Recalculation has shown that the equation as printed contains two errors, and that in its derivation the tacit assumption was made that $m > n$. The three cases ($n <$, $>$, or $= m$) are each readily found from Wilson's equation (116) by substituting $\sigma^2(I_j) = RI_j/T$ and summing over j. With the approximation, valid for $x \ll R$,

$$\begin{aligned}\Sigma j \sin(2\pi xj/R) &= \int_{-\frac{1}{2}R}^{\frac{1}{2}R} j \sin(2\pi xj/R)\mathrm{d}j \\ &= 0\,, \quad x = 0\,, \\ &= (-)^{x+1}R^2/2\pi x\,,\end{aligned}$$

x a positive integer, the covariance for fixed-time counting takes the form:

$$\begin{aligned}\mathrm{cov_{ft}}(A_m, B_n) = \frac{R}{L_0 T}\Big\{&\tfrac{1}{2}B_{m+n} - \tfrac{1}{2}B_{m-n} - A_m B_n \\ &+ \frac{(G_R - G_L)R}{2\pi L_0} \cdot \frac{(-)^{m+n} n}{m^2 - n^2} \\ &+ \frac{(G_R - G_L)R}{2\pi L_0} \cdot \frac{(-)^n A_m}{n} + \frac{R_g A_m B_n}{L_0}\Big\} \qquad (117a)\end{aligned}$$

for the case $m > n$,

$$\begin{aligned}\mathrm{cov_{ft}}(A_m, B_n) = \frac{R}{L_0 T}\Big\{&\tfrac{1}{2}B_{m+n} + \tfrac{1}{2}B_{n-m} - A_m B_n \\ &+ \frac{(G_R - G_L)R}{2\pi L_0} \cdot \frac{(-)^{m+n+1} n}{n^2 - m^2} \\ &+ \frac{(G_R - G_L)R}{2\pi L_0} \cdot \frac{(-)^n A_m}{n} + \frac{R_g A_m B_n}{L_0}\Big\} \qquad (117b)\end{aligned}$$

for the case $n > m$, and

$$\begin{aligned}\mathrm{cov_{ft}}(A_m, B_m) = \frac{R}{L_0 T}\Big\{&\tfrac{1}{2}B_{2m} - A_m B_m - \frac{(G_R - G_L)R}{8\pi L_0} \cdot \frac{1}{m} \\ &+ \frac{(G_R - G_L)R}{2\pi L_0} \cdot \frac{(-)^m A_m}{m} + \frac{R_g A_m B_m}{L_0}\Big\} \qquad (117c)\end{aligned}$$

for $m = n$. Equation (128) for the covariance arising from the variance of the background has the same form, whatever the relative magnitudes of m and n (but is, of course, zero if either m or n is zero).

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Inter-laboratory single crystal intensity projects.

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Prospective authors of reanalyses of inter-laboratory single crystal intensity projects are urged to contact members of these projects for access to the available unpublished information generated by the projects.

Measurement of identical physical quantities by several laboratories in a collaborative experiment is generally undertaken with a primary emphasis either on achieving higher accuracy in the value of these quantities or else on affording an assessment of the methods themselves. *The American Crystallographic Association Single Crystal Intensity Project* (1967) was developed in terms of the second objective, and basically sought to answer the question: 'How reproducible are structure factors measured diffractometrically in 1964–1965?'. The result obtained was that most of the seven experimental sets of structure factors contained $|F|^2$ values within five per cent of the mean values and that none agreed much better than to within two per cent; hence, it seems likely that no experiment is closer to the true values than two per cent.

The volume of information generated by this Project was so large that considerable selection was necessary in preparing the report for publication. However, the information not published was always, and is still, regarded as available on request. Similarly, unpublished information generated by the I.U.Cr. Commission on Crystallographic Apparatus Single Crystal Intensity Project (Abrahams, Hamilton & Mathieson, 1969) will also be available on request.

The value to be obtained from reanalyses of such projects would be greatest if made with a full knowledge of the pertinent information. In the recent reanalysis of the *American Crystallographic Association Single Crystal Intensity Project* by Mackenzie & Maslen (1968), a request for such information was not made. It is not our purpose to criticize Mackenzie & Maslen's methods, beyond the comment that elimination of 45 per cent of the data in order to form a 'concordant subset' violates the objective of the A.C.A. project.

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