

## Notes from Geospatial/GIS Meetup

April 14, 2022

via Zoom

**Attendees:** Janet Reyes, facilitator;  
**Via Zoom:** Amos Lee, Andrew Haglund, Canserina Kurnia, Cesar Zayas, Debbie Stocking, Jonathan Young, Mike Cohen, Nic Barth, O. Michael Alegbeleye, Rocio Gomez, Shanon Langlie, Stephane Morisseau, Yun Ge

### Announcements

This meeting was recorded; video is available [here](#). The passcode to view is #VA9U&S%

[Maptime Davis](#) has several workshops coming up that may be of interest.

The same is true for the UC ANR Informatics and GIS (IGIS) program: <https://igis.ucanr.edu/Training/>

On Thursday, April 28 from 10:00-11:00, Esri is holding a webinar on [Introducing ArcGIS Image for ArcGIS Online for Teaching and Research](#). ArcGIS Image for ArcGIS Online allows for image analysis in the cloud; while it isn't as robust as the image analysis tools found in ArcGIS Pro, many image-related functions are provided without needing to install software. This is not yet available for higher education licenses.

Another [Esri webinar](#) on May 2 will cover the building blocks of learning or teaching **spatial data science**.

On Tuesday May 3 at 9:00, the topic for Esri's [GIS in Higher Education Chat](#) will be **new tools and capabilities in ArcGIS Survey123**.

UCR Library is providing a workshop on [Choosing Geospatial Tools](#) on Wednesday, May 4 from 2:00 - 3:00.

Jonathan announced that the **R'Geospatial Club** is having its first meeting of the quarter today (April 14) at 7:00 pm. Upcoming activities include a scavenger hunt collaboration on campus and working on a map, dashboard and story map in support of the [Healthy Beverage Initiative](#). The club's Discord server is <https://discord.gg/ESz29EfC>.

In response to a question about club membership, it was stated that anyone can attend club offerings, but membership is restricted to UCR undergrads and graduate students.

### First-time Attendees

**Amos Lee, Rocio Gomez, Stephane Morisseau, and Yun Ge** were all first-time attendees.

Welcome, and we hope to see you again!

## **Presentation**

Cesar Zayas is a Mapping & GeoSpatial Representative with [California Survey and Drafting Supply](#) (CSDS), which is a [Trimble](#) dealer. Cesar presented on **Trimble Hardware and Software for GIS**.

CSDS offers training modules, repair services, and professional services in the areas of surveying, mapping, and 3D scanning. Customer assistance is available at any step, all the way from field to post-processing. Hardware options include Windows mobile handhelds, Android handhelds, and external [GNSS receivers](#).

Trimble's primary data collection software is [TerraFlex](#). Customized forms created in [Trimble Connect](#) (a browser-based platform) allow for systematic collection of attributes behind each GPS point. The data collection system, for points, lines, or polygons, is as simple as possible. Data can be exported in CSV, shapefile, geodatabase, or KML formats.

Use of the [Trimble DA2](#) GNSS receiver is available on a monthly subscription basis. The antenna connects via Bluetooth to Android or iOS devices and can provide measurements down to centimeter-grade accuracy. It's compatible with Esri field software as well as software from other providers.

The [Catalyst Handle](#) allows for handheld data collection rather than using the two-meter-tall DA2.

Another GNSS receiver, the [Trimble R2](#), provides greater speed and efficiency regarding satellite convergence and signal recovery. It also has a backpack attachment, and performs better under tree canopy than the DA2.

Cesar also touched on [GeoSLAM](#), a handheld system which allows for capture of 3D data at the rate of about 100,000 points per second. It can go down to centimeter-grade accuracy. Car and UAV (drone) mounts are also available. When connected to a device, the points can essentially be viewed as they are being collected.

As an example of academic use of GeoSLAM, Cesar mentioned researchers who scanned dinosaur footprints in the field.

Contact information: email [cesar.zayas@csdsinc.com](mailto:cesar.zayas@csdsinc.com)  
LinkedIn [www.linkedin.com/in/cesar-zayas](https://www.linkedin.com/in/cesar-zayas)

## **Discussion**

**Janet** asked for examples of higher education institutions using these products. Cesar replied that UCSD and Scripps Institution of Oceanography, as well as SDSU, are using DA2s.

## **Map sharing**

**Janet** shared the following:

Earth satellite visualization: <https://platform.leolabs.space/visualizations/leo>

UBIQUE American Geographical Society blog: <https://ubique.americangeo.org/>