

Calibration results

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Normalized Residuals

Reprojection error (cam0): mean 0.0463350204698, median 0.0430323448378, std: 0.0249567539963
Gyroscope error (imu0): mean 0.0807179293564, median 0.051789694806, std: 0.0774289986692
Accelerometer error (imu0): mean 1.26970328231, median 0.263805617431, std: 1.97696242432

Residuals

Reprojection error (cam0) [px]: mean 0.0463350204698, median 0.0430323448378, std: 0.0249567539963
Gyroscope error (imu0) [rad/s]: mean 0.00570761952112, median 0.00366208443929, std: 0.0054750570
Accelerometer error (imu0) [m/s²]: mean 0.179563160204, median 0.0373077482002, std: 0.2795847072

Transformation (cam0):

T_ci: (imu0 to cam0):

```
[[ 0.99996931 0.00004952 0.00783455 -0.04395231]
 [ 0.00002168 0.99995871 -0.0090873 -0.00512318]
 [-0.00783467 0.00908719 0.99992802 -0.01059162]
 [ 0.         0.         0.         1.        ]]
```

T_ic: (cam0 to imu0):

```
[[ 0.99996931 0.00002168 -0.00783467 0.0438681 ]
 [ 0.00004952 0.99995871 0.00908719 0.00522139]
 [ 0.00783455 -0.0090873 0.99992802 0.01088864]
 [ 0.         0.         0.         1.        ]]
```

timeshift cam0 to imu0: [s] (t_imu = t_cam + shift)
0.0011268574446884486

Gravity vector in target coords: [m/s²]

```
[ 9.80394013 -0.2200997 0.05231542]
```

Calibration configuration

Camera model: pinhole
Focal length: [468.2527687453535, 468.3265694180005]
Principal point: [364.91196913276707, 215.81303741968622]
Distortion model: equidistant
Distortion coefficients: [0.011135829319036753, -0.05338166866546771, 0.15329931633590166, -0.1346
Type: checkerboard
Rows
 Count: 7
 Distance: 0.07 [m]
Cols
 Count: 6
 Distance: 0.07 [m]

IMU configuration

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IMU0:

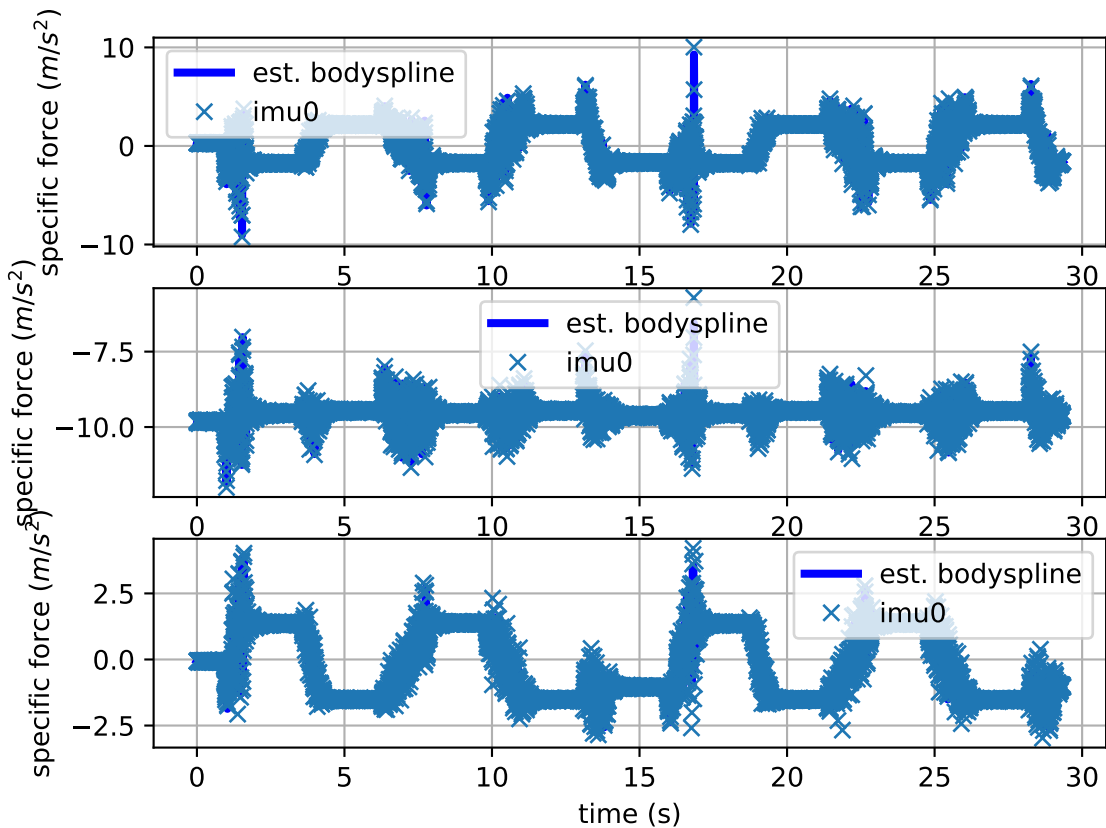
Model: calibrated
Update rate: 200.0
Accelerometer:
 Noise density: 0.01
 Noise density (discrete): 0.141421356237
 Random walk: 0.0002
Gyroscope:
 Noise density: 0.005
 Noise density (discrete): 0.0707106781187
 Random walk: 4e-06

T_i_b

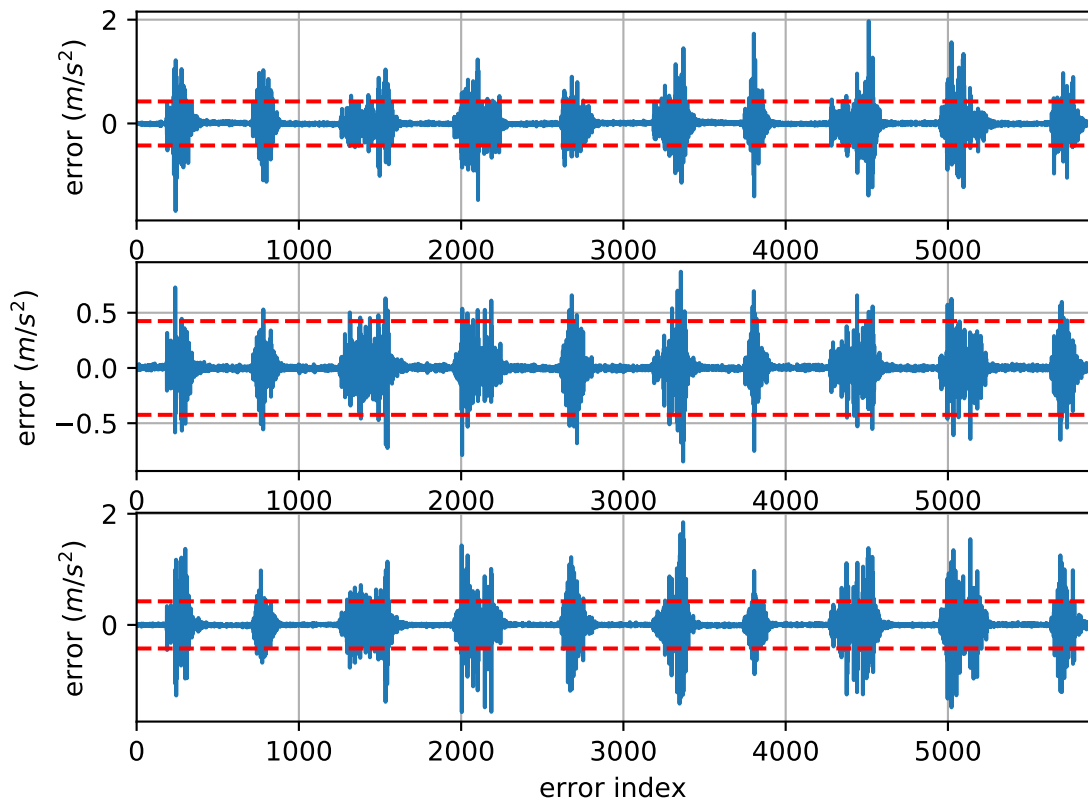
[[1. 0. 0. 0.]
[0. 1. 0. 0.]
[0. 0. 1. 0.]
[0. 0. 0. 1.]]

time offset with respect to IMU0: 0.0 [s]

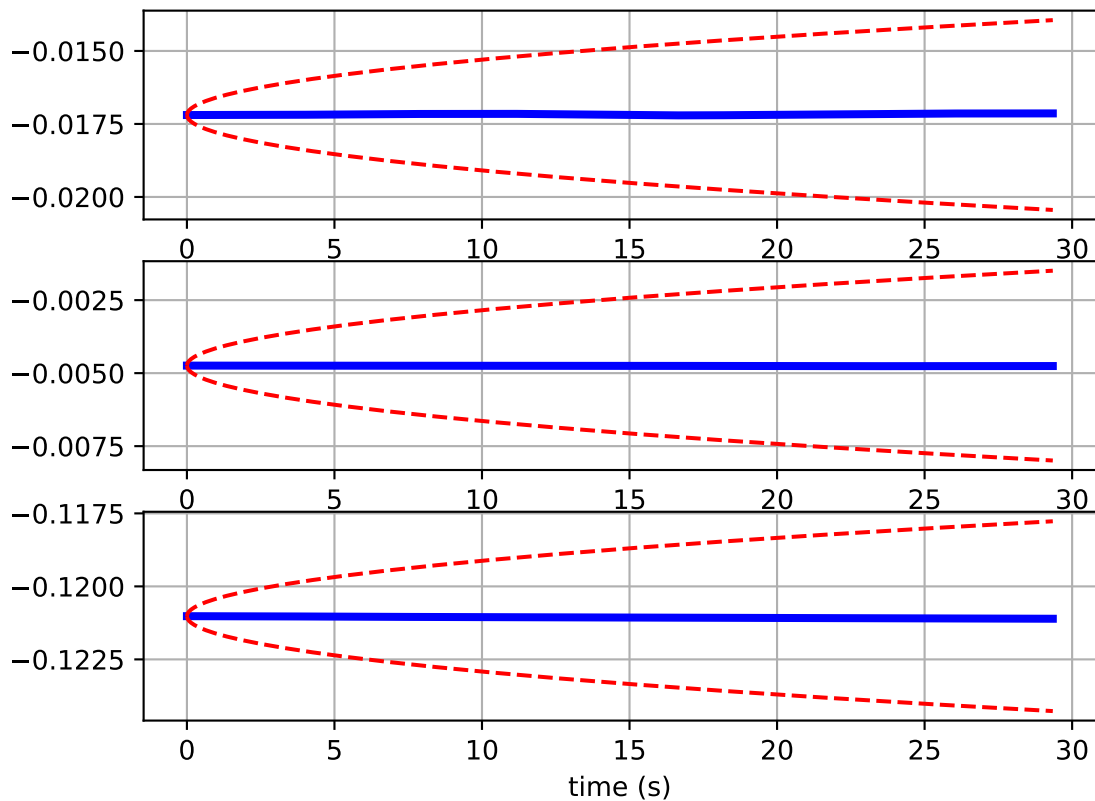
Comparison of predicted and measured specific force (imu0 frame)



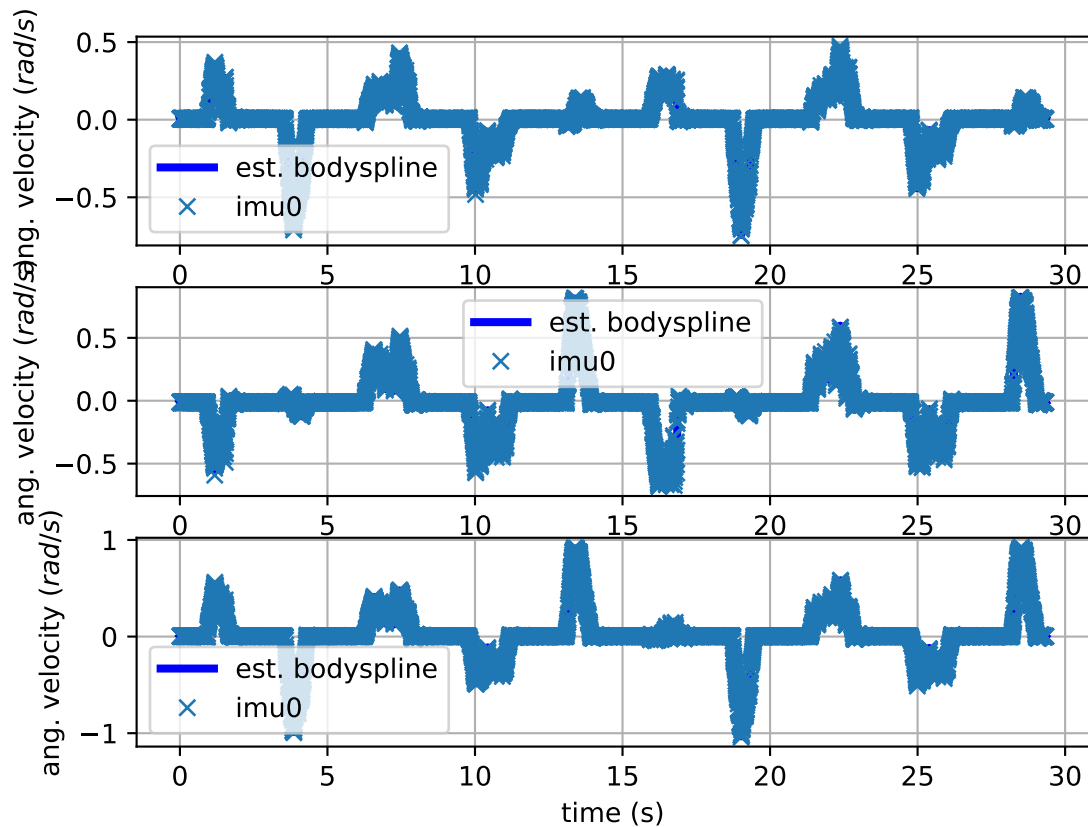
imu0: acceleration error



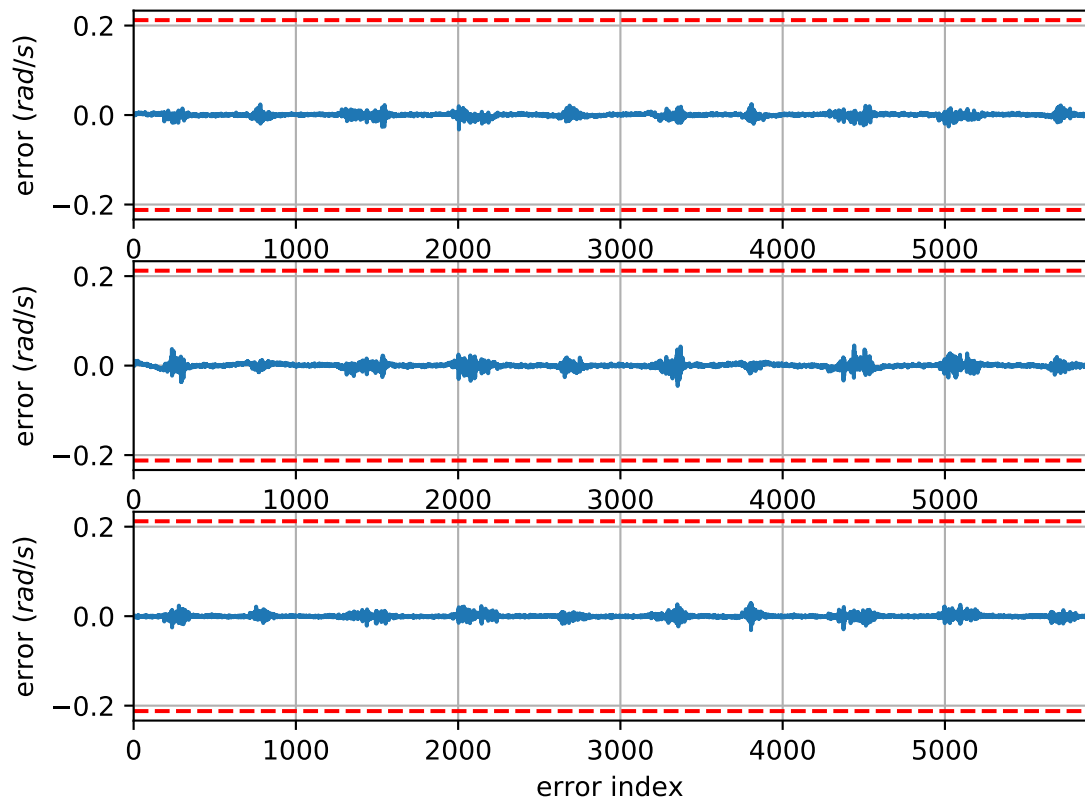
imu0: estimated accelerometer bias (imu frame)



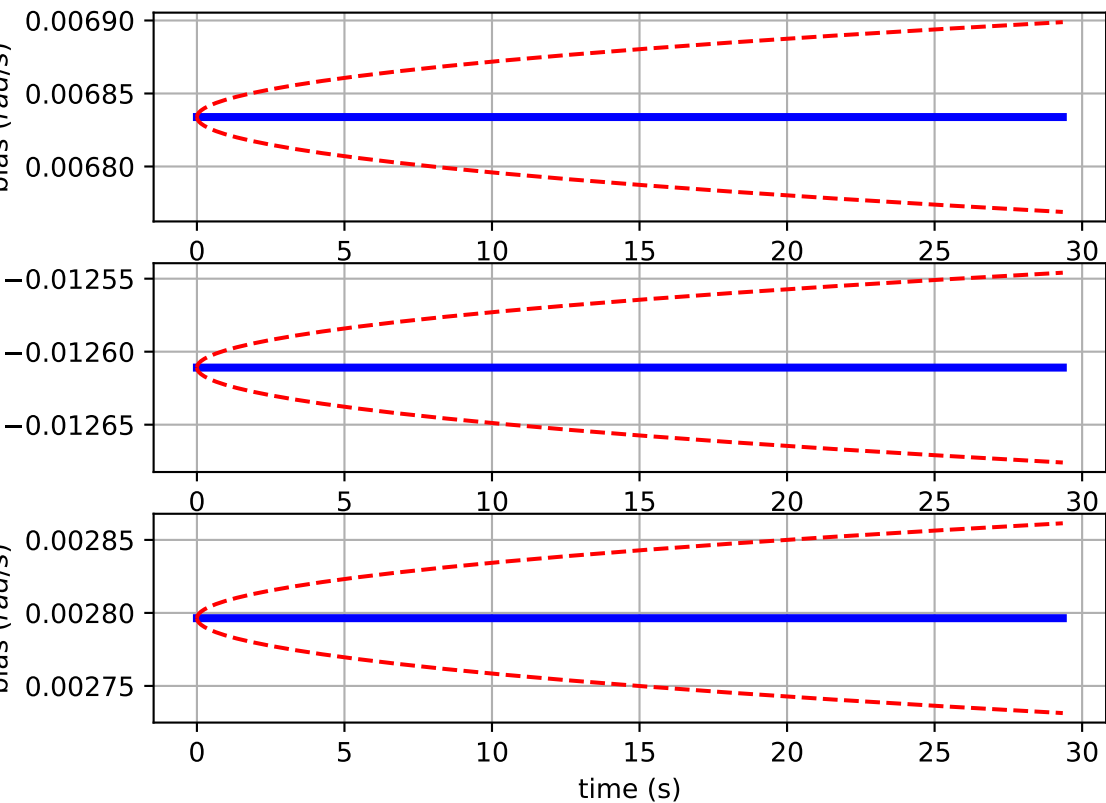
Comparison of predicted and measured angular velocities (body frame)



imu0: angular velocities error



imu0: estimated gyro bias (imu frame)



cam0: reprojection errors

