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Erratum

Erratum to: "Cubical-cavity natural-convection benchmark experiments: an extention" [International Journal of Heat and Mass Transfer 46 (2003) 3655–3660]

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The authors regret that the description of the "diamond" orientation was not in accordance with the actual experimental setup. The correct description and clarification are printed below.

p. 3656 (First column, Fig. 1). The figure caption should read as the following:

Fig. 1. Sketch defining the various orientations of the cubical cavity. The diamond orientation has $\varphi = 35.264°$ and $\psi = 30°$.

p. 3656 (First column, lines 7–12 after Fig. 1). The sentences should read as the following:

The new orientation has the cubical cavity standing on one corner with the diagonal between that lowest corner and the opposite corner slanted at 9.736° from vertical: i.e., $\varphi = 35.264°$ and $\psi = 30°$ in Fig. 1. (Note that in this orientation, the hot face, which constitutes one of the three lower faces of the cavity, is at 45° from the horizontal plane.)

The x, y and z components of the gravity vector, according to Fig. 1 on p. 3656, are given by the following expressions:

$$g_x = -g\cos\varphi\cos\psi, \quad g_y = -g\sin\varphi\cos\psi,$$
$$g_z = g\sin\psi.$$

The results at diamond orientation in Tables 1 and 2 are for $\varphi = 35.264°$ and $\psi = 30°$. However the CFD simulation, as presented in Section 3 on p. 3658–3659, are for $\varphi = 45°$ and $\psi = 35.264°$: i.e., the cubical cavity standing on one corner with the diagonal between that lowest corner and the opposite corner aligned vertically.

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