



Company Overview

www.iptsat.com – info@iptsat.com



Main Activities:

1. Remote Sensing

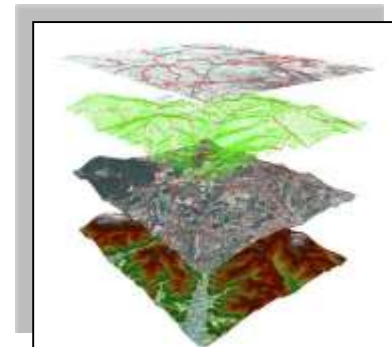
- Distribution of medium, high and very high resolution satellite images
- Proximity remote sensing using radio controlled UAV drones
- Remote sensing data processing and classification services
- Solutions for environmental monitoring, land planning and control
- Supply of data and value-added services

2. Geographic Information Systems

- Esri software sales and support
- Customization of GIS, WebGIS, Mobile GIS solutions (Android, iOS)
- Creation of geographical databases
- Supply of geographical datasets
- Cartography processing and updating

3. Training

- Software Esri Courses (ArcGIS for Desktop, ArcGIS for Server, Geodatabase)
- Territorial Information Systems Design Courses
- Remote Sensing Courses
- Digital cartography courses
- Personalized courses and on-the-job training





Main Clients

- Comune Roma, Fiumicino, Monterotondo, Lanuvio, Provincia di Roma
- Provincia di Frosinone, Regione Lazio, Provincia di Firenze,
- Regione Calabria, Regione Molise
- CNR, ENEA, INGV, ISPRA, CREA, INEA
- Parco Nazionale di Abruzzo, Lazio e Molise
- Presidenza del Consiglio dei Ministri – Dipartimento di Protezione Civile
- Ministero dell'Ambiente
- ISPRA
- ARSIAL, Consorzio di Bonifica della Capitanata
- Università di Roma "Tor Vergata"
- Università di Roma "La Sapienza"
- Università degli studi di Firenze
- Università di Napoli "Federico II"
- Università della Tuscia
- Università dell'Aquila
- Azienda Ospedaliera Verona
- ACS Advanced Computer System Spa
- ENEL
- Elsag Datamat spa
- ALTRAN Spa
- Cap Gemini Italia Spa, Selex ES

Awards received



Partner





Markets

IPTSAT distributes satellite images Planet , Quickbird, GeoEye, Ikonos, Pleiades, Aster, Spot, Landsat 7-8 and provides data processing in a GIS environment providing the various reference markets Information about assets and the environment in near real time.

Remote sensing data processing and classification services, such as

image analysis and interpretation

application of geometric and radiometric corrections

production of thematic maps and derived maps

cartography creation and updating

DEM processing (Digital Elevation Model)

Solutions with high added value for

the study and control of environmental, agricultural, vegetation and forest resources

the urban planning and infrastructure monitoring

the identification of building and environmental abuses

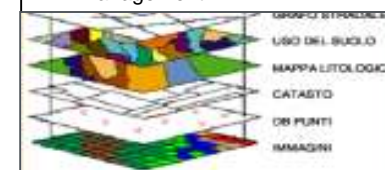
the conservation and management of archaeological, landscape, cultural and tourist assets

support for emergencies caused by natural disasters and environmental disasters

Proximity remote sensing using radio controlled UAV drones

GIS

- Geographic Information Systems
- GIS Applications for territory management



Cartography

- Satellite data
- Aerial/satellite orthoimages
- Technical Cartography
- Land Use and Land Cover
- 3D models



Environment

- Environmental quality analysis
- Subsidence;
- Coastal zone management
- Land Use Planning
- Watershed Management
- Disaster Management
- Environ. Capacity Building



Risk Mgt, land Protection

- Landslide;
- Forest fires;
- Floods;
- Geohazard;



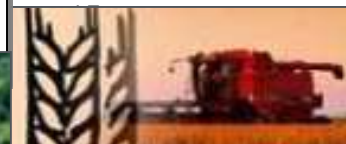
Forestry

- Forest Mapping
- Forest Inventories
- Biomass and Carbon Stocks
- Biodiversity Inventories



Agriculture

- GIS Solutions
- Parcel Reference Systems
- Subsidy Controls
- Assistance to Administrators



Infrastructure

- Transportation Systems
- Utility Management
- Facility Management
- Communication Solutions
- Location Based Services





Remote Sensing

Satellite image distributor Planet, Quickbird, GeoEye, Ikonos, Pleiades, Spot, Landsat 7-8

Satellite	Launch Date	Swath Width (km)	Output Res (mt)	Max View Scale	Bands	Stereo
Ikonos	Sept 24,1999	11,3	1pan - 4MS	1:2,500	pan + 4MS	y
QuickBird	Oct 18,2001	18	0.6pan - 2.4MS	1:1,500	pan + 4MS	n
SPOT 4-5	May 3, 2002	60	2,5pan- 5,10,20MS	1:5,000	pan + 4MS	y
SPOT 6-7	Sep 9, 2012	60	1,5pan- 6MS	1:5,000	pan + 4MS	y
WorldView-1	Sep 18, 2007	17,7	0.5	1:1,250	pan	y
RapidEye	Aug 29, 2008	77	5	1:12,500	5MS (no pan)	n
GeoEye-1	Sep 6, 2008	15,2	0.5pan-2MS	1:2,500	pan + 4MS	y
WorldView-2	Oct 8, 2009	17,7	0.5pan-2MS	1:1,250	pan + 8MS	y
Pleiades-1A	Dec 16, 2011	20	0.5pan-2MS	1:1,250	pan + 4MS	y
Pleiades-1B	Dec 2, 2012	20	0.5pan-2MS	1:1,250	pan + 4MS	y
Kompsat-2	Jul 28, 2006	15	1pan - 4MS	1:2,500	Pan + 4MS	y
Kompsat-3	May 17, 2012	16	0.5pan - 2.8MS	1:1,250	pan + 4MS	y
Kompsat-3A	Mar 25, 2015	12	0.4pan - 2.8MS	1:1,250	pan + 4MS	y
Th1	Aug 20, 2010	60	2pan - 5,10MS	1:10,000	pan +4MS	y
Triplesat	Jul 10, 2015	23,4	0.8pan - 3.2MS	1:15,000	pan + 4MS	y
WorldView-3	Aug 13, 2014	13,1	0.3pan-1.2,1.6,2MS	1:1,000	pan + 16MS	y

The European satellite program Copernicus, formed by a constellation of 6 satellites called "Sentinels", represents the cornerstone of the European Union's efforts to monitor the Earth and its ecosystems through advanced satellite remote sensing systems.

The Copernicus program makes an enormous amount of information on our planet available to citizens, public authorities, scientists and businesses, in a complete, **open** and **free** way.



GIS consists of a series of tools for acquiring, storing, extracting, transforming and visualizing spatial data by associating one or more alphanumeric descriptions to each geographical element.

The diagram illustrates the integration of various data sources into a central GeoDatabase for representation of the real world. The central component is a light blue cylinder labeled "GeoDatabase".

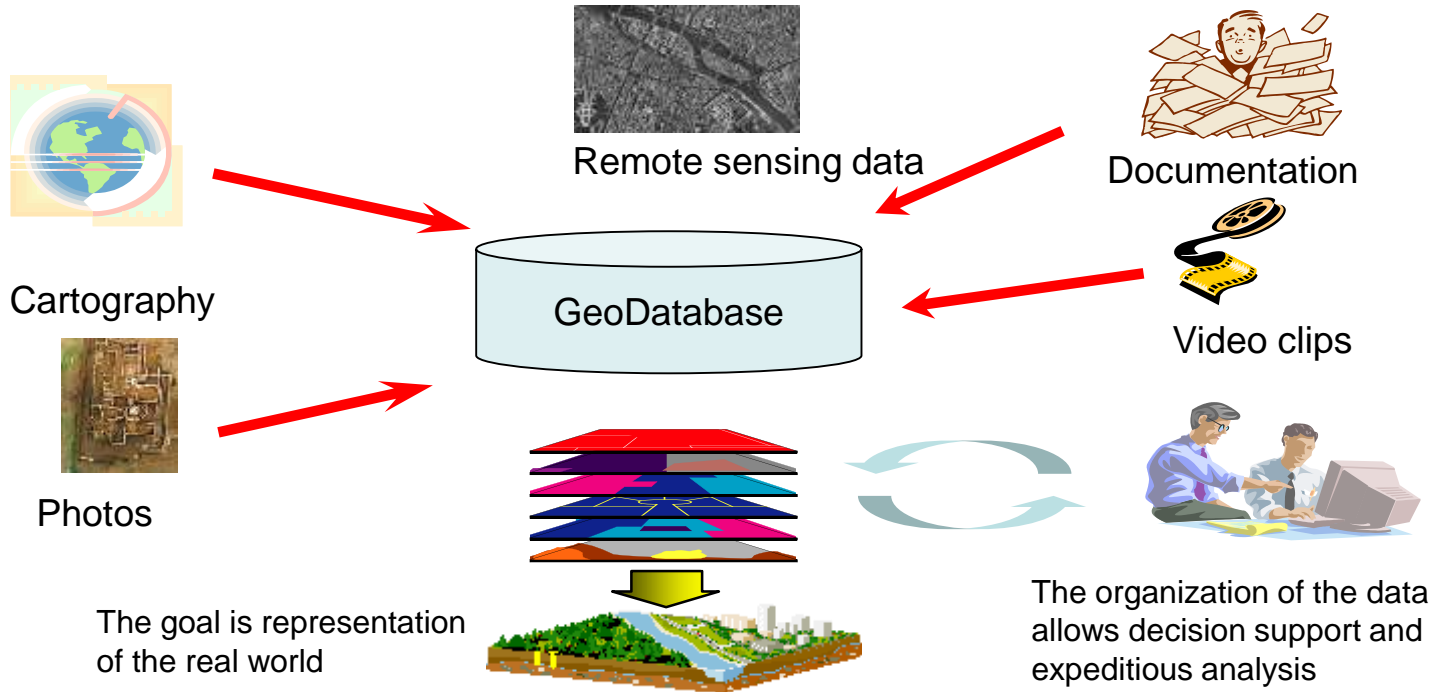
Data sources feeding into the GeoDatabase include:

- Cartography**: Represented by a globe icon with a red arrow pointing to the GeoDatabase.
- Photos**: Represented by a photograph of a building, with a red arrow pointing to the GeoDatabase.
- Remote sensing data**: Represented by a grayscale aerial image, with a red arrow pointing to the GeoDatabase.
- Documentation**: Represented by a stack of papers and a person's head, with a red arrow pointing to the GeoDatabase.
- Video clips**: Represented by a film strip icon, with a red arrow pointing to the GeoDatabase.

The output of the GeoDatabase is a 3D visualization of a city landscape, showing buildings, roads, and greenery. A yellow arrow points from the GeoDatabase to this 3D model.

Below the 3D model, a text box states: "The goal is representation of the real world".

To the right of the 3D model, there is a circular arrow icon and an illustration of two people working on a computer. A text box below this illustration states: "The organization of the data allows decision support and expeditious analysis".





Geographic Information System

GIS systems have always found application in numerous sectors (Business, Natural Resources, Security, Transport, Networks and Telecommunications...) increasingly constituting an essential element for the creation of modern and effective application solutions for the Public Administration and Enterprises.

Services

- *Territorial planning, urban planning, infrastructures, public works and transport*
- *Environmental monitoring, study and management of natural resources*
- *Emergencies and security*
- *Tourism, Archaeology, Cultural and Landscape Heritage*
- *Facility Management, Property Management, GeoMarketing, Utilities and Telecommunications*

Development and updating of Geographical Databases based on geospatial information and on esri and/or open source technology, both for Desktop and Web environments.



GIS Solutions - Environment and Biodiversity

Those who deal with natural resources, such as biologists, agronomists, foresters, agricultural operators, geologists, engineers..., thanks to the development of customized GIS solutions (integrated by geospatial data and in particular remote sensing) can for example:

- *manage, analyze and model information*
- *create statistics, estimates, simulations and make forecasts*
- *store, share, publish data*
- *optimize the management of natural resources*
- *support the conservation of the environment and biodiversity*



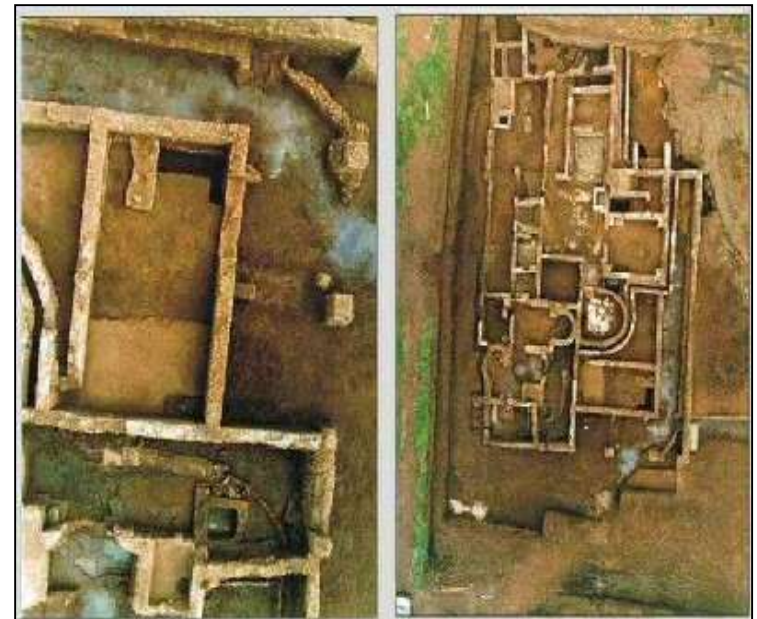


GIS Solutions - Archeology and Cultural Heritage

GIS systems and drone and/or satellite remote sensing are fundamental tools both for citizens interested in obtaining information on cultural heritage, and for all scholars and professionals (archaeologists, superintendences, museum administrations...) who they deal with the management and monitoring of cultural and archaeological heritage.

Some activities that GIS solutions and remote sensing can support:

- *optimization of processes related to the cataloging and dissemination of information relating to cultural heritage*
- *analysis for surveillance and monitoring of cultural heritage over time*
- *normalization of information, for their correct use and sharing*
- *research and localization of archaeological sites*





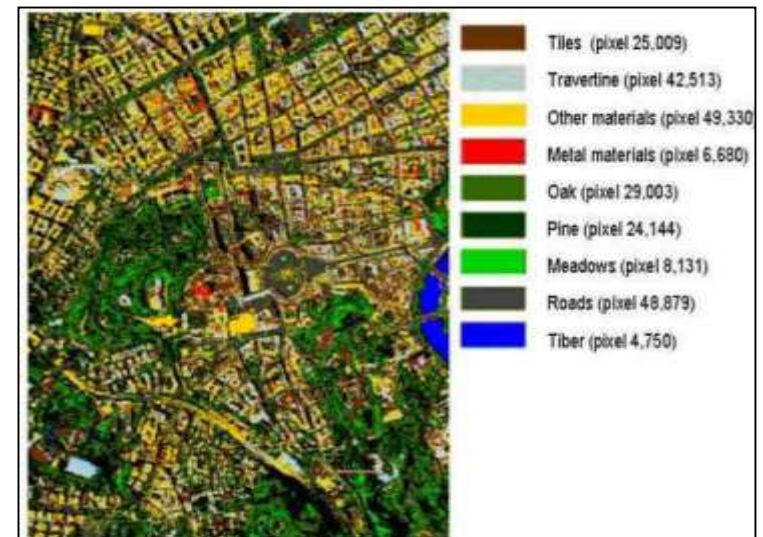
GIS solutions - Territory and transport

Territory and transport

The knowledge of the territorial characteristics and their evolution over time is the starting point for optimizing the management of the same.

To this end, the territorial study and planning processes can be supported by GIS solutions (such as geographical databases and territorial information systems), as well as by satellite data (historical and updated), in particular for

- *creation, updating and archiving of paper and digital cartographic and map information and/or any other geographical and alphanumeric data*
- *consultation, query and modification of territorial data also via the web*
- *census and control of building abuses (Multitemporal Analysis of urban areas)*
- *direct production of municipal extracts and certifications*
- *control, optimization of routes and transport*
- *Real-time publication of vehicle status via GPS*





GIS Solutions - Emergency and Safety

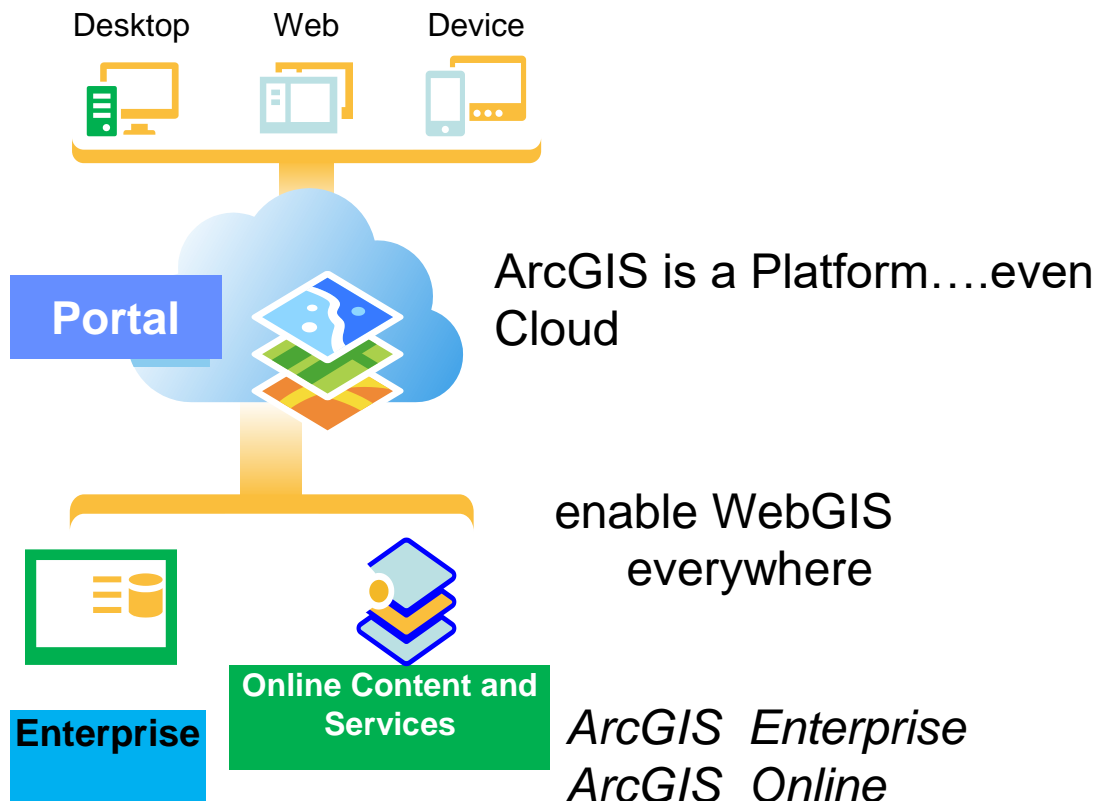
GIS and both historical and updated geospatial data are able to provide powerful tools to help public administrations and companies interested in prevention and consequently in the management of all phases of emergencies (prevention, mitigation, response and recovery) deriving from disasters natural and environmental disasters. Some activities they can support: mapping and modeling of potential disasters to visualize vulnerable areas, critical situations and potential damage





Iptsat is reseller and partner of Esri Italy

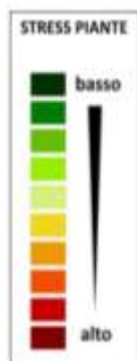
ArcGIS: a platform that allows you to add value to the decision-making and operational processes of organizations through the application of geographical knowledge.



IPTSAT PRODUCTS- FAROS (FARM OBSERVATION SYSTEM)

FAROS is a platform for the automatic production of data for farmers and agricultural technicians.

FAROS massively uses Sentinel 2 data and is accessible both through the web and through a mobile web_app, so as to allow access to the platform via smartphone and tablet even when working in the field. Quick and easy access. The time interval between information acquisition, processing and access can make the difference between making a right or wrong decision. Agronomists and farmers need information in their hands quickly, so they can fit with their workflows and can focus on identifying seasonal crop anomalies so they can take immediate action.





What is BioGIS 360



BioGIS 360 is a tool for global biodiversity monitoring, mapping and reporting to support companies to incorporate biodiversity considerations into the decision making plan.

BioGIS 360 has been developed by iptsat with the scientific support of Department of Environmental Biology (DEB) at Sapienza University of Rome

Iptsat is also the technical contact point of the Italian environmental agency (ISPRA) regarding the development of the National Biodiversity Network which represents the collection Italian hub of flora and fauna data.



BioGIS 360: Analysing Potential Area for new business

The layer list widget provides a list of operational layers about biodiversity including rasters showing **potential area for new solar and wind infrastructures**. In fact, all natural protected and urban area have been substracted from the original Italian surface. In the remaining areas have been calculated the power solar index, the wind speed and wind power density. Comparing these index with all other biodiversity layers allow users to have a 360° panorama of new business areas.

(Solar and Wind raw data acquired respectively from SOLAR GLOBAL ATLAS <https://globalsolaratlas.info/> and WIND GLOBAL ATLAS <https://globalwindatlas.info/>)



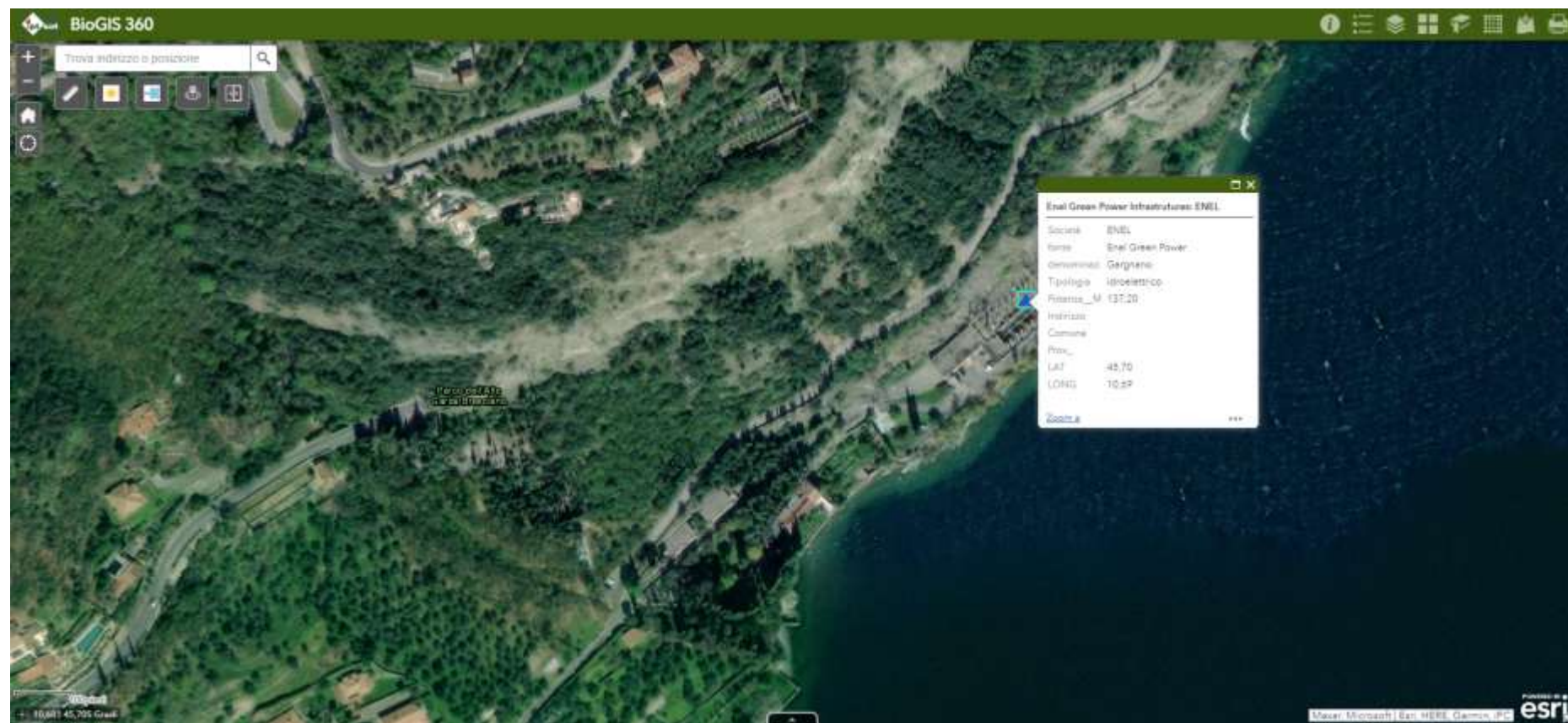
The solar&wind biodiversity report widgets (group B) allows users to define an area of interest and analyze the potential impacts of wind & solar infrastructures on different biodiversity level (areas and species). Results can be shared via a printed report or CSV file.



BioGIS 360: satellite imagery to support screening of new business areas (to be developed)

Furthermore, on demand the satellite imagery widget can be added to the webApp.

The widget may provide satellite imagery at required resolution (up to 30 cm) to support land monitoring and biodiversity impact at all decision making process.



BioGIS 360: satellite imagery to support screening of new business areas

Satellite imagery widget can offer up to date imagery to detect and observe land change to support project plan, audit and decision making process.

2019

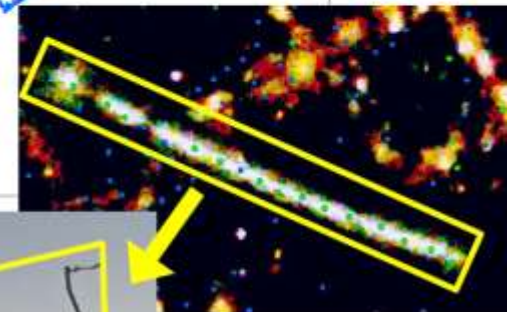
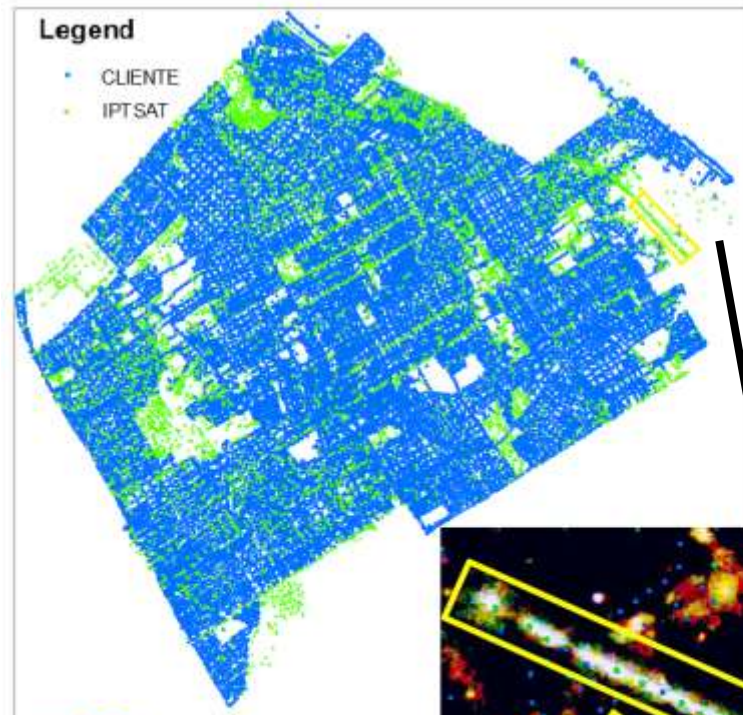
2003





IDENTIFICATION AND CENSUS OF LIGHT POINTS

This technology and our tested procedures allow us to:
map from scratch or update old lamppost censuses accurately and quickly (over 80%)



EXAMPLE OF UPDATING THE CENSUS OF LIGHT POINTS



THE LIGHT POINTS PREVIOUSLY SURVEYED BY THE CUSTOMER ARE IN GREEN.



THE NEW LIGHTING POINTS MAPPED BY SATELLITE TO COMPLETE THE CENSUS ARE IN PINK.



IN RED AND ORANGE, THE NEW MAPPED LIGHT POINTS, CLASSIFIED ACCORDING TO THE CATEGORY THEY BELONG TO (PUBLIC, PRIVATE, INDUSTRIAL, ETC.).



Cartografia a colori



Cartografia b.n.



Immagini satellitari

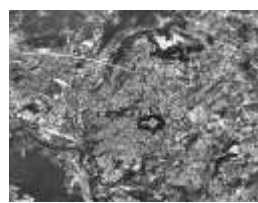
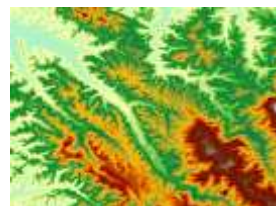


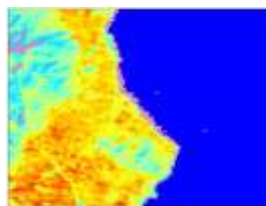
Foto Aeree



DTM



Classificazioni



Distribuzione temperature



Immagini multispettrali



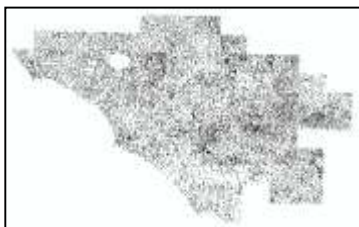
CTR



Rete stradale



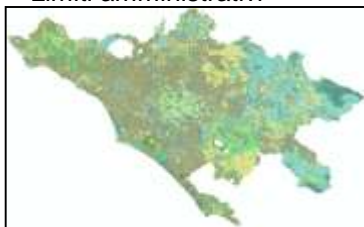
Limiti amministrativi



Toponimi



Rete irrigua



Carta Agroforestale



Carta Geologica



1:50.000

1:25.000



Training

iptsat has created specific training programs to offer to its customers, aimed at preparing technicians capable of fulfilling the increasingly complex tasks of Planning, Management, Development and Control of territorial resources.

Thanks to its ten-year experience, iptsat is able to propose the solutions and training courses that best adapt to the growing demand of the numerous sectors of the public administration and of companies with strong skills in computerized land management and environmental monitoring.

The **iptsat** courses provide for an accurate theoretical preparation and practical exercises with real data. The activities take place at our headquarters in specially equipped classrooms, or, if required, at the customer's premises.

Introduction to Geographic Information Systems

- *ArcGIS 10.x Desktop (basic level)*
- *ArcGIS 10.x Desktop (level advanced)*
- *ArcGIS 10.x Sever*
- *Creation and Management of Geographic DBs*
- *Training on the Job*
- *Personalized courses*

Remote sensing training courses

- *Introduction to remote sensing*
- *Remote Sensing*
- *Training on the job*
- *Personalized courses*

Training courses Design of Territorial Information Systems (S.I.T.)

- *Territorial Information Systems Design (S.I.T.)*
- *Training on the Job*
- *Personalized courses*

Digital cartography training courses

- *Digital cartography*
- *Training on the Job*
- *Personalized courses*

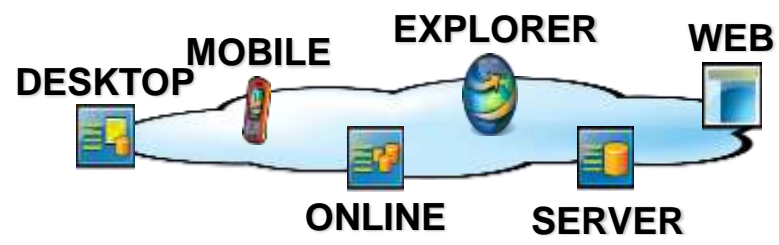




Hardware: client workstations, server workstations, input devices, output devices.



Software: Desktop gis clients, mobile gis, server applications, applications for customizing interfaces, applications for sharing data, web applications and methods.



Data: basic data, thematic data.



People: interdisciplinary skills (experts in topography and cartography; IT experts; application experts).



Methods and procedures: set of operational tools for geographic analysis and information processing.





Contacts:

Sales Area
IPTSAT s.r.l.
Via Sallustiana, 23
00187 Rome
Italy
Phone: +39 06 42041717
Fax: +39 06 42041703
E-mail: commerciale@iptsat.com
Web : <http://www.iptsat.com>