Calibration results
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Normalized Residuals
----------------------------
Reprojection error (cam0):     mean 0.0440862279877, median 0.0408525444629, std: 0.0241786653142
Gyroscope error (imu0):       mean 0.0559815889505, median 0.0486739266532, std: 0.031895695498
Accelerometer error (imu0):    mean 0.676814054136, median 0.287861310432, std: 0.747749615485

Residuals
----------------------------
Reprojection error (cam0) [px]:     mean 0.0440862279877, median 0.0408525444629, std: 0.024178665314
Gyroscope error (imu0) [rad/s]:      mean 0.00395849611685, median 0.00344176636034, std: 0.0022553662
Accelerometer error (imu0) [m/s^2]: mean 0.0957159614564, median 0.0407097369295, std: 0.105747764

Transformation (cam0):
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T_ci:  (imu0 to cam0):
[[ 0.99997478  0.0009498   0.00703762 -0.03938437]
 [-0.00089596  0.99997034 -0.00765005 -0.01532078]
 [-0.00704467  0.00764355  0.99994597 -0.00219048]
 [ 0.          0.          0.          1.        ]]

T_ic:  (cam0 to imu0):
[[ 0.99997478 -0.00089596 -0.00704467  0.03935422]
 [ 0.0009498   0.99997034  0.00764355  0.01537448]
 [ 0.00703762 -0.00765005  0.99994597  0.00235033]
 [ 0.          0.          0.          1.        ]]

timeshift cam0 to imu0: [s] (t_imu = t_cam + shift)
0.0012347069815510125


Gravity vector in target coords: [m/s^2]
[ 9.80435912 -0.20301532  0.04183223]


Calibration configuration

```
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  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
=================

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]
```
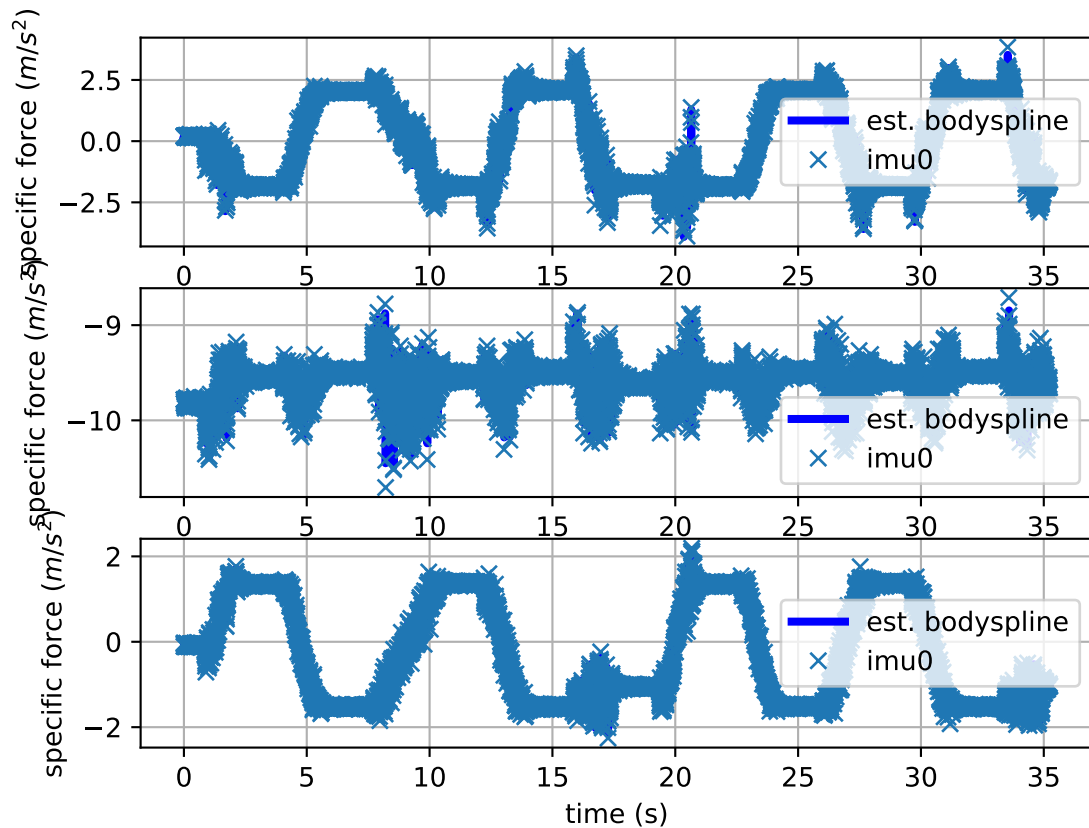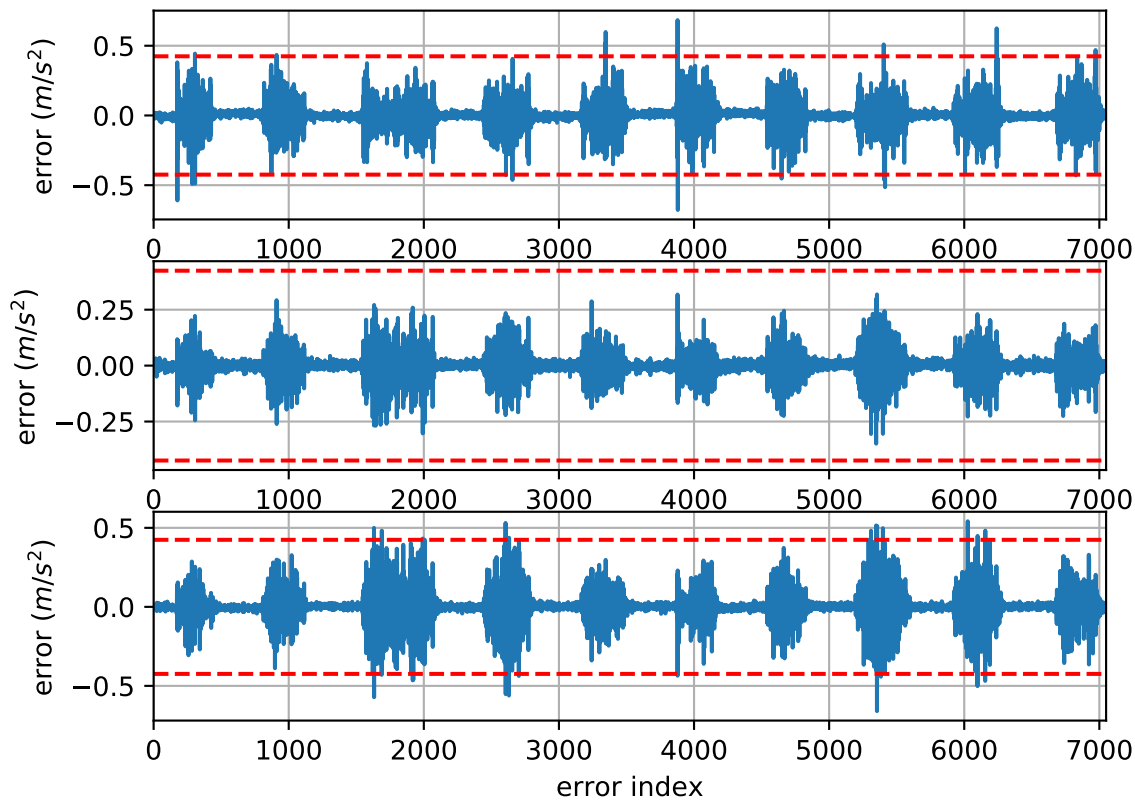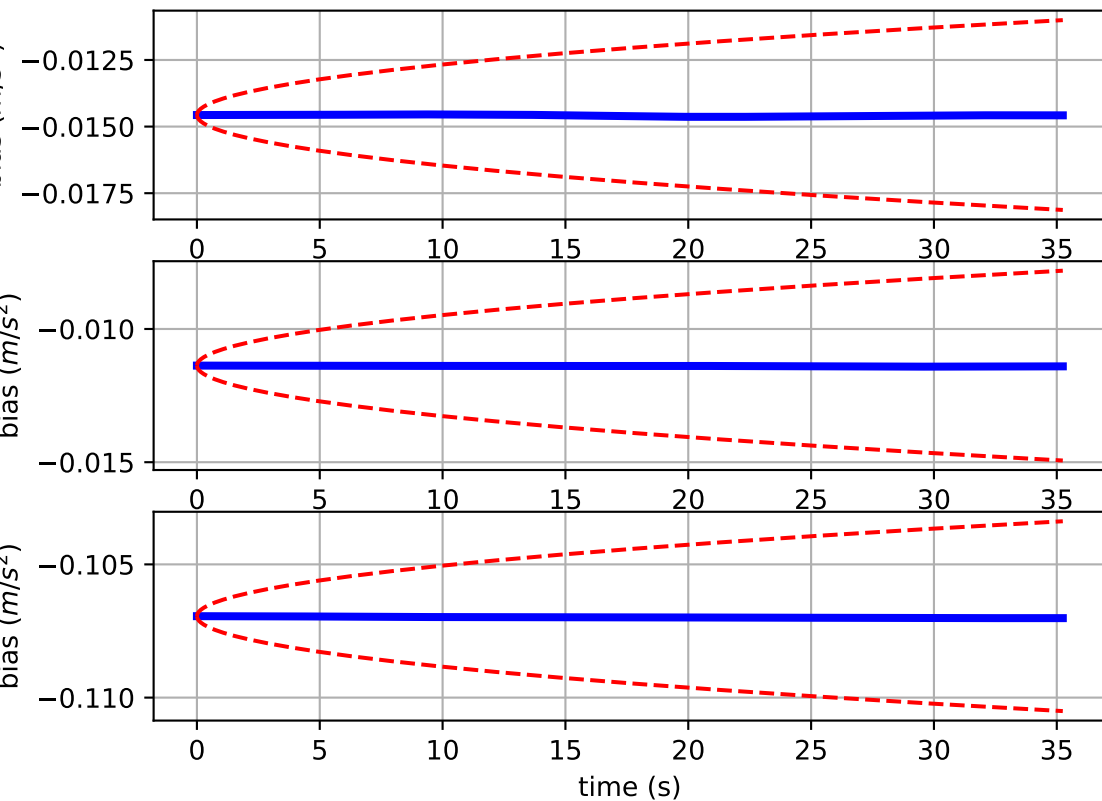
Comparison of predicted and measured specific force (imu0 frame)
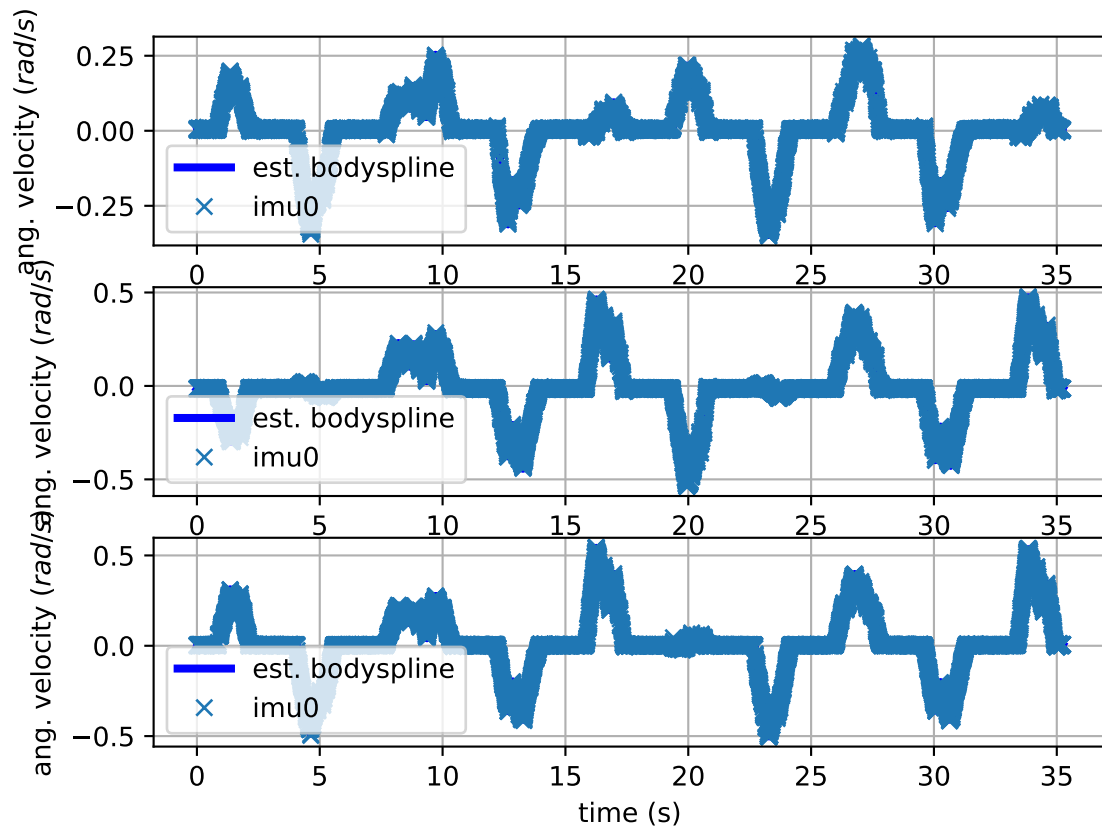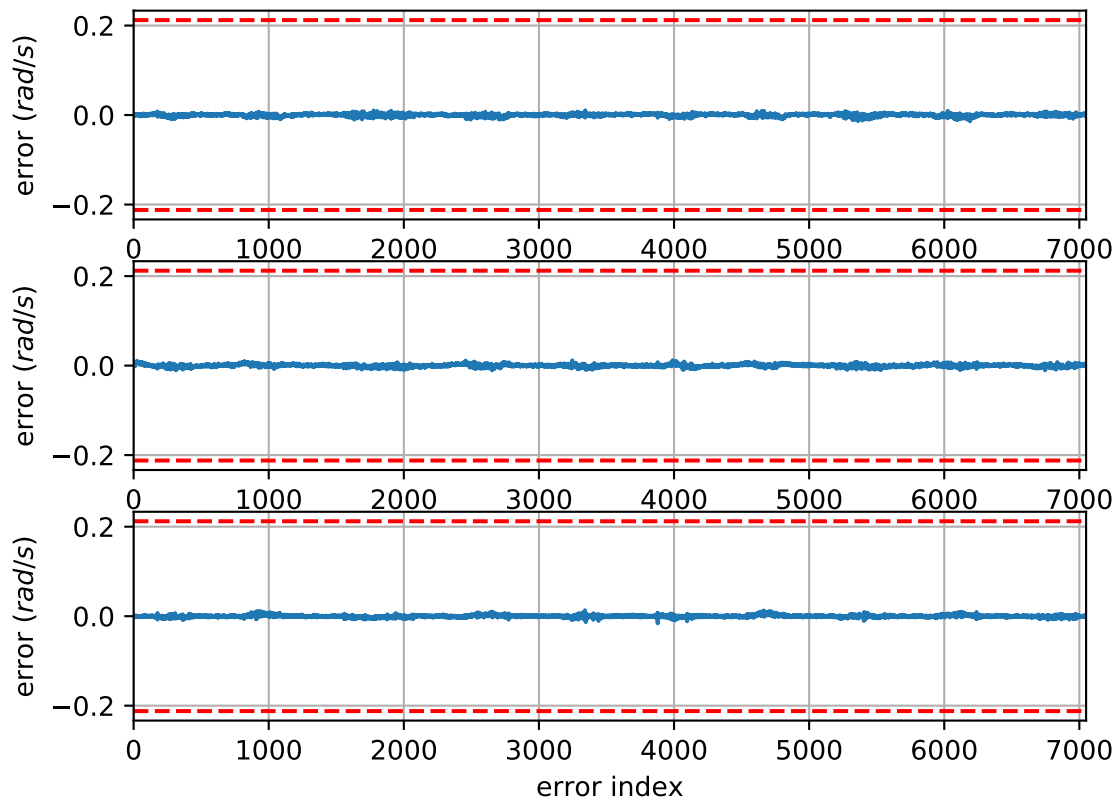
imu0: acceleration error

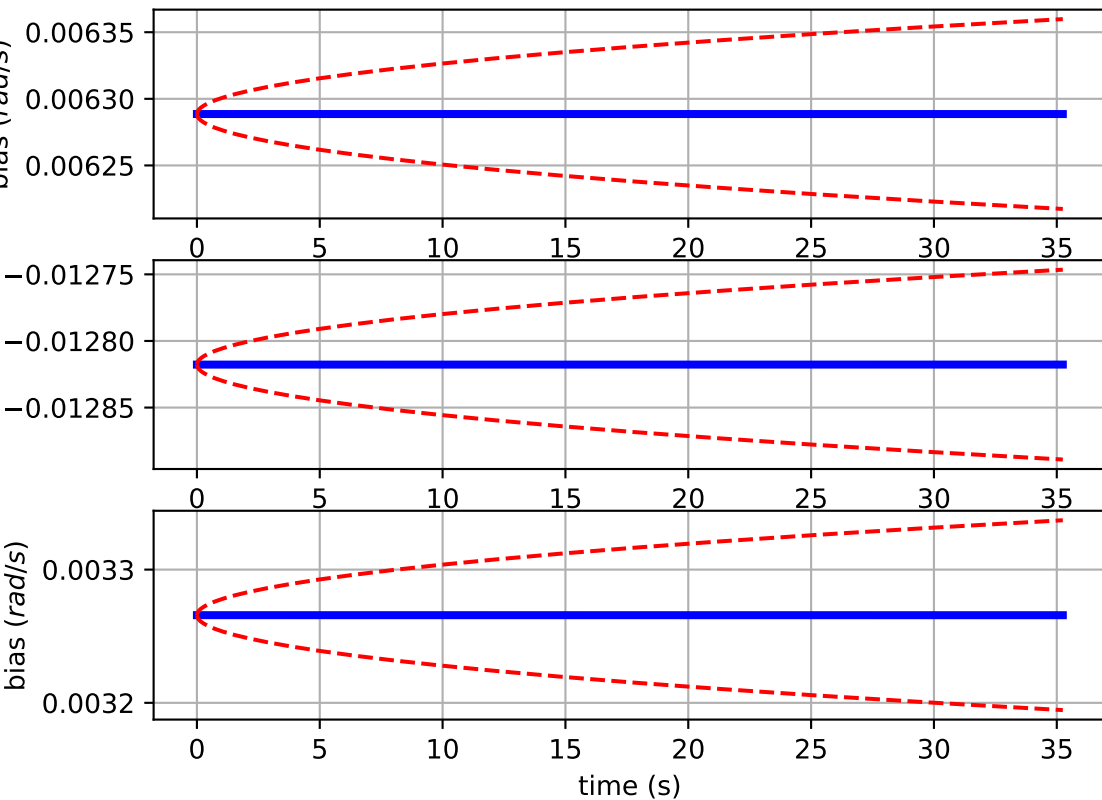imu0: estimated accelerometer bias (imu frame)

Comparison of predicted and measured angular velocities (body frame)

imu0: angular velocities error

imu0: estimated gyro bias (imu frame)

cam0: reprojection errors