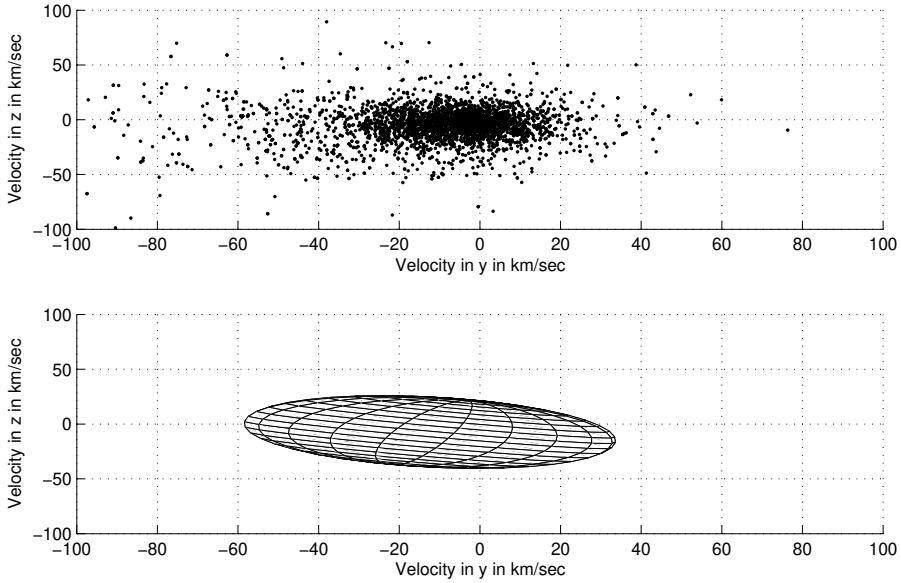

Fig. 8. Ellipsoid in $y - z$ plane.

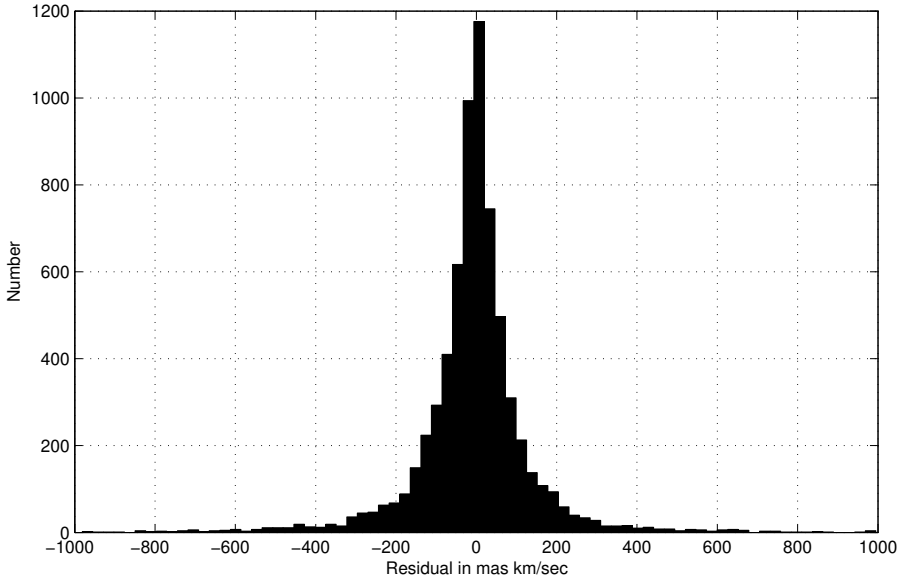

Fig. 9. Histogram of residuals from kinematical solution.

Because we generally use a 5% to 10% limit before rejecting the null hypothesis that a distribution is in fact not random, we infer that although the actual distribution deviates from normality the residuals conform to the null hypothesis of being random. If the runs test is applied separately to the equations of condition arising from the tangential velocities and those from the radial velocities, the former show 3,032 runs out of an expected 3,075 and the latter 303 runs out of an expected 329. This demonstrates that the tangential velocities seem of higher quality than the radial velocities, 31.2% probability of randomness versus 4.6%, but because they are used conjointly the residuals remain relatively random. All of this confirms, along with the singular values and Eichhorn's efficiency, that the reduction model suffers no serious defects and that inclusion of the K_1 incompleteness factor seems unnecessary.