

INDIAN SOCIETY OF GEOMATICS (ISG)
NATIONAL GEOMATICS AWARD FOR TECHNOLOGY - 2009

CITATION



Dr. Pradeep Kumar Srivastava born on 31st August, 1954 received his Master's Degree in 1979 from Peoples Friendship University, Moscow and obtained doctorate degree on 'Theoretical Mechanics and Control Systems' in 1984 from the same university. He joined Space Applications Centre (ISRO), Ahmedabad in 1983 and held many positions. Currently he is Deputy Director, Signal and Image Processing Area.

Dr. P.K. Srivastava has significantly contributed in conceptualization and implementation of various IRS Projects which includes carrying out feasibility studies, generation of requirements and firming up specifications, resolving interface issues, realization of data products systems and the inflight calibration of payloads. This included IRS-1C/1D, TES, CARTOSAT-1, RESOURCESAT-1, CARTOSAT-2 and CHANDRAYAN-1. Headed a working Group on definition of mapping satellite, Cartosat-1. He has been deeply involved in all stages of realization and operationalisation of Data Products System, Value Added Services and Mapping applications for Cartosat-1. Currently, Dr. P.K. Srivastava, in the capacity of Deputy Director, Signal and Image Processing Area at Space Applications Centre (ISRO), is coordinating the development of algorithms and software for Data products of various space borne Earth and Planetary missions of ISRO. This also includes coordinating development of software solutions for IRS International Ground Stations spread over all continents.

He has also contributed significantly in the fields of satellite photogrammetry, mapping from high resolution space imagery and satellite surveying. He developed a number of imaging models of mono and stereo sensors with orbital and orientation constraints which were successfully used in Data Products software for TES, Cartosat-1, Cartosat-2 and Chandrayaan 1 Terrain Mapping Camera. The development of unique models for long strips of stereo imagery (Stereo Strip Triangulation) resulted in realization of world class operational Data Products system for Ortho images and generation of dense Digital Elevation Model using Cartosat-1 stereo imagery (CartoDEM). His contribution is noteworthy, particularly in defining the standards for digital maps for large scale mapping at 1:10,000 scale. He also defined standards for countrywide control network for preparation of ground control points library and carried out quality control of the same leading to establishment of zeroth order, first order and image based ground control points network of ISRO. This network is effectively used for generating high precision data products at NRSC, ISRO. Developed algorithms for in-flight geometric calibration of Earth Observation sensors and prepared operational procedures for their implementation. These procedures are routinely used in ISRO to improve the geometric accuracy of system corrected products supplied by NRSC.

IN RECOGNITION OF HIS OUTSTANDING CONTRIBUTIONS IN THE FIELD OF STEREOSCOPIC REMOTE SENSING, SATELLITE PHOTOGRAMMETRY AND SPECIFIC CONTRIBUTIONS MADE TO IRS-1C/1D, TES, CARTOSAT-1, RESOURCESAT-1, CARTOSAT-2 and CHANDRAYAN-1 DATA PRODUCTS, **INDIAN SOCIETY OF GEOMATICS CONFERS THE NATIONAL GEOMATICS AWARD FOR TECHNOLOGY FOR THE YEAR 2009 ON DR. P.K. SRIVASTAVA.**

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Ahmedabad – 380 015



(R.R. Navalgund)
President, ISG.