

STUDY OF NATURE, ORIGIN, MOVEMENT AND EXTENSION OF SAND DUNES BY USING SEDIMENTOLOGICAL ASPECTS AND REMOTE SENSING TECHNIQUES IN BAIJI AREA, NORTH IRAQ

L. Kadim^{a b} A. Hussain^{*c} S. Salih^c

^c Water Resources Research Center, , University of Tikrit, Tikrit, Iraq

^b University of Tikrit, Department of Applied Geology, College of Science , , 042, Tikrit, Iraq

^a Natural Resources Research Center, University Compuss, 042, Tikrit, Iraq

Technical Commission VII Symposium 2010

KEY WORDS: Sand dunes, sand sheets, desertification, landsat TM images, sabkha, Arcview GIS

ABSTRACT:

The sand dunes in Baiji area causing many problems, such as accumulation of the moved sand on the railway, roads, sand and dust storms which affect and causes pollution for civil constructions and industries in the area, as well as, increasing desertification. This study aims to explain the morphology, origin, grain size and movement of the sand dunes in Baiji area. The study including detail field study of the sand dunes and investigation of the future effect of extension and increasing the desertification in the area within time Using of remote sensing and geographical information system in the study of desertification by Multitemporal data which including (maps and Landsat Thematic Mapper (TM) images) provided best understanding of the distribution of sand dunes and other aeolian features in the area of study. Keywords: Sand dunes, sand sheets, desertification, landsat TM images, sabkha, Arcview GIS.

TOPIC: Multi-spectral and hyperspectral remote sensing

ALTERNATIVE TOPIC: Remote sensing applications