

SPACE LIFE SCIENCES SYMPOSIUM (A1)  
Radiation Effects and Risks in Human Space Missions (4)

Author: Prof. Mosalam Shaltout  
Egyptian Space Program (The National Authority for Remote Sensing and Space Science ) Cairo , Egypt,  
mosalamshaltout@hotmail.com

DETERMINATION OF THE ARRIVAL TIME OF ICME SHOCK TO EARTH'S MAGNETOSPHERE

**Abstract**

We are estimated the arrival time of ICME shock to the Earth's magnetosphere during the solar cycle 23rd , for the period 1996-2005, by using certain temporal and spatial conditions. We selected the Data of the SSC events from Preliminary Reports of the ISGI (Institut de Physique du Globe, France). While the associated CMES during the same period are selected from SOHO/LASCO/C2. We construct a numerical model to estimate the arrival time of the CME reached the Earth's magnetosphere. According to our model, we found high correlation between CMEs and their shocks ( $R = 75$ )