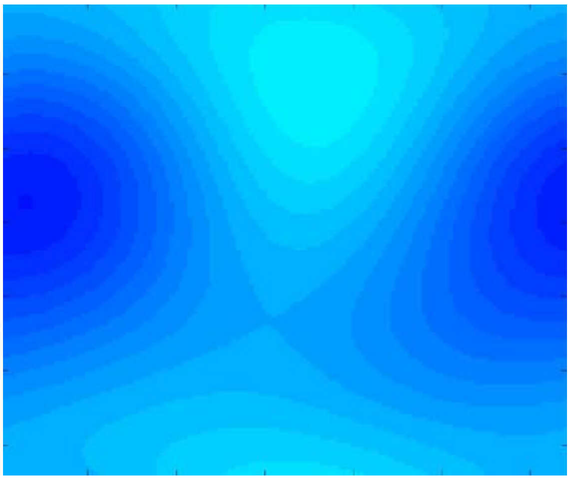
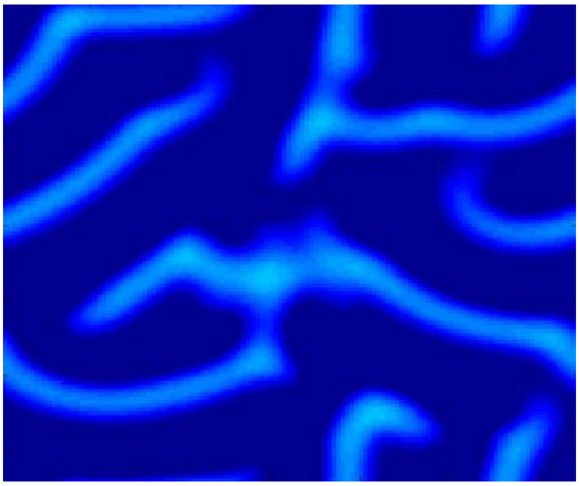
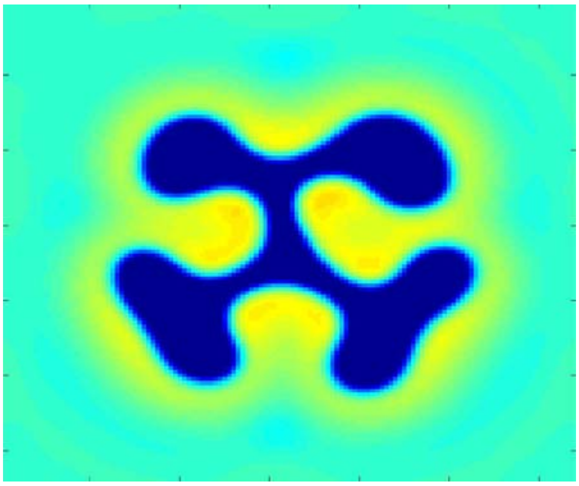
when initial vertical perturbation is made in the 2D domain (c) Spotlike pattern when initial vertical and horizontal perturbation is made in the 2D domain.



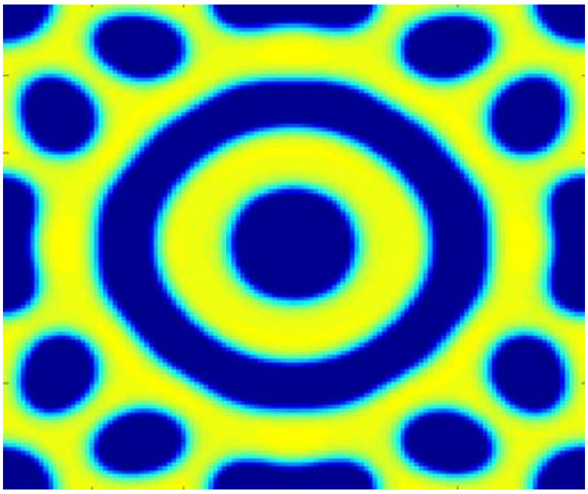
(a)



(b)



(c)



(d)

Fig. 5: Some different from simulations in the parameter space. (a) ε =0.3, f =1, q =0.0008, D_1 =3, D_2 =0.03, Δt =0.0025. (b) ε = 0.4, f =0.1, q =0.0008, D_1 =1, D_2 =0.03, Δt =0.0025. (c) ε = 1, f =0.57, q =0.002, D_1 =1, D_2 =75, Δt =0.0025. Localized initial perturbation in the centre domain. (d) ε = 1, f =0.59, q =0.002, D_1 =1, D_2 =75, Δt =0.0025. Circle initial perturbation in the 2D domain.