

Contribution ID: 154

Type: Poster in Wroclaw

Our Unfriend, the Atom: the Case of a Stratospheric Nuclear Explosion North-American Test in the Northeast Skies of Brazil

Wednesday 15 December 2021 11:45 (5 minutes)

Abstract. The aim of this paper is to present an unknown fact occurred in Brazil in 1957: three explosions of nuclear bombs realized in a diplomatic illegal way above the skies of the Northeast of Brazil. The explosions are a test to detect the possibility to create an electromagnetic barrier to avoid the exchange of radio communications by the soviet government in a case of a total nuclear war. This terrible fact are not studied in the History and Physics textbooks in Brazil but it was documented by brazilian and north-american newspapers and by the references of Basbaum and Cornwall.

1 Stratospheric Nuclear Explosion in the Brazilian Northeast

Basbaum (1960) wrote:

The failure to re-establish diplomatic and trade relations with the countries of Eastern Europe and China, which are of such great interest to our economy, is an imposition of the United States in our foreign policy. And the famous Brazil-US military agreement, through which a US domestic law regulates relations between the two countries, is without a doubt a clear intervention in our domestic policy. Just recently, the United States exploded an A-bomb in the skies of the [Brazilian] Northeast without the governors and political leaders of our country manifesting in any way. [1, p. 21]

It is very known that, during the Cold War, United States developed nuclear bombs to make test in the earthly stratosphere. The aim was to analyze the possibility to avoid radio communications or electronic guidance of nuclear missiles launched by soviets in a Nuclear War. The effect was terrible.

Cornwall wrote the memories of witnesses who witnessed the nuclear events in the year 1957:

It was around 7:00 pm (...) someone called their attention to a rising light... a large pink or reddish light spreading from the low mountain range that you see from the door towards Cacimba Nova. It was like a fern plant, streaking like coconut leaves.

The flash lasted so long that the animals left the surrounded place thinking it was a new day.

Ana (...) heard her mother comment that she saw the great light in the sky and that the day after there was dust above the plants. [2, p. 10-11]

It was evident that north-american realized an illegal nuclear test in a geographic area not allowed to conceal this madness. The New York Times related this event in its edition of 1959 [3] (Fig. 1).

Fig. 1. Edition of April 4th, 1959 –New York Times relating the nuclear experiment named Argus.

2 The Our Unfriend, the Atom

Recently it was published a paper [4] when we analyzed the Disney's film, made in 1957, entitled Our Friend the Atom. This well-known film was a piece of propaganda of the north-american government to popularize the peaceful use of the atomic energy. But this is only the surface. The real aim of this film is to make a brain wash in large scale to the US citizens accept the use, also, in a new Great War.

The idea, developing to the new brazilian curricula to High Schools is to work of contemporary physics in a historical and critical perspective, using for example, the conflicts between science and politics, for example. There is an obvious ambivalence between what is "friend" and what is "unfriend" in the field of ATOM.

3 Conclusion

The remarkable conclusion of this work is to introduce the theme of NUCLEAR PHYSICS but based upon real and unknown facts of the history of our science and humanity.

Acknowledgements

We would like to acknowledge the ex-President Luis Inácio Lula da Silva and Dilma Rousseff by the resources in education, science, technology and culture during the years 2003-2016.

References

[1] L. Basbaum, *Caminhos Brasileiros do Desenvolvimento*, Editora Fulgor, São Paulo, 1960.

[2] R. Cornwall, *Amargor: O Teste Nuclear Atmosférico Clandestino sobre o Sertão Central*, 06 de Agosto de

1957, Tipografia Íris, 2013.

[3] The New York Times, Argus Atom Tests Scored in Brazil, NYT, New York, ed. April, 4th 1959.

[4] G. B. S. dos Santos, D. A. T. Mello, M. C. D. Neves, Our Friend the Atom: An Imagery Analysis of Disney's Science Book. Dordrecht, Science & Education, 2021. <https://doi.org/10.1007/s11191-021-00284-1>

[5] M. C. D. Neves, K. M. Zan, G. M. D. Simonetti, F. Pedrocchi, Fantasies, Myths and Fallacies in Modern Physics Teaching: The Case of the 3 'R' (Radioactivity, Relativity, Redshifts), *Recen* 1 (2), 2000, 103-110.

Primary author: DANHONI NEVES, MARCOS CESAR

Co-authors: Dr SILVA, JOSIE AGATHA PARRILHA DA (State University of Ponta Grossa); Mrs SANTOS, Giovana Blitzkow Scucato dos (Federal Technological University of Paraná); Dr MELLO, DÉBORA AMARAL TAVEIRA DE (FEDERAL TECHNOLOGICAL UNIVERSITY OF PARANA)

Presenter: DANHONI NEVES, MARCOS CESAR

Session Classification: Parallel 7 - Wroclaw

Track Classification: 18. Physics for environment and social issues