Abstract：In this work, the polarization of the ferroelectret was first estimated based on the experimental results of charging current by a corona charging with a grid in combination with the reverse-polarity corona charging compensation method. The experimental results indicated that the polarization drastically increases with the rise of grid voltage accompanying the breakdown of gas in the void. Also, by means of the charging method mentioned above and analyzing the thermally stimulated discharging spectra, the charge dynamics of macroscope dipoles with space charges and their compensation charges near the free surface of the film during thermal depolarization were discussed. A geometric distribution of trap levels trapping two kinds of charges was discovered, that is, the space charges formed in the macroscopic dipoles were trapped in shallow- and deep- energy level traps respectively, while the space charges located near the free surface of the film were trapped in medium energy level traps