

THE SHUTTLE IMAGING SPECTROMETER EXPERIMENT

Abstract

Alexander F. H. Goetz

Jet Propulsion Laboratory
California Institute of Technology
Pasadena, California 91109

Recently, a shuttle-borne imaging spectrometer experiment (SISEX) has been proposed that could be orbited by 1988-89. SISEX creates images over a swath 12 km wide in 128 spectral bands simultaneously in the 0.4-2.5 μm region. The nominal spectral sampling interval is 10 nm in the 0.4-1.0 μm region and 20 nm in the 1.0-2.5 μm region. The pixel IFOV is 30 m. The spectral resolution is sufficient to allow identification of a number of surface materials directly, as opposed to discriminating among groups of materials using present-day Landsat data. SISEX portends to revolutionize data analysis and interpretation in remote sensing applications.

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