

Calibration results

=====

Camera-system parameters:

cam0 (/prophesee/left/events):

type: <class 'aslam_cv.libaslam_cv_python.DistortedPinholeCameraGeometry'>

distortion: [-0.04906525 0.08478945 -0.00015313 -0.0010344] +- [0.00103393 0.00236441 0.00007808 0.0000544]

projection: [1031.56007894 1031.30981468 635.79183109 363.73475408] +- [0.14367108 0.14521311 0.0097793 0.10355009]

reprojection error: [0.000055, -0.000060] +- [0.449780, 0.391606]

cam1 (/prophesee/right/events):

type: <class 'aslam_cv.libaslam_cv_python.DistortedPinholeCameraGeometry'>

distortion: [-0.0545412 0.08657524 0.00111675 0.00022544] +- [0.00103632 0.00226497 0.00007921 0.00005724]

projection: [1030.9613418 1031.0981144 637.4769736 365.9094424] +- [0.15070317 0.14740058 0.0185767 0.11044243]

reprojection error: [0.000111, -0.000071] +- [0.550752, 0.493971]

cam2 (/ovc/left/image_mono/compressed):

type: <class 'aslam_cv.libaslam_cv_python.DistortedPinholeCameraGeometry'>

distortion: [-0.39620366 0.16365972 0.00000643 0.00051307] +- [0.00056962 0.00105187 0.00005636 0.00003453]

projection: [1057.81896984 1058.02877184 675.51492885 334.90482515] +- [0.12857343 0.12954082 0.04393121 0.22993717]

reprojection error: [0.000157, -0.000098] +- [0.158782, 0.144846]

cam3 (/ovc/right/image_mono/compressed):

type: <class 'aslam_cv.libaslam_cv_python.DistortedPinholeCameraGeometry'>

distortion: [-0.39159612 0.15210684 -0.00009729 0.00104047] +- [0.00046723 0.00072367 0.00005426 0.00003578]

projection: [1052.07072731 1052.62836745 673.74919468 327.54300777] +- [0.12945853 0.12599691 0.0329027 0.22641517]

reprojection error: [0.000197, -0.000122] +- [0.181401, 0.151014]

cam4 (/ovc/rgb/image_color/compressed):

type: <class 'aslam_cv.libaslam_cv_python.DistortedPinholeCameraGeometry'>

distortion: [-0.41688803 0.1898501 0.0000868 -0.00021399] +- [0.00077895 0.00190327 0.000056 0.00003963]

projection: [1264.08439909 1263.92057039 654.88629922 368.39143756] +- [0.14132962 0.13667467 0.0164805 0.08530617]

reprojection error: [0.000149, -0.000078] +- [0.289115, 0.264918]

baseline T_1_0:

q: [-0.00142446 0.00219607 -0.00025972 0.99999654] +- [0.00007644 0.0000517 0.00004253]

t: [-0.12026811 0.00095723 -0.00009731] +- [0.00003121 0.00002937 0.00012075]

baseline T_2_1:

q: [-0.00043028 -0.00278367 -0.00512903 0.99998288] +- [0.00028022 0.00007309 0.00003979]

t: [0.12022521 0.06916963 0.00430691] +- [0.00002925 0.0000286 0.00011614]

baseline T_3_2:

q: [0.00024619 -0.00206428 0.00024897 0.99999781] +- [0.00031793 0.00007106 0.00003557]

t: [-0.11999543 -0.00013176 0.00070684] +- [0.00002689 0.00002724 0.00010623]

baseline T_4_3:

q: [0.00099837 0.00511469 0.00040521 0.99998634] +- [0.00026146 0.00005337 0.00003531]

t: [0.08879458 0.00618803 0.00353592] +- [0.00002574 0.00002474 0.00010552]

Target configuration

=====

Type: aprilgrid

Tags:

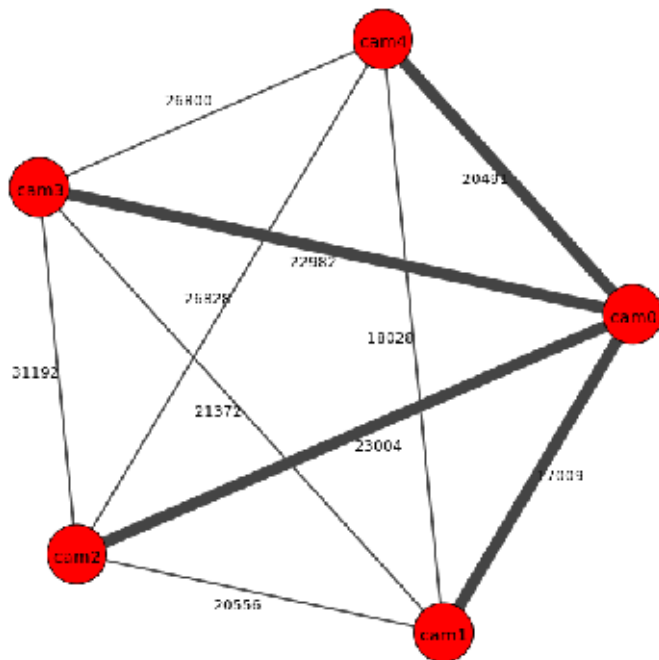
Rows: 5

Cols: 7

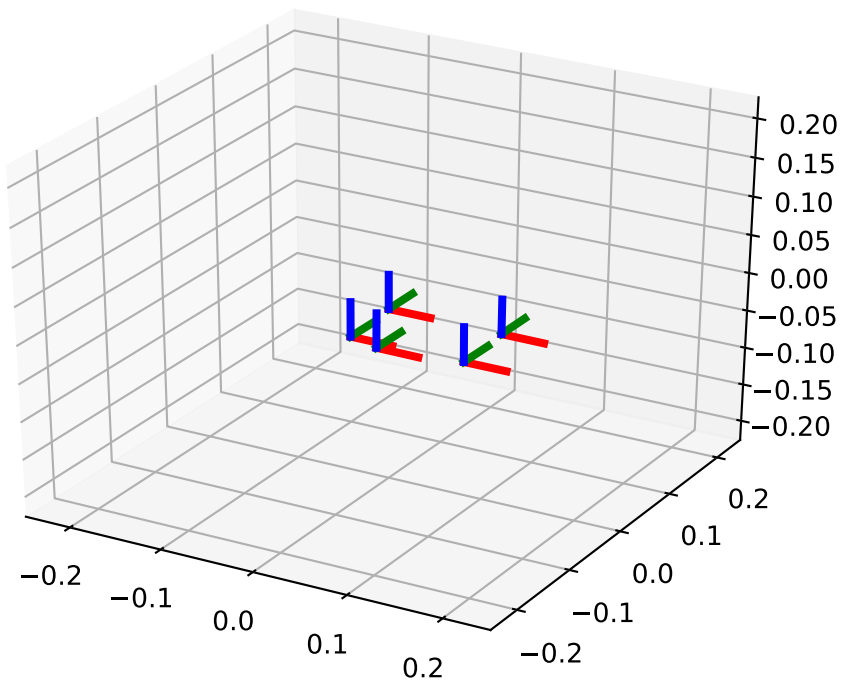
Size: 0.04 [m]

Spacing 0.01 [m]

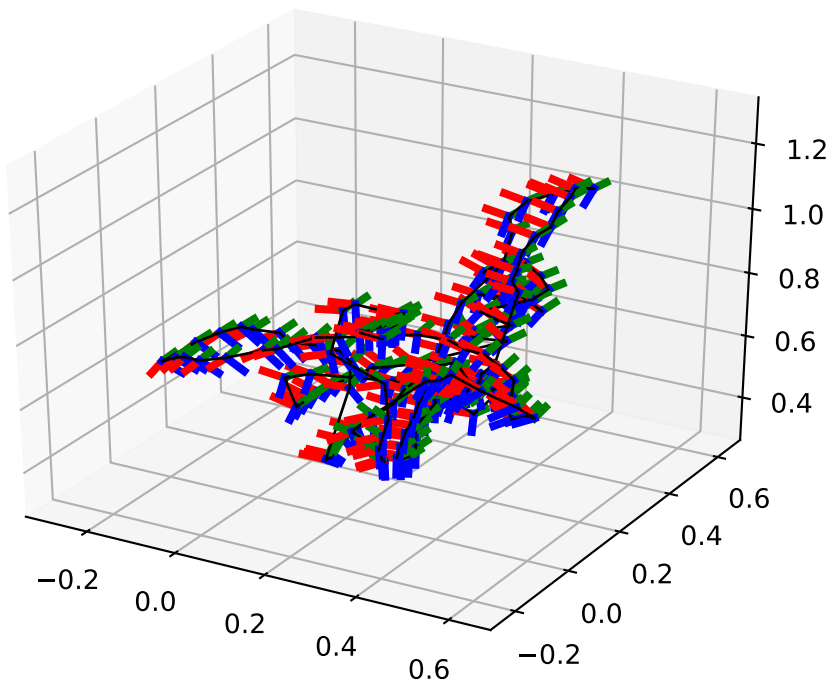
Inter-camera observations graph (edge weight=#mutual obs.)



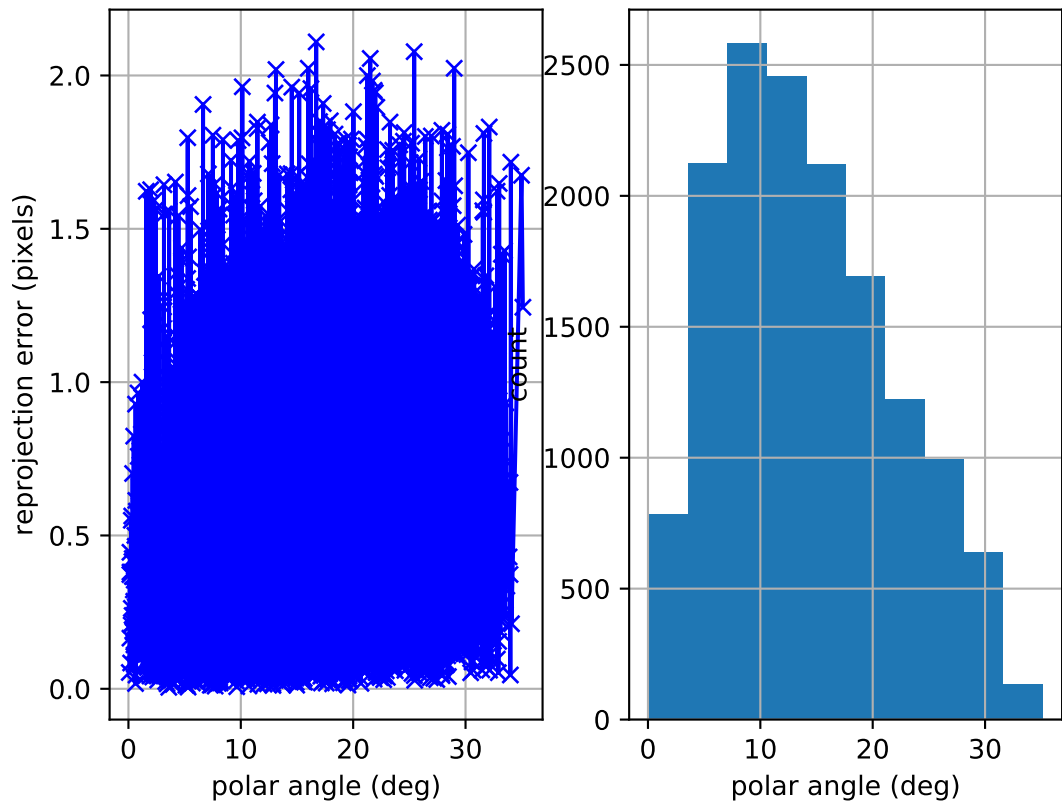
camera system



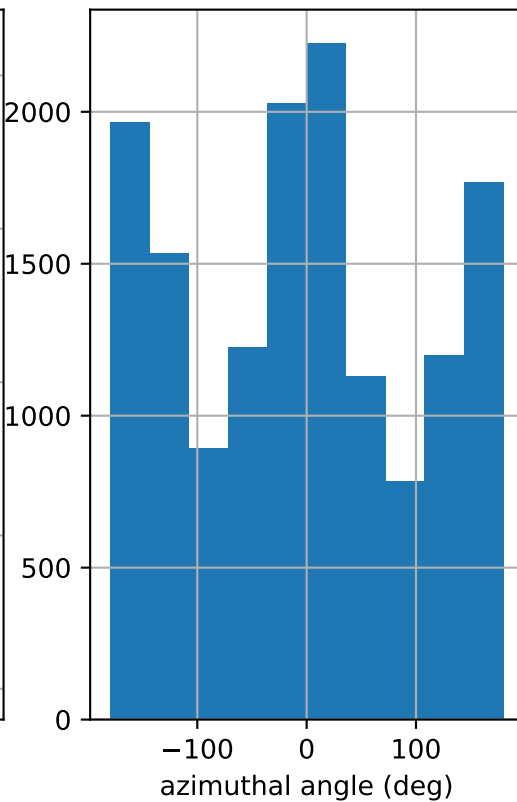
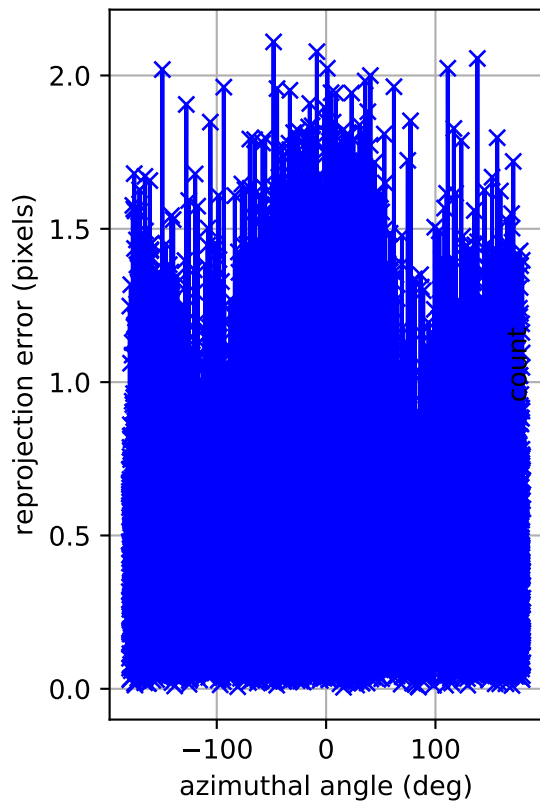
cam0: estimated poses



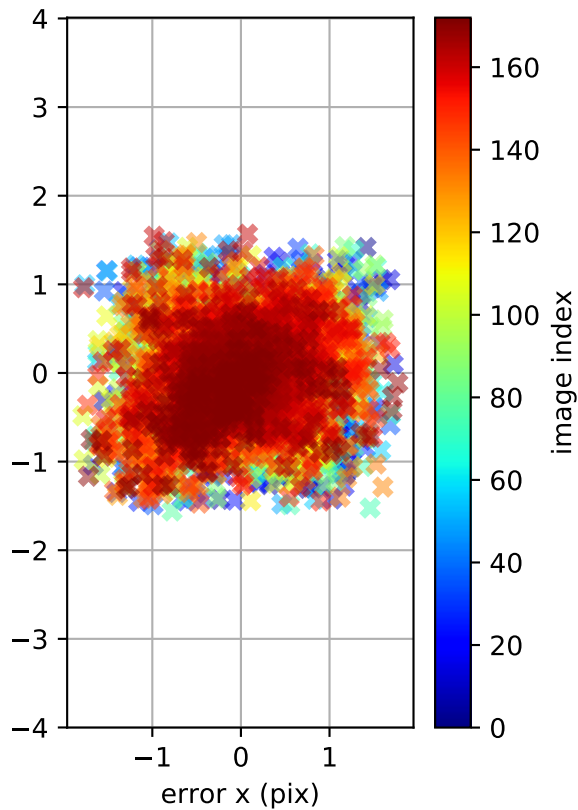
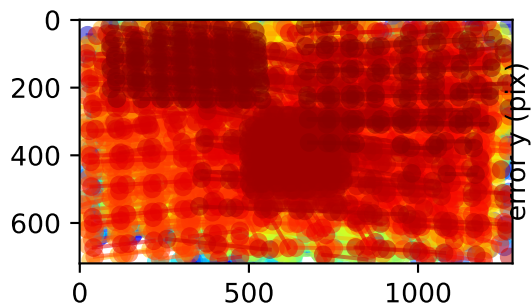
cam0: polar error



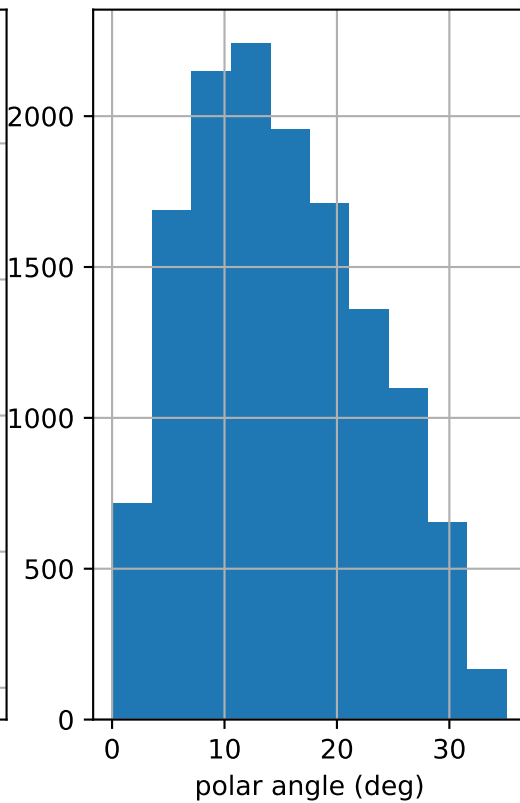
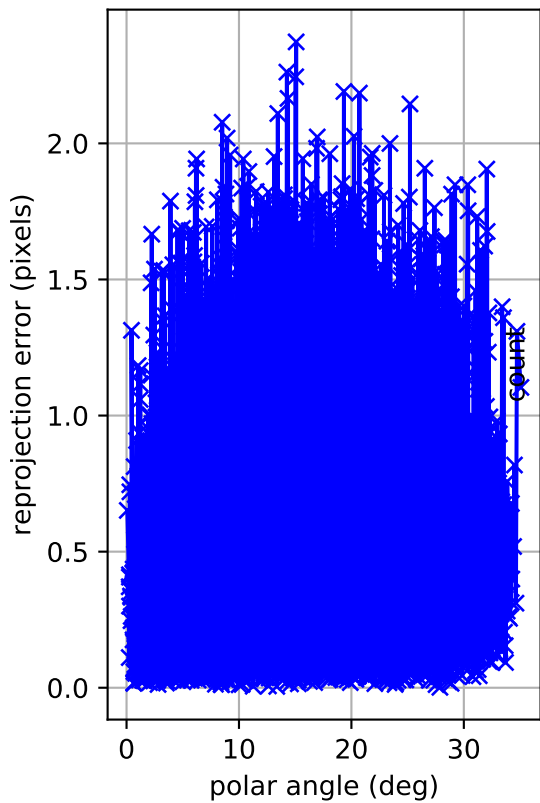
cam0: azimuthal error



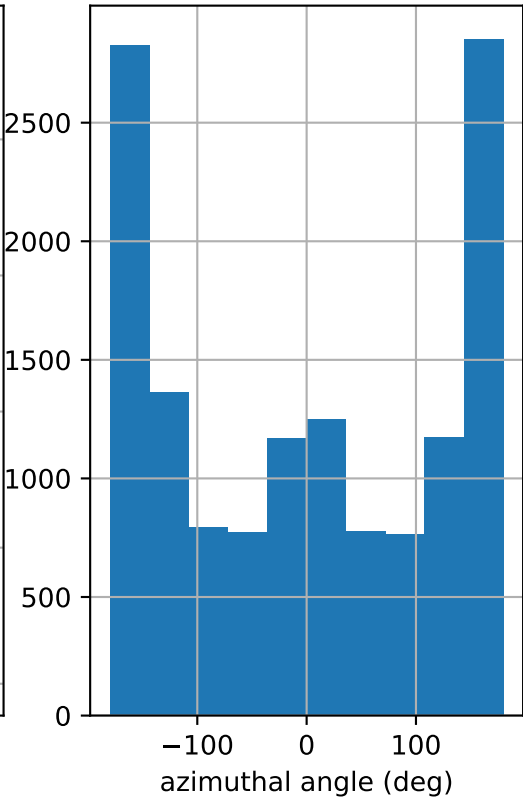
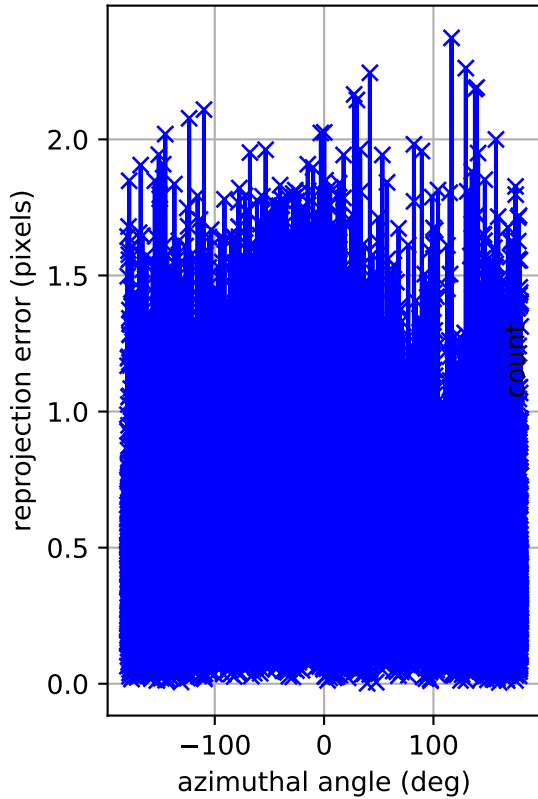
cam0: reprojection errors



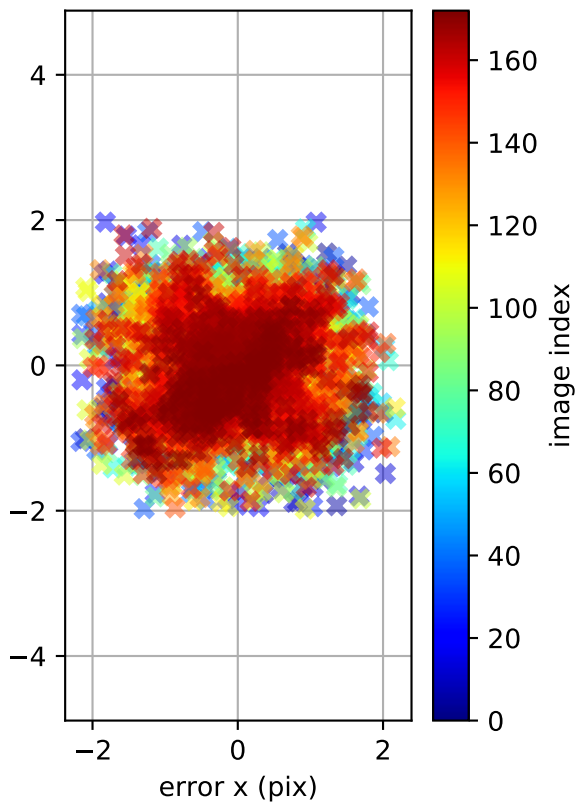
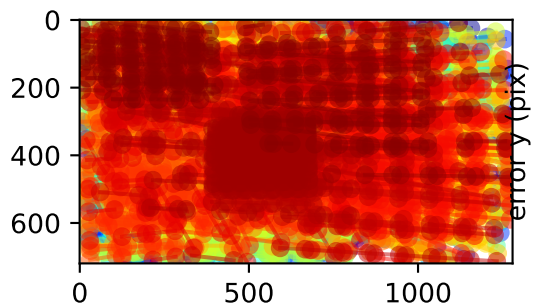
cam1: polar error



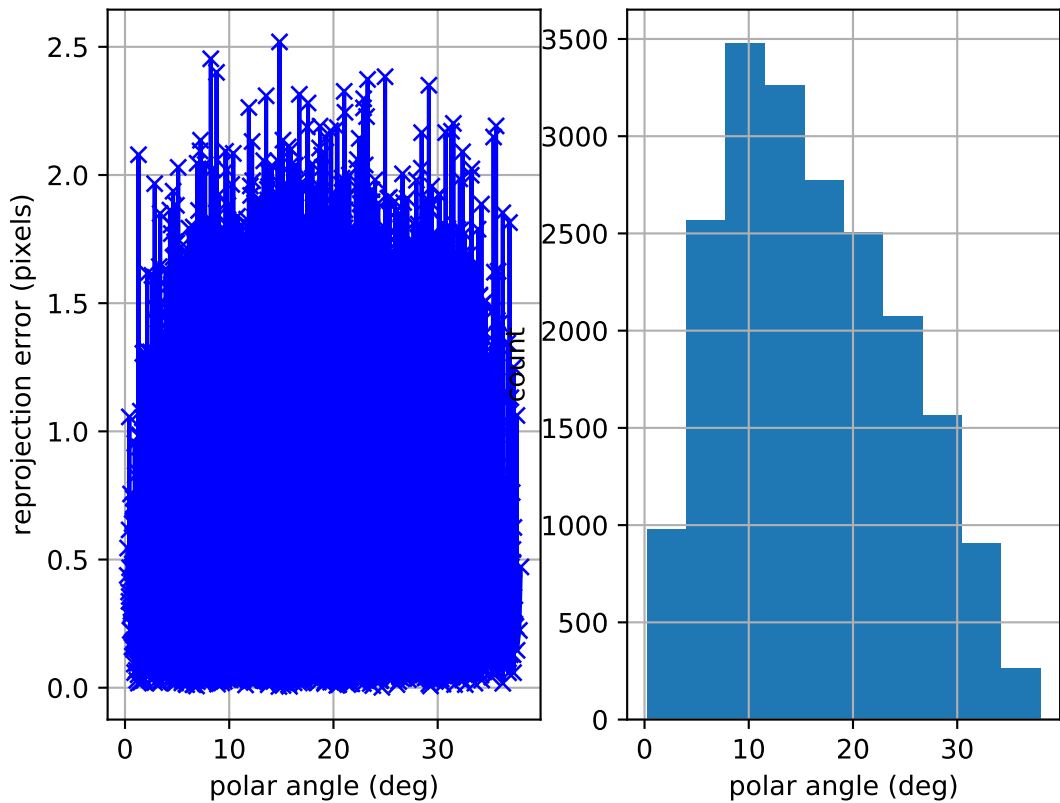
cam1: azimuthal error



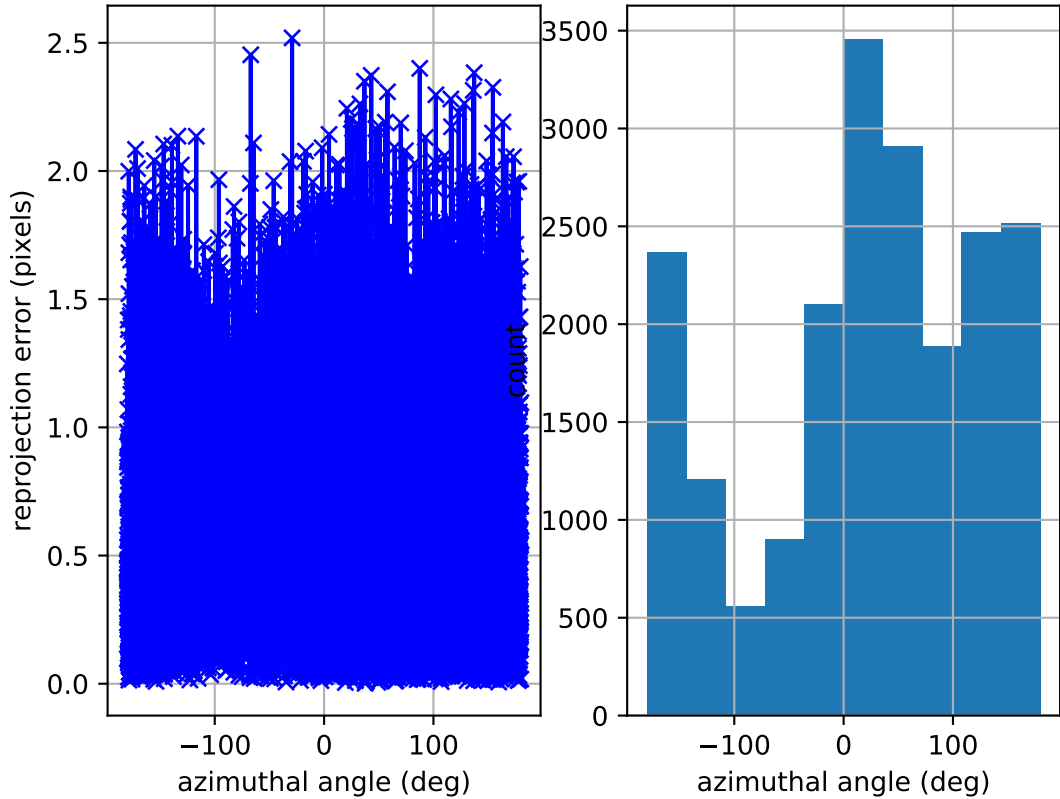
cam1: reprojection errors



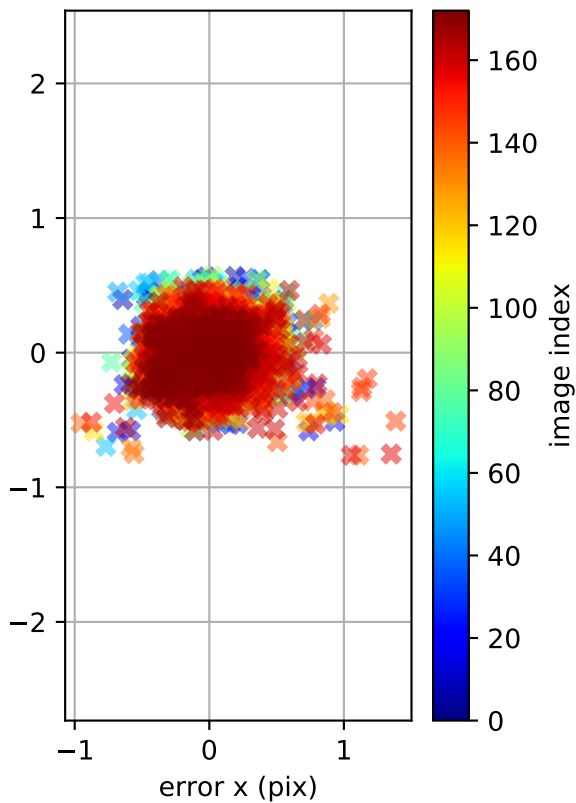
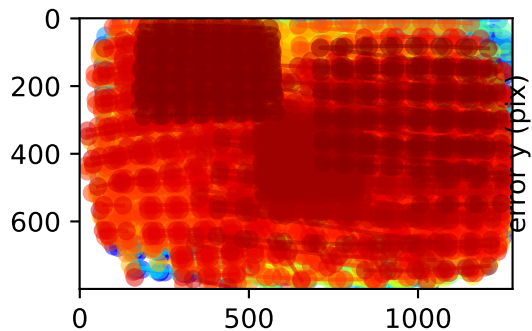
cam2: polar error



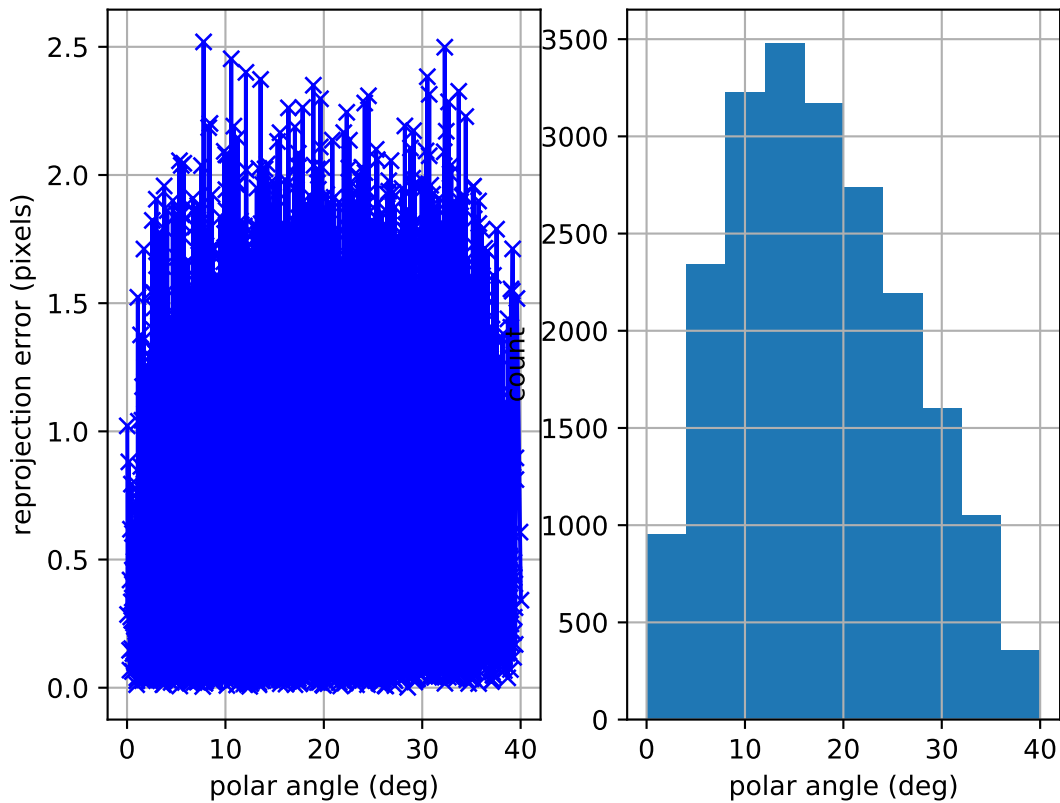
cam2: azimuthal error



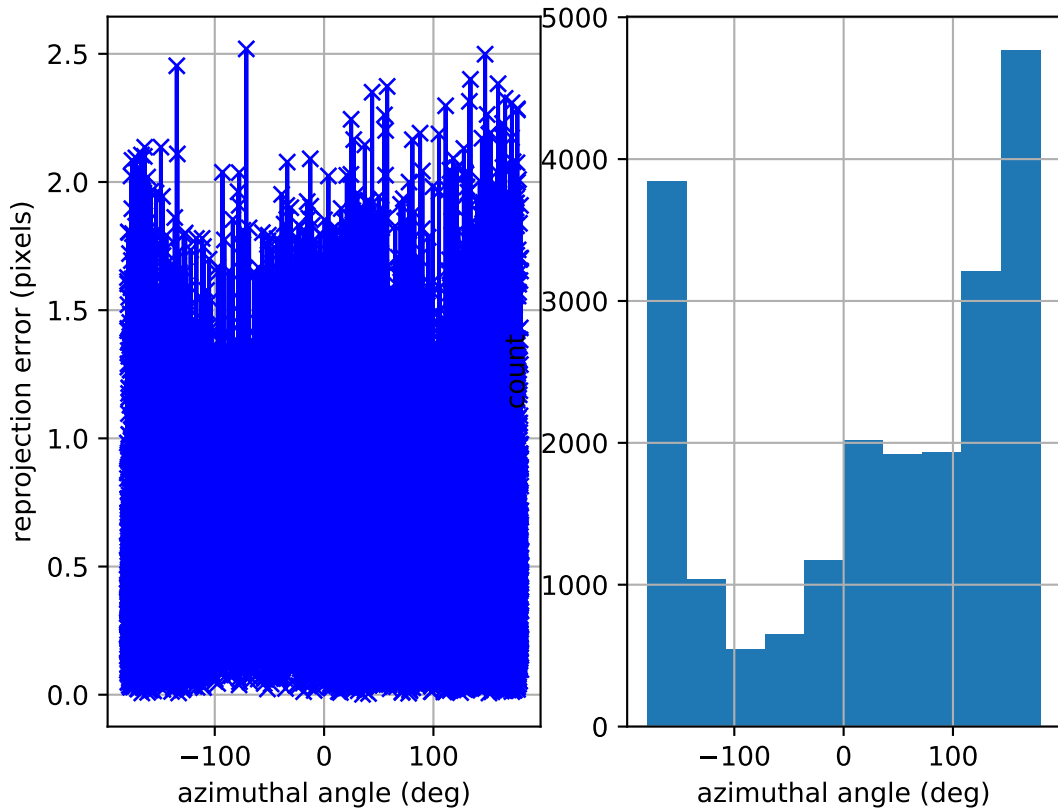
cam2: reprojection errors



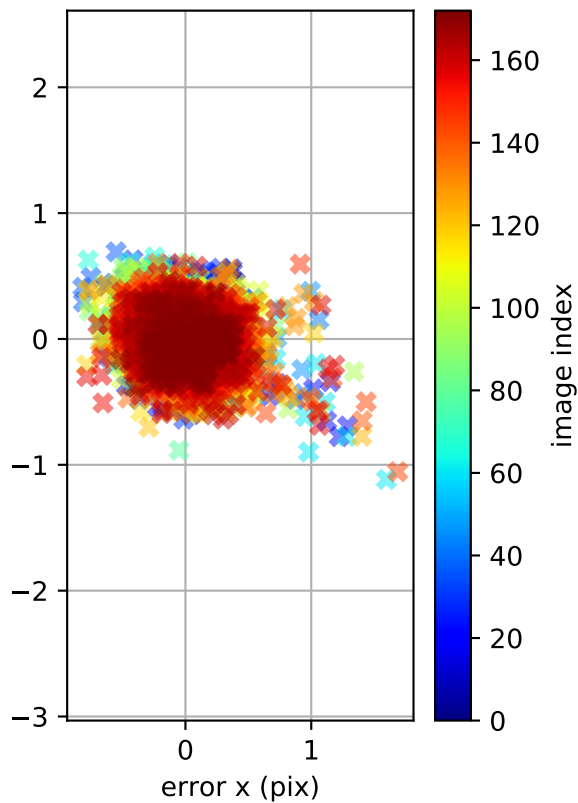
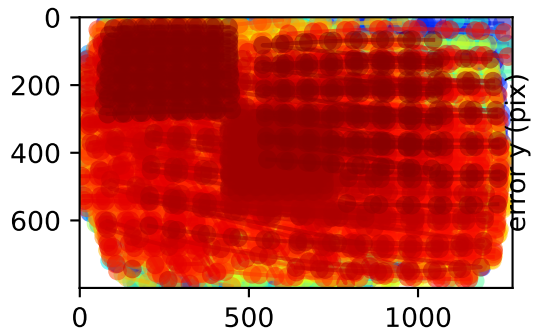
cam3: polar error



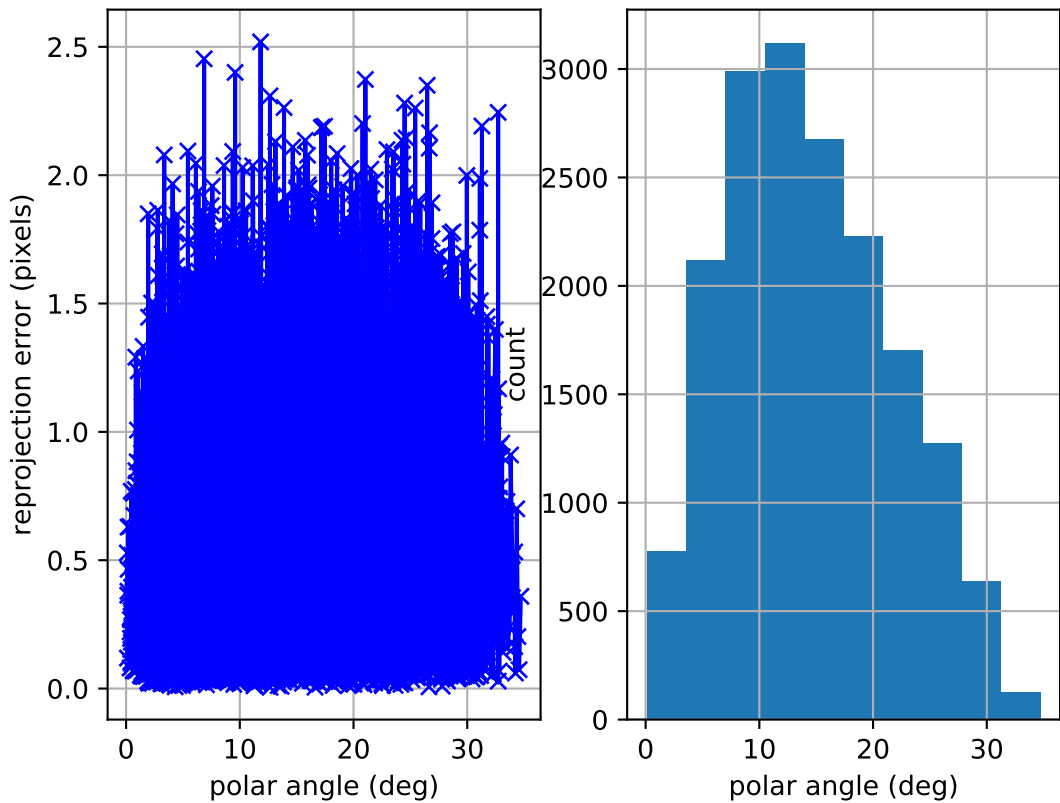
cam3: azimuthal error



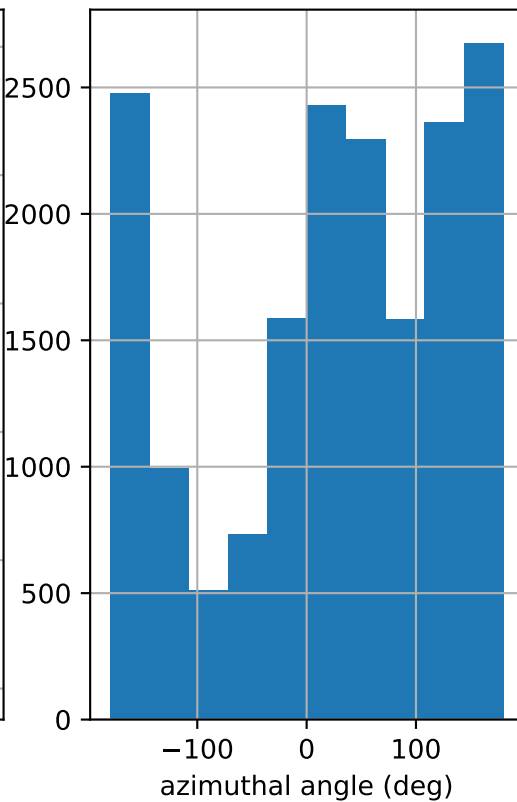
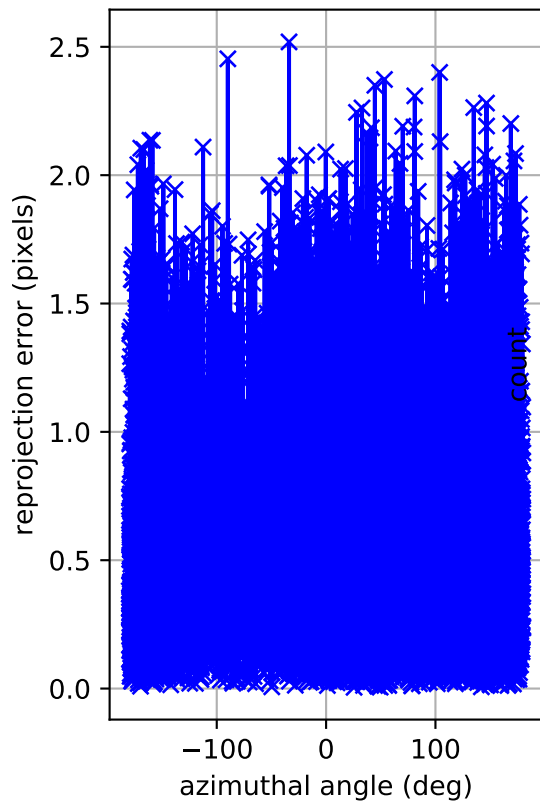
cam3: reprojection errors



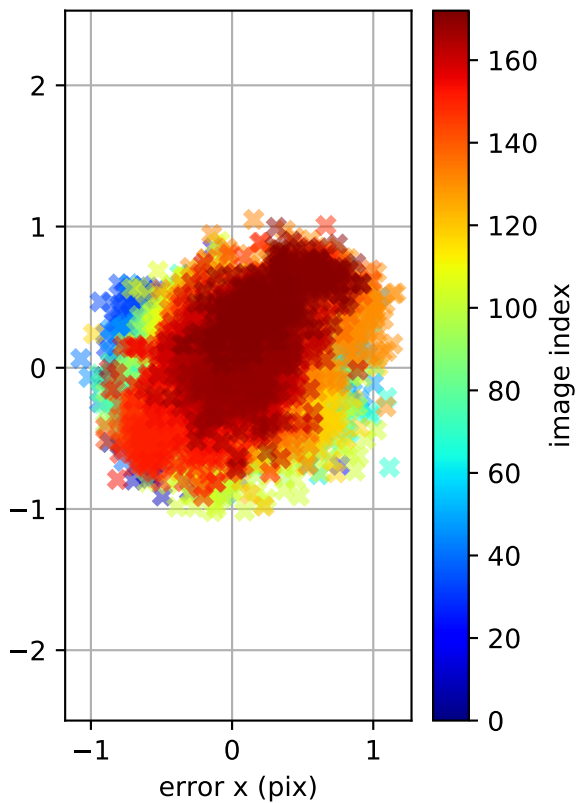
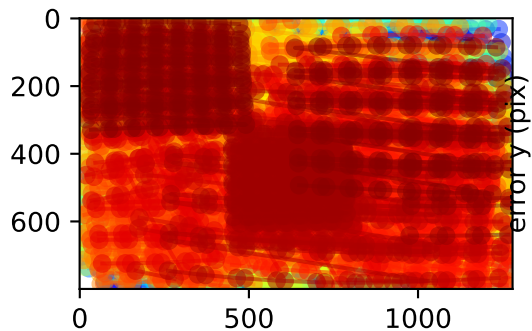
cam4: polar error



cam4: azimuthal error



cam4: reprojection errors



Location of removed outlier corners

