#### **SMART SURVEYORS FOR LAND AND WATER MANAGEMENT**

**CHALLENGES IN A NEW REALITY** 



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Data privacy protection and geographic data use as a response to COVID19 in Uruguay







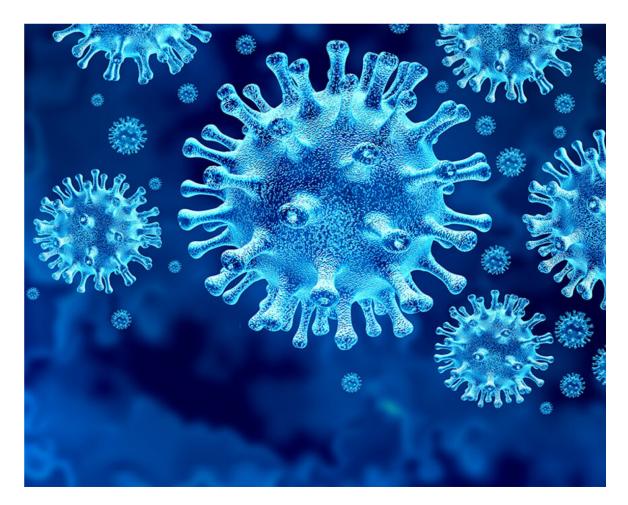








- > Pandemic in Uruguay
- > Introduction
- > Loction Data Use
- > Legal Aspects
- > Conclusions

















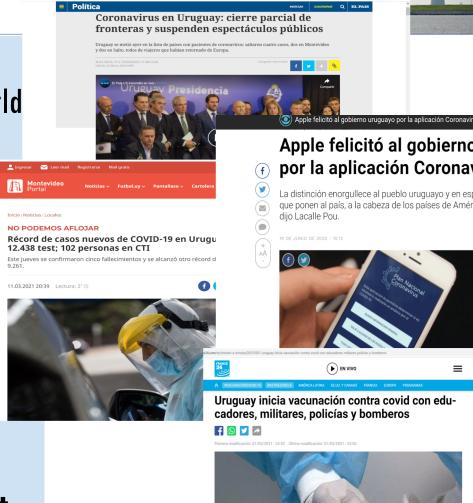
#### **SMART SURVEYORS FOR LAND AND WATER MANAGEMENT**

**CHALLENGES IN A NEW REALITY** 

### Introduction

> The spread of the COVID-19 or SARS-CoV-2 virus force the World Health Organization in March 2020 to declare a pandemic.

- It is a problem that exceeds the sanitary issue.
- > Phisical contact is the main source of infection
- > Physical distance is the most effective tool to fight against pandemic.
- > The location of a virus carrier is particularly relevant.











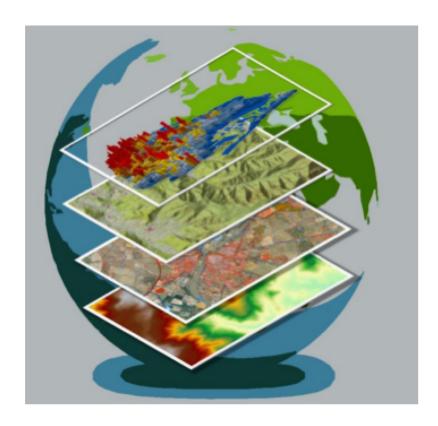








## Introduction



- Strengths of the GIS.
- Proposal to investigate geographic factors related to the spread of the virus.
- Restrictions on access to data reason for reflection between the use and the privacy / confidentiality / protection of personal geographic data.













### **Location Data Use**

- Geographic information in surveillance, modeling and response to the pandemic.
- Different forms of use of geographic data in Uruguay
  - Location in apps
  - Geoinformation in the fight against the pandemic









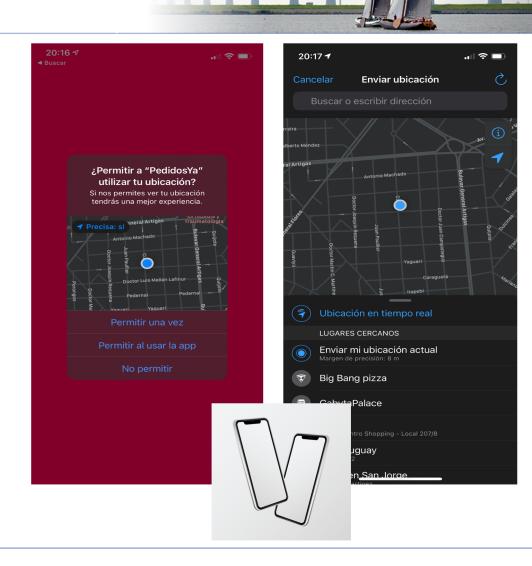






### Location Data Use

- A wide number of mobile applications that require the geolocation of the devices as an input to carry out their function.
- Frecuently, the users themselves are not aware of its use.
- "LaLiga": Spanish football application case











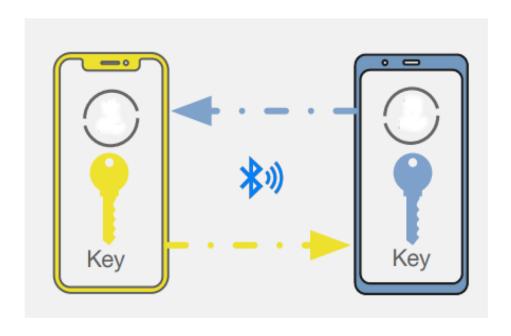




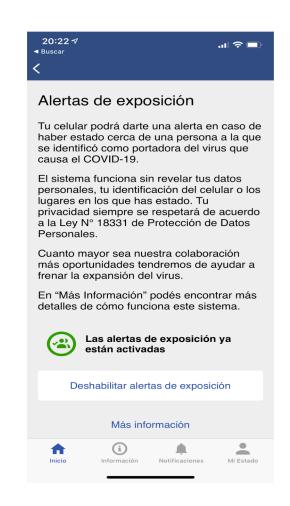


### **Location Data Use**

Exposure alerts

























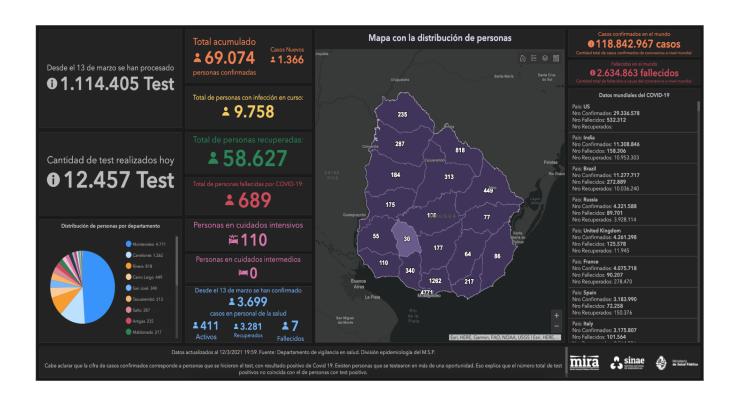


#### Location Data Use

#### COVID-19 mapping:

- MSP collects the information and then SINAE publishes it
- Georeferencing of cases that is not published

Public viewer



















# Legal aspects of personal and sensitive data

- → The protection of personal data has been regulated by various international treaties (PRE "Internet" phenomenon)
- → There is no international institution that "manages" data privacy on a global scale.
- → To analyze international law regarding the protection of personal data, we must turn to comparative law on **a regional** (eg EU) **and national** (eg United States / China) scale.

















# Legal aspects of personal and sensitive data

- European Union: positions itself on the human right to data protection
- > United States: has a sectoral base by focusing on consumer protection
- > China: it is also sectorial but through Cybersecurity regulation

#### DATA PRIVACY IS ON THE PUBLIC AGENDA

However, several countries at the national level as well as the world in its global concept do not have specific regulations that ensure all aspects of privacy and data security in these

times of pandemic. (Cascón, 2020)







## Legal aspects: Uruguayan personal data protection

REPUBLIC CONSTITUTION (Art 7 y 332)

LNo. 18331
PERSONA DATA
PROTECTION LAW

Decreto del PE No.414/2009

- Human right
- personal data is "... any type of information that can directly identify us or makes us identifiable ..." as (name, address, telephone, identity card, fingerprint, membership number, student number, a photograph or even DNA)
- > sensitive data is: "personal data that reveals racial and ethnic origin, political preferences, religious or moral convictions, union affiliation and information regarding health or sexual life".







## Legal aspect: Uruguayan personal data protection

- Health is a specially protected data: our law empowers health actors to collect information provided that they comply with professional secrecy principles and with the express consent of the person involved
- Exceptions:
- → General interest reasons
- → for health personal data when its communication is necessary for health reasons, emergency or to carry out epidemiological studies

... The hoders identity will be preserved through appropriate dissociation mechanisms ...



















The spread of infectious diseases is a spatial process; therefore, geospatial data, technologies, and analytical methods play a critical role in understanding and responding to the COVID-19 disease pandemic.

#### Legal aspects

**Location Data:** 

- ✓ Personal data category
- ✓ Human right

Localization of an infected person:

Personal data category specially protected by personal data national law that demands a double requirement for its dissemination:

#### **CONSENT EXPRESSED AND WRITTEN**

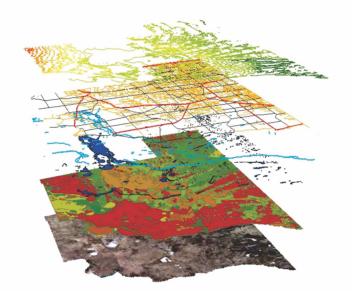
Therefore, Uruguay has national regulations that strongly protects and ensure the protection of individual and health data.





#### Geographic data - spatial analysis tool to support decision making

Protected in Uruguay, since the anonymity of the affected persons is maintained.



While this is a strength, it can also be a weakness, as it limits the generation of specific investigations.

This impact can be minimized by providing these data with a higher level of disaggregation.









#### Geographic data - proximity alert applications

Registration of contacts by bluetooth is a very advanced technique and works adequately for tracking the infected and possible infections

It is a recommended tool to be used in several countries, even if they do not have specific national regulations that protect the privacy of personal data. They comply with individual privacy standards and, in particular, with Uruguayan Law high standards.

**WEAKNESS:** MASSIVE USE NEED.

This fact can be a problem, because it requires mobile phones that support this technology and users who must know how to use them properly.





It is neccesary to carrying out strong communication campaigns, training plans and training, "call center" to canalize users questions.

ACADEMY HAS A LOT TO CONTRIBUTE IN THIS REGARD.





