# INFORME ANUAL 2020

## **GLOBE BRAZIL**



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### INTRODUCCIÓN

Throughout 2020, the GLOBE Brazil team has tried to emerge on Distance Education. As well as setting goals for the adaptation of the program to the pandemic, we have concentrated on producing content for GLOBE Brazil's social media as well as the translation of protocols and the GLOBE campaign materials to Portuguese (pt-BR), releasing it on social media with great success. 2020 was a year of change. With the help of the Ministery of Science, Technology and Innovations, the Brazilian Space Agency has distributed six technical support scolarships in four regions: Paranaguá, PR (2), Rio de Janeiro, RJ (1), Brasília, DF (1), Parnamirim, RN (1) and São Luís, MA (1). These teachers did not have the opportunity to implement the GLOBE program in schools as predicted, but their scolarships were renewed for 2021. Hopefully, we will get there soon.



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#### EDUCACIÓN

We have translated 60 GLOBE documents, from protocols to videos, to Portuguese (pt-BR). This was accomplished by the American Embassy in Brazil. A video on how to use protocols and to assist in observations was produced step by step, complementing the GLOBE Observer app.

We have led two national Online Trainings (Workshops), with over a 100 teachers present at each, on Hydrosphere and Atmosphere Protocols entitled " Mosquitoes, Cloud Protocol, Atmospheric Sciences and the GLOBE Program", reaching 24 hours of activities.

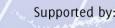
All materials on the GLOBE website, including protocols, have been reviewed and studied. In addition we trained teachers to better know GLOBE's website and tools, and the possibilities through the "Visualization System".

We have done several Cloud observations through the GLOBE Observer app, in order to study better methods to teach students and teachers to use them.



We have been present at the "GLOBE Virtual Meeting" and teachers are excited about future updates to the GLOBE Observer app and the test version (beta) of the new application.







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#### CIENCIA

At this point we are trying to adapt the new order and social reality to Science seeking to link health, environmental education and the maintenance of our most varied ecosystems. In a multiinterdisciplinary way, we have been trying to relate the Mosquito protocol to collective Health. "LábMóvel" is a bus that the Federal University of Paraná has acquired, in the South of Brazil, and has installed with lab equipment. They made a cooperation term with the Brazilian Space Agency regarding the GLOBE program: as soon as the pandemic ends, this bus will go to schools and communities and show how AEDES AEGYPTI live, procreate, and how diseases are spread (Dengue Fever, Chikungunya, and Zika Virus). We also call it "ZikaBus".

We are trying to consider science beyond school walls: the idea is that kids will have a scientific question that emerges from their own needs and then relate it to the GLOBE protocols.







#### TECNOLOGÍA

Distance learning has forced GLOBE Brazil team to invest in Technology. We have created an Instagram accont called educa\_aeb where we have been posting two GLOBE videos and tutorials. We have begun a science portal at the Brazilian Space agency, relating GLOBE protocols to the Space sector, to be launched in 2021 first semester.

One example of GLOBE social Technology was done mostly in Rio de Janeiro, by the GLOBE teacher Inês Mauad: The students were frustrated at their homes asking to do something different than watch zoom classes. We have therefore started promoting the collection of data through challenges and contests using capture traps in the students' homes for collection, identification, analysis of the larvae of the Culex mosquito and Aedes aegypti. They used different foods, water and cover in the traps. Every week they did a ranking of the data collection that varied according to the data sent.

VAMOS ESCOLHER A ARMADILHA MAIS LEGAL DE CADA TURMA!! MÃOS À OBRA!!





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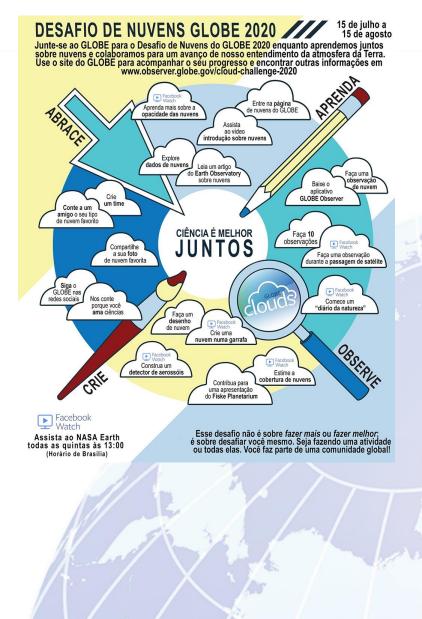






#### COMUNIDAD

We believe that the participation of the school community in programs of a magnitude such as GLOBE promotes assertive actions in students as trained observers. So, even considering the pandemic and its consequent social isolation, we have relied that Brazil GLOBE's community would do science at home. We have shipped and coordinated scientific materials into four regions of Brazil. The selected students were distributed in strategic locations to the project coordinators, namely: Paranaguá, PR (2), Rio de Janeiro, RJ (1), Brasília, DF (1), Parnamirim, RN (1) and São Luís, MA (1).



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#### COMUNICACIÓN

Considering that the main objective of GLOBE is to involve citizens in scientific research and in the protection of Earth's systems, this year we have insisted about the link between health and Environment.

We have invited the president of the Brazilian Space Agency, Carlos Moura, to do a series of four videos for GLOBE communication this year. The four videos can be found here:

https://web.facebook.com/watch/?v=1576050742581860

https://web.facebook.com/watch/live/?v=370641220265429&ref=watch\_permalink

https://web.facebook.com/watch/?v=635656407042417

https://web.facebook.com/watch/?v=689960321594905

We have tried to communicate the co-relation of health, climate change and unplanned urbanization.



#### STAFF

Brazilian Space Agency: Nádia Bandeira Sacenco Kornijezuk and Amelia Naomi Onohara

#### Country Coordinator and Deputy Country Coordinator

GLOBE teachers listed at the Ministery of Science, Technology and Innovations:

Inês Mauad Andrade – Rio de Janeiro

Manuel Ricardo de Jesus Costa - Maranhão

Lucas Raoni Farias - Paranaguá

Ariadne Lima – Natal RN

Lucas Ferreira – Brasília DF

Fabiana Pontes Rodrigues - Paranaguá

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