

Version 0.55

(Mon Jun 17 15:31:22 CEST 2013): Starting Bead Extraction  
Read 1275 beads for spim\_TL00\_Angle0.tif (id = 0)  
Read 1364 beads for spim\_TL00\_Angle1.tif (id = 1)  
Read 1026 beads for spim\_TL00\_Angle2.tif (id = 2)  
Read 1110 beads for spim\_TL00\_Angle3.tif (id = 3)  
Read 1201 beads for spim\_TL00\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:22 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:22 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:22 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:22 CEST 2013): Starting Bead Extraction  
Read 1243 beads for spim\_TL01\_Angle0.tif (id = 0)  
Read 1467 beads for spim\_TL01\_Angle1.tif (id = 1)  
Read 970 beads for spim\_TL01\_Angle2.tif (id = 2)  
Read 1125 beads for spim\_TL01\_Angle3.tif (id = 3)  
Read 1172 beads for spim\_TL01\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:22 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:22 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 1084 beads for spim\_TL02\_Angle0.tif (id = 0)  
Read 1356 beads for spim\_TL02\_Angle1.tif (id = 1)  
Read 1016 beads for spim\_TL02\_Angle2.tif (id = 2)  
Read 1067 beads for spim\_TL02\_Angle3.tif (id = 3)  
Read 1084 beads for spim\_TL02\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 1152 beads for spim\_TL03\_Angle0.tif (id = 0)  
Read 1268 beads for spim\_TL03\_Angle1.tif (id = 1)  
Read 1059 beads for spim\_TL03\_Angle2.tif (id = 2)  
Read 1068 beads for spim\_TL03\_Angle3.tif (id = 3)  
Read 1237 beads for spim\_TL03\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 1018 beads for spim\_TL04\_Angle0.tif (id = 0)  
Read 1153 beads for spim\_TL04\_Angle1.tif (id = 1)  
Read 992 beads for spim\_TL04\_Angle2.tif (id = 2)  
Read 1051 beads for spim\_TL04\_Angle3.tif (id = 3)  
Read 1218 beads for spim\_TL04\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 1046 beads for spim\_TL05\_Angle0.tif (id = 0)  
Read 1172 beads for spim\_TL05\_Angle1.tif (id = 1)  
Read 1009 beads for spim\_TL05\_Angle2.tif (id = 2)  
Read 1039 beads for spim\_TL05\_Angle3.tif (id = 3)  
Read 1212 beads for spim\_TL05\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 971 beads for spim\_TL07\_Angle0.tif (id = 0)  
Read 1082 beads for spim\_TL07\_Angle1.tif (id = 1)  
Read 992 beads for spim\_TL07\_Angle2.tif (id = 2)  
Read 1007 beads for spim\_TL07\_Angle3.tif (id = 3)

Read 1172 beads for spim\_TL07\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 965 beads for spim\_TL08\_Angle0.tif (id = 0)  
Read 1082 beads for spim\_TL08\_Angle1.tif (id = 1)  
Read 1027 beads for spim\_TL08\_Angle2.tif (id = 2)  
Read 1000 beads for spim\_TL08\_Angle3.tif (id = 3)  
Read 1175 beads for spim\_TL08\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 985 beads for spim\_TL09\_Angle0.tif (id = 0)  
Read 1060 beads for spim\_TL09\_Angle1.tif (id = 1)  
Read 971 beads for spim\_TL09\_Angle2.tif (id = 2)  
Read 1070 beads for spim\_TL09\_Angle3.tif (id = 3)  
Read 1180 beads for spim\_TL09\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
(Mon Jun 17 15:31:23 CEST 2013): Starting Bead Extraction  
Read 986 beads for spim\_TL10\_Angle0.tif (id = 0)  
Read 1105 beads for spim\_TL10\_Angle1.tif (id = 1)  
Read 997 beads for spim\_TL10\_Angle2.tif (id = 2)  
Read 1044 beads for spim\_TL10\_Angle3.tif (id = 3)  
Read 1217 beads for spim\_TL10\_Angle4.tif (id = 4)  
(Mon Jun 17 15:31:23 CEST 2013): Finished Bead Extraction  
(Mon Jun 17 15:31:23 CEST 2013): Starting Registration  
(Mon Jun 17 15:31:23 CEST 2013): Finished Registration  
Finished processing.  
Version 0.55  
(Mon Jun 17 15:37:43 CEST 2013): Loading reference timepoint information Reference  
ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:37:43 CEST 2013): Loading timepoint Template ViewStructure Timepoint 0  
information  
Read 1275 beads for spim\_TL00\_Angle0.tif (id = 0)  
Read 1364 beads for spim\_TL00\_Angle1.tif (id = 1)  
Read 1026 beads for spim\_TL00\_Angle2.tif (id = 2)  
Read 1110 beads for spim\_TL00\_Angle3.tif (id = 3)  
Read 1201 beads for spim\_TL00\_Angle4.tif (id = 4)  
spim\_TL00\_Angle2.tif<->spim\_TL00\_Angle3.tif: Remaining inliers after RANSAC: 27 of 27 (100%)  
with average error 0.6691474128100607  
spim\_TL00\_Angle2.tif<->spim\_TL00\_Angle4.tif: Remaining inliers after RANSAC: 37 of 38 (97%)  
with average error 0.44379338863733653  
spim\_TL06\_Angle0.tif<->spim\_TL00\_Angle2.tif: Remaining inliers after RANSAC: 14 of 15 (93%)  
with average error 0.7140956042068345  
spim\_TL00\_Angle1.tif<->spim\_TL00\_Angle3.tif: Remaining inliers after RANSAC: 52 of 55 (95%)  
with average error 0.6072635080378788  
spim\_TL06\_Angle1.tif<->spim\_TL00\_Angle2.tif: Remaining inliers after RANSAC: 14 of 14 (100%)  
with average error 0.6171177732092994  
spim\_TL00\_Angle1.tif<->spim\_TL00\_Angle4.tif: Remaining inliers after RANSAC: 32 of 35 (91%)  
with average error 0.4623754050116986  
spim\_TL00\_Angle0.tif<->spim\_TL00\_Angle2.tif: Remaining inliers after RANSAC: 35 of 38 (92%)  
with average error 1.016280529328755  
spim\_TL06\_Angle0.tif<->spim\_TL00\_Angle1.tif: Not enough correspondences found 4, should be at  
least 12  
spim\_TL06\_Angle2.tif<->spim\_TL00\_Angle0.tif: Remaining inliers after RANSAC: 17 of 18 (94%)  
with average error 0.6060983157333206  
spim\_TL06\_Angle0.tif<->spim\_TL00\_Angle3.tif: Remaining inliers after RANSAC: 25 of 27 (93%)  
with average error 0.850523499250412  
spim\_TL06\_Angle1.tif<->spim\_TL00\_Angle4.tif: Remaining inliers after RANSAC: 18 of 18 (100%)  
with average error 0.6293857701950603  
spim\_TL06\_Angle1.tif<->spim\_TL00\_Angle3.tif: Remaining inliers after RANSAC: 34 of 34 (100%)  
with average error 0.6525622424395645  
spim\_TL00\_Angle3.tif<->spim\_TL00\_Angle4.tif: Remaining inliers after RANSAC: 42 of 43 (98%)  
with average error 0.8881665209219568

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spim_TL06_Angle2.tif<->spim_TL00_Angle1.tif: Remaining inliers after RANSAC: 13 of 15 (87%)
with average error 0.3753714802173468
spim_TL06_Angle1.tif<->spim_TL00_Angle0.tif: Remaining inliers after RANSAC: 16 of 17 (94%)
with average error 1.0114890160039067
ViewErrorStatistics.setViewSpecificError(): Warning! spim_TL00_Angle1.tif (id = 6) is not part
of the structure of my view spim_TL06_Angle0.tif (id = 0)
spim_TL00_Angle0.tif<->spim_TL00_Angle3.tif: Remaining inliers after RANSAC: 51 of 55 (93%)
with average error 0.8029027958126628
spim_TL00_Angle1.tif<->spim_TL00_Angle2.tif: Remaining inliers after RANSAC: 37 of 37 (100%)
with average error 0.6356905201399647
spim_TL00_Angle0.tif<->spim_TL00_Angle4.tif: Remaining inliers after RANSAC: 42 of 44 (95%)
with average error 0.840297545173384
spim_TL06_Angle0.tif<->spim_TL00_Angle4.tif: Remaining inliers after RANSAC: 24 of 24 (100%)
with average error 0.4517987013484041
spim_TL00_Angle0.tif<->spim_TL00_Angle1.tif: Remaining inliers after RANSAC: 40 of 42 (95%)
with average error 1.0302402991801498
spim_TL06_Angle2.tif<->spim_TL00_Angle2.tif: Remaining inliers after RANSAC: 100 of 102 (98%)
with average error 0.21032628208398818
spim_TL06_Angle1.tif<->spim_TL00_Angle1.tif: Remaining inliers after RANSAC: 80 of 83 (96%)
with average error 0.21069390852935613
spim_TL06_Angle2.tif<->spim_TL00_Angle3.tif: Remaining inliers after RANSAC: 18 of 22 (82%)
with average error 0.45325933520992595
spim_TL06_Angle0.tif<->spim_TL00_Angle0.tif: Remaining inliers after RANSAC: 81 of 82 (99%)
with average error 0.21133165388011638
spim_TL06_Angle4.tif<->spim_TL00_Angle1.tif: Remaining inliers after RANSAC: 15 of 16 (94%)
with average error 0.6895617981751759
spim_TL06_Angle4.tif<->spim_TL00_Angle2.tif: Remaining inliers after RANSAC: 39 of 41 (95%)
with average error 0.6350838870574267
spim_TL06_Angle4.tif<->spim_TL00_Angle0.tif: Remaining inliers after RANSAC: 13 of 14 (93%)
with average error 0.6161291100657903
spim_TL06_Angle3.tif<->spim_TL00_Angle0.tif: Remaining inliers after RANSAC: 16 of 18 (89%)
with average error 0.7691099494695663
spim_TL06_Angle4.tif<->spim_TL00_Angle3.tif: Remaining inliers after RANSAC: 17 of 17 (100%)
with average error 0.5228452130275614
spim_TL06_Angle2.tif<->spim_TL00_Angle4.tif: Remaining inliers after RANSAC: 36 of 37 (97%)
with average error 0.41419285929037464
spim_TL06_Angle3.tif<->spim_TL00_Angle4.tif: Remaining inliers after RANSAC: 17 of 19 (89%)
with average error 0.47992865653599
spim_TL06_Angle3.tif<->spim_TL00_Angle2.tif: Remaining inliers after RANSAC: 24 of 26 (92%)
with average error 0.552938544501861
spim_TL06_Angle3.tif<->spim_TL00_Angle1.tif: Remaining inliers after RANSAC: 46 of 47 (98%)
with average error 0.44524666051501816
spim_TL06_Angle3.tif<->spim_TL00_Angle3.tif: Remaining inliers after RANSAC: 116 of 120 (97%)
with average error 0.3821218167913371
spim_TL06_Angle4.tif<->spim_TL00_Angle4.tif: Remaining inliers after RANSAC: 144 of 144 (100%)
with average error 0.21463561007597798
spim_TL06_Angle0.tif (id = 0) has 144 correspondences in 4 other views.
spim_TL06_Angle1.tif (id = 1) has 162 correspondences in 4 other views.
spim_TL06_Angle2.tif (id = 2) has 184 correspondences in 4 other views.
spim_TL06_Angle3.tif (id = 3) has 219 correspondences in 4 other views.
spim_TL06_Angle4.tif (id = 4) has 228 correspondences in 4 other views.
spim_TL00_Angle0.tif (id = 5) has 311 correspondences in 4 other views.
spim_TL00_Angle1.tif (id = 6) has 315 correspondences in 4 other views.
spim_TL00_Angle2.tif (id = 7) has 327 correspondences in 4 other views.
spim_TL00_Angle3.tif (id = 8) has 382 correspondences in 4 other views.
spim_TL00_Angle4.tif (id = 9) has 392 correspondences in 4 other views.
The total number of detections was: 0
The total number of true correspondences is: 1332
The total number of correspondence candidates was: 1388
The ratio is: 96%
Fixing tile spim_TL06_Angle0.tif (id = 0)
Fixing tile spim_TL06_Angle1.tif (id = 1)
Fixing tile spim_TL06_Angle2.tif (id = 2)
Fixing tile spim_TL06_Angle3.tif (id = 3)
Fixing tile spim_TL06_Angle4.tif (id = 4)
Successfully optimized configuration of 10 tiles after 210 iterations:
  average displacement: 1.025px
  minimal displacement: 0.861px
  maximal displacement: 1.243px
Optimizer Matrices
spim_TL06_Angle0.tif (id = 0):
Transformation:
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)
Scaling: (1.0, 1.0, 1.0)
spim_TL06_Angle1.tif (id = 1):
Transformation:

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3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):  
Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
0.004552126, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):  
Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,  
0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158,  
-0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL00\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (0.99880403, -2.428703E-4, -0.0041077733, 61.020546, -1.813916E-4, 0.999382,  
0.0040932633, 358.4858, 0.0036993474, 8.380413E-5, 0.9987223, 21.614502)  
Scaling: (0.9987749991624741, 1.001208654485056, 0.9969439914051773)  
spim\_TL00\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.3984493, -0.017852351, -0.9511509, 614.63696, -0.025950752, 0.9992613,  
-0.030624092, 271.6453, 0.9109962, 0.014979344, 0.32206786, -418.2312)  
Scaling: (0.9535989906105291, 1.0016059697570685, 1.0417310799511799)  
spim\_TL00\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.7449159, -0.042260386, -0.64679694, 1300.0942, -0.04498928, 0.9988398,  
-0.009780109, 240.2511, 0.6214917, 0.0016765222, -0.80720603, -89.87463)  
Scaling: (0.9688138080167756, 1.0378264989295503, 0.9984912630908743)  
spim\_TL00\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.8629845, -0.03721965, 0.5713175, 1311.1292, -0.032652352, 0.99901617,  
0.012039125, 219.21135, -0.52140266, -0.025454005, -0.8308716, 768.1265)  
Scaling: (1.0380281150297346, 1.0031215112339598, 0.9751290665644732)  
spim\_TL00\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.5076602, -0.0047055706, 0.86028206, 70.25545, -0.0016549313, 0.9997853,  
0.003312394, 149.69363, -0.82133454, -0.023289602, 0.56215394, 807.2336)  
Scaling: (0.961987733549366, 1.0320840492530776, 0.9989707811248745)  
(Mon Jun 17 15:37:43 CEST 2013): Loading reference timepoint information Reference  
ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:37:43 CEST 2013): Loading timepoint Template ViewStructure Timepoint 1  
information  
Read 1243 beads for spim\_TL01\_Angle0.tif (id = 0)  
Read 1467 beads for spim\_TL01\_Angle1.tif (id = 1)  
Read 970 beads for spim\_TL01\_Angle2.tif (id = 2)  
Read 1125 beads for spim\_TL01\_Angle3.tif (id = 3)  
Read 1172 beads for spim\_TL01\_Angle4.tif (id = 4)  
spim\_TL06\_Angle0.tif<->spim\_TL01\_Angle2.tif: Not enough correspondences found 11, should be at  
least 12  
ViewErrorStatistics.setViewSpecificError(): Warning! spim\_TL01\_Angle2.tif (id = 7) is not part  
of the structure of my view spim\_TL06\_Angle0.tif (id = 0)  
spim\_TL06\_Angle0.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 16 of 17 (94%)  
with average error 0.5595997772179544  
spim\_TL01\_Angle0.tif<->spim\_TL01\_Angle2.tif: Remaining inliers after RANSAC: 28 of 32 (88%)  
with average error 0.5160948341446263  
spim\_TL06\_Angle0.tif<->spim\_TL01\_Angle1.tif: Not enough correspondences found 3, should be at  
least 12  
ViewErrorStatistics.setViewSpecificError(): Warning! spim\_TL01\_Angle1.tif (id = 6) is not part  
of the structure of my view spim\_TL06\_Angle0.tif (id = 0)  
spim\_TL01\_Angle0.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 50 of 51 (98%)  
with average error 1.220623667538166  
spim\_TL01\_Angle1.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 64 of 71 (90%)  
with average error 0.5970996916294098  
spim\_TL06\_Angle1.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 31 of 33 (94%)  
with average error 0.642016832626635  
spim\_TL01\_Angle2.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 49 of 51 (96%)

with average error 0.5009295152766362  
spim\_TL01\_Angle1.tif<->spim\_TL01\_Angle2.tif: Remaining inliers after RANSAC: 29 of 33 (88%)  
with average error 0.6915750123303512  
spim\_TL06\_Angle1.tif<->spim\_TL01\_Angle0.tif: Remaining inliers after RANSAC: 12 of 12 (100%)  
with average error 1.2461865916848183  
spim\_TL01\_Angle1.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 48 of 52 (92%)  
with average error 0.546847222176691  
spim\_TL01\_Angle0.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 56 of 59 (95%)  
with average error 1.1047671329496165  
spim\_TL06\_Angle0.tif<->spim\_TL01\_Angle0.tif: Remaining inliers after RANSAC: 71 of 73 (97%)  
with average error 0.4118010134659183  
spim\_TL01\_Angle0.tif<->spim\_TL01\_Angle1.tif: Remaining inliers after RANSAC: 54 of 54 (100%)  
with average error 1.286801311980795  
spim\_TL06\_Angle2.tif<->spim\_TL01\_Angle2.tif: Remaining inliers after RANSAC: 59 of 62 (95%)  
with average error 0.29283465268248227  
spim\_TL06\_Angle2.tif<->spim\_TL01\_Angle0.tif: Remaining inliers after RANSAC: 17 of 18 (94%)  
with average error 0.728746598257738  
spim\_TL06\_Angle1.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 21 of 24 (88%)  
with average error 0.6291029297170185  
spim\_TL01\_Angle2.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 38 of 40 (95%)  
with average error 0.7648122012615204  
spim\_TL06\_Angle0.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 23 of 23 (100%)  
with average error 0.7739541297373564  
spim\_TL06\_Angle2.tif<->spim\_TL01\_Angle1.tif: Not enough correspondences found 9, should be at least 12  
spim\_TL06\_Angle1.tif<->spim\_TL01\_Angle2.tif: Remaining inliers after RANSAC: 15 of 18 (83%)  
with average error 0.5611411492029826  
spim\_TL06\_Angle2.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 18 of 20 (90%)  
with average error 0.47237932682037354  
ViewErrorStatistics.setViewSpecificError(): Warning! spim\_TL01\_Angle1.tif (id = 6) is not part of the structure of my view spim\_TL06\_Angle2.tif (id = 2)  
spim\_TL06\_Angle1.tif<->spim\_TL01\_Angle1.tif: Remaining inliers after RANSAC: 80 of 85 (94%)  
with average error 0.20630927672609686  
spim\_TL06\_Angle3.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 17 of 17 (100%)  
with average error 0.5944048793000334  
spim\_TL01\_Angle3.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 50 of 51 (98%)  
with average error 0.7203965879976749  
spim\_TL06\_Angle4.tif<->spim\_TL01\_Angle2.tif: Remaining inliers after RANSAC: 23 of 24 (96%)  
with average error 0.5616481396491111  
spim\_TL06\_Angle3.tif<->spim\_TL01\_Angle0.tif: Remaining inliers after RANSAC: 15 of 18 (83%)  
with average error 1.014120842019717  
spim\_TL06\_Angle3.tif<->spim\_TL01\_Angle2.tif: Remaining inliers after RANSAC: 17 of 17 (100%)  
with average error 0.543595434988246  
spim\_TL06\_Angle4.tif<->spim\_TL01\_Angle0.tif: Remaining inliers after RANSAC: 16 of 16 (100%)  
with average error 0.8767157681286335  
spim\_TL06\_Angle3.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 106 of 109 (97%)  
with average error 0.2923173497448551  
spim\_TL06\_Angle3.tif<->spim\_TL01\_Angle1.tif: Remaining inliers after RANSAC: 34 of 37 (92%)  
with average error 0.4572409360724337  
spim\_TL06\_Angle2.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 25 of 26 (96%)  
with average error 0.3835163614153862  
spim\_TL06\_Angle4.tif<->spim\_TL01\_Angle1.tif: Remaining inliers after RANSAC: 15 of 16 (94%)  
with average error 0.6994351873795192  
spim\_TL06\_Angle4.tif<->spim\_TL01\_Angle3.tif: Remaining inliers after RANSAC: 20 of 20 (100%)  
with average error 0.5565990135073662  
spim\_TL06\_Angle4.tif<->spim\_TL01\_Angle4.tif: Remaining inliers after RANSAC: 118 of 118 (100%)  
with average error 0.2199432617842646  
spim\_TL06\_Angle0.tif (id = 0) has 110 correspondences in 4 other views.  
spim\_TL06\_Angle1.tif (id = 1) has 159 correspondences in 4 other views.  
spim\_TL06\_Angle2.tif (id = 2) has 119 correspondences in 4 other views.  
spim\_TL06\_Angle3.tif (id = 3) has 189 correspondences in 4 other views.  
spim\_TL06\_Angle4.tif (id = 4) has 192 correspondences in 4 other views.  
spim\_TL01\_Angle0.tif (id = 5) has 319 correspondences in 4 other views.  
spim\_TL01\_Angle1.tif (id = 6) has 324 correspondences in 4 other views.  
spim\_TL01\_Angle2.tif (id = 7) has 258 correspondences in 4 other views.  
spim\_TL01\_Angle3.tif (id = 8) has 399 correspondences in 4 other views.  
spim\_TL01\_Angle4.tif (id = 9) has 401 correspondences in 4 other views.  
The total number of detections was: 0  
The total number of true correspondences is: 1235  
The total number of correspondence candidates was: 1320  
The ratio is: 94%  
Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
Fixing tile spim\_TL06\_Angle4.tif (id = 4)

```
Successfully optimized configuration of 10 tiles after 215 iterations:
  average displacement: 1.076px
  minimal displacement: 0.958px
  maximal displacement: 1.337px
Optimizer Matrices
spim_TL06_Angle0.tif (id = 0):
Transformation:
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)
Scaling: (1.0, 1.0, 1.0)
spim_TL06_Angle1.tif (id = 1):
Transformation:
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)
spim_TL06_Angle2.tif (id = 2):
Transformation:
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,
-0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)
spim_TL06_Angle3.tif (id = 3):
Transformation:
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,
0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)
spim_TL06_Angle4.tif (id = 4):
Transformation:
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158,
-0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)
spim_TL01_Angle0.tif (id = 5):
Transformation:
3d-affine: (0.9989437, -4.4054165E-4, -0.002276063, 59.955494, 4.1797385E-4, 1.0004922,
0.01136151, 421.8885, 5.655587E-4, 1.0319054E-4, 0.99763554, 22.755661)
Scaling: (0.9989725910248772, 0.9930968840977475, 1.0050358916617268)
spim_TL01_Angle1.tif (id = 6):
Transformation:
3d-affine: (0.40193495, -0.018702418, -0.95064044, 614.0636, -0.025847673, 0.9990353,
-0.030498862, 335.26157, 0.90959215, 0.015442578, 0.32385433, -416.91324)
Scaling: (0.9529076918537027, 1.00114645554203, 1.0428035429121718)
spim_TL01_Angle2.tif (id = 7):
Transformation:
3d-affine: (-0.7427336, -0.04233427, -0.64994735, 1300.9629, -0.04587147, 0.99874735,
-0.0025987625, 303.60333, 0.62437326, 0.0020073503, -0.8174465, -83.9919)
Scaling: (0.9681371358141274, 1.0497064058840357, 0.9971839471411227)
spim_TL01_Angle3.tif (id = 8):
Transformation:
3d-affine: (-0.8644899, -0.037189778, 0.55724174, 1324.1759, -0.032600828, 0.9992976,
0.0086686015, 285.21103, -0.5194113, -0.02521679, -0.8263208, 758.8838)
Scaling: (1.029753170725069, 0.9733678500432081, 1.002183361389124)
spim_TL01_Angle4.tif (id = 9):
Transformation:
3d-affine: (0.5048178, -0.0056011304, 0.86338884, 74.30356, -0.0012137378, 1.0002792,
1.7863512E-4, 212.4498, -0.82304025, -0.023190908, 0.5619397, 810.0481)
Scaling: (0.9618715324902022, 1.0355437019565086, 0.9985160575174881)
(Mon Jun 17 15:37:44 CEST 2013): Loading reference timepoint information Reference
ViewStructure Timepoint 6
Read 1012 beads for spim_TL06_Angle0.tif (id = 0)
Read 1169 beads for spim_TL06_Angle1.tif (id = 1)
Read 950 beads for spim_TL06_Angle2.tif (id = 2)
Read 1008 beads for spim_TL06_Angle3.tif (id = 3)
Read 1153 beads for spim_TL06_Angle4.tif (id = 4)
(Mon Jun 17 15:37:44 CEST 2013): Loading timepoint Template ViewStructure Timepoint 2
information
Read 1084 beads for spim_TL02_Angle0.tif (id = 0)
Read 1356 beads for spim_TL02_Angle1.tif (id = 1)
Read 1016 beads for spim_TL02_Angle2.tif (id = 2)
Read 1067 beads for spim_TL02_Angle3.tif (id = 3)
Read 1084 beads for spim_TL02_Angle4.tif (id = 4)
spim_TL06_Angle0.tif<->spim_TL02_Angle2.tif: Not enough correspondences found 5, should be at
least 12
ViewErrorStatistics.setViewSpecificError(): Warning! spim_TL02_Angle2.tif (id = 7) is not part
of the structure of my view spim_TL06_Angle0.tif (id = 0)
spim_TL06_Angle2.tif<->spim_TL02_Angle3.tif: Not enough correspondences found 9, should be at
least 12
ViewErrorStatistics.setViewSpecificError(): Warning! spim_TL02_Angle3.tif (id = 8) is not part
of the structure of my view spim_TL06_Angle2.tif (id = 2)
```

spim\_TL06\_Angle1.tif<->spim\_TL02\_Angle2.tif: Not enough correspondences found 9, should be at least 12  
ViewErrorStatistics.setViewSpecificError(): Warning! spim\_TL02\_Angle2.tif (id = 7) is not part of the structure of my view spim\_TL06\_Angle1.tif (id = 1)  
spim\_TL06\_Angle1.tif<->spim\_TL02\_Angle3.tif: Remaining inliers after RANSAC: 19 of 21 (90%) with average error 0.48986950359846415  
spim\_TL06\_Angle0.tif<->spim\_TL02\_Angle1.tif: Not enough correspondences found 4, should be at least 12  
ViewErrorStatistics.setViewSpecificError(): Warning! spim\_TL02\_Angle1.tif (id = 6) is not part of the structure of my view spim\_TL06\_Angle0.tif (id = 0)  
spim\_TL06\_Angle2.tif<->spim\_TL02\_Angle0.tif: Remaining inliers after RANSAC: 15 of 15 (100%) with average error 0.5725178201993306  
spim\_TL06\_Angle0.tif<->spim\_TL02\_Angle3.tif: Remaining inliers after RANSAC: 14 of 16 (88%) with average error 0.586692458816937  
spim\_TL06\_Angle2.tif<->spim\_TL02\_Angle1.tif: Not enough correspondences found 10, should be at least 12  
ViewErrorStatistics.setViewSpecificError(): Warning! spim\_TL02\_Angle1.tif (id = 6) is not part of the structure of my view spim\_TL06\_Angle2.tif (id = 2)  
spim\_TL06\_Angle0.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 18 of 21 (86%) with average error 0.4613695769674248  
spim\_TL02\_Angle2.tif<->spim\_TL02\_Angle3.tif: Remaining inliers after RANSAC: 24 of 26 (92%) with average error 0.6971105442692836  
spim\_TL02\_Angle0.tif<->spim\_TL02\_Angle3.tif: Remaining inliers after RANSAC: 47 of 49 (96%) with average error 0.7216279381450187  
spim\_TL06\_Angle2.tif<->spim\_TL02\_Angle2.tif: Remaining inliers after RANSAC: 51 of 51 (100%) with average error 0.13323551635531813  
spim\_TL02\_Angle2.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 48 of 52 (92%) with average error 0.5289047895930704  
spim\_TL02\_Angle3.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 45 of 48 (94%) with average error 0.6997178259823057  
spim\_TL02\_Angle1.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 46 of 49 (94%) with average error 0.5737335840645044  
spim\_TL02\_Angle0.tif<->spim\_TL02\_Angle2.tif: Remaining inliers after RANSAC: 33 of 33 (100%) with average error 0.5545218643365484  
spim\_TL02\_Angle1.tif<->spim\_TL02\_Angle2.tif: Remaining inliers after RANSAC: 29 of 32 (91%) with average error 0.8358245214511608  
spim\_TL02\_Angle1.tif<->spim\_TL02\_Angle3.tif: Remaining inliers after RANSAC: 54 of 61 (89%) with average error 0.5939420555476789  
spim\_TL06\_Angle1.tif<->spim\_TL02\_Angle0.tif: Remaining inliers after RANSAC: 18 of 18 (100%) with average error 1.0208344095283084  
spim\_TL06\_Angle0.tif<->spim\_TL02\_Angle0.tif: Remaining inliers after RANSAC: 67 of 68 (99%) with average error 0.22549651807813503  
spim\_TL06\_Angle1.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 18 of 19 (95%) with average error 0.6170452377862401  
spim\_TL02\_Angle0.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 61 of 62 (98%) with average error 1.0176749845020108  
spim\_TL02\_Angle0.tif<->spim\_TL02\_Angle1.tif: Remaining inliers after RANSAC: 51 of 51 (100%) with average error 0.9705642397497215  
spim\_TL06\_Angle1.tif<->spim\_TL02\_Angle1.tif: Remaining inliers after RANSAC: 78 of 79 (99%) with average error 0.2490782681374977  
spim\_TL06\_Angle4.tif<->spim\_TL02\_Angle3.tif: Remaining inliers after RANSAC: 13 of 14 (93%) with average error 0.5781297167906394  
spim\_TL06\_Angle3.tif<->spim\_TL02\_Angle0.tif: Remaining inliers after RANSAC: 18 of 18 (100%) with average error 0.6945979181263182  
spim\_TL06\_Angle4.tif<->spim\_TL02\_Angle2.tif: Remaining inliers after RANSAC: 26 of 27 (96%) with average error 0.6288383242029411  
spim\_TL06\_Angle3.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 17 of 18 (94%) with average error 0.6534997426411685  
spim\_TL06\_Angle4.tif<->spim\_TL02\_Angle0.tif: Remaining inliers after RANSAC: 18 of 19 (95%) with average error 0.7678488310840395  
spim\_TL06\_Angle4.tif<->spim\_TL02\_Angle1.tif: Remaining inliers after RANSAC: 15 of 16 (94%) with average error 0.6326961904764176  
spim\_TL06\_Angle3.tif<->spim\_TL02\_Angle1.tif: Remaining inliers after RANSAC: 38 of 38 (100%) with average error 0.6153747831030112  
spim\_TL06\_Angle3.tif<->spim\_TL02\_Angle2.tif: Model found but not enough remaining inliers (11/12) after RANSAC of 12  
ViewErrorStatistics.setViewSpecificError(): Warning! spim\_TL02\_Angle2.tif (id = 7) is not part of the structure of my view spim\_TL06\_Angle3.tif (id = 3)  
spim\_TL06\_Angle3.tif<->spim\_TL02\_Angle3.tif: Remaining inliers after RANSAC: 97 of 102 (95%) with average error 0.19065081558583946  
spim\_TL06\_Angle2.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 22 of 23 (96%) with average error 0.43174412406303664  
spim\_TL06\_Angle4.tif<->spim\_TL02\_Angle4.tif: Remaining inliers after RANSAC: 116 of 117 (99%) with average error 0.3362793837320703  
spim\_TL06\_Angle0.tif (id = 0) has 99 correspondences in 4 other views.  
spim\_TL06\_Angle1.tif (id = 1) has 133 correspondences in 4 other views.

spim\_TL06\_Angle2.tif (id = 2) has 88 correspondences in 4 other views.  
spim\_TL06\_Angle3.tif (id = 3) has 170 correspondences in 4 other views.  
spim\_TL06\_Angle4.tif (id = 4) has 188 correspondences in 4 other views.  
spim\_TL02\_Angle0.tif (id = 5) has 328 correspondences in 4 other views.  
spim\_TL02\_Angle1.tif (id = 6) has 311 correspondences in 4 other views.  
spim\_TL02\_Angle2.tif (id = 7) has 211 correspondences in 4 other views.  
spim\_TL02\_Angle3.tif (id = 8) has 313 correspondences in 4 other views.  
spim\_TL02\_Angle4.tif (id = 9) has 391 correspondences in 4 other views.  
The total number of detections was: 0  
The total number of true correspondences is: 1116  
The total number of correspondence candidates was: 1212  
The ratio is: 92%  
Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
Successfully optimized configuration of 10 tiles after 218 iterations:  
    average displacement: 1.028px  
    minimal displacement: 0.912px  
    maximal displacement: 1.208px  
Optimizer Matrices  
spim\_TL06\_Angle0.tif (id = 0):  
Transformation:  
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
Scaling: (1.0, 1.0, 1.0)  
spim\_TL06\_Angle1.tif (id = 1):  
Transformation:  
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):  
Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
-0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):  
Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,  
0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158,  
-0.0058299266, 79.84306, -0.8234671, -0.022073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL02\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (0.99924207, 9.755604E-6, -0.0013333261, 62.499012, -2.7674623E-4, 1.0005066,  
0.0043888837, 464.51746, -1.9415468E-4, 8.7649934E-4, 0.99502736, 23.365326)  
Scaling: (0.9992519068426768, 0.9938878252458128, 1.001639774912142)  
spim\_TL02\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.4027249, -0.018558353, -0.9563796, 616.0405, -0.025835328, 0.9992311,  
-0.027414799, 375.7338, 0.9096459, 0.015769273, 0.32323807, -416.3107)  
Scaling: (0.953977292943965, 1.0476273201008406, 1.0008331723955834)  
spim\_TL02\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.74194527, -0.042462625, -0.64641106, 1292.7799, -0.045539435, 0.99887,  
-0.009409428, 346.19568, 0.6255112, 0.0012879521, -0.8057023, -105.24634)  
Scaling: (0.9683501192855392, 1.0374947194230555, 0.9981792176986154)  
spim\_TL02\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.86506164, -0.037108347, 0.55828357, 1302.6368, -0.03270697, 0.99928933,  
0.010457486, 322.10956, -0.5192404, -0.02541367, -0.8306979, 773.72345)  
Scaling: (1.031119273390815, 0.9757996380459315, 1.0030309161000286)  
spim\_TL02\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.50397533, -0.0052226037, 0.86439323, 75.80269, -0.0012730435, 1.0001674,  
0.0011413395, 252.43057, -0.8236159, -0.02273006, 0.5640962, 810.8242)  
Scaling: (0.961563005857554, 1.0373997452508326, 0.99889662966719)  
(Mon Jun 17 15:37:44 CEST 2013): Loading reference timepoint information Reference  
ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)



Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:37:44 CEST 2013): Loading timepoint Template ViewStructure Timepoint 3  
information  
Read 1152 beads for spim\_TL03\_Angle0.tif (id = 0)  
Read 1268 beads for spim\_TL03\_Angle1.tif (id = 1)  
Read 1059 beads for spim\_TL03\_Angle2.tif (id = 2)  
Read 1068 beads for spim\_TL03\_Angle3.tif (id = 3)  
Read 1237 beads for spim\_TL03\_Angle4.tif (id = 4)  
spim\_TL03\_Angle2.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 21 of 24 (88%)  
with average error 0.5436144066708428  
spim\_TL03\_Angle1.tif<->spim\_TL03\_Angle2.tif: Remaining inliers after RANSAC: 23 of 26 (88%)  
with average error 0.6294371589370396  
spim\_TL03\_Angle3.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 16 of 16 (100%)  
with average error 0.8691517761908472  
spim\_TL06\_Angle0.tif<->spim\_TL03\_Angle1.tif: Remaining inliers after RANSAC: 19 of 19 (100%)  
with average error 0.6948673270250622  
spim\_TL06\_Angle1.tif<->spim\_TL03\_Angle0.tif: Remaining inliers after RANSAC: 22 of 23 (96%)  
with average error 1.0202755697748878  
spim\_TL06\_Angle2.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 33 of 35 (94%)  
with average error 0.7875408634091868  
spim\_TL06\_Angle2.tif<->spim\_TL03\_Angle0.tif: Remaining inliers after RANSAC: 28 of 30 (93%)  
with average error 0.7373200835926192  
spim\_TL06\_Angle0.tif<->spim\_TL03\_Angle2.tif: Remaining inliers after RANSAC: 28 of 28 (100%)  
with average error 0.8189767556531089  
spim\_TL03\_Angle0.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 39 of 41 (95%)  
with average error 0.9300777373405603  
spim\_TL06\_Angle0.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 22 of 25 (88%)  
with average error 0.5829718802124262  
spim\_TL06\_Angle0.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 37 of 40 (93%)  
with average error 0.8291266055123226  
spim\_TL03\_Angle0.tif<->spim\_TL03\_Angle1.tif: Remaining inliers after RANSAC: 26 of 27 (96%)  
with average error 0.9293145904174218  
spim\_TL03\_Angle0.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 23 of 23 (100%)  
with average error 0.7268640781226365  
spim\_TL06\_Angle2.tif<->spim\_TL03\_Angle1.tif: Remaining inliers after RANSAC: 28 of 31 (90%)  
with average error 0.5512735790440013  
spim\_TL06\_Angle1.tif<->spim\_TL03\_Angle2.tif: Remaining inliers after RANSAC: 21 of 22 (95%)  
with average error 0.7257205393342745  
spim\_TL03\_Angle1.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 37 of 40 (93%)  
with average error 0.5892297061713966  
spim\_TL03\_Angle2.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 54 of 54 (100%)  
with average error 0.5512454302774533  
spim\_TL06\_Angle1.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 30 of 32 (94%)  
with average error 0.6145793651541073  
spim\_TL06\_Angle1.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 45 of 50 (90%)  
with average error 0.48044655091232724  
spim\_TL03\_Angle0.tif<->spim\_TL03\_Angle2.tif: Remaining inliers after RANSAC: 33 of 33 (100%)  
with average error 0.8239579512314363  
spim\_TL03\_Angle1.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 54 of 58 (93%)  
with average error 0.6307078638562452  
spim\_TL06\_Angle2.tif<->spim\_TL03\_Angle2.tif: Remaining inliers after RANSAC: 151 of 155 (97%)  
with average error 0.18365801203477858  
spim\_TL06\_Angle3.tif<->spim\_TL03\_Angle2.tif: Remaining inliers after RANSAC: 17 of 19 (89%)  
with average error 0.5777835206073872  
spim\_TL06\_Angle4.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 22 of 24 (92%)  
with average error 0.747039989314296  
spim\_TL06\_Angle3.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 18 of 19 (95%)  
with average error 0.5388218503859308  
spim\_TL06\_Angle4.tif<->spim\_TL03\_Angle1.tif: Remaining inliers after RANSAC: 35 of 36 (97%)  
with average error 0.7551177320735795  
spim\_TL06\_Angle0.tif<->spim\_TL03\_Angle0.tif: Remaining inliers after RANSAC: 277 of 277 (100%)  
with average error 0.3461941560925345  
spim\_TL06\_Angle2.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 55 of 56 (98%)  
with average error 0.5491107713092457  
spim\_TL06\_Angle3.tif<->spim\_TL03\_Angle1.tif: Remaining inliers after RANSAC: 43 of 44 (98%)  
with average error 0.6542690777501394  
spim\_TL06\_Angle4.tif<->spim\_TL03\_Angle2.tif: Remaining inliers after RANSAC: 57 of 59 (97%)  
with average error 0.6207197448075339  
spim\_TL06\_Angle3.tif<->spim\_TL03\_Angle0.tif: Remaining inliers after RANSAC: 48 of 50 (96%)  
with average error 0.9041810754376153  
spim\_TL06\_Angle1.tif<->spim\_TL03\_Angle1.tif: Remaining inliers after RANSAC: 256 of 257 (100%)  
with average error 0.2714197063469327  
spim\_TL06\_Angle4.tif<->spim\_TL03\_Angle0.tif: Remaining inliers after RANSAC: 18 of 19 (95%)  
with average error 0.7586451669534048  
spim\_TL06\_Angle3.tif<->spim\_TL03\_Angle3.tif: Remaining inliers after RANSAC: 178 of 180 (99%)

with average error 0.2005355076843433  
spim\_TL06\_Angle4.tif<->spim\_TL03\_Angle4.tif: Remaining inliers after RANSAC: 384 of 388 (99%)  
with average error 0.3715590894523002  
spim\_TL06\_Angle0.tif (id = 0) has 383 correspondences in 4 other views.  
spim\_TL06\_Angle1.tif (id = 1) has 374 correspondences in 4 other views.  
spim\_TL06\_Angle2.tif (id = 2) has 295 correspondences in 4 other views.  
spim\_TL06\_Angle3.tif (id = 3) has 304 correspondences in 4 other views.  
spim\_TL06\_Angle4.tif (id = 4) has 516 correspondences in 4 other views.  
spim\_TL03\_Angle0.tif (id = 5) has 514 correspondences in 4 other views.  
spim\_TL03\_Angle1.tif (id = 6) has 521 correspondences in 4 other views.  
spim\_TL03\_Angle2.tif (id = 7) has 405 correspondences in 4 other views.  
spim\_TL03\_Angle3.tif (id = 8) has 445 correspondences in 4 other views.  
spim\_TL03\_Angle4.tif (id = 9) has 639 correspondences in 4 other views.  
The total number of detections was: 0  
The total number of true correspondences is: 2198  
The total number of correspondence candidates was: 2260  
The ratio is: 97%  
Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
Successfully optimized configuration of 10 tiles after 205 iterations:  
    average displacement: 0.912px  
    minimal displacement: 0.779px  
    maximal displacement: 1.058px  
Optimizer Matrices  
spim\_TL06\_Angle0.tif (id = 0):  
Transformation:  
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
Scaling: (1.0, 1.0, 1.0)  
spim\_TL06\_Angle1.tif (id = 1):  
Transformation:  
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):  
Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
-0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):  
Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,  
0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158,  
-0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL03\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (0.9994344, 1.6169809E-4, -7.839799E-4, -0.40022343, -1.2723543E-4, 0.9998392,  
0.0031979084, 16.601969, -5.522389E-4, -1.2122095E-5, 0.9968469, 0.58636475)  
Scaling: (0.9994899351931519, 0.9960450958917365, 1.0005880959524958)  
spim\_TL03\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.40352538, -0.018073738, -0.9485925, 643.1632, -0.026458934, 0.99966645,  
-0.02799356, 94.3407, 0.9088882, 0.015100528, 0.3270959, -484.12115)  
Scaling: (1.0014241172432428, 0.9536474689745903, 1.0415409818166987)  
spim\_TL03\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.74158597, -0.042314693, -0.65212035, 1355.6404, -0.045166116, 0.999689,  
-0.0090595335, 122.14189, 0.62623906, 0.0017743371, -0.8040551, -29.845718)  
Scaling: (0.9693068310747904, 1.0389063689889542, 0.9991507806281494)  
spim\_TL03\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.8657767, -0.037333943, 0.55079156, 1313.5537, -0.03247446, 0.99932235,  
0.010121822, 97.45191, -0.5185549, -0.025605302, -0.82519794, 828.7309)  
Scaling: (1.02698353842594, 0.9720500245073918, 1.0025301688476294)  
spim\_TL03\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.5038194, -0.0052101077, 0.8643524, 125.32956, -0.0010313416, 1.0006804,  
-0.0012375927, 86.42255, -0.82421154, -0.02329396, 0.56336254, 648.4653)  
Scaling: (0.9619510281311529, 1.037725087444131, 0.9986749476433351)

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ViewStructure Timepoint 6

Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)

Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)

Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)

Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)

Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)

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information

Read 1018 beads for spim\_TL04\_Angle0.tif (id = 0)

Read 1153 beads for spim\_TL04\_Angle1.tif (id = 1)

Read 992 beads for spim\_TL04\_Angle2.tif (id = 2)

Read 1051 beads for spim\_TL04\_Angle3.tif (id = 3)

Read 1218 beads for spim\_TL04\_Angle4.tif (id = 4)

spim\_TL06\_Angle2.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 25 of 27 (93%)  
with average error 0.6646111488342286

spim\_TL04\_Angle3.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 14 of 17 (82%)  
with average error 1.3286086022853851

spim\_TL04\_Angle0.tif<->spim\_TL04\_Angle1.tif: Remaining inliers after RANSAC: 16 of 17 (94%)  
with average error 0.49668862670660013

spim\_TL04\_Angle0.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 19 of 21 (90%)  
with average error 0.5773731411287659

spim\_TL06\_Angle2.tif<->spim\_TL04\_Angle0.tif: Remaining inliers after RANSAC: 27 of 28 (96%)  
with average error 0.8693735577442028

spim\_TL04\_Angle2.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 21 of 23 (91%)  
with average error 0.5908940363497962

spim\_TL04\_Angle1.tif<->spim\_TL04\_Angle2.tif: Remaining inliers after RANSAC: 27 of 31 (87%)  
with average error 0.6770253468442846

spim\_TL06\_Angle0.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 21 of 23 (91%)  
with average error 0.5597577343384426

spim\_TL06\_Angle0.tif<->spim\_TL04\_Angle2.tif: Remaining inliers after RANSAC: 28 of 29 (97%)  
with average error 0.786974004602858

spim\_TL06\_Angle0.tif<->spim\_TL04\_Angle1.tif: Remaining inliers after RANSAC: 18 of 23 (78%)  
with average error 0.6964260356293784

spim\_TL04\_Angle1.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 40 of 46 (87%)  
with average error 0.578401337750256

spim\_TL06\_Angle1.tif<->spim\_TL04\_Angle2.tif: Remaining inliers after RANSAC: 24 of 26 (92%)  
with average error 0.6960938181728125

spim\_TL06\_Angle1.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 31 of 34 (91%)  
with average error 0.6043244244590882

spim\_TL06\_Angle1.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 32 of 36 (89%)  
with average error 0.47244540974497795

spim\_TL04\_Angle0.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 44 of 46 (96%)  
with average error 0.9553350227122959

spim\_TL04\_Angle1.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 40 of 41 (98%)  
with average error 0.6048049639910461

spim\_TL06\_Angle0.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 40 of 42 (95%)  
with average error 0.8246824227273464

spim\_TL06\_Angle1.tif<->spim\_TL04\_Angle0.tif: Remaining inliers after RANSAC: 17 of 18 (94%)  
with average error 0.7282614488812054

spim\_TL04\_Angle2.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 39 of 40 (98%)  
with average error 0.6047147137996478

spim\_TL04\_Angle0.tif<->spim\_TL04\_Angle2.tif: Remaining inliers after RANSAC: 29 of 29 (100%)  
with average error 0.7848672889943781

spim\_TL06\_Angle2.tif<->spim\_TL04\_Angle1.tif: Remaining inliers after RANSAC: 27 of 29 (93%)  
with average error 0.5529460666908158

spim\_TL06\_Angle2.tif<->spim\_TL04\_Angle2.tif: Remaining inliers after RANSAC: 173 of 179 (97%)  
with average error 0.17366658478458494

spim\_TL06\_Angle4.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 12 of 14 (86%)  
with average error 0.23382191235820451

spim\_TL06\_Angle3.tif<->spim\_TL04\_Angle2.tif: Remaining inliers after RANSAC: 26 of 27 (96%)  
with average error 0.5881129508981338

spim\_TL06\_Angle4.tif<->spim\_TL04\_Angle0.tif: Remaining inliers after RANSAC: 19 of 21 (90%)  
with average error 0.6817761581195029

spim\_TL06\_Angle2.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 52 of 55 (95%)  
with average error 0.5617429916388715

spim\_TL06\_Angle4.tif<->spim\_TL04\_Angle1.tif: Remaining inliers after RANSAC: 37 of 39 (95%)  
with average error 0.7665875846066991

spim\_TL06\_Angle3.tif<->spim\_TL04\_Angle1.tif: Remaining inliers after RANSAC: 44 of 44 (100%)  
with average error 0.6273690516298468

spim\_TL06\_Angle4.tif<->spim\_TL04\_Angle2.tif: Remaining inliers after RANSAC: 53 of 53 (100%)  
with average error 0.7051453371092958

spim\_TL06\_Angle3.tif<->spim\_TL04\_Angle0.tif: Remaining inliers after RANSAC: 45 of 47 (96%)  
with average error 0.8607078187995487

spim\_TL06\_Angle3.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 20 of 23 (87%)  
with average error 0.6158950224518777

spim\_TL06\_Angle1.tif<->spim\_TL04\_Angle1.tif: Remaining inliers after RANSAC: 269 of 270 (100%)  
with average error 0.1844256242328639  
spim\_TL06\_Angle0.tif<->spim\_TL04\_Angle0.tif: Remaining inliers after RANSAC: 258 of 305 (85%)  
with average error 0.17267335484223084  
spim\_TL06\_Angle3.tif<->spim\_TL04\_Angle3.tif: Remaining inliers after RANSAC: 245 of 254 (96%)  
with average error 0.3144526930107753  
spim\_TL06\_Angle4.tif<->spim\_TL04\_Angle4.tif: Remaining inliers after RANSAC: 403 of 406 (99%)  
with average error 0.3156074763601534  
spim\_TL06\_Angle0.tif (id = 0) has 365 correspondences in 4 other views.  
spim\_TL06\_Angle1.tif (id = 1) has 373 correspondences in 4 other views.  
spim\_TL06\_Angle2.tif (id = 2) has 304 correspondences in 4 other views.  
spim\_TL06\_Angle3.tif (id = 3) has 380 correspondences in 4 other views.  
spim\_TL06\_Angle4.tif (id = 4) has 524 correspondences in 4 other views.  
spim\_TL04\_Angle0.tif (id = 5) has 474 correspondences in 4 other views.  
spim\_TL04\_Angle1.tif (id = 6) has 518 correspondences in 4 other views.  
spim\_TL04\_Angle2.tif (id = 7) has 420 correspondences in 4 other views.  
spim\_TL04\_Angle3.tif (id = 8) has 473 correspondences in 4 other views.  
spim\_TL04\_Angle4.tif (id = 9) has 639 correspondences in 4 other views.  
The total number of detections was: 0  
The total number of true correspondences is: 2235  
The total number of correspondence candidates was: 2363  
The ratio is: 95%  
Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
Successfully optimized configuration of 10 tiles after 205 iterations:  
average displacement: 0.856px  
minimal displacement: 0.679px  
maximal displacement: 1.051px  
Optimizer Matrices  
spim\_TL06\_Angle0.tif (id = 0):  
Transformation:  
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
Scaling: (1.0, 1.0, 1.0)  
spim\_TL06\_Angle1.tif (id = 1):  
Transformation:  
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):  
Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
-0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):  
Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,  
0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158,  
-0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL04\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (0.9995601, 1.5231408E-4, 0.0039675236, -0.52424973, -1.6154908E-4, 1.0000014,  
0.0066083074, 10.308493, -0.0010813456, 3.2790005E-5, 1.0014371, 1.1371918)  
Scaling: (0.9969863673594792, 1.0043915579574751, 0.9996378861136579)  
spim\_TL04\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.4036487, -0.017797068, -0.94513977, 641.9824, -0.02649633, 0.9998108,  
-0.030038059, 96.42535, 0.90886855, 0.015108264, 0.3253479, -481.22235)  
Scaling: (1.0018718615695645, 0.9515082039688115, 1.0396012048096623)  
spim\_TL04\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.7416822, -0.04232015, -0.6518508, 1352.2524, -0.04533339, 0.999792, -0.01113373,  
116.26076, 0.62637645, 0.002039846, -0.8057553, -29.157883)  
Scaling: (0.969286367370111, 1.0397090414538666, 0.9998191364810618)  
spim\_TL04\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.8661478, -0.037184294, 0.56922895, 1285.583, -0.0325645, 0.9995896, 0.005812809,  
90.95589, -0.5184871, -0.025885928, -0.8318882, 842.8015)  
Scaling: (1.03940698124288, 1.0023295222513358, 0.9759075441144182)

spim\_TL04\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.5042111, -0.005039327, 0.8625982, 123.65549, -7.946559E-4, 1.0008556,  
-0.0049890615, 83.854416, -0.8241066, -0.023355365, 0.56089044, 651.5127)  
Scaling: (0.9622917148532691, 1.0360637202398448, 0.9974613200392628)  
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ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:37:45 CEST 2013): Loading timepoint Template ViewStructure Timepoint 5  
information  
Read 1046 beads for spim\_TL05\_Angle0.tif (id = 0)  
Read 1172 beads for spim\_TL05\_Angle1.tif (id = 1)  
Read 1009 beads for spim\_TL05\_Angle2.tif (id = 2)  
Read 1039 beads for spim\_TL05\_Angle3.tif (id = 3)  
Read 1212 beads for spim\_TL05\_Angle4.tif (id = 4)  
spim\_TL05\_Angle0.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 17 of 19 (89%)  
with average error 0.8551975874339833  
spim\_TL06\_Angle1.tif<->spim\_TL05\_Angle2.tif: Remaining inliers after RANSAC: 24 of 25 (96%)  
with average error 0.7211509523913264  
spim\_TL06\_Angle0.tif<->spim\_TL05\_Angle1.tif: Remaining inliers after RANSAC: 23 of 28 (82%)  
with average error 0.8026279217523077  
spim\_TL05\_Angle0.tif<->spim\_TL05\_Angle1.tif: Remaining inliers after RANSAC: 19 of 20 (95%)  
with average error 0.9007556061995657  
spim\_TL05\_Angle3.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 12 of 15 (80%)  
with average error 0.6571984315911928  
spim\_TL05\_Angle1.tif<->spim\_TL05\_Angle2.tif: Remaining inliers after RANSAC: 22 of 25 (88%)  
with average error 0.7304955781860785  
spim\_TL06\_Angle0.tif<->spim\_TL05\_Angle2.tif: Remaining inliers after RANSAC: 28 of 29 (97%)  
with average error 0.8691278142588479  
spim\_TL06\_Angle2.tif<->spim\_TL05\_Angle1.tif: Remaining inliers after RANSAC: 21 of 23 (91%)  
with average error 0.6131882295012474  
spim\_TL06\_Angle1.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 26 of 26 (100%)  
with average error 0.7249615997649156  
spim\_TL06\_Angle2.tif<->spim\_TL05\_Angle0.tif: Remaining inliers after RANSAC: 22 of 22 (100%)  
with average error 0.9441047967834906  
spim\_TL05\_Angle2.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 25 of 25 (100%)  
with average error 0.6098491987586021  
spim\_TL05\_Angle2.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 53 of 55 (96%)  
with average error 0.5989481903753192  
spim\_TL06\_Angle1.tif<->spim\_TL05\_Angle0.tif: Remaining inliers after RANSAC: 17 of 18 (94%)  
with average error 0.9293310922734878  
spim\_TL05\_Angle1.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 43 of 46 (93%)  
with average error 0.5937172994017602  
spim\_TL05\_Angle0.tif<->spim\_TL05\_Angle2.tif: Remaining inliers after RANSAC: 25 of 26 (96%)  
with average error 1.035907942056656  
spim\_TL05\_Angle1.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 30 of 30 (100%)  
with average error 0.6641569318870704  
spim\_TL06\_Angle1.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 31 of 33 (94%)  
with average error 0.44003990196412607  
spim\_TL06\_Angle0.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 39 of 42 (93%)  
with average error 0.9368245097307059  
spim\_TL06\_Angle0.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 24 of 26 (92%)  
with average error 0.5756565127521752  
spim\_TL06\_Angle2.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 31 of 32 (97%)  
with average error 0.5900327128268057  
spim\_TL05\_Angle0.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 41 of 43 (95%)  
with average error 1.1822751949473125  
spim\_TL06\_Angle3.tif<->spim\_TL05\_Angle2.tif: Remaining inliers after RANSAC: 23 of 25 (92%)  
with average error 0.5866451804404673  
spim\_TL06\_Angle4.tif<->spim\_TL05\_Angle0.tif: Remaining inliers after RANSAC: 15 of 16 (94%)  
with average error 0.8846780558427175  
spim\_TL06\_Angle4.tif<->spim\_TL05\_Angle2.tif: Remaining inliers after RANSAC: 53 of 56 (95%)  
with average error 0.5391165713234892  
spim\_TL06\_Angle3.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 19 of 19 (100%)  
with average error 0.626711370913606  
spim\_TL06\_Angle4.tif<->spim\_TL05\_Angle1.tif: Remaining inliers after RANSAC: 30 of 30 (100%)  
with average error 0.790982777873675  
spim\_TL06\_Angle0.tif<->spim\_TL05\_Angle0.tif: Remaining inliers after RANSAC: 310 of 312 (99%)  
with average error 0.3272514651379277  
spim\_TL06\_Angle2.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 52 of 53 (98%)  
with average error 0.5779741339815351  
spim\_TL06\_Angle1.tif<->spim\_TL05\_Angle1.tif: Remaining inliers after RANSAC: 294 of 297 (99%)

with average error 0.29961466158227046  
spim\_TL06\_Angle2.tif<->spim\_TL05\_Angle2.tif: Remaining inliers after RANSAC: 258 of 261 (99%)  
with average error 0.23318362451165683  
spim\_TL06\_Angle4.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 22 of 24 (92%)  
with average error 0.9245238077234138  
spim\_TL06\_Angle3.tif<->spim\_TL05\_Angle0.tif: Remaining inliers after RANSAC: 43 of 45 (96%)  
with average error 0.8557171828525011  
spim\_TL06\_Angle3.tif<->spim\_TL05\_Angle1.tif: Remaining inliers after RANSAC: 48 of 49 (98%)  
with average error 0.6961012367780008  
spim\_TL06\_Angle3.tif<->spim\_TL05\_Angle3.tif: Remaining inliers after RANSAC: 182 of 184 (99%)  
with average error 0.23446886010140508  
spim\_TL06\_Angle4.tif<->spim\_TL05\_Angle4.tif: Remaining inliers after RANSAC: 409 of 411 (100%)  
with average error 0.27315759300857695  
spim\_TL06\_Angle0.tif (id = 0) has 424 correspondences in 4 other views.  
spim\_TL06\_Angle1.tif (id = 1) has 392 correspondences in 4 other views.  
spim\_TL06\_Angle2.tif (id = 2) has 384 correspondences in 4 other views.  
spim\_TL06\_Angle3.tif (id = 3) has 315 correspondences in 4 other views.  
spim\_TL06\_Angle4.tif (id = 4) has 529 correspondences in 4 other views.  
spim\_TL05\_Angle0.tif (id = 5) has 509 correspondences in 4 other views.  
spim\_TL05\_Angle1.tif (id = 6) has 530 correspondences in 4 other views.  
spim\_TL05\_Angle2.tif (id = 7) has 511 correspondences in 4 other views.  
spim\_TL05\_Angle3.tif (id = 8) has 426 correspondences in 4 other views.  
spim\_TL05\_Angle4.tif (id = 9) has 642 correspondences in 4 other views.  
The total number of detections was: 0  
The total number of true correspondences is: 2331  
The total number of correspondence candidates was: 2390  
The ratio is: 98%  
Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
Successfully optimized configuration of 10 tiles after 205 iterations:  
    average displacement: 0.858px  
    minimal displacement: 0.650px  
    maximal displacement: 1.044px  
Optimizer Matrices  
spim\_TL06\_Angle0.tif (id = 0):  
Transformation:  
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
Scaling: (1.0, 1.0, 1.0)  
spim\_TL06\_Angle1.tif (id = 1):  
Transformation:  
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):  
Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
-0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):  
Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,  
0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158,  
-0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL05\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (0.99976194, 6.7139044E-6, 9.6935034E-4, -3.1985304, 7.029809E-5, 1.0000293,  
0.0025108755, 2.6527495, -1.4454126E-4, -8.353591E-5, 0.99821085, 1.0262909)  
Scaling: (0.9997642071193517, 0.9975483919613124, 1.0006915085454966)  
spim\_TL05\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.4025674, -0.018081687, -0.94812334, 642.40094, -0.026504833, 0.9997685,  
-0.029753804, 83.24721, 0.9093695, 0.015172498, 0.32315397, -481.25504)  
Scaling: (1.0017753834331864, 0.9515489881165811, 1.041663278607391)  
spim\_TL05\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.742259, -0.042218417, -0.64944184, 1347.7272, -0.045244902, 0.9998733,  
-0.010130942, 106.64472, 0.6259103, 0.002410207, -0.803792, -45.747635)  
Scaling: (0.9694358363491066, 1.036981053977092, 0.9995585993768485)

spim\_TL05\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.86583704, -0.03754302, 0.56958395, 1261.8934, -0.032326933, 0.999511, 0.007049665, 79.38198, -0.5192829, -0.025227636, -0.83418965, 854.91113)  
Scaling: (1.0396408403932758, 1.0026056202637033, 0.9776085713923064)  
spim\_TL05\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.5046554, -0.005245923, 0.8602798, 124.01019, -8.4653555E-4, 1.0007813, -0.0054614693, 80.85681, -0.82394624, -0.023323731, 0.5639655, 650.96985)  
Scaling: (0.9618093321280928, 1.0366827127518816, 0.9970355762404969)  
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ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:37:46 CEST 2013): Loading timepoint Template ViewStructure Timepoint 6  
information  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:37:46 CEST 2013): Loading reference timepoint information Reference  
ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
(Mon Jun 17 15:37:46 CEST 2013): Loading timepoint Template ViewStructure Timepoint 7  
information  
Read 971 beads for spim\_TL07\_Angle0.tif (id = 0)  
Read 1082 beads for spim\_TL07\_Angle1.tif (id = 1)  
Read 992 beads for spim\_TL07\_Angle2.tif (id = 2)  
Read 1007 beads for spim\_TL07\_Angle3.tif (id = 3)  
Read 1172 beads for spim\_TL07\_Angle4.tif (id = 4)  
spim\_TL07\_Angle0.tif<->spim\_TL07\_Angle2.tif: Remaining inliers after RANSAC: 22 of 22 (100%)  
with average error 0.7628077051856301  
spim\_TL06\_Angle2.tif<->spim\_TL07\_Angle1.tif: Remaining inliers after RANSAC: 21 of 22 (95%)  
with average error 0.5971014492568516  
spim\_TL07\_Angle0.tif<->spim\_TL07\_Angle1.tif: Remaining inliers after RANSAC: 20 of 20 (100%)  
with average error 0.6922007761895657  
spim\_TL07\_Angle0.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 20 of 21 (95%)  
with average error 0.7636448815464973  
spim\_TL07\_Angle2.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 22 of 23 (96%)  
with average error 0.5573370978236198  
spim\_TL06\_Angle2.tif<->spim\_TL07\_Angle0.tif: Remaining inliers after RANSAC: 18 of 20 (90%)  
with average error 0.8498671969605817  
spim\_TL06\_Angle0.tif<->spim\_TL07\_Angle2.tif: Remaining inliers after RANSAC: 27 of 30 (90%)  
with average error 0.8421407827624569  
spim\_TL07\_Angle1.tif<->spim\_TL07\_Angle2.tif: Remaining inliers after RANSAC: 21 of 21 (100%)  
with average error 0.630502272219885  
spim\_TL07\_Angle1.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 26 of 30 (87%)  
with average error 0.6221274773661907  
spim\_TL06\_Angle0.tif<->spim\_TL07\_Angle1.tif: Remaining inliers after RANSAC: 19 of 21 (90%)  
with average error 0.5969271179484693  
spim\_TL06\_Angle1.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 31 of 33 (94%)  
with average error 0.6726346443737706  
spim\_TL06\_Angle2.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 30 of 30 (100%)  
with average error 0.7657270645101865  
spim\_TL06\_Angle1.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 37 of 39 (95%)  
with average error 0.5086175239569432  
spim\_TL06\_Angle1.tif<->spim\_TL07\_Angle2.tif: Remaining inliers after RANSAC: 24 of 27 (89%)  
with average error 0.7157894416401783  
spim\_TL07\_Angle3.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 20 of 22 (91%)  
with average error 0.4980559840798378  
spim\_TL07\_Angle1.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 41 of 42 (98%)  
with average error 0.5768868027300369  
spim\_TL06\_Angle1.tif<->spim\_TL07\_Angle0.tif: Remaining inliers after RANSAC: 22 of 23 (96%)  
with average error 1.0634485239332372  
spim\_TL07\_Angle0.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 38 of 40 (95%)  
with average error 0.9896666635023916  
spim\_TL06\_Angle0.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 21 of 24 (88%)  
with average error 0.6272811627104169

spim\_TL06\_Angle0.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 35 of 36 (97%)  
 with average error 0.65364474643554  
 spim\_TL07\_Angle2.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 56 of 60 (93%)  
 with average error 0.5407704250620943  
 spim\_TL06\_Angle3.tif<->spim\_TL07\_Angle0.tif: Remaining inliers after RANSAC: 45 of 48 (94%)  
 with average error 0.99497376481692  
 spim\_TL06\_Angle3.tif<->spim\_TL07\_Angle2.tif: Remaining inliers after RANSAC: 19 of 23 (83%)  
 with average error 0.7672072660766149  
 spim\_TL06\_Angle2.tif<->spim\_TL07\_Angle2.tif: Remaining inliers after RANSAC: 182 of 186 (98%)  
 with average error 0.20685618916260345  
 spim\_TL06\_Angle2.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 50 of 51 (98%)  
 with average error 0.4873974795639515  
 spim\_TL06\_Angle4.tif<->spim\_TL07\_Angle0.tif: Remaining inliers after RANSAC: 19 of 21 (90%)  
 with average error 0.8175418894541892  
 spim\_TL06\_Angle4.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 21 of 22 (95%)  
 with average error 0.7751758389529728  
 spim\_TL06\_Angle3.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 18 of 18 (100%)  
 with average error 0.5878220109475983  
 spim\_TL06\_Angle3.tif<->spim\_TL07\_Angle1.tif: Remaining inliers after RANSAC: 40 of 42 (95%)  
 with average error 0.4832515364512801  
 spim\_TL06\_Angle4.tif<->spim\_TL07\_Angle1.tif: Remaining inliers after RANSAC: 20 of 23 (87%)  
 with average error 0.7230976998806  
 spim\_TL06\_Angle1.tif<->spim\_TL07\_Angle1.tif: Remaining inliers after RANSAC: 283 of 285 (99%)  
 with average error 0.2228078772396165  
 spim\_TL06\_Angle0.tif<->spim\_TL07\_Angle0.tif: Remaining inliers after RANSAC: 302 of 304 (99%)  
 with average error 0.3337350059300664  
 spim\_TL06\_Angle4.tif<->spim\_TL07\_Angle2.tif: Remaining inliers after RANSAC: 60 of 64 (94%)  
 with average error 0.5967071518922844  
 spim\_TL06\_Angle3.tif<->spim\_TL07\_Angle3.tif: Remaining inliers after RANSAC: 203 of 204 (100%)  
 with average error 0.2772690714084604  
 spim\_TL06\_Angle4.tif<->spim\_TL07\_Angle4.tif: Remaining inliers after RANSAC: 410 of 410 (100%)  
 with average error 0.3283747820319927  
 spim\_TL06\_Angle0.tif (id = 0) has 404 correspondences in 4 other views.  
 spim\_TL06\_Angle1.tif (id = 1) has 397 correspondences in 4 other views.  
 spim\_TL06\_Angle2.tif (id = 2) has 301 correspondences in 4 other views.  
 spim\_TL06\_Angle3.tif (id = 3) has 325 correspondences in 4 other views.  
 spim\_TL06\_Angle4.tif (id = 4) has 530 correspondences in 4 other views.  
 spim\_TL07\_Angle0.tif (id = 5) has 506 correspondences in 4 other views.  
 spim\_TL07\_Angle1.tif (id = 6) has 491 correspondences in 4 other views.  
 spim\_TL07\_Angle2.tif (id = 7) has 433 correspondences in 4 other views.  
 spim\_TL07\_Angle3.tif (id = 8) has 447 correspondences in 4 other views.  
 spim\_TL07\_Angle4.tif (id = 9) has 652 correspondences in 4 other views.  
 The total number of detections was: 0  
 The total number of true correspondences is: 2243  
 The total number of correspondence candidates was: 2307  
 The ratio is: 97%  
 Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
 Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
 Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
 Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
 Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
 Successfully optimized configuration of 10 tiles after 205 iterations:  
     average displacement: 0.854px  
     minimal displacement: 0.676px  
     maximal displacement: 1.005px  
 Optimizer Matrices  
 spim\_TL06\_Angle0.tif (id = 0):  
 Transformation:  
 3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
 Scaling: (1.0, 1.0, 1.0)  
 spim\_TL06\_Angle1.tif (id = 1):  
 Transformation:  
 3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
 -0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
 Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
 spim\_TL06\_Angle2.tif (id = 2):  
 Transformation:  
 3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
 -0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
 Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
 spim\_TL06\_Angle3.tif (id = 3):  
 Transformation:  
 3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,  
 0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
 Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
 spim\_TL06\_Angle4.tif (id = 4):



Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158, -0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL07\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (1.0000273, -1.2154691E-5, -0.0016292781, -2.505415, 6.3977204E-5, 1.000083, -0.004391134, -3.1827688, 9.931512E-4, 1.7550588E-4, 0.9972388, -1.6707764)  
Scaling: (1.0012316659324074, 0.9961031950862201, 1.0000211660203036)  
spim\_TL07\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.4012189, -0.01806271, -0.94918597, 645.1039, -0.026545068, 1.0001054, -0.032702744, 81.35578, 0.9100449, 0.015192272, 0.32342046, -481.349)  
Scaling: (1.0027658287196684, 0.952391826781532, 1.0414727951508476)  
spim\_TL07\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.74339414, -0.042442232, -0.6508068, 1358.9497, -0.045486715, 1.0000571, -0.012030244, 103.16048, 0.6248932, 0.0020419676, -0.8058055, -14.302338)  
Scaling: (0.9698072819569047, 1.038768320114729, 1.0002829700877935)  
spim\_TL07\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.8647484, -0.036856037, 0.5564192, 1302.449, -0.032194786, 0.9998077, 0.0044804215, 79.75349, -0.521056, -0.02568255, -0.8226266, 833.258)  
Scaling: (1.0294093301485492, 0.9723568940163845, 1.0015660307903633)  
spim\_TL07\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.5062022, -0.005266033, 0.8636847, 122.49585, -6.4756756E-4, 1.0012223, -0.0062075853, 76.029434, -0.823234, -0.023060687, 0.56570506, 649.94556)  
Scaling: (0.9625583630625107, 1.0397036185267818, 0.997732783143817)  
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ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
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information  
Read 965 beads for spim\_TL08\_Angle0.tif (id = 0)  
Read 1082 beads for spim\_TL08\_Angle1.tif (id = 1)  
Read 1027 beads for spim\_TL08\_Angle2.tif (id = 2)  
Read 1000 beads for spim\_TL08\_Angle3.tif (id = 3)  
Read 1175 beads for spim\_TL08\_Angle4.tif (id = 4)  
spim\_TL06\_Angle0.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 21 of 24 (88%)  
with average error 0.5778470434958026  
spim\_TL06\_Angle0.tif<->spim\_TL08\_Angle1.tif: Remaining inliers after RANSAC: 20 of 20 (100%)  
with average error 0.5683092340826988  
spim\_TL06\_Angle0.tif<->spim\_TL08\_Angle2.tif: Remaining inliers after RANSAC: 33 of 33 (100%)  
with average error 0.8276718414642594  
spim\_TL08\_Angle1.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 40 of 42 (95%)  
with average error 0.5866856217384339  
spim\_TL06\_Angle1.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 35 of 36 (97%)  
with average error 0.5450295590928622  
spim\_TL08\_Angle0.tif<->spim\_TL08\_Angle1.tif: Remaining inliers after RANSAC: 19 of 21 (90%)  
with average error 0.53208106599356  
spim\_TL08\_Angle2.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 36 of 37 (97%)  
with average error 0.6822722181677818  
spim\_TL06\_Angle2.tif<->spim\_TL08\_Angle1.tif: Remaining inliers after RANSAC: 19 of 20 (95%)  
with average error 0.5547499162586111  
spim\_TL06\_Angle1.tif<->spim\_TL08\_Angle0.tif: Remaining inliers after RANSAC: 26 of 28 (93%)  
with average error 1.0150609904756909  
spim\_TL08\_Angle1.tif<->spim\_TL08\_Angle2.tif: Remaining inliers after RANSAC: 21 of 22 (95%)  
with average error 0.7482361999296007  
spim\_TL06\_Angle2.tif<->spim\_TL08\_Angle0.tif: Remaining inliers after RANSAC: 28 of 30 (93%)  
with average error 0.8117615681673799  
spim\_TL06\_Angle1.tif<->spim\_TL08\_Angle2.tif: Remaining inliers after RANSAC: 25 of 26 (96%)  
with average error 0.7376616752147674  
spim\_TL06\_Angle2.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 29 of 30 (97%)  
with average error 0.7095328903403776  
spim\_TL08\_Angle0.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 23 of 23 (100%)  
with average error 0.7658282887676487  
spim\_TL08\_Angle1.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 29 of 30 (97%)  
with average error 0.6479087749431873  
spim\_TL08\_Angle3.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 17 of 18 (94%)  
with average error 0.6223507111563402  
spim\_TL06\_Angle1.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 30 of 34 (88%)

with average error 0.7017105648914973  
spim\_TL08\_Angle0.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 46 of 48 (96%)  
with average error 0.9029918002045673  
spim\_TL08\_Angle0.tif<->spim\_TL08\_Angle2.tif: Remaining inliers after RANSAC: 34 of 35 (97%)  
with average error 0.8928359001874924  
spim\_TL06\_Angle0.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 37 of 38 (97%)  
with average error 0.8273006133936547  
spim\_TL08\_Angle2.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 50 of 52 (96%)  
with average error 0.669346442818642  
spim\_TL06\_Angle3.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 19 of 20 (95%)  
with average error 0.6115126719600276  
spim\_TL06\_Angle2.tif<->spim\_TL08\_Angle2.tif: Remaining inliers after RANSAC: 197 of 200 (99%)  
with average error 0.33214541407406034  
spim\_TL06\_Angle4.tif<->spim\_TL08\_Angle1.tif: Remaining inliers after RANSAC: 25 of 27 (93%)  
with average error 0.7485062682628632  
spim\_TL06\_Angle2.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 53 of 55 (96%)  
with average error 0.5775486055128981  
spim\_TL06\_Angle4.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 21 of 23 (91%)  
with average error 0.8918559781852222  
spim\_TL06\_Angle4.tif<->spim\_TL08\_Angle0.tif: Remaining inliers after RANSAC: 26 of 27 (96%)  
with average error 0.8181014404847071  
spim\_TL06\_Angle1.tif<->spim\_TL08\_Angle1.tif: Remaining inliers after RANSAC: 204 of 205 (100%)  
with average error 0.22983697884916968  
spim\_TL06\_Angle3.tif<->spim\_TL08\_Angle2.tif: Remaining inliers after RANSAC: 32 of 34 (94%)  
with average error 0.5468344711698593  
spim\_TL06\_Angle3.tif<->spim\_TL08\_Angle1.tif: Remaining inliers after RANSAC: 41 of 42 (98%)  
with average error 0.6941229584740429  
spim\_TL06\_Angle3.tif<->spim\_TL08\_Angle0.tif: Remaining inliers after RANSAC: 49 of 52 (94%)  
with average error 0.7615321494486867  
spim\_TL06\_Angle4.tif<->spim\_TL08\_Angle2.tif: Remaining inliers after RANSAC: 65 of 68 (96%)  
with average error 0.623537628696515  
spim\_TL06\_Angle0.tif<->spim\_TL08\_Angle0.tif: Remaining inliers after RANSAC: 283 of 289 (98%)  
with average error 0.2624508794726206  
spim\_TL06\_Angle3.tif<->spim\_TL08\_Angle3.tif: Remaining inliers after RANSAC: 173 of 182 (95%)  
with average error 0.16161944933580172  
spim\_TL06\_Angle4.tif<->spim\_TL08\_Angle4.tif: Remaining inliers after RANSAC: 367 of 369 (99%)  
with average error 0.32811294059073703  
spim\_TL06\_Angle0.tif (id = 0) has 394 correspondences in 4 other views.  
spim\_TL06\_Angle1.tif (id = 1) has 320 correspondences in 4 other views.  
spim\_TL06\_Angle2.tif (id = 2) has 326 correspondences in 4 other views.  
spim\_TL06\_Angle3.tif (id = 3) has 314 correspondences in 4 other views.  
spim\_TL06\_Angle4.tif (id = 4) has 504 correspondences in 4 other views.  
spim\_TL08\_Angle0.tif (id = 5) has 534 correspondences in 4 other views.  
spim\_TL08\_Angle1.tif (id = 6) has 418 correspondences in 4 other views.  
spim\_TL08\_Angle2.tif (id = 7) has 493 correspondences in 4 other views.  
spim\_TL08\_Angle3.tif (id = 8) has 434 correspondences in 4 other views.  
spim\_TL08\_Angle4.tif (id = 9) has 609 correspondences in 4 other views.  
The total number of detections was: 0  
The total number of true correspondences is: 2173  
The total number of correspondence candidates was: 2240  
The ratio is: 97%  
Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
Successfully optimized configuration of 10 tiles after 205 iterations:  
average displacement: 0.948px  
minimal displacement: 0.728px  
maximal displacement: 1.026px  
Optimizer Matrices  
spim\_TL06\_Angle0.tif (id = 0):  
Transformation:  
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
Scaling: (1.0, 1.0, 1.0)  
spim\_TL06\_Angle1.tif (id = 1):  
Transformation:  
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):  
Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
-0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):

Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796, 0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158, -0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL08\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (1.0002347, 2.3562461E-6, -0.0031548142, 0.9977648, -1.05693005E-4, 1.0002521, -0.0071258843, -3.662725, 0.0021874942, 2.1053478E-5, 0.99791926, -4.4233704)  
Scaling: (1.0002507821358617, 0.9953195802239647, 1.0028556757650657)  
spim\_TL08\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.400667, -0.018300459, -0.9518145, 652.3968, -0.026653107, 1.0000888, -0.031036437, 77.01209, 0.9106135, 0.01532818, 0.32385308, -481.76843)  
Scaling: (0.9539803736953081, 1.0024797774245038, 1.0430529443511523)  
spim\_TL08\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.74460894, -0.04254172, -0.6459364, 1348.7644, -0.04562899, 1.0000207, -0.013340265, 101.4627, 0.6238256, 0.0017906353, -0.8023195, -50.355423)  
Scaling: (0.9699181643922993, 1.0331673138100272, 1.0002449049232685)  
spim\_TL08\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.86441326, -0.037134137, 0.553884, 1262.3623, -0.03214752, 0.99973917, 0.0038140565, 71.26017, -0.52161354, -0.025530543, -0.82331455, 859.9934)  
Scaling: (1.0278028142998668, 0.97344264896486, 1.0012558549512456)  
spim\_TL08\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.50776774, -0.005195515, 0.8616134, 122.76495, -5.3839176E-4, 1.0011972, -0.008403167, 70.59592, -0.8223394, -0.023079403, 0.5656412, 654.4064)  
Scaling: (0.9627449825584714, 1.0387312576267544, 0.9967866982692399)  
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ViewStructure Timepoint 6  
Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
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information  
Read 985 beads for spim\_TL09\_Angle0.tif (id = 0)  
Read 1060 beads for spim\_TL09\_Angle1.tif (id = 1)  
Read 971 beads for spim\_TL09\_Angle2.tif (id = 2)  
Read 1070 beads for spim\_TL09\_Angle3.tif (id = 3)  
Read 1180 beads for spim\_TL09\_Angle4.tif (id = 4)  
spim\_TL09\_Angle0.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 25 of 25 (100%)  
with average error 0.8974692803621293  
spim\_TL06\_Angle0.tif<->spim\_TL09\_Angle1.tif: Remaining inliers after RANSAC: 21 of 22 (95%)  
with average error 0.5646197533323651  
spim\_TL06\_Angle2.tif<->spim\_TL09\_Angle1.tif: Remaining inliers after RANSAC: 23 of 26 (88%)  
with average error 0.7149548109458841  
spim\_TL06\_Angle2.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 22 of 23 (96%)  
with average error 0.6360154788602482  
spim\_TL09\_Angle0.tif<->spim\_TL09\_Angle2.tif: Remaining inliers after RANSAC: 26 of 26 (100%)  
with average error 0.813385142156711  
spim\_TL06\_Angle2.tif<->spim\_TL09\_Angle0.tif: Remaining inliers after RANSAC: 25 of 27 (93%)  
with average error 0.8847660183906555  
spim\_TL09\_Angle1.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 32 of 35 (91%)  
with average error 0.5356886766385286  
spim\_TL09\_Angle0.tif<->spim\_TL09\_Angle1.tif: Remaining inliers after RANSAC: 24 of 24 (100%)  
with average error 0.9574870184684793  
spim\_TL09\_Angle2.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 26 of 27 (96%)  
with average error 0.7106730542503871  
spim\_TL06\_Angle0.tif<->spim\_TL09\_Angle2.tif: Remaining inliers after RANSAC: 26 of 26 (100%)  
with average error 0.7717183301082025  
spim\_TL06\_Angle0.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 23 of 25 (92%)  
with average error 0.6149532743122267  
spim\_TL09\_Angle3.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 16 of 18 (89%)  
with average error 0.5459051737561822  
spim\_TL09\_Angle2.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 43 of 43 (100%)  
with average error 0.48725153003321137  
spim\_TL06\_Angle0.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 34 of 36 (94%)  
with average error 0.8547441963763798

spim\_TL06\_Angle1.tif<->spim\_TL09\_Angle0.tif: Remaining inliers after RANSAC: 21 of 24 (88%)  
with average error 1.0198964320477986  
spim\_TL06\_Angle1.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 31 of 35 (89%)  
with average error 0.5932639899753755  
spim\_TL06\_Angle1.tif<->spim\_TL09\_Angle2.tif: Remaining inliers after RANSAC: 25 of 27 (93%)  
with average error 0.7445943450927734  
spim\_TL09\_Angle1.tif<->spim\_TL09\_Angle2.tif: Remaining inliers after RANSAC: 23 of 24 (96%)  
with average error 0.5950353009545285  
spim\_TL06\_Angle1.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 26 of 27 (96%)  
with average error 0.688023193524434  
spim\_TL09\_Angle1.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 30 of 30 (100%)  
with average error 0.6221264603237311  
spim\_TL09\_Angle0.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 36 of 36 (100%)  
with average error 0.970171661426624  
spim\_TL06\_Angle2.tif<->spim\_TL09\_Angle2.tif: Remaining inliers after RANSAC: 166 of 167 (99%)  
with average error 0.1872330690363804  
spim\_TL06\_Angle0.tif<->spim\_TL09\_Angle0.tif: Remaining inliers after RANSAC: 237 of 241 (98%)  
with average error 0.24968501714840202  
spim\_TL06\_Angle3.tif<->spim\_TL09\_Angle2.tif: Remaining inliers after RANSAC: 26 of 26 (100%)  
with average error 0.5728287337204585  
spim\_TL06\_Angle3.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 20 of 21 (95%)  
with average error 0.5498541310429573  
spim\_TL06\_Angle4.tif<->spim\_TL09\_Angle0.tif: Remaining inliers after RANSAC: 21 of 23 (91%)  
with average error 0.7617509840499788  
spim\_TL06\_Angle2.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 58 of 59 (98%)  
with average error 0.5520383358515543  
spim\_TL06\_Angle4.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 21 of 22 (95%)  
with average error 0.90315452005182  
spim\_TL06\_Angle3.tif<->spim\_TL09\_Angle0.tif: Remaining inliers after RANSAC: 46 of 49 (94%)  
with average error 0.9113012011284414  
spim\_TL06\_Angle4.tif<->spim\_TL09\_Angle1.tif: Remaining inliers after RANSAC: 24 of 24 (100%)  
with average error 0.7346294708549976  
spim\_TL06\_Angle1.tif<->spim\_TL09\_Angle1.tif: Remaining inliers after RANSAC: 264 of 264 (100%)  
with average error 0.2538309762691796  
spim\_TL06\_Angle4.tif<->spim\_TL09\_Angle2.tif: Remaining inliers after RANSAC: 54 of 60 (90%)  
with average error 0.5958322194853315  
spim\_TL06\_Angle3.tif<->spim\_TL09\_Angle1.tif: Remaining inliers after RANSAC: 41 of 44 (93%)  
with average error 0.45771618423665444  
spim\_TL06\_Angle3.tif<->spim\_TL09\_Angle3.tif: Remaining inliers after RANSAC: 170 of 179 (95%)  
with average error 0.20476172731860595  
spim\_TL06\_Angle4.tif<->spim\_TL09\_Angle4.tif: Remaining inliers after RANSAC: 341 of 343 (99%)  
with average error 0.37255553687073273  
spim\_TL06\_Angle0.tif (id = 0) has 341 correspondences in 4 other views.  
spim\_TL06\_Angle1.tif (id = 1) has 367 correspondences in 4 other views.  
spim\_TL06\_Angle2.tif (id = 2) has 294 correspondences in 4 other views.  
spim\_TL06\_Angle3.tif (id = 3) has 303 correspondences in 4 other views.  
spim\_TL06\_Angle4.tif (id = 4) has 461 correspondences in 4 other views.  
spim\_TL09\_Angle0.tif (id = 5) has 461 correspondences in 4 other views.  
spim\_TL09\_Angle1.tif (id = 6) has 482 correspondences in 4 other views.  
spim\_TL09\_Angle2.tif (id = 7) has 415 correspondences in 4 other views.  
spim\_TL09\_Angle3.tif (id = 8) has 388 correspondences in 4 other views.  
spim\_TL09\_Angle4.tif (id = 9) has 582 correspondences in 4 other views.  
The total number of detections was: 0  
The total number of true correspondences is: 2047  
The total number of correspondence candidates was: 2108  
The ratio is: 97%  
Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
Successfully optimized configuration of 10 tiles after 205 iterations:  
average displacement: 0.930px  
minimal displacement: 0.753px  
maximal displacement: 1.072px  
Optimizer Matrices  
spim\_TL06\_Angle0.tif (id = 0):  
Transformation:  
3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
Scaling: (1.0, 1.0, 1.0)  
spim\_TL06\_Angle1.tif (id = 1):  
Transformation:  
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):

Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435, -0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):  
Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796, 0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158, -0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL09\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (1.0002067, -5.6310557E-5, -0.003608644, -1.1162484, -7.377006E-6, 1.0003572, -0.0034280121, -8.165072, 0.0036473088, -1.2488104E-4, 1.0025225, -7.42955)  
Scaling: (1.0002132827097927, 1.003526782331277, 0.9993621323832367)  
spim\_TL09\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.3992638, -0.01840435, -0.9511191, 643.9263, -0.026716411, 1.0001773, -0.03358823, 77.784744, 0.910979, 0.015582429, 0.3190107, -478.53723)  
Scaling: (1.0028790295217918, 0.9512909511572755, 1.0429510516792704)  
spim\_TL09\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.7449636, -0.04259972, -0.6471069, 1357.9419, -0.04552636, 1.0000962, -0.012134105, 97.40607, 0.6232192, 0.0019610338, -0.80397207, -21.776352)  
Scaling: (0.9699788908709331, 1.0351634275119488, 1.0001498989357436)  
spim\_TL09\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.8639921, -0.037008446, 0.55914223, 1268.8794, -0.032208174, 0.99988484, 0.0035125911, 71.58636, -0.5225732, -0.025655225, -0.8241257, 854.11926)  
Scaling: (1.0304370838187036, 0.9743458293993748, 1.0015413723251751)  
spim\_TL09\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.5087596, -0.00500435, 0.8632011, 125.13681, -6.5706763E-4, 1.0013646, -0.00654459, 72.46876, -0.82184345, -0.022852385, 0.5681267, 648.03876)  
Scaling: (0.9628885323515072, 1.0403741857614286, 0.9979658478618303)  
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Read 1012 beads for spim\_TL06\_Angle0.tif (id = 0)  
Read 1169 beads for spim\_TL06\_Angle1.tif (id = 1)  
Read 950 beads for spim\_TL06\_Angle2.tif (id = 2)  
Read 1008 beads for spim\_TL06\_Angle3.tif (id = 3)  
Read 1153 beads for spim\_TL06\_Angle4.tif (id = 4)  
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Read 986 beads for spim\_TL10\_Angle0.tif (id = 0)  
Read 1105 beads for spim\_TL10\_Angle1.tif (id = 1)  
Read 997 beads for spim\_TL10\_Angle2.tif (id = 2)  
Read 1044 beads for spim\_TL10\_Angle3.tif (id = 3)  
Read 1217 beads for spim\_TL10\_Angle4.tif (id = 4)  
spim\_TL10\_Angle1.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 30 of 36 (83%) with average error 0.549189881483714  
spim\_TL06\_Angle0.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 38 of 41 (93%) with average error 0.8355984095680087  
spim\_TL06\_Angle1.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 38 of 39 (97%) with average error 0.6323544837926564  
spim\_TL06\_Angle0.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 30 of 30 (100%) with average error 0.5703393898904321  
spim\_TL06\_Angle2.tif<->spim\_TL10\_Angle0.tif: Remaining inliers after RANSAC: 25 of 28 (89%) with average error 0.7652738471329212  
spim\_TL10\_Angle0.tif<->spim\_TL10\_Angle2.tif: Remaining inliers after RANSAC: 28 of 29 (97%) with average error 0.8315206045018775  
spim\_TL06\_Angle0.tif<->spim\_TL10\_Angle1.tif: Remaining inliers after RANSAC: 19 of 21 (90%) with average error 0.6763654845325571  
spim\_TL06\_Angle1.tif<->spim\_TL10\_Angle0.tif: Remaining inliers after RANSAC: 19 of 22 (86%) with average error 0.9892423450946808  
spim\_TL10\_Angle2.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 31 of 33 (94%) with average error 0.5953403845910104  
spim\_TL10\_Angle3.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 27 of 31 (87%) with average error 0.6270801259411706  
spim\_TL10\_Angle1.tif<->spim\_TL10\_Angle2.tif: Remaining inliers after RANSAC: 20 of 23 (87%) with average error 0.5562784291803837  
spim\_TL06\_Angle0.tif<->spim\_TL10\_Angle2.tif: Remaining inliers after RANSAC: 28 of 28 (100%)

with average error 0.7655523866415024  
 spim\_TL10\_Angle0.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 30 of 35 (86%)  
 with average error 0.5565438233315945  
 spim\_TL10\_Angle1.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 46 of 49 (94%)  
 with average error 0.5448148773740169  
 spim\_TL10\_Angle0.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 41 of 42 (98%)  
 with average error 0.9773554961855818  
 spim\_TL10\_Angle2.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 54 of 54 (100%)  
 with average error 0.5212015088785578  
 spim\_TL06\_Angle1.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 32 of 32 (100%)  
 with average error 0.654723453335464  
 spim\_TL06\_Angle1.tif<->spim\_TL10\_Angle2.tif: Remaining inliers after RANSAC: 24 of 26 (92%)  
 with average error 0.7085800444086393  
 spim\_TL06\_Angle2.tif<->spim\_TL10\_Angle1.tif: Remaining inliers after RANSAC: 22 of 23 (96%)  
 with average error 0.6392264156178995  
 spim\_TL06\_Angle2.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 41 of 43 (95%)  
 with average error 0.8435821640418797  
 spim\_TL10\_Angle0.tif<->spim\_TL10\_Angle1.tif: Remaining inliers after RANSAC: 22 of 23 (96%)  
 with average error 0.7714772705327381  
 spim\_TL06\_Angle4.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 25 of 26 (96%)  
 with average error 0.8816778308153153  
 spim\_TL06\_Angle3.tif<->spim\_TL10\_Angle2.tif: Remaining inliers after RANSAC: 22 of 24 (92%)  
 with average error 0.5604943030259826  
 spim\_TL06\_Angle4.tif<->spim\_TL10\_Angle0.tif: Remaining inliers after RANSAC: 19 of 22 (86%)  
 with average error 0.7736116922215411  
 spim\_TL06\_Angle3.tif<->spim\_TL10\_Angle1.tif: Remaining inliers after RANSAC: 48 of 53 (91%)  
 with average error 0.38575167193387944  
 spim\_TL06\_Angle1.tif<->spim\_TL10\_Angle1.tif: Remaining inliers after RANSAC: 214 of 216 (99%)  
 with average error 0.2687243780243061  
 spim\_TL06\_Angle2.tif<->spim\_TL10\_Angle2.tif: Remaining inliers after RANSAC: 177 of 179 (99%)  
 with average error 0.19972289917664335  
 spim\_TL06\_Angle3.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 22 of 23 (96%)  
 with average error 0.5515447448600422  
 spim\_TL06\_Angle4.tif<->spim\_TL10\_Angle1.tif: Remaining inliers after RANSAC: 26 of 27 (96%)  
 with average error 0.7743195100472524  
 spim\_TL06\_Angle3.tif<->spim\_TL10\_Angle0.tif: Remaining inliers after RANSAC: 46 of 50 (92%)  
 with average error 0.697570508264977  
 spim\_TL06\_Angle3.tif<->spim\_TL10\_Angle3.tif: Remaining inliers after RANSAC: 152 of 155 (98%)  
 with average error 0.3093101050165532  
 spim\_TL06\_Angle0.tif<->spim\_TL10\_Angle0.tif: Remaining inliers after RANSAC: 266 of 272 (98%)  
 with average error 0.37689406595620006  
 spim\_TL06\_Angle2.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 60 of 60 (100%)  
 with average error 0.5232935362805925  
 spim\_TL06\_Angle4.tif<->spim\_TL10\_Angle2.tif: Remaining inliers after RANSAC: 57 of 58 (98%)  
 with average error 0.6781547809379143  
 spim\_TL06\_Angle4.tif<->spim\_TL10\_Angle4.tif: Remaining inliers after RANSAC: 337 of 338 (100%)  
 with average error 0.5040717469058511  
 spim\_TL06\_Angle0.tif (id = 0) has 381 correspondences in 4 other views.  
 spim\_TL06\_Angle1.tif (id = 1) has 327 correspondences in 4 other views.  
 spim\_TL06\_Angle2.tif (id = 2) has 325 correspondences in 4 other views.  
 spim\_TL06\_Angle3.tif (id = 3) has 290 correspondences in 4 other views.  
 spim\_TL06\_Angle4.tif (id = 4) has 464 correspondences in 4 other views.  
 spim\_TL10\_Angle0.tif (id = 5) has 496 correspondences in 4 other views.  
 spim\_TL10\_Angle1.tif (id = 6) has 447 correspondences in 4 other views.  
 spim\_TL10\_Angle2.tif (id = 7) has 441 correspondences in 4 other views.  
 spim\_TL10\_Angle3.tif (id = 8) has 439 correspondences in 4 other views.  
 spim\_TL10\_Angle4.tif (id = 9) has 622 correspondences in 4 other views.  
 The total number of detections was: 0  
 The total number of true correspondences is: 2116  
 The total number of correspondence candidates was: 2191  
 The ratio is: 97%  
 Fixing tile spim\_TL06\_Angle0.tif (id = 0)  
 Fixing tile spim\_TL06\_Angle1.tif (id = 1)  
 Fixing tile spim\_TL06\_Angle2.tif (id = 2)  
 Fixing tile spim\_TL06\_Angle3.tif (id = 3)  
 Fixing tile spim\_TL06\_Angle4.tif (id = 4)  
 Successfully optimized configuration of 10 tiles after 205 iterations:  
 average displacement: 0.961px  
 minimal displacement: 0.811px  
 maximal displacement: 1.084px  
 Optimizer Matrices  
 spim\_TL06\_Angle0.tif (id = 0):  
 Transformation:  
 3d-affine: (1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0)  
 Scaling: (1.0, 1.0, 1.0)  
 spim\_TL06\_Angle1.tif (id = 1):

Transformation:  
3d-affine: (0.4019471, -0.018123448, -0.94941515, 643.9887, -0.026565894, 0.99999356,  
-0.031975985, 86.95143, 0.90984946, 0.015314827, 0.32108918, -478.69415)  
Scaling: (1.0024096594589158, 0.9508485621397472, 1.0426960902620872)  
spim\_TL06\_Angle2.tif (id = 2):  
Transformation:  
3d-affine: (-0.74307096, -0.04229408, -0.6503768, 1350.867, -0.045259617, 0.99987435,  
-0.00910145, 107.2758, 0.62513214, 0.002267208, -0.805896, -41.837677)  
Scaling: (0.969682848632148, 1.0391979831248561, 0.9994296423258292)  
spim\_TL06\_Angle3.tif (id = 3):  
Transformation:  
3d-affine: (-0.8651256, -0.037340384, 0.5560009, 1292.4794, -0.032303065, 0.99945796,  
0.004552126, 81.7959, -0.5200823, -0.025575923, -0.82603866, 843.71893)  
Scaling: (1.0296682501585668, 0.9743926675610988, 1.0013869457729445)  
spim\_TL06\_Angle4.tif (id = 4):  
Transformation:  
3d-affine: (0.50565606, -0.0051612062, 0.8625701, 122.84003, -8.2300743E-4, 1.0010158,  
-0.0058299266, 79.84306, -0.8234671, -0.023073934, 0.56407094, 650.40784)  
Scaling: (0.9624436529435839, 1.0379529258315343, 0.9974826010869479)  
spim\_TL10\_Angle0.tif (id = 5):  
Transformation:  
3d-affine: (1.0002302, 1.1655409E-4, -0.0066311657, -1.5351114, -6.2415376E-5, 1.0002973,  
-0.00845021, -0.3689736, 0.00439205, 1.3709441E-4, 0.9970395, -3.3232422)  
Scaling: (1.0032957974570738, 0.9940901451360977, 1.0002299400176915)  
spim\_TL10\_Angle1.tif (id = 6):  
Transformation:  
3d-affine: (0.39800152, -0.01871784, -0.95211184, 637.0856, -0.026722766, 1.0002093,  
-0.03477037, 84.45403, 0.91162026, 0.015581174, 0.3201466, -480.51846)  
Scaling: (1.0031985496176294, 0.9528016141758411, 1.0426716551854651)  
spim\_TL10\_Angle2.tif (id = 7):  
Transformation:  
3d-affine: (-0.7456685, -0.042600196, -0.6490191, 1356.5447, -0.04563358, 1.0002049,  
-0.012604922, 106.53738, 0.6227468, 0.0019943584, -0.80657446, -27.147202)  
Scaling: (0.9703244384240651, 1.0379995860192235, 1.0005601193316616)  
spim\_TL10\_Angle3.tif (id = 8):  
Transformation:  
3d-affine: (-0.8639772, -0.0372938, 0.55729115, 1262.5691, -0.03242065, 1.0001662,  
0.0029929578, 80.60788, -0.52314067, -0.025178025, -0.821226, 855.4925)  
Scaling: (1.029331160170114, 0.9727814108506837, 1.0013536890020147)  
spim\_TL10\_Angle4.tif (id = 9):  
Transformation:  
3d-affine: (0.509362, -0.005042419, 0.8643022, 122.694244, -5.9058005E-4, 1.0013782,  
-0.008168757, 73.391716, -0.82157373, -0.02285314, 0.56600004, 650.38715)  
Scaling: (0.9634734691761339, 1.0401273240916764, 0.9975141371910474)