

## Localization

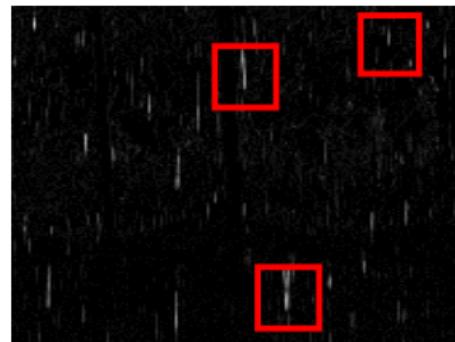
$x_1$



$o_1$



$r$



Hard patches from  $o_1$



$p_1^1$      $p_1^2$      $p_1^3$



$o_2, \dots, o_N$



$p_1^3$



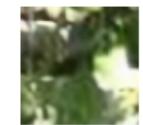
$p_2^3$



$p_3^3$



$p_4^3$



$p_N^3$

Upsampling  
Warping  
Averaging



$p_{avg,1}^3$