Supplementary Material for "Parallel Computation of 2D Morse-Smale Complexes"

(a) t=8
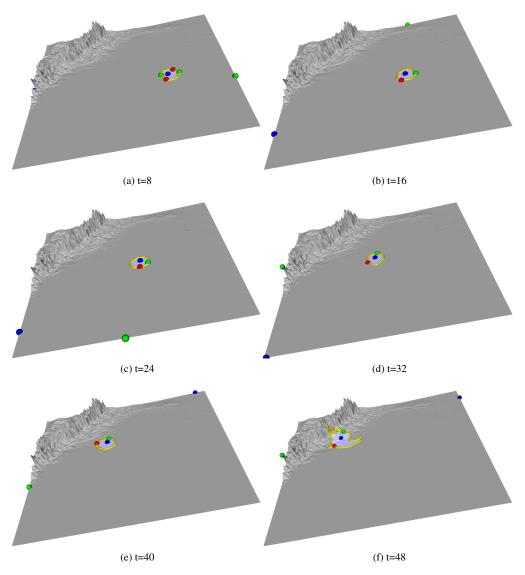
(b) t=16

(c) t=24

(d) t=32

(e) t=40

(f) t=48

Figure 1: The ascending manifold of the most persistent wind speed minimum corresponds to the eye of the hurricane. Computing this ascending manifold tracks the eye. Since the wind velocity drops sharply at the eye of the hurricane and increases sharply around the eye, the gradient behavior of the magnitude captures the movement of hurricane. The images show the MS complex of the wind speed above the surface, rendered onto the surface height field for every 8th time step beginning from the 8th. The MS complexes for (a),(b),(c),(d) were simplified upto 20%. (e) and (f) were simplified upto 25% and 35% respectively.