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Identification of Errors in 3D Building Models by a Robust Camera Pose Estimation

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Abstract. This paper presents a method for identification of errors in 3D building models which are results of inaccurate creation process. Error detection is carried out within the camera pose estimation. As observations, parameters of the building corners and of the line segments detected in the image are used and conditions for the coplanarity of corresponding edges are defined. For the estimation, the uncertainty of the 3D building models and image features are taken into account.

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