

The accurate measurements of the galactic cosmic ray (GCR) fluxes as function of time and energy by the Alpha Magnetic Spectrometer (AMS) give us unique information to study the dynamics of solar modulation. To reproduce the observed data, a 3D time-dependent numerical model is established. The input parameters in the model (solar wind speed, tilt angle, magnetic intensity and polarity) are obtained by the observation near the Earth at the right time. The time varying parameters (diffusion coefficient, drift coefficient) is constrained by the proton and helium spectrum pair and obtained by Markov Chain Monte Carlo (MCMC) method. With the obtained coefficients, the proton and helium spectrum pair are reproduced with normalized χ^2 mainly less than 1. Finally, the time variations of He/P at rigidity of 2.035 GV (fit well with AMS-02 observation) and 0.5 GV are studied. They show different behavior: The former one is mainly caused by the dependence of modulation on particle's mass-to-charge ratio, the latter one is mainly caused by the difference of particle's local interstellar spectrum.