



Errata

Analytical determination of the temperature distribution and Nusselt numbers in rectangular ducts with constant axial heat flux

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The publishers regret that Tables 3–6 (pp. 745 and 746) of the above article were incorrectly published. The correct versions of those tables are printed below.

Table 3
The coefficients $t_{n,m}$ of Eq. (13): versions 1L, 1S, 2L, 2S

Version	$t_{n,m}$
1L	$-\frac{128\beta}{\pi^4 A(\beta)} \sum_{k=1, \text{odd}}^{\infty} \sum_{j=1, \text{odd}}^{\infty} \frac{\delta_n (-1)^{\frac{m-1}{2}}}{(4n^2\beta^2 + m^2)(\beta^2 k^2 + j^2)(k^2 - n^2)(4j^2 - m^2)}$ <p>for $n = 0$ or even, and m odd</p>
1S	$-\frac{128\beta}{\pi^4 A(\beta)} \sum_{k=1, \text{odd}}^{\infty} \sum_{j=1, \text{odd}}^{\infty} \frac{\delta_m (-1)^{\frac{n-1}{2}}}{(n^2\beta^2 + 4m^2)(\beta^2 k^2 + j^2)(4k^2 - n^2)(j^2 - m^2)}$ <p>for n odd and $m = 0$ or even</p>
2L	$-\frac{4\beta}{\pi^3 A(\beta)} \sum_{k=1, \text{odd}}^{\infty} \frac{\delta_n}{m(n^2\beta^2 + m^2)(\beta^2 k^2 + m^2)(k^2 - n^2)}$ <p>for $n = 0$ or even, and m odd</p>
2S	$-\frac{4\beta}{\pi^3 A(\beta)} \sum_{j=1, \text{odd}}^{\infty} \frac{\delta_m}{n(n^2\beta^2 + m^2)(\beta^2 n^2 + j^2)(j^2 - m^2)}$ <p>n odd and $m = 0$ or even</p>

$$\delta_i = 1 \text{ if } i \neq 0, \\ \delta_i = 1/2 \text{ if } i = 0$$

[☆] PII of original article: S0017-9310(99)00188-X

Table 4

The coefficients $t_{n,m}$ of Eq. (13): versions 2C, 3L, 3S, 4

$$2C \quad -\frac{256\beta}{\pi^4 A(\beta)} \sum_{k=1, \text{ odd}}^{\infty} \sum_{j=1, \text{ odd}}^{\infty} \frac{(-1)^{\frac{n-1}{2}} (-1)^{\frac{m-1}{2}}}{(n^2\beta^2 + m^2)(\beta^2 k^2 + j^2)(4k^2 - n^2)(4j^2 - m^2)}$$

for n and m odd

$$3L \quad -\frac{32\beta}{\pi^3 A(\beta)} \sum_{k=1, \text{ odd}}^{\infty} \frac{(-1)^{\frac{n-1}{2}}}{m(n^2\beta^2 + 4m^2)(\beta^2 k^2 + m^2)(4k^2 - n^2)}$$

for n and m odd

$$3S \quad -\frac{32\beta}{\pi^3 A(\beta)} \sum_{j=1, \text{ odd}}^{\infty} \frac{(-1)^{\frac{m-1}{2}}}{n(4n^2\beta^2 + m^2)(\beta^2 n^2 + j^2)(4j^2 - m^2)}$$

for n and m odd

$$4 \quad -\frac{\beta}{\pi^2 A(\beta) m n (n^2\beta^2 + m^2)^2}$$

for n and m odd

Table 5

The bulk temperature for the H1 problem: versions 1L, 1S, 2L, 2S

Version	T_b
1L	$-\frac{1024\beta}{\pi^6 A^2(\beta)} \sum_{n=0, \text{ even}}^{\infty} \sum_{m=1, \text{ odd}}^{\infty} \sum_{l=1, \text{ odd}}^{\infty} \sum_{p=1, \text{ odd}}^{\infty} \sum_{k=1, \text{ odd}}^{\infty} \sum_{j=1, \text{ odd}}^{\infty} \frac{\delta_n}{(l^2\beta^2 + p^2)(4\beta^2 n^2 + m^2)(l^2 - n^2)(4p^2 - m^2)(\beta^2 k^2 + j^2)(k^2 - n^2)(4j^2 - m^2)}$
1S	$-\frac{1024\beta}{\pi^6 A^2(\beta)} \sum_{n=1, \text{ odd}}^{\infty} \sum_{m=0, \text{ even}}^{\infty} \sum_{l=1, \text{ odd}}^{\infty} \sum_{p=1, \text{ odd}}^{\infty} \sum_{k=1, \text{ odd}}^{\infty} \sum_{j=1, \text{ odd}}^{\infty} \frac{\delta_m}{(l^2\beta^2 + p^2)(\beta^2 n^2 + 4m^2)(4l^2 - n^2)(p^2 - m^2)(\beta^2 k^2 + j^2)(4k^2 - n^2)(j^2 - m^2)}$
2L	$-\frac{4\beta}{\pi^4 A^2(\beta)} \sum_{n=0, \text{ even}}^{\infty} \sum_{m=1, \text{ odd}}^{\infty} \sum_{l=1, \text{ odd}}^{\infty} \sum_{k=1, \text{ odd}}^{\infty} \frac{\delta_n}{m^2(l^2\beta^2 + m^2)(\beta^2 n^2 + m^2)(l^2 - n^2)(\beta^2 k^2 + m^2)(k^2 - n^2)}$
2S	$-\frac{4\beta}{\pi^4 A^2(\beta)} \sum_{n=1, \text{ odd}}^{\infty} \sum_{m=0, \text{ even}}^{\infty} \sum_{p=1, \text{ odd}}^{\infty} \sum_{j=1, \text{ odd}}^{\infty} \frac{\delta_m}{n^2(n^2\beta^2 + m^2)(\beta^2 n^2 + p^2)(p^2 - m^2)(\beta^2 n^2 + j^2)(j^2 - m^2)}$

$$\delta_i = 1 \text{ if } i \neq 0,$$

$$\delta_i = 1/2 \text{ if } i = 0$$

Table 6
The bulk temperature for the H1 problem: versions 2C, 3L, 3S, 4

Version	T_b
2C	$-\frac{4096\beta}{\pi^6 A^2(\beta)} \sum_{n=1, \text{odd}}^{\infty} \sum_{m=1, \text{odd}}^{\infty} \sum_{l=1, \text{odd}}^{\infty} \sum_{p=1, \text{odd}}^{\infty} \sum_{k=1, \text{odd}}^{\infty} \sum_{j=1, \text{odd}}^{\infty} \frac{1}{(l^2\beta^2 + p^2)(\beta^2 n^2 + m^2)(4l^2 - n^2)(4p^2 - m^2)(\beta^2 k^2 + j^2)(4k^2 - n^2)(4j^2 - m^2)}$
3L	$-\frac{64\beta}{\pi^4 A^2(\beta)} \sum_{n=1, \text{odd}}^{\infty} \sum_{m=1, \text{odd}}^{\infty} \sum_{j=1, \text{odd}}^{\infty} \sum_{k=1, \text{odd}}^{\infty} \frac{1}{m^2(j^2\beta^2 + m^2)(\beta^2 n^2 + 4m^2)(4j^2 - n^2)(\beta^2 k^2 + m^2)(4k^2 - n^2)}$
3S	$-\frac{64\beta}{\pi^4 A^2(\beta)} \sum_{n=1, \text{odd}}^{\infty} \sum_{m=1, \text{odd}}^{\infty} \sum_{j=1, \text{odd}}^{\infty} \sum_{l=1, \text{odd}}^{\infty} \frac{1}{n^2(4n^2\beta^2 + m^2)(\beta^2 n^2 + j^2)(4j^2 - m^2)(\beta^2 n^2 + l^2)(4l^2 - m^2)}$
4	$-\frac{\beta}{4\pi^2 A^2(\beta)} \sum_{n=1, \text{odd}}^{\infty} \sum_{m=1, \text{odd}}^{\infty} \frac{1}{n^2 m^2 (\beta^2 n^2 + m^2)^3}$