

# COVID-19: Strategies for a geospatial response in the Americas

## UN-GGIM Virtual Seminar Series Panama Case

**Isis Tejada H.**

National Center for Geospatial Information

National Geographic Institute

“Tommy Guardia”



# About Panama...

- Estimated population in 2018: **4,158,783**.
- Men: 2,085,950 (50.2%)
- Women: 2,072,833 (49.8%).

Population



- Total Area of the Republic: **75 517,2 km<sup>2</sup>** (including the areas of continental water bodies).

Area



- The Balboa is the currency of the country.
- Panama's economy grew by 3.73% in 2019

Others





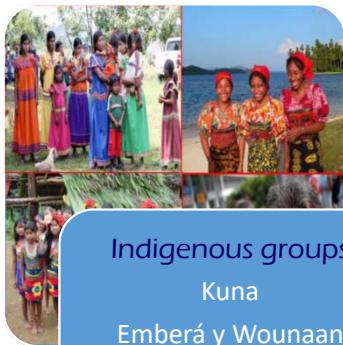
## COVID-19: Strategies for a geospatial response in the Americas



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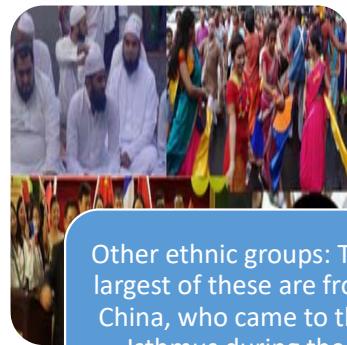
Hispano-indigenous group, is one of the largest groups in Panama.



Indigenous groups  
Kuna  
Emberá y Wounaan  
Ngäbe-Buglé  
Bokota  
Teribe  
Bri bri



Afrocolonial population and Afro-Caribbean population



Other ethnic groups: The largest of these are from China, who came to the Isthmus during the construction of the Transisthmian railway in 1850. Other groups are the Hindus, Hebrews, and Centralamerican.

# The geospatial response to COVID -19 collaborating with two programs:



It is an emergency plan and relief social assistance for those affected by the global pandemic of COVID-19.

It consists of the application of six security rings to prevent the spread of COVID-19. "Stay at Home", ROSA Program ", modules for care, Individual Notification of Case Obtained, Modular Hospital, Recovery Phase.



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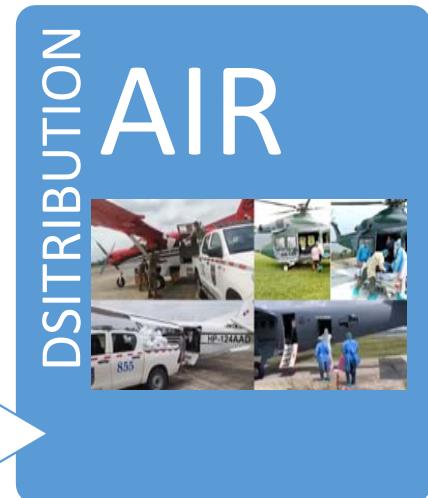
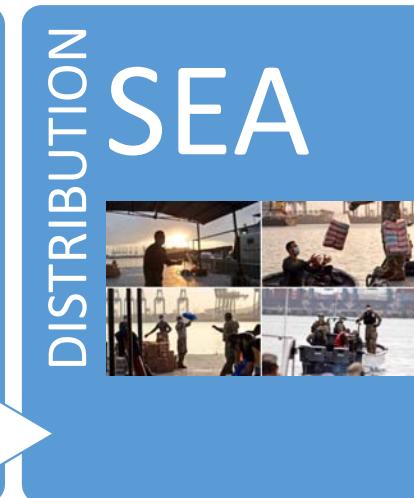
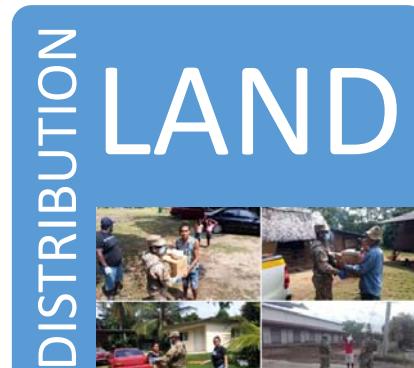
Food bags



Boucher



Rescue



Panama solidarity

## CONFORMATION OF THE TECHNICAL COMMITTEE FOR LOGISTICS OF THE SOLIDARITY PLAN

Inventory of available information

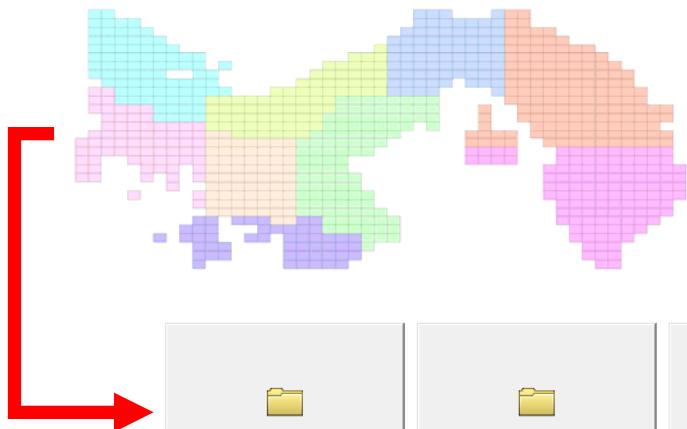
Disposition of external data

New information to generate

Aeronaval Service and the National Geographic Institute

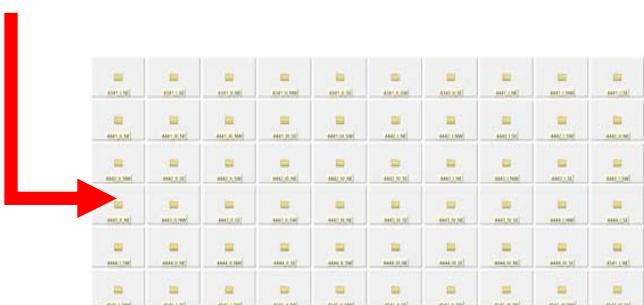


# Vector Information



Information source from the national cartography

- 814 maps 1:25 000 y 1 222 maps 1:5000



Catalog Tree

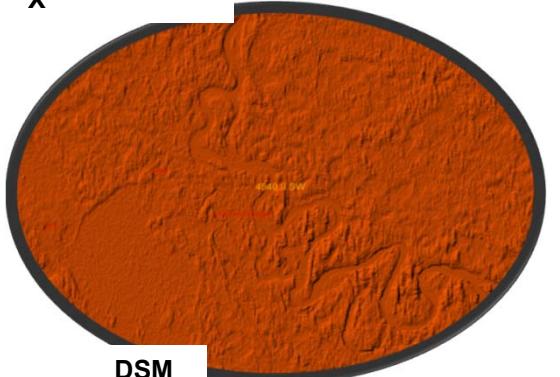
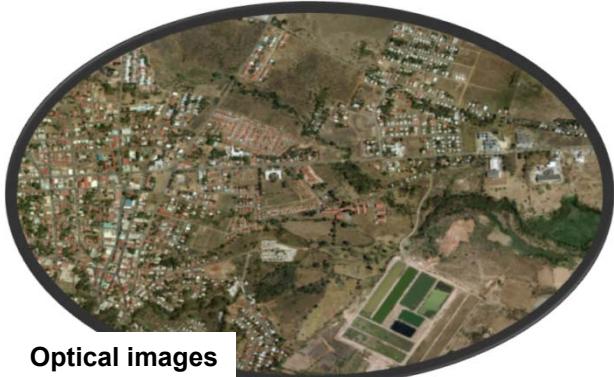
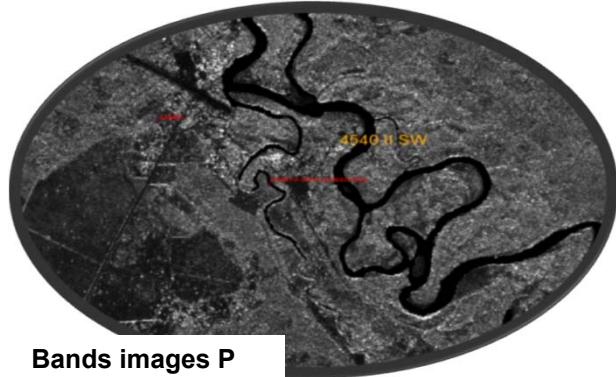
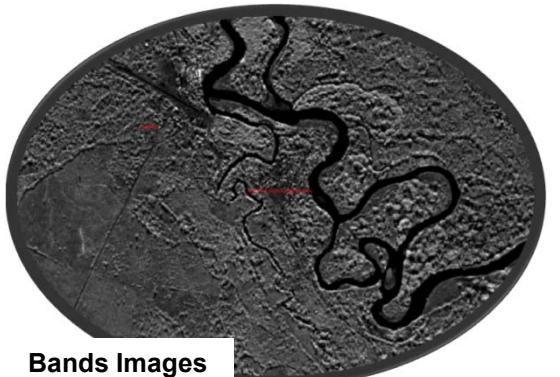
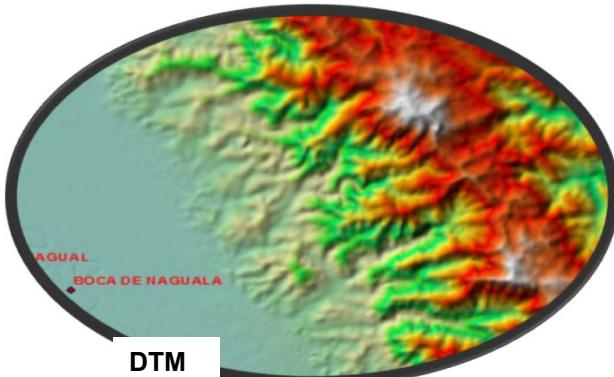
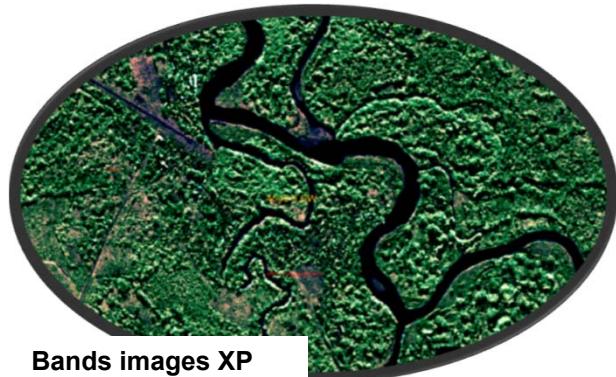
- 17N
  - 4341\_I\_NE
  - 4341\_I\_SE
  - 4341\_II\_NE
  - 4341\_II\_NW
  - 4341\_II\_SE
  - 4341\_II\_SW
  - 4342\_II\_SE
  - 4441\_I\_NE
  - 4441\_I\_NW
  - 4441\_I\_SE
  - 4441\_II\_NE
  - 4441\_III\_NE
  - 4441\_III\_SE

Contents Preview Description

- 17N
- Comunicacion\_y\_Transporte
- Edicion
- Estructura
- Hidrografía
- Límites\_Administrativos
- Poblado
- Relieve
- Vegetación
- 4341\_I\_NE.dwg
- 4341\_I\_NE.tif
- Logo ANATI.jpg
- Logo IGNIG.jpg
- Logo MOP.jpg
- Logo Oficial-Gobierno-Nacional.jpg

- Estructura
- estr\_u\_
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- estr\_p\_
- Hidrografía
- hidr\_cuer\_agua\_a
- hidr\_cuer\_agua\_mar\_ocea\_a
- hidr\_dren\_
- hidr\_line\_cost\_
- Poblado
- pobl\_area\_urba\_a
- Relieve
- rell\_subm\_arena\_a
- rell\_subm\_lodo\_fang\_a
- Transporte
- coyt\_aero\_j
- coyt\_carr\_auto\_corr\_j
- coyt\_carr\_call\_j
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- coyt\_ferr\_j
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- coyt\_pist\_atre\_j

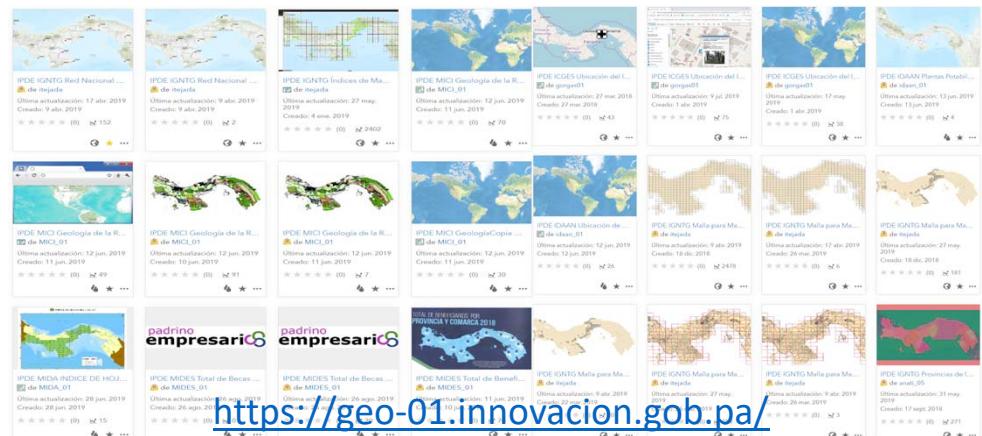
# Raster Products



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### INTERACTION PLATFORMS

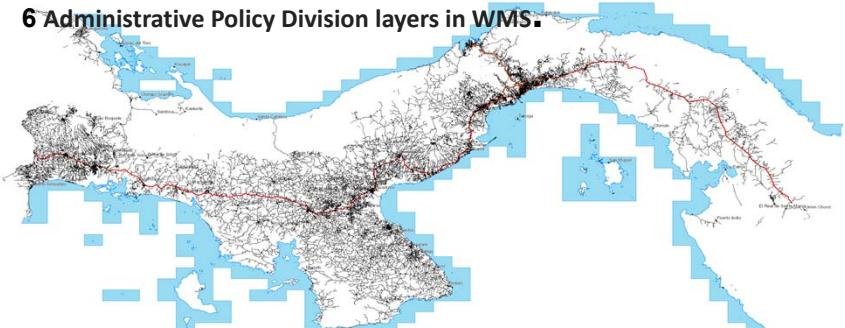
			
Catálogo de Mapas, Servicios, Datos.	Publicación de Servicios Web OGC	Publicación de Mapas y Datos Geoespaciales	Publicación de Mapas y Aplicaciones
<a href="#">Acceder</a>	<a href="#">Acceder</a>	<a href="#">Acceder</a>	<a href="#">Acceder</a>



*Generation of the Country Database.*

**22 Fundamental Data information layers .**

**6 Administrative Policy Division layers in WMS.**





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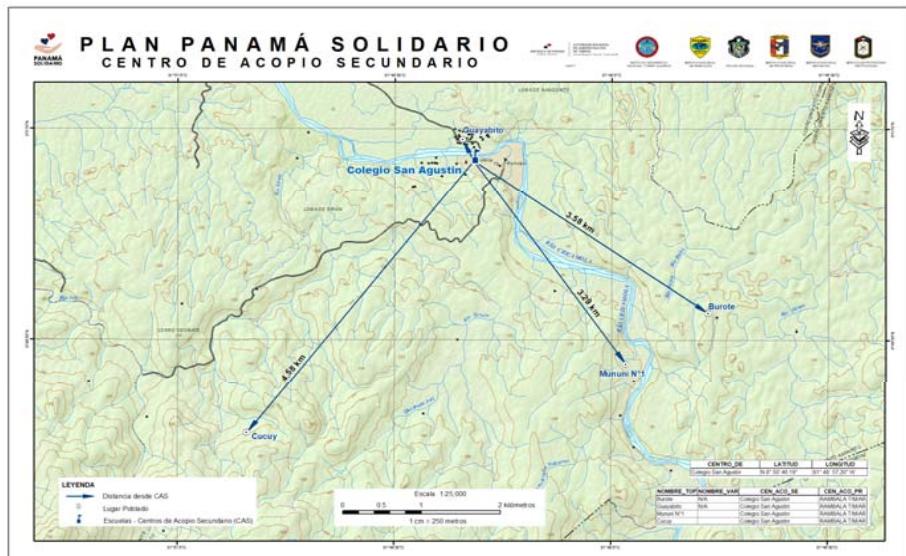


### Resulting Products...



Scale: 165K, 225K, 250K, 336K, 345K, 500K, 600K.

### Maps for distribution and medical emergencies



Scale 1:25 000



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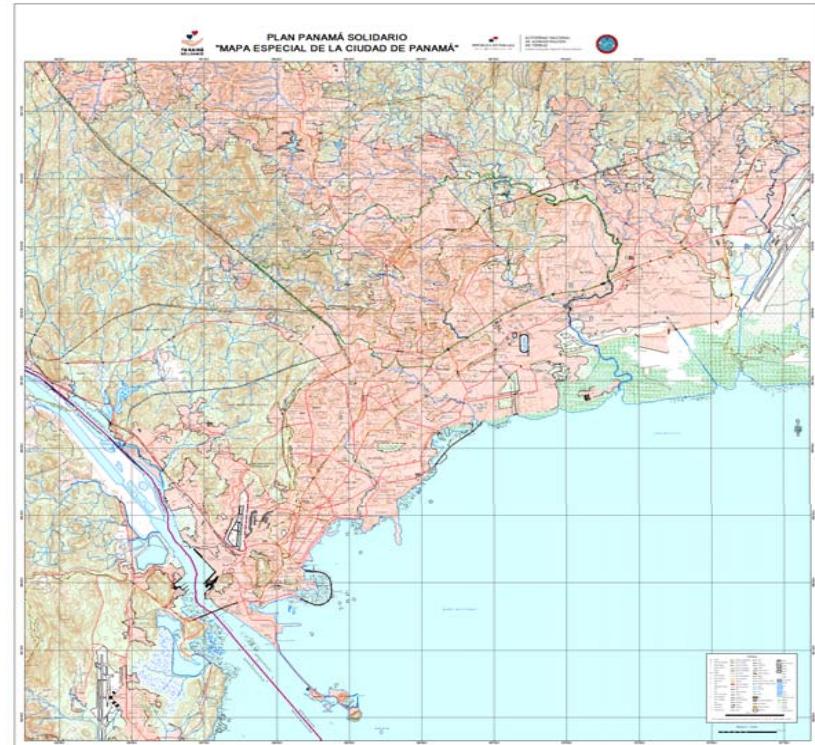
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Scale: 165K, 225K, 250K, 336K, 345K, 500K, 600K.

Maps for humanitarian aid distribution and medical emergencies

Maps for determining new routes for waste collection



Scale 1:15 000

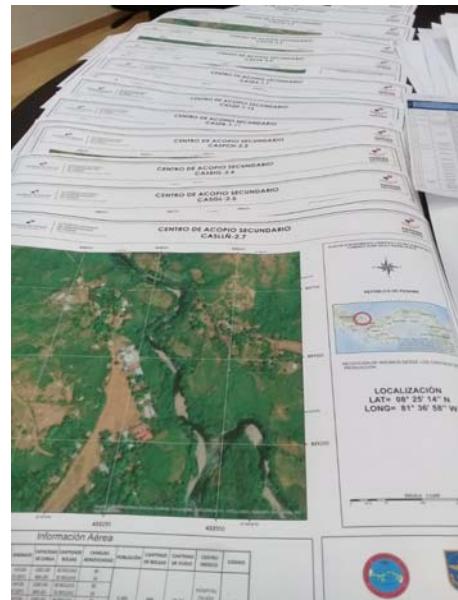


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Let's do it...

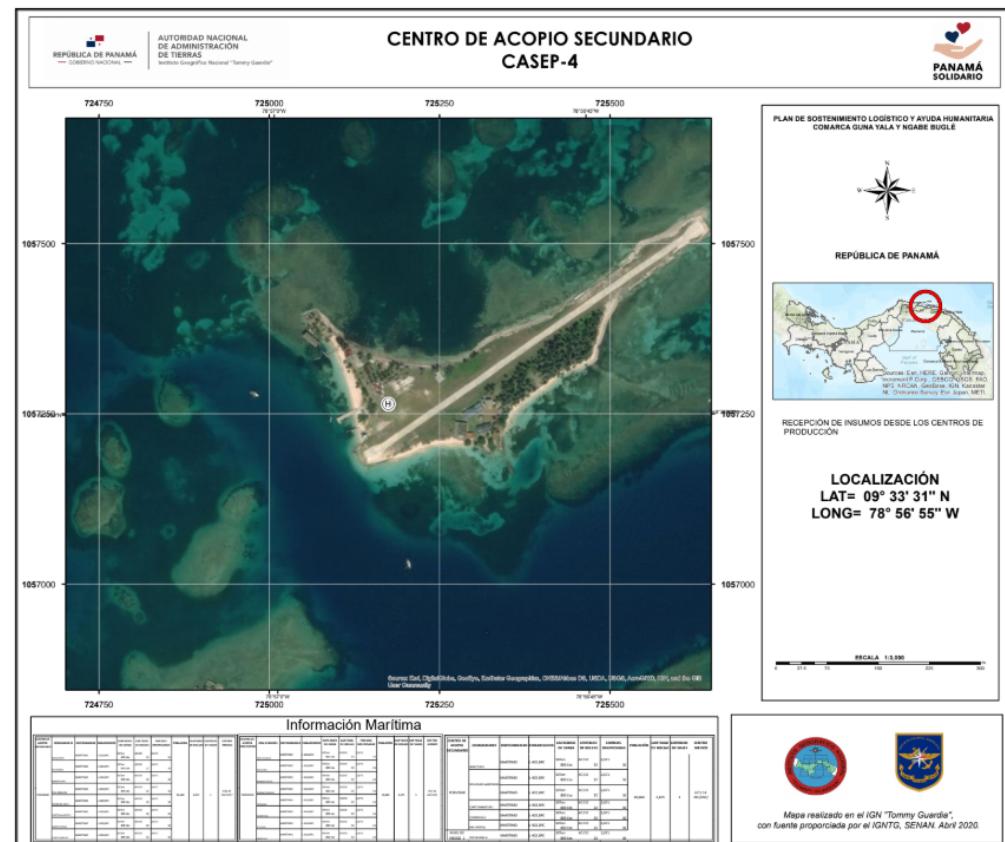
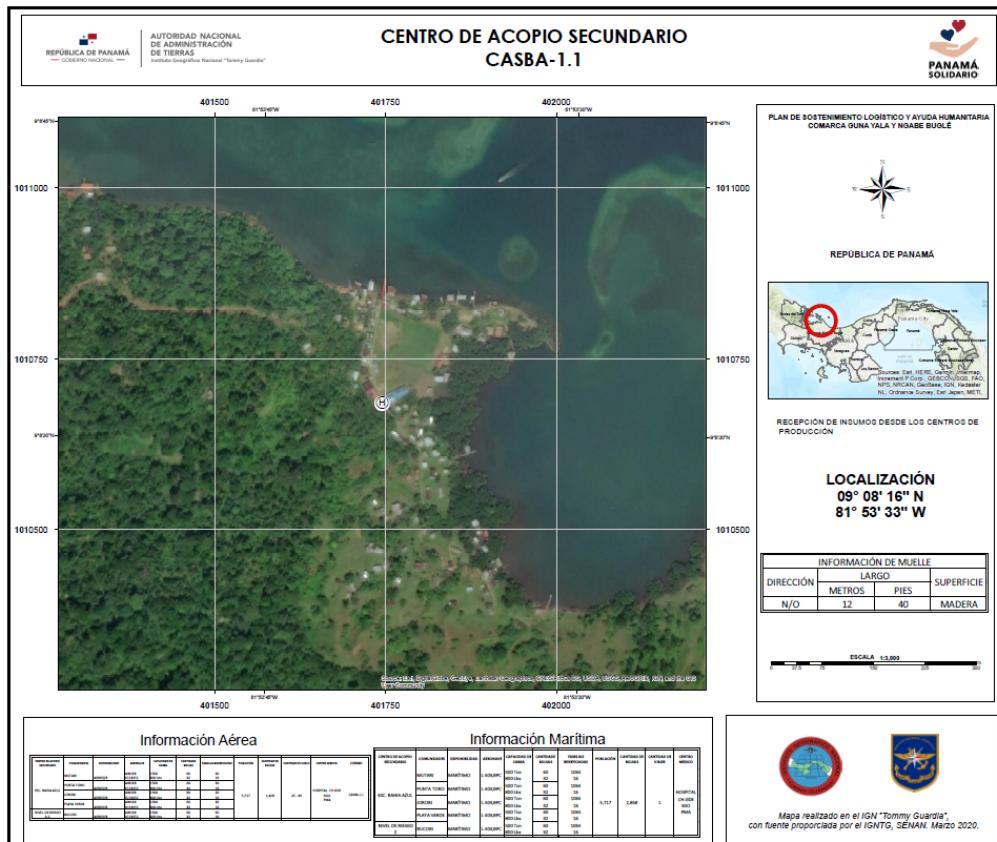




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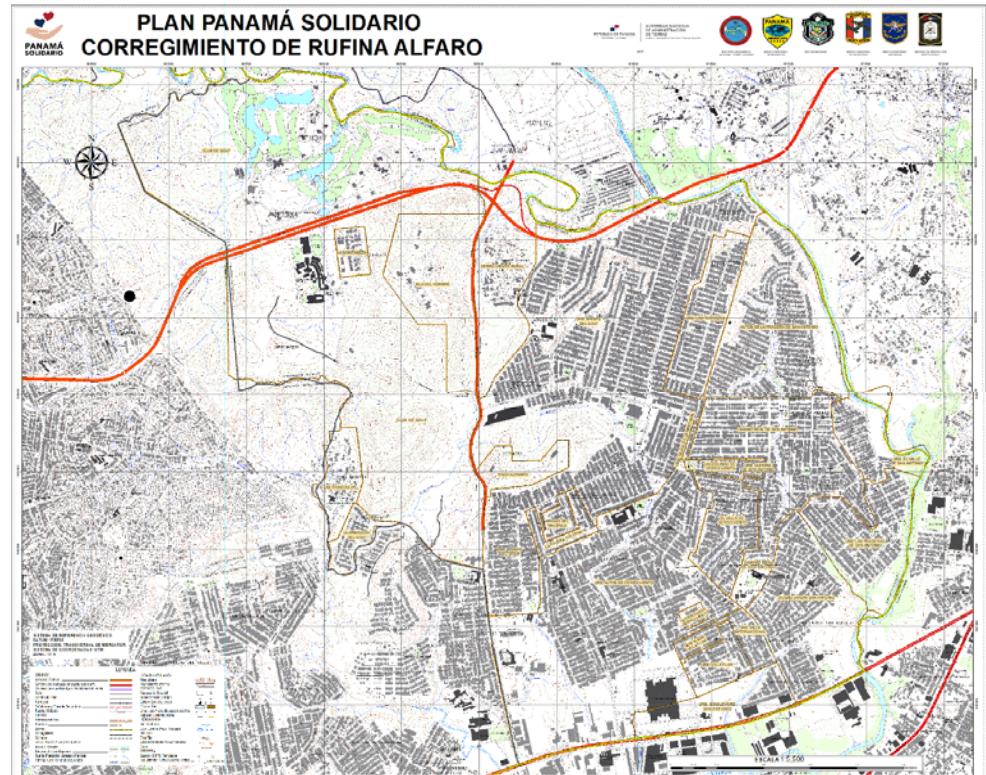
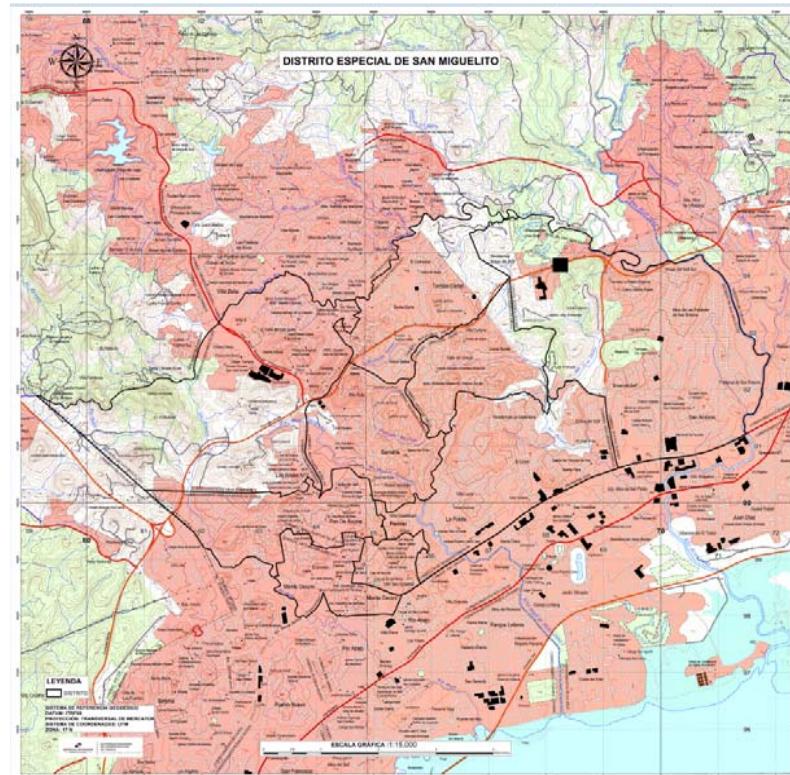


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Map of the Special District of San Miguelito at scale 1:15 000 - IGNTG Product.  
An impression. Worked with 4 raster images of the 1:25 000 scale maps and  
the Administrative Political Limits database.





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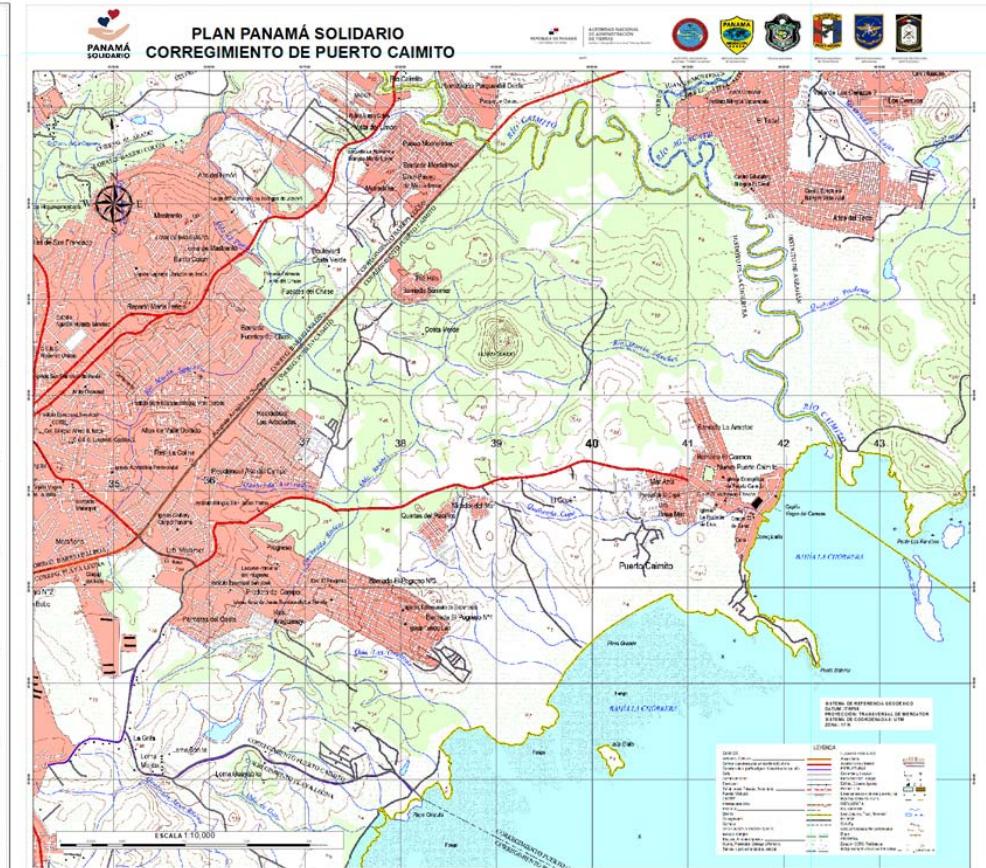
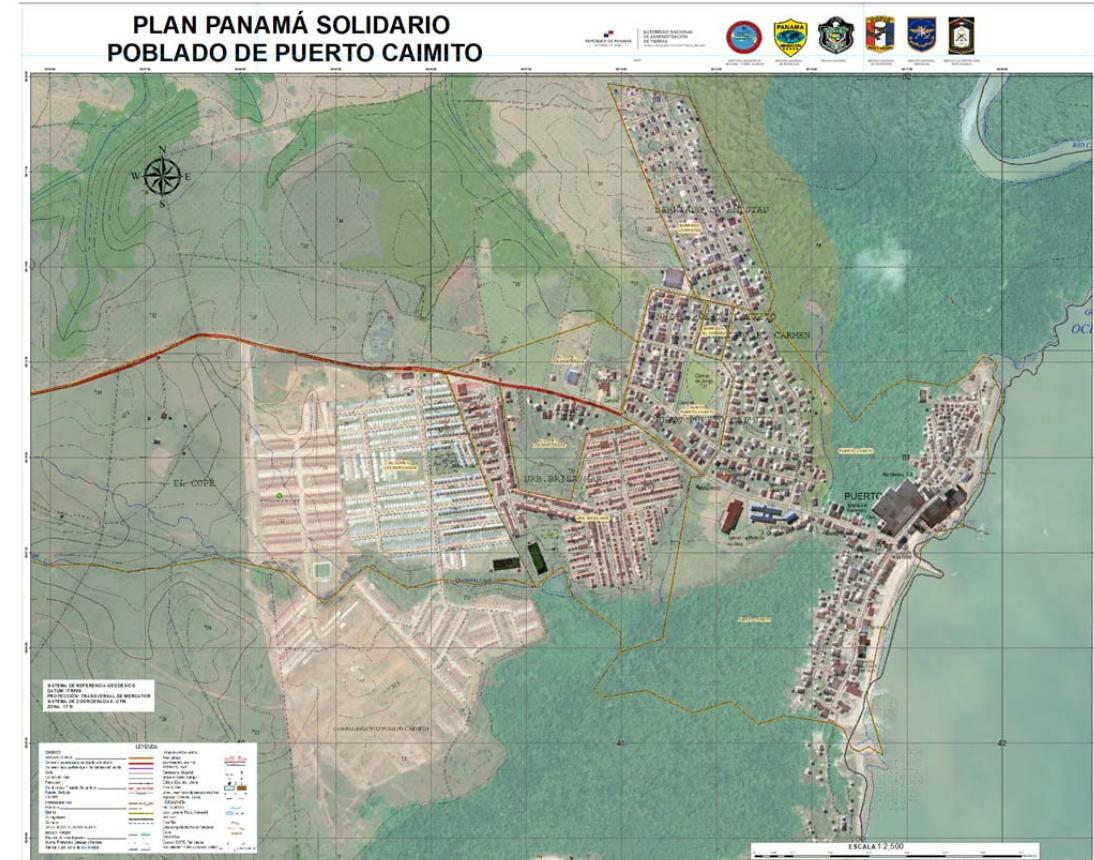


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Maps for the Vice Ministry of Economy for the distribution of aid.



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Protect Yourself Panama Plan

The plan focused on health, with 6 application measures: stay at home, ROSA virtual clinic, care module, individual notification of negative cases, modular hospital, recovery phase

<http://www.minsa.gob.pa/destacado/coronavirus-covid-19>

<https://geosocial.maps.arcgis.com/apps/opsdashboard/index.html#/2c6e932c690d467b85375af52b614472>



The screenshot shows a landing page for COVID-19 information. It features a large image of purple virus particles on the right. On the left, there's a yellow banner with the text "¡Sé un VOCERO de Información VERIFICADA!" and a blue button labeled "Conoce más". Below this, there's a section titled "Línea 169" with a phone icon and the text "Llama al 169, Si has viajado o has tenido contacto con alguna persona con #COVID19, y presentas síntomas." It also includes a WhatsApp icon with the number "6997-1234" and a link "<https://www.yomeinformopma.org/>". To the right, there are icons for "FIEBRE" (fever) and "TOS SECA" (dry cough), with the text "Conoce los síntomas".



The screenshot shows a dashboard for COVID-19. At the top, it says "CORONAVIRUS COVID-19" and "Jueves, 30 de enero de 2020". Below this is a large image of a yellow and blue coronavirus. To the right, there's a section titled "MAPA ACTUALIZADO COVID-19 PANAMA" with a list of links: "Decretos y Resoluciones", "Programas, planes y guías", "Información de OPS", "Medidas preventivas", "Vigilancia epidemiológica", "Galería de fotos", and "Noticias". There's also a "Comunicados" link.





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291 proposals were received and 32 of them were prioritized, these proposals use geo-referenced information as a core part of their research. With it they can develop location of projects, databases, test analysis, evaluations, among others.



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Centralized place where Panamanian scientists can deposit (load) or explore research data to face the global SARS-CoV2 / COVID-19 pandemic, the National Secretariat of Science, Technology and Innovation (SENACYT), through the Platform ABC has created the COVID-19 Panama research community within the Zenodo platform.

Dataset [cvs, eg]. Publications (articles or books). Posters. Presentations. Images. Audios and videos. Software (or codes). Others.



**ABC**  
Acceso a Bibliografía  
Científica

## CIENCIA ABIERTA CONTRA LA PANDEMIA REPOSITORIO DE DATOS DE INVESTIGACIÓN PARA PANAMÁ

Para centralizar los esfuerzos de divulgación de información y cooperación, la SENACYT, a través de la Plataforma ABC, pone a disposición de los investigadores, innovadores y tecnólogos una comunidad en Zenodo para compartir todos sus datos de investigación relacionados a los hallazgos referentes a SARS-CoV-2 y COVID-19 en Panamá.

**ACceso EN:**  
<https://abc.senacyt.gob.pa/repositorio-de-datos-cientificos-covid-19>



[HTTPS://ABC.SENACYT.GOB.PA/](https://abc.senacyt.gob.pa/)  
[ABC@SENACYT.GOB.PA](mailto:ABC@SENACYT.GOB.PA)  
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[@PLATAFORMaabcpanama](https://twitter.com/PLATAFORMaabcpanama)



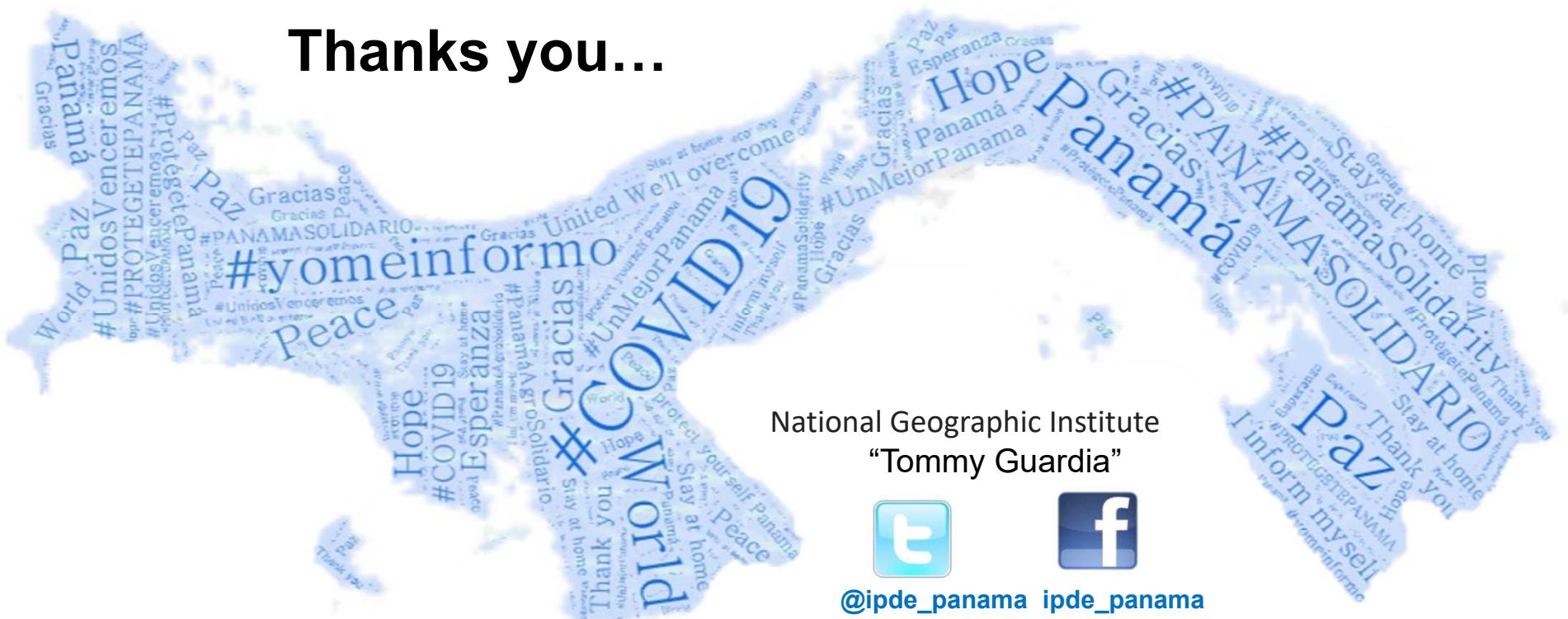
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# Thanks you...



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@ipde\_panama ipde\_panama

<http://www.ipde.gob.pa>

Telephone: (507) 524 3313  
[direccionigtg@anati.gob.pa](mailto:direccionigtg@anati.gob.pa)