

Pix4D Tutorial (Software desktop)

Jcatalão, 8 maio 2023

Versão 4.8.0 (supports windows 11)

(Problemas: <https://community.pix4d.com/t/windows-11-issue-with-pix4dmapper-pix4dfields-pix4dsurvey-and-pix4dmatric/20960>)

1. New Project
2. Add images / Add directories
3. Camera Model (FC300x_3.6_4000x3000 ou FC6360)
4. Select Output Coordinates
 - Advanced Coordinate Options
 - Known Coordinate System
 - From List > Datum ETRS89 CS: ETRS89/PortugalTM06
 - Vertical: MSL egm2008
5. Processing Options Template > 3D Maps
6. Processing Options> Advanced
 - a) Initial Processing > Calibration > Internal parameters Optimization > All Prior
 - b) Point Cloud & Mesh > Classify Point Cloud
7. Initial processing (sem PFs) (desativar as restantes etapas) : **START**

É realizada a triangulação área sem pontos fotogramétricos. Posteriormente são identificados os PFs nas imagens e recalculada a triangulação área
8. Analisar relatório de qualidade
9. Importar e identificar os PFS.
 - a) Project > GCP/MTP Manager > Import GCP
 - b) Basic Editor : Identificar os PFs nas imagens
10. Processing > Initial processing (com PFs)
11. Analisar os resultados, Identificar PFs mal marcados ou com coordenadas erradas e eliminar do processamento.

12. Point Cloud and Mesh >

Default	Low Resolution
<p>Point Cloud 3D Textured Mesh Advanced</p> <p>Point Cloud Densification</p> <p>Image Scale: <input type="text" value="1/2 (Half image size, Default)"/> <input checked="" type="checkbox"/> Multiscale</p> <p>Point Density: <input type="text" value="Optimal"/></p> <p>Minimum Number of Matches: <input type="text" value="3"/></p> <p>Point Cloud Classification</p> <p><i>Note: improves the DTM generation</i></p> <p><input type="checkbox"/> Classify Point Cloud</p> <p>Export</p> <p><input type="checkbox"/> LAS</p> <p><input type="checkbox"/> LAZ</p> <p><input type="checkbox"/> PLY</p> <p><input type="checkbox"/> XYZ</p> <p>Delimiter: <input type="text" value="Space"/></p> <p><input type="checkbox"/> Merge Tiles into One File</p>	<p>Point Cloud 3D Textured Mesh Advanced</p> <p>Point Cloud Densification</p> <p>Image Scale: <input type="text" value="1/4 (Quarter image size, Fast)"/> <input checked="" type="checkbox"/> Multiscale</p> <p>Point Density: <input type="text" value="Low (Fast)"/></p> <p>Minimum Number of Matches: <input type="text" value="3"/></p> <p>Point Cloud Classification</p> <p><i>Note: improves the DTM generation</i></p> <p><input type="checkbox"/> Classify Point Cloud</p> <p>Export</p> <p><input type="checkbox"/> LAS</p> <p><input type="checkbox"/> LAZ</p> <p><input type="checkbox"/> PLY</p> <p><input type="checkbox"/> XYZ</p> <p>Delimiter: <input type="text" value="Space"/></p> <p><input type="checkbox"/> Merge Tiles into One File</p>

13 DSM and Orto

DSM and Orthomosaic Additional Outputs Index Calculator

Resolution

Automatic

x GSD (2.07032 cm/pixel)

Custom

cm/pixel

DSM Filters

Use Noise Filtering

Use Surface Smoothing

Type:

Raster DSM

GeoTIFF

Method:

Merge Tiles

Orthomosaic

GeoTIFF

Merge Tiles

GeoTIFF Without Transparency

Google Maps Tiles and KML

1. Initial Processing

2. Point Cloud and Mesh

3. DSM, Orthomosaic and Index

Resources and Notifications

14. Executar passo 2 (Point Cloud and Mesh) e 3 (DSM)

Desativar step 1. Initial Processing.