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INTERPRETATION OF WETLANDS ECOLOGY FROM ERTS-1
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Summary

ERTS-1 images of wetlands along the South Carolina - Georgia coastline and the southern New Jersey coastline have been given preliminary analysis for ecological conditions in wetlands. The objectives of the research are as follows: (1) plant community composition; (2) successional trends; (3) identification of man-made or other causes of reduction in productivity of wetlands; and (4) delineation of shallow, productive waters around the wetlands.

RBV and MSS bands have been analyzed singly and collectively using the Spatial Data Corporation, Datacolor system, the Multispectral Image Analysis System (MIAS) and the I²S Digicol and Addicol systems. Each system apparently is going to provide certain pieces of information and no one system will provide all necessary data.

The following preliminary results have been obtained:

- (a) The red band on both RBV and MSS appears to be the least useful for density analysis of individual bands.
- (b) MSS bands 6 and 7 are very similar and one or the other may be used for density analysis or additive color enhancement.
- (c) The wetland-dryland interface is clearly defined, particularly on the IR bands and is well delineated using additive color procedures.
- (d) Tonal structure with wetlands is good when color additive viewing is utilized. This tonal structure is interpreted as species differences including Spartina alterniflora and Spartina patens.
- (e) Transition zones from wetland to dryland are tonally unique and may be used to judge successional trends in wetlands.

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