Land Use Classification

ERTS-1 Collin County, Texas
Subframe

E72-10026

CR - 127823

Analysis of Classification Results

Classification Serial Number 825214108

Run Number 72001403

Maximum Resolution

Multispectral scanner data were analyzed on a digital computer
to determine the possibility of delineating and mapping soils
and geologic features of interest in Collin County, Texas. The
procedure involved automatic clustering and classification of as
many as twelve spectrally separable classes. Features of interest
which may be identified in the classification are surface drainage
patterns which correspond closely to boundaries between different
soils, cultivated fields, an escarpment which distinctly separates
different soil associations and geologic parent materials, and
three categories of water in the Lavon Reservoir. These three
classes correspond to areas of relatively deep water, relatively
shallow water and shallow water containing many dead tree stumps.
In the agricultural areas two categories are easily separable
spectrally, fields of green vegetation with relatively low
reflectance and relatively high reflectance in the visible wave-
lengths. Those of low reflectance for scanner data obtained
on July 25 correspond to cotton, grain sorghum and alfalfa.
Those with high reflectance seem to be wheat stubble and grass
pastures.