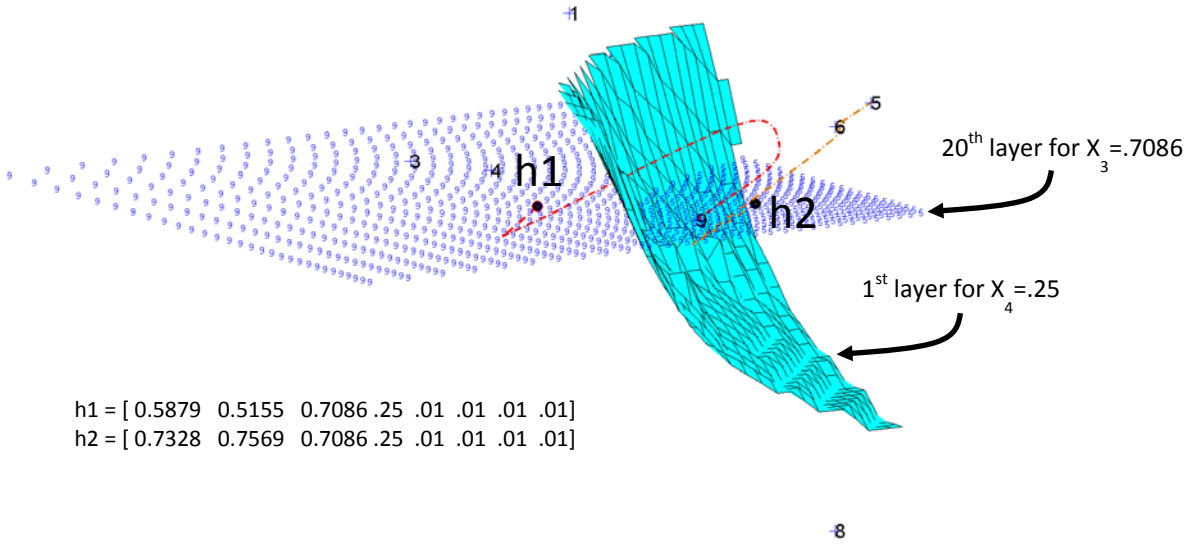

Figure S3 In DS6, two 8-dimensional deterministic tracks (red dash-dot lines) originating from h_1 and h_2 respectively are plotted in the X_1, X_2 and X_3 sub-manifold. The track originating at h_1 reaches stable fixed point #9. The track originating at h_2 reaches stable fixed point #5. The plane of numbers (in blue) indicates, as a function of X_1 and X_2 positions in the plane, which of the two stable fixed points will be reached: #9 on the left, #5 on the right. This plane is drawn at X_3=.7086 (20^{th} layer) and computed for X_4=.25 (1^{st} layer), to correspond to the starting points of h_1 and h_2. It can be seen that there is a switch over from #9 to #5 corresponding to the location of the general separatrix sub-manifold surface (cyan) cutting this plane. This general separatrix sub-manifold surface (cyan) is the 1^{st} X_4 layer sub-manifold surface so selected because it is the one that corresponds to the h_1 and h_2 X_4 starting point = .25 . Hence, as expected and consistent with the meaning of general separatrix surfaces, a track originating on the left side (*e.g.* h_1 track) will reach stable fixed point #9, and a track originating on the right side (*e.g.* h_2 track) will reach stable fixed point #5.