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Author: Dr. Ahmad Yaghi
Syria, drahmad.yaghi@hotmail.com

Mrs. Arwa Rassoq
General Organization of Remote Sensing (GORS), Syria, drahmad.yaghi@hotmail.com
Dr. Khansa Mulhem
Damascus University, Syria, khansa.mulhem@hotmail.com

DUST STORM MONITORING IN SYRIA USING NOAA DATA AND GIS

Abstract

Dust storm Monitoring in Syria Using NOAA Data and GIS

Dust storm is one of the environmental problems. They affect the urban and agricultural areas causing serious damages. They become popular phenomena in Syria especially in the Eastern part of the country. The people in that area are facing a serious health problems, damage for their agricultural lands and covering the infra structures like roads and rail ways. This research aims to monitor dust storms using NOAA data, producing the dust storms frequent maps using GIS and designs a simple model for estimating the horizontal visibility. The results of this research were compared to the ground meteorological stations distributed over the country territory. NOAA data was a fast and geographically defining the dust storms and their directions and horizontal visibility estimating and GIS was a powerful tool for mapping and defining the hot spot of affected areas in Syria.

Key Words: Dust Storms, NOAA Data, GIS, Visibility