# Cartographer Open House VII



October 12, 2017

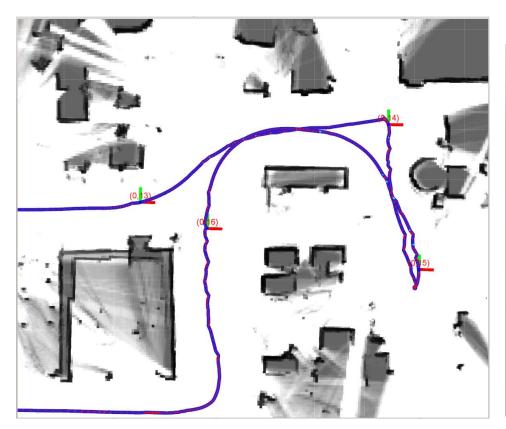
## What landed on master? • cartographer

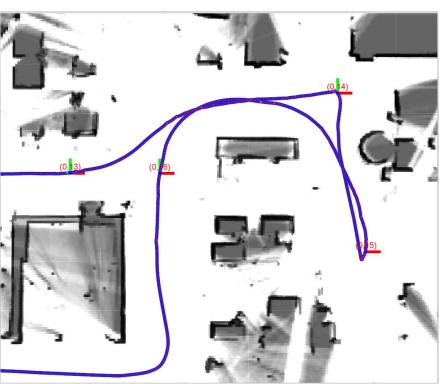
- Fix odometry in the 2D pose graph optimization. (#533).
- Add trajectory trimming support to 3D. (<u>#559</u>)
- Add FrameIdFilteringPointsProcessor. (<u>#566</u>)
- Deserialize trajectory nodes. (<u>#569</u>)
- Add support for odometry to the 3D pose graph optimization. (<u>#570</u>)
- Introduces mapping::MapById in the 2D pose graph for submaps. (<u>#578</u>)
- Bug fixes, refactorings, performance.

# What landed on master? • cartographer ros

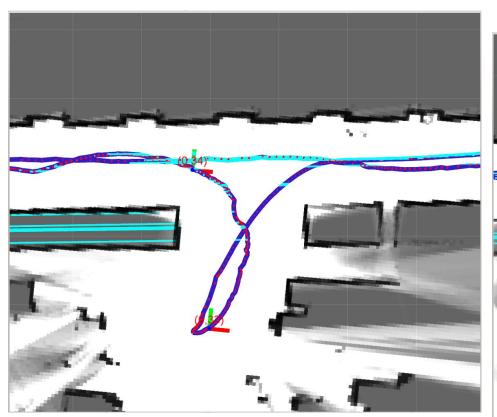
- Fixed ratio sensor sampling in cartographer\_ros (#499).
- Demo: Unwarp each (MultiEcho)LaserScan point in the assets\_writer\_main.
   (#526)
- Demo: Visualize both high and low res slices. (#532, #506)
- Bug fixes, refactorings, performance.

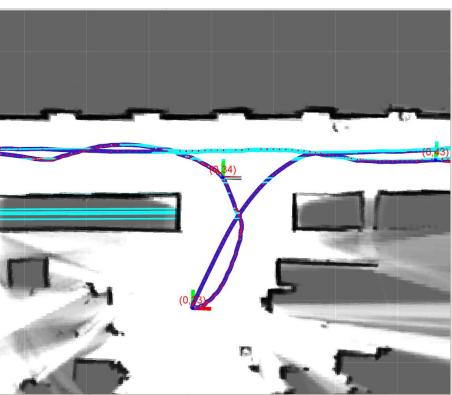
# Demo • Fix Odometry



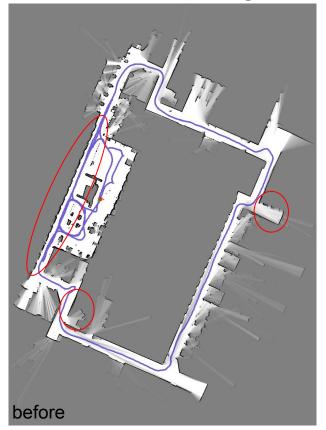


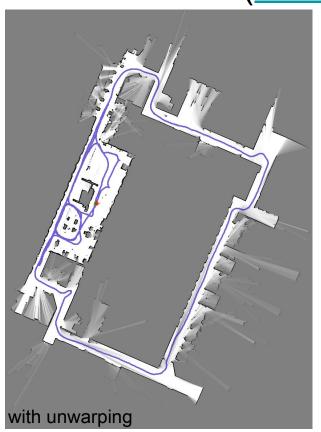
# Demo • Fix Odometry



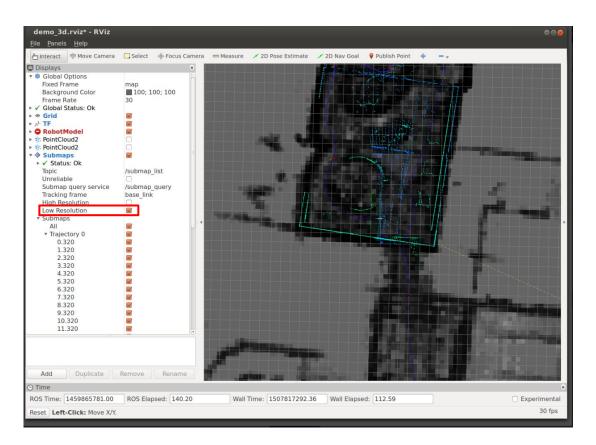


# Demo • Unwarping in Asset writer main (<u>Issue 521</u>)

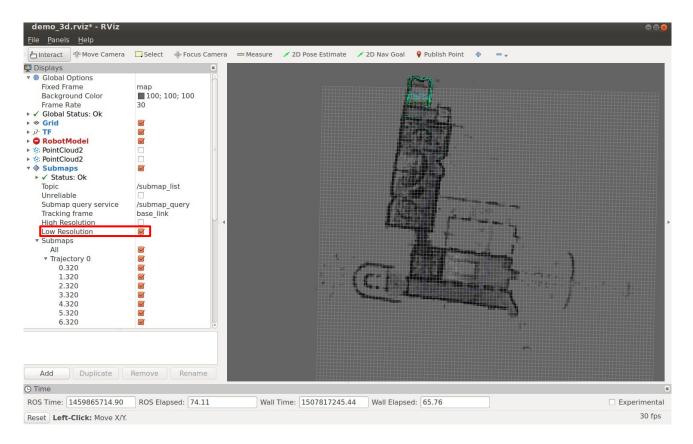




### Demo • Lo Hi Res Grid



#### Demo • Lo Hi Res Grid



#### Current work

- Verify Odometry fix.
- Life-long mapping, e.g. <u>#577</u>.
- Reuse more 3D components in 2D mapping pipeline
- Initial pose implementation.
- Bug fixes, refactorings, performance.

Placeholder for other status reports

# Thanks!

Next Open House:
November 9, 5pm CEST (8am PST)

If you would like to present anything next meeting, please reach out to <u>cschuet@google.com</u>

# Thanks!

Next Open House:
October 26, 5pm CEST (8am PST)

If you would like to present anything next meeting, please reach out to <u>cschuet@google.com</u>