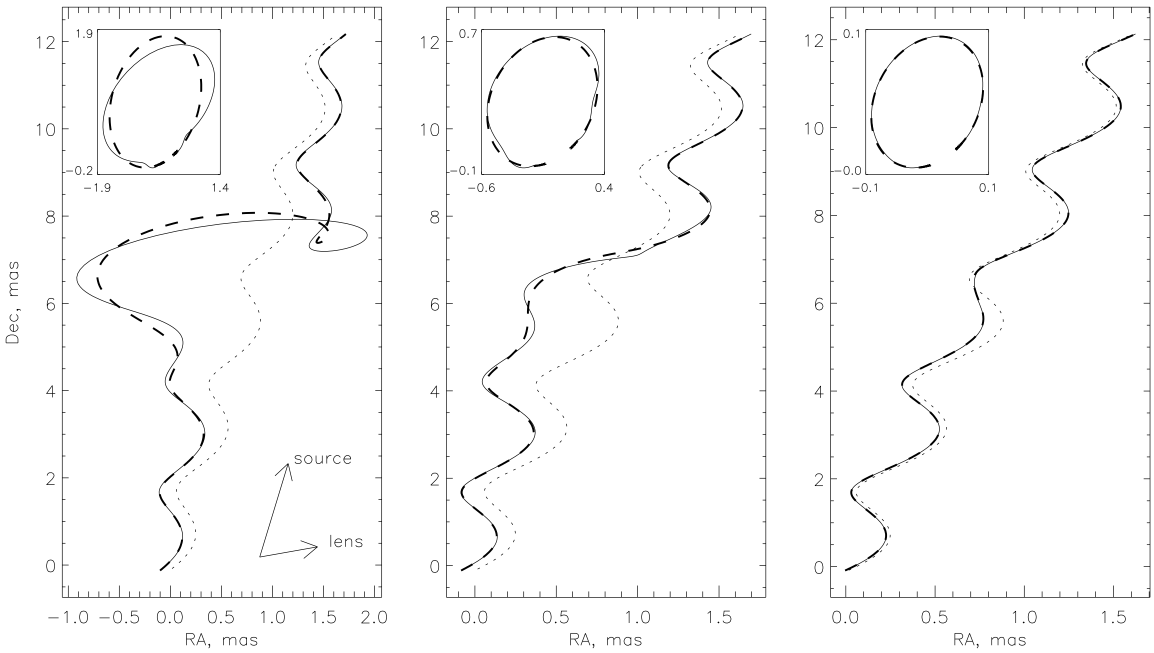

Figure 6.2: The astrometric shift of microlensing events, as seen by a barycentric (dashed line) and a terrestrial observer (solid line). Also shown for comparison is the trajectory of the source without (dotted line) the event. The insets show the deviations with source parallactic and proper motion removed. (The lens is at 150 pc (left), 1kpc (centre) and 5kpc (right), the source at 6.0 kpc, the transverse velocity is $60\,\mathrm{km\,s^{-1}}$ and the impact parameter u_0 is 1.5. The lens has mass $0.5 M_{\odot}$.)

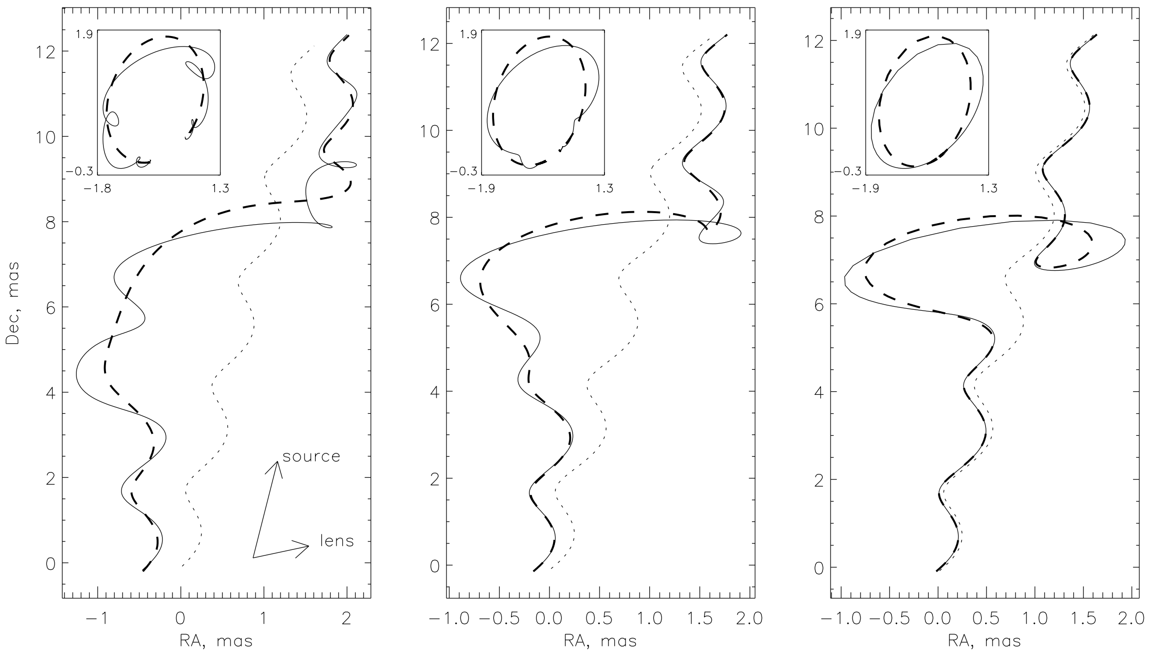

Figure 6.3: As Figure 6.2, but now the transverse velocity varies from $15\,\mathrm{km\,s^{-1}}$ (left), $40\,\mathrm{km\,s^{-1}}$ (centre) and $200\,\mathrm{km\,s^{-1}}$ (right) while the lens is fixed at 150 pc.

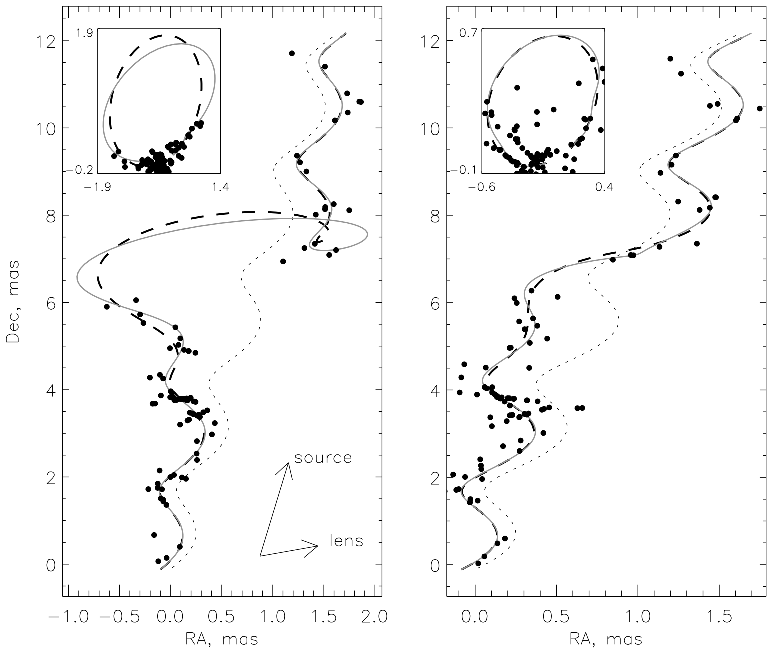

Figure 6.4: As Figure 6.2, but with simulated datapoints using the Gaia scanning law. The accuracy is 150 μas corresponding to a 16th magnitude star.

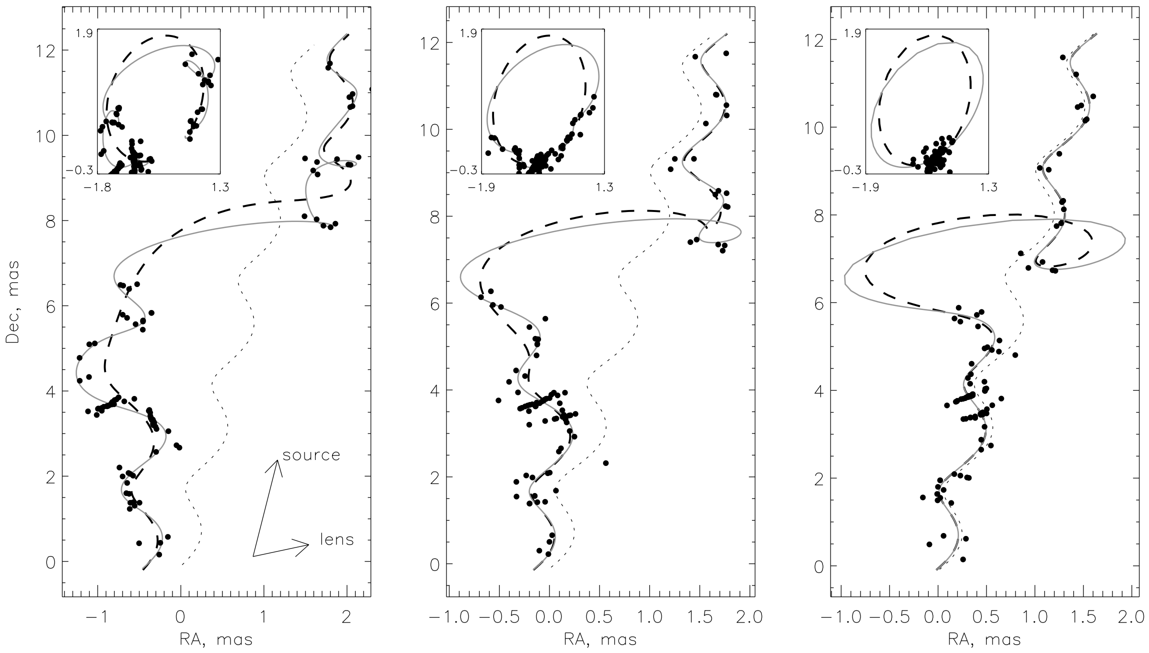

Figure 6.5: As Figure 6.3, but with simulated datapoints using the Gaia scanning law. The accuracy is 150 μas corresponding to a 16th magnitude star.