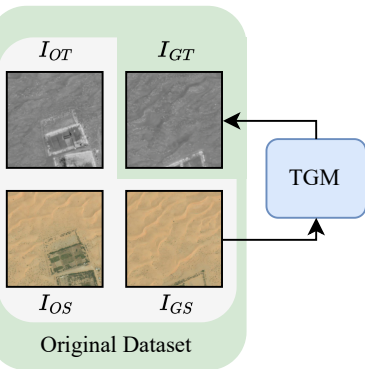


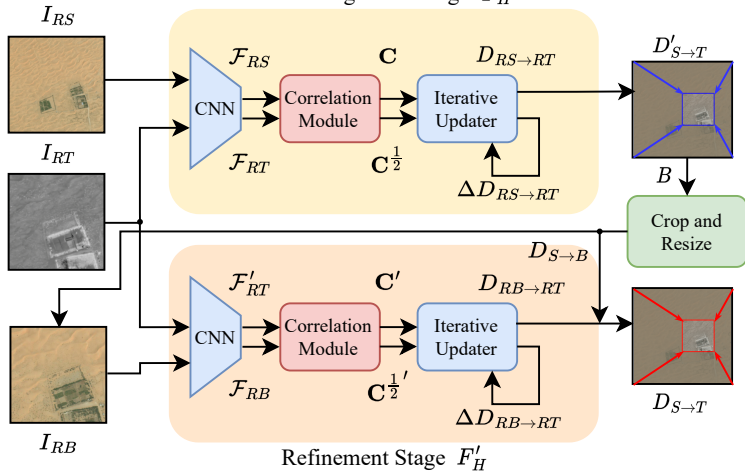
## Data Preparation Phase

Extended Dataset



## Deep Homography Estimation Phase

Coarse Alignment Stage  $F_H$



$I_{OT}$  : 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