Geospatial Modeling & Visualization

A Method Store for Advanced Survey and Modeling Technologies

GMV Geophysics

Modeling

GPS

Digital Photogrammetry 3D Scanning

Equipment Data and Projects by Region

Camera Calibration Documentation for Close-Range Photogrammetry

Each camera (referring to a camera and lens combination) used in a close-range photogrammetry project should be calibrated and a calibration file should be saved with the project data. Some close-range photogrammetry software does not require this information before processing the image block; however, it will provide most of this information after processing. The tables below describe what is appropriate to document for this process. Download a printable form in PDF format here or in a spreadsheet (.xlsx) format here.



For each camera/lens calibration:

Element	Description
Camera/Lens name	Name used to identify this camera/lens combination?@@ga@#@st&DomRhipto 2_28mm).
Date of calibration	Date that the calibration was performed.
Camera calibration file name	The exact file name for the camera calibration.
Camera specifics	Specific make and model of the camera and lens used.
Array dimensions in pixels	Width and height of digital array measured in pixels.
Array dimensions in mm	Width and height of digital array measured in millimeters.
Focal length	As indicated by camera calibration.
Principal Point	As indicated by camera calibration.
Lens distortions (K1, K2, P1 and P2 parameters)	Radial and decentering distortion parameters as measured by the camera calibration.
Affine distortions	Affine distortion parameters as measured by the camera calibration (if measured).
Calibration Quality Values	Quality values such as overall RMS, maximum residual, and photo coverage (%) from the calibration process.
Calibration adjustment report	A report on the quality of the camera calibration including the correlation between exterior and interior parameters.

For each calibration image (if performing a camera calibration with a target):

Entry	Description
Image file names	File names for calibration images.
Calibration target description	Include target dimensions, creator and description.



You are reading the series: <u>Close Range Photogrammetry Documentation</u> Project Level Documentation for Close-Range Photogrammetry <u>Control Point Documentation for Close-Range Photogrammetry and/or GPS</u> Camera Calibration Documentation for Close-Range Photogrammetry Image Acquisition Documentation for Close-Range Photogrammetry Image Processing and Block Triangulation Documentation for Close-Range Photogrammetry File Exports and Deliverables Documentation for Digital Photogrammetry

Please cite this document as: Barnes, Adam. 2012. Camera Calibration Documentation for Close-Range Photogrammetry.CAST Technical Publications Series. Number 10743. http://gmv.cast.uark.edu/photogrammetry/hardwarephotogrammetry/canon-5d-mark-ii/metadata-forms-canon-5d-mark-ii/camera-calibration-documentation-for-closerange-photogrammetry/. [Date accessed: 27 April 2013]. [Last Updated: 11 August 2012]. Disclaimer: All logos and trademarks remain the property of their respective owners.

Login

Logi

© 2013 - Geospatial Modeling & Visualization