

NEWSLETTER

Commission on Climatology

N°9

September 2010

Dear Colleagues,

A heated debate about weather and climate has been going on in recent years all over the world. People are asking themselves what is going to happen in the nearest future and how life is going to change due to the climate change and extreme weather phenomena that are taking place. There are calls for alarm that even our civilization may be endangered by a state of paralysis, as though the climatic change was a proven theory. Every day the media bring the news of destructive weather phenomena destroying property and harming or even killing people. It would be difficult not to find examples of that in the course of a year in every part of the world. The issues described above were the reasons for the Commission on Climatology to focus on extremes and regional climate studies as the main research field.

Zbigniew Ustrnul – Chair of the CoC

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1. MEMBERSHIP

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Honorary & Senior Members

- S. Gregory (U. K.), M. Yoshino (Japan), M. Domroes (Germany), L. Nkendirim (Canada),
- A. Douguédroit (France), R. Brazdil (Czech Republic), T. Mikami (Japan).

2. IGU Regional Conference Tel-Aviv 2010 – Report

During the International Geographical Union Regional Conference in Tel Aviv, Israel (12-16 July 2010) Commission on Climatology organized climatology sessions within two Conference days (14-15 July 2010). The sessions covered the general themes of essential current issues:

- ✓ Global warming and its impacts different assessments
- ✓ Urban climate and environmental impacts
- ✓ Urban climate and thermal comfort
- ✓ Mediterranean climate Joint Session with the Mediterranean Renaissance Project
- ✓ Remote sensing and advanced techniques in climate research
- ✓ Regional climatology

During 9 sessions, which were attended by about 100 participants, 38 presentations were given. They described observing and projected, global and regional climate change as well as its impacts on different aspects of human activity and the mitigation policy. Climate change in particular regions was mainly mentioned: from the cold Arctic, through expanse Asian continent, to equatorial Africa. The special attention was given to Mediterranean area not only because of the conference venue but also due to the Mediterranean Renaissance Project being realized The regional climate variability was examined with respect to both: global (atmospheric circulation, ocean-atmosphere interactions), and local factors. The latter clearly seen in the urban climate conditions.



Commission on Climatology - Opening Session (Session in honor of Prof. Arieh Bitan's 75th Birthday)

3. Professor Arieh Bitan – scientific biography



Two of the sessions during the Tel-Aviv IGU Regional Conference were devoted to Prof. Arieh Bitan – in honor and as a birthday tribute to his 75th Birthday.

I was born in 1935 in Berlin and immigrated to Israel with my parents and two sisters in 1938 to our new home in Haifa. I

served in the Israel Defense Forces and upon completion of my military service in 1957 enrolled at the Hebrew University in Jerusalem in the Department of Geography and the Department of Meteorology and Climatology. In 1960 I received my bachelor's degree cum laude and continued as a master's degree student in the Department of Geography, graduating with honors in 1963. As a doctoral student in that department I served as a teaching assistant and counselor, earning my doctorate in 1969. After advanced studies at the German Meteorology Service in urban climatology and topo-climatology I became a lecturer in the Department of Geography of the Hebrew University. From 1967 to 1976 I also was a guest lecturer in the Department of Geography of Haifa University. From 1976 to 1982 I was a senior guest lecturer in the Department of Geography of the Hebrew University in Jerusalem.

In 1977 I joined the Department of Geography and the Human Environment at Tel Aviv University with the rank of Senior Lecturer and established the Unit for Urban and Applied Climatology and Environmental Aspects, which I headed until 2008. I was promoted to the rank of Associate Professor in 1981 and then to Full Professor in 1993. I was twice the head of the Department of Geography and the Human Environment, Tel-Aviv University (1982-1987, 1995-1998). In October 2003 I retired in name only as I continue my academic activity in the Department of Geography and the Human Environment through teaching, research and supervising master and doctoral candidates.

I studied at many foreign research institutes, among them, Karlsruhe and Essen Universities and the Free University of Berlin, University of

IGU VGI Arizona, University of New Mexico and San Jose State University of California. I have been an invited speaker to innumerable universities, research institutes and international conferences.

I am among the founders of the International Association of Urban Climate (IAUC). I have been a member of its Board ever since its inception until 2006 and member of the Luke Howard Award Committee until today. From 1982 until 1995 I served as Head of the Expert Committee for Urban Climatology and Building Climatology of the International Federation for Housing and Planning (IFHP). Since 2003 I have been a member of the Commission on Climatology (CoC) of the International Geographical Union (IGU). In 2005 I was invited to join the international research group of the World Health Organization (WHO) for improving public health responses to extreme weather (EuroHEAT). Since 2010 I am member of the Board of The Israel Green Building Association. In 2010 I organized with Prof. Hadas Saaroni the climate sessions of the Commission of Climatology (CoC) at the Regional Conference of the International Geography Union (IGU) in Tel Aviv.

In 1980 and 1983 I initiated two international conferences in Israel on urban climatology and climatic related planning and chaired its organizing committee. These conferences were the foundation for establishing a regularly scheduled triennial congresses on these topics held in different venues globally organized by IAUC. I have been a member of the Scientific Committee for all the conferences that have been held since then. In addition, I initiated and organized two international summer schools in 1992 and 1993 in the Department of Geography and the Human Environment of Tel Aviv University on the subject of climatic related planning and building.

I am among the climate researchers of Israel

and was the first to conduct regional topoclimatic studies in the Besor region (Northwest Negev), the Arava region (south arid zone) and the Jordan Valley, as well as to investigate the climatic conditions of the interior lakes of Israel (Dead Sea and Lake Kinneret-Sea of Galilee).

I am among the first researchers and the leader in the study of urban climatology in Israel. I was the first to investigate (and still continues to do so) the "Urban Heat Island" effect in Tel Aviv and its environmental impact on the surroundings. I am also the leader in climatic related urban planning - from the overall urban level to the single building level. I was consultant to the Settlement Department of the Jewish Agency in decisions pertaining to selecting the locations for new settlements and their climatic related planning in the Jordan Valley, Judea and Samaria and other areas in Israel. I advised the Ministry of Housing and Construction and the Ministry of National Since 1979 I have been a Infrastructure. consultant to the Israel Defense Forces Construction Center and many other planning and building bodies. I was the climatology advisor for the "Israel 2020" planning teams, TAMA 35 - National Master Plan, the planning team of the Metropolitan Beer Sheva Master Plan, as well as for the city planning teams of, among others, Ma'ale Adumim, Ramat Beit Shemesh, Modi'in, Nazareth, Yehud, and Carmiel.

In 2006, together with my colleagues, I was awarded research grants from the National Foundation for Science and from the Ministry of the Environment for studies in which I am the lead and senior researcher. The research awarded by the National Foundation was finished in spring 2008.

I have published more then 40 articles, some of them with other colleagues, in top-ranking international journals, and more than 90 research and advisory reports. In the years 1981, 1984, 1988 and 1991 I edited a series of four books on urban climatology and climatic related planning published by Elsevier Publishing and wrote the book "Temurot Yishuyviot BaGalil HaTahton HaMizrahi, 1800-1978" [Settlement Changes in the Lower Eastern Galilee 1800-1978] published by Yad I also authored, in Yitzhak Ben-Zvi. collaboration with Sara Rubin, former director of the Climatology Department of the Israel Meteorological Service, the "Climatic Atlas for Physical Planning and Design in Israel". This atlas is the first and only one of its kind in Israel, and won the "Quality of Life" Knesset Speaker Award in 1992. The Ministry of National Infrastructure funded its publication.

In 2006 I won the "Luke Howard Award" of the International Association of Urban Climate (IAUC) for the year 2006.

In a paper published by me in 1991 I introduced for the first time the term "Climatic Rehabilitation of the Urban Environment" which is now used worldwide which expresses the improving of the urban climate mainly of existing cities by a series of measures.

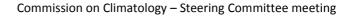
As of today, I have been supervisor to about 30 master and doctoral students.

Prof. Arieh Bitan, Department of Geography and the Human Environment Tel- Aviv University mail: <u>bitana@post.tau.ac.il</u>

4. Steering Committee meeting – Tel Aviv 15 July 2010 (decisions / suggestions)

During the IGU Regional Conference Steering Committee meeting took place. The general theme of the meeting were (1) the Commission current organizational details as well as the (2) activities planned for 2011 (e.g. IGU Regional Conference in Chile).





(1) The Commission does not have any particular member-list. It has been working with the steering committee as the only Commission <Body> however lots of climatologists and environmental as well as urban and human studies scientists are cooperating. Therefore during the meeting it was decided to complete the list of corresponding members (everyone interested in cooperating in the frame of Commission).

The Commission does not have any extra finances. The amount of money annually designed by IGU should be destined to current CoC activities, probably to any publication.

To work effectively the Commission needs permanent mailing contact. Everyone should do his best to contribute to the long-term CoC development.

(2) IGU Regional Conference in Chile.

It was decided that – if agrees –professor Francisco Mendonça would be – on behalf of the CoC –a Local Coordinator to organize Climatology Sessions during IGU Regional Conference in Santiago, Chile.

As the large members participation in the Conference is unfortunately doubtful it was decided not to organize any particular Steering committee meeting in Santiago. Apart from the mailing contact and any other possibilities the next meeting was appointed in Cologne, Germany, 2012.