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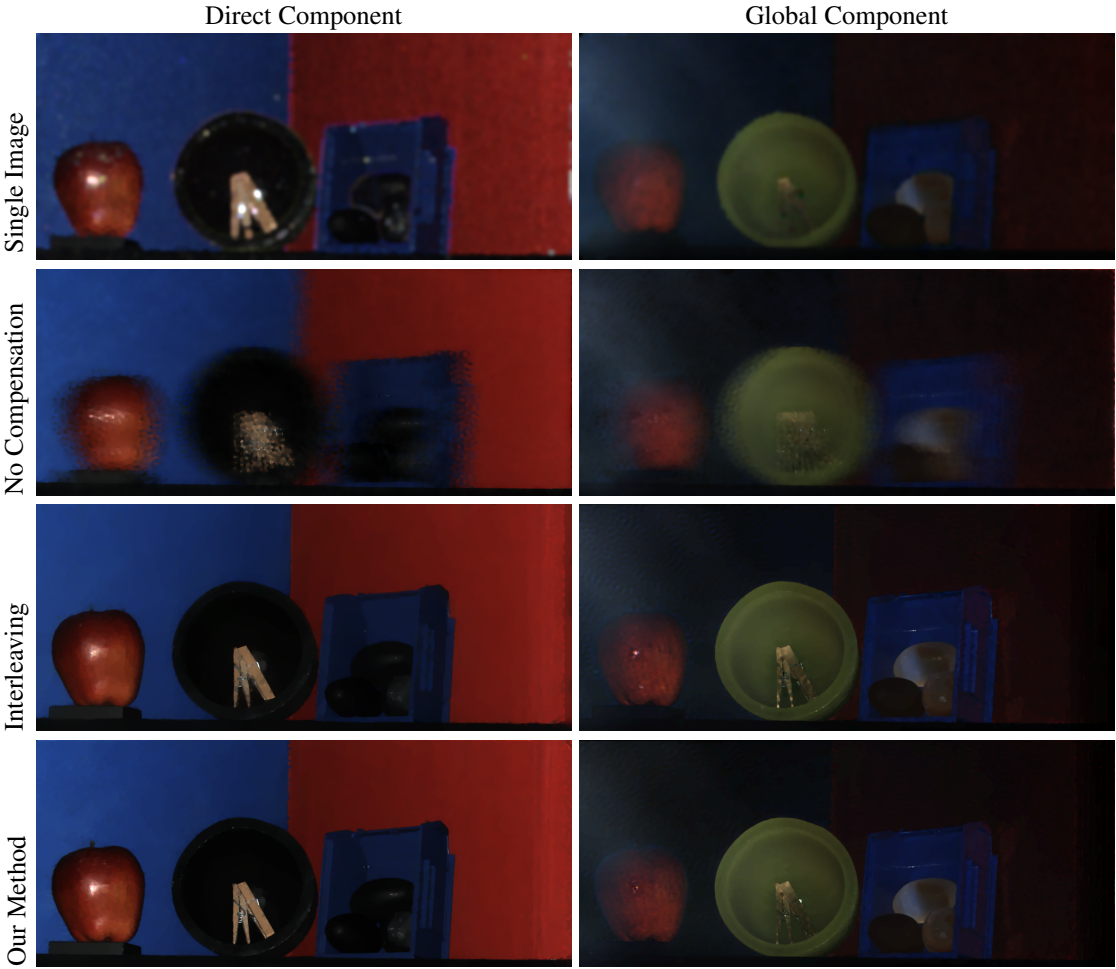
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**Compensating for Motion During Direct-Global Separation: Supplementary  
Material**

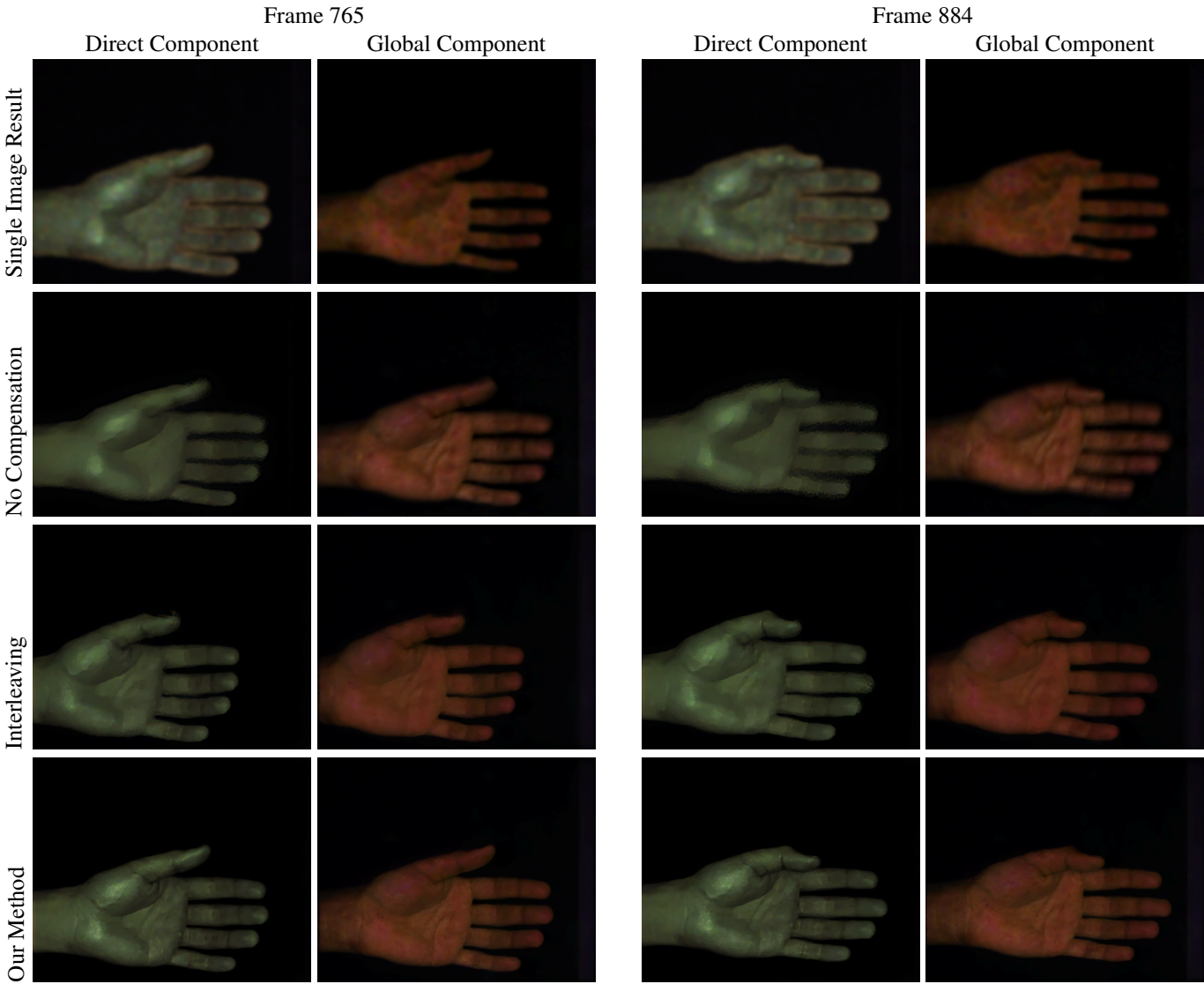
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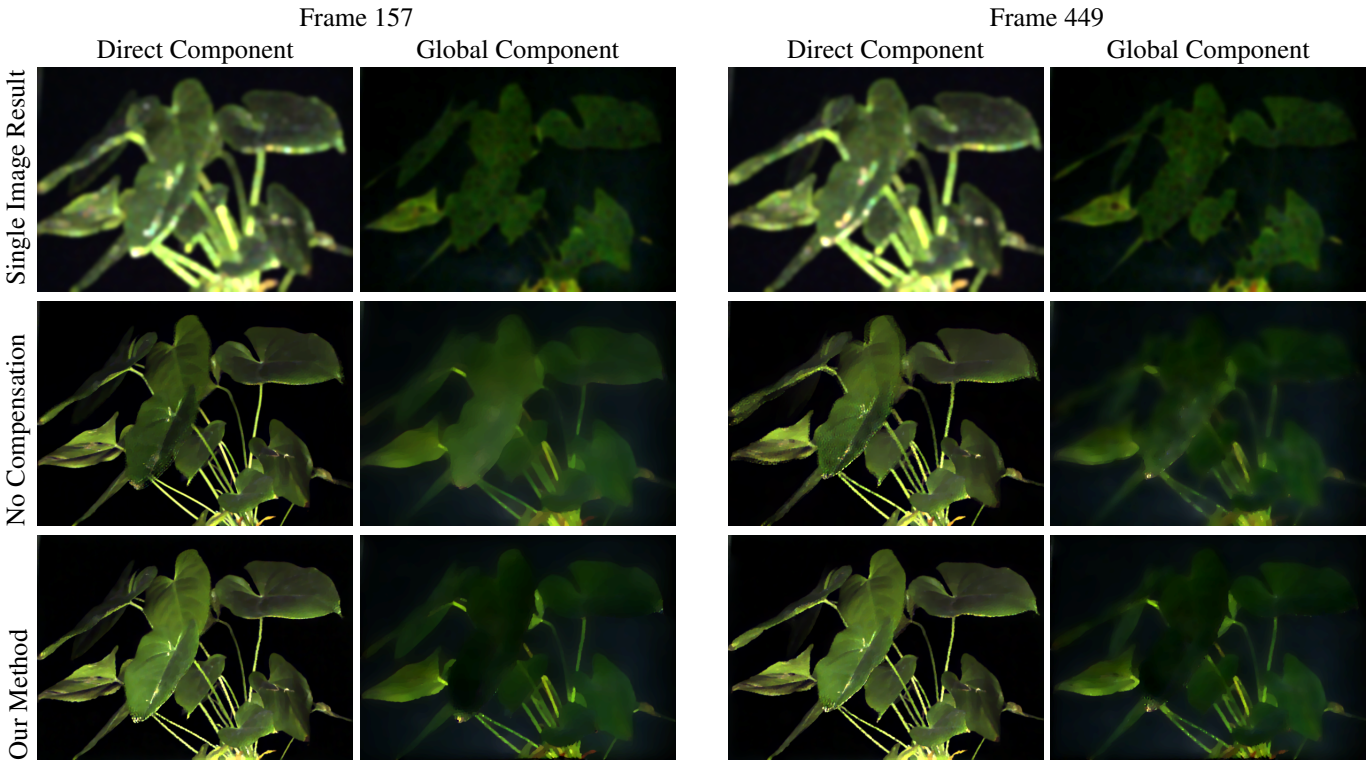
**Figure 1** Example Frames From the Toy Video Sequence: Single shot separation produces low resolution, noisy outputs. Here, because of the large translation between frames using multiple images without motion compensation causes heavy blur and artefacts. Our method is able to effectively compensate for motion and produces sharp separation results while the scene moves. Since the motion in this sequence is fairly uniform, interleaving also performs well here. The inter reflections from the blue backdrop onto the apple are visible in the global component of our method but not with interleaving.



**Figure 2** Example Frames From the Hand Video Sequence: Because of the dark background, the single shot method erodes the fingers in the global component and dilates them in the global image. Running separation without motion compensation while the fingers move introduces motion artifacts and blurs out some of the detail. Compensating for motion by interleaving corrects some of the problems due to motion, but some mistakes remain like around the thumb on the left example and the middle finger on the right example (the interleaving comparison was captured on a different but similar hand video sequence because interleaving requires a different projector pattern sequence). Our method produces sharper results with few noticeable artifacts due to motion.



**Figure 3** Example Frames From the Plant Video Sequence: Because of the dark background, the single shot method morphologically erodes the leaves in the global component and dilates them in the global image. Running separation without motion compensation causes clear ghosting of the leaves as they flutter in the breeze. Our method produces sharper results with few noticeable artifacts due to motion.



**Figure 4** Example Frames From the Face Video Sequence: Single shot separation produces low resolution, noisy outputs. Using multiple images without motion compensation causes blur and other artefacts in parts of the image that are moving. Our method is able to effectively compensate for motion and produces sharp separation results while the face moves and undergoes changes in expression.

