

## Supplementary information

January 19, 2012

We provide lookup tables of numerically calculated static advancing contact angles for material contact angles respectively  $\theta_0 = 50^\circ$ ,  $\theta_0 = 52.5^\circ$ ,  $\theta_0 = 55^\circ$ ,  $\theta_0 = 60^\circ$ ,  $\theta_0 = 70^\circ$ ,  $\theta_0 = 80^\circ$ ,  $\theta_0 = 90^\circ$ ,  $\theta_0 = 100^\circ$ ,  $\theta_0 = 110^\circ$ ,  $\theta_0 = 120^\circ$ ,  $\theta_0 = 130^\circ$ . Data are in three columns text format. The first column runs over the pillar spacing  $W/D$ , the second column runs over the aspect ratios  $H/W$  while the third column reports the calculated static advancing angles. Respective color plots are collected in figure 1.

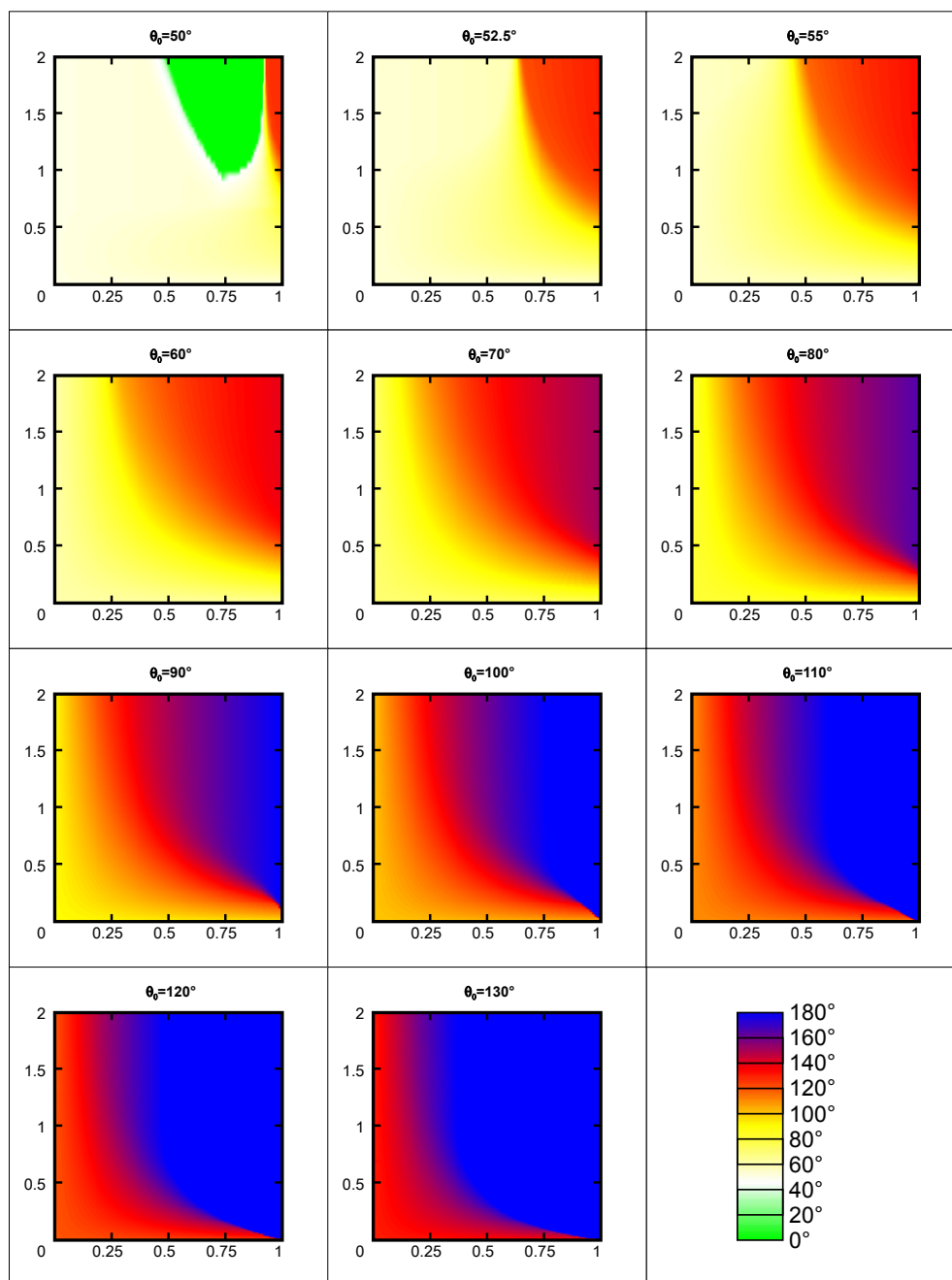


Figure 1: Color plots for:  $\theta_0 = 50^\circ$ ,  $\theta_0 = 52.5^\circ$ ,  $\theta_0 = 55^\circ$ ,  $\theta_0 = 60^\circ$ ,  $\theta_0 = 70^\circ$ ,  $\theta_0 = 80^\circ$ ,  $\theta_0 = 90^\circ$ ,  $\theta_0 = 100^\circ$ ,  $\theta_0 = 110^\circ$ ,  $\theta_0 = 120^\circ$ ,  $\theta_0 = 130^\circ$ .