

# **KAO Space Weather Monitoring System: I. Overview**

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It is well known that solar activity such as Coronal Mass Ejections (CMEs) and flares cause the abrupt variations of space environment. Abrupt disturbance of space weather can result in serious effects on high technology systems as well as human. To efficiently predict the possible effects due to the disturbance, Space Weather Scales were introduced in 2000 by NOAA/SEC. The scales are divided into 3 types according to their sources and effects as follows: Radio Blackout (R), Solar Radiation storm (S), and Geomagnetic storm (G). Based on these scales, we have constructed the KAO space weather monitoring system by using ION (IDL on the Net). The monitoring system presents (1) realtime data such as x-ray flux, proton flux, and geomagnetic Kp index observed by GOES satellites; (2) the expected effects on communications and satellites automatically determined by the scales based on the realtime data; (3) 3-days forecast reports provided by NOAA/SEC; (4) propagation models that can be used to predict the arrival of interplanetary shocks and CMEs; (5) the mirror site of Active Region Monitor; and (6) web-based data base of several solar and geophysical activities. This presentation is an overview of the KAO space weather monitoring system under development, which is also well described in two poster papers. It is expected that the system can be used as a way of communication between general public and solar and space weather researchers.