

Year: 2017/2018 Semester: Second Advanced Photogrammetry

Advanced Photogrammet Assignment No. : 2

Given a stereo-pair of standard aerial photographs taken with a camera having a principal distance of 153.380 mm.

The ground coordinates as well as the photo coordinates on the left and right photos of two ground control points are listed in the table below.

Pt.	X (m)	Y (m)	Z (m)	x(mm)	y(mm)	x'(mm)	y'(mm)
1	240254.92	1188894.56	64.63	91.835	-79.885	-1.916	-80.828
2	239771.27	1189764.03	82.56	1.832	85.096	-93.035	84.707

Using the data of the two control points, determine approximate values for:

- Exterior orientation parameters ($\omega_1, \phi_1, \kappa_1, X_{L1}, Y_{L1}, Z_{L1}$) of the left image.
- Exterior orientation parameters ($\omega_2, \phi_2, \kappa_2, X_{L2}, Y_{L2}, Z_{L2}$) of the right image.