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Solar Radiation and Climate Experiment Monthly Newsletter

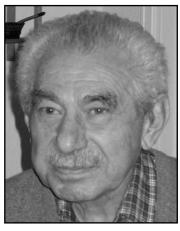
March 2009

Julius London: *March* 26, 1917 – February 25, 2009

By Tom Woods and Gary Rottman, LASP, University of Colorado; and Robert Cahalan, NASA GSFC

We wish to express our sincere condolences on the death of one of our pioneers in radiation science during the space-age era, our honored colleague Dr. Julius London.

Julius was born on March 26, 1917 in Newark, New Jersey, and he died of natural causes on February 25, 2009, just one month short of his 92nd birthday.

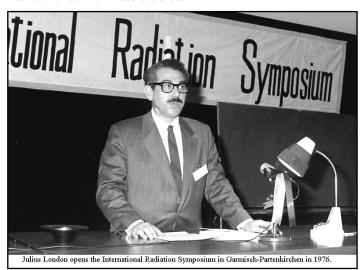


He had a distinguished research and teaching career in meteorology, radiation science, atmospheric science, and solar-climate studies. He earned his B.A. in mathematics from Brooklyn College in 1941, and his Ph.D. in Meteorology and Oceanography from New York University in 1951. During his graduate school days at New York University, Julius taught Meteorology courses for the Air Force in support of War World II efforts. Also while a graduate student, he met his wife Dorothy Sibulsky, and it was love at first sight, or should we say love at their first Bridge game. Only six weeks after this fortuitous meeting in a Bridge game, they were wed on July 6, 1946 in Chicago.

Julie, as he preferred to be called, stayed on at New York University as a professor there. But his love for Boulder, Colorado grew quickly after visiting the University of Colorado (CU) during the summer of 1955. He and his family, including their sons David and Richard, visited Boulder every summer thereafter. They moved to Boulder in 1961 when Julie accepted a professor position in the new Department of Astro-Geophysics at the University of Colorado [Walter Orr Roberts, *Pub. Astron. Soc. Pacific*, **69**, 268, 1957]; now the Astrophysical and Planetary Sciences (APS) Department. He remained at the University of Colorado for the rest of his career and was chair of the Department in 1966-1969. Although he retired as Professor in 1987, he still was very active well into the late 1990s as Professor Emeritus at the University of Colorado.

Julie and Dorothy loved to travel, and they were well known in the science communities all over the world. They spent three sabbaticals at the Federal Institute of Technology (ETH) in Zurich, where Julie was a visiting professor. He was also visiting professor / lecturer at Columbia University, Pennsylvania State University, Chinese Academy of Science in Beijing, and Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Melbourne. He attended many international conferences and helped to organize many of them.

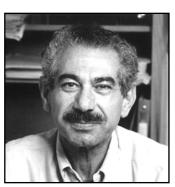
Julie had over 100 papers ranging from forecasting tropical cyclones [his first paper: Krasner, W. and J. London, Bull. Amer. Meteor. Soc., 27, 377, 1946] to stratospheric ozone and temperature responses to solar ultraviolet variations [his last paper: Chen, L., J. London, and G. Brasseur, J. Geophys. Res., 102, 29957, 1997]. The majority of his publications were about his research results concerning the Earth's stratospheric ozone, radiation physics in Earth's atmosphere, and solar influences on Earth's environment. During the later half of his career, he worked on several NASA satellite programs, such as the Solar Mesosphere Explorer (SME), the Upper Atmosphere Research Satellite (UARS), and the Solar Radiation and Climate Experiment (SORCE). Several of his early papers in the 1950s were about solar influence on climate changes at the surface, so Julie can be considered one of the founding fathers of sun-climate studies.



Among many honors received during his career are the University of Colorado Medal in 1987 and an Honorary Doctorate from ETH in 1991.

Julie unselfishly gave to the global science community in many ways. He served as editor for several journals including Journal of Geophysical Research, Contributions to Atmospheric Physics, Arctic and Alpine Research, Il Nuevo Cimento C (Italian journal), Weatherwise, Geofisica Internacional (Mexican journal), Advances in Atmospheric Sciences (Chinese journal), and Atmosfera (Mexican journal). As you can see again, he had a very international life style in his science pursuits.

Julie was also involved in many professional societies, most notably in the International Radiation Commission (IRC). He served continuously for the IRC beginning in 1963, initially as Secretary (1963-1971), then President (1971-1979), and as Honorary Member through 2008 [Hans-Jurgen Bolle, International Radiation Commissions 1896 to 2008: Research into Atmospheric Radiation from IMO to IAMAS, IAMAS Publication Series No. 1, May 2008]. His exceptional leadership for the IRC led the Commission into the age of global research programs and promoted the cooperation with COSPAR to build up a global satellite observing system and to develop appropriate calibration and evaluation methods of the data measured in space. He made many friends in East and West and brought scientists from both sides to the IRC meetings to work effectively together, which was not self-evident at that time when the world was politically split.



Julie was always excited about teaching science and discussing the science issues with so many of us. Many of his friends and family members, including granddaughters Shoshana and Anna, recall how Julie would stop during a hike and explain the physics of the specific clouds over-

head. Even though his hearing and eyesight was failing, he was still making contributions in 2008 to a paper about the IRC history, which we hope to submit for publication soon.

Julie was preceded in death by his wife Dorothy and son David. Julie's son Richard can be reached by email at judyandrich@gmail.com. At the request of his son, donations can be given in his memory to the University of Colorado Foundation (http://www.cufund.org/). Donations can be designated to go into the Astrophysical and Planetary Sciences Friends of Astronomy Fund, which provides support for the goals of the Astrophysical and Planetary Sciences Department. We will miss our good friend and stimulating colleague.

SORCE Team Attending Freiberg EUV-IR Validation Workshop –

The ESA (European Space Agency) Solar EUV-IR Validation Workshop is April 15-17, in Freiberg, Germany. This gathering is an important part of all solar irradiance programs because it provides validation of our measurements made in 2008 from the TIMED and SORCE satellites and from a rocket flight with



the prototype SDO EVE instrument. Attending on behalf of SORCE will be PI Tom Woods (XPS), Jerry Harder and Margit Haberreiter (SIM and SRPM), Marty Snow and Bill McClintock (SOLSTICE), and Greg Kopp (TIM). The workshop attendees will discuss solar science results in the EUV, UV, Visible, NIR, and TSI.

Workshop topics include:

- Calibration discussion on space instrumentation and validation
- WHI Solar Irradiance Spectra (SIRS) from the April 2008 campaign and development of an irradiance data base for solar minimum conditions
- Development of an irradiance data base for solar active minimum conditions
- TSI measurements and analysis
- Modeling of the solar spectral irradiance
- Irradiance indices for solar and solar-terrestrial relation modeling and their applications
- Solar variability in the transition region as a function of temperature to be derived by intercomparisons of data

Following the workshop, Tom Woods, Jerry Harder, Greg Kopp, and Margit Haberreiter will continue on to Vienna, Austria, to attend the European Geosciences Union (EGU) General Assembly, April 19-24. This meeting pro-



vides an opportunity for the SORCE team to communicate their research results to a broader international community. It is also a chance to promote collaborations with the other solar, climate, and space weather communities. The meeting website is:

http://meetings.copernicus.org/egu2009/

954,448

Hits to the SORCE Website

(Since 4/21/03, As of 3/20/09)

SORCE Extended Mission Proposal Submitted –

The entire SORCE team has been busy preparing the SORCE Extended Mission Proposal for 2010-2013. The NASA Earth Science Division (ESD) of the Science Mission Directorate (SMD) is supporting 13 Earth observing missions that are, or soon will be, operating beyond their prime mission lifetimes. Since extended operations and associated data production activities require a significant fraction of the ESD annual budget, NASA periodically evaluates the allocation of funds with the aim of maximizing the missions' contributions. All NASA Earth Science Missions are required to submit a proposal that includes scientific productivity, contribution to national objectives, technical status, and budget efficiency. This evaluation process is known as the "Senior Review". Proposals were due March 24, and an in-person presentation will follow in April or May.

SORCE Data Products -

By Doug Lindholm, LASP, University of Colorado

Just a reminder that LASP makes some extraordinary solar irradiance data products available to the community via the SORCE and LISIRD web sites.

The SORCE data access web site (see links below) provides interactive forms for requesting data by time and wavelength. Results can be returned as a table of numbers and/or a plot. Mission length data files are also available for download.

The SORCE products include daily and 6-hourly averaged Total Solar Irradiance (TSI) and daily averaged Solar Spectral Irradiance (SSI) with wavelength coverage of 0.1-40, 115-2400 nm.

In addition to the SORCE data products, the LASP Interactive Solar Irradiance Datacenter (LISIRD) web site (see link below) provides access to other solar irradiance data products of interest, such as:

- Solar Spectral Irradiance from the TIMED SEE, UARS SOLSTICE, and SME missions
- Composite Solar Spectral Irradiance
- WHI Solar Irradiance Reference Spectra
- Composite Lyman Alpha
- Magnesium II Core-to-Wing Ratio
- Flare Irradiance Spectral Model (FISM)
- Precision Solar Photometric Telescope (PSPT) Images and Activity Masks

More data products and access features are currently being developed. The current websites are:

SORCE Data Product Summary:

http://lasp.colorado.edu/sorce/data/data_product_summary.htm

SORCE Interactive Data Access:

http://lasp.colorado.edu/sorce/sorce_data_access/

LASP Interactive Solar Irradiance Datacenter (LISIRD):

http://lasp.colorado.edu/lisird/data access.htm.

If you have any questions or comments about the information on these web sites, please contact Doug Lindholm at doug.lindholm@lasp.colorado.edu.

Upcoming Meetings / Talks -

SORCE scientists plan to present papers or attend the following 2009 meetings:

Boulder Solar Day, March 20, Boulder, Colorado ESA Solar EUV-IR Validation Workshop, April 15-17, Freiberg, Germany

EGU General Assembly, April 19-24, Vienna, Austria

Space Weather Workshop, April 28-May 1, Boulder, Colorado

ISSI Working Group – Cross-calibration of past FUV Experiments, May 25-28, Bern Switzerland

AAS/Solar Physics Division Meeting, June 14-18, Boulder, Colorado

IAMAS/APSO – SORCE Meeting, July 19-29, Montreal, Canada

To submit information to this newsletter, please contact: vanessa.george@ lasp.colorado.edu.

