Supplementary data

For each of the case, the two principal curvatures: k_1 and k_2 and the two parameters to characterise reactivity: thickness and maximum intensity along the normal to the contour have been plotted along the flame contour.

Case 1: φ=1.0

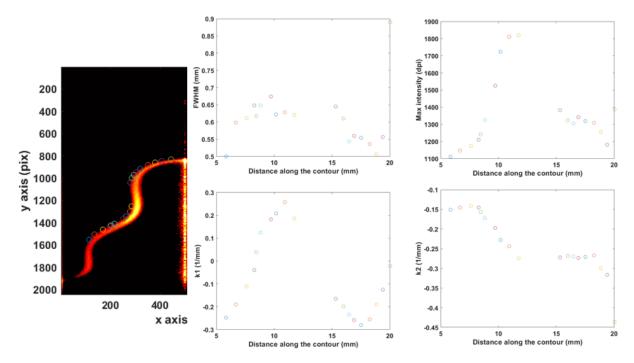


Figure 1: Curvature and reactivity plotted along the flame contour for φ =1.0.

Case 2: φ=1.1

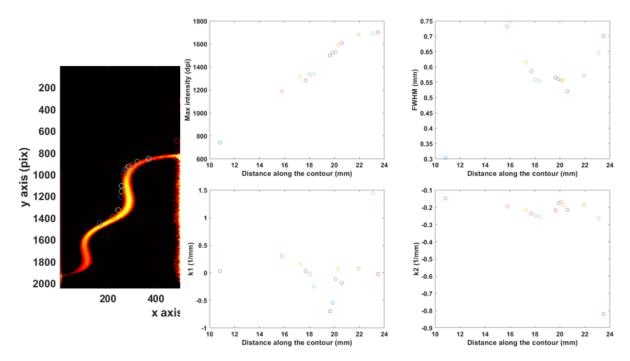


Figure 2: Curvature and reactivity plotted along the flame contour for $\phi{=}1.1.$ Case 3: $\phi{=}1.2$

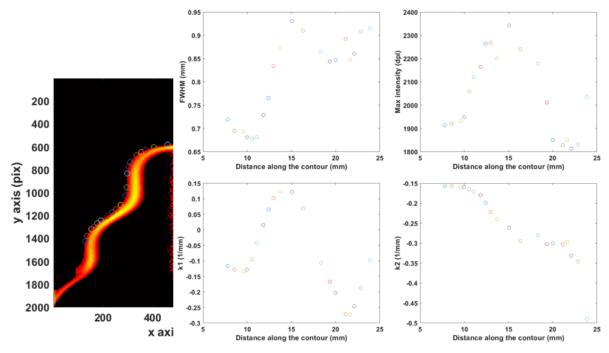


Figure 3: Curvature and reactivity plotted along the flame contour for ϕ =1.2.

Case 4: $\phi = 1.3$

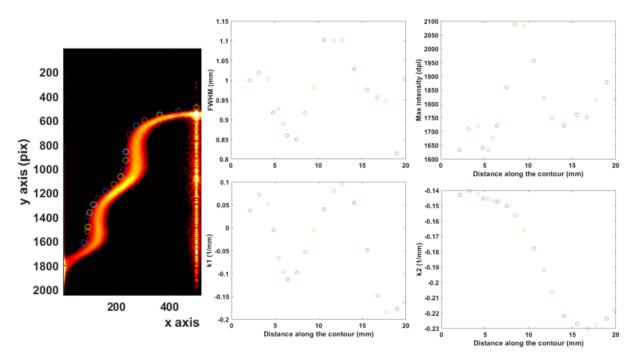


Figure 4: Curvature and reactivity plotted along the flame contour for ϕ =1.3. Case 5: ϕ =1.4

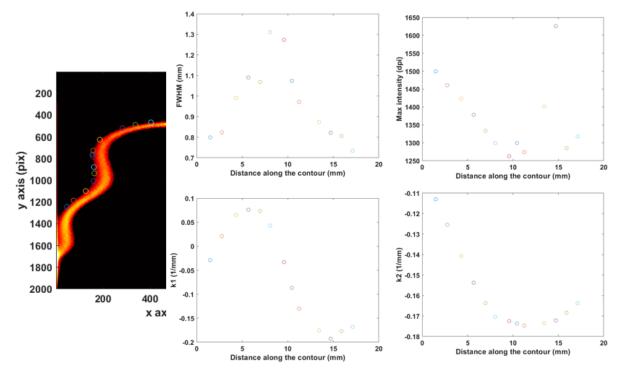


Figure 5: Curvature and reactivity plotted along the flame contour for φ =1.4.