## **Material**



**Figure 1:** Interface to input distributions of dye, and protection with developped cloth data (left) and folded cloth data (right). In the right window, red lines indicates dye and gray lines indicates protection area. Distributions of dye and protection can be input with a mouse by drawing on two windows that display developed and folded cloth. These two windows also display distributions of drawing respectively in real time, i.e, it is easy to realize the 2D distribution of the 3D drawing input.



(a) (b) (c) (c) **Figure 2:** Comparison between real dyed pattern of Seikaiha and our simulation result. A real dyed stuff of Seikaiha pattern (a), the way to fold and sew a cloth to make Seikaiha (b), and our simulation result of it (c). In the right image of (b), red dot-line shows the dyed area, and blue dot-line shows the sewn area.



(a) (b) (c) **Figure 3:** Comparison between real dyed pattern of Kumo-shibori and our simulation result. A real dyed stuff of Kumo-shibori (a), the way to fold and tie a cloth to make Kumo-shibori (b), and our simulation result of it (c).



**Figure 4:** Comparison between real dyed pattern of Itajime and our simulation result. A real dyed stuff of Itajime (a), the way to fold and protect a cloth with triangular wooden plate to make Itajime (b), and our simulation result of it (c).