EARTH OBSERVATION SYMPOSIUM (B1) Interactive Presentations (IP)

Author: Prof. Danming Li Lanzhou Institute of Physics, China

Dr. Hu Dai Lanzhou Institute of Physics, China Dr. Jvping Li Lanzhou Institute of Physics, China Mr. xiaoye wang Lanzhou Institute of Physics, China Academy of Space technology, China

PROPOSAL ON THE DEVELOPMENT OF A MICRO/NANO-SATELLITE UTILIZED

Abstract

Dust weather has been a quite important kind of weather in Northwest China, North China and other areas at present, the impacts of which on the local ecological environment, national economy, national lives and so on are increasing quickly. A new proposal that the low-cost LEO Micro/Nano satellite is utilized to investigate dust aerosol is proposed, and is of great significance to dust monitor and scientific research. The Micro/Nano-Satellite can monitor the source of dust, predict the spread path of dust aerosol, and supply the physical parameters of dust aerosol, such as column concentration, particle size distribution, amount of dust. This method has the advantage that the monitor range is quite wide in comparison to the ground site monitoring, and can incidentally survey the haze of the areas near the sub-satellite point. The orbit design, configuration scheme and payload project of the Micro/Nano-satellite were showed in this paper.