

```

x_k =
      483.4766428 +      845.4982277i
     -117.4073015 -      102.1250485i
              1 +              0i

      483.4766428 -      845.4982277i
     -117.4073015 +      102.1250485i
              1 +              0i

      382.8559756 +      320.9045448i
      256.8021558 -      75.32882061i
              1 +              0i

      382.8559756 -      320.9045448i
      256.8021558 +      75.32882061i
              1 +              0i

v_infty =
      3560.11633025242
     -489.024848414112
              1

ls =
     -0.00362046697443791
      0.00101649824566311
              1

>> verify_fixed_entities

w_groundtruth =

      4.93827160493827e-06      -7.99775434992846e-22      -0.002666666666666667
     -7.99775434992846e-22      4.93827160493827e-06      -0.001777777777777778
     -0.002666666666666667     -0.001777777777777778              3.08

error_I1 = 5.723009
error_J1 = 5.723009
error_I2 = 1.711102
error_J2 = 1.711102
error_v_infty =
     -0.00144302140137147
     -0.00515867737457517
      1.93751741251408e-08

w * v_infty =
     -0.00269001426198818
      0.000756225489772913
              1

```

ls =

-0.00362046697443791  
0.00101649824566311  
1

>> Camera\_calibration

U =

1 至 2 列

-0.448389709863253 - 0.893703548033811i -0.00175385189010003~~2~~+  
0.00101383184412793i  
-0.00211189263226645 - 4.82017244138614e-06i -0.182167615654864~~4~~-  
0.983102541767918i  
-0.0153680233970995 - 8.5257025990121e-08i 0.0175559882382791~~1~~+  
0.00346922083815094i  
7.9787266325015e-06 + 4.3034999046819e-11i -7.42925579275569e-06 + 7.29241799402~~5~~51  
e-06i

3 至 4 列

0.0153743738880304 - 0.000401060276843418i 1.4304565681421e-05 - 6.53066926190~~2~~29  
e-06i  
-0.0178532833530216 - 0.00107312531233278i -2.64683152620736e-05 + 6.11269077804~~1~~74  
e-06i  
-0.422802626727333 + 0.905913997010232i -0.000553121724747612~~2~~+  
0.00101909292161043i  
0.00115808001362328 - 6.4481632824705e-05i -0.999988080363775~~1~~-  
0.0047427472143365i

S =

231658.15566185 0 ~~0~~  
0  
0 0 488.406478161599 ~~0~~  
0 0 0 6.074058397626~~2~~4  
0 0 0 ~~0~~  
1.25982312906726e-05

V =

1 至 2 列

```

-0.999988027489732 + 0i 0.00232560338160577 +
0i
-0.00395904694580373 - 0.00171174165477025i -0.0022678986529873 -
0.00329147225977218i
-0.000417236028780778 - 0.00227302891508556i -0.18443356232653 -
0.982834103746798i
-1.93581570542319e-06 - 3.8578549099161e-06i -3.83996560256298e-06 + 5.5425216077054e-
e-08i

```

3 至 4 列

```

-0.00430538974055242 + 0i 8.08010630945882e-06 +
0i
0.91831559323339 + 0.395798540568953i -0.00232417742184635 + 5.866052364224937
e-05i
-0.00271478916828272 - 0.00294528823162877i 7.10103919759363e-06 + 3.36716206390075
e-08i
0.00227615248404693 + 0.000473765711925233i 0.974351197789702 -
0.225020750172764i

```

w\_inverse\_real =

```

324118.217274935 -601.480233052949 686.330555356422
-601.480233052949 123762.551369683 -2.05828222076658
686.330555356422 -2.05828222076658 2.34902821913196

```

k =

```

569.313812650752 -1.05650033371302 1.20553996777425
0 351.797434863769 -0.0022303427050642
0 0 0.946412505624395

```

f =

```

460.555623757261

```

>>