

$$\frac{\|\mathbf{r}\|^2}{n} - (1 - 2\hat{\text{df}}/n)\|\mathbf{r} + \text{tr}[\mathbf{\Sigma}\mathbf{A}]\psi(\mathbf{r})\|^2/n - \text{tr}[\mathbf{\Sigma}\mathbf{A}]^2\|\psi(\mathbf{r})\|^2/n - 2(\hat{\text{df}}/n)\|\boldsymbol{\epsilon}\|^2/n + \|\boldsymbol{\epsilon}\|^2/n$$

