

$$\begin{aligned}
diff1 &= \frac{\sum_{i=1}^m a_{ik} [\sum_{j=1}^n a_{ij} u_j - f_i]}{\sqrt{\sum_{i=1}^m [\sum_{j=1}^n a_{ij} u_j - f_i]^2}} + \frac{h * u_k}{\sqrt{\sum_{j=1}^n u_j^2}} \\
diff2 &= \left(\sum_{i=1}^m a_{ik} a_{iq} * \sqrt{\sum_{i=1}^m (\sum_{j=1}^n a_{ij} u_j - f_i)^2} - \frac{(\sum_{i=1}^m a_{iq} [\sum_{j=1}^n a_{ij} u_j - f_i]) * (\sum_{i=1}^m a_{ik} [\sum_{j=1}^n a_{ij} u_j - f_i])}{\sqrt{\sum_{i=1}^m (\sum_{j=1}^n a_{ij} u_j - f_i)^2}} \right) * \\
&\quad \frac{1}{\sum_{i=1}^m (\sum_{j=1}^n a_{ij} u_j - f_i)^2} + \frac{h}{\sum_{j=1}^n u_j^2} * \left(\delta_{k,q} * \sqrt{\sum_{j=1}^n u_j^2} - \frac{u_q u_k}{\sqrt{\sum_{j=1}^n u_j^2}} \right)
\end{aligned}$$