

## Known Typographical Errors in the Second Edition, Second 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 “ $\eta$ ”.
3. Page 67, Equation (3.89): The limiting value of the function is missing and “ $y$ ” should be replaced by “ $\eta$ ”. 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  $\nabla p$ ” by “Flow 3100 : Favorable  $\nabla p$ ” and replace “Flow 3600 : Favorable  $\nabla p$ ” by “Flow 3600 : Adverse  $\nabla p$ ”.
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  $\tau_m$ ” by “solving Equation (3.156) for  $\tau_m$ ”.
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 184, six lines from the bottom: Replace “Section 4.6.3” by “Section 4.6.2”.
11. Page 216, Paragraph 2, Line 6: Replace “(see Tables 4.2 and 4.9)” by “(see Table 4.9)”.
12. Page 245, six lines from the bottom: Replace “nearly identical” by “similar”.
13. Page 247, Table 5.1: All Mach numbers should be multiplied by  $\sqrt{2}$ . The correct table is as follows.

$M_\infty$	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

14. Page 258, paragraph just below Equation (5.116), ninth line: Replace “1.86” by “-1.36”.
15. 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.
16. Page 302, line 3: Replace “ $\overline{uv}$ ” with “ $\overline{u'v'}$ ”.
17. Page 302, Figure 6.8, graph (a): The vertical scale is incorrect. Values range from 0 to 0.30, not 0 to 25.
18. Page 320, second paragraph, last two lines: Replace “all four of the high-amplitude cases” by “four of the high-amplitude cases”.
19. Page 344, fourth paragraph, last line: Replace “ $k_s$  below 5” by “ $k_s^+$  below 5”.
20. Page 352, Equation (7.56): Replace “ $y - \delta$ ” by “ $\delta - y$ ”.
21. Page 392, second paragraph, second line: Replace “Jimemez” by “Jiménez”.
22. Page 410, Equation (B.16): Replace the equation for  $\beta$  with

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

23. Page 416, Figure B.2: Replace “ $\epsilon$ ” with “ $\delta$ ” 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.
24. Page 416, next to last paragraph, lines 4, 7 and 8: Replace “ $\epsilon$ ” with “ $\delta$ ”.