

---

Subject: Re: Minimum area ellipse - quadratic optimisation?  
Posted by [greg michael](#) on Tue, 21 Feb 2006 15:56:38 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Thinking some more, I think I'd not pick the furthest point to choose the axis, but find the direction with greatest moment (is that what it's called?) - i.e. maximise  $\sigma(r \cos(\theta - \phi))$ , varying  $\phi$ , with  $r, \theta$  defining the point position from your centre. You might then pick radii which enclose some sensible proportion of the points (90%) to get better representative ellipses.

greg

---