

English version

# 4C

+10  
YEARS



CUATRO<sup>®</sup>  
CONCEPTOS

Business Group

# CUATRO CONCEPTOS®

An organization formed by four fully Colombian owned companies, bringing together more than 150 highly qualified professionals dedicated to the Capture, Analytics, and Modeling of Geographic Data across Latin American territories.

A consulting firm with presence across Latin America, recognized for its extensive experience in geospatial solutions.

Specialized in the production of cartographic products spanning more than 29 million hectares, as well as in the transformation and management of geographic information. It provides technical support for land use planning projects related to water resources, multipurpose cadastre, risk management, geodesy, software development, and AI powered tools. Its portfolio also includes projects for the implementation of Continuously Operating Reference Stations (CORS).

A leading organization in technological solutions and specialized services, recognized for its comprehensive participation throughout the entire value chain of the multipurpose cadastre. The company's core activities include large scale parcel sweeping, the technological development of cadastral databases, and the quality assurance and control of cartographic and cadastral products.

A service company specializing in air transportation under the category of Special Aerial Works including *aerial photography, aerial photogrammetry, geology, and seismology*, serving both public and private sector organizations, with operations at national and international levels. Notably, it was the first company in Colombia to be certified under RAC 138 by the Special Administrative Unit of Civil Aeronautics for special aerial works with CDO-127.

A corporation with more than 20 years of experience conducting research and experimental development in the field of Natural Sciences and Engineering. Its main activities include projects related to climate change, ecosystem services, and green and blue carbon credits.



# RESEARCH, DEVELOPMENT, AND INNOVATION UNIT

Since 2018, CUATRO CONCEPTOS S.A.S. has implemented an institutional knowledge management policy, materialized through the creation of its Research, Development, and Innovation Unit (R&D+i). This Unit was officially recognized as an actor within the National Science and Technology System by the Ministry of Science, Technology and Innovation through Resolution No. 2891 of 2024, granting it the status of a corporate R&D+i Unit.

This Unit is responsible for planning, directing, and coordinating R&D+i activities to create procedures, products, technology, programs, knowledge, and methodologies in processes related to aerial operations, photogrammetric activities, geodesy and surveying, as well as in the environmental field and disaster risk management applications.

## Work Areas



### Applied Research:

Focused mainly on supporting applied research projects, following the company's research methodology.



### Technological Development:

This process enables the company to enhance its products and services through the application of a methodological framework within the context of R&D+i. As a result of these activities, new industrial designs and software may be developed for official registration.



### Innovation:

This activity focuses on driving significant improvements in existing processes to deliver products and services with greater impact.



### Knowledge Sharing:

Support aimed at communicating project progress and results, and fostering the participation of the company and its staff in academic, scientific, and commercial events.



### Knowledge Transfer:

An activity aimed at training company personnel in topics related to the mission of R&D+i, as well as providing training services to third parties.



## Héctor Mauricio Ramírez Daza

Director, Research, Development and Innovation Unit

Forest Engineer with a Master's Degree in Geography, bringing extensive expertise in remote sensing and the management of geospatial information for public policy applications. Over a 15 year career at the Agustín Codazzi Geographic Institute, he held key positions including Remote Sensing Coordinator, Head of the Research Center, Deputy Director of Geography and Cartography, and Acting General Director.

With nearly 20 years of teaching experience in geomatics, GIS, and land-use planning, he has worked with several universities across the country. He is currently Technical and Innovation Director at Grupo Cuatro Conceptos, where he leads the R&D+i Unit. He is also a founding member of the Colombian Network of Researchers in Space Sciences and Technologies (Minciencias).

# RESEARCH, TECHNOLOGICAL DEVELOPMENT, OR INNOVATION GROUP

The company endorsed the NADAR Research Group, which is registered in Minciencias' GrupLAC database.

The research group brings together the collaborative work of researchers engaged in the research lines developed by the R&D+i Unit:



## Geomatics:

Addresses topics related to geomatics and surveying.



## Territorial Analytics:

Addresses topics related to cadastral and real estate management, social management, and environmental and productive land use planning.



## Geospatial Technologies:

Addresses topics associated with technological development and applications.

All activities are carried out in compliance with legal regulations governing public policies and the technical standards established by regulatory entities, while also incorporating emerging global technologies. This approach ensures the timely delivery of high-/quality products and services to our clients.



The team engaged in research activities is composed of professionals with academic training at all levels. It is important to highlight that both in the R&D+i Unit and in the Research, Technological Development, or Innovation Group, there are four members holding PhD degrees in different fields of knowledge. This strengthens scientific rigor, fosters the generation of new knowledge, and supports the consolidation of projects with high academic, technological, and social impact.

## Did you know?

In honor of Gaspard Félix Tournachon, known as "Nadar" (Paris, April 6, 1820 – Paris, March 21, 1910), Cuatro Conceptos S.A.S. adopted his name for its research group. Nadar was a French photographer, journalist, illustrator, caricaturist, and aeronaut. Credited with taking the first aerial photographs in history in 1858, using a camera from a hot air balloon.



Photography from Wikipedia

As early as 1855, Nadar had patented the idea of using aerial photography for cartography and surveying, and he spent three years experimenting before successfully capturing the first aerial photograph.

# Authors

- Colombian Network of Researchers in Space Sciences and Technologies (2024).
- Book Chapter: IV. Inclusion of the Risk Dimension in Territorial Planning: Two Success Cases in Colombia (2024), ISBN: 978-607-2628-15-1.
- Research Article: What Do You Need to Know to Acquire and Operate a Drone in Colombia for Cartographic Purposes? (2025).
- Research Article: Adjustment of a Digital Elevation Model Generated Through Interferometry Using L-Band Radar from the SAOCOM Constellation for Disaster Risk Management in Bolívar, Colombia, Through Field Observations (2025).
- Book Chapter: Chapter 9. Remote Sensing Application in Biodiversity Assessment and Conservation (Draft, 2025).
- New Cartographic Projection for Colombia, National Origin (2020). SwissTierras – Swiss Cooperation – IGAC.
- Proposal of a Unique Cartographic Projection for Land Administration in Colombia (2018), ISBN: 978-628-96340-3-7.
- IGAC Resolution 1562 of 2018 on Technical Specifications for Geodetic Networks (2018).
- National Geodesy Plan IGAC. Draft Document (2018).
- IGAC Resolution 1392 of 2016. Technical specifications for Cartography, DTM, and Orthophoto (2017).
- National Multipurpose Cartography Plan. IGAC-DANE-DNP (2017).
- Book. Geodesy for Children (IGAC draft, 2017).
- NTC 6271 Standard. Topographic Studies GT028-ICONTEC (2015).
- Technical Guide for the Formulation of Water Resource Management Plans (2014).
- Technical Guide for the Formulation and/or Updating of Watershed Management and Land Use Plans – POMCA (2013).
- Methodology for Environmental Zoning of Watersheds at scales 1:100,000 and 1:25,000 (2010).
- Methodology for Defining Sustainable Alternative Land Uses at the National Level, scales 1:100,000 and 1:25,000 (2007).

## EXPERIENCE

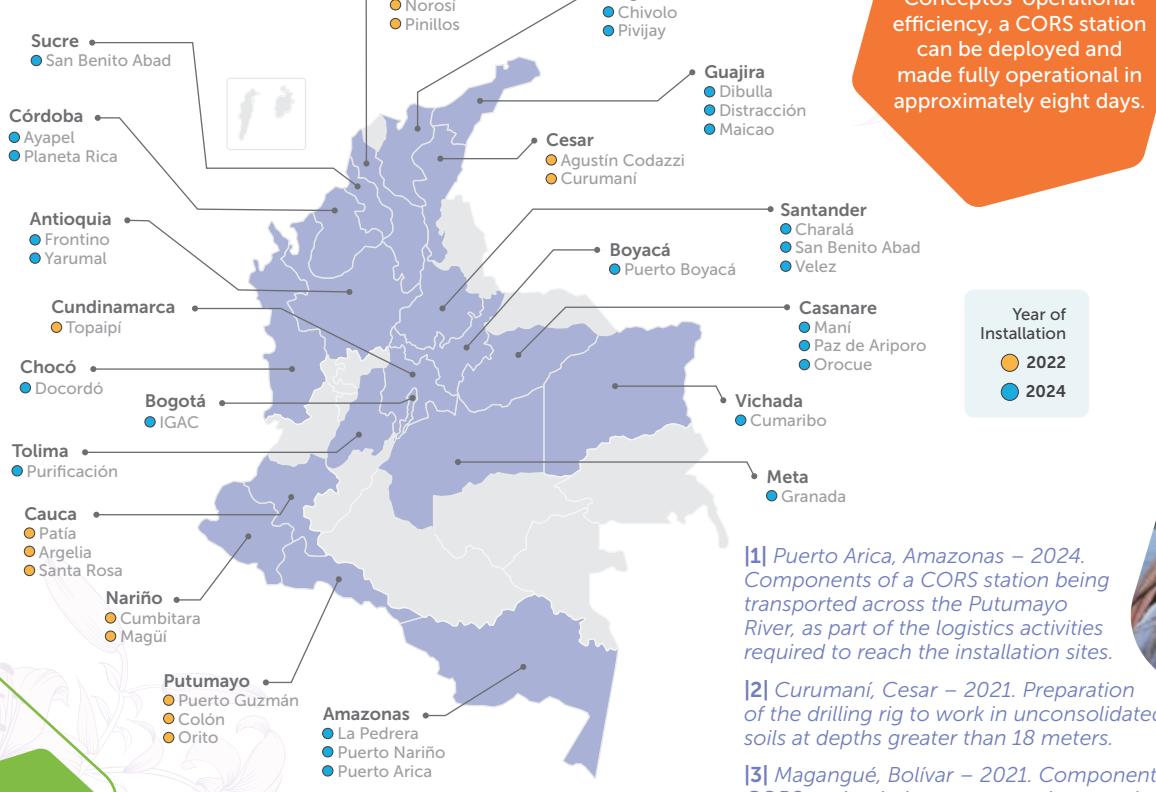
# Continuously Operating Reference Stations (CORS)

The company participated in the installation of 39 CORS stations during 2022 (Phase 1) and 2024 (Phase 2), representing a key milestone in generating high precision geographic data across the country.

The first phase involved the commissioning of 13 stations, with a telemetry model designed to ensure a reliable connectivity between the control center and the stations, enabling continuous monitoring. In the second phase, 26 additional stations were installed in 14 municipalities prioritized by the Agustín Codazzi Geographic Institute. For both phases, site surveys were conducted to guarantee stable geological and geodetic conditions, as well as long term operational sustainability.

These stations, which operate continuously using GNSS technology, provide accurate and reliable information for cadaster, infrastructure, topography, and other strategic applications. This initiative strengthens the national geodetic network and significantly contributes to better decision making in the country's territorial development.

## Installed CORS Stations

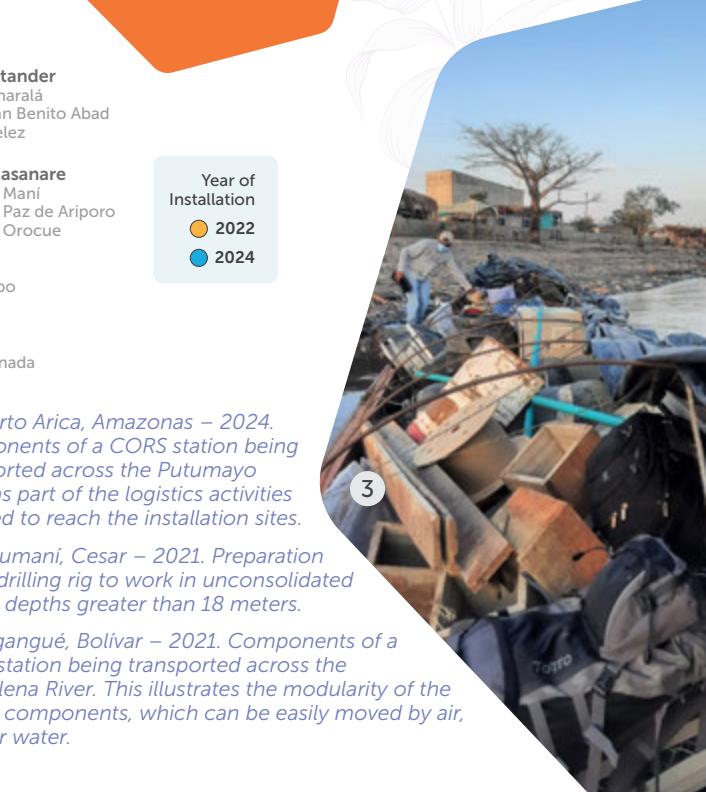


Thanks to Cuatro Conceptos' operational efficiency, a CORS station can be deployed and made fully operational in approximately eight days.

[1] Puerto Arica, Amazonas – 2024. Components of a CORS station being transported across the Putumayo River, as part of the logistics activities required to reach the installation sites.

[2] Curumaní, Cesar – 2021. Preparation of the drilling rig to work in unconsolidated soils at depths greater than 18 meters.

[3] Magangué, Bolívar – 2021. Components of a CORS station being transported across the Magdalena River. This illustrates the modularity of the station components, which can be easily moved by air, land, or water.



**EXPERIENCE**

# Cadastral Management – Tourist and Historic District

In the Tourist, Cultural, and Historic District of Santa Marta, Land People executed the cadastral update covering 1,360 hectares of the urban area. This process identified and managed 30,800 land parcels, all under the Multipurpose Cadastre approach, integrating physical, legal, and economic components, and ensuring the highest technical standards.

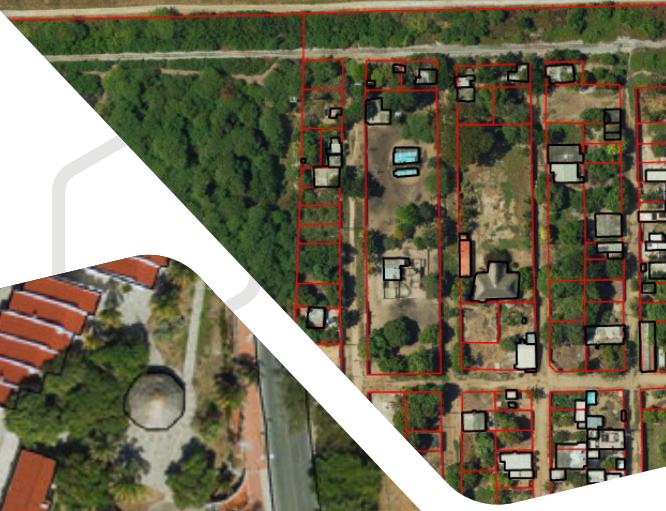
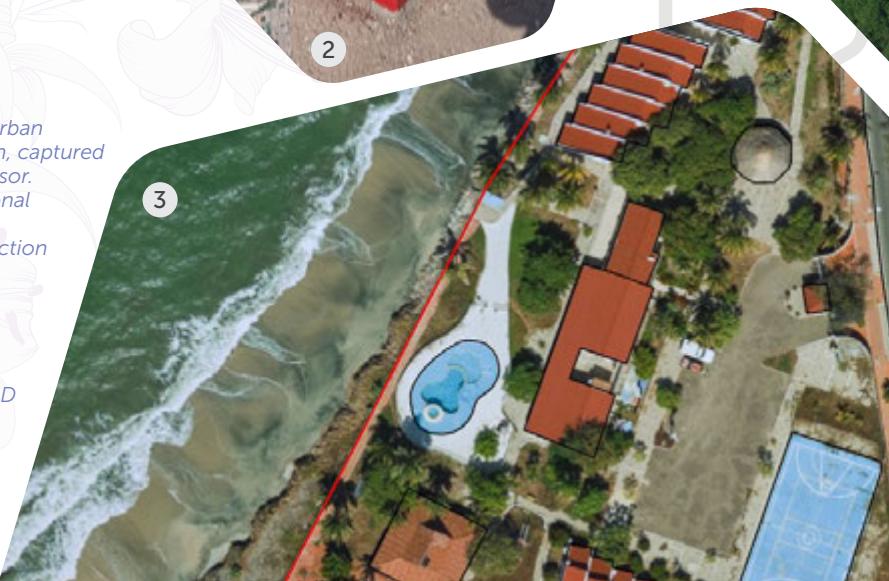
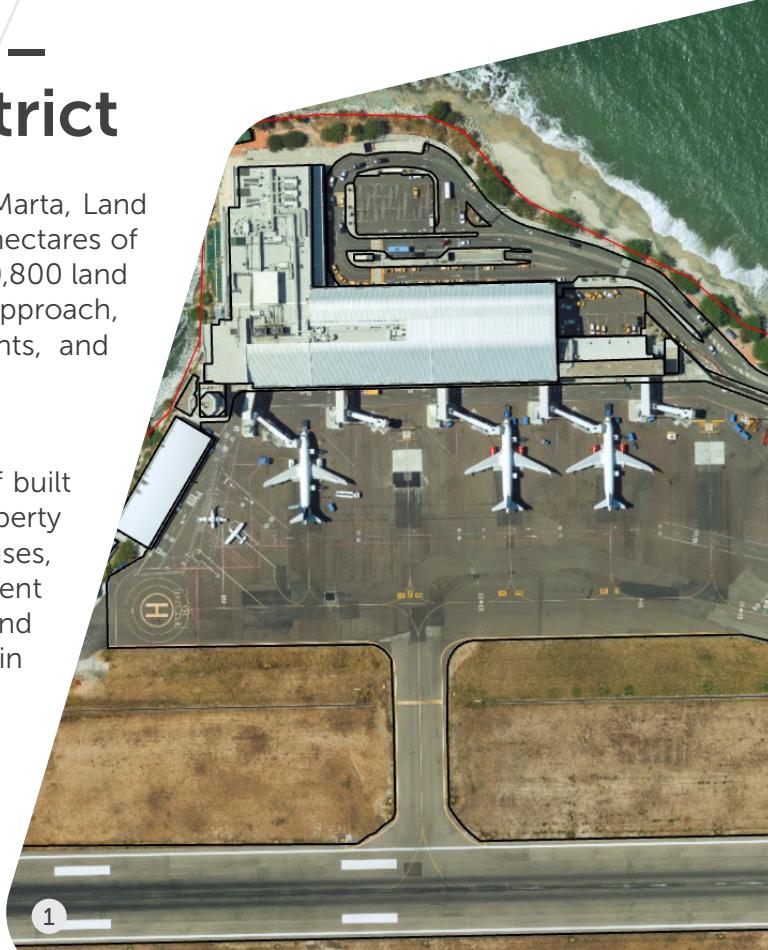
This project allowed the registration of 2,779,893m<sup>2</sup> of built up area and the establishment of a cadastral property valuation in accordance with current land uses, strengthening territorial planning and land management within the district. This experience highlights Land People's ability to lead high impact cadastral processes in strategic territories.



**[1]** Santa Marta, 2020. Urban orthophoto – GSD 8 cm, captured with a Leica RCD30 sensor. Simón Bolívar International Airport (SMR). Cadastral digitization of a construction unit – Airport Runway.

**[2]** Gaira, Santa Marta, Magdalena. Plate 15.

**[3]** Santa Marta, 2020. Urban orthophoto – GSD 8 cm, captured with a Leica RCD30 sensor. Cadastral digitization of a construction unit.



## EXPERIENCE

# Cartographic Generation

Cuatro Conceptos has consolidated its role as a national reference in the cartographic updating of rural and urban territories, aligned with Colombia's National Multipurpose Cadastre Policy.

Through an innovative vision and a commitment to technical excellence, the business group has led major projects integrating satellite, airborne, and terrestrial technologies to generate high precision geospatial information. These initiatives ensure compliance with quality standards and the incorporation of the data into Colombia's official cartography, validated by the Instituto Geográfico Agustín Codazzi (IGAC).

In the past two years, Cuatro Conceptos has achieved significant accomplishments that reflect its commitment to the territorial transformation of the country:

- The production of cartography for more than 29 million hectares, from widely dispersed rural zones to consolidated urban areas.
- The generation of orthophotos in some of the most remote and strategic regions of the country, such as the Amazon, Guaviare, and Vaupés.
- The development of LiDAR surveys and digital terrain models under extreme geographic conditions, including mountainous regions and high-/altitude approaches to snow capped peaks.
- The production of cartographic databases for over 400 population centers (sixth category municipalities), helping close information and planning gaps.

Each of these achievements evidences a firm commitment to enhancing Colombia's capacity for land management, supporting informed decision-making, orderly planning, and the safeguarding of land-related rights. Cuatro Conceptos provides not only data, but also reliability, precision, and a strategic vision for the future of the regions.



1



2



3

**[1]** Image captured from the Cessna 402B aircraft at a flight altitude of 5,000 feet, with the Betania Reservoir and Magdalena River in the background. Wilmer Fajardo, 2025.

**[2]** Interior view of the Cessna 402B aircraft during LiDAR data and imagery acquisition operations. Taken by Copilot Miguel Pabón, 2025.

**[3]** Orthophoto (GSD 1 m) overlaid on the rural DTM (10 meters) of Totoró, Cauca. 2025.

## EXPERIENCE

# Study for the Delimitation of River's Hydrological Buffer

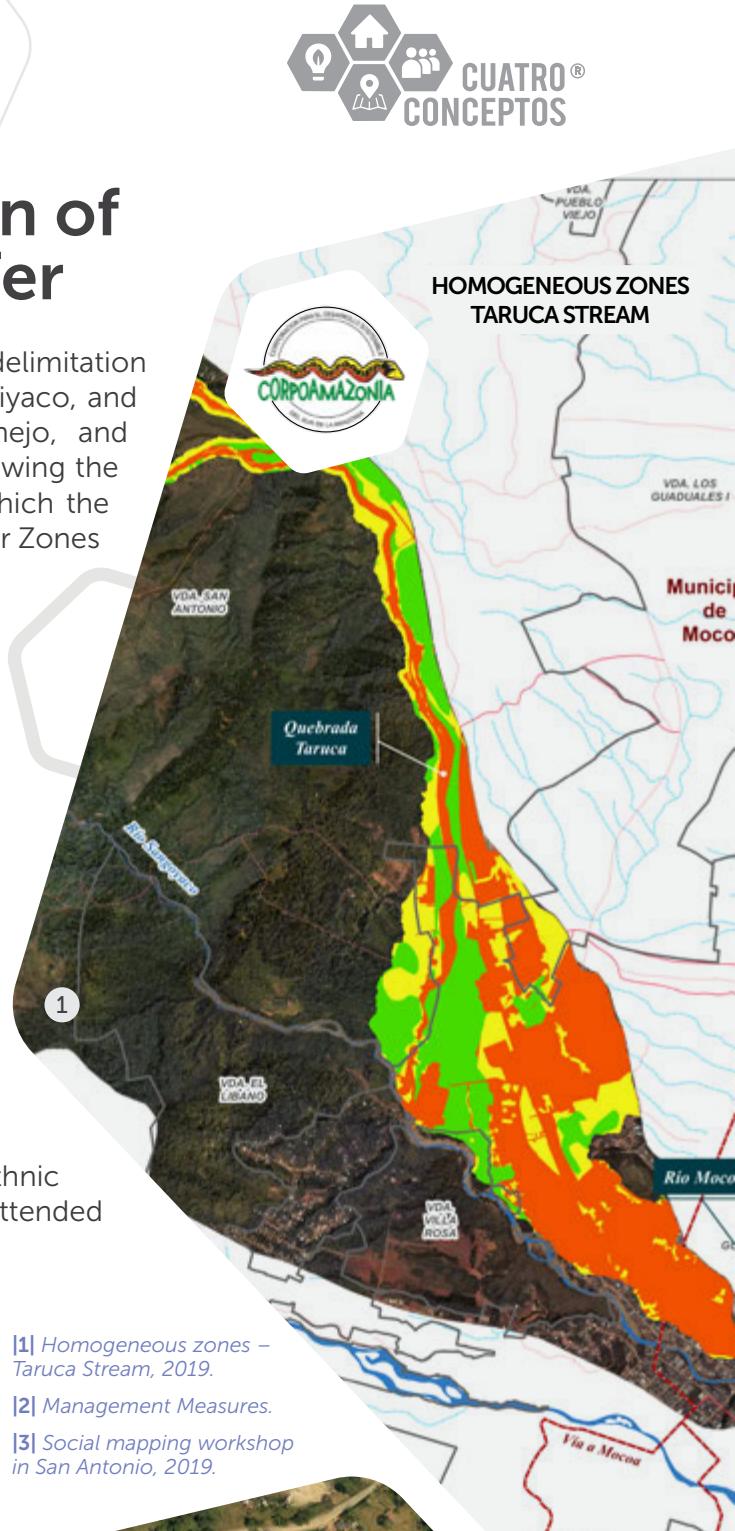
The scope of the project was to develop the study for the delimitation of the hydrological buffer zones of the Sangoyaco, Rumiyaco, and Pepino rivers, as well as the Taruca, Taruquita, Conejo, and Almorzadero streams in the municipality of Mocoa, following the specifications of Resolution 957 of May 31, 2018, "By which the Technical Guide for the Delimitation of Hydrological Buffer Zones in Colombia is adopted and other provisions are issued."

## Achievements

- This was the first project to implement the Technical Guide of Criteria for the Hydrological Buffer Zones Delimitation in Colombia.
- Six educational booklets on the Delimitation of Riparian Buffer Zones were produced for the rivers and streams mentioned above, facilitating the understanding of this process among different stakeholders in the territory.
- As part of the participatory strategies, social mapping workshops were held, identifying historical flood events through semi structured interviews. Additionally, environmental management informative sessions were conducted within the participation of ethnic groups and the community. More than 1,640 people attended across 53 participatory spaces.

Consultancy  
Contract  
No. 614 de 2018

Resolution 0957  
of 2018 from the  
Environment and  
Sustainable  
Ministry



# TECHNOLOGY



*CityMapper airborne sensor. RDC30 cameras can be seen: five (5) obliques and one (1) nadir.*

Technology

# Crewed aircraft

## Cessna 402B

Aircraft registration number: HK4933. Twin engine type with Supplemental Type Certificate -STC- specifically configured for the installation and integration of remote sensing sensors, with a range of approximately 10 flight hours.

## Piper Azteca PA23

Aircraft registration number: HK4984. Twin engine type, also certified with Supplemental Type Certificate -STC- for the integration of remote sensors with a range endurance of approximately 6 flight hours.

Both aircraft are authorized for specialized aerial operations, holding the corresponding air operator certificates pursuant RAC 138 regulations, Operation Certificate CDO-127, and the permits issued by the Civil Aviation Authority of Colombia.



### Captain Jaime Alberto Hoyos Paternina

Director of Operations at GEOLatam

Fixed wing military pilot, holding a commercial license and flight instructor rating on both single and multiengine aircraft, with over 6,000 flight hours experience

Retired from Colombian Air Force, with extensive experience in special aerial operations (aerial photography and surveillance).

He has held positions as Director of Operations, Head of Training, and Head of Planning in both national and international companies.

**GEO Latam**



Technology

# Leica CityMapper Sensors

The company operates two (2) Leica CityMapper airborne sensors, specifically designed for high precision urban mapping.

The CityMapper is a hybrid sensor that combines Hyperion2 LiDAR technology, it can operate at pulse repetition frequencies up to 2 MHz (two million pulses per second) and extract up to 15 returns per emitted pulse, with one (1) nadir RCD30 camera, and (4) four oblique ones, all **RGB+NIR** RCD30 cameras, with an incorporated PAV100 gyro-stabilized platform.

This combination enables the simultaneous acquisition of multiple datasets. Together with the circular scan pattern, it ensures a uniform distribution of ground points, achieving accuracies of up to 10 cm at a flight altitude of 1,500 meters. This makes it an optimal solution for the generation of 3D urban models and cartography for territorial planning.



Leica Geosystems traces its origins back nearly 200 years to the vision and entrepreneurial spirit of Heinrich Wild, who, in a modest empty mill, developed the T2, the world's first truly portable optical mechanical theodolite.

This is the most advanced airborne solution on the market for the creation of 3D digital city models.

3D mesh of Medellín city, Antioquia, along Ave. 33. Santiago Pulgarín 2022  
©CuatroConceptos



Technology

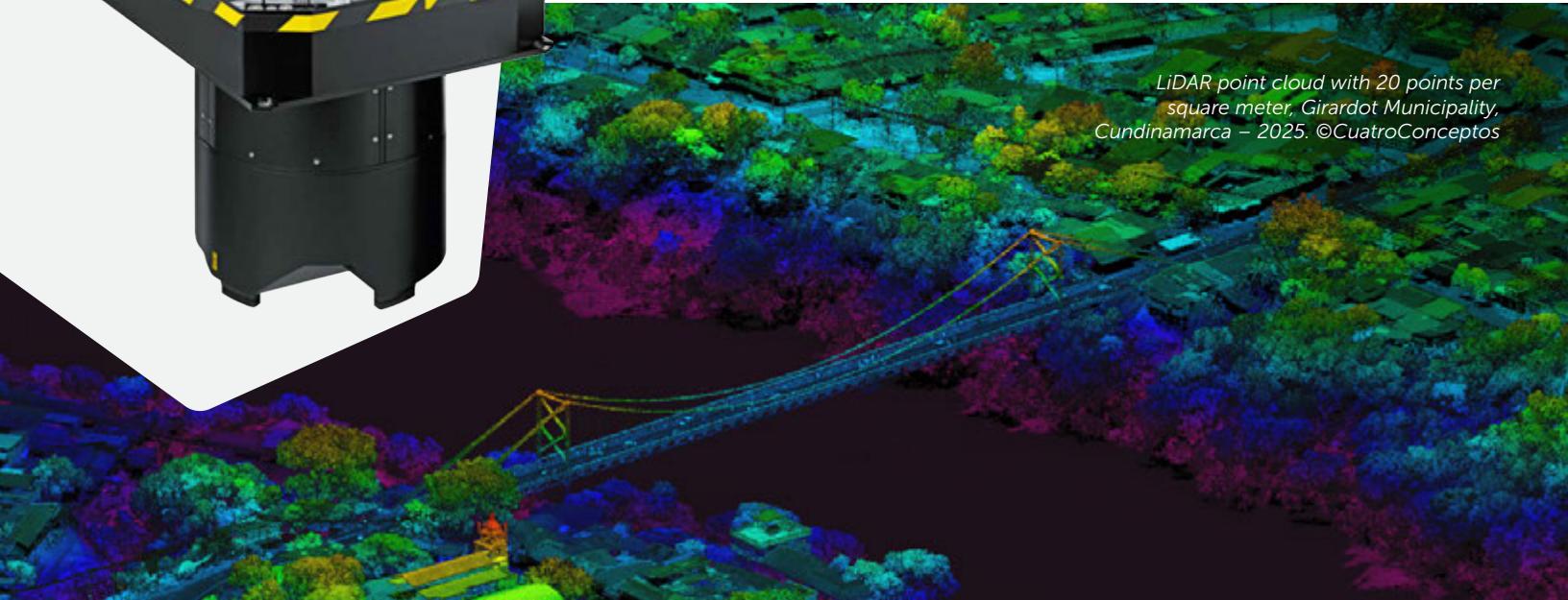
# TerrainMapper Sensor

The company operates a Leica Geosystems airborne TerrainMapper sensor, equipped with a Hyperion2 LiDAR system, capable of emitting up to 2 million pulses per second. The system integrates an RCD30 **RGB + NIR** photogrammetric camera and a PAV100 gyro-stabilized platform, ensuring accurate and stable data acquisition.

It achieves an approximate 10 cm accuracy with an operational flight altitude of up to 1,500 meters above ground level (AGL).

**Leica**  
Geosystems

Leica Geosystems offers complete solutions for capture, analysis, and visualization of geospatial data across a wide range of fields, including surveying and engineering, security, construction, and energy.



*LiDAR point cloud with 20 points per square meter, Girardot Municipality, Cundinamarca – 2025. ©CuatroConceptos*



Technology

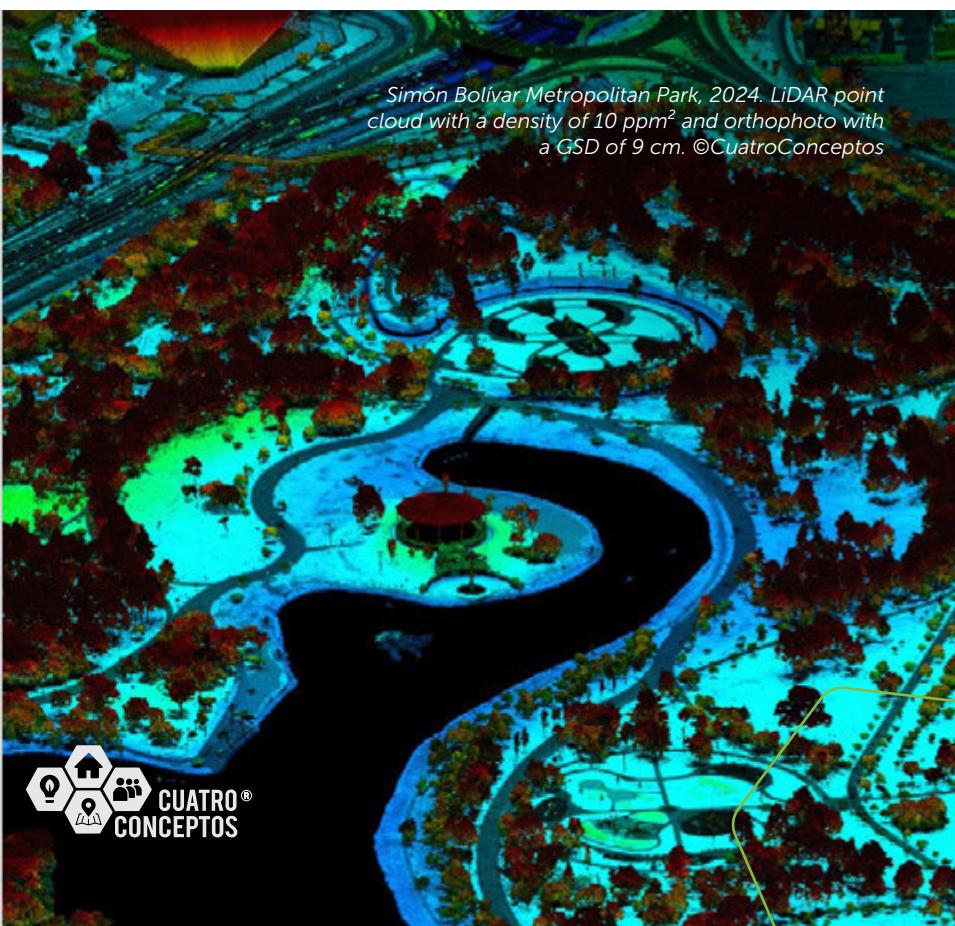
# Airborne Sensor - ALS70HP LiDAR + RCD30 camera

The ALS70HP Airborne LiDAR is a high pulse rate system designed for topographic data acquisition, enabling both urban and rural mapping with a pulse repetition frequency of 500 kHz, at altitudes ranging from 50 to 3,500 meters AGL.

It features an FMC (Forward and Lateral Motion Compensation) system and offers seamless integration with the Leica ALS LiDAR series, enabling the generation of multispectral RGBN (Red, Green, Blue, and Near-/Infrared) images.

This was the first sensor acquired by the company in 2019. Interestingly, the deal was closed with nothing more than a handshake and a signature on a notebook page a genuine gentleman's agreement which, though simple at the outset, was duly honored and subsequently formalized as it should be.

**Leica**  
Geosystems



Simón Bolívar Metropolitan Park, 2024. LiDAR point cloud with a density of  $10 \text{ ppm}^2$  and orthophoto with a GSD of 9 cm. ©CuatroConceptos

Technology

# MultiHaz Bathymetric Sensor

The NORBIT iWBMS-Long is a high resolution bathymetric mapping system, capable of capturing data from depths of 20 cm to 600 m, using two operating frequencies (200 kHz and 400 kHz) and a sound velocity profiler that reaches depths of up to 300 m.

It is equipped with a dual frequency, dual antenna geodetic geodetic navigation system (TRIMBLE) and an inertial system, the POS MV Wavemaster II (APPLANIX), ensuring precise motion compensation and accurate georeferencing during data acquisition.

**NORBIT**  
- explore more -

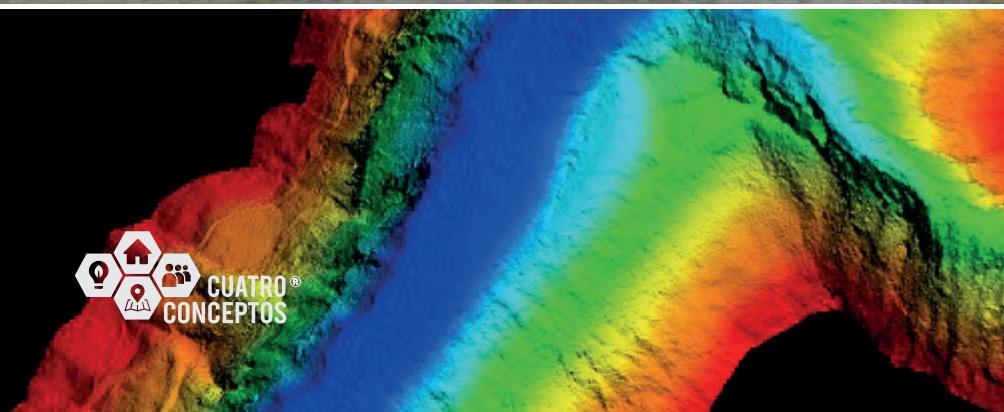
This sensor also played a key role during Ituango Hydroelectric Emergency Project, where it was used to generate the digital bathymetric model of Cauca river. During data collection, due to a minor oversight during assembly, the equipment nearly got lost in the turbulent waters. Fortunately, the company's CEO managed to grab it just in time as it had already come loose from its fastenings. What could have ended as a major loss instead turned into a memorable anecdote.



Hidroituango Dam Spillway, 2019  
©CuatroConceptos

Digital bathymetric model generated over the Hidroituango sector. 2019  
©CuatroConceptos

 CUATRO<sup>®</sup>  
CONCEPTOS



# Remotely Piloted Aircraft System (RPAS) and Zenmuse Sensors

DJI Matrice 300 RTK drone offers flight endurance of approximately 55 minutes. It is designed to carry RGB or LiDAR sensors, equipped with an anti collision system, RTK positioning with GNSS support, dual vision sensors in six directions, and an adjustable detection range between 1 and 40 m.

Compatible payloads include:



- **Zenmuse L1:** It integrates an RGB camera and LiDAR system with a ranging capacity of 3 cm to 100 cm, supporting up to 3 returns and a rate of 240,000 points per second. It provides a horizontal accuracy of 10–50 cm and vertical accuracy of 5–50 cm. It also incorporates an Inertial Measurement Unit (IMU) to calculate drone orientation.
- **Zenmuse P1:** A photogrammetric camera capable of capturing one image every 0.7 seconds during flight. It features a full frame sensor with low noise and high sensitivity, covering up to 3 km<sup>2</sup> in a single mission and delivering centimeter level accuracy.

For cartographic projects involving areas of less than 400 hectares, drone based data acquisition with these sensors achieves centimeter precision comparable airborne platforms data acquisition.



Technology

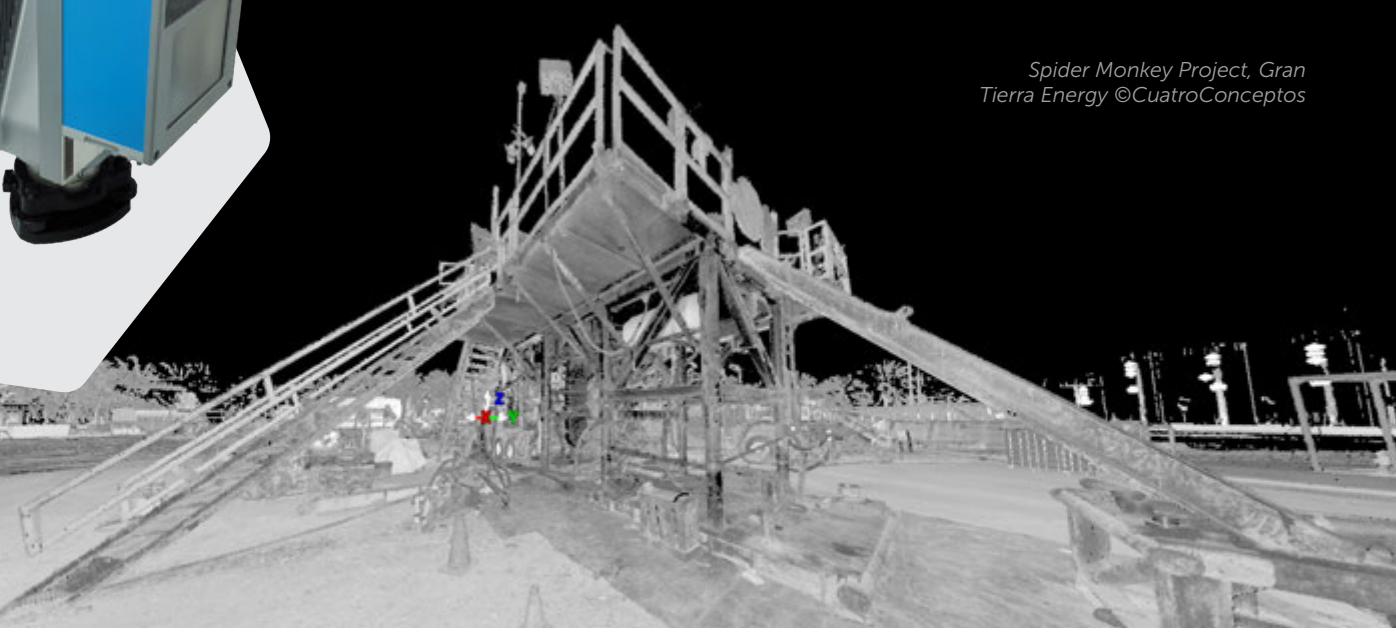
# Terrestrial Laser LiDAR Sensor

Terrestrial Laser Z+F – Imager 5010 Class 1 (eye safe, according to EN 60825-1 standard), is a terrestrial 3D laser scanner with high precision, reliability, and accessibility. It has a range of up to 187 meters, with an acquisition rate of more than 1 million (Hz) pulses per second, achieving accuracies of 3 millimeters.



It is an electrical engineering company founded in 1963 in a former coal mine by two friends, Hans Zoller and Hans Fröhlich. Since its inception, the company has emphasized innovation, developing new ideas, and transforming creative solutions into mature products, offering control panels and laser measurement technology.

Spider Monkey Project, Gran Tierra Energy ©CuatroConceptos



LiDAR Point Cloud, District Administrative Center, Bogotá ©CuatroConceptos



# Geodetic and Topographic Equipment

- **Trimble R750:** GNSS receiver used in static and kinematic surveys, with real time Trimble RTX corrections, enabling surveys and spatial data capture with centimeter level accuracy. It supports multiple constellations: GPS | GLONASS | Galileo | BeiDou | QZSS | NavIC | SBAS.
- **Trimble DA02:** Next generation GNSS receiver offering scalable accuracy from submeter to centimeter level, integrating real-time GNSS corrections. Designed to work with Trimble Catalyst subscription service.
- **Digital Level STEC DLS-03:** Offers a measuring range from 2m up to 110m with an accuracy of up to 0.3mm per kilometer of double run leveling.
- **Leica Geosystems DNA03:** High precision topographic instrument, ideal for first order leveling, with an accuracy of up to **0.3 mm/km** in double run leveling and a measurement range of 100 m.



The company owns four 3 meter geodetic invar staffs, manufactured with an alloy of minimal thermal expansion, ensuring high accuracy measurement, even under extreme temperature conditions. These are the only ones of their kind in Colombia.

# SERVICES

# SERVICES



Cuatro Conceptos business group empowers the full value chain of territorial public policy implementation, driving transformative solutions that foster the sustainable development of both urban and rural territories.

# Geomatics and Surveying

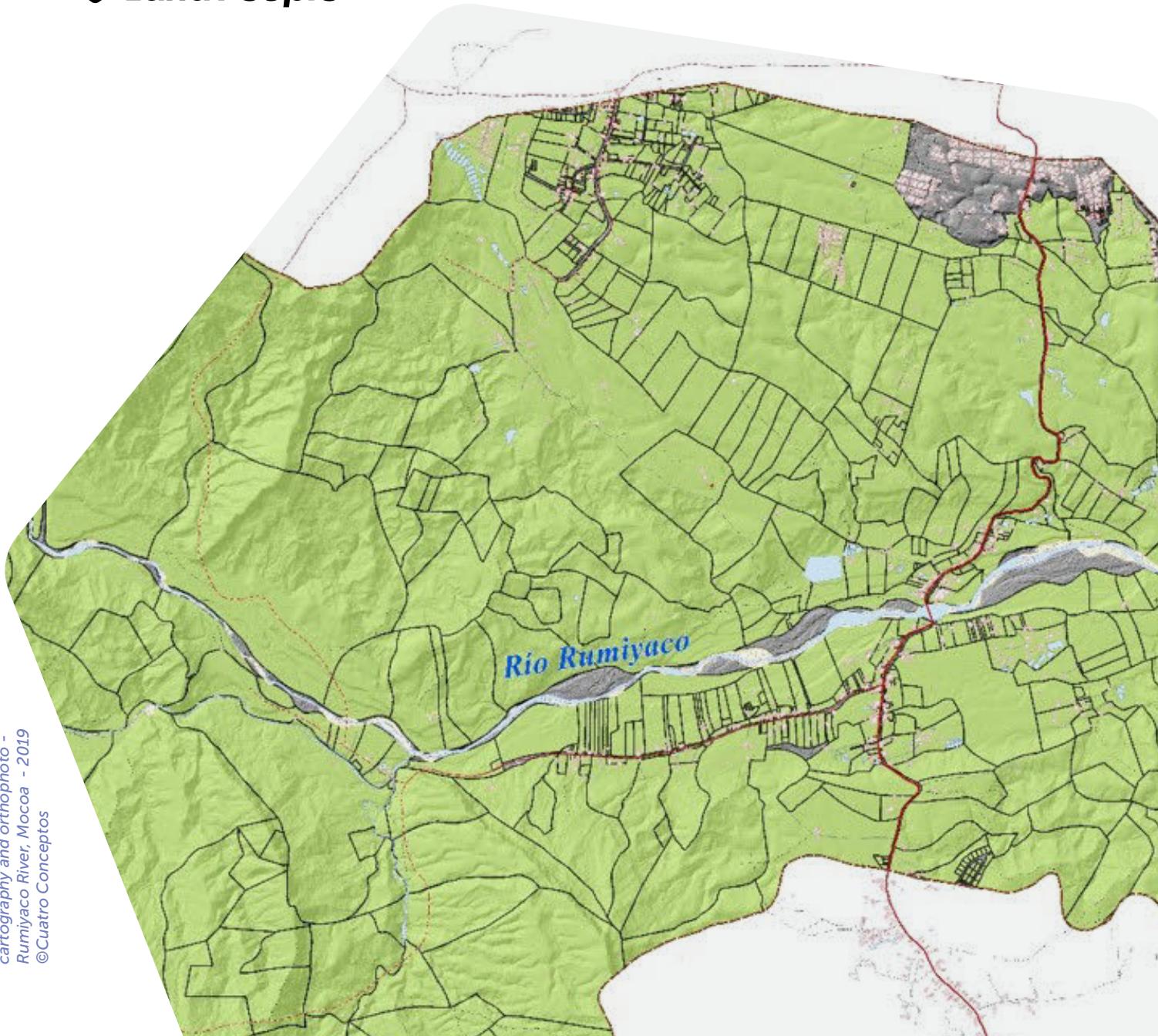
The company leverages on state of the art technology and a highly qualified team to provide comprehensive services in **geomatics, surveying, geodesy, and land measurement**. Its expertise spans include the production of precise geographic data through topographic, geodetic, and photogrammetric surveys, tailored to both urban and rural environments. Capabilities include generating Digital Terrain Models (DTMs) from LiDAR and radar sensors, processing orthoimages from satellite and airborne imagery, and geographic databases through photogrammetric restitution and cartographic digitization.

Within the field of geodesy, the company supports the maintenance and densification of geodetic networks by implementing high precision instruments, ensuring the accuracy and spatial consistency of all its products and services.



# Cadastral and Real Estate Management

Through one of its subsidiaries, LandPeople, the business group has extensive experience as a multipurpose **cadastral operator**, having carried out the update of more than 30.800 property units in the Tourist, Cultural, and Historical District of Santa Marta, integrating physical, legal, and economic components. The group also possesses the technical and operational capabilities to provide technological solutions aimed at the efficient management of cadastral maintenance, ensuring the integrity, security, and quality control of cadastral databases.



# Social Management

Building on experience from projects such as the establishment of CORS stations, cadastral management in the Tourist, Cultural, and Historical District of Santa Marta, and the delimitation of the hydrological buffer zone in Mocoa, Putumayo, the group has consolidated a social approach that merges **technological expertise with the ancestral wisdom** of local communities. This integration ensures that social and community dimensions are genuinely embedded in every project.

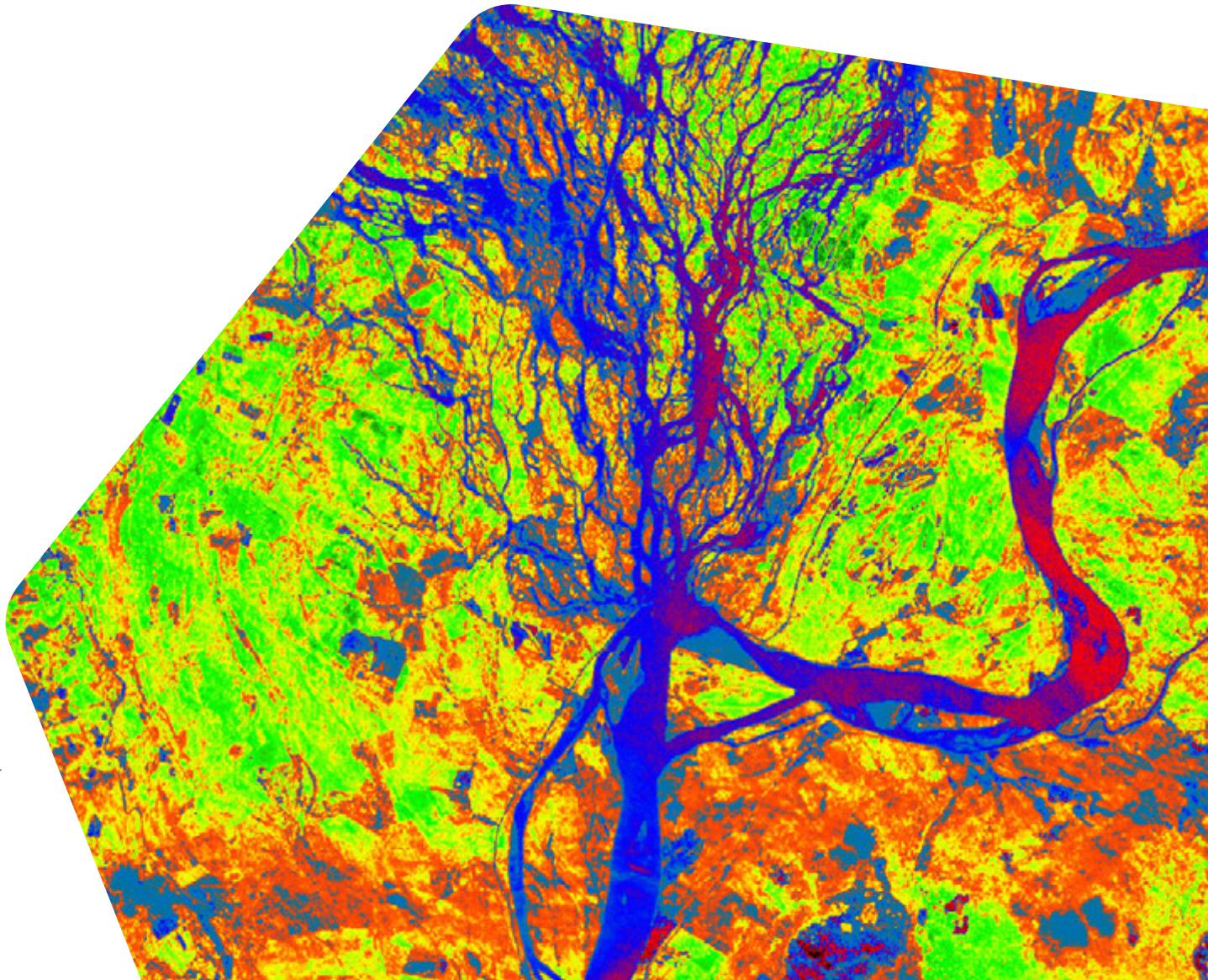
Within the framework of social management, we value territorial experiences as essential inputs for understanding the dynamics of each region. Our work fosters the **social appropriation of knowledge, strengthens local capacities**, and bridges technical solutions with the realities of the communities we serve.



# Environmental and Productive Land Use Planning

In accordance with the Colombian regulatory framework applicable to municipal, departmental, and watershed land use planning, Cuatro Conceptos has the technical capability and experience to lead **diagnostic, formulation, and consensus-building** processes for various planning instruments, integrating both **environmental and productive determinants**.

Additionally, **risk management** has been effectively incorporated into consulting projects, as demonstrated by the Hydrological Buffer Zone Delimitation Study for the municipality of Mocoa city (2018), carried out in compliance with Resolution 957 of 2018. The company also stands out for **generating cartographic inputs for basic hazard studies**, in accordance with Decree 1807 of 2014..



Sediment flow in the Ayapel Swamp  
resulting from the Caregato rupture.  
San Jacinto del Cauca, 2023.  
©Cuatro Conceptos

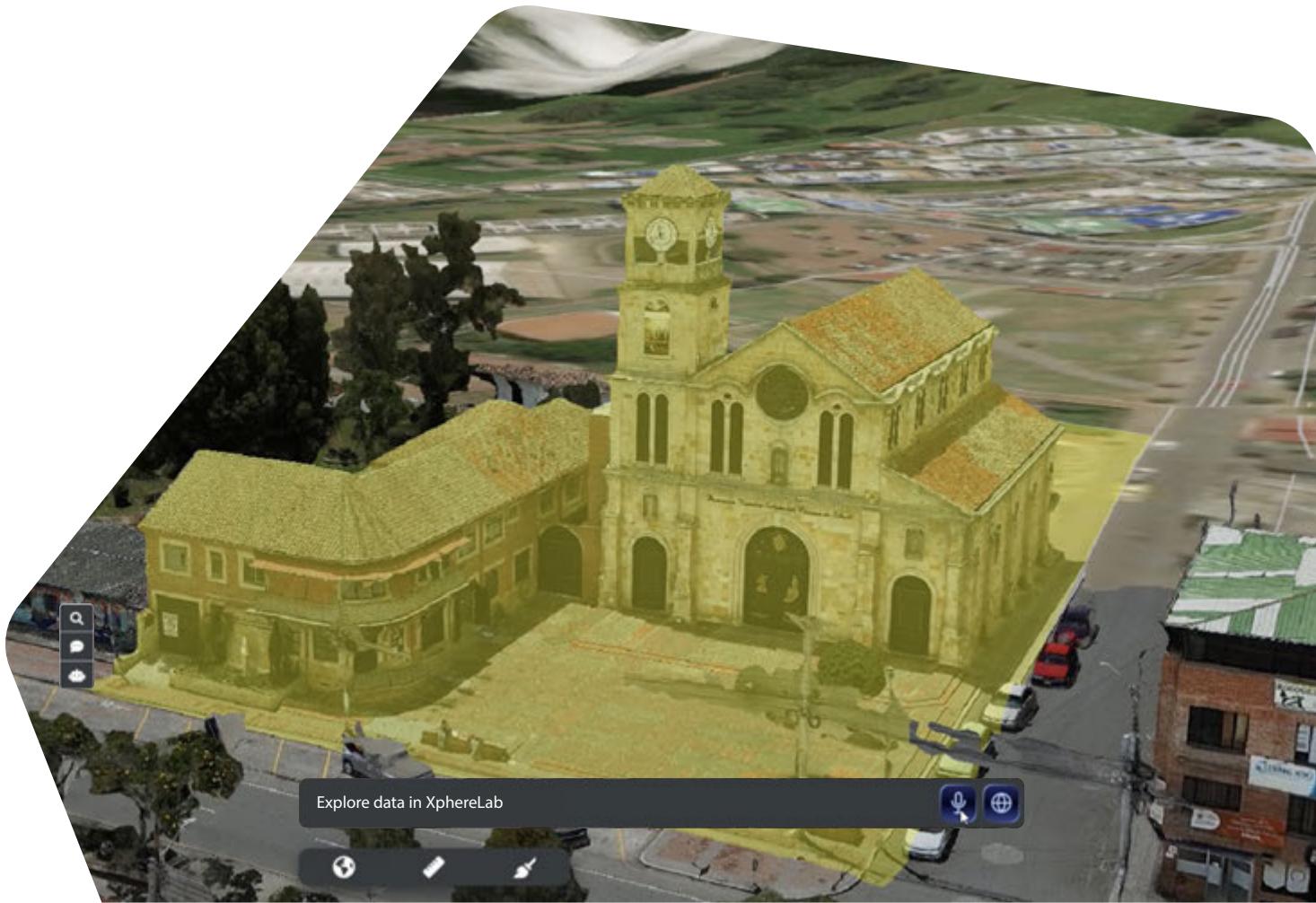
# Xpherelab – Software Factory

*Transforming Data into Intelligent Decisions*



XphereLab is a technological solution developed in Colombia, designed to tackle complex challenges in territorial planning and strategic decision making through the intensive use of geospatial data. With advanced capabilities for **deployment, visualization, querying, extraction, geoprocessing, and three-dimensional analysis enhanced by Artificial Intelligence (AI)**, XphereLab enables **seamless integration and digital modeling of information, fostering interoperability across data, technologies, and systems**, and significantly improving the understanding of complex environments.

Our mission is to facilitate management, integration, and advanced analysis of geospatial data through an innovative, dynamic, and **user friendly** platform designed to optimize decision making processes in key sectors. We are committed to delivering a robust and flexible solution that drives advances infrastructure management, territorial planning, engineering, environmental sustainability, disaster risk assessment, and other key strategic areas.



# Carbono & Bosques

The Ecosystems and Global Change Research Center, Carbono & Bosques (C&B), is an organization that, since 2002, has been dedicated to advancing research, consulting, and training activities on issues related to ecology and global environmental change. Its members are forestry specialists with broad extensive experience in **assessment and valuation of goods and services provided by forestry and land use activities**.

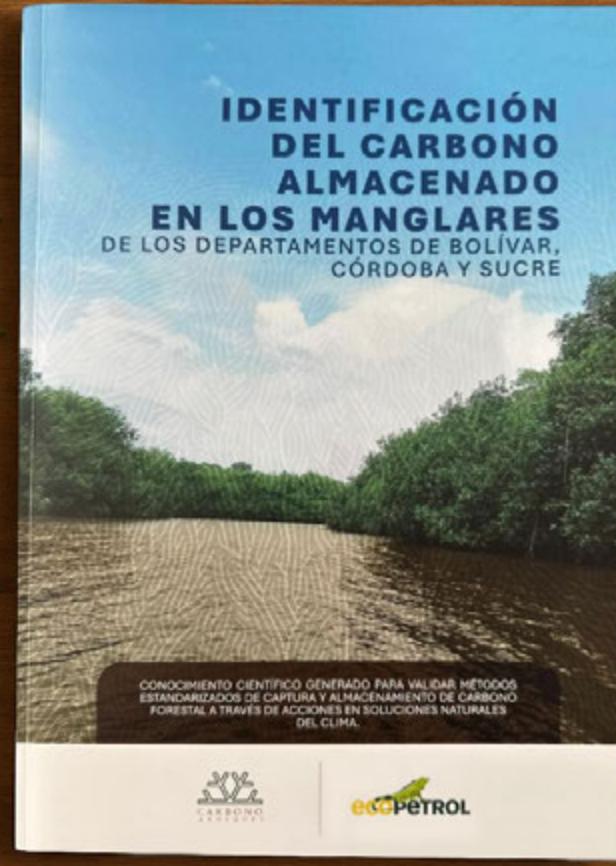
After a significant trajectory contributing to the development of environmental sciences and being recognized as a reference research group on climate change issues in Colombia, Carbono & Bosques applies state of the art knowledge and **generates scientific research for the technical and economic assessment of CO<sub>2</sub> capture and dynamics associated with Land Use Changes in the Tropics, Payment for Environmental Services (PES) schemes, and for the design of efficient and Sustainable Production Systems with an economic, environmental, and social approach.**



**CARBONO & BOSQUES**

Centro de Investigación

Research publication developed under the partnership between C&B and Ecopetrol, focused on assessing the potential of mangrove ecosystems for greenhouse gas (GHG) capture, storage, and flux dynamics.



# Our Talent

At Cuatro Conceptos, we are committed to the well /-/being and holistic development of our team, recognizing that their physical and emotional health is the cornerstone of our success in every endeavor.

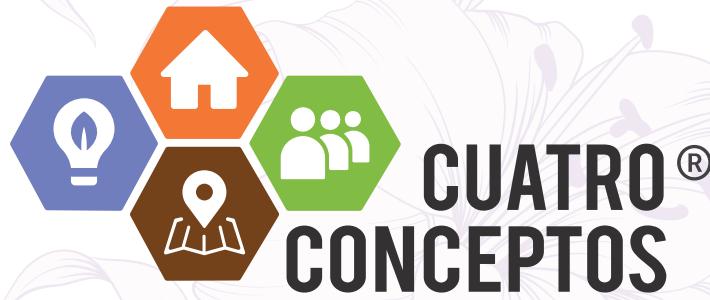
We prioritize the health and safety of our collaborators by implementing policies and protocols that ensure safe working environments, both in the office and in the field. We foster a culture of self care and prevention, and our commitment to Occupational Health and Safety is reflected in the planning of every operation.

That is why we promote and support activities that strengthen physical and mental well being, such as marathons, recreational events, and continuous training programs. We also provide additional benefits such as study loans, among others.

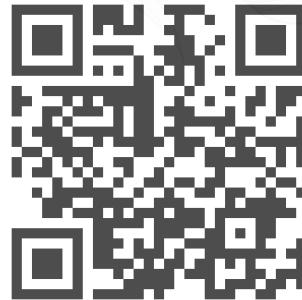


We do not only create cartographic products we are a company that believes in and trusts the potential of our people. We recognize that each team member goes through their own transformation process, like a chrysalis ready to unfold the best of itself, and we are committed to accompanying and empowering that growth.





Purpose Driven Technology



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[www.cuatroconceptos.com](http://www.cuatroconceptos.com)

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