(a)

(b)

FIG. 3. 5a–5b.–Variation of the upward velocity of a magnetic island: (a) when r is changed (Models r1–r4), (b) when $_{init}$ is changed (Models 1–3 and r3). The upward velocity is derived from the inclination of lines obtained by means of the line-fittings similar to that in Figure 3. 3. In both figures asterisks (*) and crosses (+) represent the upward velocity in the first stage (before the acceleration) and in the third stage (after the acceleration), respectively. Thick curves are the result of such curve-fittings as $v_{upward} = a \, r^b$ and $c \, {}_{init}^{d}$, where a, b, c, and d are all constant values. In the case of r = 0 or $_{init} = 0$, we obtain $v_{upward} = 0$, which means that no initial perturbation is imposed.