Changes

- Assuming camera is calibrated
  - Could possibly switch back later...
  - ... but for now makes metric reconstruction easier
Metric Reconstruction

- Calculate initial matches
  - RANSAC outliers
- Correct points using camera calibration
- Calculate essential matrix
  - Rotation + translation
- Calculate 3D structure
SUPER AWESOME DEMO TIME
Thoughts on initial results

- Needs dense matching
  - Ideally, epilines are horizontal across both images
  - Problem, my current implementation is off by up to 10 scan-lines (limits search but not ideal)
Goals

- Dense matching
  - Better rectification?
  - Adding a 3rd (or 4th, 5th, etc...) frame and calculating it’s pose / adding it’s 3D info
- Porting to a real-time capable language
  - Comparison with “Instantaneous Model”
  - Detection of objects which are not “moving with the environment”