ANNUAL REPORT

GLOBE PROGRAM DOMINICAN REPUBLIC













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INTRODUCTION



GLOBE Program Dominican Republic started the year 2020 actively participating with the City Council of Santo Domingo and the new Mayor Carolina Mejia to train more citizens, teachers, NGO's, and strategic government personnel in the GLOBE Protocols. COVID-19 stopped our workshops, but we continue inviting them to use online training. We have 89 teachers and citizen scientists pending for training and 180 untrained GLOBE observers that are contributing to their observations for the program using the GLOBE Observer App.

We organized the first Virtual Science Fair in the Dominican Republic with international visitors from 8 countries, two webinars for GLOBE LAC, and one Master Class with Ms Dorian Janney (NASA, GPM) presenting the Mosquito Protocol to an audience of more than 200 participants.

Our program "Bee Alive" has an Instagram page à @BeeAlive.DR with many followers. The Santo Domingo Mayor is going to use it as part of the new campaign to reduce the carbon print of the city and promote planting species with flowers that feed the pollinators.

Another campaign that we are also participating in is the ZIKA Project, helping the Ministry of Environment and Public Health to help report the areas of mosquitoes' reproduction, the location and type of mosquitoes found.











We also conducted a campaign to report and informed the Santo Domingo city about the dangers of an uncontrol landfill fire and the negative consequences on people's health produced by the aerosols. We used NASA's satellites data and visualizations to report the aerosols AOD given that, because of the COVID, we are in a national lockdown and cannot use the sunphotometer.

We are collaborating with the INTEC's (Instituto Tecnológico de Santo Domingo) air quality program using GLOBE Protocols, to measure the aerosols in the air and the aerosols in precipitation collected in the rain gauge with the pH Meter. All data is reported to GLOBE.

The PUCMM (Pontificia Universidad Católica de Santo Domingo) included GLOBE Program DR, in the National Sustainable Development Goals Plan for 2030 as the program that will help to contribute meaningfully to our understanding of the Earth system and global environment. The PUCMM also recognized students from 5 GLOBE schools for their scientific projects during the GLOBE Science Fairs at their schools.

The GLOBE DR Davis Station reports every 10 seconds air, precipitation and barometric pressure to the GLOBE Program. We are working to add private Davis stations to GLOBE data report and create a web to compare and validate our data.

Our GLOBE students participated in the COVID 19 Engineering Challenge organized by Teresa Kennedy, former GLOBE Program president and sponsored by the University of Texas at Tyler. The challenge accepts a proposal on how to design houses after the pandemic that are more sustainable and attune with the environmental conditions.

Our strategic plan includes the organization of a Mosquito Protocol online, continue with the promotion of the virtual certification of GLOBE Teachers and be an essential part of the National Sustainable Development Goals Plan for 2030.

GLOBE DR is also proud to announce our first ALUMNUS that was inspired by the program to study Aerospace Engineering: Diego Monzon, his dream is to become an astronaut. We wish him the very best in his journey.











EDUCATION



We organized the first Virtual Science Fair in the Dominican Republic with international visitors from 8 countries. The popularity of the event transcends the country and was highlighted by MICROSOFT at their Global Learning Week on June 22-26, 2020 on Day 1, more than a million people watch the conference.



















Two Virtual Master Classes with Ms Dorian Janney (NASA, GPM) presenting the Mosquito Protocol ended up capturing the attention of an audience of more than 200 participants, with many ideas on how to take measurements at home.



THE GLOBAL PRECIPITATION MEASUREMENT (GPM) MISSION MEASURES HOW MUCH RAIN AND SNOW IS FALLING TO EARTH FROM THE CLOUDS.

WE CAN USE GPM DATA TO HELP US DETERMINE WHEN AND WHERE WE WILL FIND OUTBREAKS OF MOSQUITO-TRANSMITTED DISEASE.









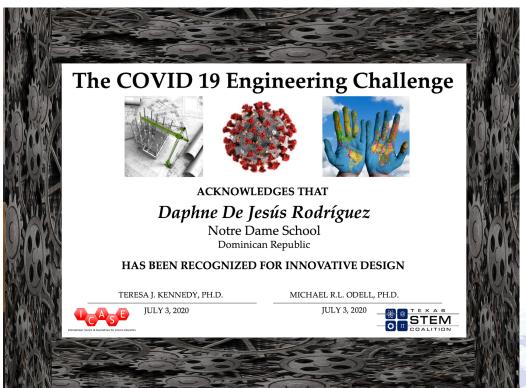






SCIENCE

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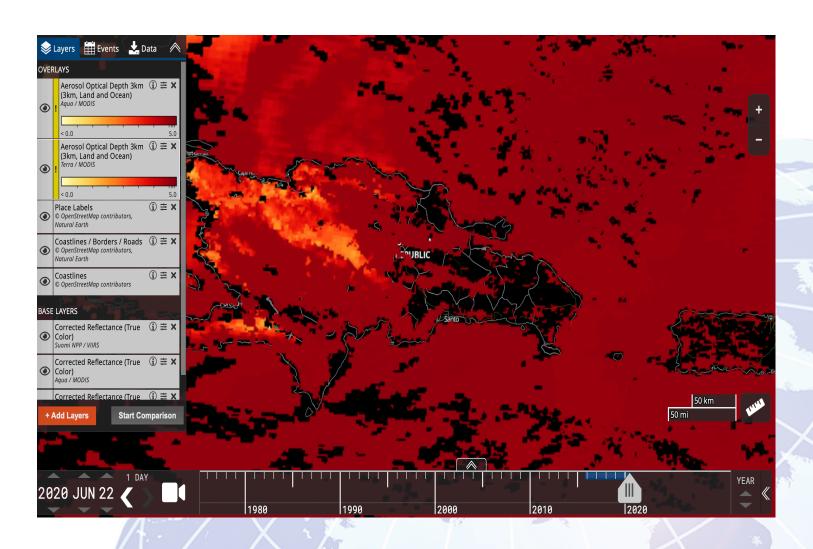


TECHNOLOGY

The GLOBE DR Davis Station reports every 10 seconds air, precipitation and barometric pressure to the GLOBE Program. We are working on adding private Davis stations to GLOBE data report and create a web to compare and validate our data.

GLOBE DR shared the data with the Dominican government and the neighbours of our administrative office. Several times our messages through Whatsapp and social media (Instagram-> @GLOBE.DR and Facebook -> GLOBE Program Dominican Republic) inform the community about possible landslides and water floods. Our alert post during the Duquesa Landfill fire went viral and was the first to give instructions on how to reduce the health consequences to the population.

We use NASA satellites and visualizations to measure aerosols AOD (Aerosols Optical Depth), and also to track and locate the event.





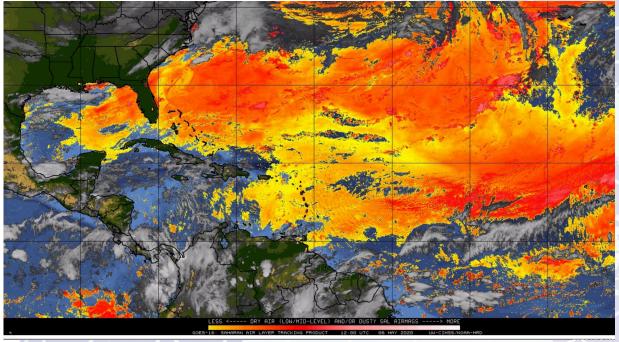


























Duquesa Landfill fire was first reported by GLOBE DR in social media. The post went viral overnight.





Supported by:























Intense Saharan Dust event in Santo Domingo.













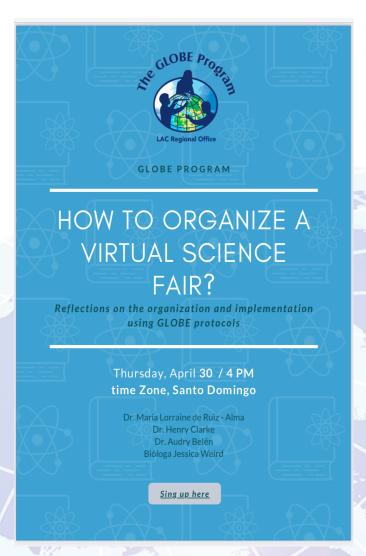
COMMUNITY

GLOBE DR Staff prepared two webinars to the GLOBE Latin-American community to share our experience with the Virtual Science Fair and the Aerosols events on the island.

The aerosols data presented was collected during the yearly Saharan Dust event, which we follow very carefully and prove again and again, how it changes the hurricane's path. The aerosols acted as a protective shield to our island.

The second event was human-made, an uncontrolled landfill fire that produced a cloud of dust that covered the city for weeks and raised the cases of COVID 19 at an alarming rate. The World Economic Forum published a study from the University of Harvard that states the positive correlation of contaminated air and coronavirus pandemic, raising the new cases and deaths.



















The Dominican Government appreciated the contribution of GLOBE DR during 21 years and now we are members of the Citizens Advisory Board of the City of Santo Domingo. We are going to participate in several projects.

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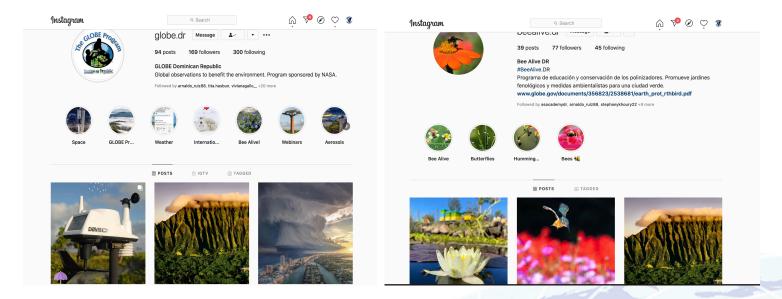


COMUNICATION

Our social media pages are always with new information for our followers. We also have a WhatsApp for all the neighbors to report the local weather and to inform about events with the City Mayor.

We had two publications of our events in local newspapers, one Microsoft Conference, and two webinars with GLOBE Latin-American.

We actively participate in the webinars and virtual annual conference organized by the GLOBE Program in USA.















STAFF

Dra. María Lorreine del Ruiz-Alma

Dr. Henry Clarke

Biochemist Sergio Mainardi

Master Laura Peña Marizán

GLOBE DR Country Coordinator

GLOBE DR Country Vice-Coordinator

Advisor

Advisor

Our staff participates at the GLOBE Program and GLOBE LAC webinars, annual conferences and regional meetings.

We also organize webinars and conferences locally and internationally.

Our professional development goals are: 1.- Complete more virtual certifications for our staff and all the GLOBE Teachers and trainers in the country.

- 2.- Promote among the 87 account requested teachers the virtual certifications of the GLOBE Program Protocols.
- 3.- Organize virtual trainings for the 180 GLOBE Observers.











APPENDIX

Here is the status of GLOBE Teachers and GLOBE Observers managed by your organization Dominican Republic for the month of October:

Member Status	Number	Description
Account Requested	0	Teachers who have requested to join GLOBE and are waiting for approval.
Account Approved	87	Teachers whose accounts have been approved but have not started the training process.
Pre-Candidate	2	New teachers who are registered for an upcoming workshop.
Candidate	0	New teachers who are registered for an in-progress workshop.
Newly Workshop Trained	0	Teachers who have completed training at a workshop in the last 30 days.
Newly eTrained	0	Teachers who have been eTrained in the last 30 days.
GLOBE Members	35	Fully trained GLOBE Teachers.
Untrained GLOBE Observers	180	GLOBE Observers in your organization who are untrained (i.e have not completed eTraining). These are citizen scientists in your country/organization who have registered with the GLOBE Observer app.
Trained GLOBE Observers	0	GLOBE Observers in your organization who have been trained in the last 30 days through the eTraining system.









