Calibration results
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Normalized Residuals

Reprojection error (cam0):   mean 0.19416578261066533, median 0.17580147211641875, std: 0.1080555
Gyroscope error (imu0):   mean 0.16236211631973924, median 0.08516105509444045, std: 0.21121683
Accelerometer error (imu0):   mean 1.022669054166046, median 0.7512944815997966, std: 0.9484571295

Residuals

Reprojection error (cam0) [px]:   mean 0.19416578261066533, median 0.17580147211641875, std: 0.1080
Gyroscope error (imu0) [rad/s]:   mean 0.02511984893649808, median 0.01317568954960127, std: 0.0326
Accelerometer error (imu0) [m/s^2]: mean 0.02675604025508642, median 0.01965608063646818, std: 0.0

Transformation (cam0):

T_ci: (imu0 to cam0):
[[-0.99989999 0.0049229   0.01325807 -0.01181555]
 [-0.00401686 -0.99770991 0.06751883 0.08955657]
 [0.0135601   0.06745883 0.99762991 -0.00878114]
 [0.   0.   0.   1.   ]]

T_ic: (cam0 to imu0):
[[-0.99989999 -0.00401686 0.0135601 -0.01133556]
 [0.0049229 -0.99770991 0.06745883 0.09000201]
 [0.01325807 0.06751883 0.99762991 0.00287022]
 [0.   0.   0.   1.   ]]

timeshift cam0 to imu0: [s] (t_imu = t_cam + shift)
-0.005996859121934054

Gravity vector in target coords: [m/s^2]
[-0.10334978 -9.80600538 0.00046456]

Calibration configuration

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 Camera model: pinhole
 Focal length: [381.50091715225676, 380.6841806683357]
 Principal point: [321.71880735049814, 239.39601119612195]
 Distortion model: radtan
 Distortion coefficients: [-0.002546507979782821, -0.0019901595883390177, 0.0013933664140284017, -0
 Type: aprilgrid
 Tags:
  Rows: 6
  Cols: 6
  Size: 0.021 [m]
  Spacing 0.005999994000000001 [m]



IMU configuration
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IMU0:
 -----------------------------
 Model: calibrated
 Update rate: 200.0
 Accelerometer:
  Noise density: 0.00185
  Noise density (discrete): 0.02616295090390226
  Random walk: 2.548e-05
 Gyroscope:
  Noise density: 0.01094
  Noise density (discrete): 0.1547149637236166
  Random walk: 0.0005897
 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]
```
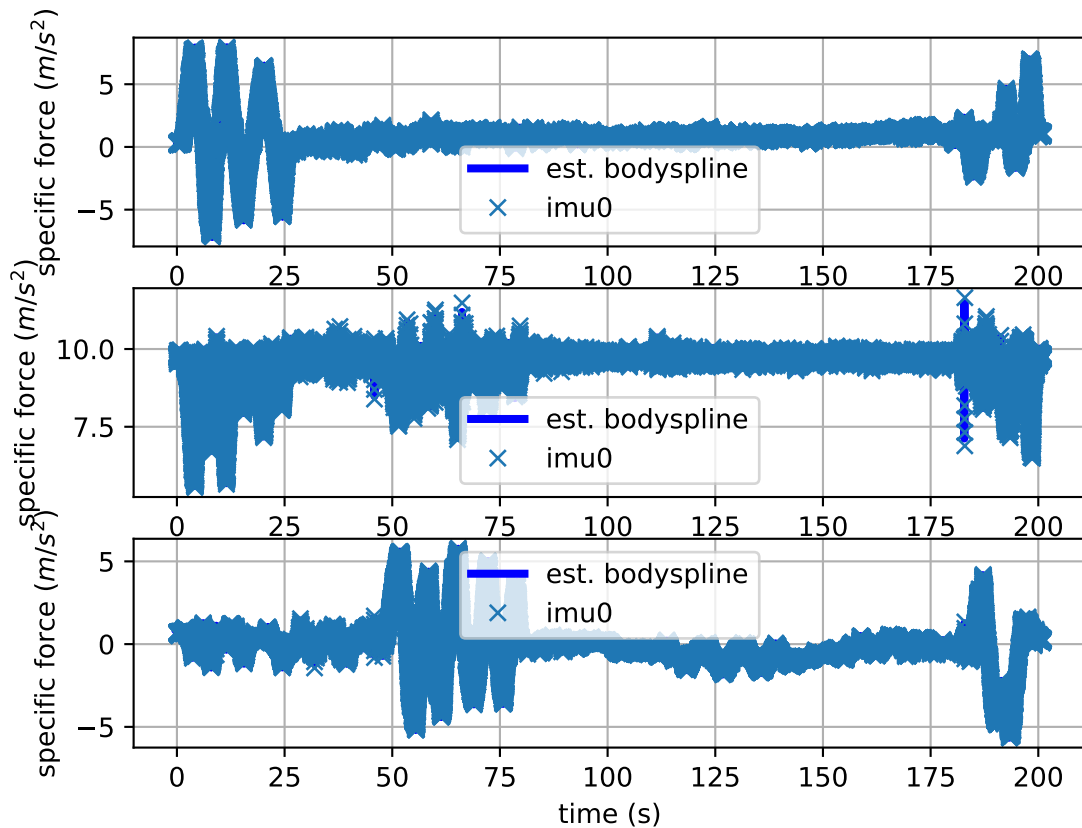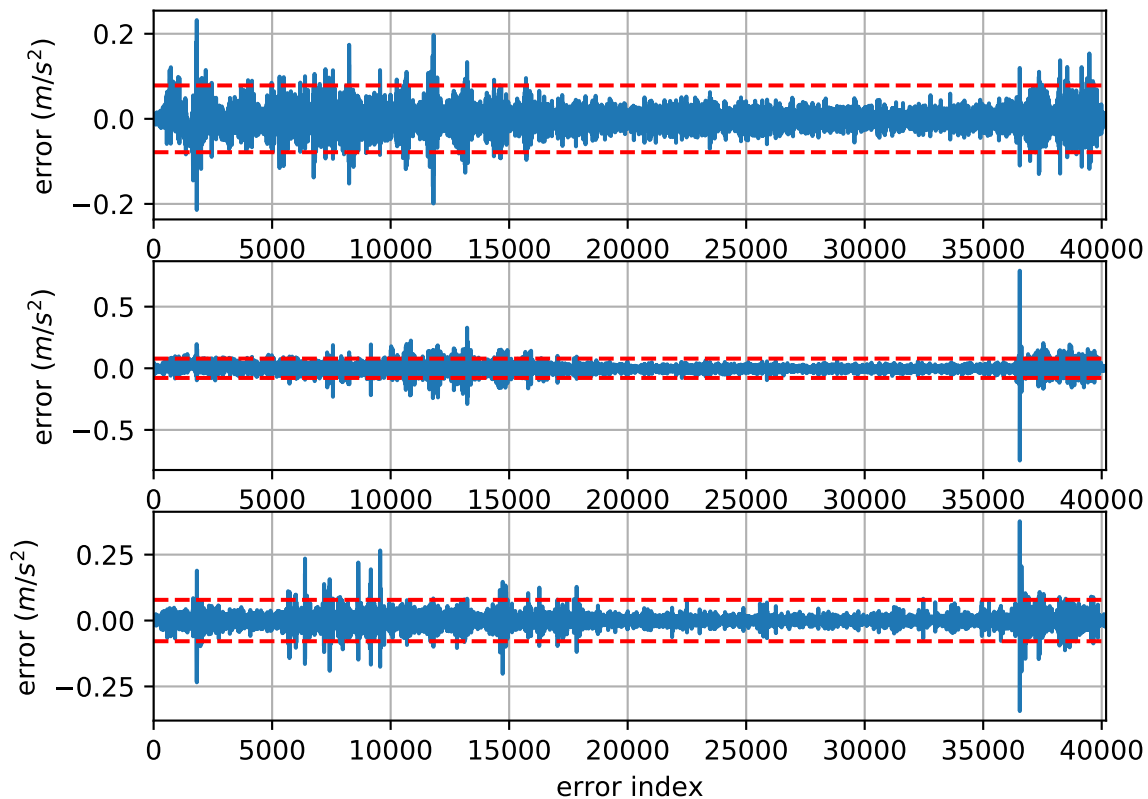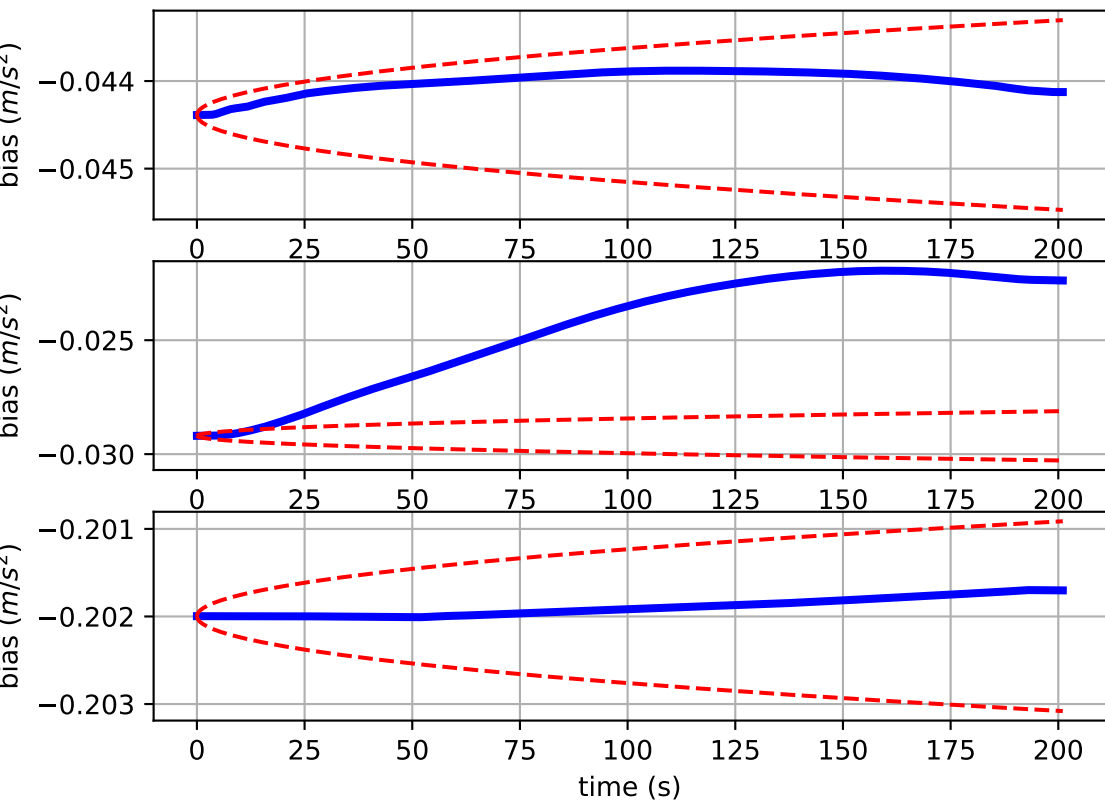
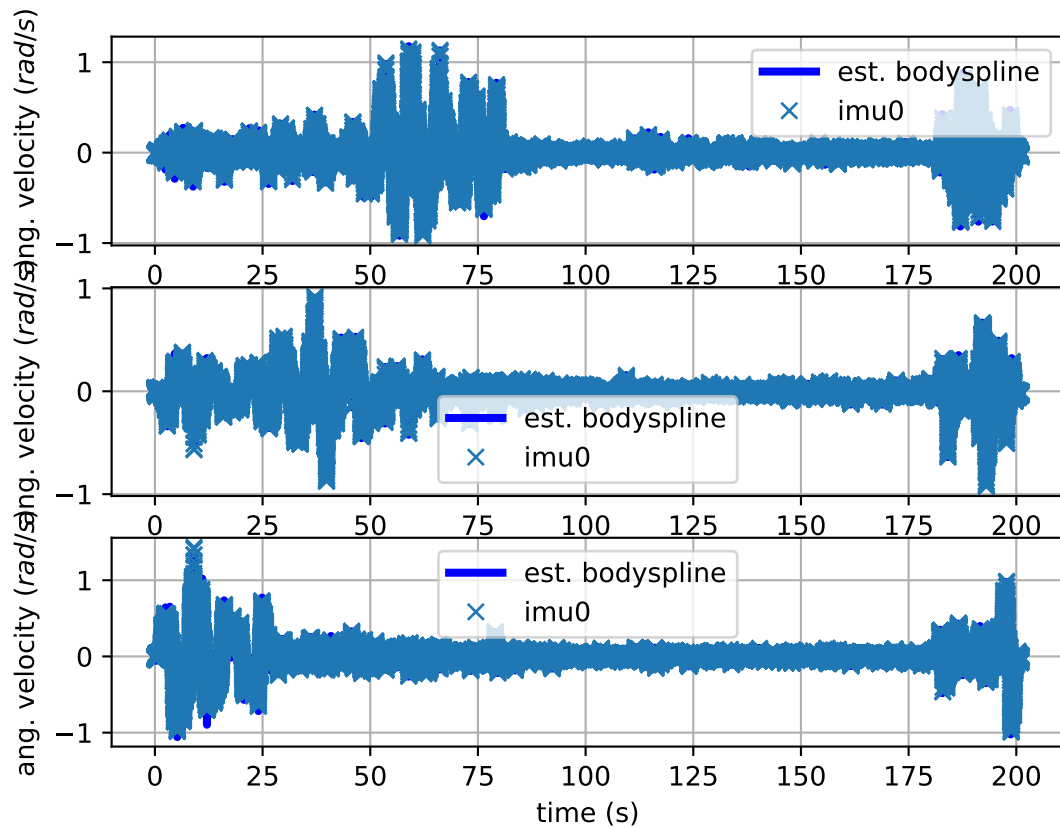Comparison of predicted and measured specific force (imu0 frame)
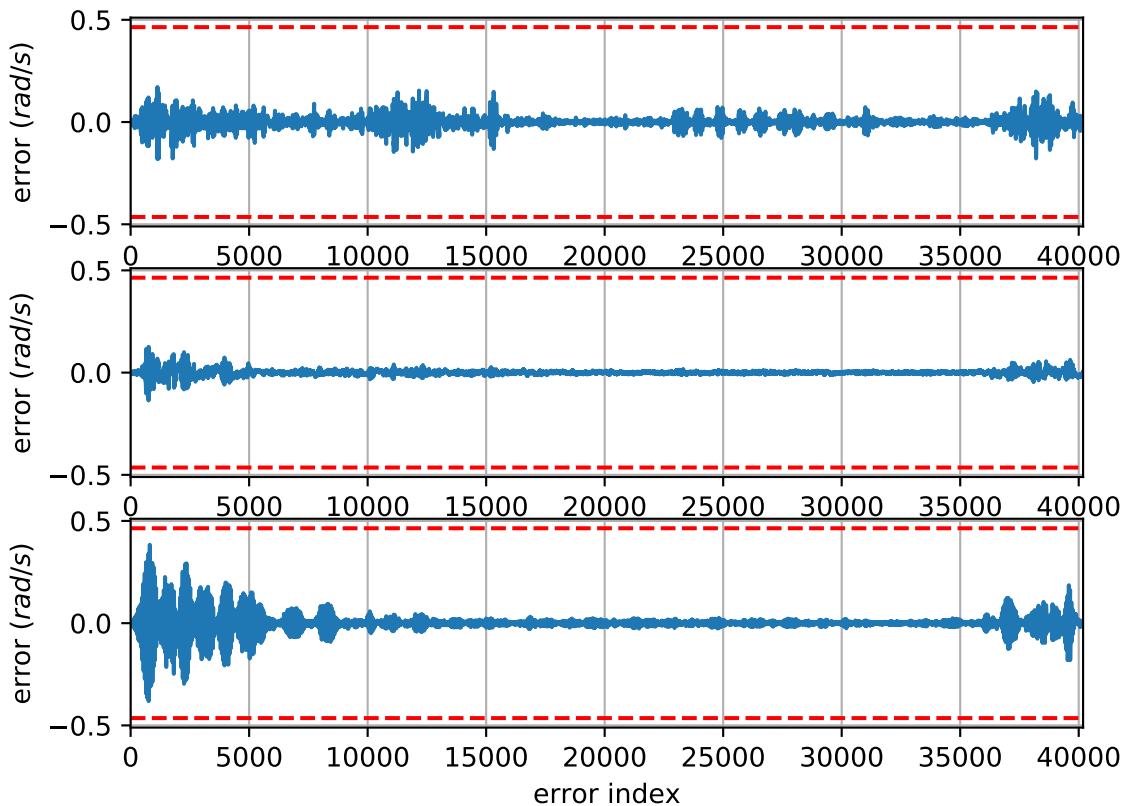
imu0: acceleration error

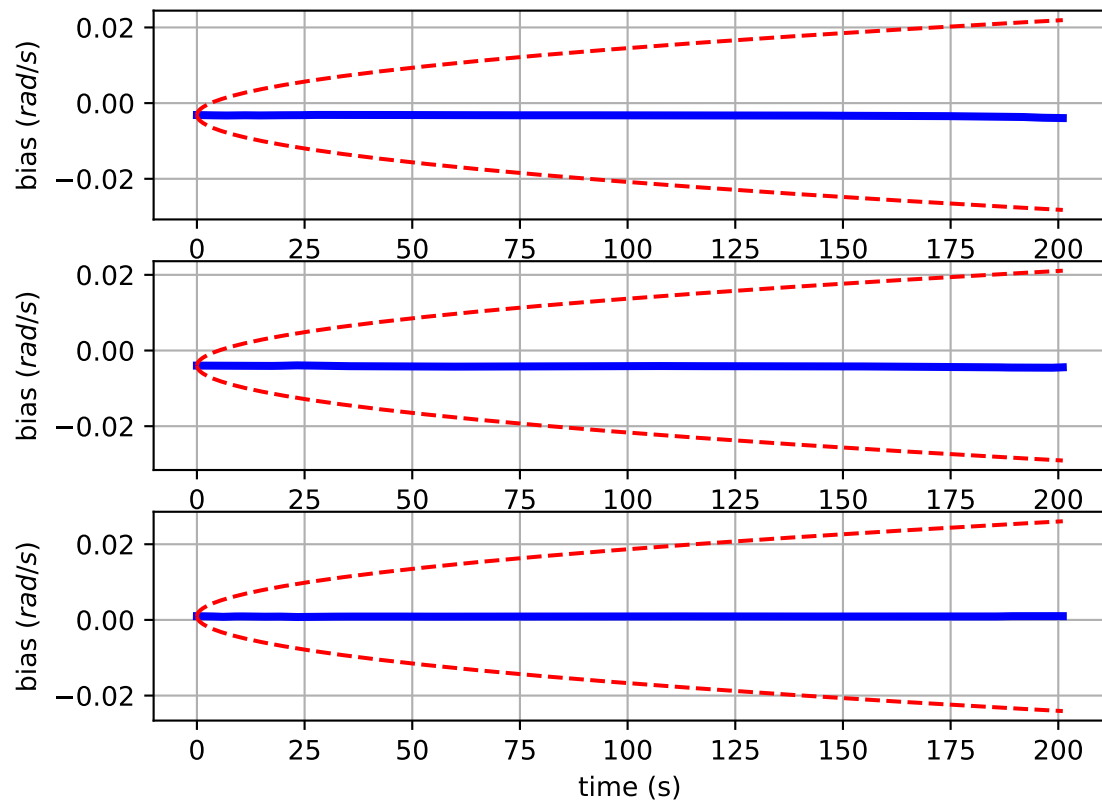imu0: estimated accelerometer bias (imu frame)

Comparison of predicted and measured angular velocities (body frame)

imu0: angular velocities error

imu0: estimated gyro bias (imu frame)

cam0: reprojection errors