

The Influence of Meteorology on Human Health

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Expert in the Biometeorology area, a field still little known in Brazil, our interviewee tells of his fascination and experience on this area of Meteorology very important in recent times where actively discusses issues related to air pollution and environmental, climate change and diseases caused by these factors. To speak of the importance that Biometeorology has on human health, we interviewed Professor Jose Clênio of the Atmospheric Science Institute (ICAT) of Federal University of Alagoas, who studies the Influence of Atmosphere on Human Health (Human Biometeorology), beyond to being author of the book entitled "Biometeorology: Case Studies in Maceio, Alagoas".

CIRRUS – What are lessons learned over the years teaching classroom of Biometeorology?

Prof. José Clênio – There is great difficulty in working with Biometeorology, especially the Human Biometeorology (area where I have been working), due to acute shortage of literature and scientific papers published by Brazilians or in Portuguese, but also by the lack of disclosure of the few which exist in Brazil!

Moreover, even with some adversity, this topic attracted me. As far as I can, not just past the little knowledge that gained over more than a decade, as have encouraged

research and paper in this area of knowledge.

CIRRUS – Throughout the I Seminar on Biometeorology: Atmosphere and Society, in 2008, were agreed that would create a Regional Section of the Brazilian Society of Biometeorology in Alagoas and quarterly seminars would be organized to congregate researchers from several areas around this study filed. These were accomplished?

Prof. José Clênio – As mentioned by Prof. Iran (Biometeorology Brazilian Society President – SBBiomet, in 2008) when he was in Maceio during this meeting, could only be created a Society section in Alagoas, after the next national congress of Biometeorology, where SBBiomet would meet and deliberate on the issue.

After this, there was a change in the presidency of SBBiomet, where with this came back to square zero and we had to start all over again!

Regarding to the quarterly seminars, this proposal was not mine, because there was a very strong consuming of my health due to few collaborations that I got inside and outside of UFAL to organize this meeting. As the Seminar in 2008, I would venture to carry out only one each year, because is necessary people who collaborate effectively and this has been difficult to achieve!



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CIRRUS – What is your assessment at the time on role of the influence of Climate on health?

Prof. José Clênio – Climate acts on human health, not only indirectly through air pollution and vector-borne disease transmissions, but also directly causing deaths in hospital beds and becoming more serious illnesses than they already are. This occurs because the human body has centers of perception to the meteorological stimulus that influence in the physical and chemical metabolism of the human organism.

As is known to all, the Earth's climate has undergone considerable change and its relation to the health of living beings is extremely dynamic. To each different weather and climate variations, meteorotropical different answers appears in living organisms. For this reason, is necessary to intensify research in this area, because the initiatives in this field have been shy and not valued by financier institutions for research projects. If one does not invest in research, have not been results for divulge and the role of climate on health is being only "theoretical fallacies"

CIRRUS - Why Biometeorology in Brazil is underdeveloped compared with other meteorology areas?

Prof. José Clênio – Historically, Brazilian meteorologists have not worried about Biometeorology development in our country, just look how many meteorologists had participated of the SBBiomet from its

foundation until the present moment! The politics of resource distribution in Brazil, including inside Meteorology, has not been favorable to Biometeorology, perhaps by the small number of meteorologists qualified in this area, because there are many more professionals of the fields of zoology and fitotecnic acting on it. I believe to be these, among other good reasons why Meteorology is much more developed than Biometeorology.

CIRRUS - How to leverage its development and to encourage more people to work with this theme so important in Brazil?

Prof. José Clênio – So that its development occurs is necessary, in my view, which fulfills some stages:

1 - Initially, to count on the goodwill of those who already work in this area and on the contribution of sensitized others in this direction, to the formation of local groups, that joined, can establish goals and accomplish them effectively in order to develop this science nationally;

2 - To stimulate students to become qualified in countries with emphasis on scientific development of Biometeorology;

3 - To fight so that the Meteorology courses of Brazil put in its curriculum classroom as "Phytological Biometeorology", "Zoological Biometeorology" and "Human Biometeorology" as class obligator at graduation and Post-Graduation the courses, as well as encourage research in these areas knowledge.



CIRRUS - Do you believe that Biometeorology can benefit from current research regarding to climate change issues?

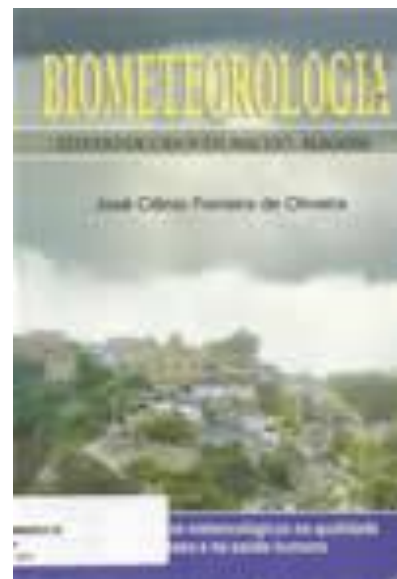
Prof. José Clênio - Of course, because Biometeorology is the science that studies the relationship between "changes" that occur in the Weather and Climate and Health of living beings. In the case of man, quality of life is also included (rural and urban). Changing the climate, therefore there will be changes in the meteorotropism of the alive being.

Thus, information about climate change may determine the severity of the situation or mitigation of disease that are present in human life, or that could be in a near future

CIRRUS - What is your final message?

Prof. José Clênio - I invite all those worry on influence of the variations of weather and climate on human health, to "join forces" towards the further development of Biometeorology in our country. I also want to be thankful for the opportunity that magazine Cirrus offers me to participate effectively in the dissemination of science, and I am willingness to work on what is needed for its development.

Before closure of this matter, we got information that from 10 to 12 November 2010 Prof. Clênio will be organizing the II Seminar Atmosphere and Society (SAS II). So we invite the whole to participate in this important meeting. Further information can be found in our Session **Agenda**.



Technical Data

- Graduate in Meteorology by UFAL (1984);
- Expertise in Semi-Arid Agrometeorology by UFAL (1995);
- Master in Development and Environment by the Regional Postgraduate Course in Development and Environment - PRODEMA, by UFPE (2004);
- He is Extension Coordinator of Atmospheric Sciences Institute of UFAL.