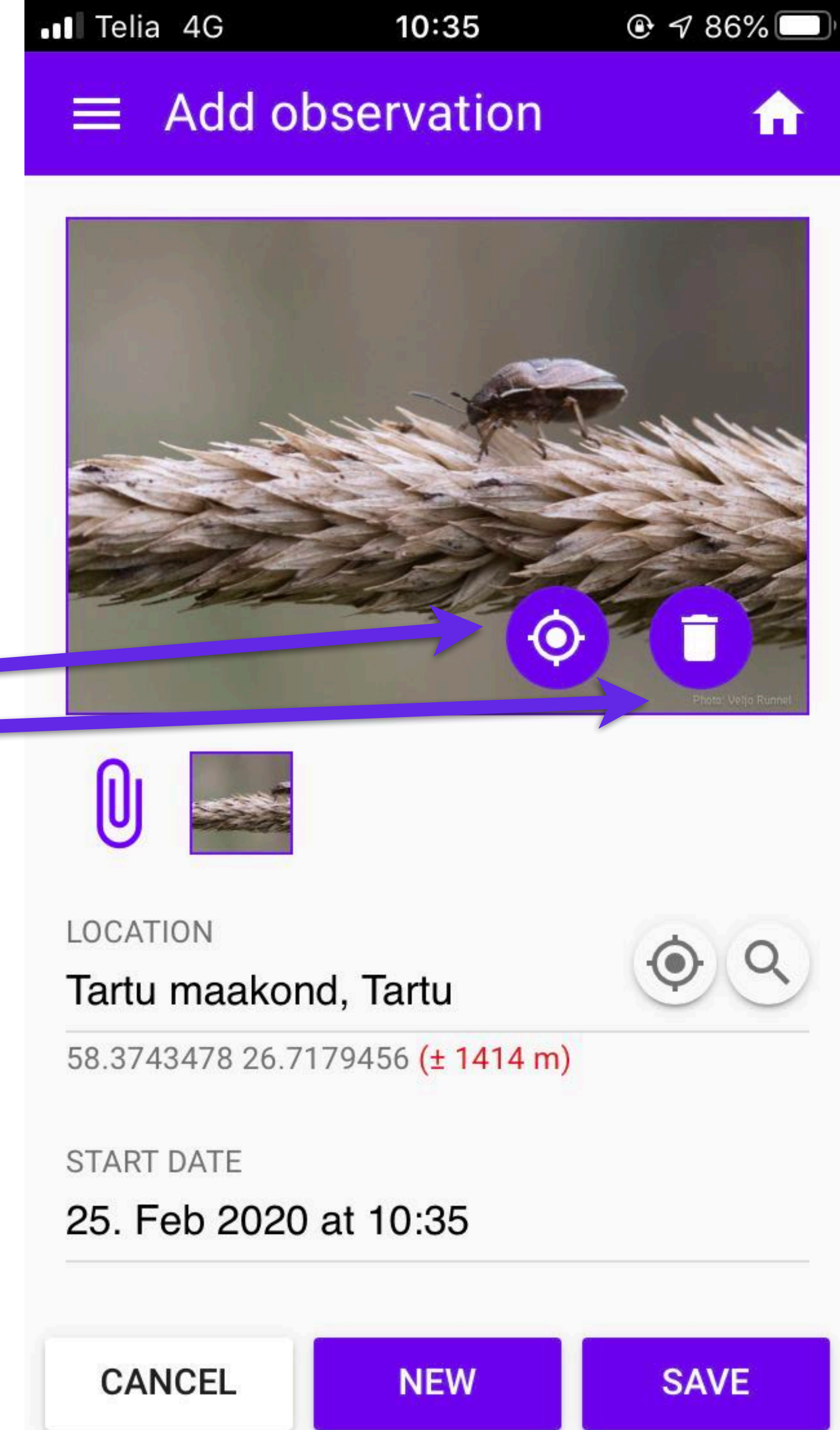
E.g. select a photo from your phone's photo gallery

Link the photo with the observation

Ask for a location and start time from the photo

Remove photo

(Asking for a location and start date from a photo only works if your phone's camera had access to that information when you took the photo - GPS was active.)




Add observation - location


The location information is automatically filled in when GPS is turned on

Telia 4G 10:35 86%

☰ Add observation 🏠



📍 🗑️

📎 

LOCATION

Tartu maakond, Tartu

58.3743478 26.7179456 (± 1414 m)

START DATE

25. Feb 2020 at 10:35

CANCEL NEW SAVE


Add observation - location

The location information is automatically filled in when GPS is turned on


The red color gives an indication of the inaccurate location

Telia 4G 10:35 86%

☰ Add observation 🏠



📍 🗑️

📎 

LOCATION

Tartu maakond, Tartu

58.3743478 26.7179456 (**± 1414 m**)

START DATE

25. Feb 2020 at 10:35

CANCEL NEW SAVE

Add observation - location

The location information is automatically filled in when GPS is turned on


The red color gives an indication of the inaccurate location

If the location is inaccurate, the user can query the location again


(You can also enter a location manually, in case of a poor or no GPS signal.)

Telia 4G 10:35 86%

≡ Add observation 🏠



📍 🗑️

📎 

LOCATION

Tartu maakond, Tartu

58.3743478 26.7179456 (± 1414 m)

START DATE

25. Feb 2020 at 10:35

CANCEL NEW SAVE


Add observation - location manually

Enter the location search view


(Entering a location manually means searching for a location by name, selecting a location on the map, or selecting a previously used location.)

Telia 4G 10:35 86%

≡ Add observation 🏠



📍 🗑️

📎 

LOCATION

Tartu maakond, Tartu

58.3743478 26.7179456 (± 1414 m)

START DATE

25. Feb 2020 at 10:35

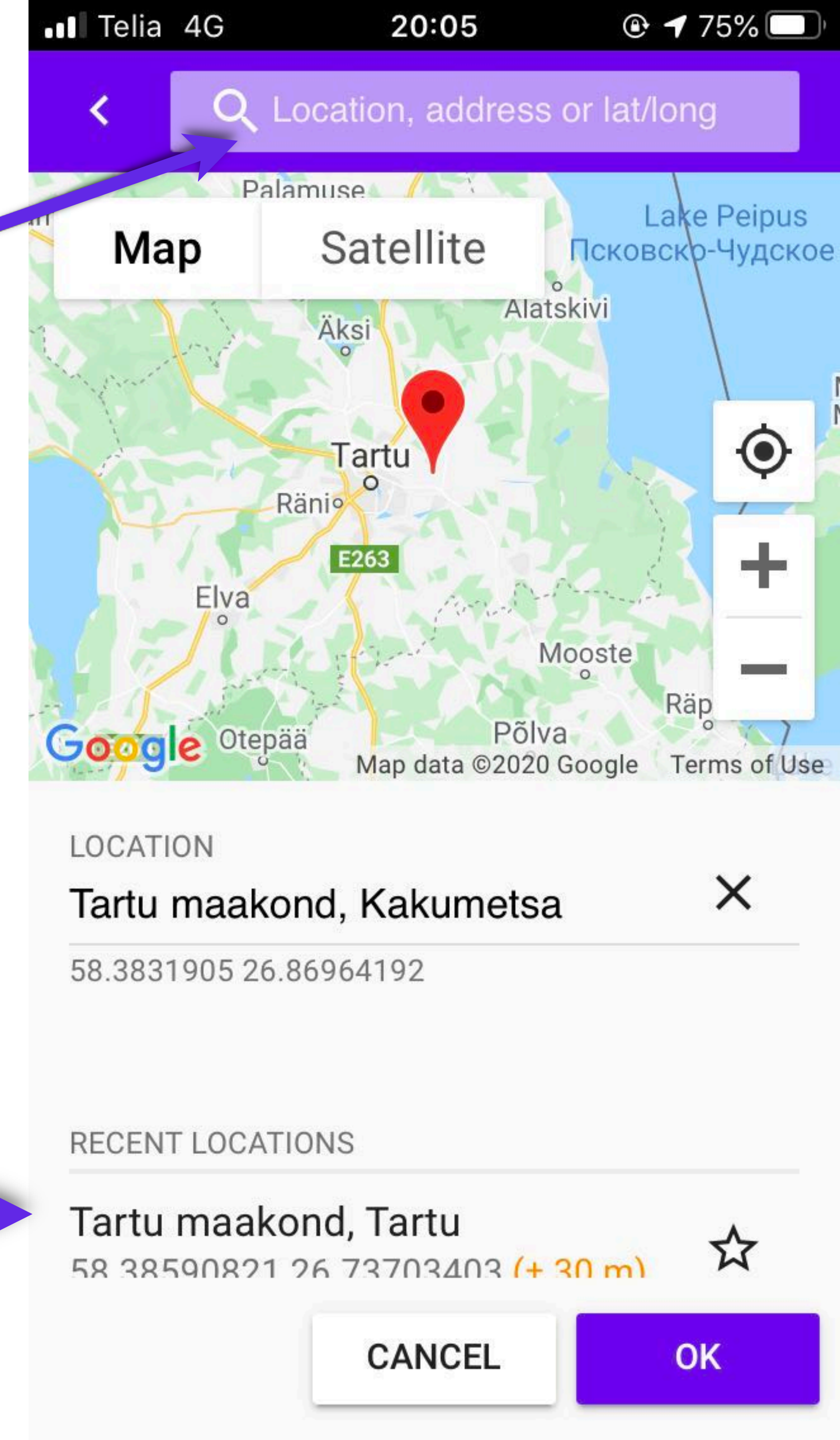
CANCEL NEW SAVE

Add observation - location manually

Search by location name or address.

(User can also search and select a location on the map.

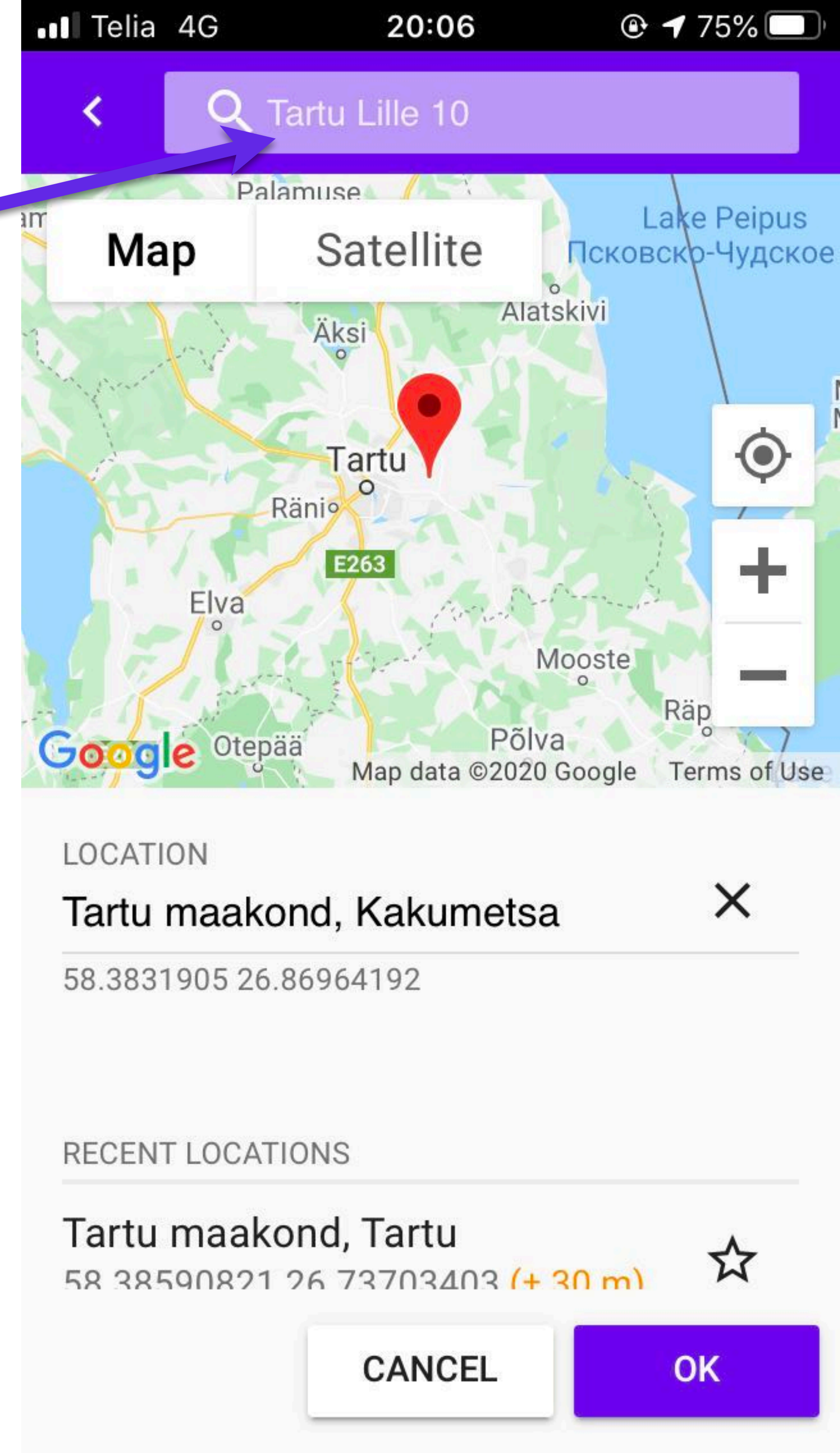
The 5 most recently entered locations are selectable again.)



Add observation - location manually

Search by location name or address

Enter an address

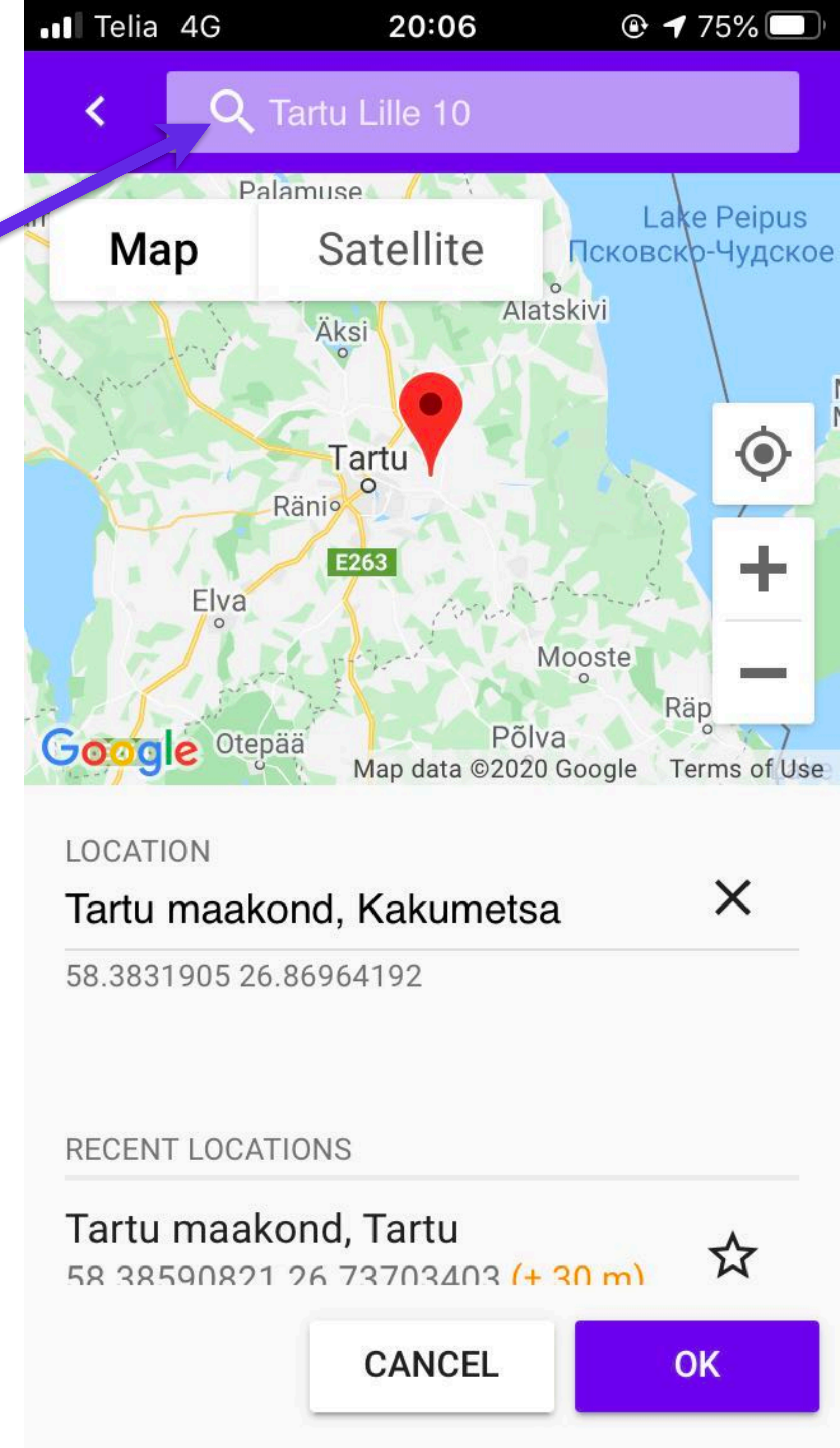


Add observation - location manually

Search by location name or address

Enter an address

Select search icon / button



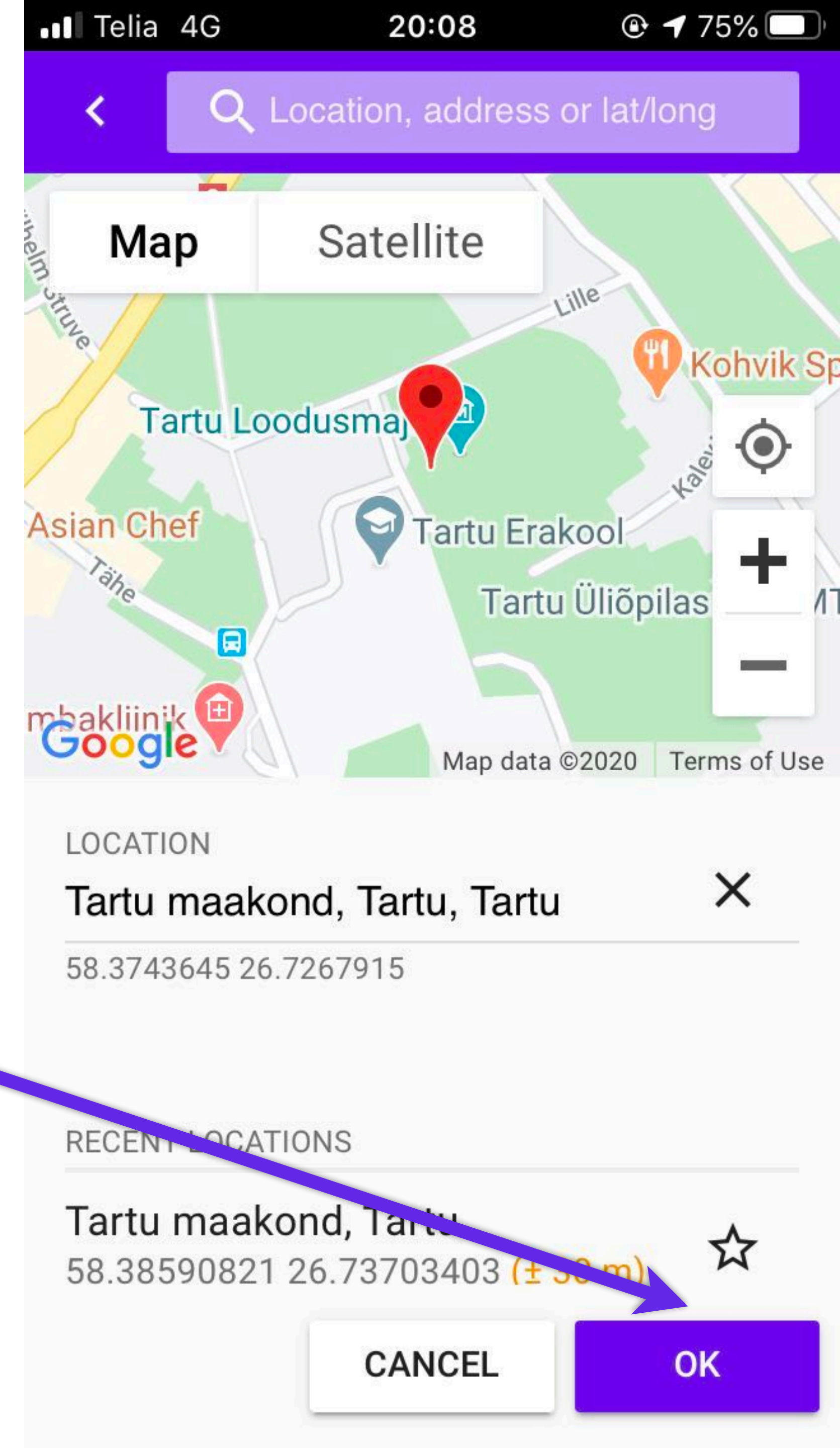
Add observation - location manually

Search by location name or address

Enter an address

Select search icon / button

Confirm your location selection and go back to entry form




Add observation - start date


The "Start date" information is filled in automatically



(Information can be changed manually.)

Telia 4G 10:35 86%

☰ Add observation 🏠



📎 

LOCATION  

Tartu maakond, Tartu

58.3743478 26.7179456 (± 1414 m)

START DATE

25. Feb 2020 at 10:35

CANCEL NEW SAVE


Add observation - start date

The "Start date" information is filled in automatically


Selecting the field content will allow manual changing of the "start date" value

Telia 4G 10:35 86%

☰ Add observation 🏠



📍 🗑️

📎 

LOCATION

Tartu maakond, Tartu

58.3743478 26.7179456 (± 1414 m)

START DATE

25. Feb 2020 at 10:35

CANCEL NEW SAVE

Add observation - project



The project selection aggregates the data into one dataset



E.g. "UNESCO Baltic Sea Project" participants can later view, manage and analyze all the gathered data as one dataset

(*Leaving the project blank does not interfere with entering nature observation.)

Telia 4G 20:11 75%

≡ Add observation 🏠

LOCATION  

Tartu maakond, Tartu, Tartu Ke

58.3743645 26.7267915




START DATE

25. Feb 2020 at 19:57

PROJECT

UNESCO Baltic Sea Project: Estoni ✕

FORM

 BSP  BSP  BSP

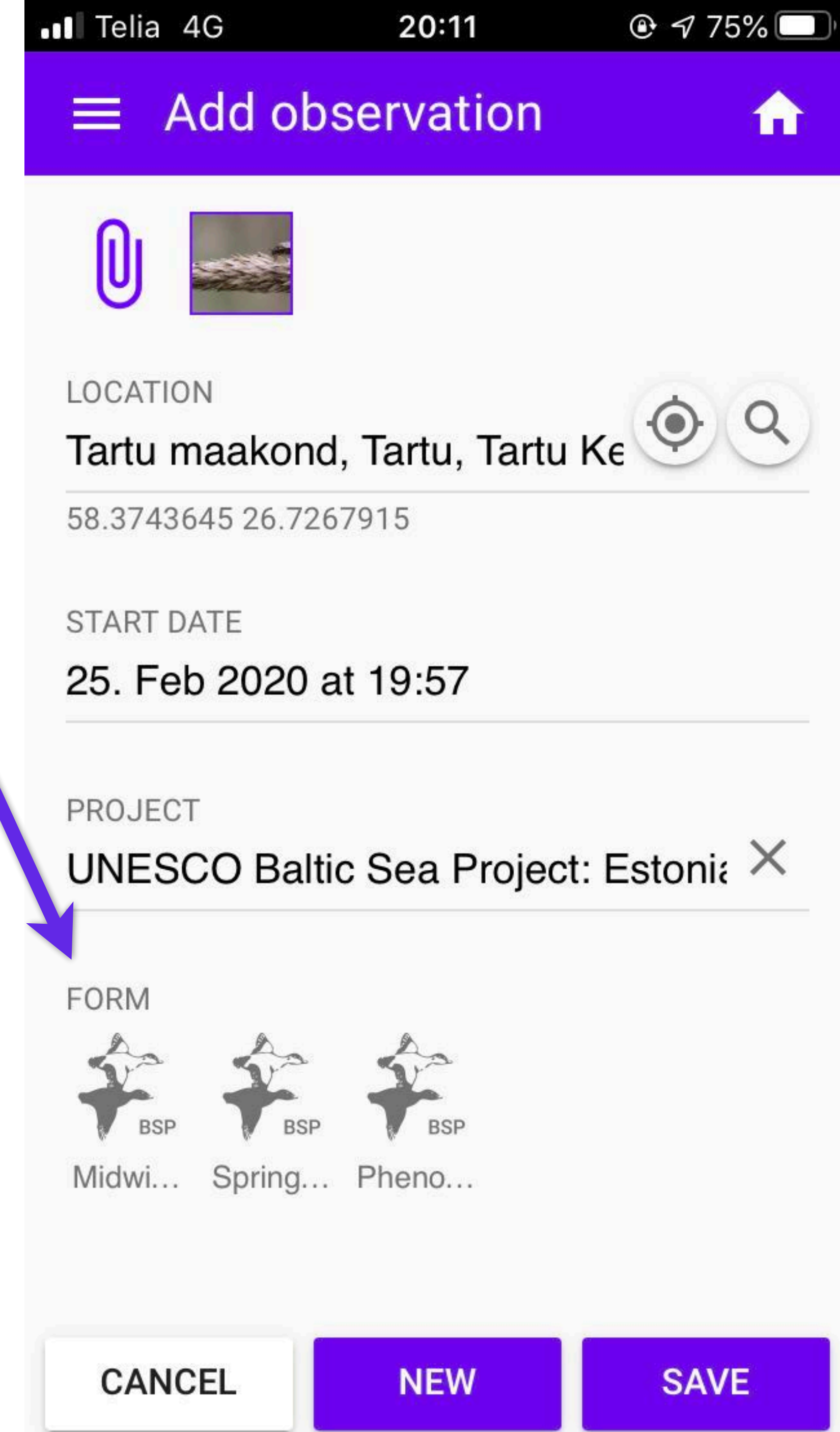
Midwi... Spring... Pheno...

CANCEL NEW SAVE



Add observation - form



The choice of form determines which species-specific fields still need to be completed

(NB! If there is no suitable form in the observation input form - eg. There are currently only 3 choices. Then you can enable more forms from the Settings.)







Add observation

LOCATION
Tartu maakond, Tartu, Tartu Ke  
58.3743645 26.7267915

START DATE
25. Feb 2020 at 19:57

PROJECT
UNESCO Baltic Sea Project: Estoni 

FORM
 BSP Midwi...  BSP Spring...  BSP Pheno...

CANCEL **NEW** **SAVE**

Add observation - form

The form "Phenological" is selected.

This is a simple form with only one required (red) field. The remaining fields are optional. The more fields user fills in, the higher the quality of the observation record.

(NB! If the name of the field does not sufficiently explain what information is desired then it is worthwhile to press the field. This will open up possible field values.)

FORM

BSP BSP BSP

Midwi... Spring... Pheno...

TAXON *

Phenological

COUNT *

1

REMARKS

ABUNDANCE

CANCEL NEW SAVE

Add observation - taxon

Find and select a taxon / species name

FORM

BSP BSP BSP

Midwi... Spring... Pheno...

TAXON *

linavä

Phenological

aafrika linavästrik (*spe*)

linavästrik (*spe*)

Done

q w e r t y u i o p

a s d f g h j k l

z x c v b n m

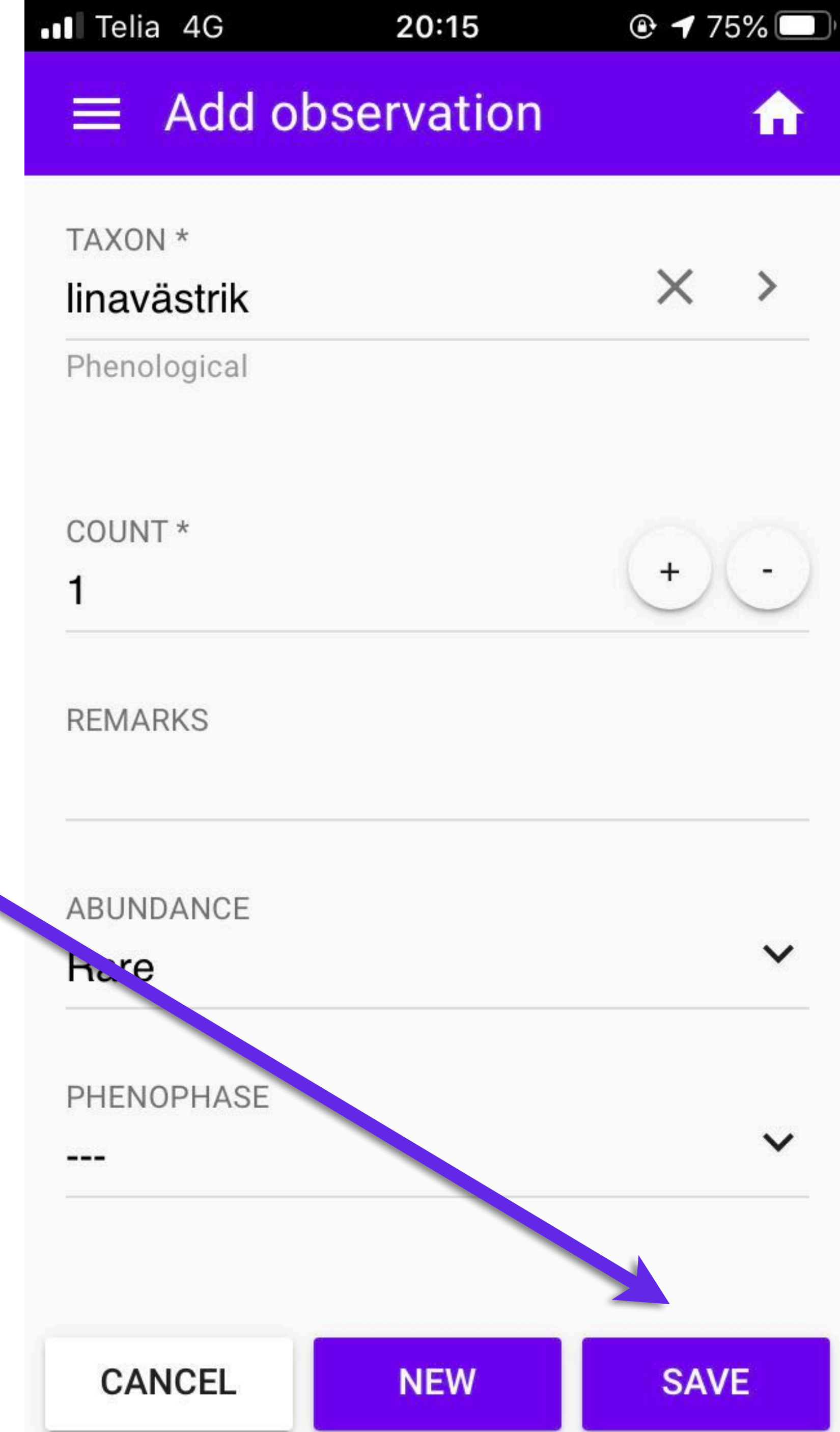
123 space return

(*The choice of form restricts which taxa are allowed to select. Taxon restrictions are made by the author / moderator of the form on the PlutoF workbench. These taxon restrictions can be later modified and supplemented.)

Save observation

Save observation

(*Saving does NOT mean that the observation has been uploaded to the PlutoF workbench. Upload must be done separately.)



The screenshot shows a mobile application interface for adding an observation. At the top, a purple header bar contains a menu icon, the text 'Add observation', and a home icon. The status bar at the very top shows 'Telia 4G', '20:15', and '75%' battery. The form fields are as follows:

- TAXON ***: A text input field containing 'linavästrik' with a close (X) and next (>) button to its right.
- Phenological**: A text input field.
- COUNT ***: A text input field containing '1' with '+' and '-' buttons to its right.
- REMARKS**: A text input field.
- ABUNDANCE**: A text input field containing 'Rare' with a dropdown arrow to its right.
- PHENOPHASE**: A text input field containing '---' with a dropdown arrow to its right.

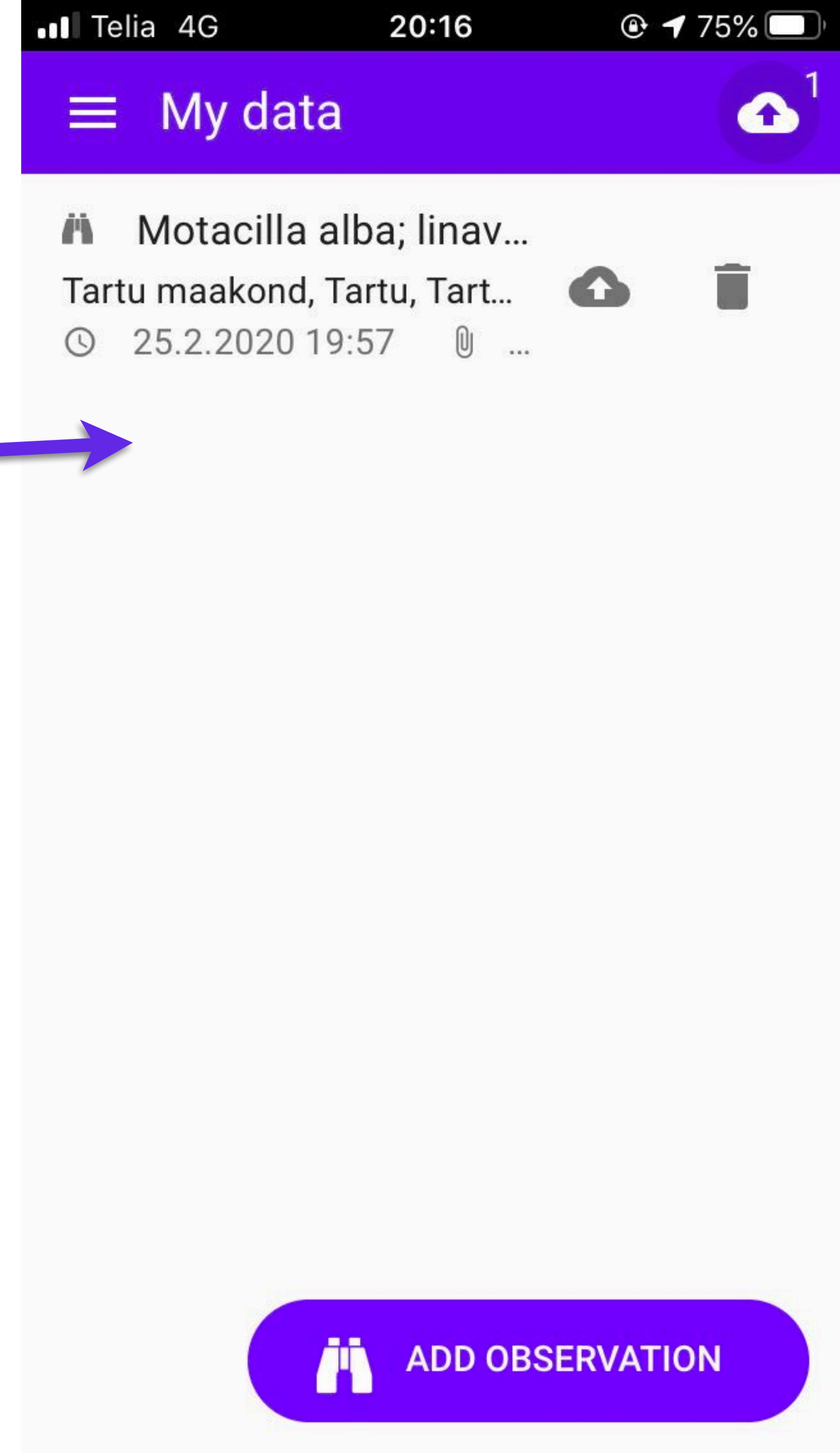
At the bottom of the screen are three buttons: 'CANCEL' (white with black text), 'NEW' (purple with white text), and 'SAVE' (purple with white text). A thick purple arrow originates from the text 'Save observation' on the left and points directly to the 'SAVE' button.

Save observation

Save observation

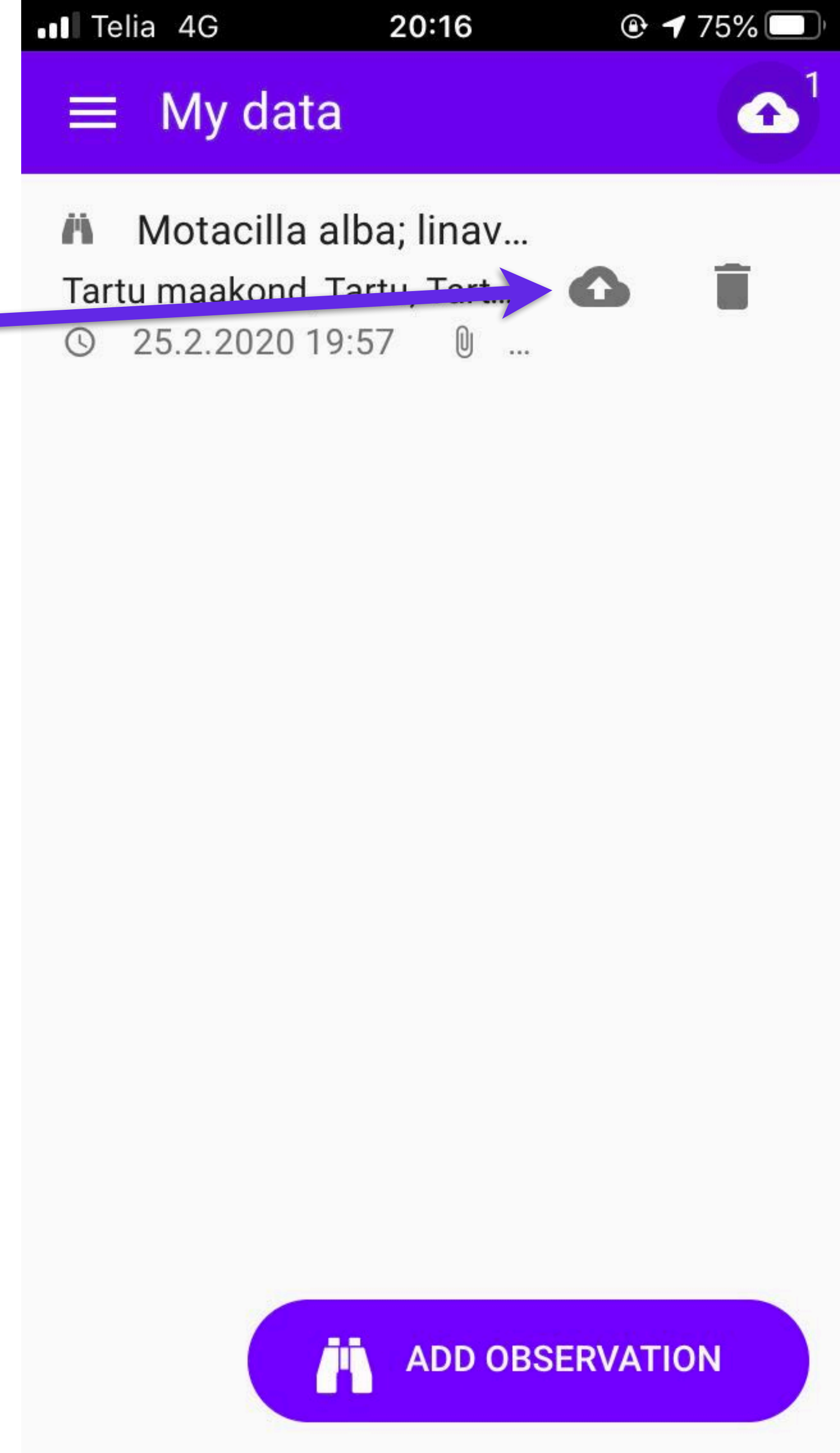
All saved observations are added to the “My Data” view

(*If there is an observation listed in “My Data”, it means that the observation has not yet been uploaded to the PlutoF workbench.)



Upload to PlutoF

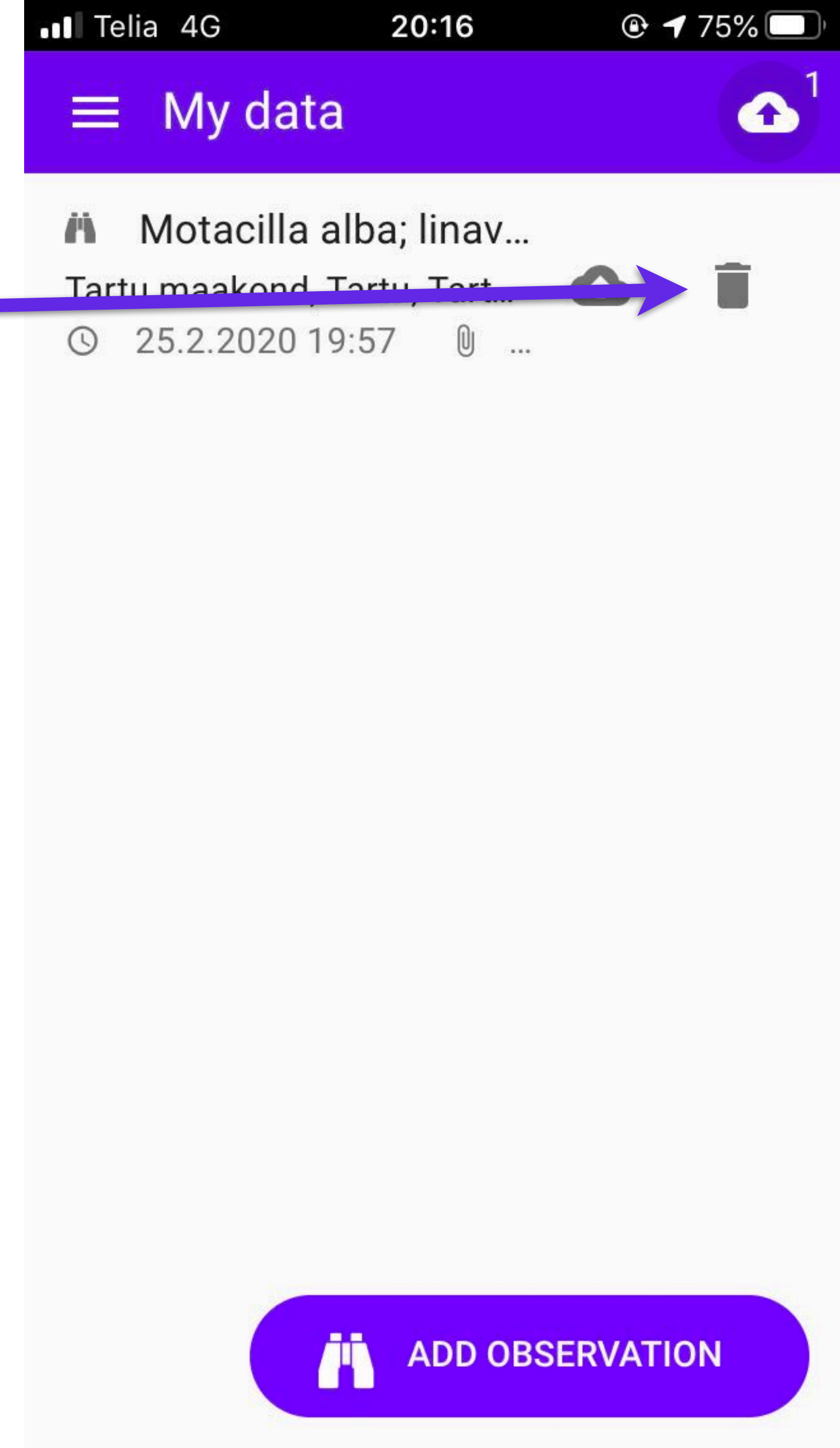
Upload observation to PlutoF workbench



(*Nature observation has been successfully uploaded when it is no longer visible in the "My data" view.)

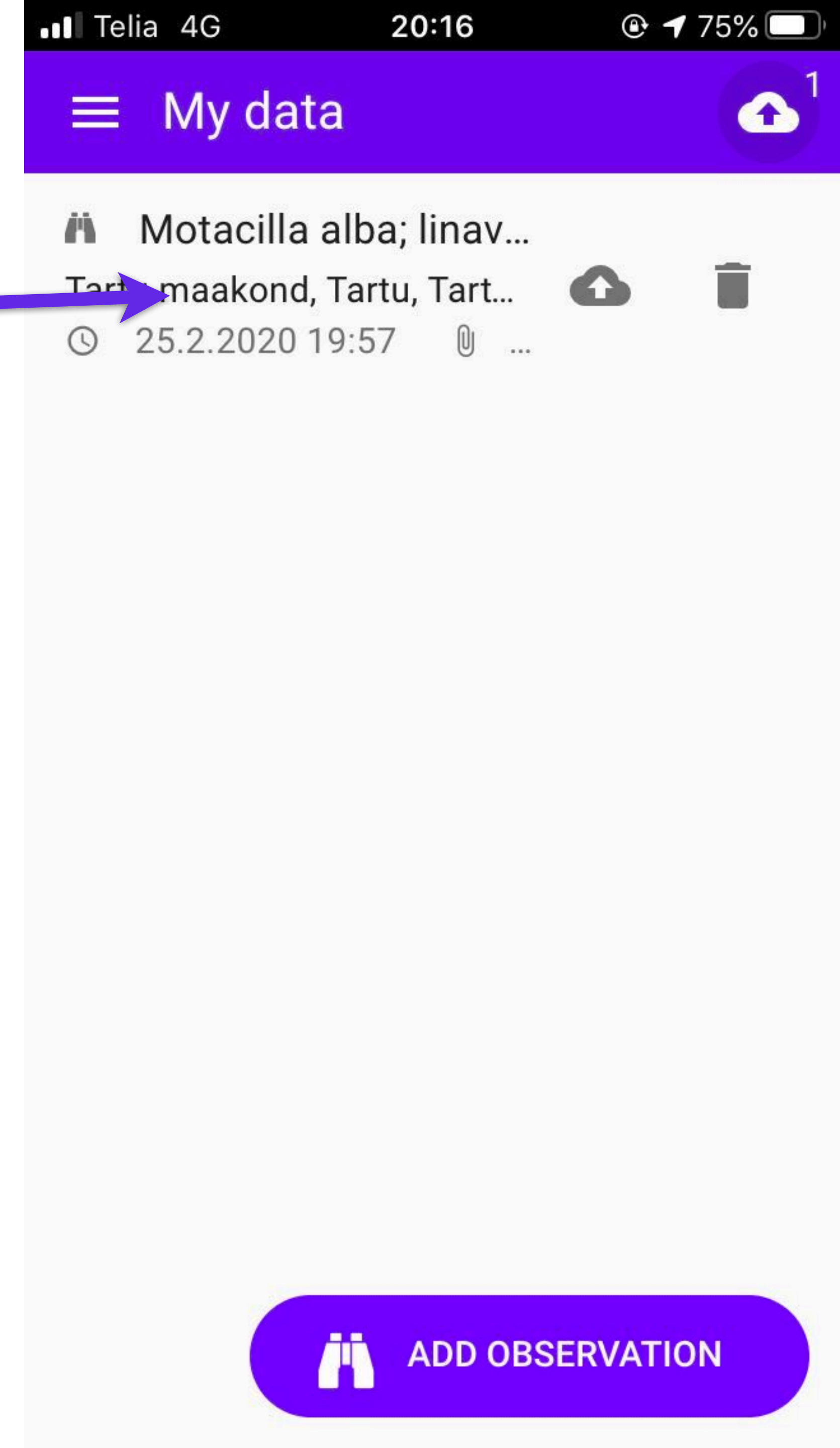
Deleting observation

Delete saved view



Edit observation

Open observation for editing



(*In Legulus, observation can only be edited before uploading to PlutoF. Later, the observation can be modified and enhanced on the PlutoF workbench.)

Phone Settings - GPS

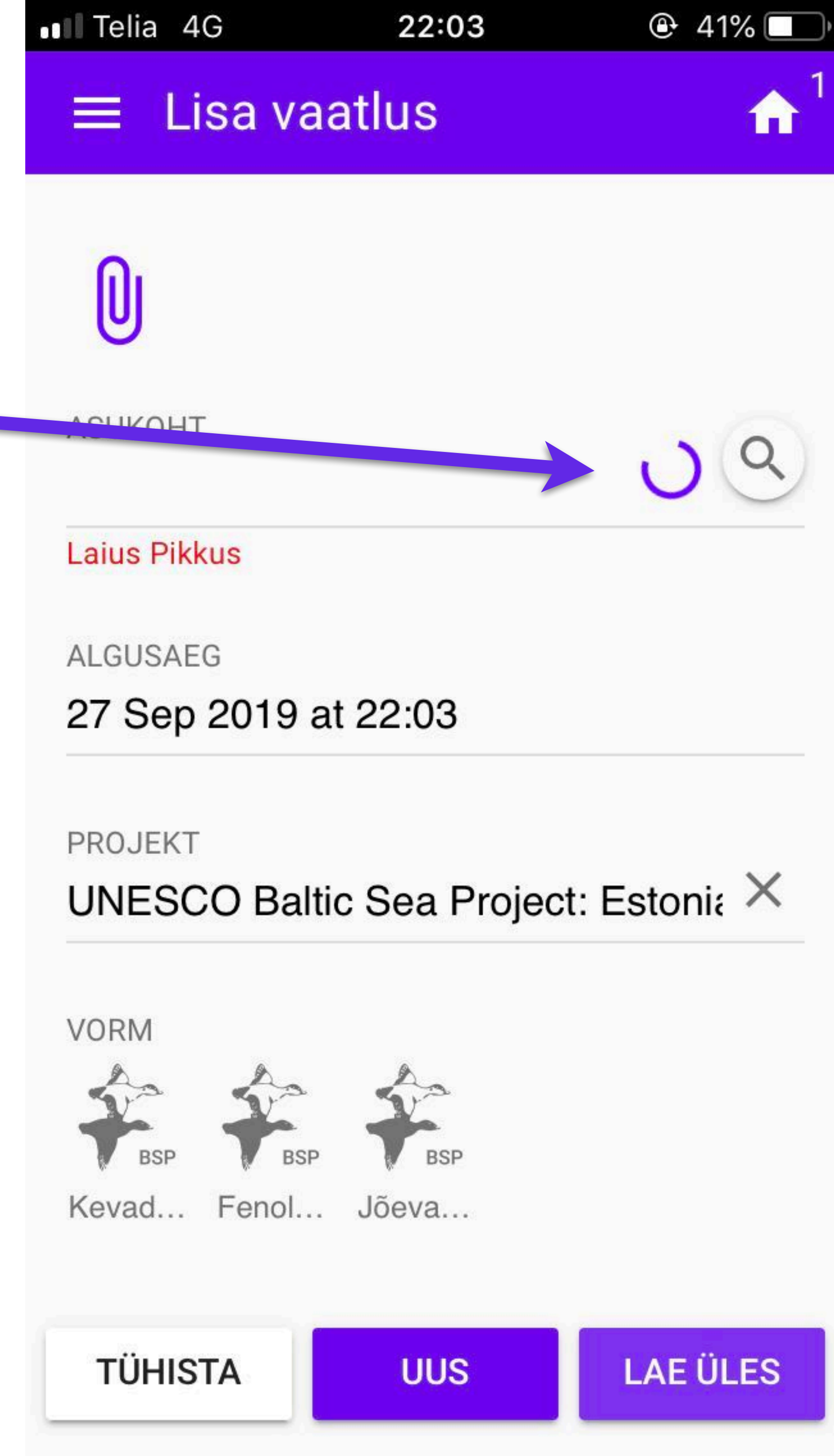
Missing "location" information and the rotating icon indicate that the phone's GPS might be turned OFF

GPS should be turned ON for comfortable use of Legulus.

GPS Setting in phone menu:

iPhone = Settings > Privacy > Location Services.

Android = Settings > Location



KIK projekt nr 12559

"Säästva arengu haridusele suunatud Läänemere Projekti (BSP) võrgustiku arendamine ja koostöö 2018-2020"

