Lia,

how can I check if the covariances I get are reasonable? Is there any standard procedure that you use?

What seems to cause the trouble for me is that the value cov[0][4] -- the covariance between q/p and the v-coordinate -- is changing sign. I do not understand why covariances between the coordinate and the momentum should change sign after ane xtrapolation at all... do you have an idea?

Cheers!
Sebastian.