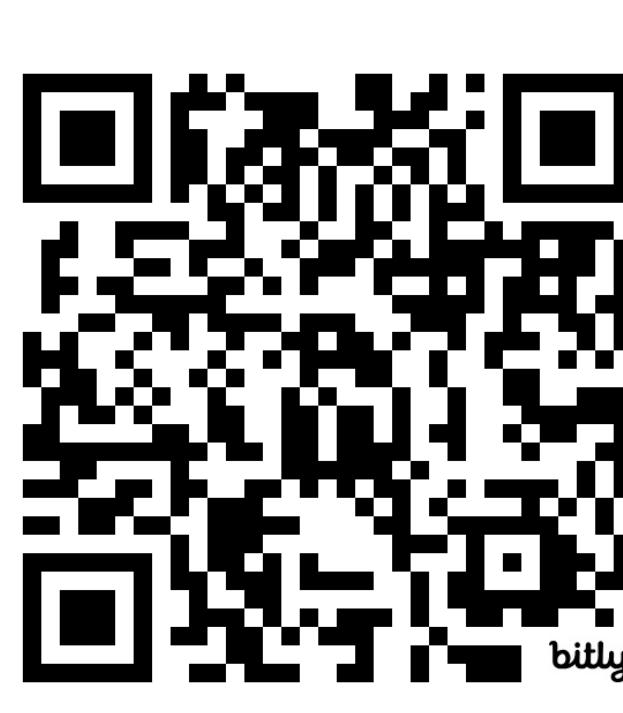
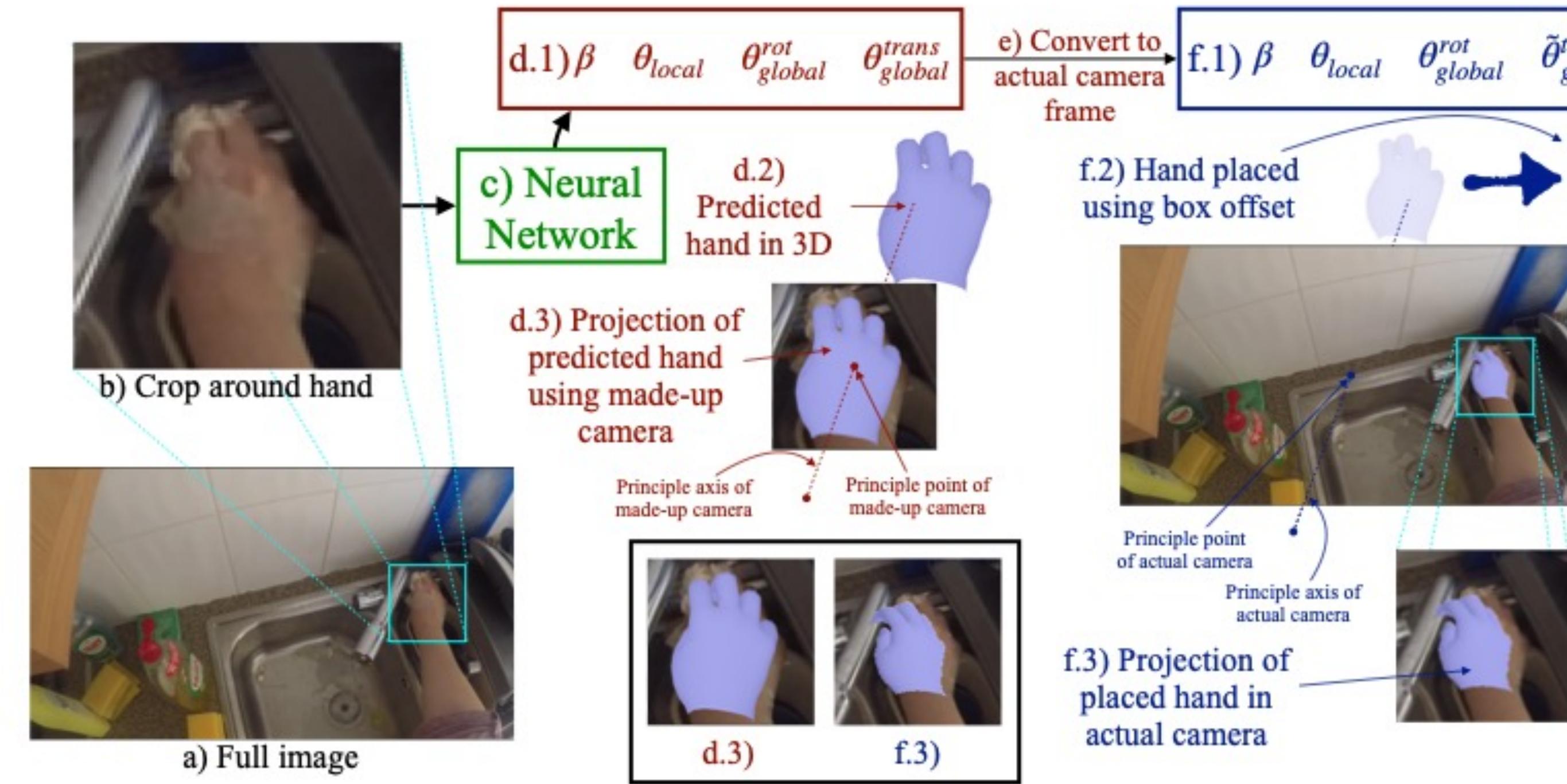


3D Hand Pose Estimation in Everyday Egocentric Images

Aditya Prakash, Ruisen Tu, Matthew Chang, Saurabh Gupta



Perspective distortion

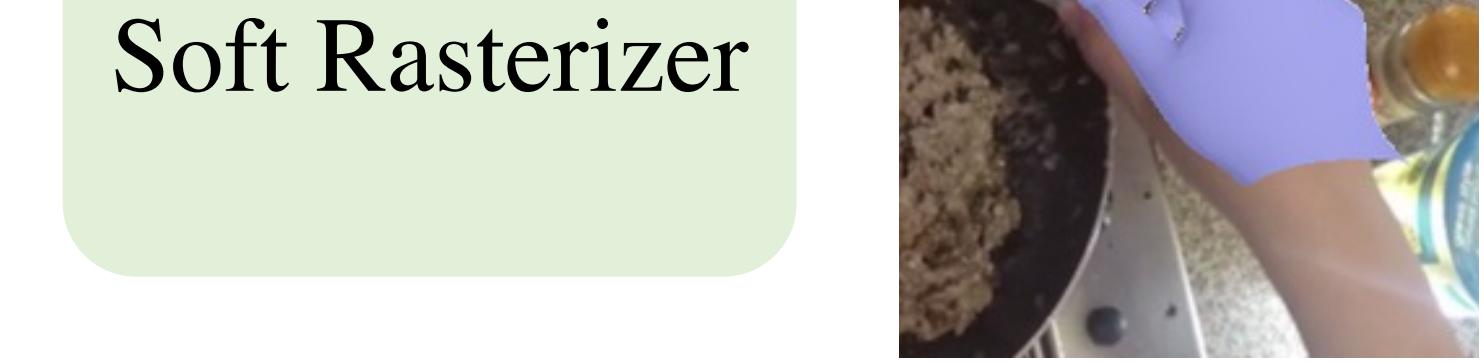


Crop location in camera's FOV is crucial in egocentric view

Auxiliary Supervision

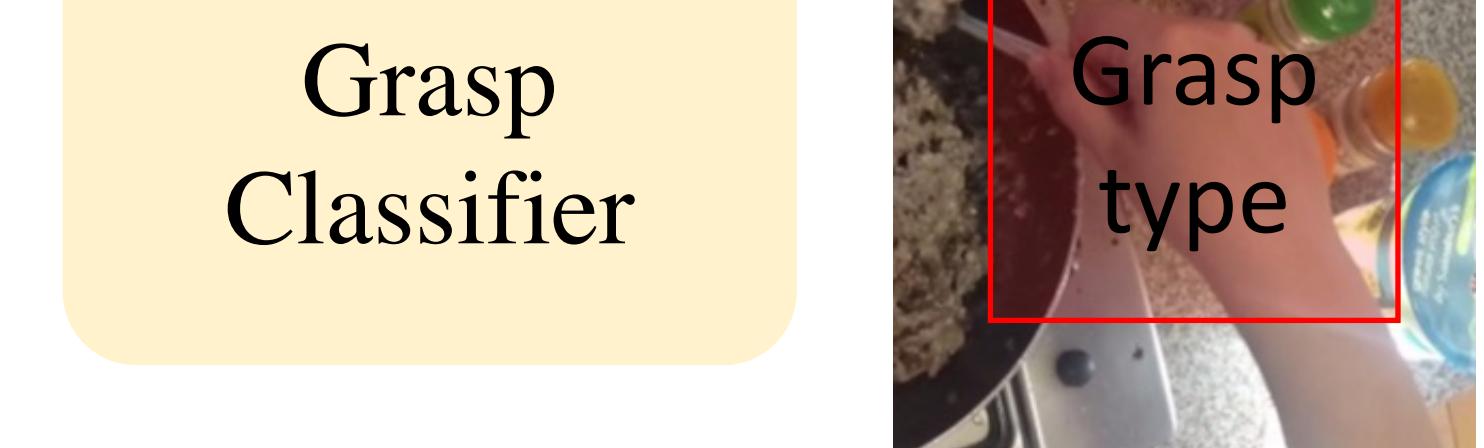
MANO

Soft Rasterizer



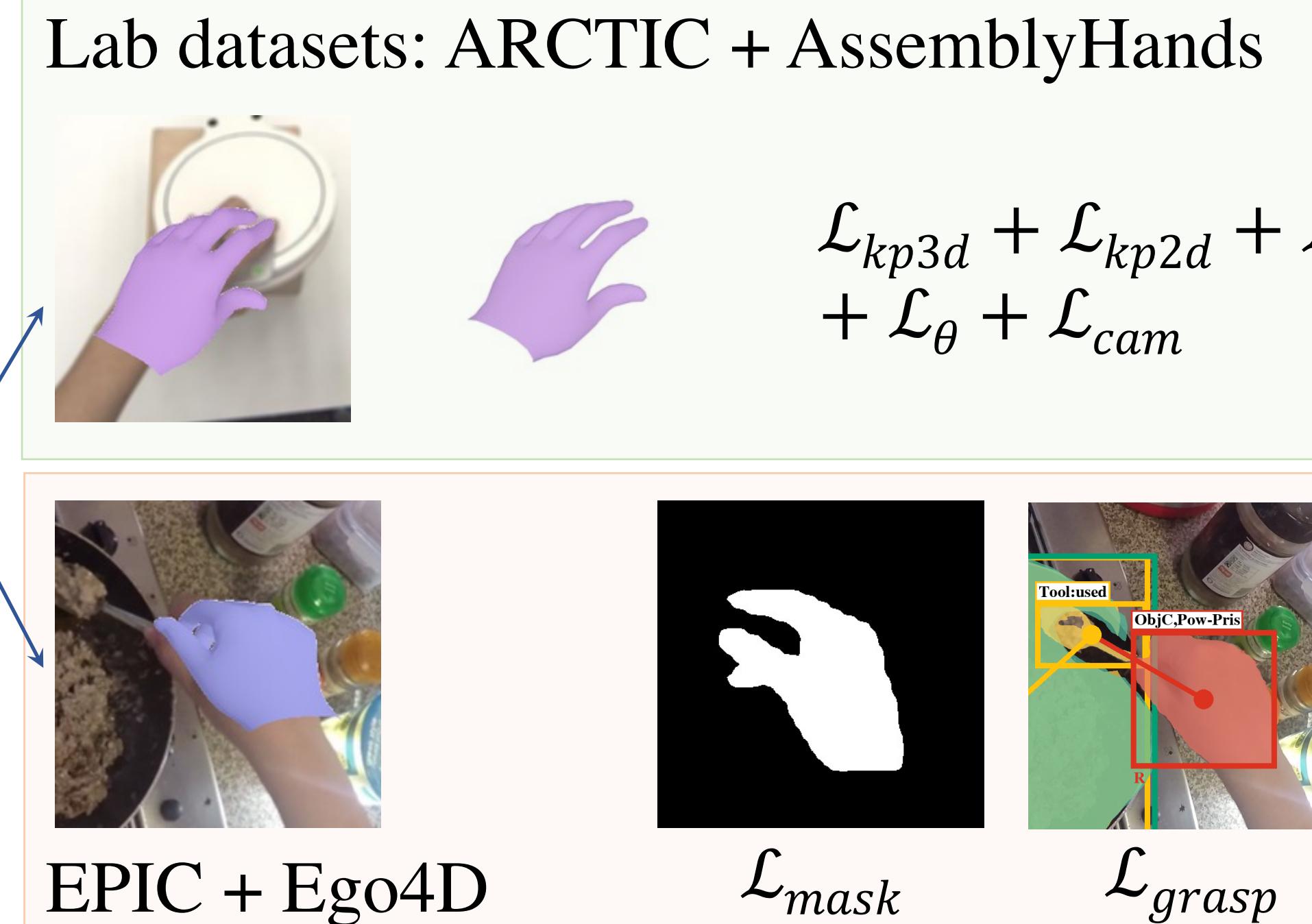
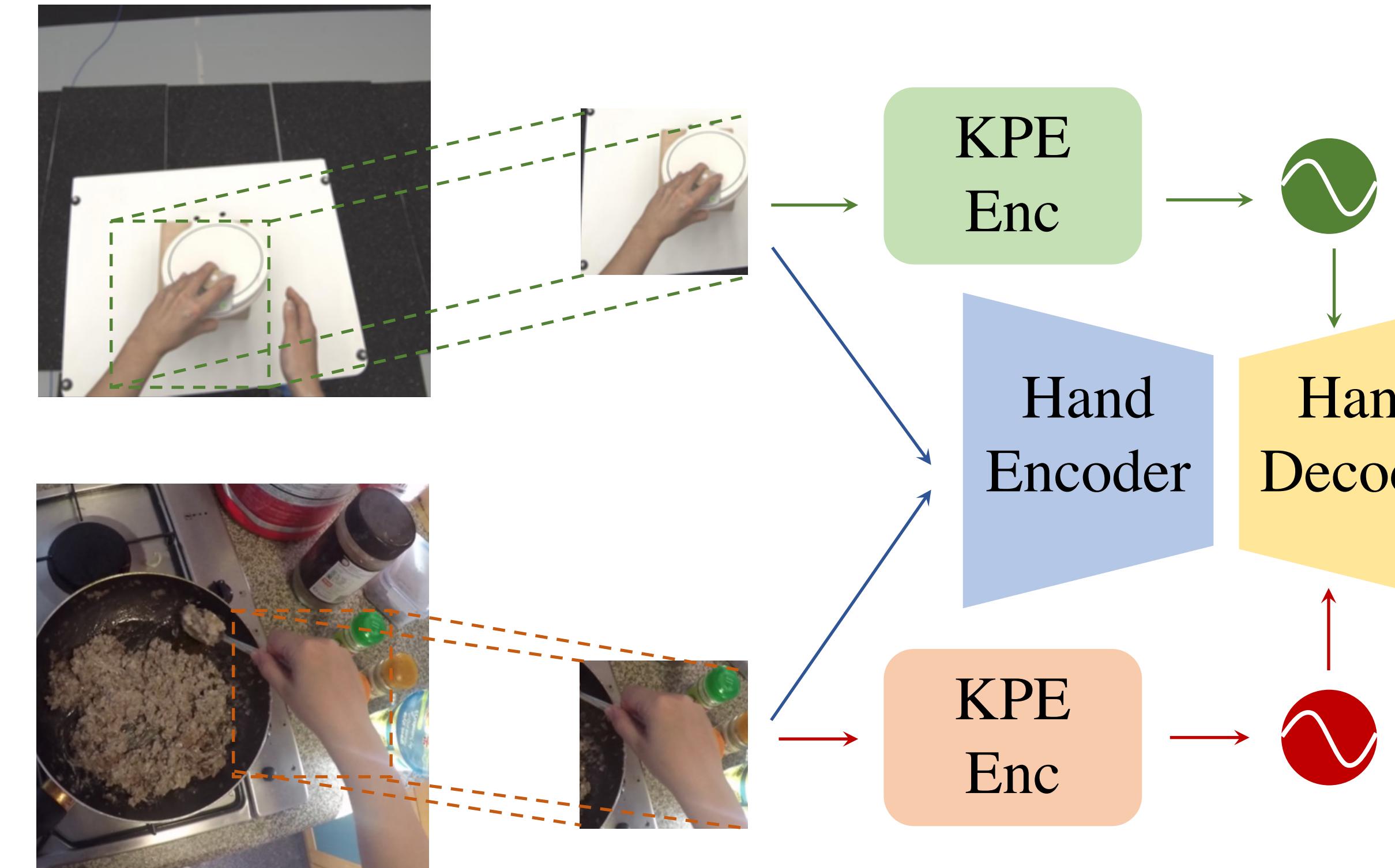
$M(\theta, \beta)$

Grasp Classifier



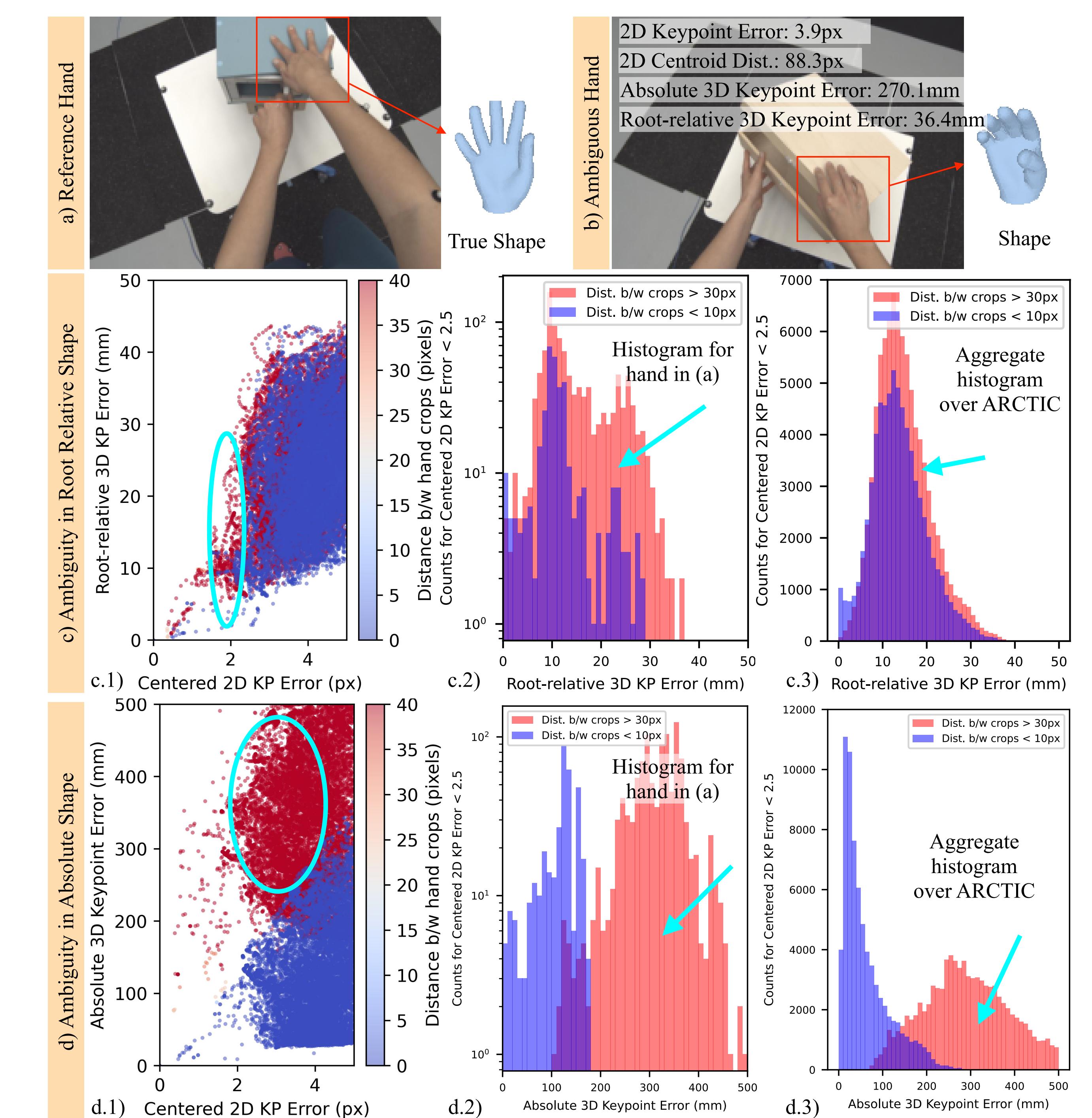
Hands masks & grasp labels are estimated from off-the-shelf model for large scale videos

WildHands

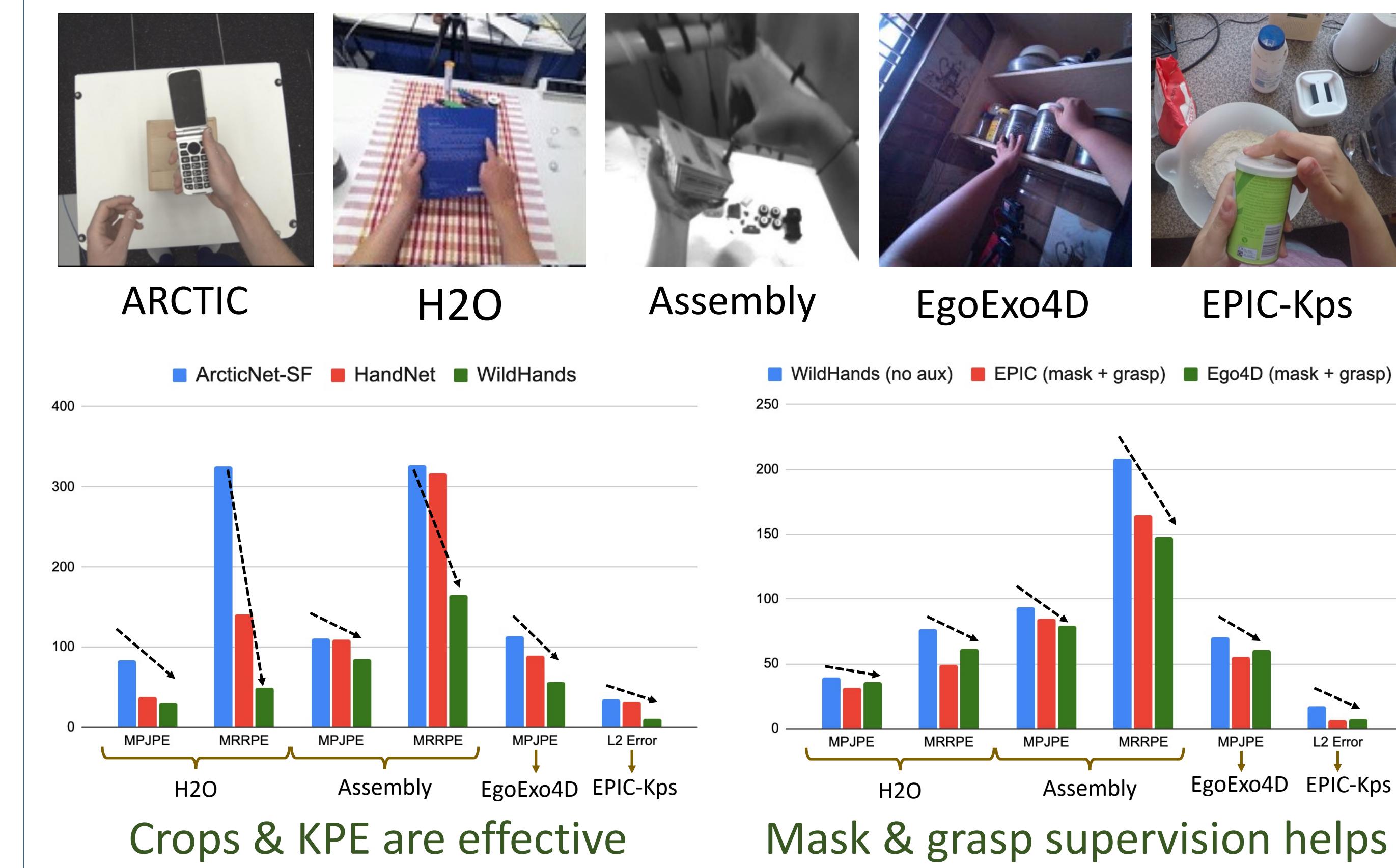


Results

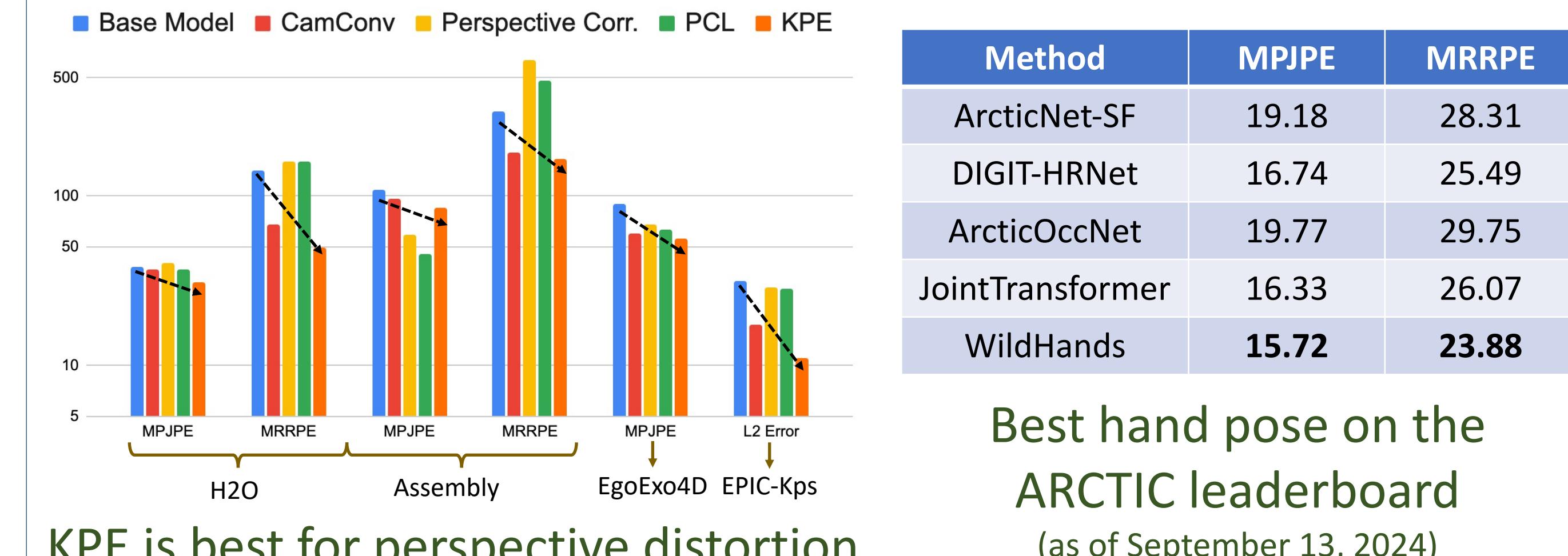
Similar 2D crops may have different underlying 3D shape in ARCTIC



Zero-shot evaluation in diverse egocentric settings



Crops & KPE are effective



KPE is best for perspective distortion

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