$$\mathcal{O} = \sum_{i=1}^{N}\sum_{j=1}^{P}\{w(Z_{ij})[g(Z_{ij}) - \ln E_i - \ln \Delta t_j]\}^2 + \lambda \sum_{z=Z_{min}+1}^{Z_{max}-1}[w(z)g"(z)]^2$$

$$w(z) = \begin{cases} z - Z_{min} & z \le \frac{1}{2}(Z_{min} + Z_{max}) \\ Z_{max} - z & z > \frac{1}{2}(Z_{min} + Z_{max}) \end{cases}$$

$$g"(z_i) = g(z_{i-1}) - 2g(z_i) + g(z_{i+1})$$