Correlative study of the Large-Scale Coronal Structures from LASCO and the distribution of the active regions from MDI Observations

T.Y. Liu (1) and W.H. Ip (1,2)

(1) Institute of Space Science, National Central University, Taiwan, China, (2) Institute of Astronomy, National Central University, Taiwan, China

Banaszkiewicz et al (1998) published a simple analytical model describing the solar coronal magnetic field structures during solar minimum as a combination of dipolar and quadrupolar fields. We have examined the coronagraphic images obtained by the LASCO instrument on SOHO in 1996 to follow the temporal evolution of the large-scale solar magnetic field by fitting the Banaszkiewicz et al model. We have also extended our study to the correlation of the coronal structures with the underlying active regions and H alpha features from solar rotation to solar rotation. Some select results will be presented in this work. The approaching solar minimum in IHY 2007 will give us another excellent opportunity to study these dynamical processes in detail.