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SPACE SYSTEMS DIVISION

GENERAL ELECTRIC COMPANY VALLEY FORGE SPACE CENTER
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(distributed 7-28-83)

25 July 1983

Mr. Allen H. Watkins
Chief, EROS Data Center
Sioux Falls, SD 57198

Dear Mr. Watkins:

Enclosed is the final title and brief abstract of a paper for presentation at the eighth William T. Pecora Memorial Symposium (POC-6-19).

Sincerely,

Eric P. Beyer

Eric P. Beyer

/hlm
Enclosure

THEMATIC MAPPER IMAGE PROCESSING
SYSTEM (TIPS) PERFORMANCE

Eric P. Beyer
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ABSTRACT

This paper reviews the performance of the Landsat Thematic Mapper processing system. A processing system overview is followed by a discussion of image geometric and radiometric correction. Performance is described in terms of system throughput and data turnaround time; geometric correction accuracy with respect to spectral band-to-band registration, temporal registration and geodetic rectification accuracy; and radiometric correction with respect to within band relative detector accuracy, between band relative accuracy and absolute radiometric accuracy.