**Penalty function of tractor spline**

(a)

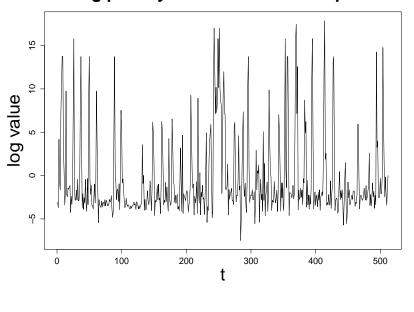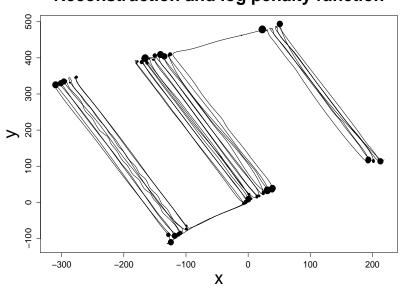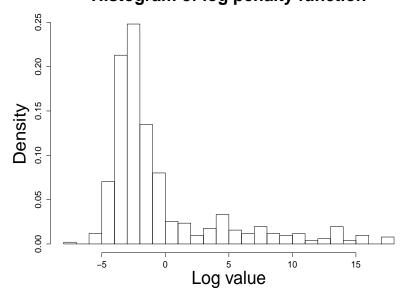**Log penalty function of tractor spline**

(b)

**Reconstruction and log penalty function**

(c)

**Histogram of log penalty function**

(d)