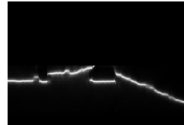
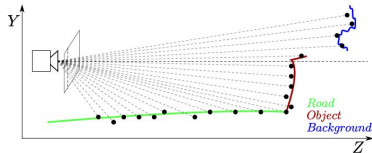


Efficient Representation of Traffic Scenes by Means of Dynamic Stixels

D. Pfeiffer and U. Franke (IV 2010)



(a) Cost image for free space.



(b) Resulting free space

- ▶ Pose and motion estimation of moving obstacles in traffic scenes
- ▶ Stixel World is a compact and flexible representation but do not allow to infer motion information
- ▶ Dense disparity images are used for the free space computation and extraction of the static stixel representation
- ▶ Tracking of stixels using 6-Vision Kalman filter framework and dense optical flow
- ▶ Lateral as well as longitudinal motion is estimated for each stixel
- ▶ Simplifies grouping of stixels based on the motion as well as detection of moving obstacles
- ▶ Demonstration on recorded data