ANALYSIS OF PROTON FLUX DIRECTIONALITIES IN FOUR SOLAR EVENTS DETECTED BY SOHO/ERNE

T. Sahla, J. Torsti

Space Research Laboratory, Department of Physics, University of Turku tero.sahla@utu.fi/Fax: +358-2-333 5993

This work presents a study of the temporal development of directional proton intensities in four different solar events observed by SOHO/ERNE. ERNE/HED detects protons in energy range 12-100 MeV with 1 degree angular resolution. The studied events are divided into two types, depending on the rate of the initial intensity increase. In events that started on 16 June, 1998 and 3 May, 1999 the intensity rise was rather gradual, and in the ones on 24 April and 27 May, 1999, the flux enhancement took place in a relatively short time. We compare the time development of directionality in these different event types, especially in their rise phases.