Report of Uruguay
The National Spatial Data Infrastructure

Prepared for

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Abstract

Uruguay is located to the southeast of South America between the parallels 30 and 35 South latitude and meridians 53 and 58 West Longitude. To the North and Northeast has borders with Brazil, to the South and West with Argentina.
We are 3,151,662 Inhabitants and the total area is about 176,215 square kilometers.
This report aims to inform on the development and management of Geographic Information in the Oriental Republic of Uruguay, on state level.

National Mapping Agency
Servicio Geográfico Militar, SGM (Military Geographic Service)
www.sgm.gub.uy

Mission

To Ensure the preparation, updating, conservation, distribution and evaluation of cartographic products, in order to support the essential mission asigned to the Army by the law, supporting the integral planning of the Security and **National Development activities.**

To **Supervise, control and approve all the publications** generated by the State and Private Organisms.

To establish, preserve and improve **National Geodetic Networks** of triangulation (now GNSS), leveling, gravimmetry and Earth's magnetism.

To integrate study commissions and **characterization of our international limits** and to take part of the **representation of the country in all the activities of its speciality** and commitments derivatives of international character.

To Establish, to maintain and to operate a **Geographic Information System (GIS)** to support management and decision making.

We have been participed with several projects and achievements, some of them are:

Global Mapping, ISCGM http://www.iscgm.org/
Version 1 was published, Version 2 will be available before end of this year.

Geocentric Reference System for the Américas, SIRGAS, http://www.sirgas.org/
There is an Official Data Processing Centre at SGM, we have been processed 74 CORS of the Continent (Brazil, Argentina, Uruguay, NASA, IGS).
Weekly Net solutions are prepared for the centers of combination and analysis.

Other Related Institutions

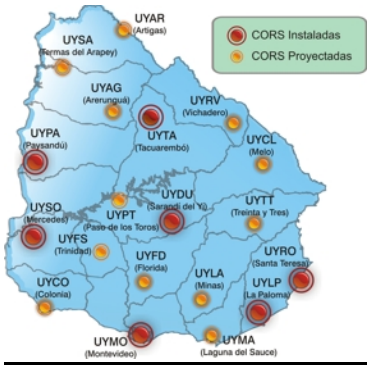
Pan American Institute of Geography and History, PAIGH http://www.ipgh.org/english/default.htm

CPIDEA http://www.cp-idea.org/

President of National Branch is the SGM Director from PAIGH and national representative to CPIDEA. Both institutions are providing a great support to our Service.

Geosur, http://www.geosur.info/geosur/ is a great project to which we are committed for their support to enable us about the implementation of several Geoservices.

Geodetic Infraestructure



Uruguayan CORS

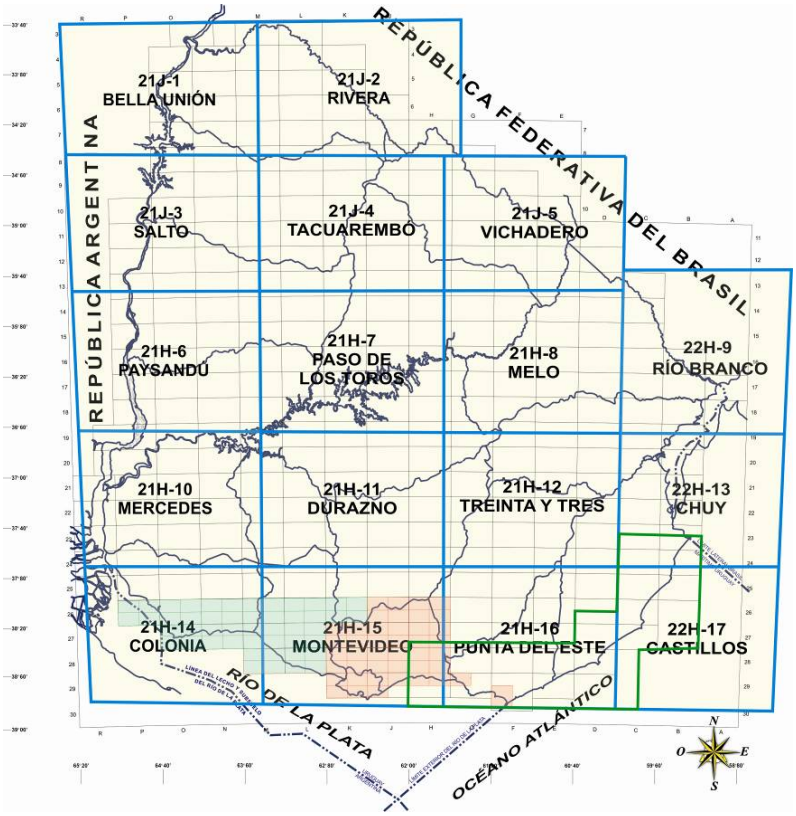
Spirit levelling lines

Gravity Stations

There is an Observatory to monitor variations of Mean Sea Level at the Coast Atlantic (City and Port of La Paloma - Rocha)

SGM Publications and Services:

Series: 1/750.000 - 1/ 250.000 (17 maps-1/50.000 (303 maps)-1/25.000 (south part, in green and red).



There is also a National Plan of Ortophotoimages at an early stage of implementation.

Available and Free Services

GNSS network
Post procesing files
RTK From the uruguayan CORS Net REGNA, NTRIP protocol.

WMS (Web Map Service)
http://servicios.sgm.gub.uy:8080/sgm

Country mapping scale 1.1.000.000.
303 topographic maps (all country) scale 1:50,000.
Topographic maps 1:25.000 South part of country is in progress
18 departmental capitals scale 1:10,000 , and other cities and towns at the same scale 1/10.000.

Search metadata service through the Geonetwork Software, which allows us to have the metadata and services of the SGM. It may also consult the geo bibliography and old maps.
Remains available to users a map viewer and images.

WFS (Web Feature Service) : basic mapping to scale 1.1.000.000.

SDI-Uruguay

The Spatial Data Infrastructure for the Oriental Republic of Uruguay (SDI-Uy) is an initiative that rises from the need to streamline the management of geospatial information, seeks to promote primarily and sustainable economic development, and territorial management. In the final analysis improve decision-making.
Also teduce efforts and costs due to duplication; provide better data, support the creation of new business opportunities in the industry of spatial information are also importanat targets.

AGESIC is the "Agency for the Development of Government Electronic, Management and Information Society and Knowledge", where this project has recently begun to be developed.

It is an agency under the Presidency of the Republic and communicates with the Executive Branch through the Office of Planning and Budget (OPP).

It aims to ensure improved services to citizens, using the possibilities offered by Information Technology and Communications.

Web services implementation of Geographic Information from a central node, in order to help its users access and use will be available next year.
Structure of the beta GI viewer, by AGESIC search for : http://www.agesic.gub.uy

Nowdays it works through a repository of Provisory Geographic Data.

Main problems to overcome

Interoperability of data.
Capacity building is a major critical issue.
There is still no final agreement defining the responsabilities of the institutions involved.