

# Space Information Infrastructure Capacity Building and Training Program (SIICaP)

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Philippine  
Space  
Agency

SIICaP is a monthly webinar hosted by PhilSA.



At the core, we want to promote space science, technology, and applications (SSTA) since it's vital in various areas for in the Philippines setting.



Food security



Disaster Risk Reduction and Prevention



Natural Resource and Environmental Management



Health



Transfer know-how. Provide access to images, train RF communication, etc.

<b>Ground Receiving Station</b>	<b>Remote Sensing</b>	<b>Artificial Intelligence</b>
		
<b>Computing and Archiving</b>	<b>Data Processing</b>	<b>Data Distribution</b>
		

Bureau Core Capabilities



# Build a space-enabled community.

The screenshot displays the SIICaP Discord server interface. The server name is SIICaP, and the current channel is #announcements. The interface includes a left sidebar with server navigation options like GOAL: LVL 1, Events, Channels & Roles, Members, WELCOME, INFORMATION, TEXT CHANNELS, and PROMOTION AND EVENTS. The main chat area shows a message from user 'pam' dated 11/29/2022 3:20 PM, announcing a contest to create a mission patch for the MULA satellite. The message includes a link to the contest details and a Google Forms sign-in link. Below the message is a promotional image for the 'MULA MISSION PATCH CONTEST' with details on eligibility, judging criteria, and prizes. The right sidebar shows a list of 44 online members.

**GOAL: LVL 1** 0/2 Boosts >

November 29, 2022

**pam** 11/29/2022 3:20 PM  
Hi @everyone! 🙌

🔗 CREATE THE MULA SATELLITE MISSION PATCH 🔗

#JoinTheMission of the country's first commercial-grade satellite in development, the Multispectral Unit for Land Assessment or MULA satellite.

Submit entries until 09 December 2022 here:  
<https://bit.ly/MULAMPC>

Read the full mechanics here:  
<https://bit.ly/MULAMPCMechanics>

**Google Forms: Sign-in**

Access Google Forms with a personal Google account or Google Workspace account (for business use).

👍 2

3:20 PM

**MULA MISSION PATCH CONTEST**

#JoinTheMission of the Multispectral Unit for Land Assessment or MULA Satellite by creating its mission patch!

**Eligibility**

Open to Filipino citizens 18 years old and above, except employees and relatives of the Philippine Space Agency and the Department of Trade and Industry up to the 2nd degree of consanguinity and affinity.

**Criteria for Judging**

Relevance	35%
Originality and Creativity	20%
Technical Execution	20%
Overall Impact	20%
Audience Impact	5%

**Prizes**

PHP 20,000.00  
Limited edition MULA Plushie

Submit entries here until **09 December 2022**

Scan QR code for the full mechanics

PHISA

in partnership with dti

ONLINE — 44

- Abooo
- anggesite
- Archrai
- ArmielynObinguar
- Astrmikki  
in to shift!
- AstroSheep  
Mornin! Nice day for fishin ain'...
- bewotiness  
beplop
- BravoCharlie  
Playing War Thunder
- Chantanaux
- Danterio
- denisechrstn
- DenzelTimeHigh  
Playing Honkai: Star Rail
- Drew04
- ew34kson
- Forms **BOT**  
Watching /help in 6926 guilds
- HENERALuis  
Listening to Spotify
- Hiroki  
Running on Coffee & Crac...
- Honey Fombuena
- iel

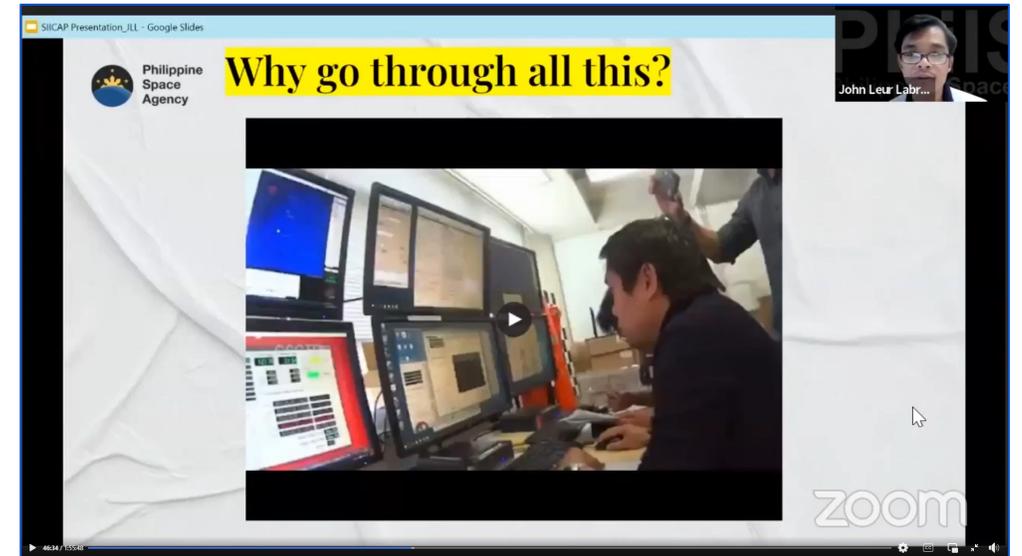
SIICaP Discord Server





Our first webinar series, Lakbay Kalawakan, talked about the country's foray into space.

The series highlighted the Filipino engineers and scientists involved in operating the first sovereign satellites, Diwata-1 and Diwata-2.



**SIICaP Data Camp**

A five-part workshop on how to use open source technologies in processing geospatial datasets.

#JoinTheMission  
#SpaceForEveryJuan  
#MulaKalawakan  
#3YearsOfPhilSA

PhilSA

QR CODE TO REGISTER

Data Camp held workshops in using open-source technologies to make use of space data.

Participants showcased their skills by applying it to different areas.

Raster Processing with Python.ipynb

```
from rasterio.plot import show
show(bandi)
```

0  
250  
500  
750  
1000  
1250  
1500  
1750

zoom

**1st Place**

**Oras: A Rhythm Generator Based on Geospatial Time Series Data**

Benjamin Joseph D. Jiao

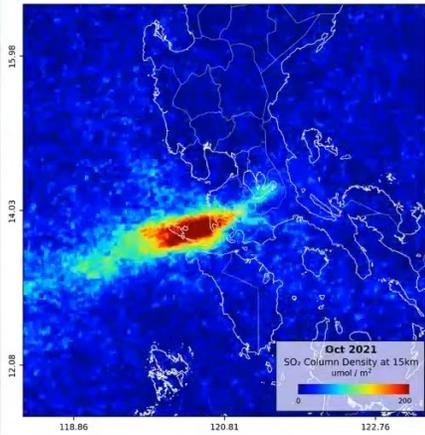
PhilSA World Space Week PHILIPPINES

zoom



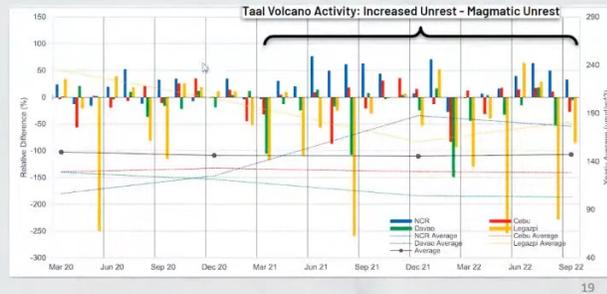


## Monitoring Air Quality from Space



### Total Vertical Column SO<sub>2</sub> Average From 2019.

- Since the eruption of Taal Volcano in January 2020, it showed little signs of unrest and minimal SO<sub>2</sub> emissions
- Increased activity resurfaced starting the latter half of 2021 and was since tagged for higher alert levels of unrest



SIICaP promotes use of space data and emphasizing its importance in hazard and climate management.



## Enabling Timely Disaster Response

Rapid disaster response in Naga, Cebu landslide (21 September 2018)

The images show the areas before and after the landslide event in Naga, Cebu. The map layout was immediately sent a team on the ground. The ability to generate this [map] information in a timely manner was crucial.

It enabled rescuers to prioritize areas for search and rescue.

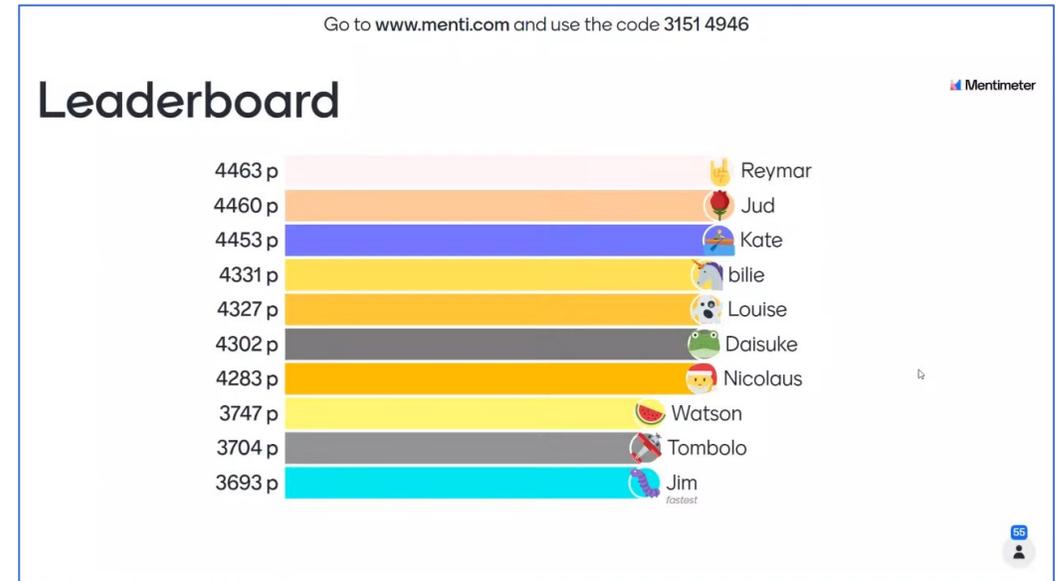
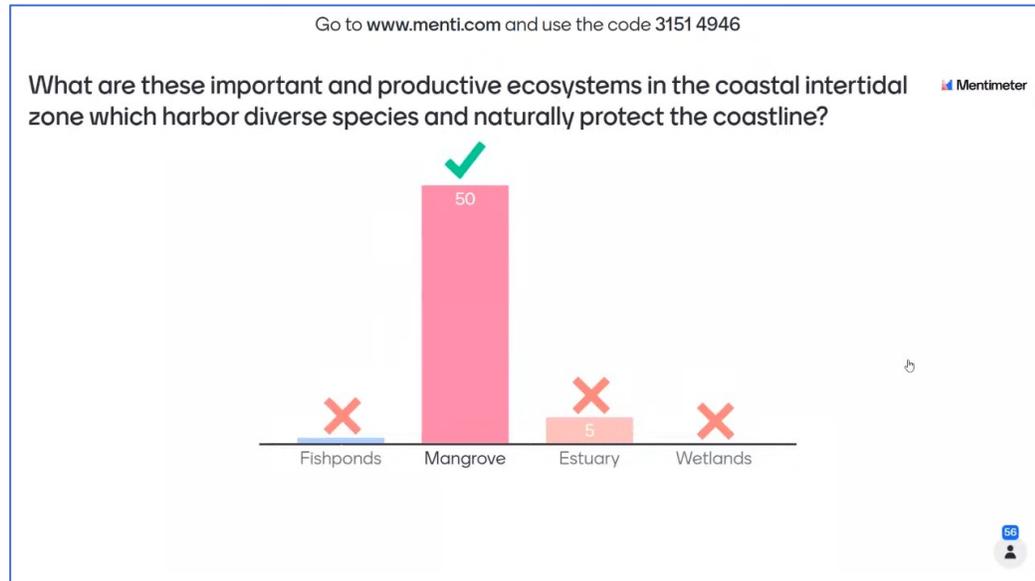


## Mangrove monitoring

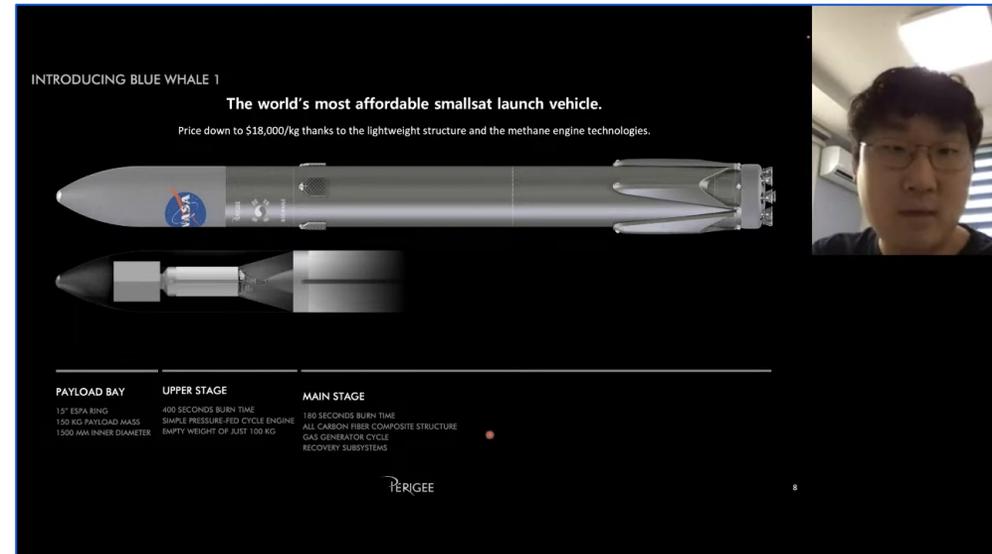
- Coastal intertidal zone
- Productive, diverse
- Blue carbon • Climate change
- Protects coasts from flood damages



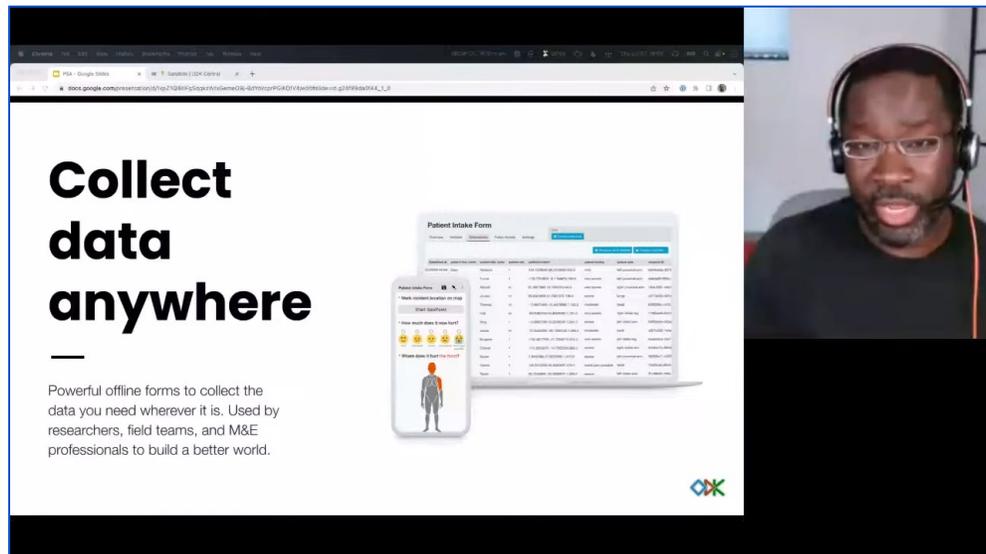
We give fun quizzes and active participation is incentivized. PhilSA sends prizes to students that got high scores during the quiz.



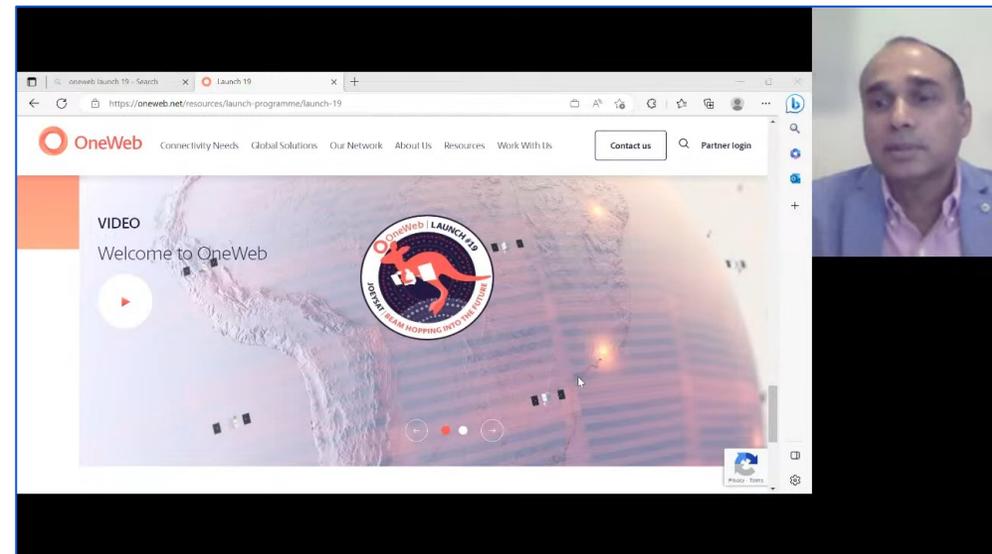
SIICaP has hosted speakers from different fields of space science, technology, and applications.



Perigee Aerospace

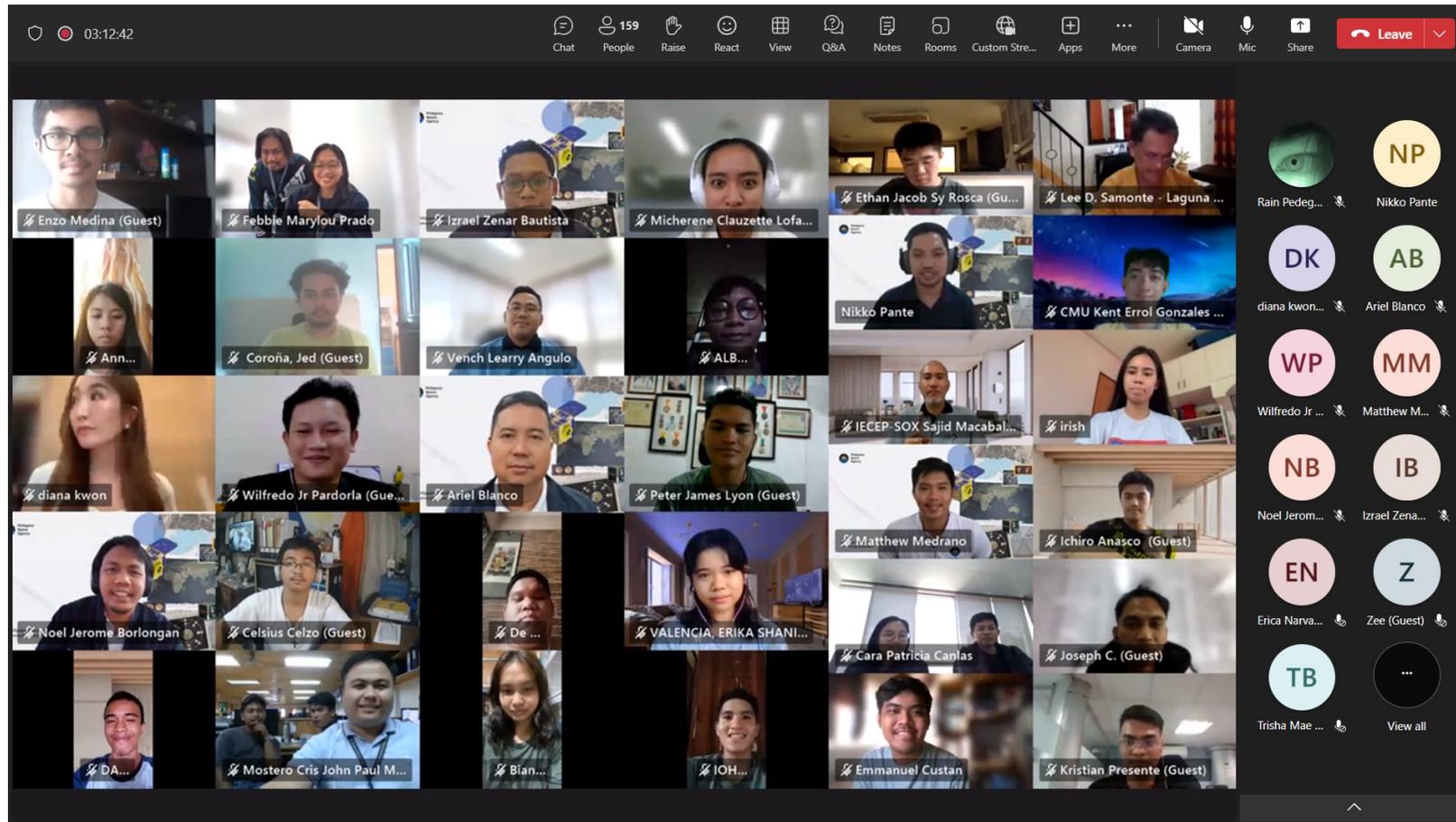


ODK



OneWeb

In 1 year, **122** High School students have attended at least 1 SIICaP webinar.



At below university level, SII CaP has contributed mainly to 3 sustainable development goals.



# Contact the Philippine Space Agency

facebook.com/PhilSpaceAgency

instagram.com/philspaceagency

linkedin.com/philspaceagency

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