

$$\frac{q_c(T_j)}{N} = X^{k=2}(T_j) \cdot \dot{Q}_c^{k=2}(T_j) \cdot \frac{n_j}{N}$$

$$\frac{e_c(T_j)}{N} = \frac{X^{k=2}(T_j) \cdot \dot{E}_c^{k=2}(T_j)}{\text{PLF}_j} \cdot \frac{n_j}{N}$$