1 What I've done

- Worked on my report.

- Captured new trajectory (square with sides 1m) with new scene (different small box, carpet on ground)

- Captured another circle trajectory with new scene (same as square trajectory)

- Initial results for new trajectories (need to play around with some of the frequency stuff to get it to work)

- Started planning out seminar slides

2 Parts of report to look at

- Intro, lit review, background info

3 Questions

- Should I see what performance is like with different features? (I'm currently using SIFT)

- Should I add a section in the background info about features?

- Is it worth trying to get ICP working or should I just cut it? Could also try use it to refine an estimate from one of the other methods rather than by itself (which is how it seems to be used in practice). Although not sure I'll have time to actually implement that.

4 Comments

- Need to try some stuff to see if I can get better trajectories (see Figure 1)

- Essential Matrix seems to be going ok until it hits the last side and gets turned around.

- PnP seems to be doing some kind of weird cross-over thing and the side are too big.

- Kabsch is complete nonsense (but can't see boxes during the turns and some of the straight sections, so somewhat expected?)

(a) Ground truth trajectory (skip 5)

(b) Trajectory estimated by Essential Matrix method

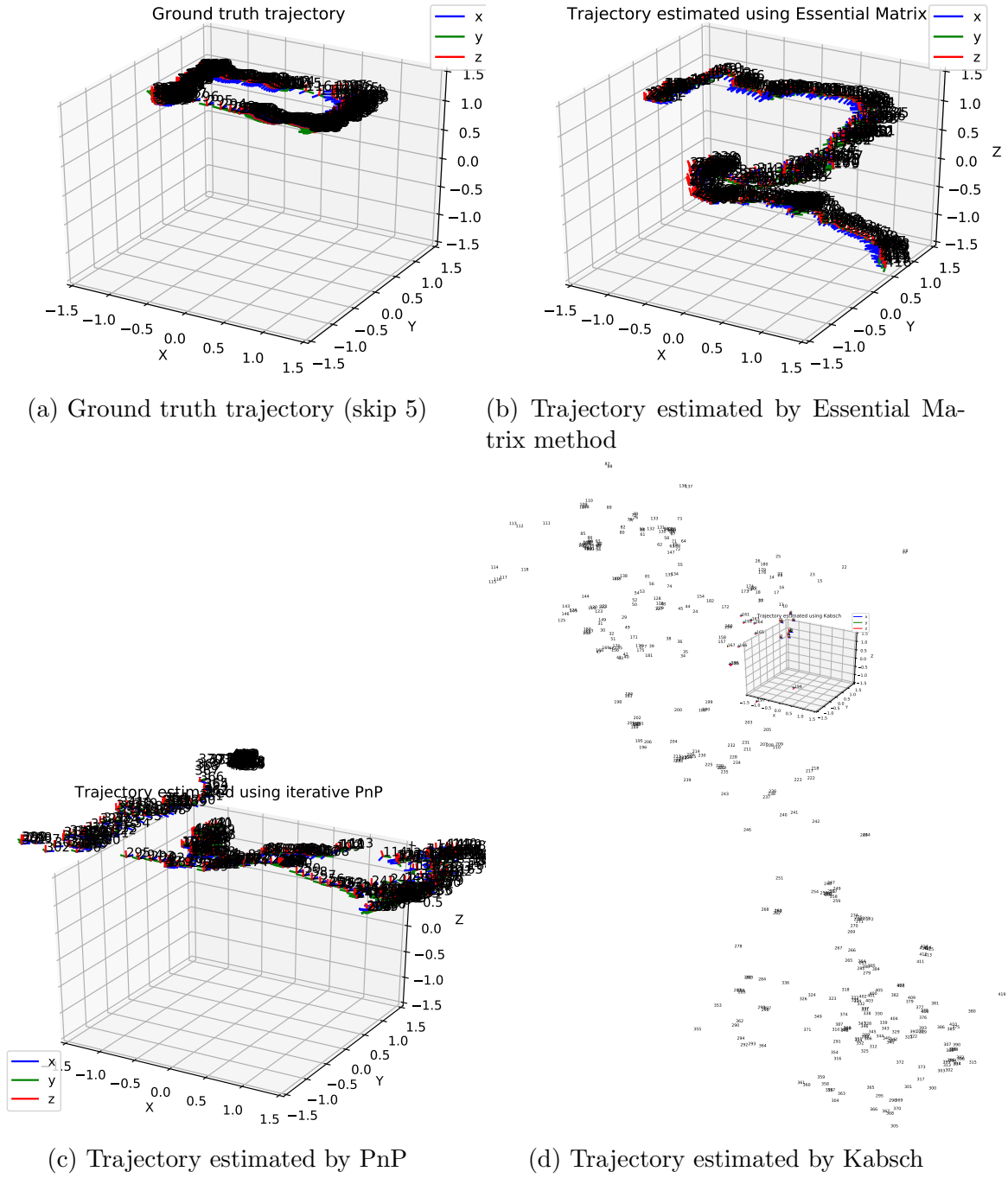(c) Trajectory estimated by PnP

(d) Trajectory estimated by Kabsch

Figure 1: Trajectories for square trajectory (1m sides), with 5 frames skipped only one loop.