Calibration results
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Normalized Residuals

Reprojection error (cam0):   mean 0.0872106422068, median 0.082695570228, std: 0.0449839606476
Gyroscope error (imu0):   mean 0.0349756072817, median 0.0330373594507, std: 0.0178234225719
Accelerometer error (imu0):   mean 0.0654597825774, median 0.0474055435296, std: 0.0481090457902

Residuals

Reprojection error (cam0) [px]:   mean 0.0872106422068, median 0.082695570228, std: 0.0449839606476
Gyroscope error (imu0) [rad/s]:   mean 0.000118707211114, median 0.000112128797976, std: 6.04926962
Accelerometer error (imu0) [m/s^2]: mean 0.0026183913031, median 0.00189622174119, std: 0.00192436

Transformation (cam0):

T_ci: (imu0 to cam0):
[[-0.0011233   0.99999815 -0.00156341 -0.06095848]
 [-0.00041888 0.00156294 0.99999869 -0.10146748]
 [0.99999928 0.00112396 0.00041712 -0.00214409]
 [0.   0.   0.   1.   ]]

T_ic: (cam0 to imu0):
[[-0.0011233 -0.00041888 0.99999928 0.00203311]
 [0.99999815 0.00156294 0.00112396 0.06111936]
 [-0.00156341 0.99999869 0.00041712 0.10137294]
 [0.   0.   0.   1.   ]]

timeshift cam0 to imu0: [s] (t_imu = t_cam + shift)
0.005383555149350277

Gravity vector in target coords: [m/s^2]
[0.00728848 9.80653999 0.01196562]

Calibration configuration

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  Camera model: pinhole
  Focal length: [521.9332, 521.9332]
  Principal point: [320.5, 240.5]
  Distortion model: radtan
  Distortion coefficients: [0.0, 0.0, 0.0, 0.0]
  Type: checkerboard
  Rows
    Count: 6
    Distance: 0.06 [m]
  Cols
    Count: 7
    Distance: 0.06 [m]



IMU configuration
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IMU0:
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  Model: calibrated
  Update rate: 100.0
  Accelerometer:
    Noise density: 0.004
    Noise density (discrete): 0.04
    Random walk: 0.006
  Gyroscope:
    Noise density: 0.0003394
    Noise density (discrete): 0.003394
    Random walk: 3.8785e-05
  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]
```
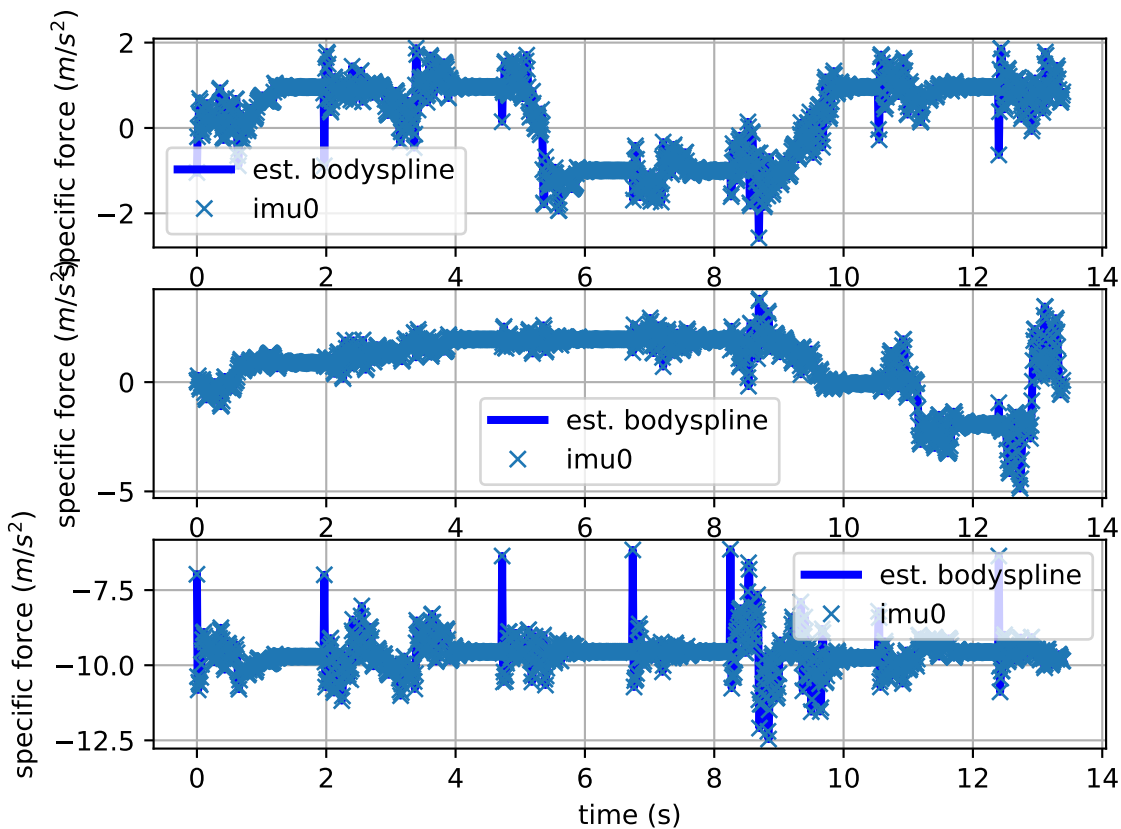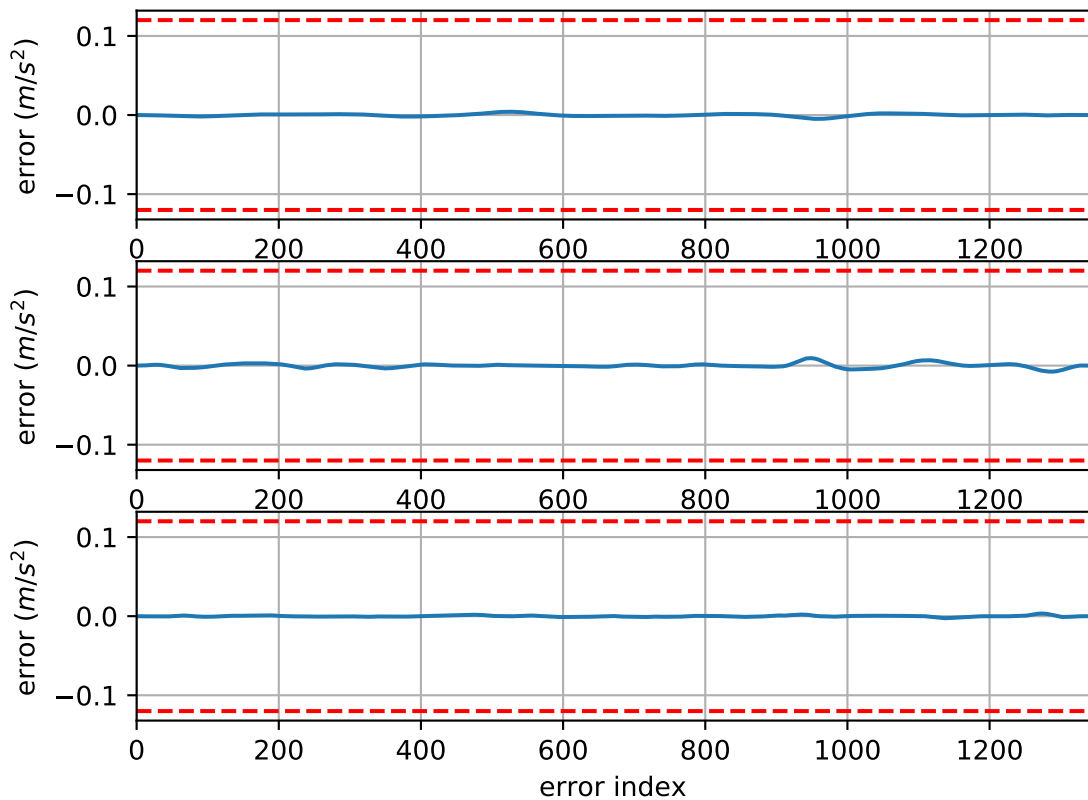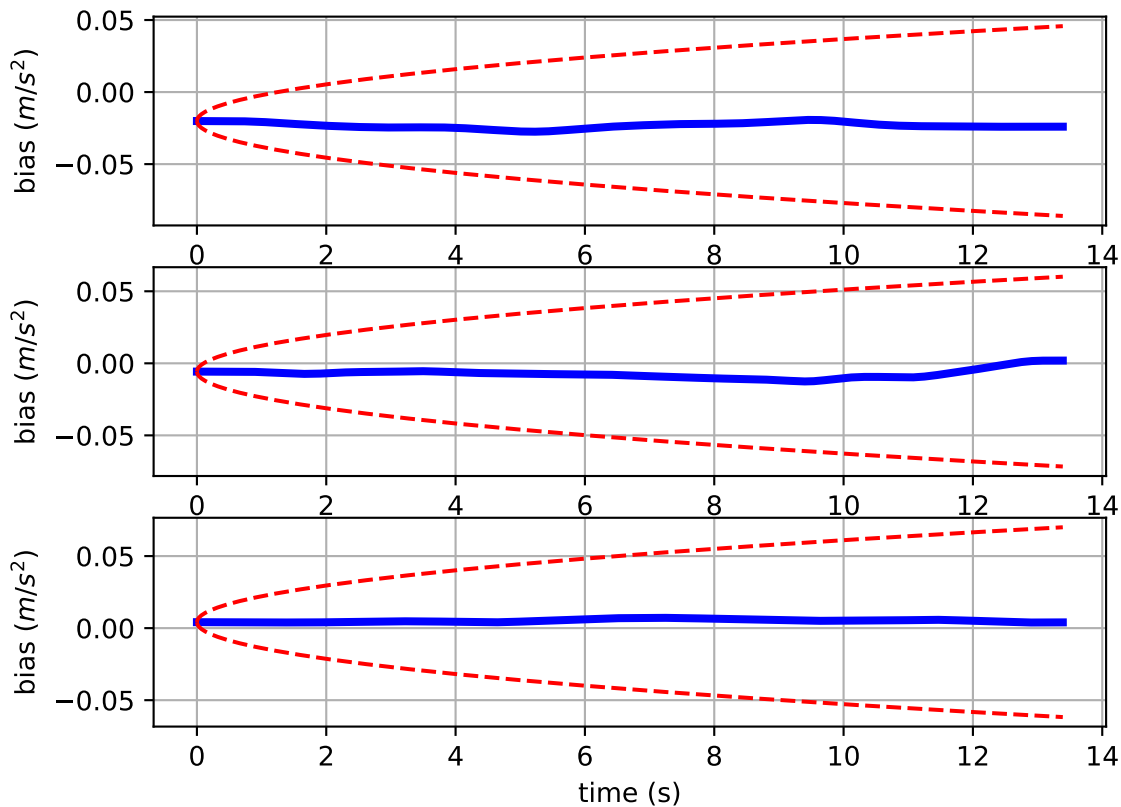
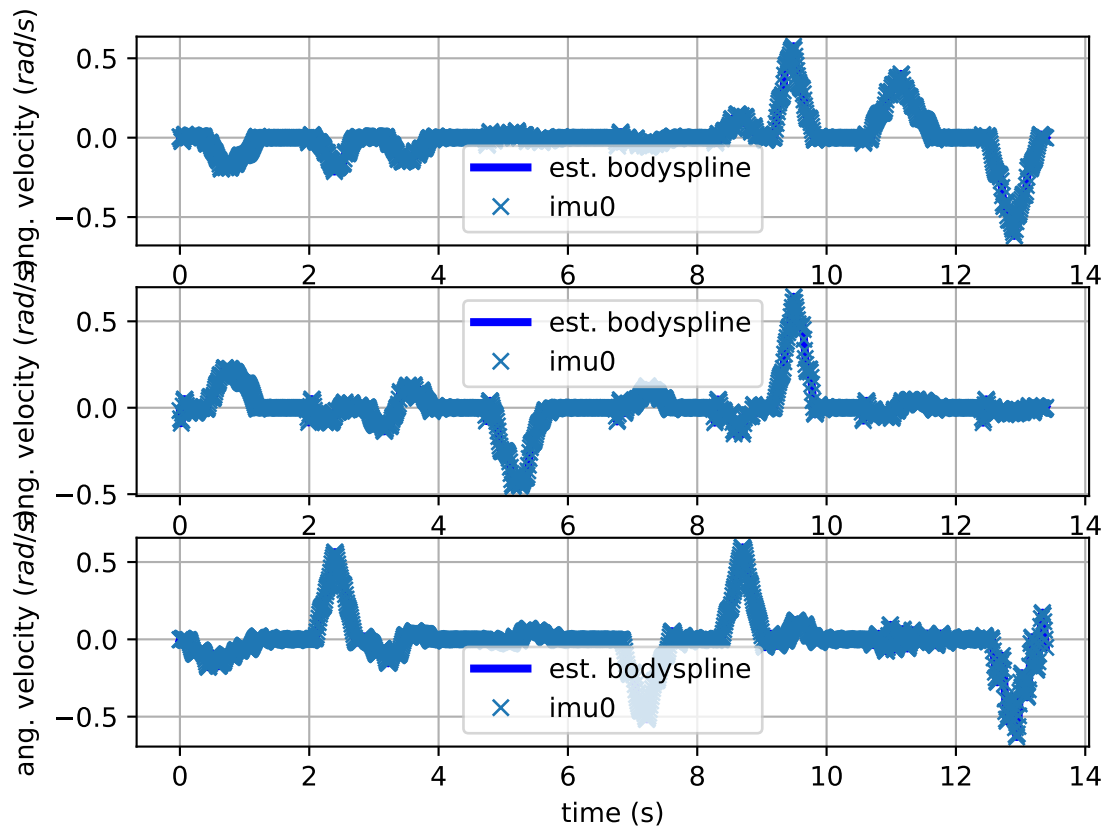Comparison of predicted and measured specific force (imu0 frame)
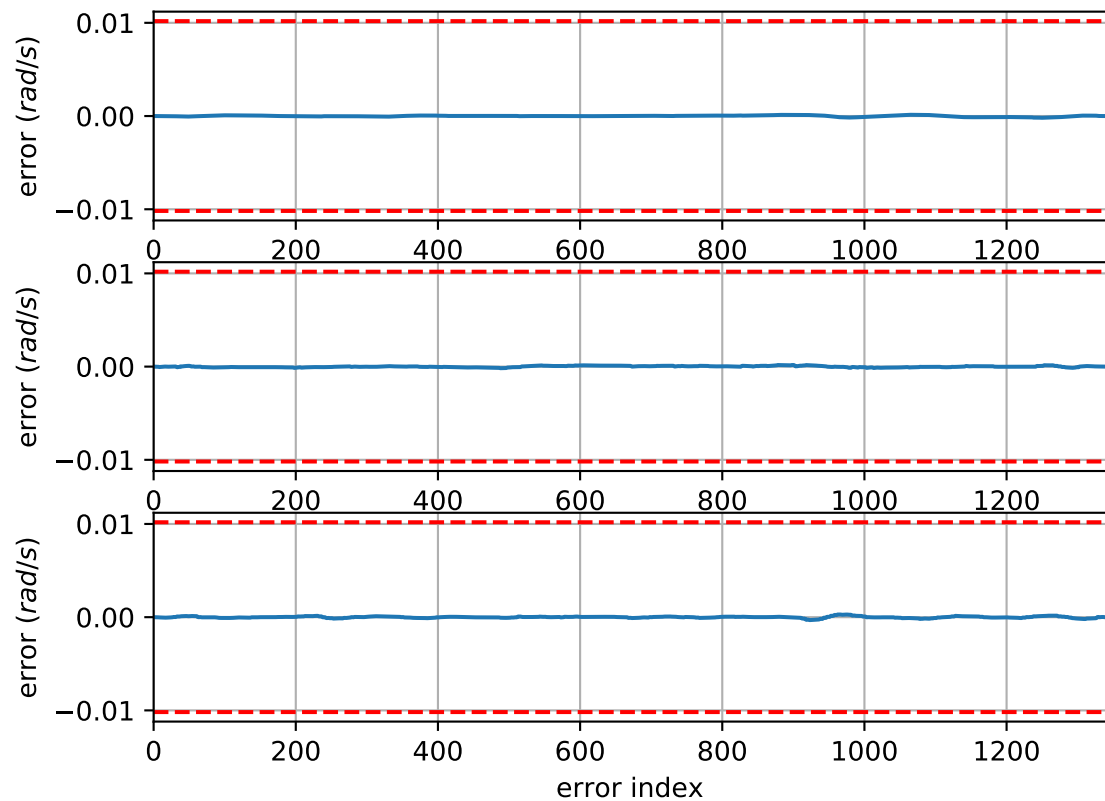
imu0: acceleration error

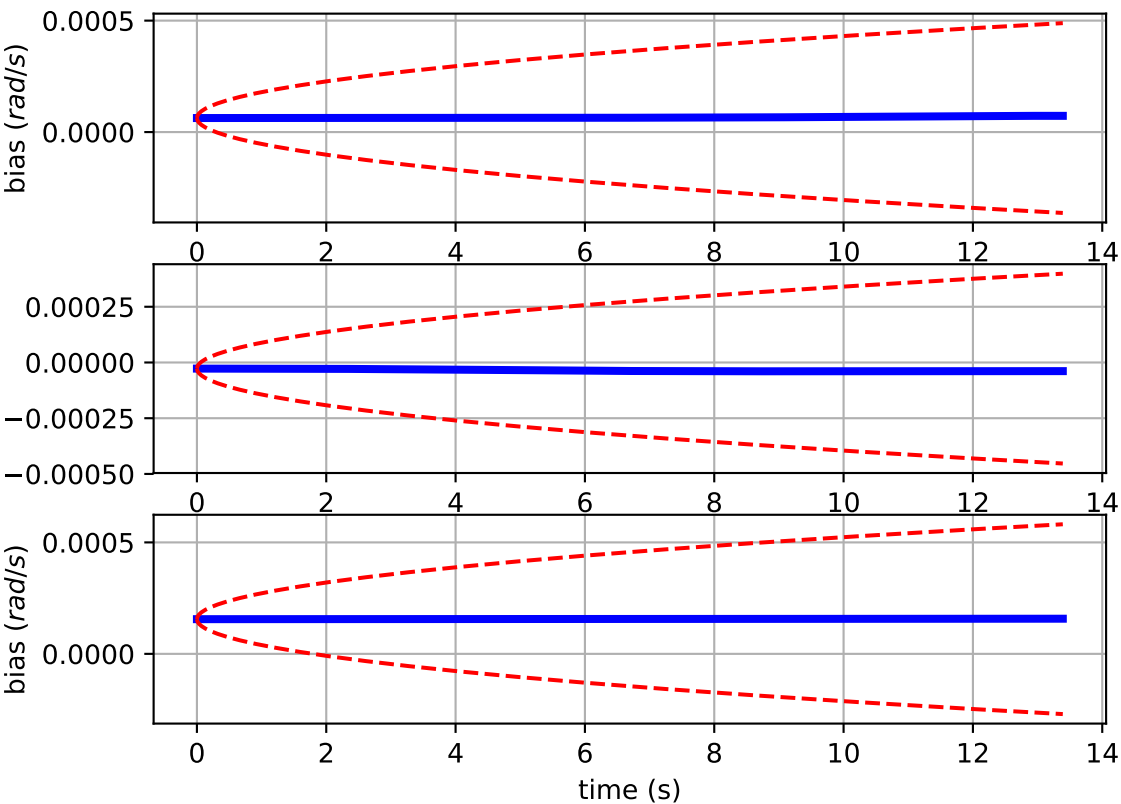imu0: estimated accelerometer bias (imu frame)

Comparison of predicted and measured angular velocities (body frame)

imu0: angular velocities error

imu0: estimated gyro bias (imu frame)

cam0: reprojection errors