WorldCereal MOOC I

DALL'E

Data collection exercise using a mobile app

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Your exercise:

1. Go to the to the **Crop Capture webpage, download the Geo-Quest app** and create an account (it's free!).
2. Select **Crop Capture**
3. Go to the **nearest crop fields** and when you are close to these, **mark each field** and follow the step-by-step instructions shown below (don't forget to **take pictures**).
4. When you have internet connection **upload the surveys**
5. Return to the **Crop Capture webpage**, **login** and explore the data you uploaded using the **same username and password** you created for Geo-Quest. Check location and delineations with satellite imagery.
6. In the **Crop Capture webpage**, **download** your data (GeoParquet) and **load it into the WorldCereal RDM –** see the WorldCereal RDM MOOC videos.
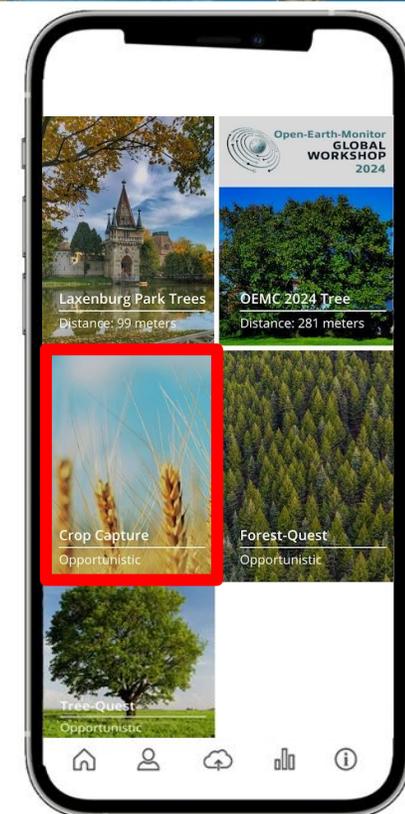
Step-by-step instructions

Go to https://crop-capture.main.geo-wiki.org/
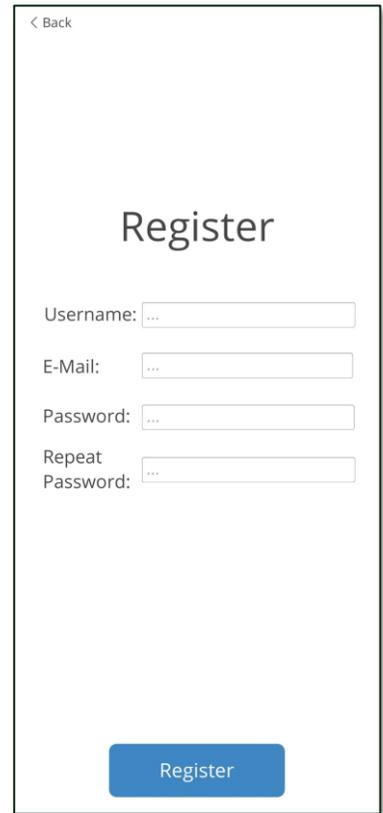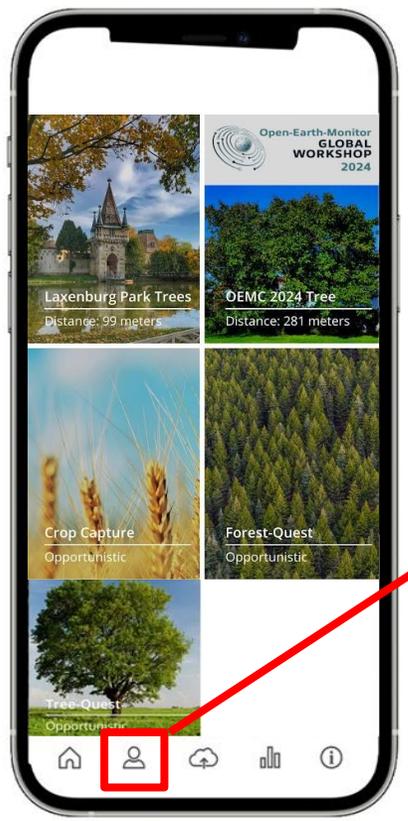and download **Geo-Quest**

* In iOS download first TestFlight and then click the link again
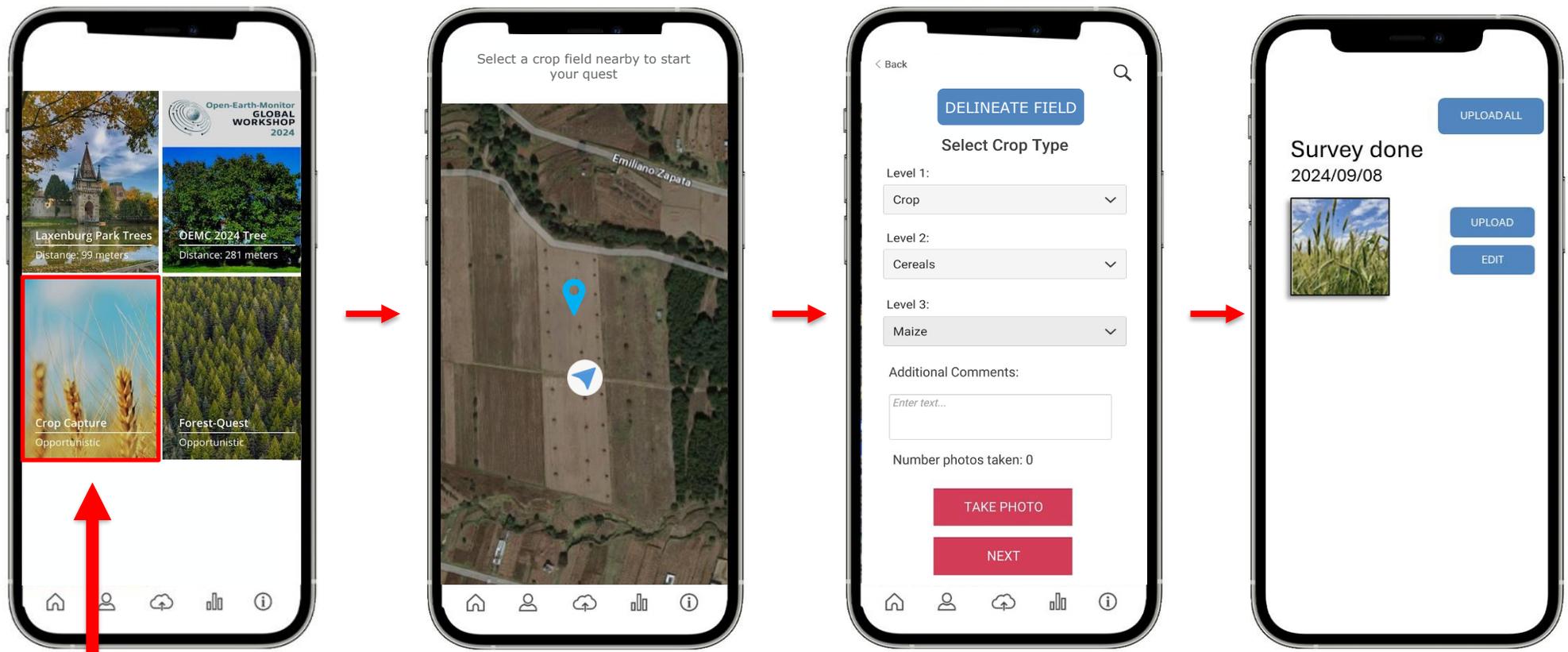
Geo-Quest Crop Capture: Registering

In Geo-Quest, register and create a free account so you can upload your surveys

Geo-Quest Crop Capture: Overview

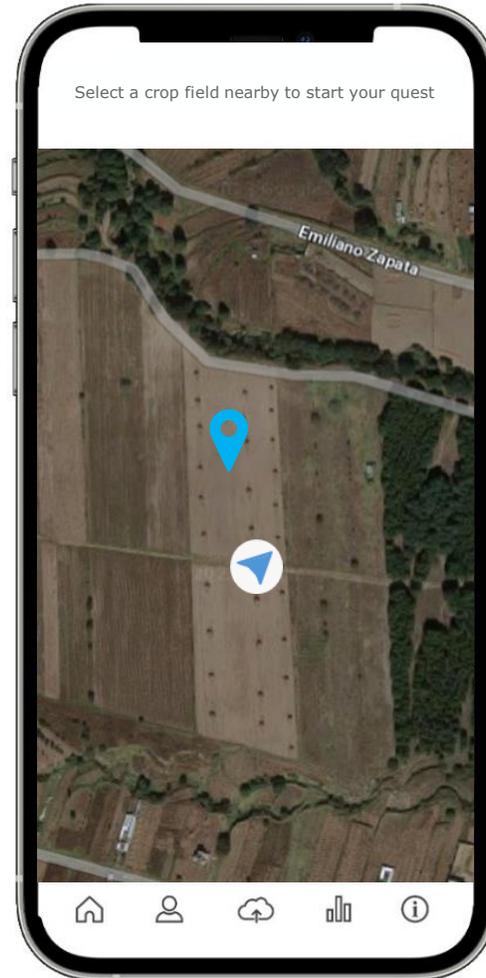

Select Crop Capture to start

Geo-Quest Crop Capture: Marking a field to survey

Specify the location of the crop field by touching on the map.

Aim for the center of the field

Select a crop field nearby to start your quest

Emiliano Zapata

Geo-Quest Crop Capture: Survey steps

If possible, delineate the field.

Make sure that the polygon boundaries do not go overlap other fields.
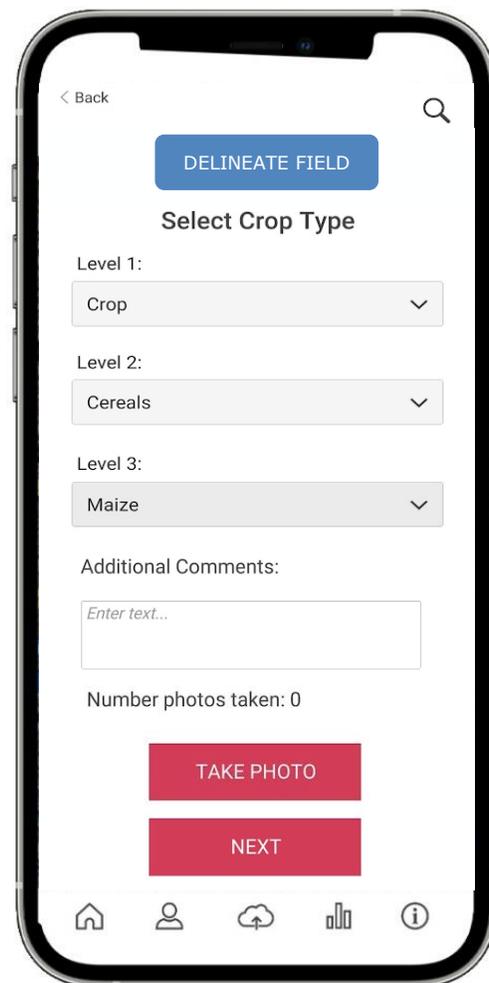
Geo-Quest Crop Capture: Delineation

Delineate a polygon by marking each of the field corners on the map

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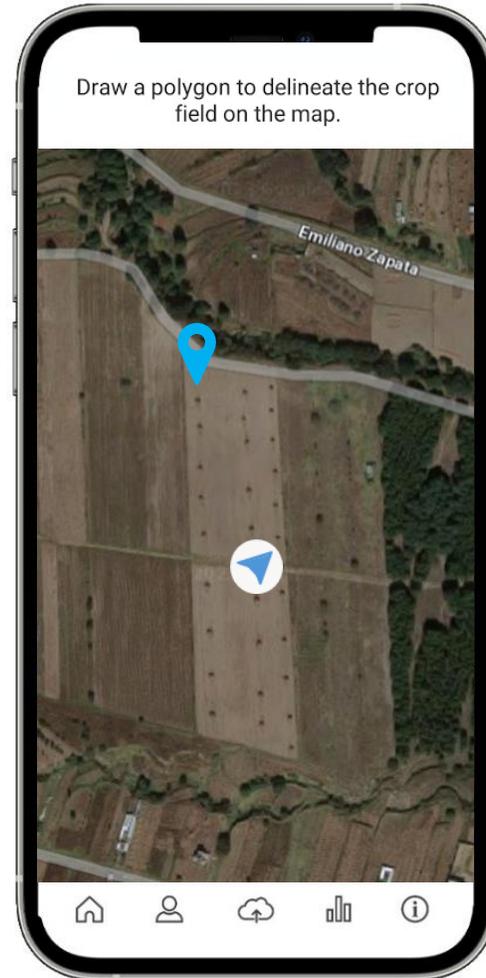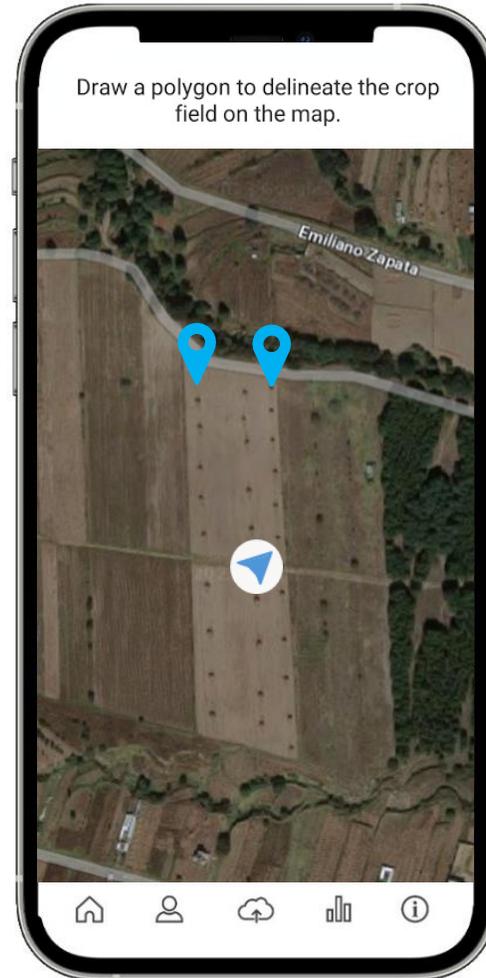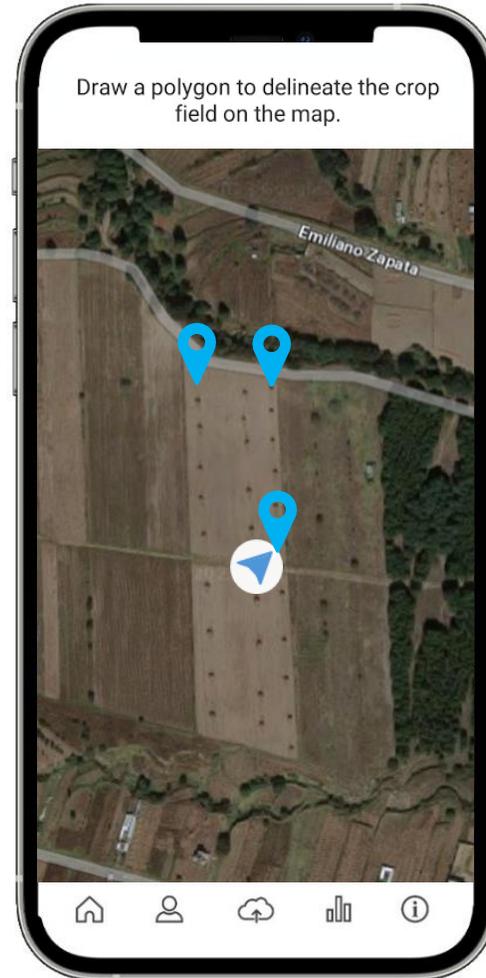
Delineate a polygon by marking each of the field corners on the map
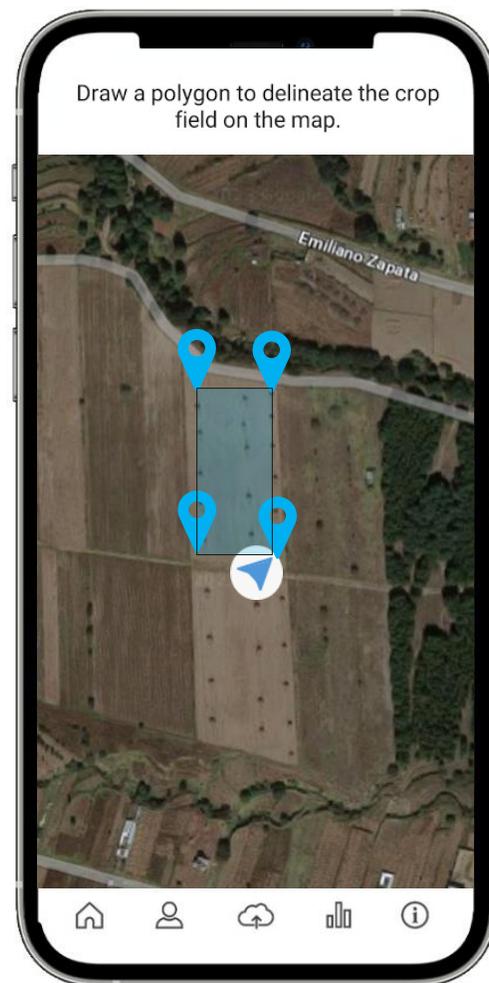
Caution:

Do this only if the satellite imagery matches reality:

Very high-resolution imagery is not always up-to-date.

Geo-Quest Crop Capture: Survey questions

Fill up the survey:

Start with level 1 and then select the best matching levels 2 and 3 as needed
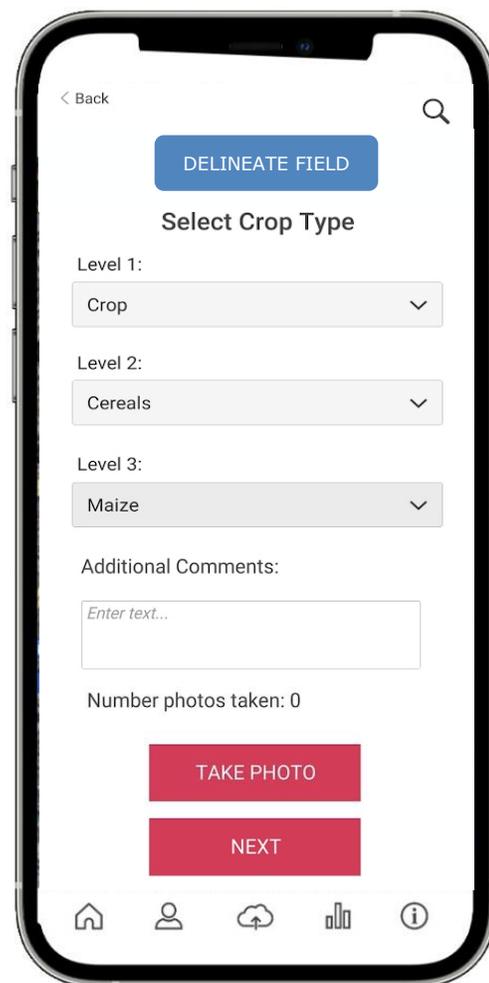
If you have additional comments or observations, use the Additional Comments box

Geo-Quest Crop Capture: Take photos

Take photos of the field to add to your survey
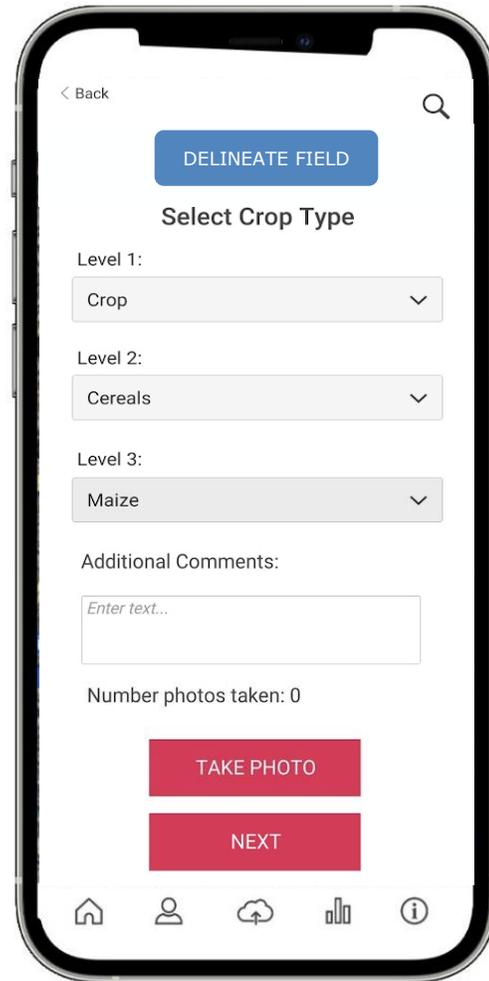
Once you are done, press NEXT

Before uploading, you can edit your survey if needed
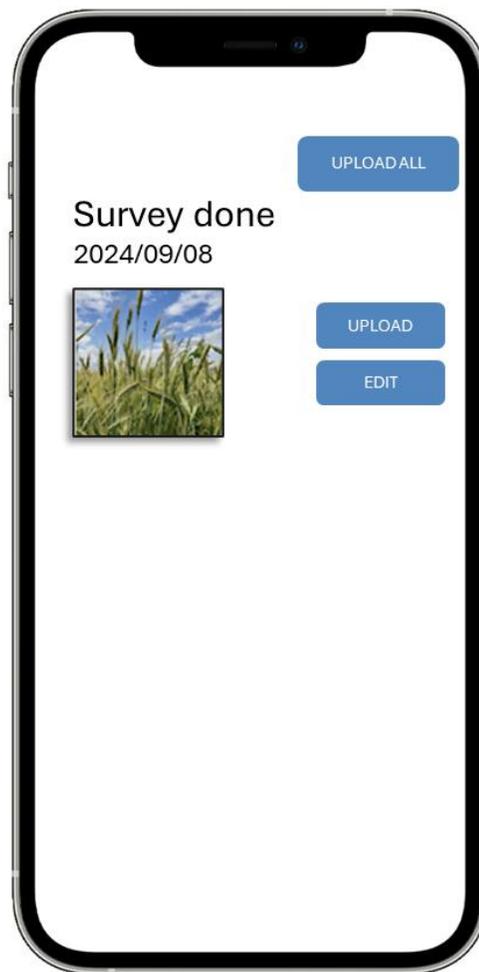
Once you have internet connection, upload your survey.

If you have recorded several fields, you can press UPLOAD ALL

Login to Crop Capture with your Geo-Quest username and password: https://crop-capture.main.geo-wiki.org/

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Crop Capture: Data visualization and downloading

.parquet files (2 files, points and polygons) can be loaded directly in the WorldCereal RDM

You can check and download your surveys

Crop Capture: Data exporting examples

Download data (csv example):

	A	B	C	D	E	F
1	QuestSurveySubmissionId	CreatorId	LocationId	LocationWKT	Status	SubmissionData
2	3a15ca98-57b2-5128-83d6-ccf835dd22af	3a155e78-80f4-6920-a68b-f964759049c4		POINT (16.26991 48.1021)	NotReviewed	{"crop2": "cropFruit", "fruit3": "fruitGrapes", "delineateField": [16.26847, 48.10368, 16.26818, 48.1036, 16.26862, 48.10298, 16.26887, 4...
3	3a15d11c-8ffc-5539-059f-c70cd24e17d5	3a155e78-80f4-6920-a68b-f964759049c4		POINT (16.51444 47.97497)	NotReviewed	{"canola2": "canolaCropResidue", "delineateField": [16.51623, 47.97574, 16.51544, 47.97606, 16.51277, 47.97412, 16.51326, 47.97371]...
4	3a15d11c-953a-8e46-bf4f-691731aaafc1	3a155e78-80f4-6920-a68b-f964759049c4		POINT (16.51424 47.97478)	NotReviewed	{"canola2": "canolaCropResidue", "delineateField": [16.51631, 47.9758, 16.5154, 47.97606, 16.51276, 47.97415, 16.51336, 47.97389], ...
5	3a1685ac-b163-9627-80d5-42e59c1fc691	3a155e78-80f4-6920-a68b-f964759049c4		POINT (16.35926 48.06865)	NotReviewed	{"crop2": "cropCereals", "cereals3": "cerealsMaize", "delineateField": [-98.48678, 19.4213, -98.48672, 19.42108, -98.48659, 19.421, -98...
6	3a1685ae-2c60-8898-8b3c-fbd06b30299d	3a155e78-80f4-6920-a68b-f964759049c4		POINT (-98.48627 19.42028)	NotReviewed	{"crop2": "cropCereals", "cereals3": "cerealsMaize", "delineateField": [-98.48582, 19.42076, -98.48681, 19.42086, -98.48688, 19.42049, ...
7	3a1685ce-15d2-a0a5-26b3-3cf538bf77a6	3a155e78-80f4-6920-a68b-f964759049c4		POINT (-98.47935 19.42032)	NotReviewed	{"crop2": "cropCereals", "cereals3": "cerealsOats", "delineateField": [-98.47929, 19.4207, -98.47917, 19.4212, -98.47928, 19.42119, -98...
8	3a1685ce-47e4-2fbb-3572-1a66c32e13d6	3a155e78-80f4-6920-a68b-f964759049c4		POINT (-98.48238 19.42108)	NotReviewed	{"crop2": "cropCereals", "cereals3": "cerealsMaize", "delineateField": [-98.48197, 19.4218, -98.48325, 19.42198, -98.48327, 19.42063, -...

Download pictures (csv list with URLs):

	A	B	C
	QuestSurveySubmissionId	CreatorId	Url
2	3a1685ac-b163-9627-80d5-42e59c1fc691	3a155e78-80f4-6920-a68b-f964759049c4	https://geoquest.blob.core.windows.net/uploads/3a14da215762a8f91a3d718f3a75fa32/3a1685acb163962780d542e59c1fc691/8cc952fdfc124918a5819b8957a5a4af.jpeg
3	3a1685ae-2c60-8898-8b3c-fbd06b30299d	3a155e78-80f4-6920-a68b-f964759049c4	https://geoquest.blob.core.windows.net/uploads/3a14da215762a8f91a3d718f3a75fa32/3a1685ae2c6088988b3cfbd06b30299d/e5e5a03370b14c88a83671e6657eff47.jpeg
	3a1685ce-15d2-a0a5-26b3-3cf538bf77a6	3a155e78-80f4-6920-a68b-f964759049c4	https://geoquest.blob.core.windows.net/uploads/3a14da215762a8f91a3d718f3a75fa32/3a1685ce15d2a0a526b33cf538bf77a6/15e4ad82f43d4fa79f33ef7ea8a473bb.jpeg
	3a1685ce-47e4-2fbb-3572-1a66c32e13d6	3a155e78-80f4-6920-a68b-f964759049c4	https://geoquest.blob.core.windows.net/uploads/3a14da215762a8f91a3d718f3a75fa32/3a1685ce47e42fbb35721a66c32e13d6/63739fd4f746452b9d965493a8345829.jpeg

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THANK YOU

Interesting links:

About ref data ➡️ https://esa-worldcereal.org/en/reference-data

RMD UI ➡️ https://rdm.esa-worldcereal.org/

Documentation ➡️ https://worldcereal.github.io/worldcereal-documentation/rdm/overview.html

Questions? ➡️ WorldCereal Forum MOOC I

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