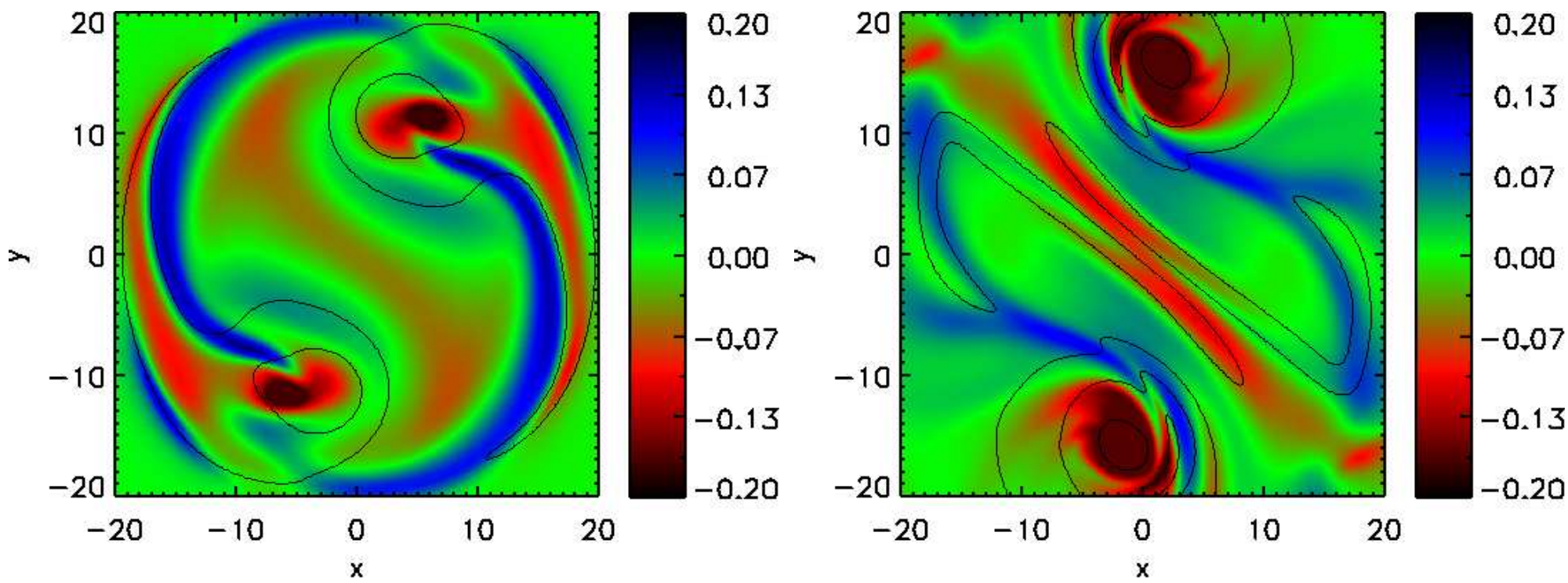

(a) $t = 40$ (b) $t = 80$