IMAGE PROCESSING

The Image Processing session was chaired by John Dalton of Goddard Space Flight Center.

Richard McKinney of the Computer Sciences Corporation presented the paper "Cartographic Considerations for the Integration of LANDSAT Digital Imagery with Existing Spatial Data". LANDSAT MSS digital imagery requires some geometric correction of data and this paper describes the cartographic problems involved in this for ten Landsat images using the Digital Rectification System.

George Kerr presented a summary of two papers that deal with the European Space Agency's METEOSAT project. "The Interactive Image System for the METEOSAT Project", by L. Fusco, G.W. Kerr, R. Powell, and J. Rupp, describes the interactive quality control of meteorological products obtained from the large-scale batch computer analysis of earth images, obtained from the METEOSAT geostationary satellite. "Image Processing and Navigation for the METEOSAT Project", by M. Jones and K.G. Lenhart deals with the preprocessing and navigation of the images produced by METEOSAT.

Frederick C. Budelman and Toini L. Figgins of the Pattern Analysis and Recognition Corporation presented the paper "Practical Application for Digital Cartographic Data Bases in Tactical Surveillance and Strike Systems". This paper describes the problems in integrating remote tactical surveillance and strike systems with digital cartographic data. The state of the art must be advanced quickly in order to meet the near-future tactical requirements for digital cartographic data bases.

Roger L.T. Cederberg of the National Defense Research Institute, Sweden, presented a paper entitled "A Data Structure for a Raster Map Data Base". In this coding scheme for raster data, the geographic entities can be accessed in line-by-line mode and as boundaries and lines (chain-coded). This Raster scan Chain code (RC-code) can be generated while scanning the map in raster code and can be extended to display a map line-by-line and column-by-column.