**Figure captions**

Fig. 1. Visualization of some examples: (a) Time  RSIs. (b) Time  RSIs. (c) Ground Truth. (d) FC-Siam-Diff. (e) DSAMNet. (f) proposed RaSRNet.

Fig. 2. The structures of ED. (a) SSED. (b) DSED-e. (c) DSED-d.

Fig. 3. Architecture of the proposed RaSRNet. The blue and yellow solid lines represent the processing flow of two RSIs. The dotted box constitutes the baseline model (i.e., SRNet).

Fig. 4. The structure of Relation-aware module.

Fig 5. Visual Comparison of RaSRNet and the state-of-the-art models on three datasets. (a) Time  RSIs. (b) Time  RSIs. (c) Ground Truth. (d) FC-EF. (e) FC-Siam-Conc. (f) FC-Siam-Diff. (g) DSAMNet. (h) STANet. (i) SRNet (ours) (j) RaSRNet (ours). White represents true positive, black represents true negative, red represents false positive, and blue represents false negative.

Fig. 6. Visual Comparison of the components of RaSRNet. (a) Time  RSIs. (b) Time  RSIs. (c) Ground Truth. (d) SRNet. (e) SRNet+SRa. (f) SRNet+CRa. (g) SRNet+SRa+CRa.

Fig. 7. Comparison of quantitative results about the performance of RaSRNet under different hyperparameters  and .

Fig. 8. Visualization feature maps of the Ra module.

Fig. 9. Visualization feature maps of the RaSRNet.  and are the input RSIs at time  and .

Fig. 10. Visual display of the failure cases. (a) Time  RSIs. (b) Time  RSIs. (c) Ground Truth. (d) CD maps generated by RaSRNet.

**Table titles**

TABLE I THE SEETING OF HYPERPARAMENTERS AND .

TABLE II QUANTITATIVE COMPARATIVE STUDIES OF DIFFERENCE CD MODELS.

TABLE III ABLATION STUDIES ABOUT THE COMPONENTS OF RASRNET.

TABLE IV ABLATION STUDIES ABOUT THE LOSS COMPONENTS OF RASRNET.