The first form of data augmentation consists of generating image translations and horizontal reflections. We do this by extracting random  $224 \times 224$  patches (and their horizontal reflections) from the  $256 \times 256$  images and training our network on these extracted patches<sup>4</sup>. This increases the size of our training set by a factor of 2048, though the resulting training examples are, of course, highly inter-