



Know your soil #1

How to use a Topsoil Mapper by



We've been working with soil since we graduated, about 20 years ago. CONSULTORA OESTE is a soil lab where we analyze water, plants and soil for growers in the "Pampas Region", Argentina's core production area. We also manage farms and do consulting to growers around Roberts, Buenos Aires, the town where our headquarter is located.

Undulating terrain is one of the main characteristics of our region. Higher areas with coarse texture and low organic Matter (<1%) coexist in the same field with heavier textures, soluble salts and buried soils. Ten years ago, we realized managing field variability was the most important challenge the farmers were facing to maximize yields, so we decided to start using soil Electrical Conductivity (EC) to map it. We started with a "contact rig" and that helped us get familiar with the technology. We were picking incredible variability across all fields but struggling to cover acres. The need for those coulters to be in good contact with the soil forced us to pull the rig at a fairly slow speed and also, as soon as the crop was planted, our window was closed.

The Topsoil Mapper was a game changer for us.

We purchased the scanner in 2019 - proud to say it was the first one in South America. Since then, we've mapped over 25,000 hectares. The size, weight and being contactless, which massively increases the window of operation, are some of the benefits we see on this sensor.



Let's meet @ ...

Where the Topsoil Mapper is ...



Info AG, St. Louise, MO
June 27/28, 2023

Precision Ag Conference



Agritechnica, Hannover, DE
November 12-18, 2023

Worlds leading Ag show

Our methodology is simple:

- Before going to the field, we download Sentinel-2 images and assess field variability. This will determine the swath spacing we will use (20 mts to 30 mts) to map the field.
- Once on the field, we map it with the TSM together with our RTK antenna to gather sub-centimeter elevation data.
- At the lab, we download elevation data and the 4 layers of ECa we get from the sensor and divide the field in 6 to 10 areas based on different ECa values
- We go back to the field and do a targeted an intense zone sampling (up to 3 mts deep if need it) with the goal of identifying the limiting factors of that specific location. Could be texture, soluble salts, moisture, compaction or as we normally see, a combination of all of them.

This last point is the most important part of our work.

Until here, the information of the sensor is just a nice "colored map". After field work, those 10 areas with different ECa get reduced to 2 to 4 zones with different levels of productivity that we give farmers to make management decisions that will have direct impact on their operations.

The layers of information available today are numerous, from weekly satellite images to yield maps and elevation maps. EC maps have been here for a long time and are extremely useful to assess soil variability. With over 500 points per hectare, the level of detail the TSM gives you is immense. This information needs to be validated "on site" but something you do one time and can use for years.



Martin Luzzi, Managing Owner at Consultora Oeste
<http://consultoraouest.com.ar>

GPO inside

BY CLARA

Change in the sales team

We would like to inform you that Michael Kopecky will change and leave Geoprospectors by the end of April 2023.

Of course, the Geoprospectors team will still be there for you.

If you have any questions, please do not hesitate to contact me via clara@geoprospectors.com or our Support-team via support@geoprospectors.com.



TSM Client Cloud

The TSM Client Cloud brings mapping capabilities to the next level.

While current desktop processing solution for soil sensors require a lot of manual input and some expertise, the TSM Client Cloud engages an automatic process from uploading the raw data to delivery of the processed product. The products can be downloaded as physical files or embedded via an API to 3rd party software products. For those who like to put hands on the data, the TSM Client Cloud offers the possibilities for fine tuning the processing settings to customize the output.

The TSM Client Cloud does not have any limits on the data through put rate. Large volumes of data can be processed in time and therefore reduces manual input to minimum. Several systems can be managed and administrated by a single user.

Special Offer Datapackages



The mapping season is just around the corner. Do you still have enough data packages in the TSM Client Cloud to record all soils?

Check your data packages now and get **20% off all packages*** until April 30th.

Just click [here](#) or order your data package via clara@geoprospectors.com.

*also available for FMS

TSM Client Cloud 2000	€ 2.100	€ 1.680
TSM Client Cloud 5000	€ 4.200	€ 3.360
TSM Client Cloud 10000	€ 6.500	€ 5.200
TSM Client Cloud 50000	€ 22.500	€ 18.000

20% OFF