A two-dimensional (2D) organic conductor $\alpha$-(BEDT-TTF)$_2$I$_3$ is well known as a charge ordered (CO) system. In a few two dimensional CO systems, strong non-linear I-V characteristics (power law behavior $I \sim V^D$) have been observed in high voltage regions.[1] In order to investigate the universal I-V behavior in 2D CO systems, we have measured I-V characteristics at various temperatures in a wide electric field region for $\alpha$-(BEDT-TTF)$_2$I$_3$. The temperature dependence of the inplane resistance in $\alpha$-(BEDT-TTF)$_2$I$_3$ shows thermal activation type $V = V_0 \exp(-U_0/2k_BT)$ with $U_0$ below 70 K for low bias voltage (in linear I-V region). The carriers are expected to be thermally excited electron-hole pairs. When the electrical flux between the excited hole and electron is well confined in the 2D layer, the Coulomb potential between them is approximately given by $U_0 \ln(r/a)$, where $r$ is the electron-hole distance, and $a$ is the minimum length, which should be comparable to the size of BEDT-TTF molecule. In a large $r$ region, we assume constant potential $U_0 \ln(\lambda/a)$ for $r > \lambda$, where $\lambda$ is the cut-off length. The factor $U_0$ depends on the dielectric constants of the BEDT-TTF and I$_3$ layers. Since the maximum Coulomb potential between the excited electron and hole is written as $\Delta(E) = U_0 \ln(U_0/aeE) - 1$ for high electric field $E$, we get the power law $I \sim E^D$ and $\alpha = U_0/2k_BT + 1$ whereas $\alpha = 1$ for low $E$. Figure 1 shows the experimental results and the simulations. We see power law behavior in the high $V$ region at low temperatures. The simulations are made for $U_0/2k_B = 165$ K, $a = 0.5$nm, $\lambda = 120$nm and the voltage contact spacing $d = 40 \mu$m. The experimental results are well reproduced except for $T = 15$ and 20 K. It may be due to quantum tunneling effect. The magnetic field effect on the nonlinear I-V characteristics will be also presented.