

Bierman formula

$$X_M = \frac{\sum_{I=1..M} \exp(-A(M-I))(N_{1I} - N_{2I})}{\sqrt{\sum \exp(-A(M-I))(N_{1I} + N_{2I})}}$$

$X_M = \{ \text{sum from } \{I=1..M\} \exp(-A(M-I)) (N_{1I} - N_{2I}) \} \text{ over } \{ \sqrt{\text{sum}} \exp(-A(M-I))(N_{1I} + N_{2I}) \}$