

Marc L. Imhoff

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Marc Imhoff began his career at NASA's Goddard Space Flight Center in 1980 as a State Project Manager in NASA's Regional Applications Program where he developed a series of technology transfer projects designed to integrate remote sensing technology with the resource management activities of various state governments in the northeastern United States. In 1983, Imhoff moved to the Space Data and Computing Division and was selected to serve on the science team of the Shuttle Imaging Radar-B (SIR-B) program. On the SIR-B Science Team, Imhoff acted as a principal investigator researching the use of radar imaging systems to target Malaria control programs in the tropics. As part of his SIR-B work, Imhoff spent considerable time working in the Peoples Republic of Bangladesh pioneering the development of radar techniques for mapping flood boundaries, land surface terrain elevations in flooded forests, and the discovery of a population driven land degradation process affecting developing countries dependent on rice agriculture. During that time, Imhoff also worked on the Landsat-4 Data Quality Assessment Team to characterize the geometric qualities of the MSS instrument, and helped run a series of NASA/DoD technology transfer projects. From 1987 through 1989, Imhoff served as an Instrument Manager with the Eos Project Office supporting the mission through its initial non-advocacy review. In 1990, Imhoff took a position in the Biospheric Sciences Branch and was awarded a Research and Study Fellowship to Stanford University. At Stanford, Imhoff worked toward the application of remote sensing to human population and biodiversity issues and to develop radar techniques for modeling global forest biomass within the context of climate change. Dr. Imhoff was principal investigator developing the first civilian long wavelength (VHF) radar sensor to penetrate vegetation and soils, and worked with both the Department of Energy and the Defense Advance Research Projects Agency on foliage penetration radar technology and applications. He was an EOS Interdisciplinary Science Team Member working on the remote assessment of the impact of urban sprawl on global biological productivity and was co-creator of the first nighttime 'city lights' images of global urbanization from the DMSP/OLS sensor. From 2001 - 2004 he served as the Earth System Science Pathfinder Program Project Scientist - a satellite development program designed to launch low cost Earth probes to address critical near-term science and applications needs. Dr. Imhoff holds a B.S. degree in Physical Geography and an M.S. Degree in Agronomy from The Pennsylvania State University and a Ph.D. in Biological Sciences from Stanford University.