

The Importance of a Simple Astronomy Club in a Science-Closed City

Luis Ricardo Pereira Lima
Physics Student in the Physics Department at the
Universidade Federal do Amazonas,
Manaus-Amazonas,
Brazil
luis.rl.pereira@gmail.com

Abstract— Manaus is a city in the heart of the Amazonian Rainforest that did not have any scientific interest whatsoever. My city lives in a constant fight against any kind of scientific relevance, that causes a population that lacks the most basic understanding of how our universe works, since 2016, a group that I'm part is working to make this situation better, we formed an Astronomy Club in our University, since the city had none like it, and we observed some changes after our work to disseminate science started. First, people of the city started to attend more and more to scientific events that started showing up here and there, then, some events that were only about pop culture and other kinds of entertainment started asking our presence to participate and spread our knowledge to the more common folk. This work continued and more and more people are starting to see science differently, with this job we want to create a more open-minded city to new experiences in astronomy, physics and other matters. **Keywords**— **City, Astronomy, People.**

NOMENCLATURE

CAUFAM: Clube de Astronomia da Universidade Federal do Amazonas. (Astronomy Club of the Federal University of Amazonas)

UFAM : Universidade Federal do Amazonas (Federal University of Amazonas)

I. INTRODUCTION

Manaus is a city deep inside the Amazonian rainforest, it is the capital city of Amazonas and is composed of 2,145,444 people, despite being the 7th largest city in Brazil [1] it suffers from a big problem, the lack of scientific growth and propagation. A big chunk of the problem comes from the poor educational system and almost non-existent scientific events in the city, to try and solve this problem, in 2016 a group called the CAUFAM was born to try and solve the lack of scientific content in the city, founded with the purpose of spreading scientific knowledge around town and try to make our city a better place, we started to provide astronomical observations with 2 telescopes provided by the UFAM, since most people around town never had the chance to have a close look at the stars and planets in the night sky. The club changes its personnel every

year, though many of our participants stay until this day in our club, most of its members change to provide a new experience every year to new people. Through the years our work showed to be relevant and led to some interesting conclusions, in this paper those conclusions are going to be exposed and analyzed so others can try and replicate these actions to your own cities or counties.

II. METHODOLOGY

Between the years of 2016 and 2018 the CAUFAM did weekly observations of the night sky, covered 9 major astronomical events such as full moon eclipses, partial moon eclipses and partial sun eclipses, these observations had the purpose of spreading science around town and oppose misinformation. In these 3 years, the CAUFAM had in total 53 participants that helped in regional events in and out of town, these events covered 5 schools composed of students of varying ages, including adults that were doing high-school again, there were also 6 events downtown and 1 in the slums, were we aimed to reach marginalized people that had were illiterate, and mostly children and teenagers that never thought they could be scientists. Beyond night sky observations, we did astronomy workshops that tried to show that science was not far away from them, but really close to their reality.

III. RESULTS AND CHALLENGES

During the 3 years we encountered many problems, including rain, cloudy skies, bad organization in the schools and places that events were set. Rain was the main issue with our work, and being in a tropical region made it a pretty hard job to do consistently, the solution for that problem was starting to make workshops in the daylight at different places and schools, that brought us to a new perspective on the younglings, they were unaware that science could be so fun and enlightening. The second main issue was the lack of interest in schools and some participants of the club to work in the projects and workshops, this made us rethink our recruitment process and change some of our participants, that didn't make so much difference because some schools didn't gave us the amount of aid that we needed, causing our transportation and application of workshops much harder.

Despite the challenges that we faced, the results were very satisfying, in the 3 years of application, we could affect more than 8,000 people, including not only kids and teenagers, but women and men of various ages, from early 20s to late 70s, and the biggest surprise on the project was that many of the older people were mesmerized and some cried because some of them never saw the moon close-by or the planets, this was a turning point in our project, and gave us data to work with the elderly. At the end of 2018 we saw that our work created a greater relevance in science at our city, with the creation of events such as the First Week of Indigenous Astronomy [2] and made our presence in other events of our town an attractive opportunity for people to go and learn more.

IV. CONCLUSION AND FUTURE GOALS

The 3 years of work resulted in a change of perspective in our town, where science was closer to the citizens and made the scientific career a reality in our schools, where science and scientists were considered almost unreachable became not only a possible dream, but a close one. The continuous work in these

three years proved to be satisfactory in the sense of science propagation, over 270 kids from many schools searched us for help in find a way to start studying and applying for science and astronomy careers, in which we aided with the help of our University and started a close relationship with the institution. Not only the citizens that we worked were impacted by this job, but the students at our University realized that astronomy was a worthy job to follow and came to some realization in the change of their careers.

Our expectations in our continuous work are that more children start aiming for a lifelong career in science, astronomy and education, so that we can open our city for future scientists that will allow us to do more researches, open more labs and observatories.

a.

- [1] <https://agenciadenoticias.ibge.gov.br/en/agencia-press-room/2185-news-agency/releases-en/22385-ibge-releases-population-estimates-of-municipalities-for-2018>
- [2] <https://noticias.band.uol.com.br/cidades/amazonas/noticias/100000907986/sesc-am-realiza-primeira-edicao-semana-de-astronomia-indigena.html>