Calibration results
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Normalized Residuals

Reprojection error (cam0):   mean 0.8298567299386125, median 0.6150622161731409, std: 1.0835667966531821
Gyroscope error (imu0):   mean 0.5310376889095152, median 0.29898529538013713, std: 0.9539775467721677
Accelerometer error (imu0):   mean 0.5367724031071074, median 0.33295840994776865, std: 1.0335897927916178

Residuals

Reprojection error (cam0) [px]:   mean 0.8298567299386125, median 0.6150622161731409, std: 1.0835667966531821
Gyroscope error (imu0) [rad/s]:   mean 0.006581396807109358, median 0.0037054636789118204, std:
0.01182308697010425
Accelerometer error (imu0) [m/s^2]: mean 0.13448597694249573, median 0.0834212727477173, std:
0.25896140009574187

Transformation (cam0):

T_ci: (imu0 to cam0):
[[-0.03902588 -0.99860768 -0.03549204 0.00097227]
 [-0.11152037 0.03964995 -0.99297084 0.00771078]
 [0.99299556 -0.03479347 -0.11291248 -0.00293512]
 [0.   0.   0.   1.   ]]

T_ic: (cam0 to imu0):
[[-0.03902588 -0.11152037 0.99299556 0.00381241]
 [-0.99860768 0.03964995 -0.03479347 0.00056306]
 [-0.03549204 -0.99297084 -0.11291248 0.00735967]
 [0.   0.   0.   1.   ]]

timeshift cam0 to imu0: [s] (t_imu = t_cam + shift)
-0.22762490866324842

Gravity vector in target coords: [m/s^2]
[-0.28908466 9.77257221 -0.76268299]

Calibration configuration
=========================

cam0

Camera model: pinhole
Focal length: [843.858052071779, 845.4261458999864]
Principal point: [642.0304338748831, 344.2220673496408]
Distortion model: radtan
Distortion coefficients: [-0.3649776105434452, 0.1067357069563635, 0.002984420877562965, -0.002477954123125047]
Type: aprilgrid
Tags:
Rows: 3
Cols: 3
Size: 0.04848 [m]
Spacing 0.009982032 [m]

IMU configuration
=================

IMU0:

Model: calibrated
Update rate: 400.0
Accelerometer:
Noise density: 0.012527281224223114
Noise density (discrete): 0.25054562448446227
Random walk: 0.00025426635923104466
Gyroscope:
Noise density: 0.0006196732307855818
Noise density (discrete): 0.012393464615711634
Random walk: 2.3521917733701375e-05

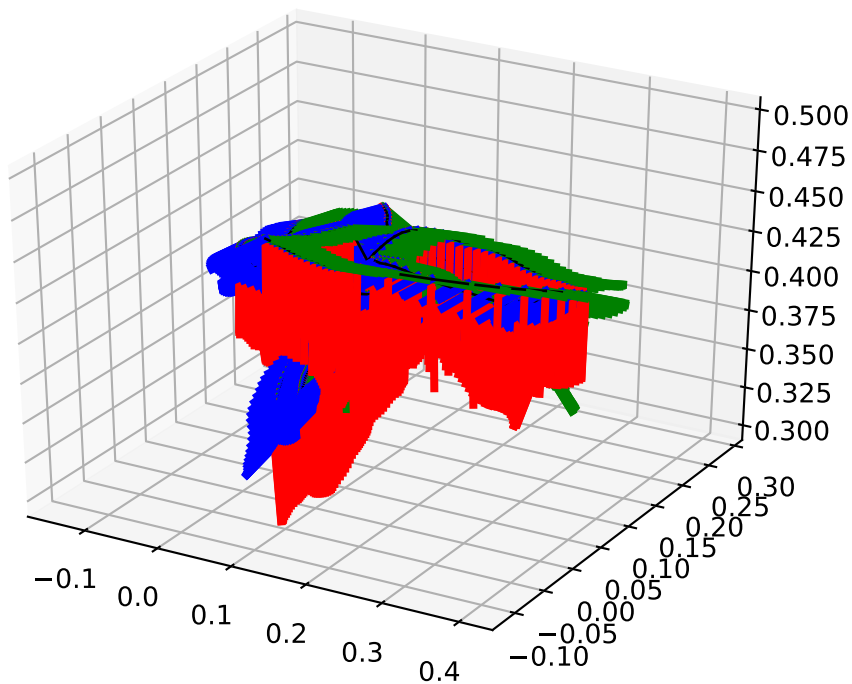```
T_ib (imu0 to imu0)
[[1. 0. 0. 0.]
[0. 1. 0. 0.]
[0. 0. 1. 0.]
[0. 0. 0. 1.]]
time offset with respect to IMU0: 0.0 [s]
```
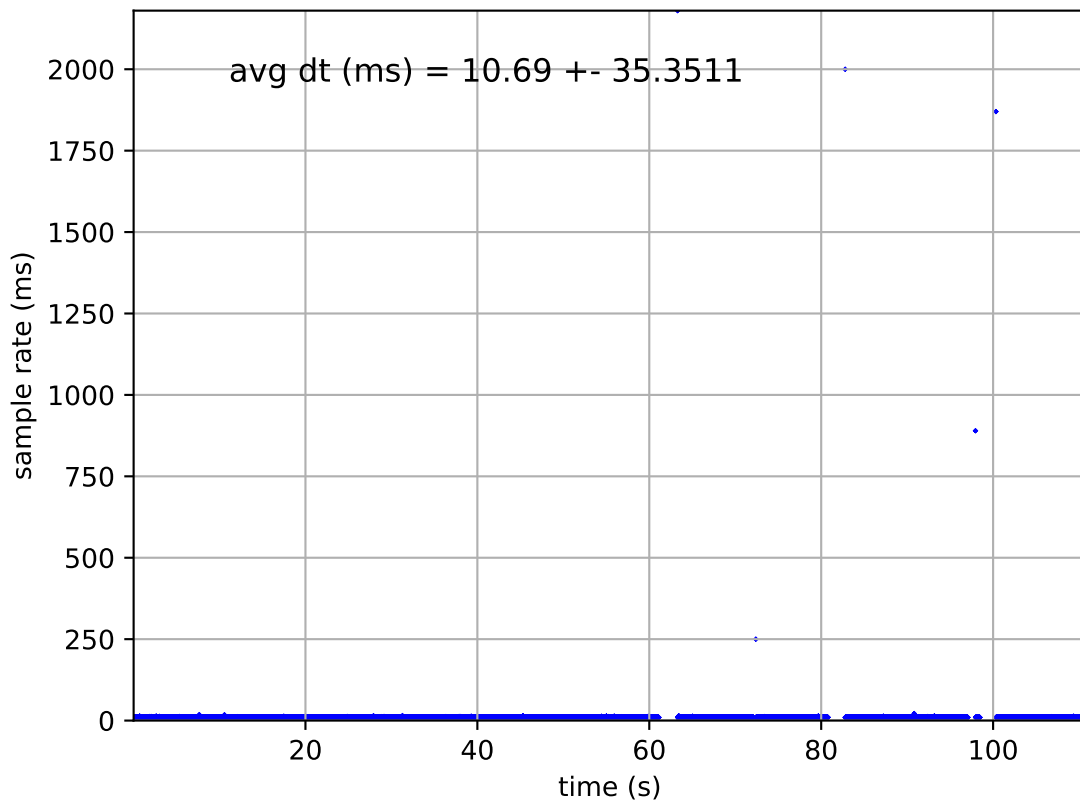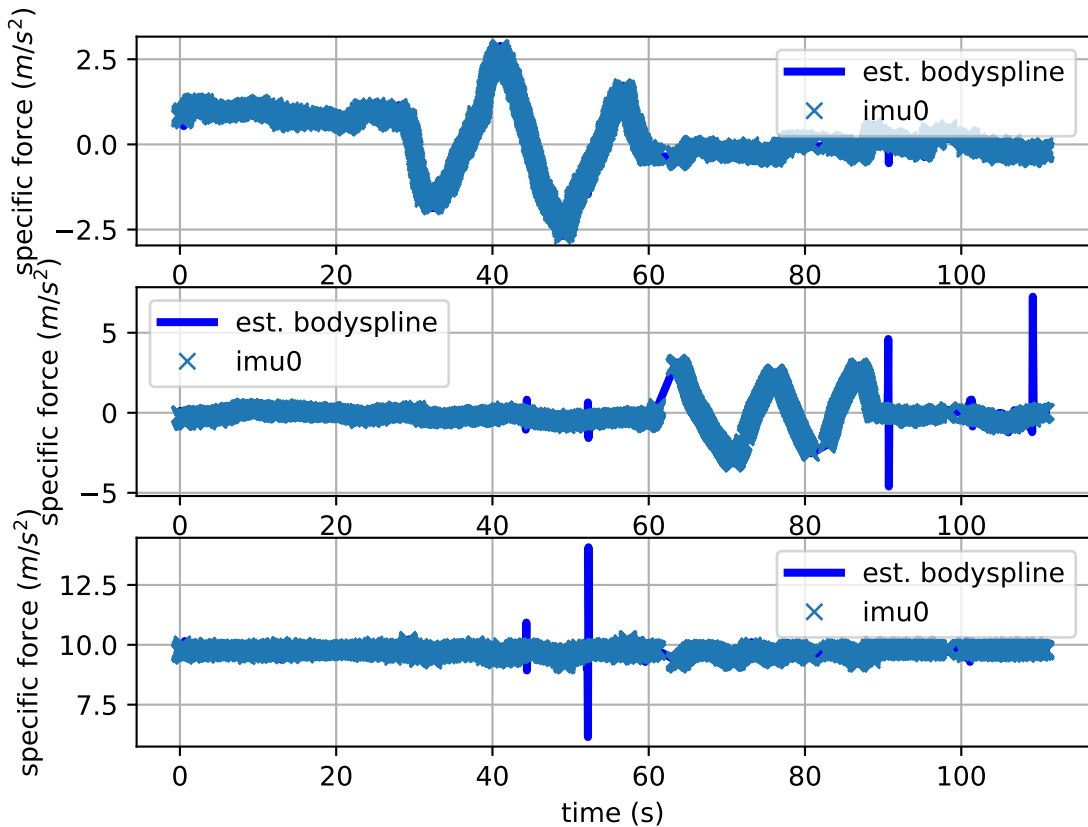
imu0: estimated poses

imu0: sample inertial rate

avg dt (ms) = 10.69 +- 35.3511
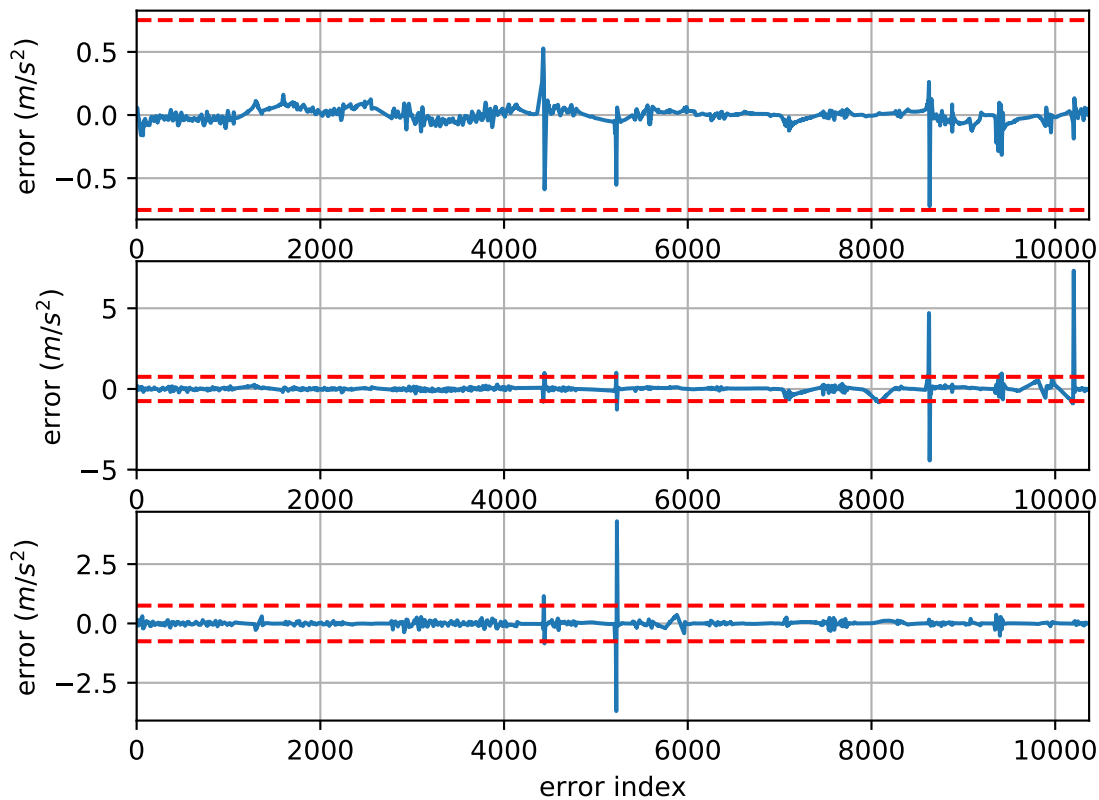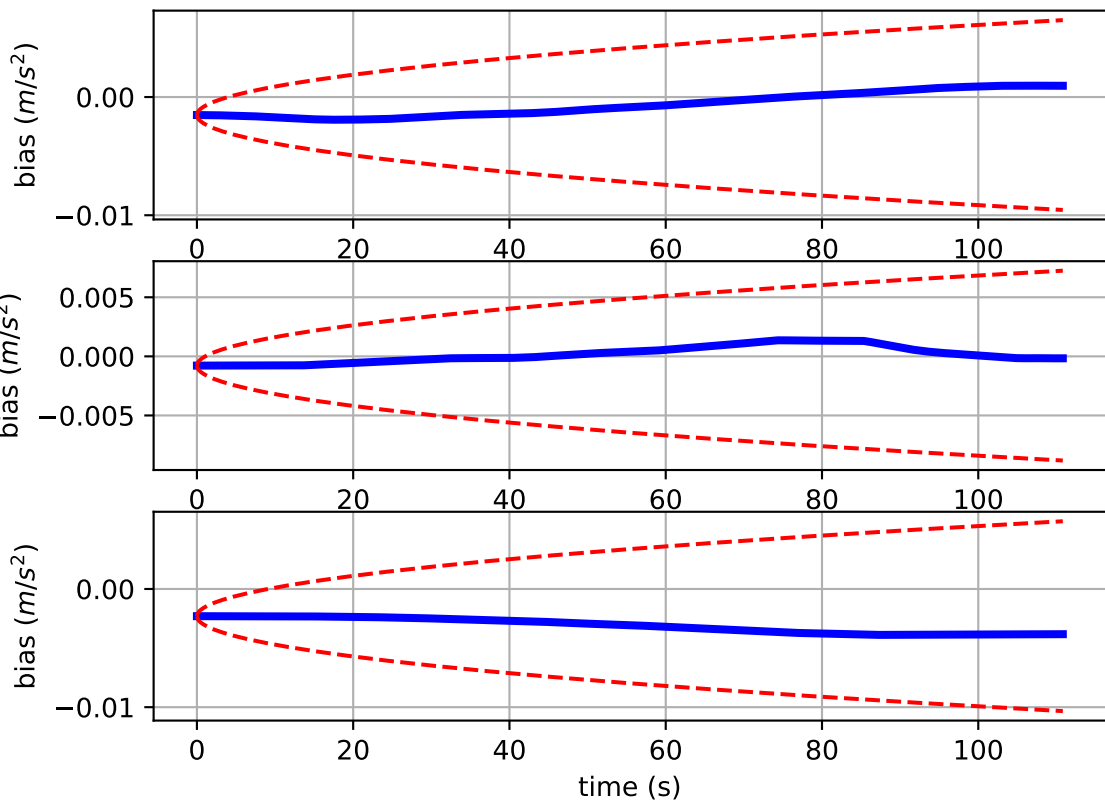
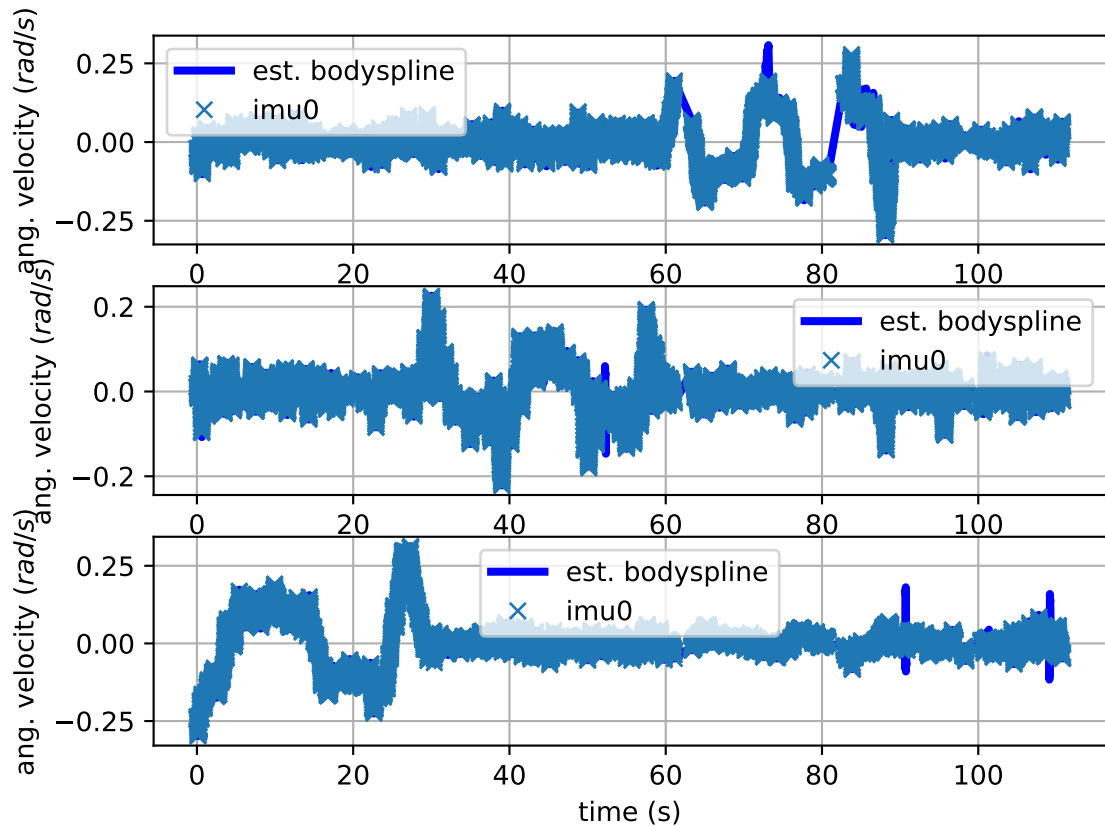Comparison of predicted and measured specific force (imu0 frame)
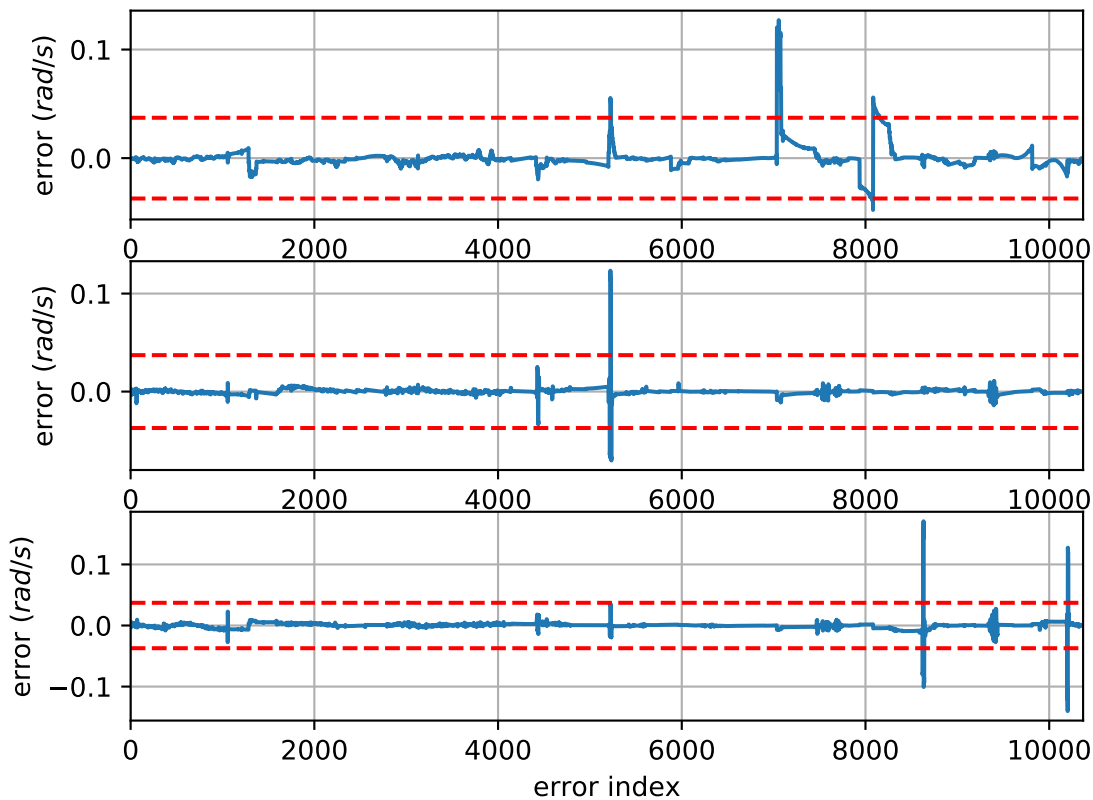
imu0: acceleration error

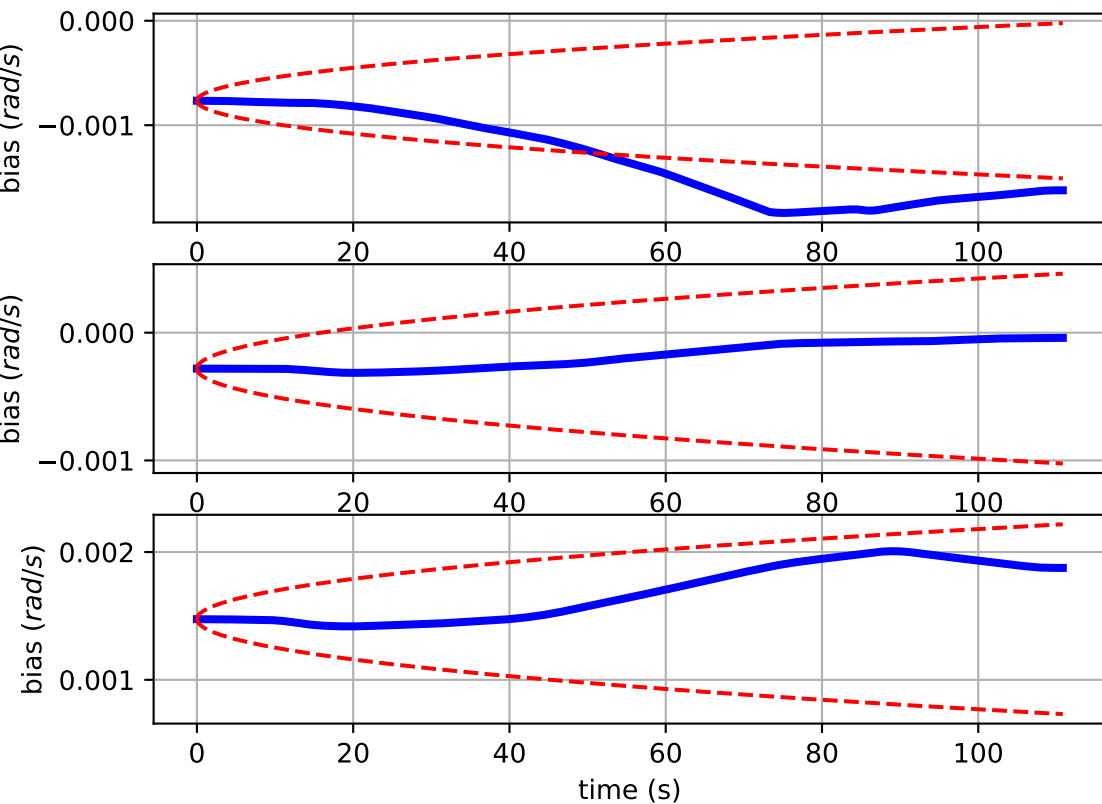imu0: estimated accelerometer bias (imu frame)

Comparison of predicted and measured angular velocities (body frame)

imu0: angular velocities error

imu0: estimated gyro bias (imu frame)

cam0: reprojection errors