GALACTIC COSMIC RAYS, SOLAR AND HELIOSPHERIC CHARACTERISTICS IN THE MAXIMUM PHASE OF SOLAR CYCLE 23

M.B. Krainev, G.A. Bazilevskaya, and V.S. Makhmutov
P. N. Lebedev Physical Institute, Russian Academy of Sciences,
Leninsky Prospect 53, Moscow 117924, Russia
krainev@fiand.msk.su / FAX: 07-095-4086102

Now it is already clear that the development of the current (23rd) solar cycle is rather unusual when correlated with that for the last two cycles, although in some respects it reminds of solar cycle 20. It is also highly probable that now we are already in the midst of the maximum phase of the current cycle. In the paper we consider the behaviour of the galactic cosmic rays (the neutron monitor and balloon data) in 1996-2001 in order to study the phenomena which were characteristic for the maximum phase of the previous four solar cycles. The solar and heliospheric characteristics as well as solar particle enhancements and electron precipitation events are also discussed.