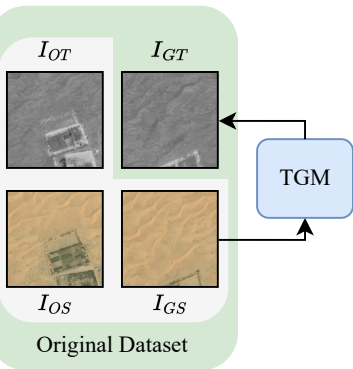
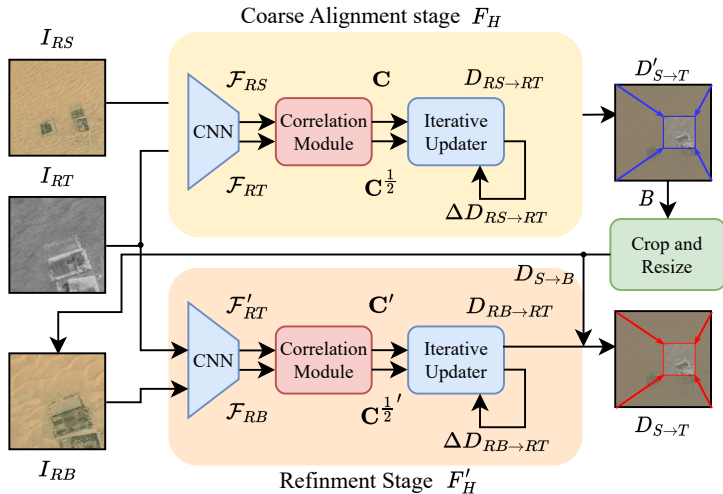


## Data Preparation Phase

Extended Dataset



## Deep Homography Estimation Phase



$I_{OT}$  : Real thermal data       $I_{RS}$  : Resized satellite images       $\mathcal{F}$  : Feature maps       $\Delta D$  : Update of Displacements  
 $I_{GT}$  : Generated thermal data       $I_{RT}$  : Resized thermal images       $\mathbf{C}$  : Correlation volumes       $D$  : Displacements  
 $I_{OS}, I_{GS}$  : Real satellite data       $I_{RB}$  : Resized cropped satellite images by  $B$        $B$  : Cropping bounding box