SPECIAL ISSUE

The 25th Anniversary of Landsat-1

Foreword

By Vincent V. Salomonson

t was a real honor to receive a call last November from Dr. Stan Morain, the Editor of PE&RS, wherein he invited me to be the Guest Editor of this special issue devoted to the 25th anniversary of Landsat 1 (then known as the Earth Resources Technology Satellite-ERTS). In constructing this issue, we have collected a set of papers discussing the developments and key events over the last 25 years from different perspectives. The first paper by Lauer et al., provides an introductory overview of Landsat. The paper by Aram Mika describes the evolution of Landsat instruments and is followed by Thome et al., discussing very important issues and developments in calibration of these instruments. Dave Landgrebe describes progress in analyses of Landsat data, and this paper is complemented by descriptions in the availability of Landsat data sets by Draeger et al. Ray Williamson then discusses the relationship of government policies and the development of commercial remote sensing stimulated by Landsat projects. Goward and Williams describe how Landsat has come to be a very valuable data resource, particularly in the terrestrial monitoring component of what is often termed Earth System Science. The final paper by Ungar looks to the evolution of technology that might reduce the cost of Landsatlike observing systems while providing increased capability.

This special issue does not intend, nor do the papers provide, an exhaustive review of the history of all the accomplishments derived from the Landsat program. There is a large and rich volume of published literature that readers should pursue for further documentation. This guest editor believes readers of this will find the presentations to be of special interest because they complement each other but differ in their interpretation of events depending upon what special interest was involved. The authors, and those who reviewed these papers, represent a very respectable accumulation of experience and involvement with Landsat. Because of this and the timeliness of this special issue, the presentations should provide a useful reference to the intriguing history of Landsat as a major technolological achievement of the U.S. civilian space program, and also the subsequent worldwide development of related space systems and applications.

Vincent V. Salomonson is the Earth Sciences Directorate at NASA/Goddard Space Flight Center located in Greenbelt, Maryland.