Calculation of the relative root mean square (RRMS) error in JSim:

RRMS error = \frac{\text{RMS error}}{\sigma_w}

- Where RMS error is the root mean square error of the model fit to data (See http://www.physiome.org/jsim/docs/User_Optim.html#stop for more information),

- The weighted mean = \mu = \frac{\sum w_i \cdot y_i}{\sum w_i}, the sum from 1 to N where N is # of data points, \( y_i \) is data point and \( w_i \) is weight associated with \( y_i \).

- And the point weighted sample standard deviation:

\[ \sigma_w = \sqrt{\frac{\sum w_i \cdot (y_i - \mu)^2}{(N-1) \cdot \sum w_i / N}} \]