

CORRIGENDUM

‘Further experiments in nearly homogeneous turbulent shear flow’

by V. G. HARRIS, J. A. H. GRAHAM and S. CORRISIN,

J. Fluid Mech. vol. 81, 1977, pp. 657–687.

Phillip Wood has kindly called to our attention some data inconsistencies and misprints in this paper. As a result, we have reviewed the original data sheets, and give below a list of corrections, drawn up with the assistance of Stavros Tavoularis. Most of them stem from the accidental use of an early mean shear value (44 s^{-1}) in the reduction of data taken later at slightly larger shear (48 s^{-1}).

p. 658. Fifth and sixth lines should be replaced by the following: mean shear of $d\bar{U}_1/dx_2 = 48 \text{ s}^{-1}$, except for the data of figures 1 and 2, which were taken with $d\bar{U}_1/dx_2 = 44 \text{ s}^{-1}$; both these values are about four times that in the earlier cited work. The centre-line velocity was equal to that in CHC (12.4 m/s ; the only exception was the data of figures 1 and 2, which were taken with $\bar{U}_c = 11.3 \text{ m/s}$).

p. 663. Fifth line from bottom should read

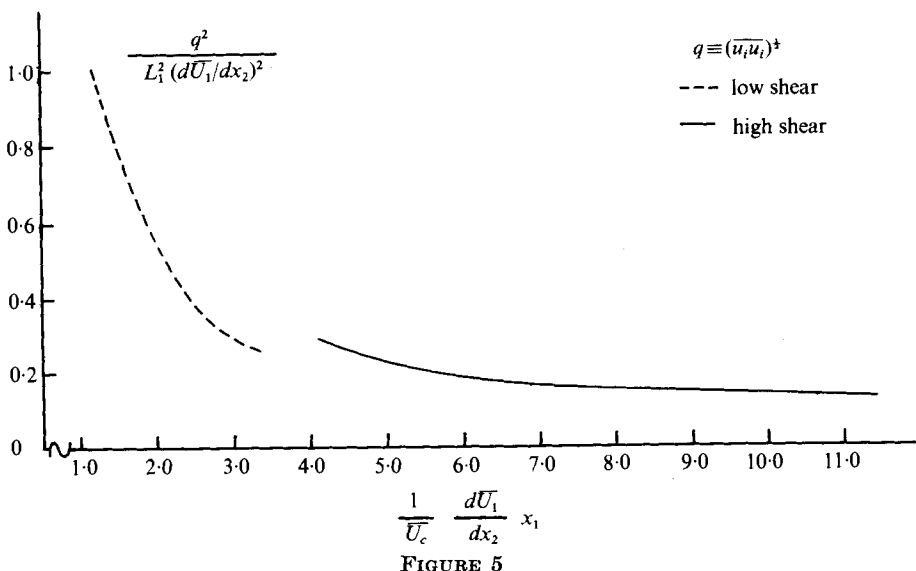
$$\bar{U}_c = 11.3 \text{ m/s.}$$

p. 665, figure 2. On all three ordinate scales for \bar{U}_1/\bar{U}_c , 0.5 should be replaced by 0.4.

p. 665, caption to figure 2. Last sentence should read: $\bar{U}_c = 11.3 \text{ m/s} \dots$

p. 666, start of § 4.2. Insert the following sentence: Data presented in figure 3 and the figures which follow were measured with a centre-line velocity $\bar{U}_c = 12.4 \text{ m/s}$ and a mean velocity gradient $d\bar{U}_1/dx_2 = 48 \text{ s}^{-1}$.

p. 669. The following replacement figure 5 shows the high shear line displaced in accordance with $d\bar{U}_1/dx_2 = 48 \text{ s}^{-1}$.



pp. 670, 671. In figures 6 and 7, the high shear line and the data, respectively, should be shifted to the right by a factor of $\frac{4.8}{4.4} = 1.09$.

p. 671. In table 1,

$$\frac{L_1}{\bar{u}_i \bar{u}_i} \frac{d\overline{u_k u_k}}{dx_1} \text{ should be } 0.022,$$

$$\frac{L_1}{|\bar{u}_1 \bar{u}_2|/u'_1 u'_2} \frac{d}{dx_1} \left(\frac{|\bar{u}_1 \bar{u}_2|}{u'_1 u'_2} \right) \text{ should be } 4.1 \times 10^{-4}.$$

p. 672. Table 2 should be replaced by the following:

Choice of $T \dots$	$T = T_1 = 0.0173 \text{ s}$	$T = T_2 \approx 0.061 \text{ s}$
$\frac{TU_c dL_1}{L_1 dx_1}$	0.060	0.21
$\left \frac{TU_c d\lambda_1}{\lambda_1^2 dx_1} \right $	3.3×10^{-3}	11.6×10^{-3}
$\frac{TU_c}{\bar{u}_i \bar{u}_i} \frac{d\overline{u_i u_i}}{dx_1}$	0.088	0.30
$\left \frac{TU_c}{(\bar{u}_1 \bar{u}_2 / u'_1 u'_2)} \frac{d}{dx_1} \left(\frac{\bar{u}_1 \bar{u}_2}{u'_1 u'_2} \right) \right $	0.001	0.006

p. 673. Equation (4.11) should be changed to

$$\left(\frac{\epsilon}{\nu} \right)^{\frac{1}{2}} \frac{dU_1}{dx_2} \approx 9.7 \quad (4.11)$$

and (4.12) should be changed to

$$\frac{\nu_T}{\nu} \equiv -\frac{\bar{u}_1 \bar{u}_2}{\nu} \frac{dU_1}{dx_2} \approx 160. \quad (4.12)$$

p. 674. In table 3 the following changes should be made:

$$-\bar{U}_c d(\overline{w u_2})/dx_1 \text{ should be } -\bar{U}_c d(\bar{u}_1 \bar{u}_2)/dx_1,$$

$$d\bar{U}_1/dx_2 = 44.0 \text{ s}^{-1} \text{ should be } d\bar{U}_1/dx_2 = 48.0 \text{ s}^{-1},$$

$$L_1 = 2.1 \text{ cm} \text{ should be } L_1 = 5.3 \text{ cm},$$

$$\lambda_1 = 0.29 \text{ cm} \text{ should be } \lambda_1 = 0.70 \text{ cm},$$

$$\epsilon = 3.28 \times 10^4 \text{ should be } \epsilon = 3.35 \times 10^4.$$

p. 674, near beginning of § 4.7. Change $\epsilon \approx 3.28 \times 10^4$ to $\epsilon \approx 3.5 \times 10^4$.

p. 674, second footnote. $(\frac{1}{3}\overline{u_k u_k})^{\frac{3}{2}} L_1$ should be $(\frac{1}{3}u_k u_k)^{\frac{3}{2}}/L_1$.

p. 678, figure 8. The effect of the correction in ϵ on the 'present work' points is within the scatter. The two u_1 points (\circ), the two u_2 points (\square) and the single u_3 point (\star) furthest from the horizontal axis should be moved 7% closer to the horizontal axis.

pp. 683–687, figures 15–18. The abscissa scale numbers should be increased by a factor of $\frac{4.8}{4.4} = 1.09$.

p. 687. The second ROSE citation should be ROSE, W. G.