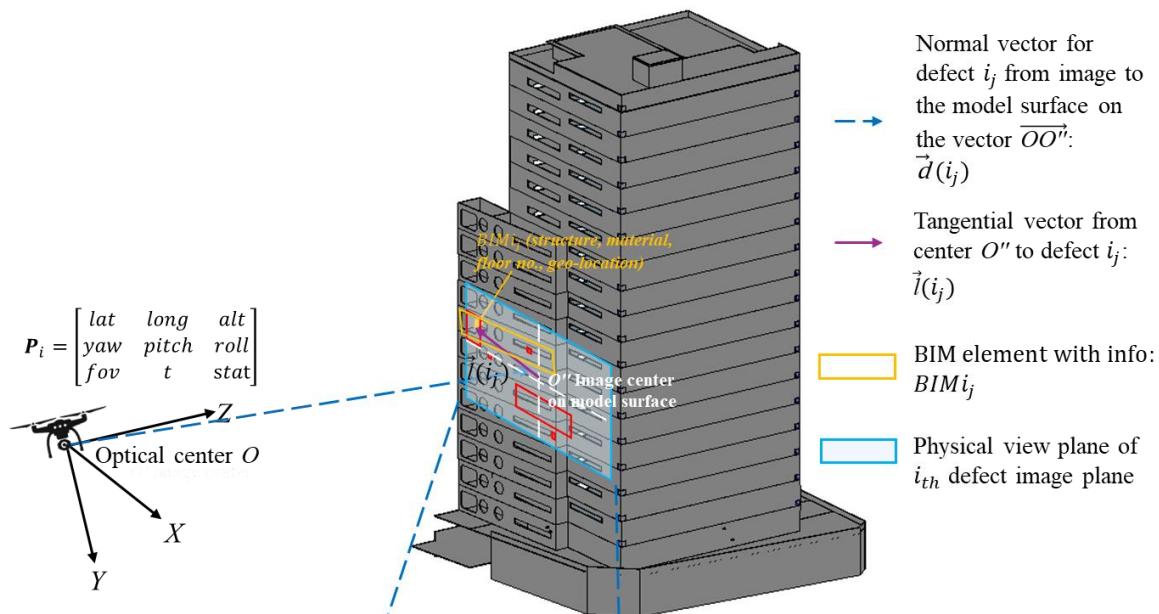
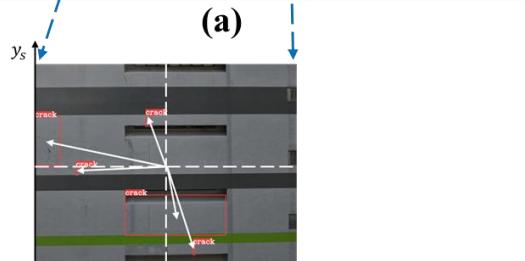
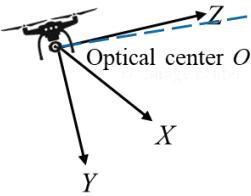


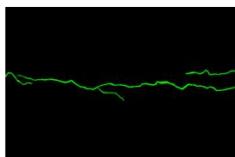
Target infrastructure BIM model



$$\mathbf{P}_i = \begin{bmatrix} lat & long & alt \\ yaw & pitch & roll \\ fov & t & stat \end{bmatrix}$$



Crack sample



Spalling sample



Physical Quantification: $\left(L_i^{(k)}, \overline{w_i^{(k)}}, A_i^{(k)}, \text{shape features}, \text{defect type} \right)$

Defect Assessment: $(SI(\mathcal{E}_j), \Phi(\mathcal{E}_j), \text{Severity Level})]$

(b)