

Known Typographical Errors in the Second Edition, First Printing of Turbulence Modeling for CFD by D. C. Wilcox

These are all of the known typographical errors as of August 9, 2009.

1. Page 59, last paragraph, line 2: Replace “dependent variables” by “independent variables”.
2. Page 67, Equation (3.88): Replace “ y ” by “ η ”.
3. Page 67, Equation (3.89): The limiting value of the function is missing and “ y ” should be replaced by “ η ”. The correct equation is

$$\frac{d}{d\eta} \left[\frac{1}{\eta^j} \frac{dF}{d\eta} \right] \eta \rightarrow 0 \quad \text{as} \quad \eta \rightarrow 0$$

4. Page 86, Figure 3.15: Replace “Flow 3100 : Adverse ∇p ” by “Flow 3100 : Favorable ∇p ” and replace “Flow 3600 : Favorable ∇p ” by “Flow 3600 : Adverse ∇p ”.
5. Page 88, Paragraph 4, Line 4: Replace “values for c_f at $x \approx 3$ m. is 13% and 2%, respectively” by “values for c_f at $x \approx 3$ m. are within 13% and 2% of the measured value, respectively”.
6. Page 92, between Equations (3.157) and (3.158): Replace “solving Equation (3.155) for τ_m ” by “solving Equation (3.156) for τ_m ”.
7. Page 133, Equation (4.85): Replace “ m ” by “ $m + j$ ” in all four exponents.
8. Page 134, Table 4.3: For the round jet, $j = 1$ and $m = 0$, while the radial jet has $j = 0$ and $m = 1$.
9. Page 136, Equation (4.97): For the round jet, replace \mathcal{V} by $|\eta\mathcal{U} - \mathcal{V}|$.
10. Page 152, Equation (4.120): Replace “ Re_{δ^*} ” by “ $u_\tau\delta^*/\nu$ ” and replace “ Δ ” by “ δ^* ”.
11. Page 153, just above Equation (4.122): Replace “ $Re_{\delta^*} \gg 1$ and $\Delta \ll L$ ” by “ $u_\tau\delta^*/\nu \gg 1$ and $\delta^* \ll L$ ”.
12. Page 153, Equation (4.122): Replace “ Re_{δ^*} ” by “ $u_\tau\delta^*/\nu$ ”.
13. Page 184, six lines from the bottom: Replace “Section 4.6.3” by “Section 4.6.2”.
14. Page 216, Paragraph 2, Line 6: Replace “(see Tables 4.2 and 4.9)” by “(see Table 4.9)”.
15. Page 245, six lines from the bottom: Replace “nearly identical” by “similar”.

16. Page 247, Table 5.1: All Mach numbers should be multiplied by $\sqrt{2}$. The correct table is as follows.

M_∞	Boundary Layer		Mixing Layer	
	$\xi^* = 0$	$\xi^* = 1$	$\xi^* = 0$	$\xi^* = 1$
0	0	0	0	0
1	0.086	0.086	0.255	0.225
2	0.161	0.151	0.437	0.321
3	0.211	0.191	0.543	0.346
4	0.246	0.218	0.600	0.359
5	0.270	0.242	0.641	0.376

17. Page 258, paragraph just below Equation (5.116), ninth line: Replace “1.86” by “-1.36”.
18. Page 301, Figure 6.7, graph (c): The vertical scale is incorrect. Values range from -0.6 to +0.18, not -0.8 to +2.4.
19. Page 302, line 3: Replace “ \overline{uv} ” with “ $\overline{u'v'}$ ”.
20. Page 302, Figure 6.8, graph (a): The vertical scale is incorrect. Values range from 0 to 0.30, not 0 to 25.
21. Page 320, second paragraph, last two lines: Replace “all four of the high-amplitude cases” by “four of the high-amplitude cases”.
22. Page 344, fourth paragraph, last line: Replace “ k_s below 5” by “ k_s^+ below 5”.
23. Page 352, Equation (7.56): Replace “ $y - \delta$ ” by “ $\delta - y$ ”.
24. Page 392, second paragraph, second line: Replace “Jimemez” by “Jiménez”.
25. Page 410, Equation (B.16): Replace the equation for β with

$$\beta = \frac{1 + \sqrt{1 - 4\delta}}{2}$$

26. Page 416, Figure B.2: Replace “ ϵ ” with “ δ ” above each graph, replace “ $y(x)$ ” with “ $F(s)$ ” on the vertical scale of each graph and replace “ x ” with “ s ” on the horizontal scale of each graph.
27. Page 416, next to last paragraph, lines 4, 7 and 8: Replace “ ϵ ” with “ δ ”.