



WILLIAM T. PECORA AWARD

Alan H. Strahler

For his many contributions to remote-sensing science, leadership, and education.

Dr. Alan H. Strahler, Professor of Geography and Environment at Boston University, is a pioneer in quantitative environmental remote sensing. After receiving his Ph.D in Geography from The Johns Hopkins University in 1969, he focused his biogeography expertise on improving fundamental understanding of the remote-sensing process and its applications to characterizing land surface properties. His professional career, now in its 43rd year, reflects contributions that have significantly advanced the analytical and theoretical foundation for remote-sensing science and applications.

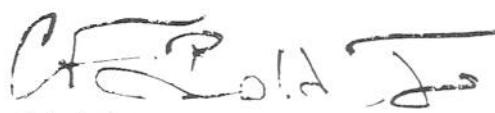
Dr. Strahler's most important early contribution originates from his innovative use of a geometric-optical model of radiative transfer to describe the interactions of electromagnetic radiation and plant canopies. This work was influential in guiding research and applications away from relatively simple empirical models and toward quantitative, biophysically-based approaches that underpin the modern field of remote sensing. He developed algorithms that enabled improved estimates of land surface albedo from satellite sensors and underpin the Moderate Resolution Imaging Spectroradiometer (MODIS) albedo standard product. Dr. Strahler made significant contributions to the application of spatial statistics in digital image analysis. His innovative methods for incorporating spatial information such as size, shape, and texture in the interpretation of remotely sensed image data were important in the coupling of remote sensing with geographic information systems. His recent work on quantifying vegetation structure with ground-based, upward-looking Light Detection And Ranging (LiDAR) is bringing new contributions to radiative transfer modeling and forest biomass quantification.

Dr. Strahler has been a prolific author and has published numerous influential papers, and his influence in remote-sensing science continues to rise. His textbooks have educated, inspired, and brought remote sensing to the attention of tens, if not hundreds, of thousands of students in physical geography and environmental science courses throughout the U.S. and internationally.

Dr. Strahler's career contributions have been recognized by the American Association for the Advancement of Science and the American Society for Photogrammetry and Remote Sensing. He also holds the honorary degree Doctorem Scientarum Honoris Causa from the Université Catholique du Louvain in Belgium.

In recognition of his many significant and sustained accomplishments, the Department of the Interior and the National Aeronautics and Space Administration take great pleasure in presenting the 2011 William T. Pecora Award to Dr. Alan H. Strahler.


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