

## Introduction of Space Weather Monitoring Lab at KASI

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Recently, KASI opens the Space Weather Monitoring Lab (SWML) to minimize space weather disaster as well as to do related scientific works. SWML displays various real-time space weather resources: (1) three space weather basic components : solar X-ray radiation (R), solar energetic particle (S), and geomagnetic storm index (G), (2) JPL global TEC (Total Electric Content) map from GPS data with KOMSAT-1, KOMSAT-2 satellite trajectories, (3) solar activity monitor with various solar latest images, (4) solar wind and KIGAM Gyeonzu magnetometer data, and (5) IPS global foF2 map. It also shows a forecast of space weather effect in communication and satellite according to NOAA space weather scales. We can estimate interplanetary shock arrival using three different models : Gopalswamy et al. (2001), Moon et al. (2002), and Kim et al. (2007). SWML has two real-time forecasts: (1) magnetopause location based on Shue et al.(1998) with Korean geosynchronous satellites' locations and (2) Dst index based on Lundstedt et al. (2002). The above all information is available at the cyber SWML (<http://sos.kasi.re.kr>). Finally, we introduce our future plans to set up an international space weather center.