

## **REFLECTIONS ON 50 YEARS OF REMOTE SENSING: Looking back, looking forward.**

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This presentation will give a review of fifty years of remote sensing developments from 1963 to 2013. Firstly the author will present his personal views on the history and developments in remote sensing since the First Symposium on Remote Sensing of Environment, held in Michigan in February, 1962. The second part of the presentation will give an assessment of some of the milestones, achievements and problems encountered along the way. The final section will review some of the challenges and opportunities for remote sensing for the future.

In the first part, information will be provided on each of the five decades of remote sensing developments, starting with the early years of the 1960's. Highlights of the 1970's that will be discussed include the launch of the first earth resources satellite in 1972, the establishments of national remote sensing societies and discuss some of the innovations in instrumentation. Also during this decade was the first International Symposium on Remote Sensing of Environment to be held outside of the USA (Manila, Philippines in 1978) and saw the introduction of remote sensing technology in China. The early 1980's witnessed the change from ISP into the ISPRS and the establishment of many regional remote sensing societies such as EARSel, AARS, and SELPER. During this decade, several other remote sensing satellite systems were launched, most noticeably the start of the SPOT programme. By the 1990's remote sensing became more operational and widely used by various government agencies and saw the rise of the commercial remote sensing industry. The 21<sup>st</sup> Century has witnessed the blossoming of many remote sensing satellites and national remote sensing programmes all around the world.

The paper then goes on to treat some of the key problems and issues faced during the development of the field, before concluding with some comments on the challenges and opportunities for remote sensing.

**Keywords:** Remote sensing history, instrumentation, international aspects.