

Calibration results

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Camera-system parameters:

cam0 (/prophesee/left/events):

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

distortion: [-0.05041641 0.09101419 -0.00074185 -0.00161467] +- [0.00114385 0.0026444 0.00010074 0.00007647]
projection: [1033.55774353 1031.89258948 632.18119829 358.82456763] +- [0.17613177 0.17528611 0.01150722 0.13919634]

reprojection error: [0.000101, 0.000046] +- [0.442983, 0.356179]

cam1 (/prophesee/right/events):

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

distortion: [-0.05348142 0.08596382 0.00014243 -0.00055497] +- [0.00115447 0.00272966 0.00009658 0.0000729]
projection: [1033.22781771 1032.05548869 631.84536312 360.7175681] +- [0.17423829 0.17034812 0.00514786 0.09018514]

reprojection error: [0.000094, 0.000031] +- [0.424125, 0.356111]

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

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

distortion: [-0.40027424 0.17056618 0.00048742 0.0007061] +- [0.00070508 0.00132854 0.00007462 0.00005182]
projection: [1059.79844179 1058.7112854 673.38706828 331.65536461] +- [0.14821333 0.14596226 0.00982728 0.24632851]

reprojection error: [0.000133, -0.000018] +- [0.165592, 0.139114]

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

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

distortion: [-0.40030216 0.16639938 0.00036766 0.00133039] +- [0.00061653 0.00111413 0.00007439 0.00005144]
projection: [1055.31586267 1054.64147499 670.80524708 324.51934033] +- [0.14600005 0.1426819 0.01764814 0.25248871]

reprojection error: [0.000124, -0.000097] +- [0.164344, 0.139085]

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

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

distortion: [-0.42058762 0.1968452 0.0008715 0.00028943] +- [0.00087901 0.00222023 0.0000733 0.00005488]
projection: [1266.46261002 1264.85437605 649.09744217 363.35085318] +- [0.14793661 0.14449186 0.00575501 0.10809687]

reprojection error: [-0.000106, 0.000071] +- [0.409614, 0.292943]

baseline T_1_0:

q: [-0.00048981 0.00160476 -0.00019415 0.99999857] +- [0.00011539 0.0000596 0.00004605]

t: [-0.12004827 0.00093651 0.00034862] +- [0.00004724 0.000046 0.00018975]

baseline T_2_1:

q: [-0.00018827 -0.00233661 -0.00491059 0.9999852] +- [0.00026147 0.00005292 0.00004459]

t: [0.11993327 0.06923301 0.00361434] +- [0.00004194 0.00003936 0.00016854]

baseline T_3_2:

q: [-0.00024511 -0.0009529 0.0003964 0.99999944] +- [0.00035893 0.00004968 0.00003904]

t: [-0.11990065 -0.000096 0.0013569] +- [0.00003438 0.00003128 0.0001426]

baseline T_4_3:

q: [0.00168807 0.0024252 0.00020267 0.99999561] +- [0.00030201 0.00004489 0.00003688]

t: [0.08881619 0.0062337 0.0023689] +- [0.00003113 0.00002886 0.00012901]

Target configuration

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Type: aprilgrid

Tags:

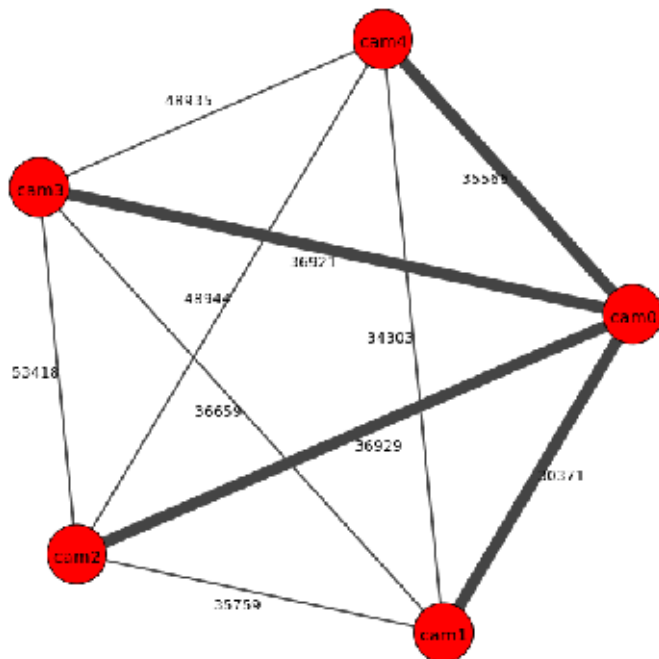
Rows: 5

Cols: 7

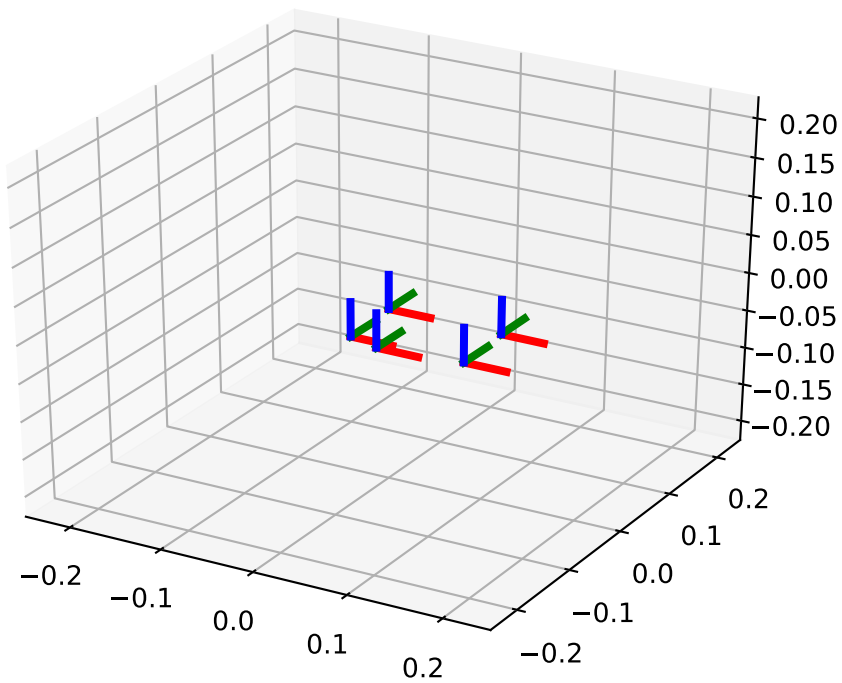
Size: 0.04 [m]

Spacing 0.01 [m]

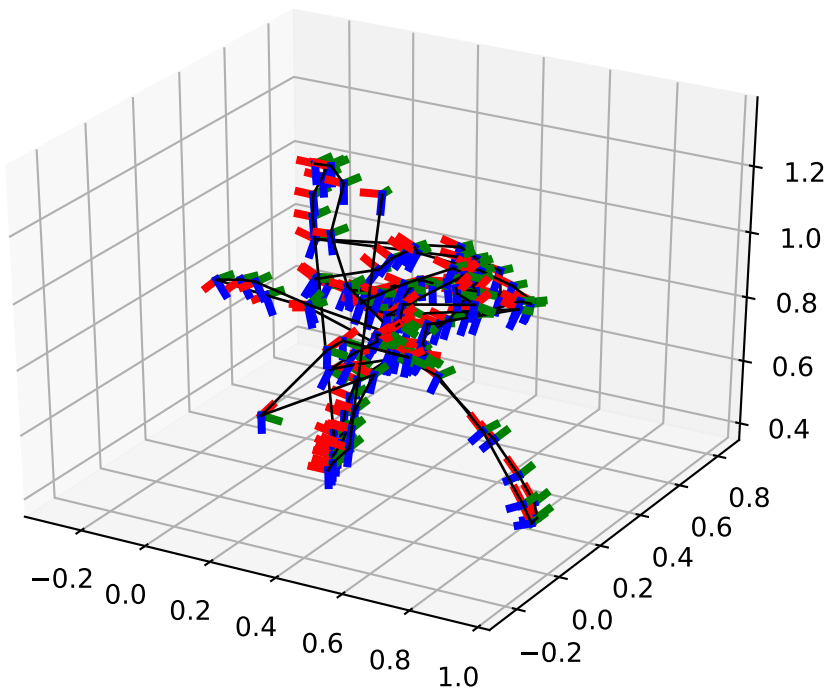
Inter-camera observations graph (edge weight=#mutual obs.)



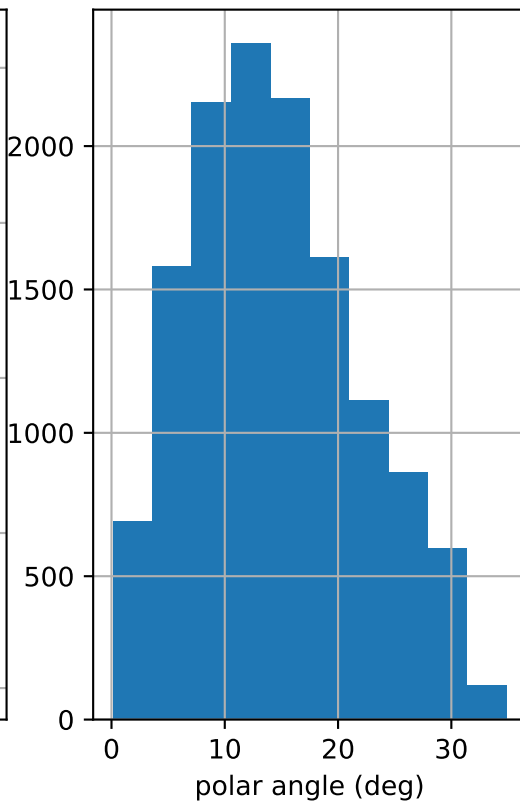
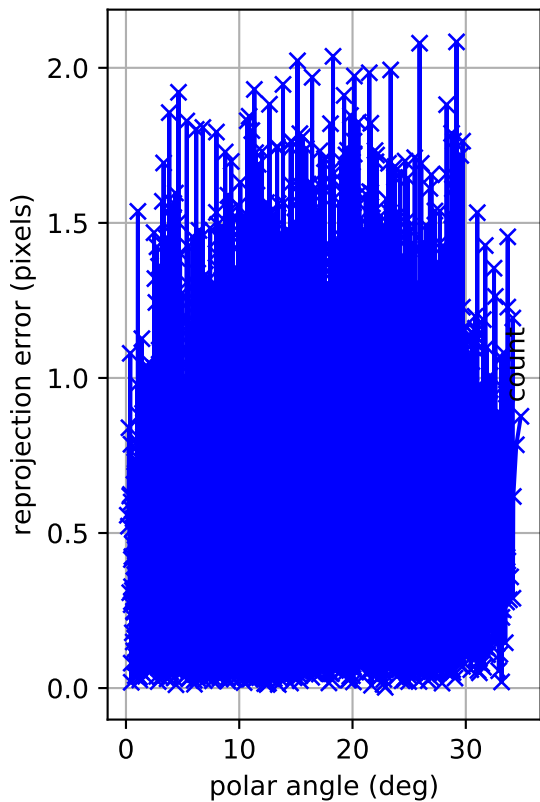
camera system



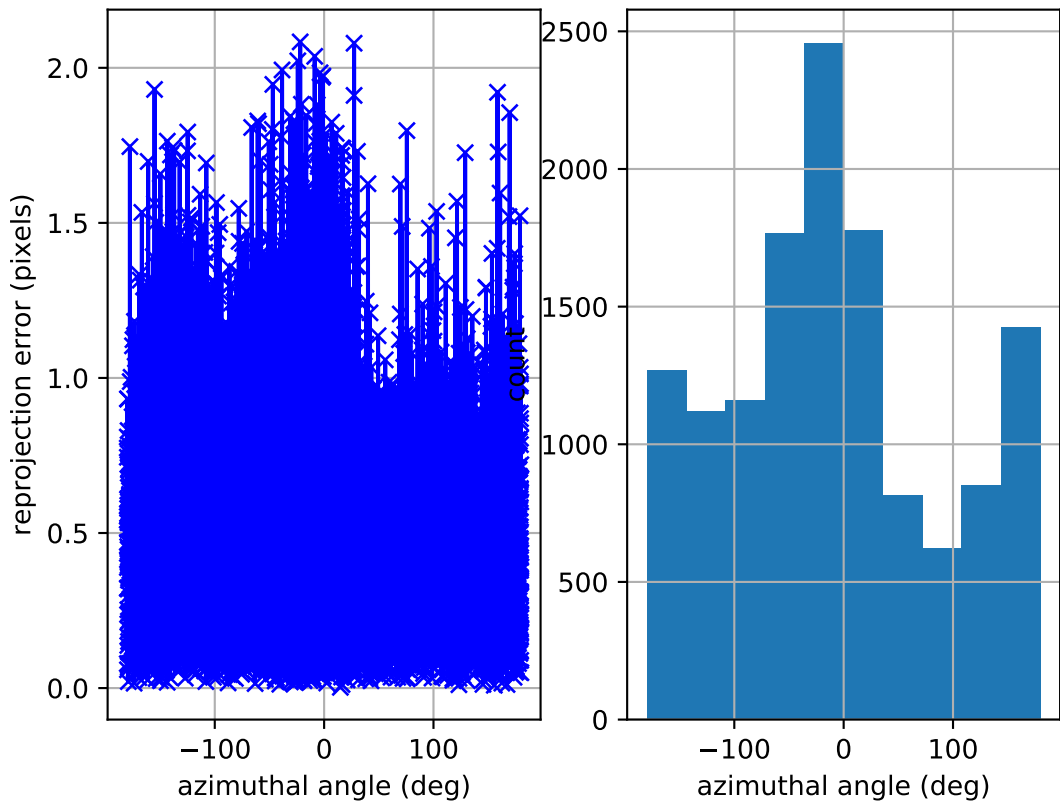
cam0: estimated poses



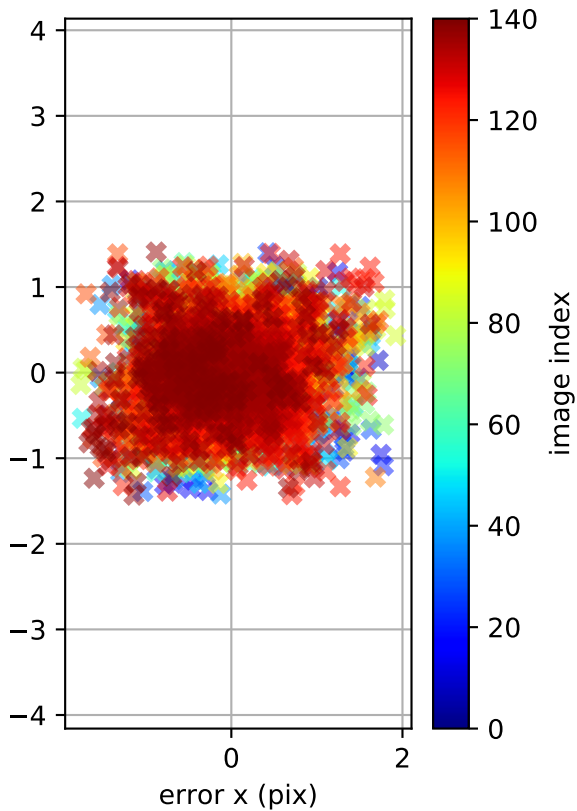
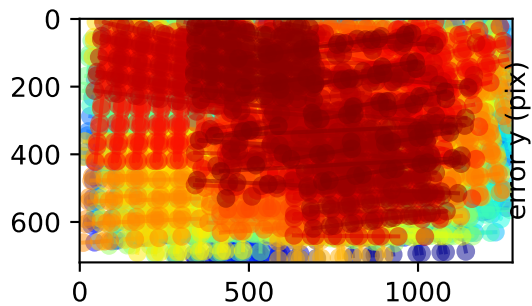
cam0: polar error



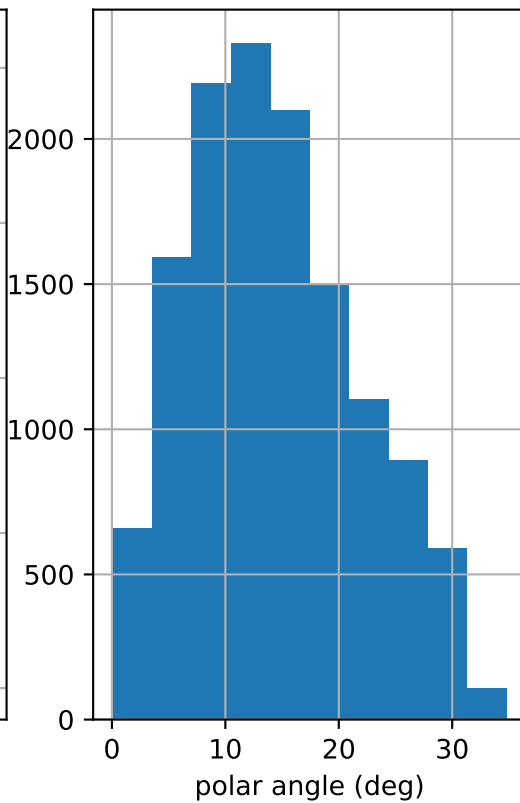
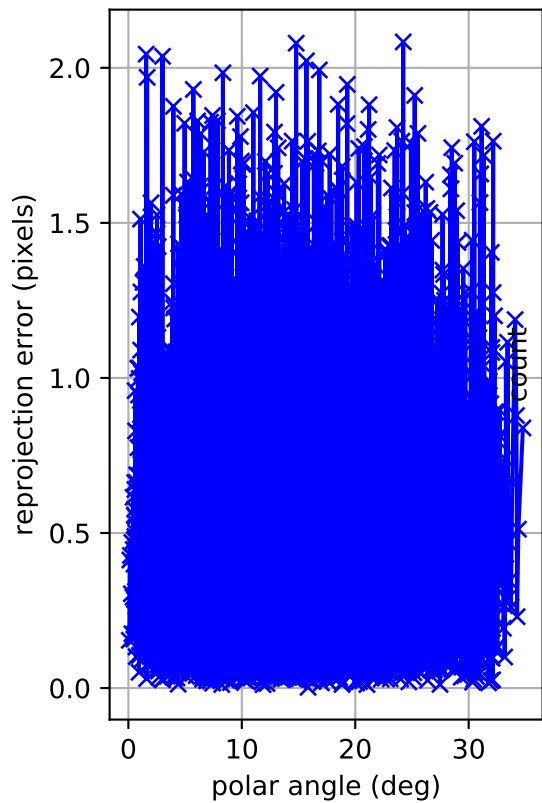
cam0: azimuthal error



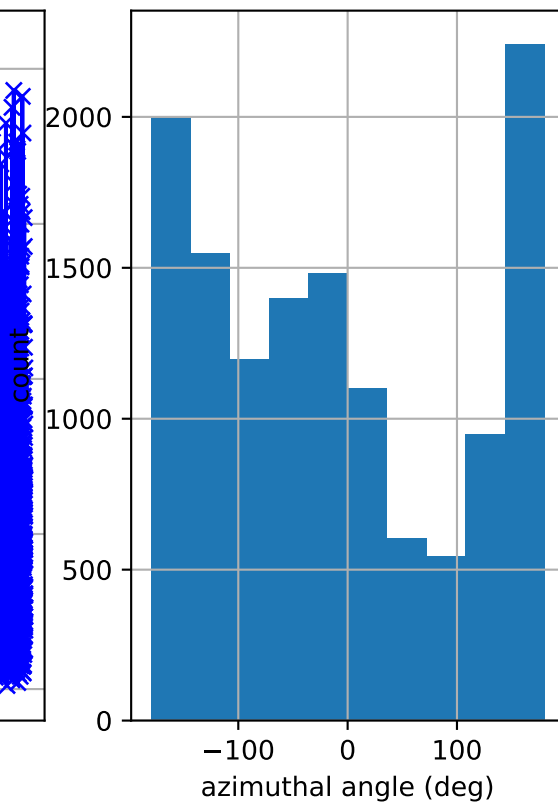
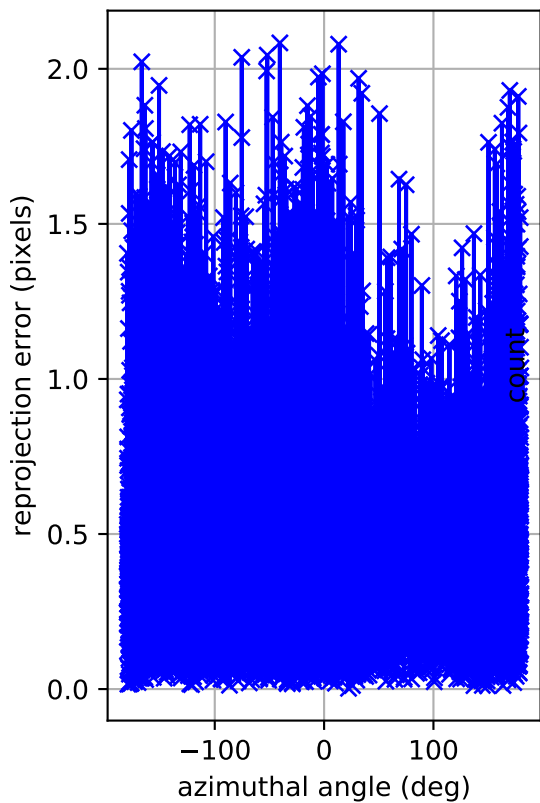
cam0: reprojection errors



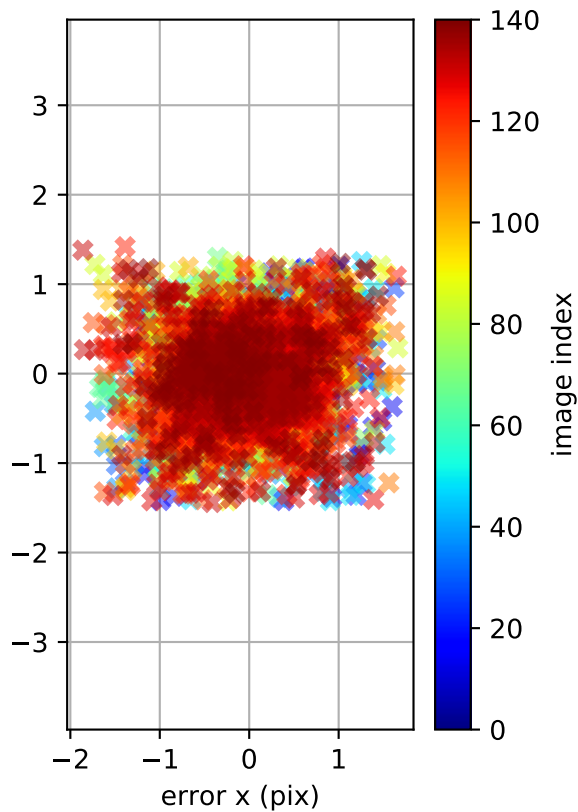
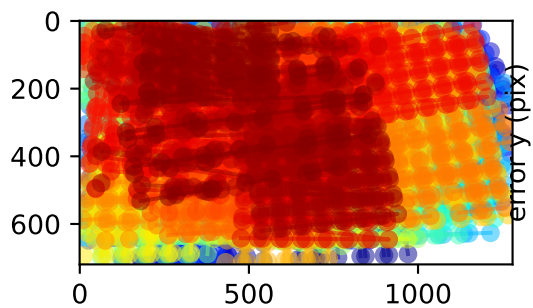
cam1: polar error



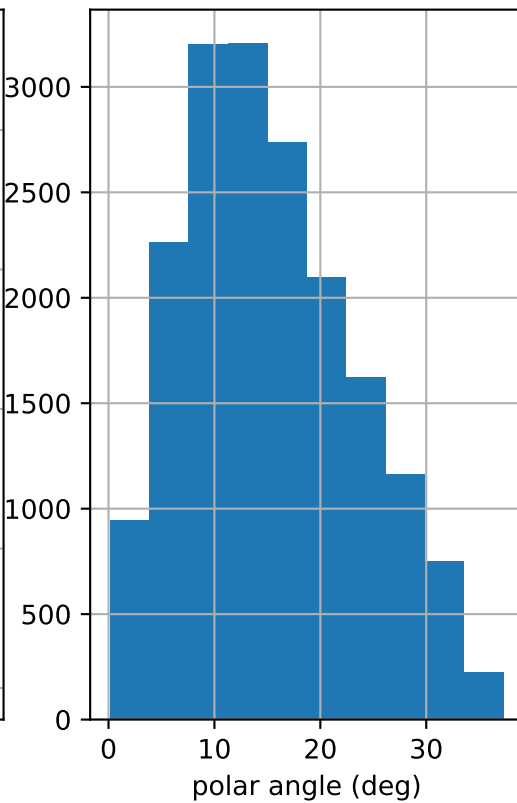
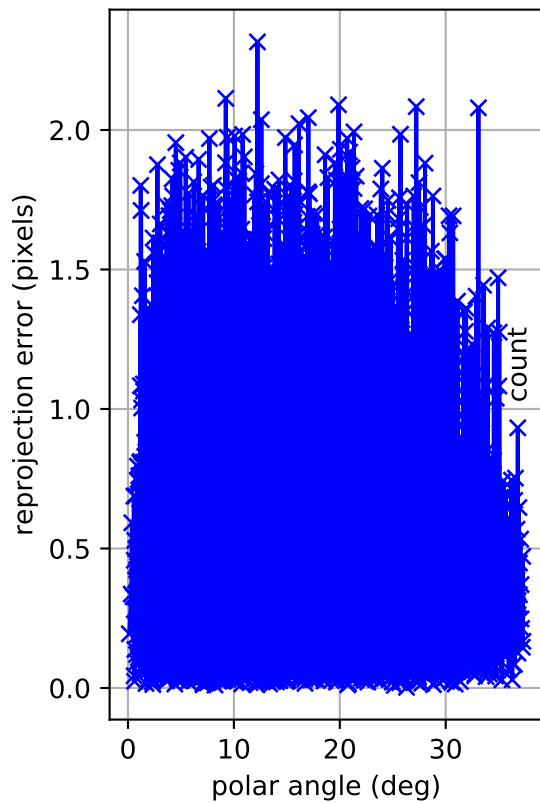
cam1: azimuthal error



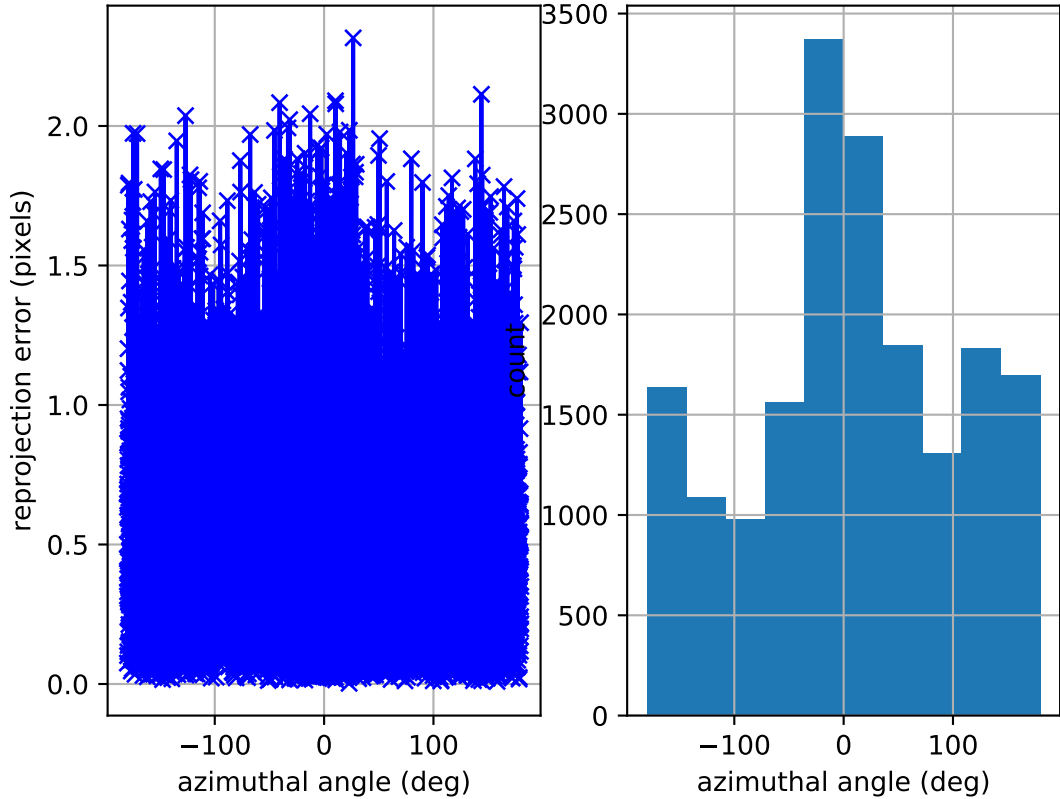
cam1: reprojection errors



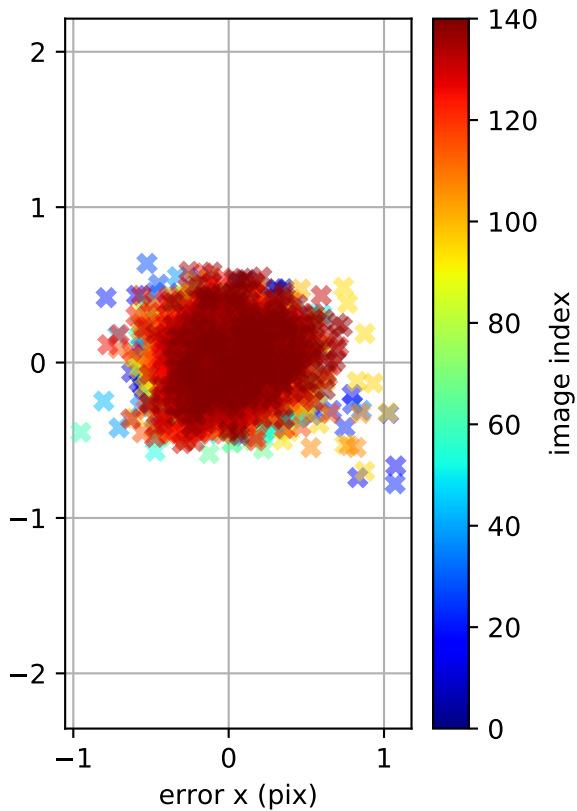
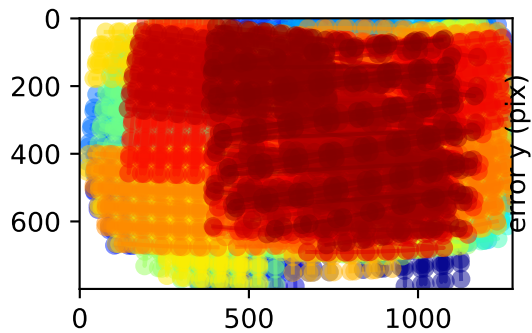
cam2: polar error



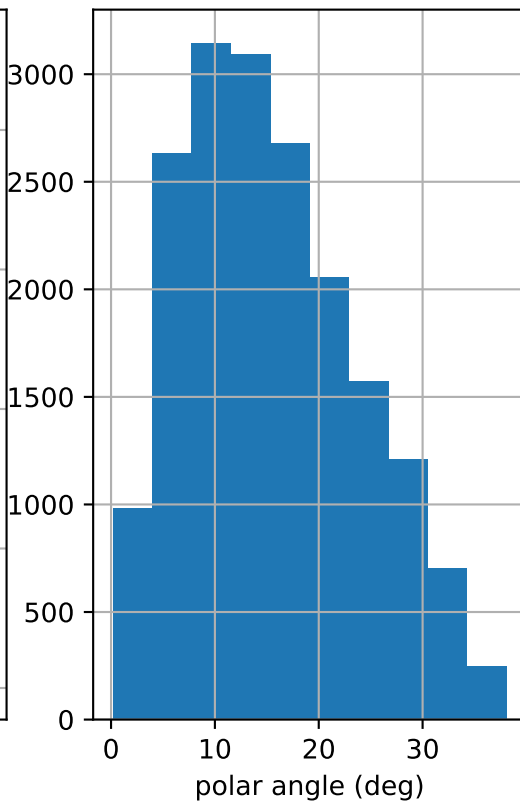
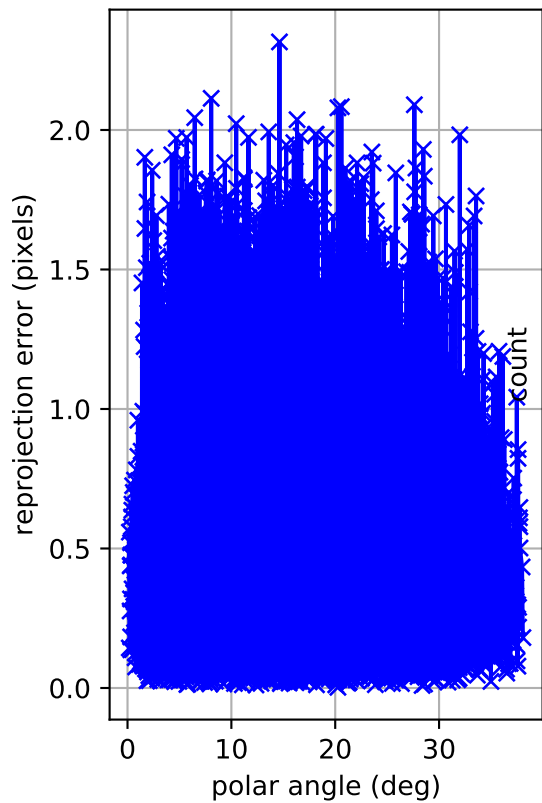
cam2: azimuthal error



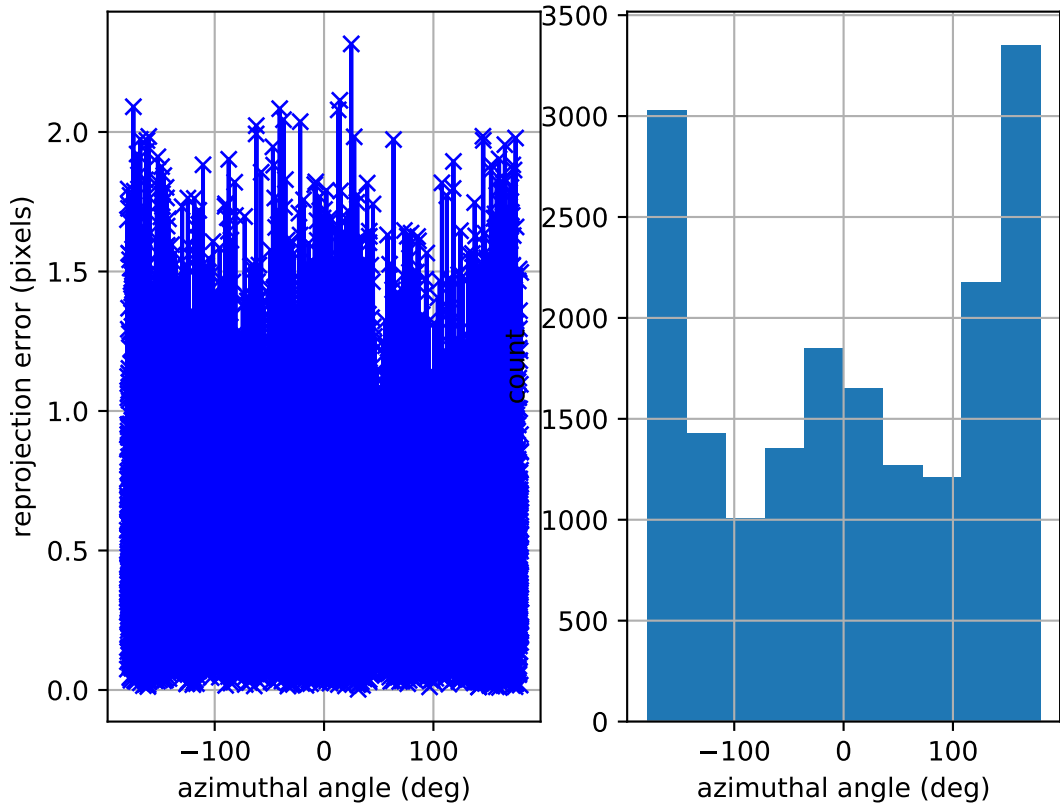
cam2: reprojection errors



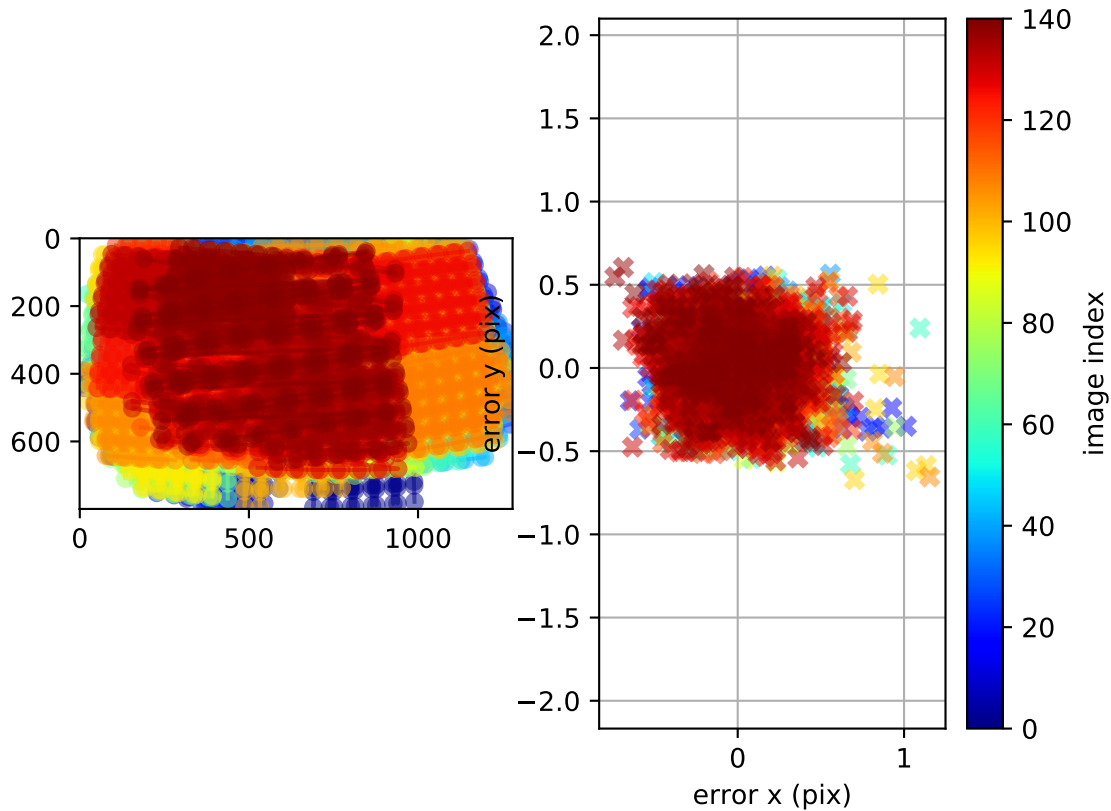
cam3: polar error



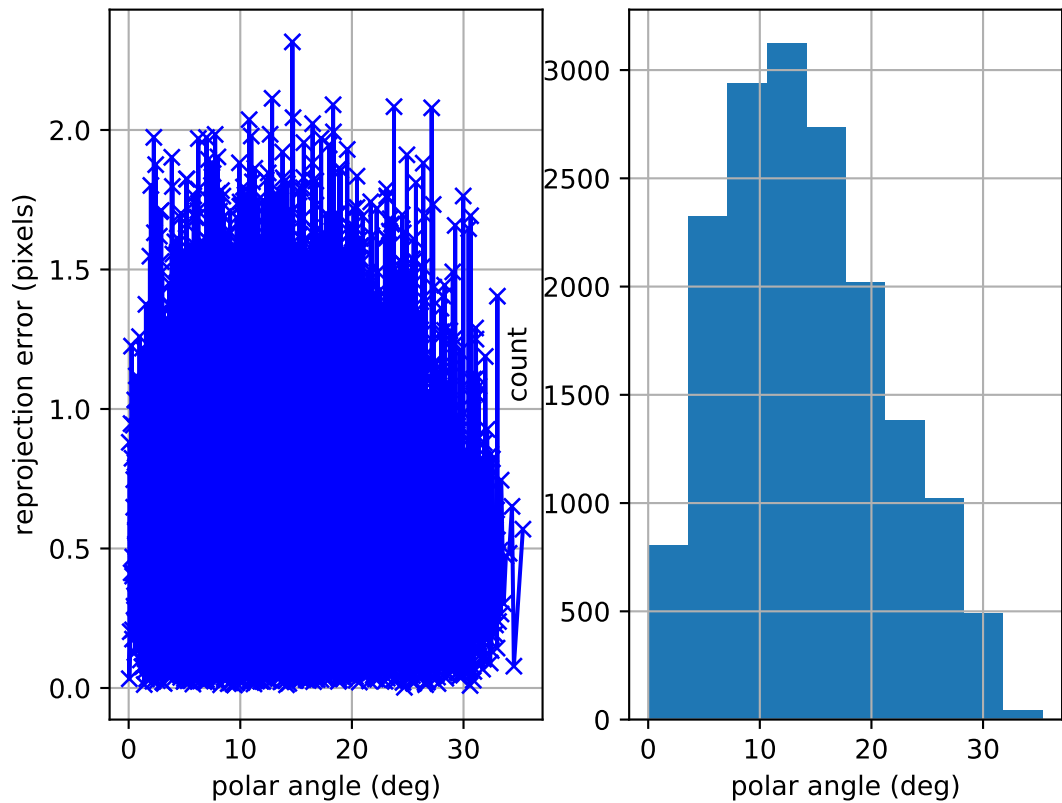
cam3: azimuthal error



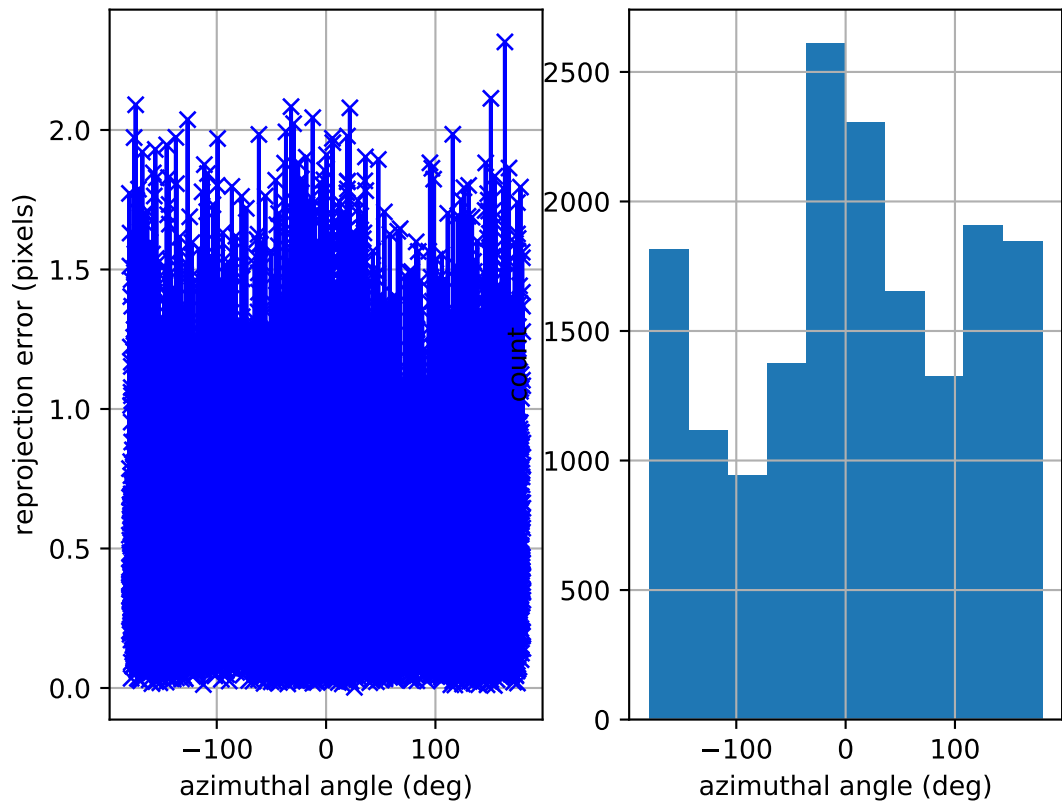
cam3: reprojection errors



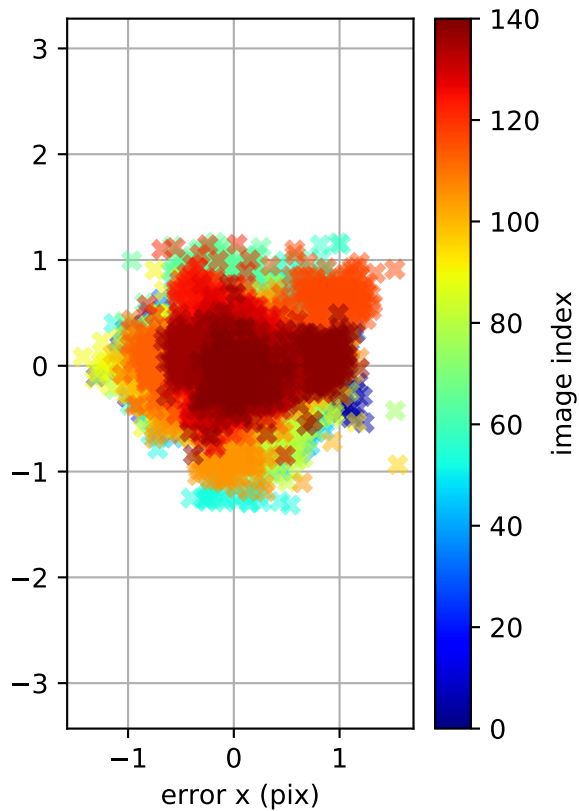
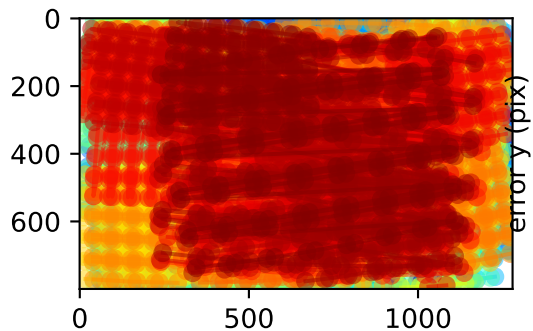
cam4: polar error



cam4: azimuthal error



cam4: reprojection errors



Location of removed outlier corners

