

---

Subject: Re: Azimuth and Offset XYZ position correction  
Posted by [James Kuyper](#) on Fri, 24 Mar 2006 23:08:48 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Dave wrote:

> Plenty fast enough....next step is to try and get the elevation angle  
> incorporated.

That's no big deal, if the distances you're measuring are small compared to the radius of the earth (which seems pretty likely for line-of-sight laser ranging to positions on the surface of the earth). Just multiply the dx and dy formulas I gave you by  $\cos(\text{elevation} \cdot \text{DTOR})$ . Of course, you have to add  $\text{distance} \cdot \sin(\text{elevation} \cdot \text{DTOR})$  to the altitude of your known site to get the altitude of the other site.

---