Equation 1:

$$Yi = \beta 0(ui, vi) + \sum k\ \beta k\ (ui, vi) Xik + \varepsilon i$$

Equation 2:

$$AICc = 2n\log_e(\hat{\sigma}) + n\log_e(2\pi) + \{\frac{(n+tr(s))}{(n-2-tr(s))}\} \ldots\ldots\ldots\ldots (23)$$