

Curriculum Vitae - William L. Smith, Sr.

Personal Data: Born May 13, 1942; Detroit, Michigan; married, eight children; residence at 117 Creek Circle, Seaford, VA 23696, (757) 874-7294.

Education: B.S. (Meteorology), St. Louis University, 1963, M.S. (Meteorology), University of Wisconsin, 1964, Ph.D. (Meteorology), University of Wisconsin, 1966.

Summary: Dr. Smith is Distinguished Professor of the Department of Atmospheric and Planetary Sciences at the Hampton University, Hampton Virginia and Professor Emeritus of the Department of Atmospheric and Oceanic Sciences at the University of Wisconsin – Madison. Professor Smith was the Principal Investigator of several satellite programs for NOAA (1966-1984), Professor of Atmospheric and Oceanic Sciences at the University of Wisconsin-Madison (1984-1997) where he also directed the Cooperative Institute for Meteorological Satellite Studies (CIMSS) and subsequently the positions of Chief, Atmospheric Sciences Division, and Senior Scientist at the NASA's Langley Research Center (1997-2004). Dr. Smith is an active satellite and airborne experimentalist. He has been Principal Investigator of three highly successful Nimbus research satellite experiments. Most notably, Dr. Smith pioneered the hyper-spectral resolution sounding technique that is being used for current and future polar satellite advanced infrared sounding systems (e.g., the Aqua/AIRS, MetOp/IASI, and NPP/NPOESS CrIS). Dr. Smith is the Principal Scientist for the Geostationary Imaging Fourier Transform Spectrometer (GIFTS) completed as an engineering development unit and prototype for future geostationary satellite operational sounding sensors (e.g., the GOES-HES). Dr. Smith is also the Principal Investigator of numerous aircraft infrared remote-sensing systems including the high altitude High resolution Interferometer Sounder and the NPOESS Aircraft Sounding Testbed Interferometer, which flies aboard the NASA ER-2, WB-57, and the Northrop- Grumman Proteus aircraft. Dr. Smith was the innovator and principal investigator of the Ocean Temperature Interferometric Survey (OTIS) experiment, conducted with a shipboard implementation of the Atmospheric Emitted Radiance Interferometer in January 1995. The success of the OTIS led to the production of the Marine Atmospheric Emitted Radiance Interferometer (M-AERI), recognized world wide as the most accurate sea surface skin temperature measurement device in existence. Dr. Smith has published more than 150 papers in the scientific literature and has contributed to books used for scientific research and teaching. Dr. Smith has received numerous awards for his research accomplishments in the field of atmospheric science.

Instrument Principal Investigator: Satellite (6): Nimbus-5 ITPR, Nimbus-6 ERB, Nimbus-6 HIRS, GOES G-HIS, NOAA/NPOESS ITS/CrIS, EO-3 GIFTS. **Aircraft (2):** NASA CV-990 BITPR, NASA ER-2 HIS, IPO NAST. **Ship (1):** OTIS (first MAERI) experiment.

Major Awards: American Meteorological Society Clarence LeRoy Meisenger Award (1970), Department of Commerce Gold Medal Award (1973), Fellow of the American Meteorological Society (1980), Symons Memorial Lecturer of the British Meteorology Society (1990), William Nordberg Memorial Lecturer of NASA (1990), American Meteorological Society Verner E. Suomi Award (1998), American Meteorological Society Remote Sensing Lecture Award (1998)

Societies and Organization Membership: American Meteorological Society, Optical Society of America, and Sigma Xi, IAMAS International Radiation Commission (served as President and Vice-president), International TOVS Working Group of the International Radiation Commission (served as originating Chair).
Editor, Journal of Climate and Applied Meteorology, American Meteorological Society, Boston, Massachusetts (1982-1985).

Publications and Television Science Roles: Journals (121), Books (3), Government Technical Reports and Memoranda (21), Meeting Proceedings (100's), Theses (3), Television (3)

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Smith, W. L., V. E. Suomi, W. P. Menzel, H. M. Woolf, L. A. Sromovsky, H. E. Revercomb, C. M. Hayden, D. N. Erickson, and F. R. Mosher, 1981: First sounding results from VAS-D. *Bull. Amer. Meteor. Soc.*, 62, 232-236.

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Smith, William L.; Harrison, F. Wallace; Revercomb, Henry E. and Bingham, Gail E.. Geostationary Fourier Transform Spectrometer (GIFTS) - The New Millenium Earth Observing-3 Mission [Geostationary Imaging Fourier Transform Spectrometer (GIFTS) - The New Millennium Earth Observing-3 Mission]. IRS 2000: Current problems in atmospheric radiation. Proceedings of the International Radiation Symposium, St. Petersburg, Russia, 24-29 July 2000. A. Deepak Publishing, Hampton, VA, 2001, pp.81-84. \

Smith W. L., F. W. Harrison, D. Hinton, V. Parsons, A. M. Larar, H. E. Revercomb, H. L. Huang, C. Velden, W. P. Menzel, R. Petersen, G. E. Bingham and R. Huppi, "GIFTS- A System for wind profiling from geostationary satellites", in *Proceedings, the Fifth International Winds Workshop*, Lorne Australia, 28 February – 3 March, 2000.

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