

in the interest of early and wide dissemination of Earth Resources Survey Program information and without liability for any use made thereof."

CR-136340

THE UTILIZATION OF ERTS-I-GENERATED PHOTOGRAPHS IN THE EVALUATION OF THE IRANIAN PLAYAS AS POTENTIAL LOCATIONS FOR ECONOMIC AND ENGINEERING DEVELOPMENT

Daniel B. Krinsley
U.S. Geological Survey
National Center STOP 908
12201 Sunrise Valley Drive
Reston, Virginia 22092

15 January 1974

Type I Progress Report for Period 1 November - 31 December 1973

Prepared for:

Goddard Space Flight Center
Greenbelt, Maryland 20771

E74-10297) THE UTILIZATION OF
ERTS-1-GENERATED PHOTOGRAPHS IN THE
EVALUATION OF THE IRANIAN PLAYAS AS
POTENTIAL LOCATIONS (Geological Survey,
Reston, Va.) 2 p HC \$3.00 CSCL 08H

N74-17086

Unclas
G3/13 00297

Type I Progress Report
ERTS-I

- a. Title: The Utilization of ERTS-I Generated Photographs in the Evaluation of the Iranian Playas as Potential Locations for Economic and Engineering Development

ERTS-I Proposal No.: SR 195

- b. GSFC 10 No. of P.I.: IN 037

- c. No problems were encountered during this reporting period.

- d. Accomplishments during the reporting period include:

1. A map is in preparation that will illustrate the progressive increase and then decrease in the water-borne sediment load within a playa lake through the seasons. A three-stage masking technique being used is as follows: (1) A negative is prepared from the ERTS-I, 9.5-inch positive of band 5 from each scene; (2) a sandwich is made of the scene's negative band 5 and positive band 4; (3) a positive is made from this sandwich, and then a false-color composite is made from the several sequential positives, each representing a place in the silting-up of the playa lake.

- e. Scientific results include:

1. False-color composites made from ratioed and stretched transparencies, generated from CCTs of ERTS-I, have enhanced hydrologic and morphologic differences within the playa surficial sediments. A composite of ratios 4/6, 5/7, 5/6, and 4/7 using blue, red, yellow, and green, respectively, was useful in separating wet, water, and dry areas in the salt crust and for delineating smooth and rough salt where relief was less than 20 cm.

- f. No papers have been published to date.

- g. There are no recommendations at this time.

- h. No changes (corrections) were made in the Standing Order Forms during this reporting period.

- i. No ERTS Image Description forms have been completed at this time.

- j. Data Request forms have been used during this reporting period.