

# Editorial

**I** CONSIDER it a great honor and pleasure to be given the opportunity to address the IEEE Geoscience and Remote Sensing community as the new Editor of these Transactions. Our Society's Administrative Committee has entrusted in me the responsibility to maintain the highest standards of scientific and technical excellence in this, our flagship refereed publication, and I accept their charge with great anticipation for what the future will hold. I firmly believe that the Earth Sciences are entering a new era of discovery, of prediction, and, most importantly, of societal relevance. The spatial, temporal, and spectral resolving power of our newest remote sensors often meet or exceed the step sizes of our best numerical models. But mass storage capacity, memory density, and computational horsepower are all growing at a Moore's Law pace, and the complexity of Earth System models will continue to be driven by, and will themselves drive, the capabilities of remote sensing instruments. It is a win-win competition of the healthiest sort. So our ability to measure, model, and predict changes in the environment will continue to improve. At the same time, the needs of society for a clear understanding of how the Earth System operates, and of how it will react to a changing world, have never been greater. We are entering an era in which fundamental policy and lifestyle decisions about the relationship between humankind and the environment could and should make use of the scientific tools we develop as never before. The science

and engineering of remote sensing is one of the cornerstones of modern Earth System Science. It is our charge as remote sensing researchers to advance the discipline with the highest of standards. And it is my charge as Editor of TGARS to ensure that those advances are reported, to our own research community and to the much larger community of end users, policy makers, and others, with accuracy, timeliness, and integrity.

Past editors of TGARS have set the tone and the standard for this journal. I can only hope to do as well. My immediate predecessor, Prof. Jon Benediktsson, deserves enormous thanks for all the time and effort he has given to our society over the past six years. He has also done his best in recent months to train and prepare me, and I am very grateful to him. The line of editors before Jon was equally as competent and dedicated. I'd like to acknowledge one in particular. My principle graduate research advisor, Cal Swift, served as TGARS editor in the 1980s. It is especially gratifying to be able to follow in his footsteps. I welcome and look forward to my term as editor.

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