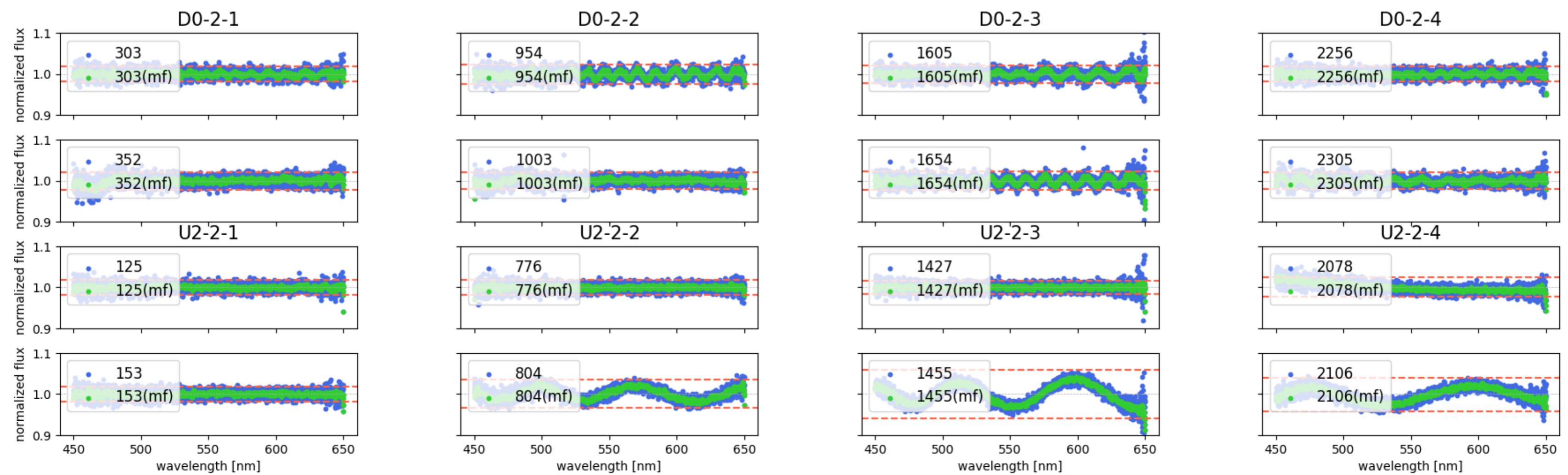
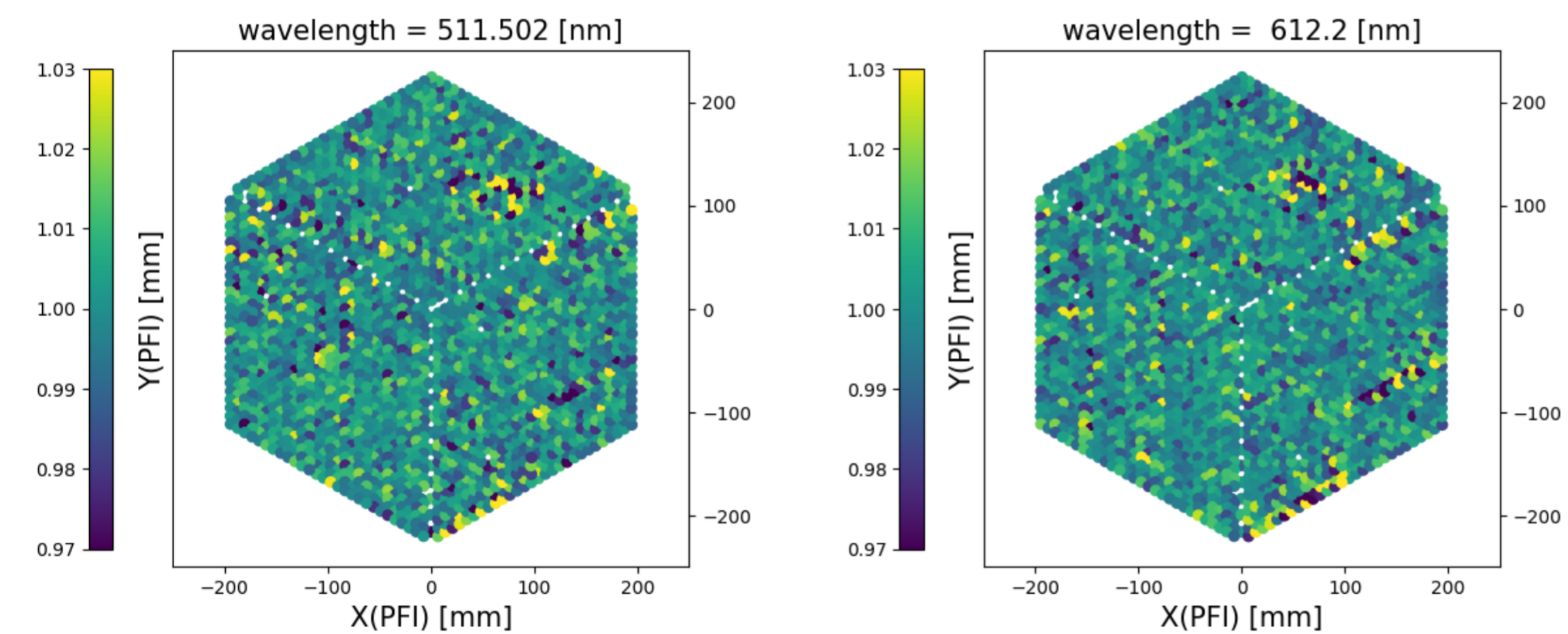
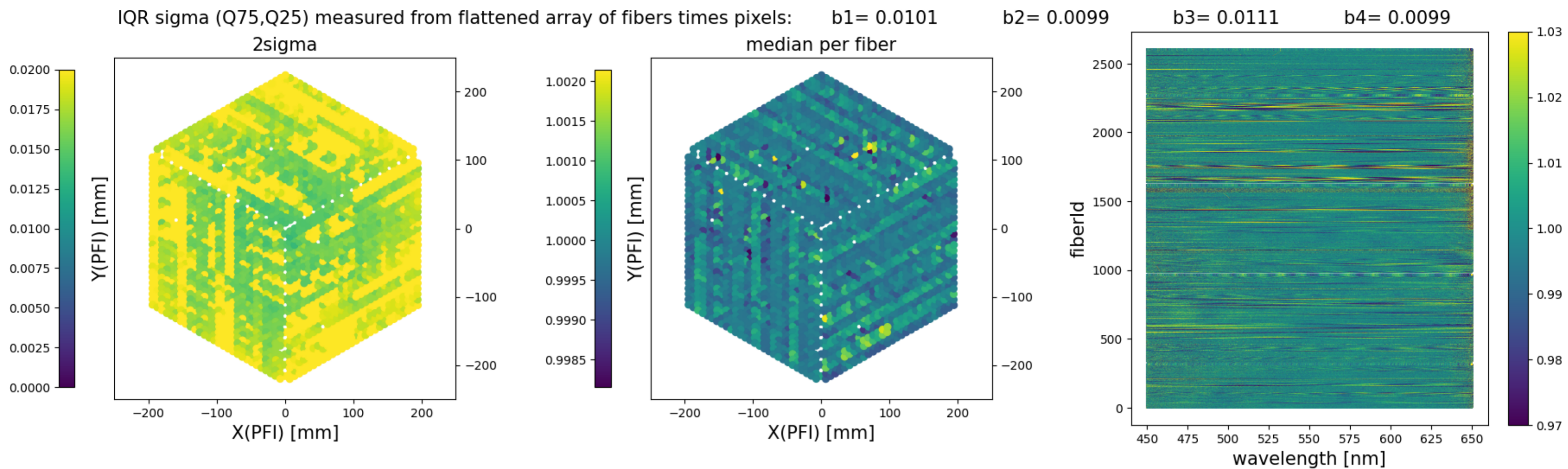
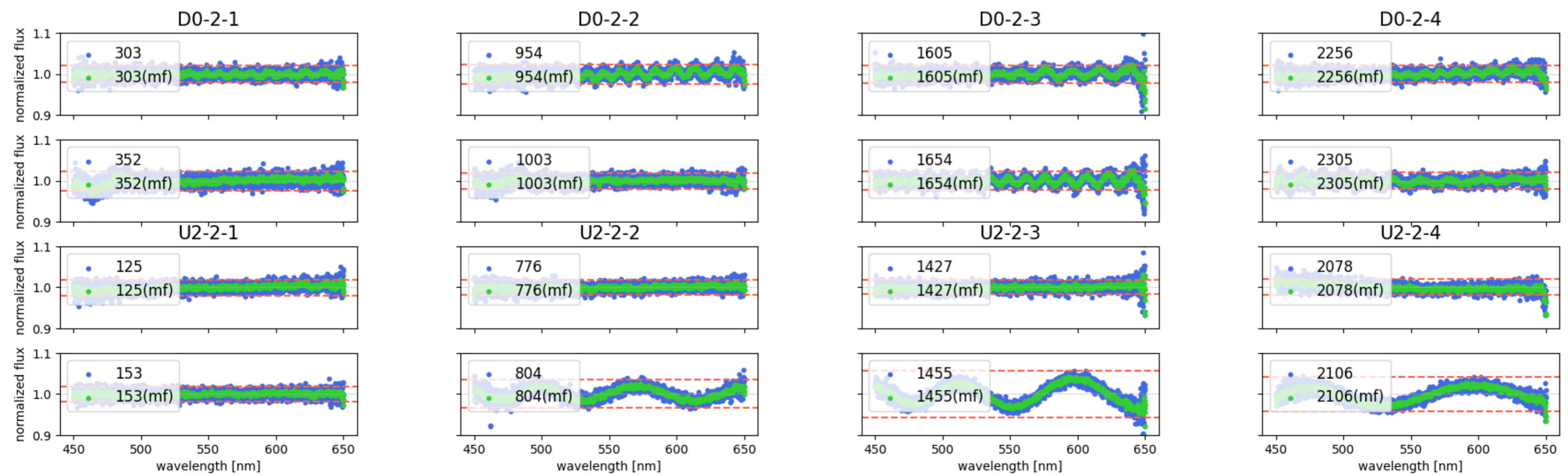
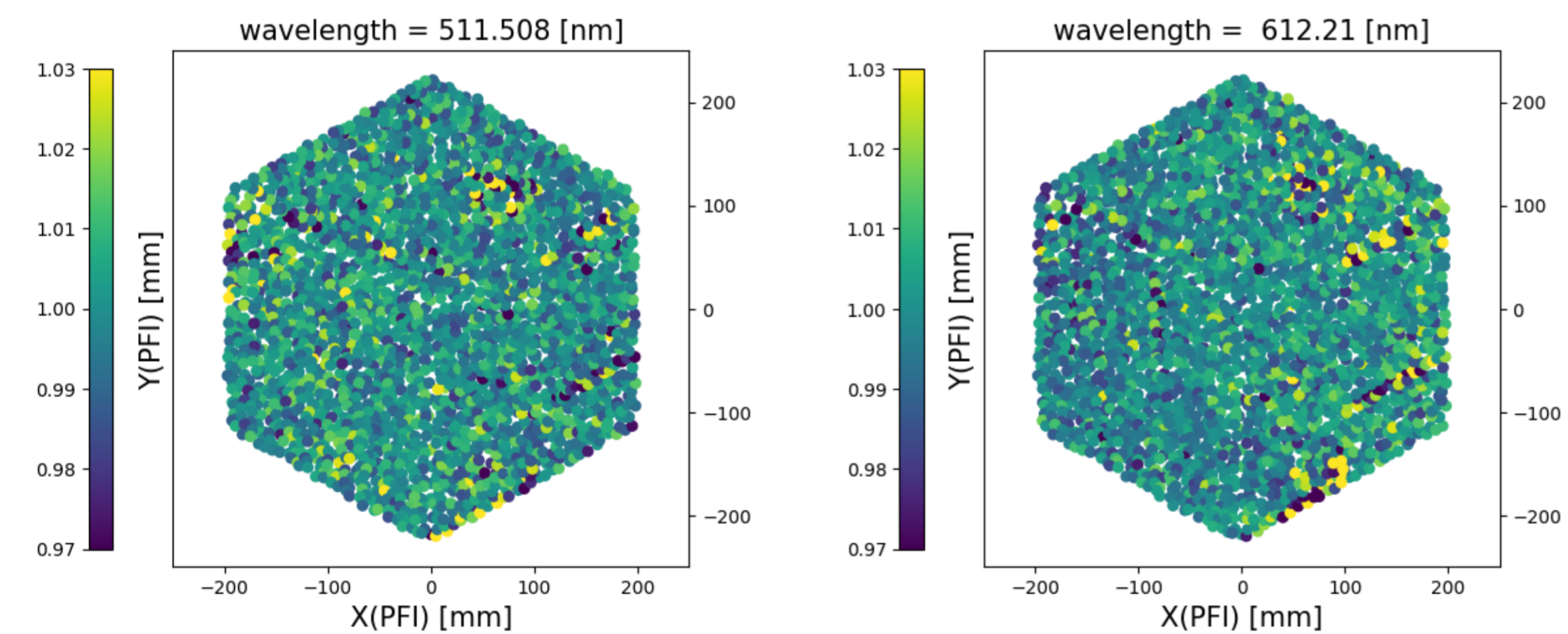
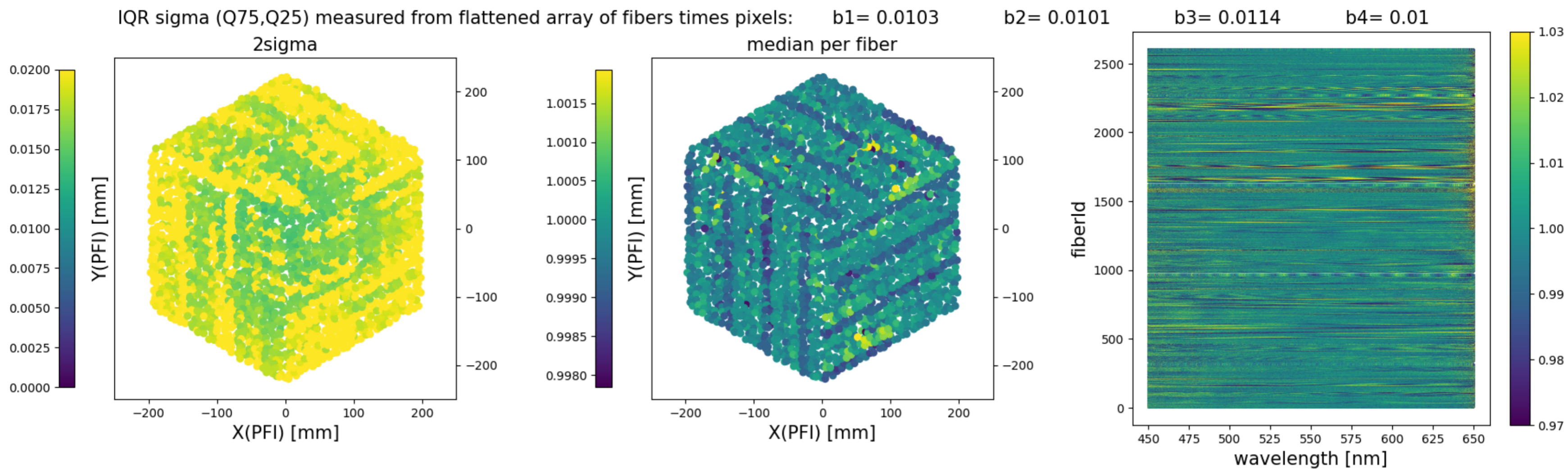


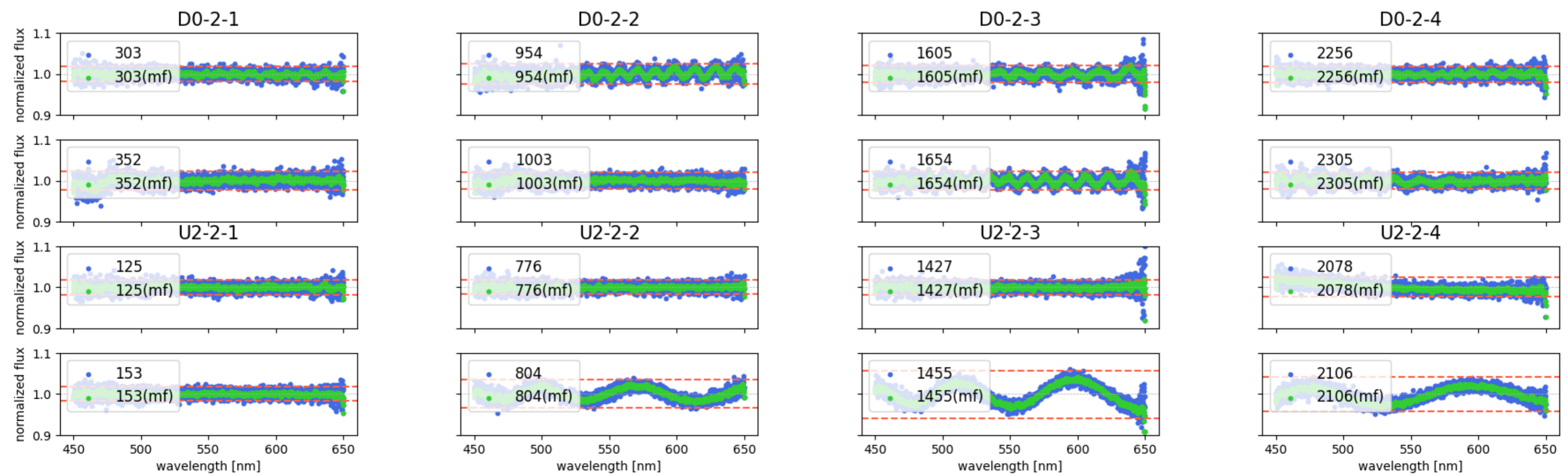
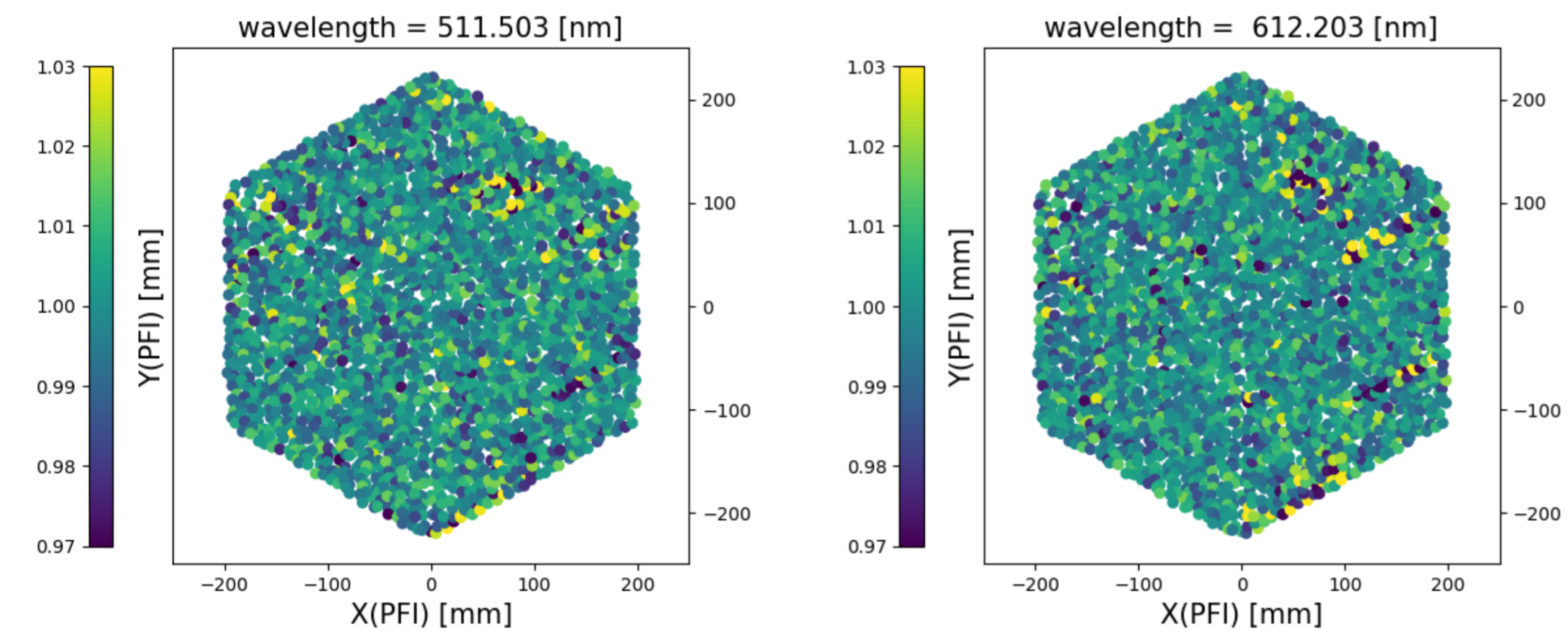
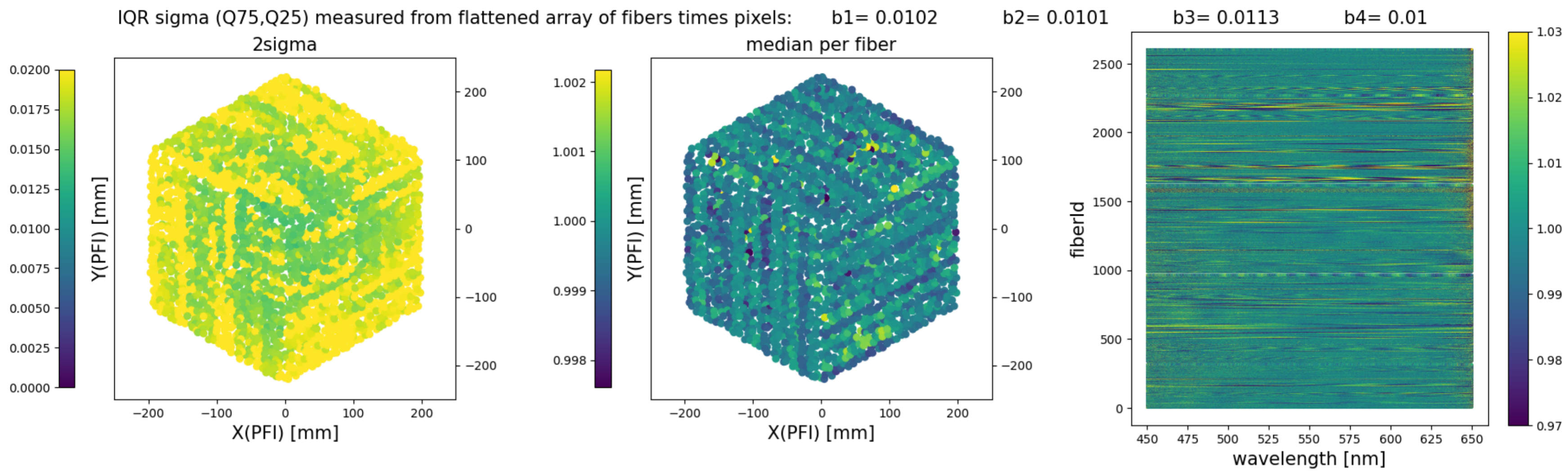
quartz - pfsArm : 115017 (2024-09-02 19:45:56 HST), arm=b, insrot = 0.0, azimuth = 322.0
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set1_115017.png



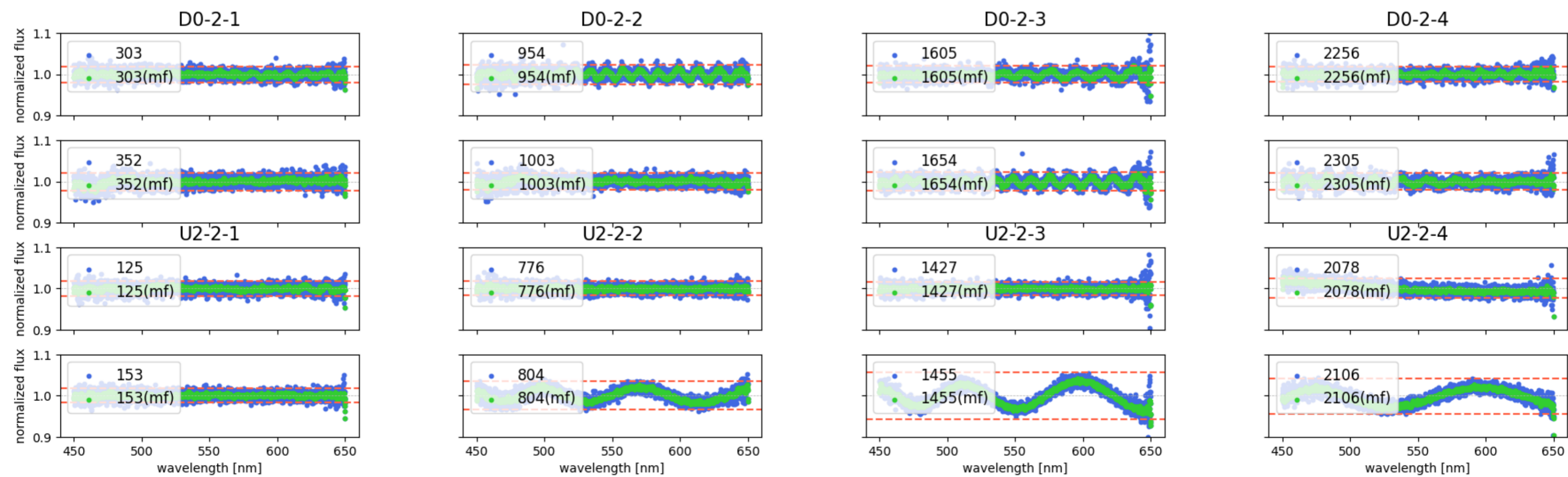
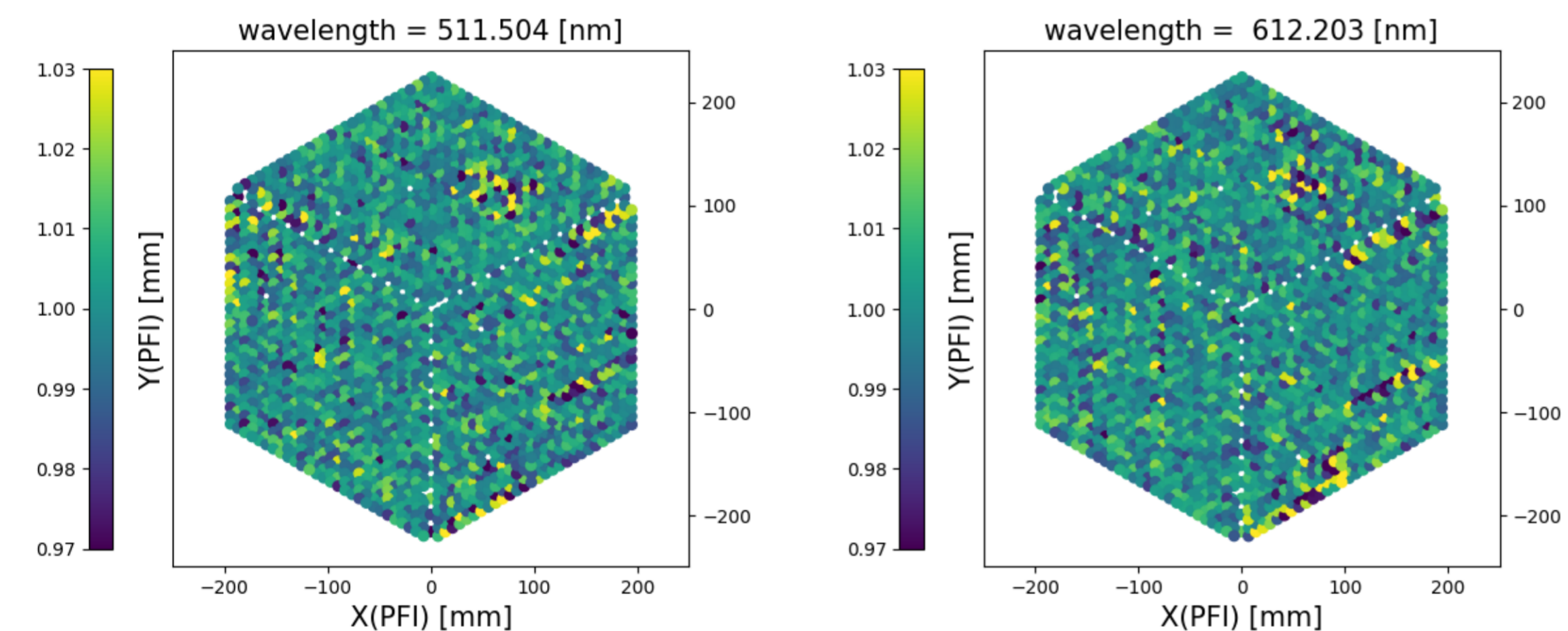
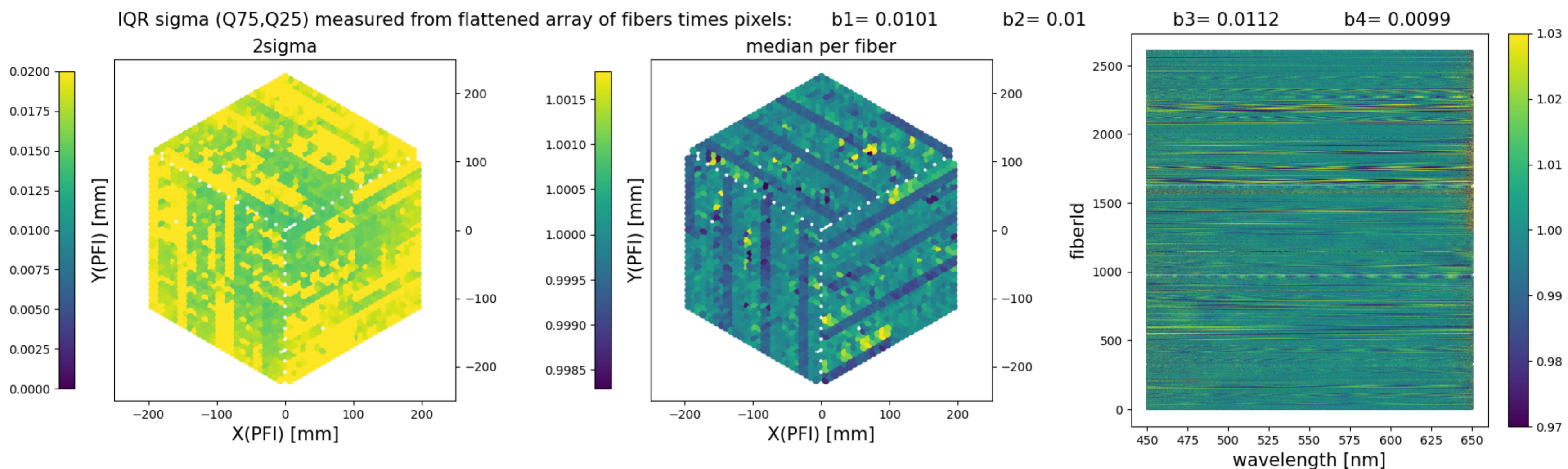
quartz - pfsArm :115023 (2024-09-02 20:38:49 HST), arm=b, insrot = -84.1, azimuth = 4.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set1_115023.png



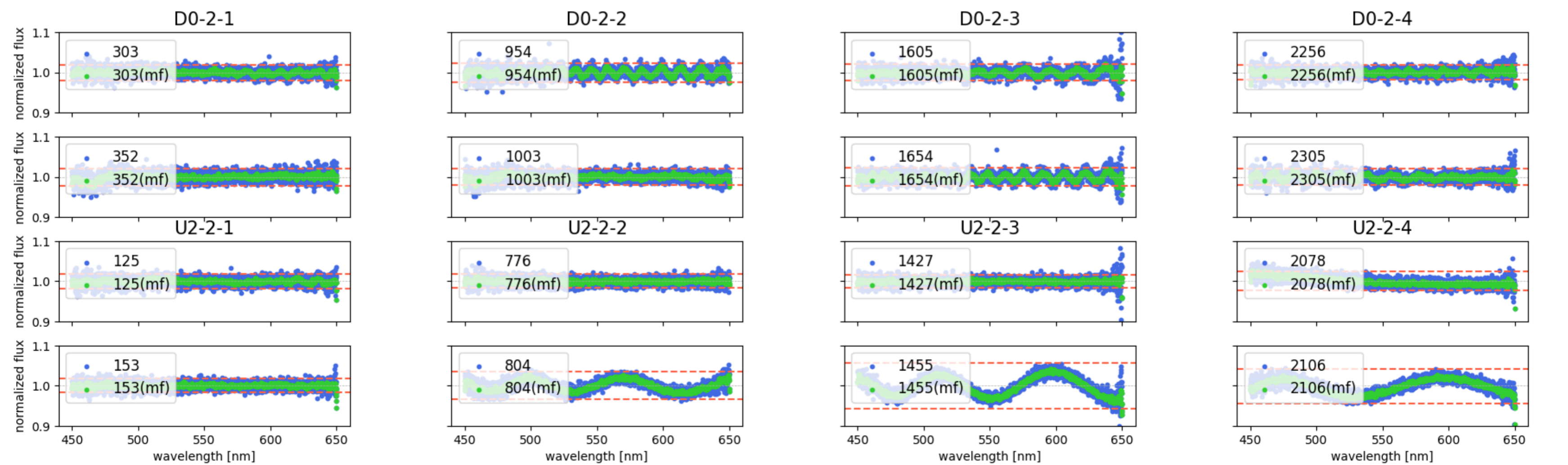
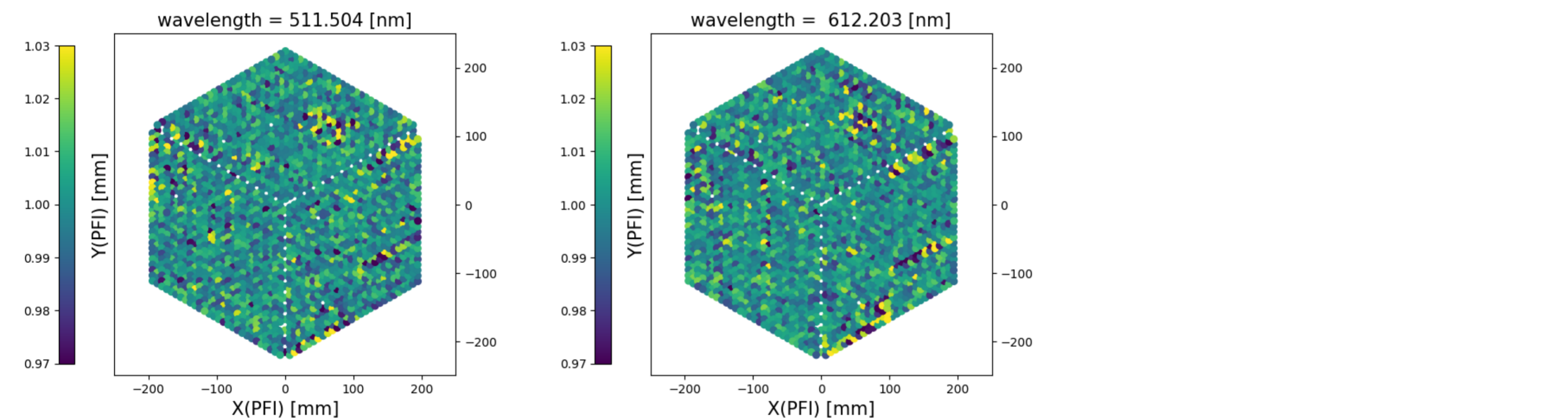
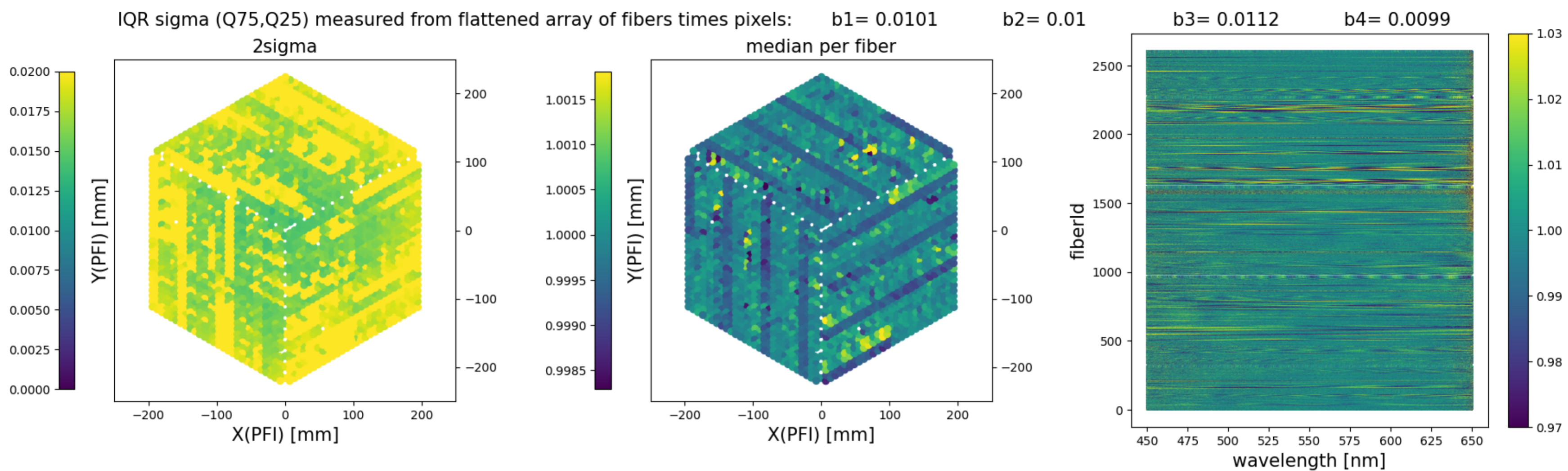
quartz - pfsArm :115024 (2024-09-02 20:43:23 HST), arm=b, insrot = -0.0, azimuth = 4.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set1_115024.png



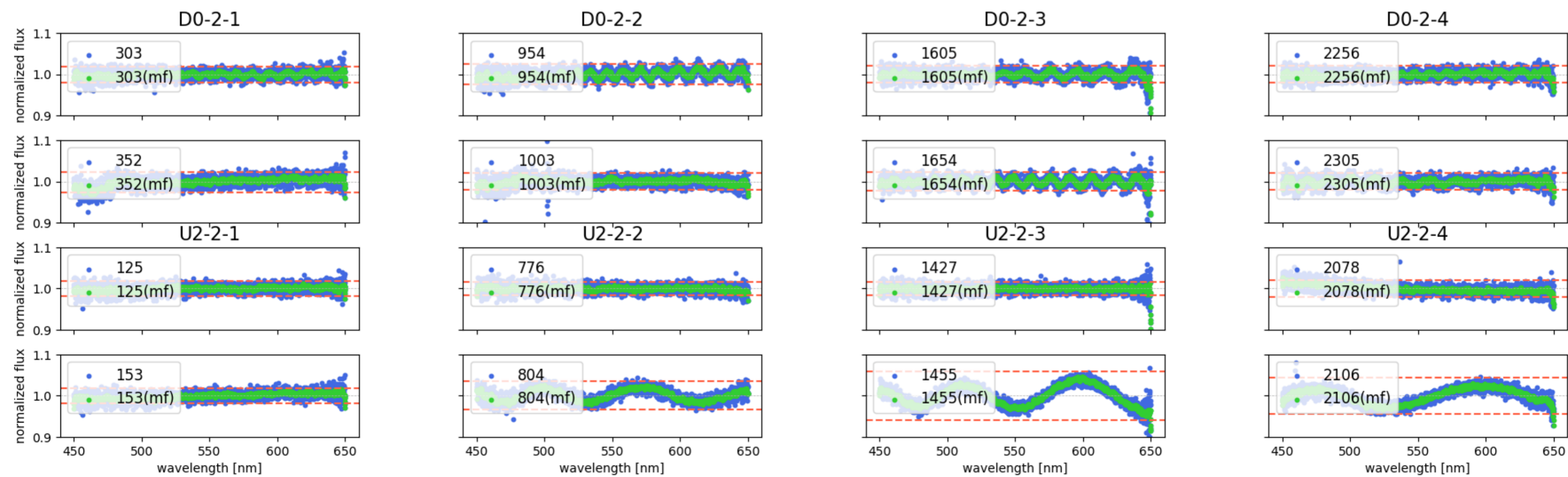
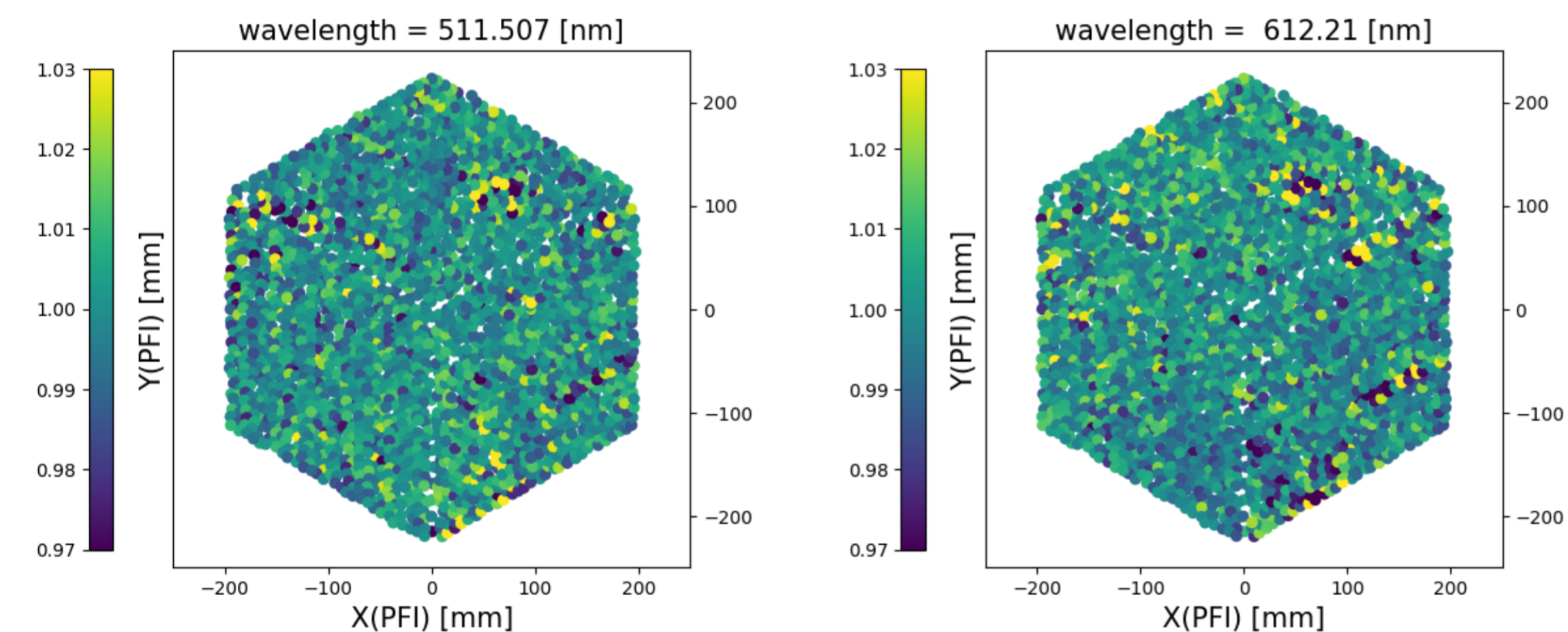
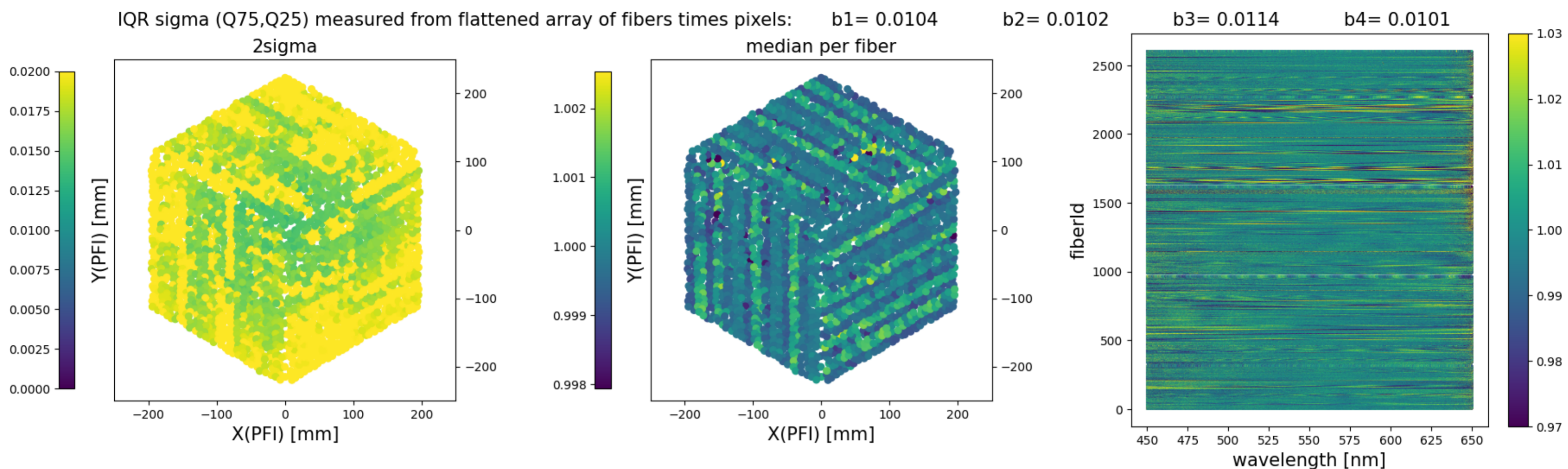
quartz - pfsArm :115026 (2024-09-02 20:46:29 HST), arm=b, insrot = -0.0, azimuth = 4.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set1_115026.png



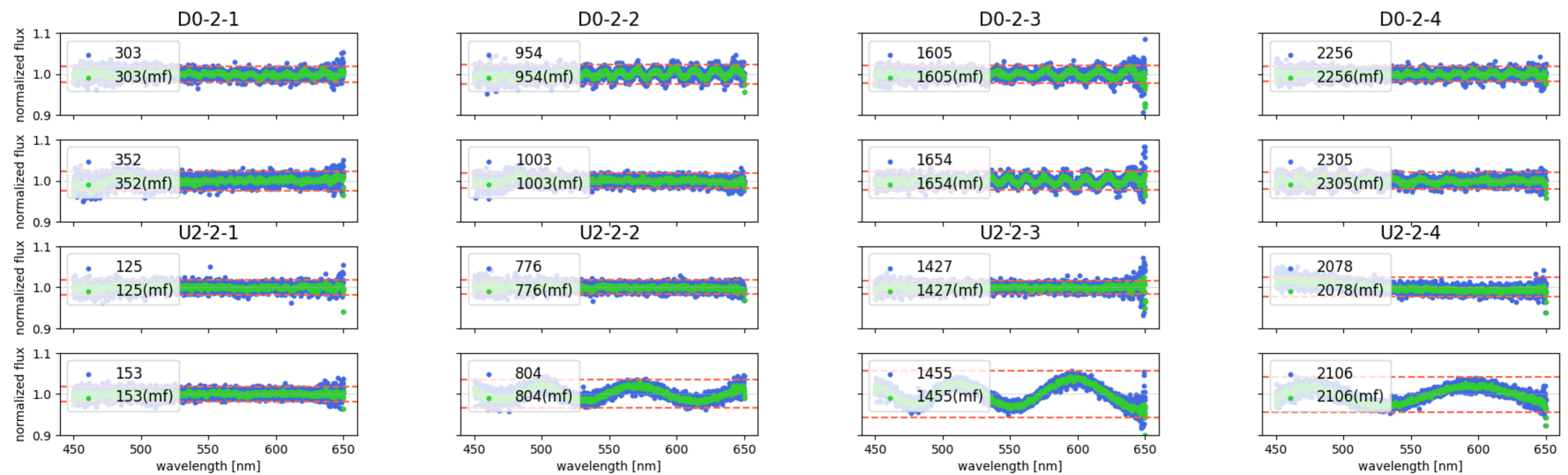
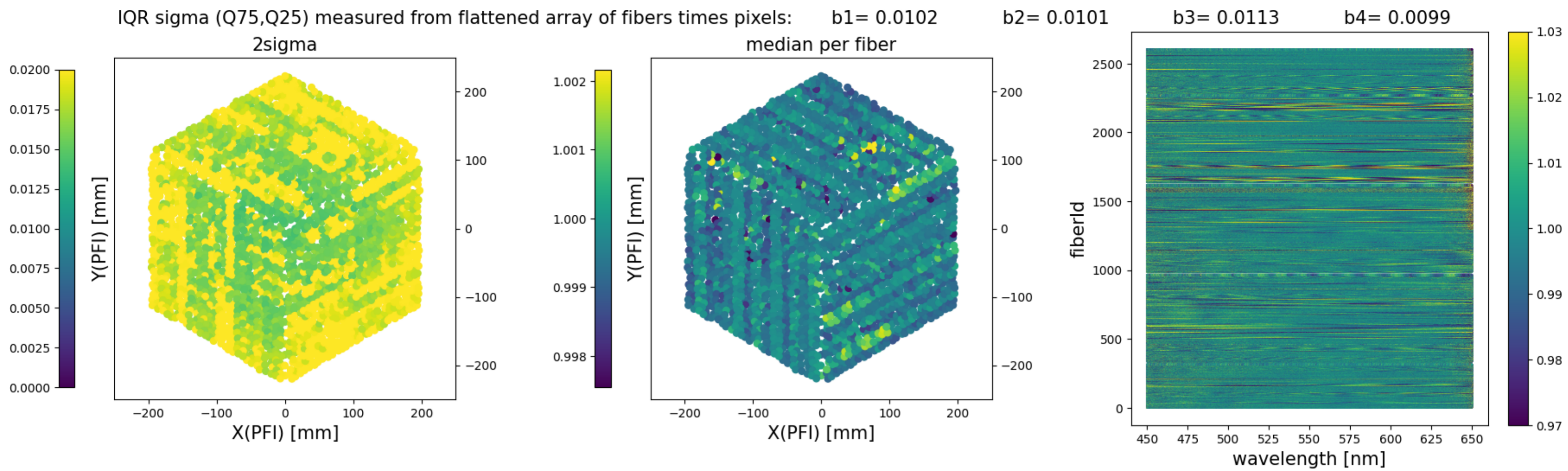
quartz - pfsArm :115026 (2024-09-02 20:46:29 HST), arm=b, insrot = -0.0, azimuth = 4.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set2_115026.png



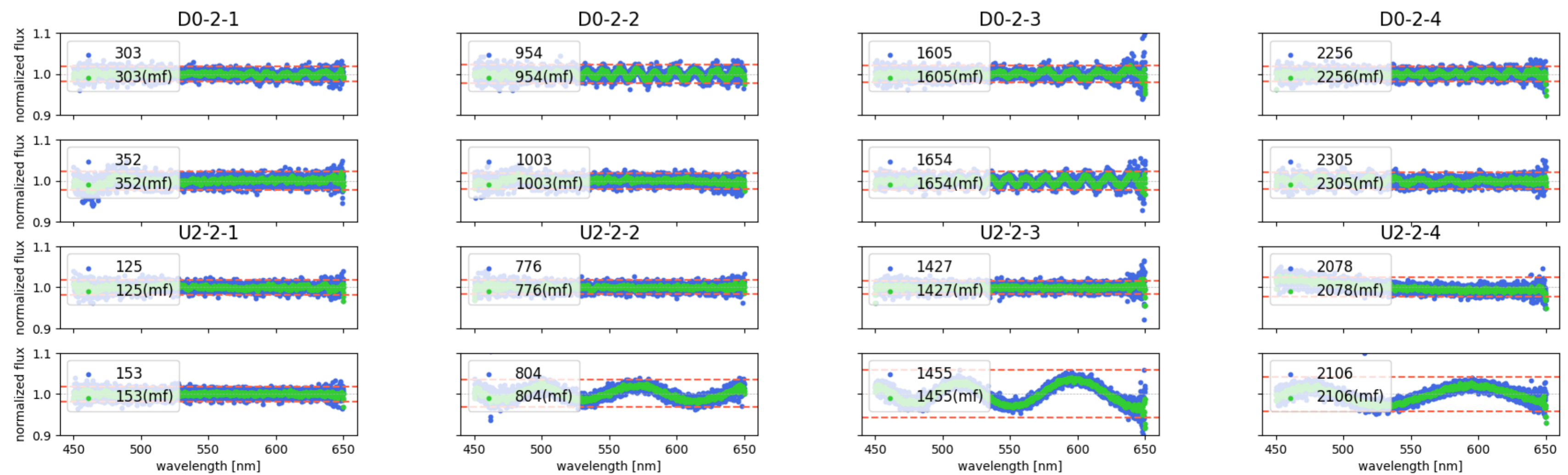
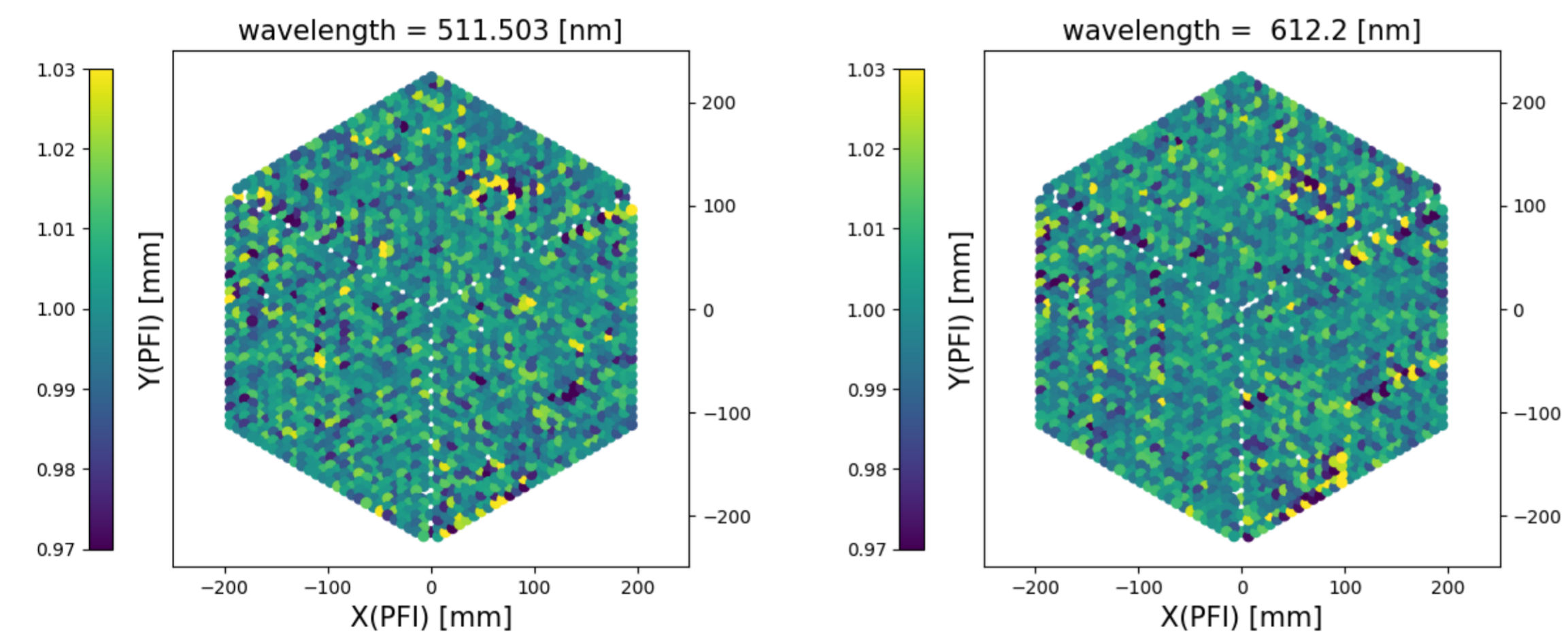
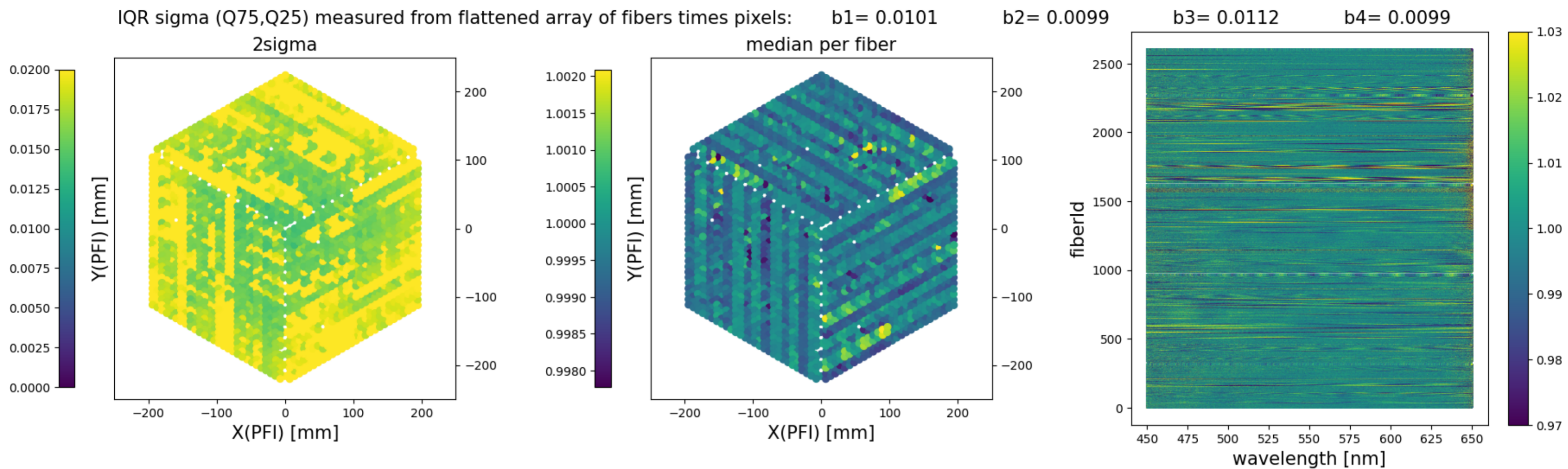
quartz - pfsArm : 115030 (2024-09-02 21:29:20 HST), arm=b, insrot = 100.6, azimuth = 310.3
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set2_115030.png



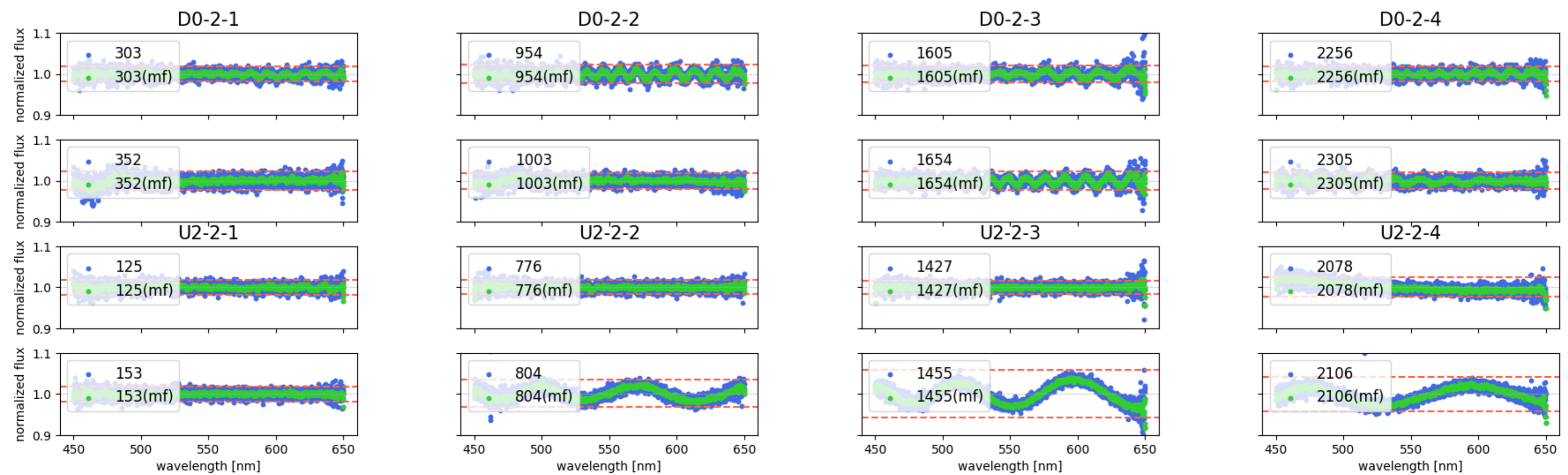
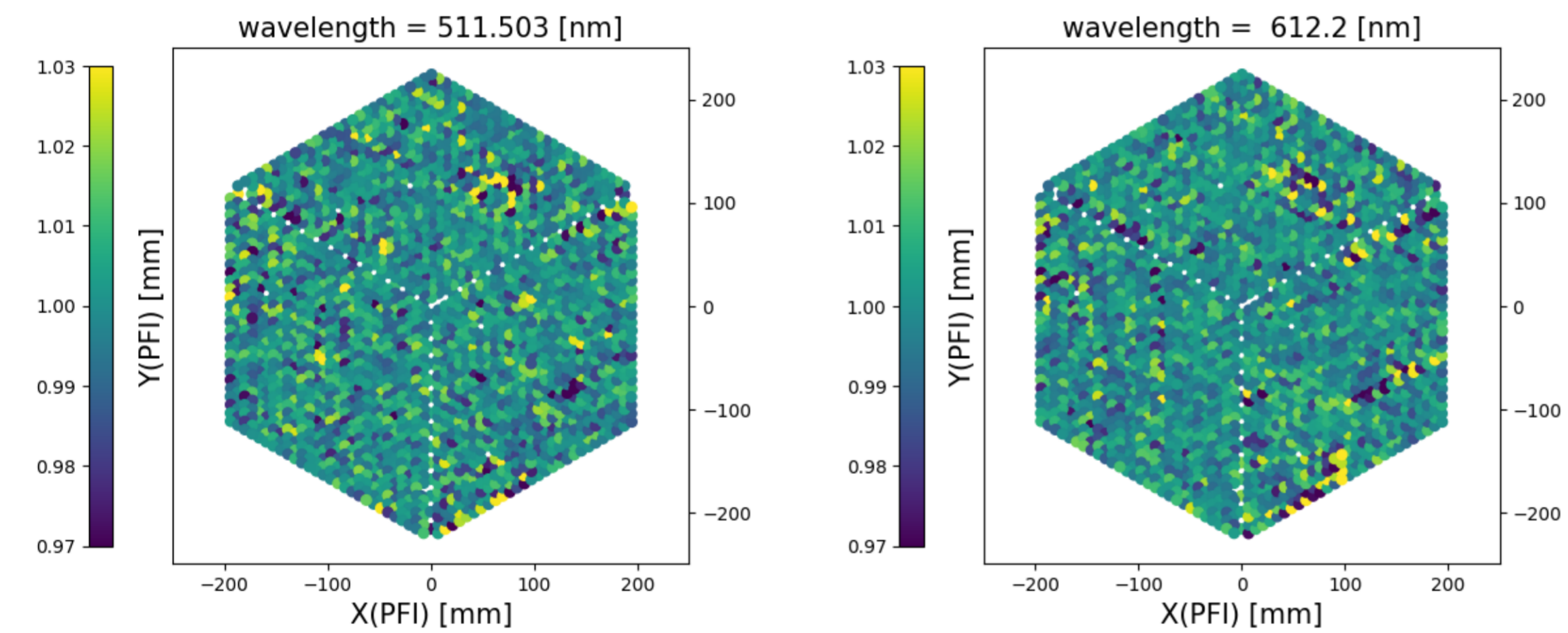
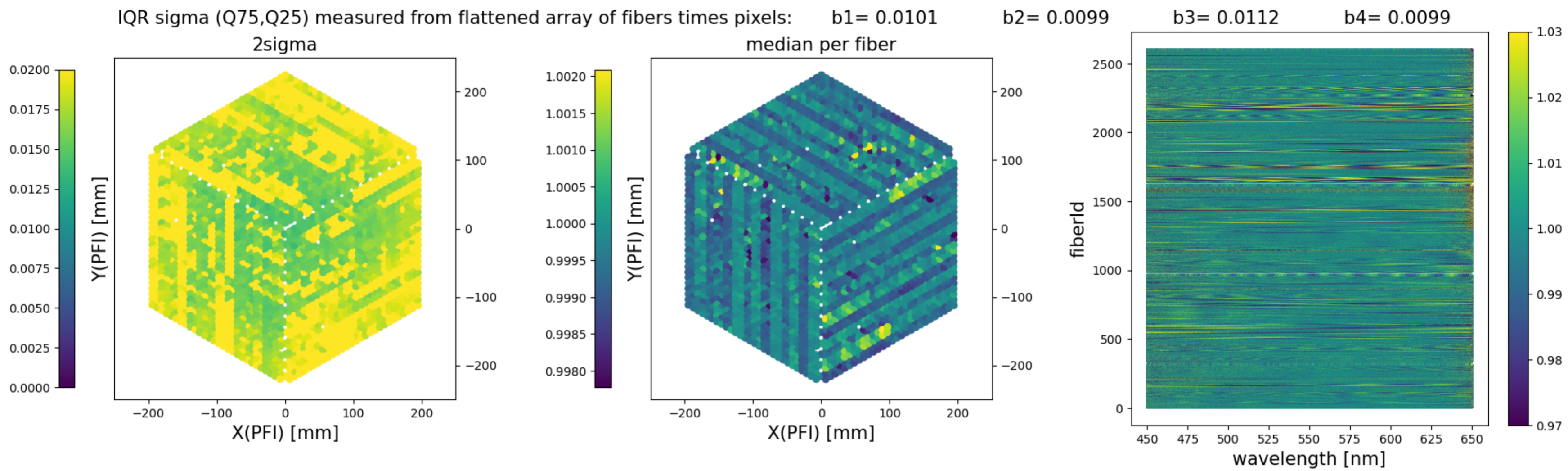
quartz - pfsArm : 115031 (2024-09-02 21:32:37 HST), arm=b, insrot = 0.0, azimuth = 310.3
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set2_115031.png



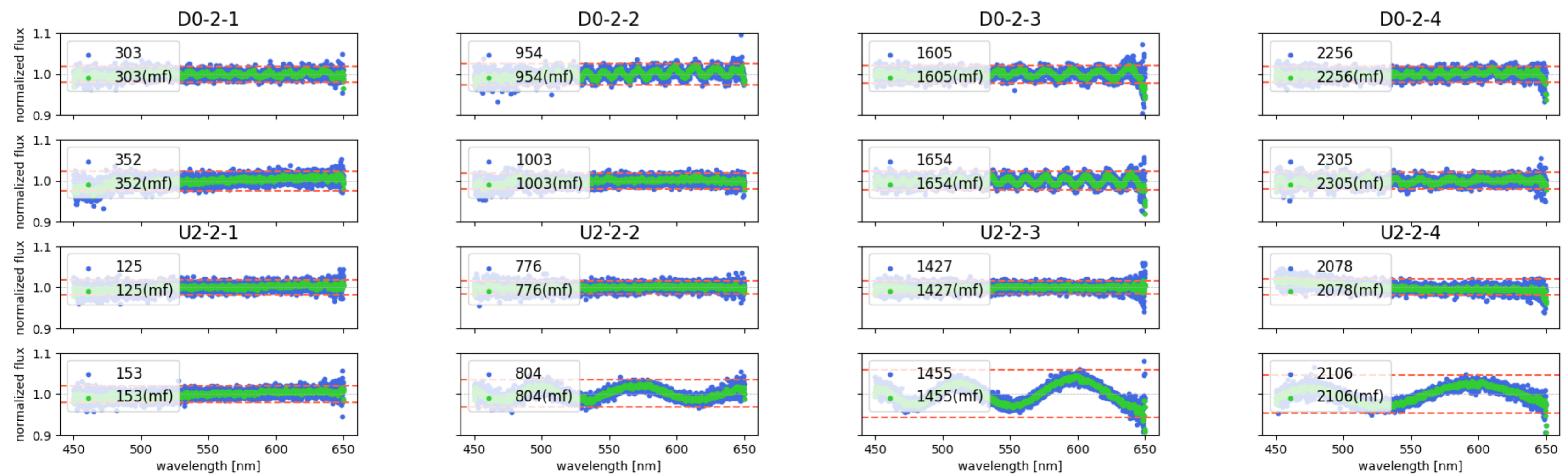
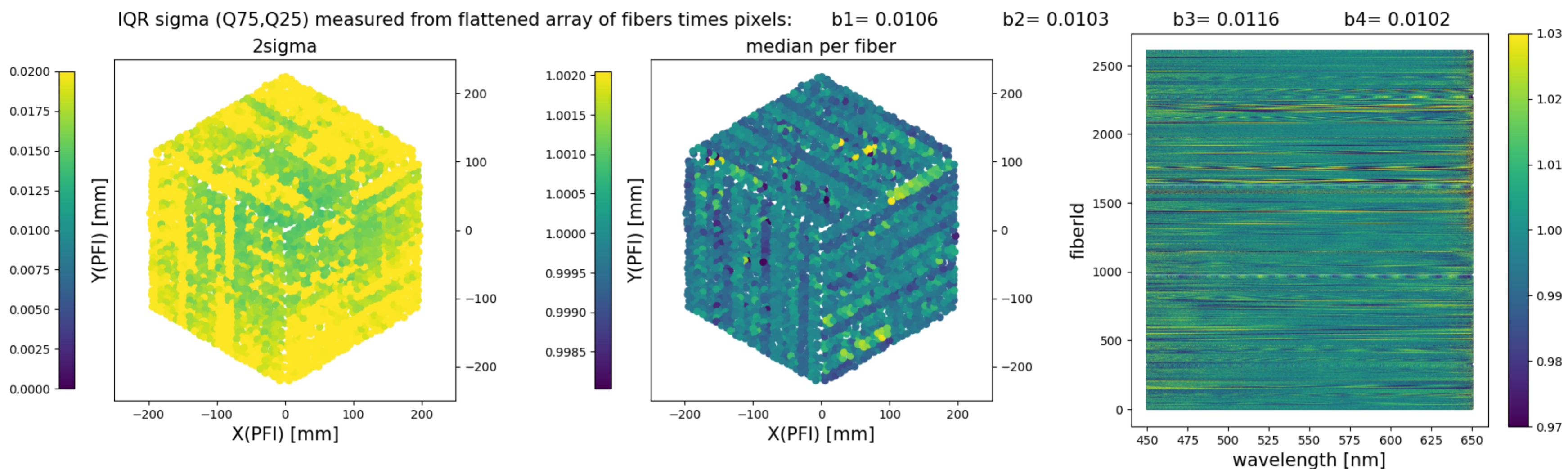
quartz - pfsArm : 115033 (2024-09-02 21:35:43 HST), arm=b, insrot = 0.0, azimuth = 310.3
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set2_115033.png



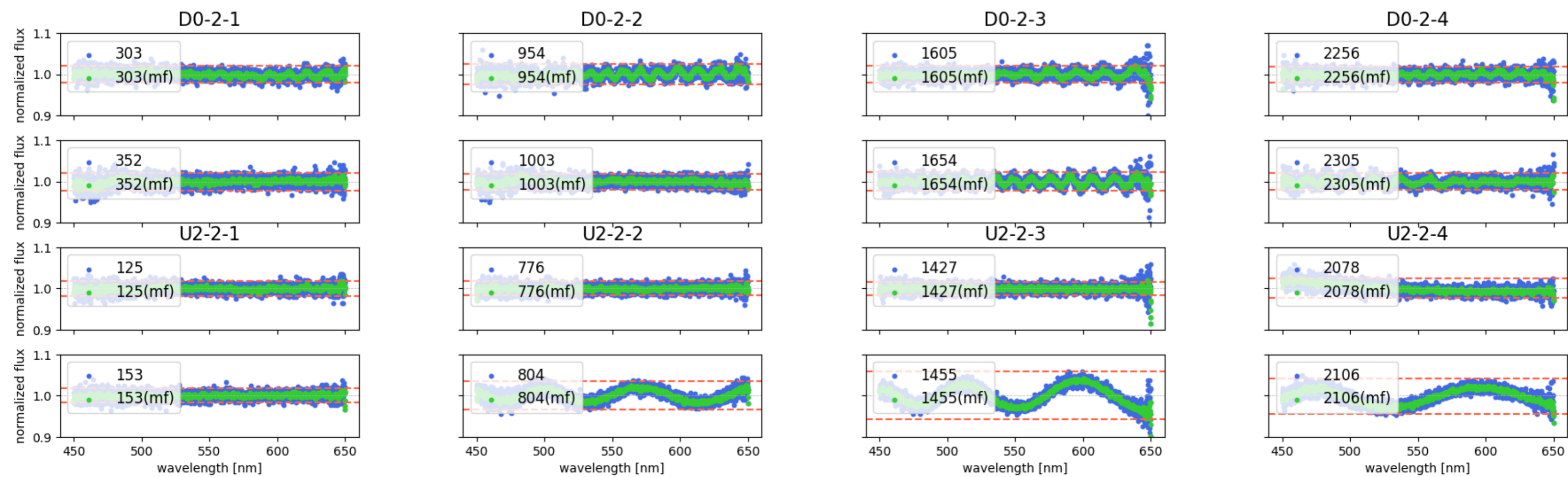
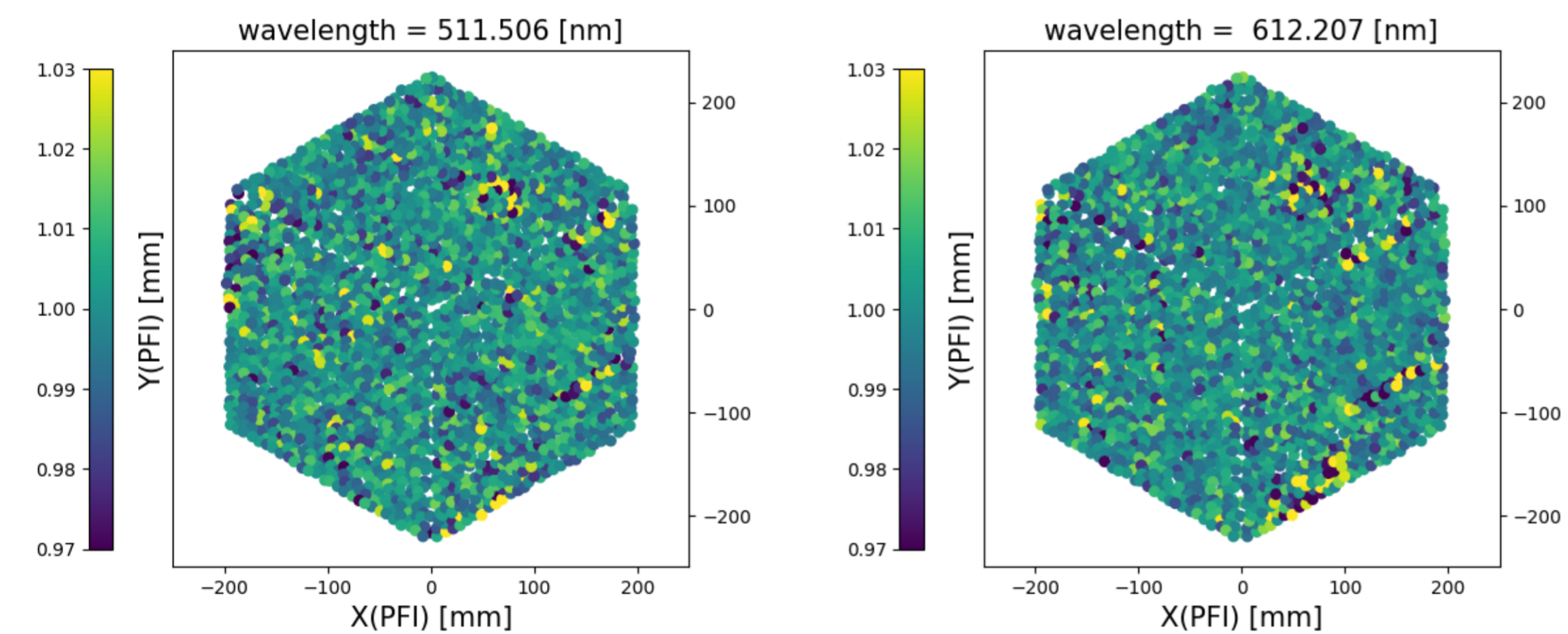
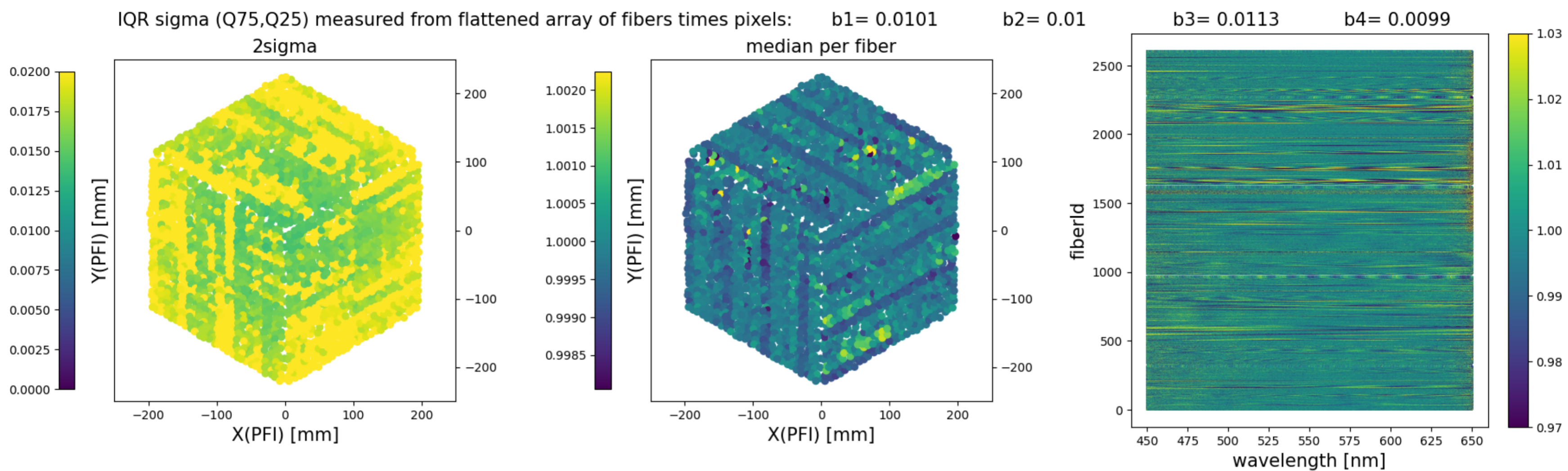
quartz - pfsArm : 115033 (2024-09-02 21:35:43 HST), arm=b, insrot = 0.0, azimuth = 310.3
/kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
file at pfsArm/20241209/b-arm/set3_115033.png



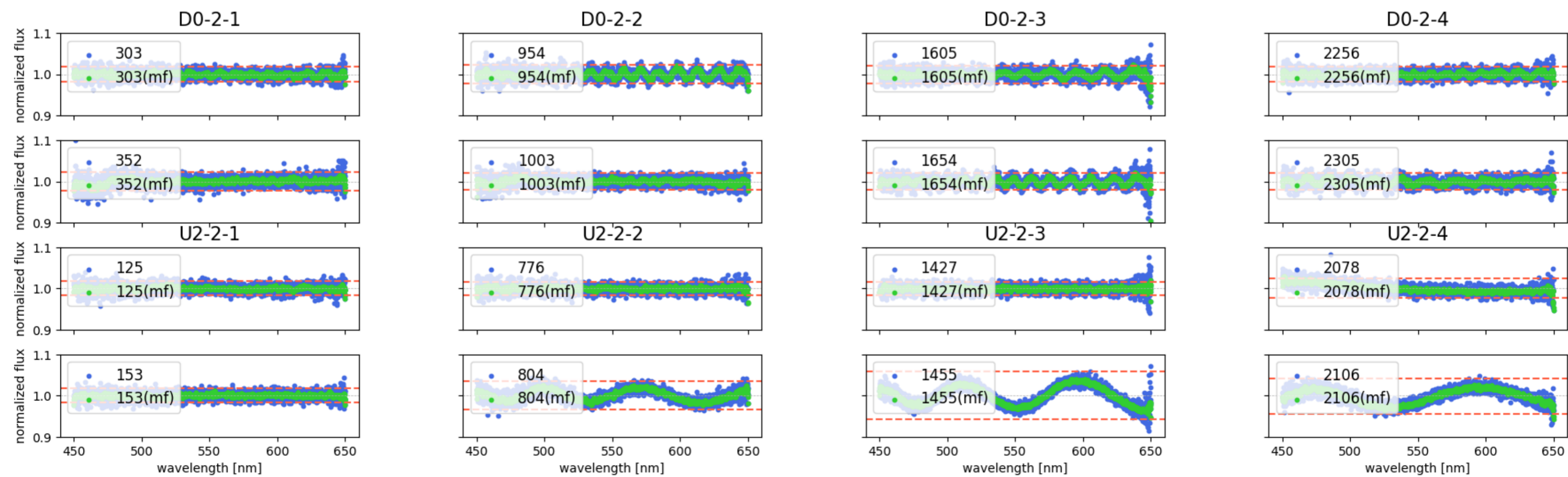
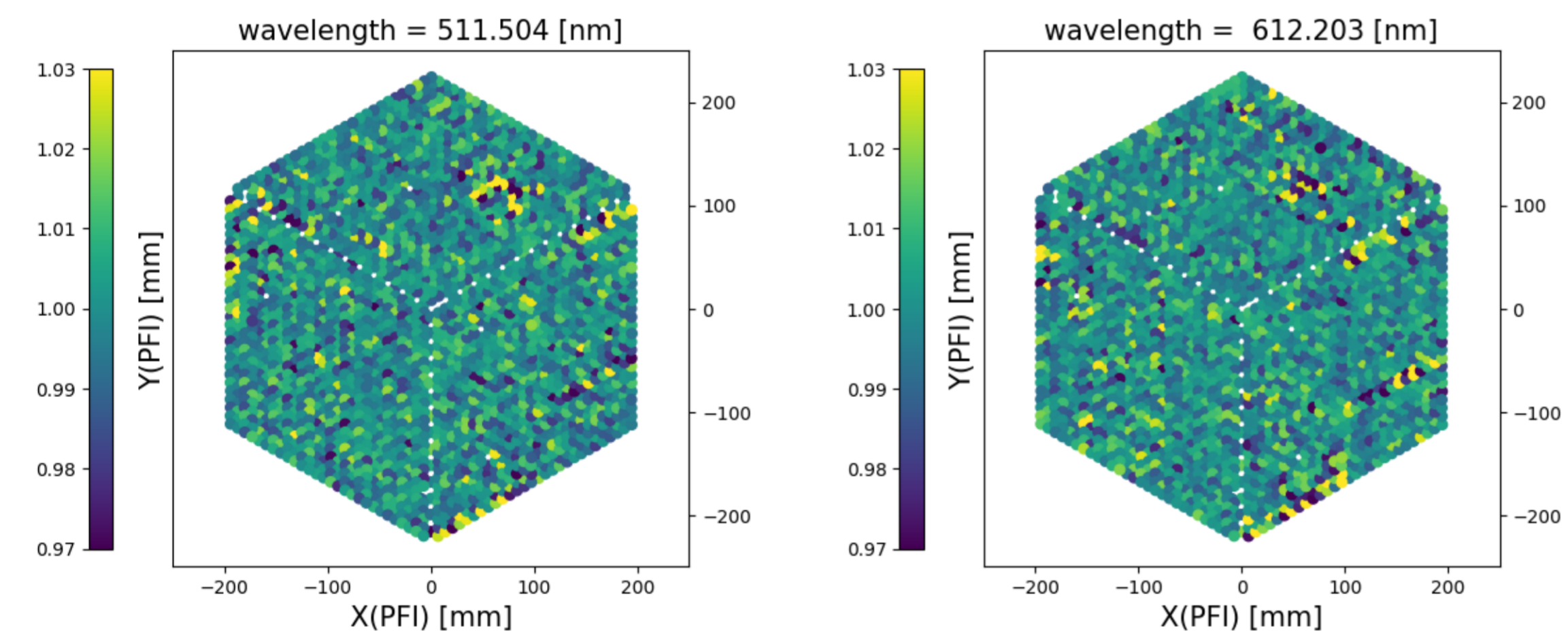
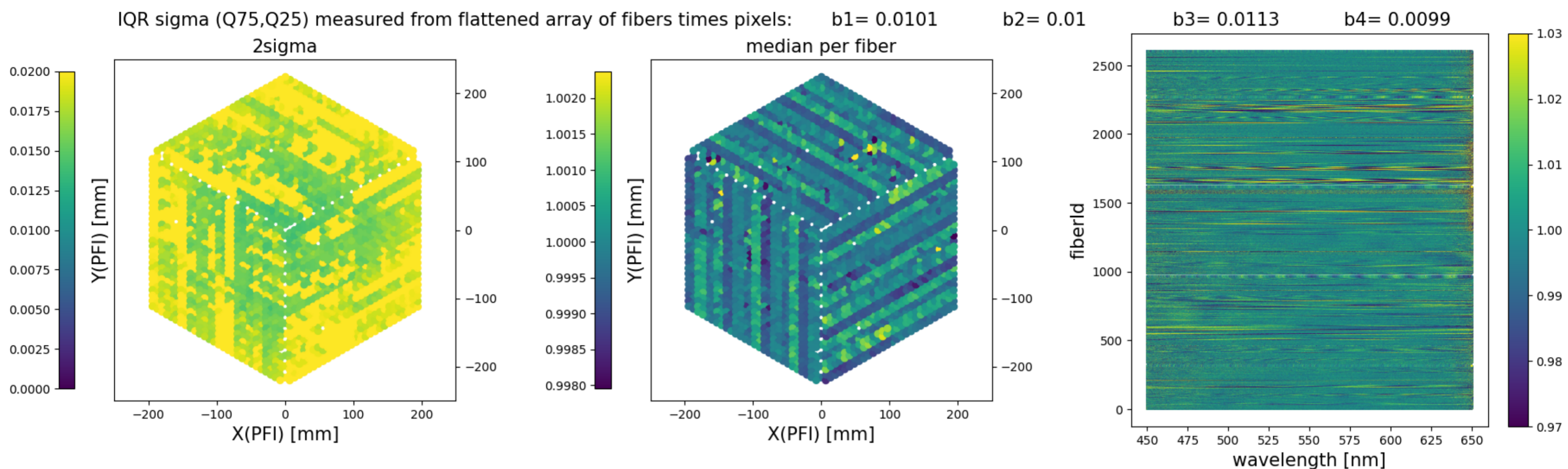
quartz - pfsArm :115037 (2024-09-02 22:15:50 HST), arm=b, insrot = 115.5, azimuth = 17.7
/kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
file at pfsArm/20241209/b-arm/set3_115037.png



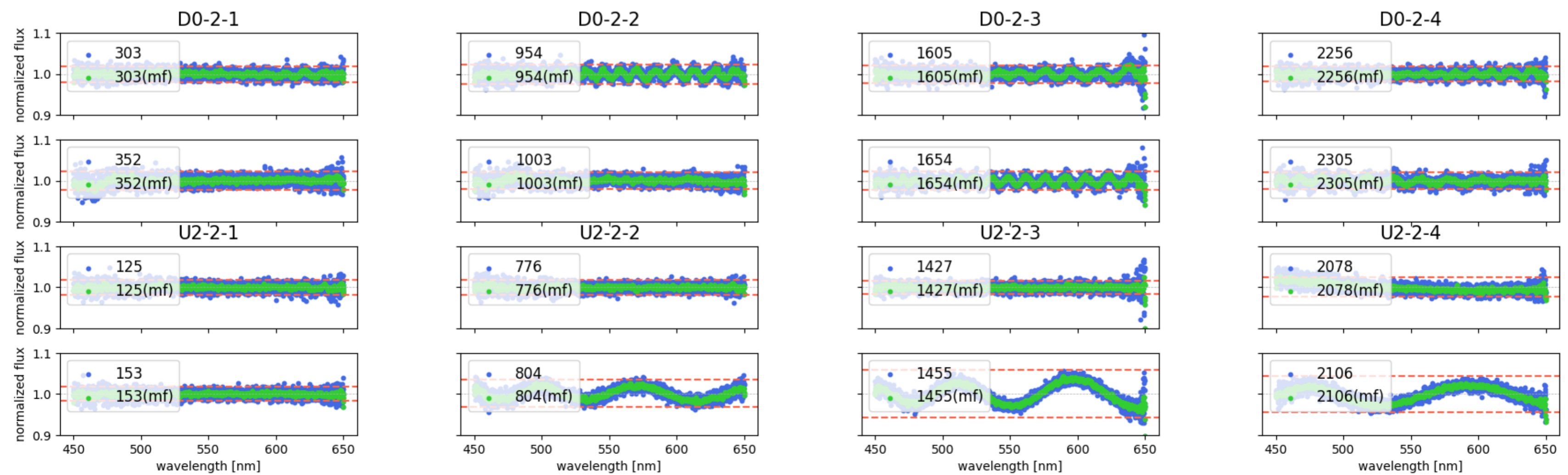
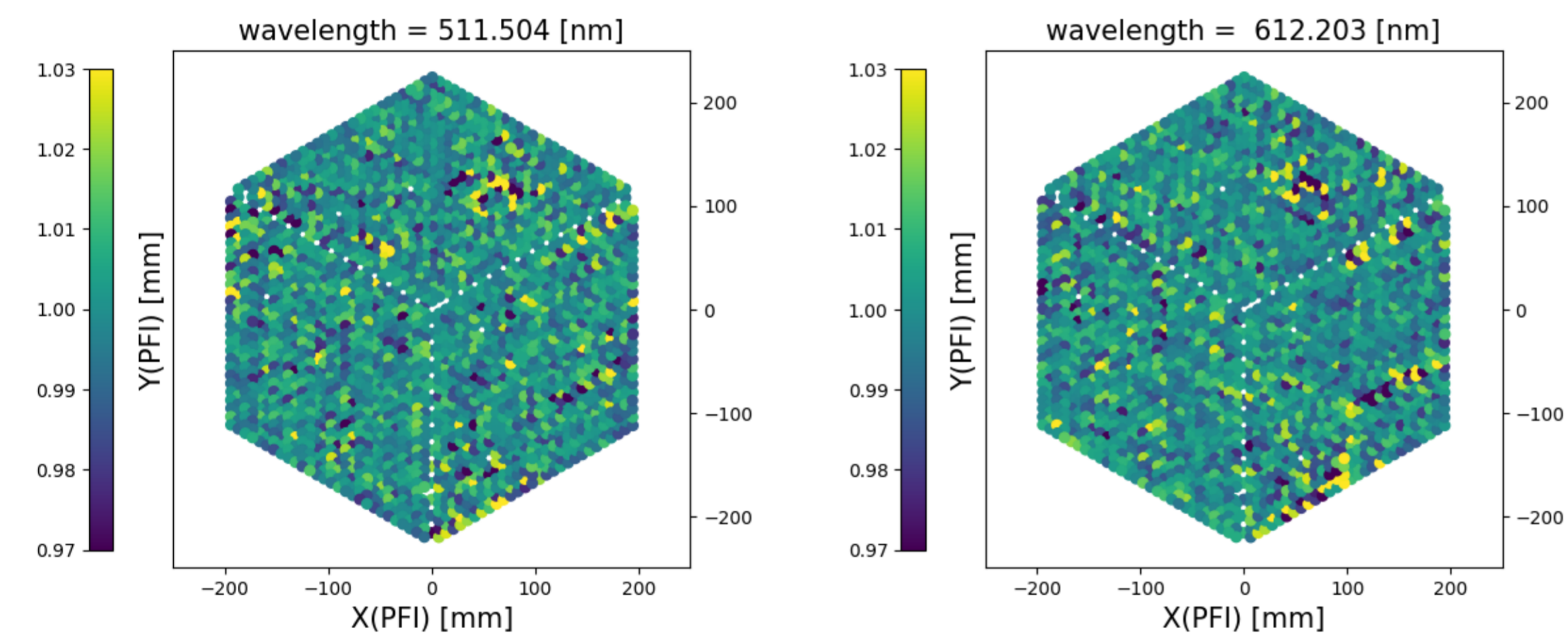
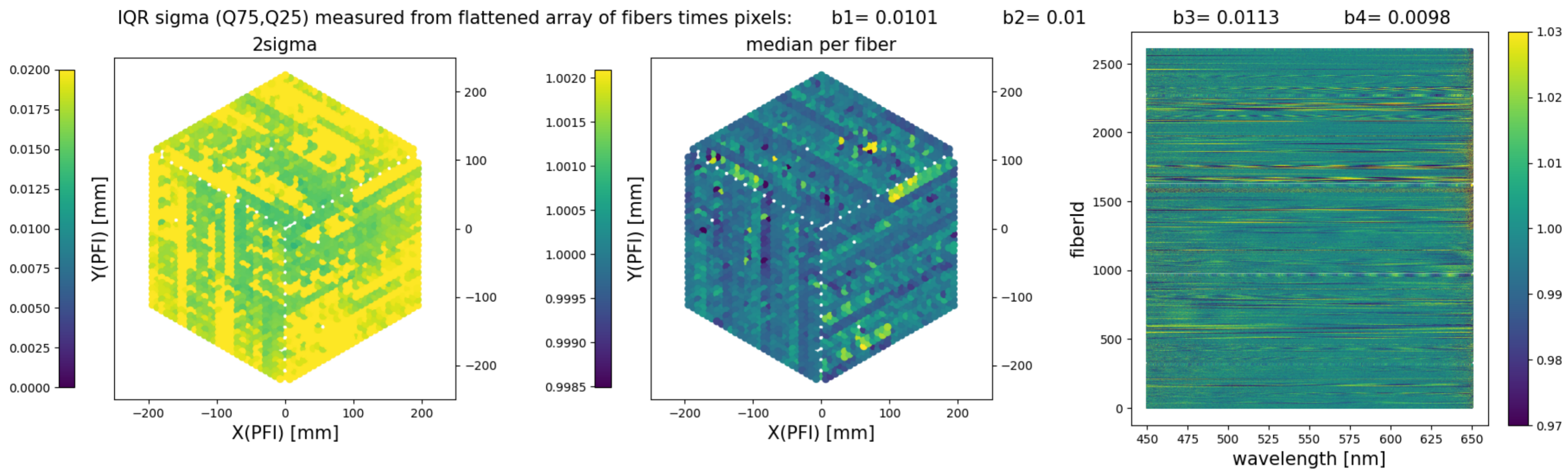
quartz - pfsArm :115038 (2024-09-02 22:19:29 HST), arm=b, insrot = -0.0, azimuth = 17.7
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set3_115038.png



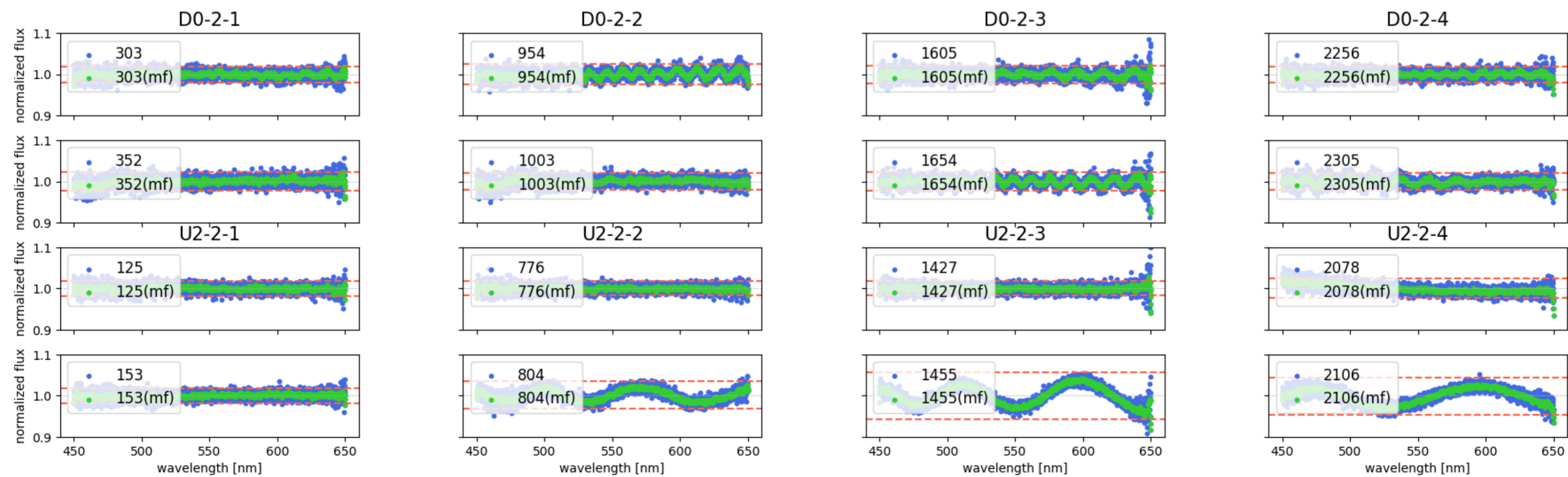
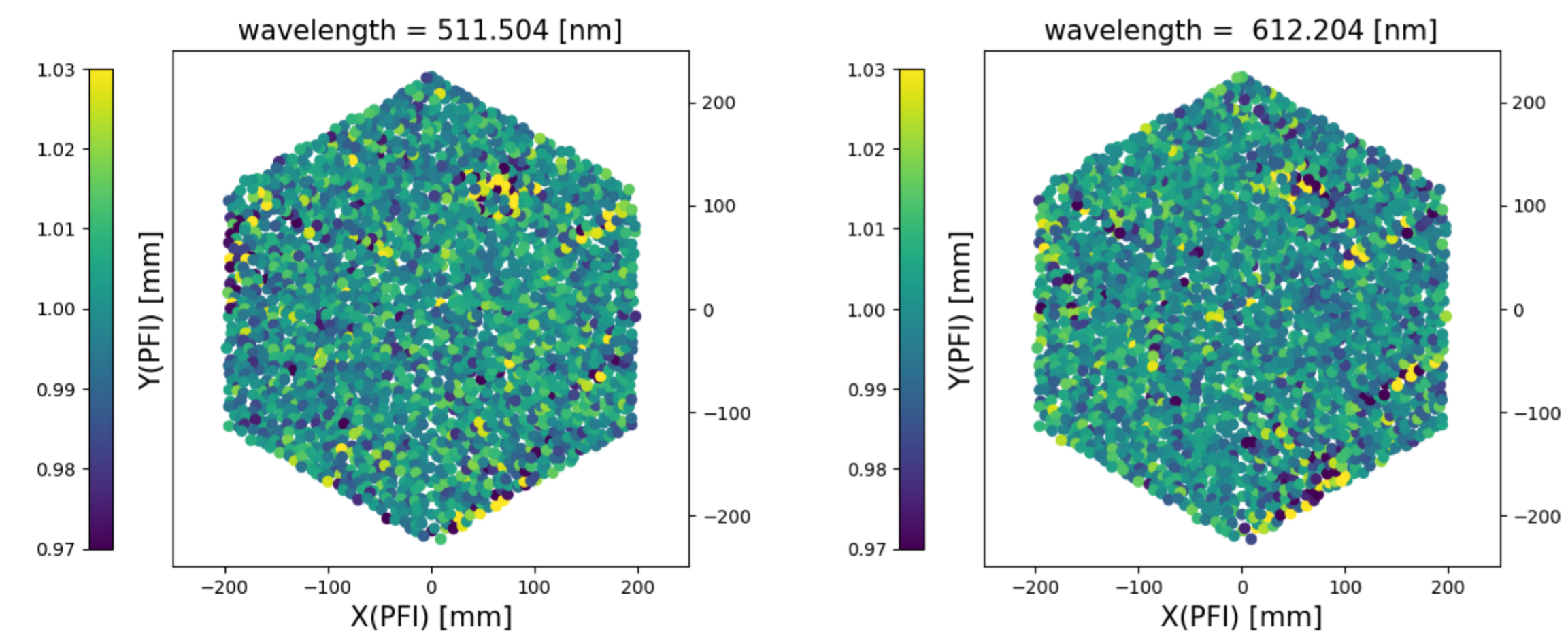
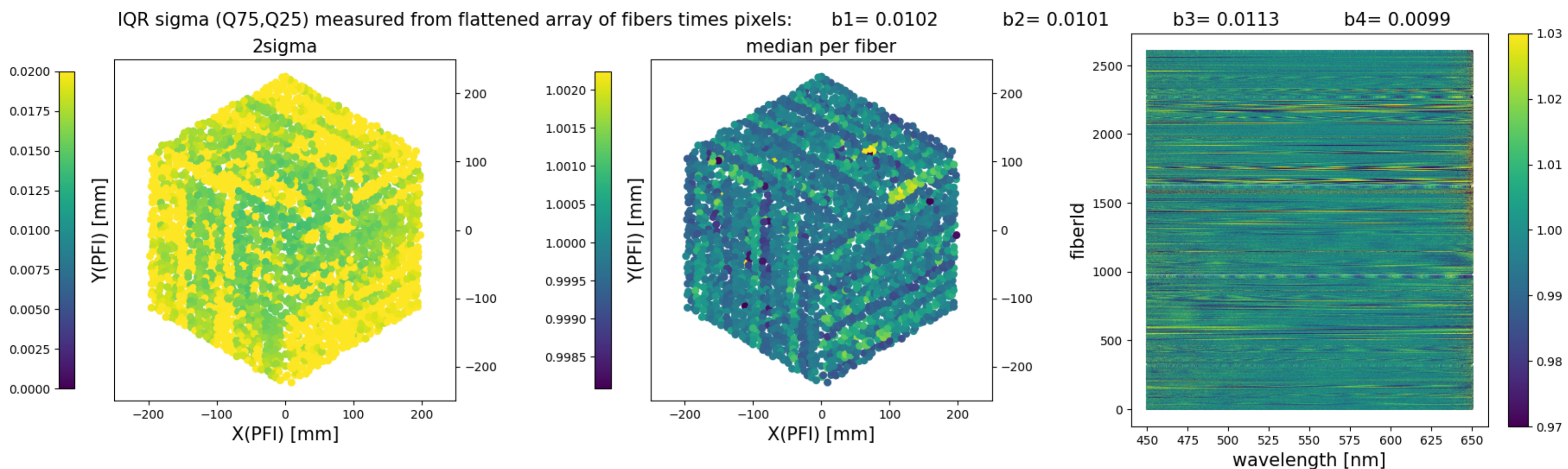
quartz - pfsArm :115040 (2024-09-02 22:22:24 HST), arm=b, insrot = -0.0, azimuth = 17.7
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set3_115040.png



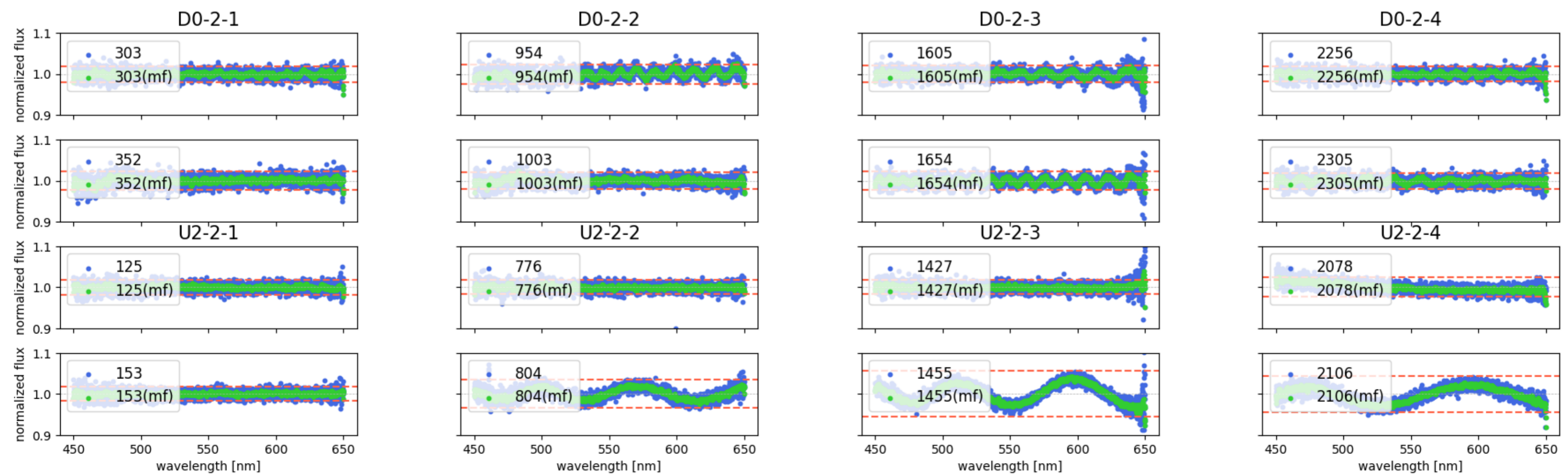
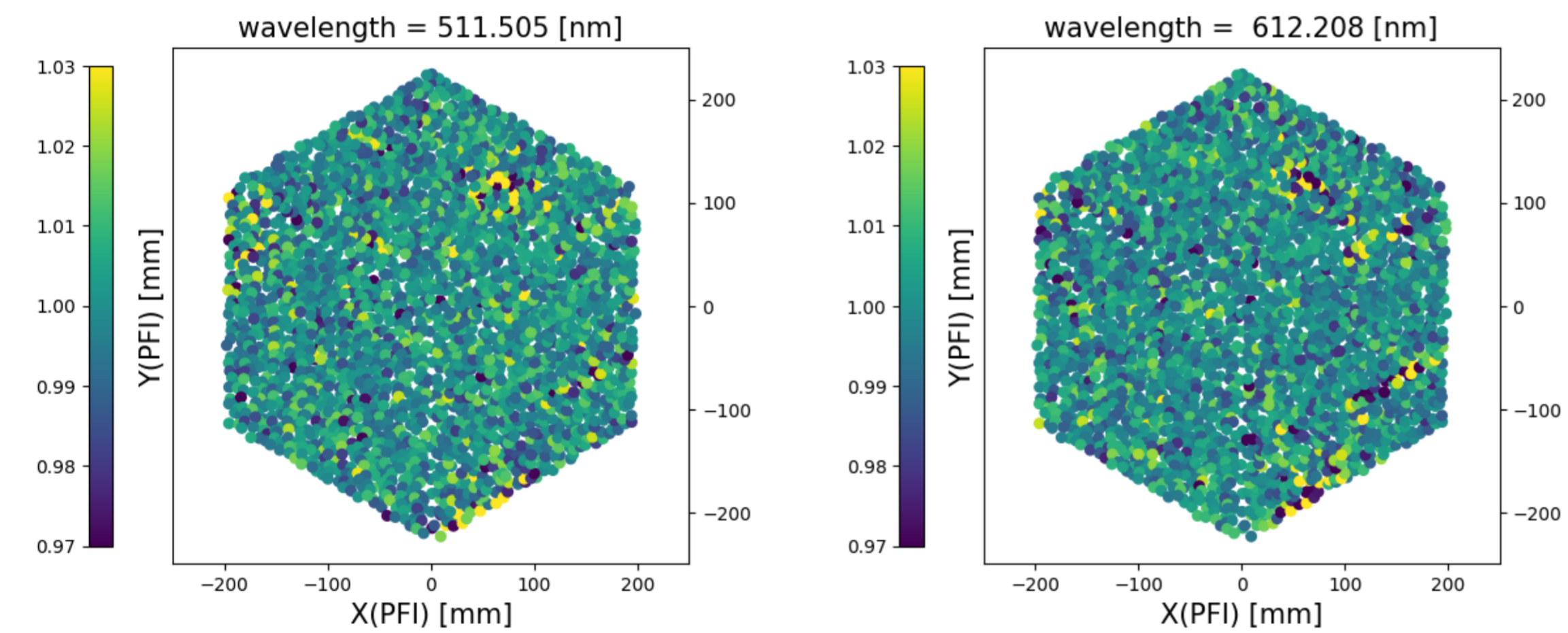
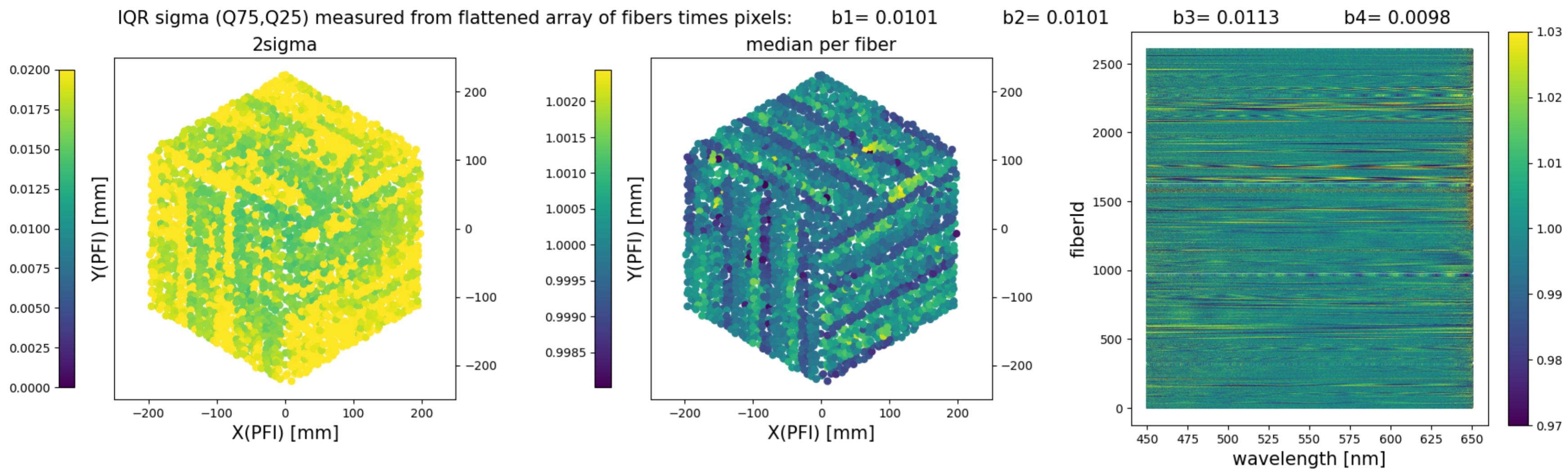
quartz - pfsArm : 115047 (2024-09-02 23:31:42 HST), arm=b, insrot = 0.0, azimuth = 180.8
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set4_115047.png



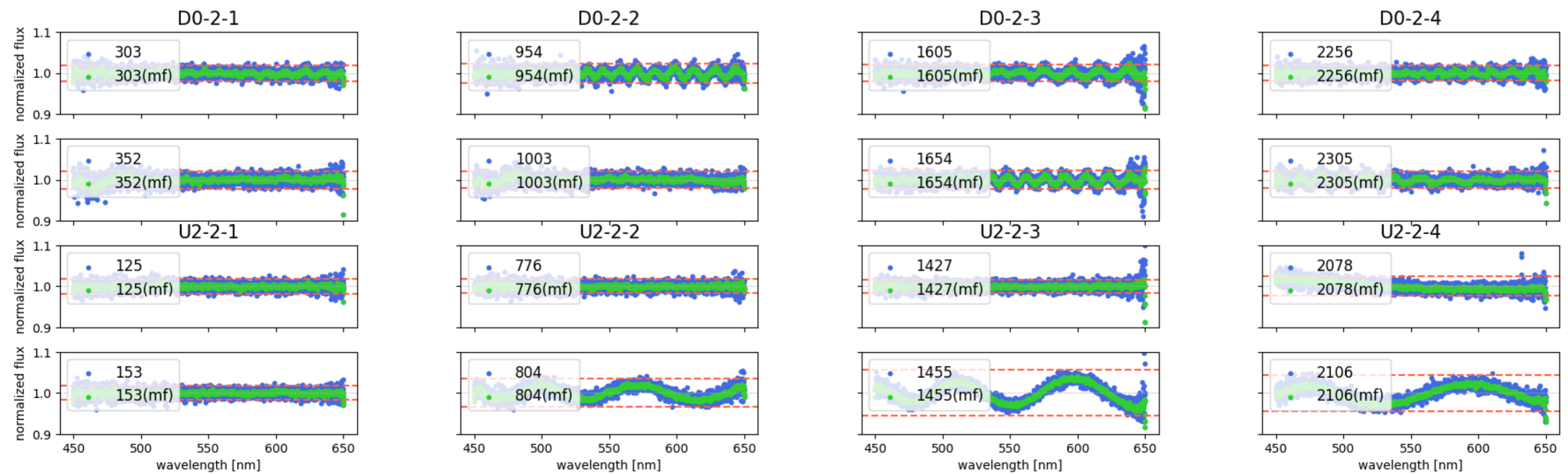
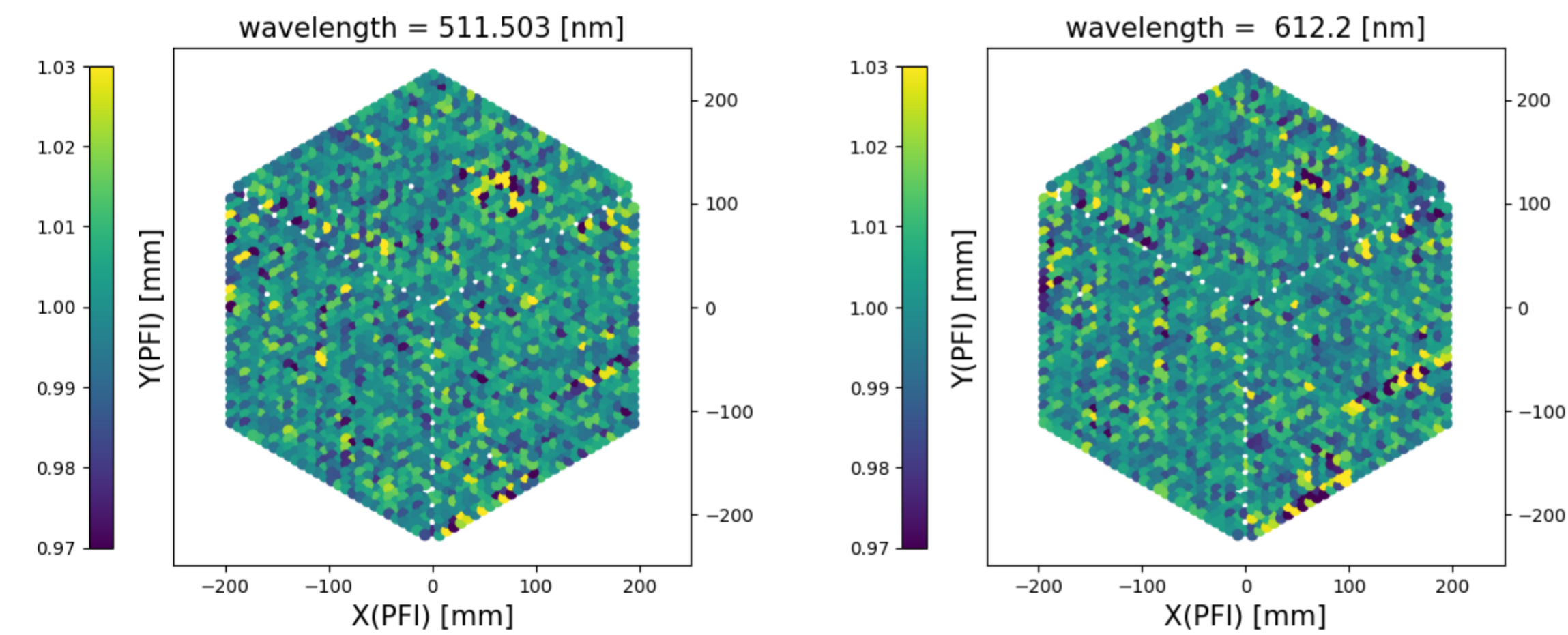
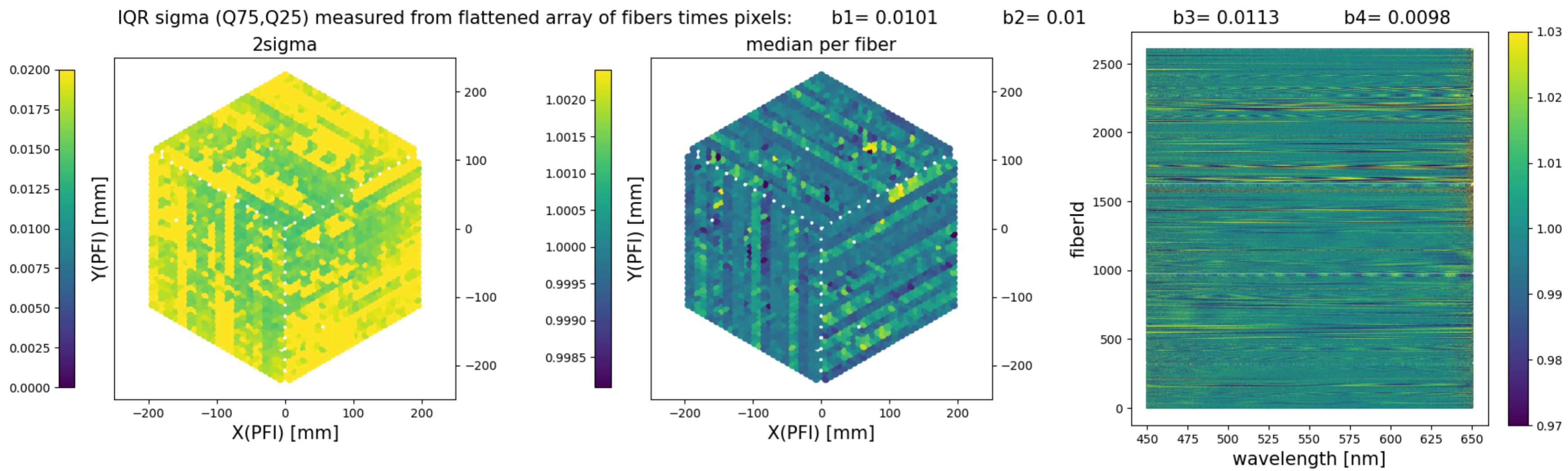
quartz - pfsArm :115051 (2024-09-03 00:10:43 HST), arm=b, insrot = 27.2, azimuth = 210.0
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set4_115051.png



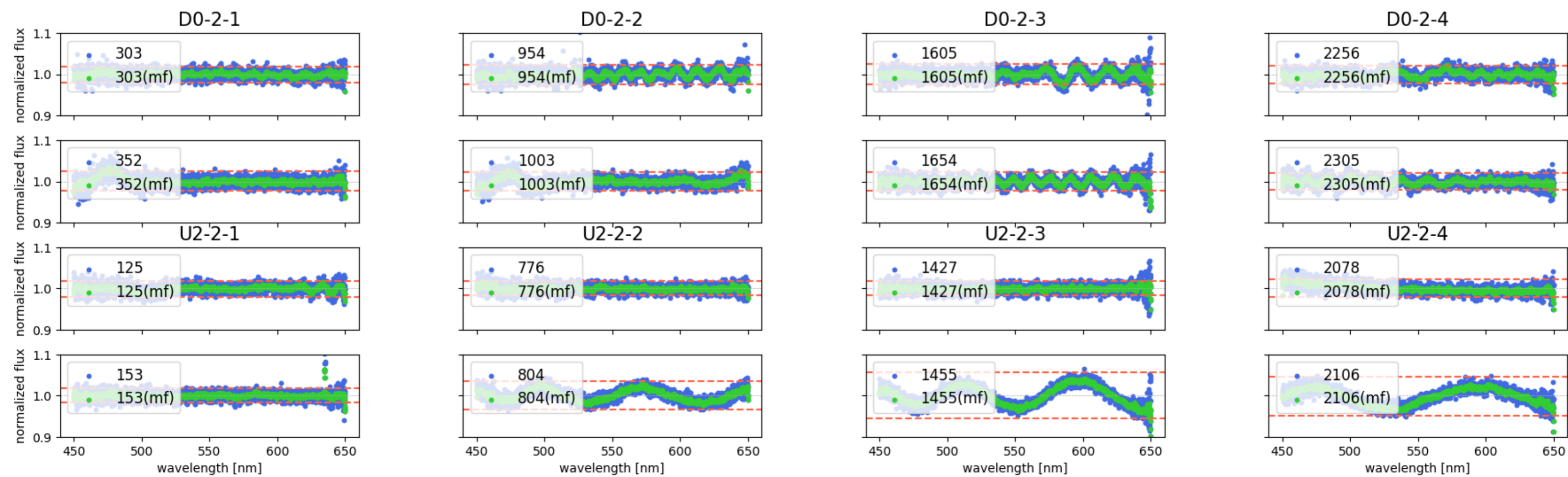
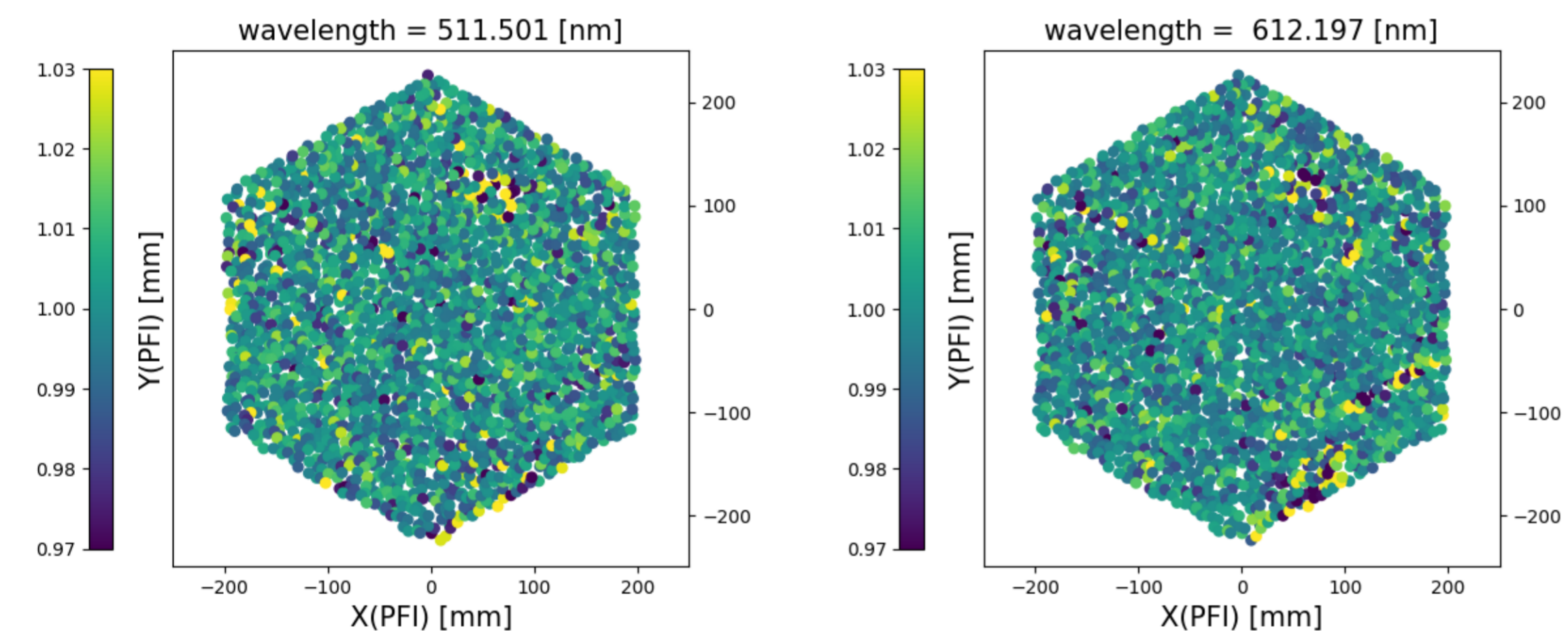
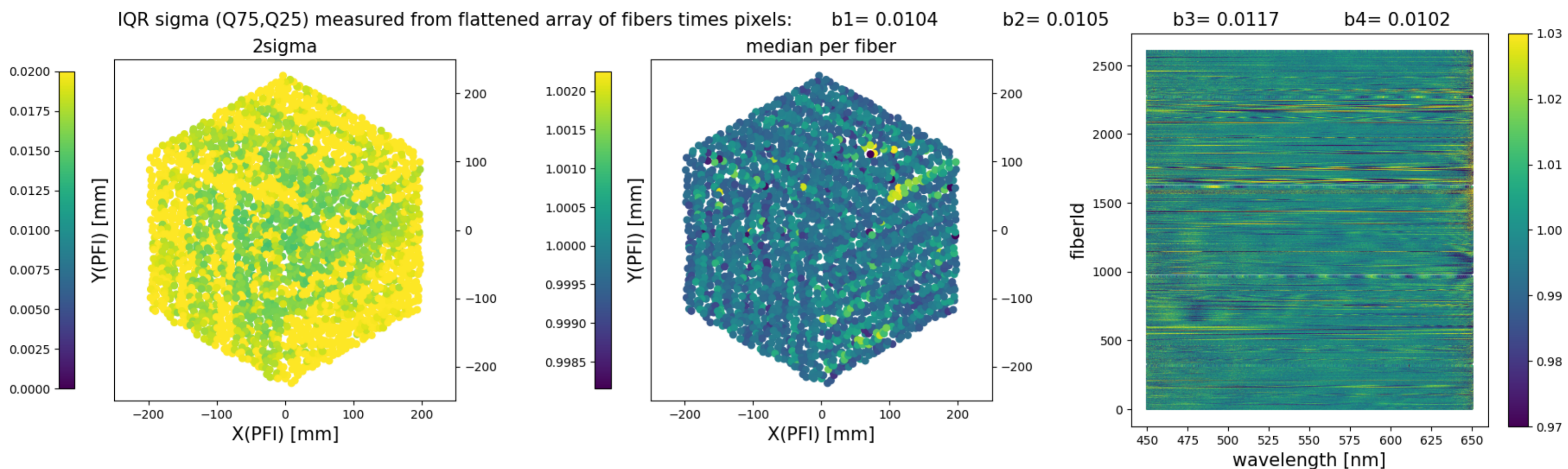
quartz - pfsArm : 115052 (2024-09-03 00:13:06 HST), arm=b, insrot = -0.0, azimuth = 210.0
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set4_115052.png



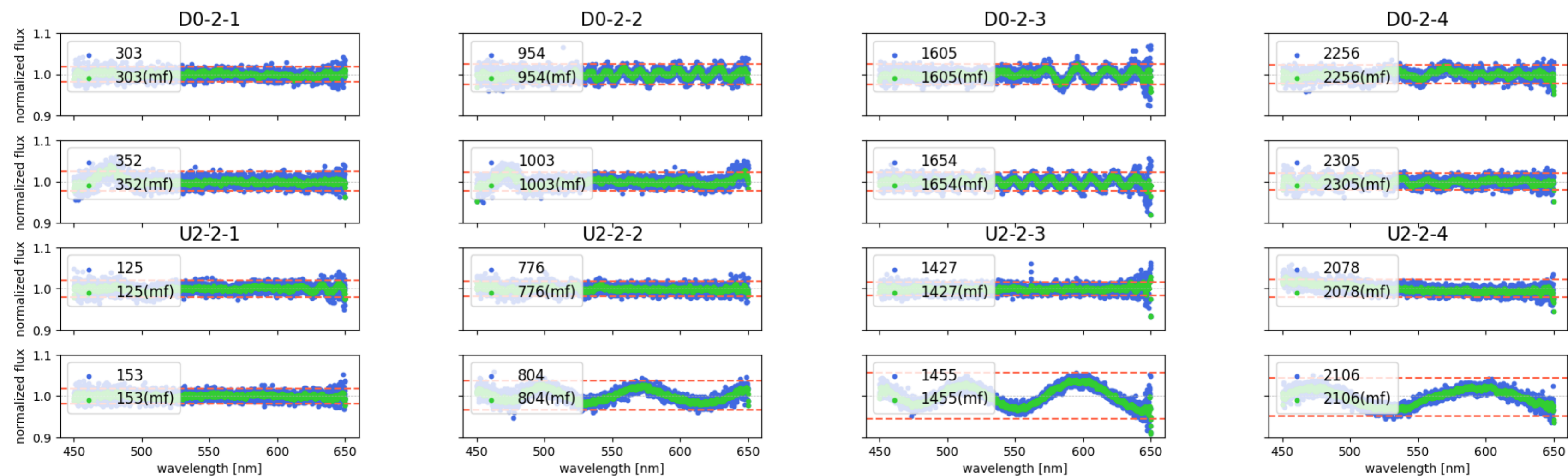
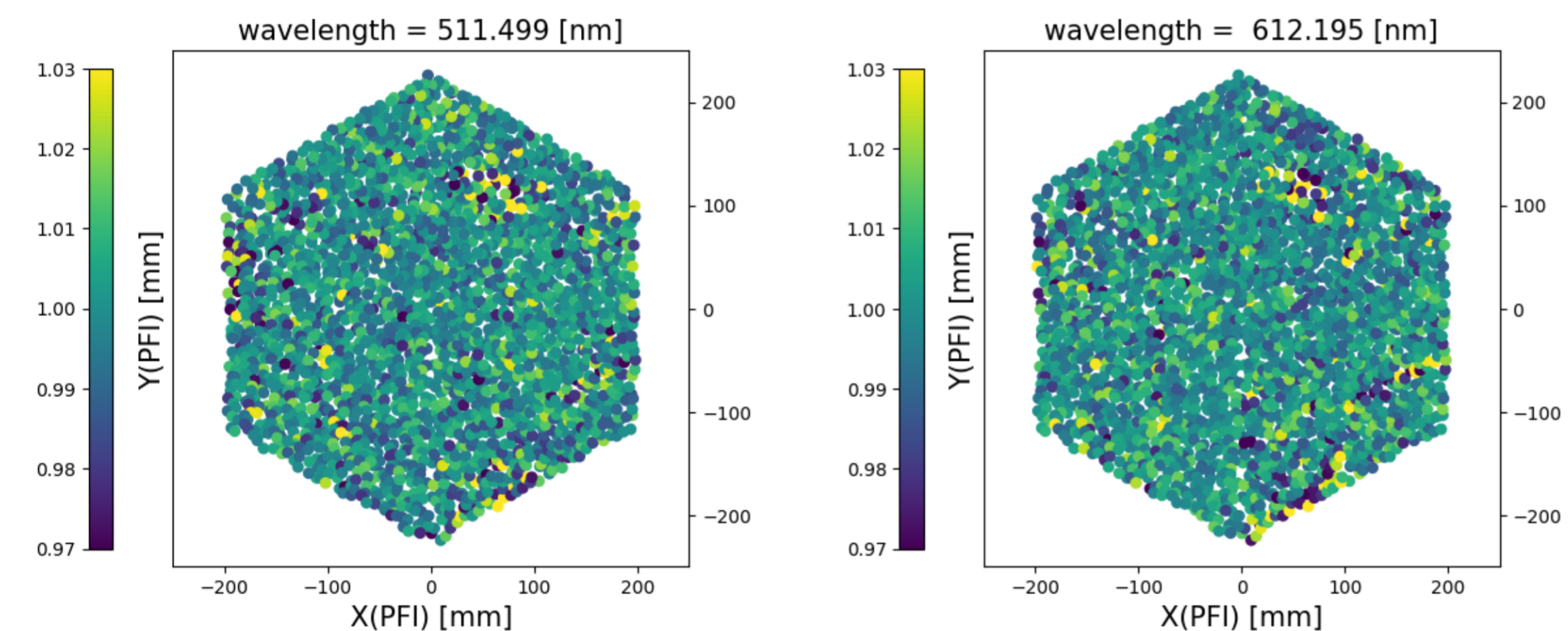
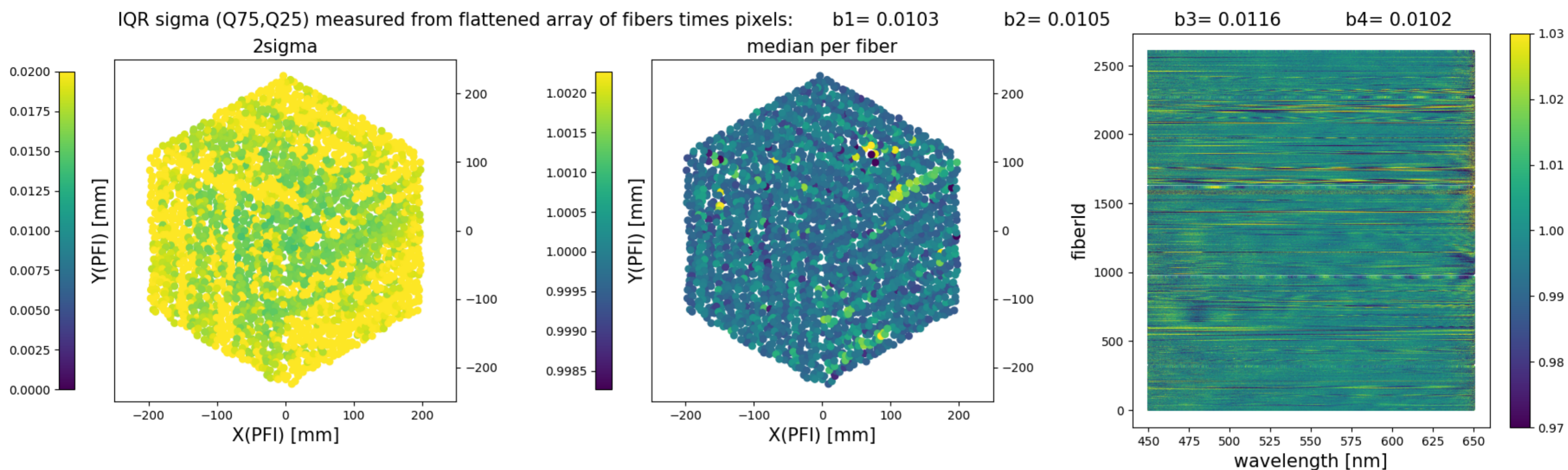
quartz - pfsArm : 115054 (2024-09-03 00:16:01 HST), arm=b, insrot = 0.0, azimuth = 210.0
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set4_115054.png



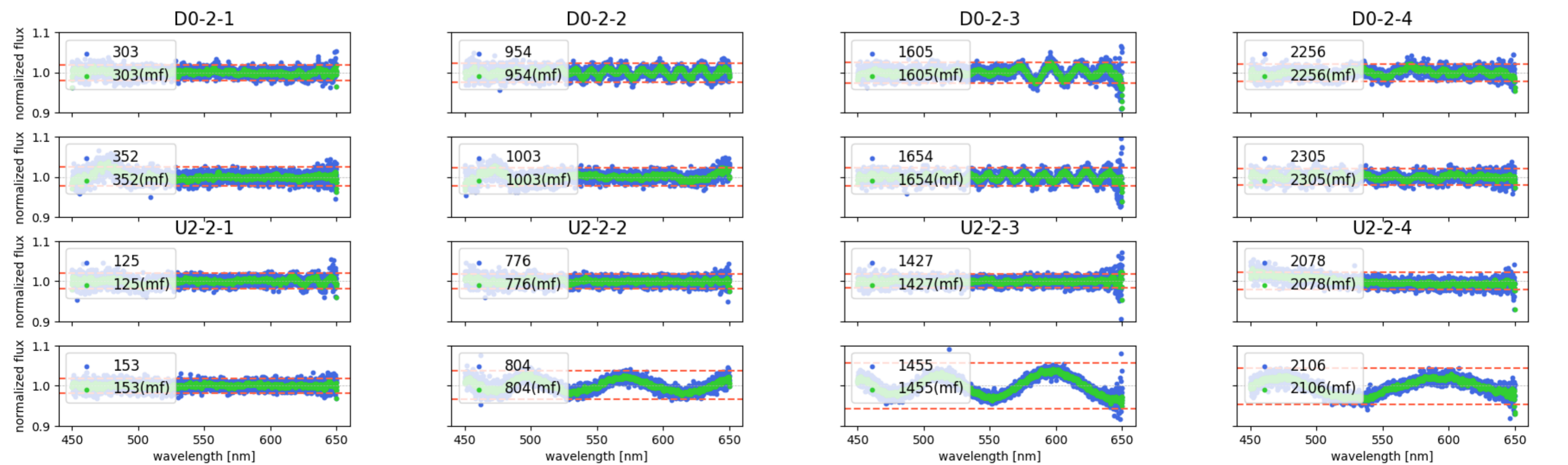
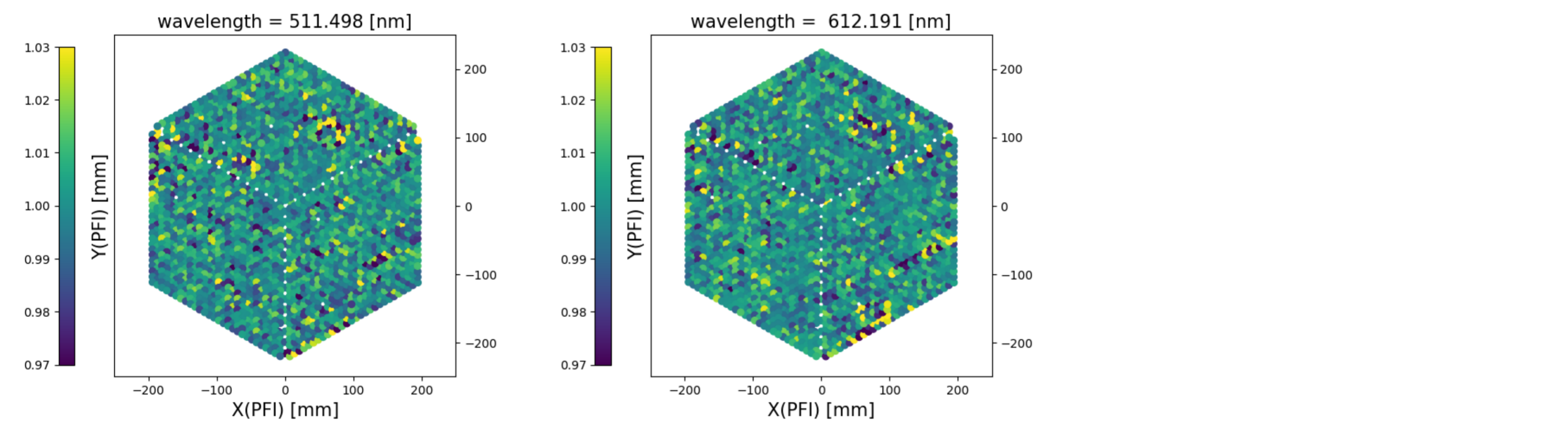
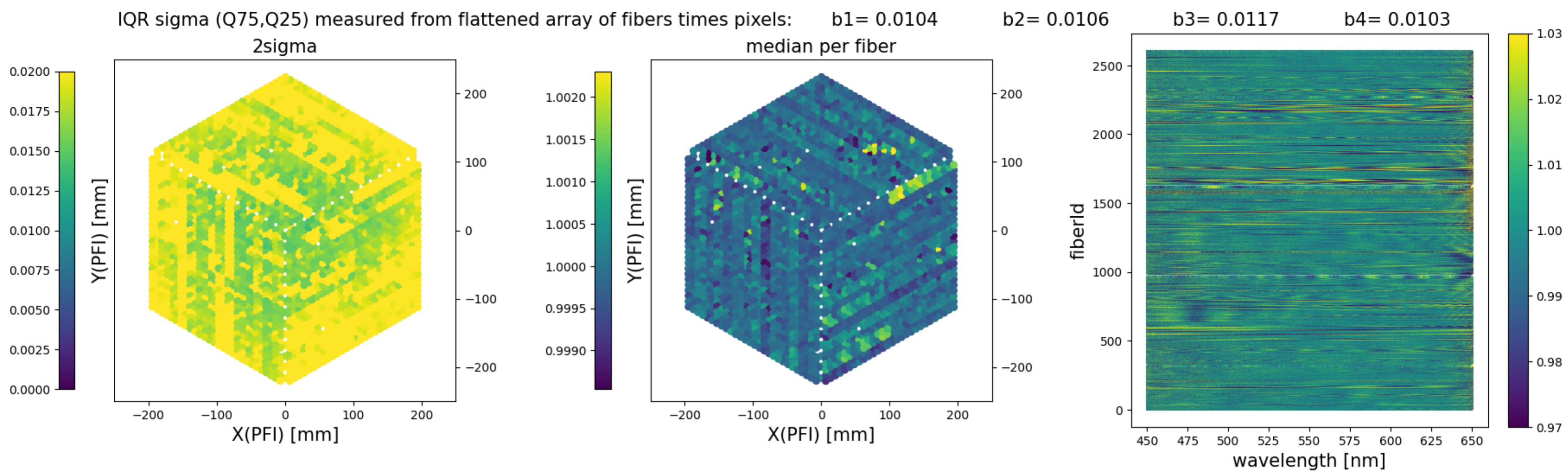
quartz - pfsArm : 115061 (2024-09-03 01:34:59 HST), arm=b, insrot = -17.9, azimuth = 164.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set5_115061.png



quartz - pfsArm : 115062 (2024-09-03 01:37:10 HST), arm=b, insrot = 0.0, azimuth = 164.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set5_115062.png



quartz - pfsArm : 115064 (2024-09-03 01:40:27 HST), arm=b, insrot = 0.0, azimuth = 164.5
/kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
file at pfsArm/20241209/b-arm/set5_115064.png



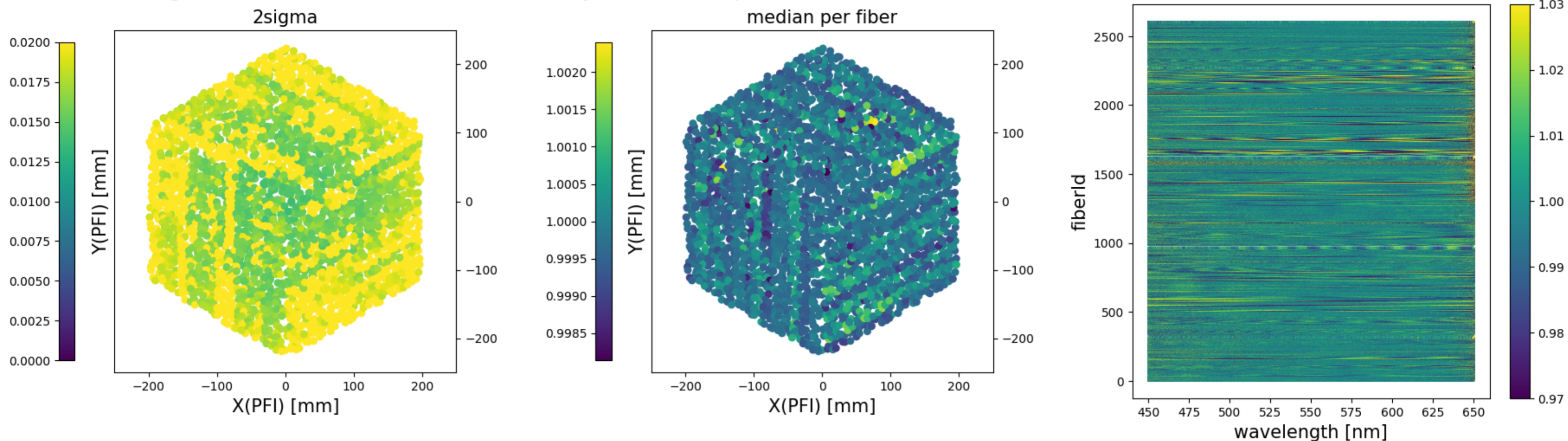
quartz - pfsArm : 115068 (2024-09-03 02:40:38 HST), arm=b, insrot = -38.0, azimuth = 139.6
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set6_115068.png

IQR sigma (Q75,Q25) measured from flattened array of fibers times pixels: b1= 0.0102

b2= 0.01

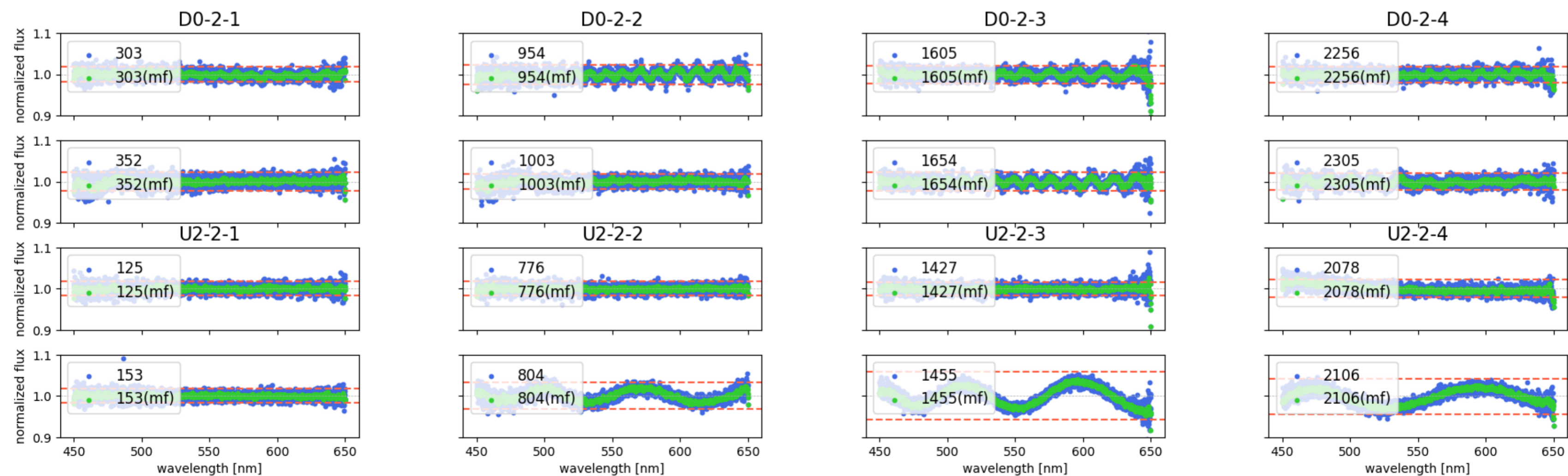
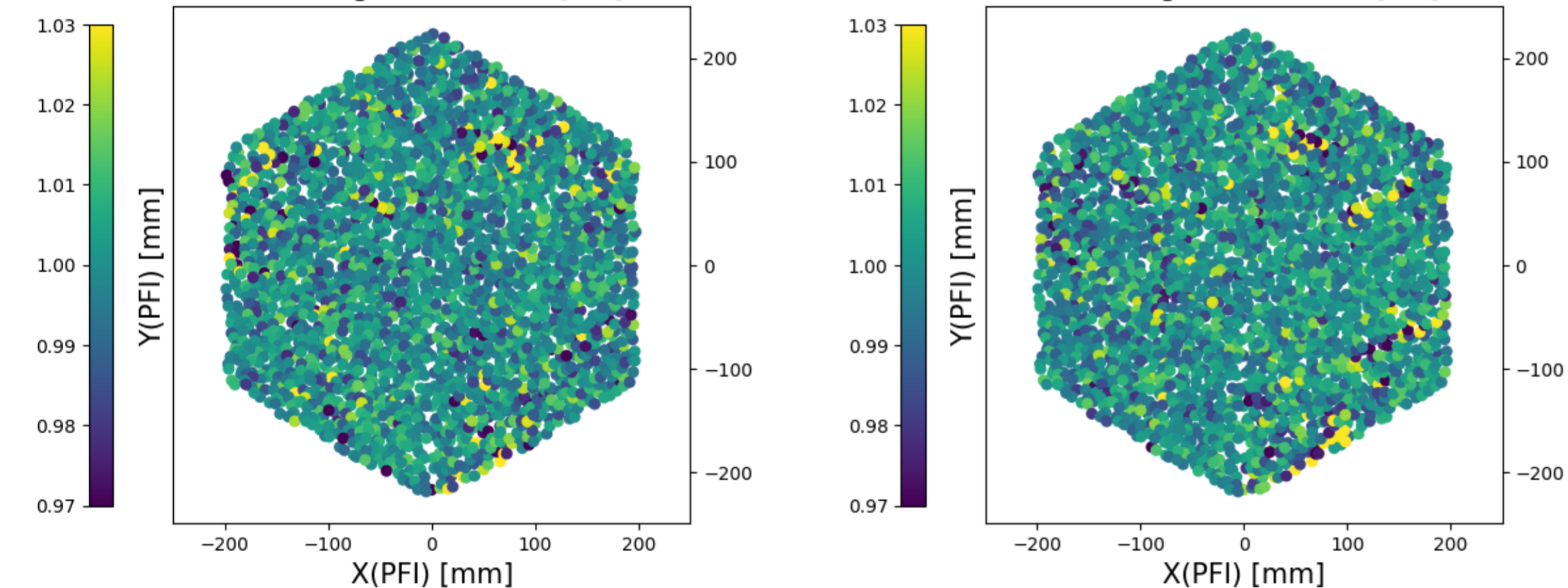
b3= 0.0113

b4= 0.0099

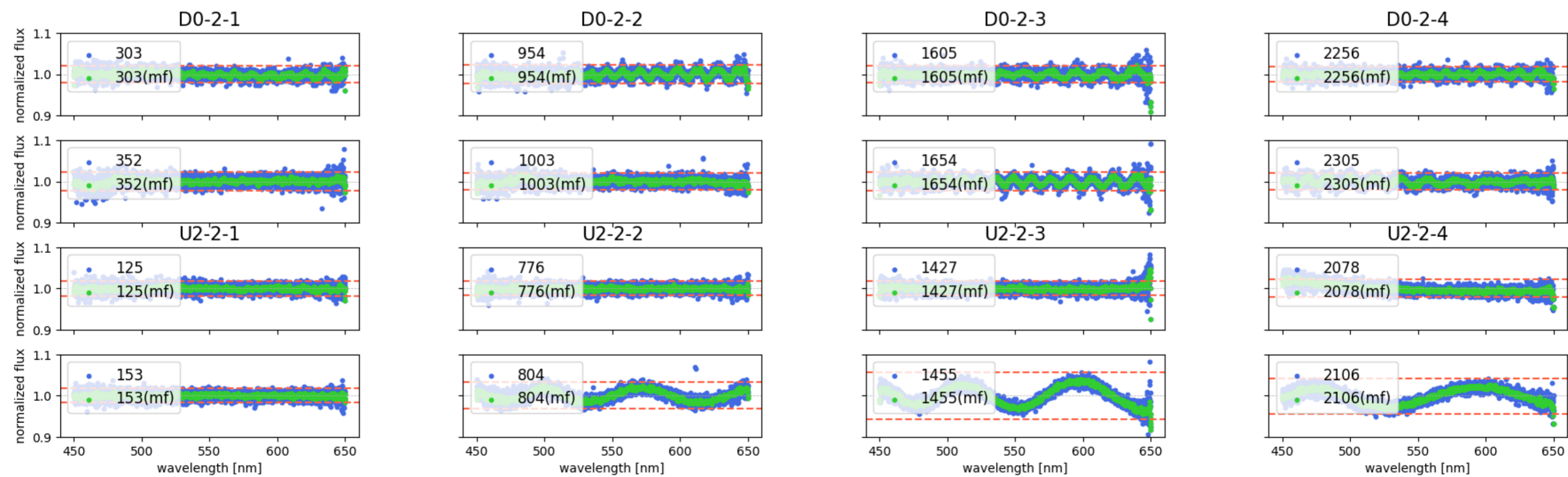
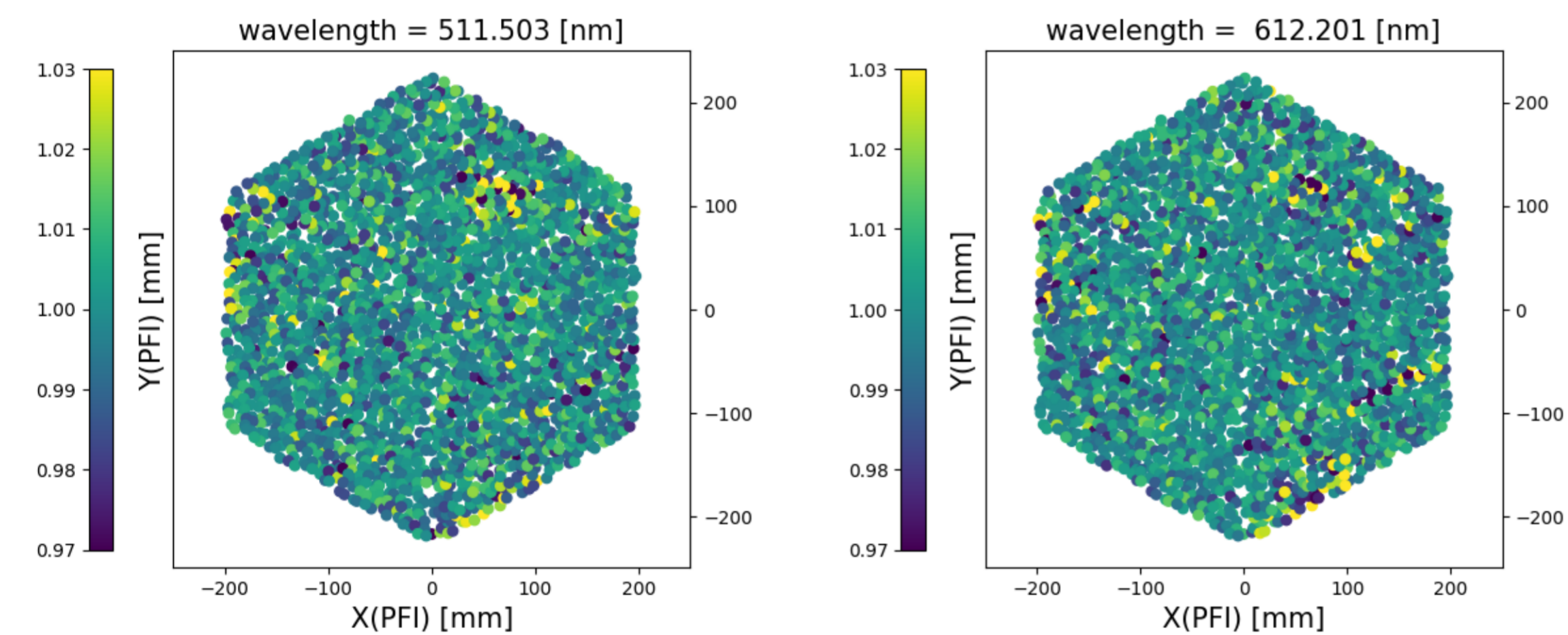
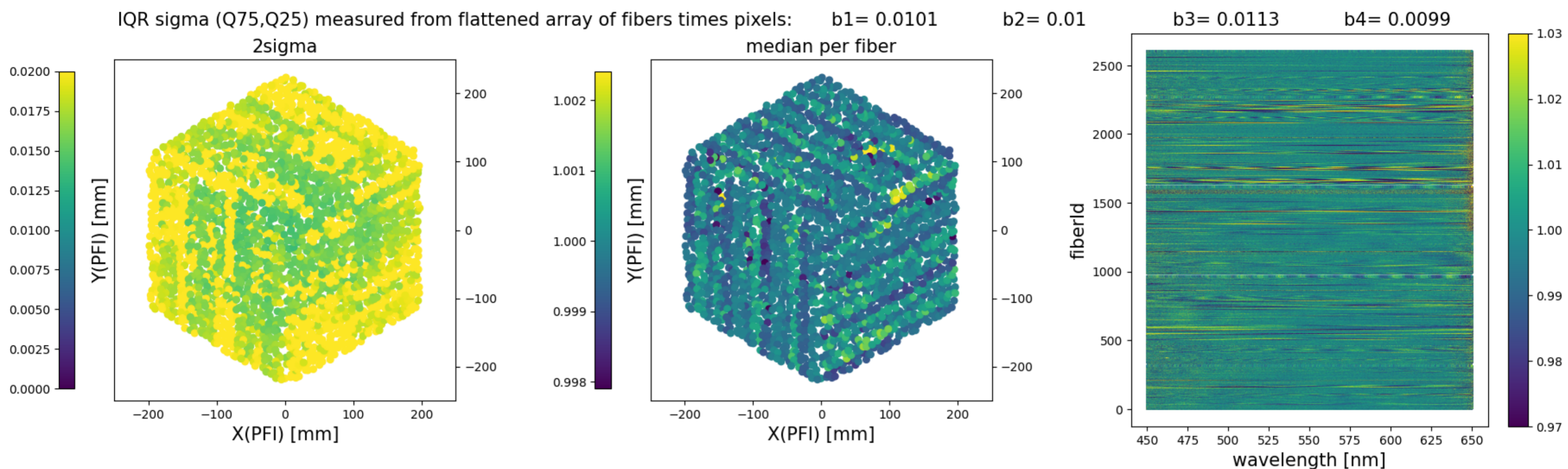


wavelength = 511.505 [nm]

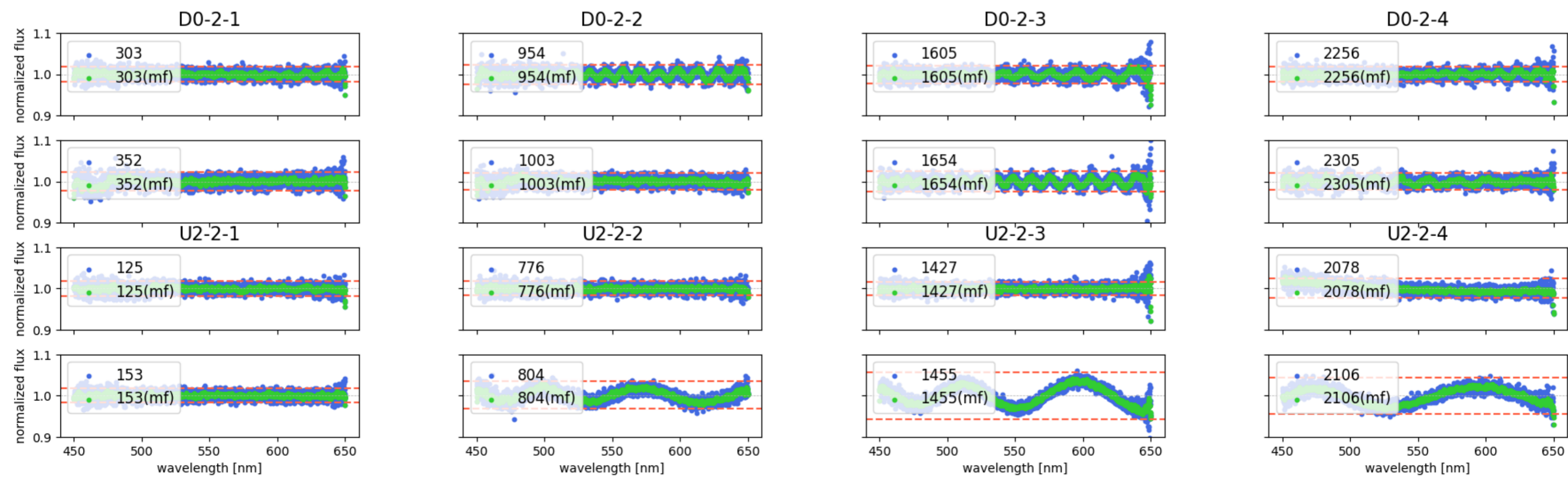
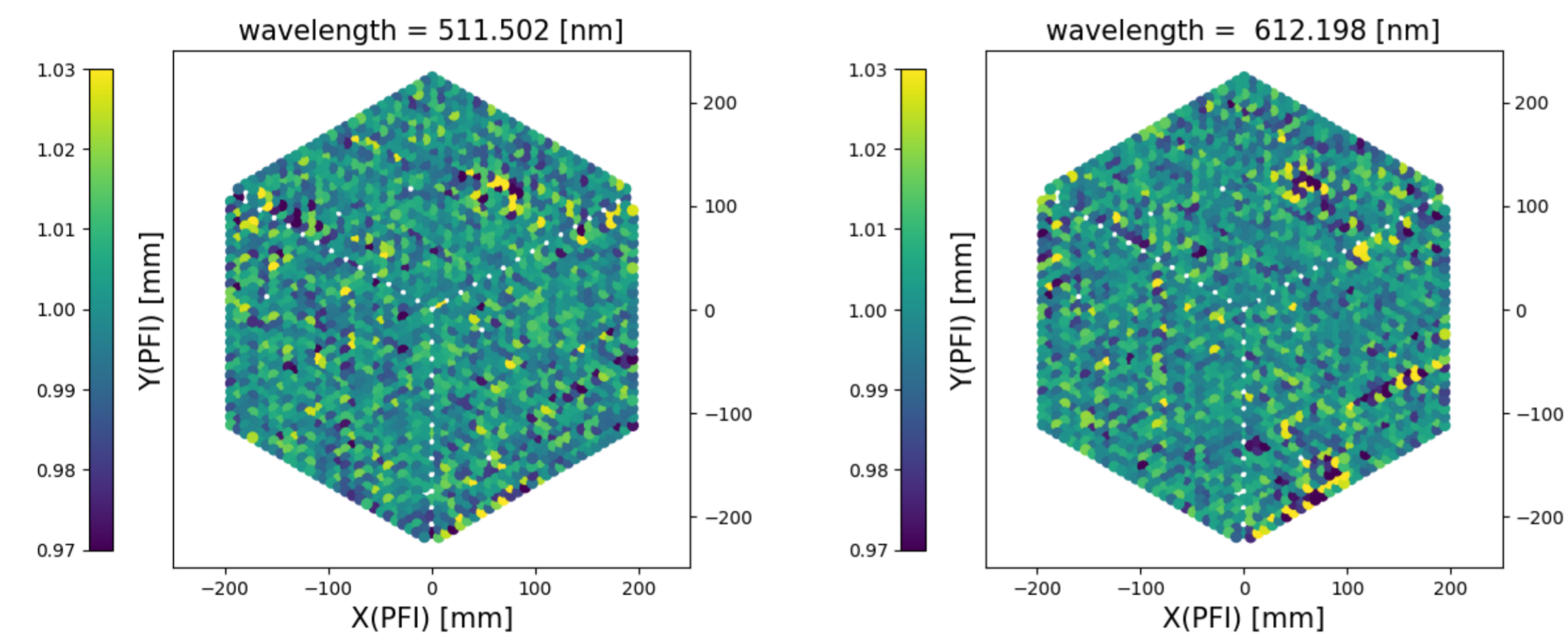
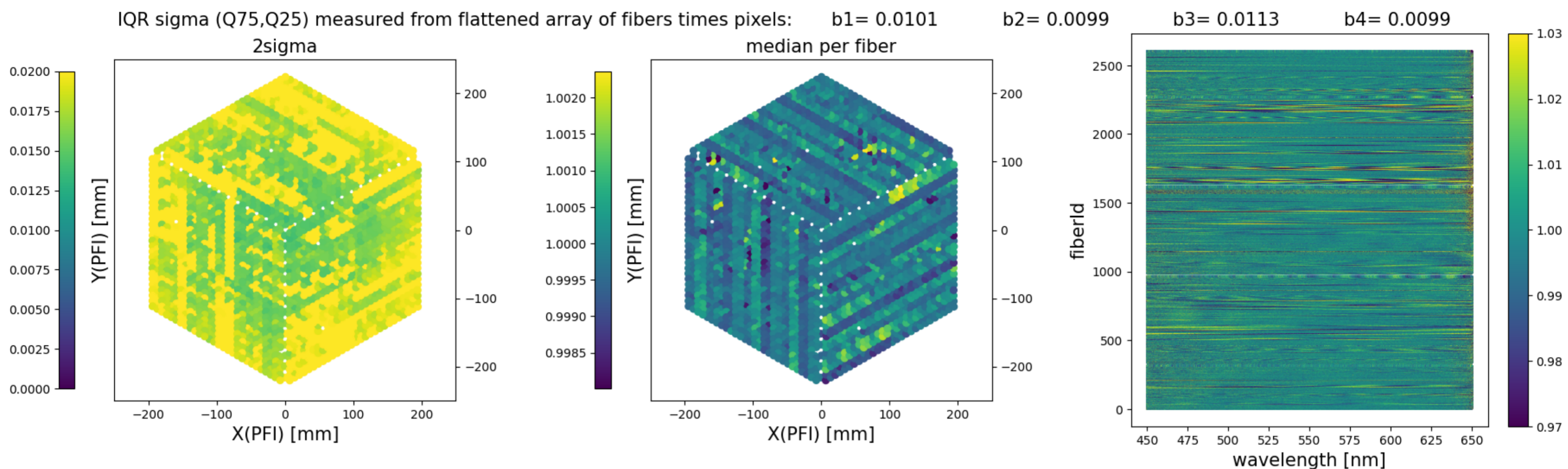
wavelength = 612.203 [nm]



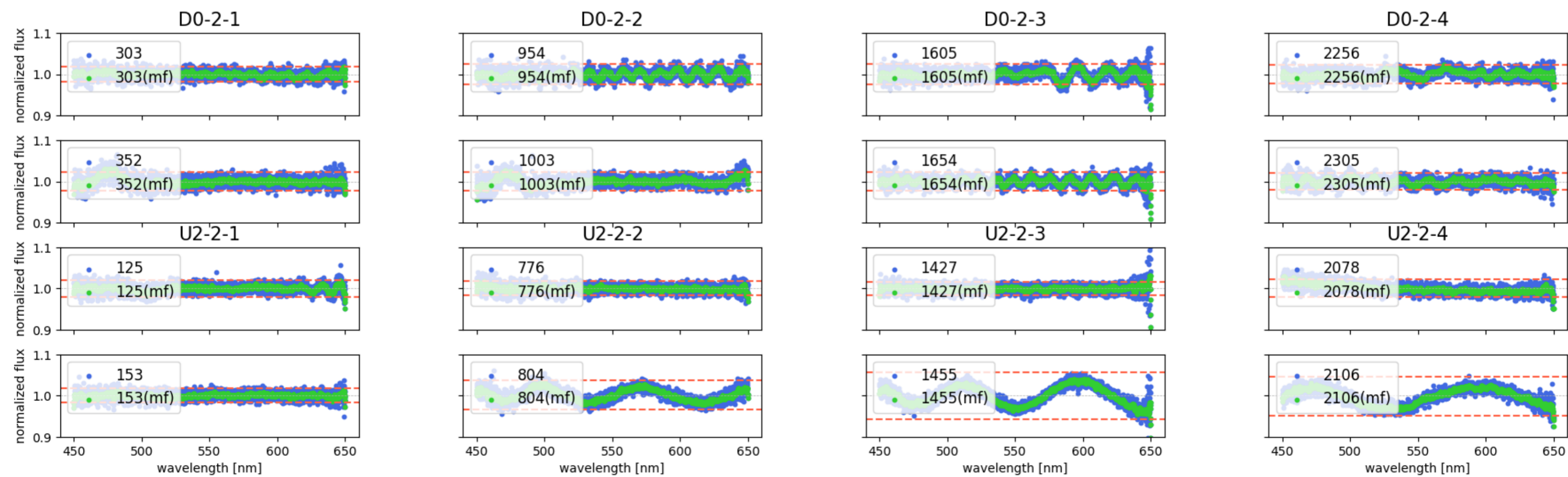
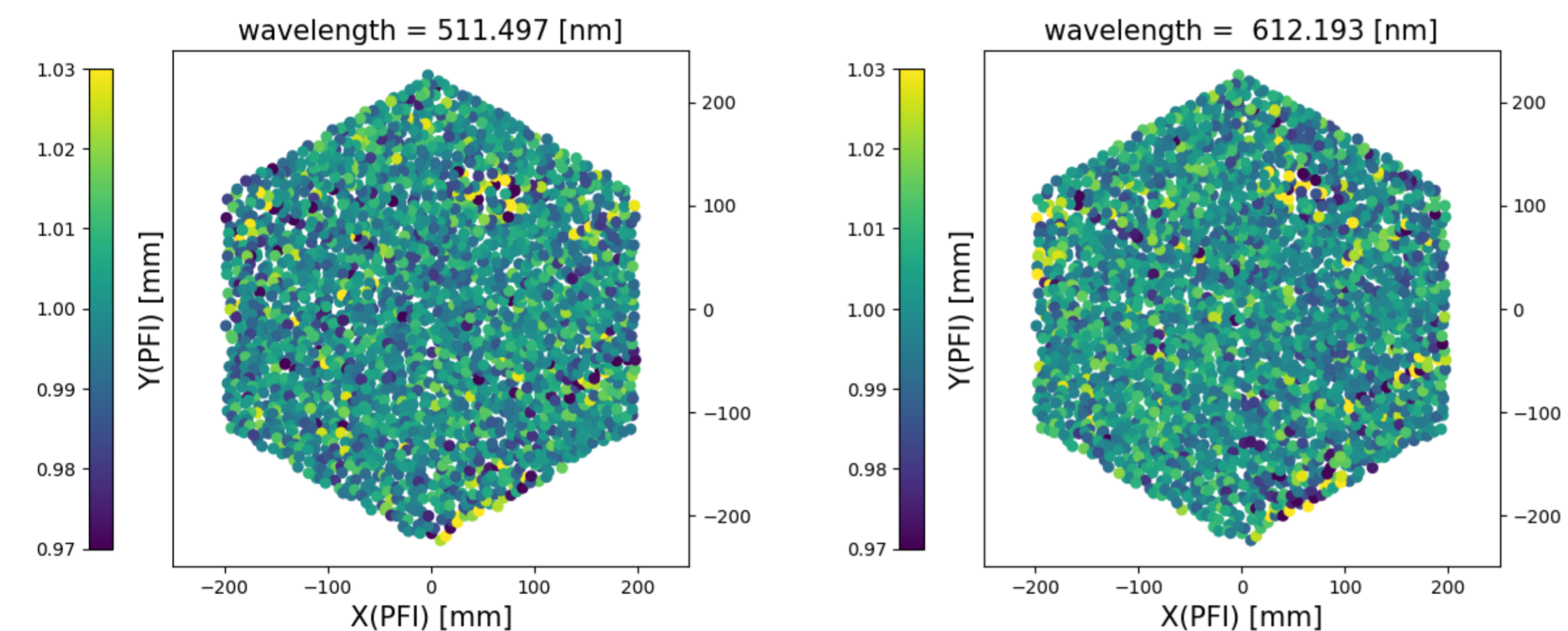
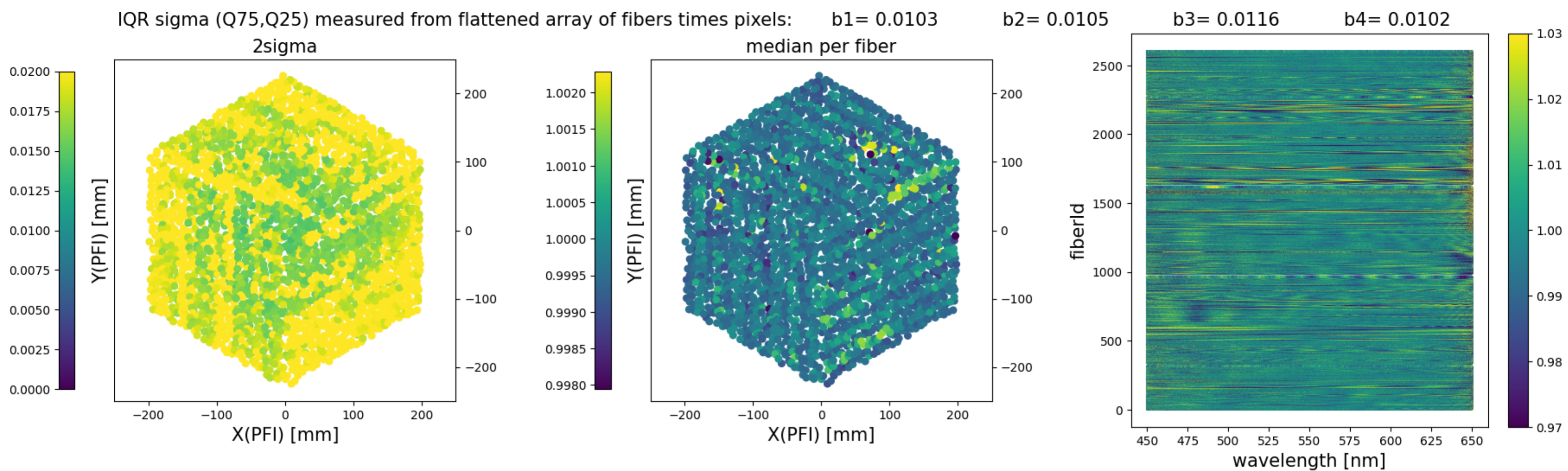
quartz - pfsArm : 115069 (2024-09-03 02:43:22 HST), arm=b, insrot = 0.0, azimuth = 139.6
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set6_115069.png



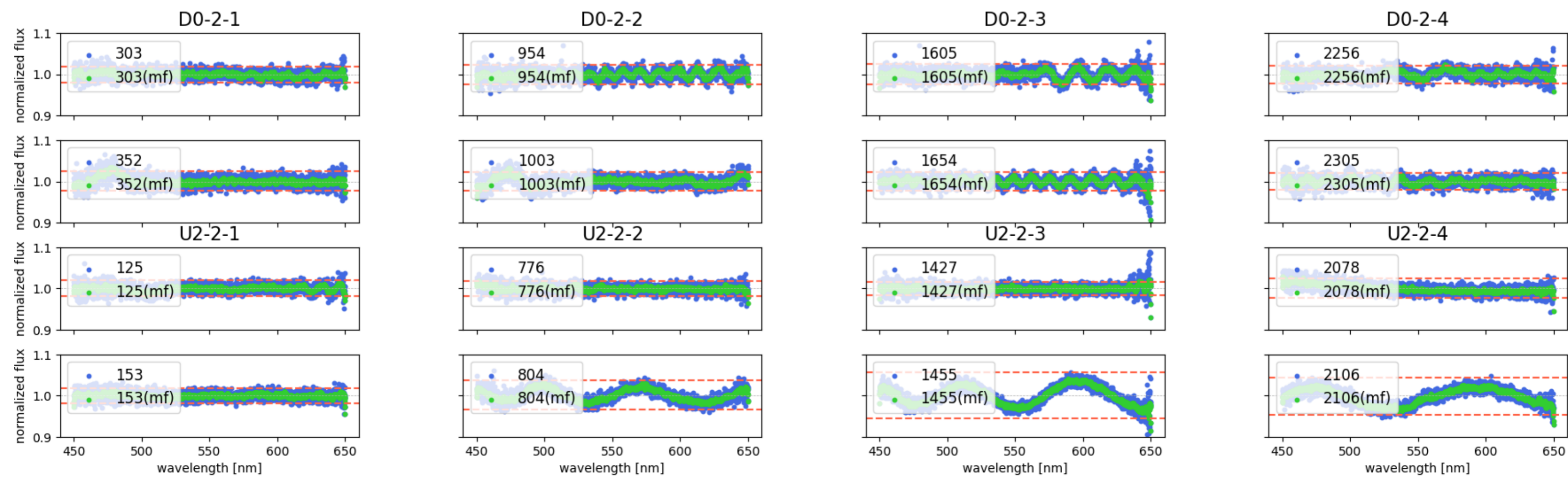
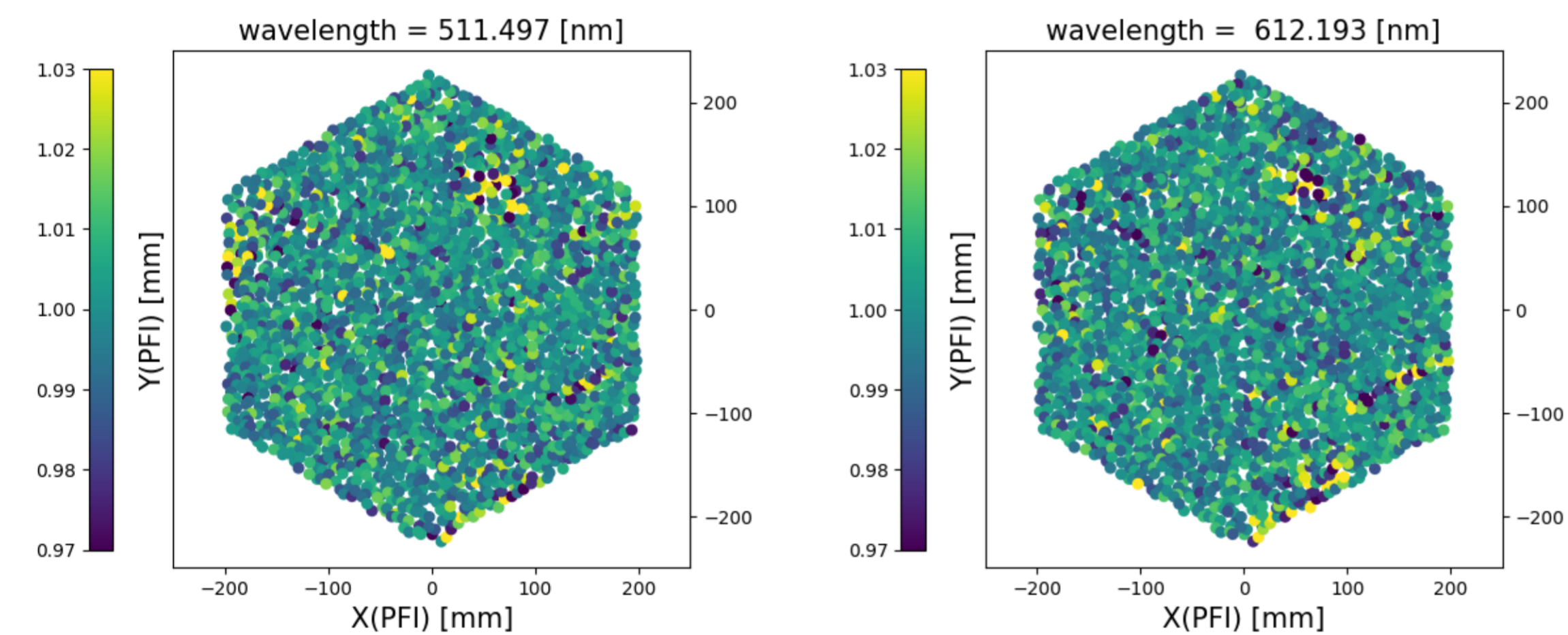
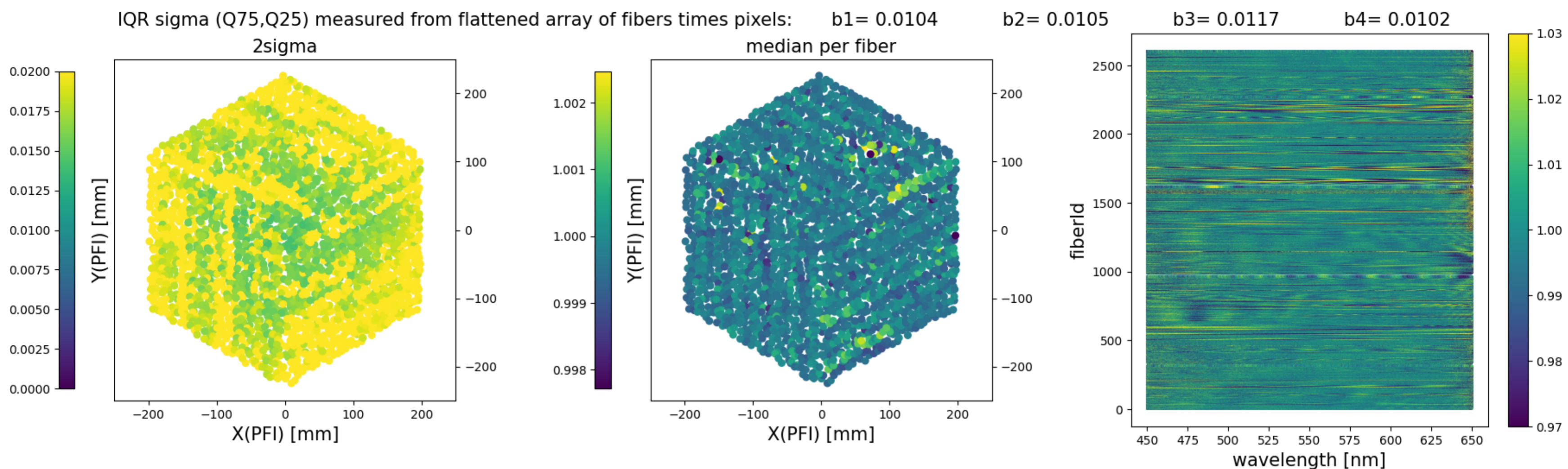
quartz - pfsArm : 115071 (2024-09-03 02:46:28 HST), arm=b, insrot = 0.0, azimuth = 139.6
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set6_115071.png



quartz - pfsArm :115075 (2024-09-03 03:42:05 HST), arm=b, insrot = 18.4, azimuth = 196.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set7_115075.png



quartz - pfsArm : 115076 (2024-09-03 03:44:27 HST), arm=b, insrot = 0.0, azimuth = 196.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set7_115076.png



quartz - pfsArm : 115078 (2024-09-03 03:48:06 HST), arm=b, insrot = 0.0, azimuth = 196.5
 /kiyoyabe/erun/run18/20240923, /work/drp/CALIB-2024-07-v7
 file at pfsArm/20241209/b-arm/set7_115078.png

