

# ABSTRACTS WITH PROGRAMS



**CHARGING INTO THE FUTURE**



04:15 PM Mainguet, Monique

ANALYSIS OF THE EFFECTS OF PRE-WAR DROUGHT ON THE DESERT SURFACE OF KUWAIT USING SPOT IMAGES.

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It is commonly believed that landforms cannot change as fast as the climate. A diachronic analysis of SPOT 1 and 2 images of Kuwait leads to a revision of the time scale of landform changes due to drought from August 1986 to August 1990 and serves as a baseline for the study of war-related changes.

Changes in the hydrologic balance were accompanied by variations in sediment balance. A decrease was noticed in the number of edifices and their sizes in a barchan dune field in northern Kuwait. Sand dunes appeared in coastal wadis and accumulated on settlement structures and irrigation canals of farms in the open desert. These changes are due to the intensification of eolian phenomena and the resulting increase of sand transport.

Degradation of the vegetation cover increased water erosion by gullies and rill wash. Sebkh deposits west of Bubiyan Island were desiccated and salt crusts appeared instead. Also, dayas (karstic depressions) lost their relict sediment cover. The drought was accompanied by a decrease in grazing activities as indicated by the reduction of cattle pathways in the open range and the concentration of people in oases.

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