UN-GGIM | United Nations Commitee of Experts on Global Geospatial Information Management

UN-GGIM INTERNATIONAL FORUM ON GEOSPATIAL INFORMATION AND SERVICES FOR DISASTERS, 4-5 AND 8 SEPTEMBER 2016, BRIDGETOWN BARBADOS

Collaborative site for disaster response

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DE ESTADÍSTICA Y GEOGRAFÍA

Background

Over the past three decades, the frequency of natural disasters has increased worldwide, especially in certain regions, such as the Caribbean and the Pacific.

Additionally, risk exposure has increased with the growth of urbanization and concentration of people and economic activities in disaster-prone areas.

Background

When disaster strikes or when it can be foreseen, **geospatial information becomes a critical asset** for actions that mitigate its effects. This information must be accessible and with quality enough to offer the best response.

Background

To ensure the availability of this information, a working group was formed within the Specialized Technical Committee on Basic Geographic Information, one of 37 corporate bodies of the National System of Statistical and Geographic Information. As a result, **INEGI has put into operation a collaborative site for disaster response**, where the different Units of the Mexican State exchange information to perform their functions more efficiently.

The site is at
http://geoweb.inegi.org.mx/SitioIntercambioDesastres/abrirAreaIntercambio.do

Geographic and Environmental National Subsytem

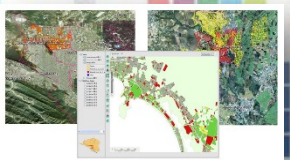
- Emissions, Waste and Hazardous Substances

- Land Use, Vegetation and Forest Resources

- Climate Change

- Basic Geographical Information

- Cadastral and Registration Information



- Water

- Rural and Urban Development

- Energy Sector Information

Operation, structure and contents

The WEB site is a restricted access site, for the moment, for users in several government agencies; those related to the production of geospatial and statistical information which is relevant for disasters to those directly in charge of the emergency response.

Once an authorized user is given access to the main page, **several sections are presented**:

Web Geoservices

- ❑ **Discovery**
- ❑ **Viewing and Consultation**
- ❑ **Discharge**
- ❑ **Direct Access**

Employment of Standars OGC:

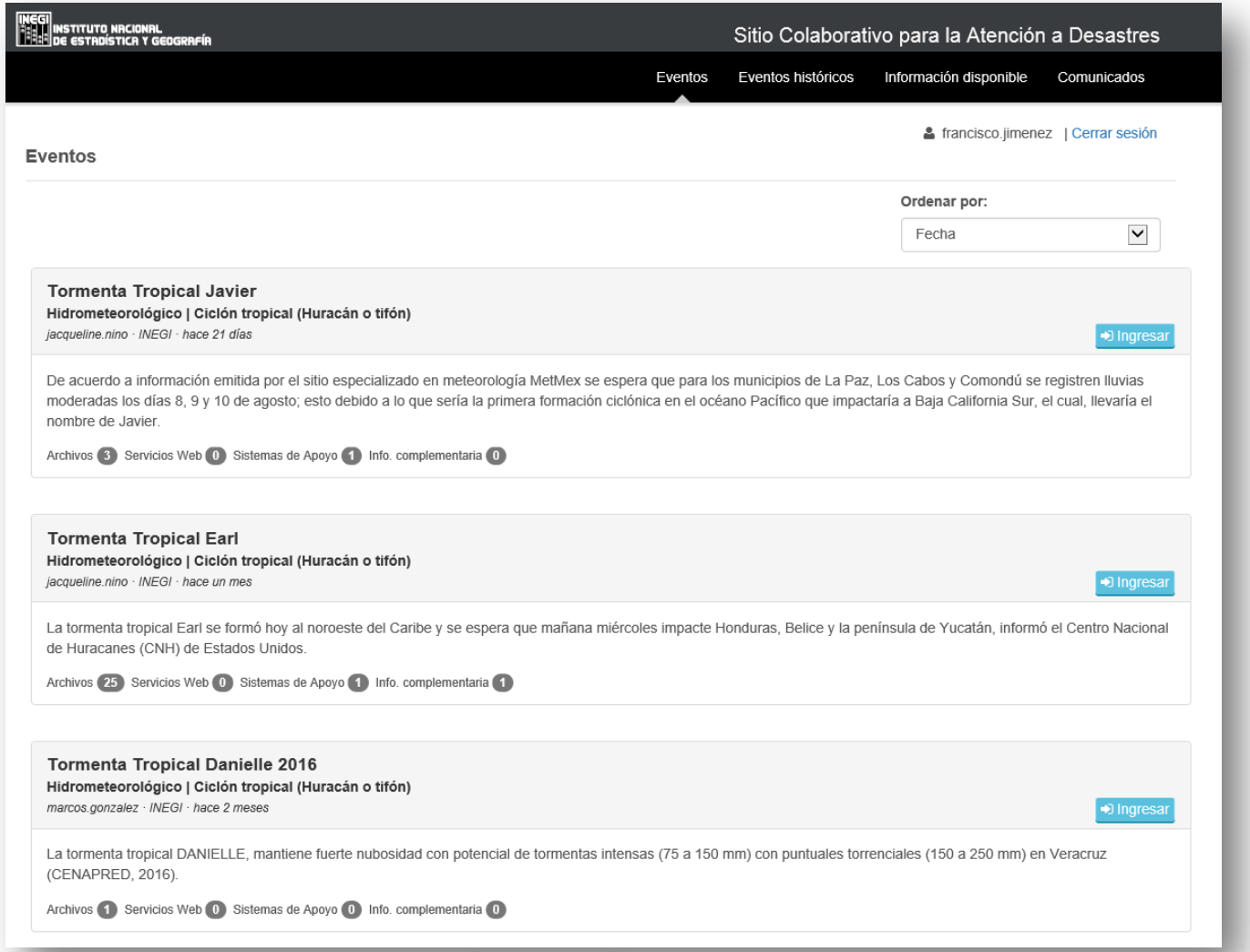
- WMS
- WCS
- WFS

Permanent base layers and by phenomenon or event

Events

In this section, there is **information related to disaster events in which the response is going on**, or occurred recently.

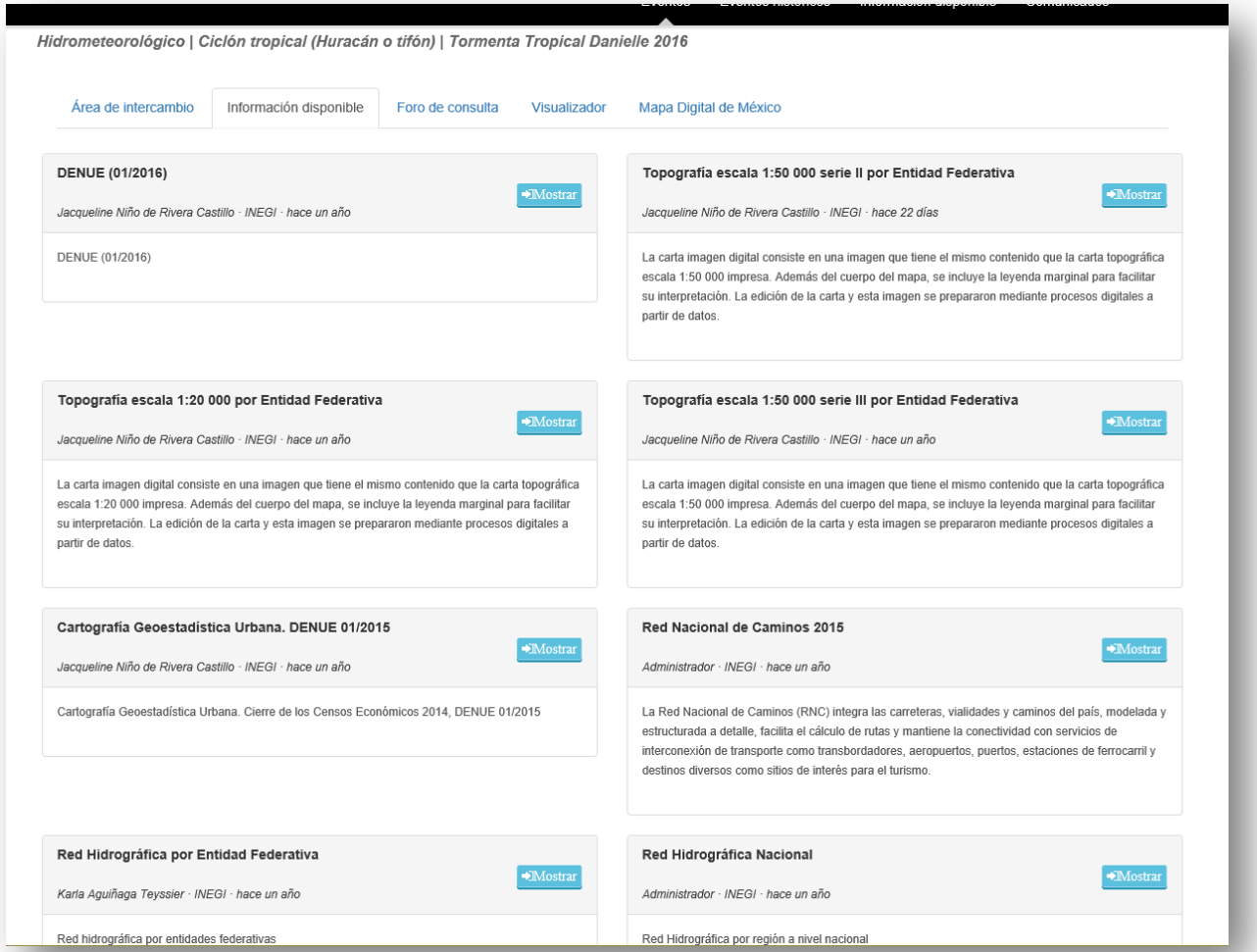
Each event can be considered as a “subsite” inside of the site. Access is given to relevant data sets, either through links to file download or the URLs to Web Map Services.



Events

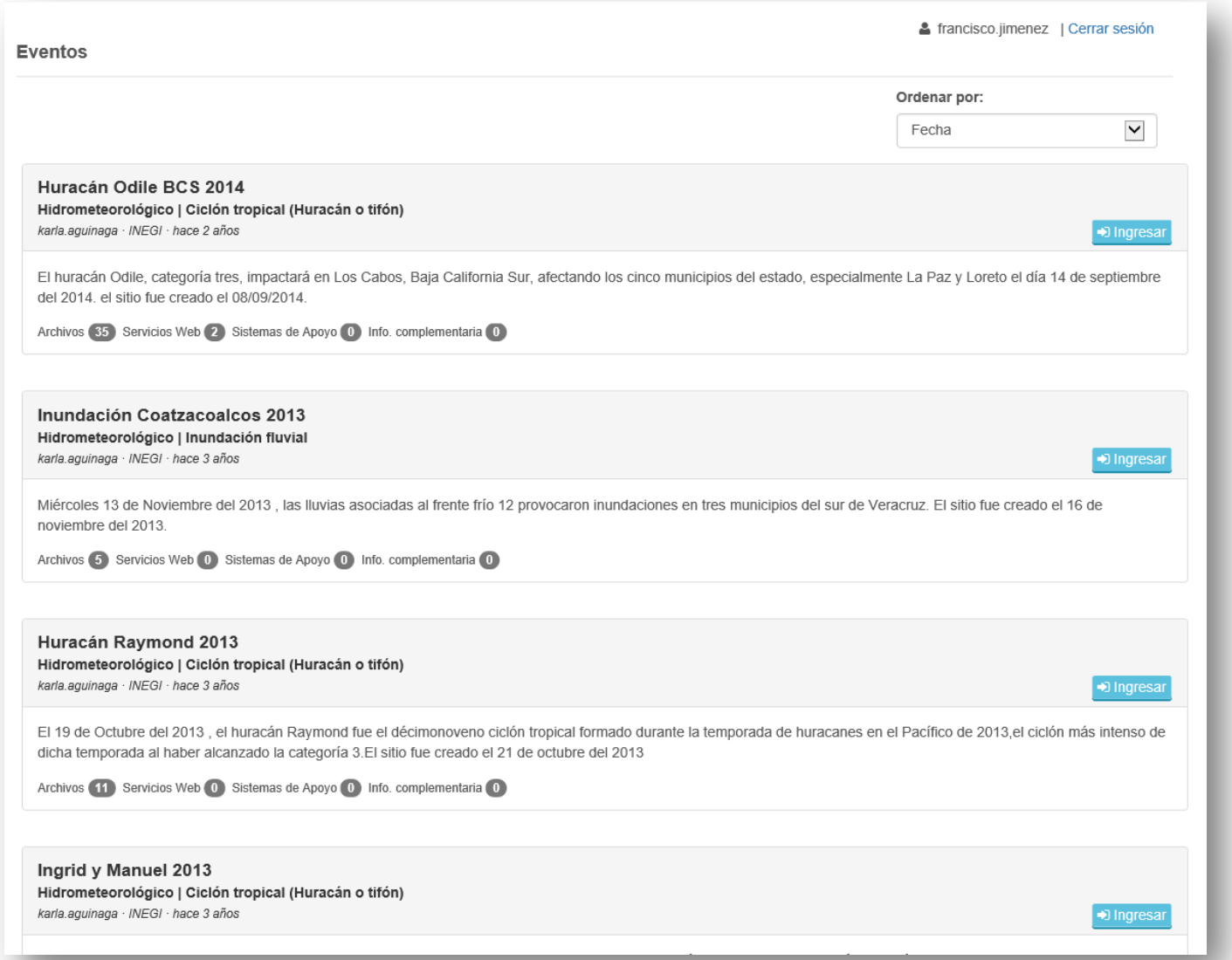
Examples are **Population (Census) data at the block level for towns or cities in the affected area, Hydrographic Network, Road Network, and Satellite Imagery**, previous to the event, and whenever possible in the hours or days after the event, so that the damaged areas and features can be located.

For each event, a message board is also created, so that several users can also exchange comments, questions, etc. There is also a section for data visualization.



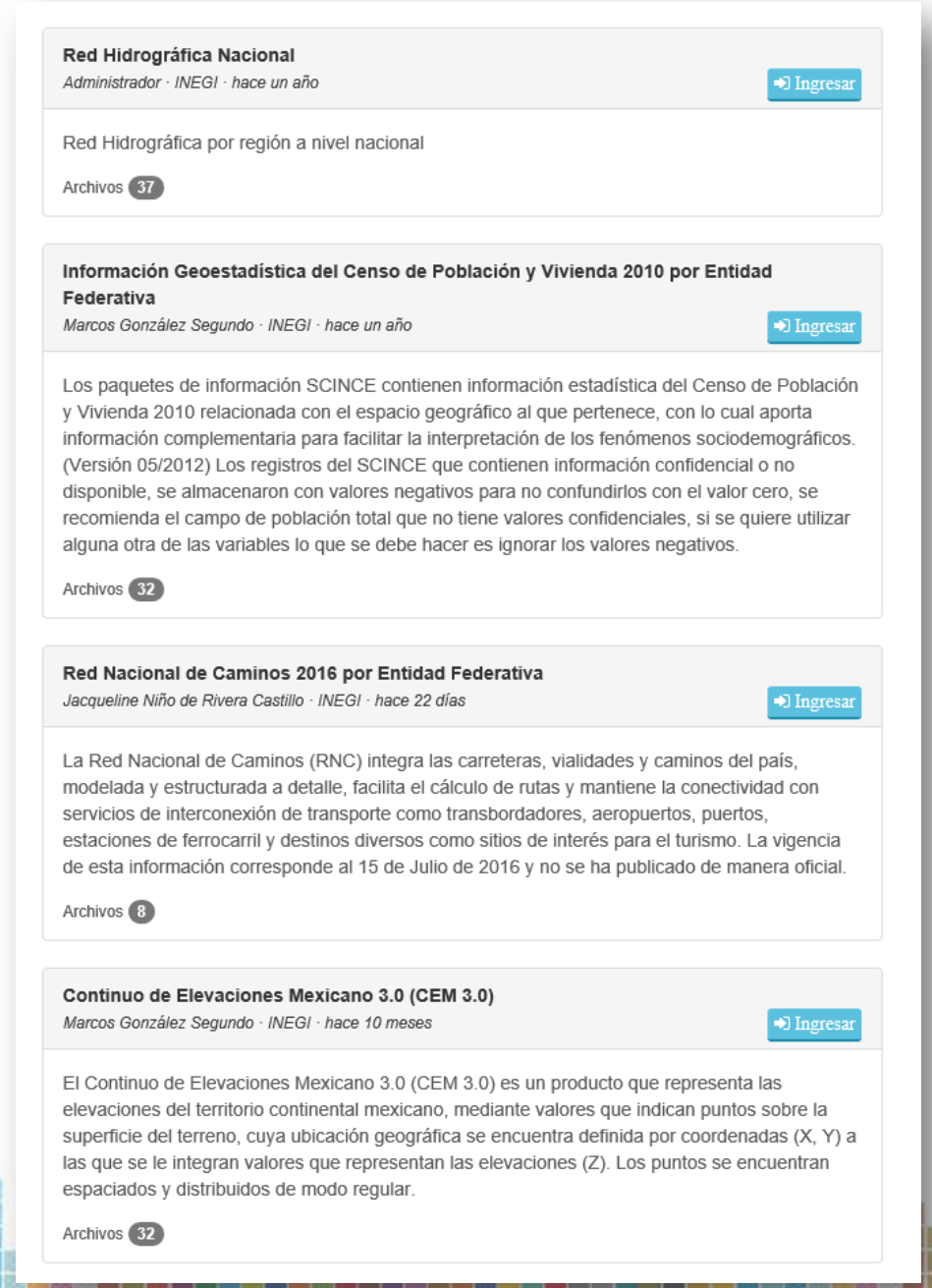
Historic events.

Access to **data sets related to events that happened in previous years** or where the emergency phase ended, is preserved through this section. The structure of this section is the same as the one for recent events.



Available Information.

As a disaster may occur at any moment and in any part of the country, there is a section which gives **permanent access to some basic or framework data sets**. Also, the access is through links for downloading files or URLs to Web Services: Web Map Services, Web Feature Services, and Web Coverage Services. These give direct and interoperable access to data for population (census), economic units (DENUE), Road Network, satellite imagery and elevation data.



CONCLUSIONS AND PERSPECTIVES

It´s important to identify any gaps that must be addressed by the statistical and geospatial communities (national, regional and global). They could improve the quality, harmonization, coordination and collaboration for better support of emergencies or extreme events and disasters response.

Harnessing the institutional and Interinstitutional so national as international experience in the processes of access, interoperability, interchange and the use of geospatial or geostatistical data, can be the difference in an emergency, extreme event or disaster, under already functional standards like those experiences presented in this event.

National Interest Information

- Defined by National System of Statistical and Geographical Información Law (Art. 78)

Cobertura del Suelo Caribe
Land Cover Caribbean

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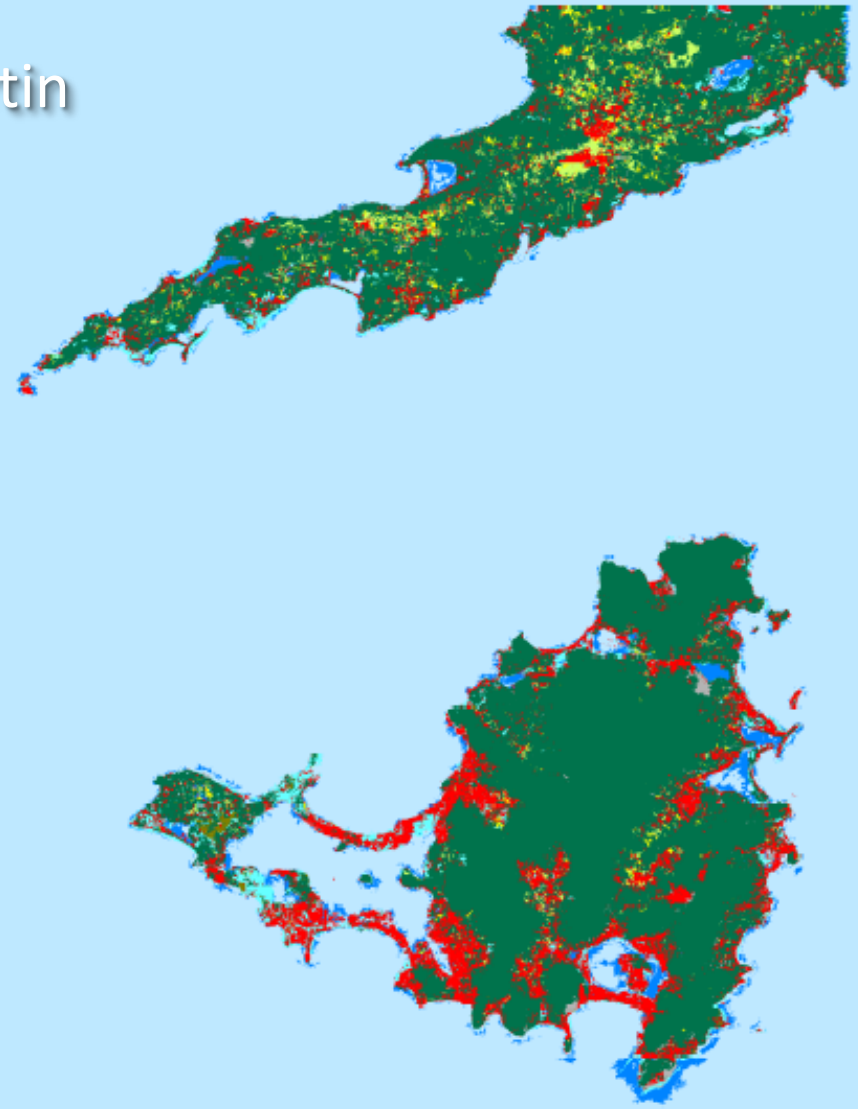
Anguila y San Martín

Anguilla and Saint Martin



Class	km^2
Cultivated land	1.7
Forest	97.1
Grassland	3.8
Scrubland	0.5
Wetland	6.3
Water bodies	6.8
Artificial surfaces	20.7
Bareland	0.9
TOTAL	137.8

SIMBOLOGÍA

- Cultivated land
- Forest
- Grassland
- Scrubland
- Wetland
- Water bodies
- Artificial surfaces
- Bareland

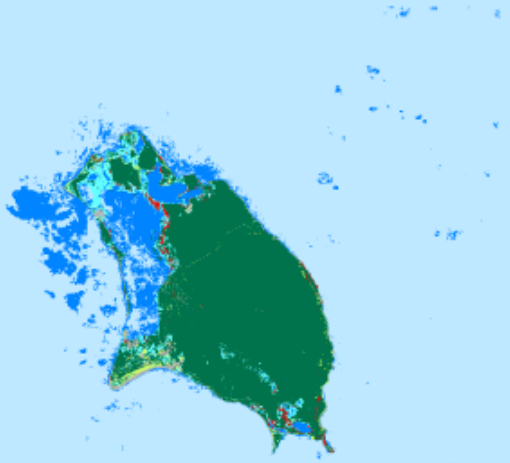
N

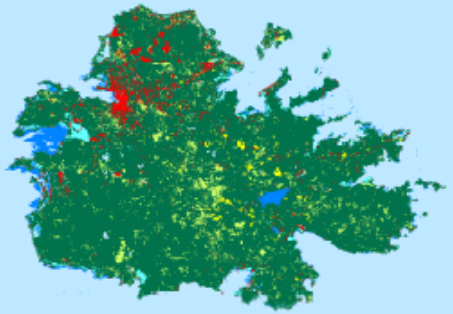
0 5 10 15 20 25 30 35 Kilómetros

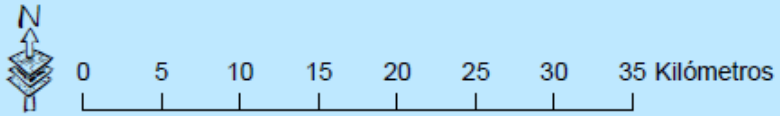
Antigua y Barbuda

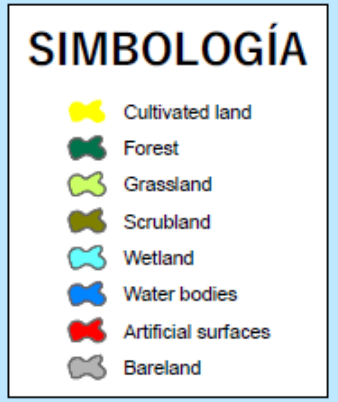
Antigua and Barbuda

Class	km^2
Cultivated land	2.7
Forest	361.6
Grassland	20.3
Scrubland	0.0
Wetland	19.4
Water bodies	62.5
Artificial surfaces	14.4
Bareland	4.7
TOTAL	485.7

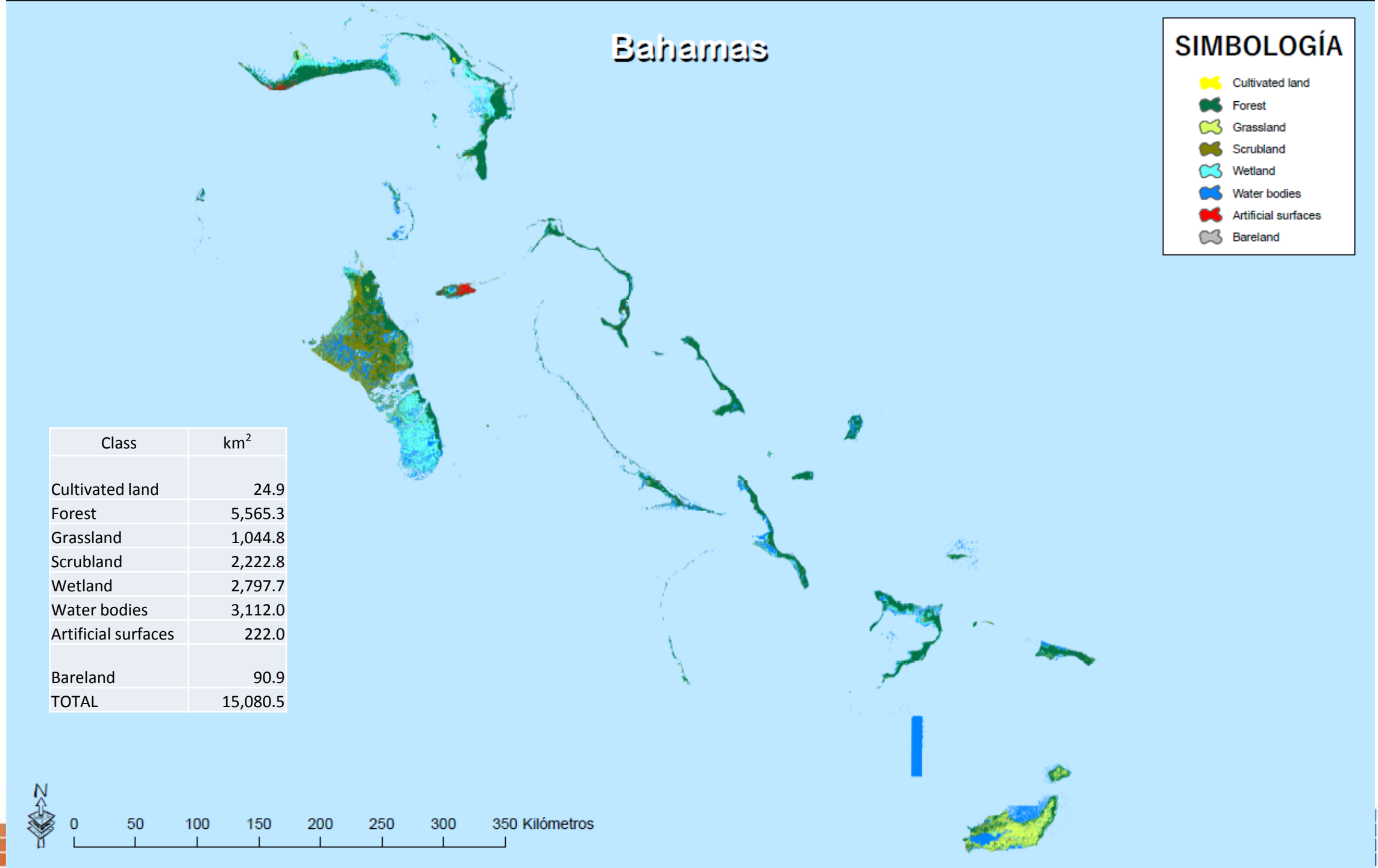








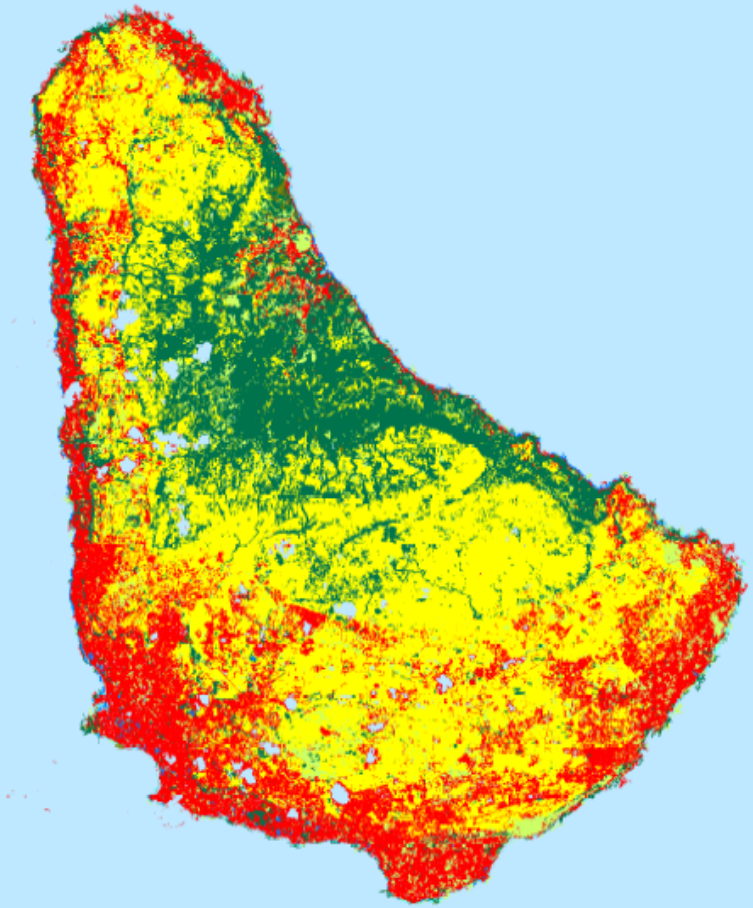
Bahamas



Class	km^2
Cultivated land	24.9
Forest	5,565.3
Grassland	1,044.8
Scrubland	2,222.8
Wetland	2,797.7
Water bodies	3,112.0
Artificial surfaces	222.0
Bareland	90.9
TOTAL	15,080.5

Barbados

Class	km^2
Cultivated land	197.1
Forest	94.3
Grassland	30.2
Scrubland	1.2
Wetland	2.2
Water bodies	2.3
Artificial surfaces	105.6
Bareland	0.7
TOTAL	433.6



SIMBOLOGÍA

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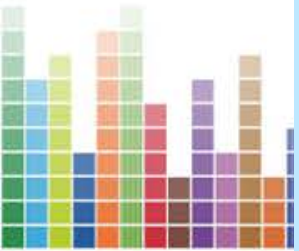
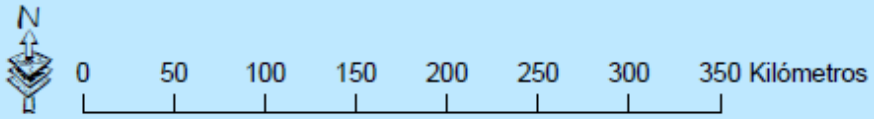
N

0 5 10 15 20 25 30 35 Kilómetros

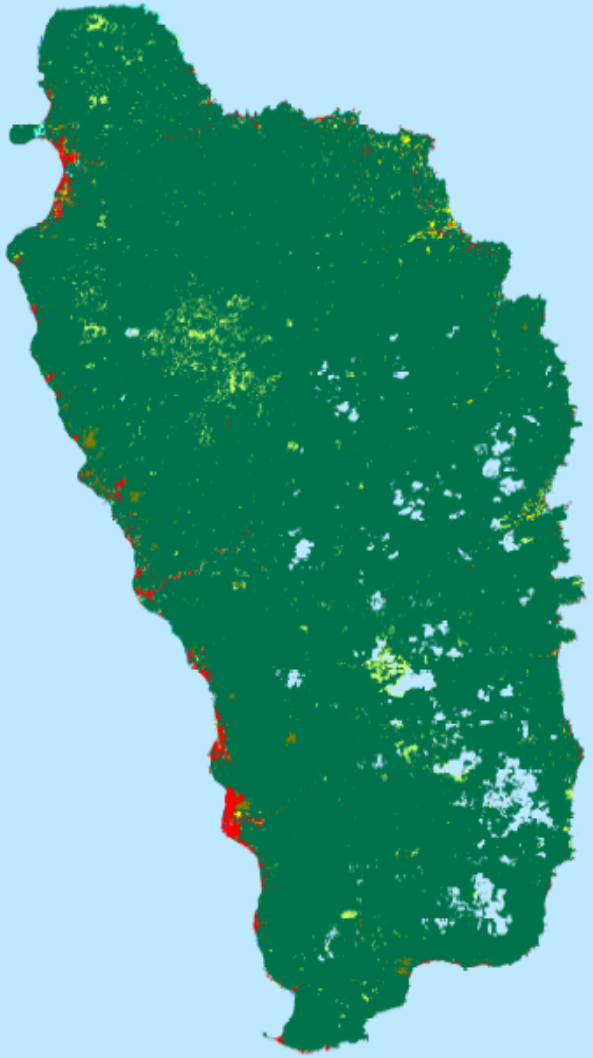
Cuba

Clase	km^2
Cultivated land	49,283.7
Forest	43,168.9
Grassland	4,309.5
Scrubland	1,136.6
Wetland	9,182.9
Water bodies	4,454.5
Artificial surfaces	1,569.1
Bareland	255.8
TOTAL	113,361.1





Dominica



SIMBOLOGÍA

- Cultivated land
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- Bareland

Class	km^2
Cultivated land	1.5
Forest	705.4
Grassland	11.9
Scrubland	2.7
Wetland	1.2
Water bodies	0.5
Artificial surfaces	7.5
Bareland	0.0
TOTAL	730.7

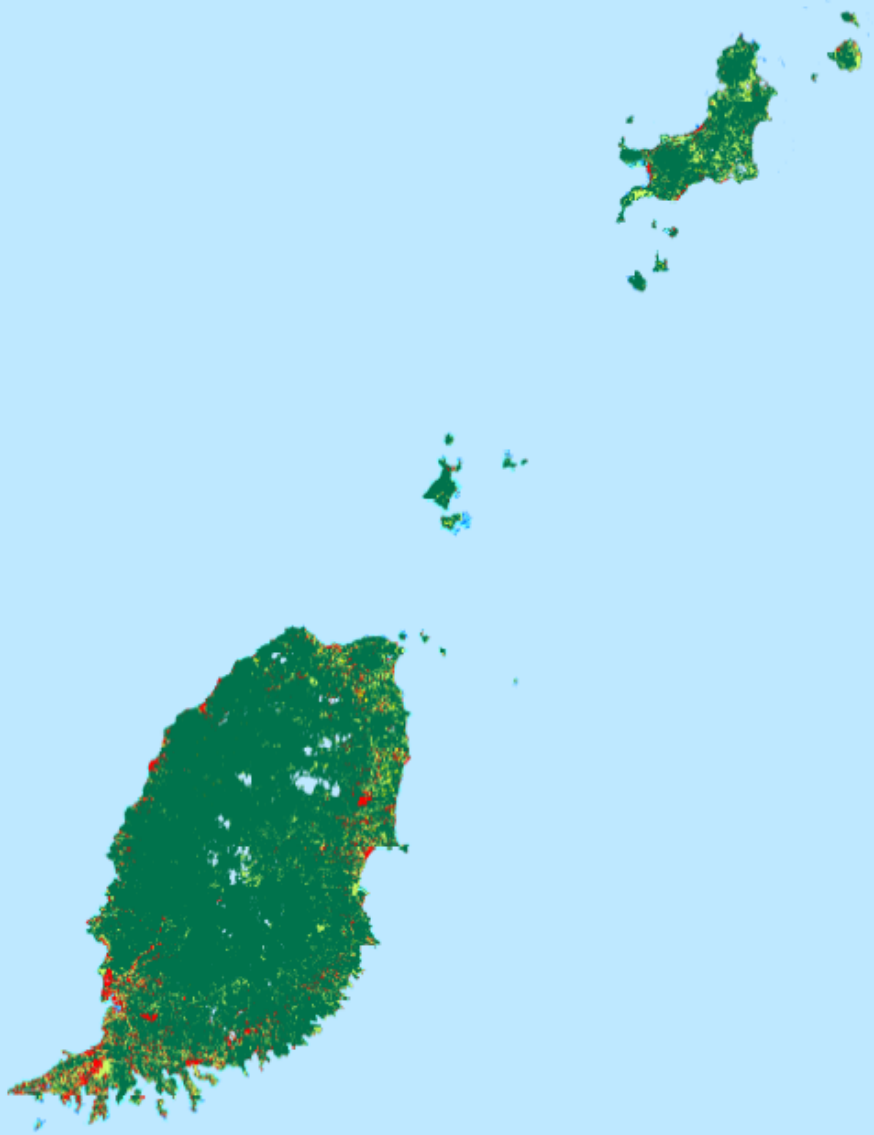
N

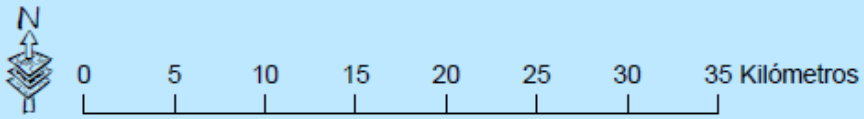
0 5 10 15 20 25 30 35 Kilómetros

Granada

Grenada

Class	km^2
Cultivated land	1.4
Forest	306.0
Grassland	25.5
Scrubland	0.2
Wetland	10.7
Water bodies	1.3
Artificial surfaces	15.9
Bareland	0.3
TOTAL	361.2

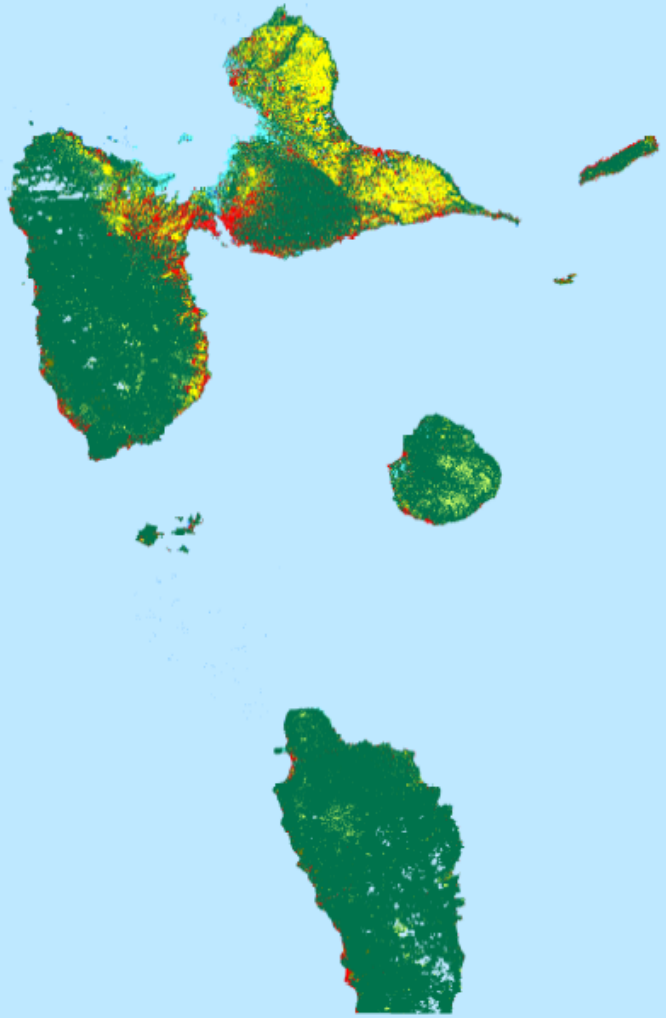




Guadalupe

Guadeloupe

Class	km^2
Cultivated land	194.6
Forest	1,826.5
Grassland	92.2
Scrubland	26.2
Wetland	46.6
Water bodies	15.4
Artificial surfaces	134.2
Bareland	0.5
TOTAL	2,336.2



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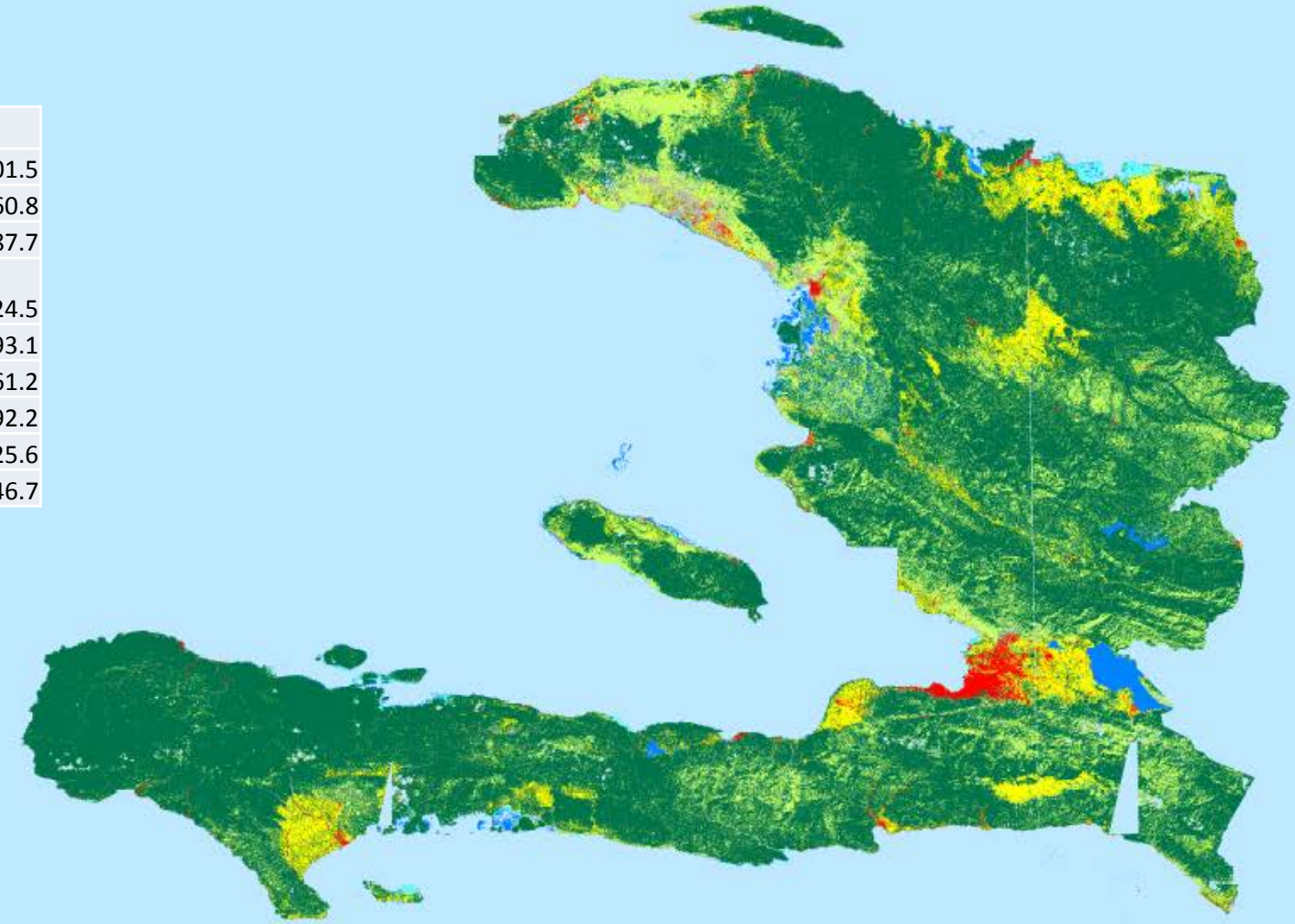
0 5 10 15 20 25 30 35 Kilómetros

Haiti

Haiti

Class	km^2
Cultivated land	1,701.5
Forest	19,060.8
Grassland	4,687.7
Scrubland	24.5
Wetland	193.1
Water bodies	461.2
Artificial surfaces	392.2
Bareland	225.6
TOTAL	26,746.7



SIMBOLOGÍA

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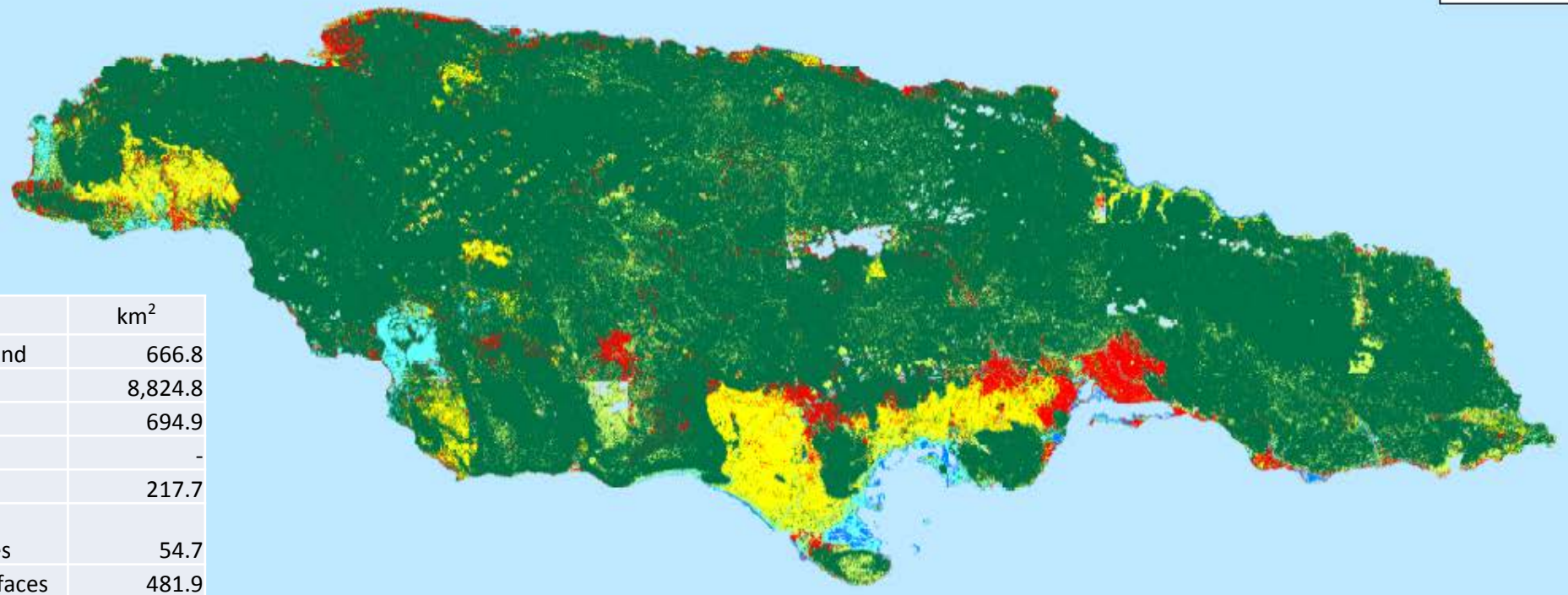
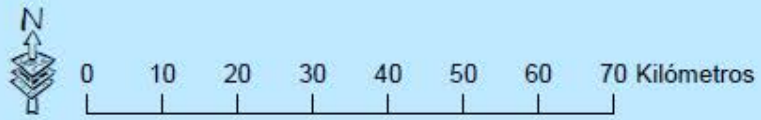
N

0 25 50 75 100 125 150 175 Kilómetros

Jamaica



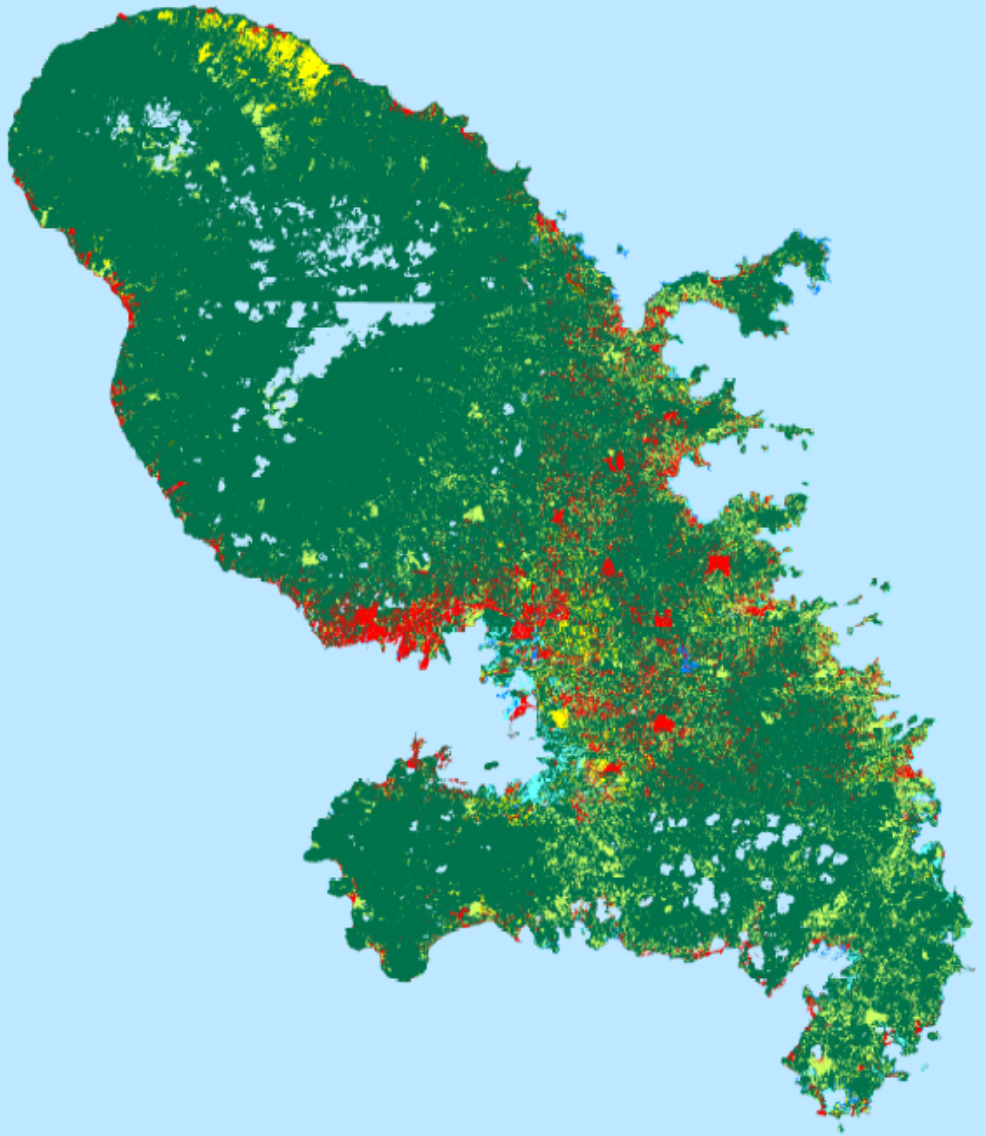
Class	km^2
Cultivated land	666.8
Forest	8,824.8
Grassland	694.9
Scrubland	-
Wetland	217.7
Water bodies	54.7
Artificial surfaces	481.9
Bareland	1.0
TOTAL	10,941.8



Martinica

Martinique

Class	km^2
Cultivated land	57.3
Forest	862.7
Grassland	36.2
Scrubland	4.1
Wetland	20.1
Water bodies	13.9
Artificial surfaces	66.1
Bareland	1.0
TOTAL	1061.5



SIMBOLOGÍA

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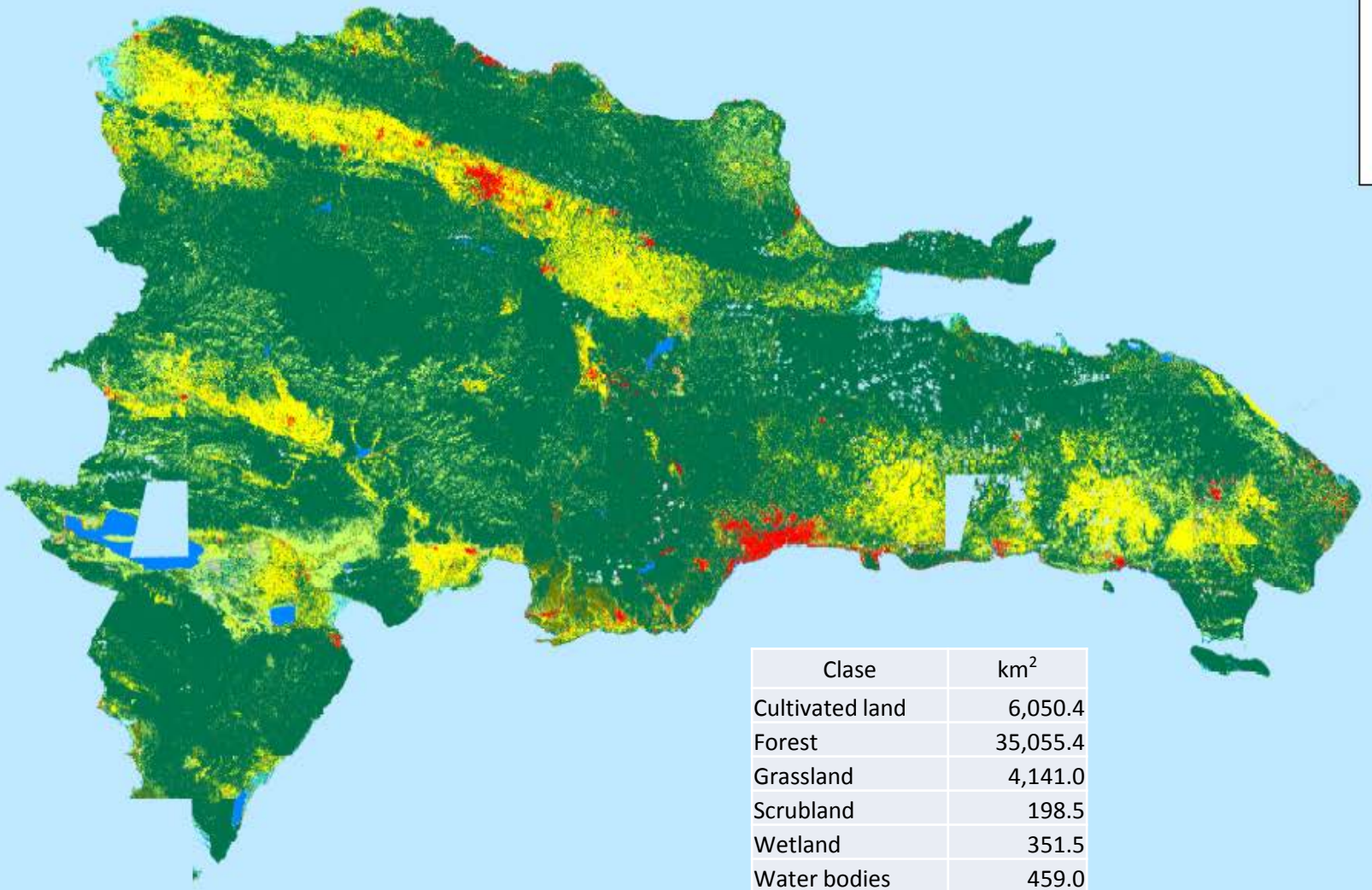
N

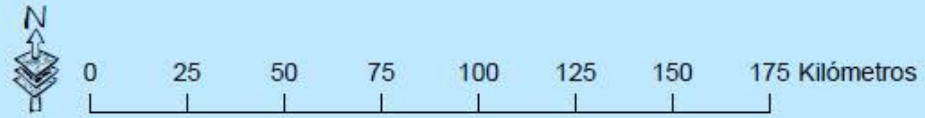
0 5 10 15 20 25 30 35 Kilómetros

República Dominicana

Dominican Republic

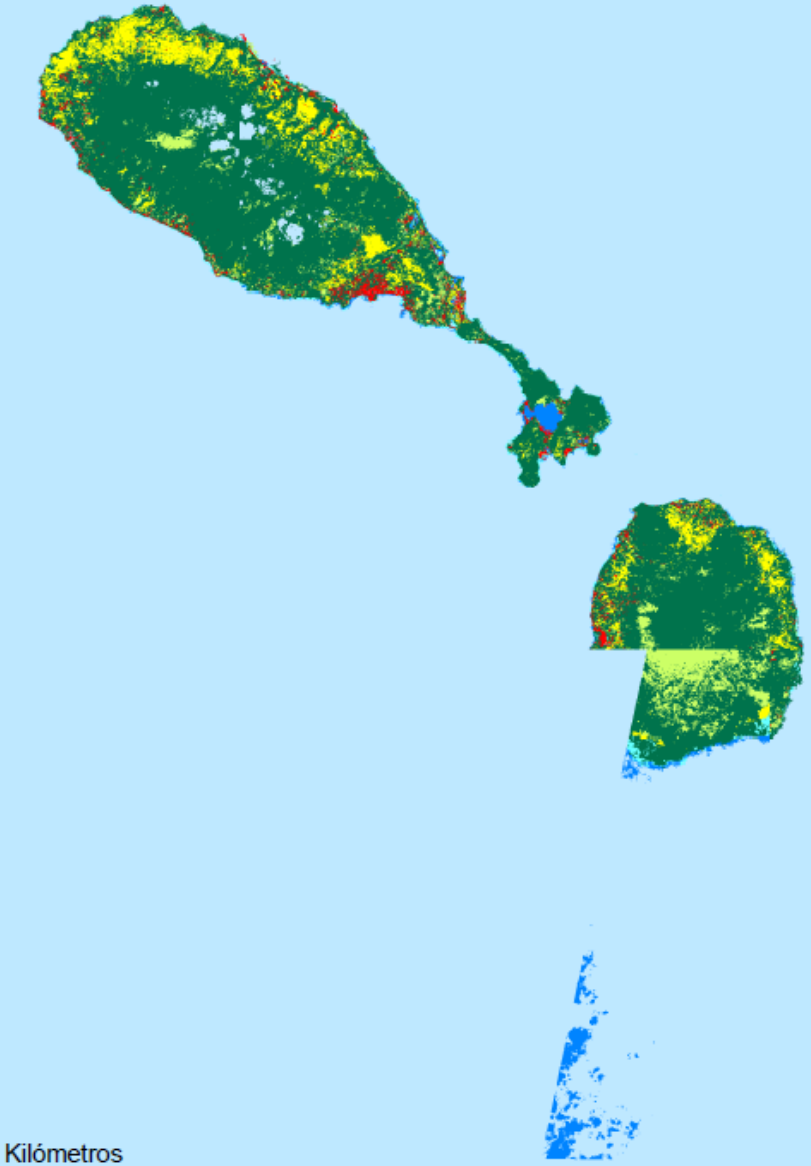


Clase	km^2
Cultivated land	6,050.4
Forest	35,055.4
Grassland	4,141.0
Scrubland	198.5
Wetland	351.5
Water bodies	459.0
Artificial surfaces	839.6
Bareland	137.5
	47,233.0



San Cristobal y Nieves

Saint Kitts and Nevis



SIMBOLOGÍA

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Class	km^2
Cultivated land	26.1
Forest	193.9
Grassland	21.9
Scrubland	0.3
Wetland	5.3
Water bodies	11.0
Artificial surfaces	8.2
Bareland	0.2
TOTAL	266.9

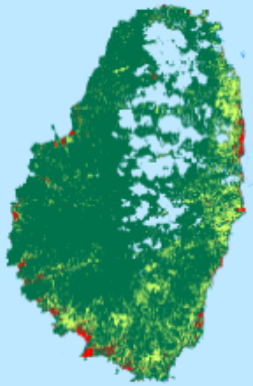
N

0 5 10 15 20 25 30 35 Kilómetros

San Vicente y Granadinas

Saint Vincent and the Grenadines

Class	km^2
Cultivated land	0.5
Forest	297.7
Grassland	38.5
Scrubland	0.7
Wetland	2.2
Water bodies	1.9
Artificial surfaces	7.5
Bareland	1.3
TOTAL	350.4



SIMBOLOGÍA

- Cultivated land
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- Artificial surfaces
- Bareland

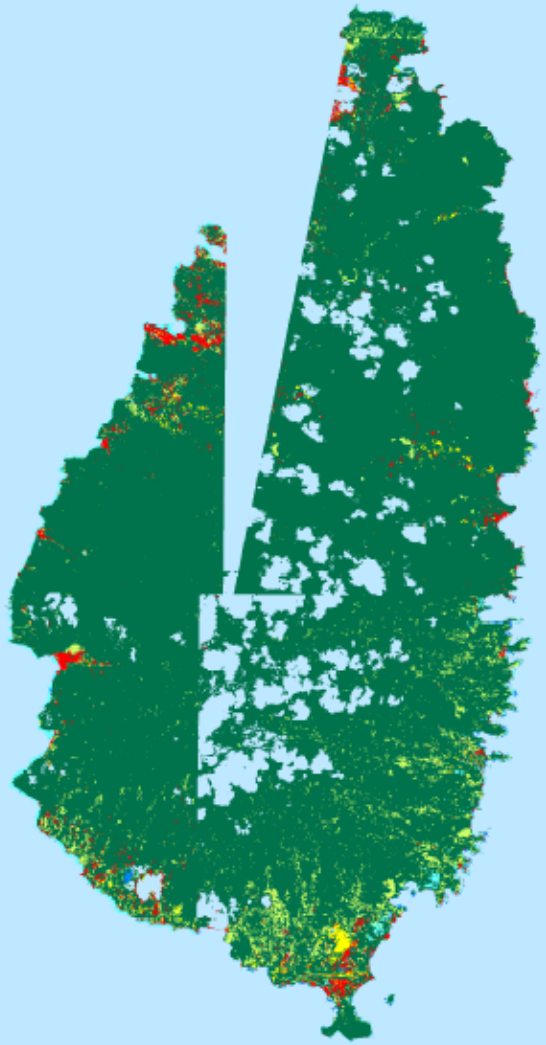
N

0 5 10 15 20 25 30 35 Kilómetros

Santa Lucia

Saint Lucia

Class	km^2
Cultivated land	2.6
Forest	477.6
Grassland	19.2
Scrubland	0.3
Wetland	6.7
Water bodies	1.2
Artificial surfaces	9.9
Bareland	0.1
TOTAL	517.6



SIMBOLOGÍA

- Cultivated land
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- Bareland

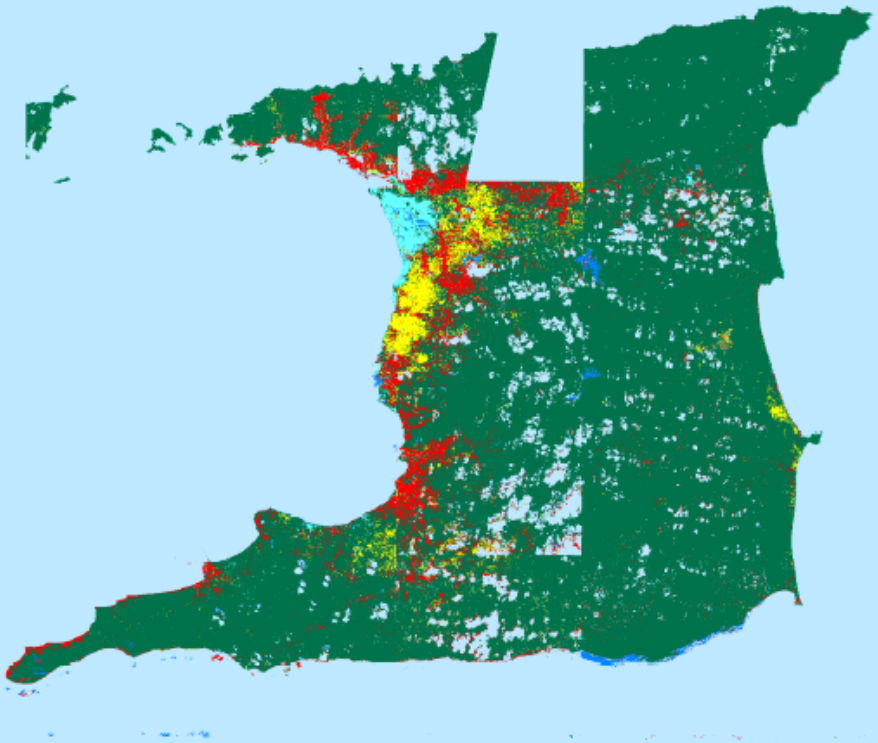
N

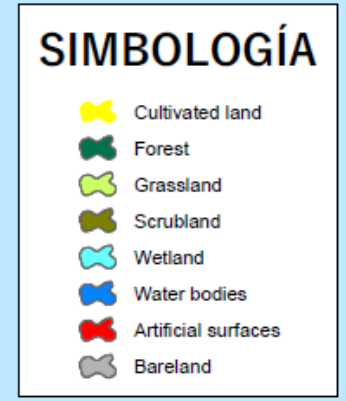
0 5 10 15 20 25 30 35 Kilómetros

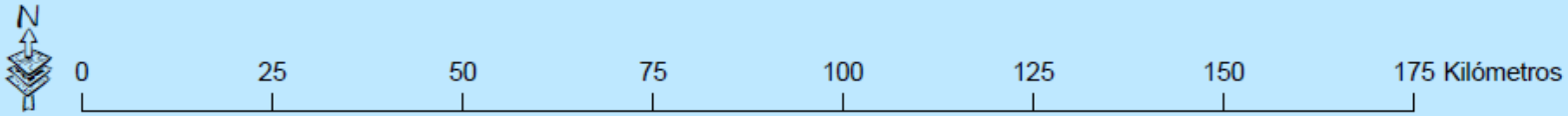
Trinidad y Tobago

Trinidad and Tobago

Class	km^2
Cultivated land	125.9
Forest	4,030.5
Grassland	25.9
Scrubland	9.8
Wetland	85.3
Water bodies	38.7
Artificial surfaces	285.9
Bareland	1.6
TOTAL	4,603.6







Superficies: Km2

		Class(km^2)								
No.	Isla	Cultivated land	Forest	Grassland	Scrubland	Wetland	Water bodies	Artificial surfaces	Bareland	Total
1	Anguila y San Martin	1.70	97.15	3.80	0.47	6.26	6.75	20.68	0.93	137.76
2	Antigua y Barbuda	2.73	361.59	20.32	0.05	19.41	62.53	14.45	4.67	485.74
3	Bahamas	24.93	5,565.34	1,044.82	2,222.79	2,797.70	3,111.97	221.98	90.94	15,080.48
4	Barbados	197.14	94.31	30.17	1.19	2.23	2.35	105.56	0.65	433.60
5	Cuba	49,283.72	43,168.87	4,309.52	1,136.63	9,182.95	4,454.54	1,569.12	255.75	113,361.10
6	Dominica	1.47	705.42	11.88	2.74	1.15	0.53	7.46	0.03	730.69
7	Granada	1.35	305.95	25.47	0.17	10.73	1.31	15.91	0.28	361.18
8	Guadalupe	194.65	1,826.53	92.24	26.20	46.55	15.41	134.16	0.48	2,336.22
9	Haiti	1,701.52	19,060.77	4,687.73	24.49	193.13	461.21	392.24	225.58	26,746.66
10	Jamaica	666.82	8,824.85	694.91	-	217.65	54.72	481.89	0.98	10,941.81
11	Martinica	573.07	8,626.55	362.22	41.37	201.21	139.32	660.80	10.43	10,614.97
12	Republica Dominicana	6,050.44	35,055.42	4,141.02	198.51	351.52	458.98	839.63	137.50	47,233.03
13	San Cristobal y Nieves	26.10	193.87	21.87	0.32	5.33	10.98	8.23	0.24	266.94
14	San Vicente y Granadinas	0.45	297.71	38.51	0.73	2.23	1.88	7.54	1.29	350.35
15	Santa Lucia	2.65	477.62	19.23	0.28	6.69	1.22	9.85	0.07	517.60
16	Trinidad y Tobago	125.86	4,030.53	25.87	9.82	85.27	38.72	285.91	1.57	4,603.56

Conociendo México

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