46th SYMPOSIUM ON SAFETY AND QUALITY IN SPACE ACTIVITIES (D5) Space Weather and Effects: Prediction, Analysis and Protection (3)

Author: Prof. Peng Zong China

A NETWORK SIMULATION OF SOLAR STORM DISASTER

Abstract

Powerful solar storms usually forms in every 22 years and magnetic field energy erupts to the peak in a cycle. Meanwhile, sunspots (also called solar flares) break forth every 11 years and reach to the peak. In 2013, awakening from "deep sleep", our sun will produce solar flares and will give hitherto unknown destruction to the earth's magnetic field. The space storms will possibly lead the national grid overheating, the air seriously affected. Solar activity within the next few years will reach to the top, might destroy everything, from the emergency service system, medical equipment, the banking system, air traffic control equipment, to the electronic products such as household daily, computer, iPad and satellite navigation system. This paper introduces a simulation system of State Grid and communication network by demonstrating the effects of the strong electromagnetic shock.